UIC – I - 5

ANNUAL REPORT (1)

2017

Annual Class I Well Report for 2017

May 28th, 2018

Agua Moss, LLC

PO Box 600

Farmington, NM 87499

Permit UICI-005

API 30-045-28653

Submitted By:

Philana Thompson

Regulatory Compliance Specialist

Merrion Oil & Gas

610 Reilly Ave

Farmington, NM 87401

505-486-1171 cell

pthompson@merrion.bz

Summary of Operations

The annual MIT was performed 6/26/2017 and Bradenhead test was performed 6/26/2017. The Fall off Test was performed 6/2017, next Fall off test to be performed June 2018. No major events occurred.

Appendices

Appendix A
Monthly Injection/disposal volumes
MAX and Average injection PSI

Appendix B
Quarterly Chemical Analyses Data

Appendix C
MIT
BH Test
FOT

Appendix D
Charts
C-138s

Appendix E
AOR

Appendix A

UIC-5-0
Agua Moss, LLC
Sunco Disposal #1 30-045-28653

2017
Quarterly
Injection Report

	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maxim Flow (gpm)	Minimum Flow (gpm)	Average Annular Pressure (psig)	Maximum Annular Pressure (psig)	Minimum Annular Pressure (psig)	Average Volume (bpd)	Maximum Volume (bpd)	Minimum Volume (bpd)	Volume (barrels)	Total Cumulative Volume (barrels)
													Previous year	1443359
Jan-2017	1796.818	2250	1500	20.1627451	38.47083333	6.5041667		0	0	691.2941176	1319	223	11752	1444545410
Feb-2017	1850	2250	1500	20.47960526	36.16666667	1.2541667		0	0	702.1578947	1240	43	13341	1445887510
Mar-2017	1817.391	2250	1600	16.76944444	45.96666667	4.2		0	0	574.9523381	1576	144	12074	1447087250
													Previous Quarter	1447087250
Apr -2017	2182.5	2300	1850	57.60854167	92.925	35.9041667		0	0	1975.158	3186	1231	39503	1451028
May-2017	1975	2200	200	19.29242424	37.12916667	5.5708333		0	0	661.4545455	1273	191	14552	1452488
Jun-2017	2069.545	2250	1700	26.95162037	90.53333333	5.8333333		0	0	924.0555556	3104	200	16633	1454151
													Previous Quarter	1454151
Jul -17	2010	2300	1600	29.50856481	37.8	16.216667		0	0	1011.722222	1296	556	18211	1455972
Aug-17	2108.696	2200	1800	27.55742754	39.60833333	2.275		0	0	944.8260087	1358	78	21731	1458145
Sep -17	2113.636	2300	1650	30.0375	61.01666667	10.4125		0	0	1029.857143	2092	357	21627	1460308
													Previous Quarter	1460308
Oct -2017	2150	2250	2000	31.11322464	56.02916667	5.6291667		0	0	1066.739726	1921	193	24535	1462707
Nov -2017	2238.286	2300	2150	27.08833333	49.1	8.7791667		0	0	928.5714286	1681	310	19965	1464717
Dec-2017	2262.5	2400	2050	24.66366741	49.81666667	9.6541667		0	0	845.6111111	1708	331	15221	1466238
											Total for year	22680	1489918	Life Of well injected

Appendix B

Rule Engineering, LLC
Solutions to Regulations for Industry

April 14, 2017

Ms. Shacie Murray
Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Re: Sunco Disposal #1
Injection Water Quarterly Monitoring
1st Quarter 2017

Dear Ms. Murray:

This report summarizes the sample collection, field screening, and laboratory analysis of the injection water at the Agua Moss LLC Sunco Disposal #1 well for the 1st Quarter 2017. Injection water of the Class I Sunco Disposal #1 well is assessed on a quarterly basis in accordance with 20.6.5207B NMAC.

Field Activities
Rule Engineering, LLC (Rule) personnel collected one injection water sample from the process line inside the pump building at the location on March 14, 2016. Injection water was discharged from the valve of the process line into a clean, 5-gallon bucket for field screening and transfer to laboratory sample containers.

Sample Collection and Field Screening Procedures
The injection water sample (S-3) was field screened for time sensitive parameters including pH, temperature, reduction potential (Eh), and specific conductance. Field screening was conducted utilizing a handheld water quality meter calibrated on the day of use with laboratory grade standards.

The sampled injection water was placed into laboratory supplied containers, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

Table 1. Field Screening and Laboratory Analytical Summary

Constituent	Laboratory Value	Field Measurement
pH	6.73	6.75
Temperature	--	15.4 °C
Reduction Potential	-226 mV	-298.3 mV
Specific Conductance	42,000 µmhos/cm	26,000 µmhos/cm
Specific Gravity	1.016	--

Constituent	Laboratory Value	Field Measurement
Total Dissolved Solids	26,900* mg/L	--
Bicarbonate (As $CaCO_3$)	663.3 mg/L $CaCO_3$	--
Carbonate (As $CaCO_3$)	<2.000 mg/L $CaCO_3$	--
Fluoride	34* mg/L	--
Chloride	11,000* mg/L	--
Bromide	47 mg/L	--
Phosphorous, Orthophosphate	16 mg/L	--
Sulfate	1,600* mg/L	--
Nitrate + Nitrite (as N)	<10 mg/L	--
Calcium	560 mg/L	--
Magnesium	77 mg/L	--
Potassium	800 mg/L	--
Sodium	7,500 mg/L	--
Reactive Cyanide	0.0302 mg/L	--
Reactive Sulfide	<0.0500 mg/L	--
Corrosivity by pH	6.60	--
Flashpoint	Did not flash at 170°F	--

*Exceeded maximum analytical level

QA/QC Considerations
Field measurements for time sensitive parameters including pH, temperature, reduction potential, and specific conductance more accurately reflect the characteristics of the injection water than laboratory results for these parameters due to their rapidly changing nature when removed from the stable environment of the process line. The hold time qualifier is indicated on the laboratory report for pH as the hold time of 15 minutes from collection was exceeded during transport prior to analysis.

A dilution due to matrix qualifier is indicated on the laboratory report for total dissolved solids due to an initial dilution made during sample preparation based on the visual observations of laboratory personnel indicating the need for the dilution. Results for fluoride, chloride, sulfate and total dissolved solids exceed the maximum analytical level reportable by the laboratory which should be taken into consideration in evaluation of water quality characteristics.

Closure and Limitations
This report is prepared for the exclusive use of Agua Moss LLC and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Agua Moss LLC. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Rule Engineering appreciates the opportunity to provide services to Agua Moss LLC. If you have any questions, please contact me at (505) 325-1055.

Sincerely,
Rule Engineering, LLC

Heather M. Woods, P.G.
Area Manager/Geologist

Attachments:
Laboratory Analytical Report (Hall: 1703798)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 14, 2017

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Sunco Disposal Well 1 OrderNo.: 1703798

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2017 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued March 31, 2017.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1703798**
Date Reported: **4/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** S-3 (3/14/17)
Project: Sunco Disposal Well 1 — **Collection Date:** 3/14/2017 10:15:00 AM
Lab ID: 1703798-001 — **Matrix:** AQUEOUS — **Received Date:** 3/15/2017 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
SPECIFIC GRAVITY						Analyst: **LGT**	
Specific Gravity	1.016	0			1	3/15/2017 4:30:00 PM	R41392
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	34	2.0	*	mg/L	20	3/28/2017 5:28:36 PM	R41713
Chloride	11000	500	*	mg/L	1E	3/21/2017 9:35:52 PM	R41545
Bromide	47	2.0		mg/L	20	3/16/2017 5:00:02 AM	A41411
Phosphorus, Orthophosphate (As P	16	2.5		mg/L	5	3/16/2017 4:47:38 AM	A41411
Sulfate	1600	500	*	mg/L	1E	3/21/2017 9:35:52 PM	R41545
Nitrate+Nitrite as N	ND	10		mg/L	50	3/21/2017 8:58:37 PM	R41545
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	42000	10		µmhos/cm	10	3/21/2017 11:56:22 AM	R41539
SM2320B: ALKALINITY						Analyst: **JRR**	
Bicarbonate (As CaCO3)	663.3	20.00		mg/L CaCO3	1	3/16/2017 3:25:09 PM	R41461
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	3/16/2017 3:25:09 PM	R41461
Total Alkalinity (as CaCO3)	663.3	20.00		mg/L CaCO3	1	3/16/2017 3:25:09 PM	R41461
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	26900	2000	*D	mg/L	1	3/19/2017 5:45:00 PM	30767
SM4500-H+B: PH						Analyst: **JRR**	
pH	6.73		H	pH units	1	3/16/2017 3:25:09 PM	R41461
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **MED**	
Calcium	560	20		mg/L	20	3/27/2017 11:36:25 AM	A41669
Magnesium	77	1.0		mg/L	1	3/27/2017 11:07:42 AM	A41669
Potassium	800	20		mg/L	20	3/27/2017 11:36:25 AM	A41669
Sodium	7500	200		mg/L	200	3/27/2017 11:37:55 AM	A41669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

1703798-001C S-3 (3/14/17)
Collected date/time: 03/14/17 10:15

SAMPLE RESULTS - 01
L896772

ONE LAB. NATIONWIDE.

Wet Chemistry by Method 2580

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	mV				
ORP	-226	T8	1	03/22/2017 17:12	WG962679

Wet Chemistry by Method 9012 B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Cyanide	0.0302		0.00500	1	03/24/2017 09:53	WG963977

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Sulfide	ND		0.0500	1	03/20/2017 23:17	WG962676

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
Corrosivity by pH	6.60	T8	1	03/24/2017 09:35	WG963432

Sample Narrative:
9040C L896772-01 WG963432: 6.60 at 20.3c

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	deg F				
Flashpoint	DNF at 170		1	03/20/2017 15:25	WG962579

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT: Hall Environmental Analysis Laboratory
PROJECT:
SDG: L896772
DATE/TIME: 04/4/17 13:09

QUALITY CONTROL SUMMARY
L896772-01

Wet Chemistry by Method 9012 B

Method Blank (MB)

(MB) R3205668-1 03/24/17 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Reactive Cyanide	U		0.0018	0.00500

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

(LCS) R3205668-2 03/24/17 09:49 • (LCSD) R3205668-3 03/24/17 09:50

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Reactive Cyanide	0.100	0.107	0.106	107	106	85-115			1	20

ACCOUNT: Hall Environmental Analysis Laboratory
PROJECT:
SDG: L896772
DATE/TIME: 04/4/17 13:09

QUALITY CONTROL SUMMARY
L896772-01

Wet Chemistry by Method 9034-9030B

Method Blank (MB)

(MB) R3204596-1 03/20/17 23:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Reactive Sulfide	U		0.00350	0.0500

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

(LCS) R3204596-2 03/20/17 23:03 • (LCSD) R3204596-3 03/20/17 23:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Reactive Sulfide	0.500	0.470	0.468	94.0	94.0	85-115			0.000	20

ACCOUNT: Hall Environmental Analysis Laboratory
PROJECT:
SDG: L896772
DATE/TIME: 04/4/17 13:09

QUALITY CONTROL SUMMARY
L896772-01

Wet Chemistry by Method 2580

Original Sample (OS) • Duplicate (DUP)

(OS) L896772-01 03/22/17 17:12 • (DUP) WG962679-3 03/22/17 17:12

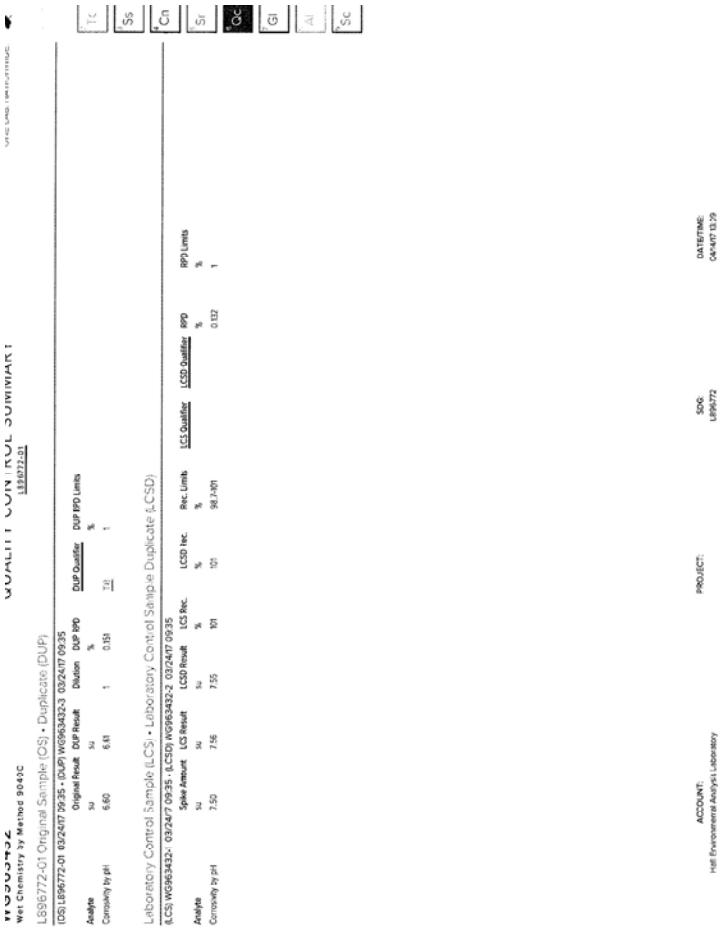
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mV	mV		%		%
ORP	-226	-222	1	0.000		20

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

(LCS) WG962679-1 03/22/17 17:12 • (LCSD) WG962679-2 03/22/17 17:12

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mV	mV	mV	%	%	%			%	%
ORP	228	228	227	100	99.6	90.0-110			0.440	20

ACCOUNT: Hall Environmental Analysis Laboratory
PROJECT:
SDG: L896772
DATE/TIME: 04/4/17 13:09



Wet Chemistry by Method 9040C

L896772-01

L896772-01 Original Sample (OS) • Duplicate (DUP)

(DUP) L896772-01 03/24/17 09:35 • (DUP) WG963432-3 03/24/17 09:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
Corrosivity by pH	6.60	6.61	1	0.151	T8	1

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

(LCS) WG963432-2 03/24/17 09:35 • (LCSD) WG963432-2 03/24/17 09:35

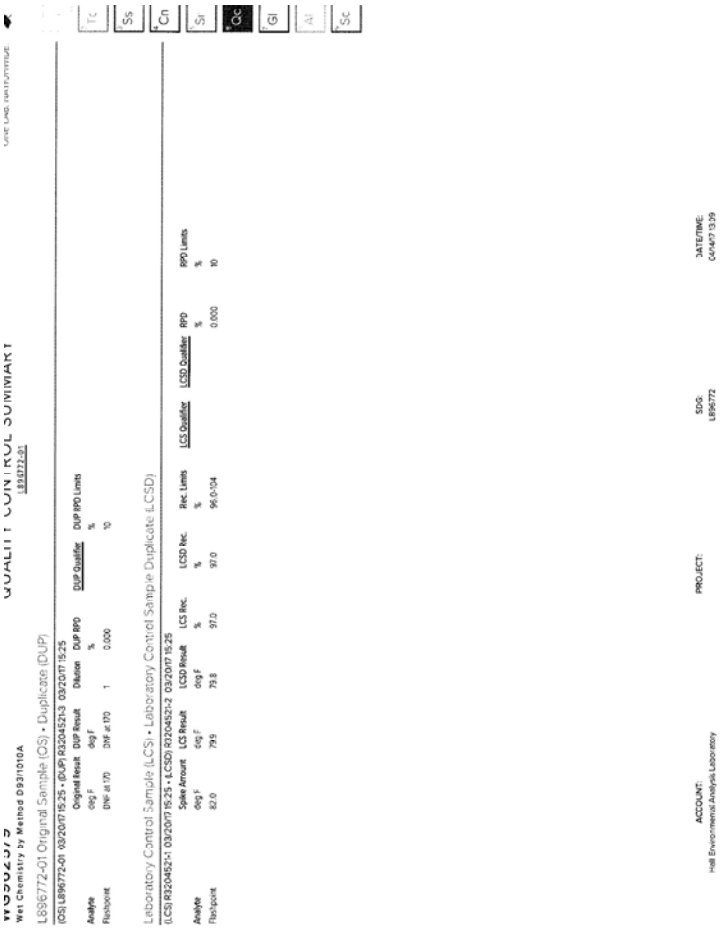
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
Corrosivity by pH	7.50	7.56	7.55	101	101	98.7-101			0.132	1

SDG: L896772

DATE/TIME: 04/4/17 13:09

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:



Wet Chemistry by Method 9131/1010A

L896772-01

L896772-01 Original Sample (OS) • Duplicate (DUP)

(DUP) L896772-01 03/20/17 15:25 • (DUP) R320452-3 03/20/17 15:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	deg F	deg F		%		%
Flashpoint	ENF at 170	ENF at 170	1	0.000		10

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

(LCS) R320452-1 03/20/17 15:25 • (LCSD) R320452-2 03/20/17 15:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	deg F	deg F	deg F	%	%	%			%	%
Flashpoint	82.0	79.9	79.8	97.0	97.0	96.0-104			0.000	10

SDG: L896772

DATE/TIME: 04/4/17 13:09

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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
T8	Sample(s) received past/too close to holding time expiration.

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L896772

DATE/TIME: 04/4/17 13:09

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703798**

14-Apr-17

Client: Rule Engineering LLC

Project: Sunco Disposal Well 1

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**A41411**	RunNo:	**41411**					
Prep Date:		Analysis Date:	**3/15/2017**	SeqNo:	**1298417**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**A41411**	RunNo:	**41411**					
Prep Date:		Analysis Date:	**3/15/2017**	SeqNo:	**1298418**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	2.6	0.10	2.500	0	103	90	110			
Phosphorus, Orthophosphate (As P	5.1	0.50	5.000	0	102	90	110			

Sample ID	**MB**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**R41545**	RunNo:	**41545**					
Prep Date:		Analysis Date:	**3/21/2017**	SeqNo:	**1303801**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID	**LCS**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R41545**	RunNo:	**41545**					
Prep Date:		Analysis Date:	**3/21/2017**	SeqNo:	**1303802**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.0	0.50	5.000	0	99.4	90	110			
Sulfate	10	0.50	10.00	0	101	90	110			
Nitrate+Nitrite as N	3.6	0.20	3.500	0	103	90	110			

Sample ID	**MB**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBW**	Batch ID:	**R41713**	RunNo:	**41713**					
Prep Date:		Analysis Date:	**3/28/2017**	SeqNo:	**1309254**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703798**

14-Apr-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID	**LCS**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSW**	Batch ID:	**R41713**	RunNo:	**41713**					
Prep Date:		Analysis Date:	**3/28/2017**	SeqNo:	**1309255**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	101	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703798**

14-Apr-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID	**MB-A**	SampType:	**MBLK**	TestCode:	**EPA Method 6010B: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**A41669**	RunNo:	**41669**					
Prep Date:		Analysis Date:	**3/27/2017**	SeqNo:	**1307438**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID	**LCS-A**	SampType:	**LCS**	TestCode:	**EPA Method 6010B: Dissolved Metals**					
Client ID:	**LCSW**	Batch ID:	**A41669**	RunNo:	**41669**					
Prep Date:		Analysis Date:	**3/27/2017**	SeqNo:	**1307439**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	53	1.0	50.00	0	106	80	120			
Magnesium	52	1.0	50.00	0	105	80	120			
Potassium	51	1.0	50.00	0	102	80	120			
Sodium	51	1.0	50.00	0	103	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703798**

14-Apr-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID	**mb-1**	SampType:	**mblk**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**PBW**	Batch ID:	**R41461**	RunNo:	**41461**					
Prep Date:		Analysis Date:	**3/16/2017**	SeqNo:	**1299924**	Units:	**mg/L CaCO3**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID	**lcs-1**	SampType:	**lcs**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**LCSW**	Batch ID:	**R41461**	RunNo:	**41461**					
Prep Date:		Analysis Date:	**3/16/2017**	SeqNo:	**1299925**	Units:	**mg/L CaCO3**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	79.04	20.00	80.00	0	98.8	90	110			

Sample ID	**mb-2**	SampType:	**mblk**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**PBW**	Batch ID:	**R41461**	RunNo:	**41461**					
Prep Date:		Analysis Date:	**3/16/2017**	SeqNo:	**1299948**	Units:	**mg/L CaCO3**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID	**lcs-2**	SampType:	**lcs**	TestCode:	**SM2320B: Alkalinity**					
Client ID:	**LCSW**	Batch ID:	**R41461**	RunNo:	**41461**					
Prep Date:		Analysis Date:	**3/16/2017**	SeqNo:	**1299949**	Units:	**mg/L CaCO3**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	79.76	20.00	80.00	0	99.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703798**

14-Apr-17

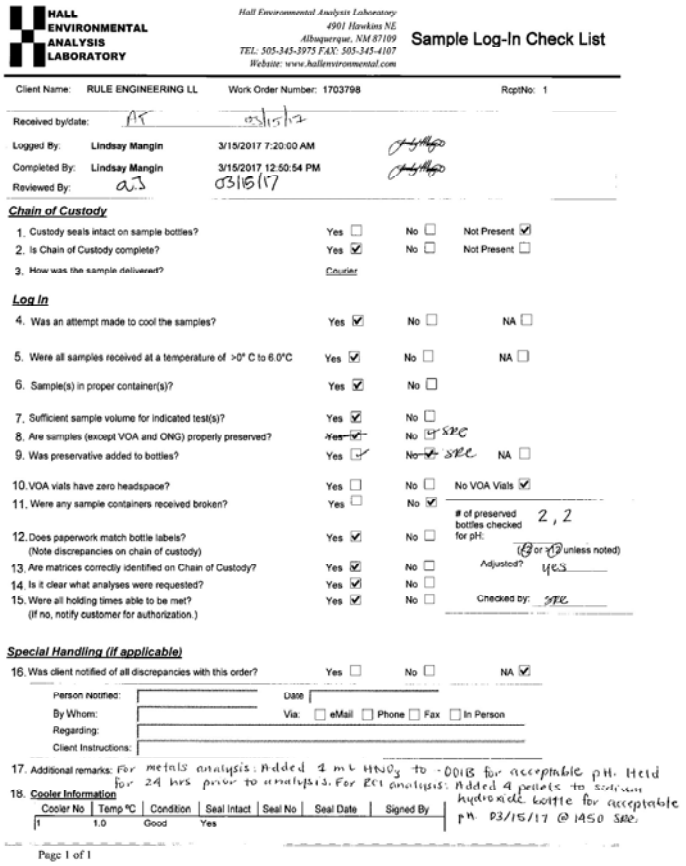
Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID	**MB-30767**	SampType:	**MBLK**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**PBW**	Batch ID:	**30767**	RunNo:	**41484**					
Prep Date:	**3/17/2017**	Analysis Date:	**3/19/2017**	SeqNo:	**1300536**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	**LCS-30767**	SampType:	**LCS**	TestCode:	**SM2540C MOD: Total Dissolved Solids**					
Client ID:	**LCSW**	Batch ID:	**30767**	RunNo:	**41484**					
Prep Date:	**3/17/2017**	Analysis Date:	**3/19/2017**	SeqNo:	**1300537**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL | Work Order Number: 1703798 | RcptNo: 1

Received by/date: AT 03/15/17

Logged By: Lindsay Mangin 3/15/2017 7:20:00 AM

Completed By: Lindsay Mangin 3/15/2017 12:50:54 PM

Reviewed By: AJ 03/15/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? ~~Yes~~ ☑ No ☑ see
9. Was preservative added to bottles? Yes ☑ ~~No~~ ☑ see NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑ # of preserved bottles checked for pH: 2, 2 (<2 or >12 unless noted)
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐ Adjusted? yes
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐ Checked by: see

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

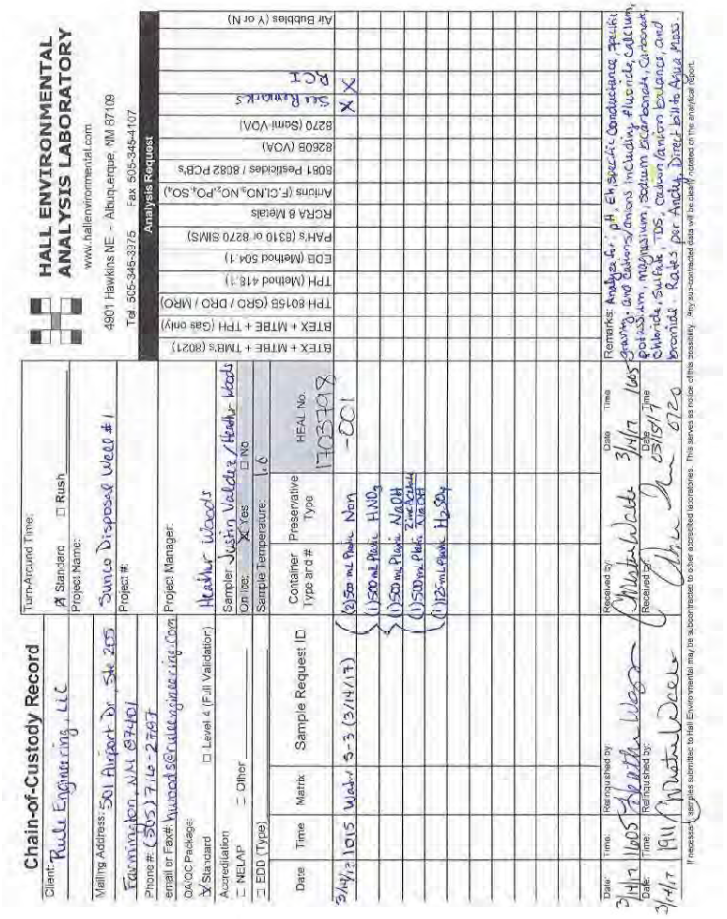
Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks: For metals analysis: Added 1 mL HNO_3 to -0018 for acceptable pH. Held for 24 hrs prior to analysis. For RCI analysis: Added 4 pellets to sodium hydroxide bottle for acceptable pH. 03/15/17 @ 1450 see.

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Page 1 of 1



HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel: 505-345-3975 Fax: 505-345-4107

Chain-of-Custody Record

Client: Rule Engineering, LLC
Mailing Address: 501 Airport Dr, Ste 205, Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax#: hunter@ruleengineering.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Sunco Disposal well #1
Project #:
Project Manager: Heather Woods
Sampler: Justin Valdez / Heather Woods
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.6

Analysis Request: BTEX + MTBE + TMB's (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIM/S) | RCRA 8 Metals | Anions (F, Cl, NO_3, NO_2, PO_4, SO_4) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | See Remarks | RCI | Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3/14/17	1015	Water	S-3 (3/14/17)	(2) 50 mL Plastic	Non	1703798 -001
				(1) 500 mL Plastic	HNO_3	
				(1) 500 mL Plastic	NaOH	
				(1) 500 mL Plastic	Zinc Acetate & NaOH	
				(1) 125 mL Plastic	H_2SO_4	

Remarks: Analyze for pH, Eh, Specific Conductance, Total Alkalinity, and Dissolved Ions including Fluoride, Calcium, Potassium, Magnesium, Sodium, Bicarbonate, Carbonate, Chloride, Sulfate, TDS, Cation/Anion Balance, and Bromide. Rules per Andy. Direct bill to Agua Moss.

Relinquished by: Heather Woods Date: 3/14/17 Time: 1605
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: 3/15/17 Time: 0720

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any subcontracted data will be clearly notated on the analytical report.

Rule Engineering, LLC
Solutions to Regulations for Industry

July 24, 2017

Ms. Shacie Murray
Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Re: Sunco Disposal #1
Injection Water Quarterly Monitoring
2nd Quarter 2017

Dear Ms. Murray:

This report summarizes the sample collection, field screening, and laboratory analysis of the injection water at the Agua Moss LLC Sunco Disposal #1 well for the 2nd Quarter 2017. Injection water of the Class I Sunco Disposal #1 well is assessed on a quarterly basis in accordance with 20.6.5207B NMAC.

Field Activities
Rule Engineering, LLC (Rule) personnel collected one injection water sample from the process line inside the pump building at the location on June 12, 2017. Injection water was discharged from the valve of the process line into a clean, 5-gallon bucket for field screening and transfer to laboratory sample containers.

Sample Collection and Field Screening Procedures
The injection water sample (S-4) was field screened for time sensitive parameters including pH, temperature, reduction potential (Eh), and specific conductance. Field screening was conducted utilizing a handheld water quality meter calibrated on the day of use with laboratory grade standards.

The sampled injection water was placed into laboratory supplied containers, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

Table 1. Field Screening and Laboratory Analytical Summary

Constituent	Laboratory Value	Field Measurement
pH	7.43	7.02
Temperature	--	18.2 °C
Reduction Potential	--	-252.2 mV
Specific Conductance	42,000 µmhos/cm	39,200 µmhos/cm
Specific Gravity	1.009	--

Constituent	Laboratory Value	Field Measurement
Total Dissolved Solids	21,000 mg/L	--
Bicarbonate (As $CaCO_3$)	1,121 mg/L $CaCO_3$	--
Carbonate (As $CaCO_3$)	<5.000 mg/L $CaCO_3$	--
Fluoride	<0.50 mg/L	--
Chloride	11,000 mg/L	--
Bromide	14 mg/L	--
Phosphorous, Orthophosphate	3.4 mg/L	--
Sulfate	2,000 mg/L	--
Nitrate + Nitrite (as N)	<20 mg/L	--
Calcium	1,100 mg/L	--
Magnesium	53 mg/L	--
Potassium	1,100 mg/L	--
Sodium	5,600 mg/L	--
Reactive Cyanide	0.0703 mg/L	--
Reactive Sulfide	0.199 mg/L	--
Corrosivity by pH	6.88	--
Flashpoint	Did not flash at 170°F	--

QA/QC Considerations
Field measurements for time sensitive parameters including pH, temperature, reduction potential, and specific conductance more accurately reflect the characteristics of the injection water than laboratory results for these parameters due to their rapidly changing nature when removed from the stable environment of the process line. The hold time qualifier is indicated on the laboratory report for pH as the hold time of 15 minutes from collection was exceeded during transport prior to analysis.

A dilution due to matrix qualifier is indicated on the laboratory report for total dissolved solids due to an initial dilution made during sample preparation based on the visual observations of laboratory personnel indicating the need for the dilution. Results for fluoride, chloride, sulfate and total dissolved solids exceed the maximum analytical level reportable by the laboratory which should be taken into consideration in evaluation of water quality characteristics.

Closure and Limitations
This report is prepared for the exclusive use of Agua Moss LLC and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Agua Moss LLC. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Rule Engineering appreciates the opportunity to provide services to Agua Moss LLC. If you have any questions, please contact me at (505) 325-1055.

Sincerely,
Rule Engineering, LLC

Heather M. Woods, P.G.
Area Manager/Geologist

Attachments:
Laboratory Analytical Report (Hall: 1706623)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 05, 2017

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Sunco Disposal Well 1 OrderNo.: 1706623

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/13/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1706623**
Date Reported: **7/5/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** S-4 (6/12/17)
Project: Sunco Disposal Well 1 — **Collection Date:** 6/12/2017 10:30:00 AM
Lab ID: 1706623-001 — **Matrix:** AQUEOUS — **Received Date:** 6/13/2017 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
SPECIFIC GRAVITY						Analyst: **JRR**	
Specific Gravity	1.009	0			1	6/16/2017 11:37:00 AM	R43561
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	ND	0.50		mg/L	5	6/13/2017 11:26:57 AM	R43459
Chloride	11000	500	*	mg/L	1E	6/27/2017 3:07:57 PM	R43827
Bromide	14	10		mg/L	100	6/28/2017 4:47:09 AM	R43827
Phosphorus, Orthophosphate (As P)	3.4	2.5		mg/L	5	6/13/2017 11:26:57 AM	R43459
Sulfate	2000	50	*	mg/L	100	6/28/2017 4:47:09 AM	R43827
Nitrate+Nitrite as N	ND	20		mg/L	100	6/28/2017 4:59:33 AM	R43827
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	42000	50		µmhos/cm	10	6/21/2017 2:21:57 AM	R43705
SM2320B: ALKALINITY						Analyst: **JRR**	
Bicarbonate (As CaCO3)	1121	50.00		mg/L CaCO3	2.5	6/21/2017 2:00:55 AM	R43705
Carbonate (As CaCO3)	ND	5.000		mg/L CaCO3	2.5	6/21/2017 2:00:55 AM	R43705
Total Alkalinity (as CaCO3)	1121	50.00		mg/L CaCO3	2.5	6/21/2017 2:00:55 AM	R43705
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	21000	200	*D	mg/L	1	6/15/2017 3:53:00 PM	32279
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.43		H	pH units	1	6/15/2017 6:04:38 PM	R43555
EPA METHOD 200.7: TOTAL METALS						Analyst: **pmf**	
Calcium	1100	100		mg/L	100	6/27/2017 2:31:49 PM	32417
Magnesium	53	5.0		mg/L	5	6/22/2017 8:08:12 PM	32417
Potassium	1100	100		mg/L	100	6/27/2017 2:31:49 PM	32417
Sodium	5600	100		mg/L	100	6/27/2017 2:31:49 PM	32417

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E	Value above quantitation range
	H Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL Practical Quanitative Limit	RL	Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

1706623-001C S-4 (6/12/17)
Collected date/time: 06/12/17 10:30

SAMPLE RESULTS - 01

L915964

ONE LAB. NATIONWIDE.

Wet Chemistry by Method 4500 CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Cyanide	0.0703		0.00500	1	06/20/2017 15:16	WG961722

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Sulfide	0.199		0.0500	1	06/19/2017 12:38	WG960729

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
Corrosivity by pH	6.88	T8	1	06/16/2017 16:34	WG959423

Sample Narrative:
9040C L915964-01 WG959423: 6.88 at 10.4c

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	deg F				
Flashpoint	DNF at 170		1	06/21/2017 01:42	WG960892

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:
Hall Environmental Analysis Laboratory		L915964	06/21/17 10:19

WG989423

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

L915964-01

ONE LAB. NATIONWIDE.

L916114-02 Original Sample (OS) • Duplicate (DUP)

(OS) L916114-02 06/16/17 16:34 • (DUP) WG989423-3 06/16/17 16:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
Corrosivity by pH	1.35	1.34	1	0.743	J3	1

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

(LCS) WG989423-1 06/16/17 16:34 • (LCSD) WG989423-2 06/16/17 16:34

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	su	su	su	%	%	%			%	%
Corrosivity by pH	6.38	6.36	6.36	99.7	99.7	98.4-102			0.000	1

WG991122

Wet Chemistry by Method 4500 CN E-2011

QUALITY CONTROL SUMMARY

L915964-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3227150-3 06/20/17 15:11

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Reactive Cyanide	U		0.0018	0.00500

L916570-02 Original Sample (OS) • Duplicate (DUP)

(OS) L916570-02 06/20/17 15:32 • (DUP) R3227150-4 06/20/17 15:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Reactive Cyanide	ND	0.000	1	0		20

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

(LCS) R3227150-2 06/20/17 15:12 • (LCSD) R3227150-3 06/20/17 15:13

	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	%	%	%			%	%
Reactive Cyanide	0.100	0.104	0.102	104	102	85-115			2	20

WG990892

Wet Chemistry by Method D93/1010A

QUALITY CONTROL SUMMARY

L915964-01

ONE LAB. NATIONWIDE.

L917187-02 Original Sample (OS) • Duplicate (DUP)

(OS) L917187-02 06/21/17 01:42 • (DUP) R3227253-3 06/21/17 01:42

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	deg F	deg F		%		%
Flashpoint	DNF at 170	DNF at 170	1	0.000		10

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

(LCS) R3227253-1 06/21/17 01:42 • (LCSD) R3227253-2 06/21/17 01:42

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	deg F	deg F	deg F	%	%	%			%	%
Flashpoint	82.0	80.7	80.9	98.0	99.0	96.0-104			0.000	10

WG990728

Wet Chemistry by Method 9034-9030B

QUALITY CONTROL SUMMARY

L915964-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3226738-1 06/19/17 12:35

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Reactive Sulfide	U		0.0065	0.0500

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

(LCS) R3226738-2 06/19/17 12:36 • (LCSD) R3226738-3 06/19/17 12:36

	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	%	%	%			%	%
Reactive Sulfide	0.500	0.519	0.518	104	104	85-115			0	20

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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
T8	Sample(s) received past/too close to holding time expiration.

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:
Hall Environmental Analysis Laboratory		L9I5964	06/21/17 10:19

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706623**
05-Jul-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID **MB-32417** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **32417** RunNo: **43729**
Prep Date: **6/21/2017** Analysis Date: **6/22/2017** SeqNo: **1377954** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID **LCSLL-32417** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **32417** RunNo: **43729**
Prep Date: Analysis Date: **6/22/2017** SeqNo: **1377955** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0	0.5000	0	99.4	50	150			
Magnesium	ND	1.0	0.5000	0	108	50	150			
Potassium	ND	1.0	0.5000	0	131	50	150			
Sodium	ND	1.0	0.5000	0	114	50	150			

Sample ID **LCS-32417** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **32417** RunNo: **43729**
Prep Date: **6/21/2017** Analysis Date: **6/22/2017** SeqNo: **1377956** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	0	98.4	85	115			
Magnesium	52	1.0	50.00	0	103	85	115			
Potassium	50	1.0	50.00	0	99.5	85	115			
Sodium	51	1.0	50.00	0	102	85	115			

Sample ID **1706623-001BMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **S-4 (6/12/17)** Batch ID: **32417** RunNo: **43729**
Prep Date: **6/21/2017** Analysis Date: **6/22/2017** SeqNo: **1377993** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	93	5.0	50.00	53.09	80.5	70	130			

Sample ID **1706623-001BMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **S-4 (6/12/17)** Batch ID: **32417** RunNo: **43729**
Prep Date: **6/21/2017** Analysis Date: **6/22/2017** SeqNo: **1377994** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	97	5.0	50.00	53.09	87.8	70	130	3.86	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706623**
05-Jul-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R43459** RunNo: **43459**
Prep Date: Analysis Date: **6/13/2017** SeqNo: **1369367** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R43459** RunNo: **43459**
Prep Date: Analysis Date: **6/13/2017** SeqNo: **1369368** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.55	0.10	0.5000	0	109	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.6	90	110			

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R43827** RunNo: **43827**
Prep Date: Analysis Date: **6/27/2017** SeqNo: **1381049** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Bromide	ND	0.10								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R43827** RunNo: **43827**
Prep Date: Analysis Date: **6/27/2017** SeqNo: **1381050** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.3	90	110			
Bromide	2.4	0.10	2.500	0	95.5	90	110			
Sulfate	9.4	0.50	10.00	0	94.1	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	94.6	90	110			

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R43827** RunNo: **43827**
Prep Date: Analysis Date: **6/27/2017** SeqNo: **1381917** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Bromide	ND	0.10								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706623**
05-Jul-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R43827** RunNo: **43827**
Prep Date: Analysis Date: **6/27/2017** SeqNo: **1381918** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.7	90	110			
Bromide	2.5	0.10	2.500	0	99.8	90	110			
Sulfate	9.8	0.50	10.00	0	98.1	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706623
05-Jul-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID mb-1	SampType: mblk	TestCode: SM2320B: Alkalinity								
Client ID: PBW	Batch ID: R43705	RunNo: 43705								
Prep Date:	Analysis Date: 6/20/2017	SeqNo: 1376590	Units: mg/L CaCO3							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID lcs-1	SampType: lcs	TestCode: SM2320B: Alkalinity								
Client ID: LCSW	Batch ID: R43705	RunNo: 43705								
Prep Date:	Analysis Date: 6/20/2017	SeqNo: 1376591	Units: mg/L CaCO3							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.00	20.00	80.00	0	97.5	90	110			

Sample ID mb-2	SampType: mblk	TestCode: SM2320B: Alkalinity								
Client ID: PBW	Batch ID: R43705	RunNo: 43705								
Prep Date:	Analysis Date: 6/20/2017	SeqNo: 1376614	Units: mg/L CaCO3							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID lcs-2	SampType: lcs	TestCode: SM2320B: Alkalinity								
Client ID: LCSW	Batch ID: R43705	RunNo: 43705								
Prep Date:	Analysis Date: 6/20/2017	SeqNo: 1376615	Units: mg/L CaCO3							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.28	20.00	80.00	0	97.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706623
05-Jul-17

Client: Rule Engineering LLC
Project: Sunco Disposal Well 1

Sample ID MB-32279	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 32279	RunNo: 43539								
Prep Date: 6/14/2017	Analysis Date: 6/15/2017	SeqNo: 1371252	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID LCS-32279	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 32279	RunNo: 43539								
Prep Date: 6/14/2017	Analysis Date: 6/15/2017	SeqNo: 1371253	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1030	20.0	1000	0	103	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL   Work Order Number: 1706623   RcptNo: 1

Received By: Anne Thorne 6/13/2017 7:55:00 AM [signature]
Completed By: Ashley Gallegos 6/13/2017 8:49:15 AM [signature]
Reviewed By: ENM 06/13/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? ~~Yes~~ ☑ No ☑ SRC
9. Was preservative added to bottles? Yes ☑ ~~No~~ ☑ SRC NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐ — # of preserved bottles checked for pH: 2, 2 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ — Adjusted? yes
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐ — Checked by: SRC

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: ____ Date ____
By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: ____
Client Instructions: ____

17. Additional remarks: For metals analysis: Added 1 mL HNO_3 to -001B for acceptable pH. Held for 24 hrs prior to analysis. 06/13/17 @ 0925 SRC.
For corr analysis: Added 6 pellets of NaOH to -001C for acceptable pH. SRC 06/13/17

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Page 1 of 1

Chain-of-Custody Record

Client: Rule Engineering LLC
Mailing Address: 501 Airport Dr. Ste 205, Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax#: hwoods@ruleengineering.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Sunco Disposal Well #1
Project #:
Project Manager: Heather Woods
Sampler: Heather Woods
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270 SIMS); RCRA 8 Metals; Anions (F,Cl,NO_3,NO_2,PO_4,SO_4); 8081 Pesticides / 8082 PCB's; 8260B (VOA); 8270 (Semi-VOA); See Remarks; RCI; Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706623	See Remarks	RCI
6/12/17	1030	Water	S-4 (6/12/17)	(2) 500mL Plastic - Non (1) 500mL Plastic - HNO3 (1) 500mL Plastic - NaOH (1) 500mL Plastic - Zinc Acetate NaOH (1) 125mL Plastic - H_2SO_4		-001	X	X

Date	Time	Relinquished by	Received by	Date	Time
6/12/17	1730	Heather M. Woods	[signature]	6/12/17	1730
6/12/17	1817	[signature]	[signature]	06/13/17	0755

Remarks: Analyze for: pH, Eh, specific conductance, specific gravity, and cations/anions including flouride, calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate, TDS, cation/anion balance and bromide. Rates per Andy. Direct bill to Agua Moss.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Agua Moss Surface Waste Management Facility (NM1-9-0) Quarterly Monitoring Services – 3rd Quarter 2017

NW ¼, Section 2, Township 29 North, Range 12 West
San Juan County, New Mexico

October 10, 2017

Prepared for:
Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Prepared by:
Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Rule Engineering, LLC
Solutions to Regulations for Industry

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Agua Moss Surface Waste Management Facility Quarterly Monitoring Services – 3rd Quarter 2017

Prepared for:

Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Prepared by:

Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Heather M. Woods, P.G., Area Manager

Reviewed by:

Russell Knight, PG, Principal Hydrogeologist

October 10, 2017

1.0 Introduction

The Agua Moss Surface Waste Management Facility, hereinafter the "Facility", is located in the NW ¼, Section 2, Township 29 North, Range 12 West, in San Juan County, New Mexico. Rule Engineering LLC (Rule) personnel performed monitoring services for the 3rd Quarter of 2017 on September 1, 2017. Quarterly monitoring services are performed in accordance with the *Closure Plan: Permit NM1-9-0* dated June 1, 2015, which was approved by the New Mexico Oil Conservation Division (NMOCD) with amendments on July, 1, 2015.

A topographic map of the location reproduced from the United States Geological Society quadrangle map of the area is included as Figure 1 and an aerial site map is included as Figure 2.

2.0 Site Specific Background Concentrations

Background concentrations for constituents of concern have be determined for the Facility through previous work. Background concentrations for constituents of concern analyzed during 3rd Quarter of 2017 sampling include: 0.2 milligrams per kilogram (mg/kg) benzene, 0.01 mg/kg toluene, 0.01 mg/kg ethylbenzene, 0.01 mg/kg p,m-xylene, 0.01 mg/kg o-xylene, 0.01 mg/kg total BTEX[1], 0.2 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), 0.1 mg/kg TPH as diesel range organics (DRO) and 0.1 mg/kg TPH as determined by United States Environmental Protection Agency (USEPA) Method 8015B. Per 19.15.36.15 NMAC, laboratory results are compared to the higher of the laboratory practical quantitation limit (PQL) or background soil concentrations to determine whether a release has occurred.

3.0 Field Activities

On September 1, 2017, Rule Engineering, LLC (Rule) personnel conducted soil sampling of the two treatment cells that comprise the Facility. One soil sample location was selected at random from each of the three designated areas (Cell #1, Cell #2 – North, and Cell #2 – South), resulting in the collection of three total samples. The soil samples were collected from the vadose zone utilizing a backhoe. The approximately 1 to 2 feet of treatment zone soils were scraped away from the selected sample locations to avoid accidental contamination of the vadose zone below. Then a pothole was advanced 3 to 4 feet below the treatment zone depth where a sample was collected for laboratory analysis at all three locations. A sample locations are illustrated on the aerial site map included as Figure 2.

[1] Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

4.0 Soil Sampling

Rule collected one soil sample from the vadose zone 3 to 4 feet below the treatment zone at each of the potholes in the designated locations, for a total of three soil samples (Cell #1, Cell #2 – North, and Cell #2 – South).

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per USEPA Method 8021B and TPH per USEPA 8015M/D.

Laboratory analytical results are summarized in Table 1 and the analytical laboratory report is included in Appendix A.

5.0 Laboratory Analytical Results

Laboratory analytical results for samples Cell #1 Vadose, Cell #2 – North Vadose, and Cell #2 – South Vadose, collected on September 1, 2017, reported the BTEX and TPH constituent concentrations below the PQL and no qualifiers were included to indicate the presence of non-quantifiable BTEX and TPH constituent concentrations below the PQL.

No quality assurance/quality check (QA/QC) qualifiers were indicated on the laboratory analytical report and review of the QA/QC data supports the suitability of the results.

Laboratory analytical results are summarized in Table 1 and the analytical laboratory report is included in Appendix A.

6.0 Conclusions

The Agua Moss Surface Waste Management Facility is located in NW ¼, Section 2, Township 29 North, Range 12 West, in San Juan County, New Mexico. Quarterly monitoring services including the collection of three samples from the vadose zone were collected on September 1, 2017. One vadose zone sample was collected at 3 to 4 feet below the treatment zone depth from each of the three designated areas (Cell #1, Cell #2 – North, and Cell #2 – South) from randomly selected locations.

Laboratory analytical results for the vadose zone samples indicate that no leaching of treatment zone constituents of concern has been identified at this time at each sample location. Quarterly monitoring is ongoing and will conducted in the 4th Quarter 2017.

7.0 Closure and Limitations

This report has been prepared for the exclusive use of Agua Moss and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Agua Moss. All work has been performed in accordance with generally accepted

professional environmental consulting practices. No other warranty is expressed or implied.

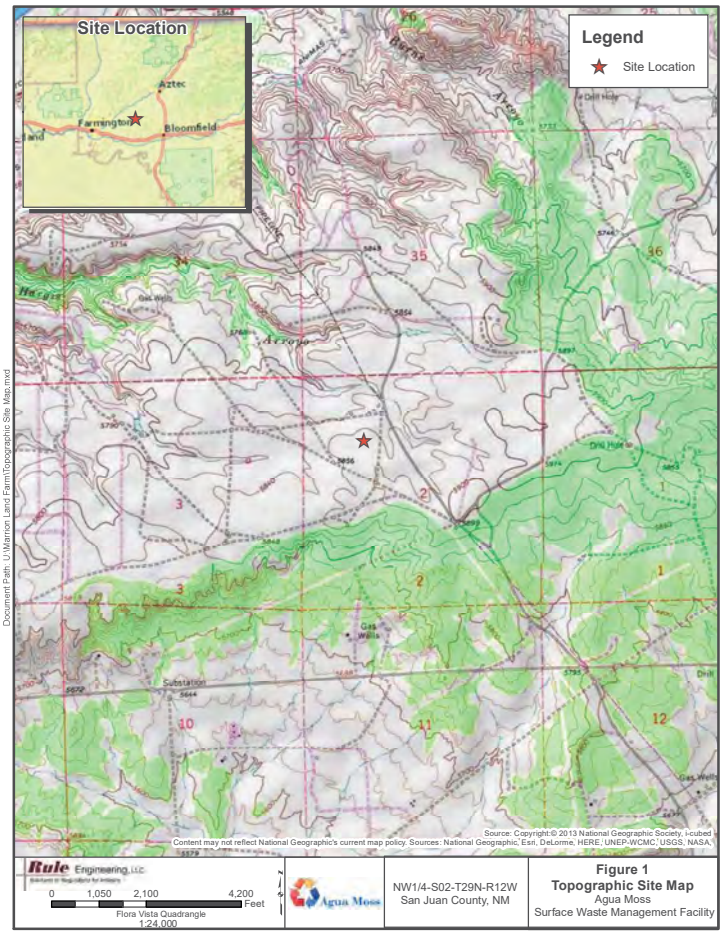
Table

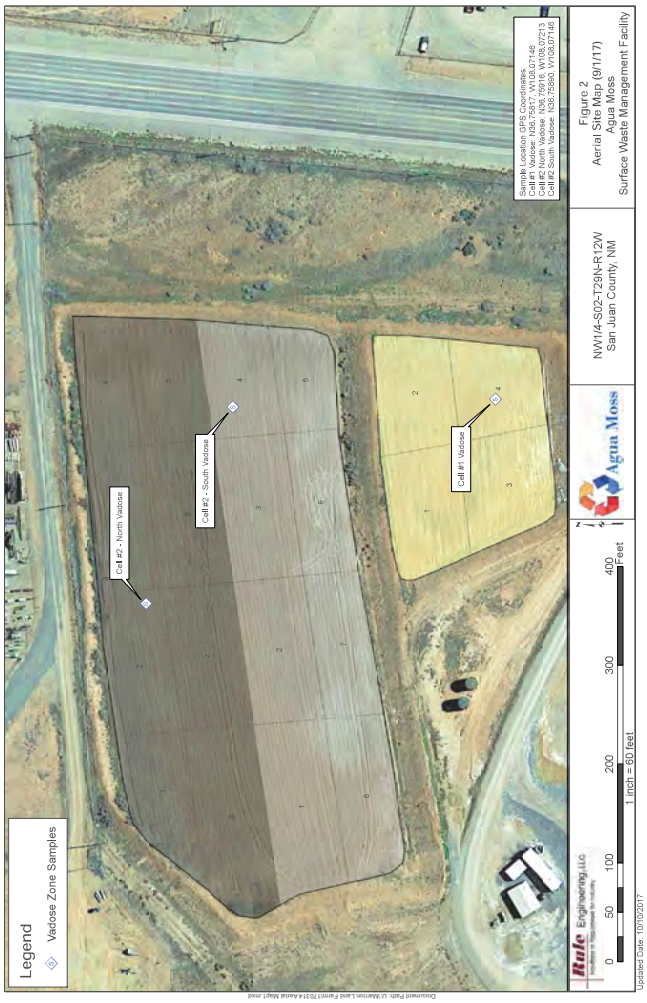
Table 1. Laboratory Analytical Results
Agua Moss Surface Waste Management Facility
Quarterly Monitoring - 3rd Quarter 2017
San Juan County, New Mexico

Sample Name	Date	Approximate Sample Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes** (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Total TPH (mg/kg)
Background Concentration*			0.01	0.01	0.01	0.01	0.01	0.2	0.1	NE	0.1
Cell #1 Vadose	9/1/2017	5 to 6	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.5	<48	ND
Cell #2 - North Vadose	9/1/2017	5 to 6	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.5	<47	ND
Cell #2 - South Vadose	9/1/2017	5 to 6	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<10	<50	ND

Notes:
ft bgs - feet below grade surface
mg/kg - milligrams per kilogram
BTEX - benzene, toluene, ethylbenzene, and xylenes
NE - not established
ND - not detected above laboratory reporting limits
*Site specific
**Includes both p,m-xylene and o-xylene

Figures





Appendix A

Analytical Laboratory Report

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 11, 2017

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Agua Moss Landfarm OrderNo.: 1709150

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/2/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1709150**
Date Reported: **9/11/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** Cell #1 Vadose
Project: Agua Moss Landfarm — **Collection Date:** 9/1/2017 9:40:00 AM
Lab ID: 1709150-001 — **Matrix:** SOIL — **Received Date:** 9/2/2017 12:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/7/2017 3:05:43 PM	33721
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/7/2017 3:05:43 PM	33721
Surr: DNOP	76.4	70-130		%Rec	1	9/7/2017 3:05:43 PM	33721
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2017 3:24:08 PM	33725
Surr: BFB	89.7	54-150		%Rec	1	9/7/2017 3:24:08 PM	33725
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	9/7/2017 3:24:08 PM	33725
Toluene	ND	0.047		mg/Kg	1	9/7/2017 3:24:08 PM	33725
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2017 3:24:08 PM	33725
Xylenes, Total	ND	0.093		mg/Kg	1	9/7/2017 3:24:08 PM	33725
Surr: 4-Bromofluorobenzene	97.6	66.6-132		%Rec	1	9/7/2017 3:24:08 PM	33725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1709150**
Date Reported: **9/11/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** Cell #2 North Vadose
Project: Agua Moss Landfarm — **Collection Date:** 9/1/2017 9:15:00 AM
Lab ID: 1709150-002 — **Matrix:** SOIL — **Received Date:** 9/2/2017 12:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/7/2017 3:27:55 PM	33721
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/7/2017 3:27:55 PM	33721
Surr: DNOP	84.5	70-130		%Rec	1	9/7/2017 3:27:55 PM	33721
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2017 4:35:12 PM	33725
Surr: BFB	89.7	54-150		%Rec	1	9/7/2017 4:35:12 PM	33725
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/7/2017 4:35:12 PM	33725
Toluene	ND	0.048		mg/Kg	1	9/7/2017 4:35:12 PM	33725
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2017 4:35:12 PM	33725
Xylenes, Total	ND	0.096		mg/Kg	1	9/7/2017 4:35:12 PM	33725
Surr: 4-Bromofluorobenzene	97.4	66.6-132		%Rec	1	9/7/2017 4:35:12 PM	33725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1709150**
Date Reported: **9/11/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** Cell #2 South Vadose
Project: Agua Moss Landfarm — **Collection Date:** 9/1/2017 9:30:00 AM
Lab ID: 1709150-003 — **Matrix:** SOIL — **Received Date:** 9/2/2017 12:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2017 3:50:11 PM	33721
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/7/2017 3:50:11 PM	33721
Surr: DNOP	83.6	70-130		%Rec	1	9/7/2017 3:50:11 PM	33721
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2017 5:45:59 PM	33725
Surr: BFB	89.0	54-150		%Rec	1	9/7/2017 5:45:59 PM	33725
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	9/7/2017 5:45:59 PM	33725
Toluene	ND	0.047		mg/Kg	1	9/7/2017 5:45:59 PM	33725
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2017 5:45:59 PM	33725
Xylenes, Total	ND	0.094		mg/Kg	1	9/7/2017 5:45:59 PM	33725
Surr: 4-Bromofluorobenzene	98.0	66.6-132		%Rec	1	9/7/2017 5:45:59 PM	33725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709150**
11-Sep-17

Client: Rule Engineering LLC
Project: Agua Moss Landfarm

Sample ID	LCS-33721	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	33721	RunNo:	45469					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1440795	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.0	73.2	114			
Surr: DNOP	4.8		5.000		96.9	70	130			

Sample ID	MB-33721	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	33721	RunNo:	45469					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1440796	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709150**
11-Sep-17

Client: Rule Engineering LLC
Project: Agua Moss Landfarm

Sample ID	LCS-33725	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442487	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	76.4	125			
Surr: BFB	1000		1000		99.6	54	150			

Sample ID	MB-33725	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442488	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.9	54	150			

Sample ID	1709150-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	Cell #2 North Vados	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442500	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	24.06	0	122	77.8	128			
Surr: BFB	980		962.5		101	54	150			

Sample ID	1709150-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	Cell #2 North Vados	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442501	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	24.90	0	112	77.8	128	4.93	20	
Surr: BFB	1000		996.0		101	54	150	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709150**
11-Sep-17

Client: Rule Engineering LLC
Project: Agua Moss Landfarm

Sample ID	1709150-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	Cell #1 Vadose	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442492	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9699	0	91.3	80.9	132	3.17	20	
Toluene	0.94	0.048	0.9699	0	96.5	79.8	136	2.66	20	
Ethylbenzene	0.97	0.048	0.9699	0	99.8	79.4	140	1.19	20	
Xylenes, Total	2.9	0.097	2.910	0	99.7	78.5	142	2.54	20	
Surr: 4-Bromofluorobenzene	0.97		0.9699		100	66.6	132	0	0	

Sample ID	LCS-33725	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442497	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.8	80	120			
Toluene	0.93	0.050	1.000	0	92.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.4	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	66.6	132			

Sample ID	MB-33725	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442498	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	66.6	132			

Sample ID	1709150-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	Cell #1 Vadose	Batch ID:	33725	RunNo:	45483					
Prep Date:	9/6/2017	Analysis Date:	9/7/2017	SeqNo:	1442499	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9588	0	95.3	80.9	132			
Toluene	0.96	0.048	0.9588	0	100	79.8	136			
Ethylbenzene	0.98	0.048	0.9588	0	102	79.4	140			
Xylenes, Total	3.0	0.096	2.876	0	103	78.5	142			
Surr: 4-Bromofluorobenzene	0.95		0.9588		98.8	66.6	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL Work Order Number: 1709150 RcptNo: 1

Received By: Andy Freeman 9/2/2017 12:50:00 PM
Completed By: Ashley Gallegos 9/5/2017 4:47:33 PM
Reviewed By: IMO 09/06/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

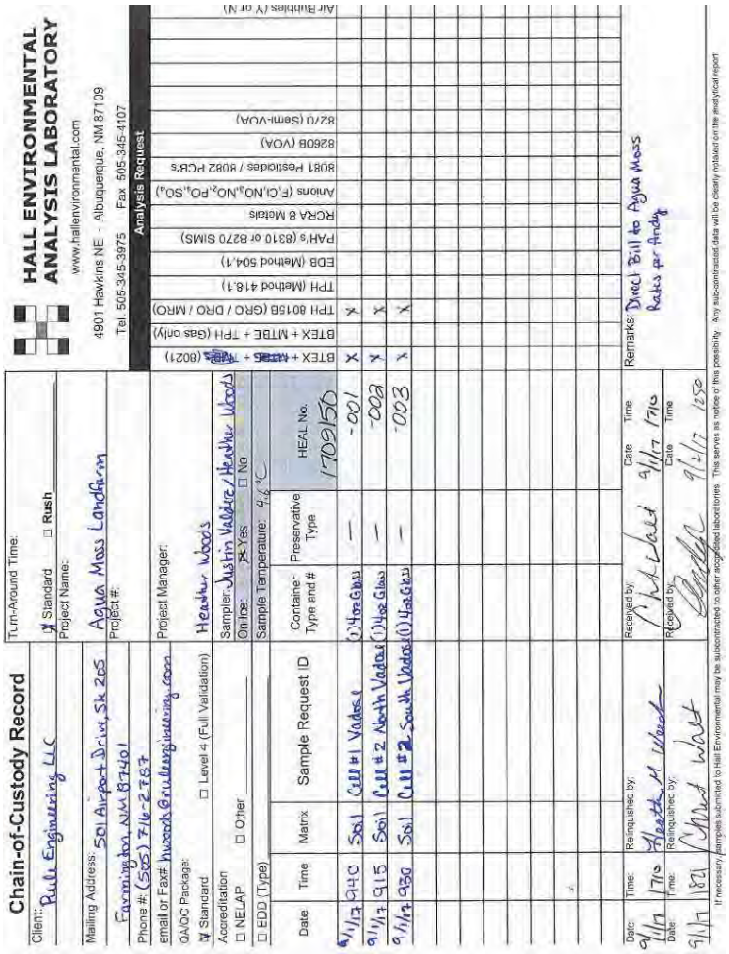
16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.6	Good	Yes			



HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE · Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Chain-of-Custody Record

Client: Rule Engineering LLC
Mailing Address: 501 Airport Drive, Ste 205 Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax#: lwoods@ruleengineering.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Agua Moss Landfarm
Project #:
Project Manager: Heather Woods
Sampler: Justin Valdez / Heather Woods
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.4°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
9/1/17	0940	Soil	Cell #1 Vadose	(1) 4oz Glass	—	1709150-001
9/1/17	0915	Soil	Cell #2 North Vadose	(1) 4oz Glass	—	-002
9/1/17	0930	Soil	Cell #2 South Vadose	(1) 4oz Glass	—	-003

Analysis Request: BTEX + MTBE + TMB's (8021) · BTEX + MTBE + TPH (Gas only) · TPH 8015B (GRO / DRO / MRO) · TPH (Method 418.1) · EDB (Method 504.1) · PAH's (8310 or 8270 SIMS) · RCRA 8 Metals · Anions (F,Cl,NO3,NO2,PO4,SO4) · 8081 Pesticides / 8082 PCB's · 8260B (VOA) · 8270 (Semi-VOA) · Air Bubbles (Y or N)

Remarks: Direct Bill to Agua Moss Rules per Andy

Relinquished by: Heather M. Woods 9/1/17 1715
Received by: [signature] 9/1/17 1715
Relinquished by: [signature] 9/1/17 1250

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any subcontracted data will be clearly notated on the analytical report.

Rule Engineering, LLC
Solutions to Regulations for Industry

November 2, 2017

Ms. Shacie Murray
Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Re: Sunco Disposal #1
Injection Water Quarterly Monitoring
3rd Quarter 2017

Dear Ms. Murray:

This report summarizes the sample collection, field screening, and laboratory analysis of the injection water at the Agua Moss LLC Sunco Disposal #1 well for the 3rd Quarter 2017. Injection water of the Class I Sunco Disposal #1 well is assessed on a quarterly basis in accordance with 20.6.5207(B) NMAC.

Field Activities
Rule Engineering, LLC (Rule) personnel collected one injection water sample (S-5) from the process line inside the pump building at the location on September 1, 2017. Injection water was discharged from the valve of the process line into a clean, 5-gallon bucket for field screening and transfer to laboratory sample containers.

Upon receipt of the laboratory results, it was discovered that the sample S-5 had not been analyzed for chlordane concentration and that benzene was reported in excess of the Toxicity Characteristic Concentrations per Table 1, 40 CFR 261.24(b). Therefore, an additional sample (S-5(R)) was collected for laboratory analysis on October 9, 2017.

Sample Collection and Field Screening Procedures
The injection water sample (S-5) was field screened for time sensitive parameters including pH, temperature, reduction potential (Eh), specific conductance, and total dissolved solids (TDS). Field screening was conducted utilizing a handheld water quality meter calibrated on the day of use with laboratory grade standards.

The sampled injection water was placed into laboratory supplied containers, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

Field Screening and Laboratory Analytical Results
The field screening and laboratory analytical results are summarized in the attached Table 1.

1055 Kipling Street, Lakewood, CO 80215 / 501 Airport Drive #205, Farmington, NM 87401
(303) 431-8500 : Fax: (303) 431-3750 : www.ruleengineering.com : (505) 325-1055

Benzene concentration for sample S-5 was reported as 1.1 mg/L, which exceeds the Toxicity Characteristic Concentration of 0.5 mg/L. The benzene concentration decreased to 0.36 mg/L in sample S-5(R).

QA/QC Considerations
Field measurements for time sensitive parameters including pH, temperature, reduction potential, and specific conductance more accurately reflect the characteristics of the injection water than laboratory results for these parameters due to their rapidly changing nature when removed from the stable environment of the process line. The hold time qualifier is indicated on the laboratory report for pH as the hold time of 15 minutes from collection was exceeded during transport prior to analysis. Similarly, the hold time was exceeded for reduction potential, phosphorus, and corrosivity by pH.

A dilution due to matrix qualifier is indicated on the laboratory report for total dissolved solids.

The recovery of a surrogate spike for chlordane was below the anticipated percentage range due to dilution or matrix interference.

Closure and Limitations
This report is prepared for the exclusive use of Agua Moss LLC and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Agua Moss LLC. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Rule Engineering appreciates the opportunity to provide services to Agua Moss LLC. If you have any questions, please contact me at (505) 325-1055.

