Received the Sandoval Gas Com A 001 A 2022 Annual SVE & GWMW Report:
Content Satisfactory
1. Continue to operate SVE system and conduct regular O&M
2. Please continue to send any updates or reporting for 2023.

Sandoval Gas Com A 001 A
NCS1803742861
30-045-22294
2022 Annual SVE & GWMW Report

SIMCOE LLC - Sandoval Gas Com A 001A

Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
10/22/2018	MW-2				NO	NO		Hose transferred from Irvin Com 1E
10/26/2018	MW-2				NO	NO		PVC installation completed from unit to MW #2.
10/29/2018	MW-2	2,766	32	-	-	NO		Initial start up | bailed 3 gal. of prod. from MW #2
10/30/2018	MW-2	2,720	34	-	YES	NO		Dry drum
10/31/2018	MW-2	2,525	34	-	YES	NO		Dry drum
11/1/2018	MW-2	2,355	34	-	YES	NO		Dry drum, effluent air sample collected
11/2/2018	MW-2	1,978	33	-	YES	YES	2.00	Drained drum, restarted
11/5/2018	MW-2	1,433	32	-	YES	YES	4.00	Installed 1 inch PVC drain piping to LLPT, drained drum, restarted
11/13/2018	MW-2	890	34	-	YES	YES	23.00	Drained drum, restarted
11/16/2018	MW-2	1,016	32	-	YES	YES	7.00	Drained drum, restarted
11/21/2018	MW-2	370	34	-	YES	YES	12.00	Drained drum, restarted
11/26/2018	MW-2	555	34	-	YES	YES	13.00	Drained drum, restarted
12/4/2018	MW-2	629	34	-	YES	YES	25.50	Drained drum, restarted
12/10/2018	MW-2	501	34	-	YES	YES	18.50	Drained drum, restarted
12/17/2018	MW-2	325	34	-	YES	YES	22.00	Drained drum, restarted
12/24/2018	MW-2	342	33	-	YES	YES	20.50	Drained drum, restarted
12/31/2018	MW-2	355	34	-	YES	YES	23.50	Drained drum, restarted
1/4/2019	MW-2	-	-	-	YES	YES	17.00	Drained drum only, restarted
1/9/2019	MW-2	383	34	-	YES	YES	18.50	Drained drum, restarted
1/15/2019	MW-2	372	34	-	YES	YES	19.50	
1/21/2019	MW-2	338	34	-	YES	YES	18.00	
1/26/2019	MW-2	350	34	-	YES	YES	17.00	
2/1/2019	MW-2	313	34	-	YES	YES	19.50	
2/7/2019	MW-2	316	33	-	YES	YES	15.50	
2/14/2019	MW-2	319	34	-	YES	YES	23.50	
2/20/2019	MW-2	260	33	-	YES	YES	22.00	
2/27/2019	MW-2	253	33	-	YES	YES	23.50	
3/5/2019	MW-2	252	32	-	YES	YES	12.00	
3/10/2019	MW-2	233	32	-	YES	YES	7.00	
3/18/2019	MW-2	254	32	-	YES	YES	18.00	
3/28/2019	MW-2	243	33	-	YES	YES	11.50	

SIMCOE LLC - Sandoval Gas Com A 001A

Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
4/16/2019	MW-2	222	32	-	YES	YES	20.50	
5/2/2019	MW-2	219	32	-	YES	YES	4.50	
5/28/2019	MW-2	207	32	-	YES	YES	10.50	
6/24/2019	MW-2	268	32	-	YES	NO		Water below drain plug, air sample collected
7/26/2019	MW-2	277	32	-	YES	NO		Dry drum
8/19/2019	MW-2	251	32	-	YES	NO		Dry drum
9/19/2019	MW-2	281	32	-	YES	NO		Dry drum
10/8/2019	MW-2	227	25	-	YES	NO		Water in drum 0.50" above drain plug
10/22/2019	MW-2	241	35	-	YES	YES	14.00	
10/29/2019	MW-2	244	33	-	YES	YES	12.00	
11/12/2019	MW-2	656	33	-	NO	YES	25.50	Drained, restarted, collect data
11/22/2019	MW-2	NA	33	-	YES	YES	18.50	
12/6/2019	MW-2	NA	33	-	NO	YES	22.00	Drained, restarted
12/10/2019	MW-2	287	33	-	YES	YES	9.00	Drained, restarted after water sample collected
12/16/2019	MW-2	230	34	-	YES	YES	17.00	Drained, restarted
12/21/2019	MW-2	NA	34	-	NO	NO		Restarted, then collected exhaust data
12/24/2019	MW-2	NA	34	-	YES	YES	14.00	Drained, restarted
12/30/2019	MW-2	NA	34	-	NO	YES	12.00	Restarted, then collected exhaust data
1/4/2020	MW-2	468	33	-	NO	NO		Restarted, then collected data
1/6/2020	MW-2	NA	NA	-	NO	NO		
1/9/2020	MW-2	NA	16	-	NO	YES	10.50	Drained, restarted, then collected data
1/10/2020	MW-2	NA	18	-	NO	YES	10.50	Drained, restarted, then collected data
1/11/2020	MW-2	NA	34	-	NO	YES	5.50	Drained, restarted, then collected data
1/14/2020	MW-2	NA	33	-	YES	YES	9.00	Drained, restarted
1/22/2020	MW-2	NA	NA	-	NO	YES	14.00	Drained, restarted, then collected data
1/29/2020	MW-2	397	33	-	NO	NO		Water in drum below drain port
2/4/2020	MW-2	NA	32	-	NO	YES	20.50	Drained, restarted, then collected data
2/10/2020	MW-2	NA	32	-	YES	YES	23.50	Drained, restarted
2/18/2020	MW-2	NA	34	-	YES	YES	21.00	Drained, restarted
2/19/2020	MW-2	NA	34	-	YES	NO		Water level in drum not measured
2/25/2020	MW-2	NA	32	-	YES	YES	15.50	
3/4/2020	MW-2	215	30	-	NO	YES	15.50	Drained, restarted, then collected data
3/12/2020	MW-2	NA	29	-	NO	NO		Water in drum below drain port, restarted, then collected data

SIMCOE LLC - Sandoval Gas Com A 001A

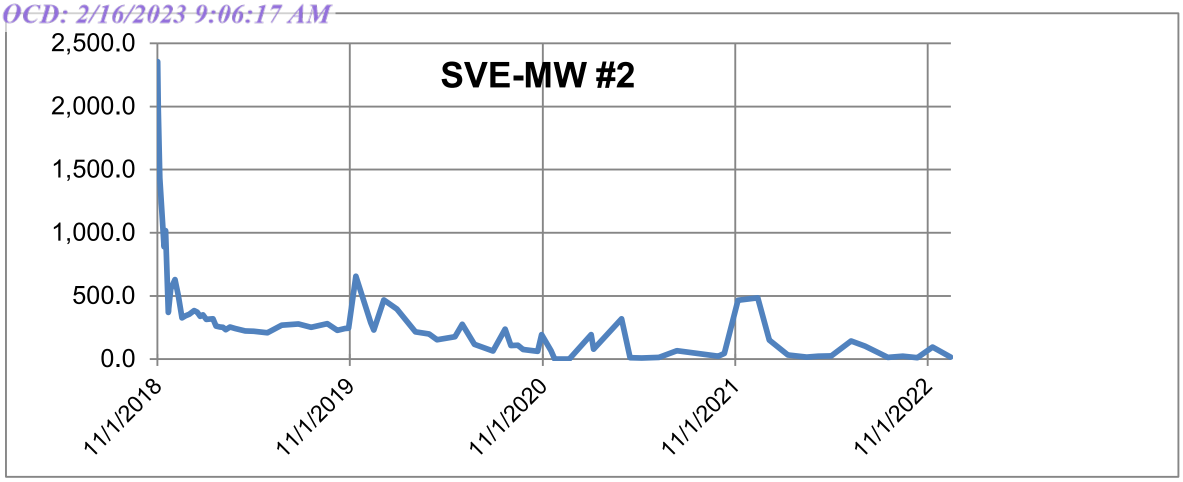
Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
3/25/2020	MW-2	NA	30	-	YES	YES	14.00	
3/30/2020	MW-2	199	30	-	YES	YES	5.50	Shut down during MW sampling, drained, restarted
4/14/2020	MW-2	153	30	-	NO	YES	11.50	Drained, restarted, then collected data
4/28/2020	MW-2	NA	29	-	YES	NO		Water in drum below drain port, restarted
5/18/2020	MW-2	178	28	-	NO	NO		Water in drum below drain port, restarted
5/20/2020	MW-2	NA	29	-	YES	NO		Water level in drum not measured
6/1/2020	MW-2	275	28	-	NO	NO		Water in drum below drain port, restarted, effluent air sample collected
6/24/2020	MW-2	116	26	-	NO	NO		Water in drum below drain port, restarted
7/29/2020	MW-2	64	26	-	NO	NO		Water level in drum not measured, restarted, then collected readings
8/21/2020	MW-2	238	27	-	NO	NO		Dry drum, restarted, then collected readings
9/1/2020	MW-2	107	28	-	YES	NO		Water level in drum not measured
9/14/2020	MW-2	111	29	-	YES	NO		Shut down prior to sampling, water in drum below drain port, restarted
9/24/2020	MW-2	76	29	-	YES	NO		Water in drum below drain port, restarted
10/9/2020	MW-2	NA	30	-	YES	NO		Water in drum just above drain port
10/22/2020	MW-2	61	29	-	YES	YES	9.50	
10/29/2020	MW-2	194	29	-	NO	YES	4.00	Drained, restarted, then collected data
11/5/2020	MW-2	NA	29	-	NO	YES		Water in drum below drain port, restarted, then collected readings
11/11/2020	MW-2	NA	30	-	YES	YES	10.50	
11/16/2020	MW-2	66	30	-	YES	YES	11.50	
11/23/2020	MW-2	NA	29	-	YES	YES	9.00	
12/4/2020	MW-2	NA	30	-	NO	YES	25.50	
12/10/2020	MW-2	NA	30	-	YES	YES	20.50	
12/15/2020	MW-2	NA	29	-	YES	YES	18.50	
12/21/2020	MW-2	NA	29	-	YES	YES	20.50	
1/31/2021	MW-2	195	-		YES	YES	-	
2/5/2021	MW-2	78	-		YES	YES	0.00	
3/30/2021	MW-2	319.5	-		YES	YES	0	
4/15/2021	MW-2	10.86	-		YES	YES	0	
5/7/2021	MW-2	8.15	-		YES	YES	0	
6/9/2021	MW-2	12.58	-		YES	YES	0	
7/13/2021	MW-2	65.27	-		YES	YES	0	
9/29/2021	MW-2	22.5	18		YES	NO	0	Water in drum below drain port

