

REVIEWED

By Mike Buchanan at 4:15 pm, Aug 21, 2023

Jaquez GC B 003 E

nJK1129233406

30-045-24217

2022 Annual SVE/GWMW

Review for the 2022
Annual SVE/GWMW:
Content Satisfactory
1. Continue to Operate
SVE System and submit
reports as schedule.

SIMCOE LLC - Jaquez Gas Com B 003E

Summary SVE System Monitoring Data

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
8/27/2019	see 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

SIMCOE LLC - Jaquez Gas Com B 003E**Summary SVE System Monitoring Data**

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

SIMCOE LLC - Jaquez Gas Com B 003E

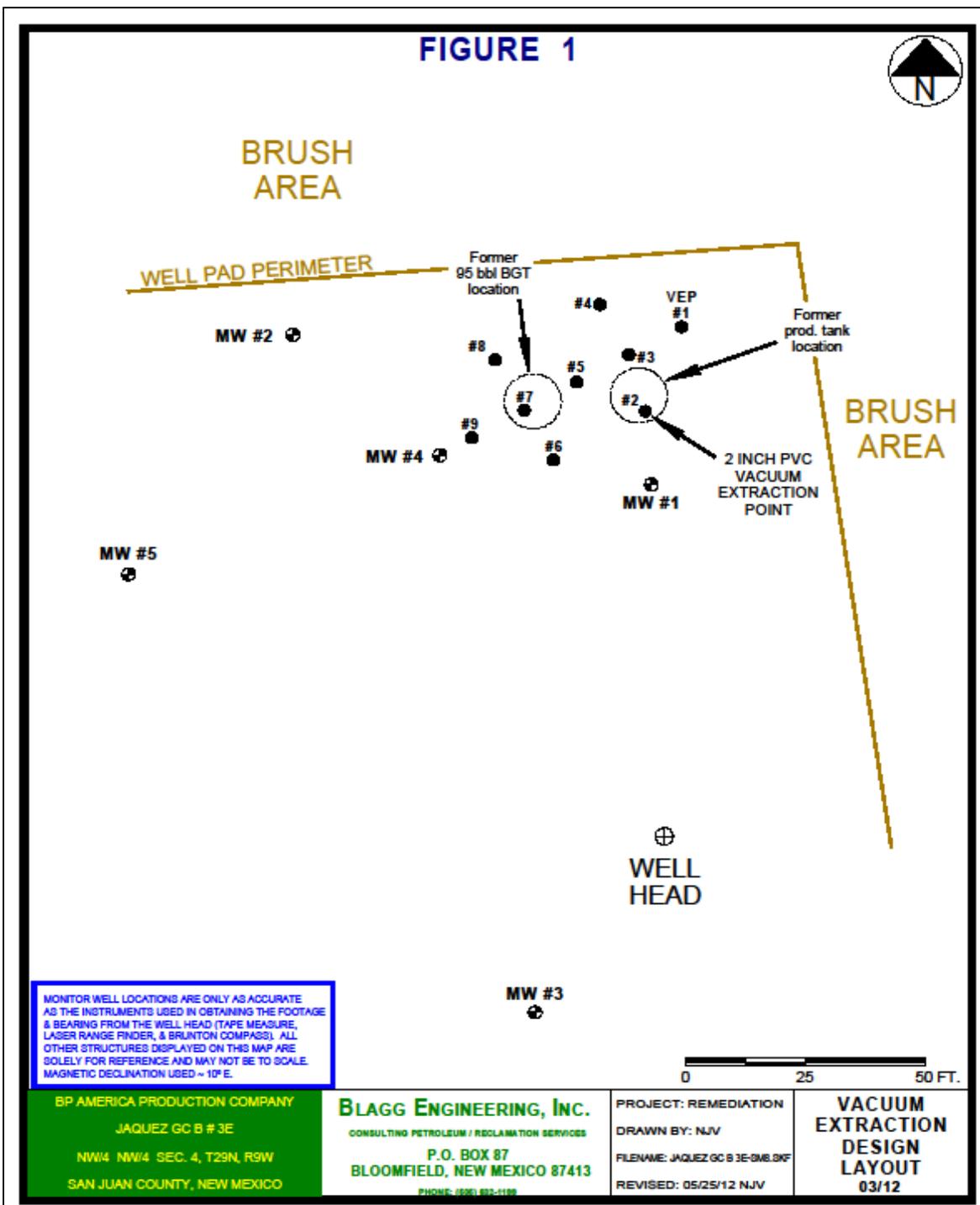
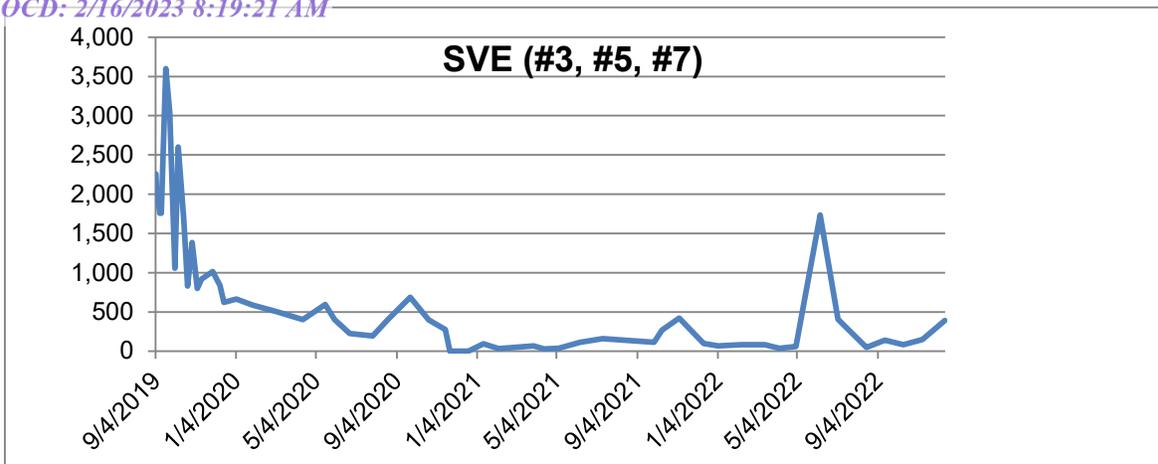
Summary SVE System Monitoring Data