Sincerely,
Rule Engineering, LLC

Heather M. Woods

Heather M. Woods, P.G.
Area Manager/Geologist

Attachments:
Table 1. Summary of Field Screening and Laboratory Analytical Results
Laboratory Analytical Reports (Hall: 1709101 and 1710519)

Table 1. Summary of Field Screening and Laboratory Analytical Results

Sample ID	S-5		S-5(R)		
Collection Date	9/1/2017		10/9/2017	Units	Toxicity Characteristic Concentrations
Analyte	Laboratory Results	Field Results	Laboratory Results		
pH	7.62 H	7.44	--	su	
Temperature	--	26.1	--	°C	
Reduction Potential	-330 H	-400	--	mV	
Specific Conductance	25,000	27,412	--	µmhos/cm	
Specific Gravity	1.012	--	--		
Total Dissolved Solids	16,300 D	17,803	--	mg/L	
Bicarbonate (As $CaCO_3$)	1,005	--	--	mg/L	
Carbonate (As $CaCO_3$)	<2.000	--	--	mg/L	
Flouride	<0.50	--	--	mg/L	
Chloride	8,800	--	--	mg/L	
Bromide	47	--	--	mg/L	
Phosphorus, Orthophosphate	<2.5 H	--	--	mg/L	
Sulfate	200	--	--	mg/L	
Nitrate + Nitrite (as N)	<10	--	--	mg/L	
Calcium	1,200	--	--	mg/L	
Magnesium	88	--	--	mg/L	
Potassium	260	--	--	mg/L	
Sodium	4,700	--	--	mg/L	
Reactive Cyanide	<0.125	--	--	mg/L	
Reactive Sulfide	0.885	--	--	mg/L	
Flashpoint	Did not flash at 170°F	--	--		
Corrosivity by pH	7.57 H	--	--	su	
Arsenic	<5.0	--	--	mg/L	5.0 mg/L
Barium	<500	--	--	mg/L	100.0 mg/L
Benzene	**1.1**	--	0.36	mg/L	0.5 mg/L
Cadmium	<1.0	--	--	mg/L	1.0 mg/L
Carbon tetrachloride	<0.50	--	--	mg/L	0.5 mg/L
Chlordane	--	--	<0.010 S	mg/L	0.03 mg/L
Chlorobenzene	<100	--	--	mg/L	100.0 mg/L
Chloroform	<6.0	--	--	mg/L	6.0 mg/L
Chromium	<5.0	--	--	mg/L	5.0 mg/L
Cresols, Total	<200	--	--	mg/L	200 mg/L
1,4-Dichlorobenzene	<7.5	--	--	mg/L	7.5 mg/L
1,2-Dichloroethane	<0.50	--	--	mg/L	0.5 mg/L
1,1-Dichloroethene	<0.70	--	--	mg/L	0.7 mg/L
2,4-Dinitrotoluene	<0.13	--	--	mg/L	0.13 mg/L
Hexachlorobenzene	<0.13	--	--	mg/L	0.13 mg/L
Hexachlorobutadiene	<0.50	--	--	mg/L	0.5 mg/L
Hexachloroethane	<3.0	--	--	mg/L	3.0 mg/L
Lead	<5.0	--	--	mg/L	5.0 mg/L
Mercury	<0.0010	--	--	mg/L	0.2 mg/L
Methyl ethyl ketone	<200	--	--	mg/L	200.0 mg/L
Nitrobenzene	<2.0	--	--	mg/L	2.0 mg/L
Pentachlorophenol	<100	--	--	mg/L	100.0 mg/L
Pyridine	<5.0	--	--	mg/L	5.0 mg/L
Selenium	<1.0	--	--	mg/L	1.0 mg/L
Silver	<5.0	--	--	mg/L	5.0 mg/L
Tetrachloroethylene	<0.70	--	--	mg/L	0.7 mg/L
Trichloroethylene	<0.50	--	--	mg/L	0.5 mg/L
2,4,5-Trichlorophenol	<400	--	--	mg/L	400.0 mg/L
2,4,6-Trichlorophenol	<2.0	--	--	mg/L	2.0 mg/L
Vinyl chloride	<0.20	--	--	mg/L	0.2 mg/L

Notes: su - standard units
°C - degrees Celcius
°F - degrees Farenheit
mV - millivolts
µmhos/cm - micromohs per centimeter
mg/L - milligrams per liter
H - Holding times for preparation or analysis exceeded
D - Sample diluted due to matrix
S - % Recovery outside of range due to dilution or matrix

1.00 Concentration exeeds the Toxicity Characteristic Concentration

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 03, 2017

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Sunco Disposal 1 OrderNo.: 1709101

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/2/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1709101**
Date Reported: **10/3/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** S-5 (9/1/17)
Project: Sunco Disposal 1 — **Collection Date:** 9/1/2017 9:20:00 AM
Lab ID: 1709101-001 — **Matrix:** AQUEOUS — **Received Date:** 9/2/2017 12:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200		mg/L	1	9/19/2017 11:13:41 AM	33765
3+4-Methylphenol	ND	200		mg/L	1	9/19/2017 11:13:41 AM	33765
Phenol	ND	200		mg/L	1	9/19/2017 11:13:41 AM	33765
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/19/2017 11:13:41 AM	33765
Hexachlorobenzene	ND	0.13		mg/L	1	9/19/2017 11:13:41 AM	33765
Hexachlorobutadiene	ND	0.50		mg/L	1	9/19/2017 11:13:41 AM	33765
Hexachloroethane	ND	3.0		mg/L	1	9/19/2017 11:13:41 AM	33765
Nitrobenzene	ND	2.0		mg/L	1	9/19/2017 11:13:41 AM	33765
Pentachlorophenol	ND	100		mg/L	1	9/19/2017 11:13:41 AM	33765
Pyridine	ND	5.0		mg/L	1	9/19/2017 11:13:41 AM	33765
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/19/2017 11:13:41 AM	33765
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/19/2017 11:13:41 AM	33765
Cresols, Total	ND	200		mg/L	1	9/19/2017 11:13:41 AM	33765
Surr: 2-Fluorophenol	42.1	15-124		%Rec	1	9/19/2017 11:13:41 AM	33765
Surr: Phenol-d5	33.8	15-118		%Rec	1	9/19/2017 11:13:41 AM	33765
Surr: 2,4,6-Tribromophenol	79.6	15-148		%Rec	1	9/19/2017 11:13:41 AM	33765
Surr: Nitrobenzene-d5	72.2	40.6-124		%Rec	1	9/19/2017 11:13:41 AM	33765
Surr: 2-Fluorobiphenyl	69.0	35.7-128		%Rec	1	9/19/2017 11:13:41 AM	33765
Surr: 4-Terphenyl-d14	64.3	18.8-115		%Rec	1	9/19/2017 11:13:41 AM	33765
SPECIFIC GRAVITY						Analyst: **JRR**	
Specific Gravity	1.012	0			1	9/7/2017 1:10:00 PM	R45481
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Fluoride	ND	0.50		mg/L	5	9/7/2017 5:14:31 PM	R45505
Chloride	8800	250		mg/L	500	9/21/2017 10:11:53 PM	A45821
Bromide	47	0.50		mg/L	5	9/7/2017 5:14:31 PM	R45505
Phosphorus, Orthophosphate (As P'	ND	2.5	H	mg/L	5	9/7/2017 5:14:31 PM	R45505
Sulfate	200	10		mg/L	20	9/7/2017 5:26:56 PM	R45505
Nitrate+Nitrite as N	ND	10		mg/L	50	9/22/2017 9:03:19 PM	R45820
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	25000	25		µmhos/cm	5	9/13/2017 3:10:46 PM	R45647
SM2320B: ALKALINITY						Analyst: **JRR**	
Bicarbonate (As CaCO3)	1005	20.00		mg/L CaCO3	1	9/7/2017 6:09:28 PM	R45511
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	9/7/2017 6:09:28 PM	R45511
Total Alkalinity (as CaCO3)	1005	20.00		mg/L CaCO3	1	9/7/2017 6:09:28 PM	R45511
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	16300	200	*D	mg/L	1	9/8/2017 3:03:00 PM	33751

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1709101**
Date Reported: **10/3/2017**

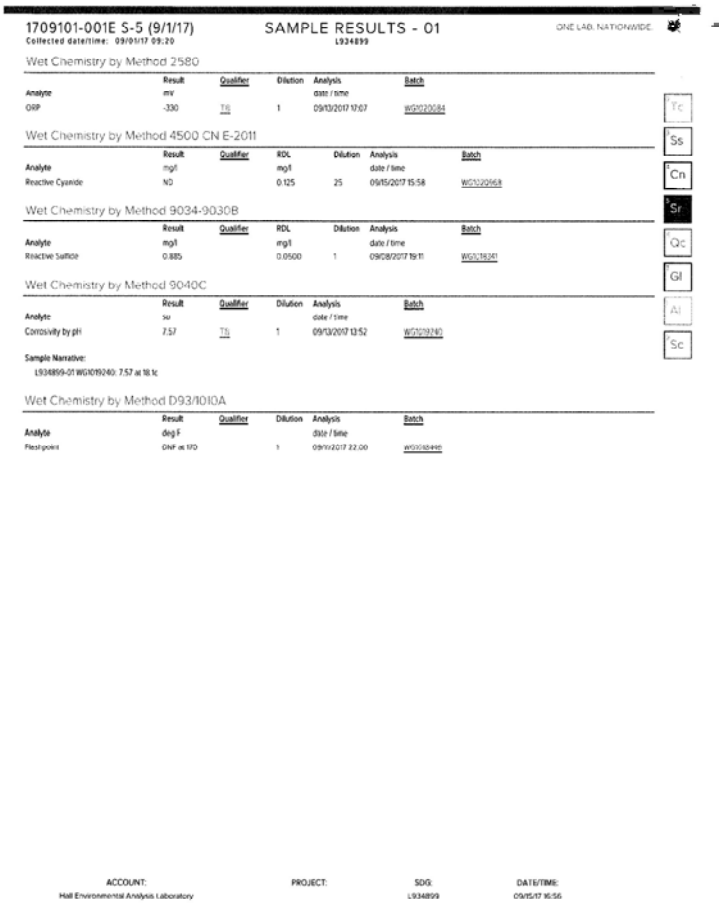
Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC — **Client Sample ID:** S-5 (9/1/17)
Project: Sunco Disposal 1 — **Collection Date:** 9/1/2017 9:20:00 AM
Lab ID: 1709101-001 — **Matrix:** AQUEOUS — **Received Date:** 9/2/2017 12:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.62		H	pH units	1	9/7/2017 6:09:28 PM	R45511
EPA METHOD 7470: MERCURY						Analyst: **DBK**	
Mercury	ND	0.0010		mg/L	5	9/15/2017 6:48:58 PM	33892
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **MED**	
Arsenic	ND	5.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Barium	ND	500		mg/L	5	9/28/2017 1:12:42 PM	34004
Cadmium	ND	1.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Calcium	1200	20		mg/L	20	9/24/2017 12:35:22 PM	34004
Chromium	ND	5.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Lead	ND	5.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Magnesium	88	5.0		mg/L	5	9/24/2017 12:38:18 PM	34004
Potassium	260	5.0		mg/L	5	9/24/2017 12:38:18 PM	34004
Selenium	ND	1.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Silver	ND	5.0		mg/L	1	9/28/2017 1:33:09 PM	34004
Sodium	4700	100		mg/L	100	9/22/2017 10:32:07 AM	34004
TCLP VOLATILES BY 8260B						Analyst: **RAA**	
Benzene	1.1	0.50		mg/L	200	9/7/2017 4:47:00 PM	T45499
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	200	9/7/2017 4:47:00 PM	T45499
2-Butanone	ND	200		mg/L	200	9/7/2017 4:47:00 PM	T45499
Carbon Tetrachloride	ND	0.50		mg/L	200	9/7/2017 4:47:00 PM	T45499
Chloroform	ND	6.0		mg/L	200	9/7/2017 4:47:00 PM	T45499
1,4-Dichlorobenzene	ND	7.5		mg/L	200	9/7/2017 4:47:00 PM	T45499
1,1-Dichloroethene	ND	0.70		mg/L	200	9/7/2017 4:47:00 PM	T45499
Hexachlorobutadiene	ND	0.50		mg/L	200	9/7/2017 4:47:00 PM	T45499
Tetrachloroethene (PCE)	ND	0.70		mg/L	200	9/7/2017 4:47:00 PM	T45499
Trichloroethene (TCE)	ND	0.50		mg/L	200	9/7/2017 4:47:00 PM	T45499
Vinyl chloride	ND	0.20		mg/L	200	9/7/2017 4:47:00 PM	T45499
Chlorobenzene	ND	100		mg/L	200	9/7/2017 4:47:00 PM	T45499
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	200	9/7/2017 4:47:00 PM	T45499
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	200	9/7/2017 4:47:00 PM	T45499
Surr: Dibromofluoromethane	102	70-130		%Rec	200	9/7/2017 4:47:00 PM	T45499
Surr: Toluene-d8	93.5	70-130		%Rec	200	9/7/2017 4:47:00 PM	T45499

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified



1709101-001E S-5 (9/1/17) — SAMPLE RESULTS - 01 — ONE LAB. NATIONWIDE.
Collected date/time: 09/01/17 09:20 — L934899

Wet Chemistry by Method 2580

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	mV				
ORP	-330	TS	1	09/13/2017 17:07	WG1020084

Wet Chemistry by Method 4500 CN E-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Cyanide	ND		0.125	25	09/15/2017 15:58	WG1020168

Wet Chemistry by Method 9034-9030B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Sulfide	0.885		0.0500	1	09/28/2017 19:11	WG1018241

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
Corrosivity by pH	7.57	TS	1	09/13/2017 13:52	WG1019240

Sample Narrative:
L934899-01 WG1019240: 7.57 at 18.1c

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	deg F				
Flashpoint	ONP at 170		1	09/19/2017 22:00	WG1018446

ACCOUNT: Hall Environmental Analysis Laboratory — PROJECT: — SDG: L934899 — DATE/TIME: 09/15/17 16:56

WG1018341

Wet Chemistry by Method 9034-9030B

QUALITY CONTROL SUMMARY

L934891-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3248007-1 09/08/17 19:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Reactive Sulfide	U		0.0065	0.0500

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

(LCS) R3248007-2 09/08/17 19:04 • (LCSD) R3248007-3 09/08/17 19:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Reactive Sulfide	0.500	0.520	0.503	104	101	85-115			3	20

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L934899

DATE/TIME: 09/15/17 16:56

WG1020084

Wet Chemistry by Method 2580

QUALITY CONTROL SUMMARY

L934899-01

ONE LAB. NATIONWIDE.

L935854-01 Original Sample (OS) • Duplicate (DUP)

(OS) L935854-01 09/13/17 17:07 • (DUP) WG1020084-3 09/13/17 17:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mV	mV		%		%
ORP	-102	-102	1	0.000	Tst	20

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

(LCS) WG1020084-1 09/13/17 17:07 • (LCSD) WG1020084-2 09/13/17 17:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mV	mV	mV	%	%	%			%	%
ORP	228	225	229	100	100	90.1-110			0.000	20

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L934899

DATE/TIME: 09/15/17 16:56

WG1019240

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

L934891-01

ONE LAB. NATIONWIDE.

L934899-01 Original Sample (OS) • Duplicate (DUP)

(OS) L934899-01 09/13/17 13:52 • (DUP) WG1019240-3 09/13/17 13:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
Corrosivity by pH	7.57	7.57	1	0.000	Tst	1

Sample Narrative:
OS: 7.57 at 18.1c
DUP: 7.57 at 18.1c

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

(LCS) WG1019240-1 09/13/17 13:52 • (LCSD) WG1019240-2 09/13/17 13:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
Corrosivity by pH	10.0	10.0	10.0	100	100	98.4-102			0.000	1

Sample Narrative:
LCS: 10.00 at 19.9c
LCSD: 10.01 at 20.0c

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L934899

DATE/TIME: 09/15/17 16:56

WG1020968

Wet Chemistry by Method 4500 CN E-2011

QUALITY CONTROL SUMMARY

L934899-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3249718-1 09/15/17 15:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Reactive Cyanide	U		0.0018	0.0050C

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

(LCS) R3249718-2 09/15/17 15:54 • (LCSD) R3249718-3 09/15/17 15:55

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Reactive Cyanide	0.100	0.0978	0.111	98	111	85-115			13	20

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L934899

DATE/TIME: 09/15/17 16:56

WG1018446

Wet Chemistry by Method D93/1010A

QUALITY CONTROL SUMMARY

L934899-01

ONE LAB. NATIONWIDE.

Tc | Ss | Cn | Sr | Qc | Gl | Al | Sc

L935017-03 Original Sample (OS) • Duplicate (DUP)

(OS) L935017-03 09/11/17 22:00 • (DUP) R3248435-3 09/11/17 22:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	deg F	deg F		%		%
Flashpoint	DNF at 170	DNF at 170	1	0.000		10

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

(LCS) R3248435-1 09/11/17 22:00 • (LCSD) R3248435-2 09/11/17 22:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	deg F	deg F	deg F	%	%	%			%	%
Flashpoint	82.0	80.7	80.9	98.0	99.0	96.0-104			0.000	10

ACCOUNT: Hall Environmental Analysis Laboratory | PROJECT: | SDG: L934899 | DATE/TIME: 09/15/17 16:56

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	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, 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
T8	Sample(s) received past/too close to holding time expiration.

ACCOUNT: Hall Environmental Analysis Laboratory | PROJECT: | SDG: L934899 | DATE/TIME: 09/15/17 16:56

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709101

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R45505** RunNo: **45505**
Prep Date: Analysis Date: **9/7/2017** SeqNo: **1442411** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.100								
Bromide	ND	0.100								
Phosphorus, Orthophosphate (As P	ND	0.500								
Sulfate	ND	0.500								

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R45505** RunNo: **45505**
Prep Date: Analysis Date: **9/7/2017** SeqNo: **1442412** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.545	0.100	0.5000	0	109	90	110			
Bromide	2.39	0.100	2.500	0	95.6	90	110			
Phosphorus, Orthophosphate (As P	4.64	0.500	5.000	0	92.8	90	110			
Sulfate	9.43	0.500	10.00	0	94.3	90	110			

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A45821** RunNo: **45821**
Prep Date: Analysis Date: **9/21/2017** SeqNo: **1456045** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A45821** RunNo: **45821**
Prep Date: Analysis Date: **9/21/2017** SeqNo: **1456046** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.5	90	110			

Sample ID **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R45820** RunNo: **45820**
Prep Date: Analysis Date: **9/22/2017** SeqNo: **1456612** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709101

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R45820** RunNo: **45820**
Prep Date: Analysis Date: **9/22/2017** SeqNo: **1456613** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID	**100ng lcs**	SampType:	**LCS**		TestCode:	**TCLP Volatiles by 8260B**				
Client ID:	**LCSW**	Batch ID:	**T45499**		RunNo:	**45499**				
Prep Date:		Analysis Date:	**9/7/2017**		SeqNo:	**1442202**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.021	0.010	0.02000	0	103	70	130			
1,1-Dichloroethene	0.022	0.010	0.02000	0	108	70	130			
Trichloroethene (TCE)	0.021	0.010	0.02000	0	103	70	130			
Chlorobenzene	0.020	0.010	0.02000	0	99.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.010		0.01000		101	70	130			
Surr: 4-Bromofluorobenzene	0.0097		0.01000		96.7	70	130			
Surr: Dibromofluoromethane	0.010		0.01000		99.8	70	130			
Surr: Toluene-d8	0.0094		0.01000		94.3	70	130			

Sample ID	**rb**	SampType:	**MBLK**		TestCode:	**TCLP Volatiles by 8260B**				
Client ID:	**PBW**	Batch ID:	**T45499**		RunNo:	**45499**				
Prep Date:		Analysis Date:	**9/7/2017**		SeqNo:	**1442203**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
1,2-Dichloroethane (EDC)	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Chlorobenzene	ND	100								
Surr: 1,2-Dichloroethane-d4	0.0099		0.01000		98.9	70	130			
Surr: 4-Bromofluorobenzene	0.0096		0.01000		95.6	70	130			
Surr: Dibromofluoromethane	0.010		0.01000		99.9	70	130			
Surr: Toluene-d8	0.0093		0.01000		93.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID	**1709101-001bms**	SampType:	**MS**		TestCode:	**EPA Method 8270C TCLP**				
Client ID:	**S-5 (9/1/17)**	Batch ID:	**33765**		RunNo:	**45731**				
Prep Date:	**9/8/2017**	Analysis Date:	**9/19/2017**		SeqNo:	**1452210**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.059	0.0010	0.1000	0	59.0	23.9	129			
3+4-Methylphenol	0.12	0.0010	0.2000	0	61.3	15	167			
2,4-Dinitrotoluene	0.052	0.0010	0.1000	0	51.6	15	147			
Hexachlorobenzene	0.061	0.0010	0.1000	0	61.0	41.4	136			
Hexachlorobutadiene	0.052	0.0010	0.1000	0	52.1	16.2	134			
Hexachloroethane	0.044	0.0010	0.1000	0	44.3	20.6	124			
Nitrobenzene	0.064	0.0010	0.1000	0	64.1	39.5	134			
Pentachlorophenol	0.043	0.0010	0.1000	0	42.7	15	137			
Pyridine	0.030	0.0010	0.1000	0	30.0	15	129			
2,4,5-Trichlorophenol	0.072	0.0010	0.1000	0	71.6	15	158			
2,4,6-Trichlorophenol	0.060	0.0010	0.1000	0	60.5	15	153			
Cresols, Total	0.18	0.0010	0.3000	0	60.6	10.6	179			
Surr: 2-Fluorophenol	0.083		0.2000		41.5	15	124			
Surr: Phenol-d5	0.069		0.2000		34.3	15	118			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		61.9	15	148			
Surr: Nitrobenzene-d5	0.071		0.1000		71.3	40.6	124			
Surr: 2-Fluorobiphenyl	0.061		0.1000		61.3	35.7	128			
Surr: 4-Terphenyl-d14	0.056		0.1000		56.1	18.8	115			

Sample ID	**1709101-001bmsd**	SampType:	**MSD**		TestCode:	**EPA Method 8270C TCLP**				
Client ID:	**S-5 (9/1/17)**	Batch ID:	**33765**		RunNo:	**45731**				
Prep Date:	**9/8/2017**	Analysis Date:	**9/19/2017**		SeqNo:	**1452211**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.063	0.0010	0.1000	0	62.6	23.9	129	5.95	20	
3+4-Methylphenol	0.13	0.0010	0.2000	0	66.4	15	167	7.89	20	
2,4-Dinitrotoluene	0.058	0.0010	0.1000	0	58.5	15	147	12.5	23.2	
Hexachlorobenzene	0.070	0.0010	0.1000	0	70.1	41.4	136	13.8	20	
Hexachlorobutadiene	0.061	0.0010	0.1000	0	60.8	16.2	134	15.4	20	
Hexachloroethane	0.049	0.0010	0.1000	0	49.2	20.6	124	10.4	31.3	
Nitrobenzene	0.076	0.0010	0.1000	0	75.9	39.5	134	16.9	26.6	
Pentachlorophenol	0.042	0.0010	0.1000	0	42.3	15	137	1.13	27.9	
Pyridine	0.010	0.0010	0.1000	0	10.2	15	129	98.3	47.4	RS
2,4,5-Trichlorophenol	0.080	0.0010	0.1000	0	80.3	15	158	11.4	36.9	
2,4,6-Trichlorophenol	0.071	0.0010	0.1000	0	71.3	15	153	16.4	37.2	
Cresols, Total	0.20	0.0010	0.3000	0	65.1	10.6	179	7.27	27.4	
Surr: 2-Fluorophenol	0.091		0.2000		45.4	15	124	0	0	
Surr: Phenol-d5	0.072		0.2000		36.0	15	118	0	0	
Surr: 2,4,6-Tribromophenol	0.14		0.2000		68.2	15	148	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID	**1709101-001bmsd**	SampType:	**MSD**		TestCode:	**EPA Method 8270C TCLP**				
Client ID:	**S-5 (9/1/17)**	Batch ID:	**33765**		RunNo:	**45731**				
Prep Date:	**9/8/2017**	Analysis Date:	**9/19/2017**		SeqNo:	**1452211**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.081		0.1000		81.4	40.6	124	0	0	
Surr: 2-Fluorobiphenyl	0.073		0.1000		72.6	35.7	128	0	0	
Surr: 4-Terphenyl-d14	0.064		0.1000		64.2	18.8	115	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID	**MB-33892**	SampType:	**MBLK**		TestCode:	**EPA Method 7470: Mercury**				
Client ID:	**PBW**	Batch ID:	**33892**		RunNo:	**45662**				
Prep Date:	**9/15/2017**	Analysis Date:	**9/15/2017**		SeqNo:	**1449239**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-33892**	SampType:	**LCS**		TestCode:	**EPA Method 7470: Mercury**				
Client ID:	**LCSW**	Batch ID:	**33892**		RunNo:	**45662**				
Prep Date:	**9/15/2017**	Analysis Date:	**9/15/2017**		SeqNo:	**1449240**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.1	80	120			

Sample ID	**1709101-001DMS**	SampType:	**MS**		TestCode:	**EPA Method 7470: Mercury**				
Client ID:	**S-5 (9/1/17)**	Batch ID:	**33892**		RunNo:	**45662**				
Prep Date:	**9/15/2017**	Analysis Date:	**9/15/2017**		SeqNo:	**1449249**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0039	0.0010	0.005000	0.0001995	73.2	75	125			S

Sample ID	**1709101-001DMSD**	SampType:	**MSD**		TestCode:	**EPA Method 7470: Mercury**				
Client ID:	**S-5 (9/1/17)**	Batch ID:	**33892**		RunNo:	**45662**				
Prep Date:	**9/15/2017**	Analysis Date:	**9/15/2017**		SeqNo:	**1449250**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0039	0.0010	0.005000	0.0001995	74.0	75	125	1.05	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB-34004** SampType: **MBLK** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **PBW** Batch ID: **34004** RunNo: **45798**
Prep Date: **9/21/2017** Analysis Date: **9/22/2017** SeqNo: **1455670** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Selenium	ND	0.050								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID **LCS-34004** SampType: **LCS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **LCSW** Batch ID: **34004** RunNo: **45798**
Prep Date: **9/21/2017** Analysis Date: **9/22/2017** SeqNo: **1455671** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	0.020	0.5000	0	104	80	120			
Barium	0.49	0.020	0.5000	0	98.4	80	120			
Cadmium	0.48	0.0020	0.5000	0	95.9	80	120			
Calcium	50	1.0	50.00	0	101	80	120			
Chromium	0.49	0.0060	0.5000	0	98.0	80	120			
Lead	0.48	0.0050	0.5000	0	95.1	80	120			
Magnesium	50	1.0	50.00	0	99.2	80	120			
Potassium	48	1.0	50.00	0	95.4	80	120			
Selenium	0.47	0.050	0.5000	0	94.6	80	120			
Silver	0.097	0.0050	0.1000	0	97.5	80	120			
Sodium	49	1.0	50.00	0	97.2	80	120			

Sample ID **1709101-001DMS** SampType: **MS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **S-5 (9/1/17)** Batch ID: **34004** RunNo: **45960**
Prep Date: **9/21/2017** Analysis Date: **9/28/2017** SeqNo: **1461674** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.62	0.020	0.5000	0.1127	102	75	125			
Cadmium	0.50	0.0020	0.5000	0	99.9	75	125			
Chromium	0.49	0.0060	0.5000	0.01869	93.8	75	125			
Lead	0.45	0.0050	0.5000	0	89.8	75	125			
Selenium	0.23	0.050	0.5000	0	46.8	75	125			S
Silver	0.11	0.0050	0.1000	0	110	75	125			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1709101-001DMSD** SampType: **MSD** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **S-5 (9/1/17)** Batch ID: **34004** RunNo: **45960**
Prep Date: **9/21/2017** Analysis Date: **9/28/2017** SeqNo: **1461678** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.59	0.020	0.5000	0	118	75	125	4.96	20	
Cadmium	0.46	0.0020	0.5000	0	91.2	75	125	9.07	20	
Chromium	0.45	0.0060	0.5000	0.01869	85.6	75	125	8.78	20	
Lead	0.41	0.0050	0.5000	0	82.5	75	125	8.50	20	
Selenium	0.20	0.050	0.5000	0	40.4	75	125	14.7	20	S
Silver	0.10	0.0050	0.1000	0	101	75	125	8.61	20	

Sample ID **1709101-001DPS** SampType: **PS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **S-5 (9/1/17)** Batch ID: **34004** RunNo: **45960**
Prep Date: Analysis Date: **9/28/2017** SeqNo: **1461679** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.41	0.050	0.5000	0	82.8	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **mb-1** SampType: **MBLK** TestCode: **SM2320B: Alkalinity**
Client ID: **PBW** Batch ID: **R45511** RunNo: **45511**
Prep Date: Analysis Date: **9/7/2017** SeqNo: **1442538** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID **lcs-1** SampType: **LCS** TestCode: **SM2320B: Alkalinity**
Client ID: **LCSW** Batch ID: **R45511** RunNo: **45511**
Prep Date: Analysis Date: **9/7/2017** SeqNo: **1442539** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	79.12	20.00	80.00	0	98.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**

03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1709101-001CDUP** SampType: **DUP** TestCode: **Specific Gravity**
Client ID: **S-5 (9/1/17)** Batch ID: **R45481** RunNo: **45481**
Prep Date: Analysis Date: **9/7/2017** SeqNo: **1441598** Units:

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Specific Gravity	1.008	0						0.337	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709101**
03-Oct-17

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB-33751**	SampType: **MBLK**			TestCode: **SM2540C MOD: Total Dissolved Solids**						
Client ID: **PBW**	Batch ID: **33751**			RunNo: **45510**						
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**			SeqNo: **1442510**	Units: **mg/L**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-33751**	SampType: **LCS**			TestCode: **SM2540C MOD: Total Dissolved Solids**						
Client ID: **LCSW**	Batch ID: **33751**			RunNo: **45510**						
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**			SeqNo: **1442511**	Units: **mg/L**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL | Work Order Number: 1709101 | RcptNo: 1

Received By: Andy Freeman 9/2/2017 12:50:00 PM
Completed By: Ashley Gallegos 9/6/2017 1:04:14 PM
Reviewed By: ENH 9/6/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH: 1, 2 (<2 or >12 unless noted)
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? no
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SRC

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

Chain-of-Custody Record

Client: Rule Engineering LLC
Mailing Address: 501 Airport Dr, Ste 205, Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax: heards@rulemanagement.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☐ Standard ☐ Rush
Project Name: Sunco Disposal #1
Project #:
Project Manager: Heather Woods
Sampler: Heather Woods
On Ice: ☑ Yes ☐ No
Sample Temperature: 4.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
9/1/17	0920	Water	S-5 (9/1/17)	(1) 500 Plastic	HNO3	-001
				(1) 250mL Plastic	NaOH + Asbest	-001
				(1) 500mL Plastic	NaOH	-001
				(2) 250mL Plastic	Non	-001
				(1) 125 mL Plastic	H2SO4	-001
				(1) 125mL Plastic	HNO3 Filtered	-001
				(3) 1L Amber Glass	Non	-001
				(3) 40mL VOA	HCl	-001

Relinquished by: Heather Woods Date: 9/1/17 Time: 1710
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: 9/2/17 Time: 1250

Analysis Request: BTEX + MTBE + TMB's (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F,Cl,NO3,NO2,PO4,SO4) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | Air Bubbles (Y or N)

Remarks: Direct Bill to Agua Moss - Rates per Andy
See Attached Pages (2)

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any subcontractor data will be clearly notated on the analytical report.

Sunco Disposal #1
Quarterly Laboratory Analytical List
Page 1

Characteristic of toxicity using the Toxicity Characteristic Leaching Procedure, EPA SW-846 Test Method 1311 (see Table 1, 40 CFR 261.24(b)).

QUARTERLY MONITORING LIST

EPA HW No.	Contaminant	SW-846 Methods	Regulatory Level (mg/L)
D004	Arsenic	1311	5.0
D005	Barium	1311	100.0
D018	Benzene	8021B	0.5
D006	Cadmium	1311	1.0
D019	Carbon tetrachloride	8021B 8260B	0.5
D020	Chlordane	8081A	0.03
D021	Chlorobenzene	8021B 8260B	100.0
D022	Chloroform	8021B 8260B	6.0
D007	Chromium	1311	5.0
D023	o-Cresol	8270D	200.0
D024	m-Cresol	8270D	200.0
D025	p-Cresol	8270D	200.0
D026	Cresol	8270D	200.0
D027	1,4-Dichlorobenzene	8021B 8121 8260B 8270D	7.5
D028	1,2-Dichloroethane	8021B 8260B	0.5
D029	1,1-Dichloroethylene	8021B 8260B	0.7
D030	2,4-Dinitrotoluene	8091 8270D	0.13
D032	Hexachlorobenzene	8121	0.13
D033	Hexachlorobutadiene	8021B 8121 8260B	0.5
D034	Hexachloroethane	8121	3.0
D008	Lead	1311	5.0
D009	Mercury	7470A 7471B	0.2
D035	Methyl ethyl ketone	8015B 8260B	200.0

D036	Nitrobenzene	8091 8270D	2.0
D037	Pentrachlorophenol	8041	100.0
D038	Pyridine	8260B 8270D	5.0

D010	Selenium	1311	1.0
D011	Silver	1311	5.0
D039	Tetrachloroethylene	8260D	0.7
D040	Trichloroethylene	8021B 8260B	0.5
D041	2,4,5-Trichlorophenol	8270D	400.0
D042	2,4,6-Trichlorophenol	8041A 8270D	2.0
D043	Vinyl chloride	8021B 8260B	0.2

If o-, m-, and p-cresol concentrations cannot be differentiated, then the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.
If the quantitation limit is greater than the regulatory level, then the quantitation limit becomes the regulatory level.
If metals (dissolved), the EPA 1311 TCLP Laboratory Method is required with the exception of Mercury (total).

ADDTIONALLY:

RCI, specific conductance, specific gravity, ORP, and general water quality parameters (general chemistry/cations and anions, including: fluoride, calcium, potassium, magnesium, sodium bicarbonate, carbonate, chloride, sulfate, total dissolved solids, cation/anion balance, pH, and bromide) using the methods specified at 40 CFR 136.3.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX:

RE: Agua Moss Sunco Disposal #1 OrderNo.: 1710519

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/10/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1710519
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: S-5 (R)(10/9/17)
Project: Agua Moss Sunco Disposal #1
Collection Date: 10/9/2017 12:33:00 PM
Lab ID: 1710519-001 **Matrix:** AQUEOUS **Received Date:** 10/10/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8081: PESTICIDES							Analyst: **MAB**
Chlordane	ND	0.010		mg/L	1	10/13/2017 12:47:29 PM	34376
Surr: Decachlorobiphenyl	40.4	57.8-124	S	%Rec	1	10/13/2017 12:47:29 PM	34376
Surr: Tetrachloro-m-xylene	49.5	43-114		%Rec	1	10/13/2017 12:47:29 PM	34376
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	0.36	0.020		mg/L	20	10/11/2017 3:05:58 PM	B46259
Toluene	1.8	0.020		mg/L	20	10/11/2017 3:05:58 PM	B46259
Ethylbenzene	0.1	0.020		mg/L	20	10/11/2017 3:05:58 PM	B46259
Xylenes, Total	1.1	0.040		mg/L	20	10/11/2017 3:05:58 PM	B46259
Surr: 4-Bromofluorobenzene	98.1	72.5-140		%Rec	20	10/11/2017 3:05:58 PM	B46259

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710519
02-Nov-17

Client: Rule Engineering LLC
Project: Agua Moss Sunco Disposal #1

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: B46259	RunNo: 46259							
Prep Date:	Analysis Date: 10/11/2017	SeqNo: 1474047	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.3	72.5	140			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: B46259	RunNo: 46259							
Prep Date:	Analysis Date: 10/11/2017	SeqNo: 1474048	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.9	71.7	126			
Toluene	19	1.0	20.00	0	92.7	73.3	119			
Ethylbenzene	19	1.0	20.00	0	95.1	80	120			
Xylenes, Total	57	2.0	60.00	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		99.5	72.5	140			

Sample ID: 1710519-001AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles							
Client ID: S-5 (R)(10/9/17)	Batch ID: B46259	RunNo: 46259							
Prep Date:	Analysis Date: 10/11/2017	SeqNo: 1474050	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	760	20	400.0	363.4	99.0	62.3	126			
Toluene	2000	20	400.0	1573	68.4	48.8	134			
Ethylbenzene	500	20	400.0	99.96	99.3	44.4	142			
Xylenes, Total	2300	40	1200	1076	104	55.7	129			
Surr: 4-Bromofluorobenzene	400		400.0		99.1	72.5	140			

Sample ID: 1710519-001AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles							
Client ID: S-5 (R)(10/9/17)	Batch ID: B46259	RunNo: 46259							
Prep Date:	Analysis Date: 10/11/2017	SeqNo: 1474051	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	740	20	400.0	363.4	94.7	62.3	126	2.31	20	
Toluene	1900	20	400.0	1573	90.9	48.8	134	1.55	20	
Ethylbenzene	490	20	400.0	99.96	96.7	44.4	142	2.11	20	
Xylenes, Total	2300	40	1200	1076	97.9	55.7	129	3.00	20	
Surr: 4-Bromofluorobenzene	390		400.0		97.5	72.5	140	0	0	

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710519
02-Nov-17

Client: Rule Engineering LLC
Project: Agua Moss Sunco Disposal #1

Sample ID: MB-34376	SampType: MBLK	TestCode: EPA Method 8081: PESTICIDES						
Client ID: PBW	Batch ID: 34376	RunNo: 46352						
Prep Date: 10/12/2017	Analysis Date: 10/13/2017	SeqNo: 1476481	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlordane	ND	1.0								
Surr: Decachlorobiphenyl	1.8		2.500		62.3	57.8	124			
Surr: Tetrachloro-m-xylene	1.5		2.500		60.2	43	114			

Sample ID: LCS-CHLORDANE-3	SampType: LCS-Chlord	TestCode: EPA Method 8081: PESTICIDES						
Client ID: BatchQC	Batch ID: 34376	RunNo: 46352						
Prep Date: 10/12/2017	Analysis Date: 10/13/2017	SeqNo: 1476482	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlordane	4.8	1.0	10.00	0	47.6	37.3	118			
Surr: Decachlorobiphenyl	1.3									
Surr: Tetrachloro-m-xylene	1.0									

Sample ID: LCSD-CHLORDANE-	SampType: LCS-CHLOR	TestCode: EPA Method 8081: PESTICIDES						
Client ID: BatchQC	Batch ID: 34376	RunNo: 46352						
Prep Date: 10/12/2017	Analysis Date: 10/13/2017	SeqNo: 1476507	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlordane	6.5	1.0	10.00	0	65.0	37.3	118	30.9	0	
Surr: Decachlorobiphenyl	1.8							0	0	
Surr: Tetrachloro-m-xylene	1.3							0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Chain-of-Custody Record

Client: Rule Engineering, LLC
Mailing Address: 501 Airport Dr, Ste 205, Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax#: hwoods@ruleengineering.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Agua Moss @ Sunco Disposal #1
Project #:
Project Manager: Heather Woods
Sampler: Heather Woods
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.5-CF-1.0=1.5

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8081 Chlordane	Air Bubbles (Y or N)
10/9/17	1233	Water	S-5(R)(10/9/17)	1 Amber	HCL	1710519-001	X	X										X	
				3 VOAs	None	-002													

Remarks: Direct Bill to Agua Moss Costs per Andy

Date: 10/9/17 Time: 1821 Relinquished by: Heather M. Woods
Received by: Via Courier
Date: 10/9/17 Time: 1944 Relinquished by:
Received by: Via Courier

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Rule Engineering, LLC
Solutions to Regulations for Industry

January 18, 2018

Ms. Shacie Murray
Agua Moss LLC
P.O. Box 600
Farmington, New Mexico 87499

Re: Sunco Disposal #1
Injection Water Quarterly Monitoring
4th Quarter 2017

Dear Ms. Murray:

This report summarizes the sample collection, field screening, and laboratory analysis of the injection water at the Agua Moss LLC Sunco Disposal #1 well for the 4th Quarter 2017. Injection water of the Class I Sunco Disposal #1 well is assessed on a quarterly basis in accordance with 20.6.5207(B) NMAC.

Field Activities
Rule Engineering, LLC (Rule) personnel collected one injection water sample (S-6) from the process line inside the pump building at the location on December 7, 2017. Injection water was discharged directly from the valve of the process line into laboratory sample containers and a clean container for field screening.

Sample Collection and Field Screening Procedures
The injection water sample (S-6) was field screened for time sensitive parameters including pH, temperature, reduction potential (Eh), specific conductance, and total dissolved solids (TDS). Field screening was conducted utilizing a handheld water quality meter calibrated on the day of use with laboratory grade standards.

The sampled injection water was placed into laboratory supplied containers, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

Field Screening and Laboratory Analytical Results
The field screening and laboratory analytical results are summarized in the attached Table 1.

Benzene concentration for sample S-6 was reported as 1.1 mg/L, which exceeds the Toxicity Characteristic Concentration of 0.5 mg/L. However, only RCRA Subtitle C exempt oilfield waste is accepted at the facility and elevated concentrations of benzene can be expected.

QA/QC Considerations
Field measurements for time sensitive parameters including pH, temperature, reduction potential, and specific conductance more accurately reflect the characteristics of the injection water than laboratory results for these parameters due to their rapidly changing nature when removed from the stable environment of the process line. The hold time qualifier is indicated on the laboratory report for pH as the hold time of 15 minutes from collection was exceeded during transport prior to analysis. Similarly, the hold time was exceeded for reduction potential and corrosivity by pH.

A dilution due to matrix qualifier is indicated on the laboratory report for total dissolved solids.

The recovery of a surrogate spike for chlordane was below the anticipated percentage range due to dilution or matrix interference and above the anticipated percentage range due to dilution or matrix interference for reactive cyanide.

Closure and Limitations
This report is prepared for the exclusive use of Agua Moss LLC and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Agua Moss LLC. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Rule Engineering appreciates the opportunity to provide services to Agua Moss LLC. If you have any questions, please contact me at (505) 325-1055.

Sincerely,
Rule Engineering, LLC

Heather M. Woods

Heather M. Woods, P.G.
Area Manager/Geologist

Attachments:
Table 1. Summary of Field Screening and Laboratory Analytical Results
Laboratory Analytical Reports (Hall: 1712479)

Table 1. Summary of Field Screening and Laboratory Analytical Results

Sample ID	S-6			
Collection Date	12/7/2017		Units	Toxicity Characteristic Concentrations
Analyte	Laboratory Results	Field Results		
pH	7.06 H	7.07	su	
Temperature	--	10.7	°C	
Reduction Potential	228 H	-224.6	mV	
Specific Conductance	73,000	52,047	µmhos/cm	
Specific Gravity	1.025	--		
Total Dissolved Solids	39,200 D	33,832	mg/L	
Bicarbonate (As $CaCO_3$)	740.3	--	mg/L	
Carbonate (As $CaCO_3$)	<2.000	--	mg/L	
Fluoride	<2.0	--	mg/L	
Chloride	25,000	--	mg/L	
Bromide	37	--	mg/L	
Phosphorus, Orthophosphate	<2.5	--	mg/L	
Sulfate	170	--	mg/L	
Nitrate + Nitrite (as N)	<20	--	mg/L	
Calcium	5,100	--	mg/L	
Magnesium	290	--	mg/L	
Potassium	1,000	--	mg/L	
Sodium	6,500	--	mg/L	
Reactive Cyanide	<0.00500 S	--	mg/L	
Reactive Sulfide	<0.0500	--	mg/L	
Flashpoint	Did not flash at 170°F	--		
Corrosivity by pH	6.89 H	--	su	
Arsenic	0.16	--	mg/L	5.0 mg/L
Barium	19	--	mg/L	100.0 mg/L
Benzene	1.1	--	mg/L	0.5 mg/L
Cadmium	<0.0020	--	mg/L	1.0 mg/L
Carbon tetrachloride	<0.50	--	mg/L	0.5 mg/L
Chlordane	<0.15 S	--	mg/L	0.03 mg/L
Chlorobenzene	<100	--	mg/L	100.0 mg/L
Chloroform	<6.0	--	mg/L	6.0 mg/L
Chromium	0.087	--	mg/L	5.0 mg/L
Cresols, Total	<200	--	mg/L	200 mg/L
1,4-Dichlorobenzene	<7.5	--	mg/L	7.5 mg/L
1,2-Dichloroethane	<0.50	--	mg/L	0.5 mg/L
1,1-Dichloroethene	<0.70	--	mg/L	0.7 mg/L
2,4-Dinitrotoluene	<0.13	--	mg/L	0.13 mg/L
Hexachlorobenzene	<0.13	--	mg/L	0.13 mg/L
Hexachlorobutadiene	<0.50	--	mg/L	0.5 mg/L
Hexachloroethane	<3.0	--	mg/L	3.0 mg/L
Lead	0.038	--	mg/L	5.0 mg/L
Mercury	0.0016	--	mg/L	0.2 mg/L
Methyl ethyl ketone	<200	--	mg/L	200.0 mg/L
Nitrobenzene	<2.0	--	mg/L	2.0 mg/L
Pentachlorophenol	<100	--	mg/L	100.0 mg/L
Pyridine	<5.0	--	mg/L	5.0 mg/L
Selenium	0.24	--	mg/L	1.0 mg/L
Silver	0.035	--	mg/L	5.0 mg/L
Tetrachloroethylene	<0.70	--	mg/L	0.7 mg/L
Trichloroethylene	<0.50	--	mg/L	0.5 mg/L
2,4,5-Trichlorophenol	<400	--	mg/L	400.0 mg/L
2,4,6-Trichlorophenol	<2.0	--	mg/L	2.0 mg/L
Vinyl chloride	<0.20	--	mg/L	0.2 mg/L

Notes: su - standard units
°C - degrees Celcius
°F - degrees Farenheit
mV - millivolts
µmhos/cm - micromohs per centimeter
mg/L - milligrams per liter
H - Holding times for preparation or analysis exceeded
D - Sample diluted due to matrix
S - % Recovery outside of range due to dilution or matix

1.00 Concentration exeeds the Toxicity Characteristic Conce

Rule Engineering, LLC
Solutions to Regulations for Industry

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Heather Woods
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX

RE: Sunco Disposal 1 OrderNo.: 1712479

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1712479**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC **Client Sample ID:** S-6 (12/7/17
Project: Sunco Disposal 1 **Collection Date:** 12/7/2017 10:36:00 AM
Lab ID: 1712479-001 **Matrix:** AQUEOUS **Received Date:** 12/8/2017 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8081: PESTICIDES TCLP						Analyst: **MAB**	
Chlordane	ND	0.15		mg/L	1	12/15/2017 2:13:50 PM	35478
Surr: Decachlorobiphenyl	118	57.8-124		%Rec	1	12/15/2017 2:13:50 PM	35478
Surr: Tetrachloro-m-xylene	120	43-114	S	%Rec	1	12/15/2017 2:13:50 PM	35478
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200		mg/L	1	12/15/2017 2:58:12 PM	35503
3+4-Methylphenol	ND	200		mg/L	1	12/15/2017 2:58:12 PM	35503
Phenol	ND	200		mg/L	1	12/15/2017 2:58:12 PM	35503
2,4-Dinitrotoluene	ND	0.13		mg/L	1	12/15/2017 2:58:12 PM	35503
Hexachlorobenzene	ND	0.13		mg/L	1	12/15/2017 2:58:12 PM	35503
Hexachlorobutadiene	ND	0.50		mg/L	1	12/15/2017 2:58:12 PM	35503
Hexachloroethane	ND	3.0		mg/L	1	12/15/2017 2:58:12 PM	35503
Nitrobenzene	ND	2.0		mg/L	1	12/15/2017 2:58:12 PM	35503
Pentachlorophenol	ND	100		mg/L	1	12/15/2017 2:58:12 PM	35503
Pyridine	ND	5.0		mg/L	1	12/15/2017 2:58:12 PM	35503
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/15/2017 2:58:12 PM	35503
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	12/15/2017 2:58:12 PM	35503
Cresols, Total	ND	200		mg/L	1	12/15/2017 2:58:12 PM	35503
Surr: 2-Fluorophenol	37.7	15-124		%Rec	1	12/15/2017 2:58:12 PM	35503
Surr: Phenol-d5	31.9	15-118		%Rec	1	12/15/2017 2:58:12 PM	35503
Surr: 2,4,6-Tribromophenol	73.1	15-148		%Rec	1	12/15/2017 2:58:12 PM	35503
Surr: Nitrobenzene-d5	59.2	40.6-124		%Rec	1	12/15/2017 2:58:12 PM	35503
Surr: 2-Fluorobiphenyl	57.0	35.7-128		%Rec	1	12/15/2017 2:58:12 PM	35503
Surr: 4-Terphenyl-d14	45.2	18.8-115		%Rec	1	12/15/2017 2:58:12 PM	35503
SPECIFIC GRAVITY						Analyst: **JRR**	
Specific Gravity	1.025	0			1	12/19/2017 12:14:00 PM	R47877
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Fluoride	ND	2.0		mg/L	20	12/8/2017 4:20:33 PM	R47664
Chloride	25000	1000	*	mg/L	2E	12/28/2017 1:11:33 AM	A48068
Bromide	37	2.0		mg/L	20	12/8/2017 4:20:33 PM	R47664
Phosphorus, Orthophosphate (As P	ND	2.5		mg/L	5	12/8/2017 4:08:08 PM	R47664
Sulfate	170	2.5		mg/L	5	12/8/2017 4:08:08 PM	R47664
Nitrate+Nitrite as N	ND	20		mg/L	100	12/28/2017 1:23:58 AM	A48068
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	73000	250		µmhos/cm	50	12/14/2017 12:22:59 AM	R47803
SM2320B: ALKALINITY						Analyst: **JRR**	
Bicarbonate (As CaCO3)	740.3	20.00		mg/L CaCO3	1	12/11/2017 4:41:02 PM	R47724
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	12/11/2017 4:41:02 PM	R47724

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1712479**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC **Client Sample ID:** S-6 (12/7/17
Project: Sunco Disposal 1 **Collection Date:** 12/7/2017 10:36:00 AM
Lab ID: 1712479-001 **Matrix:** AQUEOUS **Received Date:** 12/8/2017 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
SM2320B: ALKALINITY						Analyst: **JRR**	
Total Alkalinity (as CaCO3)	740.3	20.00		mg/L CaCO3	1	12/11/2017 4:41:02 PM	R47724
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	39200	200	*D	mg/L	1	12/13/2017 9:25:00 AM	35443
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.06		H	pH units	1	12/11/2017 4:41:02 PM	R47724
EPA METHOD 7470: MERCURY						Analyst: **MED**	
Mercury	0.0016	0.00020		mg/L	1	12/27/2017 2:44:45 PM	35706
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **MED**	
Calcium	5100	100		mg/L	100	1/4/2018 2:24:41 PM	A48195
Magnesium	290	5.0		mg/L	5	1/2/2018 10:05:49 AM	A48122
Potassium	1000	100		mg/L	100	1/4/2018 2:24:41 PM	A48195
Sodium	6500	100		mg/L	100	1/4/2018 2:24:41 PM	A48195
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **MED**	
Arsenic	0.16	0.040		mg/L	2	1/3/2018 10:41:06 AM	35440
Barium	19	1.0		mg/L	50	1/3/2018 10:42:45 AM	35440
Cadmium	ND	0.0020		mg/L	1	12/14/2017 10:04:27 AM	35440
Chromium	0.087	0.0060		mg/L	1	12/14/2017 10:04:27 AM	35440
Lead	0.038	0.010		mg/L	2	1/3/2018 10:41:06 AM	35440
Selenium	0.24	0.10		mg/L	2	1/5/2018 12:53:07 PM	35440
Silver	0.035	0.0050		mg/L	1	12/14/2017 10:04:27 AM	35440
TCLP VOLATILES BY 8260B						Analyst: **RAA**	
Benzene	1.1	0.50		mg/L	200	12/12/2017 3:00:00 AM	T47690
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	200	12/12/2017 3:00:00 AM	T47690
2-Butanone	ND	200		mg/L	200	12/12/2017 3:00:00 AM	T47690
Carbon Tetrachloride	ND	0.50		mg/L	200	12/12/2017 3:00:00 AM	T47690
Chloroform	ND	6.0		mg/L	200	12/12/2017 3:00:00 AM	T47690
1,4-Dichlorobenzene	ND	7.5		mg/L	200	12/12/2017 3:00:00 AM	T47690
1,1-Dichloroethene	ND	0.70		mg/L	200	12/12/2017 3:00:00 AM	T47690
Hexachlorobutadiene	ND	0.50		mg/L	200	12/12/2017 3:00:00 AM	T47690
Tetrachloroethene (PCE)	ND	0.70		mg/L	200	12/12/2017 3:00:00 AM	T47690
Trichloroethene (TCE)	ND	0.50		mg/L	200	12/12/2017 3:00:00 AM	T47690
Vinyl chloride	ND	0.20		mg/L	200	12/12/2017 3:00:00 AM	T47690
Chlorobenzene	ND	100		mg/L	200	12/12/2017 3:00:00 AM	T47690
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	200	12/12/2017 3:00:00 AM	T47690
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	200	12/12/2017 3:00:00 AM	T47690
Surr: Dibromofluoromethane	108	70-130		%Rec	200	12/12/2017 3:00:00 AM	T47690

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quanitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1712479**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC | **Client Sample ID:** S-6 (12/7/17
Project: Sunco Disposal 1 | **Collection Date:** 12/7/2017 10:36:00 AM
Lab ID: 1712479-001 | **Matrix:** AQUEOUS | **Received Date:** 12/8/2017 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
TCLP VOLATILES BY 8260B							Analyst: **RAA**
Surr: Toluene-d8	97.6	70-130		%Rec	200	12/12/2017 3:00:00 AM	T47690

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

1712479-001G S-6(12/7/17)
Collected date/time: 12/07/17 10:36

SAMPLE RESULTS - 01
L956865

ONE LAB. NATIONWIDE.

Wet Chemistry by Method 2580

Analyte	Result mV	Qualifier	Dilution	Analysis date / time	Batch
ORP	228	T8	1	12/14/2017 16:13	WG1053719

Wet Chemistry by Method 4500 CN E-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	J6	0.00500	1	12/15/2017 08:48	WG1053381

Wet Chemistry by Method 4500H+ B-2011

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	6.89	T8	1	12/13/2017 11:30	WG1052727

Sample Narrative:
L956865-01 WG1052727: 6.89 at 11.6C

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		0.0500	1	12/13/2017 16:54	WG1053524

Wet Chemistry by Method D93/1010A

Analyte	Result deg F	Qualifier	Dilution	Analysis date / time	Batch
Flashpoint	DNF at 170		1	12/15/2017 11:35	WG1053522

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:
Hall Environmental Analysis Laboratory		L956865	12/19/17 16:05

WG1053719
Wet Chemistry by Method 2580

QUALITY CONTROL SUMMARY
L956865-01

ONE LAB. NATIONWIDE.

L956865-01 Original Sample (OS) • Duplicate (DUP)

(OS) L956865-01 12/14/17 16:13 • (DUP) R3273092-3 12/14/17 16:13

Analyte	Original Result mV	DUP Result mV	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
ORP	228	229	1	0.438		20

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

(LCS) R3273092-1 12/14/17 16:13 • (LCSD) R3273092-2 12/14/17 16:13

Analyte	Spike Amount mV	LCS Result mV	LCSD Result mV	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
ORP	228	229	229	100	100	90.0-110			0.000	20

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:
Hall Environmental Analysis Laboratory		L956865	12/19/17 16:05

WG1053381
Wet Chemistry by Method 4500 CN E-2011

QUALITY CONTROL SUMMARY
L956865-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3273272-1 12/15/17 08:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Reactive Cyanide	U		0.0018	0.00500

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

(LCS) R3273272-2 12/15/17 08:30 • (LCSD) R3273272-3 12/15/17 08:31

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 %
Reactive Cyanide	0.100	0.0964	0.0938	96.4	93.8	85-115			2.73	20

L956865-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L956865-01 12/15/17 08:48 • (MS) R3273272-5 12/15/17 08:49 • (MSD) R3273272-6 12/15/17 08:50

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 %
Reactive Cyanide	0.100	ND	0.0592	0.0617	59.2	61.7	[redacted]	75-125	J6	J6	4.14	20

Tc Ss Cn Sr Qc Gl Al Sc

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:
Hall Environmental Analysis Laboratory		L956865	12/19/17 16:05

WG1053532

Wet Chemistry by Method D93/1010A

QUALITY CONTROL SUMMARY

L956865-01

L957491-02 Original Sample (OS) • Duplicate (DUP)

(OS) L957491-02 12/15/17 11:35 • (DUP) R3273409-3 12/15/17 11:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	deg F	deg F		%		%
Flashpoint	180	180	1	0.000		10

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

(LCS) R3273409-1 12/15/17 11:35 • (LCSD) R3273409-2 12/15/17 11:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	deg F	deg F	deg F	%	%	%			%	%
Flashpoint	82.0	81.7	81.7	99.6	99.6	96.0-104			0.000	10

Tc Ss Cn Sr Qc Gl Al Sc

WG1052727

Wet Chemistry by Method 4500H+ B-2011

QUALITY CONTROL SUMMARY

L956865-01

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

(LCS) R3272602-1 12/13/17 11:10 • (LCSD) R3272602-2 12/13/17 11:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
Corrosivity by pH	5.96	5.93	5.93	99.5	99.5	98.3-102			0.000	1

Sample Narrative:

LCS: 5.93 at 19.3C

LCSD: 5.93 at 19.3C

Tc Ss Cn Sr Qc Gl Al Sc

GLOSSARY OF TERMS

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

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	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, 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
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

Tc Ss Cn Sr Qc Gl Al Sc

WG1053534

Wet Chemistry by Method 9034-9030B

QUALITY CONTROL SUMMARY

L956865-01

Method Blank (MB)

(MB) R3272947-1 12/13/17 16:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Reactive Sulfide	U		0.0065	0.0500

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

(LCS) R3272947-2 12/13/17 16:52 • (LCSD) R3272947-3 12/13/17 16:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Reactive Sulfide	0.500	0.456	0.455	91.2	91	85-115			0.22	20

Tc Ss Cn Sr Qc Gl Al Sc

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R47664**	RunNo: **47664**							
Prep Date:	Analysis Date: **12/8/2017**	SeqNo: **1523111**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R47664**	RunNo: **47664**							
Prep Date:	Analysis Date: **12/8/2017**	SeqNo: **1523112**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	103	90	110			
Bromide	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P	5.1	0.50	5.000	0	102	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

Sample ID **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **A48068**	RunNo: **48068**							
Prep Date:	Analysis Date: **12/27/2017**	SeqNo: **1540761**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **A48068**	RunNo: **48068**							
Prep Date:	Analysis Date: **12/27/2017**	SeqNo: **1540762**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	101	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **LCS-35478**	SampType: **LCS**	TestCode: **EPA Method 8081: Pesticides TCLP**							
Client ID: **LCSW**	Batch ID: **35478**	RunNo: **47820**							
Prep Date: **12/13/2017**	Analysis Date: **12/15/2017**	SeqNo: **1529812**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0031		0.002500		126	57.8	124			S
Surr: Tetrachloro-m-xylene	0.0025		0.002500		102	43	114			

Sample ID **LCSD-35478**	SampType: **LCSD**	TestCode: **EPA Method 8081: Pesticides TCLP**							
Client ID: **LCSS02**	Batch ID: **35478**	RunNo: **47820**							
Prep Date: **12/13/2017**	Analysis Date: **12/15/2017**	SeqNo: **1529814**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0029		0.002500		117	57.8	124	0	0	
Surr: Tetrachloro-m-xylene	0.0024		0.002500		95.9	43	114	0	0	

Sample ID **MB-35478**	SampType: **MBLK**	TestCode: **EPA Method 8081: Pesticides TCLP**							
Client ID: **PBW**	Batch ID: **35478**	RunNo: **47820**							
Prep Date: **12/13/2017**	Analysis Date: **12/15/2017**	SeqNo: **1529816**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlordane	ND	0.030								
Surr: Decachlorobiphenyl	0.0021		0.002500		85.0	57.8	124			
Surr: Tetrachloro-m-xylene	0.0017		0.002500		66.6	43	114			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **100ng lcs2**	SampType: **LCS**	TestCode: **TCLP Volatiles by 8260B**							
Client ID: **LCSW**	Batch ID: **T47690**	RunNo: **47690**							
Prep Date:	Analysis Date: **12/12/2017**	SeqNo: **1524101**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50	0.02000	0	111	70	130			
1,1-Dichloroethene	ND	0.70	0.02000	0	115	70	130			
Trichloroethene (TCE)	ND	0.50	0.02000	0	107	70	130			
Chlorobenzene	ND	100	0.02000	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	0.011		0.01000		111	70	130			
Surr: 4-Bromofluorobenzene	0.010		0.01000		101	70	130			
Surr: Dibromofluoromethane	0.011		0.01000		107	70	130			
Surr: Toluene-d8	0.0099		0.01000		98.5	70	130			

Sample ID **rb2**	SampType: **MBLK**	TestCode: **TCLP Volatiles by 8260B**							
Client ID: **PBW**	Batch ID: **T47690**	RunNo: **47690**							
Prep Date:	Analysis Date: **12/12/2017**	SeqNo: **1524102**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
1,2-Dichloroethane (EDC)	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Chlorobenzene	ND	100								
Surr: 1,2-Dichloroethane-d4	0.011		0.01000		112	70	130			
Surr: 4-Bromofluorobenzene	0.010		0.01000		100	70	130			
Surr: Dibromofluoromethane	0.011		0.01000		109	70	130			
Surr: Toluene-d8	0.0098		0.01000		98.1	70	130			

Sample ID **1712479-001ams**	SampType: **MS**	TestCode: **TCLP Volatiles by 8260B**							
Client ID: **S-6 (12/7/17**	Batch ID: **T47690**	RunNo: **47690**							
Prep Date:	Analysis Date: **12/12/2017**	SeqNo: **1524104**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.8	0.50	4.000	1.135	90.9	70	130			
1,1-Dichloroethene	3.8	0.70	4.000	0	94.9	70	130			
Trichloroethene (TCE)	3.5	0.50	4.000	0	88.4	70	130			
Chlorobenzene	3.5	3.0	4.000	0.007600	88.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1712479-001ams**	SampType: **MS**	TestCode: **TCLP Volatiles by 8260B**							
Client ID: **S-6 (12/7/17**	Batch ID: **T47690**	RunNo: **47690**							
Prep Date:	Analysis Date: **12/12/2017**	SeqNo: **1524104**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.2		2.000		112	70	130			
Surr: 4-Bromofluorobenzene	2.0		2.000		101	70	130			
Surr: Dibromofluoromethane	2.1		2.000		107	70	130			
Surr: Toluene-d8	2.0		2.000		98.3	70	130			

Sample ID **1712479-001amsd**	SampType: **MSD**	TestCode: **TCLP Volatiles by 8260B**							
Client ID: **S-6 (12/7/17**	Batch ID: **T47690**	RunNo: **47690**							
Prep Date:	Analysis Date: **12/12/2017**	SeqNo: **1524105**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.5	0.50	4.000	1.135	84.5	70	130	5.48	20	
1,1-Dichloroethene	3.6	0.70	4.000	0	89.5	70	130	5.81	20	
Trichloroethene (TCE)	3.4	0.50	4.000	0	84.5	70	130	4.48	20	
Chlorobenzene	3.3	3.0	4.000	0.007600	83.4	70	130	5.44	20	
Surr: 1,2-Dichloroethane-d4	2.2		2.000		112	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.000		101	70	130	0	0	
Surr: Dibromofluoromethane	2.1		2.000		107	70	130	0	0	
Surr: Toluene-d8	2.0		2.000		97.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1712479-001cms** SampType: **MS** TestCode: **EPA Method 8270C TCLP**
Client ID: **S-6 (12/7/17** Batch ID: **35503** RunNo: **47841**
Prep Date: **12/14/2017** Analysis Date: **12/15/2017** SeqNo: **1530559** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.081	0.0010	0.1000	0	80.8	23.9	129			
3+4-Methylphenol	0.18	0.0010	0.2000	0	90.8	15	167			
2,4-Dinitrotoluene	0.070	0.0010	0.1000	0	70.5	15	147			
Hexachlorobenzene	0.079	0.0010	0.1000	0	79.4	41.4	136			
Hexachlorobutadiene	0.080	0.0010	0.1000	0	80.3	16.2	134			
Hexachloroethane	0.070	0.0010	0.1000	0	69.8	20.6	124			
Nitrobenzene	0.081	0.0010	0.1000	0	81.1	39.5	134			
Pentachlorophenol	0.069	0.0010	0.1000	0	68.8	15	137			
Pyridine	0.041	0.0010	0.1000	0	41.1	15	129			
2,4,5-Trichlorophenol	0.096	0.0010	0.1000	0	95.8	15	158			
2,4,6-Trichlorophenol	0.086	0.0010	0.1000	0	85.5	15	153			
Cresols, Total	0.26	0.0010	0.3000	0	88.3	10.6	179			
Surr: 2-Fluorophenol	0.11		0.2000		56.5	15	124			
Surr: Phenol-d5	0.095		0.2000		47.7	15	118			
Surr: 2,4,6-Tribromophenol	0.22		0.2000		109	15	148			
Surr: Nitrobenzene-d5	0.085		0.1000		85.0	40.6	124			
Surr: 2-Fluorobiphenyl	0.083		0.1000		82.9	35.7	128			
Surr: 4-Terphenyl-d14	0.051		0.1000		51.5	18.8	115			

Sample ID **1712479-001cmsd** SampType: **MSD** TestCode: **EPA Method 8270C TCLP**
Client ID: **S-6 (12/7/17** Batch ID: **35503** RunNo: **47841**
Prep Date: **12/14/2017** Analysis Date: **12/15/2017** SeqNo: **1530560** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.075	0.0010	0.1000	0	74.7	23.9	129	7.77	20	
3+4-Methylphenol	0.16	0.0010	0.2000	0	79.6	15	167	13.1	20	
2,4-Dinitrotoluene	0.072	0.0010	0.1000	0	71.9	15	147	1.94	23.2	
Hexachlorobenzene	0.076	0.0010	0.1000	0	76.1	41.4	136	4.17	20	
Hexachlorobutadiene	0.083	0.0010	0.1000	0	83.0	16.2	134	3.28	20	
Hexachloroethane	0.069	0.0010	0.1000	0	69.3	20.6	124	0.633	31.3	
Nitrobenzene	0.087	0.0010	0.1000	0	86.6	39.5	134	6.53	26.6	
Pentachlorophenol	0.041	0.0010	0.1000	0	40.8	15	137	51.0	27.9	R
Pyridine	0.037	0.0010	0.1000	0	36.9	15	129	10.7	47.4	
2,4,5-Trichlorophenol	0.093	0.0010	0.1000	0	92.9	15	158	3.07	36.9	
2,4,6-Trichlorophenol	0.078	0.0010	0.1000	0	77.9	15	153	9.38	37.2	
Cresols, Total	0.24	0.0010	0.3000	0	78.8	10.6	179	11.4	27.4	
Surr: 2-Fluorophenol	0.11		0.2000		52.8	15	124	0	0	
Surr: Phenol-d5	0.085		0.2000		42.3	15	118	0	0	
Surr: 2,4,6-Tribromophenol	0.18		0.2000		89.8	15	148	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1712479-001cmsd** SampType: **MSD** TestCode: **EPA Method 8270C TCLP**
Client ID: **S-6 (12/7/17** Batch ID: **35503** RunNo: **47841**
Prep Date: **12/14/2017** Analysis Date: **12/15/2017** SeqNo: **1530560** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.085		0.1000		85.2	40.6	124	0	0	
Surr: 2-Fluorobiphenyl	0.088		0.1000		87.9	35.7	128	0	0	
Surr: 4-Terphenyl-d14	0.046		0.1000		45.7	18.8	115	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **lcs-1 ~20uS eC** SampType: **LCS** TestCode: **SM2510B: Specific Conductance**
Client ID: **LCSW** Batch ID: **R47803** RunNo: **47803**
Prep Date: Analysis Date: **12/13/2017** SeqNo: **1528860** Units: **µmhos/cm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	22	5.0	19.96	0	110	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB-35706** SampType: **MBLK** TestCode: **EPA Method 7470: Mercury**
Client ID: **PBW** Batch ID: **35706** RunNo: **48037**
Prep Date: **12/26/2017** Analysis Date: **12/27/2017** SeqNo: **1539683** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-35706** SampType: **LCS** TestCode: **EPA Method 7470: Mercury**
Client ID: **LCSW** Batch ID: **35706** RunNo: **48037**
Prep Date: **12/26/2017** Analysis Date: **12/27/2017** SeqNo: **1539684** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0056	0.00020	0.005000	0	111	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712479**

10-Jan-18

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB-A** SampType: **MBLK** TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW** Batch ID: **A48122** RunNo: **48122**
Prep Date: Analysis Date: **1/2/2018** SeqNo: **1543126** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								

Sample ID **LCS-A** SampType: **LCS** TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A48122** RunNo: **48122**
Prep Date: Analysis Date: **1/2/2018** SeqNo: **1543131** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	56	1.0	50.00	0	112	80	120			

Sample ID **MB-A** SampType: **MBLK** TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW** Batch ID: **A48195** RunNo: **48195**
Prep Date: Analysis Date: **1/4/2018** SeqNo: **1546973** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID **LCS-A** SampType: **LCS** TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A48195** RunNo: **48195**
Prep Date: Analysis Date: **1/4/2018** SeqNo: **1546974** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	0	97.9	80	120			
Potassium	48	1.0	50.00	0	96.6	80	120			
Sodium	47	1.0	50.00	0	94.1	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712479**

10-Jan-18

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **MB-35440** SampType: **MBLK** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **PBW** Batch ID: **35440** RunNo: **47726**
Prep Date: **12/11/2017** Analysis Date: **12/13/2017** SeqNo: **1525934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID **LCS-35440** SampType: **LCS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **LCSW** Batch ID: **35440** RunNo: **47726**
Prep Date: **12/11/2017** Analysis Date: **12/13/2017** SeqNo: **1525935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.47	0.020	0.5000	0	94.5	80	120			
Barium	0.51	0.020	0.5000	0	102	80	120			
Cadmium	0.50	0.0020	0.5000	0	101	80	120			
Chromium	0.48	0.0060	0.5000	0	96.6	80	120			
Selenium	0.50	0.050	0.5000	0	100	80	120			
Silver	0.10	0.0050	0.1000	0	105	80	120			

Sample ID **MB-35440** SampType: **MBLK** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **PBW** Batch ID: **35440** RunNo: **47726**
Prep Date: **12/11/2017** Analysis Date: **12/13/2017** SeqNo: **1526525** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0050								

Sample ID **LCS-35440** SampType: **LCS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **LCSW** Batch ID: **35440** RunNo: **47726**
Prep Date: **12/11/2017** Analysis Date: **12/13/2017** SeqNo: **1526526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.52	0.0050	0.5000	0	104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712479**

10-Jan-18

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **mb-1 alk** SampType: **MBLK** TestCode: **SM2320B: Alkalinity**
Client ID: **PBW** Batch ID: **R47724** RunNo: **47724**
Prep Date: Analysis Date: **12/11/2017** SeqNo: **1525726** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID **lcs-1 alk** SampType: **LCS** TestCode: **SM2320B: Alkalinity**
Client ID: **LCSW** Batch ID: **R47724** RunNo: **47724**
Prep Date: Analysis Date: **12/11/2017** SeqNo: **1525727** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.80	20.00	80.00	0	98.5	90	110			

Sample ID **mb-2 alk** SampType: **MBLK** TestCode: **SM2320B: Alkalinity**
Client ID: **PBW** Batch ID: **R47724** RunNo: **47724**
Prep Date: Analysis Date: **12/11/2017** SeqNo: **1525750** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID **lcs-2 alk** SampType: **LCS** TestCode: **SM2320B: Alkalinity**
Client ID: **LCSW** Batch ID: **R47724** RunNo: **47724**
Prep Date: Analysis Date: **12/11/2017** SeqNo: **1525751** Units: **mg/L CaCO3**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.44	20.00	80.00	0	98.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1712479**

10-Jan-18

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID **1712479-001DDUP** SampType: **DUP** TestCode: **Specific Gravity**
Client ID: **S-6 (12/7/17** Batch ID: **R47877** RunNo: **47877**
Prep Date: Analysis Date: **12/19/2017** SeqNo: **1532349** Units:

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Specific Gravity	1.026	0						0.0487	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712479
10-Jan-18

Client: Rule Engineering LLC
Project: Sunco Disposal 1

Sample ID	MB-35443	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	35443	RunNo:	47725					
Prep Date:	12/11/2017	Analysis Date:	12/13/2017	SeqNo:	1525834	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-35443	SampType:	LCS	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID:	35443	RunNo:	47725					
Prep Date:	12/11/2017	Analysis Date:	12/13/2017	SeqNo:	1525835	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL Work Order Number: 1712479 RcptNo: 1

Received By: Anne Thorne 12/8/2017 7:55:00 AM
Completed By: Anne Thorne 12/8/2017 10:13:08 AM
Reviewed By: AT 12/08/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐ AT 12/08/17
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 3 2 (2 or >2 unless noted)
Adjusted?
Checked by: AT 12/08/17

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:
18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Rule Engineering LLC
Mailing Address: 501 Airport Dr, Ste 205, Farmington, NM 87401
Phone #: (505) 716-2787
email or Fax#: hwoods@ruleengineering.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Sunco Disposal #1
Project #:
Project Manager: Heather Woods
Samples: Heather Woods
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.0

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	See Attached	Air Bubbles (Y or N)
12/7/17	1030	Water	S-16 (12/7/17)	(1) 500 mL Plastic	HNO3	1712479	201											X	
				(1) 500 mL Plastic	NaOH Zinc Acetate		201												
				(2) 500 mL Plastic	Non		201												
				(4) 125 mL Plastic	H2SO4		201												
				(1) 125 mL Plastic	Filtered HNO3		201												
				(5) 1 L Water Glass	Non		201												
				(3) 40 mL VOA	HCl		201												

Remarks: Direct Bill to Agua Mass - Rates per Agmt
See Attached Pages (2)

Relinquished by: Date 12/7/17 Time 1930
Received by: Date 12/7/17 Time 1930
Relinquished by: Date 12/8/17 Time 0755
Received by: Date 12/8/17 Time 0755

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contract data will be clearly notated on the analytical report.

