

UICI - 5

QUARTERLY REPORT (Q3)

2023



November 1, 2023

RE: Sunco Disposal #1 Injection Water Monitoring – 3rd Quarter 2023

This report summarizes sample collection, field screening, and laboratory analysis of the injection water at the Agua Moss LLC Sunco Disposal #1 well for the 4th Quarter 2023. Injection water of the Class I/II Sunco Disposal #1 well is assessed on a quarterly basis in accordance with Paragraph (1) of Subsection B of 20.6.2.5207 New Mexico Administrative Code (NMAC).

Field Activities

Philana Thompson, Merrion Oil & Gas, collected one injection water sample, S-27, from the process line inside the pump building on September 27, 2023. The injection water was discharged directly from 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-27) was field screened for time sensitive parameters including pH, temperature and reduction potential. 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.

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 exposed to environmental factors. 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 corrosivity by pH, oxidation reduction potential (ORP), and total dissolved solids (TDS).

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

Data Evaluation

Laboratory analytical and field screening results report all applicable constituent concentrations below the maximum toxicity characteristic concentrations per 40 Code of Federal Regulation (CFR) 261.24 Table 1 except for benzene. The Sunco Disposal #1 accepts both Class I non-hazardous fluid and Class II exempt oil and gas fluids. The Sunco Disposal #1 therefore occasionally receives Class II fluids with common oil and association constituents, such as benzene, at concentrations in excess of the toxicity characteristic concentrations.

Sincerely,

Philana Thompson
Merriion Oil & Gas Corporation
HSE & Regulatory Compliance Specialist
pthompson@merriion.bz
505-486-1171

Attachments:

*Table 1. Summary of Field Screening and Laboratory Analytical Results
Laboratory Analytical Reports (Hall 2309F96)*

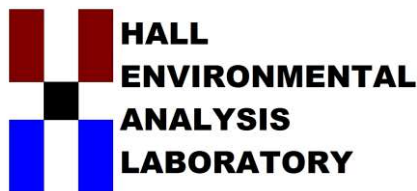
Table 1:
Summary of Field Screening and Laboratory Analytical Results

AGUA MOSS LLC
SUNCO DISPOSAL #1
3RD QUARTER 2023 MONITORING

Sample ID	S-27			
Collection Date	9/27/2023			
Analyte	Field Results	Laboratory Results	Units	Toxicity Characteristic Concentrations
Arsenic	--	ND	mg/L	5.0 mg/L
Barium	--	ND	mg/L	100.0 mg/L
Benzene	--	2.5	mg/L	0.5 mg/L
Cadmium	--	ND	mg/L	1 mg/L
Carbon tetrachloride	--	ND	mg/L	0.5 mg/L
Chlordane	--	ND	mg/L	0.03 mg/L
Chlorobenzene	--	ND	mg/L	100.0 mg/L
Chloroform	--	ND	mg/L	6.0 mg/L
Chromium	--	ND	mg/L	5.0 mg/L
o-Cresol	--	--	mg/L	200.0 mg/L
m+p-Cresol	--	--	mg/L	200.0 mg/L
Cresol	--	ND	mg/L	200.0 mg/L
1,4-Dichlorobenzene	--	ND	mg/L	7.5 mg/L
1,2-Dichloroethane	--	90.7	mg/L	0.5 mg/L
1,1-Dichloroethylene	--	ND	mg/L	0.7 mg/L
2,4-Dinitrotoluene	--	ND	mg/L	0.13 mg/L
Hexachlorobenzene	--	ND	mg/L	0.13 mg/L
Hexachlorobutadiene	--	ND	mg/L	0.5 mg/L
Hexachloroethane	--	ND	mg/L	3.0 mg/L
Lead	--	ND	mg/L	5.0 mg/L
Mercury	--	ND	mg/L	0.2 mg/L
Methylethylketone (Buta	--	ND	mg/L	200.0 mg/L
Nitrobenzene	--	ND	mg/L	2.0 mg/L
Pentachlorophenol	--	ND	mg/L	100.0 mg/L
Pyridine	--	ND	mg/L	5.0 mg/L
Selenium	--	ND	mg/L	1.0 mg/L
Silver	--	ND	mg/L	5.0 mg/L
Tetrachloroethylene	--	ND	mg/L	0.7 mg/L
Trichloroethylene	--	ND	mg/L	0.5 mg/L
2,4,5-Trichlorophenol	--	ND	mg/L	400.0 mg/L
2,4,6-Trichlorophenol	--	ND	mg/L	2.0 mg/L
Vinyl chloride	--	ND	mg/L	0.2 mg/L
Reactive sulfide	--	ND	mg/L	
Reactive cyanide	--	ND	mg/L	
Corrosivity by pH	--	7.25	s.u.	
Ignitability	--	DNF at 170	deg F	
Specific conductance		69,000	µmhos/cm	
Specific gravity	--	1.022		
ORP	94	-84.2	mV	
Fluoride	--	ND	mg/L	
Calcium	--	330	mg/L	
Potassium	--	75	mg/L	
Magnesium	--	100	mg/L	
Bicarbonate (as CaCO3)	--	546.7	mg/L Ca	
Carbonate (as CaCO3)	--	ND	mg/L Ca	
Chloride	--	20,000	mg/L	
Sulfate	--	3.7	mg/L	
Total dissolved solids		36400 D	mg/L	
pH	6.93	7.25		
Bromide	--	79	mg/L	
Temperature	30.1	--	deg C	

Notes: ORP - oxidation reduction potential
mg/L - milligrams per liter
s.u. - standard units
µmhos/cm - micromhos per centimeter
deg F - degrees Fahrenheit
deg C - degrees Celsius
mV - millivolts
DNF - does not flash

Qualifiers: D - sample diluted due to matrix
H - hold time for preparation or analysis exceeded
S - laboratory control spike recovery low



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

October 30, 2023

Philana Thompson
Merrion Oil and Gas
610 Reilly Avenue
Farmington, NM 87401
TEL: (505) 324-5300
FAX: (505) 327-1496

RE: Sunco Disposal 1

OrderNo.: 2309F96

Dear Philana Thompson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/28/2023 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 #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309F96

Date Reported: 10/30/2023

CLIENT: Merrion Oil and Gas

Client Sample ID: S-27 (09/27/23)

