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 07, 2023

Kyle Siesser

Cottonwood Consulting LLC
PO BOX 1653
Durango, CO 81302
TEL: (970) 764-7356
FAX:

Accepted for the record, 1 AIR sample.

RE: AL Elliot D 002 OrderNo.: 2306A80

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/21/2023 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2306A80**
Date Reported: **7/7/2023**

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: AL Elliot D 002
Collection Date: 6/20/2023 3:30:00 PM
Lab ID: 2306A80-001 **Matrix:** AIR
Received Date: 6/21/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	340	25		µg/L	5	6/21/2023 1:53:29 PM
Surr: BFB	337	15-412		%Rec	5	6/21/2023 1:53:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**
Methyl tert-butyl ether (MTBE)	ND	1.2		µg/L	5	6/21/2023 1:53:29 PM
Benzene	ND	0.50		µg/L	5	6/21/2023 1:53:29 PM
Toluene	ND	0.50		µg/L	5	6/21/2023 1:53:29 PM
Ethylbenzene	0.89	0.50		µg/L	5	6/21/2023 1:53:29 PM
Xylenes, Total	7.7	1.0		µg/L	5	6/21/2023 1:53:29 PM
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	5	6/21/2023 1:53:29 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 Quanitative 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

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ANALYTICAL SUMMARY REPORT

July 06, 2023

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: B23061956 Quote ID: B15626

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 6/22/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B23061956-001	2306A80-001A SVE	06/20/23 15:30	06/22/23	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By: Cindy Rohrer
Laboratory Manager

Digitally signed by
Cindy Rohrer
Date: 2023.07.06 12:51:15 -06:00

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B23061956-001
Client Sample ID: 2306A80-001A SVE

Report Date: 07/06/23
Collection Date: 06/20/23 15:30
DateReceived: 06/22/23
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.29	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Nitrogen	78.16	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Carbon Dioxide	0.55	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	06/23/23 08:53 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	06/23/23 08:53 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	06/23/23 08:53 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	06/23/23 08:53 / jrj
Pseudo-critical Pressure, psia	547			1		GPA 2261-95	06/23/23 08:53 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	06/23/23 08:53 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	06/23/23 08:53 / jrj
Air, %	97.27			0.01		GPA 2261-95	06/23/23 08:53 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	06/23/23 08:53 / jrj

- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.
- GPM = gallons of liquid at standard conditions per 1000 cu. ft. of moisture free gas @ standard conditions.
- To convert BTU to a water-saturated basis @ standard conditions, multiply by 0.9825.
- Standard conditions: 60 F & 14.73 psi on a dry basis.

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B23061956 **Report Date:** 07/06/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R404409
Lab ID: B23061956-001ADUP	12	Sample Duplicate				Run: GCNGA-B_230623A				06/23/23 09:20
Oxygen		21.3	Mol %	0.01				0	20	
Nitrogen		78.2	Mol %	0.01				0.0	20	
Carbon Dioxide		0.56	Mol %	0.01				1.8	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		<0.01	Mol %	0.01					20	
Lab ID: LCS062323	11	Laboratory Control Sample				Run: GCNGA-B_230623A				06/23/23 09:50
Oxygen		0.65	Mol %	0.01	130	70	130			
Nitrogen		6.15	Mol %	0.01	102	70	130			
Carbon Dioxide		0.99	Mol %	0.01	100	70	130			
Methane		74.2	Mol %	0.01	99	70	130			
Ethane		6.00	Mol %	0.01	100	70	130			
Propane		5.26	Mol %	0.01	107	70	130			
Isobutane		1.99	Mol %	0.01	99	70	130			
n-Butane		2.01	Mol %	0.01	100	70	130			
Isopentane		0.97	Mol %	0.01	97	70	130			
n-Pentane		0.98	Mol %	0.01	98	70	130			
Hexanes plus		0.76	Mol %	0.01	95	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B23061956

Login completed by: Dylan A. Chirrick
Date Received: 6/22/2023
Reviewed by: gmccartney
Received by: crs
Reviewed Date: 6/27/2023
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	17.1°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

SUB CONTRATOR:	Energy Labs -Billings	COMPANY:	Energy Laboratories	PHONE: (406) 869-6253	FAX: (406) 252-6069
ADDRESS:	1120 South 27th Street			ACCOUNT #:	EMAIL:
CITY, STATE, ZIP:	Billings, MT 59107				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2306A80-001A	SVE	TEDLAR	Air	6/20/2023 3:30:00 PM	1	Natural Gases 02 ,CO2

B23061956

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.

Relinquished By:	Date: 6/21/2023	Time: 8:28 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: Usundeen 6/22/23	Date:	Time: 0905

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: ____

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Sample Log-In Check List

Client Name: Cottonwood Consulting LLC

Work Order Number: 2306A80

RcptNo: 1

Received By: Tracy Casarrubias 6/21/2023 6:50:00 AM

Completed By: Tracy Casarrubias 6/21/2023 8:18:04 AM

Reviewed By: TMC 6/21/23

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° 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: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: TMC 6/21/23

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:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	N/A	Good	Yes			

Chain-of-Custody Record

Client: Cottonwood Consulting LLC

Mailing Address: PO Box 1653
Durango, CO 81302

Phone #: 970-764-7356

email or Fax#: ksiesser@cottonwoodconsulting.com

QA/QC Package:
■ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
■ Standard ☐ Rush

Project Name: AL Elliot D #002

Project #:

Project Manager: Kyle Siesser

Sampler: Joseph LaFortune

On Ice: ☐ Yes ☒ No

# of Coolers: 1

Cooler Temp(Including CF): N/A

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 Name	Container Type and #	Preservative Type	HEAL No. 2306A80	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TPH (8015B)	CO2	O2
6/20/23	1530	AIR	SVE	tedlar bag - 1	NA	001	■										■	■	■

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6-20-23	1615		Christ Ward		6/20/23	1615
6/20/23	1754	Christ Ward		courier	6/21/23	6:50

Remarks:
please cc emillar@cottonwoodconsulting.com
jlafortune@cottonwoodconsulting.com

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.

Cottonwood CONSULTING

REVIEWED
By Mike Buchanan at 3:36 pm, Mar 26, 2024

Review of the monthly SVE system operations monitoring for 12 months: 01/23 through 12/23. Received for the record..

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Exhaust Rate (cfm) *if known*	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic ALS 9A	1-10-23	1	11.1	-46	-37	—	Y	26.5	Y	
Florence GCU 16		2	23.1	Broken	—	—	N	31.4	N	Drum Frozen
Sandoval		1	62.2	-8	Broken	—	N	14	Y	Tank 80-90% Full
Jacquez		3	7.4	0.0	Broken	—	N	9	Y	Attempted to restart unit will not turn on
AI Elliot		5	165.0	-10	-10	—	Y	27.5	Y	638.8 hours run time
GCU 1480		All	—	—	—	—	Y	—	—	2.5 PSI 154°F 1947.1 hrs 1)0.0 2)0.0 3)1.0 4)0.0
Heaton		Unit	106.6	-66	Broken	—	Y	26.5	Y	
Mudge B12R	1/12/23	1	—	—	—	—	N	32	N	drum frozen- unable to drain. SVE not operational.
Mudge A2	1/12/23	2	0.8	-54	—	—	Y	31	N	water in drum below drain port.

Notes:
SVE - Soil Vapor Extraction
OVM - Organic Vapor Monitoring
ppm- parts per million
H2O"- inches water
cfm- cubic feet per minute
bTOD- below top of drum

Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Exhaust Rate (cfm) *if known*	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic ALS 9A	2-7-23	1	5.4	-38	-47	—	Y	26.5	Y	
Florence		2	2.5 ~~Broke~~ JL	Broken	—	—	N	27	N	Restarted System, System running when left Drum Frozen
Sandoval		1	~~2~~ 0.4 JL	—	—	—	N	14.25	Y	Attempted to restart Won't restart
Jaquez		3	1.0	—	—		N	28	N	Attempted to restart Won't restart, Drum Frozen
Al Elliot		5	2.4	—	—	—	N	27.5	Y	Attempted to restart Will not restart
GGU H80		All	—	—	—	—	Y	—	—	2.6 PSI 150°F 2618.0 hrs 1) 0.5 2) 0.5 3) 0.5 4) 0.25
Heaton	↓	Unit	106.7	-56	—	—	Y	29.5	Y	
Mudge B12R	2-9-23	1	0.2	—	—	—	N	32.0	N	Attempted to restart System won't Start, Drum Frozen
Mudge A2	2-9-23	2	2.1	-54	—	—	Y	30.5	N	Drum Frozen

Notes:
SVE - Soil Vapor Extraction
OVM - Organic Vapor Monitoring
ppm- parts per million
H2O"- inches water
cfm- cubic feet per minute
bTOD- below top of drum

Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Exhaust Rate (cfm) *if known*	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	3/9/23	1	5.9	-36	-46	-	Y	31.25	Y	
Florance		2	131.3	broken	none	-	Y	24.5	Y	drum valve leaking
Sandoval		1	13.3	Broken	Broken	-	Y	31.0	Y	run time 1041.4 hrs Grabbed gas sample @ 1045
Jacquez		3	-	-	-	-	N	-	N	System not operational
Al Elliot		5	132.0	-8	-10	-	Y	30.25	Y	run time 971.7 hours
GCU H80	↓	All	-	-	-	-	Y	-		2.5 psi 150°F 3334.0 hours 1)0.2 2)0.2 3)1.25 4)0.1
Heaton	3/10/23	unk	113.8	-42	-	-	Y	28.5	Y	
Mudge B12R		1	-	-	-	-	-	-	-	unable to access site
Mudge A2	↓	2	109.1	-52	-	-	Y	31.5	N	water in drum below valve

Notes:
SVE - Soil Vapor Extraction
OVM - Organic Vapor Monitoring
ppm- parts per million
H2O"- inches water
cfm- cubic feet per minute
bTOD- below top of drum

Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	4-6-23	1	5.1	-44	-36	—	Y	30.5	N	Drum Frozen
Florance		2	104.1	Broken	—	—	Y	30.5	Y	Drum leaking From Drain Valve
Sandoval		1	10.5	Broken	Broken	168.2	N	14.3	Y	system restarted after Draining drum
Jaquez		3	142.1	-30	—	334.3	Y	28.75	Y	
AL Ellott		5	110.5	-8	-12	1347.5	Y	30.5	Y	
GC4 H180		All	—	—	—	4005.7	Y	—	—	2.6 psi 160° (1)0.5 (2)0.5 (3)0.5 (4)0.5
Heaton		Unit	122.7	-56	—	—	Y	31.25	Y	
Mudge B 12R		1	204.7	-44	-30	—	Y	29.25	Y	
Mudge A 002	↓	2	96.5	-52	—	—	Y	30.5	Y	

Notes:
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cfm- cubic feet per minute
bTOD- below top of drum

Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	5/3/23	1	38.4	-35	-45	-	Y	32	N	water below port
Florance		2	101.9	Broken	-	-	N	33	N	water below port Restarted system. Drain valve still leaking
Sandoval		1	9.6	Broken	Broken	23290	Y	26.5	Y	2329.0 hrs
Jaquez		3	-	-	-	-	N	29	Y	System won't start.
AL Elliott		5	106.2	-8	-11	1951.3	Y	32	Y	1951.3 hrs
GCU H180		All	-	-	-	4510.2	Y	-	-	2.5psi 165° Temp 1)0.5 2)0.5 3)1.0 4)0.5 4510.2 hrs psi
Heaton		UNK	104.3	-53	-	-	Y	Dry	N	
Mudge B12R		1	122.3	-44	-29	-	Y	31.5	Y	
Mudge A002		2	69.3	-59	-	-	N	31	N	water below port. restarted system

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	6/6/23	1	5.5	-44	0	—	Y	Dry	N	
Florence		2	99.6	Broken	—	—	Y	29"	Y	Drum leaking from drain valve
Sandoval		1	7.3	Broken	Broken	3144.4	Y	Below Port	N	3144.4 hrs
Juaquez		3	123.2	-24	—	1606.7	Y	30"	Y	1606.7 hrs
AL Elliott		5	96.8	-8	-11	2683.0	Y	Below Port	N	2683.0 hrs
GCU #180		All	—	—	—	5326.6	Y	—	—	110° 2.4 PSI 1)0.75 2)0.5 5326.6 hrs 3)0.5 4)0.5 PSI
Heaton		Unk	110.5	-54	—	—	Y	Dry	N	Vacuum Pressure guage removed (downstream)
Mudge B12R		1	101.1	-44	-29	—	Y	Dry	N	
Mudge A002	↓	2	171.6	-50	—	—	Y	Below Port	N	

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	7/7/23	1	8.0	-34	-44	—	Y	Dry	N	
Florence		2	64.9	Broken	—	—	Y	Dry	N	
Sandoval		1	5.7	Broken	Broken	3889.3	Y	Dry	N	3889.3 hrs
Jacquez		3	88.7	-24	—	2351.8	Y	Dry	N	2351.8 hrs
AL Elliott		5	92.1	-11	-12	3333.9	Y	Dry	N	3333.9 hrs
GCU H 180		All	—	—	—	6071.9	Y	—	—	175°F 2.4 PSI 6071.9 hrs
Heaton		unk	118.6	-52	—	—	Y	Dry	N	
Mudge B12R		1	99.3	-44	-30	—	Y	Dry	N	
Mudge A002	↓	2	153.3	-50	—	—	Y	Dry	N	

1)0.5 3)0.7
2)0.5 4)0.5

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	8-9-23	1	7.8	-35	-46	-	Y	Dry	N	
Florence		2	85.2	-3	-	-	Y	Dry	N	
Sandoval		1	7.6	Broken	Broken	4679.6	Y	Dry	N	
Jacquez		3	115.3	-24	-	3137.9	Y	Dry	N	
AL Elliott		5	83.8	-9	-12	4128.0	Y	Dry	N	
GCU H 180		All	-	-	-	6688.3	Y	-	-	165°F 2.5 psi 1. 2.5psi) 2. 2psi) 3. 2.2psi) 4. 2.4psi
Heaton		unit	104.2	-52	-	-	Y	Dry	N	
Mudge B12R		1	75.9	-44	-30	-	Y	Dry	N	
Mudge A002		2	354.9	-50	-	-	Y	Dry	N	

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	9-7-23	1	1.1	-35	-46	-	Y	Dry	No	
Florance GC J 16		2	26.8	-3	-	-	Y	Dry	No	
Sandoval GC A 1A		3	3.7	Broken	Broken	5375.3	Y	Dry	No	
Jacquez GC B 3E		1	41.1	-24	-	3833.6	Y	Dry	No	
Al Elliot D 002		5	35.6	-10	-12	4771.2	Y	Dry	No	
GCU H180		All	-	-	-	7384.3	Y	-	-	#3 A tenant could be heard from valve 190°F 1) 1.8 psi 2) 0.7 psi 2.5 psi 3) 2.0 psi 4) 1.5 psi
Heaton LS 5		Unk	81.5	-54	-	-	Y	Dry	No	
Mudge B12 R		1	42.8	-44	-30	-	Y	Dry	No	
Mudge A 002 MV		2	228.6	-51	-	-	Y	Dry	No	

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	10-18-2023	1	201.5	-36	-46	-	Y	31.5 2	N	Water below drain level
Florance GC J 16		2	156.8	-6	-	-	Y	22.25	Y	Leaking from gasket on drain valve
Sandoval GC A 1A		3	48.6	Broken	0	6358.6	Y	29.5	Y	
Jacquez GC B 3E		1	227.5	-24	-	4817.4	Y	25.5	Y	
Al Elliot D 002		5	93.7	-10	-14	5354.9	Y	29.25	Y	
GCU H180		All	-	-	-	8368.2	Y	-	-	140°F 2.0 PSI 1)0.0 2)0.0 3)0.0 4)0.0
Heaton LS 5		Unk	123.4	-54	-	-	Y	Dry	N	
Mudge B12 R		1	103.6	-45	-30	-	Y	29.75	Y	
Mudge A 002 MV		2	327.2	-52	-	-	Y	Dry	N	

The tubing at Vacuum Station #2 is damaged and leaking

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Cottonwood CONSULTING

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	11-15-23	1	2.7	-36	-46	-	Y	Dry	N	
Florance GC J 16	11-15-23	2	0.7	-4(inhg)	-	-	N	Dry	N	
Sandoval GC A 1A	11-15-23	3	103.1	-20(kpa)	Broken	6,540	N	22.5	Y	Replaced gauge w/ Hi -30(inhg) / -100(kpa) gauge
Jacquez GC B 3E	11-15-23	1	30.2	-26	-	5,326	Y	20.5	Y	
Al Elliot D 002	11-15-23	5	37.8	-10	-12	5,775	Y	Dry	N	
GCU H180	11-14-23	All	-	-	-	-	N	-	-	Motor sounded rough with clicking sound upon restarting. SVE point leak fixed.
Heaton LS 5	11-14-23	Unk	75.2	-32	-	-	~~N~~ Y JL	Dry	N	
Mudge B12 R	11-14-23	1	35.7	-46	-12	-	Y	21.0	Y	Drum leaking at PVC connection.
Mudge A 002 MV	11-14-23	2	150.1	-40	-	-	Y	Dry	N	

100°F 2.7psi
1) 1.0 2) 1.25
3) 2.5 4) 0.5

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SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	12/15/23	1	19.3	-40	-50	—	Yes	26	Y	
Florance GC J 16	12/15/23	2	~~4.0~~ DS 60.3	-4.0	—	-	Yes	29	Y	Drum load out leaking from gasket
Sandoval GC A 1A	~~135.8~~ KO 12/15/23	3	135.8	3.0	0	7238.4	Yes	19	Y	
Jacquez GC B 3E	12/15/23	1	1.4	-2	—	Not Readable	Yes	29	Y	
Al Elliot D 002	12/15/23	5	110.3	-10	-10	6268.5	Yes	24.5	Y	
GCU H180	12/14/23	All	-	-	-	8656.4	~~8656.4~~ KO No	-	-	Not Running on arrival. sounds like its not running properly all other psi indicators @0.0
Heaton LS 5	12/14/23	Unk	101.5	34	-	—	Yes	29	Y	
Mudge B12 R	12/14/23	1	180.6	-40	-10	—	Yes	30	Y	
Mudge A 002 MV	12/15/23	2	108.2	-50	~~30~~ DS	—	Yes	—	—	Dry

~ 85°F
~~[illegible]~~
132.0

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

CONDITIONS

Action 301533

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 301533
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the monthly SVE system operations monitoring for 12 months: 01/23 through 12/23. Received for the record..	3/26/2024