Sunco Disposal #1
Quarterly Laboratory Analytical List
Page 1

Characteristic of toxicity using the Toxicity Characteristic Leaching Procedure, EPA SW-846 Test Method 1311 (see Table 1, 40 CFR 261.24(b)).

QUARTERLY MONITORING LIST

EPA HW No.	Contaminant	SW-846 Methods	Regulatory Level (mg/L)
D004	Arsenic	1311	5.0
D005	Barium	1311	100.0
D018	Benzene	8021B	0.5
D006	Cadmium	1311	1.0
D019	Carbon tetrachloride	8021B 8260B	0.5
D020	Chlordane	8081A	0.03
D021	Chlorobenzene	8021B 8260B	100.0
D022	Chloroform	8021B 8260B	6.0
D007	Chromium	1311	5.0
D023	o-Cresol	8270D	200.0
D024	m-Cresol	8270D	200.0
D025	p-Cresol	8270D	200.0
D026	Cresol	8270D	200.0
D027	1,4-Dichlorobenzene	8021B 8121 8260B 8270D	7.5
D028	1,2-Dichloroethane	8021B 8260B	0.5
D029	1,1-Dichloroethylene	8021B 8260B	0.7
D030	2,4-Dinitrotoluene	8091 8270D	0.13
D032	Hexachlorobenzene	8121	0.13
D033	Hexachlorobutadiene	8021B 8121 8260B	0.5
D034	Hexachloroethane	8121	3.0
D008	Lead	1311	5.0
D009	Mercury	7470A 7471B	0.2
D035	Methyl ethyl ketone	8015B 8260B	200.0

D036	Nitrobenzene	8091 8270D	2.0
D037	Pentrachlorophenol	8041	100.0
D038	Pyridine	8260B 8270D	5.0

D010	Selenium	1311	1.0
D011	Silver	1311	5.0
D039	Tetrachloroethylene	8260B	0.7
D040	Trichloroethylene	8021B 8260B	0.5
D041	2,4,5-Trichlorophenol	8270D	400.0
D042	2,4,6-Trichlorophenol	8041A 8270D	2.0
D043	Vinyl chloride	8021B 8260B	0.2

If o-, m-, and p-cresol concentrations cannot be differentiated, then the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.
If the quantitation limit is greater than the regulatory level, then the quantitation limit becomes the regulatory level.
If metals (dissolved), the EPA 1311 TCLP Laboratory Method is required with the exception of Mercury (total).

ADDTIONALLY:

RCI, specific conductance, specific gravity, ORP, and general water quality parameters (general chemistry/cations and anions, including: fluoride, calcium, potassium, magnesium, sodium bicarbonate, carbonate, chloride, sulfate, total dissolved solids, cation/anion balance, pH, and bromide) using the methods specified at 40 CFR 136.3.

Appendix C

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

MECHANICAL INTEGRITY TEST REPORT

(TA OR UIC)

Date of Test 6-26-17 Operator Hilcorp Energy Co API # 30-0 45-28653

Property Name Sunco Disposal Well # 1 Location: Unit E Sec 2 Twn 29 Rge 12

Land Type:
State ____
Federal ____
Private ✓
Indian ____

OIL CONS. DIV DIST. 3
JUN 26 2017

Well Type:
Water Injection ____
Salt Water Disposal ✓
Gas Injection ____
Producing Oil/Gas ____
Pressure observation ____

Temporarily Abandoned Well (Y/N): ____ TA Expires: ____

Casing Pres. 0 Tbg. SI Pres. ____ Max. Inj. Pres. ____
Bradenhead Pres. 0 Tbg. Inj. Pres. ____
Tubing Pres. 1699
Int. Casing Pres. N/A

Pressured annulus up to 380 psi. for 30 mins. Test passed/failed

REMARKS:
Packer set at 4282
Top Perf 4350
Chart at start. Watched gauge.

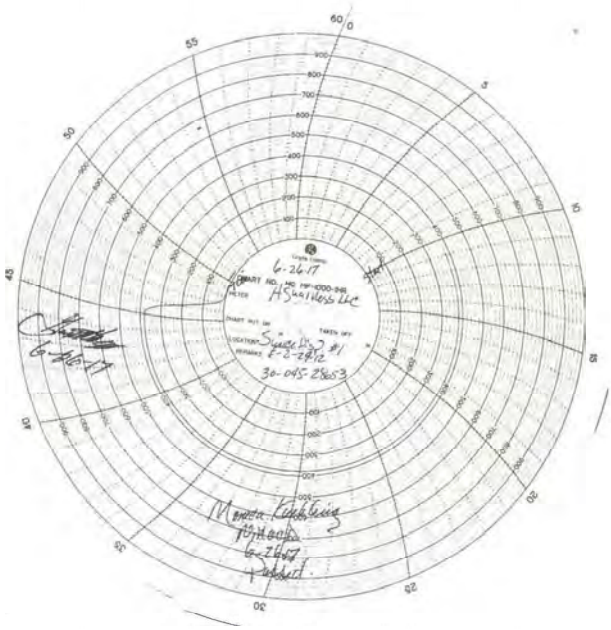
By _____ Witness Monica Kuehling
(Operator Representative) (NMOCD)

(Position)

Revised 02-11-02

Oil Conservation Division * 1000 Rio Brazos Road * Aztec, New Mexico 87410
Phone: (505) 334-6178 * Fax (505) 334-6170 * http://www.emnrd.state.nm.us

OIL CONS. DIV DIST. 3
JUN 26 2017



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONS. DIV DIST. 3

JUN 26 2017

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170

BRADENHEAD TEST REPORT
(submit 1 copy to above address)

Date of Test 6-26-17 Operator Agua Moss, LLC API #30-0 45-28653

Property Name Sunco SWD Well No. 1 Location: Unit E Section 2 Township 29 Range 12

Well Status (Shut-In or Producing) Initial PSI: Tubing 800 Intermediate N/A Casing 0 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing TIME	PRESSURE Bradenhead BH	Bradenhead Int	Bradenhead Csg	INTERM Int	INTERM Csg
5 min	0		0		
10 min	0		0		
15 min	0		0		
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	BRADENHEAD	INTERMEDIATE
Steady Flow		
Surges		
Down to Nothing	/ (vacuum)	
Nothing		
Gas		
Gas & Water		
Water		

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR____ FRESH____ SALTY____ SULFUR____ BLACK____

5 MINUTE SHUT-IN PRESSURE BRADENHEAD 0 INTERMEDIATE N/A

REMARKS: Small vacuum when opened - / Nothing when opened after 5 min Shut in

By _____ Witness Monica Kuehling

(Position)

E-mail address _____

Sunco SWD #1

30-045-28653

Class I Disposal: UICI-5-0

2017 Falloff Test

Agua Moss, LLC

P.O Box 600

Farmington, NM 87499

ORGID 247130

Report Components:

1. Facility Operator Information
   a. Agua Moss, LLC
   b. PO Box 600 Farmington, NM 87499
   c. OGRID 247130
2. Well Information:
   a. UIC Permit # UICI-5-0
   b. Class I
   c. Sunco Disposal #1
   d. 30-045-28653
   e. UL E, Sec 2, T29N, R12W 1595 FNL & 1005 FWL San Juan County
3. Current Wellbore Diagram: **Attached** (page 4)
4. Copy of Electronic Log: **Previously submitted 1992** (page 5)
5. Copy of Porosity Log: **Previously submitted 1992** (page 6)
6. See attached Fall off Test analysis
   a. FOT Procedure (page 8)
   b. Analysis (page 8)
   c. Results (page 20)
   d. Summary (page 10)
7. Results Comparison attached (page 19)
8. The raw test data will be kept on file for a period of 3-year and will be made available to the NMOCD upon written request. (page 20)
9. Conclusions (page 20)
10. Any pressure or temperature anomaly: **None seen on BH readings.** As seen in Figures 4 & 5 the change in rate and surface pressure are not significant and quickly stabilize. The results, Table 1, and IRT analysis confirm that the injection rate attained a pseudo-steady state, therefore the slight variation did not affect the integrity of the results.
11. Plots attached
    a. Pressure and Rate (fig 3) (page 21)
    b. Injection Rate vs Time (fig 4) (page 22)
    c. Pressure and Rate (fig 5) (page 23)
    d. Elapsed Time (fig 2) (page 8)
    e. Derivative Plot (fig 7) (page 24)
    f. Horner Plot (fig 7) (page 25)
    g. Elapsed Gauge Time (fig 8) (page 26)
    h. Injection Volumes and Surface Pressure (fig 9) (page 27)
    i. Average Hourly Injection Rate (fig 10) (page 28)
12. NO PVT data necessary, injected fluid is fresh-to-slightly saline water. No significant hydrocarbons present that would alter the density, compressibility and/or viscosity of the fluid.
13. The Agua Moss, LLC internal Daily Injection Reports were used to determine the appropriate injection history to use for the analysis. A summary of those reports (January 2017 through June 2017) are attached. (page 29-33)

14. The Sunco Disposal #1 has injected approximately 16,154,574 bbls into the point lookout formation from 1994 through July 2017 (see attached). The offset well McGrath SWD #4 API 30-045-25923 was plugged 7/25/2013. Cumulative injection 1994-7/2013 27,746,479 bbls.
15. 1 Mile AOR:
    a. AOR 1 mile (page 34)
    b. AOR 1 mile well data (page 35)
    c. The McGrath #4 was the only offset well that was injecting into the Point Lookout formation within 1 mile. This well was plugged 7/25/2013.
16. Geological information was provided in the last Permit renewal submitted and approved in 2012.
17. Offset Wells: One offset well that was completed in the same injection interval was the McGrath #4. This well was plugged 7/2013 and therefore was not impacted.
18. Chronological listing of the daily, testing activities (operations log) attached (pages 37-53)
    a. Date of Test: **Monday June 26th , 2017 through Monday July 5th, 2017**
    b. Time of the injection period: **50.63 hours**
    c. Type of injection fluid: **Produced water**
    d. Final injection pressure & temp prior to shutting in in the well: **3953.93 psi, 84.99 °F**
    e. Total shut-in time: **159.22 hours**
    f. Final static pressure & temp at the end of the fall-off portion of the test: **3457 psi, 92.44 °F**
19. Location of the shut in valve: **A wing valve located on the well's Christmas Tree was closed to begin the FOT.**
20. Pressure Gauges: (see attached)
    a. SP-2000 Memory Pressure Gauge (page 54)
    b. Pressure range: **0-5000 psig** (page 55)
    c. Last Calibration: **2/23/15** (page 37)

Wellbore Schematic:

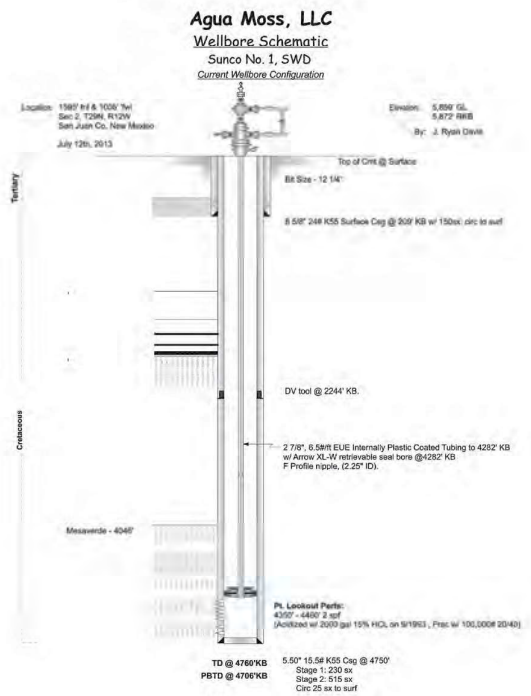
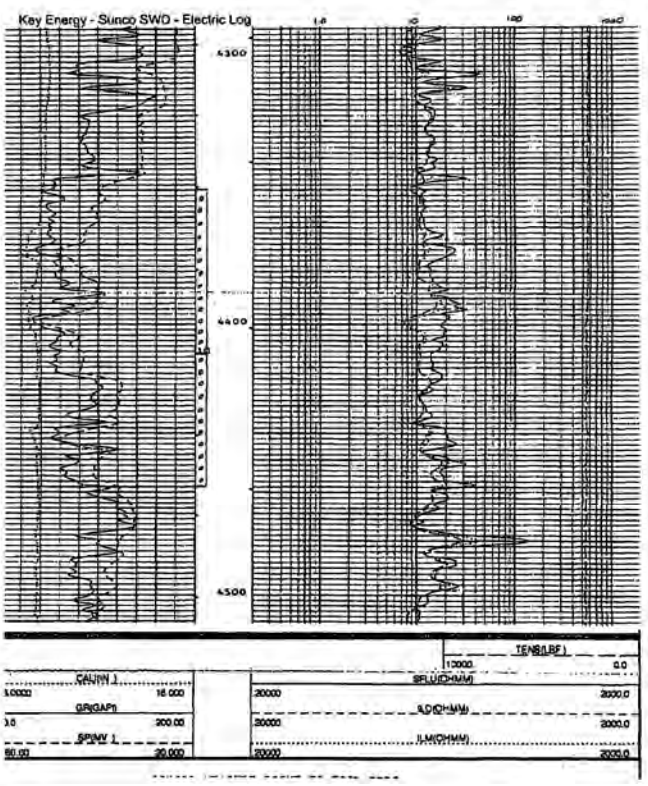
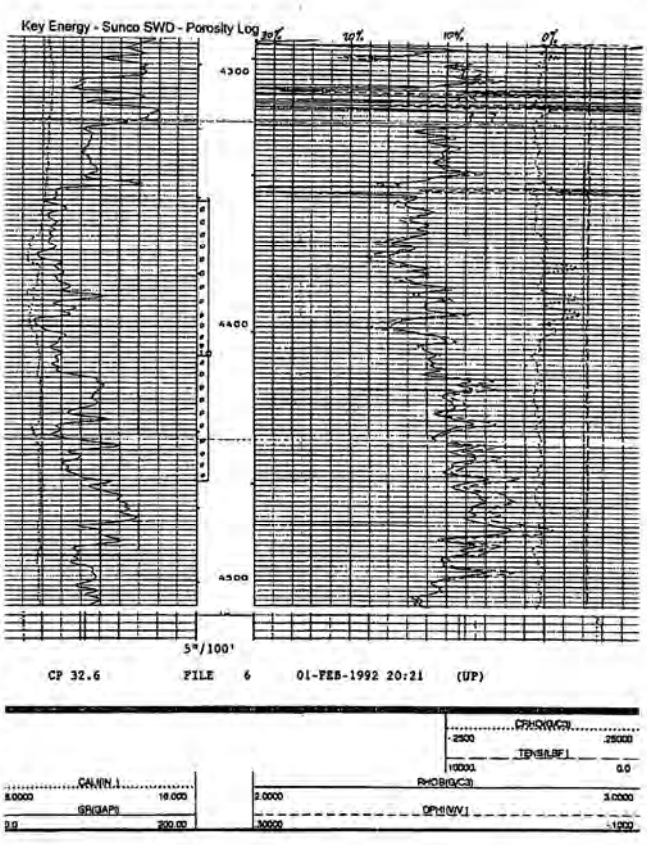
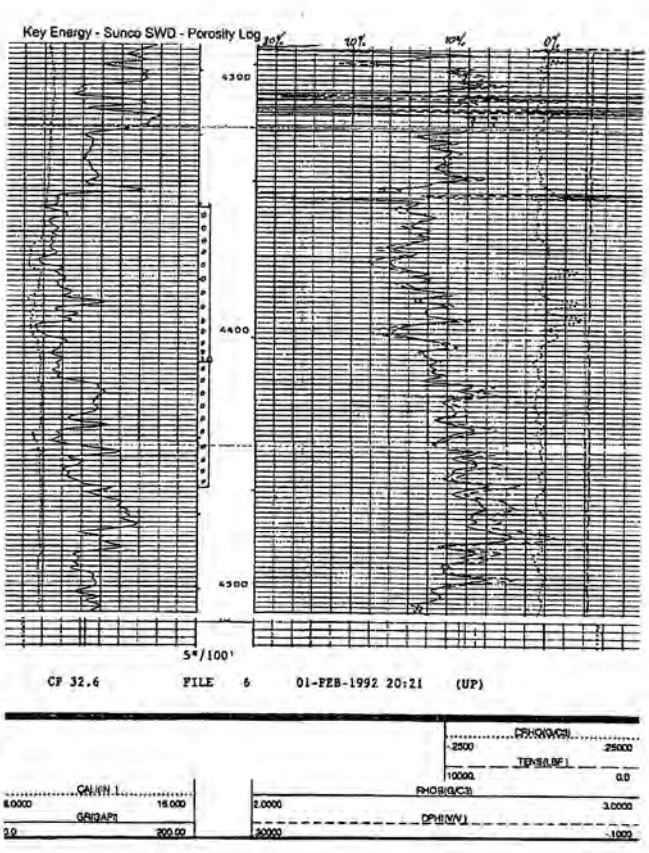


Figure 1: Wellbore Schematic







At the request of the NMOCD and permit requirements, a Falloff Test (FOT) was performed on the Sunco SWD #1 Class I injection well (UICI-5-0) on **06/26/2017**. Below is a summary of findings from the FOT.

Procedure:

Tandem electronic gauges were run in the subject well. The initial BHP was 3480 psi at a depth of 4405'. The injection period started at 3:00 pm on 06/26/2017, with a total of 6498 bbls injected over 50 hours, and an average injection rate of 3150 bpd (91 gpm). The final bottom hole injection pressure was 3953 psi. Injection was shut down and the well was shut it at the wellhead. The bottom hole pressures were monitored for 159 hours of pressure falloff. The final BHP was 3457 psi.

Analysis:

The FOT data was compiled in excel and analyzed. The data was also given to a third party consultant for further analysis and confirmation of results, the analysis is found on pages 9 -18.

A Cartesian plot of pressure and temperature versus elapsed time is presented in Figure 2 below. The stabilization of pressure was confirmed prior to shut-in. The plot was reviewed for anomalous data and none was found.

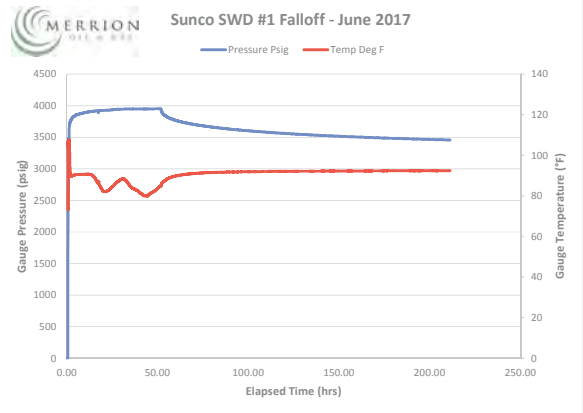


Figure 2 Pressure and Temp vs. Time

2017 Fall-off Pressure Test Analysis
for the
Sunco Disposal Well #1
San Juan County, New Mexico

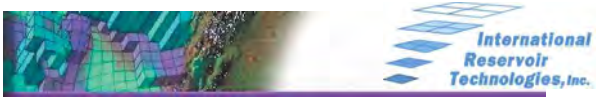
prepared for

Merrion Oil and Gas Corporation

25 July 2017

International Reservoir Technologies, Inc.
Lakewood, Colorado, USA

Tel. (303) 279-0877
Fax (303) 279-0936



Sunco Disposal Well #1 2017 Fall-off Test Results

Summary:

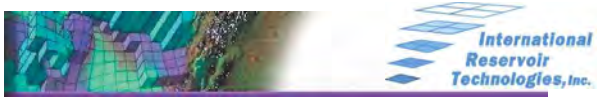
The results of the 2017 fall off test (FOT) for the Sunco Disposal Well #1 indicate that the length of the shut-in test did just allow the transient to reach a stabilized flow period and that the well has a significant hydraulic fracture. These results are similar to the 2015 and 2016 fall-off test results. The pressure transient effect of the frac plus the wellbore storage effects do obscure to some extent the reservoir property influences; however, a reasonable and satisfactory set of reservoir properties could be calculated. The conventional straight-line analysis for extrapolated pressure and the reservoir property calculations from the Horner and MDH type plots are acceptable. The input parameters for the fluid properties (i.e. PVT data) were the same as the newly available data for the 2016 test (Report titled "2nd Quarter 2016 Sampling - Injection Well.pdf", NM1-9 INJECTION WELL ANALYTICAL RESULTS, Agua Moss Disposal Facility, Crouch Mesa Road, San Juan County, New Mexico, 6/28/16).

The results from the derivative, Horner and MDH type pressure plots are summarized in the table below. The results for the different methods were consistent and the average calculated properties were:

- Estimated Kw (permeability) = 10.4 md
- Estimated skin = -6.0
- Extrapolated pressure = 3,273 psig
- Fracture half-length = 517 feet (from derivative half-slope line)
- Radius of investigation = 1,790 feet

Calculated Reservoir Parameters				
	Horner Analysis	MDH Plot	Derivative Plot	Average
Estimated Kw (permeability, mD)	9.9	12.3	9.1	10.4
Estimated skin (dimensionless)	-6.0	-5.9	-6.1	-6.0
Extrapolated pressure (psig)	3,255	3,329	3,235	3,273
Fracture half-length (feet)	--	--	517	517
Radius of investigation (feet)	1,820	2,000	1,550	1,790

Larger versions of the plots appear at the end of this document.

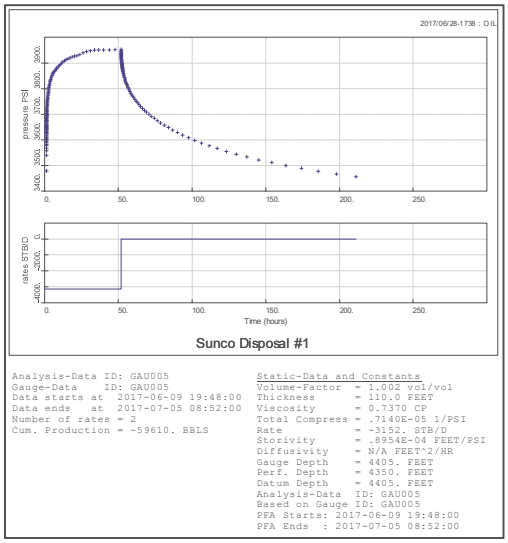


Input data and assumptions:

Assumptions:

- Formation fluid properties equal injection water properties due to cumulative volume injected and miscibility of formation water and injection water
- Reservoir temperature = 91 deg F
- Porosity = 0.114 (fraction, estimated from density log)
- Net pay = 110 feet
- Rock compressibility = 4.50E-06 1/psi (correlation)
- Wellbore radius = 0.506 ft
- Wellbore volume total = 34.88 bbls (tubing = 24.79 bbls, casing = 10.09 bbls)
- Wellbore compressibility = injection water compressibility =2.64E-06 1/psi (from Osif correlation)
- Injected water specific gravity = 1.006 (pure water =1.0); density = 8.392 lb./gal, TDS = 15,500 mg/L
- Injected water FVF = 1.0023 rb/stb (McCain correlation)
- Injected water viscosity = 0.737 cp (McCain correlation)

DATA PLOT:



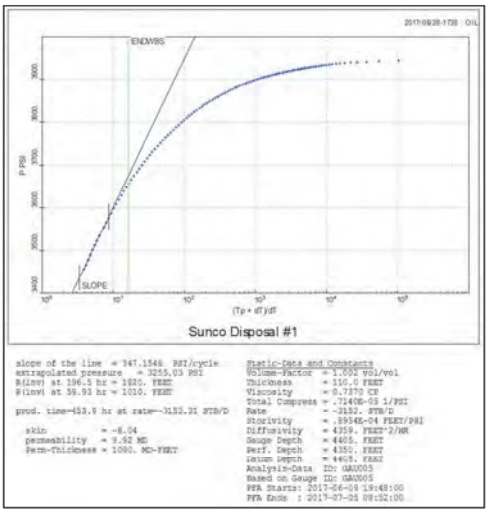
Analysis-Data ID: GAU005
Gauge-Data ID: GAU005
Data starts at 2017-06-09 19:48:00
Data ends at 2017-07-05 08:52:00
Number of rates = 2
Cum. Production = -59610. BBLS

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = N/A FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

HORNER PLOT:

Conclusions: The stabilized flow period was reached relatively late in the conventional straight-line extrapolation for the extrapolated pressure, however the reservoir property calculations appear reasonable.

- Estimated extrapolated pressure = 3,255 psig
- Estimated Kw (permeability) = 9.9 md
- Estimated skin = -6.04
- Radius of investigation = 1,820 feet



slope of the line = 347.1546 PSI/cycle
extrapolated pressure = 3255.03 PSI
$(1hr) at 196.5 hr = 1820. FEET
$(1hr) at 39.93 hr = 1010. FEET

prod. time=453.8 hr at rate=-3152.31 STB/D

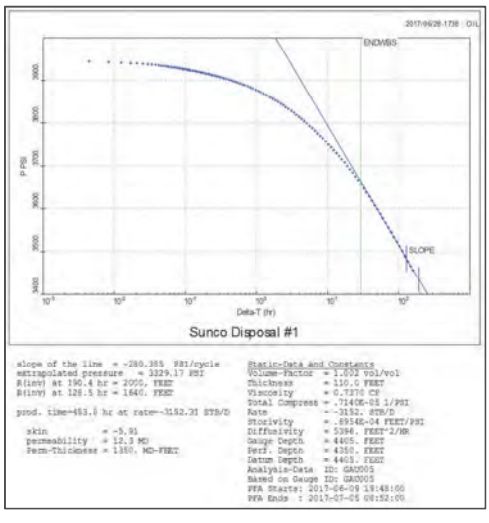
skin = -6.04
permeability = 9.92 MD
Perm-Thickness = 1080. MD-FEET

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 4359. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

MDH PLOT:

Conclusions: The stabilized flow period was reached relatively late in the conventional straight-line extrapolation for the extrapolated pressure, however the MDH values do appear reasonable.

- Estimated extrapolated pressure = 3,329 psig
- Estimated Kw (permeability) = 12.3 md
- Estimated skin = -5.91
- Radius of investigation = 2,000 feet



slope of the line = -286.385 PSI/cycle
extrapolated pressure = 3329.17 PSI
$(1hr) at 190.4 hr = 2000. FEET
$(1hr) at 128.5 hr = 1640. FEET

prod. time=453.8 hr at rate=-3152.31 STB/D

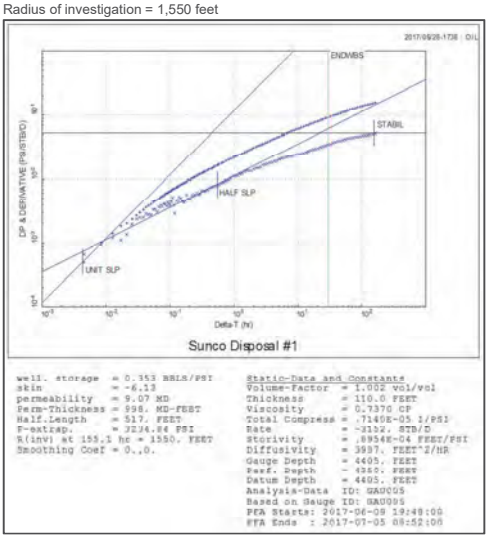
skin = -5.91
permeability = 12.3 MD
Perm-Thickness = 1350. MD-FEET

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 5396. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

DERIVATIVE PLOT:

Conclusions: The behavior of the derivative curve is affected by the wellbore storage and the influence of an apparent hydraulic fracture. The data does appear valid. Also the plot indicates that the length of the shut-in test was sufficient to reach a stabilized period. A half-slope is shown in the derivative curve which is characteristic of linear-flow due to a hydraulic-fracture. The calculated half-length for the fracture was 594 feet. There is no clear indication of a boundary or fault.

- Estimated extrapolated pressure = 3,235 psig
- Estimated Kw (permeability) = 9.07 md
- Estimated skin = -6.13
- Fracture half-length = 517 feet
- Radius of investigation = 1,550 feet

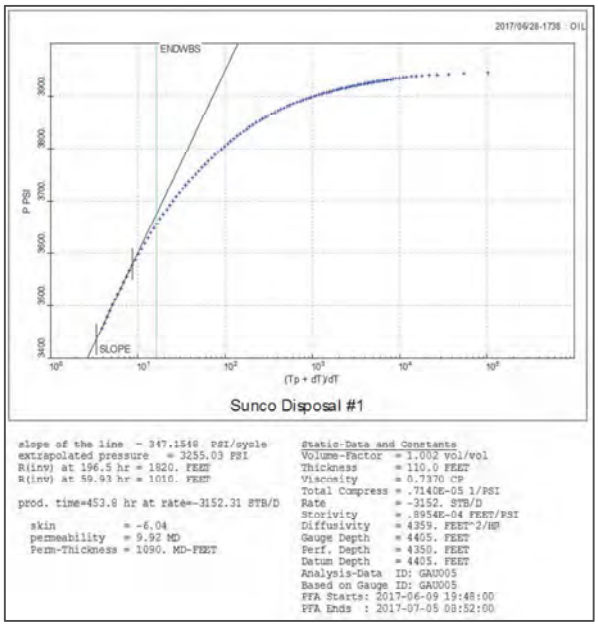


wellb. storage = 0.353 BBLS/PSI
skin = -6.13
permeability = 9.07 MD
Perm-Thickness = 998. MD-FEET
Half.Length = 517. FEET
P-extrap. = 3234.84 PSI
$(1hr) at 153.1 hr = 1550. FEET
Smoothing Coef = 0.,0.

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7145E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 3937. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

ENLARGED PLOTS:

HORNER PLOT:



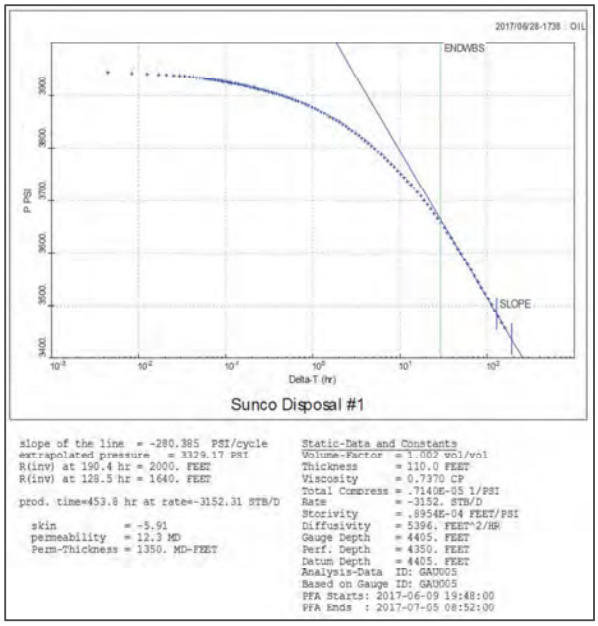
slope of the line = 347.1548 PSI/cycle
extrapolated pressure = 3255.03 PSI
R(inv) at 196.5 hr = 1820. FEET
R(inv) at 59.93 hr = 1016. FEET

prod. time=453.8 hr at rate=-3152.31 STB/D

skin = -6.04
permeability = 9.92 MD
Perm-Thickness = 1090. MD-FEET

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 4359. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

MDH PLOT:



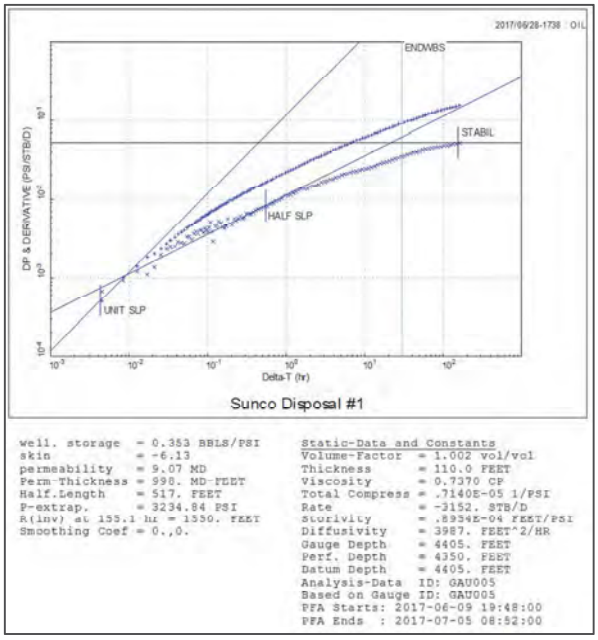
slope of the line = -280.385 PSI/cycle
extrapolated pressure = 3329.17 PSI
R(inv) at 190.4 hr = 2000. FEET
R(inv) at 128.5 hr = 1640. FEET

prod. time=453.8 hr at rate=-3152.31 STB/D

skin = -5.91
permeability = 12.3 MD
Perm-Thickness = 1350. MD-FEET

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 5396. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

DERIVATIVE PLOT:



well. storage = 0.353 BBLS/PSI
skin = -6.13
permeability = 9.07 MD
Perm-Thickness = 998. MD-FEET
Half.Length = 517. FEET
P-extrap. = 3234.84 PSI
R(inv) at 155.1 hr = 1550. FEET
Smoothing Coef = 0.,0.

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FEET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3152. STB/D
Storivity = .8954E-04 FEET/PSI
Diffusivity = 3987. FEET^2/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FEET
Analysis-Data ID: GAU005
Based on Gauge ID: GAU005
PFA Starts: 2017-06-09 19:48:00
PFA Ends : 2017-07-05 08:52:00

Results:

The results from the Horner, MDH, and Derivative pressure plots are summarized in the Table 1 below. The results for the different methods were consistent and the average calculated properties were:

1. P* = 3273 psi
2. K = 10.4 md
3. S = -6.0
4. Radius of Investigation = 1790 feet
5. No indication of boundary

Table 1 Calculated Reservoir Properties

Calculated Reservoir Parameters				
	Horner Analysis	MDH Plot	Derivative Plot	Average
Estimated Kw (permeability, mD)	9.9	12.3	9.1	10.4
Estimated skin (dimensionless)	-6.0	-5.9	-6.1	-6.0
Extrapolated pressure (psig)	3,255	3,329	3,235	3,273
Fracture half-length (feet)	---	---	517	517
Radius of investigation (feet)	1,820	2,000	1,550	1,790

The Derivative plot, Figure 6, shows flow regimes for wellbore storage, and linear flow, the stable or radial flow is not clearly present. The lack of a clear break-over into a flat plateau is most likely due to naturally fractured rock.

Comparison with past Falloff Tests:

The results from the 2017 FOT were compiled with previous FOT results from the facility and are shown below in Table 2.

Table 2: Results Comparison

	2017	2016	2015	2010	2009	2008	2007
Rate (bbl/day)	**3150**	3132	3340	4500			
P* (psi)	**3273**	3114	3283	3231	3242	3176	3258
K (md)	**10.4**	11.5	15.8	13.6	10.2	20.7	
S	**-6.0**	-5.93	-5.97	-7.18	-7.23	-6.79	
Radius of Inv (ft)	**1790**	1430	1580	1450	1250	1750	1620
Frac ½ Length (ft)	**517**	594	467	893	926	596	688
Boundary	**none**	none	none	648, 1520	755	987	none

Agua Moss did not conduct tests prior to 2015 and is relying on the 2010 report submitted by Key Energy, the past operator, for those results. The following observations were derived from a comparison of the results:

1. The differing P* over the last 3 years can most likely be explained by the increased injection volume in the months near the FOT. In both 2015 and 2017 the volume of injected water from April to June was about 20,000 and 40,000 bbls respectively more than in 2016. If given time to equilibrate before the FOT, it is expected that the P* would be close to the 2016 value.
2. The radius of investigation for 2017 was adequate enough to see out beyond all but one of the previously seem boundaries.
   Note: *On 2010 results seems peculiar to have a boundary beyond the Radius of Investigation.*
3. The parameters calculated compare well enough with previous FOT parameter to validate the 2017 FOT results.

The raw test data obtain during the 2017 falloff test will be kept on file for a period of three (3) years and will be available upon request.

Conclusions:

Based on the above analysis and results comparison, Agua Moss believes the Sunco SWD #1 2017 FOT was successfully completed. The results do not show indications of concern in continuing the current waste injection operations.

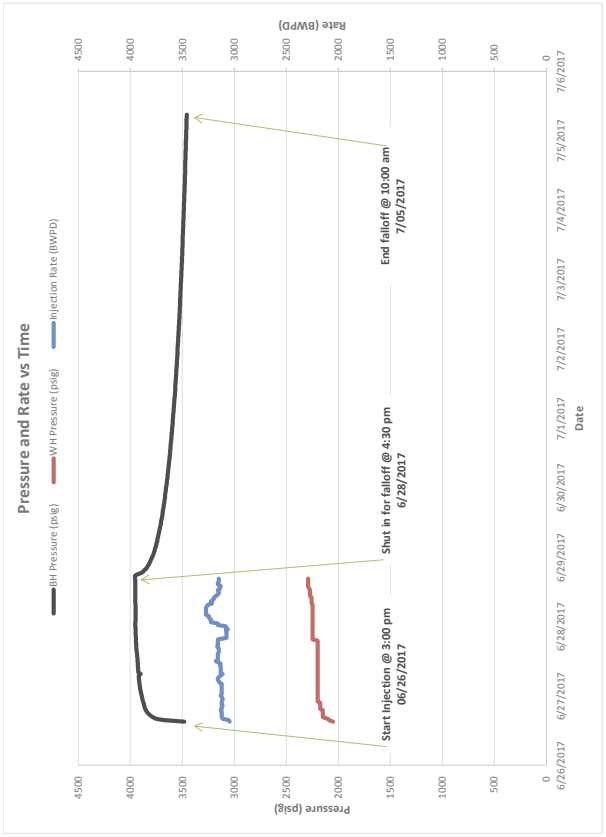


Figure 3 Pressure and Rate vs Time

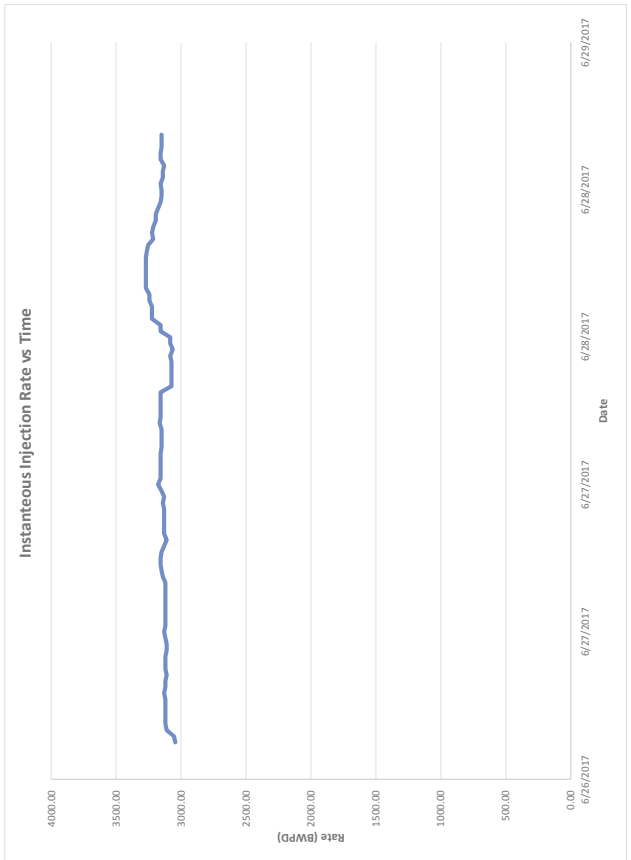


Figure 4 Injection Rate vs Time

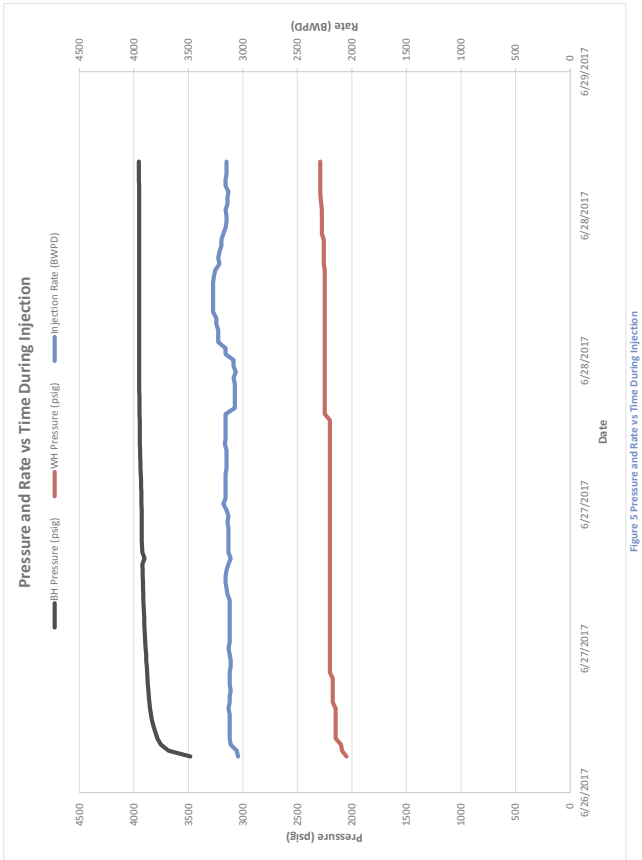


Figure 5 Pressure and Rate vs Time During Injection

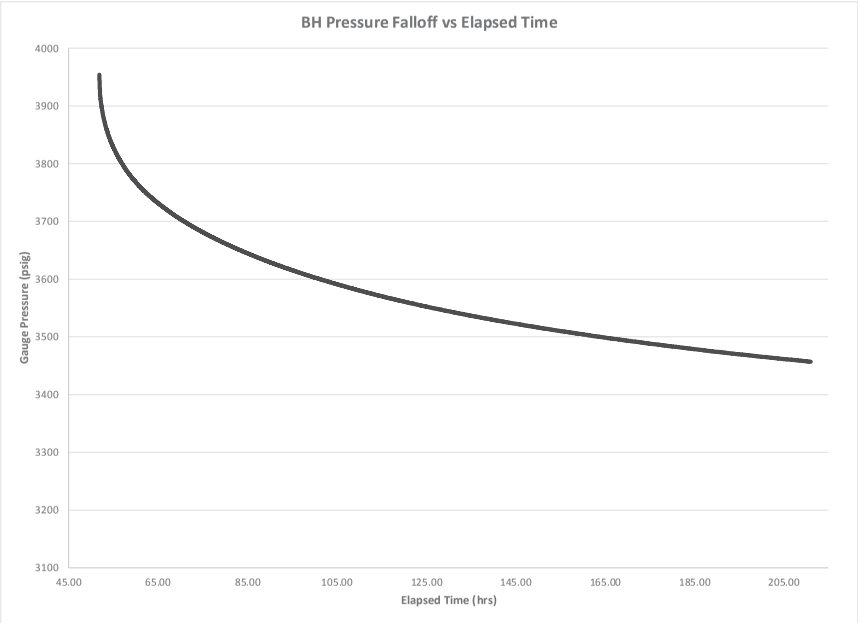


Figure 8 BH Pressure Falloff vs Elapsed Time

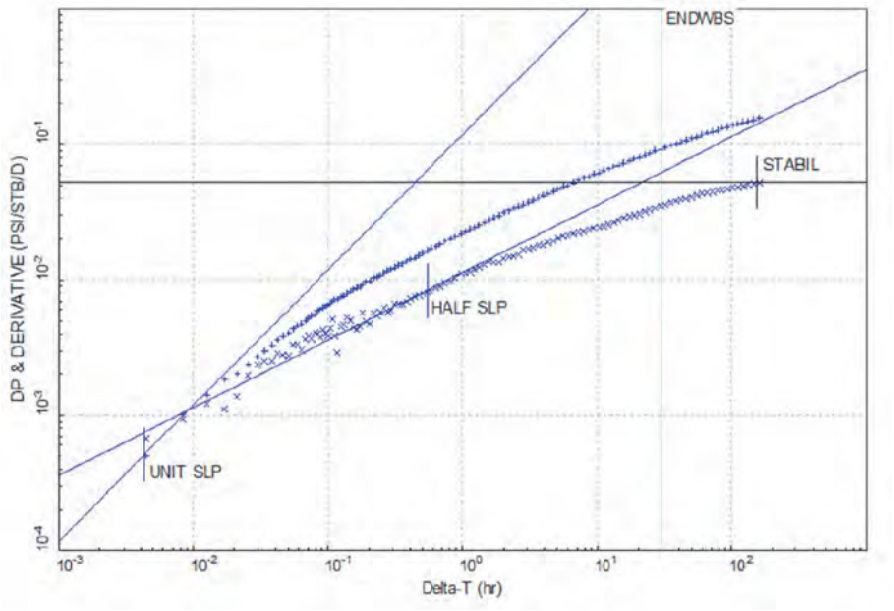


Figure 6 Derivative Plot

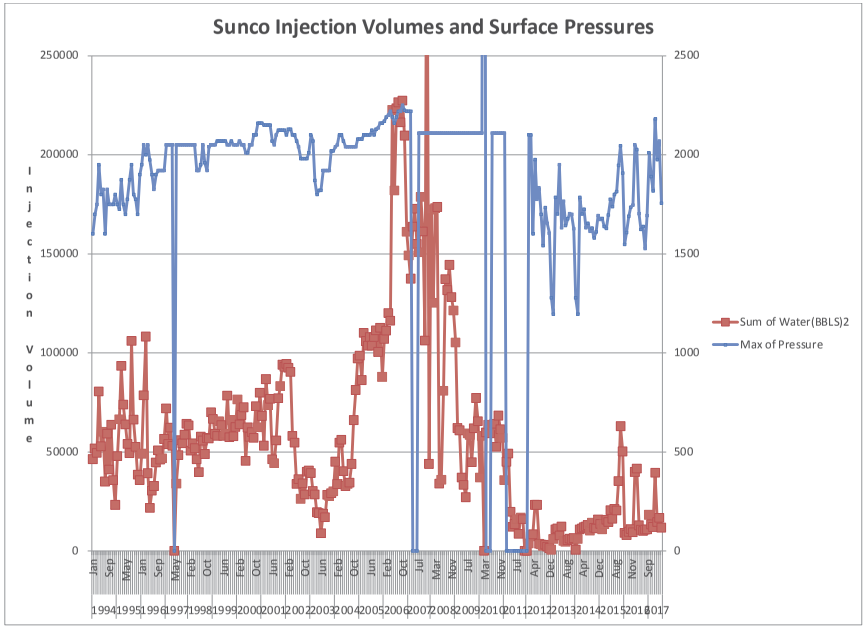


Figure 9 Injection and Pressure Plot

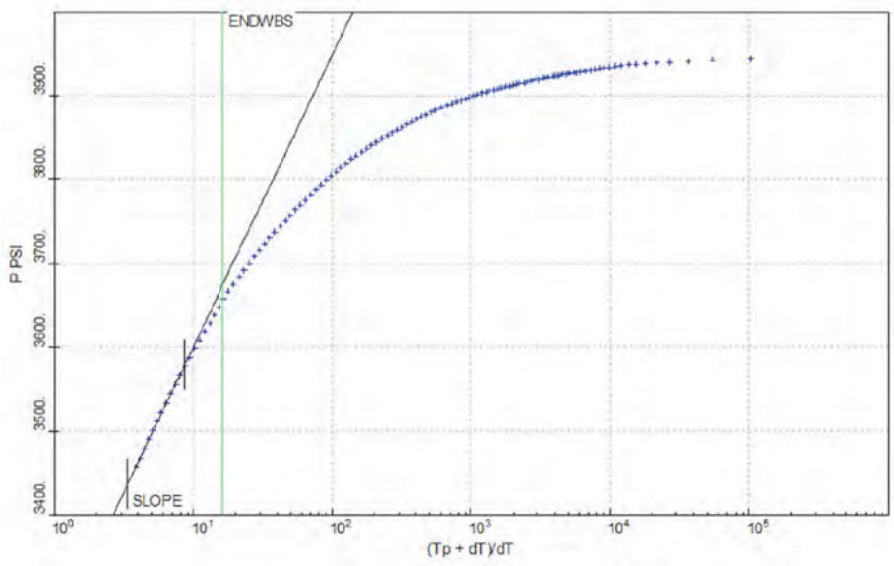


Figure 7 Horner Plot

	WH	AP
4/1/17		0
4/2/17		
4/3/17	2100	
4/4/17	1850	
4/5/17	2250	
4/6/17	2200	
4/7/17	1950	
4/8/17		
4/9/17		
4/10/17	2250	
4/11/17	2300	
4/12/17	2250	
4/13/17	2200	
4/14/17	2100	
4/15/17		
4/16/17		
4/17/17	2100	
4/18/17	2300	
4/19/17	2250	
4/20/17	2300	
4/21/17	2300	
4/22/17		
4/23/17		
4/24/17	2300	
4/25/17	2300	
4/26/17	2200	
4/27/17	2300	
4/28/17	1850	
4/29/17		
4/30/17		
	2182.5	**0**	**AVG**
	1850	**0**	**MIN**
	2300	**0**	**MAX**

	WH	AP
5/1/17	2000	0
5/2/17	2100	
5/3/17	2000	
5/4/17	2000	
5/5/17	2100	
5/6/17		
5/7/17		
5/8/17	2000	
5/9/17	2000	
5/10/17	2000	
5/11/17	2200	
5/12/17	2100	
5/13/17		
5/14/17		
5/15/17	2100	
5/16/17	1800	
5/17/17	200	
5/18/17	1750	
5/19/17	2100	
5/20/17		
5/21/17		
5/22/17	2100	
5/23/17	2200	
5/24/17	2100	
5/25/17	2200	
5/26/17	2100	
5/27/17		
5/28/17		
5/29/17		
5/30/17	2200	
5/31/17	2100	
	1975	**0**	**AVG**
	200	**0**	**MIN**
	2200	**0**	**MAX**

	WH	AP
6/1/17	2200	0
6/2/17	2200	
6/3/17		
6/4/17		
6/5/17	2200	
6/6/17	2250	
6/7/17	2000	
6/8/17	1700	
6/9/17	2200	
6/10/17		
6/11/17		
6/12/17	1800	
6/13/17	2000	
6/14/17	2000	
6/15/17	2000	
6/16/17	1900	
6/17/17		
6/18/17		
6/19/17	1850	
6/20/17	2100	
6/21/17	2200	
6/22/17	2250	
6/23/17	2250	
6/24/17		
6/25/17		
6/26/17	2200	
6/27/17	2200	
6/28/17	2290	
6/29/17	1890	
6/30/17	1850	
	2069.545	**0**	**AVG**
	1700	**0**	**MIN**
	2290	**0**	**MAX**

7/1/17
7/2/17
7/3/17
7/4/17
7/5/17
7/6/17
7/7/17
7/8/17
7/9/17
7/10/17
7/11/17
7/12/17
7/13/17
7/14/17
7/15/17
7/16/17
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7/28/17
7/29/17
7/30/17
7/31/17

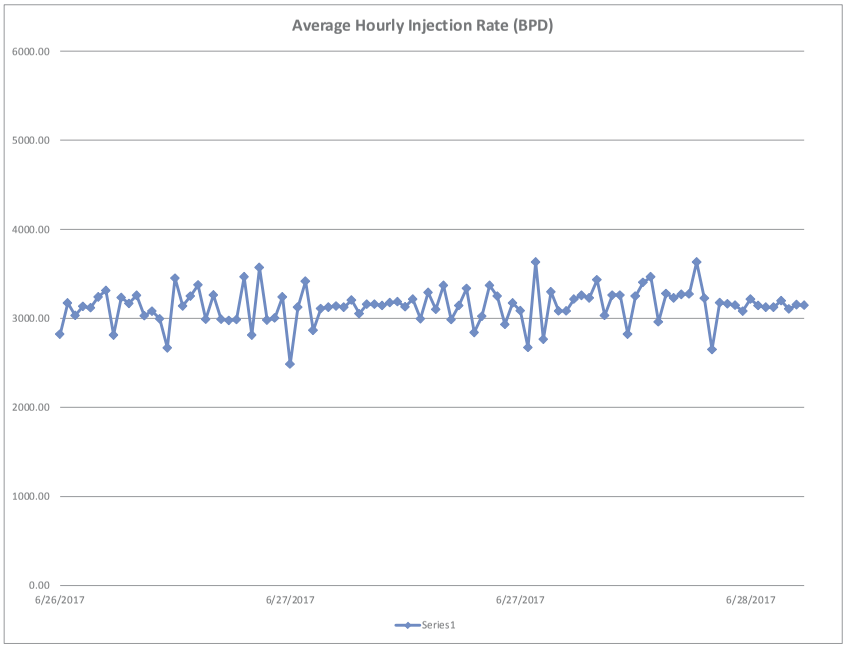

Figure 10 Avg Hourly Injection Rate vs Time

Total Injected	Avg Vol	Avg Flow
1/1/2017		
1/2/2017	714	20.825
1/3/2017	343	10.00416667
1/4/2017	1319	38.47083333
1/5/2017		
1/6/2017	952	27.76666667
1/7/2017		
1/8/2017		
1/9/2017	861	25.1125
1/10/2017	261	7.6125
1/11/2017	728	21.23333333
1/12/2017	250	7.291666667
1/13/2017		
1/14/2017		
1/15/2017		
1/16/2017	342	9.975
1/17/2017	957	27.9125
1/18/2017		
1/19/2017	805	23.47916667
1/20/2017	761	22.19583333
1/21/2017		
1/22/2017		
1/23/2017		
1/24/2017	748	21.81666667
1/25/2017		
1/26/2017	1173	34.2125
1/27/2017	489	14.2625
1/28/2017		
1/29/2017		
1/30/2017	223	6.504166667
1/31/2017	826	24.09166667

	Avg Vol	Avg Flow
2/1/2017	1142	33.30833333
2/2/2017	912	26.6
2/3/2017	456	13.3
2/4/2017		
2/5/2017		
2/6/2017	1149	33.5125
2/7/2017	1127	32.87083333
2/8/2017	611	17.82083333
2/9/2017	978	28.525
2/10/2017	829	24.17916667
2/11/2017		
2/12/2017		
2/13/2017	822	23.975
2/14/2017	958	27.94166667
2/15/2017	189	5.5125
2/16/2017	43	1.254166667
2/17/2017		
2/18/2017		
2/19/2017		
2/20/2017	1240	36.16666667
2/21/2017	623	18.17083333
2/22/2017	162	4.725
2/23/2017	552	16.1
2/24/2017	530	15.45833333
2/25/2017		
2/26/2017		
2/27/2017	461	13.44583333
2/28/2017	557	16.24583333

	Avg Vol	Avg Flow
3/1/2017	919	26.80416667
3/2/2017	1576	45.96666667
3/3/2017	816	23.8
3/4/2017		
3/5/2017		
3/6/2017	1136	33.13333333
3/7/2017	1082	31.55833333
3/8/2017	304	8.866666667
3/9/2017	378	11.025
3/10/2017	550	16.04166667
3/11/2017		
3/12/2017		
3/13/2017	651	18.9875
3/14/2017	503	14.67083333
3/15/2017	349	10.17916667
3/16/2017	683	19.92083333
3/17/2017	459	13.3875
3/18/2017		
3/19/2017		
3/20/2017	320	9.333333333
3/21/2017	210	6.125
3/22/2017	462	13.475
3/23/2017	221	6.445833333
3/24/2017		
3/25/2017		
3/26/2017		
3/27/2017	144	4.2
3/28/2017	277	8.079166667
3/29/2017		
3/30/2017	237	6.9125
3/31/2017	797	23.24583333

	Avg Vol	Avg Flow
4/1/2017		
4/2/2017		
4/3/2017	1587	46.2875
4/4/2017	1231	35.90416667
4/5/2017	1340	39.08333333
4/6/2017	2595	75.6875
4/7/2017	1538	44.85833333
4/8/2017		
4/9/2017		
4/10/2017	3186	92.925
4/11/2017	2246	65.50833333
4/12/2017	1615	47.10416667
4/13/2017	1723	50.25416667
4/14/2017	1601	46.69583333
4/15/2017		
4/16/2017		
4/17/2017	1450	42.29166667
4/18/2017	2272	66.26666667
4/19/2017	2333	68.04583333
4/20/2017	2251	65.65416667
4/21/2017	1871	54.57083333
4/22/2017		
4/23/2017		
4/24/2017	2440	71.16666667
4/25/2017	2294	66.90833333
4/26/2017	2396	69.88333333
4/27/2017	1959	57.1375
4/28/2017	1575	45.9375
4/29/2017		
4/30/2017		

AVG	691.2941	20.1627451	702.1579	20.47960526
MAX	1319	38.47083333	1240	36.16666667
MIN	223	6.5041667	43	1.2541667
Total for month	11752		13341	

AVG	574.9524	16.76944444	1975.15	57.60854167
MAX	1576	45.96666667	3186	92.925
MIN	144	4.2000000	1231	35.9041667
Total for month	12074		39503	

	WH	AP
1/1/17		0
1/2/17	1750	
1/3/17	1750	
1/4/17	2250	
1/5/17	1550	
1/6/17	1850	
1/7/17		
1/8/17		
1/9/17	1800	
1/10/17	1750	
1/11/17	1800	
1/12/17	1750	
1/13/17	1600	
1/14/17		
1/15/17		
1/16/17	1750	
1/17/17	1800	
1/18/17	1500	
1/19/17	1750	
1/20/17	2000	
1/21/17		
1/22/17		
1/23/17	1500	
1/24/17	1800	
1/25/17	1500	
1/26/17	1850	
1/27/17	1800	
1/28/17		
1/29/17		
1/30/17	1750	
1/31/17	1800	
	1756.818	**0**	**AVG**
	1500	**0**	**MIN**
	2250	**0**	**MAX**

	WH	AP
2/1/17	2250	0
2/2/17	2000	
2/3/17	1900	
2/4/17		
2/5/17		
2/6/17	2000	
2/7/17	2200	
2/8/17	2000	
2/9/17	1850	
2/10/17	1900	
2/11/17		
2/12/17		
2/13/17	1800	
2/14/17	2000	
2/15/17	2000	
2/16/17	1500	
2/17/17	1600	
2/18/17		
2/19/17		
2/20/17	2000	
2/21/17	1800	
2/22/17	1800	
2/23/17	1750	
2/24/17	1900	
2/25/17		
2/26/17		
2/27/17	1750	
2/28/17	1800	
3/1/17		
	1890	**0**	**AVG**
	1500	**0**	**MIN**
	2250	**0**	**MAX**

	WH	AP
3/1/17	1800	0
3/2/17	2250	
3/3/17	1900	
3/4/17		
3/5/17		
3/6/17	1900	
3/7/17	1850	
3/8/17	1800	
3/9/17	1800	
3/10/17	1900	
3/11/17		
3/12/17		
3/13/17	1850	
3/14/17	1850	
3/15/17	1900	
3/16/17	1750	
3/17/17	1900	
3/18/17		
3/19/17		
3/20/17	1850	
3/21/17	1750	
3/22/17	1750	
3/23/17	1900	
3/24/17	1600	
3/25/17		
3/26/17		
3/27/17	1700	
3/28/17	1600	
3/29/17	1600	
3/30/17	1800	
3/31/17	1800	
	1817.391	**0**	**AVG**
	1600	**0**	**MIN**
	2250	**0**	**MAX**

2016 AREA OF REVIEW

UNIT LETTERS ENCOMPASSED BY THE 1-MILE AOR

Sec	TWN	RNG	UL
1	29N	12W	DELM
2	29N	12W	ALL
3	29N	12W	ABCFGHIJKOP
10	29N	12W	AB
11	29N	12W	ABCDEF
34	30N	12W	AGHIJKNOP
35	30N	12W	DEFGHIJKLMNOP
36	30N	12W	LM

All tracts within the AOR were reviewed for activity that had ensued since 2015 Annual Report.