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	-	
3/30/2021	#3,#5,#7	69	-	NA	YES	NO	-	
4/15/2021	#3,#5,#7	27	-	NA	YES	NO	-	
5/7/2021	#3,#5,#7	38	-	NA	YES	NO	-	
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

SIMCOE LLC - Jaquez Gas Com B 003E

Summary SVE System Monitoring Data

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



2/8/2022	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

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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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2203996

Date Reported: 3/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

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

Analyses	Result	RL	Qual	Units	DF	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
Ethylbenzene	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
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
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
Naphthalene	ND	0.20		µg/L	1	3/22/2022 1:02:00 PM
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		µg/L	1	3/22/2022 1:02:00 PM
Bromoform	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
Bromomethane	ND	0.20		µg/L	1	3/22/2022 1:02:00 PM
2-Butanone	ND	1.0		µg/L	1	3/22/2022 1:02:00 PM
Carbon disulfide	ND	1.0		µg/L	1	3/22/2022 1:02:00 PM
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
Chloromethane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
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		µg/L	1	3/22/2022 1:02:00 PM
cis-1,3-Dichloropropene	ND	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	0.10		µg/L	1	3/22/2022 1:02:00 PM
Dibromomethane	ND	0.20		µg/L	1	3/22/2022 1:02:00 PM
1,2-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
1,3-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
1,4-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
Dichlorodifluoromethane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
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
1,2-Dichloropropane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
1,3-Dichloropropane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
2,2-Dichloropropane	ND	0.10		µg/L	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 Quantitative 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

Analytical Report

Lab Order 2203996

Date Reported: 3/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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
2-Hexanone	ND	1.0		µg/L	1	3/22/2022 1:02:00 PM
Isopropylbenzene	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
4-Isopropyltoluene	ND	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	ND	0.30		µg/L	1	3/22/2022 1:02:00 PM
n-Propylbenzene	ND	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
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
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		µg/L	1	3/22/2022 1:02:00 PM
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
Trichlorofluoromethane	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
1,2,3-Trichloropropane	ND	0.20		µg/L	1	3/22/2022 1:02:00 PM
Vinyl chloride	ND	0.10		µg/L	1	3/22/2022 1:02:00 PM
Xylenes, Total	3.2	0.15		µg/L	1	3/22/2022 1:02:00 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/22/2022 1:02:00 PM
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	3/22/2022 1:02:00 PM
Surr: Toluene-d8	101	70-130		%Rec	1	3/22/2022 1:02:00 PM
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

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:



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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental
Project: Not Indicated
Client Sample ID: 2203996-001A; SVE
Location:
Lab ID: G22030398-001

Report Date: 03/25/22
Collection Date: 03/16/22 09:45
Date Received: 03/23/22
Sampled By: Not Indicated

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
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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
Definitions: 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 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 Analytical Run: R270004

Lab ID: CCV-2203241254 Continuing Calibration Verification Standard 03/24/22 12:55

Oxygen	0.637	Mol %	0.001	106	90	110			
Nitrogen	1.378	Mol %	0.001	98	85	110			
Carbon Dioxide	0.954	Mol %	0.001	95	90	110			
Hydrogen 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 plus	0.154	Mol %	0.001	103	90	110			

Lab ID: ICV-2203241303 Initial Calibration Verification Standard 03/24/22 13:04

Oxygen	0.391	Mol %	0.001	97	75	110			
Nitrogen	5.154	Mol %	0.001	103	90	110			
Carbon Dioxide	4.900	Mol %	0.001	99	90	110			
Hydrogen 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 plus	0.307	Mol %	0.001	102	90	110			

Lab ID: CCV-2203241628 Continuing Calibration Verification Standard 03/24/22 16:28

Oxygen	0.609	Mol %	0.001	102	90	110			
Nitrogen	1.288	Mol %	0.001	92	85	110			
Carbon Dioxide	0.965	Mol %	0.001	97	90	110			
Hydrogen 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 plus	0.153	Mol %	0.001	102	90	110			

Method: GPA 2261 Batch: R270004

Lab ID: G22030398-001ADUP	Sample Duplicate			Run: Varian GC_220324A	03/24/22 14:50
Oxygen	22.112	Mol %	0.001	0.0	10

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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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 Duplicate					Run: Varian 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)



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Work Order Receipt Checklist

Hall Environmental

G22030398

Login completed by: Jill S. Jeffress

Date Received: 3/23/2022

Reviewed by: Misty Stephens

Received 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 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: °C
- 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



CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Hall Environmental Analysis Laboratory
1901 Hankins VE
Albuquerque, NM 87109
TEL. 505-345-3975
FAX 505-345-4107
Website clients.hallenvironmental.com

SUB CONTRACTOR: Energy Labs-Gillette COMPANY: Energy Laboratories PHONE: (866) 686-7175 FAX:
ADDRESS: 400 W Boxelder Rd ACCOUNT #
CITY, STATE, ZIP: Gillette, WY 82718 EMAIL:

Table with columns: ITEM, SAMPLE, CLIENT SAMPLE ID, BOTTLE TYPE, MATRIX, COLLECTION DATE, ANALYTICAL COMMENTS. Row 1: 1, 2203996-001A, SVE, TEDLAR, Air, 3/16/2022 9:45:00 AM, 1 Natural Gases O2, CO2

627030398

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: SKL Date: 3/18/2022 Time: 8:57 AM Received By: M. Ray Date: 03/15/2023 Time: 10:30
Temp of Samples:
Comments:



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

Client Name: Cottonwood Consulting LLC

Work Order Number: 2203996

RcptNo: 1

Received By: Cheyenne Cason

3/18/2022 8:05:00 AM

Handwritten signature

Completed By: Sean Livingston

3/18/2022 8:43:55 AM

Handwritten signature

Reviewed By: [Signature] 3-18-22

Chain of Custody

1. Is Chain of Custody complete? Yes [checked] No [] Not Present []

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes [] No [] NA [checked]

4. Were all samples received at a temperature of >0° C to 6.0°C Yes [] No [] NA [checked]

5. Sample(s) in proper container(s)? Yes [checked] No []

6. Sufficient sample volume for indicated test(s)? Yes [checked] No []

7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []

8. Was preservative added to bottles? Yes [] No [checked] NA []

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]

10. Were any sample containers received broken? Yes [] No [checked]

11. Does paperwork match bottle labels? Yes [checked] No []

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []

13. Is it clear what analyses were requested? Yes [checked] No []

14. Were all holding times able to be met? Yes [checked] No []

(If no, notify customer for authorization.)

