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.

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

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2/15/2023

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

2/15/2023

Summary SVE System Monitoring Data

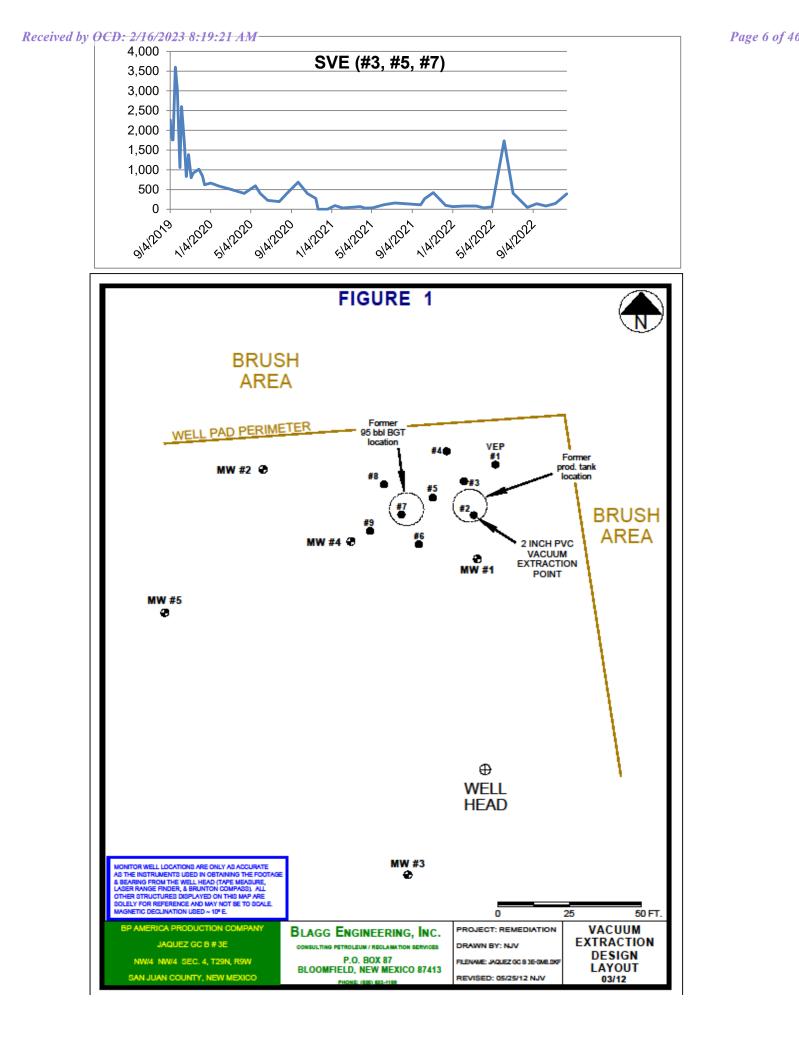
Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H ₂ O Drained from drum?	H ₂ O Amt. Drained (Gal.)?	Comments
9/24/2020	#3,#5,#7	689	28	NA	YES	NO		Water in drum below drain port
10/22/2020	#3,#5,#7	398	24	NA	YES	NO		Water in drum just above 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

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2/15/2023

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



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Received by OCD: 2/16/2023 8:19:21 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	3,040
10/3/2019	1,057
10/8/2019	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	
9/24/2020	401
9/24/2020	689 398
11/16/2020	274
	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
Date	OVM (ppm)
	0 m (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
·	

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70 1 1 1	OCD	2/16/2023184 <u>1/2022</u> AM
Received by	O(D)	2/16/202318/0/912318/0/2023
neccorreacy	000	

023184 19.021 2AM	69
	09
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



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

Hall Environmental Analysis Laboratory

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

Website: clients.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Cottonwood Consulting LLC

Analytical Report Lab Order 2203996

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/28/2022

Client Sample ID: SVE Deter 2/16/2022 0.45.00 AM

CELERT: Contonwood Consulting EEC	Collection Date: 3/16/2022 9:45:00 AM								
Project: Jacquez GC B 003		Collection	Date: 3/16/2	022 9:45:00 AM					
Lab ID: 2203996-001	Matrix: AIR	Received	Date: 3/18/2	022 8:05:00 AM					
Analyses	Result	RL Qual U	nits DF	Date Analyzed					
EPA METHOD 8260B: VOLATILES				Analyst: CCM					
Benzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Toluene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Ethylbenzene	ND		ıg/L 1	3/22/2022 1:02:00 PM					
Methyl tert-butyl ether (MTBE)	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,2,4-Trimethylbenzene	0.26	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,3,5-Trimethylbenzene	1.1	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,2-Dichloroethane (EDC)	ND		ıg/L 1	3/22/2022 1:02:00 PM					
1,2-Dibromoethane (EDB)	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Naphthalene	ND	0.20 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1-Methylnaphthalene	ND	0.40 µ	ıg/L 1	3/22/2022 1:02:00 PM					
2-Methylnaphthalene	ND	0.40 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Acetone	ND		ug/L 1	3/22/2022 1:02:00 PM					
Bromobenzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Bromodichloromethane	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Bromoform	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Bromomethane	ND	0.20 µ	ıg/L 1	3/22/2022 1:02:00 PM					
2-Butanone	ND	1.0 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Carbon disulfide	ND	1.0 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Carbon tetrachloride	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Chlorobenzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Chloroethane	ND	0.20 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Chloroform	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Chloromethane	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
2-Chlorotoluene	ND	0.10 µ	ug/L 1	3/22/2022 1:02:00 PM					
4-Chlorotoluene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
cis-1,2-DCE	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
cis-1,3-Dichloropropene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,2-Dibromo-3-chloropropane	ND	0.20 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Dibromochloromethane	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Dibromomethane	ND	0.20 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,2-Dichlorobenzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,3-Dichlorobenzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,4-Dichlorobenzene	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
Dichlorodifluoromethane	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,1-Dichloroethane	ND	0.10 µ	ıg/L 1	3/22/2022 1:02:00 PM					
1,1-Dichloroethene	ND	0.10 µ	ıg/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.