	Avg Vol	Avg Flow
5/1/2017	711	20.7375
5/2/2017	201	5.8625
5/3/2017	752	21.93333333
5/4/2017	719	20.97083333
5/5/2017	854	24.90833333
5/6/2017		
5/7/2017		
5/8/2017	594	17.325
5/9/2017	978	28.525
5/10/2017	1273	37.12916667
5/11/2017	1099	32.05416667
5/12/2017	785	22.89583333
5/13/2017		
5/14/2017		
5/15/2017	283	8.254166667
5/16/2017	191	5.570833333
5/17/2017	468	13.65
5/18/2017	268	7.816666667
5/19/2017	815	23.77083333
5/20/2017		
5/21/2017		
5/22/2017	421	12.27916667
5/23/2017	377	10.99583333
5/24/2017	521	15.19583333
5/25/2017	952	27.76666667
5/26/2017	785	22.89583333
5/27/2017		
5/28/2017		
5/29/2017		
5/30/2017	1154	33.65833333
5/31/2017	351	10.2375

	Avg Vol	Avg Flow
6/1/2017	495	14.4375
6/2/2017	1040	30.33333333
6/3/2017		
6/4/2017		
6/5/2017	541	15.77916667
6/6/2017	1067	31.12083333
6/7/2017	911	26.57083333
6/8/2017		
6/9/2017	567	16.5375
6/10/2017		
6/11/2017		
6/12/2017	697	20.32916667
6/13/2017	268	7.816666667
6/14/2017	627	18.2875
6/15/2017	411	11.9875
6/16/2017		
6/17/2017		
6/18/2017		
6/19/2017	331	9.654166667
6/20/2017	957	27.9125
6/21/2017	200	5.833333333
6/22/2017	1089	31.7625
6/23/2017	702	20.475
6/24/2017		
6/25/2017		
6/26/2017	607	17.70416667
6/27/2017	3104	90.53333333
6/28/2017	3019	88.05416667
6/29/2017		
6/30/2017		

	661.4545	19.29242424	924.0556	26.95162037
	1273	37.12916667	3104	90.53333333
	191	5.5708333	200	5.8333333
	14552		16633	

	API	Well Name	Well #	Current Operator	Type	Lease	Status	Sec	TWN	RNG	UL	Spud Date	TD	Surface Casing size	Surface Casing depth	Surface Casing Sacks TOC	INT Casing size	INT Casing depth	INT Casing Sacks TOC	Production Casing size	Production Casing depth	Production Casing Sacks TOC	Perfs	Packer	PLUGGED
x	30045-08851	ALLEN A	#001	BP America	Gas	Private	Active	1	29N	12W	D	3/12/1961	6785	8.265	264	200 surf				4.5	6785	300 surf	6518 -6718		
x	30045-26214	ALLEN A	#001E	BP America	Gas	Federal	Active	1	29N	12W	L	3/22/1985	5825	8.625	318	225 surf				5.5	6622	820 surf	6425 -6602		
x	30045-32346	CORNELL	#002R	Energen Resources	Gas	Federal	Active	1	29N	12W	M	7/22/2004	2152	7	137	90 surf				4.5	2151	310 surf	1702 -1926		
x	30045-32241	BECK	#001R	Burlington	Gas	Private	Active	2	29N	12W	G	12/1/2004	2225	7	135	34 surf				4.5	2221	262 surf	1774 -2077		
x	30045-33811	BECK	#001S	Burlington	Gas	Private	Active	2	29N	12W	D	8/17/2006	2200	7	162	85 surf				4.5	2195	255 surf	1730 -1951		
x	30045-31580	CORNELL COM	#500	Burlington	Gas	Federal	Active	2	29N	12W	N	7/14/2003	2136	7	139	44 surf	6.25	2126		4.5	2126	258 surf	1658 -1878		
x	30045-08714	CORNELL SRC	#007	Burlington	Gas	Federal	Active	2	29N	12W	L	7/29/1944	2107	16	42	10 surf	5.5	1978		3.5	2106	250 surf	1976 -2010		
x	30045-08704	MCGRATH B	#001	Burlington	Gas	Private	Active	2	29N	12W	J	11/19/1961	6720	8.625	318	225 surf				4.5	1865	1065 surf	6489 -6596		
	30045-28653	SUNCO DISPOSAL	#001	Agua Moss	Salt Water Disposal	Private	Active	2	29N	12W	E	1/28/1992	4760	8.625	209	150 surf				5.5	4760	1010 surf	4350 -4460	4282 10/15/07	4350-4460 TA'd
x	30045-08839	YOUNG	#001	Burlington	Gas	Private	Active	2	29N	12W	D	8/1/1961	6740	8.625	307	275 surf				4.5	6739	700 surf	6446 -6644		
x	30045-33580	MCGRATH	#003S	Burlington	Gas	Private	Active	3	29N	12W	B	7/13/2007	2132	7	218	150 surf				4.5	2112	289 surf	1692 -1904		
x	30045-08712	MCGRATH A	#001	Burlington	Gas	Private	Active	3	29N	12W	I	3/14/1964	6689	8.625	307	250 surf				4.5	6688	500 surf	6432 -6524		
x	30045-32931	WALKER	#100S	Burlington	Gas	Private	Active	3	29N	12W	F	8/14/2005	2120	7	144	61 surf				4.5	2117	238 surf	1621 -1885		NOI to PA 5/2014
x	30045-23889	BECK A	#001E	Burlington	Gas	Federal	Active	10	29N	12W	B	1/5/1981	6514	8.625	240	150 surf				4.5	6514	765 surf	6277 -6454		
x	30045-30381	CORNELL	#100	Burlington	Gas	Federal	Active	10	29N	12W	B	1/7/2003	1968	7	147	55 surf				4.5	1959	229 surf	1943-1704 1744-1800		
x	30-045-08615	CORNELL	#006	Thompson Engr & Prod	Gas	Federal	Active	11	29N	12W	C	11/7/1955	1839	8.625	106	70 surf	5.5	1811		3.5	2022	181 surf	1811 -1839		
x	30045-31581	CORNELL	#101	Burlington	Gas	Federal	Active	11	29N	12W	D	10/7/2003	2008	7	140	35 surf				4.5	2000	270 surf	1726 -1764		
x	30045-13092	CORNELL C	#001	BP America	Gas	Federal	Active	11	29N	12W	D	12/6/1961	6604	8.625	250	150 surf				4.5	6604	300 surf	6298 -6483		
x	30045-26141	DUFF GAS COM	#001E	Burlington	Gas	Federal	TA'd	34	30N	12W	G	11/20/1984	6608	8.625	316	295 surf				4.5	6608	1000 surf	6396-6576 DK RC to FC 1492-1870		TA'd 3/5/14
x	30045-08946	CARNAHAN COM	#001	Holcomb Oil & Gas	Gas	Private	Active	35	30N	12W	P	12/19/1960	6778	8.625	301	200 surf				4.5	6760	445 surf	6521-6708 94 RC to FC 1824-2037		
x	30-045-25844	CARNAHAN COM	#002	Merrion Oil & Gas	Gas	Private	Active	35	30N	12W	P	6/15/1984	6780	8.625	230	170 surf				4.5	6777	1425 surf	6529 -6714		
x	30045-11770	HUDSON J	#003	Burlington	Gas	Federal	Active	35	30N	12W	E	7/22/1966	6750	8.625	306	250 surf				4.5	6750	750 surf	6460 6680 DK RC to FC 1784-1994		
	30-045-28177	FC STATE COM	#024	Burlington	Gas	State	Plugged	36	30N	12W	M	10/9/1990	6608	8.625	316	250 surf				4.5	6609	6000 surf	3492 -1870		3/26/2013
	30045-08945	MCGRATH C	#001	Burlington	Gas	Federal	Plugged	34	30n	12W	p	2/7/1963	6637	8.625	323	225 surf				4.5	6637	925 surf	6357 -6576		12 SF 2018

UICI-5-0
Agua Moss, LLC
Sunco Disposal #1 30-045-28653

2017
Quarterly
Injection Report

	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maxium Flow (gpm)	Minimum Flow (gpm)	Average Annular Pressure (psig)	Maximum Annular Pressure (psig)	Minimum Annular Pressure (psig)	Average Volume (bpd)	Maximum Volume (bpd)	Minimum Volume (bpd)	Volume (barrels)	Total Cumulative Volume (barrels)	
													Previous year	144336	
Jan-2017	1756.818	2250	1500	20.1627451	38.47083333	6.5041667	0	0	0	691.2941176	1319	223	11752	144454	10
Feb-2017	1890	2250	1500	20.47960526	36.16666667	1.2541667	0	0	0	702.1578947	1240	43	13341	144587	51
Mar-2017	1817.391	2250	1600	16.76944444	45.96666667	4.2	0	0	0	574.952381	1576	144	12074	144708	25
													Previous Quarter	144708	25
Apr-2017	2182.5	2300	1850	57.60854167	92.925	35.9041667	0	0	0	1975.15	3186	1231	39503	145109	28
May-2017	1975	2200	200	19.29242424	37.12916667	5.5708333	0	0	0	661.4545455	1273	191	14552	145248	80
Jun-2017	2069.545	2290	1700	26.95162037	90.53333333	5.8333333	0	0	0	924.0555556	3104	200	16633	145415	13
													Previous Quarter	145415	13
Jul-17	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
Aug-17	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
Sep-17	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
													Previous Quarter	145415	13
Oct-2017	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
Nov-2017	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
Dec-2017	0	0	0	0	0	0	0	0	0	0	0	0	0	145415	13
													Total for year	107855	1464938 Life Of well injected

30-045-08713	McGrath SRC	#001	Burlington	Gas	Private	Plugged	2	29n	12w	j	7/7/1973	2136	13 & 10.75	550 & 864	2 sx mud 4 sx mud	8.625	1526	5 sx mud	5.50 & 3.50	2020 2136	12 sx mud 140 surf	2020-2136 2012-2078		1998
30045-08797	Pre-Ongard		Southland	Gas	Private	Plugged	2	29n	12w	g	4/14/1948	2125												2/23/1984
30045-30486	MCGRATH SRC	#001R	Burlington	Gas	Private	Plugged, Not Released	2	29N	12W	J	3/23/2001	2235	8.625	53	12 surf				2.875	2228	425 surf	2010 -2157		6/25/2010
30045-08793	Pre-Ongard		Southern union	Gas	Private	Plugged	1	29N	12W	E	3/16/1948	2125												3/16/1948
30-045-08656	Cornell	2	Energen Resources	Gas	Federal	Plugged	1	29N	12W	M	10/2/1955	1996	8.625	97	75 surf				5.5	1950	100 surf	1711 -1936		9/15/2005
30045-08823	Walker SRC	1	Burlington	Gas	Private	Plugged	3	29N	12W	G	2/25/1943	2050	16	21	20 surf	5.5	1930		3.5	2050	175 surf	1938 -1974		10/12/2009
30045-08711	Pre-Ongard		Union Texas	Gas	Private	Plugged	3	29N	12W	K	6/25/1955	1940												11/10/1964
30-045-23758	Pre-Ongard		Southland	Gas	Federal	Plugged	10	29N	12W	A	12/19/1980	1870												2/10/1984
30-045-08950	HUDSON	2	Burlington	Gas	Federal	Plugged	34	30N	12W	P	7/17/1946	2137	15.5	38	20 surf	10 & 8.625	1217 1618	99 surf	5.5	1961	40 surf	1728 -1938 1962-2008	2128	9/26/2008
30045-08955	Pre-Ongard		Aztec O&G	Gas	Private	Plugged	34	30N	12W	N	11/1/1944	1965												10/29/1977
30-045-20140	Pre-Ongard		Southland	Gas	Federal	Plugged	35	30N	12W	L	9/7/1967	DH												6/9/1982
30-045-33573	CORNELL COM	#500S	Burlington	Gas	Private	Plugged	2	29N	12W	P	3/18/2006	2210	7	132	34 surf	6.25	2210		4.5	2198	279 surf	1754 -1939 1743-1924		1/23/2013
30045-08844	KATTLER	#001	Burlington	Gas	Private	Plugged	2	29N	12W	C	1/26/1945	2069	10	846	surf	5.5	1960		3.5	2050	205 surf	1961 -2007		5/26/2012
30045-08709	MCGRATH	#003	Burlington	Gas	Private	Plugged	3	29N	12W	J	3/4/1945	2040	13.375	675	2 surf	8.625 INT 1 5.5 INT 2	1460 1928	4 surf 58 surf	3.5	2011	110 surf	1872 -1912 1922-1937	1871-1876	3/1/2013

07/06/17 Page A
File Reference F262705.RED

Customer .... AGUA MOSS, LLC
Street .... P.O. BOX 600
City/State..................... FARMINGTON, NM 87499
Country .... USA
Service Company .... TEFTELLER, INC.

Well Name .... SUNCO SWD NO. 1
Well Location .... SAN JUAN COUNTY, NM
Field / Pool .... POINT LOOKOUT FORMATION
Status (Oil, Gas, Other) .... DISPOSAL

Test Type .... INJECTION & FALL-OFF TESTS
Date of Test 6-26-17
Producing Interval .... 4350' - 4460'
Recorder Depth .... 4405'
Recorder Position .... 4405'
Shut In Date .... Start: 6-26-2017
Stop: 7-5-2017
Duration: 212 HRS. TANDEM ELEC. MEMORY INST. TIME
Bottom Hole Temperature ....

Gauge Identification

Gauge Manufacturer .... MICRO-SMART SYSTEMS
Serial Number 262
Model Number SP2000
Pressure Range ....
Battery Type ....
Calibration I.D. ....
Last Calibration 2/23/15

Gauge Setup Parameters

Probe Set Up Time 6/26/17 13: 2: 0
Time Delay to First Reading ....
Test Type Selection .... INJECTION & FALL-OFF TESTS
Test Duration Selection .... 212 HRS. TANDEM ELEC. MEMORY INST. TIME

COMPANY: AGUA MOSS, LLC PAGE 1 OF 11
WELL NAME : SUNCO SWD NO. 1 DATE : 07/06/17
WELL LOCATION : SAN JUAN COUNTY, NM FILE REF F262705.RED

Date MM/DD	Time hh.mm.ss	Test Time mmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Rel. to 14.7 Psi Atm.
06/26	13:02:00	.0000	.01	106.59		
06/26	13:28:00	26.0000	.01	104.24	.00	
06/26	13:31:00	29.0000	6.77	102.44	6.76	PRESSURED UP LUBRICATOR
06/26	13:31:15	29.2500	35.46	101.38	28.69	
06/26	13:31:30	29.5000	938.47	102.88	903.01	
06/26	13:31:45	29.7500	1522.12	102.38	583.65	
06/26	13:33:30	31.5000	1534.09	98.87	11.97	
06/26	13:34:45	32.7500	1534.34	95.65	.25	
06/26	13:35:30	33.5000	1549.79	93.30	15.45	SURFACE STOP
06/26	13:35:45	33.7500	1559.68	92.52	9.89	
06/26	13:36:00	34.0000	1572.86	91.74	13.18	RAN TANDEM ELEC. MEMORY INST. IN WELL
06/26	13:36:15	34.2500	1592.92	90.95	20.06	
06/26	13:36:30	34.5000	1605.41	90.17	12.49	
06/26	13:36:45	34.7500	1632.49	89.39	27.08	
06/26	13:37:00	35.0000	1666.46	88.61	33.97	
06/26	13:37:15	35.2500	1694.63	87.48	28.17	
06/26	13:37:30	35.5000	1718.72	86.49	24.09	
06/26	13:37:45	35.7500	1736.94	85.49	18.23	
06/26	13:38:00	36.0000	1755.17	84.50	18.23	
06/26	13:38:15	36.2500	1776.85	83.51	21.68	
06/26	13:38:30	36.5000	1801.40	82.52	24.55	
06/26	13:38:45	36.7500	1819.79	81.53	18.39	
06/26	13:39:00	37.0000	1838.06	80.53	18.26	
06/26	13:39:15	37.2500	1859.90	79.55	21.84	
06/26	13:39:30	37.5000	1882.91	78.56	23.01	
06/26	13:39:45	37.7500	1905.06	77.57	22.16	
06/26	13:40:00	38.0000	1931.11	76.58	26.04	
06/26	13:40:15	38.2500	1963.43	75.89	32.32	
06/26	13:40:30	38.5000	1999.92	75.64	36.49	
06/26	13:40:45	38.7500	2041.59	75.39	41.66	
06/26	13:41:00	39.0000	2088.29	75.13	46.70	
06/26	13:41:15	39.2500	2117.19	74.88	28.90	
06/26	13:41:30	39.5000	2139.49	74.62	22.30	
06/26	13:41:45	39.7500	2160.50	74.36	21.01	
06/26	13:42:00	40.0000	2183.09	74.10	22.59	
06/26	13:42:15	40.2500	2206.53	73.85	23.45	
06/26	13:42:30	40.5000	2231.14	73.60	24.60	
06/26	13:42:45	40.7500	2256.03	73.34	24.90	
06/26	13:43:00	41.0000	2279.49	73.09	23.46	
06/26	13:43:15	41.2500	2302.97	73.21	23.48	
06/26	13:43:30	41.5000	2323.38	73.61	20.41	
06/26	13:43:45	41.7500	2343.79	74.01	20.40	
06/26	13:44:00	42.0000	2362.18	74.41	18.39	
06/26	13:44:15	42.2500	2378.70	74.81	16.52	
06/26	13:44:30	42.5000	2402.97	75.21	24.28	
06/26	13:44:45	42.7500	2435.00	75.61	32.03	
06/26	13:45:00	43.0000	2467.03	76.01	32.03	
06/26	13:45:15	43.2500	2491.87	76.41	24.84	
06/26	13:45:30	43.5000	2513.26	76.81	21.39	
06/26	13:45:45	43.7500	2534.51	77.21	21.25	
06/26	13:46:00	44.0000	2555.89	77.61	21.38	
06/26	13:46:15	44.2500	2581.26	78.26	25.36	
06/26	13:46:30	44.5000	2612.10	79.04	30.85	
06/26	13:46:45	44.7500	2641.36	79.82	29.26	
06/26	13:47:00	45.0000	2666.60	80.60	25.24	
06/26	13:47:15	45.2500	2693.97	81.39	27.37	
06/26	13:47:30	45.5000	2724.22	82.17	30.24	
06/26	13:47:45	45.7500	2743.26	82.95	19.04	
06/26	13:48:00	46.0000	2765.02	83.74	21.76	
06/26	13:48:15	46.2500	2788.35	84.52	23.33	
06/26	13:48:30	46.5000	2813.83	85.31	25.48	
06/26	13:48:45	46.7500	2836.57	86.09	22.74	
06/26	13:49:00	47.0000	2859.60	86.88	23.03	
06/26	13:49:15	47.2500	2881.69	87.74	22.09	
06/26	13:49:30	47.5000	2906.89	88.64	25.21	

COMPANY: AGUA MOSS, LLC PAGE 2 OF 11
WELL NAME : SUNCO SWD NO. 1 DATE : 07/06/17
WELL LOCATION : SAN JUAN COUNTY, NM FILE REF F262705.RED

Date MM/DD	Time hh.mm.ss	Test Time mmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Rel. to 14.7 Psi Atm.
06/26	13:49:45	47.7500	2941.13	89.53	34.24	
06/26	13:50:00	48.0000	2972.06	90.42	30.93	
06/26	13:50:15	48.2500	3005.42	91.31	33.36	
06/26	13:50:30	48.5000	3040.77	92.20	35.35	
06/26	13:50:45	48.7500	3070.52	93.09	29.75	
06/26	13:51:00	49.0000	3095.54	93.98	25.02	
06/26	13:51:15	49.2500	3127.41	94.88	31.87	
06/26	13:51:30	49.5000	3153.12	95.77	25.71	
06/26	13:51:45	49.7500	3180.25	96.66	27.13	
06/26	13:52:00	50.0000	3213.09	97.56	32.84	
06/26	13:52:15	50.2500	3242.13	98.38	29.04	
06/26	13:52:30	50.5000	3264.89	99.17	22.76	
06/26	13:52:45	50.7500	3290.50	99.96	25.61	
06/26	13:53:00	51.0000	3311.95	100.75	21.45	
06/26	13:53:15	51.2500	3329.96	101.54	18.01	
06/26	13:53:30	51.5000	3348.11	102.33	18.15	
06/26	13:53:45	51.7500	3369.54	103.12	21.43	
06/26	13:54:00	52.0000	3392.25	103.91	22.71	
06/26	13:54:15	52.2500	3407.09	104.70	14.84	
06/26	13:54:30	52.5000	3422.78	105.49	15.69	
06/26	13:54:45	52.7500	3441.90	106.29	19.12	
06/26	13:55:00	53.0000	3463.29	107.08	21.39	
06/26	13:58:15	56.2500	3481.75	103.70	18.46	TANDEM ELEC. MEMORY INST. @ 4405'
06/26	14:00:00	58.0000	3480.40	100.55	-1.46	
06/26	14:02:15	60.2500	3479.56	97.60	-.84	
06/26	14:06:45	64.7500	3479.22	94.52	-.34	
06/26	14:14:00	72.0000	3478.60	93.21	-.62	BEGAN INJECTING WATER
06/26	14:15:00	73.0000	3540.52	93.33	61.92	
06/26	14:15:15	73.2500	3557.59	93.12	17.07	
06/26	14:15:30	73.5000	3568.93	93.55	11.34	
06/26	14:16:00	74.0000	3583.42	94.43	14.49	
06/26	14:16:15	74.2500	3589.16	94.86	5.75	
06/26	14:17:00	75.0000	3605.36	96.18	16.20	
06/26	14:17:15	75.2500	3609.52	96.61	4.16	
06/26	14:18:45	76.7500	3628.99	99.98	19.47	
06/26	14:20:00	78.0000	3643.76	103.13	14.77	
06/26	14:21:30	79.5000	3656.60	106.18	12.83	
06/26	14:24:30	82.5000	3676.32	107.61	19.72	
06/26	14:24:45	82.7500	3677.05	107.49	.73	
06/26	14:29:30	87.5000	3694.48	104.44	17.43	
06/26	14:33:15	91.2500	3705.61	101.32	11.14	
06/26	14:37:45	95.7500	3717.75	98.20	12.14	
06/26	14:43:30	101.5000	3730.89	95.11	13.14	
06/26	14:52:45	110.7500	3747.23	92.09	16.34	
06/26	15:10:15	128.2500	3766.77	89.93	19.54	
06/26	15:10:30	128.5000	3767.07	89.92	.30	
06/26	15:32:30	150.5000	3786.76	89.63	19.69	
06/26	15:32:45	150.7500	3786.89	89.63	.13	
06/26	15:59:00	177.0000	3802.99	89.88	16.10	
06/26	16:25:00	203.0000	3817.32	90.11	14.33	
06/26	16:51:00	229.0000	3828.78	90.27	11.46	
06/26	17:17:00	255.0000	3837.80	90.36	9.02	
06/26	17:43:00	281.0000	3845.63	90.41	7.83	
06/26	18:09:00	307.0000	3852.70	90.45	7.07	
06/26	18:35:00	333.0000	3858.71	90.48	6.01	
06/26	19:01:00	359.0000	3863.16	90.46	4.45	
06/26	19:27:00	385.0000	3866.16	90.47	2.94	
06/26	19:53:00	411.0000	3869.17	90.50	3.01	
06/26	20:19:00	437.0000	3872.32	90.51	3.15	
06/26	20:45:00	463.0000	3875.20	90.52	2.88	
06/26	21:11:00	489.0000	3878.12	90.54	2.92	
06/26	21:37:00	515.0000	3881.25	90.55	3.13	
06/26	22:03:00	541.0000	3884.42	90.58	3.17	
06/26	22:29:00	567.0000	3887.32	90.59	2.90	
06/26	22:55:00	593.0000	3890.15	90.61	2.83	

Date MM/DD	Time hh:mm:ss	Test Time =======	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
06/26 21:21:00		619.0000	3892.77	90.63	2.62	
06/26 23:47:00		648.0000	3895.43	90.64	2.66	
06/27 00:13:00		673.0000	3897.97	90.66	2.54	
06/27 00:39:00		697.0000	3900.33	90.65	2.36	
06/27 01:05:00		723.0000	3902.69	90.64	2.36	
06/27 01:31:00		749.0000	3904.74	90.61	2.05	
06/27 01:57:00		775.0000	3906.68	90.54	1.95	
06/27 02:23:00		801.0000	3908.52	90.44	1.83	
06/27 02:49:00		827.0000	3910.31	90.27	1.79	
06/27 03:15:00		853.0000	3911.88	90.03	1.57	
06/27 03:41:00		879.0000	3913.44	89.71	1.56	
06/27 04:07:00		905.0000	3914.78	89.29	1.34	
06/27 04:33:00		931.0000	3915.99	88.77	1.22	
06/27 04:59:00		957.0000	3916.85	87.98	.86	
06/27 05:25:00		983.0000	3917.88	87.35	1.02	
06/27 05:51:00		1009.0000	3918.76	86.74	.88	
06/27 06:17:00		1035.0000	3919.72	86.13	.96	
06/27 06:25:30		1043.5000	3900.37	86.10	-19.35	
06/27 06:25:45		1043.7500	3899.91	86.11	-.47	
06/27 06:51:00		1069.0000	3919.42	85.77	19.51	
06/27 06:52:00		1070.0000	3919.69	85.72	.27	
06/27 07:18:00		1096.0000	3922.88	84.85	3.19	
06/27 07:44:00		1122.0000	3924.21	84.17	1.33	
06/27 08:10:00		1148.0000	3924.71	83.56	.50	
06/27 08:36:00		1174.0000	3926.48	82.91	.77	
06/27 09:02:00		1200.0000	3926.08	82.44	-.40	
06/27 09:28:00		1226.0000	3926.62	82.16	.54	
06/27 09:54:00		1252.0000	3927.02	82.10	.41	
06/27 10:20:00		1278.0000	3927.61	82.15	.58	
06/27 10:46:00		1304.0000	3927.93	82.22	.32	
06/27 11:12:00		1330.0000	3928.41	82.36	.48	
06/27 11:38:00		1356.0000	3928.88	82.56	.46	
06/27 12:04:00		1382.0000	3929.54	82.87	.66	
06/27 12:30:00		1408.0000	3930.37	83.20	.83	
06/27 12:56:00		1434.0000	3931.51	83.60	1.14	
06/27 13:22:00		1460.0000	3933.02	83.96	1.51	
06/27 13:48:00		1486.0000	3934.57	84.30	1.55	
06/27 14:14:00		1512.0000	3936.17	84.65	1.59	
06/27 14:40:00		1538.0000	3937.76	85.04	1.59	
06/27 15:06:00		1564.0000	3939.13	85.40	1.38	
06/27 15:32:00		1590.0000	3940.42	85.82	1.28	
06/27 15:58:00		1616.0000	3941.51	86.19	1.09	
06/27 16:24:00		1642.0000	3942.50	86.54	.99	
06/27 16:50:00		1668.0000	3943.11	86.86	.62	
06/27 17:16:00		1694.0000	3943.61	87.16	.49	
06/27 17:42:00		1720.0000	3944.08	87.43	.47	
06/27 18:08:00		1746.0000	3944.56	87.69	.48	
06/27 18:34:00		1772.0000	3944.99	87.93	.42	
06/27 19:00:00		1798.0000	3945.62	88.17	.63	
06/27 19:26:00		1824.0000	3946.16	88.38	.54	
06/27 19:52:00		1850.0000	3946.78	88.44	.62	
06/27 20:18:00		1876.0000	3947.39	88.43	.60	
06/27 20:44:00		1902.0000	3947.88	88.27	.50	
06/27 21:10:00		1928.0000	3948.12	87.97	.24	
06/27 21:36:00		1954.0000	3948.56	87.56	.44	
06/27 22:02:00		1980.0000	3949.00	87.10	.45	
06/27 22:28:00		2006.0000	3949.54	86.59	.54	
06/27 22:54:00		2032.0000	3949.90	86.07	.35	
06/27 23:20:00		2058.0000	3950.03	85.54	.13	
06/27 23:46:00		2084.0000	3950.15	85.03	.12	
06/28 00:12:00		2110.0000	3950.18	84.56	.03	
06/28 00:38:00		2136.0000	3950.17	84.16	-.00	
06/28 01:04:00		2162.0000	3950.12	83.81	-.05	
06/28 01:30:00		2188.0000	3949.93	83.57	-.19	
06/28 01:56:00		2214.0000	3949.88	83.42	-.05	

Date MM/DD	Time hh:mm:ss	Test Time =======	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
06/28 02:22:00		2240.0000	3949.75	83.33	-.13	
06/28 02:48:00		2266.0000	3949.54	83.18	-.22	
06/28 03:14:00		2292.0000	3949.45	82.95	-.09	
06/28 03:40:00		2318.0000	3949.55	82.68	.10	
06/28 04:06:00		2344.0000	3949.55	82.41	-.00	
06/28 04:32:00		2370.0000	3949.64	82.12	.09	
06/28 04:58:00		2396.0000	3949.73	81.82	.09	
06/28 05:24:00		2422.0000	3949.84	81.53	.11	
06/28 05:50:00		2448.0000	3949.89	81.22	.05	
06/28 06:16:00		2474.0000	3949.92	80.98	.03	
06/28 06:42:00		2500.0000	3949.89	80.60	-.03	
06/28 07:08:00		2526.0000	3949.97	80.30	.08	
06/28 07:34:00		2552.0000	3950.07	80.06	.10	
06/28 07:50:00		2578.0000	3950.17	80.04	.10	
06/28 08:26:00		2604.0000	3950.17	80.07	-.00	
06/28 08:52:00		2630.0000	3950.22	80.01	.05	
06/28 09:18:00		2656.0000	3950.24	79.93	.01	
06/28 09:44:00		2682.0000	3950.36	80.11	.12	
06/28 10:10:00		2708.0000	3950.47	80.60	.11	
06/28 10:36:00		2734.0000	3950.53	80.97	.06	
06/28 11:02:00		2760.0000	3950.59	81.24	.07	
06/28 11:28:00		2786.0000	3950.67	81.45	.08	
06/28 11:54:00		2812.0000	3950.70	81.56	.02	
06/28 12:20:00		2838.0000	3950.83	81.65	.13	
06/28 12:46:00		2864.0000	3951.00	82.04	.17	
06/28 13:12:00		2890.0000	3951.19	82.33	.18	
06/28 13:38:00		2916.0000	3951.50	82.60	.31	
06/28 14:04:00		2942.0000	3951.73	82.93	.23	
06/28 14:30:00		2968.0000	3952.05	83.24	.33	
06/28 14:56:00		2994.0000	3952.38	83.65	.32	
06/28 15:22:00		3020.0000	3952.70	83.96	.32	
06/28 15:48:00		3046.0000	3953.11	84.31	.41	
06/28 16:14:00		3072.0000	3953.39	84.65	.28	
06/28 16:40:00		3098.0000	3953.82	84.88	.42	
06/28 16:55:45		3113.7500	3334.47	85.01	-19.35	STOPPED INJECTING WATER
06/28 16:56:00		3114.0000	3333.76	85.03	-.71	BRIDAN FALL-OFF TEST
06/28 17:06:00		3124.0000	3914.44	85.75	19.32	
06/28 17:06:15		3124.2500	3913.95	85.77	-.48	
06/28 17:26:45		3144.7500	3894.19	86.39	-19.76	
06/28 17:27:00		3145.0000	3893.99	86.39	-.20	
06/28 17:53:00		3171.0000	3877.07	86.63	-16.92	
06/28 18:19:00		3197.0000	3863.63	87.00	-13.44	
06/28 18:45:00		3223.0000	3852.17	87.32	-11.46	
06/28 19:11:00		3249.0000	3843.88	87.63	-8.29	
06/28 19:37:00		3275.0000	3834.72	87.92	-8.16	
06/28 20:03:00		3301.0000	3827.19	88.19	-7.52	
06/28 20:29:00		3327.0000	3820.20	88.42	-6.99	
06/28 20:55:00		3353.0000	3813.68	88.61	-6.52	
06/28 21:21:00		3379.0000	3807.60	88.81	-6.08	
06/28 21:47:00		3405.0000	3801.97	88.98	-5.63	
06/28 22:13:00		3431.0000	3796.56	89.11	-5.41	
06/28 22:39:00		3457.0000	3791.45	89.26	-5.11	
06/28 23:05:00		3483.0000	3786.63	89.39	-4.81	
06/28 23:31:00		3509.0000	3782.11	89.50	-4.52	
06/28 23:57:00		3535.0000	3777.74	89.60	-4.38	
06/29 00:23:00		3561.0000	3773.57	89.70	-4.17	
06/29 00:49:00		3587.0000	3769.62	89.79	-3.95	
06/29 01:15:00		3613.0000	3765.77	89.87	-3.85	
06/29 01:41:00		3639.0000	3762.23	89.96	-3.54	
06/29 02:07:00		3665.0000	3758.56	90.02	-3.67	
06/29 02:33:00		3691.0000	3755.13	90.09	-3.43	
06/29 02:59:00		3717.0000	3751.80	90.15	-3.33	
06/29 03:25:00		3743.0000	3748.78	90.21	-3.01	
06/29 03:51:00		3769.0000	3745.72	90.28	-3.06	
06/29 04:17:00		3795.0000	3742.65	90.34	-3.07	

Date MM/DD	Time hh:mm:ss	Test Time =======	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
06/29 04:43:00		3821.0000	3739.72	90.40	-2.93	
06/29 05:09:00		3847.0000	3736.91	90.46	-2.81	
06/29 05:35:00		3873.0000	3734.20	90.52	-2.71	
06/29 06:01:00		3899.0000	3731.53	90.57	-2.67	
06/29 06:27:00		3925.0000	3728.86	90.61	-2.66	
06/29 06:53:00		3951.0000	3726.26	90.66	-2.61	
06/29 07:19:00		3977.0000	3723.73	90.70	-2.53	
06/29 07:45:00		4003.0000	3721.25	90.74	-2.48	
06/29 08:11:00		4029.0000	3718.75	90.78	-2.50	
06/29 08:37:00		4055.0000	3716.36	90.83	-2.38	
06/29 09:03:00		4081.0000	3713.99	90.87	-2.37	
06/29 09:29:00		4107.0000	3711.68	90.90	-2.32	
06/29 09:55:00		4133.0000	3709.43	90.93	-2.25	
06/29 10:21:00		4159.0000	3707.15	90.97	-2.27	
06/29 10:47:00		4185.0000	3705.02	90.99	-2.14	
06/29 11:13:00		4211.0000	3702.82	91.03	-2.20	
06/29 11:39:00		4237.0000	3700.74	91.06	-2.08	
06/29 12:05:00		4263.0000	3698.67	91.10	-2.07	
06/29 12:31:00		4289.0000	3696.64	91.14	-2.02	
06/29 12:57:00		4315.0000	3694.61	91.16	-2.04	
06/29 13:23:00		4341.0000	3692.62	91.19	-1.99	
06/29 13:49:00		4367.0000	3690.68	91.21	-1.94	
06/29 14:15:00		4393.0000	3688.77	91.23	-1.91	
06/29 14:41:00		4419.0000	3686.90	91.26	-1.87	
06/29 15:07:00		4445.0000	3685.02	91.29	-1.88	
06/29 15:33:00		4471.0000	3683.22	91.30	-1.81	
06/29 15:59:00		4497.0000	3681.39	91.33	-1.83	
06/29 16:25:00		4523.0000	3679.56	91.36	-1.83	
06/29 16:51:00		4549.0000	3677.79	91.37	-1.77	
06/29 17:17:00		4575.0000	3676.06	91.39	-1.73	
06/29 17:43:00		4601.0000	3674.29	91.41	-1.77	
06/29 18:09:00		4627.0000	3672.57	91.43	-1.72	
06/29 18:35:00		4653.0000	3670.88	91.44	-1.69	
06/29 19:01:00		4679.0000	3669.23	91.46	-1.65	
06/29 19:27:00		4705.0000	3667.60	91.48	-1.63	
06/29 19:53:00		4731.0000	3665.90	91.49	-1.71	
06/29 20:19:00		4757.0000	3664.32	91.51	-1.58	
06/29 20:45:00		4783.0000	3662.74	91.52	-1.58	
06/29 21:11:00		4809.0000	3661.18	91.54	-1.56	
06/29 21:37:00		4835.0000	3659.65	91.55	-1.53	
06/29 22:03:00		4861.0000	3658.06	91.56	-1.59	
06/29 22:29:00		4887.0000	3656.59	91.58	-1.47	
06/29 22:55:00		4913.0000	3655.06	91.58	-1.53	
06/29 23:21:00		4939.0000	3653.55	91.61	-1.51	
06/29 23:47:00		4965.0000	3652.09	91.62	-1.46	
06/30 00:13:00		4991.0000	3650.64	91.63	-1.45	
06/30 00:39:00		5017.0000	3649.18	91.64	-1.46	
06/30 01:05:00		5043.0000	3647.77	91.64	-1.41	
06/30 01:31:00		5069.0000	3646.36	91.64	-1.41	
06/30 01:57:00		5095.0000	3644.92	91.65	-1.44	
06/30 02:23:00		5121.0000	3643.48	91.65	-1.43	
06/30 02:49:00		5147.0000	3642.12	91.67	-1.36	
06/30 03:15:00		5173.0000	3640.73	91.68	-1.39	
06/30 03:41:00		5199.0000	3639.33	91.69	-1.39	
06/30 04:07:00		5225.0000	3638.02	91.70	-1.32	
06/30 04:33:00		5251.0000	3636.67	91.70	-1.35	
06/30 04:59:00		5277.0000	3635.36	91.72	-1.31	
06/30 05:25:00		5303.0000	3633.97	91.74	-1.39	
06/30 05:51:00		5329.0000	3632.74	91.75	-1.23	
06/30 06:17:00		5355.0000	3631.41	91.76	-1.32	
06/30 06:43:00		5381.0000	3630.15	91.77	-1.27	
06/30 07:09:00		5407.0000	3628.91	91.77	-1.24	
06/30 07:35:00		5433.0000	3627.65	91.78	-1.26	
06/30 08:01:00		5459.0000	3626.44	91.79	-1.21	
06/30 08:27:00		5485.0000	3625.20	91.79	-1.24	

Date MM/DD	Time hh:mm:ss	Test Time =======	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
06/30 08:53:00		5511.0000	3624.02	91.79	-1.17	
06/30 09:19:00		5537.0000	3622.82	91.81	-1.21	
06/30 09:45:00		5563.0000	3621.56	91.81	-1.26	
06/30 10:11:00		5589.0000	3620.41	91.82	-1.16	
06/30 10:37:00		5615.0000	3619.25	91.83	-1.16	
06/30 11:03:00		5641.0000	3618.05	91.84	-1.20	
06/30 11:29:00		5667.0000	3616.93	91.84	-1.12	
06/30 11:55:00		5693.0000	3615.78	91.84	-1.15	
06/30 12:21:00		5719.0000	3614.62	91.86	-1.17	
06/30 12:47:00		5745.0000	3613.47	91.87	-1.15	
06/30 13:13:00		5771.0000	3612.38	91.88	-1.09	
06/30 13:39:00		5797.0000	3611.22	91.88	-1.16	
06/30 14:05:00		5823.0000	3610.08	91.89	-1.14	
06/30 14:31:00		5849.0000	3608.93	91.89	-1.16	
06/30 14:57:00		5875.0000	3607.93	91.89	-1.00	
06/30 15:23:00		5901.0000	3606.86	91.89	-1.06	
06/30 15:49:00		5927.0000	3605.82	91.89	-1.05	
06/30 16:15:00		5953.0000	3604.70	91.90	-1.11	
06/30 16:41:00		5979.0000	3603.65	91.91	-1.06	
06/30 17:07:00		6005.0000	3602.56	91.91	-1.09	
06/30 17:33:00		6031.0000	3601.56	91.92	-1.01	
06/30 17:59:00		6057.0000	3600.49	91.92	-1.07	
06/30 18:25:00		6083.0000	3599.49	91.93	-1.00	
06/30 18:51:00		6109.0000	3598.50	91.93	-.99	
06/30 19:17:00		6135.0000	3597.51	91.94	-.99	
06/30 19:43:00		6161.0000	3596.50	91.94	-1.01	
06/30 20:09:00		6187.0000	3595.51	91.94	-.99	
06/30 20:35:00		6213.0000	3594.48	91.95	-1.03	
06/30 21:01:00		6239.0000	3593.49	91.96	-1.00	
06/30 21:27:00		6265.0000	3592.48	91.96	-1.00	
06/30 21:53:00		6291.0000	3591.60	91.96	-.88	
06/30 22:19:00		6317.0000	3590.58	91.96	-1.02	
06/30 22:45:00		6343.0000	3589.61	91.97	-.94	
06/30 23:11:00		6369.0000	3588.65	91.98	-.96	
06/30 23:37:00		6395.0000	3587.74	91.96	-.91	
07/01 00:03:00		6421.0000	3586.77	91.98	-.97	
07/01 00:29:00		6447.0000	3585.82	91.99	-.95	
07/01 00:55:00		6473.0000	3584.91	91.99	-.91	
07/01 01:21:00		6499.0000	3583.98	91.99	-.93	
07/01 01:47:00		6525.0000	3583.07	91.99	-.91	
07/01 02:13:00		6551.0000	3582.14	92.00	-.93	
07/01 02:39:00		6577.0000	3581.23	92.00	-.91	
07/01 03:05:00		6603.0000	3580.28	92.01	-.95	
07/01 03:31:00		6629.0000	3579.40	92.01	-.88	
07/01 03:57:00		6655.0000	3578.45	92.01	-.95	
07/01 04:23:00		6681.0000	3577.61	92.01	-.85	
07/01 04:49:00		6707.0000	3576.70	92.02	-.90	
07/01 05:15:00		6733.0000	3575.85	92.02	-.85	
07/01 05:41:00		6759.0000	3574.99	92.03	-.86	
07/01 06:07:00		6785.0000	3574.07	92.03	-.92	
07/01 06:33:00		6811.0000	3573.29	92.03	-.78	
07/01 06:59:00		6837.0000	3572.40	92.03	-.89	
07/01 07:25:00		6863.0000	3571.52	92.03	-.88	
07/01 07:51:00		6889.0000	3570.67	92.04	-.85	
07/01 08:17:00		6915.0000	3569.86	92.05	-.81	
07/01 08:43:00		6941.0000	3569.03	92.05	-.83	
07/01 09:09:00		6967.0000	3568.20	92.06	-.84	
07/01 09:35:00		6993.0000	3567.35	92.06	-.84	
07/01 10:01:00		7019.0000	3566.55	92.06	-.80	
07/01 10:27:00		7045.0000	3565.76	92.06	-.79	
07/01 10:53:00		7071.0000	3564.98	92.07	-.78	
07/01 11:19:00		7097.0000	3564.28	92.07	-.70	
07/01 11:45:00		7123.0000	3563.46	92.08	-.80	
07/01 12:11:00		7149.0000	3562.63	92.08	-.83	
07/01 12:37:00		7175.0000	3561.83	92.08	-.80	

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
07/01	13:03:00	7201.0000	3561.07	92.08	-.76	
07/01	13:29:00	7227.0000	3560.27	92.11	-.80	
07/01	13:55:00	7253.0000	3559.38	92.11	-.83	
07/01	14:31:00	7289.0000	3558.79	92.11	-.90	
07/01	14:47:00	7305.0000	3558.00	92.11	-.78	
07/01	15:13:00	7331.0000	3557.28	92.11	-.72	
07/01	15:39:00	7357.0000	3556.50	92.11	-.77	
07/01	16:05:00	7383.0000	3555.75	92.12	-.75	
07/01	16:31:00	7409.0000	3554.99	92.12	-.76	
07/01	16:47:00	7425.0000	3554.26	92.12	-.73	
07/01	17:23:00	7461.0000	3553.51	92.12	-.74	
07/01	17:49:00	7487.0000	3552.75	92.13	-.76	
07/01	18:15:00	7513.0000	3552.02	92.13	-.73	
07/01	18:41:00	7539.0000	3551.30	92.13	-.72	
07/01	19:07:00	7565.0000	3550.61	92.13	-.69	
07/01	19:33:00	7591.0000	3549.87	92.13	-.73	
07/01	19:59:00	7617.0000	3549.17	92.14	-.70	
07/01	20:25:00	7643.0000	3548.48	92.14	-.69	
07/01	20:51:00	7669.0000	3547.80	92.14	-.68	
07/01	21:17:00	7695.0000	3547.08	92.13	-.72	
07/01	21:43:00	7721.0000	3546.36	92.14	-.72	
07/01	22:09:00	7747.0000	3545.69	92.15	-.68	
07/01	22:35:00	7773.0000	3545.03	92.15	-.66	
07/01	23:01:00	7799.0000	3544.35	92.15	-.68	
07/01	23:27:00	7825.0000	3543.64	92.15	-.71	
07/01	23:53:00	7851.0000	3542.98	92.15	-.66	
07/02	00:19:00	7877.0000	3542.33	92.16	-.65	
07/02	00:45:00	7903.0000	3541.65	92.16	-.68	
07/02	01:11:00	7929.0000	3541.04	92.16	-.61	
07/02	01:37:00	7955.0000	3540.38	92.15	-.66	
07/02	02:03:00	7981.0000	3539.73	92.16	-.65	
07/02	02:29:00	8007.0000	3539.02	92.17	-.71	
07/02	02:55:00	8033.0000	3538.34	92.17	-.68	
07/02	03:21:00	8059.0000	3537.72	92.16	-.62	
07/02	03:47:00	8085.0000	3537.07	92.18	-.65	
07/02	04:13:00	8111.0000	3536.41	92.18	-.66	
07/02	04:39:00	8137.0000	3535.77	92.18	-.64	
07/02	05:05:00	8163.0000	3535.13	92.18	-.63	
07/02	05:31:00	8189.0000	3534.52	92.18	-.61	
07/02	05:57:00	8215.0000	3533.83	92.19	-.69	
07/02	06:23:00	8241.0000	3533.22	92.19	-.61	
07/02	06:49:00	8267.0000	3532.56	92.20	-.66	
07/02	07:15:00	8293.0000	3531.94	92.20	-.62	
07/02	07:41:00	8319.0000	3531.33	92.20	-.61	
07/02	08:07:00	8345.0000	3530.73	92.20	-.60	
07/02	08:33:00	8371.0000	3530.10	92.20	-.63	
07/02	08:59:00	8397.0000	3529.49	92.20	-.61	
07/02	09:25:00	8423.0000	3528.90	92.21	-.59	
07/02	09:51:00	8449.0000	3528.28	92.20	-.62	
07/02	10:17:00	8475.0000	3527.69	92.20	-.59	
07/02	10:43:00	8501.0000	3527.02	92.22	-.67	
07/02	11:09:00	8527.0000	3526.35	92.22	-.67	
07/02	11:35:00	8553.0000	3525.95	92.22	-.56	
07/02	12:01:00	8579.0000	3525.34	92.22	-.61	
07/02	12:27:00	8605.0000	3524.81	92.22	-.53	
07/02	12:53:00	8631.0000	3524.15	92.23	-.66	
07/02	13:19:00	8657.0000	3523.60	92.23	-.55	
07/02	13:45:00	8683.0000	3523.07	92.25	-.53	
07/02	14:11:00	8709.0000	3522.52	92.24	-.56	
07/02	14:37:00	8735.0000	3521.99	92.25	-.53	
07/02	15:03:00	8761.0000	3521.35	92.25	-.64	
07/02	15:29:00	8787.0000	3520.79	92.25	-.56	
07/02	15:55:00	8813.0000	3520.24	92.25	-.55	
07/02	16:21:00	8839.0000	3519.68	92.25	-.57	
07/02	16:47:00	8865.0000	3519.05	92.25	-.62	

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
07/02	17:13:00	8891.0000	3518.57	92.26	-.48	
07/02	17:39:00	8917.0000	3518.01	92.26	-.56	
07/02	18:05:00	8943.0000	3517.48	92.26	-.53	
07/02	18:31:00	8969.0000	3516.90	92.26	-.57	
07/02	18:57:00	8995.0000	3516.34	92.26	-.57	
07/02	19:23:00	9021.0000	3515.74	92.26	-.60	
07/02	19:49:00	9047.0000	3515.26	92.27	-.47	
07/02	20:15:00	9073.0000	3514.74	92.26	-.53	
07/02	20:41:00	9099.0000	3514.19	92.26	-.55	
07/02	21:07:00	9125.0000	3513.69	92.26	-.50	
07/02	21:33:00	9151.0000	3513.12	92.27	-.57	
07/02	21:59:00	9177.0000	3512.64	92.27	-.48	
07/02	22:25:00	9203.0000	3512.07	92.27	-.57	
07/02	22:51:00	9229.0000	3511.57	92.27	-.50	
07/02	23:17:00	9255.0000	3511.05	92.27	-.52	
07/02	23:43:00	9281.0000	3510.53	92.27	-.52	
07/03	00:09:00	9307.0000	3510.06	92.28	-.47	
07/03	00:35:00	9333.0000	3509.52	92.28	-.54	
07/03	01:01:00	9359.0000	3509.01	92.28	-.51	
07/03	01:27:00	9385.0000	3508.55	92.28	-.46	
07/03	01:53:00	9411.0000	3508.00	92.27	-.56	
07/03	02:19:00	9437.0000	3507.54	92.29	-.46	
07/03	02:45:00	9463.0000	3507.00	92.29	-.54	
07/03	03:11:00	9489.0000	3506.52	92.29	-.48	
07/03	03:37:00	9515.0000	3506.04	92.29	-.48	
07/03	04:03:00	9541.0000	3505.53	92.29	-.51	
07/03	04:29:00	9567.0000	3505.05	92.29	-.48	
07/03	04:55:00	9593.0000	3504.51	92.29	-.54	
07/03	05:21:00	9619.0000	3504.02	92.29	-.49	
07/03	05:47:00	9645.0000	3503.59	92.29	-.44	
07/03	06:13:00	9671.0000	3503.00	92.30	-.59	
07/03	06:39:00	9697.0000	3502.51	92.30	-.49	
07/03	07:05:00	9723.0000	3502.03	92.31	-.49	
07/03	07:31:00	9749.0000	3501.51	92.31	-.52	
07/03	07:57:00	9775.0000	3501.05	92.31	-.47	
07/03	08:23:00	9801.0000	3500.61	92.31	-.44	
07/03	08:49:00	9827.0000	3500.05	92.32	-.56	
07/03	09:15:00	9853.0000	3499.58	92.32	-.46	
07/03	09:41:00	9879.0000	3499.06	92.32	-.52	
07/03	10:07:00	9905.0000	3498.66	92.32	-.40	
07/03	10:33:00	9931.0000	3498.16	92.32	-.51	
07/03	10:59:00	9957.0000	3497.69	92.32	-.47	
07/03	11:25:00	9983.0000	3497.28	92.33	-.41	
07/03	11:51:00	10009.0000	3496.81	92.32	-.47	
07/03	12:17:00	10035.0000	3496.33	92.32	-.48	
07/03	12:43:00	10061.0000	3495.90	92.32	-.43	
07/03	13:09:00	10087.0000	3495.44	92.33	-.46	
07/03	13:35:00	10113.0000	3494.94	92.34	-.50	
07/03	14:01:00	10139.0000	3494.50	92.32	-.44	
07/03	14:27:00	10165.0000	3494.04	92.33	-.46	
07/03	14:53:00	10191.0000	3493.66	92.34	-.38	
07/03	15:19:00	10217.0000	3493.22	92.34	-.43	
07/03	15:45:00	10243.0000	3492.73	92.34	-.50	
07/03	16:11:00	10269.0000	3492.25	92.34	-.47	
07/03	16:37:00	10295.0000	3491.86	92.34	-.39	
07/03	17:03:00	10321.0000	3491.40	92.34	-.46	
07/03	17:29:00	10347.0000	3490.95	92.34	-.45	
07/03	17:55:00	10373.0000	3490.50	92.35	-.46	
07/03	18:21:00	10399.0000	3490.09	92.35	-.40	
07/03	18:47:00	10425.0000	3489.59	92.35	-.51	
07/03	19:13:00	10451.0000	3489.21	92.36	-.38	
07/03	19:39:00	10477.0000	3488.72	92.35	-.49	
07/03	20:05:00	10503.0000	3488.23	92.36	-.49	
07/03	20:31:00	10529.0000	3487.89	92.36	-.34	
07/03	20:57:00	10555.0000	3487.45	92.36	-.45	

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
07/03	21:23:00	10581.0000	3487.03	92.36	-.43	
07/03	21:49:00	10607.0000	3486.59	92.36	-.42	
07/03	22:15:00	10633.0000	3486.16	92.36	-.43	
07/03	22:41:00	10659.0000	3485.77	92.37	-.39	
07/03	23:07:00	10685.0000	3485.33	92.36	-.44	
07/03	23:33:00	10711.0000	3484.91	92.36	-.42	
07/03	23:59:00	10737.0000	3484.47	92.37	-.44	
07/04	00:25:00	10763.0000	3484.10	92.37	-.37	
07/04	00:51:00	10789.0000	3483.67	92.37	-.43	
07/04	01:17:00	10815.0000	3483.26	92.37	-.41	
07/04	01:43:00	10841.0000	3482.86	92.37	-.40	
07/04	02:09:00	10867.0000	3482.49	92.36	-.37	
07/04	02:35:00	10893.0000	3482.05	92.37	-.44	
07/04	03:01:00	10919.0000	3481.63	92.38	-.41	
07/04	03:27:00	10945.0000	3481.23	92.38	-.41	
07/04	03:53:00	10971.0000	3480.89	92.37	-.34	
07/04	04:19:00	10997.0000	3480.39	92.38	-.51	
07/04	04:45:00	11023.0000	3480.01	92.37	-.37	
07/04	05:11:00	11049.0000	3479.58	92.38	-.43	
07/04	05:37:00	11075.0000	3479.15	92.38	-.44	
07/04	06:03:00	11101.0000	3478.72	92.39	-.42	
07/04	06:29:00	11127.0000	3478.31	92.37	-.41	
07/04	06:55:00	11153.0000	3477.90	92.36	-.41	
07/04	07:21:00	11179.0000	3477.48	92.37	-.42	
07/04	07:47:00	11205.0000	3477.16	92.38	-.32	
07/04	08:13:00	11231.0000	3476.72	92.37	-.44	
07/04	08:39:00	11257.0000	3476.30	92.38	-.41	
07/04	09:05:00	11283.0000	3475.91	92.39	-.40	
07/04	09:31:00	11309.0000	3475.46	92.38	-.45	
07/04	09:57:00	11335.0000	3475.09	92.39	-.37	
07/04	10:23:00	11361.0000	3474.74	92.39	-.35	
07/04	10:49:00	11387.0000	3474.33	92.39	-.41	
07/04	11:15:00	11413.0000	3473.91	92.38	-.42	
07/04	11:41:00	11439.0000	3473.54	92.39	-.36	
07/04	12:07:00	11465.0000	3473.21	92.39	-.34	
07/04	12:33:00	11491.0000	3472.87	92.39	-.34	
07/04	12:59:00	11517.0000	3472.46	92.39	-.41	
07/04	13:25:00	11543.0000	3472.09	92.40	-.37	
07/04	13:51:00	11569.0000	3471.71	92.39	-.38	
07/04	14:17:00	11595.0000	3471.34	92.39	-.37	
07/04	14:43:00	11621.0000	3471.01	92.39	-.33	
07/04	15:09:00	11647.0000	3470.61	92.39	-.40	
07/04	15:35:00	11673.0000	3470.26	92.39	-.35	
07/04	16:01:00	11699.0000	3469.89	92.39	-.38	
07/04	16:27:00	11725.0000	3469.52	92.40	-.36	
07/04	16:53:00	11751.0000	3469.13	92.40	-.40	
07/04	17:19:00	11777.0000	3468.84	92.40	-.29	
07/04	17:45:00	11803.0000	3468.40	92.41	-.44	
07/04	18:11:00	11829.0000	3468.06	92.41	-.34	
07/04	18:37:00	11855.0000	3467.73	92.41	-.34	
07/04	19:03:00	11881.0000	3467.38	92.41	-.35	
07/04	19:29:00	11907.0000	3466.98	92.41	-.40	
07/04	19:55:00	11933.0000	3466.62	92.41	-.36	
07/04	20:21:00	11959.0000	3466.28	92.41	-.34	
07/04	20:47:00	11985.0000	3465.88	92.41	-.40	
07/04	21:13:00	12011.0000	3465.50	92.42	-.38	
07/04	21:39:00	12037.0000	3465.00	92.41	-.50	
07/04	22:05:00	12063.0000	3464.82	92.41	-.18	
07/04	22:31:00	12089.0000	3464.49	92.42	-.34	
07/04	22:57:00	12115.0000	3464.08	92.42	-.41	
07/04	23:23:00	12141.0000	3463.71	92.43	-.37	
07/04	23:49:00	12167.0000	3463.41	92.43	-.30	
07/05	00:15:00	12193.0000	3463.08	92.43	-.33	
07/05	00:41:00	12219.0000	3462.81	92.43	-.27	
07/05	01:07:00	12245.0000	3462.46	92.43	-.35	

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
07/05	01:33:00	12271.0000	3462.06	92.43	-.41	
07/05	01:59:00	12297.0000	3461.67	92.43	-.39	
07/05	02:25:00	12323.0000	3461.36	92.43	-.30	
07/05	02:51:00	12349.0000	3461.05	92.43	-.31	
07/05	03:17:00	12375.0000	3460.67	92.44	-.39	
07/05	03:43:00	12401.0000	3460.40	92.44	-.27	
07/05	04:09:00	12427.0000	3460.07	92.44	-.33	
07/05	04:35:00	12453.0000	3459.79	92.44	-.28	
07/05	05:01:00	12479.0000	3459.43	92.45	-.36	
07/05	05:27:00	12505.0000	3459.11	92.45	-.32	
07/05	05:53:00	12531.0000	3458.78	92.45	-.33	
07/05	06:19:00	12557.0000	3458.34	92.45	-.43	
07/05	06:45:00	12583.0000	3458.02	92.45	-.32	
07/05	07:11:00	12609.0000	3457.70	92.46	-.33	
07/05	07:37:00	12635.0000	3457.34	92.46	-.35	
07/05	08:03:00	12661.0000	3457.02	92.45	-.32	
07/05	08:10:15	12668.2500	3438.13	92.43	19.89	ENDED FALL-OFF TEST / INST. OFF BOTTOM
07/05	08:10:30	12668.5000	3422.89	92.94	-15.24	
07/05	08:10:45	12668.7500	3405.93	93.46	-16.96	
07/05	08:11:00	12669.0000	3387.63	93.97	-18.31	
07/05	08:11:15	12669.2500	3370.72	94.49	-16.91	
07/05	08:11:30	12669.5000	3352.19	95.00	-18.52	
07/05	08:11:45	12669.7500	3336.53	95.52	-15.66	
07/05	08:12:00	12670.0000	3318.99	96.04	-17.81	
07/05	08:12:15	12670.2500	3302.36	96.55	-16.36	
07/05	08:12:30	12670.5000	3280.83	97.07	-21.53	
07/05	08:13:45	12671.7500	3275.09	100.88	-5.74	
07/05	08:14:45	12672.7500	3274.67	104.40	.44	
07/05	08:15:45	12673.7500	3277.38	107.92	.81	
07/05	08:17:15	12675.2500	3278.52	111.35	1.14	
07/05	08:19:00	12677.0000	3278.75	114.67	.23	STOP @ 4000'
07/05	08:19:30	12677.5000	3262.00	115.08	-16.75	
07/05	08:19:45	12677.7500	3227.53	115.17	-34.47	
07/05	08:20:00	12678.0000	3193.44	115.26	-34.09	
07/05	08:20:15	12678.2500	3157.17	115.36	-36.27	
07/05	08:20:30	12678.5000	3119.42	115.45	-37.75	
07/05	08:20:45	12678.7500	3083.96	115.54	-35.46	
07/05	08:21:00	12679.0000	3046.64	115.64	-37.33	
07/05	08:21:15	12679.2500	3012.03	115.74	-34.61	
07/05	08:21:30	12679.5000	2972.16	115.83	-39.87	
07/05	08:21:45	12679.7500	2926.58	115.92	-45.57	
07/05	08:22:00	12680.0000	2888.42	116.02	-38.17	
07/05	08:22:15	12680.2500	2849.93	115.84	-38.49	
07/05	08:24:48	12682.7000	2844.70	113.93	-3.59	
07/05	08:28:00	12686.0000	2846.25	109.68	-.45	
07/05	08:29:15	12687.2500	2844.07	108.84	-2.18	STOP @ 3000'
07/05	08:29:30	12687.5000	2810.65	108.67	-33.42	
07/05	08:29:45	12687.7500	2768.10	108.50	-42.54	
07/05	08:30:00	12688.0000	2725.11	108.33	-42.99	
07/05	08:30:15	12688.2500	2679.83	108.17	-45.28	
07/05	08:30:30	12688.5000	2629.27	108.00	-50.56	
07/05	08:30:45	12688.7500	2581.00	107.83	-48.27	
07/05	08:31:00	12689.0000	2528.87	107.66	-52.13	
07/05	08:31:15	12689.2500	2473.87	107.32	-55.00	
07/05	08:31:30	12689.5000	2421.18	106.76	-52.69	
07/05	08:33:00	12691.0000	2407.37	103.97	-13.81	
07/05	08:34:30	12692.5000	2406.53	100.10	-.84	
07/05	08:36:16	12694.2500	2406.65	95.94	.11	
07/05	08:38:45	12696.7500	2404.92	94.03	-.60	
07/05	08:39:30	12697.5000	2411.06	93.35	6.14	STOP @ 2000'
07/05	08:39:45	12697.7500	2383.30	93.12	-27.75	
07/05	08:40:00	12698.0000	2337.65	92.89	-45.65	
07/05	08:40:15	12698.2500	2288.99	92.67	-48.67	
07/05	08:40:30	12698.5000	2236.96	92.14	-52.03	
07/05	08:40:45	12698.7500	2181.49	91.61	-55.47	

COMPANY: AGUA MOSS, LLC

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WELL NAME : SUNCO SWD NO. 1

DATE : 07/06/17

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F262705.EDT

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
07/05	08:41:00	12699.0000	2133.02	91.08	-48.47	
07/05	08:41:15	12699.2500	2085.99	90.54	-47.03	
07/05	08:41:30	12699.5000	2032.63	90.02	-53.36	
07/05	08:41:45	12699.7500	1988.87	89.48	-43.76	
07/05	08:42:00	12700.0000	1971.59	88.96	-17.28	
07/05	08:42:15	12700.2500	1968.22	88.43	-3.37	
07/05	08:43:45	12701.7500	1968.63	84.79	.41	
07/05	08:45:00	12703.0000	1967.69	81.59	-.94	
07/05	08:46:15	12704.2500	1966.91	78.54	-.78	
07/05	08:48:30	12706.5000	1966.31	75.34	-.60	
07/05	08:49:15	12707.2500	1966.05	74.38	-.26	STOP @ 1000'
07/05	08:49:30	12707.5000	1941.62	74.08	-24.43	
07/05	08:49:45	12707.7500	1912.80	73.77	-28.82	
07/05	08:50:00	12708.0000	1858.70	73.46	-54.10	
07/05	08:50:15	12708.2500	1801.72	73.16	-56.98	
07/05	08:50:30	12708.5000	1743.16	72.85	-58.56	
07/05	08:50:45	12708.7500	1687.03	72.55	-56.13	
07/05	08:51:00	12709.0000	1645.12	72.25	-41.91	
07/05	08:51:15	12709.2500	1600.33	71.94	-44.78	
07/05	08:51:30	12709.5000	1560.00	71.64	-40.33	
07/05	08:52:00	12710.0000	1542.97	71.02	-17.03	
07/05	08:52:15	12710.2500	1529.87	70.57	-13.10	
07/05	08:56:15	12714.2500	1514.26	70.47	-15.61	SURFACE STOP
07/05	08:56:30	12714.5000	1492.29	70.71	-21.97	
07/05	08:56:45	12714.7500	29.03	70.95	-1463.26	
07/05	08:57:00	12715.0000	.01	71.19	-29.02	
07/05	09:00:15	12718.2500	.01	74.35	.00	
07/05	09:05:00	12723.0000	.01	77.79	.00	
07/05	09:13:00	12731.0000	.01	80.81	.00	

****
* E V E N T   S U M M A R Y *
****

COMPANY : AGUA MOSS, LLC

PAGE : B1

WELL NAME : SUNCO SWD NO. 1

DATE : 07/06/17

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: [illegible]

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmmm	Key Event	Pressure Psig	Temp Deg F
06/26	13:31:00	29.0000	PRESSURED UP LUBRICATOR	8.77	103.44
06/26	13:35:30	33.5000	SURFACE STOP	1549.78	93.30
06/26	13:36:30	34.5000	RAN TANDEM ELEC. MEMORY INST. IN WELL	1572.86	91.74
06/26	13:59:15	66.2500	TANDEM ELEC. MEMORY INST. @ 4405'	3481.75	103.70
06/26	14:14:00	72.5000	BEGAN INJECTING WATER	3478.60	97.21
06/28	16:55:45	3113.7500	STOPPED INJECTING WATER	3974.47	88.03
06/28	16:56:00	3114.0000	BEGAN FALL-OFF TEST	3933.76	88.62
07/05	08:10:15	12668.2500	ENDED FALL-OFF TEST / INST. OFF BOTTOM	3439.13	92.43
07/05	08:19:00	12677.0000	STOP @ 4000'	3278.75	114.67
07/05	08:29:15	12687.2500	STOP @ 3000'	2846.07	108.84
07/05	08:39:30	12697.5000	STOP @ 2000'	2411.95	93.36
07/05	08:49:15	12707.2500	STOP @ 1000'	1966.05	74.38
07/05	08:56:15	12714.2500	SURFACE STOP	1514.26	70.47

****
* E V E N T   S U M M A R Y *
****

COMPANY : AGUA MOSS, LLC

PAGE : B1

WELL NAME : SUNCO SWD NO. 1

DATE : 07/06/17

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F262705.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmm.mmmm	Key Event	Pressure Psig	Temp Deg F
06/26	13:31:00	29.0000	PRESSURED UP LUBRICATOR	8.77	103.44
06/26	13:35:00	33.0000	SURFACE STOP	1534.06	94.87
06/26	13:36:00	34.0000	RAN TANDEM ELEC. MEMORY INST. IN WELL	1572.86	91.74
06/26	13:56:00	54.0000	TANDEM ELEC. MEMORY INST. @ 4405'	3480.[illegible]	106.14
06/26	14:14:00	72.0000	BEGAN INJECTING WATER	3478.60	93.21
06/28	16:52:00	3110.0000	STOPPED INJECTING WATER	3953.94	88.70
06/28	16:53:00	3111.0000	BEGAN FALL-OFF TEST	3946.58	88.11
07/05	08:06:00	12664.0000	ENDED FALL-OFF TEST / INST. OFF BOTTOM	3457.00	92.44
07/05	08:19:00	12677.0000	STOP @ 4000'	3278.75	114.67
07/05	08:29:00	12687.0000	STOP @ 3000'	2846.14	109.00
07/05	08:39:00	12697.0000	STOP @ 2000'	2404.90	93.81
07/05	08:49:00	12707.0000	STOP @ 1000'	1966.18	74.63
07/05	08:55:00	12713.0000	SURFACE STOP	1522.53	69.33

Company: AGUA MOSS, LLC
Well: SUNCO SWD NO. 1 — County: SAN JUAN
Field: POINT LOOKOUT FORMATION — State: NEW MEXICO
Engineer: NEIL TEFTELLER — Date: 06/26/2017
Gauge Type: ELECTRONIC MEMORY — Well Type: DISPOSAL
Gauge Range: 0 - 5000 — Test Type: GRADIENT
Gauge Depth: 4405 ft — Status: SHUT IN
Serial No.: 262 — File Name: 67072

Tubing: 2-7/8" TO 4282'
Tubing: TO
Casing: TO — Oil Level
Perfs.: 4350' - 4460' — H2O Level

Shut-in BHP 3481 @ 4405 ft — Shut-in BHT 0 F @ 0 ft
Shut-in WHP 1523 — Shut-in WHT 0 F

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	4405	4405	3481.00	
2	4405	4405	3457.00	0.000
3	4000	4000	3279.00	0.440
4	3000	3000	2846.00	0.433
5	2000	2000	2405.00	0.441
6	1000	1000	1966.00	0.439
7	0	0	1523.00	0.443

WATER LEVEL @ SURFACE

Company: AGUA MOSS, LLC
Well: SUNCO SWD NO. 1
Field: POINT LOOKOUT FORMATION
Engineer: NEIL TEFTELLER
Gauge Type: ELECTRONIC MEMORY
Gauge Range: 0 - 6000
Gauge Depth: 4405 ft
Serial No.: 262

County: SAN JUAN
State: NEW MEXICO
Date: 06/26/2017
Well Type: DISPOSAL
Test Type: GRADIENT
Status: SHUT IN
File Name: 67072

Tubing: 2-7/8" TO 4282'
Tubing: TO
Casing: TO
Perfs.: 4350' - 4460'

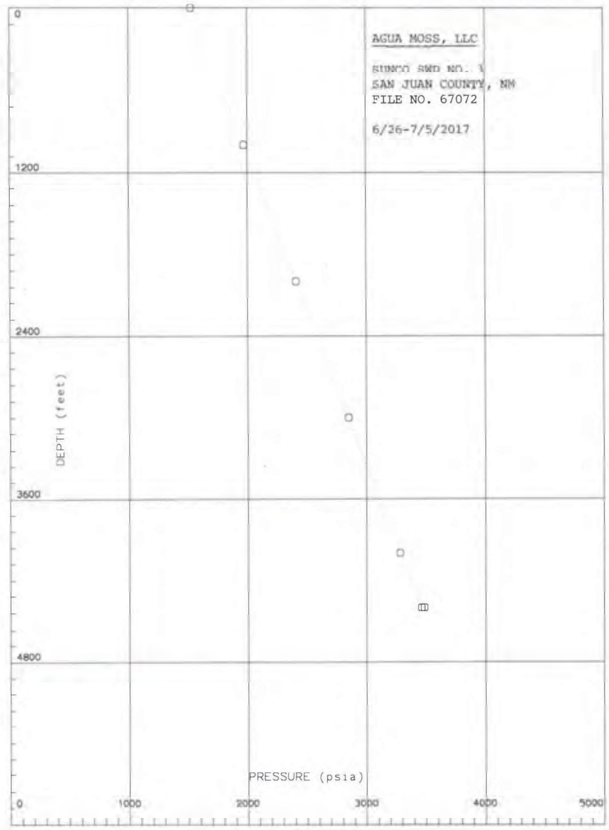
Oil Level
H2O Level

Shut-in BHP 3481 @ 4405 ft Shut-in BHT 0 F @ 0 ft
Shut-in WHP 1523 Shut-in WHT 0 F

(Tefteller Incorporated)

#	MD	TVD	PRESSURE	PSI/ft
1	4405	4405	3481.00	
2	4405	4405	3457.00	0.000
3	4000	4000	3279.00	0.440
4	3000	3000	2846.00	0.433
5	2000	2000	2405.00	0.441
6	1000	1000	1966.00	0.439
7	0	0	1523.00	0.443

WATER LEVEL @ SURFACE



SP-2000

Downhole Memory Pressure Gauge

The SP-2000 downhole memory pressure gauge is controlled by an internal microprocessor and powerful software.