SIMCOE LLC - Sandoval Gas Com A 001A

Summary SVE System Monitoring Data

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H_2O Drained from drum?	H_2O Amt. Drained (Gal.)?	Comments
10/11/2021	MW-2	44	18		YES	YES	1	
11/6/2021	MW-2	465.9	18		NO	YES	26.32	Drained, restarted, then collected data
12/13/2021	MW-2	486	20		NO	YES	27.14	Drained, restarted, then collected data
1/4/2022	MW-2	150.1	-18	-	NO	NO	0	Frozen attempt to drain drum, no flow, restart system
2/8/2022	MW-2	33.4	12	-	NO	NO	-	Drain full of ice unalbe to drain - restarted
3/16/2022	MW-2	15	10	-	YES	YES	49.35	
4/7/2022	MW-2	23.1	9	-	YES	YES	0.00	water in drum below drain port
5/2/2022	MW-2	24.4	-8	-	YES	NO	0.00	water in drum below drain port
6/8/2022	MW-2	143.6	-8	-	YES	NO	0.00	Dry drum
7/5/2022	MW-2	101.2	-9	-	YES	NO	0.00	Dry drum downstream guage broken
8/17/2022	MW-2	13.8	-8	-	YES	NO	0.00	Dry drum downstream guage broken
9/14/2022	MW-2	21.8	8	-	YES	NO	0.00	Dry drum downstream guage broken
10/12/2022	MW-2	10.3	-9	-	YES	NO	0.00	Below the port, downstream guage broken
11/10/2022	MW-2	94	-9	-	NO	YES	22.62	Downstream guage broken
12/14/2022	MW-2	15.7	10	-	YES	YES	30.43	Downstream guage broken


SVE-MW #2
2,500.0
2,000.0
1,500.0
1,000.0
500.0
0.0
11/1/2018
11/1/2019
11/1/2020
11/1/2021
11/1/2022

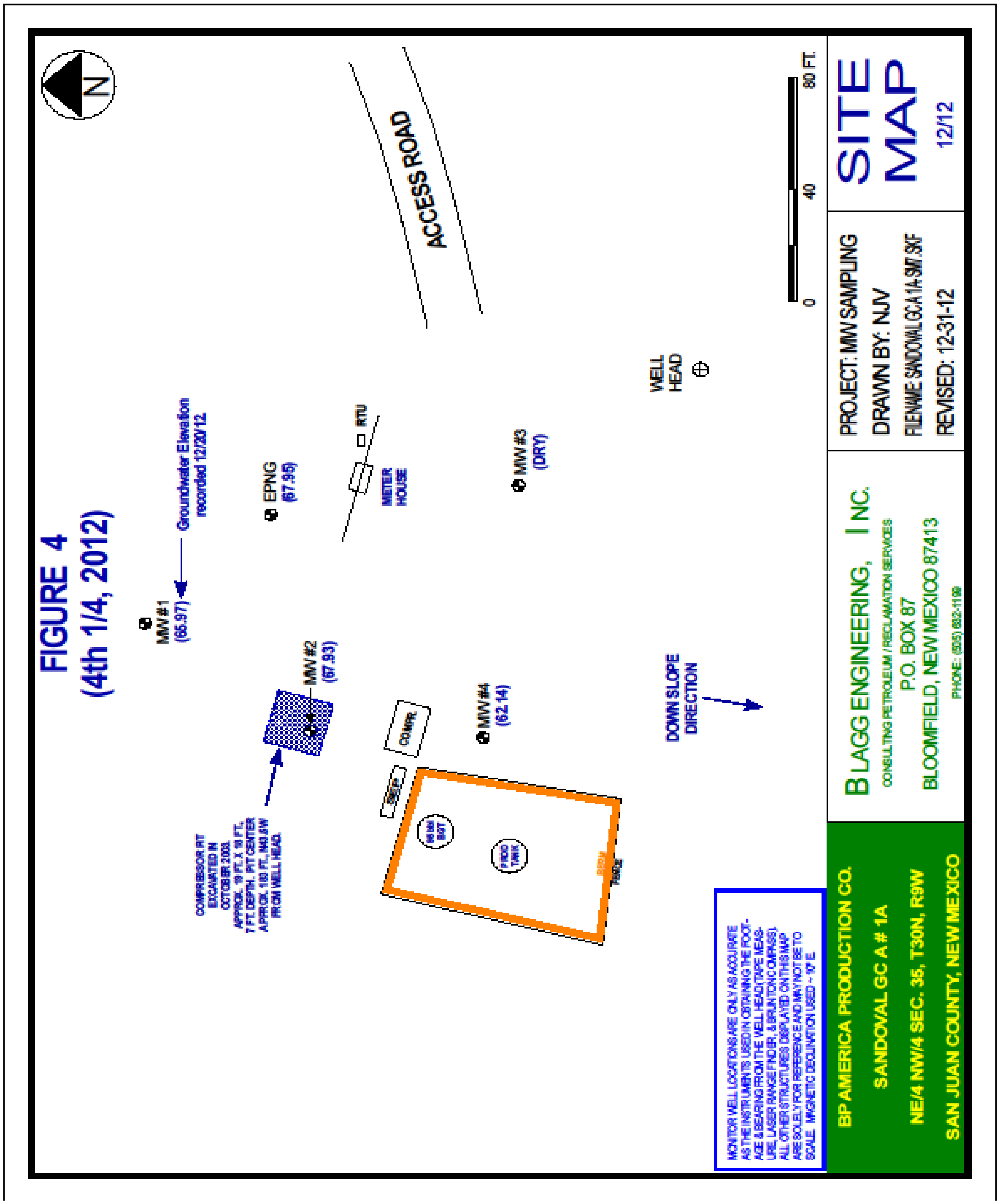


FIGURE 4
(4th 1/4, 2012)
Groundwater Elevation recorded 12/20/12
MW #1 (65.97)
EPNG (67.95)
RTU
METER HOUSE
MW #3 (DRY)
WELL HEAD
ACCESS ROAD
MW #2 (67.93)
MW #4 (62.14)
COMPR.
DOWN SLOPE DIRECTION
0
40
80 FT.
SITE MAP
12/12
PROJECT: MW SAMPLING
DRAWN BY: NJV
REVISED: 12-31-12
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
BP AMERICA PRODUCTION CO.
SANDOVAL GC A # 1A
NE/4 NW/4 SEC. 35, T30N, R9W
SAN JUAN COUNTY, NEW MEXICO

BPX Energy Inc. - Sandoval GC A 1A

SVE-MW #2 OVM Data

Date	Exhaust OVM (ppm)
11/1/2018	2,355.0
11/2/2018	1,978.0
11/5/2018	1,433.0
11/13/2018	890.0
11/16/2018	1,016.0
11/21/2018	370.0
11/26/2018	555.0
12/4/2018	629.0
12/10/2018	501.0
12/17/2018	325.0
12/24/2018	342.0
12/31/2018	355.0
1/9/2019	383.0
1/15/2019	372.0
1/21/2019	338.0
1/26/2019	350.0
2/1/2019	313.0
2/7/2019	316.0
2/14/2019	319.0
2/20/2019	260.0
2/27/2019	253.0
3/5/2019	252.0
3/10/2019	233.0
3/18/2019	254.0
3/28/2019	243.0
4/16/2019	222.0
5/2/2019	219.0
5/28/2019	207.0
6/24/2019	268.0
7/26/2019	277.0
8/19/2019	251.0
9/19/2019	281.0
10/8/2019	227.2
10/22/2019	241.0
10/29/2019	243.7
11/12/2019	656.0
12/10/2019	287.0
12/16/2019	230.0
1/4/2020	468.0
1/29/2020	397.0
3/4/2020	215.0
3/30/2020	199.0
4/14/2020	153.0
5/18/2020	178.0

Date	Exhaust OVM (ppm)
6/24/2020	116.0
7/29/2020	64.0
8/21/2020	238.0
9/1/2020	107.1
9/14/2020	110.6
9/24/2020	75.8
10/22/2020	61.0
10/29/2020	194.3
11/16/2020	66.1
11/16/2020	66.1
11/23/2020	NA
12/4/2020	NA
12/10/2020	NA
12/15/2020	NA
12/21/2020	NA
1/31/2021	194.6
2/5/2021	78.2
3/30/2021	319.5
4/15/2021	10.9
5/7/2021	8.2
6/9/2021	12.6
7/13/2021	65.3
9/29/2021	22.5
10/11/2021	44.0
11/6/2021	465.9
12/13/2021	486.0
1/4/2022	150.1
2/8/2022	33.4
3/16/2022	15.0
4/7/2022	23.1
5/2/2022	24.4
6/8/2022	143.6
7/5/2022	101.2
8/17/2022	13.8
9/14/2022	21.8
10/12/2022	10.3
11/10/2022	94.0
12/14/2022	15.7

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

CHAIN-OF-CUSTODY # : N / A

SANDOVAL GC A # 1A - COMPR. PIT
UNIT C, SEC. 35, T30N, R9W

LABORATORY (S) USED : GAL

Date : 3/16/22

DEVELOPER / SAMPLER : E. Millar/J. Harter

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	—	dry	40.00	-	-	-	-	-
2	101.78	—	37.3'	40.00	0920	7.54	3200	12.1	1.5
DEPTH TO PRODUCT (FT.) =			—	DEPTH TO WATER (FT.) =		—	PRODUCT THICKNESS (FT.) =		—
3	99.13	—	dry	38.73	-	-	-	-	-
4	98.96	—	—	38.62	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	4.01/7.00/10.00	1,413
DATE & TIME =		

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".
~~Fair/good~~ Poor recovery in MW #2. Purged well using new disposable bailer. Collected sample for BTEX per US EPA Method 8260B from MW #2 only. SVE operational prior to sampling, shut down during purging/sampling, then re-started afterward.

unable to locate MW #4

v. poor recovery in MW #2.