ND

ND

ND

Qualifiers:

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

* 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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

в Analyte detected in the associated Method Blank

1

1

1

Е Estimated value

0.10

0.10

0.10

J Analyte detected below quantitation limits

µg/L

µg/L

µg/L

Р Sample pH Not In Range

RL Reporting Limit Page 1 of 2

3/22/2022 1:02:00 PM

3/22/2022 1:02:00 PM

3/22/2022 1:02:00 PM

CLIENT: Cottonwood Consulting LLC

Project: Jacquez GC B 003

Analytical Report Lab Order 2203996

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/28/2022
Client Sample ID: SVE

Collection Date: 3/16/2022 9:45:00 AM

Lab ID: 2203996-001	Matrix: AIR	Recei	Received Date: 3/18/2022 8:05:00 AM				
Analyses	Result	RL Qua	l 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		
				-			

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

93.2

70-130

Qualifiers:

Value exceeds Maximum Contaminant Level. 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

%Rec

1

P Sample pH Not In Range

RL Reporting Limit

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3/22/2022 1:02:00 PM

*

D

Surr: 4-Bromofluorobenzene



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:



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 Gillette, WY Branch

	r repared by Giller	le, wi Dialich				
Client:	Hall Environmental					
Project:	Not Indicated		Report D	ate: 03/25/22		
Client Sample ID:	2203996-001A; SVE	Collection Date: 03/16/22 09:45				
Location:			Date Receiv	red: 03/23/22		
Lab ID:	G22030398-001		Sampled	By: Not Indicated		
Analyses		Result Units	Qualifier Method	Analysis Date / By		
NATURAL GAS CH	ROMATOGRAPHIC 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	0/1000 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 PRO	OPERTIES					
Calculation Pressure E	Base	14.730 psia	GPA 2261	03/24/22 14:44 / blb		
Calculation Temperatu	ire Base	60 °F	GPA 2261	03/24/22 14:44 / blb		
Compressibility Factor		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 Pressu	ire, psia	548 psia	GPA 2261	03/24/22 14:44 / blb		
Pseudo-critical Tempe		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 @		< 0.01 BTU/cu ft	GPA 2261	03/24/22 14:44 / blb		
Gross BTU per cu ft @	e 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



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QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: H	Hall Environmental			Work Order:	G2203	80398	Repo	ort Date:	: 03/25/22	
Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261							Ar	nalytical Run	R270004
Lab ID:	CCV-2203241254	Continuing Ca	alibration V	erification Standa	rd				03/24	1/22 12:5
Oxygen		0.637	Mol %	0.001	106	90	110			
Nitrogen		1.378	Mol %	0.001	98	85	110			
Carbon Dio	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 pl	lus	0.154	Mol %	0.001	103	90	110			
Lab ID:	ICV-2203241303	Initial Calibrat	ion Verifica	ation Standard					03/24	4/22 13:04
Oxygen		0.391	Mol %	0.001	97	75	110			
Nitrogen		5.154	Mol %	0.001	103	90	110			
Carbon Dio	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	9	0.986	Mol %	0.001	99	90	110			
n-Pentane		0.997	Mol %	0.001	100	90	110			
Hexanes pl	lus	0.307	Mol %	0.001	102	90	110			
Lab ID:	CCV-2203241628	Continuing Ca	alibration V	erification Standa	rd				03/24	4/22 16:28
Oxygen		0.609	Mol %	0.001	102	90	110			
Nitrogen		1.288	Mol %	0.001	92	85	110			
Carbon Dio	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 pl	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)