The SP-2000 can stay downhole and collect data for hours or days; depending on your application. It is slimline and operates fully from battery power.

The microprocessor is capable of detecting the correct pressure and temperature and adjust the sampling rate automatically (once programmed for the test application).

The SP-2000 is tough, dependable, simple, and intelligent. If your job requires gauges that are reliable yet rugged and simple to use, the SP-2000 memory gauge, with it's Hybrid-Quartz sensor is the one for you. It is so simple that a paper clip can be used to program it by changing the switch settings for the Type and Duration of test.

With the use of our simple, menu driven software, you can retrieve and report the gauge data (using a compatible computer and printer) from the tool once it is removed from the well.

Advanced reporting features are available such as data printouts, gradient reports, gradient plots and most of the standard time vs. pressure/temperature plot formats.

Micro-Smart Systems offers complete Well Test Interpretation, utilizing Fekete's "F.A.S.T. Well Test™" software. This powerful state-of-the-art software includes data preparation, various analysis methods, analytical reservoir modeling and deliverability.

Micro-Smart Systems is the *SMART* choice for cutting-edge technology and superior customer support. We can save you time, money, and help you keep your customers satisfied.

SMART Features:

The technological features of the SP-2000 are:

- Dual EEPROM Memory
- Tool performs internal tests and delivers audible signal to confirm operation
- Multiple-run data storage capability
- User friendly software
- Convert from memory to SRO gauge with simple module change
- Compatible with Micro-Smart's production logging tools
- Standard ASCII data storage format
- Switch selectable programming without the use of a computer
- Selectable switches for duration in *DAYS* and *TYPE* of *TEST*
- Custom computer programming
  - up to 15 time periods
  - specify time interval, sampling rate, and Δ P switching.

"SMART AND SIMPLE"

SPECIFICATIONS:

Memory Capacity: 48,000 data sets (main memory)
2,000 data sets (backup memory)
(time, pressure, temp.)
Sampling Intervals: 1.875 seconds to 64 minutes (in binary multiples)
Diameter: 1.25 inch (31.3 mm)
Resolution: Pressure .01 psi
Temp. .04° F
Accuracy: Pressure ±.05% full scale
Temp. ± 1° F
Time ± .05%

Pressure Ranges: 2,500 psi (17,000 KPA)
5,000 psi (34,000 KPA)
10,000 psi (68,000 KPA)
15,000 psi (102,000 KPA)
20,000 psi (136,000 KPA)
Weight: [illegible]
Operating Temp.: 32° F to 325° F
(0° C to 163° C)
Power: 13.5v (9 'c' cell Alkaline)
14.4v (4 'c' cell Lithium)
Length: 53 in. (1.3 m) plus battery pack
24 in. (.6 m) for 9 cell pack
16 in. (.4 m) for 4 cell pack

#9

ACCURACY VERIFICATION

5-February-2014

Gauge Model	SP-2000	Pressure Range	5 K
Gauge S/N	162	Accuracy 0.05%	Full Scale

Applied Pressure psig	Recorded Pressure psig	Difference psi	Difference Percent (%)
0.01	0.71	0.70	0.0139%
774.08	774.96	0.88	0.0177%
1498.24	1499.12	0.88	0.0176%
2222.36	2222.99	0.63	0.0126%
2946.53	2947.04	0.51	0.0102%
3670.66	3671.23	0.57	0.0113%
4394.87	4395.53	0.66	0.0133%
5119.00	5119.94	0.94	0.0187%
4394.87	4396.16	1.29	0.0258%
3670.66	3671.99	1.33	0.0265%
2946.53	2947.97	1.44	0.0287%
2222.36	2223.84	1.48	0.0296%
1498.24	1499.73	1.49	0.0299%
774.08	775.18	1.10	0.0220%
0.01	0.25	0.24	0.0049%

Oven Temperature: 144.7 °F Probe Temperature: 144.7 °F

Smart Gauge Calibration accuracy is confirmed.

Calibrated with RUSKA Pressure Standard, model # 2451-700-00
Serial #26618, Mass Set Serial #25008
Compensated to local acceleration due to gravity

Verified by: CM

Appendix D

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 2011

"Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection."

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. **Originating Site:**
Chaco Gas Plant

3. **Location of Material (Street Address, City, State or ULSTR):**
UL M Section 16, T26N, R12W; 36.482905, -108.119193, San Juan County, NM

4. **Source and Description of Waste:**
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 120 yd³ bbls Known Volume (to be entered by the operator at the end of the haul) 5933 yd³/ bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: Triple S Trucking**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12West Moss, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Wurtz TITLE: Superintendent DATE: 12/17
SIGNATURE: _____ TELEPHONE NO.: _____
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 09, 2016

Thomas Long
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Chaco Plant OrderNo.: 1604674

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/15/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative
WO#: 1604674
Date: 5/9/2016

CLIENT: Enterprise Field Services
Project: Chaco Plant

Analytical Notes Regarding EPA Method 8270 TCLP:
The recovery for pyridine in the LCS was low. The sample was reextracted and reanalyzed, past the holding time, and the initial result, ND, was confirmed.

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1604674
Date Reported: 5/9/2016

CLIENT: Enterprise Field Services
Project: Chaco Plant
Lab ID: 1604674-001 **Matrix:** SOLID

Client Sample ID: Air Dry Dessicant
Collection Date: 4/14/2016 10:08:00 AM
Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst: **pmf**	
Mercury	ND	0.020		mg/L	1	4/26/2016 8:56:44 PM	24994
EPA METHOD 6010B: TCLP METALS						Analyst: **MED**	
Arsenic	ND	5.0		mg/L	1	4/25/2016 11:02:11 AM	24953
Barium	ND	100		mg/L	1	4/25/2016 11:02:11 AM	24953
Cadmium	ND	1.0		mg/L	1	4/25/2016 11:02:11 AM	24953
Chromium	ND	5.0		mg/L	1	4/25/2016 11:02:11 AM	24953
Lead	ND	5.0		mg/L	1	4/25/2016 11:02:11 AM	24953
Selenium	ND	1.0		mg/L	1	4/25/2016 11:02:11 AM	24953
Silver	ND	5.0		mg/L	1	4/25/2016 11:02:11 AM	24953
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200		mg/L	1	4/22/2016 6:24:22 PM	24921
3/4-Methylphenol	ND	200		mg/L	1	4/22/2016 6:24:22 PM	24921
Phenol	ND	200		mg/L	1	4/22/2016 6:24:22 PM	24921
2,4-Dinitrotoluene	ND	0.13		mg/L	1	4/22/2016 6:24:22 PM	24921
Hexachlorobenzene	ND	0.13		mg/L	1	4/22/2016 6:24:22 PM	24921
Hexachlorobutadiene	ND	0.50		mg/L	1	4/22/2016 6:24:22 PM	24921
Hexachloroethane	ND	3.0		mg/L	1	4/22/2016 6:24:22 PM	24921
Nitrobenzene	ND	2.0		mg/L	1	4/22/2016 6:24:22 PM	24921
Pentachlorophenol	ND	100		mg/L	1	4/22/2016 6:24:22 PM	24921
Pyridine	ND	5.0		mg/L	1	4/22/2016 6:24:22 PM	24921
2,4,5-Trichlorophenol	ND	400		mg/L	1	4/22/2016 6:24:22 PM	24921
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	4/22/2016 6:24:22 PM	24921
Cresols, Total	ND	200		mg/L	1	4/22/2016 6:24:22 PM	24921
Surr: 2-Fluorophenol	68.1	15-121		%Rec	1	4/22/2016 6:24:22 PM	24921
Surr: Phenol-d5	41.6	31.8-117		%Rec	1	4/22/2016 6:24:22 PM	24921
Surr: 2,4,6-Tribromophenol	80.1	31.3-139		%Rec	1	4/22/2016 6:24:22 PM	24921
Surr: Nitrobenzene-d5	77.6	48.3-128		%Rec	1	4/22/2016 6:24:22 PM	24921
Surr: 2-Fluorobiphenyl	73.1	58.4-114		%Rec	1	4/22/2016 6:24:22 PM	24921
Surr: 4-Terphenyl-d14	90.8	37.4-141		%Rec	1	4/22/2016 6:24:22 PM	24921
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst: **DJF**	
Benzene	ND	0.50		ppm	10	4/18/2016 1:23:16 PM	24836
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	4/18/2016 1:23:16 PM	24836
2-Butanone	ND	200		ppm	10	4/18/2016 1:23:16 PM	24836
Carbon tetrachloride	ND	0.50		ppm	10	4/18/2016 1:23:16 PM	24836
Chlorobenzene	ND	100		ppm	10	4/18/2016 1:23:16 PM	24836
Chloroform	ND	6.0		ppm	10	4/18/2016 1:23:16 PM	24836
1,4-Dichlorobenzene	ND	7.5		ppm	10	4/18/2016 1:23:16 PM	24836
1,1-Dichloroethene	ND	0.70		ppm	10	4/18/2016 1:23:16 PM	24836

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
R RPD outside accepted recovery limits
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1604674
Date Reported: 5/9/2016

CLIENT: Enterprise Field Services
Project: Chaco Plant
Lab ID: 1604674-001 **Matrix:** SOLID

Client Sample ID: Air Dry Dessicant
Collection Date: 4/14/2016 10:08:00 AM
Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst: **DJF**	
Tetrachloroethene (PCE)	ND	0.70		ppm	10	4/18/2016 1:23:16 PM	24836
Trichloroethene (TCE)	ND	0.50		ppm	10	4/18/2016 1:23:16 PM	24836
Vinyl chloride	ND	0.20		ppm	10	4/18/2016 1:23:16 PM	24836
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	10	4/18/2016 1:23:16 PM	24836
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	10	4/18/2016 1:23:16 PM	24836
Surr: Dibromofluoromethane	103	70-130		%Rec	10	4/18/2016 1:23:16 PM	24836
Surr: Toluene-d8	99.8	70-130		%Rec	10	4/18/2016 1:23:16 PM	24836

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
R RPD outside accepted recovery limits
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1604674
Date Reported: 5/9/2016

CLIENT: Enterprise Field Services
Project: Chaco Plant
Lab ID: 1604674-002 **Matrix:** AQUEOUS

Client Sample ID: Non Exempt Tank
Collection Date: 4/14/2016 10:45:00 AM
Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200		mg/L	1	4/22/2016 6:54:25 PM	24921
3/4-Methylphenol	ND	200		mg/L	1	4/22/2016 6:54:25 PM	24921
Phenol	ND	200		mg/L	1	4/22/2016 6:54:25 PM	24921
2,4-Dinitrotoluene	ND	0.13		mg/L	1	4/22/2016 6:54:25 PM	24921
Hexachlorobenzene	ND	0.13		mg/L	1	4/22/2016 6:54:25 PM	24921
Hexachlorobutadiene	ND	0.50		mg/L	1	4/22/2016 6:54:25 PM	24921
Hexachloroethane	ND	3.0		mg/L	1	4/22/2016 6:54:25 PM	24921
Nitrobenzene	ND	2.0		mg/L	1	4/22/2016 6:54:25 PM	24921
Pentachlorophenol	ND	100		mg/L	1	4/22/2016 6:54:25 PM	24921
Pyridine	ND	5.0		mg/L	1	4/22/2016 6:54:25 PM	24921
2,4,5-Trichlorophenol	ND	400		mg/L	1	4/22/2016 6:54:25 PM	24921
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	4/22/2016 6:54:25 PM	24921
Cresols, Total	ND	200		mg/L	1	4/22/2016 6:54:25 PM	24921
Surr: 2-Fluorophenol	44.8	15-124		%Rec	1	4/22/2016 6:54:25 PM	24921
Surr: Phenol-d5	33.4	15-118		%Rec	1	4/22/2016 6:54:25 PM	24921
Surr: 2,4,6-Tribromophenol	74.6	15-148		%Rec	1	4/22/2016 6:54:25 PM	24921
Surr: Nitrobenzene-d5	64.0	40.6-124		%Rec	1	4/22/2016 6:54:25 PM	24921
Surr: 2-Fluorobiphenyl	67.4	35.7-128		%Rec	1	4/22/2016 6:54:25 PM	24921
Surr: 4-Terphenyl-d14	98.2	18.8-145		%Rec	1	4/22/2016 6:54:25 PM	24921
EPA METHOD 7470: MERCURY						Analyst: **pmf**	
Mercury	0.0035	0.00050		mg/L	1	4/26/2016 11:28:07 AM	24968
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **MED**	
Arsenic	ND	5.0		mg/L	1	4/26/2016 11:45:10 AM	24977
Barium	ND	100		mg/L	1	5/5/2016 8:45:25 AM	24977
Cadmium	ND	1.0		mg/L	1	5/5/2016 8:45:25 AM	24977
Chromium	ND	5.0		mg/L	1	5/5/2016 8:45:25 AM	24977
Lead	ND	5.0		mg/L	1	4/26/2016 11:45:10 AM	24977
Selenium	ND	1.0		mg/L	1	5/5/2016 8:45:25 AM	24977
Silver	ND	5.0		mg/L	1	5/5/2016 8:45:25 AM	24977
TCLP VOLATILES BY 8260B						Analyst: **DJF**	
Benzene	ND	0.50		mg/L	1	4/26/2016 9:15:00 PM	B33807
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	4/26/2016 9:15:00 PM	B33807
2-Butanone	ND	10		mg/L	1	4/26/2016 9:15:00 PM	B33807
Carbon Tetrachloride	ND	0.50		mg/L	1	4/26/2016 9:15:00 PM	B33807
Chloroform	ND	6.0		mg/L	1	4/26/2016 9:15:00 PM	B33807
1,4-Dichlorobenzene	ND	7.5		mg/L	1	4/26/2016 9:15:00 PM	B33807
1,1-Dichloroethene	ND	0.70		mg/L	1	4/26/2016 9:15:00 PM	B33807
Hexachlorobutadiene	ND	0.50		mg/L	1	4/26/2016 9:15:00 PM	B33807

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
R RPD outside accepted recovery limits
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1604674
Date Reported: 5/9/2016

CLIENT: Enterprise Field Services
Project: Chaco Plant
Lab ID: 1604674-002 **Matrix:** AQUEOUS

Client Sample ID: Non Exempt Tank
Collection Date: 4/14/2016 10:45:00 AM
Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
TCLP VOLATILES BY 8260B						Analyst: **DJF**	
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	4/26/2016 9:15:00 PM	B33807
Trichloroethene (TCE)	ND	0.50		mg/L	1	4/26/2016 9:15:00 PM	B33807
Vinyl chloride	ND	0.20		mg/L	1	4/26/2016 9:15:00 PM	B33807
Chlorobenzene	ND	100		mg/L	1	4/26/2016 9:15:00 PM	B33807
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/26/2016 9:15:00 PM	B33807
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	4/26/2016 9:15:00 PM	B33807
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/26/2016 9:15:00 PM	B33807
Surr: Toluene-d8	94.2	70-130		%Rec	1	4/26/2016 9:15:00 PM	B33807

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
R RPD outside accepted recovery limits
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: mb-24836	SampType: MBLK	TestCode: EPA Method 8260B: TCLP Compounds							
Client ID: PBS	Batch ID: 24836	RunNo: 33605							
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1034248	Units: ppm						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

Sample ID: lcs-24836	SampType: LCS	TestCode: EPA Method 8260B: TCLP Compounds							
Client ID: LCSS	Batch ID: 24836	RunNo: 33605							
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1034249	Units: ppm						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	108	70	130			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	107	70	130			
Trichloroethene (TCE)	1.0	0.050	1.000	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: vstb dbfl	SampType: MBLK	TestCode: TCLP Volatiles by 8260B							
Client ID: PBW	Batch ID: B33807	RunNo: 33807							
Prep Date:	Analysis Date: 4/26/2016	SeqNo: 1041359	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
1,2-Dichloroethane (EDC)	ND	0.50								
2-Butanone	ND	10								
Carbon Tetrachloride	ND	0.50								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Chlorobenzene	ND	100								
Surr: 1,2-Dichloroethane-d4	0.0099		0.01000		98.9	70	130			
Surr: 4-Bromofluorobenzene	0.011		0.01000		107	70	130			
Surr: Dibromofluoromethane	0.011		0.01000		106	70	130			
Surr: Toluene-d8	0.0098		0.01000		98.4	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: TCLP Volatiles by 8260B							
Client ID: LCSW	Batch ID: B33807	RunNo: 33807							
Prep Date:	Analysis Date: 4/26/2016	SeqNo: 1041360	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.022	0.0010	0.02000	0	112	70	130			
1,1-Dichloroethene	0.021	0.0010	0.02000	0	106	70	130			
Trichloroethene (TCE)	0.021	0.0010	0.02000	0	103	70	130			
Chlorobenzene	0.019	0.0010	0.02000	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.010		0.01000		101	70	130			
Surr: 4-Bromofluorobenzene	0.010		0.01000		105	70	130			
Surr: Dibromofluoromethane	0.011		0.01000		107	70	130			
Surr: Toluene-d8	0.0095		0.01000		94.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: mb-24921	SampType: MBLK	TestCode: EPA Method 8270C TCLP							
Client ID: PBS	Batch ID: 24921	RunNo: 33739							
Prep Date: 4/21/2016	Analysis Date: 4/22/2016	SeqNo: 1039149	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.12		0.2000		58.4	19	121			
Surr: Phenol-d5	0.087		0.2000		43.5	31.8	117			
Surr: 2,4,6-Tribromophenol	0.17		0.2000		84.1	31.3	139			
Surr: Nitrobenzene-d5	0.084		0.1000		84.3	48.2	128			
Surr: 2-Fluorobiphenyl	0.083		0.1000		83.8	58.4	114			
Surr: 4-Terphenyl-d14	0.067		0.1000		67.3	17.4	141			

Sample ID: mb-25008	SampType: MBLK	TestCode: EPA Method 8270C TCLP							
Client ID: PBS	Batch ID: 25008	RunNo: 33838							
Prep Date: 4/27/2016	Analysis Date: 4/27/2016	SeqNo: 1042551	Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	0.16		0.2000		80.7	19	121			
Surr: Phenol-d5	0.17		0.2000		82.7	31.8	117			
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.1	31.3	139			
Surr: Nitrobenzene-d5	0.081		0.1000		81.5	48.2	128			
Surr: 2-Fluorobiphenyl	0.088		0.1000		87.6	58.4	114			
Surr: 4-Terphenyl-d14	0.064		0.1000		64.0	17.4	141			

Sample ID: lcs-25008	SampType: LCS	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS	Batch ID: 25008	RunNo: 33838							
Prep Date: 4/27/2016	Analysis Date: 4/27/2016	SeqNo: 1042552	Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	0.096		0.2000		47.9	19	121			
Surr: Phenol-d5	0.078		0.2000		39.1	31.8	117			
Surr: 2,4,6-Tribromophenol	0.16		0.2000		81.9	31.3	139			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: lcs-25009	SampType: LCS	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS	Batch ID: 25008	RunNo: 33838							
Prep Date: 4/27/2016	Analysis Date: 4/27/2016	SeqNo: 1042552	Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.065		0.1000		65.1	48.2	128			
Surr: 2-Fluorobiphenyl	0.062		0.1000		61.7	58.4	114			
Surr: 4-Terphenyl-d14	0.056		0.1000		56.3	17.4	141			

Sample ID: lcs-24921	SampType: LCS	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS	Batch ID: 24921	RunNo: 33739							
Prep Date: 4/21/2016	Analysis Date: 4/22/2016	SeqNo: 1042554	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.074	0.010	0.1000	0	74.5	37.6	110			
3+4-Methylphenol	0.15	0.010	0.2000	0	73.9	30.5	140			
2,4-Dinitrotoluene	0.072	0.010	0.1000	0	71.8	24.9	93.7			
Hexachlorobenzene	0.087	0.010	0.1000	0	86.7	40	114			
Hexachlorobutadiene	0.066	0.010	0.1000	0	65.9	37.4	119			
Hexachloroethane	0.057	0.010	0.1000	0	57.2	33.8	105			
Nitrobenzene	0.077	0.010	0.1000	0	77.3	33.4	115			
Pentachlorophenol	0.073	0.010	0.1000	0	73.0	27.9	90.3			
Pyridine	0.011	0.010	0.1000	0	11.3	29.3	105			S
2,4,5-Trichlorophenol	0.098	0.010	0.1000	0	97.6	34	116			
2,4,6-Trichlorophenol	0.097	0.010	0.1000	0	96.6	34.1	109			
Cresols, Total	0.22	0.010	0.3000	0	74.1	30	136			
Surr: 2-Fluorophenol	0.10		0.2000		52.0	19	121			
Surr: Phenol-d5	0.082		0.2000		40.8	31.8	117			
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.4	31.3	139			
Surr: Nitrobenzene-d5	0.081		0.1000		81.3	48.2	128			
Surr: 2-Fluorobiphenyl	0.083		0.1000		83.0	58.4	114			
Surr: 4-Terphenyl-d14	0.069		0.1000		69.3	17.4	141			

Sample ID: lcsd-24921	SampType: LCSD	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS02	Batch ID: 24921	RunNo: 33739							
Prep Date: 4/21/2016	Analysis Date: 4/22/2016	SeqNo: 1042555	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.078	0.010	0.1000	0	77.6	37.6	110	4.13	20	
3+4-Methylphenol	0.17	0.010	0.2000	0	83.8	30.5	140	12.6	20	
2,4-Dinitrotoluene	0.074	0.010	0.1000	0	73.9	24.9	93.7	2.88	20	
Hexachlorobenzene	0.091	0.010	0.1000	0	90.8	40	114	4.57	20	
Hexachlorobutadiene	0.066	0.010	0.1000	0	65.9	37.4	119	0.0303	20	
Hexachloroethane	0.064	0.010	0.1000	0	64.2	33.8	105	11.6	20	
Nitrobenzene	0.081	0.010	0.1000	0	81.4	33.4	115	5.19	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: lcsd-24921	SampType: LCSD	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS03	Batch ID: 24921	RunNo: 33739							
Prep Date: 4/21/2016	Analysis Date: 4/22/2016	SeqNo: 1042555	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pentachlorophenol	0.079	0.010	0.1000	0	79.0	27.9	90.3	7.79	20	
Pyridine	0.017	0.010	0.1000	0	16.6	29.3	105	32.3	20	RS
2,4,5-Trichlorophenol	0.10	0.010	0.1000	0	103	34	118	5.40	20	
2,4,6-Trichlorophenol	0.097	0.010	0.1000	0	97.2	34.1	109	0.599	20	
Cresols, Total	0.25	0.010	0.3000	0	81.7	30	136	9.82	20	
Surr: 2-Fluorophenol	0.12		0.2000		61.6	19	121	0	20	
Surr: Phenol-d5	0.094		0.2000		46.9	31.5	117	0	20	
Surr: 2,4,6-Tribromophenol	0.19		0.2000		95.3	31.3	139	0	20	
Surr: Nitrobenzene-d5	0.085		0.1000		85.3	48.2	126	0	20	
Surr: 2-Fluorobiphenyl	0.087		0.1000		86.7	58.4	114	0	20	
Surr: 4-Terphenyl-d14	0.069		0.1000		69.3	17.4	141	0	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: MB-25066	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 25066	RunNo: 33807							
Prep Date: 4/28/2016	Analysis Date: 4/29/2016	SeqNo: 1044543	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-25066	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 25066	RunNo: 33807							
Prep Date: 4/28/2016	Analysis Date: 4/29/2016	SeqNo: 1044544	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: MB-24994	SampType: MBLK	TestCode: MERCURY, TCLP							
Client ID: PBW	Batch ID: 24994	RunNo: 33798							
Prep Date: 4/26/2016	Analysis Date: 4/26/2016	SeqNo: 1040933	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID: LCS-24994	SampType: LCS	TestCode: MERCURY, TCLP							
Client ID: LCSW	Batch ID: 24994	RunNo: 33798							
Prep Date: 4/26/2016	Analysis Date: 4/26/2016	SeqNo: 1040935	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	99.3	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1604674
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: MB-24953	SampType: MBLK	TestCode: EPA Method 6010B: TCLP Metals							
Client ID: PBW	Batch ID: 24953	RunNo: 33748							
Prep Date: 4/22/2016	Analysis Date: 4/25/2016	SeqNo: 1039448	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID: LCS-24953	SampType: LCS	TestCode: EPA Method 6010B: TCLP Metals							
Client ID: LCSW	Batch ID: 24953	RunNo: 33748							
Prep Date: 4/22/2016	Analysis Date: 4/25/2016	SeqNo: 1039449	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	109	80	120			
Barium	ND	100	0.5000	0	98.0	80	120			
Cadmium	ND	1.0	0.5000	0	102	80	120			
Chromium	ND	5.0	0.5000	0	97.6	80	120			
Lead	ND	5.0	0.5000	0	98.4	80	120			
Selenium	ND	1.0	0.5000	0	110	80	120			
Silver	ND	5.0	0.1000	0	106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604074
09-May-16

Client: Enterprise Field Services
Project: Chaco Plant

Sample ID: MB-24977 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 24977 | RunNo: 33820
Prep Date: 4/25/2016 | Analysis Date: 4/27/2016 | SeqNo: 1041825 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Lead	ND	0.0050								

Sample ID: LCS-24977 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 24977 | RunNo: 33820
Prep Date: 4/25/2016 | Analysis Date: 4/27/2016 | SeqNo: 1041826 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.51	0.020	0.5000	0	102	80	120			
Lead	0.47	0.0050	0.5000	0	94.3	80	120			

Sample ID: MB-24977 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 24977 | RunNo: 33997
Prep Date: 4/25/2016 | Analysis Date: 5/5/2016 | SeqNo: 1047607 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-24977 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 24977 | RunNo: 33997
Prep Date: 4/25/2016 | Analysis Date: 5/5/2016 | SeqNo: 1047608 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.020	0.5000	0	100	80	120			
Cadmium	0.50	0.0020	0.5000	0	99.6	80	120			
Chromium	0.49	0.0060	0.5000	0	98.6	80	120			
Selenium	0.51	0.050	0.5000	0	102	80	120			
Silver	0.10	0.0050	0.1000	0	100	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not in Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Enterprise | Work Order Number: 1604074 | RcptNo: 1

Received by/date: [signature] 04/15/16

Logged By: Ashley Gallegos | 4/15/2016 7:30:00 AM | [initials]

Completed By: Ashley Gallegos | 4/15/2016 12:18:09 PM | [initials]

Reviewed By: [signature] | 04/15/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ✔
2. Is Chain of Custody complete? Yes ✔ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ✔ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ✔ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ✔ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ✔ No ☐
8. Are samples (except VOA and ONG) properly preserved? ~~Yes ✔~~ a-s No ✔
9. Was preservative added to bottles? Yes ✔ ~~No ✔~~ a-s NA ☐
10. VOA vials have zero headspace? Yes ✔ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ✔
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ✔ No ☐ — # of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ✔ No ☐ — Adjusted? yes
14. Is it clear what analyses were requested? Yes ✔ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ✔ No ☐ — Checked by: a-s

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ✔

Person Notified: ______ Date: ______
By Whom: ______ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: ______
Client Instructions: ______

17. Additional remarks: For metals analysis; added 1mL HNO_3 to -002 for acceptable pH
18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

4/15 @ 1529
a-s

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Enterprise Products
Mailing Address: 614 Reilly Ave. Farmington NM 87401
Phone #: 505-599-2286
email or Fax#: E-Haby
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Chaco Plant
Project #:
Project Manager: Thomas Long
Sampler: TL
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.5

Analysis Request: BTEX + MTBE + TMB's (8021) · BTEX + MTBE + TPH (Gas only) · TPH 8015B (GRO / DRO / MRO) · TPH (Method 418.1) · EDB (Method 504.1) · PAH's (8310 or 8270 SIMS) · RCRA 8 Metals · Anions (F, Cl, NO_3, NO_2, PO_4, SO_4) · 8081 Pesticides / 8082 PCB's · 8260B (VOA) TCLP · 8270 (Semi-VOA) TCLP · 6010 RCRA Metals · Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1604074	8260B (VOA)	8270 (Semi-VOA)	6010 RCRA Metals
4/14/16	1008	Solid	Air Dry Desiccant	2 4oz	Cool	-001	X	X	X
	1045	Water	Non Exempt Tank	1L, VOAs	Cool	-002	X	X	X

Remarks: Report TCLP RCRA Limits

Relinquished by: Thomas Long — Date/Time: 4/14/16 1456 — Received by: [signature] — 4/14/16 1456
Relinquished by: [signature] — 1904 — Received by: [signature] — 04/15/16 0730

2017

District I — 1625 N. French Dr., Hobbs, NM 88240
District II — 1301 W. Grand Avenue, Artesia, NM 88210
District III — 1000 Rio Brazos Road, Aztec, NM 87410
District IV — 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised [illegible]

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Middle Mesa Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL N Section 10 Township 31 North Range 7 West; 36.907568, -107.562762, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids
Estimated Volume 60 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 229 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________, representative for ______ Agua Moss, LLC ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Various Apporved Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Emmett Higgins TITLE: Superintendent DATE: 12/17
SIGNATURE: [signature] TELEPHONE NO.: ______
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 19, 2016

Ashley Maxwell
Souder, Miller and Associates
401 W Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Middle Mesa CS OrderNo.: 1603994

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1603994**
Date Reported: **4/19/2016**

CLIENT: Souder, Miller and Associates
Project: Middle Mesa CS
Lab ID: 1603994-001
Matrix: AQUEOUS
Client Sample ID: Middle Mesa Non Exempt
Collection Date: 3/17/2016 9:39:00 AM
Received Date: 3/18/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200		mg/L	1	3/24/2016 3:52:21 PM	24409
3+4-Methylphenol	ND	200		mg/L	1	3/24/2016 3:52:21 PM	24409
Phenol	ND	200		mg/L	1	3/24/2016 3:52:21 PM	24409
2,4-Dinitrotoluene	ND	0.13		mg/L	1	3/24/2016 3:52:21 PM	24409
Hexachlorobenzene	ND	0.13		mg/L	1	3/24/2016 3:52:21 PM	24409
Hexachlorobutadiene	ND	0.50		mg/L	1	3/24/2016 3:52:21 PM	24409
Hexachloroethane	ND	3.0		mg/L	1	3/24/2016 3:52:21 PM	24409
Nitrobenzene	ND	2.0		mg/L	1	3/24/2016 3:52:21 PM	24409
Pentachlorophenol	ND	100		mg/L	1	3/24/2016 3:52:21 PM	24409
Pyridine	ND	5.0		mg/L	1	3/24/2016 3:52:21 PM	24409
2,4,5-Trichlorophenol	ND	400		mg/L	1	3/24/2016 3:52:21 PM	24409
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	3/24/2016 3:52:21 PM	24409
Cresols, Total	ND	200		mg/L	1	3/24/2016 3:52:21 PM	24409
Surr: 2-Fluorophenol	3.10	15-124	S	%Rec	1	3/24/2016 3:52:21 PM	24409
Surr: Phenol-d5	6.28	15-116	S	%Rec	1	3/24/2016 3:52:21 PM	24409
Surr: 2,4,6-Tribromophenol	8.01	15-148	S	%Rec	1	3/24/2016 3:52:21 PM	24409
Surr: Nitrobenzene-d5	59.1	46.6-124		%Rec	1	3/24/2016 3:52:21 PM	24409
Surr: 2-Fluorobiphenyl	60.0	35.7-128		%Rec	1	3/24/2016 3:52:21 PM	24409
Surr: 4-Terphenyl-d14	73.2	19.8-115		%Rec	1	3/24/2016 3:52:21 PM	24409
EPA METHOD 7470: MERCURY						Analyst: **pmf**	
Mercury	ND	0.00080		mg/L	1	3/25/2016 8:10:23 AM	24421
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **MED**	
Arsenic	ND	0.20		mg/L	1	3/25/2016 1:11:34 PM	24414
Barium	ND	0.20		mg/L	1	3/25/2016 1:11:34 PM	24414
Cadmium	ND	0.020		mg/L	1	3/25/2016 1:11:34 PM	24414
Chromium	ND	0.060		mg/L	1	3/25/2016 1:11:34 PM	24414
Lead	ND	0.050		mg/L	1	3/25/2016 1:11:34 PM	24414
Selenium	ND	2.5		mg/L	5	3/25/2016 1:13:08 PM	24414
Silver	ND	0.050		mg/L	1	3/25/2016 1:11:34 PM	24414
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Toluene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Ethylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1603994**
Date Reported: **4/19/2016**

CLIENT: Souder, Miller and Associates
Project: Middle Mesa CS
Lab ID: 1603994-001
Matrix: AQUEOUS
Client Sample ID: Middle Mesa Non Exempt
Collection Date: 3/17/2016 9:39:00 AM
Received Date: 3/18/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Naphthalene	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
1-Methylnaphthalene	ND	0.80		mg/L	200	3/23/2016 3:33:24 PM	R33025
2-Methylnaphthalene	ND	0.80		mg/L	200	3/23/2016 3:33:24 PM	R33025
Acetone	ND	2.0		mg/L	200	3/23/2016 3:33:24 PM	R33025
Benzonitrile	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Bromodichloromethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Bromoform	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Bromomethane	ND	0.60		mg/L	200	3/23/2016 3:33:24 PM	R33025
2-Butanone	ND	2.0		mg/L	200	3/23/2016 3:33:24 PM	R33025
Carbon disulfide	ND	2.0		mg/L	200	3/23/2016 3:33:24 PM	R33025
Carbon Tetrachloride	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Chlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Chloroethane	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
Chloroform	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Chloromethane	ND	0.60		mg/L	200	3/23/2016 3:33:24 PM	R33025
2-Chlorotoluene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
4-Chlorotoluene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
cis-1,2-DCE	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
Dibromochloromethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Dibromomethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,3-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,4-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Dichlorodifluoromethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1-Dichloroethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1-Dichloroethene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2-Dichloropropane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,3-Dichloropropane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
2,2-Dichloropropane	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Hexachlorobutadiene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
2-Hexanone	ND	2.0		mg/L	200	3/23/2016 3:33:24 PM	R33025
Isopropylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
4-Isopropyltoluene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
4-Methyl-2-pentanone	ND	2.0		mg/L	200	3/23/2016 3:33:24 PM	R33025
Methylene Chloride	ND	0.60		mg/L	200	3/23/2016 3:33:24 PM	R33025
n-Butylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1603994**
Date Reported: **4/19/2016**

CLIENT: Souder, Miller and Associates
Project: Middle Mesa CS
Lab ID: 1603994-001
Matrix: AQUEOUS
Client Sample ID: Middle Mesa Non Exempt
Collection Date: 3/17/2016 9:39:00 AM
Received Date: 3/18/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
n-Propylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
sec-Butylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Styrene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
tert-Butylbenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
trans-1,2-DCE	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Trichlorofluoromethane	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/23/2016 3:33:24 PM	R33025
Vinyl chloride	ND	0.20		mg/L	200	3/23/2016 3:33:24 PM	R33025
Xylenes, Total	ND	0.30		mg/L	200	3/23/2016 3:33:24 PM	R33025
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	200	3/23/2016 3:33:24 PM	R33025
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	200	3/23/2016 3:33:24 PM	R33025
Surr: Dibromofluoromethane	116	70-130		%Rec	200	3/23/2016 3:33:24 PM	R33025
Surr: Toluene-d8	103	70-130		%Rec	200	3/23/2016 3:33:24 PM	R33025

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

WO#: 1603994

Hall Environmental Analysis Laboratory, Inc.

19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R33025	RunNo: 33025							
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013095	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.4	70	130			
Surr: Dibromofluoromethane	12		10.00		115	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R33025	RunNo: 33025							
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013096	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

WO#: 1603994

Hall Environmental Analysis Laboratory, Inc.

19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R33025	RunNo: 33025							
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013096	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropene	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
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- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

WO#: 1603994

Hall Environmental Analysis Laboratory, Inc.

19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R33025	RunNo: 33025							
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013096	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

WO#: 1603994

Hall Environmental Analysis Laboratory, Inc.

19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: mb-24409	SampType: MBLK	TestCode: EPA Method 8270C TCLP							
Client ID: PBS	Batch ID: 24409	RunNo: 33040							
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014302	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.14		0.2000		71.9	15	124			
Surr: Phenol-d5	0.17		0.2000		86.2	16	118			
Surr: 2,4,6-Tribromophenol	0.16		0.2000		78.8	15	148			
Surr: Nitrobenzene-d5	0.087		0.1000		87.3	40.6	124			
Surr: 2-Fluorobiphenyl	0.083		0.1000		83.2	35.7	128			
Surr: 4-Terphenyl-d14	0.061		0.1000		61.2	18.8	115			

Sample ID: lcs-24409	SampType: LCS	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS	Batch ID: 24409	RunNo: 33040							
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014304	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.096	0.010	0.1000	0	95.8	32.1	120			
3+4-Methylphenol	0.28	0.010	0.2000	0	138	10.9	204			
2,4-Dinitrotoluene	0.087	0.010	0.1000	0	87.2	41.5	116			
Hexachlorobenzene	0.081	0.010	0.1000	0	81.4	37.7	99.4			
Hexachlorobutadiene	0.098	0.010	0.1000	0	97.8	30.6	107			
Hexachloroethane	0.087	0.010	0.1000	0	87.5	37.4	131			
Nitrobenzene	0.090	0.010	0.1000	0	90.0	28.6	134			
Pentachlorophenol	0.080	0.010	0.1000	0	80.2	7.71	111			
Pyridine	0.075	0.010	0.1000	0	74.9	8.54	92.4			
2,4,5-Trichlorophenol	0.10	0.010	0.1000	0	103	25.3	146			
2,4,6-Trichlorophenol	0.098	0.010	0.1000	0	98.4	21.5	145			
Cresols, Total	0.37	0.010	0.3000	0	124	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		84.1	15	124			
Surr: Phenol-d5	0.18		0.2000		90.5	16	118			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603994
19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: lcs-24409	SampType: LCS	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS	Batch ID: 24409	RunNo: 33040							
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014304	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.17		0.2000		86.1	15	148			
Surr: Nitrobenzene-d5	0.10		0.1000		102	40.6	124			
Surr: 2-Fluorobiphenyl	0.094		0.1000		94.2	35.7	128			
Surr: 4-Terphenyl-d14	0.067		0.1000		66.8	18.8	115			

Sample ID: lcsd-24409	SampType: LCSD	TestCode: EPA Method 8270C TCLP							
Client ID: LCSS02	Batch ID: 24409	RunNo: 33040							
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014305	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.097	0.010	0.1000	0	96.9	32.1	120	1.22	20	
3+4-Methylphenol	0.32	0.010	0.2000	0	160	16.9	204	15.0	20	
2,4-Dinitrotoluene	0.080	0.010	0.1000	0	80.2	41.9	116	8.34	20	
Hexachlorobenzene	0.095	0.010	0.1000	0	95.3	37.7	99.8	7.70	20	
Hexachlorobutadiene	0.10	0.010	0.1000	0	104	30.6	107	6.47	20	
Hexachloroethane	0.089	0.010	0.1000	0	89.0	27.4	121	1.88	20	
Nitrobenzene	0.091	0.010	0.1000	0	91.1	26.6	134	1.13	20	
Pentachlorophenol	0.084	0.010	0.1000	0	84.4	7.71	111	5.15	20	
Pyridine	0.078	0.010	0.1000	0	78.1	8.54	92.4	4.16	20	
2,4,5-Trichlorophenol	0.12	0.010	0.1000	0	115	25.3	146	11.1	20	
2,4,6-Trichlorophenol	0.10	0.010	0.1000	0	102	21.5	145	3.14	20	
Cresols, Total	0.42	0.010	0.3000	0	139	30	138	11.6	20	S
Surr: 2-Fluorophenol	0.16		0.2000		79.6	15	124	0	20	
Surr: Phenol-d5	0.19		0.2000		97.5	15	118	0	20	
Surr: 2,4,6-Tribromophenol	0.19		0.2000		93.2	15	148	0	20	
Surr: Nitrobenzene-d5	0.11		0.1000		106	40.6	124	0	20	
Surr: 2-Fluorobiphenyl	0.091		0.1000		90.7	35.7	128	0	20	
Surr: 4-Terphenyl-d14	0.066		0.1000		67.8	18.8	115	0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603994
19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: MB-24421	SampType: mblk	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 24421	RunNo: 33122							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016891	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-24421	SampType: lcs	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 24421	RunNo: 33122							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016892	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.7	80	120			

Sample ID: LCSD-24421	SampType: lcsd	TestCode: EPA Method 7470: Mercury							
Client ID: LCSS02	Batch ID: 24421	RunNo: 33122							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016893	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	80	120	1.77	20	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603994
19-Apr-16

Client: Souder, Miller and Associates
Project: Middle Mesa CS

Sample ID: MB-24414	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 24414	RunNo: 33073							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1014893	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-24414	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 24414	RunNo: 33073							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1014894	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.4	80	120			
Barium	0.48	0.020	0.5000	0	96.2	80	120			
Cadmium	0.48	0.0020	0.5000	0	95.6	80	120			
Chromium	0.48	0.0060	0.5000	0	96.0	80	120			
Lead	0.47	0.0050	0.5000	0	94.8	80	120			
Selenium	0.48	0.050	0.5000	0	96.3	80	120			
Silver	0.097	0.0050	0.1000	0	97.4	80	120			

Sample ID: LCSD-24414	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 24414	RunNo: 33073							
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1014895	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.7	80	120	0.315	20	
Barium	0.49	0.020	0.5000	0	98.1	80	120	0.164	20	
Cadmium	0.48	0.0020	0.5000	0	95.7	80	120	0.105	20	
Chromium	0.48	0.0060	0.5000	0	96.1	80	120	0.0875	20	
Lead	0.47	0.0050	0.5000	0	94.6	80	120	0.232	20	
Selenium	0.48	0.050	0.5000	0	96.8	80	120	0.480	20	
Silver	0.097	0.0050	0.1000	0	97.3	80	120	0.123	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA FARM | Work Order Number: 1603994 | RcptNo: 1

Received by/date: LM 03/18/16
Logged By: Anne Thorne 3/18/2016 7:30:00 AM
Completed By: Anne Thorne 3/18/2016
Reviewed By: 03/21/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☑	
9. Was preservative added to bottles?	Yes ☑	No ☑ AJ	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? Yes
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: AJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks: For Metals analysis: added 1 ML HNO3 to cooler for acceptable pH

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

3/21 @ 1435 AJ

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
4901 Hawkins NE – Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: SMA
Mailing Address: 401 W. Broadway, Farmington NM 87401
Phone #: 505 325-7535
email or Fax#: Ashley.maxwell@soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Mixed Mesa CS
Project #:
Project Manager: Tom Long, Ashley Maxwell
Sampler: Ashley Watson
On Ice:
Sample Temperature:

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270SIMS); RCRA 8 Metals TCLP; Anions (F, Cl, NO_3, NO_2, PO_4, SO_4); 8081 Pesticides / 8082 PCB's; 8260B (VOA); 8270 (Semi-VOA); Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3/21/16	9:30	H_2O	McDermott Non Exempt	Various	Various	1603A61 -001

Relinquished by: Rashid — Date/Time: 3/21/16 1507
Received by: Christa Wheeler — 3/21/16 1507
Relinquished by: Christa Wheeler — 3/21/16 1840
Received by: 03/22/16 0730

Remarks: 82bd Full List; Report TCLP compounds at TCLP Limits. Invoice: Enterprise, cc Tom Long

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
McDermott Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL H Section 1 Township 31 North Range 13 West; 36.928673, -108.150197, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non-Hazardous Water from the compressor skids.
Estimated Volume 60 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 30 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Gayle Higgins TITLE: Superintendent DATE: 12/17
SIGNATURE: Surface Waste Management Facility Authorized Agent TELEPHONE NO.:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 11, 2016

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: McDermott CS OrderNo.: 1603A61

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/22/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1603A61
Date Reported: 4/11/2016

CLIENT: Souder, Miller and Associates — Client Sample ID: McDermott Non Exempt
Project: McDermott CS — Collection Date: 3/21/2016 9:30:00 AM
Lab ID: 1603A61-001 — Matrix: AQUEOUS — Received Date: 3/22/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Mercury	ND	0.00020		mg/L	1	3/25/2016 8:14:34 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: MED
Arsenic	ND	0.20		mg/L	1	3/25/2016 1:17:46 PM
Barium	0.48	0.20		mg/L	1	3/25/2016 1:17:46 PM
Cadmium	ND	0.020		mg/L	1	3/25/2016 1:17:46 PM
Chromium	ND	0.060		mg/L	1	3/25/2016 1:17:46 PM
Lead	ND	0.050		mg/L	1	3/25/2016 1:17:46 PM
Selenium	ND	0.50		mg/L	1	3/25/2016 1:17:46 PM
EPA METHOD 8270C TCLP						Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	3/24/2016 4:52:18 PM
3+4-Methylphenol	ND	200		mg/L	1	3/24/2016 4:52:18 PM
Phenol	ND	200		mg/L	1	3/24/2016 4:52:18 PM
2,4-Dinitrotoluene	ND	0.13		mg/L	1	3/24/2016 4:52:18 PM
Hexachlorobenzene	ND	0.13		mg/L	1	3/24/2016 4:52:18 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	3/24/2016 4:52:18 PM
Hexachloroethane	ND	3.0		mg/L	1	3/24/2016 4:52:18 PM
Nitrobenzene	ND	2.0		mg/L	1	3/24/2016 4:52:18 PM
Pentachlorophenol	ND	100		mg/L	1	3/24/2016 4:52:18 PM
Pyridine	ND	5.0		mg/L	1	3/24/2016 4:52:18 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	3/24/2016 4:52:18 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	3/24/2016 4:52:18 PM
Cresols, Total	ND	200		mg/L	1	3/24/2016 4:52:18 PM
Surr: 2-Fluorophenol	3.72	15-124	S	%Rec	1	3/24/2016 4:52:18 PM
Surr: Phenol-d5	15.8	15-116		%Rec	1	3/24/2016 4:52:18 PM
Surr: 2,4,6-Tribromophenol	8.11	15-148	S	%Rec	1	3/24/2016 4:52:18 PM
Surr: Nitrobenzene-d5	77.5	40.6-124		%Rec	1	3/24/2016 4:52:18 PM
Surr: 2-Fluorobiphenyl	79.3	35.7-126		%Rec	1	3/24/2016 4:52:18 PM
Surr: 4-Terphenyl-d14	72.8	18.6-118		%Rec	1	3/24/2016 4:52:18 PM
EPA METHOD 8260B: VOLATILES						Analyst: AG
Benzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Toluene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Ethylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S [illegible]
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- [illegible]

Analytical Report
Lab Order 1603A61

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/11/2016

CLIENT: Souder, Miller and Associates
Client Sample ID: McDermott Non Exempt
Project: McDermott CS
Collection Date: 3/21/2016 9:30:00 AM
Lab ID: 1603A61-001
Matrix: AQUEOUS
Received Date: 3/22/2016 7:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: AG
Naphthalene	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
1-Methylnaphthalene	ND	0.80		mg/L	200	3/24/2016 3:00:52 PM
2-Methylnaphthalene	ND	0.80		mg/L	200	3/24/2016 3:00:52 PM
Acetone	ND	2.0		mg/L	200	3/24/2016 3:00:52 PM
Benzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Bromobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Bromochloromethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Bromodichloromethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Bromoform	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Bromomethane	ND	0.60		mg/L	200	3/24/2016 3:00:52 PM
2-Butanone	ND	2.0		mg/L	200	3/24/2016 3:00:52 PM
Carbon disulfide	ND	3.0		mg/L	200	3/24/2016 3:00:52 PM
Carbon Tetrachloride	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Chlorobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Chloroethane	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
Chloroform	ND	0.60		mg/L	200	3/24/2016 3:00:52 PM
Chloromethane	ND	0.60		mg/L	200	3/24/2016 3:00:52 PM
2-Chlorotoluene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
4-Chlorotoluene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
cis-1,2-DCE	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
Dibromochloromethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Dibromomethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2-Dichlorobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,3-Dichloropropane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,4-Dichlorobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Dichlorodifluoromethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1-Dichloroethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1-Dichloroethene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2-Dichloropropane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,3-Dichloropropene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
2,2-Dichloropropane	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
1,1-Dichloropropene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Hexachlorobutadiene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
2-Hexanone	ND	2.0		mg/L	200	3/24/2016 3:00:52 PM
Isopropylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
4-Isopropyltoluene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
4-Methyl-2-pentanone	ND	2.0		mg/L	200	3/24/2016 3:00:52 PM
Methylene Chloride	ND	0.60		mg/L	200	3/24/2016 3:00:52 PM
n-butylbenzene	ND	0.60		mg/L	200	3/24/2016 3:00:52 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1603A61

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/11/2016

CLIENT: Souder, Miller and Associates
Client Sample ID: McDermott Non Exempt
Project: McDermott CS
Collection Date: 3/21/2016 9:30:00 AM
Lab ID: 1603A61-001
Matrix: AQUEOUS
Received Date: 3/22/2016 7:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: AG
n-Propylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
sec-Butylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Styrene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
tert-Butylbenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
trans-1,2-DCE	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Trichlorofluoromethane	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/24/2016 3:00:52 PM
Vinyl chloride	ND	0.20		mg/L	200	3/24/2016 3:00:52 PM
Xylenes, Total	ND	0.30		mg/L	200	3/24/2016 3:00:52 PM
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	200	3/24/2016 3:00:52 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	200	3/24/2016 3:00:52 PM
Surr: Dibromofluoromethane	97.1	70-130		%Rec	200	3/24/2016 3:00:52 PM
Surr: Toluene-d8	94.1	70-130		%Rec	200	3/24/2016 3:00:52 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: LCSW	Batch ID: R33057	RunNo: 33057								
Prep Date:	Analysis Date: 3/24/2016	SeqNo: 1014299	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	19	1.0	20.00	0	94.1	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	117	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	19		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	19		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		115	70	130			
Surr: Toluene-d8	9.4		10.00		93.7	70	130			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R33057	RunNo: 33057								
Prep Date:	Analysis Date: 3/24/2016	SeqNo: 1014300	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: LCSW	Batch ID: R33057	RunNo: 33057								
Prep Date:	Analysis Date: 3/24/2016	SeqNo: 1014299	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	19	1.0	20.00	0	94.1	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	117	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	19		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	19		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		115	70	130			
Surr: Toluene-d8	9.4		10.00		93.7	70	130			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R33057	RunNo: 33057								
Prep Date:	Analysis Date: 3/24/2016	SeqNo: 1014300	Units: µg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R33057	RunNo: 33057						
Prep Date:	Analysis Date: 3/24/2016	SeqNo: 1014300	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: mb-24409	SampType: MBLK	TestCode: EPA Method 8270C TCLP						
Client ID: PBS	Batch ID: 24409	RunNo: 33040						
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014302	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	9.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.14		0.2000		71.9	15	124			
Surr: Phenol-d5	0.17		0.2000		86.2	15	118			
Surr: 2,4,6-Tribromophenol	0.16		0.2000		78.8	15	148			
Surr: Nitrobenzene-d5	0.087		0.1000		87.3	40.8	124			
Surr: 2-Fluorobiphenyl	0.085		0.1000		85.3	35.7	128			
Surr: 4-Terphenyl-d14	0.091		0.1000		91.2	18.8	115			

Sample ID: lcs-24409	SampType: LCS	TestCode: EPA Method 8270C TCLP						
Client ID: LCSS	Batch ID: 24409	RunNo: 33040						
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014304	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.096	0.010	0.1000	0	95.8	32.1	120			
3+4-Methylphenol	0.28	0.010	0.2000	0	138	10.9	204			
2,4-Dinitrotoluene	0.057	0.010	0.1000	0	57.2	41.9	116			
Hexachlorobenzene	0.081	0.010	0.1000	0	81.4	37.7	99.4			
Hexachlorobutadiene	0.098	0.010	0.1000	0	97.8	30.6	107			
Hexachloroethane	0.087	0.010	0.1000	0	87.3	27.4	121			
Nitrobenzene	0.090	0.010	0.1000	0	90.0	28.6	134			
Pentachlorophenol	0.080	0.010	0.1000	0	80.2	7.71	111			
Pyridine	0.075	0.010	0.1000	0	74.9	8.54	93.5			
2,4,5-Trichlorophenol	0.10	0.010	0.1000	0	103	25.3	146			
2,4,6-Trichlorophenol	0.098	0.010	0.1000	0	98.4	21.5	145			
Cresols, Total	0.37	0.010	0.3000	0	124	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		84.1	15	124			
Surr: Phenol-d5	0.19		0.2000		96.8	15	118			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: lcs-24409	SampType: LCS	TestCode: EPA Method 8270C TCLP						
Client ID: LCSS	Batch ID: 24409	RunNo: 33040						
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014304	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.17		0.2000		86.1	15	148			
Surr: Nitrobenzene-d5	0.10		0.1000		102	40.8	124			
Surr: 2-Fluorobiphenyl	0.094		0.1000		94.2	35.7	128			
Surr: 4-Terphenyl-d14	0.097		0.1000		96.8	18.8	115			

Sample ID: lcsd-24409	SampType: LCSD	TestCode: EPA Method 8270C TCLP						
Client ID: LCSS02	Batch ID: 24409	RunNo: 33040						
Prep Date: 3/24/2016	Analysis Date: 3/24/2016	SeqNo: 1014305	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.097	0.010	0.1000	0	96.9	32.1	120	1.22	20	
3+4-Methylphenol	0.32	0.010	0.2000	0	159	10.9	204	15.0	20	
2,4-Dinitrotoluene	0.080	0.010	0.1000	0	80.2	41.9	116	8.34	20	
Hexachlorobenzene	0.088	0.010	0.1000	0	87.9	37.7	99.4	7.70	20	
Hexachlorobutadiene	0.10	0.010	0.1000	0	104	30.6	107	6.47	20	
Hexachloroethane	0.089	0.010	0.1000	0	89.0	27.4	121	1.88	20	
Nitrobenzene	0.091	0.010	0.1000	0	91.1	28.6	134	1.13	20	
Pentachlorophenol	0.084	0.010	0.1000	0	84.4	7.71	111	5.15	20	
Pyridine	0.078	0.010	0.1000	0	78.1	8.54	92.4	4.16	20	
2,4,5-Trichlorophenol	0.12	0.010	0.1000	0	118	25.3	146	11.1	20	
2,4,6-Trichlorophenol	0.10	0.010	0.1000	0	102	21.5	145	3.14	20	
Cresols, Total	0.42	0.010	0.3000	0	139	30	136	11.8	20	m
Surr: 2-Fluorophenol	0.16		0.2000		79.8	15	124	0	20	
Surr: Phenol-d5	0.19		0.2000		97.5	15	118	0	20	
Surr: 2,4,6-Tribromophenol	0.19		0.2000		93.2	15	148	0	20	
Surr: Nitrobenzene-d5	0.11		0.1000		106	40.8	124	0	20	
Surr: 2-Fluorobiphenyl	0.091		0.1000		90.7	35.7	128	0	20	
Surr: 4-Terphenyl-d14	0.066		0.1000		67.8	18.8	115	0	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: MB-24421	SampType: mblk	TestCode: EPA Method 7470: Mercury						
Client ID: PBW	Batch ID: 24421	RunNo: 33122						
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016891	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-24421	SampType: lcs	TestCode: EPA Method 7470: Mercury						
Client ID: LCSW	Batch ID: 24421	RunNo: 33122						
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016893	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.7	80	120			

Sample ID: LCSD-24421	SampType: lcsd	TestCode: EPA Method 7470: Mercury						
Client ID: LCSS02	Batch ID: 24421	RunNo: 33122						
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1016894	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	80	120	1.77	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A61
11-Apr-16

Client: Souder, Miller and Associates
Project: McDermott CS

Sample ID: MB-24414 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 24414 | RunNo: 33073
Prep Date: 3/24/2016 | Analysis Date: 3/25/2016 | SeqNo: 1014893 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-24414 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 24414 | RunNo: 33073
Prep Date: 3/24/2016 | Analysis Date: 3/25/2016 | SeqNo: 1014894 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.4	80	120			
Barium	0.48	0.020	0.5000	0	96.2	80	120			
Cadmium	0.48	0.0020	0.5000	0	95.6	80	120			
Chromium	0.48	0.0060	0.5000	0	96.0	80	120			
Lead	0.47	0.0050	0.5000	0	94.8	80	120			
Selenium	0.48	0.050	0.5000	0	96.3	80	120			
Silver	0.097	0.0050	0.1000	0	97.4	80	120			

Sample ID: LCSD-24414 | SampType: LCSD | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSS02 | Batch ID: 24414 | RunNo: 33073
Prep Date: 3/24/2016 | Analysis Date: 3/25/2016 | SeqNo: 1014895 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.7	80	120	0.315	20	
Barium	0.48	0.020	0.5000	0	96.1	80	120	0.164	20	
Cadmium	0.48	0.0020	0.5000	0	95.7	80	120	0.105	20	
Chromium	0.48	0.0060	0.5000	0	96.1	80	120	0.0875	20	
Lead	0.47	0.0050	0.5000	0	94.6	80	120	0.232	20	
Selenium	0.48	0.050	0.5000	0	96.8	80	120	0.480	20	
Silver	0.097	0.0050	0.1000	0	97.3	80	120	0.123	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM | Work Order Number: 1603A61 | RptNo: 1

Received by/date: LM 03/22/16
Logged By: Anne Thorne | 3/22/2016 7:05:00 AM | Anne Thorne
Completed By: Anne Thorne | 3/22/2016 | Anne Thorne
Reviewed By: AG | 03/22/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

\# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
Adjusted? No
Checked by: JA

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: | Date:
By Whom: | Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Not Present			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: SMA
Mailing Address: 401 W. Broadway, Farmington NM 87401
Phone #: 505-325-7535
email or Fax#: ashley.maxwell@soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Turn-Around Time: ☑ Standard ☐ Rush
Project Name: McDermott CS
Project #:
Project Manager: Tom Long, Ashley Maxwell
Sampler: Randy Whitson
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.1-1.0=1.1

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270SIMS) ☒; RCRA 8 Metals ☒ TCLP; Anions (F, Cl, NO_3, NO_2, PO_4, SO_4); 8081 Pesticides / 8082 PCB's; 8260B (VOA) ☒; 8270 (Semi-VOA); Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
	9:30	Aq	McDermott	Various	Various	1603A61 -001

Remarks: 8260 Full List; Report TCLP Compounds at TCLP Limits. Invoice: Enterprise. cc: Tom Long

Relinquished by: Randy Whitson | Received by: [signature] | Date: 3/21/16 | Time: 1732
Relinquished by: Cheryl Walker | Received by: [signature] | Date: 03/22/16 | Time: 0705

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Hart Canyon Compressor Station – West Below Grade Tank #2

3. Location of Material (Street Address, City, State or ULSTR):
UL P Section 29 Township 30 North Range 9 West; 36.778715, -107.795740, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non Hazardous Water from the compressor skids
Estimated Volume 100 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 31 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________, representative for ______ Agua Moss, LLC ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Gary Higgins TITLE: Superintendent DATE: 12/17
SIGNATURE: [signature] TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 02, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Hart Canyon 2 OrderNo.: 1701B28

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/27/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1701B28
Date Reported: 2/2/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-001 **Matrix:** AQUEOUS

Client Sample ID: East BGT
Collection Date: 1/26/2017 7:58:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	pmf
Mercury	ND	0.00020		mg/L	1	1/30/2017 3:09:15 PM	29942
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	pmf
Arsenic	ND	5.0		mg/L	10	2/1/2017 5:08:03 PM	29931
Barium	ND	100		mg/L	10	2/1/2017 5:08:03 PM	29931
Cadmium	ND	1.0		mg/L	1	1/30/2017 11:51:20 AM	29931
Chromium	ND	5.0		mg/L	10	2/1/2017 5:08:03 PM	29931
Lead	ND	5.0		mg/L	5	2/1/2017 5:06:53 PM	29931
Selenium	ND	10		mg/L	10	2/1/2017 5:08:03 PM	29931
Silver	ND	5.0		mg/L	5	2/1/2017 5:06:53 PM	29931
EPA METHOD 8270C: PAHS						Analyst:	DAM
Naphthalene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
1-Methylnaphthalene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
2-Methylnaphthalene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Acenaphthylene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Acenaphthene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Fluorene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Phenanthrene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Anthracene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Fluoranthene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Pyrene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Benz(a)anthracene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Chrysene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Benzo(b)fluoranthene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Benzo(k)fluoranthene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Benzo(a)pyrene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Dibenz(a,h)anthracene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Benzo(g,h,i)perylene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Indeno(1,2,3-cd)pyrene	ND	2.5	D	µg/L	1	1/30/2017 3:06:31 PM	29925
Surr: N-hexadecane	34.3	15-176	D	%Rec	1	1/30/2017 3:06:31 PM	29925
Surr: Benzo(e)pyrene	61.8	15-198	D	%Rec	1	1/30/2017 3:06:31 PM	29925
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
Benzene	0.64	0.50		mg/L	200	1/27/2017 8:13:49 PM	A40344
Toluene	1.1	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Ethylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1701B28
Date Reported: 2/2/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-001 **Matrix:** AQUEOUS

Client Sample ID: East BGT
Collection Date: 1/26/2017 7:58:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Naphthalene	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
1-Methylnaphthalene	ND	0.80		mg/L	200	1/27/2017 8:13:49 PM	A40344
2-Methylnaphthalene	ND	0.80		mg/L	200	1/27/2017 8:13:49 PM	A40344
Acetone	ND	2.0		mg/L	200	1/27/2017 8:13:49 PM	A40344
Bromobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Bromodichloromethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Bromoform	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Bromomethane	ND	0.60		mg/L	200	1/27/2017 8:13:49 PM	A40344
2-Butanone	ND	2.0		mg/L	200	1/27/2017 8:13:49 PM	A40344
Carbon disulfide	ND	2.0		mg/L	200	1/27/2017 8:13:49 PM	A40344
Carbon Tetrachloride	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Chlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Chloroethane	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
Chloroform	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Chloromethane	ND	0.80		mg/L	200	1/27/2017 8:13:49 PM	A40344
2-Chlorotoluene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
4-Chlorotoluene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
cis-1,2-DCE	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
cis-1,3-Dichloropropene	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2-Dibromo-3-chloropropane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Dibromochloromethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Dibromomethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,3-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,4-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Dichlorodifluoromethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1-Dichloroethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1-Dichloroethene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2-Dichloropropane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,3-Dichloropropane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
2,2-Dichloropropane	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1-Dichloropropene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Hexachlorobutadiene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
2-Hexanone	ND	2.0		mg/L	200	1/27/2017 8:13:49 PM	A40344
Isopropylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
4-Isopropyltoluene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
4-Methyl-2-pentanone	ND	2.0		mg/L	200	1/27/2017 8:13:49 PM	A40344
Methylene Chloride	ND	0.60		mg/L	200	1/27/2017 8:13:49 PM	A40344

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Analytical Report
Lab Order 1701B28
Date Reported: 2/2/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-001 **Matrix:** AQUEOUS

Client Sample ID: East BGT
Collection Date: 1/26/2017 7:58:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
n-Butylbenzene	ND	0.80		mg/L	200	1/27/2017 8:13:49 PM	A40344
n-Propylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
sec-Butylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Styrene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
tert-Butylbenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
trans-1,2-DCE	ND	0.30		mg/L	200	1/27/2017 8:13:49 PM	A40344
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1,1-Trichloroethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,1,2-Trichloroethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Trichloroethene (TCE)	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Trichlorofluoromethane	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
1,2,3-Trichloropropane	ND	0.40		mg/L	200	1/27/2017 8:13:49 PM	A40344
Vinyl chloride	ND	0.20		mg/L	200	1/27/2017 8:13:49 PM	A40344
Xylenes, Total	ND	0.30		mg/L	200	1/27/2017 8:13:49 PM	A40344
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	200	1/27/2017 8:13:49 PM	A40344
Surr: 4-Bromofluorobenzene	80.5	70-130		%Rec	200	1/27/2017 8:13:49 PM	A40344
Surr: Dibromofluoromethane	98.8	70-130		%Rec	200	1/27/2017 8:13:49 PM	A40344
Surr: Toluene-d8	99.0	70-130		%Rec	200	1/27/2017 8:13:49 PM	A40344

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- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-003 **Matrix:** AQUEOUS