Top of casing MW #1 ~ 1.00 ft., MW #2 ~ 2.75 ft. above grade, MW #3 ~ @ grade, MW #4 ~ 0.25 ft. below grade.

on-site	0840	temp	~40°F
off-site	0930	temp	~40°F
sky cond.	cloudy		
wind speed	breeze ~5mph	direct.	east

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: Sandoval GC A 1A OrderNo.: 2203998

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/18/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2203998**
Date Reported: **3/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 1A
Collection Date: 3/16/2022 8:55:00 AM
Lab ID: 2203998-001 **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 1:24:00 PM
Toluene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Ethylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Naphthalene	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
1-Methylnaphthalene	ND	0.40		µg/L	1	3/22/2022 1:24:00 PM
2-Methylnaphthalene	ND	0.40		µg/L	1	3/22/2022 1:24:00 PM
Acetone	ND	1.0		µg/L	1	3/22/2022 1:24:00 PM
Bromobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Bromodichloromethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Bromoform	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Bromomethane	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
2-Butanone	ND	1.0		µg/L	1	3/22/2022 1:24:00 PM
Carbon disulfide	ND	1.0		µg/L	1	3/22/2022 1:24:00 PM
Carbon tetrachloride	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Chlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Chloroethane	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
Chloroform	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Chloromethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
2-Chlorotoluene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
4-Chlorotoluene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
cis-1,2-DCE	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
Dibromochloromethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Dibromomethane	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
1,2-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,3-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,4-Dichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Dichlorodifluoromethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1-Dichloroethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1-Dichloroethene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2-Dichloropropane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,3-Dichloropropane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
2,2-Dichloropropane	ND	0.10		µg/L	1	3/22/2022 1:24:00 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2203998**
Date Reported: **3/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 1A
Collection Date: 3/16/2022 8:55:00 AM
Lab ID: 2203998-001 **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 1:24:00 PM
Hexachlorobutadiene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
2-Hexanone	ND	1.0		µg/L	1	3/22/2022 1:24:00 PM
Isopropylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
4-Isopropyltoluene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
4-Methyl-2-pentanone	ND	1.0		µg/L	1	3/22/2022 1:24:00 PM
Methylene chloride	ND	0.30		µg/L	1	3/22/2022 1:24:00 PM
n-Butylbenzene	ND	0.30		µg/L	1	3/22/2022 1:24:00 PM
n-Propylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
sec-Butylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Styrene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
tert-Butylbenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
trans-1,2-DCE	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1,1-Trichloroethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,1,2-Trichloroethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Trichloroethene (TCE)	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Trichlorofluoromethane	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
1,2,3-Trichloropropane	ND	0.20		µg/L	1	3/22/2022 1:24:00 PM
Vinyl chloride	ND	0.10		µg/L	1	3/22/2022 1:24:00 PM
Xylenes, Total	ND	0.15		µg/L	1	3/22/2022 1:24:00 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/22/2022 1:24:00 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	3/22/2022 1:24:00 PM
Surr: Toluene-d8	90.9	70-130		%Rec	1	3/22/2022 1:24:00 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	3/22/2022 1:24:00 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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ANALYTICAL SUMMARY REPORT

March 25, 2022

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

Work Order: G22030399

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
G22030399-001	2203998-001A; SVE	03/16/22 8:55	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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LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client:	Hall Environmental		
Project:	Not Indicated	**Report Date:**	03/25/22
Client Sample ID:	2203998-001A; SVE	**Collection Date:**	03/16/22 08:55
Location:		**Date Received:**	03/23/22
Lab ID:	G22030399-001	**Sampled By:**	Not Indicated

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
NATURAL GAS CHROMATOGRAPHIC ANALYSIS REPORT					
Oxygen	22.385	Mol %		GPA 2261	03/24/22 14:59 / blb
Nitrogen	77.582	Mol %		GPA 2261	03/24/22 14:59 / blb
Carbon Dioxide	0.033	Mol %		GPA 2261	03/24/22 14:59 / blb
Hydrogen Sulfide	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Methane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Ethane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Propane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Isobutane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
n-Butane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Isopentane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
n-Pentane	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
Hexanes plus	< 0.001	Mol %		GPA 2261	03/24/22 14:59 / blb
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS					
GPM Ethane	< 0.0003	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Propane	< 0.0003	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Isobutane	< 0.0003	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM n-Butane	< 0.0003	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Isopentane	< 0.0004	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM n-Pentane	< 0.0004	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Hexanes plus	< 0.0004	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Pentanes plus	< 0.0004	gal/MCF		GPA 2261	03/24/22 14:59 / blb
GPM Total	< 0.0004	gal/MCF		GPA 2261	03/24/22 14:59 / blb
CALCULATED PROPERTIES					
Calculation Pressure Base	14.730	psia		GPA 2261	03/24/22 14:59 / blb
Calculation Temperature Base	60	°F		GPA 2261	03/24/22 14:59 / blb
Compressibility Factor, Z	1.0000	unitless		GPA 2261	03/24/22 14:59 / blb
Molecular Weight	28.91	unitless		GPA 2261	03/24/22 14:59 / blb
Pseudo-critical Pressure, psia	547	psia		GPA 2261	03/24/22 14:59 / blb
Pseudo-critical Temperature, deg R	239	deg R		GPA 2261	03/24/22 14:59 / blb
Specific Gravity (air=1.000)	1.001	unitless		GPA 2261	03/24/22 14:59 / blb
Gross BTU per cu ft @ std cond, dry	< 0.01	BTU/cu ft		GPA 2261	03/24/22 14:59 / blb
Gross BTU per cu ft @ std cond, wet	< 0.01	BTU/cu ft		GPA 2261	03/24/22 14:59 / blb

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

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QA/QC Summary Report

Prepared by Gillette, WY Branch

Client: Hall Environmental **Work Order:** G22030399 **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: **G22030399-001ADUP**	Sample Duplicate				Run: Varian GC_220324A				03/24/22 15:09
Oxygen	22.383	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:** G22030399 **Report Date:** 03/25/22

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261**									Batch: R270004
Lab ID: **G22030399-001ADUP**	Sample Duplicate				Run: Varian GC_220324A				03/24/22 15:09
Nitrogen	77.585	Mol %	0.001				0.0	10	
Carbon Dioxide	0.032	Mol %	0.001				3.1	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

G22030399

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: Hand Del

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

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

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2203998-001A	SVE	TEDLAR	Air	3/16/2022 8:55:00 AM	1	Natural Gases O2, CO2

6220 30399

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: [signature]	Date: 3/18/2022	Time: 9:06 AM	Received By: M. Ray	Date: 03/23/2023	Time: 1030
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☑ RUSH: Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples: _____ °C Attempt to Cool ? _____

Comments: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2203998 | RcptNo: 1

Received By: Cheyenne Cason 3/18/2022 8:05:00 AM

Completed By: Sean Livingston 3/18/2022 9:05:24 AM

Reviewed By: 3-18-22

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SA 3/18/22

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				

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:
Sandoval GC A #1A

Project #:

Project Manager:
Kyle Siesser

Sampler: Emma Millar
On Ice: ~~☐ Yes~~ ☒ No
# of Coolers: 1
Cooler Temp(including CF): NA

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2203998	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	CO2	O2				
3/16/2022	0855	AIR	SVE	tedlar bag - 1	NA	001								■			■	■				

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/17/22	1337		NA Wap		3/17/22	1337
3/17/22	1802					
			Chris Green		3/18/22	0805

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.

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

30 March 2022

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: VOC 8260

Enclosed are the results of analyses for samples received by the laboratory on 03/16/22 14:00. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Debbie Zufelt
Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-22-13

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-21-14

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2203147-01	Water	03/16/22 09:20	03/16/22 14:00	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

MW #2

2203147-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dichlorodifluoromethane*	<0.050	0.050	0.009	mg/L	100	03/25/22 14:22	8260B		MS
Chloromethane*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
Vinyl chloride*	<0.050	0.050	0.005	mg/L	100	03/25/22 14:22	8260B		MS
Bromomethane*	<0.050	0.050	0.005	mg/L	100	03/25/22 14:22	8260B		MS
Chloroethane*	<0.050	0.050	0.012	mg/L	100	03/25/22 14:22	8260B		MS
Trichlorofluoromethane*	<0.050	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
1,1-Dichloroethene*	<0.050	0.050	0.015	mg/L	100	03/25/22 14:22	8260B		MS
Carbon disulfide*	<0.100	0.100	0.028	mg/L	100	03/25/22 14:22	8260B		MS
Iodomethane	<0.100	0.100	0.013	mg/L	100	03/25/22 14:22	8260B		MS
Acrolein*	<0.500	0.500	0.070	mg/L	100	03/25/22 14:22	8260B		MS
Methylene chloride*	<0.500	0.500	0.032	mg/L	100	03/25/22 14:22	8260B		MS
Acetone*	<1.00	1.00	0.578	mg/L	100	03/25/22 14:22	8260B		MS
trans-1,2-Dichloroethene*	<0.050	0.050	0.018	mg/L	100	03/25/22 14:22	8260B		MS
Methyl t-Butyl Ether*	<0.100	0.100	0.026	mg/L	100	03/25/22 14:22	8260B		MS
1,1-Dichloroethane*	<0.050	0.050	0.008	mg/L	100	03/25/22 14:22	8260B		MS
Acrylonitrile*	<0.200	0.200	0.152	mg/L	100	03/25/22 14:22	8260B		MS
Vinyl acetate*	<0.050	0.050	0.037	mg/L	100	03/25/22 14:22	8260B		MS
cis-1,2-Dichloroethene*	<0.050	0.050	0.011	mg/L	100	03/25/22 14:22	8260B		MS
2,2-Dichloropropane*	<0.050	0.050	0.029	mg/L	100	03/25/22 14:22	8260B		MS
Bromochloromethane*	<0.050	0.050	0.007	mg/L	100	03/25/22 14:22	8260B		MS
Chloroform*	<0.050	0.050	0.005	mg/L	100	03/25/22 14:22	8260B		MS
Carbon tetrachloride*	<0.050	0.050	0.012	mg/L	100	03/25/22 14:22	8260B		MS
1,1,1-Trichloroethane*	<0.050	0.050	0.012	mg/L	100	03/25/22 14:22	8260B		MS
1,1-Dichloropropene*	<0.050	0.050	0.007	mg/L	100	03/25/22 14:22	8260B		MS
2-Butanone*	<0.200	0.200	0.166	mg/L	100	03/25/22 14:22	8260B		MS
Benzene*	**1.95**	0.050	0.009	mg/L	100	03/25/22 14:22	8260B		MS
1,2-Dichloroethane*	<0.050	0.050	0.015	mg/L	100	03/25/22 14:22	8260B		MS
Trichloroethene*	<0.050	0.050	0.016	mg/L	100	03/25/22 14:22	8260B		MS
Dibromomethane*	<0.050	0.050	0.016	mg/L	100	03/25/22 14:22	8260B		MS
1,2-Dichloropropane*	<0.050	0.050	0.014	mg/L	100	03/25/22 14:22	8260B		MS
Bromodichloromethane*	<0.050	0.050	0.007	mg/L	100	03/25/22 14:22	8260B		MS
cis-1,3-Dichloropropene*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