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QA/QC Summary Report

Prepared by Gillette, WY Branch

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

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

G22030398	3
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Login completed by:	Jill S. Jeffress	Date Received: 3/23/2022							
Reviewed by:	Misty Stephens		Red	ceived by: csj					
Reviewed Date:	3/24/2022		Carr	ier name: FedEx					
Shipping container/cooler in	good condition?	Yes 🗹	No 🗌	Not Present					
Custody seals intact on all s	hipping 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 whe	en relinquished and received?	Yes 🗹	No 🗌						
Chain of custody agrees with	h sample labels?	Yes 🗹	No 🗌						
Samples in proper container	/bottle?	Yes 🗹	No 🗌						
Sample containers intact?		Yes 🗹	No 🗌						
Sufficient sample volume for	r indicated test?	Yes 🗹	No 🗌						
All samples received within I (Exclude analyses that are c such as pH, DO, Res CI, Su	considered field parameters	Yes 🗹	No 🗌						
Temp Blank received in all s	hipping container(s)/cooler(s)?	Yes 🗌	No 🗌	Not Applicable 🗹					
Container/Temp Blank temp	erature:	°C							
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 🗌	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

Received	by	OCD;	2/1	16/2023	8:19:21 AM	
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Sar

Date:

Tune

3/18/2022

8:57 AM

M.Ray

13/13/2023 1030

HARDCOPY (extra cost)

REPORT TRANSMITTAL DESIRED

FOR LAB USE ONLY

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

Tune

Received By

Date

Time

TAT

Standard 17

RUSH

Next BD

2nd BD 🔲

3rd BD 📋

Connents

Temp of samples

Attempt to Cool *

02, C02	1 Natural Gases 02, CO2	3/16/2022 9 45.00 AM	Arr 3	TEDLAR	avs	2203996-001A SVE	щ
ANALYTICAL COMMENTS	# CONTAINERS	COLLECTION DATE	MATRIX	BOTTLE TYPE	CLIENT SAMPLE ID	SAMPLE	ITEM
					Gillette, WY 82718	CTTY, STATE, ZIP Gillett	Cilly S
EMAIL.		ACCOUNT#			400 W Boxelder Rd		ADDRESS
75 FAX	(866) 686-7175	PHONE	25	Energy Laboratories	SUB CONTRATOR Energy Labs-Gillette COMPANY	NTRATOR Energ	SUBCO
Website clients hallenvironmental com							
Albuquerque_NM 8~109 TEL_505-345-3975 FAX_505-345-4107					ORY	ANALYSIS	

622030398

45-65-65

HALL ENVIRONMENTAL

CHAIN OF CUSTODY RECORD PAGE 1 OF 1

Hall Environmental Analysis Laboratory 4901 Havkins NE Albuquerque_NM 8~109 TEL_505-345-3975

.

Client Name: Cottonwood Consulting LLC	Work Order Numbe				
		er: 2203996		RcptNo:	1
Received By: Cheyenne Cason	3/18/2022 8:05:00 AM	м	Chul		
Completed By: Sean Livingston Reviewed By: 3-19-72	3/18/2022 8:43:55 AN	М	Chenl S-L	John	
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	f >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 🔽	# of preserved bottles checked	
 Does paperwork match bottle labels? (Note discrepancies on chain of custody) 		Yes 🔽	No 🗌	for pH:	>12 unless noted)
12. Are matrices correctly identified on Chain of Co	ustody?	Yes 🖌	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🔽	No 🗌		-1 da-
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🔽	No 🗌	Checked by:	n3118/22
<u>Special Handling (if applicable)</u>					
15. Was client notified of all discrepancies with the	s order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date:				
By Whom:	Via:	🗌 eMail 🔲 P	hone 🗌 Fax	In Person	
Regarding:					
Client Instructions:	n ann an tha tha tha tan ann ann ann an tha ann an tha				
16. Additional remarks:					
17. <u>Cooler Information</u> Cooler No Temp °C Condition Sea 1 NA Good	I Intact Seal No	Seal Date	Signed By		

Page 1 of 1

		4901 Hawkins NF - Albucuerous NN 97100	Tel 505-345-3075 Eev 505 245 400	naly	(0	אואמ s'5 אוא		10 ^{2;} 1082 11) 1082 1092 1092 1092 1092 1092 1092 1092 109	8/8 8/8 001 9 01 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		MT MT Selic Selic Me Me Me Me Me Me Me Me Me	7 1 2 2 2 2 2 2 2 2 2 2 2 2 2							Date Time Remarks: $\frac{3}{1/7} \int_{22} \frac{1}{2} \frac{3}{2} \frac{3}{2}$ please cc emillar@cottonwoodconsulting.com	Via: Daté Time Cleur 3/18/20 BDS
Turn-Around Time:	Standard	Jacquez GC B #003E	Project #:		Project Manager:	Kyle Siesser		: Emma Millar	□ Yes	# of Coolers: 1	Cooler Temp(including CF): NA	Container Preservative Tvpe and # Tvpe	-						iatu bart	
Chain-of-Custody Record	Cottonwood Consulting LLC	PO Box 1653	CO 81302		email or Fax#: ksiesser@cottonwoodconsulting.com		Level 4 (Full Validation)	mpliance		¥		Sample Name	SVE						. (to Hall Environmental may have subso
n-of-C	Cottonwo	ess:	Durango,	-764-7356	t; ksiesser@	je:			□ Other	(5		e Matrix		 						Keiinquisnea by:
Chai	Client:	Mailing Address:		Phone #: 970-764-7356	mail or Fax#	QA/QC Package:	Standard	Accreditation:	D NELAC	EDD (Type)		Date Time	3/16/2022 00/45	 	 				Date: Time: 3117/38 1337	22