Project: Sunco Disposal 1

Collection Date: 9/27/2023 4:00:00 PM

Lab ID: 2309F96-001

Matrix: AQUEOUS

Received Date: 9/28/2023 6:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8081: PESTICIDES TCLP						Analyst: SB
Chlordane	ND	1.5	D	mg/L	10	10/4/2023 2:36:15 PM
Surr: Decachlorobiphenyl	0	40.9-111	SD	%Rec	10	10/4/2023 2:36:15 PM
Surr: Tetrachloro-m-xylene	0	15-107	SD	%Rec	10	10/4/2023 2:36:15 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Fluoride	ND	5.0		mg/L	50	10/11/2023 10:22:03 AM
Chloride	20000	2500	*	mg/L	5000	10/11/2023 10:34:28 AM
Bromide	79	5.0		mg/L	50	10/11/2023 10:22:03 AM
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	9/28/2023 4:06:03 PM
Sulfate	3.7	2.5		mg/L	5	9/28/2023 4:06:03 PM
Nitrate+Nitrite as N	ND	20		mg/L	100	10/11/2023 12:01:19 PM
EPA METHOD 200.7: METALS						Analyst: JRR
Barium	ND	5000	*	mg/L	50	10/5/2023 10:31:24 AM
Cadmium	ND	5.0		mg/L	5	10/3/2023 1:41:17 PM
Chromium	ND	25		mg/L	5	10/3/2023 1:41:17 PM
Silver	ND	0.025		mg/L	5	10/3/2023 1:41:17 PM
Sulfur	9.6	5.0		mg/L	5	10/3/2023 1:41:17 PM
EPA 200.8: METALS						Analyst: bcv
Arsenic	ND	5.0		mg/L	1	10/18/2023 2:12:11 PM
Lead	ND	5.0		mg/L	1	10/18/2023 2:12:11 PM
Selenium	ND	1.0		mg/L	1	10/18/2023 2:12:11 PM
EPA METHOD 245.1: MERCURY						Analyst: tem
Mercury	ND	0.020		mg/L	1	10/13/2023 2:05:09 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: VP
Calcium	330	5.0		mg/L	5	9/29/2023 9:14:40 AM
Magnesium	100	5.0		mg/L	5	9/29/2023 9:14:40 AM
Potassium	75	5.0		mg/L	5	9/29/2023 9:14:40 AM
Sodium	14000	500		mg/L	500	9/29/2023 10:03:27 AM
EPA METHOD 8270C TCLP						Analyst: JME
2-Methylphenol	ND	200		mg/L	1	10/18/2023 5:35:55 PM
3+4-Methylphenol	ND	200		mg/L	1	10/18/2023 5:35:55 PM
2,4-Dinitrotoluene	ND	0.13		mg/L	1	10/18/2023 5:35:55 PM
Hexachlorobenzene	ND	0.13		mg/L	1	10/18/2023 5:35:55 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	10/18/2023 5:35:55 PM
Hexachloroethane	ND	3.0		mg/L	1	10/18/2023 5:35:55 PM
Nitrobenzene	ND	2.0		mg/L	1	10/18/2023 5:35:55 PM
Pentachlorophenol	ND	100		mg/L	1	10/18/2023 5:35:55 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 standard limits. If undiluted results may be estimated.

B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309F96

Date Reported: 10/30/2023

CLIENT: Merrion Oil and Gas

Client Sample ID: S-27 (09/27/23)

Project: Sunco Disposal 1

Collection Date: 9/27/2023 4:00:00 PM

Lab ID: 2309F96-001

Matrix: AQUEOUS

Received Date: 9/28/2023 6:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: JME
Pyridine	ND	5.0		mg/L	1	10/18/2023 5:35:55 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	10/18/2023 5:35:55 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	10/18/2023 5:35:55 PM
Cresols, Total	ND	200		mg/L	1	10/18/2023 5:35:55 PM
Surr: 2-Fluorophenol	26.1	20.8-71.9		%Rec	1	10/18/2023 5:35:55 PM
Surr: Phenol-d5	36.7	16.2-54.5		%Rec	1	10/18/2023 5:35:55 PM
Surr: 2,4,6-Tribromophenol	28.3	18.8-117		%Rec	1	10/18/2023 5:35:55 PM
Surr: Nitrobenzene-d5	67.7	33-85.9		%Rec	1	10/18/2023 5:35:55 PM
Surr: 2-Fluorobiphenyl	49.8	26.3-79.6		%Rec	1	10/18/2023 5:35:55 PM
Surr: 4-Terphenyl-d14	66.6	53.9-124		%Rec	1	10/18/2023 5:35:55 PM
TCLP VOLATILES BY 8260B						Analyst: JR
Benzene	2.5	0.50		mg/L	200	10/4/2023 12:51:49 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	200	10/4/2023 12:51:49 AM
2-Butanone	ND	200		mg/L	200	10/4/2023 12:51:49 AM
Carbon Tetrachloride	ND	0.50		mg/L	200	10/4/2023 12:51:49 AM
Chloroform	ND	6.0		mg/L	200	10/4/2023 12:51:49 AM
1,4-Dichlorobenzene	ND	7.5		mg/L	200	10/4/2023 12:51:49 AM
1,1-Dichloroethene	ND	0.70		mg/L	200	10/4/2023 12:51:49 AM
Tetrachloroethene (PCE)	ND	0.70		mg/L	200	10/4/2023 12:51:49 AM
Trichloroethene (TCE)	ND	0.50		mg/L	200	10/4/2023 12:51:49 AM
Vinyl chloride	ND	0.20		mg/L	200	10/4/2023 12:51:49 AM
Chlorobenzene	ND	100		mg/L	200	10/4/2023 12:51:49 AM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	200	10/4/2023 12:51:49 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	200	10/4/2023 12:51:49 AM
Surr: Dibromofluoromethane	95.1	70-130		%Rec	200	10/4/2023 12:51:49 AM
Surr: Toluene-d8	99.8	70-130		%Rec	200	10/4/2023 12:51:49 AM
SM2510B: SPECIFIC CONDUCTANCE						Analyst: RBC
Conductivity	69000	100		µmhos/c	10	10/3/2023 3:45:23 PM
SM4500-H+B / 9040C: PH						Analyst: RBC
pH	7.46		H	pH units	1	9/29/2023 8:15:09 PM
SM2320B: ALKALINITY						Analyst: RBC
Bicarbonate (As CaCO3)	546.7	20.00		mg/L Ca	1	9/29/2023 8:15:09 PM
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	9/29/2023 8:15:09 PM
Total Alkalinity (as CaCO3)	546.7	20.00		mg/L Ca	1	9/29/2023 8:15:09 PM
SPECIFIC GRAVITY						Analyst: RBC
Specific Gravity	1.022	0			1	10/19/2023 4:03:00 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	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 Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2309F96
Date Reported: 10/30/2023

CLIENT: Merrion Oil and Gas Client Sample ID: S-27 (09/27/23)
Project: Sunco Disposal 1 Collection Date: 9/27/2023 4:00:00 PM
Lab ID: 2309F96-001 Matrix: AQUEOUS Received Date: 9/28/2023 6:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: MCA
Total Dissolved Solids	36400	250	*D	mg/L	1	10/2/2023 2:07:00 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	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 Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