MW #2

2203147-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Toluene*	<0.050	0.050	0.007	mg/L	100	03/25/22 14:22	8260B		MS
4-Methyl-2-pentanone*	<0.100	0.100	0.014	mg/L	100	03/25/22 14:22	8260B		MS
Tetrachloroethene*	<0.050	0.050	0.011	mg/L	100	03/25/22 14:22	8260B		MS
trans-1,3-Dichloropropene*	<0.050	0.050	0.008	mg/L	100	03/25/22 14:22	8260B		MS
1,1,2-Trichloroethane*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
Dibromochloromethane*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
1,3-Dichloropropane*	<0.050	0.050	0.001	mg/L	100	03/25/22 14:22	8260B		MS
1,2-Dibromoethane*	<0.050	0.050	0.011	mg/L	100	03/25/22 14:22	8260B		MS
2-Hexanone*	<0.100	0.100	0.010	mg/L	100	03/25/22 14:22	8260B		MS
Chlorobenzene*	<0.050	0.050	0.002	mg/L	100	03/25/22 14:22	8260B		MS
Ethylbenzene*	**0.922**	0.050	0.009	mg/L	100	03/25/22 14:22	8260B		MS
1,1,1,2-Tetrachloroethane*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
m+p - Xylene*	**7.19**	0.100	0.047	mg/L	100	03/25/22 14:22	8260B		MS
o-Xylene*	**0.943**	0.050	0.007	mg/L	100	03/25/22 14:22	8260B		MS
Total Xylenes*	**8.13**	0.100	0.053	mg/L	100	03/25/22 14:22	8260B		MS
Bromoform*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
Styrene*	<0.050	0.050	0.002	mg/L	100	03/25/22 14:22	8260B		MS
Isopropylbenzene*	**0.129**	0.050	0.002	mg/L	100	03/25/22 14:22	8260B		MS
Bromobenzene*	<0.050	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
n-Propylbenzene*	**0.123**	0.050	0.001	mg/L	100	03/25/22 14:22	8260B		MS
1,1,2,2-Tetrachloroethane*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
2-Chlorotoluene*	<0.050	0.050	0.004	mg/L	100	03/25/22 14:22	8260B		MS
1.2.3-trichloropropane*	<0.050	0.050	0.005	mg/L	100	03/25/22 14:22	8260B		MS
1,3,5-Trimethylbenzene*	**1.48**	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
trans-1,4-Dichloro-2-butene	<1.00	1.00	0.588	mg/L	100	03/25/22 14:22	8260B		MS
4-Chlorotoluene*	<0.050	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
tert-Butylbenzene*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
1,2,4-Trimethylbenzene*	**2.52**	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
sec-Butylbenzene*	<0.050	0.050	0.002	mg/L	100	03/25/22 14:22	8260B		MS
p-Isopropyltoluene*	**0.191**	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
1,3-Dichlorobenzene*	<0.050	0.050	0.004	mg/L	100	03/25/22 14:22	8260B		MS
1,4 Dichlorobenzene*	<0.050	0.050	0.004	mg/L	100	03/25/22 14:22	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

MW #2

2203147-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
n-Butylbenzene*	<0.050	0.050	0.003	mg/L	100	03/25/22 14:22	8260B		MS
1,2-Dichlorobenzene*	<0.050	0.050	0.006	mg/L	100	03/25/22 14:22	8260B		MS
1,2-Dibromo-3-chloropropane*	<0.050	0.050	0.025	mg/L	100	03/25/22 14:22	8260B		MS
Hexachlorobutadiene*	<0.050	0.050	0.010	mg/L	100	03/25/22 14:22	8260B		MS
1,2,4-Trichlorobenzene*	<0.050	0.050	0.009	mg/L	100	03/25/22 14:22	8260B		MS
Naphthalene*	**0.148**	0.050	0.004	mg/L	100	03/25/22 14:22	8260B		MS
1,2,3-Trichlorobenzene*	<0.050	0.050	0.010	mg/L	100	03/25/22 14:22	8260B		MS
1,4-Dioxane	<10.0	10.0	2.87	mg/L	100	03/25/22 14:22	8260B		MS
Surrogate: Dibromofluoromethane			*100 %*	*82.4-141*		*03/25/22 14:22*	*8260B*		MS
Surrogate: Toluene-d8			*100 %*	*87.1-110*		*03/25/22 14:22*	*8260B*		MS
Surrogate: 4-Bromofluorobenzene			*93.7 %*	*76.4-114*		*03/25/22 14:22*	*8260B*		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles										
Blank (2032212-BLK1)				Prepared: 03/22/22 Analyzed: 03/23/22						
1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,1-Trichloroethane	ND	0.0005	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethene	ND	0.0005	mg/L							
1,1-Dichloropropene	ND	0.0005	mg/L							
1,2,3-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trimethylbenzene	ND	0.0005	mg/L							
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L							
1,2-Dibromoethane	ND	0.0005	mg/L							
1,2-Dichlorobenzene	ND	0.0005	mg/L							
1,2-Dichloroethane	ND	0.0005	mg/L							
1,2-Dichloropropane	ND	0.0005	mg/L							
1,3,5-Trimethylbenzene	ND	0.0005	mg/L							
1,3-Dichlorobenzene	ND	0.0005	mg/L							
1,3-Dichloropropane	ND	0.0005	mg/L							
1,4 Dichlorobenzene	ND	0.0005	mg/L							
1,4-Dioxane	ND	0.100	mg/L							
1.2.3-trichloropropane	ND	0.0005	mg/L							
2,2-Dichloropropane	ND	0.0005	mg/L							
2-Butanone	ND	0.002	mg/L							
2-Chlorotoluene	ND	0.0005	mg/L							
2-Hexanone	ND	0.001	mg/L							
Surrogate: 4-Bromofluorobenzene	*0.0229*		mg/L	*0.0250*		*91.4*	*76.4-114*			
4-Chlorotoluene	ND	0.0005	mg/L							
4-Methyl-2-pentanone	ND	0.001	mg/L							
Acetone	ND	0.010	mg/L							
Acrolein	ND	0.005	mg/L							
Acrylonitrile	ND	0.002	mg/L							
Benzene	ND	0.0005	mg/L							
Bromobenzene	ND	0.0005	mg/L							
Bromochloromethane	ND	0.0005	mg/L							
Bromodichloromethane	ND	0.0005	mg/L							
Bromoform	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles (Continued)										
Blank (2032212-BLK1) (Continued)			Prepared: 03/22/22 Analyzed: 03/23/22							
Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
Surrogate: Dibromofluoromethane	*0.0254*		mg/L	*0.0250*		*101*	*82.4-141*			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl t-Butyl Ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
Surrogate: Toluene-d8	*0.0256*		mg/L	*0.0250*		*102*	*87.1-110*			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles (Continued)										
LCS (2032212-BS1)			Prepared: 03/22/22 Analyzed: 03/23/22							
1,1,1,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		101	89.5-111			
1,1,1-Trichloroethane	0.020	0.0005	mg/L	0.0200		99.8	85.1-117			
1,1,2,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		101	68.8-127			
1,1,2-Trichloroethane	0.020	0.0005	mg/L	0.0200		102	77.4-118			
1,1-Dichloroethane	0.020	0.0005	mg/L	0.0200		102	78.1-121			
1,1-Dichloroethene	0.020	0.0005	mg/L	0.0200		100	64-124			
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		101	81-122			
1,2,3-Trichlorobenzene	0.021	0.0005	mg/L	0.0200		104	85.7-115			
1,2,4-Trichlorobenzene	0.021	0.0005	mg/L	0.0200		104	83.5-117			
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		112	78.4-126			
1,2-Dibromo-3-chloropropane	0.020	0.0005	mg/L	0.0200		98.4	77.2-116			
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		103	88.6-113			
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		102	86.5-111			
1,2-Dichloroethane	0.019	0.0005	mg/L	0.0200		93.3	75.6-120			
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		95.6	76.8-121			
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		107	79.2-127			
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		101	87.7-112			
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		98.2	82.1-119			
1,4 Dichlorobenzene	0.019	0.0005	mg/L	0.0200		97.0	85.2-111			
1,4-Dioxane	0.393	0.100	mg/L	0.400		98.2	-34.9-102			
1.2.3-trichloropropane	0.030	0.0005	mg/L	0.0200		149	53.2-135			BS1
2,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		95.0	74.3-136			
2-Butanone	0.039	0.002	mg/L	0.0400		96.7	65.6-132			
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		103	78.3-123			
2-Hexanone	0.042	0.001	mg/L	0.0400		104	66.6-126			
Surrogate: 4-Bromofluorobenzene	*0.0237*		mg/L	*0.0250*		*94.9*	*76.4-114*			
4-Chlorotoluene	0.021	0.0005	mg/L	0.0200		107	76.8-129			
4-Methyl-2-pentanone	0.043	0.001	mg/L	0.0400		107	67.7-128			
Acetone	0.040	0.010	mg/L	0.0400		99.2	54.3-140			
Acrolein	0.174	0.005	mg/L	0.200		87.1	29.4-149			
Acrylonitrile	0.046	0.002	mg/L	0.0400		115	60.8-143			
Benzene	0.020	0.0005	mg/L	0.0200		99.6	82.7-115			
Bromobenzene	0.020	0.0005	mg/L	0.0200		98.4	85.1-112			
Bromochloromethane	0.019	0.0005	mg/L	0.0200		94.1	77.8-118			
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		98.5	82.7-118			
Bromoform	0.024	0.0005	mg/L	0.0200		119	76.1-133			
Bromomethane	0.019	0.0005	mg/L	0.0200		95.1	61.1-126			
Carbon disulfide	0.040	0.001	mg/L	0.0400		101	67.2-128			
Carbon tetrachloride	0.019	0.0005	mg/L	0.0200		97.0	89.7-117			

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles (Continued)										
LCS (2032212-BS1) (Continued)			Prepared: 03/22/22 Analyzed: 03/23/22							
Chlorobenzene	0.020	0.0005	mg/L	0.0200		98.4	86.2-112			
Chloroethane	0.019	0.0005	mg/L	0.0200		93.1	62.4-125			
Chloroform	0.020	0.0005	mg/L	0.0200		98.0	86.7-115			
Chloromethane	0.022	0.0005	mg/L	0.0200		108	47.1-145			
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		99.8	76-117			
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		106	80.9-123			
Dibromochloromethane	0.023	0.0005	mg/L	0.0200		113	88.7-121			
Surrogate: Dibromofluoromethane	*0.0254*		mg/L	*0.0250*		*101*	*82.4-141*			
Dibromomethane	0.019	0.0005	mg/L	0.0200		92.8	86.4-114			
Dichlorodifluoromethane	0.021	0.0005	mg/L	0.0200		104	36.1-160			
Ethylbenzene	0.021	0.0005	mg/L	0.0200		104	84.3-117			
Hexachlorobutadiene	0.023	0.0005	mg/L	0.0200		116	94.3-116			
Iodomethane	0.043	0.001	mg/L	0.0400		108	77.4-124			
Isopropylbenzene	0.020	0.0005	mg/L	0.0200		99.8	88.1-114			
m+p - Xylene	0.042	0.001	mg/L	0.0400		105	85.9-122			
Methyl t-Butyl Ether	0.042	0.001	mg/L	0.0400		106	78.9-118			
Methylene chloride	0.021	0.0005	mg/L	0.0200		106	64.2-134			
Naphthalene	0.022	0.0005	mg/L	0.0200		111	80.6-121			
n-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	82.2-123			
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		106	78.9-125			
o-Xylene	0.021	0.0005	mg/L	0.0200		105	85.6-112			
p-Isopropyltoluene	0.022	0.0005	mg/L	0.0200		112	82.5-123			
sec-Butylbenzene	0.022	0.0005	mg/L	0.0200		111	82.1-128			
Styrene	0.020	0.0005	mg/L	0.0200		99.4	78.3-117			
tert-Butylbenzene	0.022	0.0005	mg/L	0.0200		109	79.5-129			
Tetrachloroethene	0.020	0.0005	mg/L	0.0200		99.4	86.6-110			
Toluene	0.020	0.0005	mg/L	0.0200		98.8	82.8-112			
Surrogate: Toluene-d8	*0.0254*		mg/L	*0.0250*		*102*	*87.1-110*			
Total Xylenes	0.063	0.001	mg/L	0.0600		105	86.5-118			
trans-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		107	69.2-119			
trans-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		108	77.4-131			
trans-1,4-Dichloro-2-butene	0.078	0.010	mg/L	0.0400		195	41.4-204			
Trichloroethene	0.018	0.0005	mg/L	0.0200		90.7	82.2-114			
Trichlorofluoromethane	0.020	0.0005	mg/L	0.0200		100	78.2-126			
Vinyl acetate	0.020	0.0005	mg/L	0.0200		101	56.2-148			
Vinyl chloride	0.021	0.0005	mg/L	0.0200		107	62-135			
LCS Dup (2032212-BSD1)			Prepared: 03/22/22 Analyzed: 03/23/22							
1,1,1,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		100	89.5-111	0.695	6.88	

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

GREEN ANALYTICAL LABORATORIES

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles (Continued)										
LCS Dup (2032212-BSD1) (Continued)			Prepared: 03/22/22 Analyzed: 03/23/22							
1,1,1-Trichloroethane	0.019	0.0005	mg/L	0.0200		96.8	85.1-117	3.05	7.43	
1,1,2,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		97.9	68.8-127	2.92	8.68	
1,1,2-Trichloroethane	0.020	0.0005	mg/L	0.0200		98.5	77.4-118	3.44	6.82	
1,1-Dichloroethane	0.020	0.0005	mg/L	0.0200		101	78.1-121	1.68	4.3	
1,1-Dichloroethene	0.018	0.0005	mg/L	0.0200		91.5	64-124	9.13	16.5	
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		98.5	81-122	2.90	5.47	
1,2,3-Trichlorobenzene	0.019	0.0005	mg/L	0.0200		94.9	85.7-115	8.72	43	
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		99.1	83.5-117	4.92	22.3	
1,2,4-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		106	78.4-126	5.66	8.94	
1,2-Dibromo-3-chloropropane	0.019	0.0005	mg/L	0.0200		93.8	77.2-116	4.68	15.1	
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		101	88.6-113	1.57	5.83	
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		99.4	86.5-111	2.78	8.72	
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		89.9	75.6-120	3.71	8.94	
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		93.9	76.8-121	1.79	5.51	
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		104	79.2-127	3.17	16.5	
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		100	87.7-112	0.846	9	
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		98.6	82.1-119	0.406	6.06	
1,4 Dichlorobenzene	0.019	0.0005	mg/L	0.0200		93.8	85.2-111	3.30	7.71	
1,4-Dioxane	0.385	0.100	mg/L	0.400		96.2	-34.9-102	2.02	35.2	
1.2.3-trichloropropane	0.022	0.0005	mg/L	0.0200		111	53.2-135	29.4	49.2	
2,2-Dichloropropane	0.018	0.0005	mg/L	0.0200		92.1	74.3-136	3.10	9.62	
2-Butanone	0.038	0.002	mg/L	0.0400		94.5	65.6-132	2.30	14.2	
2-Chlorotoluene	0.020	0.0005	mg/L	0.0200		99.0	78.3-123	3.67	8.62	
2-Hexanone	0.041	0.001	mg/L	0.0400		102	66.6-126	2.65	7.28	
Surrogate: 4-Bromofluorobenzene	*0.0241*		mg/L	*0.0250*		*96.3*	*76.4-114*			
4-Chlorotoluene	0.021	0.0005	mg/L	0.0200		103	76.8-129	3.38	15.5	
4-Methyl-2-pentanone	0.042	0.001	mg/L	0.0400		104	67.7-128	3.24	7.57	
Acetone	0.034	0.010	mg/L	0.0400		83.9	54.3-140	16.8	30.5	
Acrolein	0.159	0.005	mg/L	0.200		79.7	29.4-149	8.93	22.4	
Acrylonitrile	0.044	0.002	mg/L	0.0400		111	60.8-143	3.08	7.62	
Benzene	0.019	0.0005	mg/L	0.0200		97.0	82.7-115	2.65	4.16	
Bromobenzene	0.019	0.0005	mg/L	0.0200		95.0	85.1-112	3.52	8.41	
Bromochloromethane	0.019	0.0005	mg/L	0.0200		92.8	77.8-118	1.45	5.16	
Bromodichloromethane	0.019	0.0005	mg/L	0.0200		95.4	82.7-118	3.25	5.36	
Bromoform	0.022	0.0005	mg/L	0.0200		108	76.1-133	10.0	14.1	
Bromomethane	0.019	0.0005	mg/L	0.0200		93.3	61.1-126	1.96	21.5	
Carbon disulfide	0.037	0.001	mg/L	0.0400		93.5	67.2-128	7.31	20.3	
Carbon tetrachloride	0.019	0.0005	mg/L	0.0200		94.8	89.7-117	2.30	11.4	
Chlorobenzene	0.019	0.0005	mg/L	0.0200		96.8	86.2-112	1.69	5.18	

Green Analytical Laboratories

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2032212 - Volatiles (Continued)										
LCS Dup (2032212-BSD1) (Continued)			Prepared: 03/22/22 Analyzed: 03/23/22							
Chloroethane	0.018	0.0005	mg/L	0.0200		89.6	62.4-125	3.78	24.1	
Chloroform	0.019	0.0005	mg/L	0.0200		96.6	86.7-115	1.44	5.15	
Chloromethane	0.021	0.0005	mg/L	0.0200		107	47.1-145	1.02	27	
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		100	76-117	0.600	5.73	
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		106	80.9-123	0.0944	6.09	
Dibromochloromethane	0.021	0.0005	mg/L	0.0200		106	88.7-121	5.71	7.24	
Surrogate: Dibromofluoromethane	*0.0253*		mg/L	*0.0250*		*101*	*82.4-141*			
Dibromomethane	0.019	0.0005	mg/L	0.0200		93.3	86.4-114	0.483	5.75	
Dichlorodifluoromethane	0.020	0.0005	mg/L	0.0200		102	36.1-160	2.63	22.6	
Ethylbenzene	0.021	0.0005	mg/L	0.0200		103	84.3-117	0.819	4.83	
Hexachlorobutadiene	0.021	0.0005	mg/L	0.0200		106	94.3-116	9.03	18.4	
Iodomethane	0.040	0.001	mg/L	0.0400		101	77.4-124	6.39	24.3	
Isopropylbenzene	0.020	0.0005	mg/L	0.0200		98.4	88.1-114	1.41	6.25	
m+p - Xylene	0.042	0.001	mg/L	0.0400		104	85.9-122	1.46	5.77	
Methyl t-Butyl Ether	0.042	0.001	mg/L	0.0400		104	78.9-118	1.76	12.8	
Methylene chloride	0.020	0.0005	mg/L	0.0200		101	64.2-134	5.16	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		103	80.6-121	7.21	33.5	
n-Butylbenzene	0.020	0.0005	mg/L	0.0200		101	82.2-123	5.25	10.1	
n-Propylbenzene	0.020	0.0005	mg/L	0.0200		101	78.9-125	4.29	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		103	85.6-112	1.68	6.29	
p-Isopropyltoluene	0.021	0.0005	mg/L	0.0200		107	82.5-123	4.39	9.26	
sec-Butylbenzene	0.021	0.0005	mg/L	0.0200		107	82.1-128	3.95	9.85	
Styrene	0.019	0.0005	mg/L	0.0200		96.2	78.3-117	3.22	7.55	
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		104	79.5-129	4.79	18.6	
Tetrachloroethene	0.020	0.0005	mg/L	0.0200		97.7	86.6-110	1.73	6.38	
Toluene	0.019	0.0005	mg/L	0.0200		96.8	82.8-112	2.10	5.67	
Surrogate: Toluene-d8	*0.0254*		mg/L	*0.0250*		*102*	*87.1-110*			
Total Xylenes	0.062	0.001	mg/L	0.0600		104	86.5-118	1.53	5.83	
trans-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		104	69.2-119	2.55	19.1	
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		105	77.4-131	3.11	6.26	
trans-1,4-Dichloro-2-butene	0.066	0.010	mg/L	0.0400		166	41.4-204	16.2	92.8	
Trichloroethene	0.018	0.0005	mg/L	0.0200		91.6	82.2-114	0.987	4.92	
Trichlorofluoromethane	0.019	0.0005	mg/L	0.0200		95.6	78.2-126	5.05	19.8	
Vinyl acetate	0.020	0.0005	mg/L	0.0200		99.1	56.2-148	1.60	7.84	
Vinyl chloride	0.021	0.0005	mg/L	0.0200		105	62-135	2.50	23	

Green Analytical Laboratories

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	03/30/22 10:05

Notes and Definitions

BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

GAL Analytical Laboratories
(970) 247-4220
Fax: (970) 247-4227
service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC	Bill to (if different):
Project Manager: Kyle Siesser	P.O. #:
Address: PO Box 1653	Company:
City: Durango **State:** CO **Zip:** 81302	Attn:
Phone #: 970-764-7356 **Email:** ksiesser@cottonwoodconsulting.com	Address:
Additional Report To:	City:
Project Name: Sandoval GC A #001A	State: Zip:
Project Number:	Phone #:
Sampler Name (Print): Emma Millar/Jacob Harter	Fax or Email:

FOR LAB USE ONLY		Collected		Matrix (check one)						# of containers							ANALYSIS REQUEST
Lab I.D.	Sample Name or Location	Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:		EPA Method 8260
2203-147-01	MW #2	3/16/22	0920	X								4					X

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	**Date:** 3/16/22 **Time:** 1400	Received By: Linda Gumper
Relinquished By:	Date: Time:	Received By:
Relinquished By:	Date: Time:	Received By:

ADDITIONAL REMARKS: Report to State? (Circle) Yes (No)

Delivered By: (Circle One)
(Sampler) - UPS - FedEx - Kangaroo - Other:

Temperature at reciept: 13.9°C CHECKED BY:

Indoor Laser #2

† GAL cannot always accept verbal changes. Please fax or email written change requests.
* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

Sandoval GC A #001A - Compr Pit
Unit C Sec 35 T30N R9W

LABORATORY (S) USED : GAL

Date : 6/8/22

DEVELOPER / SAMPLER : EM / KS

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	~~dry~~	dry	—	—	—	—	—	—
2	101.78	—	36.52	37.25	1020	6.90	3300	20.0	0.3
3	99.13	~~dry~~	dry	—	—	—	—	—	—
4	98.96	—	—	—	—	—	—	—	—

NOTES : Volume of water purged from well prior to sampling: V = pi x r^2 x h x 7.48 gal./ft^3) x 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".

Collect sample from MW #2 for BTEX per EPA mehod 8260B. Shut down SVE prior to sampling, then re-start.

Unable to locate MW #4 (buried).

Dark grey to black, sheen, HC odor.

Top of casing MW # 1 ~ 1.00 ft., MW # 2 ~ 2.75 ft., MW # 3 ~ @ grade, MW # 4 ~ 0.25 ft below grade

on-site	0945	temp	~80°F
off-site	1030	temp	~80°F
sky cond.	clear		
wind speed	light	direct.	-

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 23, 2022

Kyle Siesser

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

RE: Sandoval GC A 1A OrderNo.: 2206607

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/10/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2206607**
Date Reported: **6/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 1A
Collection Date: 6/8/2022 9:50:00 AM
Lab ID: 2206607-001 **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	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Toluene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Ethylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Methyl tert-butyl ether (MTBE)	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2,4-Trimethylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,3,5-Trimethylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2-Dichloroethane (EDC)	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2-Dibromoethane (EDB)	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Naphthalene	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1-Methylnaphthalene	ND	0.80	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
2-Methylnaphthalene	ND	0.80	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Acetone	ND	2.0	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Bromobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Bromodichloromethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Bromoform	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Bromomethane	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
2-Butanone	ND	2.0	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Carbon disulfide	ND	2.0	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Carbon tetrachloride	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Chlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Chloroethane	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Chloroform	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Chloromethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
2-Chlorotoluene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
4-Chlorotoluene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
cis-1,2-DCE	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
cis-1,3-Dichloropropene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2-Dibromo-3-chloropropane	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Dibromochloromethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Dibromomethane	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2-Dichlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,3-Dichlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,4-Dichlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Dichlorodifluoromethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1-Dichloroethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1-Dichloroethene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2-Dichloropropane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,3-Dichloropropane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
2,2-Dichloropropane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708

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

Qualifiers:

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

Analytical Report
Lab Order **2206607**
Date Reported: **6/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 1A
Collection Date: 6/8/2022 9:50:00 AM
Lab ID: 2206607-001 **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	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Hexachlorobutadiene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
2-Hexanone	ND	2.0	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Isopropylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
4-Isopropyltoluene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
4-Methyl-2-pentanone	ND	2.0	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Methylene chloride	ND	0.60	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
n-Butylbenzene	ND	0.60	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
n-Propylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
sec-Butylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Styrene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
tert-Butylbenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1,1,2-Tetrachloroethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1,2,2-Tetrachloroethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Tetrachloroethene (PCE)	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
trans-1,2-DCE	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
trans-1,3-Dichloropropene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2,3-Trichlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2,4-Trichlorobenzene	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1,1-Trichloroethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,1,2-Trichloroethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Trichloroethene (TCE)	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Trichlorofluoromethane	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
1,2,3-Trichloropropane	ND	0.40	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Vinyl chloride	ND	0.20	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Xylenes, Total	ND	0.30	D	µg/L	2	6/14/2022 4:14:00 PM	R88708
Surr: Dibromofluoromethane	112	70-130	D	%Rec	2	6/14/2022 4:14:00 PM	R88708
Surr: 1,2-Dichloroethane-d4	99.4	70-130	D	%Rec	2	6/14/2022 4:14:00 PM	R88708
Surr: Toluene-d8	95.8	70-130	D	%Rec	2	6/14/2022 4:14:00 PM	R88708
Surr: 4-Bromofluorobenzene	96.4	70-130	D	%Rec	2	6/14/2022 4:14:00 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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ANALYTICAL SUMMARY REPORT

June 23, 2022

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

Work Order: G22060306
Project Name: 2206607

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
G22060306-001	2206607-001A; SVE	06/08/22 9:50	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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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

CLIENT: Hall Environmental
Project: 2206607
Work Order: G22060306

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: 2206607
Client Sample ID: 2206607-001A; SVE
Location:
Lab ID: G22060306-001

Report Date: 06/23/22
Collection Date: 06/08/22 09:50
Date Received: 06/16/22
Sampled By: Not Provided

Analyses	Result	Units	Qualifier	Method	Analysis Date / By
GAS CHROMATOGRAPHIC ANALYSIS REPORT					
Oxygen	21.89	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Nitrogen	78.07	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Carbon Dioxide	0.04	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Hydrogen Sulfide	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Methane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Ethane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Propane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Isobutane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
n-Butane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Isopentane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
n-Pentane	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
Hexanes plus	<0.01	Mol %		GPA 2261-	06/20/22 14:36 / eli-b
GPM @ STD COND/1000 CU.FT., MOISTURE FREE GAS					
Propane	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
Isobutane	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
n-Butane	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
Isopentane	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
n-Pentane	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
Hexanes plus	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
GPM Total	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
GPM Pentanes plus	< 0.001	gpm		GPA 2261-	06/20/22 14:36 / eli-b
CALCULATED PROPERTIES					
Gross BTU per cu ft @ Std Cond. (HHV	<1			GPA 2261-	06/20/22 14:36 / eli-b
Net BTU per cu ft @ std cond. (LHV)	<1			GPA 2261-	06/20/22 14:36 / eli-b
Pseudo-critical Pressure, psia	545			GPA 2261-	06/20/22 14:36 / eli-b
Pseudo-critical Temperature, deg R	239			GPA 2261-	06/20/22 14:36 / eli-b
PHYSICAL PROPERTIES-CALCULATED					
Specific Gravity @ 60/60F	0.998			D3588-81	06/20/22 14:36 / eli-b
COMMENTS					
-				-	06/20/22 14:36 / 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 Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** G22060306 **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**	Sample Duplicate				Run: GCNGA-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 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

G22060306

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

ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD 1 1

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

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

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2206607-001A	SVE	TEDLAR	Air	6/8/2022 9:50:00 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@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 6/10/2022	Time: 10:44 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

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

FOR LAB USE ONLY
Temp of samples ____ ℃ Attempt to Cool ? ____
Comments: ____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Cottonwood Consulting LLC

Work Order Number: 2206607

RcptNo: 1

Received By: **Cheyenne Cason** 6/10/2022 7:05:00 AM

Completed By: **Sean Livingston** 6/10/2022 10:42:06 AM

Reviewed By: KPG 6.10.22

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: CMC 6/10/22

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	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: Sandoval GC A #1A

Project #:

Project Manager: Kyle Siesser

Sampler: Emma Millar
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): NA

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2206607	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	CO2	O2				
6/8/22	0950	AIR	SVE	tedlar bag - 1	NA	001								■			■	■				

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/9/22	1546			Courier	6/9/22	1546
6/9/22	1806				6/10/22	0705

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.

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

16 June 2022

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: VOC 8260

Enclosed are the results of analyses for samples received by the laboratory on 06/08/22 17:00. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Brenna Kampf
Project Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-22-14

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-22-15

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2206101-01	Water	06/08/22 10:20	06/08/22 17:00	

Green Analytical Laboratories

Brenna Kampf, Project Manager

GREEN Analytical Laboratories

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

MW #2

2206101-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dichlorodifluoromethane*	<0.100	0.100	0.018	mg/L	200	06/14/22 10:51	8260B		MS
Chloromethane*	<0.100	0.100	0.012	mg/L	200	06/14/22 10:51	8260B		MS
Vinyl chloride*	<0.100	0.100	0.010	mg/L	200	06/14/22 10:51	8260B		MS
Bromomethane*	<0.100	0.100	0.010	mg/L	200	06/14/22 10:51	8260B		MS
Chloroethane*	<0.100	0.100	0.024	mg/L	200	06/14/22 10:51	8260B		MS
Trichlorofluoromethane*	<0.100	0.100	0.006	mg/L	200	06/14/22 10:51	8260B		MS
1,1-Dichloroethene*	<0.100	0.100	0.030	mg/L	200	06/14/22 10:51	8260B		MS
Carbon disulfide*	<0.200	0.200	0.057	mg/L	200	06/14/22 10:51	8260B		MS
Iodomethane	<0.200	0.200	0.026	mg/L	200	06/14/22 10:51	8260B		MS
Acrolein*	<1.00	1.00	0.139	mg/L	200	06/14/22 10:51	8260B		MS
Methylene chloride*	<0.100	0.100	0.065	mg/L	200	06/14/22 10:51	8260B		MS
Acetone*	<2.00	2.00	1.16	mg/L	200	06/14/22 10:51	8260B		MS
trans-1,2-Dichloroethene*	<0.100	0.100	0.036	mg/L	200	06/14/22 10:51	8260B		MS
Methyl t-Butyl Ether*	<0.200	0.200	0.051	mg/L	200	06/14/22 10:51	8260B		MS
1,1-Dichloroethane*	<0.100	0.100	0.016	mg/L	200	06/14/22 10:51	8260B		MS
Acrylonitrile*	<0.400	0.400	0.303	mg/L	200	06/14/22 10:51	8260B		MS
Vinyl acetate*	<0.100	0.100	0.074	mg/L	200	06/14/22 10:51	8260B		MS
cis-1,2-Dichloroethene*	<0.100	0.100	0.022	mg/L	200	06/14/22 10:51	8260B		MS
2,2-Dichloropropane*	<0.100	0.100	0.058	mg/L	200	06/14/22 10:51	8260B		MS
Bromochloromethane*	<0.100	0.100	0.015	mg/L	200	06/14/22 10:51	8260B		MS
Chloroform*	<0.100	0.100	0.009	mg/L	200	06/14/22 10:51	8260B		MS
Carbon tetrachloride*	<0.100	0.100	0.023	mg/L	200	06/14/22 10:51	8260B		MS
1,1,1-Trichloroethane*	<0.100	0.100	0.023	mg/L	200	06/14/22 10:51	8260B		MS
1,1-Dichloropropene*	<0.100	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
2-Butanone*	<0.400	0.400	0.332	mg/L	200	06/14/22 10:51	8260B		MS
Benzene*	**1.23**	0.100	0.018	mg/L	200	06/14/22 10:51	8260B		MS
1,2-Dichloroethane*	<0.100	0.100	0.030	mg/L	200	06/14/22 10:51	8260B		MS
Trichloroethene*	<0.100	0.100	0.033	mg/L	200	06/14/22 10:51	8260B		MS
Dibromomethane*	<0.100	0.100	0.032	mg/L	200	06/14/22 10:51	8260B		MS
1,2-Dichloropropane*	<0.100	0.100	0.029	mg/L	200	06/14/22 10:51	8260B		MS
Bromodichloromethane*	<0.100	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
cis-1,3-Dichloropropene*	<0.100	0.100	0.011	mg/L	200	06/14/22 10:51	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

MW #2

2206101-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Toluene*	<0.100	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
4-Methyl-2-pentanone*	<0.200	0.200	0.029	mg/L	200	06/14/22 10:51	8260B		MS
Tetrachloroethene*	<0.100	0.100	0.021	mg/L	200	06/14/22 10:51	8260B		MS
trans-1,3-Dichloropropene*	<0.100	0.100	0.016	mg/L	200	06/14/22 10:51	8260B		MS
1,1,2-Trichloroethane*	<0.100	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
Dibromochloromethane*	<0.100	0.100	0.011	mg/L	200	06/14/22 10:51	8260B		MS
1,3-Dichloropropane*	<0.100	0.100	0.002	mg/L	200	06/14/22 10:51	8260B		MS
1,2-Dibromoethane*	<0.100	0.100	0.023	mg/L	200	06/14/22 10:51	8260B		MS
2-Hexanone*	<0.200	0.200	0.019	mg/L	200	06/14/22 10:51	8260B		MS
Chlorobenzene*	<0.100	0.100	0.004	mg/L	200	06/14/22 10:51	8260B		MS
Ethylbenzene*	**0.578**	0.100	0.018	mg/L	200	06/14/22 10:51	8260B		MS
1,1,1,2-Tetrachloroethane*	<0.100	0.100	0.012	mg/L	200	06/14/22 10:51	8260B		MS
m+p - Xylene*	**9.31**	0.200	0.093	mg/L	200	06/14/22 10:51	8260B		MS
o-Xylene*	**0.949**	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
Total Xylenes*	**10.3**	0.200	0.107	mg/L	200	06/14/22 10:51	8260B		MS
Bromoform*	<0.100	0.100	0.012	mg/L	200	06/14/22 10:51	8260B		MS
Styrene*	<0.100	0.100	0.003	mg/L	200	06/14/22 10:51	8260B		MS
Isopropylbenzene*	<0.100	0.100	0.005	mg/L	200	06/14/22 10:51	8260B		MS
Bromobenzene*	<0.100	0.100	0.007	mg/L	200	06/14/22 10:51	8260B		MS
n-Propylbenzene*	<0.100	0.100	0.002	mg/L	200	06/14/22 10:51	8260B		MS
1,1,2,2-Tetrachloroethane*	<0.100	0.100	0.013	mg/L	200	06/14/22 10:51	8260B		MS
2-Chlorotoluene*	<0.100	0.100	0.008	mg/L	200	06/14/22 10:51	8260B		MS
1.2.3-trichloropropane*	<0.100	0.100	0.010	mg/L	200	06/14/22 10:51	8260B		MS
1,3,5-Trimethylbenzene*	**0.778**	0.100	0.007	mg/L	200	06/14/22 10:51	8260B		MS
trans-1,4-Dichloro-2-butene	<2.00	2.00	1.18	mg/L	200	06/14/22 10:51	8260B		MS
4-Chlorotoluene*	<0.100	0.100	0.006	mg/L	200	06/14/22 10:51	8260B		MS
tert-Butylbenzene*	<0.100	0.100	0.012	mg/L	200	06/14/22 10:51	8260B		MS
1,2,4-Trimethylbenzene*	**1.29**	0.100	0.007	mg/L	200	06/14/22 10:51	8260B		MS
sec-Butylbenzene*	<0.100	0.100	0.004	mg/L	200	06/14/22 10:51	8260B		MS
p-Isopropyltoluene*	**0.101**	0.100	0.006	mg/L	200	06/14/22 10:51	8260B		MS
1,3-Dichlorobenzene*	<0.100	0.100	0.007	mg/L	200	06/14/22 10:51	8260B		MS
1,4 Dichlorobenzene*	<0.100	0.100	0.008	mg/L	200	06/14/22 10:51	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

MW #2

2206101-01 (Ground Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**									
VOLATILES BY GC/MS									
n-Butylbenzene*	<0.100	0.100	0.006	mg/L	200	06/14/22 10:51	8260B		MS
1,2-Dichlorobenzene*	<0.100	0.100	0.011	mg/L	200	06/14/22 10:51	8260B		MS
1,2-Dibromo-3-chloropropane*	<0.100	0.100	0.050	mg/L	200	06/14/22 10:51	8260B		MS
Hexachlorobutadiene*	<0.100	0.100	0.020	mg/L	200	06/14/22 10:51	8260B		MS
1,2,4-Trichlorobenzene*	<0.100	0.100	0.018	mg/L	200	06/14/22 10:51	8260B		MS
Naphthalene*	**0.120**	0.100	0.007	mg/L	200	06/14/22 10:51	8260B		MS
1,2,3-Trichlorobenzene*	<0.100	0.100	0.019	mg/L	200	06/14/22 10:51	8260B		MS
1,4-Dioxane	<20.0	20.0	5.74	mg/L	200	06/14/22 10:51	8260B		MS
Surrogate: Dibromofluoromethane			*102 %*	*82.4-141*		*06/14/22 10:51*	*8260B*		MS
Surrogate: Toluene-d8			*99.2 %*	*87.1-110*		*06/14/22 10:51*	*8260B*		MS
Surrogate: 4-Bromofluorobenzene			*101 %*	*76.4-114*		*06/14/22 10:51*	*8260B*		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles										
Blank (2061316-BLK1)				Prepared & Analyzed: 06/13/22						
1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,1-Trichloroethane	ND	0.0005	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethene	ND	0.0005	mg/L							
1,1-Dichloropropene	ND	0.0005	mg/L							
1,2,3-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trimethylbenzene	ND	0.0005	mg/L							
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L							
1,2-Dibromoethane	ND	0.0005	mg/L							
1,2-Dichlorobenzene	ND	0.0005	mg/L							
1,2-Dichloroethane	ND	0.0005	mg/L							
1,2-Dichloropropane	ND	0.0005	mg/L							
1,3,5-Trimethylbenzene	ND	0.0005	mg/L							
1,3-Dichlorobenzene	ND	0.0005	mg/L							
1,3-Dichloropropane	ND	0.0005	mg/L							
1,4 Dichlorobenzene	ND	0.0005	mg/L							
1,4-Dioxane	ND	0.100	mg/L							
1.2.3-trichloropropane	ND	0.0005	mg/L							
2,2-Dichloropropane	ND	0.0005	mg/L							
2-Butanone	ND	0.002	mg/L							
2-Chlorotoluene	ND	0.0005	mg/L							
2-Hexanone	ND	0.001	mg/L							
Surrogate: 4-Bromofluorobenzene	*0.0248*		mg/L	*0.0250*		*99.0*	*76.4-114*			
4-Chlorotoluene	ND	0.0005	mg/L							
4-Methyl-2-pentanone	ND	0.001	mg/L							
Acetone	ND	0.010	mg/L							
Acrolein	ND	0.005	mg/L							
Acrylonitrile	ND	0.002	mg/L							
Benzene	ND	0.0005	mg/L							
Bromobenzene	ND	0.0005	mg/L							
Bromochloromethane	ND	0.0005	mg/L							
Bromodichloromethane	ND	0.0005	mg/L							
Bromoform	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles (Continued)										
Blank (2061316-BLK1) (Continued)			Prepared & Analyzed: 06/13/22							
Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
Surrogate: Dibromofluoromethane	*0.0261*		mg/L	*0.0250*		*104*	*82.4-141*			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl t-Butyl Ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
Surrogate: Toluene-d8	*0.0252*		mg/L	*0.0250*		*101*	*87.1-110*			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