Received by OCD: 2/16/2023 8:19:21 AM



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

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

	2000
aboratory, Inc.	Da

Lab Order 2206603

Hall Environmental Analysi	s Laboratory, In	с.			Lab Order 2206603 Date Reported: 6/23/20	22
CLIENT: Cottonwood Consulting LLCProject: Jacquez GC B 003ELab ID: 2206603-001	Matrix: AIR	Colle		: 6/8	/E 8/2022 11:00:00 AM 10/2022 7:05:00 AM	
Analyses	Result	RL Qu	al 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
				-		B

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

0.20

0.20

0.20

ND

ND

ND

Qualifiers:

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

* 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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

Analyte detected in the associated Method Blank В

2

2

2

6/14/2022 3:50:00 PM

6/14/2022 3:50:00 PM

6/14/2022 3:50:00 PM

Е Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range RL Reporting Limit

µg/L

µg/L

µg/L

Page 1 of 2

R88708

R88708

R88708

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2206603

Date	e Repo	rted:	6/23/2022

CLIENT:Cottonwood Consulting LLCProject:Jacquez GC B 003ELab ID:2206603-001	Matrix: AIR	Col		e: 6/8	/E 8/2022 11:00:00 AM 10/2022 7:05:00 AM	
Analyses	Result	RL Q	ual 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.

* 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

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Qualifiers:



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:

Received by OCD: 2 ENERGY LABORATORIES	Trust our People. Trust our Data. www.energylab.com	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	Report Date: 06/23/22
Work Order:	G22060305	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

	пора	red by Oniette, WT Dianon		
Client:	Hall Environmental			
Project:	2206603		Report D	ate: 06/23/22
Client Sample ID:	2206603-001A;SVE		Collection D	Date: 06/08/22 11:00
Location:			Date Recei	ved: 06/16/22
Lab ID:	G22060305-001		Sampled	By: Not Provided
Analyses		Result Units	Qualifier Method	Analysis Date / By
GAS CHROMATOO	RAPHIC 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 CONE	/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 PRO	OPERTIES			
Gross BTU per cu ft @	Std Cond. (HHV	<1	GPA 2261	- 06/20/22 13:50 / eli-b
Net BTU per cu ft @ s	td cond. (LHV)	<1	GPA 2261	- 06/20/22 13:50 / eli-b
Pseudo-critical Pressu	ire, psia	546	GPA 2261	- 06/20/22 13:50 / eli-b
Pseudo-critical Tempe	rature, deg R	239	GPA 2261	- 06/20/22 13:50 / eli-b
PHYSICAL PROPE	RTIES-CALCULATED			
Specific Gravity @ 60/	60F	0.999	D3588-81	06/20/22 13:50 / eli-b
COMMENTS				
-			-	06/20/22 13:50 / eli-b

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.



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QA/QC Summary Report

Prepared by Billings, MT Branch

Client:	Hall Environmental			Work Order:	G2206	60305	Repor	rt 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	9		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 D	lioxide	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	9	2.01	Mol %	0.01	100	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentar	ne	1.01	Mol %	0.01	101	70	130			
n-Pentane	e	1.00	Mol %	0.01	100	70	130			
Hexanes	plus	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 D	lioxide	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	9	<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentar	ne	<0.01	Mol %	0.01					20	
n-Pentane	е	<0.01	Mol %	0.01					20	
Hexanes	plus	0.17	Mol %	0.01				52	20	R

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ENERGY LABORATORIES

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Work Order Receipt Checklist

Hall Environmental

Login completed by:	Chantel S. Johnson		Date I	Received: 6/16/2022
Reviewed by:	Alyson T. Degnan		Red	ceived by: csj
Reviewed Date:	6/21/2022		Carı	rier name: FedEx
Shipping container/cooler in	good condition?	Yes 🗸	No 🗌	Not Present
Custody seals intact on all s	hipping 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 who	en relinquished and received?	Yes 🗹	No 🗌	
Chain of custody agrees with	h sample labels?	Yes 🗹	No 🗌	
Samples in proper container	/bottle?	Yes 🗹	No 🗌	
Sample containers intact?		Yes 🗹	No 🗌	
Sufficient sample volume for	r indicated test?	Yes 🗹	No 🗌	
All samples received within I (Exclude analyses that are of such as pH, DO, Res CI, Su	considered field parameters	Yes 🗸	No 🗌	
Temp Blank received in all s	hipping container(s)/cooler(s)?	Yes	No 🗌	Not Applicable
Container/Temp Blank temp	erature:	°C		
Containers requiring zero he bubble that is <6mm (1/4").	adspace 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

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паш Environmental Analysis Laboratory