Client Sample ID: West BGT
Collection Date: 1/26/2017 7:33:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst: pmf	
Mercury	0.00645	0.00020		ug/L	1	1/30/2017 3:11:16 PM	29942
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: pmf	
Arsenic	ND	5.0		mg/L	10	2/1/2017 5:11:35 PM	29931
Barium	ND	100		mg/L	5	2/1/2017 5:10:22 PM	29931
Cadmium	ND	1.0		mg/L	1	1/30/2017 11:52:28 AM	29931
Chromium	ND	5.0		mg/L	10	2/1/2017 5:11:35 PM	29931
Lead	ND	5.0		mg/L	5	2/1/2017 5:10:22 PM	29931
Selenium	ND	1.0		mg/L	5	2/1/2017 5:10:22 PM	29931
Silver	ND	5.0		mg/L	5	2/1/2017 5:10:22 PM	29931
EPA METHOD 8270C: PAHS						Analyst: DAM	
Naphthalene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
1-Methylnaphthalene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
2-Methylnaphthalene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Acenaphthylene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Acenaphthene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Fluorene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Phenanthrene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Anthracene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Fluoranthene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Pyrene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Benz(a)anthracene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Chrysene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Benzo(b)fluoranthene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Benzo(k)fluoranthene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Benzo(a)pyrene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Dibenz(a,h)anthracene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Benzo(g,h,i)perylene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Indeno(1,2,3-cd)pyrene	ND	2.5	D	ug/L	1	1/30/2017 3:30:43 PM	29925
Surr: N-hexadecane	30.4	15-176	D	%Rec	1	1/30/2017 3:30:43 PM	29925
Surr: Benzo(e)pyrene	84.3	16-198	D	%Rec	1	1/30/2017 3:30:43 PM	29925
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Benzene	ND	0.50		mg/L	200	1/27/2017 9:40:36 PM	A40344
Toluene	0.37	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Ethylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-002 **Matrix:** AQUEOUS

Client Sample ID: West BGT
Collection Date: 1/26/2017 7:33:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Naphthalene	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
1-Methylnaphthalene	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344
2-Methylnaphthalene	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344
Acetone	ND	2.0		mg/L	200	1/27/2017 9:40:36 PM	A40344
Bromobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Bromodichloromethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Bromoform	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Bromomethane	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344
2-Butanone	ND	2.0		mg/L	200	1/27/2017 9:40:36 PM	A40344
Carbon disulfide	ND	2.0		mg/L	200	1/27/2017 9:40:36 PM	A40344
Carbon Tetrachloride	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Chlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Chloroethane	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
Chloroform	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Chloromethane	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344
2-Chlorotoluene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
4-Chlorotoluene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
cis-1,2-DCE	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
Dibromochloromethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Dibromomethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,3-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,4-Dichlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Dichlorodifluoromethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1-Dichloroethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1-Dichloroethene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2-Dichloropropane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,3-Dichloropropane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
2,2-Dichloropropane	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1-Dichloropropene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Hexachlorobutadiene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
2-Hexanone	ND	2.0		mg/L	200	1/27/2017 9:40:36 PM	A40344
Isopropylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
4-Isopropyltoluene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
4-Methyl-2-pentanone	ND	2.0		mg/L	200	1/27/2017 9:40:36 PM	A40344
Methylene Chloride	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Hart Canyon 2
Lab ID: 1701B28-003 **Matrix:** AQUEOUS

Client Sample ID: West BGT
Collection Date: 1/26/2017 7:33:00 AM
Received Date: 1/27/2017 8:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
n-Butylbenzene	ND	0.60		mg/L	200	1/27/2017 9:40:36 PM	A40344
n-Propylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
sec-Butylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Styrene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
tert-Butylbenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
Tetrachloroethene (PCE)	0.38	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
trans-1,2-DCE	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1,1-Trichloroethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,1,2-Trichloroethane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Trichloroethene (TCE)	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Trichlorofluoromethane	ND	0.40		mg/L	200	1/27/2017 9:40:36 PM	A40344
1,2,3-Trichloropropane	ND	0.20		mg/L	200	1/27/2017 9:40:36 PM	A40344
Vinyl chloride	ND	0.30		mg/L	200	1/27/2017 9:40:36 PM	A40344
Xylenes, Total	ND	0.30		mg/L	200	1/27/2017 9:40:36 PM	A40344
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	200	1/27/2017 9:40:36 PM	A40344
Surr: 4-Bromofluorobenzene	82.1	70-130		%Rec	200	1/27/2017 9:40:36 PM	A40344
Surr: Dibromofluoromethane	100	70-130		%Rec	200	1/27/2017 9:40:36 PM	A40344
Surr: Toluene-d8	97.5	70-130		%Rec	200	1/27/2017 9:40:36 PM	A40344

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

Work: 1701B28
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: rb2 | Sample Type: MBLK | TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW | Batch ID: A40344 | RunNo: 40344
Prep Date: | Analysis Date: 1/27/2017 | SeqNo: 1254955 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701828
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: rb2	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: A40344	RunNo: 40344							
Prep Date:	Analysis Date: 1/27/2017	SeqNo: 1264955	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.3	70	130			
Surr: 4-Bromofluorobenzene	8.5		10.00		84.8	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: A40344	RunNo: 40344							
Prep Date:	Analysis Date: 1/27/2017	SeqNo: 1264956	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.0	70	130			
Toluene	19	1.0	20.00	0	94.1	70	130			
Chlorobenzene	18	1.0	20.00	0	91.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701828
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: A40344	RunNo: 40344							
Prep Date:	Analysis Date: 1/27/2017	SeqNo: 1264956	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	8.3		10.00		83.0	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.6	70	130			
Surr: Toluene-d8	9.8		10.00		97.6	70	130			

Sample ID: 1701b28-001a ms	SampType: MS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: East BGT	Batch ID: A40344	RunNo: 40344							
Prep Date:	Analysis Date: 1/27/2017	SeqNo: 1264962	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.5	0.20	4.000	0.5447	99.3	70	130			
Toluene	4.9	0.20	4.000	1.115	94.1	70	130			
Chlorobenzene	3.7	0.20	4.000	0	91.9	70	130			
1,1-Dichloroethene	4.1	0.20	4.000	0	102	70	130			
Trichloroethene (TCE)	4.0	0.20	4.000	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	2.0		2.000		98.2	70	130			
Surr: 4-Bromofluorobenzene	1.6		2.000		79.9	70	130			
Surr: Dibromofluoromethane	2.0		2.000		98.9	70	130			
Surr: Toluene-d8	1.9		2.000		97.0	70	130			

Sample ID: 1701b28-001a msd	SampType: MSD	TestCode: EPA Method 8260B: VOLATILES							
Client ID: East BGT	Batch ID: A40344	RunNo: 40344							
Prep Date:	Analysis Date: 1/27/2017	SeqNo: 1264964	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.4	0.20	4.000	0.5447	97.0	70	130	2.05	20	
Toluene	4.8	0.20	4.000	1.115	95.0	70	130	0.733	20	
Chlorobenzene	3.7	0.20	4.000	0	92.4	70	130	0.562	20	
1,1-Dichloroethene	3.8	0.20	4.000	0	94.1	70	130	8.51	20	
Trichloroethene (TCE)	3.9	0.20	4.000	0	97.2	70	130	3.77	20	
Surr: 1,2-Dichloroethane-d4	2.0		2.000		99.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.7		2.000		82.8	70	130	0	0	
Surr: Dibromofluoromethane	2.0		2.000		100	70	130	0	0	
Surr: Toluene-d8	2.0		2.000		99.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701828
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: lcs-29925	SampType: LCS	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSW	Batch ID: 29925	RunNo: 40381							
Prep Date: 1/27/2017	Analysis Date: 1/30/2017	SeqNo: 1265826	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	14	0.50	20.00	0	67.9	37.4	120			
1-Methylnaphthalene	13	0.50	20.00	0	64.5	39.3	121			
2-Methylnaphthalene	13	0.50	20.00	0	65.2	37.8	122			
Acenaphthylene	15	0.50	20.00	0	73.9	37	124			
Acenaphthene	15	0.50	20.00	0	72.9	35.2	123			
Fluorene	15	0.50	20.00	0	77.0	35.2	122			
Phenanthrene	16	0.50	20.00	0	79.0	38.8	122			
Anthracene	14	0.50	20.00	0	72.0	37.5	125			
Fluoranthene	14	0.50	20.00	0	71.2	37.4	131			
Pyrene	15	0.50	20.00	0	73.1	27.5	140			
Benz(a)anthracene	15	0.50	20.00	0	77.4	25.4	141			
Chrysene	15	0.50	20.00	0	74.7	33.6	155			
Benzo(b)fluoranthene	15	0.50	20.00	0	75.4	39	153			
Benzo(k)fluoranthene	14	0.50	20.00	0	69.7	38	154			
Benzo(e)pyrene	14	0.50	20.00	0	72.3	38.6	153			
Dibenz(a,h)anthracene	15	0.50	20.00	0	77.4	39.7	155			
Benzo(g,h,i)perylene	14	0.50	20.00	0	72.5	39.6	154			
Indeno(1,2,3-cd)pyrene	15	0.50	20.00	0	73.6	19.1	153			
Surr: N-hexadecane	65		87.60		73.8	15	176			
Surr: Benzo(e)pyrene	14		20.00		71.4	15	198			

Sample ID: lcsd-29925	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 29925	RunNo: 40381							
Prep Date: 1/27/2017	Analysis Date: 1/30/2017	SeqNo: 1265827	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	61.5	37.4	120	9.89	20	
1-Methylnaphthalene	13	0.50	20.00	0	63.9	39.3	121	0.996	20.8	
2-Methylnaphthalene	12	0.50	20.00	0	61.6	37.8	122	5.68	23.8	
Acenaphthylene	13	0.50	20.00	0	66.0	37	124	11.3	28.6	
Acenaphthene	14	0.50	20.00	0	68.6	35.2	123	6.08	27	
Fluorene	15	0.50	20.00	0	72.6	35.2	122	5.88	25.7	
Phenanthrene	15	0.50	20.00	0	73.2	38.8	122	0.274	20	
Anthracene	15	0.50	20.00	0	75.5	37.5	125	4.75	21.2	
Fluoranthene	15	0.50	20.00	0	73.4	37.4	131	3.04	21.8	
Pyrene	15	0.50	20.00	0	77.4	27.5	140	5.71	31.1	
Benz(a)anthracene	16	0.50	20.00	0	78.0	25.4	141	0.772	26.6	
Chrysene	15	0.50	20.00	0	73.8	33.6	155	1.16	21.2	
Benzo(b)fluoranthene	15	0.50	20.00	0	73.3	39	153	2.82	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701828
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: lcsd-29925	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 29925	RunNo: 40381							
Prep Date: 1/27/2017	Analysis Date: 1/30/2017	SeqNo: 1265827	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	14	0.50	20.00	0	68.0	38	154	2.47	21	
Benzo(k)fluoranthene	14	0.50	20.00	0	71.7	38.6	153	0.702	24.8	
Dibenz(a,h)anthracene	15	0.50	20.00	0	75.0	39.7	155	3.15	26	
Benzo(g,h,i)perylene	14	0.50	20.00	0	70.6	39.6	154	2.66	20	
Indeno(1,2,3-cd)pyrene	15	0.50	20.00	0	74.2	19.1	153	0.812	20	
Surr: N-hexadecane	58		87.60		66.1	15	176	0	0	
Surr: Benzo(e)pyrene	15		20.00		73.4	15	198	0	0	

Sample ID: mb-29925	SampType: MBLK	TestCode: EPA Method 8270C: PAHs							
Client ID: PBW	Batch ID: 29925	RunNo: 40381							
Prep Date: 1/27/2017	Analysis Date: 1/30/2017	SeqNo: 1265828	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(e)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	68		87.60		77.6	15	176			
Surr: Benzo(e)pyrene	16		20.00		80.6	15	198			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701B28
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: MB-29942 | SampType: MBLK | TestCode: EPA Method 7470: Mercury
Client ID: PBW | Batch ID: 29942 | RunNo: 40390
Prep Date: 1/30/2017 | Analysis Date: 1/30/2017 | SeqNo: 1266211 | Units: ug/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-29942 | SampType: LCS | TestCode: EPA Method 7470: Mercury
Client ID: LCSW | Batch ID: 29942 | RunNo: 40390
Prep Date: 1/30/2017 | Analysis Date: 1/30/2017 | SeqNo: 1266213 | Units: ug/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.9	80	120			

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701B28
02-Feb-17

Client: Souder, Miller and Associates
Project: Hart Canyon 2

Sample ID: LCS-29931 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 29931 | RunNo: 40375
Prep Date: 1/27/2017 | Analysis Date: 1/30/2017 | SeqNo: 1265621 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.47	0.020	0.5000	0	94.2	80	120			
Barium	0.48	0.020	0.5000	0	95.4	80	120			
Cadmium	0.47	0.0020	0.5000	0	93.4	80	120			
Chromium	0.47	0.0060	0.5000	0	93.9	80	120			
Selenium	0.46	0.050	0.5000	0	92.8	80	120			
Silver	0.096	0.0050	0.1000	0	96.3	80	120			

Sample ID: MB-29931 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 29931 | RunNo: 40375
Prep Date: 1/27/2017 | Analysis Date: 1/30/2017 | SeqNo: 1265643 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-29931 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 29931 | RunNo: 40375
Prep Date: 1/27/2017 | Analysis Date: 1/30/2017 | SeqNo: 1265655 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.48	0.0050	0.5000	0	95.5	80	120			

Sample ID: MB-29931 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 29931 | RunNo: 40375
Prep Date: 1/27/2017 | Analysis Date: 1/30/2017 | SeqNo: 1265656 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0050								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM | Work Order Number: 1701B28 | RcptNo: 1

Received by/date: RE 01/27/17
Logged By: Ashley Gallegos 1/27/2017 8:40:00 AM
Completed By: Ashley Gallegos 1/27/2017 8:08:38 AM
Reviewed By: AJ 1/27/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 2
(<2 or >12 unless noted)
Adjusted? NO
Checked by: RE

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: | Date:
By Whom: | Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: SMA
Mailing Address: 401 W. Broadway, Farmington, NM 87401
Phone #: 505-325-7535
email or Fax#: Ashley.Maxwell@soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☐ Standard ☒ Rush ASAP
Project Name: Hart Canyon # 2
Project #:
Project Manager: Ashley Maxwell, Tom Long
Sampler: Randy Watson
On Ice: Yes ☐ No
Sample Temperature: 1.9 - CF 0.1 = 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1701B28	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270SIMS)	RCRA 8 Metals TCLP	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
1-27	7:38	H_2O	East BGT	Various	Various	-001						X	X			X		
	7:33	H_2O	West BGT	"	Various	-002						X	X			X		

Date: 1-26-17 Time: 1801 Relinquished by: [signature] | Received by: [signature] Date: 1/26/17 Time: 1801
Date: 1-26-17 Time: 1903 Relinquished by: [signature] | Received by: [signature] Date: 1/27/17 Time: 0840

Remarks: 8260 Full List Report TCLP compound at TCLP Limits
Invoice: Enterprise cc Tom Long

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
MAPL Huerfano Pumping Station

3. Location of Material (Street Address, City, State or ULSTR):
UL L Section 21 Township 26 North Range 10 West; 36.471831, -107.908114

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 80 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 134 / 222 yd³/ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12W San Juan County, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Adrian Hilson TITLE: Operator DATE: 5/25/17
SIGNATURE: _____ TELEPHONE NO.: (505) 334-6186
Surface Waste Management Facility Authorized Agent

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: 1702072
Date Reported:

CLIENT: Souder, Miller and Associates
Project: Huerfano Station
Lab ID: 1702072-001 Matrix: AQUEOUS

Client Sample ID: Huerfano BGT
Collection Date: 2/1/2017 1:50:00 PM
Received Date: 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	gmf
Mercury	ND	0.00020		mg/L	1	2/2/2017 5:40:31 PM	30033
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	gmf
Arsenic	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Barium	ND	100		mg/L	1	2/6/2017 11:55:58 AM	30031
Cadmium	ND	1.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Chromium	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Lead	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Selenium	ND	1.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Silver	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
EPA METHOD 8270C: PAHS						Analyst:	JDC
Naphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
1-Methylnaphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
2-Methylnaphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Acenaphthylene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Acenaphthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Fluorene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Phenanthrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benz(a)anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Chrysene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(b)fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(k)fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(a)pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Dibenz(a,h)anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(g,h,i)perylene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Indeno(1,2,3-cd)pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Surr: Nitrobenzene-d5	75.6	15-179	D	%Rec	1	2/3/2017 12:17:25 PM	30020
Surr: Benzo(e)pyrene	74.3	15-198	D	%Rec	1	2/3/2017 12:17:25 PM	30020
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
Benzene	ND	0.50		mg/L	200	2/3/2017 5:43:02 PM	W40507
Toluene	0.23	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Ethylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: 1702072
Date Reported:

CLIENT: Souder, Miller and Associates
Project: Huerfano Station
Lab ID: 1702072-001 Matrix: AQUEOUS

Client Sample ID: Huerfano BGT
Collection Date: 2/1/2017 1:50:00 PM
Received Date: 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Naphthalene	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
1-Methylnaphthalene	ND	0.80		mg/L	200	2/3/2017 5:43:02 PM	W40507
2-Methylnaphthalene	ND	0.80		mg/L	200	2/3/2017 5:43:02 PM	W40507
Acetone	ND	2.0		mg/L	200	2/3/2017 5:43:02 PM	W40507
Bromobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Bromodichloromethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Bromoform	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Bromomethane	ND	0.60		mg/L	200	2/3/2017 5:43:02 PM	W40507
2-Butanone	ND	2.0		mg/L	200	2/3/2017 5:43:02 PM	W40507
Carbon disulfide	ND	2.0		mg/L	200	2/3/2017 5:43:02 PM	W40507
Carbon Tetrachloride	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Chlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Chloroethane	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
Chloroform	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Chloromethane	ND	0.60		mg/L	200	2/3/2017 5:43:02 PM	W40507
2-Chlorotoluene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
4-Chlorotoluene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
cis-1,2-DCE	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
Dibromochloromethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Dibromomethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,3-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,4-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Dichlorodifluoromethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1-Dichloroethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1-Dichloroethene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2-Dichloropropane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,3-Dichloropropane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
2,2-Dichloropropane	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Hexachlorobutadiene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
2-Hexanone	ND	2.0		mg/L	200	2/3/2017 5:43:02 PM	W40507
Isopropylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
4-Isopropyltoluene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
4-Methyl-2-pentanone	ND	2.0		mg/L	200	2/3/2017 5:43:02 PM	W40507
Methylene Chloride	ND	0.60		mg/L	200	2/3/2017 5:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: 1702072
Date Reported:

CLIENT: Souder, Miller and Associates
Project: Huerfano Station
Lab ID: 1702072-001 Matrix: AQUEOUS

Client Sample ID: Huerfano BGT
Collection Date: 2/1/2017 1:50:00 PM
Received Date: 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
n-Butylbenzene	ND	0.60		mg/L	200	2/3/2017 5:43:02 PM	W40507
n-Propylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
sec-Butylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Styrene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
tert-Butylbenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
trans-1,2-DCE	ND	0.30		mg/L	200	2/3/2017 5:43:02 PM	W40507
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1,1-Trichloroethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,1,2-Trichloroethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Trichloroethene (TCE)	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Trichlorofluoromethane	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
1,2,3-Trichloropropane	ND	0.40		mg/L	200	2/3/2017 5:43:02 PM	W40507
Vinyl chloride	ND	0.20		mg/L	200	2/3/2017 5:43:02 PM	W40507
Xylenes, Total	ND	0.30		mg/L	200	2/3/2017 5:43:02 PM	W40507
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	200	2/3/2017 5:43:02 PM	W40507
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	200	2/3/2017 5:43:02 PM	W40507
Surr: Dibromofluoromethane	103	70-130		%Rec	200	2/3/2017 5:43:02 PM	W40507
Surr: Toluene-d8	109	70-130		%Rec	200	2/3/2017 5:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Do not at pretty lady 10/4/16

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Angel Peak Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL E Section 20 Township 27 North Range 10 West; 36.561288, -107.926090, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids
Estimated Volume 100 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) *202* yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *[signature]*, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ **RCRA Non-Exempt:** Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *[signature]*, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________________, representative for ____________ Agua Moss, LLC ____________ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: *Gayle Higgins* TITLE: *Supervisor* DATE: *12/17*
SIGNATURE: *[signature]* TELEPHONE NO.: ____________
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 03, 2016

Tom Long
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Enterprise Angel Peak OrderNo.: 1609441

Dear Tom Long:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/9/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

[signature]

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1609441**
Date Reported: **10/3/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates **Client Sample ID:** Angel Peak BGT
Project: Enterprise Angel Peak **Collection Date:** 9/8/2016 2:30:00 PM
Lab ID: 1609441-001 **Matrix:** AQUEOUS **Received Date:** 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst:	**DAM**
2-Methylphenol	ND	200		mg/L	1	9/14/2016 4:58:02 PM	27476
3+4-Methylphenol	ND	200		mg/L	1	9/14/2016 4:58:02 PM	27476
Phenol	ND	200		mg/L	1	9/14/2016 4:58:02 PM	27476
2,4-Dinitrotoluene	ND	0.13		mg/L	1	9/14/2016 4:58:02 PM	27476
Hexachlorobenzene	ND	0.13		mg/L	1	9/14/2016 4:58:02 PM	27476
Hexachlorobutadiene	ND	0.50		mg/L	1	9/14/2016 4:58:02 PM	27476
Hexachloroethane	ND	3.0		mg/L	1	9/14/2016 4:58:02 PM	27476
Nitrobenzene	ND	2.0		mg/L	1	9/14/2016 4:58:02 PM	27476
Pentachlorophenol	ND	100		mg/L	1	9/14/2016 4:58:02 PM	27476
Pyridine	ND	5.0		mg/L	1	9/14/2016 4:58:02 PM	27476
2,4,5-Trichlorophenol	ND	400		mg/L	1	9/14/2016 4:58:02 PM	27476
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	9/14/2016 4:58:02 PM	27476
Cresols, Total	ND	200		mg/L	1	9/14/2016 4:58:02 PM	27476
Surr: 2-Fluorophenol	15.1	15-124		%Rec	1	9/14/2016 4:58:02 PM	27476
Surr: Phenol-d5	19.4	15-118		%Rec	1	9/14/2016 4:58:02 PM	27476
Surr: 2,4,6-Tribromophenol	27.3	15-148		%Rec	1	9/14/2016 4:58:02 PM	27476
Surr: Nitrobenzene-d5	45.8	40.6-124		%Rec	1	9/14/2016 4:58:02 PM	27476
Surr: 2-Fluorobiphenyl	39.2	35.7-128		%Rec	1	9/14/2016 4:58:02 PM	27476
Surr: 4-Terphenyl-d14	28.7	18.8-115		%Rec	1	9/14/2016 4:58:02 PM	27476
EPA METHOD 7470: MERCURY						Analyst:	**pmf**
Mercury	0.00078	0.00020		mg/L	1	9/22/2016 3:36:35 PM	27641
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	**MED**
Arsenic	ND	0.020		mg/L	1	9/22/2016 3:48:44 PM	27619
Barium	0.048	0.020		mg/L	1	9/22/2016 3:48:44 PM	27619
Cadmium	ND	0.0020		mg/L	1	9/22/2016 3:48:44 PM	27619
Chromium	ND	0.0060		mg/L	1	9/22/2016 3:48:44 PM	27619
Lead	ND	0.0050		mg/L	1	9/22/2016 3:48:44 PM	27619
Selenium	ND	0.050		mg/L	1	9/22/2016 3:48:44 PM	27619
Silver	ND	0.0050		mg/L	1	9/22/2016 3:48:44 PM	27619
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	0.50		mg/L	200	9/13/2016 12:17:00 PM	R37161
Toluene	0.61	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Ethylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report
Lab Order **1609441**
Date Reported: **10/3/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates **Client Sample ID:** Angel Peak BGT
Project: Enterprise Angel Peak **Collection Date:** 9/8/2016 2:30:00 PM
Lab ID: 1609441-001 **Matrix:** AQUEOUS **Received Date:** 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Naphthalene	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
1-Methylnaphthalene	ND	0.80		mg/L	200	9/13/2016 12:17:00 PM	R37161
2-Methylnaphthalene	ND	0.80		mg/L	200	9/13/2016 12:17:00 PM	R37161
Acetone	ND	2.0		mg/L	200	9/13/2016 12:17:00 PM	R37161
Bromobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Bromodichloromethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Bromoform	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Bromomethane	ND	0.60		mg/L	200	9/13/2016 12:17:00 PM	R37161
2-Butanone	ND	2.0		mg/L	200	9/13/2016 12:17:00 PM	R37161
Carbon disulfide	ND	2.0		mg/L	200	9/13/2016 12:17:00 PM	R37161
Carbon Tetrachloride	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Chlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Chloroethane	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
Chloroform	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Chloromethane	ND	0.60		mg/L	200	9/13/2016 12:17:00 PM	R37161
2-Chlorotoluene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
4-Chlorotoluene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
cis-1,2-DCE	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
Dibromochloromethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Dibromomethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2-Dichlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,3-Dichlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,4-Dichlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Dichlorodifluoromethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1-Dichloroethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1-Dichloroethene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2-Dichloropropane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,3-Dichloropropane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
2,2-Dichloropropane	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1-Dichloropropene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Hexachlorobutadiene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
2-Hexanone	ND	2.0		mg/L	200	9/13/2016 12:17:00 PM	R37161
Isopropylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
4-Isopropyltoluene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
4-Methyl-2-pentanone	ND	2.0		mg/L	200	9/13/2016 12:17:00 PM	R37161
Methylene Chloride	ND	0.60		mg/L	200	9/13/2016 12:17:00 PM	R37161
n-Butylbenzene	ND	0.60		mg/L	200	9/13/2016 12:17:00 PM	R37161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1609441
Date Reported: 10/3/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Enterprise Angel Peak
Lab ID: 1609441-001
Client Sample ID: Angel Peak BGT
Collection Date: 9/8/2016 2:30:00 PM
Matrix: AQUEOUS
Received Date: 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
n-Propylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
sec-Butylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Styrene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
tert-Butylbenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
trans-1,2-DCE	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1,1-Trichloroethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,1,2-Trichloroethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Trichloroethene (TCE)	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Trichlorofluoromethane	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
1,2,3-Trichloropropane	ND	0.40		mg/L	200	9/13/2016 12:17:00 PM	R37161
Vinyl chloride	ND	0.20		mg/L	200	9/13/2016 12:17:00 PM	R37161
Xylenes, Total	ND	0.30		mg/L	200	9/13/2016 12:17:00 PM	R37161
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	200	9/13/2016 12:17:00 PM	R37161
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	200	9/13/2016 12:17:00 PM	R37161
Surr: Dibromofluoromethane	105	70-130		%Rec	200	9/13/2016 12:17:00 PM	R37161
Surr: Toluene-d8	97.4	70-130		%Rec	200	9/13/2016 12:17:00 PM	R37161

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1609441
03-Oct-16

Client: Souder, Miller and Associates
Project: Enterprise Angel Peak

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152623	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromochloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	2.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1609441
03-Oct-16

Client: Souder, Miller and Associates
Project: Enterprise Angel Peak

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152623	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.8		10.00		95.7	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152624	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	19	1.0	20.00	0	97.0	70	130			

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1609441
03-Oct-16

Client: Souder, Miller and Associates
Project: Enterprise Angel Peak

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152624	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.7	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			

Sample ID: 1609441-001a ms	SampType: MS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: Angel Peak BGT	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152645	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4800	200	4000	0.8476	120	70	130			
Toluene	4600	200	4000	0.6113	114	70	130			
Chlorobenzene	3800	200	4000	0	95.0	70	130			
1,1-Dichloroethene	4100	200	4000	0	104	70	130			
Trichloroethene (TCE)	4200	200	4000	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	2100		2000		105	70	130			
Surr: 4-Bromofluorobenzene	1900		2000		94.9	70	130			
Surr: Dibromofluoromethane	2200		2000		110	70	130			
Surr: Toluene-d8	1900		2000		95.4	70	130			

Sample ID: 1609441-001a msd	SampType: MSD	TestCode: EPA Method 8260B: VOLATILES							
Client ID: Angel Peak BGT	Batch ID: R37161	RunNo: 37161							
Prep Date:	Analysis Date: 9/13/2016	SeqNo: 1152649	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4600	200	4000	0.8476	115	70	130	3.08	20	
Toluene	4400	200	4000	0.6113	110	70	130	3.10	20	
Chlorobenzene	3700	200	4000	0	93.2	70	130	1.97	20	
1,1-Dichloroethene	3900	200	4000	0	97.6	70	130	6.03	20	
Trichloroethene (TCE)	4000	200	4000	0	101	70	130	4.53	20	
Surr: 1,2-Dichloroethane-d4	2000		2000		98.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	1900		2000		96.3	70	130	0	0	
Surr: Dibromofluoromethane	2000		2000		102	70	130	0	0	
Surr: Toluene-d8	1900		2000		94.6	70	130	0	0	

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609441

05-Oct-16

Client: Souder, Miller and Associates
Project: Enterprise Angel Peak

Sample ID: MB-27641	SampType: MBLK	TestCode: EPA Method 7470: Mercury								
Client ID: PBW	Batch ID: 27641	RunNo: 37426								
Prep Date: 9/21/2016	Analysis Date: 9/22/2016	SeqNo: 1163336	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-27641	SampType: LCS	TestCode: EPA Method 7470: Mercury								
Client ID: LCSW	Batch ID: 27641	RunNo: 37426								
Prep Date: 9/21/2016	Analysis Date: 9/22/2016	SeqNo: 1163337	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0046	0.00020	0.005000	0	92.2	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM Work Order Number: 1609441 RcptNo: 1

Received by/date: AG 09/09/16
Logged By: Lindsay Mangin 9/9/2016 7:30:00 AM
Completed By: Lindsay Mangin 9/9/2016 8:34:58 AM
Reviewed By: JC 09/09/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
Adjusted? NO
Checked by: aJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Page 1 of 1

Chain-of-Custody Record

Client: SMA
Mailing Address: 401 W. Broadway, Farmington, NM 87401
Phone #: 505-325-7535
email or Fax#: Ashley.Maxwell@soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Enterprise Angel Peak
Project #:
Project Manager: Tom Long / Ashley Maxwell
Sampler: SH
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1609441	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals TCLP	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
	1430	H2O	Angel Peak BGT	various	various	-001						X	X			X		

Relinquished by: Stephanie Woods — Time: 2030 — Received by: Christie Woods — Date: 9/8/16 Time: 2030
Relinquished by: Christie Woods — Time: 2100 — Received by: [signature] — Date: 09/08/16 Time: 0730

Remarks: 8260 Full List: Report TCLP compounds at TCLP Limits
Invoice: Enterprise and cc Tom Long.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Do NOT TAKE AT pretty lady 4/26/17

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Lindrith Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL I Section 18 Township 24 North Range 5 West; 36.310358, -107.395766, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 100 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 516 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ________, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Bryce Higgins TITLE: Superintendent DATE: 12/17
SIGNATURE: [signature] TELEPHONE NO.
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 17, 2016

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lindreth CS OrderNo.: 1603077

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/2/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1603077**
Date Reported: **3/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Lindreth Non Exempt
Project: Lindreth CS
Collection Date: 3/1/2016 11:54:00 AM
Lab ID: 1603077-001 **Matrix:** AQUEOUS **Received Date:** 3/2/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: DAM	
2-Methylphenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
3+4-Methylphenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Phenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4-Dinitrotoluene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachlorobenzene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachlorobutadiene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachloroethane	ND	3.0	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Nitrobenzene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Pentachlorophenol	ND	100	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Pyridine	ND	5.0	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4,5-Trichlorophenol	ND	400	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4,6-Trichlorophenol	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Cresols, Total	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Surr: 2-Fluorophenol	0	15-124	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: Phenol-d5	0	15-118	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 2,4,6-Tribromophenol	0	15-148	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: Nitrobenzene-d5	0	46.8-124	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 2-Fluorobiphenyl	0	35.7-126	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 4-Terphenyl-d14	0	18.8-115	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
EPA METHOD 8260B: VOLATILES						Analyst: AG	
Benzene	1.3	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Toluene	2.1	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Ethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Naphthalene	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
1-Methylnaphthalene	ND	0.80		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Methylnaphthalene	ND	0.80		mg/L	200	3/8/2016 9:38:32 PM	R32659
Acetone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromodichloromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromoform	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromomethane	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Butanone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Carbon disulfide	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Carbon Tetrachloride	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1603077**
Date Reported: **3/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Lindreth Non Exempt
Project: Lindreth CS
Collection Date: 3/1/2016 11:54:00 AM
Lab ID: 1603077-001 **Matrix:** AQUEOUS **Received Date:** 3/2/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: AG	
Chlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Chloroethane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
Chloroform	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Chloromethane	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Chlorotoluene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
4-Chlorotoluene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
cis-1,2-DCE	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
Dibromochloromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Dibromomethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,3-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,4-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Dichlorodifluoromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1-Dichloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1-Dichloroethene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dichloropropane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,3-Dichloropropane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
2,2-Dichloropropane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1-Dichloropropene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Hexachlorobutadiene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Hexanone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Isopropylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
4-Isopropyltoluene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
4-Methyl-2-pentanone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Methylene Chloride	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
n-Butylbenzene	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
n-Propylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
sec-Butylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Styrene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
tert-Butylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
trans-1,2-DCE	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1603077
Date Reported: 3/17/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Lindreth CS
Lab ID: 1603077-001
Matrix: AQUEOUS
Client Sample ID: Lindreth Non Exempt
Collection Date: 3/1/2016 11:54:00 AM
Received Date: 3/2/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	AG
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Trichlorofluoromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
Vinyl chloride	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Xylenes, Total	0.88	0.30		mg/L	200	3/8/2016 9:38:32 PM	R32659
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: Dibromofluoromethane	104	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: Toluene-d8	115	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B16030406-001
Client Sample ID: 1603077-001C Lindreth Non Exempt
Report Date: 03/14/16
Collection Date: 03/01/16 11:54
DateReceived: 03/03/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL							
Arsenic	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rlh
Barium	ND	mg/L		0.5		SW6010B	03/08/16 12:51 / rlh
Cadmium	ND	mg/L		0.01		SW6010B	03/08/16 12:51 / rlh
Chromium	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rlh
Lead	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rlh
Mercury	0.076	mg/L		0.002		SW7470A	03/09/16 16:29 / ser
Selenium	0.2	mg/L		0.1		SW6010B	03/08/16 12:51 / rlh
Silver	ND	mg/L		0.02		SW6010B	03/08/16 12:51 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Report Date: 03/14/16
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B						Analytical Run: ICP203-B_160308A				
Lab ID: QCS	7	Initial Calibration Verification Standard							03/08/16 09:50	
Arsenic		0.912	mg/L	0.10	101	90	110			
Barium		0.774	mg/L	0.10	97	90	110			
Cadmium		0.400	mg/L	0.010	100	90	110			
Chromium		0.764	mg/L	0.050	96	90	110			
Lead		0.806	mg/L	0.050	101	90	110			
Selenium		0.797	mg/L	0.10	100	90	110			
Silver		0.392	mg/L	0.010	98	90	110			
Lab ID: ICSA	7	Interference Check Sample A							03/08/16 09:54	
Arsenic		0.0133	mg/L	0.10						
Barium		-1.00E-05	mg/L	0.10						
Cadmium		-0.00248	mg/L	0.010						
Chromium		0.000480	mg/L	0.050						
Lead		0.0721	mg/L	0.050						
Selenium		0.0136	mg/L	0.10						
Silver		7.00E-05	mg/L	0.010						
Lab ID: ICSAB	7	Interference Check Sample AB							03/08/16 09:57	
Arsenic		0.965	mg/L	0.10	97	80	120			
Barium		0.467	mg/L	0.10	93	80	120			
Cadmium		0.882	mg/L	0.010	88	80	120			
Chromium		0.438	mg/L	0.050	88	80	120			
Lead		0.928	mg/L	0.050	93	80	120			
Selenium		0.982	mg/L	0.10	98	80	120			
Silver		0.953	mg/L	0.010	95	80	120			
Method: SW6010B									Batch: 97382	
Lab ID: MB-97382	7	Method Blank				Run: ICP203-B_160308A			03/08/16 12:37	
Arsenic		ND	mg/L	0.02						
Barium		0.0003	mg/L	0.0002						
Cadmium		ND	mg/L	0.0004						
Chromium		ND	mg/L	0.003						
Lead		0.02	mg/L	0.02						
Selenium		ND	mg/L	0.02						
Silver		ND	mg/L	0.003						
Lab ID: LCS-97382	7	Laboratory Control Sample				Run: ICP203-B_160308A			03/08/16 12:40	
Arsenic		0.448	mg/L	0.10	90	80	120			
Barium		4.88	mg/L	0.10	89	80	120			
Cadmium		0.232	mg/L	0.010	93	80	120			
Chromium		0.440	mg/L	0.050	88	80	120			
Lead		0.470	mg/L	0.050	91	80	120			
Selenium		0.461	mg/L	0.10	92	80	120			
Silver		0.222	mg/L	0.010	89	80	120			

Qualifiers:
RL - Analyte reporting limit.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Report Date: 03/14/16
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 97382	
Lab ID: B16030465-003BDIL	7	Serial Dilution				Run: ICP203-B_160308A			03/08/16 13:01	
Arsenic		ND	mg/L	1.7		0	0		10	
Barium		0.0649	mg/L	0.060		0	0		10	N
Cadmium		ND	mg/L	0.041		0	0		10	
Chromium		ND	mg/L	0.27		0	0		10	
Lead		ND	mg/L	1.6		0	0		10	
Selenium		ND	mg/L	2.0		0	0		10	
Silver		ND	mg/L	0.30		0	0		10	
Lab ID: B16030465-003BPDS	7	Post Digestion/Distillation Spike				Run: ICP203-B_160308A			03/08/16 13:36	
Arsenic		20.8	mg/L	0.35	100	75	125			
Barium		18.7	mg/L	0.050	98	75	125			
Cadmium		9.56	mg/L	0.0085	93	75	125			
Chromium		19.4	mg/L	0.065	94	75	125			
Lead		19.4	mg/L	0.33	94	75	125			
Selenium		19.9	mg/L	0.41	97	75	125			
Silver		9.74	mg/L	0.061	95	75	125			
Lab ID: B16030465-003BMS	7	Sample Matrix Spike				Run: ICP203-B_160308A			03/08/16 13:40	
Arsenic		0.703	mg/L	0.34	141	75	125			S
Barium		5.62	mg/L	0.050	100	75	125			
Cadmium		0.252	mg/L	0.0083	101	75	125			
Chromium		0.455	mg/L	0.053	91	75	125			
Lead		0.676	mg/L	0.32	115	75	125			
Selenium		0.298	mg/L	0.20	65	75	125			S
Silver		0.320	mg/L	0.060	128	75	125			S
Lab ID: B16030465-003BMSD	7	Sample Matrix Spike Duplicate				Run: ICP203-B_160308A			03/08/16 13:43	
Arsenic		0.830	mg/L	0.34	166	75	125	17	20	S
Barium		5.41	mg/L	0.050	93	75	125	2.1	20	
Cadmium		0.236	mg/L	0.0083	94	75	125	8.5	20	
Chromium		0.474	mg/L	0.053	95	75	125	3.9	20	
Lead		0.880	mg/L	0.32	136	75	125	17	20	S
Selenium		0.326	mg/L	0.20	65	75	125	9.0	20	S
Silver		0.282	mg/L	0.060	113	75	125	12	20	

Qualifiers:
RL - Analyte reporting limit.
N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LAB — Inspiring People. Trusted Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated

Report Date: 03/14/16
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A									Analytical Run: HGCV202-B_160309A	
Lab ID: ICV		Initial Calibration Verification Standard							03/09/16 15:50	
Mercury		0.00209	mg/L	0.00010	105	90	110			
Method: SW7470A									**Batch: 97457**	
Lab ID: MB-97457		Method Blank				Run: HGCV202-B_160309A			03/09/16 15:55	
Mercury		ND	mg/L	4E-06						
Lab ID: LCS-97457		Laboratory Control Sample				Run: HGCV202-B_160309A			03/09/16 15:57	
Mercury		0.00205	mg/L	0.00010	102	80	120			
Lab ID: B16030101-005CDIL		Serial Dilution				Run: HGCV202-B_160309A			03/09/16 16:03	
Mercury		0.000138	mg/L	0.00025		0	0		10	
Lab ID: B16030101-005CMS		Sample Matrix Spike				Run: HGCV202-B_160309A			03/09/16 16:05	
Mercury		0.00154	mg/L	0.00010	70	75	125			S
Lab ID: B16030101-005CMSD		Sample Matrix Spike Duplicate				Run: HGCV202-B_160309A			03/09/16 16:07	
Mercury		0.00152	mg/L	0.00010	69	75	125	1.3	20	S

Qualifiers:

RL - Analyte reporting limit.
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999259	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	115	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID: vab dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999258	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: vab dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999268	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: vab dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999268	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM Work Order Number: 1603077 RcptNo: 1

Received by/date: AT 03/02/16
Logged By: Lindsay Mangin 3/2/2016 7:00:00 AM
Completed By: Lindsay Mangin 3/2/2016 7:58:01 AM
Reviewed By: [signature] 03/02/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes	No	Not Present ✓
2. Is Chain of Custody complete?	Yes ✓	No	Not Present
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ✓	No	NA
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✓	No	NA
6. Sample(s) in proper container(s)?	Yes ✓	No	
7. Sufficient sample volume for indicated test(s)?	Yes ✓	No	
8. Are samples (except VOA and ONG) properly preserved?	Yes ✓	No	
9. Was preservative added to bottles?	Yes	No ✓	NA
10. VOA vials have zero headspace?	Yes ✓	No	No VOA Vials
11. Were any sample containers received broken?	Yes	No ✓	# of preserved bottles checked for pH:
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✓	No	(<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ✓	No	Adjusted?
14. Is it clear what analyses were requested?	Yes ✓	No	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✓	No	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA ✓

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

Page 1 of 1

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: SMA
Mailing Address: 401 W. Broadway Farmington NM 87401
Phone #: 505 325-7535
email or Fax#: Ashley.maxwell@soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Lindreth CS
Project #:
Project Manager: Tom Long / Ashley Maxwell
Sampler: Ramey Watson
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.4

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270 SIMS); RCRA 8 Metals TCLP; Anions (F,Cl,NO_3,NO_2,PO_4,SO_4); 8081 Pesticides / 8082 PCB's; 8260B (VOA); 8270 (Semi-VOA); Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1603077	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals TCLP	8260B (VOA)
3-1-16	11:54	H_2O	Lindreth Non Exempt	Various	Various	-001	X	X	X

Date	Time	Relinquished by	Received by	Date	Time
3-1-16	1737	[signature]	[signature]	3/1/16	1737
3/1/16	1757	[signature]	[signature]	03/02/16	0700

Remarks: 8260 Full List; TCLP Compound Report AT TCLP Limits
cc: Tom Long / Enterprise

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Pump Canyon Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL K Section 24 Township 30 North Range 9 West; 36.795082, -107.733534

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non Hazardous Water from the compressor skids
Estimated Volume 100 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 70 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ________________, representative for ________ Agua Moss, LLC ________ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Eraque Higgins TITLE: Specialist DATE: 1/3/17
SIGNATURE: [signature] TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 25, 2016

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Pump Canyon CS OrderNo.: 1603839

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/16/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

[redacted] [signature]

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Pump Canyon Non Exempt
Project: Pump Canyon CS
Collection Date: 3/15/2016 1:11:00 PM
Lab ID: 1603839-001
Matrix: AQUEOUS
Received Date: 3/16/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: DAM	
2-Methylphenol	ND	200		mg/L	1	3/17/2016 7:42:15 PM	24302
3+4-Methylphenol	ND	200		mg/L	1	3/17/2016 7:42:15 PM	24302
Phenol	ND	200		mg/L	1	3/17/2016 7:42:15 PM	24302
2,4-Dinitrotoluene	ND	0.13		mg/L	1	3/17/2016 7:42:15 PM	24302
Hexachlorobenzene	ND	0.13		mg/L	1	3/17/2016 7:42:15 PM	24302
Hexachlorobutadiene	ND	0.50		mg/L	1	3/17/2016 7:42:15 PM	24302
Hexachloroethane	ND	3.0		mg/L	1	3/17/2016 7:42:15 PM	24302
Nitrobenzene	ND	2.0		mg/L	1	3/17/2016 7:42:15 PM	24302
Pentachlorophenol	ND	100		mg/L	1	3/17/2016 7:42:15 PM	24302
Pyridine	ND	5.0		mg/L	1	3/17/2016 7:42:15 PM	24302
2,4,5-Trichlorophenol	ND	400		mg/L	1	3/17/2016 7:42:15 PM	24302
2,4,6-Trichlorophenol	ND	3.0		mg/L	1	3/17/2016 7:42:15 PM	24302
Cresols, Total	ND	200		mg/L	1	3/17/2016 7:42:15 PM	24302
Surr: 2-Fluorophenol	48.5	10-124		%Rec	1	3/17/2016 7:42:15 PM	24302
Surr: Phenol-d5	37.5	15-118		%Rec	1	3/17/2016 7:42:15 PM	24302
Surr: 2,4,6-Tribromophenol	88.4	15-148		%Rec	1	3/17/2016 7:42:15 PM	24302
Surr: Nitrobenzene-d5	86.4	40.6-124		%Rec	1	3/17/2016 7:42:15 PM	24302
Surr: 2-Fluorobiphenyl	81.6	35.7-128		%Rec	1	3/17/2016 7:42:15 PM	24302
Surr: 4-Terphenyl-d14	64.1	18.8-115		%Rec	1	3/17/2016 7:42:15 PM	24302
EPA METHOD 7470: MERCURY						Analyst: pmf	
Mercury	ND	0.00060		mg/L	1	3/18/2016 11:00:56 AM	24317
EPA METHOD 6010B: TOTAL RECOVERABLE METALS						Analyst: MED	
Arsenic	ND	0.20		mg/L	1	3/21/2016 9:08:53 AM	24322
Barium	ND	0.20		mg/L	1	3/21/2016 9:08:53 AM	24322
Cadmium	0.043	0.020		mg/L	1	3/21/2016 9:08:53 AM	24322
Chromium	0.067	0.060		mg/L	1	3/21/2016 9:08:53 AM	24322
Lead	0.088	0.050		mg/L	1	3/21/2016 9:08:53 AM	24322
Selenium	ND	0.50		mg/L	1	3/21/2016 9:08:53 AM	24322
Silver	ND	0.060		mg/L	1	3/21/2016 9:08:53 AM	24322
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Benzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Toluene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Ethylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1603839
Date Reported: 3/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Pump Canyon Non Exempt
Project: Pump Canyon CS
Collection Date: 3/15/2016 1:11:00 PM
Lab ID: 1603839-001
Matrix: AQUEOUS
Received Date: 3/16/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Naphthalene	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
1-Methylnaphthalene	ND	0.80		mg/L	200	3/23/2016 8:08:35 PM	R33024
2-Methylnaphthalene	ND	0.80		mg/L	200	3/23/2016 8:08:35 PM	R33024
Acetone	4.8	2.0		mg/L	200	3/23/2016 8:08:35 PM	R33024
Bromobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Bromodichloromethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Bromoform	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Bromomethane	ND	0.60		mg/L	200	3/23/2016 8:08:35 PM	R33024
2-Butanone	ND	2.0		mg/L	200	3/23/2016 8:08:35 PM	R33024
Carbon disulfide	ND	2.0		mg/L	200	3/23/2016 8:08:35 PM	R33024
Carbon tetrachloride	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Chlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Chloroethane	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
Chloroform	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Chloromethane	ND	0.60		mg/L	200	3/23/2016 8:08:35 PM	R33024
2-Chlorotoluene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
4-Chlorotoluene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
cis-1,2-DCE	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
Dibromochloromethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Dibromomethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,3-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,4-Dichlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Dichlorodifluoromethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1-Dichloroethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1-Dichloroethene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2-Dichloropropane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,3-Dichloropropane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
2,2-Dichloropropane	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Hexachlorobutadiene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
2-Hexanone	ND	2.0		mg/L	200	3/23/2016 8:08:35 PM	R33024
Isopropylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
4-Isopropyltoluene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
4-Methyl-2-pentanone	ND	2.0		mg/L	200	3/23/2016 8:08:35 PM	R33024
Methylene Chloride	ND	0.60		mg/L	200	3/23/2016 8:08:35 PM	R33024
n-Butylbenzene	ND	0.60		mg/L	200	3/23/2016 8:08:35 PM	R33024

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
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D Sample Diluted Due to Matrix
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P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1603839
Date Reported: 3/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Pump Canyon Non Exempt
Project: Pump Canyon CS
Collection Date: 3/15/2016 1:11:00 PM
Lab ID: 1603839-001
Matrix: AQUEOUS
Received Date: 3/16/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
n-Propylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
sec-Butylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Styrene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
tert-Butylbenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
trans-1,2-DCE	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Trichlorofluoromethane	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/23/2016 8:08:35 PM	R33024
Vinyl chloride	ND	0.20		mg/L	200	3/23/2016 8:08:35 PM	R33024
Xylenes, Total	ND	0.30		mg/L	200	3/23/2016 8:08:35 PM	R33024
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	200	3/23/2016 8:08:35 PM	R33024
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	200	3/23/2016 8:08:35 PM	R33024
Surr: Dibromofluoromethane	98.6	70-130		%Rec	200	3/23/2016 8:08:35 PM	R33024
Surr: Toluene-d8	99.1	70-130		%Rec	200	3/23/2016 8:08:35 PM	R33024

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
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J Analyte detected below quantitation limits
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603839
23-Mar-16

Client: Souder, Miller and Associates
Project: Pump Canyon CS

Sample ID: vb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R33024	RunNo: 33024							
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013063	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,3-Dibromo-2-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:
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J Analyte detected below quantitation limits
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W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603839
23-Mar-16

Client: Souder, Miller and Associates
Project: Pump Canyon CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES					
Client ID: PBW	Batch ID: R33024	RunNo: 33024					
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013063	Units: µg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		114	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.6	70	130			
Surr: Toluene-d8	9.9		10.00		99.1	70	130			

Sample ID: 100ng lcs b	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R33024	RunNo: 33024					
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013064	Units: µg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	22	1.0	20.00	0	109	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603839
23-Mar-16

Client: Souder, Miller and Associates
Project: Pump Canyon CS

Sample ID: 100ng lcs b	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R33024	RunNo: 33024					
Prep Date:	Analysis Date: 3/23/2016	SeqNo: 1013064	Units: µg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	110	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603839
23-Mar-16

Client: Souder, Miller and Associates
Project: Pump Canyon CS

Sample ID: MB-24317	SampType: MBLK	TestCode: EPA Method 7470: Mercury					
Client ID: PBW	Batch ID: 24317	RunNo: 32894					
Prep Date: 3/17/2016	Analysis Date: 3/18/2016	SeqNo: 1008338	Units: mg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-24317	SampType: LCS	TestCode: EPA Method 7470: Mercury					
Client ID: LCSW	Batch ID: 24317	RunNo: 32894					
Prep Date: 3/17/2016	Analysis Date: 3/18/2016	SeqNo: 1008336	Units: mg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603839
23-Mar-16

Client: Souder, Miller and Associates
Project: Pump Canyon CS

Sample ID: MB-24322	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals					
Client ID: PBW	Batch ID: 24322	RunNo: 32920					
Prep Date: 3/17/2016	Analysis Date: 3/21/2016	SeqNo: 1009596	Units: mg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-24322	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals					
Client ID: LCSW	Batch ID: 24322	RunNo: 32920					
Prep Date: 3/17/2016	Analysis Date: 3/21/2016	SeqNo: 1009591	Units: mg/L				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.48	0.020	0.5000	0	96.0	80	120			
Barium	0.46	0.020	0.5000	0	92.0	80	120			
Cadmium	0.47	0.0020	0.5000	0	93.6	80	120			
Chromium	0.46	0.0060	0.5000	0	91.5	80	120			
Lead	0.46	0.0050	0.5000	0	91.4	80	120			
Selenium	0.46	0.050	0.5000	0	91.8	80	120			
Silver	0.097	0.0050	0.1000	0	97.4	80	120			

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM   Work Order Number: 1603839   RcptNo: 1

Received by/date: im 03/16/16

Logged By: Anne Thorne 3/16/2016 7:45:00 AM

Completed By: Anne Thorne 3/16/2016

Reviewed By: RS 3-16-16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐ (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted? NO
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ (If no, notify customer for authorization.) Checked by: aJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Page 1 of 1

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: SMA
Mailing Address: 401 W. Broadway, Farmington NM 87401
Phone #: 505-325-2535
email or Fax#: Ashley.watson@... / sender.mill...
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Pump Canyon CS
Project #:
Project Manager: Tom Long, Ashley Watson
Sampler: Rainey Watson
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.3-1.0=1.3

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270SIMS) ☒; RCRA 8 Metals ☒ TCLP; Anions (F,Cl,NO₃,NO₂,PO₄,SO₄); 8081 Pesticides / 8082 PCB's; 8260B (VOA) ☒; 8270 (Semi-VOA); Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1603839
	13:11	H2O	Pump Canyon Pit Water	Various	Various	-001

Relinquished by: | Received by: | Date 3/15/16 | Time 1735
Relinquished by: | Received by: | Date 3/16/16 | Time 0745

Remarks: 8260 Full List; Report TCLP compounds at TCLP Limits. Inv. Enterprise. cc: Tom Long, Enterprise

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: New Mexico Gas Company 7120 Wyoming BLVD, NE, STE, 20 BC-22 Albuquerque, New Mexico 87109

2. Originating Site: Corto Pipeline project 107°59'3.037"W 36°41'1.844"N

3. Location of Material (Street Address, City, State or ULSTR): Corto Project 107°59'3.037"W 36°41'1.844"N

4. Source and Description of Waste: Hydrostatic test water from a Municipal Source in newly constructed pipe. Analysis was conducted on 8 10,000-gallon storage tanks.

Estimated Volume 1,272.72 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 1780 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, James Lloyd, representative or authorized agent for New Mexico Gas Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ____, representative for ____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: MHR

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: NM-01-009

Address of Facility: CO Rd 350 #345 Farmington New Mexico 87401

Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Gabe Higgins TITLE: Superintendent DATE: 12/17

SIGNATURE: ____ TELEPHONE NO.:

Surface Waste Management Facility Authorized Agent

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: New Mexico Gas Co.
Chain Of Custody Number:
Samples Received: 12/8/2017 2:40:00PM
Job Number: 09137-0065
Work Order: P712019
Project Name/Location: Corto Hydro Test

Report Reviewed By: Date: 12/12/17
Walter Hinchman, Laboratory Director

Date: 12/12/17
Tim Cain, Quality Assurance Officer

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

envirotech
Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Corto Tank #200	P712019-01A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #300	P712019-02A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #400	P712019-03A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #500	P712019-04A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #600	P712019-05A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #700	P712019-06A	Aqueous	12/08/17	12/08/17	Poly 250mL
Corto Tank #800	P712019-07A	Aqueous	12/08/17	12/08/17	Poly 250mL

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fx (800) 362-1879

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Corto Tank #200
P712019-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	7.59		pH Units	1	1750804	12/11/17 13:06	12/11/17 14:28	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>95		°C	1	1750805	12/11/17	12/12/17	ASTM D93-16a	
Reactivity	Negative		N/A	1	1750806	12/11/17	12/12/17		

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Corto Tank #300
P712019-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	7.59		pH Units	1	1750804	12/11/17 13:06	12/11/17 14:28	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>95		°C	1	1750805	12/11/17	12/12/17	ASTM D93-16a	
Reactivity	Negative		N/A	1	1750806	12/11/17	12/12/17		

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Corto Tank #400
P712019-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	7.55		pH Units	1	1750804	12/11/17 13:06	12/11/17 14:28	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>95		°C	1	1750805	12/11/17	12/12/17	ASTM D93-16a	
Reactivity	Negative		N/A	1	1750806	12/11/17	12/12/17		

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fx (800) 362-1879

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Corto Tank #700
P712019-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	7.60		pH Units	1	1750004	12/11/17 13:06	12/11/17 14:28	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>95		°C	1	1750005	12/11/17	12/12/17	ASTM D93-10a	>
Reactivity	Negative		N/A	1	1750006	12/11/17	12/12/17		

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Corto Tank #800
P712019-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	7.59		pH Units	1	1750004	12/11/17 13:06	12/11/17 14:28	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>95		°C	1	1750003	12/11/17	12/12/17	ASTM D93-10a	
Reactivity	Negative		N/A	1	1750006	12/11/17	12/12/17		

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12 Dec 17 15:10

Corrosivity - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1750004 - Wet Chemistry Preparation										
LCS (1750004-BS1)			Prepared & Analyzed: 11-Dec-17							
pH	7.01		pH Units	7.00		100	98.3-101.25			
Duplicate (1750004-DUP1)			Source: P712019-01	Prepared & Analyzed: 11-Dec-17						
pH	7.59		pH Units		7.59			0.00	20	

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879

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Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test	
P.O. Box 97500	Project Number:	09137-0065	Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree	12-Dec-17 15:10

Waste Characteristic - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1750005 - Wet Chemistry Preparation										
LCS (1750005-BS1)			Prepared: 11-Dec-17 Analyzed: 12-Dec-17							
Flash Point	115		°C	111		104	95-105			
LCS Dup (1750005-BSD1)			Prepared: 11-Dec-17 Analyzed: 12-Dec-17							
Flash Point	112		°C	111		101	95-105	2.64	20	

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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879

envirotech Analytical Laboratory

New Mexico Gas Co.	Project Name:	Corto Hydro Test		
P.O. Box 97500	Project Number:	09133-0065		Reported:
Albuquerque NM, 87199-7500	Project Manager:	Greg Crabtree		12-Dec-17 15:10

Notes and Definitions

H1	Sample was received after regulatory hold-time exceeded for target analyte.
*	Exceeds upper permit limit
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody

Project Information — Client: NMGC; Project: Corto Hydro Test; Project Manager: Greg Crabtree; Email: Greg / Felipe

Report Attention — Report due by: / Attention: / Address: / City, State, Zip / Phone: / Email:

Lab Use Only — Lab WO# P712019; Job Number 09133-0065

TAT: 1D 3D — EPA Program: RCRA X CWA SDWA — State: NM X

Time Sampled	Date Sampled	Matrix	No. Containers	Sample ID	Lab Number	Analysis	Remarks
15:40	12-8-17	A	1	Corto Tank # 200	1	X	Poly 250 mL
15:45				Corto Tank # 300	2		
15:50				Corto Tank # 400	3		
15:55				Corto Tank # 500	4		
16:00				Corto Tank # 600	5		
16:05				Corto Tank # 700	6		
16:10				Corto Tank # 800	7		

Additional Instructions: Via ice in cooler

Relinquished by: 12-8-17 14:39 — Received by: 12-8-17 14:45

Lab Use Only — Received on ice: Y / N

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Chain of Custody

Project Information — Client: NMGC; Project: Corto Hydro Test; Project Manager: Greg Crabtree; Email: Greg / Felipe

Lab Use Only — Lab WO# P712019; Job Number 09133-0065

Time Sampled	Date Sampled	Matrix	No. Containers	Sample ID	Lab Number	Analysis	Remarks
15:40	12-8-17	A	1	Corto Tank # 200	1	X	Poly 250 mL
15:45				Corto Tank # 300	2		
15:50				Corto Tank # 400	3		
15:55				Corto Tank # 500	4		
16:00				Corto Tank # 600	5		
16:05				Corto Tank # 700	6		
16:10				Corto Tank # 800	7		

Additional Instructions: Drained to Basin 1-day per F. Bragan 12/11/17

Relinquished by: 12-8-17 14:39 — Received by: 12-8-17 14:45

Lab Use Only — Received on ice: Y / N

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
3B-1 Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL I, Section 33 Township 30 North Range 9 West; 36.767063, -107.792775, San Juan County, NM

4. Source and Description of Waste:
Source: Soil impacted with lube oil, motor oil or condensate.
Description: Non Exempt/Non-Hazardous Soil from housekeeping activities.
Estimated Volume 80 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) ________ yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________, representative for Agua Moss, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined West States

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Higgins TITLE: Superintendent DATE: 12/11
SIGNATURE: [signature] TELEPHONE NO.: ____________
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 28, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: 3B-1 CS OrderNo.: 1703354

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/8/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1703354**
Date Reported: **3/28/2017**

CLIENT: Souder, Miller and Associates
Project: 3B-1 CS
Lab ID: 1703354-001 **Matrix:** AQUEOUS

Client Sample ID: 3B-1 BGT
Collection Date: 3/7/2017 9:35:00 AM
Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst: **pmf**	
Mercury	ND	0.00020		mg/L	1	3/9/2017 8:30:41 PM	30616
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **pmf**	
Arsenic	ND	5.0		mg/L	1	3/10/2017 12:46:30 PM	30610
Barium	ND	100		mg/L	1	3/10/2017 12:46:30 PM	30610
Cadmium	ND	1.0		mg/L	1	3/10/2017 12:46:30 PM	30610
Chromium	ND	5.0		mg/L	1	3/10/2017 12:46:30 PM	30610
Lead	ND	5.0		mg/L	1	3/10/2017 12:46:30 PM	30610
Selenium	ND	1.0		mg/L	1	3/10/2017 12:46:30 PM	30610
Silver	ND	5.0		mg/L	1	3/10/2017 12:46:30 PM	30610
EPA METHOD 8270C: PAHS						Analyst: **DAM**	
Naphthalene	1.2	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
1-Methylnaphthalene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
2-Methylnaphthalene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Acenaphthylene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Acenaphthene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Fluorene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Phenanthrene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Anthracene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Fluoranthene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Pyrene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Benz(a)anthracene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Chrysene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Benzo(b)fluoranthene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Benzo(k)fluoranthene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Benzo(a)pyrene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Dibenz(a,h)anthracene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Benzo(g,h,i)perylene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Indeno(1,2,3-cd)pyrene	ND	0.50		µg/L	1	3/17/2017 11:20:07 AM	30649
Surr: N-hexadecane	45.3	15-178		%Rec	1	3/17/2017 11:20:07 AM	30649
Surr: Benzo(e)pyrene	51.0	15-198		%Rec	1	3/17/2017 11:20:07 AM	30649
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.50		mg/L	200	3/8/2017 6:05:00 PM	R41247
Toluene	0.80	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Ethylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2,4-Trimethylbenzene	ND	0.50		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limit
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1703354**
Date Reported: **3/28/2017**

CLIENT: Souder, Miller and Associates
Project: 3B-1 CS
Lab ID: 1703354-001 **Matrix:** AQUEOUS

Client Sample ID: 3B-1 BGT
Collection Date: 3/7/2017 9:35:00 AM
Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Naphthalene	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
1-Methylnaphthalene	ND	0.80		mg/L	200	3/8/2017 6:05:00 PM	R41247
2-Methylnaphthalene	ND	0.80		mg/L	200	3/8/2017 6:05:00 PM	R41247
Acetone	ND	2.0		mg/L	200	3/8/2017 6:05:00 PM	R41247
Bromobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Bromodichloromethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Bromoform	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Bromomethane	ND	0.80		mg/L	200	3/8/2017 6:05:00 PM	R41247
2-Butanone	ND	2.0		mg/L	200	3/8/2017 6:05:00 PM	R41247
Carbon disulfide	ND	2.0		mg/L	200	3/8/2017 6:05:00 PM	R41247
Carbon Tetrachloride	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Chlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Chloroethane	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
Chloroform	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Chloromethane	ND	0.60		mg/L	200	3/8/2017 6:05:00 PM	R41247
2-Chlorotoluene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
4-Chlorotoluene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
cis-1,2-DCE	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
Dibromochloromethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Dibromomethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,3-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,4-Dichlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Dichlorodifluoromethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1-Dichloroethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1-Dichloroethene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2-Dichloropropane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,3-Dichloropropane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
2,2-Dichloropropane	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1-Dichloropropene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Hexachlorobutadiene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
2-Hexanone	ND	2.0		mg/L	200	3/8/2017 6:05:00 PM	R41247
Isopropylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
4-Isopropyltoluene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
4-Methyl-2-pentanone	ND	2.0		mg/L	200	3/8/2017 6:05:00 PM	R41247
Methylene Chloride	ND	0.60		mg/L	200	3/8/2017 6:05:00 PM	R41247

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Qualifiers:
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H Holding times for preparation or analysis exceeded
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R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limit
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1703354**
Date Reported: **3/28/2017**

CLIENT: Souder, Miller and Associates
Project: 3B-1 CS
Lab ID: 1703354-001 **Matrix:** AQUEOUS

Client Sample ID: 3B-1 BGT
Collection Date: 3/7/2017 9:35:00 AM
Received Date: 3/8/2017 7:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
n-Butylbenzene	ND	0.60		mg/L	200	3/8/2017 6:05:00 PM	R41247
n-Propylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
sec-Butylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Styrene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
tert-Butylbenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
trans-1,2-DCE	ND	0.30		mg/L	200	3/8/2017 6:05:00 PM	R41247
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Trichlorofluoromethane	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/8/2017 6:05:00 PM	R41247
Vinyl chloride	ND	0.20		mg/L	200	3/8/2017 6:05:00 PM	R41247
Xylenes, Total	ND	0.30		mg/L	200	3/8/2017 6:05:00 PM	R41247
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%Rec	200	3/8/2017 6:05:00 PM	R41247
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	200	3/8/2017 6:05:00 PM	R41247
Surr: Dibromofluoromethane	103	70-130		%Rec	200	3/8/2017 6:05:00 PM	R41247
Surr: Toluene-d8	104	70-130		%Rec	200	3/8/2017 6:05:00 PM	R41247

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E Value above quantitation range
J Analyte detected below quantitation limit
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: 100ng lcs2	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R41247	RunNo: 41247							
Prep Date:	Analysis Date: 3/8/2017	SeqNo: 1292353	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	94.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R41247	RunNo: 41247							
Prep Date:	Analysis Date: 3/8/2017	SeqNo: 1292354	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R41247	RunNo: 41247							
Prep Date:	Analysis Date: 3/8/2017	SeqNo: 1292354	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R41247	RunNo: 41247							
Prep Date:	Analysis Date: 3/8/2017	SeqNo: 1292354	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Qualifiers:

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- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: lcs-30649	SampType: LCS	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSW	Batch ID: 30649	RunNo: 41482							
Prep Date: 3/13/2017	Analysis Date: 3/17/2017	SeqNo: 1300978	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	18	0.50	20.00	0	91.9	37.4	120			
1-Methylnaphthalene	19	0.50	20.00	0	94.5	38.3	121			
2-Methylnaphthalene	18	0.50	20.00	0	88.3	37.8	122			
Acenaphthylene	19	0.50	20.00	0	95.4	37	124			
Acenaphthene	20	0.50	20.00	0	98.5	35.6	123			
Fluorene	19	0.50	20.00	0	93.9	35.2	122			
Phenanthrene	18	0.50	20.00	0	89.2	38.8	122			
Anthracene	18	0.50	20.00	0	91.3	37.5	125			
Fluoranthene	18	0.50	20.00	0	90.5	37.4	131			
Pyrene	18	0.50	20.00	0	90.5	27.5	140			
Benz(a)anthracene	18	0.50	20.00	0	88.1	25.4	141			
Chrysene	17	0.50	20.00	0	83.5	33.6	155			
Benzo(b)fluoranthene	18	0.50	20.00	0	89.4	39	153			
Benzo(k)fluoranthene	19	0.50	20.00	0	97.3	38	154			
Benzo(a)pyrene	18	0.50	20.00	0	87.6	36.6	153			
Dibenz(a,h)anthracene	19	0.50	20.00	0	94.0	39.7	155			
Benzo(g,h,i)perylene	18	0.50	20.00	0	90.9	39.6	154			
Indeno(1,2,3-cd)pyrene	18	0.50	20.00	0	92.0	39.1	153			
Surr: N-hexadecane	84		87.80		95.8	15	178			
surr: benzo(e)pyrene	18		20.00		89.1	10	198			

Sample ID: lcsd-30649	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSD02	Batch ID: 30649	RunNo: 41482							
Prep Date: 3/13/2017	Analysis Date: 3/17/2017	SeqNo: 1300979	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	17	0.50	20.00	0	84.6	37.4	120	8.04	20	
1-Methylnaphthalene	19	0.50	20.00	0	90.3	38.3	121	4.50	20.6	
2-Methylnaphthalene	17	0.50	20.00	0	84.7	37.8	122	4.16	23.6	
Acenaphthylene	17	0.50	20.00	0	85.0	37	124	11.5	28.6	
Acenaphthene	19	0.50	20.00	0	89.9	35.6	123	10.1	27	
Fluorene	17	0.50	20.00	0	83.7	35.2	122	11.5	25.7	
Phenanthrene	18	0.50	20.00	0	87.5	38.8	122	1.92	20	
Anthracene	17	0.50	20.00	0	86.6	37.5	125	5.28	21.2	
Fluoranthene	17	0.50	20.00	0	84.5	37.4	131	6.86	21.8	
Pyrene	17	0.50	20.00	0	86.6	27.5	140	4.40	31.1	
Benz(a)anthracene	17	0.50	20.00	0	85.8	25.4	141	2.65	26.6	
Chrysene	17	0.50	20.00	0	82.8	33.6	155	0.842	21.2	
Benzo(b)fluoranthene	17	0.50	20.00	0	83.4	39	153	6.84	20	

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WorkOrder: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: lcss-30648	SampType: LCS	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 30648	RunNo: 41462							
Prep Date: 3/13/2017	Analysis Date: 3/17/2017	SeqNo: 1300979	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	17	0.50	20.00	0	86.6	38	154	11.8	21	
Benzo(a)pyrene	17	0.50	20.00	0	87.4	38.8	153	0.229	24.8	
Dibenz(a,h)anthracene	17	0.50	20.00	0	86.9	39.7	155	7.85	26	
Benzo(g,h,i)perylene	18	0.50	20.00	0	89.4	39.6	154	1.66	20	
Indeno(1,2,3-cd)pyrene	17	0.50	20.00	0	86.5	39.1	153	6.16	20	
Surr: N-hexadecane	72		97.60		81.6	15	176	0	0	
Surr: Benzo(e)pyrene	16		20.00		80.2	15	198	0	0	

Sample ID: mb-30649	SampType: MBLK	TestCode: EPA Method 8270C: PAHs							
Client ID: PBW	Batch ID: 30649	RunNo: 41462							
Prep Date: 3/13/2017	Analysis Date: 3/17/2017	SeqNo: 1300980	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	81		97.60		82.9	15	176			
Surr: Benzo(e)pyrene	18		20.00		89.5	15	198			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WorkOrder: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: MB-30616	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 30616	RunNo: 41302							
Prep Date: 3/9/2017	Analysis Date: 3/9/2017	SeqNo: 1294145	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-30616	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 30616	RunNo: 41302							
Prep Date: 3/9/2017	Analysis Date: 3/9/2017	SeqNo: 1294146	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	100	80	120			

Sample ID: LCSD-30616	SampType: LCSD	TestCode: EPA Method 7470: Mercury							
Client ID: LCSS02	Batch ID: 30616	RunNo: 41302							
Prep Date: 3/9/2017	Analysis Date: 3/9/2017	SeqNo: 1294158	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.0	80	120	1.94	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WorkOrder: 1703354
28-Mar-17

Client: Souder, Miller and Associates
Project: 3B-1 CS

Sample ID: MD-30610	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 30610	RunNo: 41305							
Prep Date: 3/9/2017	Analysis Date: 3/10/2017	SeqNo: 1294285	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-30610	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 30610	RunNo: 41305							
Prep Date: 3/9/2017	Analysis Date: 3/10/2017	SeqNo: 1294286	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.4	80	120			
Barium	0.50	0.020	0.5000	0	99.5	80	120			
Cadmium	0.49	0.0020	0.5000	0	97.8	80	120			
Chromium	0.49	0.0060	0.5000	0	98.3	80	120			
Lead	0.49	0.0050	0.5000	0	97.8	80	120			
Selenium	0.49	0.050	0.5000	0	97.5	80	120			
Silver	0.098	0.0050	0.1000	0	97.9	80	120			

Sample ID: LCSD-30610	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 30610	RunNo: 41305							
Prep Date: 3/9/2017	Analysis Date: 3/10/2017	SeqNo: 1294287	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	100	80	120	1.08	20	
Barium	0.50	0.020	0.5000	0	99.9	80	120	0.604	20	
Cadmium	0.49	0.0020	0.5000	0	97.6	80	120	0.141	20	
Chromium	0.49	0.0060	0.5000	0	97.9	80	120	0.457	20	
Lead	0.49	0.0050	0.5000	0	97.7	80	120	0.113	20	
Selenium	0.47	0.050	0.5000	0	94.7	80	120	3.16	20	
Silver	0.098	0.0050	0.1000	0	97.7	80	120	0.123	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA FARM | Work Order Number: 1703354 | RcptNo: 1

Received by/date: 03/08/17
Logged By: Lindsay Mangin 3/8/2017 7:35:00 AM
Completed By: Lindsay Mangin 3/8/2017 9:32:53 AM
Reviewed By: 03/08/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 2 (<2 or >12 unless noted)
Adjusted? No
Checked by: DS

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: Sauaer miller
Mailing Address: 401 W Broadway Farmington NM 87401
Phone #: 505 325-7535
email or Fax#: Ashley.Maxwell@sauaer miller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: 36-1 CS
Project #:
Project Manager: Ashley Maxwell / Tom Long
Sampler: Candy Watson
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

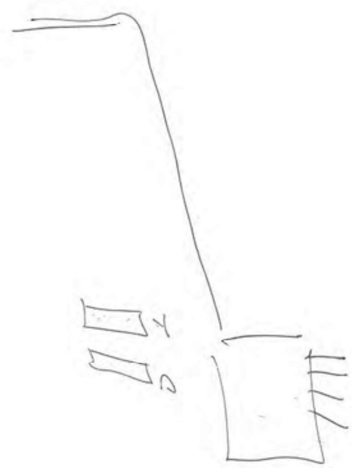
Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1703354	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAHs (8310 or 8270SIMS)	RCRA 8 Metals TCLP	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
-17	9:35	H_2O	36-1 CS-T	Various	Various	-001						X	X			X		

Date	Time	Relinquished by	Received by	Date	Time
7-17	1610	[signature]	Misty Walk	7/7/17	1610
7/1	1904	Misty Walk	[signature]	07/08/17	0725

Remarks: 8260 Full List Report TCLP compounds At TCLP Limits. Invoice Tom Long/Enterprise

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



2017

060517MK

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Western Refining Southwest, Inc.
111 County Road 4990
Bloomfield, NM 87413

2. Originating Site:
Pipeline Maintenance Yard
5754 Highway 64
Farmington, NM 87401

3. Location of Material (Street Address, City, State or ULSTR):
Same as originating Site

4. Source and Description of Waste:
Hydro test water used to test frac tanks.

Estimated Volume 500 bbls Known Volume (to be entered by the operator at the end of the haul) 430 yd³/bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Matthew Krakow [signature] (PRINT & SIGN NAME), representative or authorized agent for Western Refining Southwest, Inc. (COMPANY NAME) do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, N/A, representative for N/A do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
To be determined. Inland

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Agua Moss, LLC Permit #: UICI-005 (Class 1 Non-Hazardous Well)

Address of Facility: 345 CR 350, San Juan County, Aztec, NM 87410
Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Gaye Higgins TITLE: Superintendent DATE: 12/17
SIGNATURE: [signature] TELEPHONE NO.:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 20, 2017

Kelly Robinson
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4135
FAX (505) 632-3911

RE: Pipeline Frac Tank Hydro Water

OrderNo.: 1706322

Dear Kelly Robinson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/7/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

[signature]

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1706322
Date Reported: 6/20/2017

CLIENT: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water
Lab ID: 1706322-001
Client Sample ID: Hydro Test Water
Collection Date: 6/5/2017 1:00:00 PM
Matrix: AQUEOUS
Received Date: 6/7/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/14/2017 1:22:59 PM	32299
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	**MED**
Arsenic	ND	0.020		mg/L	1	6/13/2017 10:47:49 AM	32235
Barium	0.092	0.020		mg/L	1	6/13/2017 10:47:49 AM	32235
Cadmium	ND	0.0020		mg/L	1	6/13/2017 10:47:49 AM	32235
Chromium	ND	0.0060		mg/L	1	6/13/2017 10:47:49 AM	32235
Lead	ND	0.0050		mg/L	1	6/13/2017 10:47:49 AM	32235
Selenium	ND	0.050		mg/L	1	6/13/2017 10:47:49 AM	32235
Silver	ND	0.0050		mg/L	1	6/13/2017 10:47:49 AM	32235
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Toluene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Ethylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Naphthalene	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1-Methylnaphthalene	ND	4.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
2-Methylnaphthalene	ND	4.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Acetone	ND	10		µg/L	1	6/7/2017 7:07:00 PM	R43337
Bromobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Bromodichloromethane	8.7	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Bromoform	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Bromomethane	ND	3.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
2-Butanone	ND	10		µg/L	1	6/7/2017 7:07:00 PM	R43337
Carbon disulfide	ND	10		µg/L	1	6/7/2017 7:07:00 PM	R43337
Carbon Tetrachloride	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Chlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Chloroethane	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Chloroform	25	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Chloromethane	ND	3.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
2-Chlorotoluene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
4-Chlorotoluene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
cis-1,2-DCE	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1706322
Date Reported: 6/20/2017

CLIENT: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water
Lab ID: 1706322-001
Client Sample ID: Hydro Test Water
Collection Date: 6/5/2017 1:00:00 PM
Matrix: AQUEOUS
Received Date: 6/7/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Dibromochloromethane	2.4	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Dibromomethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1-Dichloroethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1-Dichloroethene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2-Dichloropropane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,3-Dichloropropane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
2,2-Dichloropropane	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1-Dichloropropene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Hexachlorobutadiene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
2-Hexanone	ND	10		µg/L	1	6/7/2017 7:07:00 PM	R43337
Isopropylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
4-Isopropyltoluene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
4-Methyl-2-pentanone	ND	10		µg/L	1	6/7/2017 7:07:00 PM	R43337
Methylene Chloride	ND	3.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
n-butylbenzene	ND	3.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
n-Propylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
sec-Butylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Styrene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
tert-Butylbenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
trans-1,2-DCE	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Trichlorofluoromethane	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Vinyl chloride	ND	1.0		µg/L	1	6/7/2017 7:07:00 PM	R43337
Xylenes, Total	ND	1.5		µg/L	1	6/7/2017 7:07:00 PM	R43337
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	6/7/2017 7:07:00 PM	R43337
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/7/2017 7:07:00 PM	R43337

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1706322
Date Reported: 6/20/2017

CLIENT: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water
Lab ID: 1706322-001
Client Sample ID: Hydro Test Water
Collection Date: 6/5/2017 1:00:00 PM
Matrix: AQUEOUS
Received Date: 6/7/2017 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Surr: Dibromofluoromethane	103	70-130		%Rec	1	6/7/2017 7:07:00 PM	R43337
Surr: Toluene-d8	100	70-130		%Rec	1	6/7/2017 7:07:00 PM	R43337

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: 100ng lcs	SampType: LCS4	TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R43337	RunNo: 43337							
Prep Date:	Analysis Date: 6/7/2017	SeqNo: 1364431	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Ethylbenzene	20	1.0	20.00	0	101	70	130			
Methyl tert-butyl ether (MTBE)	36	1.0	40.00	0	90.1	70	130			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	98.5	70	130			
1,3,5-Trimethylbenzene	19	1.0	20.00	0	97.2	70	130			
1,2-Dichloroethane (EDC)	19	1.0	20.00	0	97.4	62.2	143			
1,2-Dibromoethane (EDB)	19	1.0	20.00	0	95.3	70	130			
Naphthalene	17	2.0	20.00	0	85.7	70	130			
1-Methylnaphthalene	18	4.0	20.00	0	87.9	60	140			
2-Methylnaphthalene	13	4.0	20.00	0	66.4	60	140			
Acetone	40	10	40.00	0	99.6	60	140			
Bromobenzene	20	1.0	20.00	0	98.6	70	130			
Bromodichloromethane	20	1.0	20.00	0	102	70	130			
Bromoform	19	1.0	20.00	0	95.2	70	130			
Bromomethane	16	3.0	20.00	0	78.2	60	140			
2-Butanone	46	10	40.00	0	114	60	140			
Carbon disulfide	41	10	40.00	0	102	60	140			
Carbon Tetrachloride	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
Chloroethane	21	2.0	20.00	0	107	60	140			
Chloroform	21	1.0	20.00	0	106	70	130			
Chloromethane	16	3.0	20.00	0	81.0	60	140			
2-Chlorotoluene	19	1.0	20.00	0	96.9	70	130			
4-Chlorotoluene	19	1.0	20.00	0	97.5	70	130			
cis-1,2-DCE	21	1.0	20.00	0	106	70	130			
cis-1,3-Dichloropropene	19	1.0	20.00	0	93.3	70	130			
1,2-Dibromo-3-chloropropane	18	2.0	20.00	0	90.8	70	130			
Dibromochloromethane	18	1.0	20.00	0	91.7	70	130			
Dibromomethane	21	1.0	20.00	0	104	70	130			
1,2-Dichlorobenzene	19	1.0	20.00	0	96.6	70	130			
1,3-Dichlorobenzene	20	1.0	20.00	0	98.9	70	130			
1,4-Dichlorobenzene	20	1.0	20.00	0	98.8	67.2	141			
Dichlorodifluoromethane	24	1.0	20.00	0	121	60	140			
1,1-Dichloroethane	20	1.0	20.00	0	99.7	52.6	157			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
1,2-Dichloropropane	20	1.0	20.00	0	100	63.7	138			
1,3-Dichloropropane	19	1.0	20.00	0	95.3	70	130			
2,2-Dichloropropane	20	2.0	20.00	0	101	70	130			

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: 100ng lcs	SampType: LCS4	TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R43337	RunNo: 43337							
Prep Date:	Analysis Date: 6/7/2017	SeqNo: 1364431	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	20	1.0	20.00	0	102	70	130			
Hexachlorobutadiene	17	1.0	20.00	0	82.6	70	130			
2-Hexanone	35	10	40.00	0	86.7	60	140			
Isopropylbenzene	20	1.0	20.00	0	101	70	130			
4-Isopropyltoluene	20	1.0	20.00	0	100	70	130			
4-Methyl-2-pentanone	37	10	40.00	0	93.6	60	140			
Methylene Chloride	21	3.0	20.00	0	104	70	130			
n-Butylbenzene	19	3.0	20.00	0	93.2	70	130			
n-Propylbenzene	19	1.0	20.00	0	96.7	70	130			
sec-Butylbenzene	19	1.0	20.00	0	95.9	70	130			
Styrene	20	1.0	20.00	0	101	70	130			
tert-Butylbenzene	19	1.0	20.00	0	97.3	70	130			
1,1,1,2-Tetrachloroethane	19	1.0	20.00	0	97.0	70	130			
1,1,2,2-Tetrachloroethane	19	2.0	20.00	0	96.5	65.9	133			
Tetrachloroethene (PCE)	21	1.0	20.00	0	104	70	130			
trans-1,2-DCE	20	1.0	20.00	0	101	70	130			
trans-1,3-Dichloropropene	18	1.0	20.00	0	88.1	70	130			
1,2,3-Trichlorobenzene	18	1.0	20.00	0	89.0	70	130			
1,2,4-Trichlorobenzene	17	1.0	20.00	0	87.2	70	130			
1,1,1-Trichloroethane	21	1.0	20.00	0	103	70	130			
1,1,2-Trichloroethane	19	1.0	20.00	0	95.4	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Trichlorofluoromethane	21	1.0	20.00	0	105	70	130			
1,2,3-Trichloropropane	19	2.0	20.00	0	95.6	69.7	129			
Vinyl chloride	20	1.0	20.00	0	101	70	130			
Xylenes, Total	60	1.5	60.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R43337	RunNo: 43337							
Prep Date:	Analysis Date: 6/7/2017	SeqNo: 1364456	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R43337	RunNo: 43337							
Prep Date:	Analysis Date: 6/7/2017	SeqNo: 1364456	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R43337	RunNo: 43337							
Prep Date:	Analysis Date: 6/7/2017	SeqNo: 1364456	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: MB-32269	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 32269	RunNo: 43487							
Prep Date: 6/14/2017	Analysis Date: 6/14/2017	SeqNo: 1369690	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-32269	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 32269	RunNo: 43487							
Prep Date: 6/14/2017	Analysis Date: 6/14/2017	SeqNo: 1369693	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	93.7	80	120			

Sample ID: 1706322-001BMS	SampType: MS	TestCode: EPA Method 7470: Mercury							
Client ID: Hydro Test Water	Batch ID: 32269	RunNo: 43487							
Prep Date: 6/14/2017	Analysis Date: 6/14/2017	SeqNo: 1369697	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.2	75	125			

Sample ID: 1706322-001BMSD	SampType: MSD	TestCode: EPA Method 7470: Mercury							
Client ID: Hydro Test Water	Batch ID: 32269	RunNo: 43487							
Prep Date: 6/14/2017	Analysis Date: 6/14/2017	SeqNo: 1369698	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0046	0.00020	0.005000	0	92.8	75	125	6.71	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1706322
20-Jun-17

Client: Western Refining Southwest, Inc.
Project: Pipeline Frac Tank Hydro Water

Sample ID: MB-32235 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 32235 | RunNo: 43448
Prep Date: 6/13/2017 | Analysis Date: 6/13/2017 | SeqNo: 1368063 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-32235 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 32235 | RunNo: 43448
Prep Date: 6/12/2017 | Analysis Date: 6/13/2017 | SeqNo: 1368064 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.53	0.020	0.5000	0	106	80	120			
Barium	0.51	0.020	0.5000	0	102	80	120			
Cadmium	0.51	0.0020	0.5000	0	101	80	120			
Chromium	0.51	0.0060	0.5000	0	102	80	120			
Lead	0.51	0.0050	0.5000	0	101	80	120			
Selenium	0.51	0.050	0.5000	0	102	80	120			
Silver	0.10	0.0050	0.1000	0	104	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Southw | Work Order Number: 1706322 | RcptNo: 1

Received By: Anne Thorne 6/7/2017 7:30:00 AM [signature]
Completed By: Sophia Campuzano 6/7/2017 9:10:16 AM [signature]
Reviewed By: [signature] 6/7/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted? [illegible]
Checked by: [illegible]

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: | Date:
By Whom: | Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: Western Refining
Mailing Address: 50 CR 4990 Bloomfield NM 87413
Phone #: 505-632-4169
Turn-Around Time: X Standard ☐ Rush
Project Name: Pipeline frac tank hydro water
Project #: PO# 12620973
Project Manager: Kelly Robinson
Sampler: Matt Krakow
On Ice: X Yes ☐ No
Sample Temperature: 1.3
QA/QC Package: X Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request: BTEX + MTBE + TMB's (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F,Cl,NO3,NO2,PO4,SO4) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706322	8260B (VOA)	RCRA 8 Metals
6/5/17	1:PM	H_2O	Hydro-test water	5-VOA	HCL	-001	X	
"	"	"	"	500 ml poly	HNO_3	-001		X

Remarks: Hydro-test water from frac tanks tested at Farmington bld refinery

Relinquished by: [signature] Date: 6/6/17 Time: 1545 — Received by: [signature] Date: 6/6/17 Time: 1545
Relinquished by: [signature] Date: 6/6/17 Time: 1800 — Received by: [signature] Date: 6/07/17 Time: 0730

2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
* Ranger Development 5400 LBJ Freeway Suite 460 Dallas TX, 75240
2. Originating Site:
* Apache 34-2
3. Location of Material (Street Address, City, State or ULSTR):
* Chambers AZ
4. Source and Description of Waste:
* Produced water from helium well

Estimated Volume * 2,000 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) [illegible] yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, * Russell Gibbs, representative or authorized agent for * Ranger Development do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

*☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Russell Gibbs representative for Ranger Development do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
* M+R or Other

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Agua Moss LLC Permit# UICI-005

Address of Facility: 345 CR 350, Aztec, NM 87410, San Juan County

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Adrian Hudson TITLE: Operator DATE: 2/7/17
SIGNATURE: [signature]
Surface Waste Management Facility Authorized Agent
TELEPHONE NO.:

Russell Gibbs

envirotech
Analytical Laboratory

Analytical Report

Report Summary
Client: Ranger Development
Chain Of Custody Number:
Samples Received: 2/1/2017 12:30:00PM
Job Number: 08135-0002
Work Order: P702004
Project Name/Location: Apache

Report Reviewed By: Walter Hinchman, Laboratory Director Date: 2/2/17

Tim Cain, Quality Assurance Officer Date: 2/2/17

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fx (800) 362-1879

envirotech
Analytical Laboratory

Analytical Report

Report Summary
Client: Ranger Development
Chain Of Custody Number:
Samples Received: 2/1/2017 12:30:00PM
Job Number: 08135-0002
Work Order: P702004
Project Name/Location: Apache

Report Reviewed By: Walter Hinchman, Laboratory Director Date: 2/2/17

Tim Cain, Quality Assurance Officer Date: 2/2/17

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

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Page 1 of 6

envirotech
Analytical Laboratory

Ranger Development	Project Name:	Apache	
-	Project Number:	08135-0002	Reported:
--,--	Project Manager:	Gaeye Higgins	02-Feb-17 15:51

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Produced Water	P702004-01A	Aqueous	01/01/17	02/01/17	Plastic Drinking Water Bottle

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envirotech
Analytical Laboratory

Ranger Development	Project Name:	Apache	
-	Project Number:	08135-0002	Reported:
--,--	Project Manager:	Gaeye Higgins	02-Feb-17 15:51

Produced Water
P702004-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Corrosivity									
pH @25°C	6.73		pH Units	1	1705020	02/02/17 14:21	02/02/17 14:46	9045D/9040 C	H1
Waste Characteristic									
Flash Point	>93		°C	1	1705008	01/31/17	02/01/17	ASTM D93-16e	
Reactivity	Negative		N/A	1	1705008	01/31/17	02/01/17		H2

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envirotech Analytical Laboratory

Ranger Development	Project Name:	Apache	
	Project Number:	08135-0002	Reported:
	Project Manager:	Garye Higgins	02-Feb-17 13:51

Corrosivity - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1705020 - No Prep Wet Chem										
LCS (1705020-BS1)				Prepared & Analyzed: 02-Feb-17						
pH	8.01		pH Units				98.75-101.25			
Duplicate (1705020-DUP1)		Source: P702004-01		Prepared & Analyzed: 02-Feb-17						
pH	6.75		pH Units		6.73			0.297	20	

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envirotech Analytical Laboratory

Ranger Development	Project Name:	Apache	
	Project Number:	08135-0002	Reported:
	Project Manager:	Garye Higgins	02-Feb-17 13:31

Notes and Definitions

H2	Sample was analyzed after regulatory hold-time exceeded for target analyte.
H1	Sample was received after regulatory hold-time exceeded for target analyte.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879

Chain of Custody

Client: Ranger Development
Project: Apache
Sampler: Russell Gibbs
Phone: 970 996 7849
Email(s): russell@...
Project Manager: Russell Gibbs

RUSH? 1d ☑ 3d ☐

Lab Use Only — Lab WO#: P702004 — Job Number: 08135-0002 — Page 1 of 1

Analysis and Method: GRO/DRO by 8015, BTEX by 8021, TPH by 418.1, Chloride by 300.0, TCLP Metals, CO Table 910-1, TDS, pH ✓

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/Type/Preservative	Lab Number	Correct Cont/Prsrv (s) Y/N
Produced Water	02-01-17	3:00pm	Aq	1-drinking H2O bottle	1	Y

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	1 Feb 17	12:30	[signature]	02-01-17	12:32

Lab Use Only: **Received on ice Y / (N) — T1 20.8 T2 T3 — AVG Temp °C 20.8

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass

FROM : H & M Precision Products Inc. PHONE NO. : 505 326 4949 Open Aug. 28 2014 08:54AM P1 2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

H&M Precision Products

2. Originating Site:
#17 CR 5859 Farmington, New Mexico 87401

3. Location of Material (Street Address, City, State or ULSTR):
#17 CR 5859 Farmington, New Mexico 87401

4. Source and Description of Waste:
Sodium Bicarbonate rinse water. (note this water is used to rinse out pump truck after acid jobs to neutralize the acid)

Estimated Volume 20 bbls yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 20 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Johnny Campbell, representative or authorized agent for H&M Precision Products do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Johnny Campbell, representative for H&M Precision Products do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
H&M Precision Products

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Agua Moss, LLC Crouch Mesa Disposal Facility Permit# UICI-005

Address of Facility: C. RD 350 #345 Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED (Must Be Maintained As Permanent Record)**

PRINT NAME: CHRIS MORGAN TITLE: FORMAN DATE: 28AUG14 12/17

SIGNATURE: [signature] TELEPHONE NO.: 505 334 6156
Surface Waste Management Facility Authorized Agent

2017

District I
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Endurance Lift Solutions 2505 E Main Street Farmington NM 87401

2. **Originating Site:**
2505 E Main Street Farmington N.M 87401

3. **Location of Material (Street Address, City, State or ULSTR):**
2505 E Main Street, Farmington NM 87401

4. **Source and Description of Waste:**
City water run through Hot Wash Steamer. Clean pumps for repair, clean off oil, parafin, sand, Corr [illegible]

Estimated Volume 35 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 30 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Mark Gammon, representative or authorized agent for Endurance Lift Solutions do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ______, representative for ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
C+J Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: NM-01-[illegible]
Address of Facility: [illegible]

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Gayne Higgins TITLE: Supervisor DATE: [illegible]/17
SIGNATURE: [signature] TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

3/16/17

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. **Originating Site:**
Hill Top Compressor Station

3. **Location of Material (Street Address, City, State or ULSTR):**
UL I Section 18 Township 24 North Range 5 West; 36.310358, -107.395766, San Juan County, NM

4. **Source and Description of Waste:**
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 100 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 32 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ______, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: To Be Determined** West States

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Adrian Hudson TITLE: Operator DATE: 4/6/17
SIGNATURE: [signature] TELEPHONE NO.: (505) 334-6186
Surface Waste Management Facility Authorized Agent

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: SMA
Mailing Address: 401 W. Broadway, Farmington NM 87401
Phone #: 505 325-7535
email or Fax#: Ashley.maxwell@ [illegible]
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Lindrith CS
Project #:
Project Manager: Tom Long / Ashley Maxwell
Sampler: Rainey Watson
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.4

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270SIMS) ☒; RCRA 8 Metals TCLP ☒; Anions (F, Cl, NO_3, NO_2, PO_4, SO_4); 8081 Pesticides / 8082 PCB's; 8260B (VOA) ☒; 8270 (Semi-VOA); Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3-1-16	11:55	H_2O	Lindrith non exempt	Various	Various	1603077 -001

Remarks: 8260 Full List; Report TCLP Compound AT TCLP Limits. Bill: Tom Long / Enterprise

Date	Time	Relinquished by	Received by	Date	Time
3-1-16	1737	[signature]	[signature]	3/1/16	1737
3/1/16	1757	[signature]	[signature]	03/02/16	0700

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM Work Order Number: 1603077 RcptNo: 1

Received by/date: AT 03/02/16
Logged By: Lindsay Mangin 3/2/2016 7:00:00 AM [signature]
Completed By: Lindsay Mangin 3/2/2016 7:58:01 AM [signature]
Reviewed By: [signature] 03/02/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
(If no, notify customer for authorization.)

# of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

Page 1 of 1

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: vsb dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999266	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: vsb dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999266	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603077
17-Mar-16

Client: Souder, Miller and Associates
Project: Lindreth CS

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999258	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	115	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID: vsb dell	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R32659	RunNo: 32659							
Prep Date:	Analysis Date: 3/8/2016	SeqNo: 999258	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated

Report Date: 03/14/16
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPD Limit	Qual
Method: SW7470A										Analytical Run: HGCV202-B_160309A
Lab ID: ICV		Initial Calibration Verification Standard								03/09/16 15:50
Mercury		0.00209	mg/L	0.00010	105	90	110			
Method: SW7470A										Batch: 97457
Lab ID: MB-97457		Method Blank								Run: HGCV202-B_160309A 03/09/16 15:55
Mercury		ND	mg/L	4E-05						
Lab ID: LCS-97457		Laboratory Control Sample								Run: HGCV202-B_160309A 03/09/16 15:57
Mercury		0.00205	mg/L	0.00010	102	80	120			
Lab ID: B16030191-005CDIL		Serial Dilution								Run: HGCV202-B_160309A 03/09/16 16:03
Mercury		0.000138	mg/L	0.00025		0	0		10	
Lab ID: B16030191-005CMS		Sample Matrix Spike								Run: HGCV202-B_160309A 03/09/16 16:05
Mercury		0.00154	mg/L	0.00010	70	75	125		20	S
Lab ID: B16030191-005CMSD		Sample Matrix Spike Duplicate								Run: HGCV202-B_160309A 03/09/16 16:07
Mercury		0.00162	mg/L	0.00010	66	75	125	1.2	20	S

Qualifiers:

RL - Analyte reporting limit.
S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Report Date: 03/14/16
Project: Not Indicated
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B										Batch: 97382
Lab ID: B16030465-003BDIL	7	Serial Dilution				Run: ICP203-B_160308A				03/08/16 13:01
Arsenic		ND	mg/L	1.7		0	0		10	
Barium		0.0649	mg/L	0.050		0	0		10	N
Cadmium		ND	mg/L	0.041		0	0		10	
Chromium		ND	mg/L	0.27		0	0		10	
Lead		ND	mg/L	1.6		0	0		10	
Selenium		ND	mg/L	2.0		0	0		10	
Silver		ND	mg/L	0.30		0	0		10	
Lab ID: B16030465-003BPDS	7	Post Digestion/Distillation Spike				Run: ICP203-B_160308A				03/08/16 13:36
Arsenic		20.5	mg/L	0.35	100	75	125			
Barium		19.7	mg/L	0.050	96	75	125			
Cadmium		9.58	mg/L	0.0085	93	75	125			
Chromium		19.4	mg/L	0.055	94	75	125			
Lead		19.4	mg/L	0.33	94	75	125			
Selenium		19.9	mg/L	0.41	97	75	125			
Silver		9.74	mg/L	0.061	95	75	125			
Lab ID: B16030465-003BMS	7	Sample Matrix Spike				Run: ICP203-B_160308A				03/08/16 13:40
Arsenic		0.761	mg/L	0.34	141	75	125			S
Barium		5.52	mg/L	0.050	100	75	125			
Cadmium		0.252	mg/L	0.0083	101	75	125			
Chromium		0.455	mg/L	0.053	91	75	125			
Lead		0.576	mg/L	0.32	115	75	125			
Selenium		0.295	mg/L	0.20	60	75	125			S
Silver		0.320	mg/L	0.060	128	75	125			S
Lab ID: B16030465-003BMSD	7	Sample Matrix Spike Duplicate				Run: ICP203-B_160308A				03/08/16 13:43
Arsenic		0.830	mg/L	0.34	166	75	125	17	20	S
Barium		5.41	mg/L	0.050	98	75	125	2.1	20	
Cadmium		0.236	mg/L	0.0083	94	75	125	6.5	20	
Chromium		0.474	mg/L	0.053	95	75	125	3.9	20	
Lead		0.680	mg/L	0.32	136	75	125	17	20	S
Selenium		0.326	mg/L	0.20	65	75	125	9.0	20	S
Silver		0.282	mg/L	0.060	113	75	125	12	20	

Qualifiers:

RL - Analyte reporting limit.
N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Report Date: 03/14/16
Project: Not Indicated
Work Order: B16030406

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B										Analytical Run: ICP203-B_160308A
Lab ID: QCS	7	Initial Calibration Verification Standard								03/08/16 09:50
Arsenic		0.812	mg/L	0.10	101	90	110			
Barium		0.774	mg/L	0.10	97	90	110			
Cadmium		0.400	mg/L	0.010	100	90	110			
Chromium		0.784	mg/L	0.050	98	90	110			
Lead		0.805	mg/L	0.050	101	90	110			
Selenium		0.797	mg/L	0.10	100	90	110			
Silver		0.392	mg/L	0.010	98	90	110			
Lab ID: ICSA	7	Interference Check Sample A								03/08/16 09:54
Arsenic		0.0133	mg/L	0.10						
Barium		-1.00E-05	mg/L	0.10						
Cadmium		-0.00248	mg/L	0.010						
Chromium		0.000480	mg/L	0.050						
Lead		0.0221	mg/L	0.050						
Selenium		0.0136	mg/L	0.10						
Silver		7.00E-05	mg/L	0.010						
Lab ID: ICSAB	7	Interference Check Sample AB								03/08/16 09:57
Arsenic		0.965	mg/L	0.10	97	80	120			
Barium		0.467	mg/L	0.10	93	80	120			
Cadmium		0.882	mg/L	0.010	88	80	120			
Chromium		0.436	mg/L	0.050	88	80	120			
Lead		0.928	mg/L	0.050	93	80	120			
Selenium		0.962	mg/L	0.10	96	80	120			
Silver		0.883	mg/L	0.010	88	80	120			
Method: SW6010B										Batch: 97382
Lab ID: MB-97382	7	Method Blank				Run: ICP203-B_160308A				03/08/16 12:37
Arsenic		ND	mg/L	0.02						
Barium		0.0003	mg/L	0.0002						
Cadmium		ND	mg/L	0.0004						
Chromium		ND	mg/L	0.003						
Lead		0.02	mg/L	0.02						
Selenium		ND	mg/L	0.02						
Silver		ND	mg/L	0.003						
Lab ID: LCS-97382	7	Laboratory Control Sample				Run: ICP203-B_160308A				03/08/16 12:40
Arsenic		0.448	mg/L	0.10	90	80	120			
Barium		4.88	mg/L	0.10	89	80	120			
Cadmium		0.232	mg/L	0.010	93	80	120			
Chromium		0.440	mg/L	0.050	88	80	120			
Lead		0.475	mg/L	0.050	91	80	120			
Selenium		0.461	mg/L	0.10	92	80	120			
Silver		0.222	mg/L	0.010	89	80	120			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Report Date: 03/14/16
Project: Not Indicated
Collection Date: 03/01/16 11:54
Lab ID: B16030406-001
DateReceived: 03/03/16
Client Sample ID: 1603077-001C Lindreth Non Exempt
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
METALS, TOTAL							
Arsenic	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rh
Barium	ND	mg/L		0.5		SW6010B	03/08/16 12:51 / rh
Cadmium	ND	mg/L		0.01		SW6010B	03/08/16 12:51 / rh
Chromium	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rh
Lead	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rh
Mercury	0.078	mg/L		0.002		SW7470A	03/09/16 15:29 / eli
Selenium	ND	mg/L		0.1		SW6010B	03/08/16 12:51 / rh
Silver	ND	mg/L		0.02		SW6010B	03/08/16 12:51 / rh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1603077
Date Reported: 3/17/2016

CLIENT: Souder, Miller and Associates
Client Sample ID: Lindreth Non Exempt
Project: Lindreth CS
Collection Date: 3/1/2016 11:54:00 AM
Lab ID: 1603077-001
Matrix: AQUEOUS
Received Date: 3/2/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: AG
1,1,1-Trichloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,1,2-Trichloroethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Trichloroethene (TCE)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Trichlorofluoromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,3-Trichloropropane	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
Vinyl chloride	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Xylenes, Total	0.68	0.30		mg/L	200	3/8/2016 9:38:32 PM	R32659
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: Dibromofluoromethane	104	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659
Surr: Toluene-d8	113	70-130		%Rec	200	3/8/2016 9:38:32 PM	R32659

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
R RPD outside accepted recovery limits
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1603077**
Date Reported: **3/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Lindreth Non Exempt
Project: Lindreth CS
Collection Date: 3/1/2016 11:34:00 AM
Lab ID: 1603077-001 **Matrix:** AQUEOUS **Received Date:** 3/2/2016 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP						Analyst: **DAM**	
2-Methylphenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
3+4-Methylphenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Phenol	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4-Dinitrotoluene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachlorobenzene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachlorobutadiene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Hexachloroethane	ND	3.0	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Nitrobenzene	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Pentachlorophenol	ND	100	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Pyridine	ND	5.0	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4,5-Trichlorophenol	ND	400	D	mg/L	1	3/16/2016 4:57:42 PM	24087
2,4,6-Trichlorophenol	ND	2.5	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Cresols, Total	ND	200	D	mg/L	1	3/16/2016 4:57:42 PM	24087
Surr: 2-Fluorophenol	0	15-124	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: Phenol-d5	0	15-118	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 2,4,6-Tribromophenol	0	15-148	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: Nitrobenzene-d5	0	40.6-124	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 2-Fluorobiphenyl	0	35.7-128	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
Surr: 4-Terphenyl-d14	0	18.8-115	SD	%Rec	1	3/16/2016 4:57:42 PM	24087
EPA METHOD 8260B: VOLATILES						Analyst: **AG**	
Benzene	1.3	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Toluene	2.1	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Ethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Naphthalene	ND	0.40		mg/L	200	3/8/2016 9:38:32 PM	R32659
1-Methylnaphthalene	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Methylnaphthalene	ND	0.80		mg/L	200	3/8/2016 9:38:32 PM	R32659
Acetone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromobenzene	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromodichloromethane	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromoform	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659
Bromomethane	ND	0.60		mg/L	200	3/8/2016 9:38:32 PM	R32659
2-Butanone	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Carbon disulfide	ND	2.0		mg/L	200	3/8/2016 9:38:32 PM	R32659
Carbon Tetrachloride	ND	0.20		mg/L	200	3/8/2016 9:38:32 PM	R32659

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 17, 2016

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lindreth CS OrderNo.: 1603077

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/2/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1606964**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Non Exempt Tank
Project: Lindrith CS
Collection Date: 6/16/2016 10:36:00 AM
Lab ID: 1606964-001 **Matrix:** AQUEOUS **Received Date:** 6/17/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
1,1-Dichloropropene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Hexachlorobutadiene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
2-Hexanone	ND	100		µg/L	10	6/20/2016 1:50:37 PM
Isopropylbenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
4-Isopropyltoluene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	6/20/2016 1:50:37 PM
Methylene Chloride	ND	30		µg/L	10	6/20/2016 1:50:37 PM
n-Butylbenzene	ND	30		µg/L	10	6/20/2016 1:50:37 PM
n-Propylbenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
sec-Butylbenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Styrene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
tert-Butylbenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/20/2016 1:50:37 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/20/2016 1:50:37 PM
trans-1,2-DCE	ND	10		µg/L	10	6/20/2016 1:50:37 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Trichloroethene (TCE)	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Trichlorofluoromethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	6/20/2016 1:50:37 PM
Vinyl chloride	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Xylenes, Total	210	15		µg/L	10	6/20/2016 1:50:37 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	10	6/20/2016 1:50:37 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	10	6/20/2016 1:50:37 PM
Surr: Dibromofluoromethane	97.9	70-130		%Rec	10	6/20/2016 1:50:37 PM
Surr: Toluene-d8	98.9	70-130		%Rec	10	6/20/2016 1:50:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1606964**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Non Exempt Tank
Project: Lindrith CS
Collection Date: 6/16/2016 10:36:00 AM
Lab ID: 1606964-001 **Matrix:** AQUEOUS **Received Date:** 6/17/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**
Benzene	530	10		µg/L	10	6/20/2016 1:50:37 PM
Toluene	510	10		µg/L	10	6/20/2016 1:50:37 PM
Ethylbenzene	27	10		µg/L	10	6/20/2016 1:50:37 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2,4-Trimethylbenzene	18	10		µg/L	10	6/20/2016 1:50:37 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Naphthalene	ND	20		µg/L	10	6/20/2016 1:50:37 PM
1-Methylnaphthalene	ND	40		µg/L	10	6/20/2016 1:50:37 PM
2-Methylnaphthalene	ND	40		µg/L	10	6/20/2016 1:50:37 PM
Acetone	520	100		µg/L	10	6/20/2016 1:50:37 PM
Bromobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Bromodichloromethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Bromoform	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Bromomethane	ND	30		µg/L	10	6/20/2016 1:50:37 PM
2-Butanone	160	100		µg/L	10	6/20/2016 1:50:37 PM
Carbon disulfide	ND	100		µg/L	10	6/20/2016 1:50:37 PM
Carbon Tetrachloride	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Chlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Chloroethane	ND	20		µg/L	10	6/20/2016 1:50:37 PM
Chloroform	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Chloromethane	ND	30		µg/L	10	6/20/2016 1:50:37 PM
2-Chlorotoluene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
4-Chlorotoluene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
cis-1,2-DCE	ND	10		µg/L	10	6/20/2016 1:50:37 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/20/2016 1:50:37 PM
Dibromochloromethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Dibromomethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
Dichlorodifluoromethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1-Dichloroethane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,1-Dichloroethene	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,2-Dichloropropane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
1,3-Dichloropropane	ND	10		µg/L	10	6/20/2016 1:50:37 PM
2,2-Dichloropropane	ND	20		µg/L	10	6/20/2016 1:50:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

2017
Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
MAPL Huerfano Pumping Station

3. Location of Material (Street Address, City, State or ULSTR):
UL L Section 21 Township 26 North Range 10 West; 36.471831, -107.908114

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non-Hazardous Water from the compressor skids.
Estimated Volume 80 yd³ / (bbls) Known Volume (to be entered by the operator at the end of the haul) 124 yd³ / (bbls)

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long [signature], representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ____________, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: [signature] TITLE: [signature] DATE: 1/3/17
SIGNATURE: [signature] TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

Analytical Report
Lab Order 1702072
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Huerfano BGT
Project: Huerfano Station | **Collection Date:** 2/1/2017 1:50:00 PM
Lab ID: 1702072-001 | **Matrix:** AQUEOUS | **Received Date:** 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	pmf
Mercury	ND	0.00020		mg/L	1	2/2/2017 5:40:31 PM	30033
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	pmf
Arsenic	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Barium	ND	100		mg/L	1	2/6/2017 11:55:58 AM	30031
Cadmium	ND	1.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Chromium	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Lead	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Selenium	ND	1.0		mg/L	1	2/6/2017 11:55:58 AM	30031
Silver	ND	5.0		mg/L	1	2/6/2017 11:55:58 AM	30031
EPA METHOD 8270C: PAHS						Analyst:	JDC
Naphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
1-Methylnaphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
2-Methylnaphthalene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Acenaphthylene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Acenaphthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Fluorene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Phenanthrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benz(a)anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Chrysene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(b)fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(k)fluoranthene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(a)pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Dibenz(a,h)anthracene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Benzo(g,h,i)perylene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Indeno(1,2,3-cd)pyrene	ND	2.5	D	µg/L	1	2/3/2017 12:17:25 PM	30020
Surr: N-hexadecane	73.6	15-176	D	%Rec	1	2/3/2017 12:17:25 PM	30020
Surr: Benzo(e)pyrene	74.3	15-198	D	%Rec	1	2/3/2017 12:17:25 PM	30020
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
Benzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Toluene	0.23	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Ethylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report
Lab Order 1702072
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Huerfano BGT
Project: Huerfano Station | **Collection Date:** 2/1/2017 1:50:00 PM
Lab ID: 1702072-001 | **Matrix:** AQUEOUS | **Received Date:** 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Naphthalene	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
1-Methylnaphthalene	ND	0.80		mg/L	200	2/3/2017 6:43:02 PM	W40507
2-Methylnaphthalene	ND	0.80		mg/L	200	2/3/2017 6:43:02 PM	W40507
Acetone	ND	2.0		mg/L	200	2/3/2017 6:43:02 PM	W40507
Bromobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Bromodichloromethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Bromoform	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Bromomethane	ND	0.60		mg/L	200	2/3/2017 6:43:02 PM	W40507
2-Butanone	ND	2.0		mg/L	200	2/3/2017 6:43:02 PM	W40507
Carbon disulfide	ND	2.0		mg/L	200	2/3/2017 6:43:02 PM	W40507
Carbon Tetrachloride	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Chlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Chloroethane	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
Chloroform	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Chloromethane	ND	0.60		mg/L	200	2/3/2017 6:43:02 PM	W40507
2-Chlorotoluene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
4-Chlorotoluene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
cis-1,2-DCE	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
Dibromochloromethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Dibromomethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,3-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,4-Dichlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Dichlorodifluoromethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1-Dichloroethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1-Dichloroethene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2-Dichloropropane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,3-Dichloropropane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
2,2-Dichloropropane	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Hexachlorobutadiene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
2-Hexanone	ND	2.0		mg/L	200	2/3/2017 6:43:02 PM	W40507
Isopropylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
4-Isopropyltoluene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
4-Methyl-2-pentanone	ND	2.0		mg/L	200	2/3/2017 6:43:02 PM	W40507
Methylene Chloride	ND	0.60		mg/L	200	2/3/2017 6:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

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Analytical Report
Lab Order 1702072
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Huerfano BGT
Project: Huerfano Station | **Collection Date:** 2/1/2017 1:50:00 PM
Lab ID: 1702072-001 | **Matrix:** AQUEOUS | **Received Date:** 2/2/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
n-Butylbenzene	ND	0.60		mg/L	200	2/3/2017 6:43:02 PM	W40507
n-Propylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
sec-Butylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Styrene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
tert-Butylbenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
trans-1,2-DCE	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1,1-Trichloroethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,1,2-Trichloroethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Trichloroethene (TCE)	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Trichlorofluoromethane	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
1,2,3-Trichloropropane	ND	0.40		mg/L	200	2/3/2017 6:43:02 PM	W40507
Vinyl chloride	ND	0.20		mg/L	200	2/3/2017 6:43:02 PM	W40507
Xylenes, Total	ND	0.30		mg/L	200	2/3/2017 6:43:02 PM	W40507
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	200	2/3/2017 6:43:02 PM	W40507
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	200	2/3/2017 6:43:02 PM	W40507
Surr: Dibromofluoromethane	103	70-130		%Rec	200	2/3/2017 6:43:02 PM	W40507
Surr: Toluene-d8	109	70-130		%Rec	200	2/3/2017 6:43:02 PM	W40507

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. **Originating Site:**
Potter Compressor Station

3. **Location of Material (Street Address, City, State or UTM):**
Ul. A Section 19 Township 30 North Range 10 West; 36.803020, -107.921590, San Juan County, NM

4. **Source and Description of Waste:**
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non-Hazardous Water from the compressor skids
Estimated Volume 80 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 200 yd³ (bbls)

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous limit does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to confirm to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste confirm to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: To Be Determined**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **NW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Andrew Hunter TITLE: Operator DATE: 12/1/17
SIGNATURE: _____ TELEPHONE NO.: (505)334-6178
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 04, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Potter CS OrderNo.: 1711506

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/9/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1711506**
Date Reported: 12/4/2017

CLIENT: Souder, Miller and Associates
Client Sample ID: Potter BGT
Project: Potter CS
Collection Date: 11/7/2017 2:00:00 PM
Lab ID: 1711506-001 **Matrix:** AQUEOUS **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY							Analyst: **MED**
Mercury	ND	0.0033		mg/L	1	11/21/2017 4:04:21 PM	36088
EPA 6010B: TOTAL RECOVERABLE METALS							Analyst: **MED**
Arsenic	ND	5.0		mg/L	1	11/27/2017 10:37:58 AM	35055
Barium	ND	100		mg/L	1	11/27/2017 10:37:58 AM	35055
Cadmium	ND	1.0		mg/L	1	11/27/2017 10:37:58 AM	35055
Chromium	ND	5.0		mg/L	1	11/27/2017 10:37:58 AM	35055
Lead	ND	5.0		mg/L	1	11/27/2017 2:50:55 PM	35055
Selenium	ND	1.0		mg/L	1	11/27/2017 10:37:58 AM	35055
Silver	ND	5.0		mg/L	1	11/27/2017 10:37:58 AM	35055
EPA METHOD 8270C: PAHS							Analyst: **DAM**
Naphthalene	3.8	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
1-Methylnaphthalene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
2-Methylnaphthalene	2.9	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Acenaphthylene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Acenaphthene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Fluorene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Phenanthrene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Anthracene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Fluoranthene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Pyrene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Benz(a)anthracene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Chrysene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Benzo(b)fluoranthene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Benzo(k)fluoranthene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Benzo(a)pyrene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Dibenz(a,h)anthracene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Benzo(g,h,i)perylene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Indeno(1,2,3-cd)pyrene	ND	2.5		µg/L	1	11/14/2017 3:37:17 PM	34973
Surr: N-Nitrosodiethylamine	78.0	54.2-111		%Rec	1	11/14/2017 3:37:17 PM	34973
Surr: Benzo(e)pyrene	61.0	39.3-124		%Rec	1	11/14/2017 3:37:17 PM	34973
EPA METHOD 8260B: VOLATILES							Analyst: **RAA**
Benzene	ND	0.50		µg/L	200	11/13/2017 1:46:00 PM	R47088
Toluene	0.32	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Ethylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Methyl tert-butyl ether (MTBE)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,4-Trimethylbenzene	ND	0.30		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,3,5-Trimethylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dichloroethane (EDC)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quantitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1711506**
Date Reported: 12/4/2017

CLIENT: Souder, Miller and Associates
Client Sample ID: Potter BGT
Project: Potter CS
Collection Date: 11/7/2017 2:00:00 PM
Lab ID: 1711506-001 **Matrix:** AQUEOUS **Received Date:** 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: **RAA**
1,2-Dibromoethane (EDB)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Naphthalene	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
1-Methylnaphthalene	ND	0.80		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Methylnaphthalene	ND	0.80		µg/L	200	11/13/2017 1:46:00 PM	R47088
Acetone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromodichloromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromoform	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromomethane	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Butanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Carbon disulfide	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Carbon Tetrachloride	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloroethane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloroform	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloromethane	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Chlorotoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Chlorotoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
cis-1,2-DCE	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
cis-1,3-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dibromo-3-chloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dibromochloromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dibromomethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,3-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,4-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dichlorodifluoromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloroethene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dichloropropane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,3-Dichloropropane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
2,2-Dichloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Hexachlorobutadiene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Hexanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Isopropylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Isopropyltoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Methyl-2-pentanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Methylene Chloride	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
PQL Practical Quantitative Limit
RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix
W Sample container temperature is out or limit as specified

Analytical Report
Lab Order 1711506
Date Reported: 12/4/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter CS
Lab ID: 1711506-001
Client Sample ID: Potter BGT
Collection Date: 11/7/2017 2:00:00 PM
Matrix: AQUEOUS
Received Date: 11/9/2017 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Naphthalene	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
1-Methylnaphthalene	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Methylnaphthalene	ND	0.80		µg/L	200	11/13/2017 1:46:00 PM	R47088
Acetone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromodichloromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromoform	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Bromomethane	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Butanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Carbon disulfide	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Carbon Tetrachloride	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloroethane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloroform	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Chloromethane	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Chlorotoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Chlorotoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
cis-1,2-DCE	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
cis-1,3-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dibromo-3-chloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dibromochloromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dibromomethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,3-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,4-Dichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Dichlorodifluoromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloroethene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2-Dichloropropane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,3-Dichloropropane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
2,2-Dichloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Hexachlorobutadiene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
2-Hexanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Isopropylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Isopropyltoluene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
4-Methyl-2-pentanone	ND	2.0		µg/L	200	11/13/2017 1:46:00 PM	R47088
Methylene Chloride	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
n-Butylbenzene	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
n-Propylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
sec-Butylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Styrene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
tert-Butylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,1,2-Tetrachloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,2,2-Tetrachloroethane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Tetrachloroethene (PCE)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
trans-1,2-DCE	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
trans-1,3-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,3-Trichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,4-Trichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,1-Trichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,2-Trichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Trichloroethene (TCE)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Trichlorofluoromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,3-Trichloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Vinyl chloride	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Xylenes, Total	ND	0.30		µg/L	200	11/13/2017 1:46:00 PM	R47088
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: Dibromofluoromethane	110	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: Toluene-d8	98.4	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1711506
Date Reported: 12/4/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: Potter CS
Lab ID: 1711506-001
Client Sample ID: Potter BGT
Collection Date: 11/7/2017 2:00:00 PM
Matrix: AQUEOUS
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Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
n-Butylbenzene	ND	0.60		µg/L	200	11/13/2017 1:46:00 PM	R47088
n-Propylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
sec-Butylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Styrene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
tert-Butylbenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,1,2-Tetrachloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,2,2-Tetrachloroethane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Tetrachloroethene (PCE)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
trans-1,2-DCE	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
trans-1,3-Dichloropropene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,3-Trichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,4-Trichlorobenzene	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,1-Trichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,1,2-Trichloroethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Trichloroethene (TCE)	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Trichlorofluoromethane	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
1,2,3-Trichloropropane	ND	0.40		µg/L	200	11/13/2017 1:46:00 PM	R47088
Vinyl chloride	ND	0.20		µg/L	200	11/13/2017 1:46:00 PM	R47088
Xylenes, Total	ND	0.30		µg/L	200	11/13/2017 1:46:00 PM	R47088
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: Dibromofluoromethane	110	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088
Surr: Toluene-d8	98.4	70-130		%Rec	200	11/13/2017 1:46:00 PM	R47088

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

Work Order: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: 100ng lcs	SampType: LCS4	TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R47088	RunNo: 47088							
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502364	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	19	1.0	20.00	0	97.4	70	130			
Ethylbenzene	18	1.0	20.00	0	95.8	70	130			
Methyl tert-butyl ether (MTBE)	44	1.0	40.00	0	110	70	130			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	100	70	130			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	100	70	130			
1,2-Dichloroethane (EDC)	22	1.0	20.00	0	109	62.2	143			
1,2-Dibromoethane (EDB)	20	1.0	20.00	0	99.6	70	130			
Naphthalene	20	2.0	20.00	0	97.8	70	130			
1-Methylnaphthalene	20	4.0	20.00	0	99.1	60	140			
2-Methylnaphthalene	15	4.0	20.00	0	73.3	60	140			
Acetone	40	10	40.00	0	101	60	140			
Bromobenzene	20	1.0	20.00	0	102	70	130			
Bromodichloromethane	22	1.0	20.00	0	111	70	130			
Bromoform	19	1.0	20.00	0	94.8	70	130			
Bromomethane	13	3.0	20.00	0	66.3	60	140			
2-Butanone	45	10	40.00	0	112	60	140			
Carbon disulfide	45	10	40.00	0	112	60	140			
Carbon Tetrachloride	21	1.0	20.00	0	105	70	130			
Chlorobenzene	19	1.0	20.00	0	97.3	70	130			
Chloroethane	19	2.0	20.00	0	96.3	60	140			
Chloroform	22	1.0	20.00	0	110	70	130			
Chloromethane	21	3.0	20.00	0	103	60	140			
2-Chlorotoluene	21	1.0	20.00	0	103	70	130			
4-Chlorotoluene	21	1.0	20.00	0	103	70	130			
cis-1,2-DCE	22	1.0	20.00	0	112	70	130			
cis-1,3-Dichloropropene	21	1.0	20.00	0	103	70	130			
1,2-Dibromo-3-chloropropane	20	2.0	20.00	0	101	70	130			
Dibromochloromethane	18	1.0	20.00	0	92.0	70	130			
Dibromomethane	23	1.0	20.00	0	113	70	130			
1,2-Dichlorobenzene	20	1.0	20.00	0	98.7	70	130			
1,3-Dichlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,4-Dichlorobenzene	20	1.0	20.00	0	99.1	67.2	141			
Dichlorodifluoromethane	23	1.0	20.00	0	116	60	140			
1,1-Dichloroethane	22	1.0	20.00	0	109	52.6	157			
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
1,2-Dichloropropane	22	1.0	20.00	0	111	63.7	155			
1,3-Dichloropropane	20	1.0	20.00	0	100	70	130			
2,2-Dichloropropane	23	2.0	20.00	0	113	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

Work Order: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: 100ng lcs	SampType: LCS4	TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R47088	RunNo: 47088							
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502364	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	22	1.0	20.00	0	108	70	130			
Hexachlorobutadiene	18	1.0	20.00	0	88.6	70	130			
2-Hexanone	39	10	40.00	0	98.3	60	140			
Isopropylbenzene	19	1.0	20.00	0	94.8	70	130			
4-Isopropyltoluene	20	1.0	20.00	0	100	70	130			
4-Methyl-2-pentanone	45	10	40.00	0	112	60	140			
Methylene Chloride	22	3.0	20.00	0	110	70	130			
n-Butylbenzene	19	3.0	20.00	0	96.7	70	130			
n-Propylbenzene	20	1.0	20.00	0	102	70	130			
sec-Butylbenzene	20	1.0	20.00	0	98.1	70	130			
Styrene	19	1.0	20.00	0	95.5	70	130			
tert-Butylbenzene	20	1.0	20.00	0	98.1	70	130			
1,1,1,2-Tetrachloroethane	19	1.0	20.00	0	94.1	70	130			
1,1,2,2-Tetrachloroethane	23	2.0	20.00	0	114	65.9	133			
Tetrachloroethene (PCE)	18	1.0	20.00	0	90.3	70	130			
trans-1,2-DCE	21	1.0	20.00	0	106	70	130			
trans-1,3-Dichloropropene	19	1.0	20.00	0	94.0	70	130			
1,2,3-Trichlorobenzene	18	1.0	20.00	0	90.3	70	130			
1,2,4-Trichlorobenzene	19	1.0	20.00	0	93.5	70	130			
1,1,1-Trichloroethane	21	1.0	20.00	0	105	70	130			
1,1,2-Trichloroethane	20	1.0	20.00	0	98.9	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Trichlorofluoromethane	21	1.0	20.00	0	106	70	130			
1,2,3-Trichloropropane	22	2.0	20.00	0	110	69.7	129			
Vinyl chloride	21	1.0	20.00	0	104	70	130			
Xylenes, Total	58	1.5	60.00	0	97.2	70	130			
Sur: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Sur: 4-bromofluorobenzene	11		10.00		107	70	130			
Sur: Dibromofluoromethane	11		10.00		113	70	130			
Sur: Toluene-d8	10		10.00		101	70	130			

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R47088	RunNo: 47088							
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502370	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: R47088	RunNo: 47088
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502370 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	3.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: R47088	RunNo: 47088
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502370 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		116	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	9.9		10.00		99.0	70	130			

Sample ID: 1711506-001ams	SampType: MS	TestCode: EPA Method 8260B: VOLATILES
Client ID: Potter BGT	Batch ID: R47088	RunNo: 47088
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502383 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.2	0.20	4.000	0.3284	122	70	130			
Toluene	4.4	0.20	4.000	0.3204	102	70	130			
Chlorobenzene	4.1	0.20	4.000	0.03640	101	70	130			
1,1-Dichloroethene	5.3	0.20	4.000	0	132	70	130			S
Trichloroethene (TCE)	4.8	0.20	4.000	0.03720	118	70	130			
Surr: 1,2-Dichloroethane-d4	2.4		2.000		122	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: 1711506-001ams	SampType: MS	TestCode: EPA Method 8260B: VOLATILES
Client ID: Potter BGT	Batch ID: R47088	RunNo: 47088
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502383 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	2.1		2.000		103	70	130			
Surr: Dibromofluoromethane	2.4		2.000		122	70	130			
Surr: Toluene-d8	2.0		2.000		99.6	70	130			

Sample ID: 1711506-001amsd	SampType: MSD	TestCode: EPA Method 8260B: VOLATILES
Client ID: Potter BGT	Batch ID: R47088	RunNo: 47088
Prep Date:	Analysis Date: 11/13/2017	SeqNo: 1502384 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.9	0.20	4.000	0.3284	114	70	130	6.64	20	
Toluene	4.1	0.20	4.000	0.3204	95.4	70	130	6.18	20	
Chlorobenzene	3.8	0.20	4.000	0.03640	88.7	70	130	5.75	20	
1,1-Dichloroethene	4.8	0.20	4.000	0	120	70	130	9.76	20	
Trichloroethene (TCE)	4.4	0.20	4.000	0.03720	110	70	130	7.25	20	
Surr: 1,2-Dichloroethane-d4	2.4		2.000		121	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.000		101	70	130	0	0	
Surr: Dibromofluoromethane	2.4		2.000		120	70	130	0	0	
Surr: Toluene-d8	2.0		2.000		97.6	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1711506
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: lcs-34973	SampType: LCS	TestCode: EPA Method 8270C: PAHs
Client ID: LCSW	Batch ID: 34973	RunNo: 47113
Prep Date: 11/14/2017	Analysis Date: 11/14/2017	SeqNo: 1503513 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	79.4	28.6	113			
1-Methylnaphthalene	16	0.50	20.00	0	79.5	27	113			
2-Methylnaphthalene	16	0.50	20.00	0	77.0	26.3	112			
Acenaphthylene	16	0.50	20.00	0	77.5	36.2	114			
Acenaphthene	16	0.50	20.00	0	80.1	35.6	116			
Fluorene	16	0.50	20.00	0	81.2	38.4	116			
Phenanthrene	18	0.50	20.00	0	91.0	42.3	119			
Anthracene	18	0.50	20.00	0	90.0	42.2	117			
Fluoranthene	18	0.50	20.00	0	90.7	42.5	118			
Pyrene	17	0.50	20.00	0	87.4	40.8	121			
Benz(a)anthracene	17	0.50	20.00	0	84.6	43	118			
Chrysene	17	0.50	20.00	0	82.7	39.4	119			
Benzo(b)fluoranthene	18	0.50	20.00	0	88.9	47.8	115			
Benzo(k)fluoranthene	17	0.50	20.00	0	85.1	40.5	120			
Benzo(a)pyrene	17	0.50	20.00	0	84.0	41.6	116			
Dibenz(a,h)anthracene	18	0.50	20.00	0	87.7	48.6	115			
Benzo(g,h,i)perylene	18	0.50	20.00	0	92.1	42	119			
Indeno(1,2,3-cd)pyrene	18	0.50	20.00	0	92.3	42.6	118			
Surr: n-hexadecane	75		87.60		86.1	34.2	111			
Surr: Benzo(e)pyrene	18		20.00		89.2	39.3	124			

Sample ID: lcsd-34973	SampType: LCSD	TestCode: EPA Method 8270C: PAHs
Client ID: LCSSD02	Batch ID: 34973	RunNo: 47113
Prep Date: 11/14/2017	Analysis Date: 11/14/2017	SeqNo: 1503514 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	77.1	28.6	113	2.94	40.7	
1-Methylnaphthalene	15	0.50	20.00	0	75.1	27	113	5.69	30.4	
2-Methylnaphthalene	15	0.50	20.00	0	72.8	26.3	112	5.61	25.5	
Acenaphthylene	15	0.50	20.00	0	76.3	36.2	114	1.56	34.1	
Acenaphthene	16	0.50	20.00	0	75.8	35.6	116	5.52	32.5	
Fluorene	16	0.50	20.00	0	77.6	38.4	116	4.28	28	
Phenanthrene	17	0.50	20.00	0	86.3	42.3	119	6.47	37.4	
Anthracene	17	0.50	20.00	0	83.3	42.2	117	7.73	36.2	
Fluoranthene	17	0.50	20.00	0	85.6	42.5	118	5.79	26.6	
Pyrene	17	0.50	20.00	0	83.7	40.8	121	4.32	28.8	
Benz(a)anthracene	17	0.50	20.00	0	83.5	43	118	1.31	25.1	
Chrysene	16	0.50	20.00	0	80.4	39.4	119	2.82	23.3	
Benzo(b)fluoranthene	17	0.50	20.00	0	86.6	47.8	115	5.01	22.8	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1711508
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: lcsd-34973	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 34973	RunNo: 47113							
Prep Date: 11/14/2017	Analysis Date: 11/14/2017	SeqNo: 1503514	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	16	0.50	20.00	0	78.8	40.5	120	7.69	30.9	
Benzo(a)pyrene	17	0.50	20.00	0	84.4	41.5	115	0.591	23.2	
Dibenz(a,h)anthracene	17	0.50	20.00	0	84.5	46.6	115	3.72	26.5	
Benzo(g,h,i)perylene	16	0.50	20.00	0	80.1	42	119	4.44	30.7	
Indeno(1,2,3-cd)pyrene	17	0.50	20.00	0	87.3	42.9	118	5.46	25.4	
Surr: N-Hexatriacontane	78		87.60		85.3	34.2	111	0	0	
Surr: Benzo(a)pyrene	17		20.00		86.4	39.3	124	0	0	

Sample ID: mb-34973	SampType: MBLK	TestCode: EPA Method 8270C: PAHs							
Client ID: PBW	Batch ID: 34973	RunNo: 47113							
Prep Date: 11/14/2017	Analysis Date: 11/14/2017	SeqNo: 1503515	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-Hexatriacontane	54		87.60		61.6	34.2	111			
Surr: Benzo(a)pyrene	12		20.00		61.4	39.3	124			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1711508
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: MB-35088	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 35088	RunNo: 47282							
Prep Date: 11/20/2017	Analysis Date: 11/21/2017	SeqNo: 1508211	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-35088	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 35088	RunNo: 47282							
Prep Date: 11/20/2017	Analysis Date: 11/21/2017	SeqNo: 1508212	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	80.4	80	120			

Sample ID: 1711508-001CMS	SampType: MS	TestCode: EPA Method 7470: Mercury							
Client ID: Potter BGT	Batch ID: 35088	RunNo: 47282							
Prep Date: 11/20/2017	Analysis Date: 11/21/2017	SeqNo: 1508216	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.0002167	81.3	75	125			

Sample ID: 1711508-001CMSD	SampType: MSD	TestCode: EPA Method 7470: Mercury							
Client ID: Potter BGT	Batch ID: 35088	RunNo: 47282							
Prep Date: 11/20/2017	Analysis Date: 11/21/2017	SeqNo: 1508219	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.0002167	81.0	75	125	0	20	

Qualifiers:

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1711508
04-Dec-17

Client: Souder, Miller and Associates
Project: Potter CS

Sample ID: MB-35055	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 35055	RunNo: 47331							
Prep Date: 11/17/2017	Analysis Date: 11/27/2017	SeqNo: 1510192	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-35055	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 35055	RunNo: 47331							
Prep Date: 11/17/2017	Analysis Date: 11/27/2017	SeqNo: 1510193	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.53	0.020	0.5000	0	106	80	120			
Barium	0.49	0.020	0.5000	0	98.4	80	120			
Cadmium	0.50	0.0020	0.5000	0	99.0	80	120			
Chromium	0.49	0.0060	0.5000	0	98.9	80	120			
Selenium	0.50	0.050	0.5000	0	100	80	120			
Silver	0.10	0.0050	0.1000	0	101	80	120			

Sample ID: MB-35055	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 35055	RunNo: 47331							
Prep Date: 11/17/2017	Analysis Date: 11/27/2017	SeqNo: 1510489	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0050								

Sample ID: LCS-35055	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 35055	RunNo: 47331							
Prep Date: 11/17/2017	Analysis Date: 11/27/2017	SeqNo: 1510490	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.49	0.0050	0.5000	0	98.4	80	120			

Qualifiers:

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- P Sample pH Not In Range
- PQL Practical Quantitative Limit
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HALL ENVIRONMENTAL ANALYSIS LABORATORY
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM | Work Order Number: 1711508 | RcptNo: 1

Received By: Anne Thorne 11/9/2017 7:00:00 AM
Completed By: Ashley Gallegos 11/9/2017 11:05:00 AM
Reviewed By: 11/9/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? N/A
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐ Checked by: DJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑
Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:
17. Additional remarks:
18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: SMA

Mailing Address: 401 W Broadway, Farmington NM 87401

Phone #: 505 325-7535

email or Fax#: Ashley.maxwell@...