ANALYTICAL REPORT

October 09, 2023

Hall Environmental Analysis Laboratory

Sample Delivery Group: L1661150
Samples Received: 09/29/2023
Project Number:
Description:

Report To: Andy Freeman
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:



John Hawkins
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

ACCOUNT:

Hall Environmental Analysis Laboratory

PROJECT:

SDG:

L1661150

DATE/TIME:

10/09/23 09:56

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Received by OCD: 11/1/2023 10:18:19 AM

1 C

2 S

3 S

4 C

5 S

6 Qc

7 Gl

8 Al

9 Sc

Released to Imaging: 11/9/2023 3:54:47 PM

SAMPLE SUMMARY

Received by OCD: 11/16/23 10:18:19 AM

6 Qc

7 GI

8 AI

9 Sc

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2309F96-001FG S-27 (09/27/23) L1661150-01 GW

Collected by Collected date/time Received date/time
09/27/23 16:00 09/29/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2580	WG2140097	1	10/06/23 16:40	10/06/23 16:40	NTG	Mt. Juliet, TN
Wet Chemistry by Method 4500 CN E-2016	WG2142030	1	10/02/23 11:26	10/02/23 15:55	UNP	Mt. Juliet, TN
Wet Chemistry by Method 4500 S2 D-2011	WG2142413	1	09/30/23 11:55	09/30/23 11:55	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2143715	1	10/05/23 10:35	10/05/23 10:35	EPW	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG2145931	1	10/05/23 21:37	10/05/23 21:37	WOS	Mt. Juliet, TN

CASE NARRATIVE

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



John Hawkins
Project Manager

Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 4500 CN E-2016.
All Reactive Sulfide results reported in the attached report were determined as totals using method 4500 S2 D-2011.

Received by OGD: 11/1/2023 11:13:19 AM

1	C
2	T
3	S
4	C
5	S
6	Qc
7	GI
8	AI
9	Sc

Released to Imaging: 11/9/2023 3:54:47 PM

2309F96-001FG S-27 (09/27/23)

Collected date/time: 09/27/23 16:00

SAMPLE RESULTS - 01

L1661150

Wet Chemistry by Method 2580

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
ORP	-84.2	<u>T8</u>	1	10/06/2023 16:40	WG2140097

Sample Narrative:

L1661150-01 WG2140097: -84.2

Wet Chemistry by Method 4500 CN E-2016

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Reactive Cyanide	mg/l		mg/l			
Reactive Cyanide	ND		0.00500	1	10/02/2023 15:55	WG2142030

Wet Chemistry by Method 4500 S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Reactive Sulfide	ND		0.0500	1	09/30/2023 11:55	WG2142413

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
pH	7.25	<u>T8</u>	1	10/05/2023 10:35	WG2143715

Sample Narrative:

L1661150-01 WG2143715: 7.25 at 20.5C

Wet Chemistry by Method D93/1010A

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	deg F				
Flashpoint	DNF at 170		1	10/05/2023 21:37	WG2145931

Received by OCD: 11/1/2023 14:18:19 AM
1 C
2 T
3 S
4 C
5 S
6 Qc
7 Gl
8 Al
9 Sc

L1661150-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1661150-01		10/06/23 16:40 • (DUP) R3983083-3	10/06/23 16:40		
Original Result		DUP Result	Dilution	DUP Diff	DUP Qualifier
Analyte	mV	mV		mV	mV
ORP	-84.2	-83.4	1	0.000	20

Sample Narrative:
OS: -84.2
DUP: -83.4

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

(LCS) R3983083-1		10/06/23 16:40 • (LCSD) R3983083-2	10/06/23 16:40		
Spike Amount		LCS Result	LCSD Result	LCS Rec.	LCSD Rec.
Analyte	mV	mV	mV	%	%
ORP	97.0	93.9	95.8	96.8	98.8

Rec. Limits	LCS Qualifier	LCSD Qualifier	Diff	Diff Limits
%			mV	mV
90.0-110			1.90	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1661150-01

Method Blank (MB)

(MB) R3980616-1 10/02/23 15:12		MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL		
Analyte	mg/l		mg/l		mg/l		
Reactive Cyanide	U		0.00180		0.00500		

L1660536-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1660536-01 10/02/23 15:19 • (DUP) R3980616-3 10/02/23 15:21		Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l		mg/l		%		%
Reactive Cyanide	ND		ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3980616-2 10/02/23 15:13		Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>		
Analyte	mg/l		mg/l	%	%			
Reactive Cyanide	0.100		0.111	111	87.1-120			

L1660536-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1660536-01 10/02/23 15:19 • (MS) R3980616-4 10/02/23 15:22 • (MSD) R3980616-5 10/02/23 15:23		Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l		mg/l	mg/l	mg/l	%	%		%			%	%
Reactive Cyanide	0.100		ND	0.0604	0.0440	60.4	44.0	1	90.0-110	J6	J3 J6	31.4	20

Sample Narrative:

MS: Spike failure due to matrix
MSD: Spike failure due to matrix

Method Blank (MB)

(MB) R3979894-1 09/30/23 11:36					
MB Result		MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l	mg/l	mg/l	mg/l	
Reactive Sulfide	U	0.0250	0.0500		

Laboratory Control Sample (LCS)

(LCS) R3979894-2 09/30/23 11:38					
Spike Amount		LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Reactive Sulfide	0.500	0.455	91.0	85.0-115	

10/05/23 11:13:19 AM

L1661150-01

L1660343-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1660343-03 10/05/23 10:35 • (DUP) R3982276-2 10/05/23 10:35

Original Result		DUP Result		Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
Analyte	su	su	su			%	%	
pH	6.98	7.05	1	0.998	1			

Sample Narrative:

OS: 6.98 at 20.6C

DUP: 7.05 at 20.9C

L1661446-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1661446-15 10/05/23 10:35 • (DUP) R3982276-3 10/05/23 10:35

Original Result		DUP Result		Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
Analyte	su	su	su			%	%	
pH	7.67	7.74	1	0.909	1			

Sample Narrative:

OS: 7.67 at 20.3C

DUP: 7.74 at 20.6C

Laboratory Control Sample (LCS)

(LCS) R3982276-1 10/05/23 10:35

Spike Amount		LCS Result		LCS Rec.	Rec. Limits	LCS Qualifier	
Analyte	su	su	su			%	%
pH	10.0	10.0	100	99.0-101			

Sample Narrative:

LCS: 10.01 at 21.2C

L1661150-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1661150-01 10/05/23 21:37 • (DUP) R3982616-3 10/05/23 21:37									
Original Result		DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits			
Analyte	deg F	deg F		%		%			
Flashpoint	DNF at 170	DNF at 170	1	0.000		10			

L1662502-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1662502-01 10/05/23 21:37 • (DUP) R3982616-4 10/05/23 21:37									
Original Result		DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	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) R3982616-1 10/05/23 21:37 • (LCSD) R3982616-2 10/05/23 21:37									
Spike Amount		LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD
Analyte	deg F	deg F	deg F	%	%	%			%
Flashpoint	126	127	127	101	101	96.0-104			0.000

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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

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, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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

J3	The associated batch QC was outside the established quality control range for precision.
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.