EAV. 505 245 110	TEL: 505-345-397:	Albuquerque, NM 87109	4901 Hawkins NI

Website: www.hallenvironmental.com rAX: 303-343-4107

	s						1 DONGEND ANTA CVIE	-
ANALYTICAL COMMENTS	# CONLVINEK	COLLECTION	MATRIX	BOTTLE	E ID	CLIENT SAMPLE ID	ITEM SAMPLE	ITE
						e, WY 82718	CITY, STATE, ZIP: Gillette, WY 82718	2
EMAIL:	INT #:	ACCOUNT #				400 W Boxelder Rd	400 W	
	C/1/-000 (000)			;			ADDRESS:	ADI
FAX:		PHONE	ries	Energy Laboratories	COMPANY	Energy Labs-Gillette	Energ	
					COMPANY		CONTRATOR	SUI
								1

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2206603-001A SVE

TEDLAR

Air

6/8/2022 11:00:00 AM

1 Natural Gases O2, CO2

Received by OCD: 2/16/2023 8:19:21 AM

linquished By

Shed By

Date: Date:

Date: Time: 10:01 AM Time: Time

Received By ed By

Date

III

HARDCOPY (extra cost)

REPORT TRANSMITTAL DESIRED:

EMAIL

ONLINE

FOR LAB USE ONLY FAX

Attempt to Cool ?

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 icc. Thank you.

Celinquished By

TAT:

andard

RUSH

Next BD

BD

Frd BL

Temp of sar

ANAL	RONMENTAL YSIS RATORY	TEL: 505-345-3	ıtal Analysis Labor 4901 Hawkiı Albuquerque, NM 8 975 FAX: 505-345- v.hallenvironmenta	15 NE 87109 Sam 14107	ple Log-In Check	List
Client Name:	Cottonwood Consulting LLC	Work Order Num	ber: 2206603		RcptNo: 1	
eceived By:	Cheyenne Cason	6/10/2022 7:05:00	AM	Chenl		
completed By:	Tracy Casarrubias	6/10/2022 9:57:46	AM			
leviewed By:	KPG 5.10.2	9				
hain of Cus	stody				_	
Is Chain of C	sustody complete?		Yes 🗹	No 🗌	Not Present	
How was the	sample delivered?		<u>Courier</u>			
.og In Waa an attar	npt made to cool the samples	2	Yes 🔽	No 🗔		
was an allen	npt made to cool the samples	f	Tes 💌			
Were all sam	ples received at a temperatur	e of >0° C to 6.0°C	Yes 🗌	No 🗌	NA 🗹	
Sample(s) in	proper container(s)?		Yes 🗹	No 🗌		
Sufficient san	nple volume for indicated test	(s)?	Yes 🗹	No 🗌		
Are samples	(except VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗌		
Was preserva	ative added to bottles?		Yes	No 🔽	NA 🗆	
Received at le	east 1 vial with headspace <1	/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	1
. Were any sa	mple containers received bro	ken?	Yes	No 🗹 🛛	# of preserved	
·	ork match bottle labels?		Yes 🗹	No 🗔	bottles checked for pH:	_
	ancies on chain of custody)	f Cuatadu D	Yes 🔽	No 🗆	(52 or >12 unles Adjusted?	is noted)
-	correctly identified on Chain on a constant of a constant	n Custody?	Yes ⊻ Yes ⊻		/	
-	ing times able to be met?		Yes 🗹		Checked by MC	line
	customer for authorization.)					
	<u>ling (if applicable)</u>		_	_	_	
Was client n	otified of all discrepancies wil	h this order?	Yes 📙	No 🗌	NA 🗹	
	Notified:	Date	P			
By Wh		Via:	🗌 eMail 🔲 I	Phone 🗍 Fax	In Person	
Regard	ding: Instructions:					
6. Additional re]	
. <u>Cooler Info</u>						
Cooler No		Seal Intact Seal No	Seal Date	Signed By		
		Seal Intact Seal No	Seal Date	Signed By		

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Page 1 of 1

												1001	, in the second s	ieulai naĝ - 1	U V		llon	6 [8]22
	02		Total Colif	8270 (Sen	■ 8260 (VO/	Cl, F, Br,	PAHs by 8 RCRA 8 M	EDB (Met	8081 Pest	TPH:8015	BTEX / M	HEAL NO.	Couler Terrip(induding CF), /V &- Container Preservative Type and # Type tedlar han - 1 NA	Container Container Type and #	Sample Name	Matrix	Time	Date
			orm	· · · · · · · · · · · · · · · · · · ·						-	TBE		1	# of Coolers:			EDD (Type)	ΤΞ
			(Presei	DA)						· · ·	/ TMB	□ ₩		Sampler: Emma Millar On Ice: /ሿ Yes	npliance	Az Compliance Other	Accreditation:	Accreditati
			nt/Abser			PO ₄ . S	0511/15		PCB's		's (8021		Б	Kyle Siesser	Level 4 (Full Validation)		QA/QC Package:	Ξ Ϋ́
			Analysis Request o⁴	Reo	ilysis	O₄ Ans)))		ger:	Project Manager:	Phone #: 970-764-7356 email or Fax#: ksiesser@cottonwoodconsulting.com	4-7356 siesser@cc	Phone #: 970-764-7356 email or Fax#: ksiesser(역 #
	7	Fax 505-345-4107	5-34:	x 50	Fa		-39	5-34	Tel. 505-345-3975	le				Project #:	Durango, CO 81302	Durango,		
	7109	Albuquerque, NM 87109	que, l	querc	Albud	ı.	NS NE	awkir	4901 Hawkins NE	490			C B #003E	Jacquez GC B #003E	PO Box 1653		Mailing Address:	
		ЮП П	www.hallenvironmental.com		nviro	nallei	ww.l	ş						Project Name:				
			<u>ڳ</u> ۾		NAL LINY	- F K m	2] 	Þ J			ר ר		🗆 Rush	Standard	Cottonwood Consulting LLC	ttonwoo	S	Client:
>	ENVIDONMENTAL	2	5		Z			Ľ					Time:	Turn-Around Time:	Chain-of-Custody Record	of-Cu	hain-	<u>0</u>

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Received by OCD: 2/16/2023 8:19:21 AM



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

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2209733

Date Reported:	9/29/2022

CLIENT: Cottonwood Consulting LLC Project: Jacquez GC B 003E			t Sample I ection Dat		VE 14/2022 11:20:00 AM	
Lab ID: 2209733-001	Matrix: AIR	Re	ceived Dat	t e: 9/	15/2022 7:35:00 AM	
Analyses	Result	RL Qu	ial 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

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2209733

Date Reported:	0/20/2022
Date Reported.	912912022

CLIENT: Cottonwood (Project: Jacquez GC H	e e		lient Sample II Collection Dat		/E 4/2022 11:20:00 AM	
Lab ID: 2209733-001		1	Received Dat	e: 9/1	5/2022 7:35:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B:	VOLATILES				Analyst	CCM
1,1-Dichloropropene	NE	0.10	µg/L	1	9/15/2022 3:07:00 PM	R91060
Hexachlorobutadiene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
2-Hexanone	NE	1.0	μg/L	1	9/15/2022 3:07:00 PM	R91060
Isopropylbenzene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
4-Isopropyltoluene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
4-Methyl-2-pentanone	NE	1.0	μg/L	1	9/15/2022 3:07:00 PM	R91060
Methylene chloride	NE	0.30	μg/L	1	9/15/2022 3:07:00 PM	R91060
n-Butylbenzene	NE	0.30	μg/L	1	9/15/2022 3:07:00 PM	R91060
n-Propylbenzene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
sec-Butylbenzene	NE	0.10	µg/L	1	9/15/2022 3:07:00 PM	R91060
Styrene	NE	0.10	µg/L	1	9/15/2022 3:07:00 PM	R91060
tert-Butylbenzene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,1,2-Tetrachloroethan	e ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,2,2-Tetrachloroethan	e ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Tetrachloroethene (PCE)	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
trans-1,2-DCE	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
trans-1,3-Dichloropropen	e ND	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,3-Trichlorobenzene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,4-Trichlorobenzene	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,1-Trichloroethane	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,1,2-Trichloroethane	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Trichloroethene (TCE)	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
Trichlorofluoromethane	NE	0.10	μg/L	1	9/15/2022 3:07:00 PM	R91060
1,2,3-Trichloropropane	NE	0.20	μg/L	1	9/15/2022 3:07:00 PM	R91060
Vinyl chloride	NE	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: Dibromofluorome	ethane 103	70-130	%Rec	1	9/15/2022 3:07:00 PM	R91060
Surr: 1,2-Dichloroetha	ne-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-Bromofluorobe	nzene 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.

* 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

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Qualifiers:



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 **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 DateReceived: 09/16/22 Matrix: Air

					MCL/		
Analyses	Result	Units	Qualifiers	RL	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.

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

09/20/22 12:23 / jrj



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

QA/QC Summary Report

Prepared by Billings, MT Branch

Cliont	Hall Environmental	
Onent.		

Client:	Hall Environmental				Work Order:	B2209	1520	Repo	rt 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:	B22091527-002ADUF	• 12 Sar	nple Duplic	ate			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 D	Vioxide		1.74	Mol %	0.01				0.6	20	
Hydroger	n 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	e		<0.01	Mol %	0.01					20	
n-Butane			<0.01	Mol %	0.01					20	
Isopentar	ne		<0.01	Mol %	0.01					20	
n-Pentan	e		<0.01	Mol %	0.01					20	
Hexanes	plus		<0.01	Mol %	0.01					20	
Lab ID:	LCS092022	11 Lab	oratory Co	ntrol Sample	•		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 D	Vioxide		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	e		2.05	Mol %	0.01	102	70	130			
n-Butane			2.04	Mol %	0.01	102	70	130			
Isopentar	ne		1.03	Mol %	0.01	103	70	130			
n-Pentan	e		1.03	Mol %	0.01	103	70	130			
Hexanes	plus		0.81	Mol %	0.01	101	70	130			