Turn-Around Time: X Standard ☐ Rush

Project Name: Potter CS

Project Manager: Ashley Maxwell

Sampler: Randy Watson

Sample Temperature: 1.0

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
	1130	H2O	Potter BGT	Various	Various	1711506 -001

Analysis Request: BTEX + MTBE + TMB's (8021); BTEX + MTBE + TPH (Gas only); TPH 8015B (GRO / DRO / MRO); TPH (Method 418.1); EDB (Method 504.1); PAH's (8310 or 8270SIMS) X; RCRA 8 Metals TCLP X; Anions (F, Cl, NO3, NO2, PO4, SO4); 8081 Pesticides / 8082 PCB's; 8260B (VOA) X; 8270 (Semi-VOA); Air Bubbles (Y or N)

Remarks: Full List 8260 / Report TCLP Compounds at Limits / Invoice To Tom Long Enterprise / cc: Tom Long

Relinquished by / Received by / Date / Time: 1750; 0700

11-17-17

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Kutz Compressor Station

3. Location of Material (Street Address, City, State or ULSTR):
UL N Section 31 Township 29 North Range 12 West: 36.723088, -108.088655, San Juan County, NM

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 100 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 471 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, ______________, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Triple S Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: [signature] TITLE: Operator DATE: 11/17/17
SIGNATURE: ______ TELEPHONE NO. (505) 334-6186
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 16, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Kutz CS OrderNo.: 1710E55

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/27/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1710E55
Date Reported: 11/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates **Client Sample ID:** Kutz BGT
Project: Kutz CS **Collection Date:** 10/26/2017 2:30:00 PM
Lab ID: 1710E55-001 **Matrix:** AQUEOUS **Received Date:** 10/27/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY							Analyst: JLF
Mercury	ND	0.00020		mg/L	1	11/9/2017 5:00:30 PM	34923
EPA 6010B: TOTAL RECOVERABLE METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	11/6/2017 8:57:26 AM	34816
Barium	ND	100		mg/L	1	11/6/2017 8:57:26 AM	34816
Cadmium	ND	1.0		mg/L	1	11/6/2017 8:57:26 AM	34816
Chromium	ND	5.0		mg/L	1	11/6/2017 8:57:26 AM	34816
Lead	ND	5.0		mg/L	1	11/6/2017 8:57:26 AM	34816
Selenium	ND	1.0		mg/L	1	11/6/2017 8:57:26 AM	34816
Silver	ND	5.0		mg/L	1	11/6/2017 8:57:26 AM	34816
EPA METHOD 8270C: PAHS							Analyst: DAM
Naphthalene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
1-Methylnaphthalene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
2-Methylnaphthalene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Acenaphthylene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Acenaphthene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Fluorene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Phenanthrene	ND	50	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Anthracene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Fluoranthene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Pyrene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Benz(a)anthracene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Chrysene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Benzo(b)fluoranthene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Benzo(k)fluoranthene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Benzo(a)pyrene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Dibenz(a,h)anthracene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Benzo(g,h,i)perylene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Indeno(1,2,3-cd)pyrene	ND	25	D	µg/L	10	11/14/2017 12:04:21 PM	34769
Surr: N-hexadecane	[illegible]	[illegible]	[illegible]	%Rec	10	11/14/2017 12:04:21 PM	34769
Surr: Benzo(e)pyrene	0	[illegible]	[illegible]	%Rec	10	11/14/2017 12:04:21 PM	34769
EPA METHOD 8260B: VOLATILES							Analyst: RAA
Benzene	240	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Toluene	470	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Ethylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2,4-Trimethylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,3,5-Trimethylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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Analytical Report
Lab Order 1710E55
Date Reported: 11/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Kutz BGT
Project: Kutz CS
Collection Date: 10/26/2017 2:30:00 PM
Lab ID: 1710E55-001
Matrix: AQUEOUS
Received Date: 10/27/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Naphthalene	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
1-Methylnaphthalene	ND	200		µg/L	50	10/31/2017 6:20:00 AM	A46753
2-Methylnaphthalene	ND	200		µg/L	50	10/31/2017 6:20:00 AM	A46753
Acetone	ND	500		µg/L	50	10/31/2017 6:20:00 AM	A46753
Bromobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Bromodichloromethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Bromoform	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Bromomethane	ND	150		µg/L	50	10/31/2017 6:20:00 AM	A46753
2-Butanone	ND	500		µg/L	50	10/31/2017 6:20:00 AM	A46753
Carbon disulfide	ND	300		µg/L	50	10/31/2017 6:20:00 AM	A46753
Carbon Tetrachloride	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Chlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Chloroethane	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
Chloroform	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Chloromethane	ND	150		µg/L	50	10/31/2017 6:20:00 AM	A46753
2-Chlorotoluene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
4-Chlorotoluene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
cis-1,2-DCE	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
cis-1,3-Dichloropropene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
Dibromochloromethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Dibromomethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2-Dichlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,3-Dichlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,4-Dichlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Dichlorodifluoromethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1-Dichloroethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1-Dichloroethene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2-Dichloropropane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,3-Dichloropropane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
2,2-Dichloropropane	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1-Dichloropropene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Hexachlorobutadiene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
2-Hexanone	ND	500		µg/L	50	10/31/2017 6:20:00 AM	A46753
Isopropylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
4-Isopropyltoluene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
4-Methyl-2-pentanone	ND	500		µg/L	50	10/31/2017 6:20:00 AM	A46753
Methylene Chloride	ND	150		µg/L	50	10/31/2017 6:20:00 AM	A46753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
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- H Holding times for preparation or analysis exceeded
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- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1710E55
Date Reported: 11/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Kutz BGT
Project: Kutz CS
Collection Date: 10/26/2017 2:30:00 PM
Lab ID: 1710E55-001
Matrix: AQUEOUS
Received Date: 10/27/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: RAA
n-Butylbenzene	ND	150		µg/L	50	10/31/2017 6:20:00 AM	A46753
n-Propylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
sec-Butylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Styrene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
tert-Butylbenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
Tetrachloroethene (PCE)	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
trans-1,2-DCE	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
trans-1,3-Dichloropropene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2,3-Trichlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2,4-Trichlorobenzene	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1,1-Trichloroethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,1,2-Trichloroethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Trichloroethene (TCE)	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Trichlorofluoromethane	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
1,2,3-Trichloropropane	ND	100		µg/L	50	10/31/2017 6:20:00 AM	A46753
Vinyl chloride	ND	50		µg/L	50	10/31/2017 6:20:00 AM	A46753
Xylenes, Total	210	75		µg/L	50	10/31/2017 6:20:00 AM	A46753
Surr: 1,2-Dichloroethene-d4	98.1	70-130		%Rec	50	10/31/2017 6:20:00 AM	A46753
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	50	10/31/2017 6:20:00 AM	A46753
Surr: Dibromofluoromethane	103	70-130		%Rec	50	10/31/2017 6:20:00 AM	A46753
Surr: Toluene-d8	97.4	70-130		%Rec	50	10/31/2017 6:20:00 AM	A46753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- PQL Practical Quantitative Limit
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: 100ng lcs2 SampType: LCS TestCode: EPA Method 8260B: VOLATILES
Client ID: LCSW Batch ID: A46753 RunNo: 46753
Prep Date: Analysis Date: 10/31/2017 SeqNo: 1489928 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	19	1.0	20.00	0	94.5	70	130			
Chlorobenzene	19	1.0	20.00	0	96.0	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID: rb2 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW Batch ID: A46753 RunNo: 46753
Prep Date: Analysis Date: 10/31/2017 SeqNo: 1489929 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:
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- P Sample pH Not In Range
- PQL Practical Quantitative Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: rb2 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW Batch ID: A46753 RunNo: 46753
Prep Date: Analysis Date: 10/31/2017 SeqNo: 1489929 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	3.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:
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- P Sample pH Not In Range
- PQL Practical Quantitative Limit
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- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: rb2	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: A46763	RunNo: 46763							
Prep Date:	Analysis Date: 10/31/2017	SeqNo: 1489929	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.4	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.5	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: lcs-34769	SampType: LCS	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSW	Batch ID: 34769	RunNo: 47113							
Prep Date: 11/2/2017	Analysis Date: 11/14/2017	SeqNo: 1503152	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	79.9	28.6	113			
1-Methylnaphthalene	14	0.50	20.00	0	67.9	27	113			
2-Methylnaphthalene	15	0.50	20.00	0	73.2	26.3	112			
Acenaphthylene	17	0.50	20.00	0	83.3	36.2	114			
Acenaphthene	18	0.50	20.00	0	88.7	35.6	116			
Fluorene	18	0.50	20.00	0	89.0	38.4	116			
Phenanthrene	18	1.0	20.00	0	88.8	42.3	118			
Anthracene	17	0.50	20.00	0	86.9	42.2	117			
Fluoranthene	18	0.50	20.00	0	90.1	42.5	118			
Pyrene	17	0.50	20.00	0	84.2	40.8	121			
Benz(a)anthracene	20	0.50	20.00	0	97.7	43	118			
Chrysene	17	0.50	20.00	0	86.9	39.4	119			
Benzo(b)fluoranthene	19	0.50	20.00	0	93.3	47.8	115			
Benzo(k)fluoranthene	19	0.50	20.00	0	95.8	40.5	120			
Benzo(e)pyrene	18	0.50	20.00	0	92.5	41.5	115			
Dibenz(a,h)anthracene	18	0.50	20.00	0	89.5	46.8	115			
Benzo(g,h,i)perylene	19	0.50	20.00	0	90.8	42	119			
Indeno(1,2,3-cd)pyrene	18	0.50	20.00	0	87.7	42.9	118			
Surr: N-hexadecane	71		87.60		81.3	34.2	111			
Surr: Benzo(e)pyrene	17		20.00		85.1	39.3	124			

Sample ID: lcsd-34769	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 34769	RunNo: 47113							
Prep Date: 11/2/2017	Analysis Date: 11/14/2017	SeqNo: 1503153	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	17	0.50	20.00	0	82.7	28.6	113	3.44	40.7	
1-Methylnaphthalene	17	0.50	20.00	0	82.8	27	113	19.8	38.4	
2-Methylnaphthalene	15	0.50	20.00	0	75.0	26.3	112	2.43	25.5	
Acenaphthylene	16	0.50	20.00	0	82.0	36.2	114	1.57	34.1	
Acenaphthene	17	0.50	20.00	0	84.5	35.6	116	4.85	32.1	
Fluorene	17	0.50	20.00	0	84.7	38.4	116	4.95	28	
Phenanthrene	17	1.0	20.00	0	83.3	42.3	118	6.39	37.4	
Anthracene	16	0.50	20.00	0	80.7	42.2	117	7.40	36.2	
Fluoranthene	17	0.50	20.00	0	85.8	42.5	118	4.89	26.6	
Pyrene	17	0.50	20.00	0	84.9	40.8	121	0.826	26.8	
Benz(a)anthracene	17	0.50	20.00	0	86.9	43	118	11.7	25.1	
Chrysene	16	0.50	20.00	0	81.1	39.4	119	6.90	23.3	
Benzo(b)fluoranthene	17	0.50	20.00	0	85.6	47.8	115	8.61	22.5	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: lcsd-34769	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 34769	RunNo: 47113							
Prep Date: 11/2/2017	Analysis Date: 11/14/2017	SeqNo: 1503153	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	17	0.50	20.00	0	85.5	40.5	120	11.2	30.9	
Benzo(e)pyrene	17	0.50	20.00	0	84.4	41.5	115	9.16	23.2	
Dibenz(a,h)anthracene	18	0.50	20.00	0	88.6	46.8	115	1.01	26.5	
Benzo(g,h,i)perylene	17	0.50	20.00	0	87.0	42	119	4.27	30.7	
Indeno(1,2,3-cd)pyrene	18	0.50	20.00	0	89.6	42.9	118	2.14	25.4	
Surr: N-hexadecane	74		87.60		84.8	34.2	111	0	0	
Surr: Benzo(e)pyrene	17		20.00		83.1	39.3	124	0	0	

Sample ID: mb-34769	SampType: MBLK	TestCode: EPA Method 8270C: PAHs							
Client ID: PBW	Batch ID: 34769	RunNo: 47113							
Prep Date: 11/2/2017	Analysis Date: 11/14/2017	SeqNo: 1503154	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	1.0								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(e)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	60		87.60		68.2	34.2	111			
Surr: Benzo(e)pyrene	15		20.00		73.6	39.3	124			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: MB-34923	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 34923	RunNo: 47017							
Prep Date: 11/9/2017	Analysis Date: 11/9/2017	SeqNo: 1500290	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-34923	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 34923	RunNo: 47017							
Prep Date: 11/9/2017	Analysis Date: 11/9/2017	SeqNo: 1500291	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	104	80	120			

Sample ID: 1710E55-001CMS	SampType: MS	TestCode: EPA Method 7470: Mercury							
Client ID: Kutz BGT	Batch ID: 34923	RunNo: 47017							
Prep Date: 11/9/2017	Analysis Date: 11/9/2017	SeqNo: 1500293	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0.0001159	78.3	75	125			

Sample ID: 1710E55-001CMSD	SampType: MSD	TestCode: EPA Method 7470: Mercury							
Client ID: Kutz BGT	Batch ID: 34923	RunNo: 47017							
Prep Date: 11/9/2017	Analysis Date: 11/9/2017	SeqNo: 1500294	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0.0001159	78.3	75	125	0.227	20	

Qualifiers:

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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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W	Sample container temperature is out of limit as specified		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: MB-34816 | SampType: MBLK | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: PBW | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495802 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LLLCS-34816 | SampType: LCSLL | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: BatchQC | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495803 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.020	0.02000	0	133	50	150			
Barium	ND	0.020	0.002000	0	121	50	150			
Cadmium	0.0021	0.0020	0.002000	0	106	50	150			
Chromium	0.0067	0.0060	0.006000	0	112	50	150			
Lead	ND	0.0050	0.005000	0	57.2	50	150			
Selenium	0.057	0.050	0.05000	0	113	50	150			
Silver	ND	0.0050	0.005000	0	99.4	50	150			

Sample ID: LCS-34816 | SampType: LCS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: LCSW | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495804 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.52	0.020	0.5000	0	105	80	120			
Barium	0.49	0.020	0.5000	0	98.4	80	120			
Cadmium	0.49	0.0020	0.5000	0	98.9	80	120			
Chromium	0.49	0.0060	0.5000	0	98.9	80	120			
Lead	0.50	0.0050	0.5000	0	99.2	80	120			
Selenium	0.52	0.050	0.5000	0	104	80	120			
Silver	0.10	0.0050	0.1000	0	102	80	120			

Sample ID: 1710E55-001CMS | SampType: MS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: Kutz BGT | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495834 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.57	0.020	0.5000	0.02075	109	75	125			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
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- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710E55
16-Nov-17

Client: Souder, Miller and Associates
Project: Kutz CS

Sample ID: 1710E55-001CMS | SampType: MS | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: Kutz BGT | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495834 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.020	0.5000	0.01230	101	75	125			
Cadmium	0.50	0.0020	0.5000	0.002240	99.6	75	125			
Chromium	0.52	0.0060	0.5000	0.009240	101	75	125			
Lead	0.51	0.0050	0.5000	0	102	75	125			
Selenium	0.60	0.050	0.5000	0.02856	114	75	125			
Silver	0.10	0.0050	0.1000	0	102	75	125			

Sample ID: 1710E55-001CMSD | SampType: MSD | TestCode: EPA 6010B: Total Recoverable Metals
Client ID: Kutz BGT | Batch ID: 34816 | RunNo: 46888
Prep Date: 11/4/2017 | Analysis Date: 11/6/2017 | SeqNo: 1495835 | Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.58	0.020	0.5000	0.02075	111	75	125	1.35	20	
Barium	0.52	0.020	0.5000	0.01230	101	75	125	0.162	20	
Cadmium	0.51	0.0020	0.5000	0.002240	101	75	125	0.997	20	
Chromium	0.52	0.0060	0.5000	0.009240	102	75	125	0.597	20	
Lead	0.51	0.0050	0.5000	0	102	75	125	0.769	20	
Selenium	0.61	0.050	0.5000	0.02856	117	75	125	2.79	20	
Silver	0.10	0.0050	0.1000	0	101	75	125	0.345	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM | Work Order Number: 1710E55 | RcptNo: 1

Received By: Sophia Campuzano 10/27/2017 8:00:00 AM
Completed By: Erin Melendrez 10/27/2017 9:22:48 AM
Reviewed By: [signature] 10/27/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
9. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1
(<2 or >12 unless noted)
Adjusted? no
Checked by: DDS

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: | Date:
By Whom: | Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record

Client: Souder Miller Assoc.
Mailing Address: 401 W. Broadway, Farmington NM 87401
Phone #: 505 325-7535
email or Fax#: Ashley Maxwell @ soudermiller.com
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: Kutz CS
Project #:
Project Manager: Ashley Maxwell
Sampler: Ranny Watson
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.9+0.2(CF)=3.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1710E55	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270SIMS)	RCRA 8 Metals TCLP	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/26/17	12:30	H_2O	Kutz BGT	Various	Various	-001						X	X			X		

Date	Time	Relinquished by	Received by	Date	Time
10/26/17	1643	[signature]	[signature]	10/26/17	1643
10/26/17	1946	[signature]	[signature]	10/27/17	0800

Remarks: 8260 Full List Report TCLP Compounds At TCLP Limits
Invoice Tom Long of Enterprise

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

#717

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. **Originating Site:**
Martinez Compressor Station

3. **Location of Material (Street Address, City, State or ULSTR):**
Ul. P Section 16 Township 27 North Range 6 West; 36.566660, -107.464881, San Juan County, NM

4. **Source and Description of Waste:**
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non Hazardous Water from the compressor skids.
Estimated Volume 100 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 40 yd³ (bbls)

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency:*** ☐ ***Monthly*** ☐ ***Weekly*** ☐ ***Per Load***

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: To Be Determined**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12nouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: 11/7/17
SIGNATURE: _____ TELEPHONE NO.: (505)334-6178
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 06, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-7535
FAX

RE: Martinez CS OrderNo.: 1710702

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1710702
Date Reported: 11/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates **Client Sample ID:** Martinez BOT
Project: Martinez CS **Collection Date:** 10/10/2017 12:04:00 PM
Lab ID: 1710702-001 **Matrix:** AQUEOUS **Received Date:** 10/12/2017 7:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: MED
Mercury	ND	0.020		mg/L	1	10/25/2017 9:00:15 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: MED
Arsenic	ND	5.0		mg/L	1	10/18/2017 10:34:52 AM
Barium	ND	100		mg/L	1	10/18/2017 10:34:52 AM
Cadmium	ND	1.0		mg/L	1	10/18/2017 10:34:52 AM
Chromium	ND	5.0		mg/L	1	10/18/2017 10:34:52 AM
Lead	ND	5.0		mg/L	1	10/18/2017 10:34:52 AM
Selenium	ND	1.0		mg/L	1	10/18/2017 10:34:52 AM
Silver	ND	2.0		mg/L	1	10/18/2017 10:34:52 AM
EPA METHOD 8270C: PAHS						Analyst: DAM
Naphthalene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
1-Methylnaphthalene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
2-Methylnaphthalene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Acenaphthylene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Acenaphthene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Fluorene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Phenanthrene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Anthracene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Fluoranthene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Pyrene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Benz(a)anthracene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Chrysene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Benzo(b)fluoranthene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Benzo(k)fluoranthene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Benzo(a)pyrene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Dibenz(a,h)anthracene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Benzo(g,h,i)perylene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Indeno(1,2,3-cd)pyrene	ND	5.0	D	µg/L	1	10/19/2017 2:15:28 PM
Surr: N-Hexadecane	50.8	34.2-111	D	%Rec	1	10/19/2017 2:15:28 PM
Surr: Benzo(e)pyrene	69.9	39.3-124	D	%Rec	1	10/19/2017 2:15:28 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50		mg/L	200	10/13/2017 8:40:00 PM
Toluene	0.46	0.20		mg/L	200	10/13/2017 8:40:00 PM
Ethylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2-Dichloroethene (EDC)	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1710702
Date Reported: 11/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates **Client Sample ID:** Martinez BOT
Project: Martinez CS **Collection Date:** 10/10/2017 12:04:00 PM
Lab ID: 1710702-001 **Matrix:** AQUEOUS **Received Date:** 10/12/2017 7:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Naphthalene	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
1-Methylnaphthalene	ND	0.80		mg/L	200	10/13/2017 8:40:00 PM
2-Methylnaphthalene	ND	0.80		mg/L	200	10/13/2017 8:40:00 PM
Acetone	ND	2.0		mg/L	200	10/13/2017 8:40:00 PM
Bromobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Bromodichloromethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Bromoform	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Bromomethane	ND	0.60		mg/L	200	10/13/2017 8:40:00 PM
2-Butanone	ND	2.0		mg/L	200	10/13/2017 8:40:00 PM
Carbon disulfide	ND	2.0		mg/L	200	10/13/2017 8:40:00 PM
Carbon Tetrachloride	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Chlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Chloroethane	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
Chloroform	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Chloromethane	ND	0.60		mg/L	200	10/13/2017 8:40:00 PM
2-Chlorotoluene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
4-Chlorotoluene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
cis-1,2-DCE	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
cis-1,3-Dichloropropene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2-Dibromo-3-chloropropane	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
Dibromochloromethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Dibromomethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2-Dichlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,3-Dichlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,4-Dichlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Dichlorodifluoromethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1-Dichloroethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1-Dichloroethene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2-Dichloropropane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,3-Dichloropropane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
2,2-Dichloropropane	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
1,1-Dichloropropene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Hexachlorobutadiene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
2-Hexanone	ND	2.0		mg/L	200	10/13/2017 8:40:00 PM
Isopropylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
4-Isopropyltoluene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
4-Methyl-2-pentanone	ND	2.0		mg/L	200	10/13/2017 8:40:00 PM
Methylene Chloride	ND	0.60		mg/L	200	10/13/2017 8:40:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix
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Analytical Report
Lab Order 1710702
Date Reported: 11/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Martinez BGT
Project: Martinez CS
Collection Date: 10/10/2017 12:04:00 PM
Lab ID: 1710702-001
Matrix: AQUEOUS
Received Date: 10/12/2017 7:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
n-Butylbenzene	ND	0.60		mg/L	200	10/13/2017 8:40:00 PM
n-Propylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
sec-Butylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Styrene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
tert-Butylbenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
Tetrachloroethene (PCE)	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
trans-1,2-DCE	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
trans-1,3-Dichloropropene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1,1-Trichloroethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,1,2-Trichloroethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Trichloroethene (TCE)	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Trichlorofluoromethane	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
1,2,3-Trichloropropane	ND	0.40		mg/L	200	10/13/2017 8:40:00 PM
Vinyl chloride	ND	0.20		mg/L	200	10/13/2017 8:40:00 PM
Xylenes, Total	ND	0.30		mg/L	200	10/13/2017 8:40:00 PM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	200	10/13/2017 8:40:00 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	200	10/13/2017 8:40:00 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	200	10/13/2017 8:40:00 PM
Surr: Toluene-d8	95.9	70-130		%Rec	200	10/13/2017 8:40:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: 100ng lcs | SampType: LCS4 | TestCode: EPA Method 8260B: VOLATILES
Client ID: BatchQC | Batch ID: R46343 | RunNo: 46343
Prep Date: | Analysis Date: 10/13/2017 | SeqNo: 1476097 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	98.1	70	130			
Ethylbenzene	20	1.0	20.00	0	99.5	70	130			
Methyl tert-butyl ether (MTBE)	40	1.0	40.00	0	101	70	130			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	95.5	70	130			
1,3,5-Trimethylbenzene	19	1.0	20.00	0	94.7	70	130			
1,2-Dichloroethane (EDC)	20	1.0	20.00	0	97.9	62.2	145			
1,2-Dibromoethane (EDB)	20	1.0	20.00	0	98.9	70	130			
Naphthalene	18	2.0	20.00	0	89.1	70	130			
1-Methylnaphthalene	18	4.0	20.00	0	90.8	60	140			
2-Methylnaphthalene	14	4.0	20.00	0	70.2	60	140			
Acetone	35	10	40.00	0	88.6	60	140			
Bromobenzene	20	1.0	20.00	0	99.7	70	130			
Bromodichloromethane	21	1.0	20.00	0	103	70	130			
Bromoform	20	1.0	20.00	0	98.0	70	130			
Bromomethane	13	3.0	20.00	0	65.5	60	140			
2-Butanone	42	10	40.00	0	104	60	140			
Carbon disulfide	38	10	40.00	0	96.0	60	140			
Carbon Tetrachloride	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
Chloroethane	20	2.0	20.00	0	98.7	60	140			
Chloroform	21	1.0	20.00	0	103	70	130			
Chloromethane	21	3.0	20.00	0	103	60	140			
2-Chlorotoluene	19	1.0	20.00	0	94.5	70	130			
4-Chlorotoluene	19	1.0	20.00	0	95.4	70	130			
cis-1,2-DCE	21	1.0	20.00	0	105	70	130			
cis-1,3-Dichloropropene	19	1.0	20.00	0	96.9	70	130			
1,2-Dibromo-3-chloropropane	19	2.0	20.00	0	95.2	70	130			
Dibromochloromethane	18	1.0	20.00	0	94.5	70	130			
Dibromomethane	21	1.0	20.00	0	104	70	130			
1,2-Dichlorobenzene	19	1.0	20.00	0	95.2	70	130			
1,3-Dichlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,4-Dichlorobenzene	19	1.0	20.00	0	95.6	57.2	141			
Dichlorodifluoromethane	21	1.0	20.00	0	106	60	140			
1,1-Dichloroethane	21	1.0	20.00	0	103	52.6	157			
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
1,2-Dichloropropane	21	1.0	20.00	0	105	63.7	138			
1,3-Dichloropropane	20	1.0	20.00	0	98.0	70	130			
2,2-Dichloropropane	21	2.0	20.00	0	105	70	130			

Qualifiers:
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: rb | SampType: MBLK | TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW | Batch ID: R46343 | RunNo: 46343
Prep Date: | Analysis Date: 10/13/2017 | SeqNo: 1476098 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: rb | SampType: MBLK | TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW | Batch ID: R46343 | RunNo: 46343
Prep Date: | Analysis Date: 10/13/2017 | SeqNo: 1476098 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.3	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.4	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: lcs-34414	SampType: LCS	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSW	Batch ID: 34414	RunNo: 46486							
Prep Date: 10/16/2017	Analysis Date: 10/19/2017	SeqNo: 1480925	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	19	0.50	20.00	0	92.9	28.6	113			
1-Methylnaphthalene	18	0.50	20.00	0	79.4	27	113			
2-Methylnaphthalene	18	0.50	20.00	0	92.1	26.3	112			
Acenaphthylene	20	0.50	20.00	0	97.5	36.2	114			
Acenaphthene	19	0.50	20.00	0	97.1	35.6	116			
Fluorene	20	0.50	20.00	0	101	38.4	116			
Phenanthrene	18	0.50	20.00	0	92.5	42.5	116			
Anthracene	18	0.50	20.00	0	91.2	42.2	117			
Fluoranthene	19	0.50	20.00	0	94.0	42.5	118			
Pyrene	19	0.50	20.00	0	96.6	40.6	121			
Benz(a)anthracene	20	0.50	20.00	0	99.4	43	118			
Chrysene	19	0.50	20.00	0	94.4	39.4	119			
Benzo(b)fluoranthene	19	0.50	20.00	0	95.0	47.8	115			
Benzo(k)fluoranthene	20	0.50	20.00	0	99.0	40.5	120			
Benzo(a)pyrene	19	0.50	20.00	0	93.1	41.5	115			
Dibenz(a,h)anthracene	19	0.50	20.00	0	93.7	48.6	115			
Benzo(g,h,i)perylene	19	0.50	20.00	0	95.7	42	119			
Indeno(1,2,3-cd)pyrene	19	0.50	20.00	0	94.8	42.9	118			
Surr: N-hexadecane	78		87.60		89.0	34.2	111			
Surr: Benzo(e)pyrene	17		20.00		84.6	39.3	124			

Sample ID: lcsd-34414	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 34414	RunNo: 46486							
Prep Date: 10/16/2017	Analysis Date: 10/19/2017	SeqNo: 1480926	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	19	0.50	20.00	0	95.4	28.6	113	2.66	40.7	
1-Methylnaphthalene	17	0.50	20.00	0	83.3	27	113	4.79	38.4	
2-Methylnaphthalene	20	0.50	20.00	0	98.5	26.3	112	6.72	25.5	
Acenaphthylene	19	0.50	20.00	0	93.1	36.2	114	4.62	34.1	
Acenaphthene	19	0.50	20.00	0	97.0	35.6	116	0.103	32.1	
Fluorene	20	0.50	20.00	0	101	38.4	116	0.297	28	
Phenanthrene	20	0.50	20.00	0	102	42.3	118	9.59	37.4	
Anthracene	20	0.50	20.00	0	101	42.2	117	10.0	36.2	
Fluoranthene	21	0.50	20.00	0	104	42.5	118	9.72	26.6	
Pyrene	20	0.50	20.00	0	101	40.8	121	5.39	26.8	
Benz(a)anthracene	22	0.50	20.00	0	108	43	118	8.86	25.1	
Chrysene	21	0.50	20.00	0	103	39.4	119	9.10	23.3	
Benzo(b)fluoranthene	20	0.50	20.00	0	100	47.8	115	5.33	22.5	

Qualifiers:

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: lcsd-34414	SampType: LCSD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batch ID: 34414	RunNo: 46486							
Prep Date: 10/16/2017	Analysis Date: 10/19/2017	SeqNo: 1480926	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(g,h,i)perylene	21	0.50	20.00	0	105	40.5	120	5.50	30.9	
Benzo(a)pyrene	20	0.50	20.00	0	101	41.5	115	7.94	23.2	
Dibenz(a,h)anthracene	20	0.50	20.00	0	99.2	48.6	115	5.70	26.5	
Benzo(g,h,i)perylene	20	0.50	20.00	0	102	42	119	6.76	30.7	
Indeno(1,2,3-cd)pyrene	20	0.50	20.00	0	98.3	42.9	118	3.63	25.4	
Surr: N-hexadecane	75		87.60		85.7	34.2	111	0	0	
Surr: Benzo(e)pyrene	17		20.00		86.0	39.3	124	0	0	

Sample ID: mb-34414	SampType: MBLK	TestCode: EPA Method 8270C: PAHs							
Client ID: PBW	Batch ID: 34414	RunNo: 46486							
Prep Date: 10/16/2017	Analysis Date: 10/19/2017	SeqNo: 1480927	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	78		87.60		88.6	34.2	111			
Surr: Benzo(e)pyrene	19		20.00		96.7	39.3	124			

Qualifiers:

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: MB-34396	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 34396	RunNo: 46515							
Prep Date: 10/24/2017	Analysis Date: 10/25/2017	SeqNo: 1484756	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-34396	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 34396	RunNo: 46515							
Prep Date: 10/24/2017	Analysis Date: 10/25/2017	SeqNo: 1484759	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0046	0.00020	0.005000	0	92.9	80	120			

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710702
06-Nov-17

Client: Souder, Miller and Associates
Project: Martinez CS

Sample ID: MB-34449	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 34449	RunNo: 46437							
Prep Date: 10/17/2017	Analysis Date: 10/18/2017	SeqNo: 1479313	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-34449	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 34449	RunNo: 46437							
Prep Date: 10/17/2017	Analysis Date: 10/18/2017	SeqNo: 1479314	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.53	0.020	0.5000	0	107	80	120			
Barium	0.50	0.020	0.5000	0	99.7	80	120			
Cadmium	0.51	0.0020	0.5000	0	102	80	120			
Chromium	0.50	0.0060	0.5000	0	101	80	120			
Lead	0.50	0.0050	0.5000	0	99.3	80	120			
Selenium	0.52	0.050	0.5000	0	104	80	120			
Silver	0.11	0.0050	0.1000	0	106	80	120			

Sample ID: LLLCS-34449	SampType: LCSLL	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: BatchQC	Batch ID: 34449	RunNo: 46437							
Prep Date: 10/17/2017	Analysis Date: 10/18/2017	SeqNo: 1479315	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020	0.02000	0	91.4	50	150			
Barium	ND	0.020	0.02000	0	133	50	150			
Cadmium	0.0022	0.0020	0.002000	0	110	50	150			
Chromium	0.0069	0.0060	0.006000	0	116	50	150			
Lead	ND	0.0050	0.005000	0	50.8	50	150			
Selenium	0.054	0.050	0.05000	0	108	50	150			
Silver	0.0053	0.0050	0.005000	0	107	50	150			

Qualifiers:

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM | Work Order Number: 1710702 | RcptNo: 1

Received By: Anna Thorne 10/12/2017 7:05:00 AM
Completed By: Anna Thorne 10/12/2017 12:41:56 PM
Reviewed By: DDS 10/12/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☑ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ~~NO~~ No ~~☐~~ ☒
9. Was preservative added to bottles? Yes ☒ No ~~☐~~ NA ☐
10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☑
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐ # of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted? NaOH
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐ Checked by: KB

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

17. Additional remarks: Fe, metals analyses, 1mL HNO3 was added to cooler. Sample was held 24 hrs prior to analysis. 1555 10/12/17 KB

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

9/26/17

District I 1625 N. French Dr., Hobbs, NM 88240
District II 1301 W. Grand Avenue, Artesia, NM 88210
District III 1000 Rio Brazos Road, Aztec, NM 87410
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

"Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection."

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. **Originating Site:**
MAPL White Lakes Pumping Station

3. **Location of Material (Street Address, City, State or ULSTR):**
UL B Section 16 Township 9S North Range 29 East; 33.539365, -103.987745

4. **Source and Description of Waste:**
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains
Description: Non Exempt/Non-Hazardous Water from the compressor skids
Estimated Volume 80 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 93 yd³ (bbls)

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Lung, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Lung, representative for Enterprise Products Operating authorizes Agua Moss, LLC to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. **Transporter: To Be Determined**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12wch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:
☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: William Clayton TITLE: Operator DATE: 9/26/17
SIGNATURE: _____ TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 16, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Caprock BGT OrderNo.: 1704C71

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1704C71**
Date Reported: **5/16/2017**

CLIENT: Souder, Miller and Associates
Project: Caprock BGT
Lab ID: 1704C71-001 **Matrix:** AQUEOUS

Client Sample ID: Caprock BGT
Collection Date: 4/26/2017 2:15:00 PM
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY							Analyst: **MED**
Mercury	ND	0.00020		mg/L	1	5/8/2017 3:39:07 PM	31669
EPA 6010B: TOTAL RECOVERABLE METALS							Analyst: **MED**
Arsenic	ND	5.0		mg/L	1	5/9/2017 11:27:58 AM	31602
Barium	ND	100		mg/L	1	5/9/2017 11:27:58 AM	31602
Cadmium	ND	1.0		mg/L	1	5/9/2017 11:27:58 AM	31602
Chromium	ND	5.0		mg/L	1	5/9/2017 11:27:58 AM	31602
Lead	ND	5.0		mg/L	1	5/9/2017 11:27:58 AM	31602
Selenium	ND	1.0		mg/L	1	5/9/2017 11:27:58 AM	31602
Silver	ND	5.0		mg/L	1	5/9/2017 11:27:58 AM	31602
EPA METHOD 8270C: PAHS							Analyst: **DAM**
Naphthalene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
1-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
2-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Acenaphthylene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Acenaphthene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Fluorene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Phenanthrene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Anthracene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Fluoranthene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Pyrene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Benz(a)anthracene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Chrysene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Benzo(b)fluoranthene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Benzo(k)fluoranthene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Benzo(a)pyrene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Dibenz(a,h)anthracene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Benzo(g,h,i)perylene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Indeno(1,2,3-cd)pyrene	ND	0.50		µg/L	1	5/10/2017 3:04:56 PM	31520
Surr: n-Nitrobenzene	59.7	15-178		%Rec	1	5/10/2017 3:04:56 PM	31520
Surr: Benzo(e)pyrene	72.4	15-198		%Rec	1	5/10/2017 3:04:56 PM	31520
EPA METHOD 8260B: VOLATILES							Analyst: **rds**
Benzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Toluene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Ethylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Methyl tert-butyl ether (MTBE)	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2,4-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,3,5-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2-Dichloroethane (EDC)	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix
B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C71
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Caprock BGT
Project: Caprock BGT
Collection Date: 4/26/2017 2:15:00 PM
Lab ID: 1704C71-001
Matrix: AQUEOUS
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: rda
1,2-Dibromoethane (EDB)	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
Naphthalene	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
1-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 6:00:00 PM	R42451
2-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 6:00:00 PM	R42451
Acetone	ND	2000		µg/L	200	4/28/2017 6:00:00 PM	R42451
Bromobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Bromodichloromethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Bromoform	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Bromomethane	ND	600		µg/L	200	4/28/2017 6:00:00 PM	R42451
2-Butanone	ND	2000		µg/L	200	4/28/2017 6:00:00 PM	R42451
Carbon disulfide	ND	2000		µg/L	200	4/28/2017 6:00:00 PM	R42451
Carbon Tetrachloride	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Chlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Chloroethane	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
Chloroform	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Chloromethane	ND	600		µg/L	200	4/28/2017 6:00:00 PM	R42451
2-Chlorotoluene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
4-Chlorotoluene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
cis-1,2-DCE	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
cis-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2-Dibromo-3-chloropropane	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
Dibromomethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,3-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,4-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Dichlorodifluoromethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1-Dichloroethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1-Dichloroethene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2-Dichloropropane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,3-Dichloropropane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
2,2-Dichloropropane	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1-Dichloropropene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Hexachlorobutadiene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
2-Hexanone	ND	2000		µg/L	200	4/28/2017 6:00:00 PM	R42451
Isopropylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
4-Isopropyltoluene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
4-Methyl-2-pentanone	ND	2000		µg/L	200	4/28/2017 6:00:00 PM	R42451
Methylene Chloride	ND	600		µg/L	200	4/28/2017 6:00:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C71
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Client Sample ID: Caprock BGT
Project: Caprock BGT
Collection Date: 4/26/2017 2:15:00 PM
Lab ID: 1704C71-001
Matrix: AQUEOUS
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: rda
n-Butylbenzene	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
n-Propylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
sec-Butylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Styrene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
tert-Butylbenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1,1,2-Tetrachloroethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1,2,2-Tetrachloroethane	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
Tetrachloroethene (PCE)	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
trans-1,2-DCE	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
trans-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2,3-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2,4-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1,1-Trichloroethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,1,2-Trichloroethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Trichloroethene (TCE)	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Trichlorofluoromethane	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
1,2,3-Trichloropropane	ND	400		µg/L	200	4/28/2017 6:00:00 PM	R42451
Vinyl chloride	ND	200		µg/L	200	4/28/2017 6:00:00 PM	R42451
Xylenes, Total	ND	300		µg/L	200	4/28/2017 6:00:00 PM	R42451
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	200	4/28/2017 6:00:00 PM	R42451
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	200	4/28/2017 6:00:00 PM	R42451
Surr: Dibromofluoromethane	100	70-130		%Rec	200	4/28/2017 6:00:00 PM	R42451
Surr: Toluene-d8	102	70-130		%Rec	200	4/28/2017 6:00:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C71
16-May-17

Client: Souder, Miller and Associates
Project: Caprock BGT

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334830	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	23	1.0	20.00	0	114	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C71
16-May-17

Client: Souder, Miller and Associates
Project: Caprock BGT

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromodichloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C71
16-May-17

Client: Souder, Miller and Associates
Project: Caprock BGT

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R42451	RunNo: 42451						
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1134831	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

9/26/17

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
MAPL Caprock Pumping Station

3. Location of Material (Street Address, City, State or ULSTR):
U/L D Section 27 Township 12S North Range 33 East; 33.256475, -103.609407

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non-Hazardous Water from the compressor skids.
Estimated Volume 80 yd³ bbls Known Volume (to be entered by the operator at the end of the haul) 29 yd³ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long, representative for Enterprise Products Operating authorizes Agua Moss, LLC to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12nuch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: William Weber TITLE: Operator DATE: 9/29/17
SIGNATURE: _____ TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 16, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: White Lakes Station OrderNo.: 1704C69

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report; both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1704C69**
Date Reported: **5/16/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: White Lakes Station
Lab ID: 1704C69-001 **Matrix:** AQUEOUS

Client Sample ID: White Lakes BGT
Collection Date: 4/26/2017 12:00:00 PM
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY							Analyst: **MED**
Mercury	ND	0.00030		mg/L	1	5/8/2017 5:16:05 PM	31603
EPA 6010B: TOTAL RECOVERABLE METALS							Analyst: **MED**
Arsenic	ND	5.0		mg/L	1	5/9/2017 11:24:51 AM	31602
Barium	ND	100		mg/L	1	5/9/2017 11:24:51 AM	31602
Cadmium	ND	1.0		mg/L	1	5/9/2017 11:24:51 AM	31602
Chromium	ND	5.0		mg/L	1	5/9/2017 11:24:51 AM	31602
Lead	ND	5.0		mg/L	1	5/9/2017 11:24:51 AM	31602
Selenium	ND	1.0		mg/L	1	5/9/2017 11:24:51 AM	31602
Silver	ND	5.0		mg/L	1	5/9/2017 11:24:51 AM	31602
EPA METHOD 8270C: PAHS							Analyst: **DAM**
Naphthalene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
1-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
2-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Acenaphthylene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Acenaphthene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Fluorene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Phenanthrene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Anthracene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Pyrene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Benz(a)anthracene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Chrysene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Benzo(b)fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Benzo(k)fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Benzo(a)pyrene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Dibenz(a,h)anthracene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Benzo(g,h,i)perylene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Indeno(1,2,3-cd)pyrene	ND	0.50		µg/L	1	5/10/2017 2:16:30 PM	31520
Surr: N-hexadecane	70.2	15-178		%Rec	1	5/10/2017 2:16:30 PM	31520
Surr: Benzo(e)pyrene	88.8	15-198		%Rec	1	5/10/2017 2:16:30 PM	31520
EPA METHOD 8260B: VOLATILES							Analyst: **rde**
Benzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Toluene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Ethylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Methyl tert-butyl ether (MTBE)	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2,4-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,3,5-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2-Dichloroethane (EDC)	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C69
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: White Lakes Station
Lab ID: 1704C69-001
Matrix: AQUEOUS
Client Sample ID: White Lakes BGT
Collection Date: 4/26/2017 12:00:00 PM
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: rde
1,2-Dibromoethane (EDB)	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Naphthalene	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
1-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 5:12:00 PM	R42451
2-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 5:12:00 PM	R42451
Acetone	ND	2000		µg/L	200	4/28/2017 5:12:00 PM	R42451
Bromobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Bromodichloromethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Bromoform	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Bromomethane	ND	800		µg/L	200	4/28/2017 5:12:00 PM	R42451
2-Butanone	ND	2000		µg/L	200	4/28/2017 5:12:00 PM	R42451
Carbon disulfide	ND	2000		µg/L	200	4/28/2017 5:12:00 PM	R42451
Carbon Tetrachloride	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Chlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Chloroethane	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
Chloroform	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Chloromethane	ND	600		µg/L	200	4/28/2017 5:12:00 PM	R42451
2-Chlorotoluene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
4-Chlorotoluene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
cis-1,2-DCE	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
cis-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2-Dibromo-3-chloropropane	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
Dibromochloromethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Dibromomethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,3-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,4-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Dichlorodifluoromethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1-Dichloroethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1-Dichloroethene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2-Dichloropropane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,3-Dichloropropane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
2,2-Dichloropropane	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Hexachlorobutadiene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
2-Hexanone	ND	2000		µg/L	200	4/28/2017 5:12:00 PM	R42451
Isopropylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
4-Isopropyltoluene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
4-Methyl-2-pentanone	ND	2000		µg/L	200	4/28/2017 5:12:00 PM	R42451
Methylene Chloride	ND	600		µg/L	200	4/28/2017 5:12:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C69
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates
Project: White Lakes Station
Lab ID: 1704C69-001
Matrix: AQUEOUS
Client Sample ID: White Lakes BGT
Collection Date: 4/26/2017 12:00:00 PM
Received Date: 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: rde
n-Butylbenzene	ND	600		µg/L	200	4/28/2017 5:12:00 PM	R42451
n-Propylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
sec-Butylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Styrene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
tert-Butylbenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1,1,2-Tetrachloroethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1,2,2-Tetrachloroethane	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
Tetrachloroethene (PCE)	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
trans-1,2-DCE	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
trans-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2,3-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2,4-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1,1-Trichloroethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,1,2-Trichloroethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Trichloroethene (TCE)	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Trichlorofluoromethane	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
1,2,3-Trichloropropane	ND	400		µg/L	200	4/28/2017 5:12:00 PM	R42451
Vinyl chloride	ND	200		µg/L	200	4/28/2017 5:12:00 PM	R42451
Xylenes, Total	ND	300		µg/L	200	4/28/2017 5:12:00 PM	R42451
Surr: 1,2-Dichloroethane-d4	87.0	70-130		%Rec	200	4/28/2017 5:12:00 PM	R42451
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	200	4/28/2017 5:12:00 PM	R42451
Surr: Dibromofluoromethane	96.0	70-130		%Rec	200	4/28/2017 5:12:00 PM	R42451
Surr: Toluene-d8	102	70-130		%Rec	200	4/28/2017 5:12:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
15-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334830	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	23	1.0	20.00	0	114	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,3,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
15-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch ID: R42451	RunNo: 42451							
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:
- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R42451	RunNo: 42451						
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: lcs-31520	SampType: LCS	TestCode: EPA Method 8270C: PAHs						
Client ID: LCSW	Batch ID: 31520	RunNo: 42709						
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343408	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	60.4	37.4	120			
1-Methylnaphthalene	13	0.50	20.00	0	64.7	39.3	121			
2-Methylnaphthalene	12	0.50	20.00	0	59.2	37.8	122			
Acenaphthylene	12	0.50	20.00	0	61.1	37	124			
Acenaphthene	13	0.50	20.00	0	67.3	35.6	123			
Fluorene	14	0.50	20.00	0	68.2	35.2	122			
Phenanthrene	13	0.50	20.00	0	67.9	36.6	122			
Anthracene	13	0.50	20.00	0	66.2	37.5	125			
Fluoranthene	13	0.50	20.00	0	67.1	37.4	131			
Pyrene	13	0.50	20.00	0	66.4	27.5	140			
Benz(a)anthracene	13	0.50	20.00	0	67.0	25.4	141			
Chrysene	13	0.50	20.00	0	62.9	33.6	155			
Benzo(b)fluoranthene	14	0.50	20.00	0	70.5	39	153			
Benzo(k)fluoranthene	14	0.50	20.00	0	67.7	38	154			
Benzo(a)pyrene	14	0.50	20.00	0	68.1	36.6	153			
Dibenz(a,h)anthracene	14	0.50	20.00	0	71.1	39.7	155			
Benzo(g,h,i)perylene	14	0.50	20.00	0	70.8	39.6	154			
Indeno(1,2,3-cd)pyrene	14	0.50	20.00	0	69.1	19.1	153			
Surr: N-hexadecane	59		87.60		67.3	15	176			
Surr: Benzo(e)pyrene	16		20.00		78.0	15	198			

Sample ID: lcsd-31520	SampType: LCSD	TestCode: EPA Method 8270C: PAHs						
Client ID: LCSS02	Batch ID: 31520	RunNo: 42709						
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343410	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	60.8	37.4	120	0.680	20	
1-Methylnaphthalene	13	0.50	20.00	0	62.7	39.3	121	3.14	28.8	
2-Methylnaphthalene	12	0.50	20.00	0	59.2	37.8	122	0	23.8	
Acenaphthylene	13	0.50	20.00	0	65.1	37	124	6.34	28.8	
Acenaphthene	13	0.50	20.00	0	67.2	35.6	123	0.149	27	
Fluorene	14	0.50	20.00	0	69.2	35.2	122	1.46	25.7	
Phenanthrene	14	0.50	20.00	0	70.6	36.6	122	4.93	20	
Anthracene	14	0.50	20.00	0	69.2	37.5	125	4.43	21.2	
Fluoranthene	14	0.50	20.00	0	70.4	37.4	131	4.80	21.8	
Pyrene	15	0.50	20.00	0	75.2	27.5	140	12.4	31.1	
Benz(a)anthracene	14	0.50	20.00	0	69.0	25.4	141	2.94	26.6	
Chrysene	13	0.50	20.00	0	67.1	33.6	155	6.46	21.2	
Benzo(b)fluoranthene	15	0.50	20.00	0	73.7	39	153	3.02	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: lcsd-31520	SampType: LCSD	TestCode: EPA Method 8270C: PAHs						
Client ID: LCSS02	Batch ID: 31520	RunNo: 42709						
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343410	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	15	0.50	20.00	0	77.7	38	154	13.8	21	
Benzo(e)pyrene	14	0.50	20.00	0	72.5	36.6	153	6.26	24.8	
Dibenz(a,h)anthracene	15	0.50	20.00	0	74.7	39.7	155	4.94	26	
Benzo(g,h,i)perylene	15	0.50	20.00	0	74.9	39.6	154	5.49	20	
Indeno(1,2,3-cd)pyrene	14	0.50	20.00	0	72.2	19.1	153	4.39	20	
Surr: N-hexadecane	66		87.60		75.3	15	176	0	0	
Surr: Benzo(e)pyrene	16		20.00		80.3	15	198	0	0	

Sample ID: mb-31520	SampType: MBLK	TestCode: EPA Method 8270C: PAHs						
Client ID: PBW	Batch ID: 31520	RunNo: 42709						
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343412	Units: µg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(e)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	66		87.60		75.9	15	176			
Surr: Benzo(e)pyrene	17		20.00		84.2	15	198			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: MB-31603	SampType: MBLK	TestCode: EPA Method 7470: Mercury						
Client ID: PBW	Batch ID: 31603	RunNo: 42613						
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340483	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-31603	SampType: LCS	TestCode: EPA Method 7470: Mercury						
Client ID: LCSW	Batch ID: 31603	RunNo: 42613						
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340484	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	94.8	80	120			

Sample ID: LCSD-31603	SampType: LCSD	TestCode: EPA Method 7470: Mercury						
Client ID: LCSS02	Batch ID: 31603	RunNo: 42613						
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340485	Units: mg/L					

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120	1.39	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: MB-31602	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340442	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-31602	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340443	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.52	0.020	0.5000	0	104	80	120			
Cadmium	0.50	0.0020	0.5000	0	100	80	120			
Chromium	0.50	0.0060	0.5000	0	100	80	120			
Lead	0.50	0.0050	0.5000	0	101	80	120			
Selenium	0.51	0.050	0.5000	0	102	80	120			
Silver	0.10	0.0050	0.1000	0	102	80	120			

Sample ID: LCSD-31602	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340444	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.020	0.5000	0	103	80	120	3.46	20	
Cadmium	0.51	0.0020	0.5000	0	102	80	120	0.818	20	
Chromium	0.51	0.0060	0.5000	0	102	80	120	1.51	20	
Lead	0.51	0.0050	0.5000	0	103	80	120	1.65	20	
Selenium	0.50	0.050	0.5000	0	101	80	120	1.51	20	
Silver	0.10	0.0050	0.1000	0	104	80	120	2.08	20	

Sample ID: MB-31602	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340458	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C69
16-May-17

Client: Souder, Miller and Associates
Project: White Lakes Station

Sample ID: LCS-31602	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340457	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	101	80	120			

Sample ID: LCSD-31602	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340458	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	101	80	120	0.206	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

9/6/17

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
MAPL Mesa Pumping Station

3. Location of Material (Street Address, City, State or ULSTR):
UL H Section 13 Township 4S North Range 32 East; 33.964397, -104.581023

4. Source and Description of Waste:
Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.
Description: Non Exempt/Non-Hazardous Water from the compressor skids.
Estimated Volume 80 yd³ bbls Known Volume (to be entered by the operator at the end of the haul) 25 bbls yd³

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long, representative for Enterprise Products Operating authorizes Agua Moss, LLC to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Agua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: To Be Determined

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: ***Agua Moss, LLC - Permit #: NM-01-009**
Address of Facility: **SW/4 NW/4 Section 2, Township 29N, Range 12nouch Mesa, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: William Clarke TITLE: Operator DATE: 9/29/17
SIGNATURE: _____ TELEPHONE NO.: 505-334-6186
Surface Waste Management Facility Authorized Agent

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 16, 2017

Ashley Maxwell
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Mesa Station BGT OrderNo.: 1704C70

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/28/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 – NMED-DWB Cert #NM9425 – NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1704C70
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Mesa Station
Project: Mesa Station BGT | **Collection Date:** 4/26/2017 9:40:00 AM
Lab ID: 1704C70-001 | **Matrix:** AQUEOUS | **Received Date:** 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	5/8/2017 3:18:07 PM	31603
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	**MED**
Arsenic	ND	5.0		mg/L	1	5/9/2017 11:26:24 AM	31602
Barium	ND	100		mg/L	1	5/9/2017 11:26:24 AM	31602
Cadmium	ND	1.0		mg/L	1	5/9/2017 11:26:24 AM	31602
Chromium	ND	5.0		mg/L	1	5/9/2017 11:26:24 AM	31602
Lead	ND	5.0		mg/L	1	5/9/2017 11:26:24 AM	31602
Selenium	ND	1.0		mg/L	1	5/9/2017 11:26:24 AM	31602
Silver	ND	5.0		mg/L	1	5/9/2017 11:26:24 AM	31602
EPA METHOD 8270C: PAHS						Analyst:	**DAM**
Naphthalene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
1-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
2-Methylnaphthalene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Acenaphthylene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Acenaphthene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Fluorene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Phenanthrene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Anthracene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Pyrene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Benz(a)anthracene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Chrysene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Benzo(b)fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Benzo(k)fluoranthene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Benzo(a)pyrene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Dibenz(a,h)anthracene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Benzo(g,h,i)perylene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Indeno(1,2,3-cd)pyrene	ND	0.50		µg/L	1	5/10/2017 2:40:43 PM	31520
Surr: N-hexadecane	68.4	15-176		%Rec	1	5/10/2017 2:40:43 PM	31520
Surr: Benzo(e)pyrene	67.4	15-196		%Rec	1	5/10/2017 2:40:43 PM	31520
EPA METHOD 8260B: VOLATILES						Analyst:	**rde**
Benzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Toluene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Ethylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Methyl tert-butyl ether (MTBE)	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2,4-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,3,5-Trimethylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2-Dichloroethane (EDC)	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C70
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Mesa Station
Project: Mesa Station BGT | **Collection Date:** 4/26/2017 9:40:00 AM
Lab ID: 1704C70-001 | **Matrix:** AQUEOUS | **Received Date:** 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**rde**
1,2-Dibromoethane (EDB)	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Naphthalene	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
1-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 5:36:00 PM	R42451
2-Methylnaphthalene	ND	800		µg/L	200	4/28/2017 5:36:00 PM	R42451
Acetone	ND	2000		µg/L	200	4/28/2017 5:36:00 PM	R42451
Bromobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Bromodichloromethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Bromoform	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Bromomethane	ND	600		µg/L	200	4/28/2017 5:36:00 PM	R42451
2-Butanone	ND	2000		µg/L	200	4/28/2017 5:36:00 PM	R42451
Carbon disulfide	ND	2000		µg/L	200	4/28/2017 5:36:00 PM	R42451
Carbon Tetrachloride	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Chlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Chloroethane	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
Chloroform	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Chloromethane	ND	600		µg/L	200	4/28/2017 5:36:00 PM	R42451
2-Chlorotoluene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
4-Chlorotoluene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
cis-1,2-DCE	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
cis-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2-Dibromo-3-chloropropane	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
Dibromochloromethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Dibromomethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,3-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,4-Dichlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Dichlorodifluoromethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1-Dichloroethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1-Dichloroethene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2-Dichloropropane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,3-Dichloropropane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
2,2-Dichloropropane	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Hexachlorobutadiene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
2-Hexanone	ND	2000		µg/L	200	4/28/2017 5:36:00 PM	R42451
Isopropylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
4-Isopropyltoluene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
4-Methyl-2-pentanone	ND	2000		µg/L	200	4/28/2017 5:36:00 PM	R42451
Methylene Chloride	ND	600		µg/L	200	4/28/2017 5:36:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
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- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1704C70
Date Reported: 5/16/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates | **Client Sample ID:** Mesa Station
Project: Mesa Station BGT | **Collection Date:** 4/26/2017 9:40:00 AM
Lab ID: 1704C70-001 | **Matrix:** AQUEOUS | **Received Date:** 4/28/2017 9:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**rde**
n-Butylbenzene	ND	600		µg/L	200	4/28/2017 5:36:00 PM	R42451
n-Propylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
sec-Butylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Styrene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
tert-Butylbenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1,1,2-Tetrachloroethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1,2,2-Tetrachloroethane	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
Tetrachloroethene (PCE)	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
trans-1,2-DCE	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
trans-1,3-Dichloropropene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2,3-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2,4-Trichlorobenzene	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1,1-Trichloroethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,1,2-Trichloroethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Trichloroethene (TCE)	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Trichlorofluoromethane	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
1,2,3-Trichloropropane	ND	400		µg/L	200	4/28/2017 5:36:00 PM	R42451
Vinyl chloride	ND	200		µg/L	200	4/28/2017 5:36:00 PM	R42451
Xylenes, Total	ND	300		µg/L	200	4/28/2017 5:36:00 PM	R42451
Surr: 1,2-Dichloroethane-d4	87.0	70-130		%Rec	200	4/28/2017 5:36:00 PM	R42451
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	200	4/28/2017 5:36:00 PM	R42451
Surr: Dibromofluoromethane	99.7	70-130		%Rec	200	4/28/2017 5:36:00 PM	R42451
Surr: Toluene-d8	104	70-130		%Rec	200	4/28/2017 5:36:00 PM	R42451

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C70
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: 100ng lcs | SampType: LCS | TestCode: EPA Method 8260B: VOLATILES
Client ID: LCSW | Batch ID: R42451 | RunNo: 42451
Prep Date: | Analysis Date: 4/28/2017 | SeqNo: 1334830 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	23	1.0	20.00	0	114	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: rb | SampType: MBLK | TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW | Batch ID: R42451 | RunNo: 42451
Prep Date: | Analysis Date: 4/28/2017 | SeqNo: 1334831 | Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C70
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: R42451	RunNo: 42451
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C70
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: R42451	RunNo: 42451
Prep Date:	Analysis Date: 4/28/2017	SeqNo: 1334831 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

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- S % Recovery outside of range due to dilution or matrix
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- E Value above quantitation range
- J Analyte detected below quantitation limits
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C70
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: lcs-31520	SampType: LCS	TestCode: EPA Method 8270C: PAHs
Client ID: LCSW	Batch ID: 31520	RunNo: 42709
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343408 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	60.4	37.4	120			
1-Methylnaphthalene	13	0.50	20.00	0	64.7	39.3	121			
2-Methylnaphthalene	12	0.50	20.00	0	59.2	37.8	122			
Acenaphthylene	12	0.50	20.00	0	61.1	37	124			
Acenaphthene	13	0.50	20.00	0	67.3	35.6	123			
Fluorene	14	0.50	20.00	0	68.2	35.2	122			
Phenanthrene	13	0.50	20.00	0	67.2	38.8	122			
Anthracene	13	0.50	20.00	0	66.2	37.5	125			
Fluoranthene	13	0.50	20.00	0	67.1	37.4	131			
Pyrene	13	0.50	20.00	0	66.4	27.5	140			
Benz(a)anthracene	13	0.50	20.00	0	67.0	25.4	141			
Chrysene	13	0.50	20.00	0	62.9	33.6	155			
Benzo(b)fluoranthene	14	0.50	20.00	0	70.5	39	153			
Benzo(k)fluoranthene	14	0.50	20.00	0	67.7	38	154			
Benzo(a)pyrene	14	0.50	20.00	0	68.1	38.6	153			
Dibenz(a,h)anthracene	[illegible]	0.50	20.00	0	71.1	39.7	155			
Benzo(g,h,i)perylene	14	0.50	20.00	0	70.9	39.6	154			
Indeno(1,2,3-cd)pyrene	14	0.50	20.00	0	69.1	19.1	153			
Surr: N-hexadecane	59		87.60		67.3	15	176			
Surr: Benzo(e)pyrene	16		20.00		78.0	15	198			

Sample ID: lcsd-31520	SampType: LCSD	TestCode: EPA Method 8270C: PAHs
Client ID: LCSS02	Batch ID: 31520	RunNo: 42709
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343410 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	60.8	37.4	120	0.660	20	
1-Methylnaphthalene	13	0.50	20.00	0	62.7	39.3	121	3.14	26.8	
2-Methylnaphthalene	12	0.50	20.00	0	59.2	37.8	122	0	23.8	
Acenaphthylene	13	0.50	20.00	0	65.1	37	124	6.34	28.6	
Acenaphthene	13	0.50	20.00	0	67.2	35.6	123	0.149	27	
Fluorene	14	0.50	20.00	0	69.2	35.2	122	1.46	25.7	
Phenanthrene	14	0.50	20.00	0	70.6	38.8	122	4.93	20	
Anthracene	14	0.50	20.00	0	69.2	37.5	125	4.43	21.2	
Fluoranthene	14	0.50	20.00	0	70.4	37.4	131	4.80	21.8	
Pyrene	15	0.50	20.00	0	75.2	27.5	140	12.4	31.1	
Benz(a)anthracene	14	0.50	20.00	0	69.0	25.4	141	2.94	26.6	
Chrysene	13	0.50	20.00	0	67.1	33.6	155	6.46	21.2	
Benzo(b)fluoranthene	15	0.50	20.00	0	72.7	39	153	3.07	20	

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C70
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: lcsd-31520	SampType: LCSD	TestCode: EPA Method 8270C: PAHs
Client ID: LCSS02	Batch ID: 31520	RunNo: 42709
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343410 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	16	0.50	20.00	0	77.7	38	154	13.8	21	
Benzo(a)pyrene	14	0.50	20.00	0	72.5	38.6	153	6.26	24.8	
Dibenz(a,h)anthracene	15	0.50	20.00	0	74.7	39.7	155	4.94	26	
Benzo(g,h,i)perylene	15	0.50	20.00	0	74.9	39.6	154	5.49	20	
Indeno(1,2,3-cd)pyrene	14	0.50	20.00	0	72.2	19.1	153	4.39	20	
Surr: N-hexadecane	66		87.60		75.3	15	176	0	0	
Surr: Benzo(e)pyrene	16		20.00		80.3	15	198	0	0	

Sample ID: mb-31520	SampType: MBLK	TestCode: EPA Method 8270C: PAHs
Client ID: PBW	Batch ID: 31520	RunNo: 42700
Prep Date: 5/2/2017	Analysis Date: 5/10/2017	SeqNo: 1343412 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	66		87.60		75.9	15	176			
Surr: Benzo(e)pyrene	17		20.00		84.2	15	198			

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C78
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: MB-31603	SampType: MBLK	TestCode: EPA Method 7470: Mercury							
Client ID: PBW	Batch ID: 31603	RunNo: 42613							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340483	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID: LCS-31603	SampType: LCS	TestCode: EPA Method 7470: Mercury							
Client ID: LCSW	Batch ID: 31603	RunNo: 42613							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340484	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	94.8	80	120			

Sample ID: LCSD-31603	SampType: LCSD	TestCode: EPA Method 7470: Mercury							
Client ID: LCSS02	Batch ID: 31603	RunNo: 42613							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340485	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120	1.39	20	

Qualifiers:

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- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C78
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: MB-31602	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340442	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-31602	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340443	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.020	0.5000	0	100	80	120			
Cadmium	0.50	0.0020	0.5000	0	101	80	120			
Chromium	0.50	0.0060	0.5000	0	100	80	120			
Lead	0.50	0.0050	0.5000	0	101	80	120			
Selenium	0.51	0.050	0.5000	0	102	80	120			
Silver	0.10	0.0050	0.1000	0	102	80	120			

Sample ID: LCSD-31602	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340444	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.020	0.5000	0	103	80	120	2.48	20	
Cadmium	0.51	0.0020	0.5000	0	102	80	120	0.818	20	
Chromium	0.51	0.0060	0.5000	0	102	80	120	1.51	20	
Lead	0.51	0.0050	0.5000	0	103	80	120	1.65	20	
Selenium	0.50	0.050	0.5000	0	101	80	120	1.51	20	
Silver	0.10	0.0050	0.1000	0	104	80	120	2.09	20	

Sample ID: MB-31602	SampType: MBLK	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: PBW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340456	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1704C78
16-May-17

Client: Souder, Miller and Associates
Project: Mesa Station BGT

Sample ID: LCS-31602	SampType: LCS	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSW	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340457	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	101	80	120			

Sample ID: LCSD-31602	SampType: LCSD	TestCode: EPA 6010B: Total Recoverable Metals							
Client ID: LCSS02	Batch ID: 31602	RunNo: 42612							
Prep Date: 5/8/2017	Analysis Date: 5/8/2017	SeqNo: 1340458	Units: mg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	101	80	120	0.208	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified