REVIEWED

By Mike Buchanan at 3:14 pm, Oct 16, 2023

Jaquez GC B 003 E nJK1129233406 30-045-24217 2022 Annual SVE/GWMW

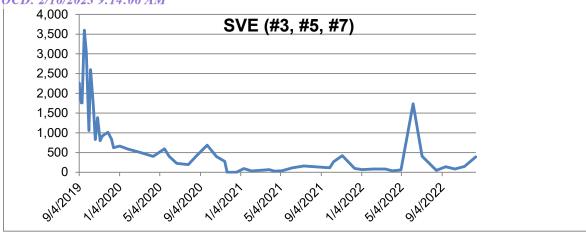
Review of the Jaquez GC B 003 2022 Annual SVE/ GWMW Report: Content Satisfactory. 1. Continue to operate the SVE system and conduct routine O&M as scheduled. 2. Please continue to send reporting on a quarterly basis or annually.

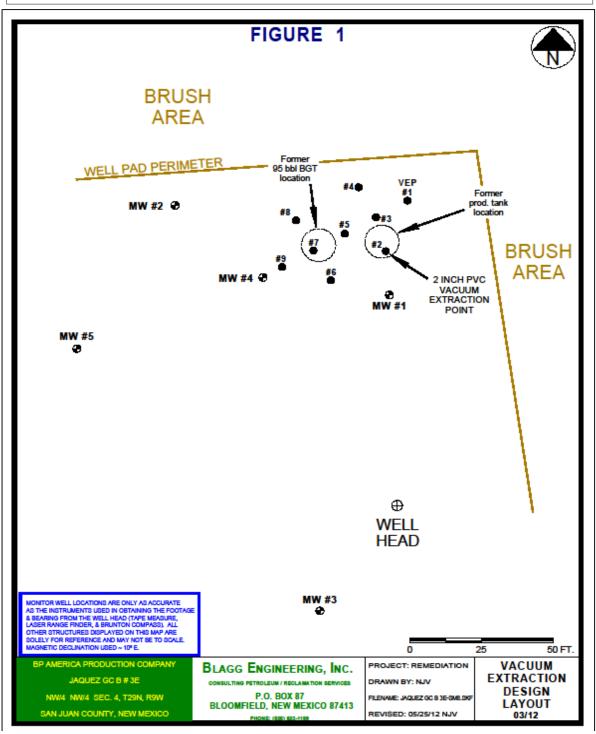
Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H ₂ O Drained from drum?	H ₂ O Amt. Drained (Gal.)?	Comments
	see	· ·			-			
8/27/2019	comments	1,765	24	50	-	-	-	Initial start up (SVE - #2,#3,#4,#5,#6,#7 open)
8/28/2019	see comments	1,727	24	50	YES	NO		(SVE - #2,#3,#4,#5,#6,#7 open), drum water below drain plug
8/29/2019	see comments	1,441	24	NA	YES	NO		(SVE - #2,#3,#4,#5,#6,#7 open), drum water below drain plug
8/30/2019	see comments	3,755	25	50	YES	NO		(SVE - #2,#3,#4,#5,#6,#7 open), drum water below drain plug
8/31/2019	see comments	3,549	25	50	YES	NO		(SVE - #2,#3,#4,#5,#6,#7 open), drum water below drain plug
9/3/2019	see comments	1,718	20	50	YES	NO		All 9 SVE pts. open; drum water below drain plug
9/4/2019	#3,#5,#7	2,257	42	50	YES	NO		drum water below drain plug
9/5/2019	#3,#5,#7	2,090	42	60	YES	NO		drum water below drain plug
9/10/2019	#3,#5,#7	1,757	42	60	YES	NO		drum water below drain plug
9/12/2019	#3,#5,#7	1,757	41	60	YES	NO		drum water below drain plug
9/19/2019	#3,#5,#7	3,600	41	50	YES	NO		drum water below drain plug
9/25/2019	#3,#5,#7	3,040	41	NA	YES	NO		Water in drum 2.5" above drain plug
10/3/2019	#3,#5,#7	1,057	40	50	YES	NO		Water in drum not measured
10/8/2019	#3,#5,#7	2,603	40	NA	YES	YES	15.50	Peak reading for OVM recorded
10/16/2019	#3,#5,#7	1,695	39	NA	YES	YES	17.00	Drained, restarted
10/22/2019	#3,#5,#7	830	39	50	YES	YES	14.00	Drained, restarted
10/29/2019	#3,#5,#7	1,384	38	NA	YES	YES	20.50	Drained, restarted
11/1/2019	#3,#5,#7	NA	38	NA	YES	YES	14.00	Drained, restarted
11/6/2019	#3,#5,#7	800	36	NA	YES	YES	16.00	Drained, restarted
11/12/2019	#3,#5,#7	917	36	NA	YES	YES	17.00	Drained, restarted
11/22/2019	#3,#5,#7	NA	NA	NA	NO	NO		high water level shut off, drum water below drain plug, restarted
11/29/2019	#3,#5,#7	1,015	34	80	YES	YES	25.50	Drained, restarted
12/6/2019	#3,#5,#7	NA	33	NA	NO	YES	9.00	Drained, restarted, then collected data
12/10/2019	#3,#5,#7	836	34	NA	YES	YES	14.00	Drained, restarted

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H ₂ O Drained from drum?	H ₂ O Amt. Drained (Gal.)?	Comments
12/16/2019	#3,#5,#7	623	33	95	YES	YES	22.00	Drained, restarted
12/21/2019	#3,#5,#7	NA	33	NA	YES	YES	23.50	Drained, restarted
12/24/2019	#3,#5,#7	NA	33	NA	YES	YES	15.50	Drained, restarted
12/30/2019	#3,#5,#7	NA	32	NA	YES	YES	14.00	Drained, restarted
1/4/2020	#3,#5,#7	665	33	NA	YES	YES	23.50	Drained, restarted
1/9/2020	#3,#5,#7	NA	13	NA	YES	NO		
1/10/2020	#3,#5,#7	NA	32	NA	YES	YES	12.00	Temp. repair of pvc near VEP #1. drained, restarted, then collected data
1/14/2020	#3,#5,#7	NA	30	65	NO	NO		Water in drum below drain port, restarted, then collected data
1/17/2020	#3,#5,#7	NA	32	55	YES	YES	8.00	Drained, restarted
1/22/2020	#3,#5,#7	NA	33	NA	YES	YES	18.50	Drained, restarted
1/29/2020	#3,#5,#7	587	30	70	NO	NO		Dry drum, restarted, then collected data
2/3/2020	#3,#5,#7	NA	34	NA	YES	YES	13.00	Drained, restarted
2/10/2020	#3,#5,#7	NA	NA	NA	NO	NO		High water level shut off, water in drum below drain port, restarted
2/18/2020	#3,#5,#7	NA	34	60	YES	YES	21.00	Drained, restarted
2/25/2020	#3,#5,#7	NA	35	50	YES	YES	22.00	Drained, restarted
3/4/2020	#3,#5,#7	508	34	70	YES	YES	22.00	Drained, restarted
3/12/2020	#3,#5,#7	NA	30	50	YES	YES	13.50	Drained, restarted
3/25/2020	#3,#5,#7	NA	NA	NA	NO	NO		High water level shut off, water in drum below drain port, restarted
4/14/2020	#3,#5,#7	404	31	50	YES	YES	23.50	Drained, restarted
5/18/2020	#3,#5,#7	596	30	NA	YES	YES	2.00	Drained, restarted
6/1/2020	#3,#5,#7	402	28	NA	YES	NO		Water in drum not measured, AIR SAMPLE COLLECTED
6/24/2020	#3,#5,#7	226	26	NA	YES	NO		Water in drum not measured
7/29/2020	#3,#5,#7	194	26	NA	YES	NO		Water in drum not measured
8/21/2020	#3,#5,#7	401	30	NA	YES	NO		Dry drum

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H ₂ O Drained from drum?	H ₂ O Amt. Drained (Gal.)?	Comments
9/24/2020	#3,#5,#7	689	28	NA	YES	NO		Water in drum below drain port
10/22/2020	#3,#5,#7	398	24	NA	YES	NO		Water in drum just above drain
10/29/2020	#3,#5,#7	NA	24	NA	YES	NO	17.00	
11/5/2020	#3,#5,#7	NA	26	NA	YES	YES	7.00	
11/11/2020	#3,#5,#7	NA	26	NA	YES	YES	10.50	
11/16/2020	#3,#5,#7	274	22	NA	YES	YES	10.50	
11/23/2020	#3,#5,#7	NA	14	NA	YES	NO		Water in drum below drain port
12/4/2020	#3,#5,#7	NA	14	NA	NO	NO		Water in drum below drain port, restarted, then collected readings
12/10/2020	#3,#5,#7	NA	20	NA	YES	YES	17.00	
12/15/2020	#3,#5,#7	NA	14	NA	YES	YES	18.50	Drum bottom leaking badly after removing top cap to measure water
12/21/2020	#3,#5,#7	NA	25	NA	YES	YES	10.50	Drum bottom leaking badly after removing top cap to measure water
1/31/2021	#3,#5,#7	94	-	NA	YES	NO	-	
2/5/2021	#3,#5,#7	34	-	NA	YES	NO	ı	
3/30/2021	#3,#5,#7	69	-	NA	YES	NO	-	
4/15/2021	#3,#5,#7	27	-	NA	YES	NO	ı	
5/7/2021	#3,#5,#7	38	-	NA	YES	NO	ı	
6/9/2021	#3,#5,#7	113	-	NA	YES	NO	-	
7/13/2021	#3,#5,#7	159	-	NA	YES	NO	-	
9/29/2021	#3,#5,#7	113	29	NA	YES	YES	1.00	
10/11/2021	#3,#5,#7	267	28	NA	YES	YES	10.69	
11/6/2021	#3,#5,#7	422	20	NA	NO	NO	-	Dry Drum Restarted system then collected data
12/13/2021	#3,#5,#7	100	12	NA	NO	NO	-	Dry Drum Restarted system then collected data
1/4/2022	#3,#5,#7	69	-12	-	NO	NO	0.00	Below port
2/8/2022	#3,#5,#7	84	12	-	YES	NO	0.00	water below port