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

B22091520

Work Order Receipt Checklist

Hall Environmental

Login completed by:	Yvonna E. Smith		Date R	eceived: 9/16/2022
Reviewed by:	darcy		Rece	eived by: yes
Reviewed Date:	9/24/2022		Carrie	er name: FedEx
Shipping container/cooler in	good condition?	Yes 🗹	No 🗌	Not Present
Custody seals intact on all sh	hipping 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	n 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 h (Exclude analyses that are co such as pH, DO, Res CI, Su	onsidered field parameters	Yes 🗹	No 🗌	
Temp Blank received in all sh	nipping container(s)/cooler(s)?	Yes	No 🗹	Not Applicable
Container/Temp Blank tempe	erature:	19.4°C No Ice		
Containers requiring zero hea bubble that is <6mm (1/4").	adspace 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	
ALC: NO	
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SUBC	DATEATOR: Energ	SUB CONTRATOR Energy Labs -Billings COMPANY: E	Energy Laboratori	5	PHONE	1263-038 (30E)	FAX	0909-555 (90F)
ADDRESS	1120				ACCOUNT &	CONCERCION (ALL)	EMAIL:	1000-707 (004)
CITY, S	TATE, ZIP. Billin	CITY, STATE, 21P Billings, MT 59107						
ITEM	TIMMAS	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ALYTICA	ANALYTICAL COMMENTS
	2209733-001A SVE	SVE	TEDLAR	Air	9/14/2022 11:20:00 AM	1 Natural Gases O2, CO2		B22091520

tchrquished By CM	Date: 9/15/2022	Date MISU2022 Tane 8:22 AM Received By:	Received By:	Date	Time	REPORT TRANSMITTAL DESIRED:
clinquished By:	Date	Time	Received fly:	Date	Time	HARDCOPY (cotta cost)
						V TAN BUT AN TOWN
Relinquished By:	Date	Time	Judina Smith Melez 0930	Alle 122	0000	I CONTINUE
						Tanp of surplus
TAT:	Standard M	RUSH	Nave IID Trid BD	3480		
						Contraction

PECTA I

	<i>16/2023 8:19:21 AM</i> Ronmental Ysis Ratory	TEL: 505-34	umental Analysis Lab. 4901 Hawl Albuquerque, NM 15-3975 FAX: 505-34 www.hallenvironmen	kins NE 187109 Sai 5-4107	mple Log-In Check	Page 39 List
Client Name:	Cottonwood Consulting	Work Order N	umber: 2209733		RcptNo: 1	
Received By:	Juan Rojas	9/15/2022 7:35:	00 AM	Juan Eng		
Completed By:	Cheyenne Cason	9/15/2022 8:21:4	40 AM	Granden G.		
Reviewed By:	Ju alistzz					
Chain of Cus						
1. Is Chain of C	ustody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
<u>Log In</u>						
3. Was an atten	npt made to cool the samples	?	Yes 🗌	No 🗌	NA 🗹	
4. Were all sam	ples received at a temperature	e of >0° C to 6.0°C	Yes	No 🗌	NA 🔽	
5. Sample(s) in	proper container(s)?		Yes 🔽	No 🗌		
	ple volume for indicated test(Yes 🖌	No 🗌		
	except VOA and ONG) prope	rly preserved?	Yes 🖌	No 🗌		
8. Was preserva	tive added to bottles?		Yes	No 🔽	NA 🗌	
9. Received at le	ast 1 vial with headspace <1/	4" for AQ VOA?	Yes	No 🗌	NA 🗹	
10. Were any san	nple containers received brok	en?	Yes	No 🔽		
					# of preserved bottles checked	
	rk match bottle labels?		Yes 🔽	No 🗌	for pH:	
	ncies on chain of custody) orrectly identified on Chain of	Custody2	Yes 🗸	Ne 🗔	(<2 or >12 unless Adjusted?	s noted)
	analyses were requested?	Custody?	Yes ✔ Yes ✔	No 🗌	, lajuoida :	
14. Were all holdir	ig times able to be met? Istomer for authorization.)		Yes 🗹		Checked by: Ser 9 1	5/22
	ing (if applicable)				1	
	ified of all discrepancies with	this order?	Yes	No 🗌	NA 🗹	
Person	Notified:	Da	te:	Accession of the second se		
By Who	m:	Via	·	Phone 🦳 Fax	In Person	
Regardi	ng:					
Client In	structions:					
16. Additional ren	narks:					
17. <u>Cooler Inforr</u> Cooler No			0.10			
1		eal Intact Seal No t Present	Seal Date	Signed By		

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Page 1 of 1

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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

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project:

Lab ID:

CLIENT: Cottonwood Consulting LLC

2212A23-001

Jacquez GC B 003E

Analytical Report Lab Order 2212A23

Hall Environmental Analysis Laboratory, Inc.