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: [Signature] 3/18/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Form with fields: Person Notified, Date, By Whom, Via (eMail, Phone, Fax, In Person), Regarding, Client Instructions

16. Additional remarks:

17. Cooler Information

Table with columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, NA, Good, [], [], []



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
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							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Page 2 of 2



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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:



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CLIENT: Hall Environmental
Project: 2206603
Work Order: G22060305

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.



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LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Hall Environmental
Project: 2206603
Client Sample ID: 2206603-001A;SVE
Location:
Lab ID: G22060305-001

Report Date: 06/23/22
Collection Date: 06/08/22 11:00
Date Received: 06/16/22
Sampled By: Not Provided

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
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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
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COMMENTS

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

- 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 RL - Analyte Reporting Limit
Definitions: 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: 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 Control Sample				Run: GCNGA-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 Dioxide	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 plus	0.77	Mol %	0.01	96	70	130					
Lab ID: B22061652-001ADUP							Run: GCNGA-B_220620A			06/20/22 12:55	
Sample Duplicate											
Oxygen	21.3	Mol %	0.01				0	20			
Nitrogen	77.7	Mol %	0.01				0.1	20			
Carbon Dioxide	0.77	Mol %	0.01				0.0	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	0.17	Mol %	0.01				52	20	R		

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

R - Relative Percent Difference (RPD) exceeds advisory limit



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Work Order Receipt Checklist

Hall Environmental

G22060305

Login completed by: Chantel S. Johnson

Date Received: 6/16/2022

Reviewed by: Alyson T. Degnan

Received by: csj

Reviewed Date: 6/21/2022

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: °C
- 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



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

SUB CONTRACTOR		Energy Labs-Gillette		COMPANY	Energy Laboratories		PHONE:	(866) 686-7175		FAX:
ADDRESS		400 W Boxelder Rd		CITY, STATE, ZIP		Gillette, WY 82718		ACCOUNT #	EMAIL:	
ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS			
1	2206603-001A	SVE	TEDLAR	Air	6/8/2022 11:00:00 AM	1	Natural Gases O2, CO2			

SPECIAL INSTRUCTIONS/COMMENTS:

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

Retinquished By:	Date:	Time:	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED:
<i>[Signature]</i>	6/10/2022	10:01 AM	<i>[Signature]</i>	6/10/2022	11:00 AM	<input type="checkbox"/> HARD COPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
Retinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY
			<i>[Signature]</i>	6/10/2022	11:00 AM	Temp of samples <input type="checkbox"/> C <input type="checkbox"/> Attempt to Cool?
TAT:	Standard <input type="checkbox"/>	RUSH <input type="checkbox"/>	Next BD <input type="checkbox"/>	2nd BD <input type="checkbox"/>	3rd BD <input type="checkbox"/>	Comments: <i>[Signature]</i>



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 LLC Work Order Number: 2206603 RcptNo: 1

Received By: Cheyenne Cason 6/10/2022 7:05:00 AM [Signature]

Completed By: Tracy Casarrubias 6/10/2022 9:57:46 AM

Reviewed By: [Signature] 5.10.22

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [] No [] NA [checked]
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes [checked] No []

of preserved bottles checked for pH:
Adjusted?
Checked by [Signature]

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

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

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, NA, Good, Yes, [], [], []



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

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

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

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:



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

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B22091520-001
Client Sample ID: 2209733-001A, SVE

Report Date: 09/28/22
Collection Date: 09/14/22 11:20
Date Received: 09/16/22
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, %	99.79			0.01		GPA 2261-95	09/20/22 12:23 / jrj

- The analysis was not corrected for air.

COMMENTS

-
-
- 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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www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.233.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

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	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: GPA 2261-95											
Batch: R388187											
Lab ID: B22091527-002ADUP	12 Sample Duplicate			Run: GCNGA-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 Dioxide		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 plus		<0.01	Mol %	0.01					20		
Lab ID: LCS092022	11 Laboratory Control Sample			Run: GCNGA-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 Dioxide		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 plus		0.81	Mol %	0.01	101	70	130				

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

Work Order Receipt Checklist

Hall Environmental

B22091520

Login completed by: Yvonna E. Smith

Date Received: 9/16/2022

Reviewed by: darcy

Received by: yes

Reviewed Date: 9/24/2022

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: 19.4°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

CHAIN OF CUSTODY RECORD



Hall Environmental Analysis Laboratory
 4901 Hawkins NE
 Albuquerque, NM 87109
 TEL: 505.345.3975
 FAX: 505.345-4107
 Website: www.hallenvironmental.com

SUB-CONTRACTOR: Energy Labs -Billings		COMPANY: Energy Laboratories	PHONE: (406) 869-6253	FAX: (406) 252-6069			
ADDRESS: 1120 South 27th Street		ACCOUNT #:					
CITY, STATE, ZIP: Billings, MT 59107		EMAIL:					
ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2209733-001A	SVE	TEDLAR	Air	9/14/2022 11:20:00 AM	1	Natural Gases O2, CO2 B22091520

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.

Requested By: <i>CME</i>	Date: 9/15/2022	Time: 8:22 AM	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARDCOPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE	
Requested By:	Date:	Time:	Requested By:	Date:	Time:	FOR LAB USE ONLY	
Requested By:	Date:	Time:	<i>Yoshina Smith</i>	<i>9/16/22</i>	<i>8:30</i>	Temp of samples: _____ °C	Attempt to Cool? _____
TAT:	Standard <input checked="" type="checkbox"/>	RUSH <input type="checkbox"/>	Next BD <input type="checkbox"/>	2nd BD <input type="checkbox"/>	3rd BD <input type="checkbox"/>	Comments: _____	



Sample Log-In Check List

Client Name: Cottonwood Consulting LLC

Work Order Number: 2209733

RcptNo: 1

Received By: Juan Rojas

9/15/2022 7:35:00 AM

Juan Rojas

Completed By: Cheyenne Cason

9/15/2022 8:21:40 AM

Cason

Reviewed By:

JR 9/15/22

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 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? Yes No
(Note discrepancies on chain of custody)
- 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? Yes No
(If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: *SC 9/15/22*

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	Na	Good	Not Present			



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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
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

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	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.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of standard limits. If undiluted results may be estimated.	

Analytical Report

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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

Client Name: Cottonwood Consulting LLC

Work Order Number: 2212A23

RcptNo: 1

Received By: Tracy Casarrubias 12/16/2022 7:40:00 AM

Completed By: Tracy Casarrubias 12/16/2022 9:31:22 AM

Reviewed By: [Signature] 12-16-22

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [] No [] NA [checked]
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? Yes [checked] No []

of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: [Signature] 12/16/22
See 12/16/22

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

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

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, NA, 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:
 Jacquez GC B #003E

Project #:

Project Manager:
 Kyle Siesser

Sampler: Emma Millar
 On Ice: Yes No

of Coolers: 1
 Cooler Temp (including CF): 1.6 0.1 - 1.5

Container Type and #
 tedlar bag - 1

Preservative Type
 NA

HEAL No.
2212223

Date: 12/14 Time: 1720
 Matrix: AIR
 Sample Name: SVE

Received by: [Signature] Date: 12/15/22 Time: 1205

Relinquished by: [Signature]

Date: 12/15/22 Time: 1810

Relinquished by: [Signature]

Date: 12/16/22 Time: 7:40

Received by: [Signature] Date: 12/16/22 Time: 7:40

Via: Walt

Via: [Signature]



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

Analysis Request	
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)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	
TPH (8015)	<input checked="" type="checkbox"/>

Remarks:
 please cc emillar@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.

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
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 186978

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 186978
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review for the 2022 Annual SVE/GWMW: Content Satisfactory 1. Continue to Operate SVE System and submit reports as schedule.	8/21/2023