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H ₂ O Drained from drum?	H ₂ O Amt. Drained (Gal.)?	Comments
3/16/2022	#3,#5,#7	83	12	-	YES	NO	0.00	Did not shut down system
4/7/2022	#3,#5,#7	38	10	-	YES	NO	0.00	Drum dry
5/2/2022	#3,#5,#7	59	-12	-	YES	NO	0.00	Drum dry
6/8/2022	#3,#5,#7	1,733	-27	-	YES	NO	0.00	water below the port
7/5/2022	#3,#5,#7	405	-28	-	YES	NO	0.00	Drum dry
8/17/2022	#3,#5,#7	48	-28	-	YES	NO	0.00	Drum dry
9/14/2022	#3,#5,#7	140	28	-	YES	NO	0.00	Water below the port
10/12/2022	#3,#5,#7	83	-28	-	YES	NO	0.00	Below the port - leaking drum
11/10/2022	#3,#5,#7	147	-29	-	YES	YES	38.66	N/A
12/14/2022	#3,#5,#7	390	21	-	NO	NO	0.00	Drum frozen





Received by OCD: 2/16/2023 9:14:06 AM SIMCOE, LLC. - Jaquez GC B #3E SVE (#3, #5, #7) OVM Data

Date	Exhaust
	OVM (ppm)
9/4/2019	2,257
9/5/2019	2,090
9/10/2019	1,757
9/12/2019	1,757
9/19/2019	3,600
9/25/2019	
10/3/2019	3,040
10/3/2019	1,057
	2,603
10/16/2019	1,695
10/22/2019	830
10/29/2019	1,384
11/6/2019	800
11/12/2019	917
11/29/2019	1,015
12/10/2019	836
12/16/2019	623
1/4/2020	665
1/29/2020	587
3/4/2020	508
4/14/2020	404
5/18/2020	596
6/1/2020	402
6/24/2020	226
7/29/2020	194
8/21/2020	401
9/24/2020	689
10/22/2020	398
11/16/2020	274
11/23/2020	-
12/4/2020	-
12/10/2020	-
12/15/2020	-
12/21/2020	-
1/13/2021	94.0
2/5/2021	34.0
3/30/2021	69.0
4/15/2021	27.0
5/7/2021	38.0
6/9/2021	113.0
7/13/2021	159.0
9/29/2021	113.0
10/11/2021	267.0
11/6/2021	422.0
12/13/2021	100.0

·	
Date	Exhaust
	OVM (ppm)
2/8/2022	84
3/16/2022	83
4/7/2022	38
5/2/2022	59
6/8/2022	1,733
7/5/2022	405
8/17/2022	48
9/14/2022	140
10/12/2022	83
11/10/2022	147
12/14/2022	390

23 1419 <u>1922</u> 111	69
2/8/2022	84
3/16/2022	83
4/7/2022	38
5/2/2022	59
6/8/2022	1,733
7/5/2022	405
8/17/2022	48
9/14/2022	140
10/12/2022	83
11/10/2022	147
12/14/2022	390



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

March 28, 2022

Kyle Siesser Cottonwood Consulting LLC PO BOX 1653 Durango, CO 81302

TEL: (970) 764-7356

FAX:

RE: Jacquez GC B 003 OrderNo.: 2203996

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/18/2022 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

andy

4901 Hawkins NE

Albuquerque, NM 87109

CLIENT: Cottonwood Consulting LLC

Analytical Report

Lab Order **2203996**Date Reported: **3/28/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SVE

 Project:
 Jacquez GC B 003
 Collection Date: 3/16/2022 9:45:00 AM

 Lab ID:
 2203996-001
 Matrix: AIR
 Received Date: 3/18/2022 8:05:00 AM

Result **RL Qual Units** DF Analyses **Date Analyzed EPA METHOD 8260B: VOLATILES** Analyst: CCM Benzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Toluene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM ND 0.10 3/22/2022 1:02:00 PM Ethylbenzene μg/L 1 Methyl tert-butyl ether (MTBE) ND 0.10 µg/L 1 3/22/2022 1:02:00 PM 1,2,4-Trimethylbenzene 0.26 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,3,5-Trimethylbenzene 1.1 0.10 μg/L 1 3/22/2022 1:02:00 PM ND 1,2-Dichloroethane (EDC) 0.10 μg/L 1 3/22/2022 1:02:00 PM 3/22/2022 1:02:00 PM 1,2-Dibromoethane (EDB) ND 0.10 μg/L 1 ND Naphthalene 0.20 1 3/22/2022 1:02:00 PM μg/L 1-Methylnaphthalene ND 0.40 μg/L 1 3/22/2022 1:02:00 PM 2-Methylnaphthalene ND 0.40 μg/L 1 3/22/2022 1:02:00 PM Acetone ND 1.0 μg/L 1 3/22/2022 1:02:00 PM Bromobenzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Bromodichloromethane ND 0.10 3/22/2022 1:02:00 PM μg/L 1 **Bromoform** ND 0.10 µg/L 1 3/22/2022 1:02:00 PM 3/22/2022 1:02:00 PM Bromomethane ND 0.20 μg/L 1 2-Butanone ND 1.0 μg/L 1 3/22/2022 1:02:00 PM ND 1 3/22/2022 1:02:00 PM Carbon disulfide 1.0 μg/L Carbon tetrachloride ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Chlorobenzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Chloroethane ND 0.20 μg/L 1 3/22/2022 1:02:00 PM Chloroform ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 3/22/2022 1:02:00 PM Chloromethane ND 0.10 µg/L 1 2-Chlorotoluene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 4-Chlorotoluene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM cis-1,2-DCE ND 0.10 3/22/2022 1:02:00 PM μg/L 1 ND cis-1,3-Dichloropropene 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,2-Dibromo-3-chloropropane ND 0.20 μg/L 1 3/22/2022 1:02:00 PM Dibromochloromethane ND 3/22/2022 1:02:00 PM 0.10 μg/L 1 Dibromomethane ND 0.20 µg/L 1 3/22/2022 1:02:00 PM ND 1,2-Dichlorobenzene 0.10 μg/L 1 3/22/2022 1:02:00 PM ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1.3-Dichlorobenzene 1,4-Dichlorobenzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Dichlorodifluoromethane ND 0.10 3/22/2022 1:02:00 PM μg/L 1 1,1-Dichloroethane ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,1-Dichloroethene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,2-Dichloropropane ND 0.10 1 1,3-Dichloropropane µg/L 3/22/2022 1:02:00 PM μg/L 2,2-Dichloropropane 3/22/2022 1:02:00 PM ND 0.10 1

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

CLIENT: Cottonwood Consulting LLC

Analytical Report

Lab Order **2203996**Date Reported: **3/28/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SVE