Matrix: AIR

Date Reported: 12/30/2022

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. Sample Diluted Due to Matrix

D н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

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

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 1 of 2

*

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2212A23

Date Reported: 12/30/2022

y>	j,			Da	ite Reported. 12/30/2022
CLIENT: Cottonwood Consulting LLC		Client Sa	mple ID	:SVE	
Project: Jacquez GC B 003E		Collecti	ion Date	: 12/14/	/2022 11:20:00 AM
Lab ID: 2212A23-001	Matrix: AIR	Receiv	ed 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
			_		

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

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93.9

70-130

70-130

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

D н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

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

Analyte detected in the associated Method Blank в

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%Rec

%Rec

Е Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 2 of 2

12/27/2022 2:41:00 PM

12/27/2022 2:41:00 PM

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Surr: Toluene-d8

Surr: 4-Bromofluorobenzene

HALL ENVIRONN ANALYSIS LABORATO		TEL: 505-345-39	4901 Hawki Ibuquerque. NM	ins NE 87109 San 5-4107	nple Log-In C	heck List
Client Name: Cott LLC	onwood Consulting	Work Order Numbe	er: 2212A23		RcptNo:	1
-	cy Casarrubias	12/16/2022 7:40:00				
Completed By: Tra	cy Casarrubias / / T.· 16- ZZ	12/16/2022 9:31:22 /	A M			
Chain of Custody						
1. Is Chain of Custody	/ complete?		Yes 🗹	No 🗌	Not Present	
2. How was the samp	le delivered?		Courier			
Log In 3. Was an attempt ma	de to cool the samples?		Yes 🔽	No 🗌	NA 🗌	
4. Were all samples re	ceived 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 vo	lume for indicated test(s)	?	Yes 🔽	No 🗌		
7. Are samples (excep	t VOA and ONG) properly	preserved?	Yes 🗹	No 🗌		
8. Was preservative ad	ided 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 c	ontainers received broker	1?	Yes 🗌	No 🗹	# of preserved	
11. Does paperwork ma (Note discrepancies	tch bottle labels? on chain of custody)		Yes 🗹	No 🗌	bottles checked for pH:	>12 unless noted)
	ly identified on Chain of (Sustody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analy	ses were requested?		Yes 🗹	No 🗌		izlicin
14. Were all holding tim (If no, notify custom)			Yes 🗹	No 🗌	Checked by: S	2a 12/17/
Special Handling (/	Se aluin
	of all discrepancies with t	nis order?	Yes 🗌	No 🗌	NA 🗹	
Person Notifie By Whom: Regarding: Client Instruct		Date: J Via:	🗌 eMail 🔛	Phone 🗌 Fax	In Person	
16. Additional remarks	-					
17. Cooler Informatio	<u>n</u>					
r 1			Seal Date	Signed By		
1 NA	Good Yes					

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2 Altone	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
1	-subcontracted to other accredited laboratories. TI
Unnetu-Unlig	amples submitted to Hall Environmental may be
75/27- 1810 1	If necessary, s

Received b	v ocb.	2/16/2023	Received by OCD: 2/16/2023 8:19:21 AM Chain-of-Custody Record	Turn-Around Time:		Page 45
Client:	ပိ	ottonwo	Cottonwood Consulting LLC	Standard 🗆 Rush	AALL ENVIRONMENTAL	
					www.hallenvironmental.com	
Mailing	Mailing Address:		PO Box 1653	Jacquez GC B #003E	4901 Hawkins NE - Albuquerque, NM 87109	
		Durango,	o, CO 81302	Project #:	10	
Phone	Phone #: 970-764-7356	34-7356			Analysis	
email o	r Fax#: k	siesser@c	email or Fax#: ksiesser@cottonwoodconsulting.com	Project Manager:	°0 (0	
QAVQC	QA/QC Package:			Kyle Siesser	0 ⁴ , S SMIS СВ's И МR	
	laara		Level 4 (Full Validation)		- d (S0, с b с	
Accreditation:	itation:		Az Compliance Ather	r: Emma	NO ₂ 14.1) 1827 1827	
					1) (E (O)3')3' 1 2 00 0 20 8 20 8 20 8 20 1 2	
	1 (1 ype)_			# of Coolers: I Twy up N	D)(G 9)(G 9) 9) 9) 9) 9) 9) 9) 9) 9) 9) 9) 9) 9)	
				Cooler Temp(induding CF):	1310 9451 948 948 940 940 700 700 700 700 700 700 700 700 700 7	
Date	Time	Matrix	Sample Name	Container Preservative HEAL No. Type and # Type	втех трн:8 во81 F во81 F в260 (в270 (тоtal (г, F, тоtal (г, F, в250 (
かんし)	0.511	AIR	SVE	- 1 NA		
						Ι
						I
Date:	Time:	Relinquished by:	ed by:	Via: Date T		
12 51/11	cn7.1 42/s1/1	1/1		t Want Tisper	please cc emillar@cottonwoodconsulting.com	
1	1810		MARTIN ADD Le	received by: via. water and late time	•	
	lf necessary. s	amples		er accredited laboratories. This serves	s notice of this mossibility. Any sub-contracted data will be clearly notated on the analytical report	

Page 45 of 46

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

CONDIT	IONS
Operator:	OGRID:
SIMCOE LLC	329736
1199 Main Ave., Suite 101	Action Number:
Durango, CO 81301	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