ACCREDITATIONS & LOCATIONS

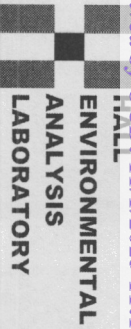
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA—Crypto	TN00003		

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

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

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



CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

Hall Environmental Analysis Laboratory

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975

FAX: 505-345-4107

Website: www.hallenvironmental.com

D149

SUB CONTRACTOR		Pace TN		COMPANY		PACE TN		PHONE		(800) 767-5859		FAX		(615) 758-5859	
ADDRESS		12065 Lebanon Rd		CITY, STATE, ZIP		Mt. Juliet, TN 37122		ACCOUNT #				EMAIL			
ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS								
1	2309F96-001F	S-27 (09/27/23)	500HDPE	Aqueous	9/27/2023 4:00:00 PM	3 RCI	11661150 For								
2	2309F96-001G	S-27 (09/27/23)	125HDP	Aqueous	9/27/2023 4:00:00 PM	1 ORP									

Sample Receipt Checklist

COC Seal Present/Intact: Y N If Applicable

COC Signed/Accurate: Y N VOC Zero Headspace: Y N

Bottles arrive intact: Y N Pres. Correct/Check: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

RA Screen <0.5 mb/hr: Y N

3.4 + 0 = 3.4

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

T# 10841 8346 3565

Relinquished By:	Date	Time	Received By:	Date	Time
	9/28/2023	8:34 AM	Alexa Mitchell	9/29/23	0930
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

TAT: ☒ Standard ☐ RUSH

Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED: ☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples ☐ C Attempt to Cool? ☐

Comments:

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB-77875 SampType: MBLK TestCode: EPA Method 200.7: Metals

Client ID: PBW Batch ID: 77875 RunNo: 100185

Prep Date: 10/2/2023 Analysis Date: 10/3/2023 SeqNo: 3667337 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0030								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Silver	ND	0.0050								

Sample ID: LCSLL-77875 SampType: LCSLL TestCode: EPA Method 200.7: Metals

Client ID: BatchQC Batch ID: 77875 RunNo: 100185

Prep Date: 10/2/2023 Analysis Date: 10/3/2023 SeqNo: 3667338 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0030	0.002000	0	82.2	50	150			
Cadmium	0.0022	0.0020	0.002000	0	109	50	150			
Chromium	ND	0.0060	0.006000	0	95.4	50	150			
Silver	ND	0.0050	0.005000	0	98.8	50	150			

Sample ID: LCS-77875 SampType: LCS TestCode: EPA Method 200.7: Metals

Client ID: LCSW Batch ID: 77875 RunNo: 100185

Prep Date: 10/2/2023 Analysis Date: 10/3/2023 SeqNo: 3667339 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0030	0.5000	0	100	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			
Silver	0.097	0.0050	0.1000	0	97.0	85	115			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MSLCSLL-TL-77875		SampType: LCSLL		TestCode: EPA 200.8: Metals						
Client ID: BatchQC		Batch ID: 77875			RunNo: 100202					
Prep Date: 10/2/2023		Analysis Date: 10/3/2023			SeqNo: 3668331		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.00050	0.0005000	0	66.0	50	150			

Sample ID: MSLCS-77875		SampType: LCS			TestCode: EPA 200.8: Metals					
Client ID: LCSW		Batch ID: 77875			RunNo: 100202					
Prep Date: 10/2/2023		Analysis Date: 10/3/2023			SeqNo: 3668332		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.00050	0.02500	0	99.2	85	115			
Lead	0.012	0.00050	0.01250	0	98.6	85	115			
Selenium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID: MB-77875		SampType: MBLK		TestCode: EPA 200.8: Metals						
Client ID: PBW		Batch ID: 77875			RunNo: 100202					
Prep Date: 10/2/2023		Analysis Date: 10/3/2023			SeqNo: 3668356		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.00050								
Lead	ND	0.00050								
Selenium	ND	0.0010								

Sample ID: MSLCSLL-77875		SampType: LCSLL		TestCode: EPA 200.8: Metals						
Client ID: BatchQC		Batch ID: 77875			RunNo: 100202					
Prep Date: 10/2/2023		Analysis Date: 10/3/2023			SeqNo: 3668357		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050	0.0005000	0	97.6	50	150			
Selenium	ND	0.0010	0.001000	0	53.1	50	150			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB-78090	SampType: MBLK	TestCode: EPA Method 245.1: Mercury
Client ID: PBW	Batch ID: 78090	RunNo: 100458
Prep Date: 10/11/2023	Analysis Date: 10/13/2023	SeqNo: 3680272 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	ND 0.00020	

Sample ID: LCSLL-78090	SampType: LCSLL	TestCode: EPA Method 245.1: Mercury
Client ID: BatchQC	Batch ID: 78090	RunNo: 100458
Prep Date: 10/11/2023	Analysis Date: 10/13/2023	SeqNo: 3680273 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	ND 0.00020 0.0001500	0 69.2 50 150

Sample ID: LCS-78090	SampType: LCS	TestCode: EPA Method 245.1: Mercury
Client ID: LCSW	Batch ID: 78090	RunNo: 100458
Prep Date: 10/11/2023	Analysis Date: 10/13/2023	SeqNo: 3680274 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 96.9 85 115

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 standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R100091	RunNo: 100091								
Prep Date:	Analysis Date: 9/28/2023	SeqNo: 3662905 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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: R100091	RunNo: 100091								
Prep Date:	Analysis Date: 9/28/2023	SeqNo: 3662906 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Orthophosphate (As P)	4.7	0.50	5.000	0	93.3	90	110			
Sulfate	10	0.50	10.00	0	101	90	110			

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R100407	RunNo: 100407								
Prep Date:	Analysis Date: 10/11/2023	SeqNo: 3677917 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R100407	RunNo: 100407								
Prep Date:	Analysis Date: 10/11/2023	SeqNo: 3677918 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			
Chloride	4.6	0.50	5.000	0	92.7	90	110			
Bromide	2.4	0.10	2.500	0	94.5	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.3	90	110			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB-77924

SampType: MBLK

TestCode: EPA Method 8081: Pesticides TCLP

Client ID: PBW

Batch ID: 77924

RunNo: 100229

Prep Date: 10/3/2023

Analysis Date: 10/4/2023

SeqNo: 3669595

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		82.9	40.9	111			
Surr: Tetrachloro-m-xylene	0.0015		0.002500		59.9	15	107			

Sample ID: LCS-77924		SampType: LCS		TestCode: EPA Method 8081: Pesticides TCLP						
Client ID: LCSW		Batch ID: 77924		RunNo: 100229						
Prep Date: 10/3/2023		Analysis Date: 10/4/2023		SeqNo: 3669596			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0021		0.002500		83.0	40.9	111			
Surr: Tetrachloro-m-xylene	0.0015		0.002500		61.4	15	107			

Sample ID: LCSD-77924		SampType: LCSD		TestCode: EPA Method 8081: Pesticides TCLP						
Client ID: LCSS02		Batch ID: 77924		RunNo: 100229						
Prep Date: 10/3/2023		Analysis Date: 10/4/2023		SeqNo: 3669597			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0021		0.002500		84.9	40.9	111	0	0	
Surr: Tetrachloro-m-xylene	0.0017		0.002500		66.1	15	107	0	0	

Sample ID: MB-77924	SampType: MBLK			TestCode: EPA Method 8081: Pesticides TCLP						
Client ID: PBW	Batch ID: 77924			RunNo: 100229						
Prep Date: 10/3/2023	Analysis Date: 10/4/2023			SeqNo: 3669601			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		85.6	40.9	111			
Surr: Tetrachloro-m-xylene	0.0015		0.002500		59.6	15	107			

Sample ID: LCS-77924		SampType: LCS		TestCode: EPA Method 8081: Pesticides TCLP						
Client ID: LCSW		Batch ID: 77924		RunNo: 100229						
Prep Date: 10/3/2023		Analysis Date: 10/4/2023		SeqNo: 3669602		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0021		0.002500		85.7	40.9	111			
Surr: Tetrachloro-m-xylene	0.0015		0.002500		61.0	15	107			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: LCSD-77924

SampType: LCSD

TestCode: EPA Method 8081: Pesticides TCLP

Client ID: LCSS02

Batch ID: 77924

RunNo: 100229

Prep Date: 10/3/2023

Analysis Date: 10/4/2023

SeqNo: 3669603

Units: %Rec

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	0.0022		0.002500		87.9	40.9	111	0	0	
Surr: Tetrachloro-m-xylene	0.0016		0.002500		65.8	15	107	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 standard limits. If undiluted results may be estimated.
- B

Analyte detected in the associated Method Blank
- E

Above Quantitation Range/Estimated Value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: 100ng lcs	SampType: LCS				TestCode: TCLP Volatiles by 8260B					
Client ID: LCSW	Batch ID: TW100184				RunNo: 100184					
Prep Date:	Analysis Date: 10/3/2023				SeqNo: 3666478	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.021	0.0010	0.02000	0	105	70	130			
1,1-Dichloroethene	0.020	0.0010	0.02000	0	101	70	130			
Trichloroethene (TCE)	0.020	0.0010	0.02000	0	100	70	130			
Chlorobenzene	0.022	0.0010	0.02000	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.0096		0.01000		95.8	70	130			
Surr: 4-Bromofluorobenzene	0.010		0.01000		104	70	130			
Surr: Dibromofluoromethane	0.010		0.01000		101	70	130			
Surr: Toluene-d8	0.010		0.01000		100	70	130			

Sample ID: mb	SampType: MBLK				TestCode: TCLP Volatiles by 8260B					
Client ID: PBW	Batch ID: TW100184				RunNo: 100184					
Prep Date:	Analysis Date: 10/3/2023				SeqNo: 3666480	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								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Chlorobenzene	ND	100								
Surr: 1,2-Dichloroethane-d4	0.0091		0.01000		90.6	70	130			
Surr: 4-Bromofluorobenzene	0.010		0.01000		100	70	130			
Surr: Dibromofluoromethane	0.010		0.01000		100	70	130			
Surr: Toluene-d8	0.0099		0.01000		99.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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 Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB-77870	SampType: MBLK			TestCode: EPA Method 8270C TCLP						
Client ID: PBW	Batch ID: 77870			RunNo: 100373						
Prep Date: 10/2/2023	Analysis Date: 10/10/2023			SeqNo: 3686173		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								
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	0.11		0.2000		53.1	20.8	71.9			
Surr: Phenol-d5	0.085		0.2000		42.4	16.2	54.5			
Surr: 2,4,6-Tribromophenol	0.13		0.2000		66.0	18.8	117			
Surr: Nitrobenzene-d5	0.060		0.1000		60.4	33	85.9			
Surr: 2-Fluorobiphenyl	0.052		0.1000		52.0	26.3	79.6			
Surr: 4-Terphenyl-d14	0.091		0.1000		90.7	53.9	124			

Sample ID: LCS-77870	SampType: LCS			TestCode: EPA Method 8270C TCLP						
Client ID: LCSW	Batch ID: 77870			RunNo: 100373						
Prep Date: 10/2/2023	Analysis Date: 10/10/2023			SeqNo: 3686174		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.063	0.00010	0.1000	0	63.0	26.8	92.9			
3+4-Methylphenol	0.13	0.00010	0.2000	0	65.8	23.7	100			
2,4-Dinitrotoluene	0.045	0.00010	0.1000	0	45.5	22.3	71.2			
Hexachlorobenzene	0.064	0.00010	0.1000	0	64.2	26.1	91.6			
Hexachlorobutadiene	0.038	0.00010	0.1000	0	38.4	15	74.2			
Hexachloroethane	0.038	0.00010	0.1000	0	38.1	15	85.4			
Nitrobenzene	0.058	0.00010	0.1000	0	57.8	26.1	89.6			
Pentachlorophenol	0.065	0.00010	0.1000	0	64.8	21.7	89.4			
Pyridine	0.029	0.00010	0.1000	0	29.2	15	68.4			
2,4,5-Trichlorophenol	0.065	0.00010	0.1000	0	65.3	27	97.9			
2,4,6-Trichlorophenol	0.063	0.00010	0.1000	0	62.6	27.9	92.6			
Cresols, Total	0.19	0.00010	0.3000	0	64.9	24.8	97.7			
Surr: 2-Fluorophenol	0.10		0.2000		49.9	20.8	71.9			
Surr: Phenol-d5	0.078		0.2000		38.9	16.2	54.5			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		59.3	18.8	117			

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 standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Released to Imaging: 11/9/2023 3:54:47 PM

Received by OCD: 11/1/2023 11:13:19 AM

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96
30-Oct-23

Client: Merrion Oil and Gas
Project: Sunco Disposal 1

Sample ID: LCS-77870

SampType: LCS

TestCode: EPA Method 8270C TCLP

Client ID: LCSW

Batch ID: 77870

RunNo: 100373

Prep Date: 10/2/2023

Analysis Date: 10/10/2023

SeqNo: 3686174

Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.055		0.1000		55.1	33	85.9			
Surr: 2-Fluorobiphenyl	0.050		0.1000		50.4	26.3	79.6			
Surr: 4-Terphenyl-d14	0.086		0.1000		85.6	53.9	124			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Above Quantitation Range/Estimated Value |
| 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 Limit |
| S % Recovery outside of standard limits. If undiluted results may be estimated. | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96
30-Oct-23

Client: Merrion Oil and Gas
Project: Sunco Disposal 1

Sample ID: LCS-1 99.5uS eC	SampType: LCS	TestCode: SM2510B: Specific Conductance								
Client ID: LCSW	Batch ID: R100201	RunNo: 100201								
Prep Date:	Analysis Date: 10/3/2023	SeqNo: 3668298	Units: µmhos/cm							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	10	99.50	0	104	85	115			

Sample ID: 2309F96-001C DUP	SampType: DUP	TestCode: SM2510B: Specific Conductance								
Client ID: S-27 (09/27/23)	Batch ID: R100201	RunNo: 100201								
Prep Date:	Analysis Date: 10/3/2023	SeqNo: 3668300	Units: µmhos/cm							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	69000	100						0.00577	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 Quantitative Limit
 - S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96

30-Oct-23

Client: Merrion Oil and Gas

Project: Sunco Disposal 1

Sample ID: MB-A	SampType: MBLK		TestCode: EPA Method 6010B: Dissolved Metals							
Client ID: PBW	Batch ID: A100079		RunNo: 100079							
Prep Date:	Analysis Date: 9/29/2023		SeqNo: 3662098		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: A100079		RunNo: 100079							
Prep Date:	Analysis Date: 9/29/2023		SeqNo: 3662100		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	53	1.0	50.00	0	105	80	120			
Magnesium	53	1.0	50.00	0	106	80	120			
Potassium	52	1.0	50.00	0	105	80	120			
Sodium	52	1.0	50.00	0	103	80	120			

Sample ID: LCSD-A	SampType: LCSD		TestCode: EPA Method 6010B: Dissolved Metals							
Client ID: LCSS02	Batch ID: A100079		RunNo: 100079							
Prep Date:	Analysis Date: 9/29/2023		SeqNo: 3662101		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	53	1.0	50.00	0	105	80	120	0.132	20	
Magnesium	53	1.0	50.00	0	106	80	120	0.225	20	
Potassium	52	1.0	50.00	0	104	80	120	0.476	20	
Sodium	52	1.0	50.00	0	104	80	120	0.378	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 Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96
30-Oct-23

Client: Merrion Oil and Gas
Project: Sunco Disposal 1

Sample ID: MB-2 Alk	SampType: MBLK	TestCode: SM2320B: Alkalinity
Client ID: PBW	Batch ID: A100131	RunNo: 100131
Prep Date:	Analysis Date: 9/29/2023	SeqNo: 3664553 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: A100131	RunNo: 100131
Prep Date:	Analysis Date: 9/29/2023	SeqNo: 3664554 Units: mg/L CaCO3
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Total Alkalinity (as CaCO3)	79.96	20.00 80.00 0 100 90 110

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309F96
30-Oct-23

Client: Merrion Oil and Gas
Project: Sunco Disposal 1

Sample ID: MB-77854	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids
Client ID: PBW	Batch ID: 77854	RunNo: 100134
Prep Date: 9/29/2023	Analysis Date: 10/2/2023	SeqNo: 3664656 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
total Dissolved Solids	ND	50.0

Sample ID: LCS-77854	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids
Client ID: LCSW	Batch ID: 77854	RunNo: 100134
Prep Date: 9/29/2023	Analysis Date: 10/2/2023	SeqNo: 3664657 Units: mg/L
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Total Dissolved Solids	1000	50.0 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
- PQL

Practical Quantitative Limit
- S

% Recovery outside of standard limits. If undiluted results may be estimated.
- B

Analyte detected in the associated Method Blank
- E

Above Quantitation Range/Estimated Value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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: Merrion Oil and Gas

Work Order Number: 2309F96

RcptNo: 1

Received By: Tracy Casarrubias 9/28/2023 6:10:00 AM

Completed By: Tracy Casarrubias 9/28/2023 8:20:45 AM

Reviewed By: *7/28/23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☒ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. 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 >12 unless noted)

Adjusted? *NO*

Checked by: *JH 9-28-23*

Special Handling (if applicable)

15. 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: _____

16. Additional remarks: *poured off 125 ml from 001B for ORP analysis. JH 9-28-23*

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes	Yogi		

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	Hexachlorocyclopentadiene	8121	3.0
D008	Lead	1311	5.0
D009	Mercury	7470A 7471B	0.2
D035	Methyl ethyl ketone	8015B 8260B	200.0

Sunco Disposal #1
Quarterly Laboratory Analytical List
Page 2

D036	Nitrobenzene	8091 8270D	2.0
D037	Pentachlorophenol	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).*

ADDITIONALLY:

RC1, 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.

Quarterly
Injection Report

	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maximum 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)	Previous year Volume (barrels)	Total Cumulative Volume (barrels)
Jan-2023	1835.484	2100	1600	28.63269231	49.49583333	1.05	0	0	0	981.6923077	1697	36	25524	16107402
Feb-2023	2009.821	2100	1700	36.20123457	58.82916667	13.8833333	0	0	0	1241.185185	2017	476	33512	16140914
Mar-2023	2014.516	2150	1750	31.30241935	54.97916667	10.1791667	0	0	0	1073.225806	1885	349	33270	16174184
Apr-2023	2051.667	2100	1750	50.61321839	139.9125	17.1791667	0	0	0	1735.310345	4797	589	50324	16174184
May-2023	2079.032	2250	1875	99.89865591	130.6375	55.3583333	0	0	0	3425.096774	4479	1898	106178	16224508
Jun-2023	2166.667	2250	1900	111.7734722	131.25	62.2125	0	0	0	3832.233333	4500	2133	114967	16330686
Jul-23	2054.348	2250	1900	66.92608696	131.25	22.7791667	0	0	0	2294.608696	4500	781	52776	16445653
Aug-23	2042.391	2250	1900	63.83568841	110.9208333	21.1166667	0	0	0	2188.652174	3803	724	50339	16498429
Sep-23	2019.048	2250	1900	62.43888889	83.825	39.9875	0	0	0	2140.761905	2874	1371	44956	16548768
Oct-2023	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	16593724
Nov-2023	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	16593724
Dec-2023	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	16593724
Total for year														511846
Life Of well injected														17105570

1/31	Pump Press.	Well Head Press.	Charge Press.	ANNULUS	FILTER	Tank 1st	Tank 2nd	Flow Rate	Flow Meter Total	Total Inj.	Total Received	Flow Back Reserve	PRODUCED	ASSI
1	B	1900/1950	38	400/550		11.5	10.5	4577	86123	1412	1810	0	1810	0
2	B	1600/2025	38	575/525		18	17	4380	87967	1844	3043	0	2963	80
3	S	1900/1900	62	400/500		17.5	16.5	1626	90542	2575	2400	80	2320	0
4	B	1900/2000	34	500/550		15	12.5	4785	93400	2859	2348	0	2348	20
5														
6														
7	B	1550/1950	38	575/450		17	15.5	4775	94126	726	1809	0	1809	0
8	B	1900/1900	36	400/600		15	14	4577	96916	2790	2165	0	2165	0
9	B	1600/2000	36	600/450		18	17	4757	98749	1833	2675	0	2560	15
10	B	1900/2225	36	450/525		18	17	4794	880	2131	2504	0	2504	0
11	B	1900/2250	38	450/550		19	18	4794	4022	3142	3513	0	3513	0
12														
13														
14	B	1600/2200	32	600/450		17	16	4870	7825	3803	2703	0	2703	0
15	B	1900/2225	32	400/575		13.5	12.5	4870	10454	2629	2085	0	1605	480
16	B	1700/2000	32	600/550		17	16	4898	12330	1876	2410	0	2410	0
17	B	1950/1950	32	450/700		12.5	11.5	4766	14986	2656	2207	0	2207	0
18	B	1700/2250	36	450/500		18	17.5	4851	16956	1970	3286	0	2726	560
19														
20														
21	B	1600/1950	30	600/600		12	11	4804	19839	2883	1988	0	1988	0
22	B	1700/1950	30	600/600		15	14	4813	21430	1591	2000	0	2000	0
23	B	1900/1950	32	450/400		15	14.5	4823	23390	1960	1971	0	1971	0
24	B	1900/2000	32	275/250		13	12	4804	25754	2364	1980	0	1980	0
25	B	1700/1900	30	500/600		9.5	8.5	4813	27668	1914	1595	0	1595	0
26														
27														
28	B	1550/1950	34	550/400		17.5	16.5	4889	28392	724	1913	0	1913	0
29	B	1900/2225	30	450/550		11	10	4832	31121	2729	1800	0	1800	0
30	B	1700/2225	28	575/475		14	13	4898	33098	1977	2270	0	2270	0
31	B	1675/2000	30	550/650		16.5	14	4870	35050	1952	2480	0	2480	0

AVG. 521

AVG. 2042

T. 50359 T. 52955 T. 80 T. 51720 T. 1155 T.O

SAN JUAN PRINTING 10/8/17

SEPT 25

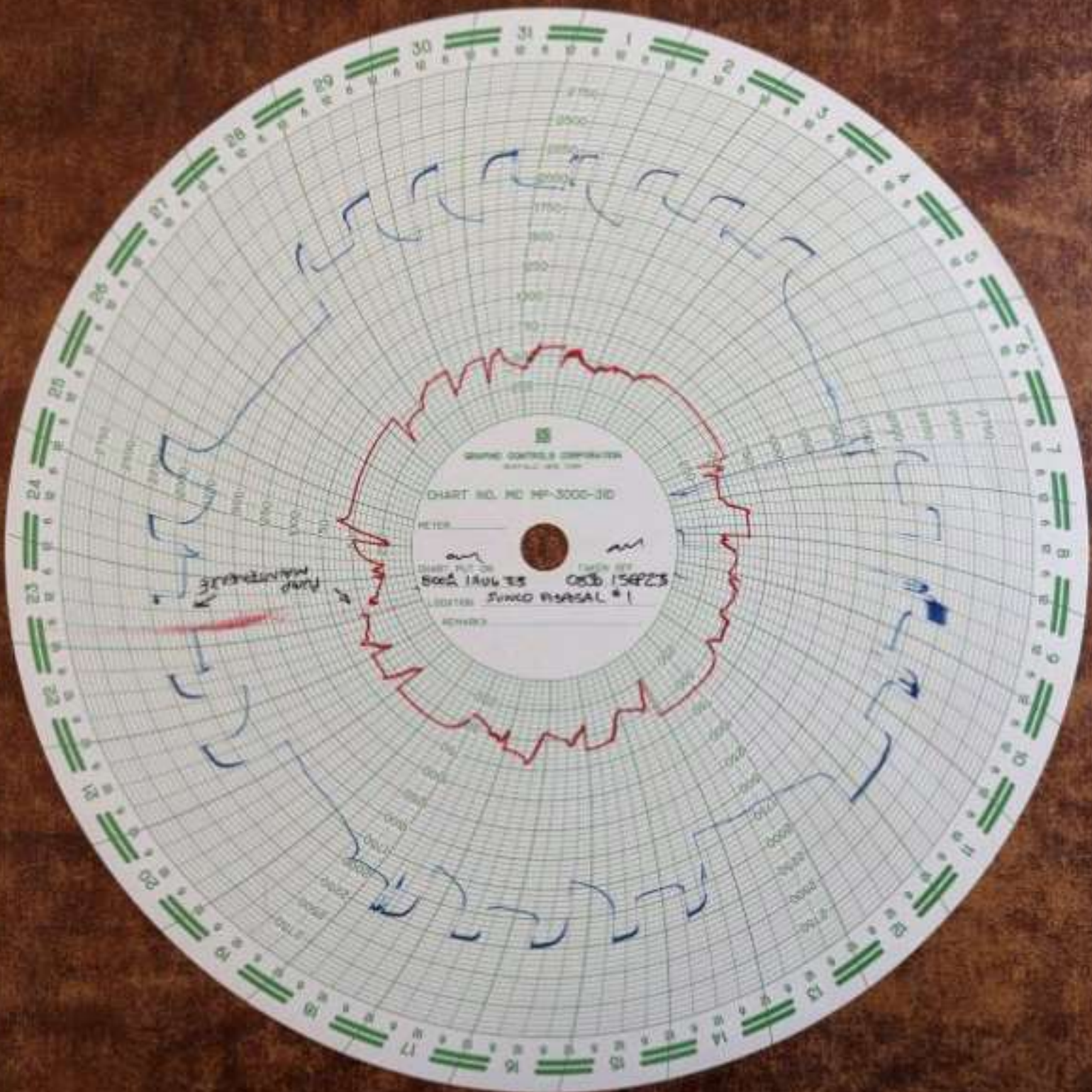
1/31	Pump Press.	Well Head Press.	ANNUAL Charge Press.	FIL 28.4	Tank 1422	Tank 1420	Flow Rate	Flow Meter Total	Total Inj.	Total Received	Flow Back Reserve	PRODUCED CLASS I
1	B	1900	2000	550	500	28		4842	2802	2854	0	2854
2												
3												
4	B	1550	2000	600	450	32	4889	39699	1847	2310	0	2310
5	S	1900	1900	250	350	62	1626	42275	2576	1336	0	1336
6	B	1650	1950	400	450	28	4917	43646	1371	1600	0	1600
7	B	1650	2000	200	300	28	4995	45576	1930	2413	0	2413
8	B	1925	2050	150	250	28	4955	48445	2869	2865	0	2865
9												
10												
11	B	1975	2000	300	250	32	4917	51176	2731	2895	0	2895
12	S	1900	1900	250	250	64	1617	53019	1843	1260	0	1260
13	B	1650	2000	300	100	34	4842	54606	1587	2236	0	2236
14	B	1900	1950	100	200	28	4870	56656	2050	1365	0	1365
15	B	1650	2200	300	25	28	4927	58452	1796	2208	0	2208
16												
17												
18	B	1550	2000	200	0	32	4917	60350	1898	2170	0	2170
19	B	1650	1950	250	75	28	4898	62272	1922	1740	0	1740
20	S	1650	1900	250	50	58	1673	63738	1466	1420	0	1420
21	B	1900	2000	0	100	64	4823	65284	1546	2364	0	2364
22	B	1900	2000	100	25	64	4775	68158	2874	2608	0	2608
23												
24												
25	B	1575	1950	300	0	62	4870	70325	2167	1940	0	1940
26	B	1625	2000	250	50	62	4898	72108	1783	1957	0	1957
27	B	1900	2000	50	150	60	4946	74686	2578	2200	0	2200
28	B	1900	2250	50	250	60	4870	77288	2602	2789	0	2789
29	B	1950	2200	100	250	60	4832	80006	2718	2624	0	2624
30												
31												

AVG. 1756 AVG. 177

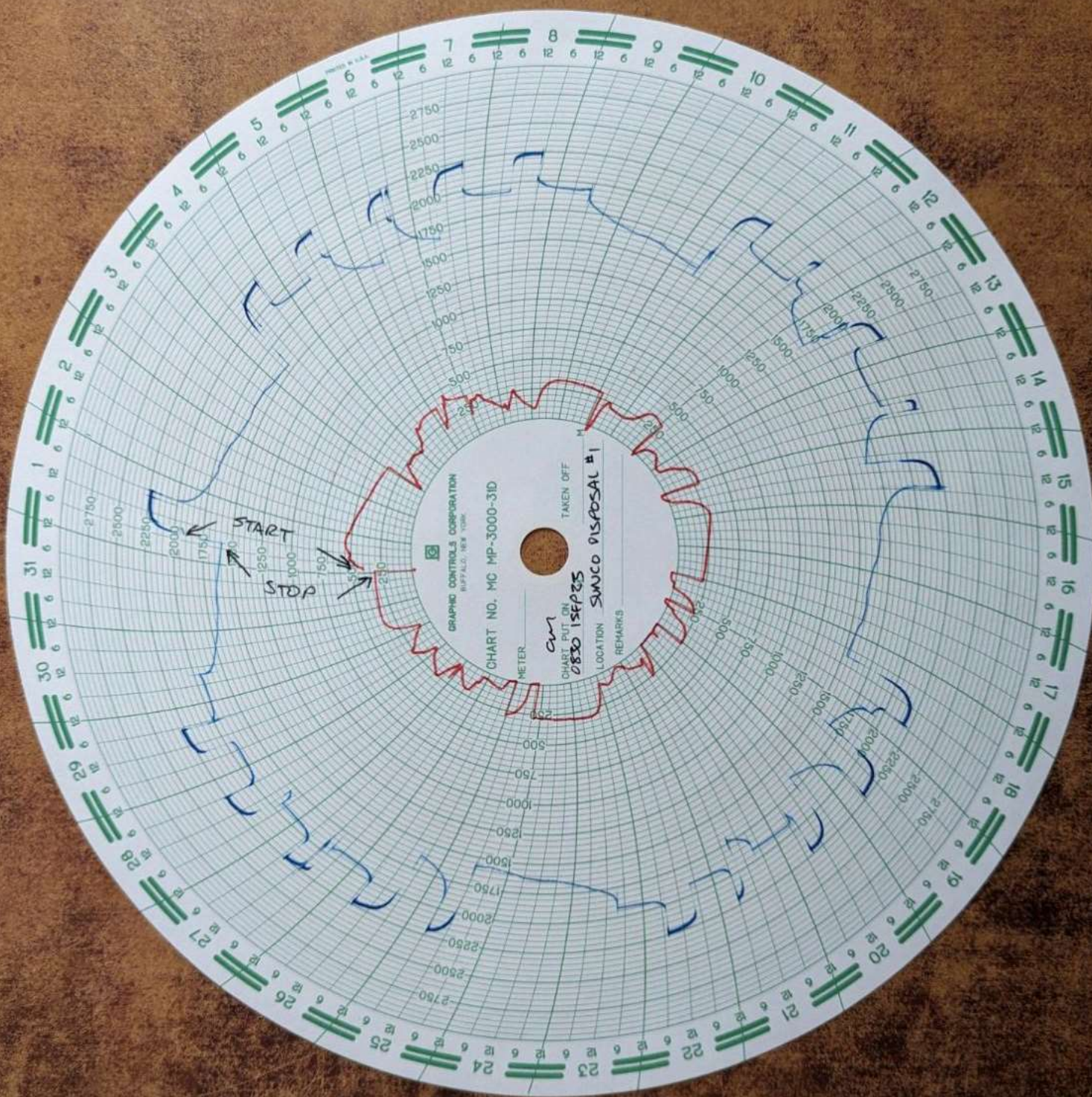
T. 44956 T. 45154 T. 0 T. 45154 T. 0 T. 0

T. 0

SAN JUAN PORTING 1010071A







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1625 N. French Dr., Hobbs, NM 88240
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District II
811 S. First St., Artesia, NM 88210
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District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 281776

COMMENTS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 281776
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

COMMENTS

Created By	Comment	Comment Date
cchavez	Quarterly Report FY23 Q3 Submittal	11/3/2023
cchavez	Actually QR FY23 Q4 Submittal	11/9/2023

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
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CONDITIONS

Action 281776

CONDITIONS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 281776
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
cchavez	Condition of Approval: 1. Ensure that detections of hazardous toxicity characteristics parameters above the statutory limit, i.e., 1,2-Dichloroethane, that are not typically associated oilfield exempt wastewaters are retested before acceptance or rejection at the facility. 2. Rejected effluent must be regarded for disposition at RCRA Subtitle "C" Hazardous Disposal Facilities.	11/9/2023