 Project:
 Jacquez GC B 003
 Collection Date: 3/16/2022 9:45:00 AM

 Lab ID:
 2203996-001
 Matrix: AIR
 Received Date: 3/18/2022 8:05:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8260B: VOLATILES** Analyst: CCM 1.1-Dichloropropene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Hexachlorobutadiene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 3/22/2022 1:02:00 PM ND 2-Hexanone 1.0 μg/L 1 Isopropylbenzene ND 0.10 µg/L 1 3/22/2022 1:02:00 PM ND 4-Isopropyltoluene 0.10 μg/L 1 3/22/2022 1:02:00 PM 4-Methyl-2-pentanone ND 1.0 μg/L 1 3/22/2022 1:02:00 PM Methylene chloride ND 0.30 μg/L 1 3/22/2022 1:02:00 PM n-Butylbenzene 3/22/2022 1:02:00 PM ND 0.30 μg/L 1 ND n-Propylbenzene 0.10 μg/L 1 3/22/2022 1:02:00 PM sec-Butylbenzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM Styrene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM tert-Butylbenzene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,1,1,2-Tetrachloroethane ND 0.10 μg/L 1 3/22/2022 1:02:00 PM μg/L 1,1,2,2-Tetrachloroethane ND 0.10 3/22/2022 1:02:00 PM 1 Tetrachloroethene (PCE) ND 0.10 μg/L 1 3/22/2022 1:02:00 PM trans-1.2-DCE ND 0.10 μg/L 1 3/22/2022 1:02:00 PM trans-1,3-Dichloropropene ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,2,3-Trichlorobenzene ND 0.10 1 3/22/2022 1:02:00 PM μg/L 1,2,4-Trichlorobenzene ND 0.10 µg/L 1 3/22/2022 1:02:00 PM 1,1,1-Trichloroethane ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 1,1,2-Trichloroethane ND 0.10 µg/L 1 3/22/2022 1:02:00 PM Trichloroethene (TCE) ND 0.10 μg/L 1 3/22/2022 1:02:00 PM 3/22/2022 1:02:00 PM Trichlorofluoromethane ND 0.10 µg/L 1 1,2,3-Trichloropropane ND 0.20 µg/L 1 3/22/2022 1:02:00 PM ND Vinyl chloride 0.10 μg/L 1 3/22/2022 1:02:00 PM Xylenes, Total 0.15 µg/L 3/22/2022 1:02:00 PM 3.2 1 Surr: Dibromofluoromethane %Rec 101 70-130 1 3/22/2022 1:02:00 PM Surr: 1,2-Dichloroethane-d4 %Rec 99.5 70-130 1 3/22/2022 1:02:00 PM Surr: Toluene-d8 %Rec 1 3/22/2022 1:02:00 PM 101 70-130 Surr: 4-Bromofluorobenzene 93.2 70-130 %Rec 1 3/22/2022 1:02:00 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 2

ANALYTICAL SUMMARY REPORT

March 25, 2022

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

Work Order: G22030398
Project Name: Not Indicated

Energy Laboratories Inc. Gillette WY received the following 1 sample for Hall Environmental on 3/23/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
G22030398-001	2203996-001A; SVE	03/16/22 9:45	03/23/22	Air	Natural Gas Analysis - BTU Natural Gas Analysis - Compressibility Factor Natural Gas Analysis - GPM Natural Gas Analysis - Molecular Weight Natural Gas Analysis - Routine Natural Gas Analysis - Pressure Base Natural Gas Analysis - Psuedo- Critical Pressure Natural Gas Analysis - Psuedo- Critical Temperature Natural Gas Analysis - Specific Gravity Natural Gas Analysis - Temperature Base

The analyses presented in this report were performed by Energy Laboratories, Inc., 400 W. Boxelder Rd., Gillette, WY 82718, 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 tests results, please contact your Project Manager.

Report Approved By:

Date Received: 03/23/22

LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental

 Project:
 Not Indicated
 Report Date: 03/25/22

 Client Sample ID:
 2203996-001A; SVE
 Collection Date: 03/16/22 09:45

Location:

Lab ID: G22030398-001 Sampled By: Not Indicated

22200000000		Campica By: Not maleated		
Analyses	Result Units	Qualifier Method	Analysis Date / By	
NATURAL GAS CHROMATOGRAPHIC ANALYSIS REPORT				
Oxygen	22.113 Mol %	GPA 2261	03/24/22 14:44 / blb	
Nitrogen	77.702 Mol %	GPA 2261	03/24/22 14:44 / blb	
Carbon Dioxide	0.185 Mol %	GPA 2261	03/24/22 14:44 / blb	
Hydrogen Sulfide	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Methane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Ethane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Propane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Isobutane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
n-Butane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Isopentane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
n-Pentane	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
Hexanes plus	< 0.001 Mol %	GPA 2261	03/24/22 14:44 / blb	
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS				
GPM Ethane	< 0.0003 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Propane	< 0.0003 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Isobutane	< 0.0003 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM n-Butane	< 0.0003 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Isopentane	< 0.0004 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM n-Pentane	< 0.0004 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Hexanes plus	< 0.0004 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Pentanes plus	< 0.0004 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
GPM Total	< 0.0004 gal/MCF	GPA 2261	03/24/22 14:44 / blb	
CALCULATED PROPERTIES				
Calculation Pressure Base	14.730 psia	GPA 2261	03/24/22 14:44 / blb	
Calculation Temperature Base	60 °F	GPA 2261	03/24/22 14:44 / blb	
Compressibility Factor, Z	1.0000 unitless	GPA 2261	03/24/22 14:44 / blb	
Molecular Weight	28.92 unitless	GPA 2261	03/24/22 14:44 / blb	
Pseudo-critical Pressure, psia	548 psia	GPA 2261	03/24/22 14:44 / blb	
Pseudo-critical Temperature, deg R	240 deg R	GPA 2261	03/24/22 14:44 / blb	
Specific Gravity (air=1.000)	1.002 unitless	GPA 2261	03/24/22 14:44 / blb	
Gross BTU per cu ft @ std cond, dry	< 0.01 BTU/cu ft	GPA 2261	03/24/22 14:44 / blb	
Gross BTU per cu ft @ std cond, wet	< 0.01 BTU/cu ft	GPA 2261	03/24/22 14:44 / blb	

Report RL - Analyte Reporting Limit MCL - Maximum Contaminant Level

Definitions: QCL - Quality Control Limit ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental Work Order: G22030398 Report Date: 03/25/22

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261							An	alytical Run	R270004
Lab ID:	CCV-2203241254	Continuing Ca	alibration Ve	rification Standa	ırd				03/24	1/22 12:55
Oxygen		0.637	Mol %	0.001	106	90	110			
Nitrogen		1.378	Mol %	0.001	98	85	110			
Carbon Did	oxide	0.954	Mol %	0.001	95	90	110			
Hydrogen S	Sulfide	0.025	Mol %	0.001	100	70	130			
Methane		93.438	Mol %	0.001	100	90	110			
Ethane		1.014	Mol %	0.001	101	90	110			
Propane		1.009	Mol %	0.001	101	90	110			
Isobutane		0.495	Mol %	0.001	99	90	110			
n-Butane		0.495	Mol %	0.001	99	90	110			
Isopentane)	0.200	Mol %	0.001	100	90	110			
n-Pentane		0.201	Mol %	0.001	100	90	110			
Hexanes p	lus	0.154	Mol %	0.001	103	90	110			
Lab ID:	ICV-2203241303	Initial Calibrat	ion Verificati	ion Standard					03/24	1/22 13:04
Oxygen		0.391	Mol %	0.001	97	75	110			
Nitrogen		5.154	Mol %	0.001	103	90	110			
Carbon Did	oxide	4.900	Mol %	0.001	99	90	110			
Hydrogen S	Sulfide	0.130	Mol %	0.001	131	100	136			
Methane		73.196	Mol %	0.001	100	90	110			
Ethane		4.997	Mol %	0.001	101	90	110			
Propane		4.993	Mol %	0.001	100	90	110			
Isobutane		1.984	Mol %	0.001	99	90	110			
n-Butane		1.965	Mol %	0.001	98	90	110			
Isopentane)	0.986	Mol %	0.001	99	90	110			
n-Pentane		0.997	Mol %	0.001	100	90	110			
Hexanes p	lus	0.307	Mol %	0.001	102	90	110			
Lab ID:	CCV-2203241628	Continuing Ca	alibration Ve	rification Standa	ırd				03/24	1/22 16:28
Oxygen		0.609	Mol %	0.001	102	90	110			
Nitrogen		1.288	Mol %	0.001	92	85	110			
Carbon Dic	oxide	0.965	Mol %	0.001	97	90	110			
Hydrogen S	Sulfide	0.021	Mol %	0.001	84	70	130			
Methane		93.560	Mol %	0.001	100	90	110			
Ethane		1.015	Mol %	0.001	101	90	110			
Propane		1.006	Mol %	0.001	101	90	110			
Isobutane		0.492	Mol %	0.001	98	90	110			
n-Butane		0.492	Mol %	0.001	98	90	110			
Isopentane)	0.199	Mol %	0.001	99	90	110			
n-Pentane		0.200	Mol %	0.001	100	90	110			
Hexanes p	lus	0.153	Mol %	0.001	102	90	110			
Method:	GPA 2261								Batch	: R270004
Lab ID:	G22030398-001ADUP	Sample Dupli	cate			Run: Varia	n GC_220324A		03/24	1/22 14:50
Oxygen		22.112	Mol %	0.001				0.0	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental Work Order: G22030398 Report Date: 03/25/22

Analyte	Result	Units	RL	%REC Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261							Batch:	R270004
Lab ID: G22030398-001ADUP	Sample Dupli	cate		Run: Variar	n GC_220324A		03/24	/22 14:50
Nitrogen	77.703	Mol %	0.001			0.0	10	
Carbon Dioxide	0.185	Mol %	0.001			0.0	10	
Hydrogen Sulfide	< 0.001	Mol %	0.001				10	
Methane	< 0.001	Mol %	0.001				10	
Ethane	< 0.001	Mol %	0.001				10	
Propane	< 0.001	Mol %	0.001				10	
Isobutane	< 0.001	Mol %	0.001				10	
n-Butane	< 0.001	Mol %	0.001				10	
Isopentane	< 0.001	Mol %	0.001				10	
n-Pentane	< 0.001	Mol %	0.001				10	
Hexanes plus	< 0.001	Mol %	0.001				10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Billings, MT 800.735.4489 • Casper, WY 888.235.0515 Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

Work Order Receipt Checklist

Hall Environmental

G22030398

Login completed by:	Jill S. Jeffress		Date	Received: 3/23/2022				
Reviewed by:	Misty Stephens		Re	ceived by: csj				
Reviewed Date:	3/24/2022		Carrier name: FedEx					
Shipping container/cooler in	good condition?	Yes ✓	No 🗌	Not Present				
Custody seals intact on all st	nipping container(s)/cooler(s)?	Yes 🗸	No 🗌	Not Present				
Custody seals intact on all sa	ample bottles?	Yes	No 🗌	Not Present ✓				
Chain of custody present?		Yes 🗸	No 🗌					
Chain of custody signed whe	en relinquished and received?	Yes 🔽	No 🗌					
Chain of custody agrees with	Yes 🔽	No 🗌						
Samples in proper container	Yes 🔽	No 🗌						
Sample containers intact?		Yes 🗸	No 🗌					
Sufficient sample volume for	indicated test?	Yes 🗸	No 🗌					
All samples received within h (Exclude analyses that are of such as pH, DO, Res CI, Su	onsidered field parameters	Yes ✓	No 🗌					
Temp Blank received in all sl	nipping container(s)/cooler(s)?	Yes	No 🗌	Not Applicable 🗸				
Container/Temp Blank tempe	erature:	°C						
Containers requiring zero her bubble that is <6mm (1/4").	adspace have no headspace or	Yes	No 🗌	No VOA vials submitted [\checkmark			
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

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 Relinquished By Relinquished By-

Date Date Date

Tune Time:

Received By Received By

Dak

Time Time

HARDCOPY (extra cost)

ONLINE

POR LAB USE ONLY

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TAT

Standard 17

RUSH

Next BD

2nd BD

Jid BD []

Comments

Temp of samples

Attempt to Cool *

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		TAL	

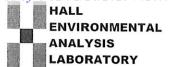
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PAGE 1 OF: 1	
Hall Environment	

Hall Environmental And), sts Laborator, 4901 Hawkins NE Albuquerque NM 87109, TEL 505, 315, 3075

Website clients hallenvironmental com F4X 505-345-4107

SUBC	ONTRATOR Encr	SUB CONTRATOR Energy Labs-Gillette COMPANY	Energy Laboratories	ies	PHONE	(866) 686-7175
ADDRESS	400 W	400 W Boxelder Rd		ı	ACCOUNT#	EMAIL.
Cill'	CTTY, STATE, ZIP Gillet	Gillette, WY 82718		ļ		
ITEM	SAMPLE	CLENT SAMPLE ID	воттье	MATRIX	COLLECTION DATE	* ANALYTICAL COMMENTS
ш	1 2203996-001A SVE	SVE	TEDLAR	Air	3/16/2022 9 45:00 AM	1 Natural Gases 02, CO2
						257:1



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

	Cottonwood Consulting LLC	Work Order Number	r: 2203996		RcptNo	1
Received By:	Cheyenne Cason	3/18/2022 8:05:00 AM	1	Chenl		,
Completed By:	Sean Livingston ダ <i>オー</i> ターでと	3/18/2022 8:43:55 AM	1	Chul S.L.	, and the second	
Chain of Custo	od <u>v</u>					
1. Is Chain of Cus	tody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the sa	imple delivered?		Courier			
<u>Log In</u>						
Was an attempt	made to cool the samples?		Yes	No 🗌	NA 🗹	
4. Were all sample	s received at a temperature	of >0° C to 6.0°C	Yes	No 🗌	NA 🗸	
5. Sample(s) in pro	oper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample	e volume for indicated test(s)?	Yes 🗸	No 🗌		
7. Are samples (ex	cept VOA and ONG) proper	y preserved?	Yes 🗸	No 🗌		
8. Was preservative	e added to bottles?		Yes	No 🗸	NA 🗌	
9. Received at leas	t 1 vial with headspace <1/4	" for AQ VOA?	Yes	No 🗌	NA 🗸	
10. Were any samp	le containers received broke	n?	Yes	No 🗸	# of processed	
	match bottle labels? cies on chain of custody)		Yes 🗸	No 🗌	# of preserved bottles checked for pH:	>12 unless noted)
	rectly identified on Chain of	Custody?	Yes 🗸	No 🗆	Adjusted?	Jumese netec,
	nalyses were requested?		Yes 🗸	No 🗌		1
	times able to be met?		Yes 🔽	No 🗌	Checked by:	m3/18/22
	g (if applicable)					
	ed of all discrepancies with	this order?	Yes	No 🗌	NA 🗸	
Person No	otified:	Date:	of the last and the same of th	VO SEMINA CHE MININE MANAGER		-
By Whom	PARISH SHEETEN STORY	Via:	eMail [☐ Phone ☐ Fax	☐ In Person	
Regarding			- A A A A A A A A A A A A A A A A A A A	A MARINE STATE OF THE STATE OF		
Client Inst	ructions:	THE SHAREST THE PARTY OF THE SHARE SHARE SHARES SHAREST STREET	9	TATALAN AND AND AND AND AND AND AND AND AND A	CONTRACTOR AND AN ARCHITECTURE AND ARCHI	
16. Additional rema	ırks:					an en
17. Cooler Informa	ation					
Cooler No		eal Intact Seal No S	Seal Date	Signed By		
1	NA Good					

S S S S	in-of-	Chain-of-Custody Record	Turn-Around Time:	
Client:	Cotton	Cottonwood Consulting LLC	Standard Rush	HALL ENVIRONMENTAL
				ANALISIS LABORALORY
Mailing Address:	ress:	PO Box 1653	- Jacquez GC B #003E	www.inalienvironmental.com
	Durar	Durango, CO 81302	Project #:	
Phone #: 970-764-7356	0-764-735	9		Analy
email or Fax	:#; ksiesser	email or Fax#: ksiesser@cottonwoodconsulting.com	Project Manager:	((
QA/QC Package:	age:		Kyle Siesser	9,8 SI SI SI
Standard Standard		☐ Level 4 (Full Validation)	•	PCE PCE
Accreditation:		☐ Az Compliance	Sampler: Emma Millar	S82 (1) S27C
□ NELAC	□ Other	her		\ O)8\z .40 .40 N
☐ EDD (Type)	e)		olers: (GR des des des des des des
******			Cooler Temp(induding cF): NA	stici etho etho 83 Me Me (AC
			Θ	
_	1	ix Sample Name	Type and # Type 72つ3999	855 875 875 876 876 876 876 876
3/16/2022 09/45	4 AIR	SVE		
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	- 1			
Jate: IIme:	****	Relinguished by:	Via: Date Time	Remarks:
Jate: Time:	_	Solino de la companio	Num 7/17/22 1357	please cc emillar@cottonwoodconsulting.com
3/ , S.O.	۲ .	,	Received by: Via: Date Time	
11/22/180	5	immit house of	me cen 3/18/20 305	
If necess	sary samples s	all Environmental may be subc	to other accredited laboratories. This serves as	anseibility. Any eith-contracted data will be already address the sales of the sale



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

June 23, 2022

Kyle Siesser Cottonwood Consulting LLC PO BOX 1653 Durango, CO 81302

TEL: (970) 764-7356

FAX:

RE: Jacquez GC B 003E OrderNo.: 2206603

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/10/2022 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

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2206603

Date Reported: 6/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC Client Sample ID: SVE

 Project:
 Jacquez GC B 003E
 Collection Date: 6/8/2022 11:00:00 AM

 Lab ID:
 2206603-001
 Matrix: AIR
 Received Date: 6/10/2022 7:05:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: CCM
Benzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Toluene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Ethylbenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Methyl tert-butyl ether (MTBE)	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2,4-Trimethylbenzene	0.79	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,3,5-Trimethylbenzene	2.3	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2-Dichloroethane (EDC)	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2-Dibromoethane (EDB)	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Naphthalene	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
1-Methylnaphthalene	ND	0.80	μg/L	2	6/14/2022 3:50:00 PM	R88708
2-Methylnaphthalene	ND	0.80	μg/L	2	6/14/2022 3:50:00 PM	R88708
Acetone	ND	2.0	μg/L	2	6/14/2022 3:50:00 PM	R88708
Bromobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Bromodichloromethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Bromoform	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Bromomethane	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
2-Butanone	ND	2.0	μg/L	2	6/14/2022 3:50:00 PM	R88708
Carbon disulfide	ND	2.0	μg/L	2	6/14/2022 3:50:00 PM	R88708
Carbon tetrachloride	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Chlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Chloroethane	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
Chloroform	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Chloromethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
2-Chlorotoluene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
4-Chlorotoluene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
cis-1,2-DCE	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
cis-1,3-Dichloropropene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2-Dibromo-3-chloropropane	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
Dibromochloromethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Dibromomethane	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2-Dichlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,3-Dichlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,4-Dichlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Dichlorodifluoromethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1-Dichloroethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1-Dichloroethene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2-Dichloropropane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,3-Dichloropropane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
2,2-Dichloropropane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

Analytical Report

Lab Order **2206603**Date Reported: **6/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC Client Sample ID: SVE

 Project:
 Jacquez GC B 003E
 Collection Date: 6/8/2022 11:00:00 AM

 Lab ID:
 2206603-001
 Matrix: AIR
 Received Date: 6/10/2022 7:05:00 AM

Analyses	Result	RL C	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: CCM
1,1-Dichloropropene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Hexachlorobutadiene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
2-Hexanone	ND	2.0	μg/L	2	6/14/2022 3:50:00 PM	R88708
Isopropylbenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
4-Isopropyltoluene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
4-Methyl-2-pentanone	ND	2.0	μg/L	2	6/14/2022 3:50:00 PM	R88708
Methylene chloride	ND	0.60	μg/L	2	6/14/2022 3:50:00 PM	R88708
n-Butylbenzene	ND	0.60	μg/L	2	6/14/2022 3:50:00 PM	R88708
n-Propylbenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
sec-Butylbenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Styrene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
tert-Butylbenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1,1,2-Tetrachloroethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1,2,2-Tetrachloroethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Tetrachloroethene (PCE)	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
trans-1,2-DCE	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
trans-1,3-Dichloropropene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2,3-Trichlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2,4-Trichlorobenzene	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1,1-Trichloroethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,1,2-Trichloroethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Trichloroethene (TCE)	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Trichlorofluoromethane	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
1,2,3-Trichloropropane	ND	0.40	μg/L	2	6/14/2022 3:50:00 PM	R88708
Vinyl chloride	ND	0.20	μg/L	2	6/14/2022 3:50:00 PM	R88708
Xylenes, Total	4.1	0.30	μg/L	2	6/14/2022 3:50:00 PM	R88708
Surr: Dibromofluoromethane	107	70-130	%Rec	2	6/14/2022 3:50:00 PM	R88708
Surr: 1,2-Dichloroethane-d4	97.0	70-130	%Rec	2	6/14/2022 3:50:00 PM	R88708
Surr: Toluene-d8	105	70-130	%Rec	2	6/14/2022 3:50:00 PM	R88708
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	2	6/14/2022 3:50:00 PM	R88708

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 2

Billings, MT 800.735.4489 • Casper, WY 888.235.0515 Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

June 23, 2022

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

Work Order: G22060305
Project Name: 2206603

Energy Laboratories Inc. Gillette WY received the following 1 sample for Hall Environmental on 6/16/2022 for analysis.

•		•		•
Lab ID	Client Sample ID	Collect Date Receive Date	Matrix	Test
G22060305-001	2206603-001A;SVE	06/08/22 11:00 06/16/22	Gas	Air Correction Calculations Analysis Corrections 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., 400 W. Boxelder Rd., Gillette, WY 82718, 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 tests results, please contact your Project Manager.

Report Approved By:

Page 24 of 46
Billings, MT 800.735.4489 • Casper, WY 888.235.0515 Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

CLIENT: Hall Environmental

Project: 2206603

G22060305 Work Order:

Report Date: 06/23/22 **CASE NARRATIVE**

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515 Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

Date Received: 06/16/22

LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental

Project: 2206603 Report Date: 06/23/22 **Client Sample ID:** 2206603-001A;SVE Collection Date: 06/08/22 11:00

Location:

Lab ID: G22060305-001 Sampled By: Not Provided

Analyses	Result Units	Qualifier Method Analysis Date / By
GAS CHROMATOGRAPHIC ANALYSIS REPORT		
Oxygen	21.74 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Nitrogen	78.07 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Carbon Dioxide	0.19 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Hydrogen Sulfide	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Methane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Ethane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Propane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Isobutane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
n-Butane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Isopentane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
n-Pentane	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
Hexanes plus	<0.01 Mol %	GPA 2261- 06/20/22 13:50 / eli-b
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS		
Propane	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
Isobutane	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
n-Butane	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
Isopentane	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
n-Pentane	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
Hexanes plus	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
GPM Total	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
GPM Pentanes plus	< 0.001 gpm	GPA 2261- 06/20/22 13:50 / eli-b
CALCULATED PROPERTIES		
Gross BTU per cu ft @ Std Cond. (HHV	<1	GPA 2261- 06/20/22 13:50 / eli-b
Net BTU per cu ft @ std cond. (LHV)	<1	GPA 2261- 06/20/22 13:50 / eli-b
Pseudo-critical Pressure, psia	546	GPA 2261- 06/20/22 13:50 / eli-b
Pseudo-critical Temperature, deg R	239	GPA 2261- 06/20/22 13:50 / eli-b
PHYSICAL PROPERTIES-CALCULATED		
Specific Gravity @ 60/60F	0.999	D3588-81 06/20/22 13:50 / eli-b
COMMENTS		

⁻ BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.

Report RL - Analyte Reporting Limit MCL - Maximum Contaminant Level

Definitions: QCL - Quality Control Limit ND - Not detected at the Reporting Limit (RL)

06/20/22 13:50 / eli-b

⁻ 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.



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental Work Order: G22060305 Report Date: 06/22/22

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261-95								Batch:	R383462
Lab ID:	LCS062022	Laboratory Co	ontrol Sample			Run: GCN	GA-B_220620A		06/20)/22 15:28
Oxygen		0.60	Mol %	0.01	120	70	130			
Nitrogen		5.97	Mol %	0.01	99	70	130			
Carbon Dic	oxide	1.01	Mol %	0.01	102	70	130			
Methane		74.5	Mol %	0.01	100	70	130			
Ethane		6.07	Mol %	0.01	101	70	130			
Propane		5.08	Mol %	0.01	103	70	130			
Isobutane		2.01	Mol %	0.01	100	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane)	1.01	Mol %	0.01	101	70	130			
n-Pentane		1.00	Mol %	0.01	100	70	130			
Hexanes pl	lus	0.77	Mol %	0.01	96	70	130			
Lab ID:	B22061652-001ADUP	Sample Dupli	cate			Run: GCN	GA-B_220620A		06/20)/22 12:55
Oxygen		21.3	Mol %	0.01				0	20	
Nitrogen		77.7	Mol %	0.01				0.1	20	
Carbon Dic	oxide	0.77	Mol %	0.01				0.0	20	
Hydrogen S	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 pl	lus	0.17	Mol %	0.01				52	20	R

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

Trust our People. Trust our Data. www.energylab.com

Billings, MT **800.735.4489** • Casper, WY **888.235.0515**Gillette, WY **866.686.7175** • Helena, MT **877.472.0711**

Work Order Receipt Checklist

Hall Environmental

Login completed by: Chantel S. Johnson

G22060305

Date Received: 6/16/2022

Login completed by:	Charles C. Comicon		Date	1100011001 0, 10,2022	
Reviewed by:	Alyson T. Degnan		Re	ceived by: csj	
Reviewed Date:	6/21/2022		Car	rier name: FedEx	
Shipping container/cooler in	n 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 wh	nen relinquished and received?	Yes 🔽	No 🗌		
Chain of custody agrees wi	th sample labels?	Yes ✓	No 🗌		
Samples in proper containe	er/bottle?	Yes ✓	No 🗌		
Sample containers intact?		Yes ✓	No 🗌		
Sufficient sample volume for	or indicated test?	Yes 🔽	No 🗌		
All samples received within (Exclude analyses that are such as pH, DO, Res Cl, S	considered field parameters	Yes ✓	No 🗌		
Temp Blank received in all	shipping container(s)/cooler(s)?	Yes	No 🗌	Not Applicable 🗸	
Container/Temp Blank temp	perature:	°C			
Containers requiring zero houbble that is <6mm (1/4").	eadspace have no headspace or	Yes	No 🗌	No VOA vials submitted	\checkmark
Water - pH acceptable upor	n 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

Date Date:

Date: Time: 10:01 AM Time

Received By

Date

TAT:

RUSH

Next BD

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.

ENVIRONMENTAL LABORATORY ANALYSIS

TWO THE TANK TOWN

пан Environmental Analysis Laboratory

Albuquerque, NM 87109

4901 Hawkins NE

COLLECTION Z ANALYTICAL COMMENTS 6/8/2022 11:00:00 AM 1 Natural Gases 02, CO2	COLLECTION X DATE 6/8/2022 11:00:00 AM	MATRIX Air	TYPE TEDLAR	1 2206603-001A SVE
# CON.				
				CITY, STATE, ZIP Gillette, WY 82718
EMAIL:	ACCOUNT #:			400 W Boxelder Rd
(866) 686-7175 FAX:	PHONE:	ies	Energy Laboratories	ADDRESS:

HARDCOPY (extra cost) REPORT TRANSMITTAL DESIRED. EMAIL

FOR LAB USE ONLY

Attempt to Cool?

Released to Imaging: 10/16/2023 3:20:02 PM

ONLINE

Website: www.hallenvironmental.com

FAX: 505-345-4107 TEL: 505-345-3975



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: Cottonw LLC	ood Consulting	Work Order Numbe	r: 2206603		RcptNo:	1
Received By: Cheyer	nne Cason	6/10/2022 7:05:00 AM	Л	Chal		
Completed By: Tracy (Casarrubias	6/10/2022 9:57:46 AM	Л			
Reviewed By: WPG	5.10.2)				
Chain of Custody						
1. Is Chain of Custody co	mplete?		Yes 🗹	No 🗆	Not Present	
2. How was the sample d	elivered?		<u>Courier</u>			
<u>Log In</u>			_		_	
3. Was an attempt made	to cool the sample	\$?	Yes 🗹	No 🗌	na 🗆	
4. Were all samples recei	ved at a temperatu	re of >0° C to 6.0°C	Yes 🗌	No 🗌	NA 🗹	
5. Sample(s) in proper co	ntainer(s)?		Yes 🗹	No 🗆		
6. Sufficient sample volum	ne for indicated tes	t(s)?	Yes 🗹	No 🗌		
7. Are samples (except V	OA and ONG) prop	erly preserved?	Yes 🗹	No 🗆		
8. Was preservative adde	d 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 cont	ainers received bro	ken?	Yes	No 🗹	# of preserved	
11. Does paperwork match			Yes 🗹	No 🗆	bottles checked for pH:	>12 unless noted)
(Note discrepancies on	•	af Ovaladi.O	Yes 🗹	No 🗆	Adjusted?	>12 uniess noteu)
12. Are matrices correctly in		or Custody?		No 🗆		
13. Is it clear what analyses 14.Were all holding times :			Yes ☑ Yes ☑	No 🗆	Checked by	me Cluster
(If no, notify customer f			res 🖭	NO	/ 555,()	CONOIO
Special Handling (if a	pplicable)					
15. Was client notified of a	Il discrepancies wi	th this order?	Yes 🗌	No 🗆	NA 🗹	٦
Person Notified:		Date:				
By Whom:		Via:	eMail [] Phone [] Fax	☐ In Person	
Regarding:	1		ACTUAL CONTRACTOR OF THE STREET OF THE STREET OF			
Client Instruction	s: T					
16. Additional remarks:						
17. Cooler Information	,			*	i.	
Cooler No Temp		Seal Intact Seal No	Seal Date	Signed By		
1 NA	Good	Yes			1	

Chain-of-Custody Record

Turn-Around Time:

Client C-#	, ecold	1						_	HALL	F	П	7	井	ENVIRONMENTAL	Z	<u>~</u>	Z	¥		
	1	Project Name:	7001	and the season of the season o				•		MALTSIS	# 1/	į	. P	2	Č	Ž	7	<u>c</u>	LABORATORY	•
Mailing Address: PO Box 1653	1653	Jacquez GC	C B #003E			49	<u> </u>	a¥.	4901 Hawkins NE		' <u>ā</u>		Jelo Elei	ins NE - Albuquerque, NM 87109		871	9			
Durango, CO 81302		Project #:					<u>.</u> 5) (၁	Tel. 505-345-3975	975		Fax	5	Fax 505-345-4107	54	07				
Phone #: 970-764-7356										A	naly	SIS	Rec	Analysis Request	÷			i	1.	اس
email or Fax#; ksiesser@cottonwoodconsulting.com	sulting.com	Project Manager:	jer:		1)	0)					O ₄			nt)						
QA/QC Package:		Kyle Siesser	4		8021	MR	B's		MS) ₄ , S			bse						
	☐ Level 4 (Full Validation)				3's (₹0/	PC		0SI		, PC			nt/A						
Accreditation: Az Compliance		Sampler: Emma Millar	na Millar		ME	DF	082	.1)	827		102			ese						
		On Ice: ,		□ No	/	२०	s/8	504	or	s	3, 1		DA)	(Pr						
□ EDD (Type)		# of Coolers:	1	•	BE	(GI	ide	od :	310	etal	NO.)	i-V(rm						
		Cooler Temp(induding cF);	nduding CF); // A		МТ	15D	estic	eth	y 83	Me	Br, 1	OA)	emi	olifo						
		Container	tive	HEAL No.	EX/	PH:801	81 Pe	OB (M	\Hs b	CRA 8	, F, B	60 (V	70 (S	tal Co	02	2				
Date Time Matrix Samp	Sample Name	#		220 b 603	вт	ΤP	80	ED	PΑ	RC	CI,	82	82	То	C	02			<u> </u>	
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it 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.	onmental may be subco	ontracted to other ac	credited laboratories	s. This serves as notice of this	possi	billy.	Any s	5-00	ııracıe	id dan	8	e cie	any no	rated	on th	e anai	ytical	repor		
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

September 29, 2022

Kyle Siesser Cottonwood Consulting LLC PO BOX 1653 Durango, CO 81302

TEL: (970) 764-7356

FAX

RE: Jacquez GC B 003E OrderNo.: 2209733

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/15/2022 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

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2209733

Date Reported: 9/29/2022

Hall Environmental Analysis Laboratory, Inc.

Matrix: AIR

CLIENT: Cottonwood Consulting LLC

Project: Jacquez GC B 003E

Lab ID: 2209733-001

Client Sample ID: SVE

Collection Date: 9/14/2022 11:20:00 AM

Received Date: 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst	CCM
Benzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Toluene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Ethylbenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Methyl tert-butyl ether (MTBE)	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,4-Trimethylbenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,3,5-Trimethylbenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2-Dichloroethane (EDC)	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2-Dibromoethane (EDB)	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Naphthalene	ND	0.20		μg/L	1	9/15/2022 3:07:00 PM	R91060
1-Methylnaphthalene	ND	0.40		μg/L	1	9/15/2022 3:07:00 PM	R91060
2-Methylnaphthalene	ND	0.40		μg/L	1	9/15/2022 3:07:00 PM	R91060
Acetone	ND	1.0		μg/L	1	9/15/2022 3:07:00 PM	R91060
Bromobenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Bromodichloromethane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Bromoform	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Bromomethane	ND	0.20		μg/L	1	9/15/2022 3:07:00 PM	R91060
2-Butanone	ND	1.0		μg/L	1	9/15/2022 3:07:00 PM	R91060
Carbon disulfide	ND	1.0		μg/L	1	9/15/2022 3:07:00 PM	R91060
Carbon tetrachloride	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Chlorobenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Chloroethane	ND	0.20		μg/L	1	9/15/2022 3:07:00 PM	R91060
Chloroform	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Chloromethane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
2-Chlorotoluene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
4-Chlorotoluene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
cis-1,2-DCE	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
cis-1,3-Dichloropropene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2-Dibromo-3-chloropropane	ND	0.20		μg/L	1	9/15/2022 3:07:00 PM	R91060
Dibromochloromethane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Dibromomethane	ND	0.20		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2-Dichlorobenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,3-Dichlorobenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,4-Dichlorobenzene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
Dichlorodifluoromethane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1-Dichloroethane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1-Dichloroethene	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2-Dichloropropane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
1,3-Dichloropropane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060
2,2-Dichloropropane	ND	0.10		μg/L	1	9/15/2022 3:07:00 PM	R91060

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

Analytical Report

Lab Order **2209733**

Date Reported: 9/29/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Client Sample ID: SVE

 Project:
 Jacquez GC B 003E
 Collection Date: 9/14/2022 11:20:00 AM

 Lab ID:
 2209733-001
 Matrix: AIR
 Received Date: 9/15/2022 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: ССМ
1,1-Dichloropropene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Hexachlorobutadiene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
2-Hexanone	ND	1.0	μg/L	1	9/15/2022 3:07:00 PM	R91060
Isopropylbenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
4-Isopropyltoluene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
4-Methyl-2-pentanone	ND	1.0	μg/L	1	9/15/2022 3:07:00 PM	R91060
Methylene chloride	ND	0.30	μg/L	1	9/15/2022 3:07:00 PM	R91060
n-Butylbenzene	ND	0.30	μg/L	1	9/15/2022 3:07:00 PM	R91060
n-Propylbenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
sec-Butylbenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Styrene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
tert-Butylbenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,1,2-Tetrachloroethane	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,2,2-Tetrachloroethane	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Tetrachloroethene (PCE)	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
trans-1,2-DCE	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
trans-1,3-Dichloropropene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,3-Trichlorobenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,4-Trichlorobenzene	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,1-Trichloroethane	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,2-Trichloroethane	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Trichloroethene (TCE)	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Trichlorofluoromethane	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,3-Trichloropropane	ND	0.20	μg/L	1	9/15/2022 3:07:00 PM	R91060
Vinyl chloride	ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Xylenes, Total	ND	0.15	μg/L	1	9/15/2022 3:07:00 PM	R91060
Surr: Dibromofluoromethane	103	70-130	%Rec	1	9/15/2022 3:07:00 PM	R91060
Surr: 1,2-Dichloroethane-d4	96.3	70-130	%Rec	1	9/15/2022 3:07:00 PM	R91060
Surr: Toluene-d8	88.0	70-130	%Rec	1	9/15/2022 3:07:00 PM	R91060
Surr: 4-Bromofluorobenzene	88.6	70-130	%Rec	1	9/15/2022 3:07:00 PM	R91060

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 2

ANALYTICAL SUMMARY REPORT

September 28, 2022

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

Work Order: B22091520
Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 9/16/2022 for analysis.

Lab ID	Client Sample ID	Collect Date Receive Date	Matrix	Test
B22091520-001	2209733-001A, SVE	09/14/22 11:20 09/16/22	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:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental **Report Date:** 09/28/22 Project: Not Indicated Collection Date: 09/14/22 11:20 Lab ID: B22091520-001 DateReceived: 09/16/22 Client Sample ID: 2209733-001A, SVE Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS	REPORT						
Oxygen	21.84	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Nitrogen	78.12	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Carbon Dioxide	0.04	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Hydrogen Sulfide	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Ethane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Propane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Isobutane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
n-Butane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Isopentane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
n-Pentane	< 0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 12:23 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 12:23 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	09/20/22 12:23 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	09/20/22 12:23 / jrj
Pseudo-critical Pressure, psia	545			1		GPA 2261-95	09/20/22 12:23 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-95	09/20/22 12:23 / jrj
Specific Gravity @ 60/60F	0.998			0.001		D3588-81	09/20/22 12:23 / jrj
Air, % - The analysis was not corrected for air.	99.79			0.01		GPA 2261-95	09/20/22 12:23 / jrj
•							
COMMENTS							

⁻ BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.

RL - Analyte Reporting Limit Report MCL - Maximum Contaminant Level

Definitions: QCL - Quality Control Limit ND - Not detected at the Reporting Limit (RL)

09/20/22 12:23 / jrj

⁻ 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.



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental Work Order: B22091520 Report Date: 09/28/22

Analyte		Count	Result	Units	RL	%REC I	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261-95									Batch:	R388187
Lab ID:	B22091527-002ADUP	12 Sai	mple Duplic	ate		ı	Run: GCNG	GA-B_220920A		09/20/	22 10:57
Oxygen			20.3	Mol %	0.01				0	20	
Nitrogen			78.0	Mol %	0.01				0.0	20	
Carbon Did	oxide		1.74	Mol %	0.01				0.6	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 p	lus		<0.01	Mol %	0.01					20	
Lab ID:	LCS092022	11 Lat	ooratory Co	ntrol Sample		ı	Run: GCNG	GA-B_220920A		09/20/	22 12:51
Oxygen			0.63	Mol %	0.01	126	70	130			
Nitrogen			6.13	Mol %	0.01	102	70	130			
Carbon Did	oxide		1.01	Mol %	0.01	102	70	130			
Methane			74.0	Mol %	0.01	99	70	130			
Ethane			6.11	Mol %	0.01	102	70	130			
Propane			5.18	Mol %	0.01	105	70	130			
Isobutane			2.05	Mol %	0.01	102	70	130			
n-Butane			2.04	Mol %	0.01	102	70	130			
Isopentane			1.03	Mol %	0.01	103	70	130			
n-Pentane			1.03	Mol %	0.01	103	70	130			
Hexanes p	lus		0.81	Mol %	0.01	101	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Login completed by: Yvonna F. Smith

Billings, MT 800.735.4489 • Casper, WY 888.235.0515 Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

Work Order Receipt Checklist

Hall Environmental

B22091520

Date Received: 9/16/2022

_og oop.otoa 2).				
Reviewed by:	darcy		Re	ceived by: yes
Reviewed Date:	9/24/2022		Car	rier name: FedEx
Shipping container/cooler in	good condition?	Yes ✓	No 🗌	Not Present
Custody seals intact on all s	shipping container(s)/cooler(s)?	Yes ✓	No 🗌	Not Present
Custody seals intact on all s	ample bottles?	Yes	No 🗌	Not Present 🗹
Chain of custody present?		Yes ✓	No 🗌	
Chain of custody signed wh	en relinquished and received?	Yes ✓	No 🗌	
Chain of custody agrees wit	h sample labels?	Yes ✓	No 🗌	
Samples in proper container	r/bottle?	Yes ✓	No 🗌	
Sample containers intact?		Yes ✓	No 🗌	
Sufficient sample volume fo	r indicated test?	Yes ✓	No 🗌	
All samples received within (Exclude analyses that are couch as pH, DO, Res CI, Science as pH, DO, Res	considered field parameters	Yes 🔽	No 🗌	
Temp Blank received in all s	shipping container(s)/cooler(s)?	Yes	No 🗸	Not Applicable
Container/Temp Blank temp	erature:	19.4°C No Ice		
Containers requiring zero he bubble that is <6mm (1/4").	eadspace have no headspace or	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

4901 Handina NE
Albaquerque, NM 87109
TEL: 505.345.3975
FAX: 505.345.4107

Website: www.hallenvironmental.com

Hall Environmental Analysis Laboratory

CHAIN OF CUSTODY RECORD PAGE 1

B22091520 ANALYTICAL COMMENTS (406) 252-6069 EMAIL XX 1 Natural Gases 02, C02 (406) 869-6253 # CONTAINER: COLLECTION ACCOUNT PHONE MATRIX Energy Laboratories BOTTLE TEDLAR COMPANY CLIENT SAMPLE ID 1120 South 27th Street BCONTRATOR Energy Labs -Billings Billings, MT 59107 2209733-001A SVE ITEM SAMPLE SITT, STATE, ZIP. ADDRESS

J RECTIONS / 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.	Date: 91502822 Tare: 8.22 AM Rocated By: Date: Time:	Date Time Recented By Dute Time HARDCOPY (certa cost) FAX EMAIL CNLINE	Date Time Shirty Mo/22 By30		
SPECIAL INSTRUCTIONS / COA	Picase include the LAB ID	Refineguaded By CMC	Relinquished By:	Relinquished By:	TAT:	

LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Cottonwood Consulting Work Order Number: 2209733 RcptNo: 1 LLC Received By: Juan Rojas 9/15/2022 7:35:00 AM Completed By: Cheyenne Cason 9/15/2022 8:21:40 AM Reviewed By: Jn a/15/22 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 No 🗌 NA V 5. Sample(s) in proper container(s)? Yes 🗸 No 🗌 6. Sufficient sample volume for indicated test(s)? Yes 🗸 No \square 7. Are samples (except VOA and ONG) properly preserved? Yes V No \square 8. Was preservative added to bottles? No 🗸 Yes 🗌 NA 🗌 9. Received at least 1 vial with headspace <1/4" for AQ VOA? No 🗌 Yes NA 🗸 10. Were any sample containers received broken? Yes No 🗸 # of preserved bottles checked 11. Does paperwork match bottle labels? Yes 🗸 No 🔲 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) 12. Are matrices correctly identified on Chain of Custody? Adjusted? Yes 🗸 No 13. Is it clear what analyses were requested? No 🗌 Checked by: & 9/15/22 14. Were all holding times able to be met? Yes 🗸 No (If no, notify customer for authorization.) 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: Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By Na Good Not Present

	hair	-0 [-C	Chain-of-Custody Record	Turn-Around Time:						i		ġ		i	i	
Client		ottonwo	Cottonwood Consulting LLC	Standard 🗆 Rush						֡֞֟֝֟֝֟֝֟֝֟֝֓֓֟֝֟֝֓֟֟֝֟֟֝֟֟֝֟֟֟֝	MALL ENVIRONMENTAL	5 5	E (4	
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Mailing	Mailing Address:	S:	PO Box 1653	Jacquez GC B #003E			901 F	www.ha	ww.ha	lenvir	www.hallenvironmental.com	ital.co	E 2	,		
		Durango,	o, CO 81302	Project #:		-	Tel	505_345_3075	3075		- Albuquerque, NIM 87109	ue, N	M 8/	<u> </u>		
Phone :	#: 970-7	Phone #: 970-764-7356					6.5	040-0	V V	nalvs	Analysis Reduest	1.540 11est	410/			
email or	r Fax#:	ksiesser@	email or Fax#: ksiesser@cottonwoodconsulting.com	Project Manager:		-	Ļ	_		* ((1				_
QA/QC	QA/QC Package:	.,		Kyle Siesser				S		os '		uəs				
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				Cooler Temp(including CF): N	1/19		ioite		ΘM		-	noli				
Date	Time	Matrix	Sample Name	Container Preservative 7.7	HEAL No.	STEX /	9G 1808	M) BDE	8 ARD	3, F, Br 260 (VC	5) 07S	otal Col	000		-	
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4/4/24 1812	1816	(Mouth	who Wortens	Havier 9	SEIF SCASIA	ì										
Ĭ	necessary,	samples subi	mitted to Hall Environmental may be subcor	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 renort	is serves as notice of this p	ossibility.	Any sub	contracte	d data v	vill be cle	arly notal	ted on th	Vene er	rinal ren	to	



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

December 30, 2022

Kyle Siesser Cottonwood Consulting LLC PO BOX 1653 Durango, CO 81302

TEL: (970) 764-7356

FAX:

RE: Jacquez GC B 003E OrderNo.: 2212A23

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/16/2022 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

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2212A23

Date Reported: 12/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Project: Jacquez GC B 003E

Lab ID: 2212A23-001

Matrix: AIR

Client Sample ID: SVE

Collection Date: 12/14/2022 11:20:00 AM

Received Date: 12/16/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	300	5.0		μg/L	1	12/19/2022 9:59:43 AM
Surr: BFB	547	15-380	S	%Rec	1	12/19/2022 9:59:43 AM
EPA METHOD 8260B: VOLATILES						Analyst: CCM
Benzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Toluene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Ethylbenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,2,4-Trimethylbenzene	0.26	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,3,5-Trimethylbenzene	1.5	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,2-Dichloroethane (EDC)	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Naphthalene	ND	0.20		μg/L	1	12/27/2022 2:41:00 PM
1-Methylnaphthalene	ND	0.40		μg/L	1	12/27/2022 2:41:00 PM
2-Methylnaphthalene	ND	0.40		μg/L	1	12/27/2022 2:41:00 PM
Acetone	ND	1.0		μg/L	1	12/27/2022 2:41:00 PM
Bromobenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Bromodichloromethane	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Bromoform	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Bromomethane	ND	0.20		μg/L	1	12/27/2022 2:41:00 PM
2-Butanone	ND	1.0		μg/L	1	12/27/2022 2:41:00 PM
Carbon disulfide	ND	1.0		μg/L	1	12/27/2022 2:41:00 PM
Carbon tetrachloride	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Chlorobenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Chloroethane	ND	0.20		μg/L	1	12/27/2022 2:41:00 PM
Chloroform	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Chloromethane	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
2-Chlorotoluene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
4-Chlorotoluene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
cis-1,2-DCE	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
cis-1,3-Dichloropropene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,2-Dibromo-3-chloropropane	ND	0.20		μg/L	1	12/27/2022 2:41:00 PM
Dibromochloromethane	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Dibromomethane	ND	0.20		μg/L	1	12/27/2022 2:41:00 PM
1,2-Dichlorobenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,3-Dichlorobenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,4-Dichlorobenzene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
Dichlorodifluoromethane	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,1-Dichloroethane	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM
1,1-Dichloroethene	ND	0.10		μg/L	1	12/27/2022 2:41:00 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value Ε
- J Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

Analytical Report

Lab Order 2212A23

Date Reported: 12/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC Client Sample ID: SVE

 Project:
 Jacquez GC B 003E
 Collection Date: 12/14/2022 11:20:00 AM

 Lab ID:
 2212A23-001
 Matrix: AIR
 Received Date: 12/16/2022 7:40:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: CCM
1,2-Dichloropropane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,3-Dichloropropane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
2,2-Dichloropropane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,1-Dichloropropene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Hexachlorobutadiene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
2-Hexanone	ND	1.0	μg/L	1	12/27/2022 2:41:00 PM
Isopropylbenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
4-Isopropyltoluene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
4-Methyl-2-pentanone	ND	1.0	μg/L	1	12/27/2022 2:41:00 PM
Methylene chloride	ND	0.30	μg/L	1	12/27/2022 2:41:00 PM
n-Butylbenzene	ND	0.30	μg/L	1	12/27/2022 2:41:00 PM
n-Propylbenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
sec-Butylbenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Styrene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
tert-Butylbenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,1,1,2-Tetrachloroethane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,1,2,2-Tetrachloroethane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Tetrachloroethene (PCE)	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
trans-1,2-DCE	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
trans-1,3-Dichloropropene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,2,3-Trichlorobenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,2,4-Trichlorobenzene	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,1,1-Trichloroethane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,1,2-Trichloroethane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Trichloroethene (TCE)	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Trichlorofluoromethane	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
1,2,3-Trichloropropane	ND	0.20	μg/L	1	12/27/2022 2:41:00 PM
Vinyl chloride	ND	0.10	μg/L	1	12/27/2022 2:41:00 PM
Xylenes, Total	2.2	0.15	μg/L	1	12/27/2022 2:41:00 PM
Surr: Dibromofluoromethane	101	70-130	%Rec	1	12/27/2022 2:41:00 PM
Surr: 1,2-Dichloroethane-d4	97.3	70-130	%Rec	1	12/27/2022 2:41:00 PM
Surr: Toluene-d8	112	70-130	%Rec	1	12/27/2022 2:41:00 PM
Surr: 4-Bromofluorobenzene	93.9	70-130	%Rec	1	12/27/2022 2:41:00 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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

ph Not in Range

Page 2 of 2

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

Released to Imaging: 10/16/2023 3:20:02 PM

Client Name:	Cottonwood Consulting LLC	Work Order Nun	nber: 221	2A23		RcptN	lo: 1
Received By:	Tracy Casarrubias	12/16/2022 7:40:0	0 AM				
Completed By:	Tracy Casarrubias	12/16/2022 9:31:2	2 AM				
Reviewed By:	ff 12.16-22						
Chain of Cus	stody						
1. Is Chain of C	custody complete?		Yes	V	No 🗌	Not Present	
2. How was the	sample delivered?		<u>Cou</u>	<u>rier</u>			
Log In							
3. Was an atten	mpt made to cool the samples?		Yes	\checkmark	No 🗌	NA 🗌	
4. Were all sam	ples received at a temperature	of >0° C to 6.0°C	Yes		No 🗆	NA 🗹	
5. Sample(s) in	proper container(s)?		Yes	V	No 🗆		
6. Sufficient san	nple volume for indicated test(s)?	Yes	V	No 🗌		
7. Are samples	(except VOA and ONG) proper	ly preserved?	Yes	V	No 🗌		
8. Was preserva	ative added to bottles?		Yes		No 🗹	NA 🗌	
9. Received at le	east 1 vial with headspace <1/4	" for AQ VOA?	Yes		No 🗌	NA 🗹	
10. Were any sar	mple containers received broke	n?	Yes		No 🗹	# of preserved	
	ork match bottle labels?		Yes	V	No 🗌	bottles checked for pH:	
	ancies on chain of custody)	0.1.10	.,		No □	Adjusted?	or >12 unless noted)
	correctly identified on Chain of at analyses were requested?	Custody?	Yes Yes	_	No ∐ No □	. Injurior	12/16/22
	ing times able to be met?		Yes		No 🗆	Checked by:	1 1
	sustomer for authorization.)		165	•	140	/	
Special Handi	ling (if applicable)					,	Sec 12/10/19
15. Was client no	otified of all discrepancies with	this order?	Yes		No 🗌	NA 🗹	
Person	Notified:	Date	: [r)	
By Who	om:	Via:	eMa	ail 🗀	Phone Fa	c ☐ In Person	
Regard	ling:						
Client I	nstructions:						
16. Additional re	marks:						
17. Cooler Infor	rmation						
Cooler No		eal Intact Seal No	Seal D	ate	Signed By		
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								8	www.hallenvironmental.com	enviro	nmen	tal.cc	 E			
Mailing Address:	ess:	PO Box 1653	2 GC	B #003E		49(Ha Ha	4901 Hawkins NE		Albuc	lnerd	S, S	- Albuquerque, NM 87109	တ		
	Durango,	go, CO 81302	Project #:			Tel	l. 505	505-345-3975		Тах	× 505	-345	505-345-4107			
Phone #: 970-764-7356	1-764-7356								An	Analysis		Request				
mail or Fax	#: ksiesser(email or Fax#: ksiesser@cottonwoodconsulting.com	Project Manager:				H		F	₽ O		(Ju		-		Г
QA/QC Package:	ge:		Kyle Siesser				s,g	SM		S 'Þ		ıəsq				
Standard		☐ Level 4 (Full Validation)					ьc	VISC		<u></u>		A\Jr				
Accreditation:		☐ Az Compliance	Sampler: Emma Millar	Millar						ان2،		1986				
O NELAC		er.	On Ice:		□ No					N '	(A) (Pre		 -		
☐ EDD (Type)	e)		# of Coolers:		AN ULU NA						-		(c			
			Cooler Temp(induding CF):	ing CF7:	مرا الر								1.00			
Date Time	le Matrix	Sample Name	Container Prese	rvative	HEAL No.	BTEX /	9G 1808	M) 803 PAHs b	RCRA 8	SSe0 (∧	S) 0728	Total Co	3) H9T			
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Date: Time: 12.05	Relinquished by:	shed by:	Received by: Vi	Via:	Date Time 12/15/52 1705	Remarks: please cc emillar@cottonwoodconsulting.com	900	millar	000	ftonv	poo,	cons	ultina	COM		
Date: Time:	Relinquished by:	C		la Getton	3	_)	ı	:)			
18/ 18/m		JANA JAJARJA			12/16/11											
	+				10/00											1

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.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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**

CONDITIONS

Action 187033

CONDITIONS

Operator:	OGRID:
SIMCOE LLC	329736
, and the second	Action Number:
Durango, CO 81301	187033
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Jaquez GC B 003 2022 Annual SVE/GWMW Report: Content Satisfactory. 1. Continue to operate the SVE system and conduct routine O&M as scheduled. 2. Please continue to send reporting on a quarterly basis or annually.	10/16/2023