Green Analytical Laboratories

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles (Continued)										
LCS (2061316-BS1)			Prepared & Analyzed: 06/13/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		107	89.5-111			
1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		105	85.1-117			
1,1,2,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		109	68.8-127			
1,1,2-Trichloroethane	0.022	0.0005	mg/L	0.0200		109	77.4-118			
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		95.4	78.1-121			
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		110	64-124			
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		98.4	81-122			
1,2,3-Trichlorobenzene	0.027	0.0005	mg/L	0.0200		134	85.7-115			BS1
1,2,4-Trichlorobenzene	0.026	0.0005	mg/L	0.0200		130	83.5-117			BS1
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		110	78.4-126			
1,2-Dibromo-3-chloropropane	0.025	0.0005	mg/L	0.0200		123	77.2-116			BS1
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		106	88.6-113			
1,2-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		106	86.5-111			
1,2-Dichloroethane	0.022	0.0005	mg/L	0.0200		111	75.6-120			
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		92.6	76.8-121			
1,3,5-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		109	79.2-127			
1,3-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		112	87.7-112			
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		102	82.1-119			
1,4 Dichlorobenzene	0.022	0.0005	mg/L	0.0200		110	85.2-111			
1,4-Dioxane	0.540	0.100	mg/L	0.400		135	-34.9-102			BS1
1.2.3-trichloropropane	0.019	0.0005	mg/L	0.0200		94.1	53.2-135			
2,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		104	74.3-136			
2-Butanone	0.049	0.002	mg/L	0.0400		123	65.6-132			
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		104	78.3-123			
2-Hexanone	0.046	0.001	mg/L	0.0400		116	66.6-126			
Surrogate: 4-Bromofluorobenzene	*0.0251*		mg/L	*0.0250*		*100*	*76.4-114*			
4-Chlorotoluene	0.021	0.0005	mg/L	0.0200		103	76.8-129			
4-Methyl-2-pentanone	0.048	0.001	mg/L	0.0400		120	67.7-128			
Acetone	0.056	0.010	mg/L	0.0400		141	54.3-140			BS1
Acrolein	0.200	0.005	mg/L	0.200		99.9	29.4-149			
Acrylonitrile	0.045	0.002	mg/L	0.0400		112	60.8-143			
Benzene	0.021	0.0005	mg/L	0.0200		103	82.7-115			
Bromobenzene	0.020	0.0005	mg/L	0.0200		99.3	85.1-112			
Bromochloromethane	0.020	0.0005	mg/L	0.0200		98.0	77.8-118			
Bromodichloromethane	0.022	0.0005	mg/L	0.0200		112	82.7-118			
Bromoform	0.026	0.0005	mg/L	0.0200		131	76.1-133			
Bromomethane	0.021	0.0005	mg/L	0.0200		103	61.1-126			
Carbon disulfide	0.040	0.001	mg/L	0.0400		101	67.2-128			
Carbon tetrachloride	0.023	0.0005	mg/L	0.0200		113	89.7-117			

Green Analytical Laboratories

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Brenna Kampf, Project Manager

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles (Continued)										
LCS (2061316-BS1) (Continued)			Prepared & Analyzed: 06/13/22							
Chlorobenzene	0.020	0.0005	mg/L	0.0200		102	86.2-112			
Chloroethane	0.019	0.0005	mg/L	0.0200		97.2	62.4-125			
Chloroform	0.021	0.0005	mg/L	0.0200		107	86.7-115			
Chloromethane	0.018	0.0005	mg/L	0.0200		90.8	47.1-145			
cis-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		103	76-117			
cis-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		111	80.9-123			
Dibromochloromethane	0.023	0.0005	mg/L	0.0200		116	88.7-121			
Surrogate: Dibromofluoromethane	*0.0261*		mg/L	*0.0250*		*104*	*82.4-141*			
Dibromomethane	0.021	0.0005	mg/L	0.0200		107	86.4-114			
Dichlorodifluoromethane	0.016	0.0005	mg/L	0.0200		80.7	36.1-160			
Ethylbenzene	0.020	0.0005	mg/L	0.0200		99.6	84.3-117			
Hexachlorobutadiene	0.026	0.0005	mg/L	0.0200		132	94.3-116			BS1
Iodomethane	0.042	0.001	mg/L	0.0400		104	77.4-124			
Isopropylbenzene	0.022	0.0005	mg/L	0.0200		111	88.1-114			
m+p - Xylene	0.044	0.001	mg/L	0.0400		110	85.9-122			
Methyl t-Butyl Ether	0.041	0.001	mg/L	0.0400		102	78.9-118			
Methylene chloride	0.016	0.0005	mg/L	0.0200		82.2	64.2-134			
Naphthalene	0.027	0.0005	mg/L	0.0200		135	80.6-121			BS1
n-Butylbenzene	0.025	0.0005	mg/L	0.0200		124	82.2-123			BS1
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		106	78.9-125			
o-Xylene	0.022	0.0005	mg/L	0.0200		108	85.6-112			
p-Isopropyltoluene	0.023	0.0005	mg/L	0.0200		116	82.5-123			
sec-Butylbenzene	0.022	0.0005	mg/L	0.0200		110	82.1-128			
Styrene	0.021	0.0005	mg/L	0.0200		103	78.3-117			
tert-Butylbenzene	0.023	0.0005	mg/L	0.0200		117	79.5-129			
Tetrachloroethene	0.021	0.0005	mg/L	0.0200		107	86.6-110			
Toluene	0.021	0.0005	mg/L	0.0200		104	82.8-112			
Surrogate: Toluene-d8	*0.0250*		mg/L	*0.0250*		*100*	*87.1-110*			
Total Xylenes	0.066	0.001	mg/L	0.0600		109	86.5-118			
trans-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		110	69.2-119			
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		107	77.4-131			
trans-1,4-Dichloro-2-butene	0.049	0.010	mg/L	0.0400		121	41.4-204			
Trichloroethene	0.020	0.0005	mg/L	0.0200		102	82.2-114			
Trichlorofluoromethane	0.021	0.0005	mg/L	0.0200		106	78.2-126			
Vinyl acetate	0.019	0.0005	mg/L	0.0200		96.2	56.2-148			
Vinyl chloride	0.017	0.0005	mg/L	0.0200		86.0	62-135			
LCS Dup (2061316-BSD1)			Prepared & Analyzed: 06/13/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		106	89.5-111	1.12	6.88	

Green Analytical Laboratories

Brenna Kampf

Brenna Kampf, Project Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles (Continued)										
LCS Dup (2061316-BSD1) (Continued)			Prepared & Analyzed: 06/13/22							
1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		105	85.1-117	0.572	7.43	
1,1,2,2-Tetrachloroethane	0.019	0.0005	mg/L	0.0200		96.0	68.8-127	12.4	8.68	QR-04
1,1,2-Trichloroethane	0.022	0.0005	mg/L	0.0200		109	77.4-118	0.0459	6.82	
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		96.6	78.1-121	1.25	4.3	
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		108	64-124	1.79	16.5	
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		102	81-122	3.50	5.47	
1,2,3-Trichlorobenzene	0.021	0.0005	mg/L	0.0200		106	85.7-115	23.6	43	
1,2,4-Trichlorobenzene	0.022	0.0005	mg/L	0.0200		108	83.5-117	17.8	22.3	
1,2,4-Trimethylbenzene	0.020	0.0005	mg/L	0.0200		102	78.4-126	7.62	8.94	
1,2-Dibromo-3-chloropropane	0.021	0.0005	mg/L	0.0200		104	77.2-116	16.5	15.1	QR-04
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		102	88.6-113	3.78	5.83	
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		97.7	86.5-111	8.53	8.72	
1,2-Dichloroethane	0.022	0.0005	mg/L	0.0200		108	75.6-120	2.42	8.94	
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		93.0	76.8-121	0.377	5.51	
1,3,5-Trimethylbenzene	0.020	0.0005	mg/L	0.0200		102	79.2-127	7.20	16.5	
1,3-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		108	87.7-112	3.77	9	
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		102	82.1-119	0.539	6.06	
1,4 Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	85.2-111	4.91	7.71	
1,4-Dioxane	0.429	0.100	mg/L	0.400		107	-34.9-102	23.0	35.2	BS1
1.2.3-trichloropropane	0.024	0.0005	mg/L	0.0200		120	53.2-135	23.8	49.2	
2,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		103	74.3-136	0.917	9.62	
2-Butanone	0.041	0.002	mg/L	0.0400		102	65.6-132	18.3	14.2	QR-04
2-Chlorotoluene	0.020	0.0005	mg/L	0.0200		98.7	78.3-123	5.57	8.62	
2-Hexanone	0.039	0.001	mg/L	0.0400		98.2	66.6-126	16.4	7.28	QR-04
Surrogate: 4-Bromofluorobenzene	*0.0252*		mg/L	*0.0250*		*101*	*76.4-114*			
4-Chlorotoluene	0.020	0.0005	mg/L	0.0200		99.4	76.8-129	3.61	15.5	
4-Methyl-2-pentanone	0.042	0.001	mg/L	0.0400		105	67.7-128	13.2	7.57	QR-04
Acetone	0.043	0.010	mg/L	0.0400		109	54.3-140	25.6	30.5	
Acrolein	0.168	0.005	mg/L	0.200		84.2	29.4-149	17.1	22.4	
Acrylonitrile	0.039	0.002	mg/L	0.0400		97.5	60.8-143	14.2	7.62	QR-04
Benzene	0.020	0.0005	mg/L	0.0200		101	82.7-115	2.15	4.16	
Bromobenzene	0.019	0.0005	mg/L	0.0200		96.2	85.1-112	3.12	8.41	
Bromochloromethane	0.019	0.0005	mg/L	0.0200		94.2	77.8-118	3.85	5.16	
Bromodichloromethane	0.021	0.0005	mg/L	0.0200		105	82.7-118	6.12	5.36	QR-04
Bromoform	0.023	0.0005	mg/L	0.0200		117	76.1-133	11.3	14.1	
Bromomethane	0.021	0.0005	mg/L	0.0200		105	61.1-126	1.69	21.5	
Carbon disulfide	0.039	0.001	mg/L	0.0400		97.0	67.2-128	3.64	20.3	
Carbon tetrachloride	0.022	0.0005	mg/L	0.0200		112	89.7-117	1.02	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		99.0	86.2-112	2.79	5.18	

Green Analytical Laboratories

Brenna Kampf, Project Manager

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061316 - Volatiles (Continued)										
LCS Dup (2061316-BSD1) (Continued)			Prepared & Analyzed: 06/13/22							
Chloroethane	0.019	0.0005	mg/L	0.0200		97.0	62.4-125	0.154	24.1	
Chloroform	0.021	0.0005	mg/L	0.0200		107	86.7-115	0.0466	5.15	
Chloromethane	0.019	0.0005	mg/L	0.0200		94.0	47.1-145	3.35	27	
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		101	76-117	1.47	5.73	
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		107	80.9-123	3.71	6.09	
Dibromochloromethane	0.023	0.0005	mg/L	0.0200		114	88.7-121	2.13	7.24	
Surrogate: Dibromofluoromethane	*0.0261*		mg/L	*0.0250*		*105*	*82.4-141*			
Dibromomethane	0.021	0.0005	mg/L	0.0200		103	86.4-114	3.57	5.75	
Dichlorodifluoromethane	0.016	0.0005	mg/L	0.0200		80.8	36.1-160	0.124	22.6	
Ethylbenzene	0.020	0.0005	mg/L	0.0200		99.6	84.3-117	0.0502	4.83	
Hexachlorobutadiene	0.024	0.0005	mg/L	0.0200		122	94.3-116	7.17	18.4	BS1
Iodomethane	0.041	0.001	mg/L	0.0400		103	77.4-124	1.28	24.3	
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		106	88.1-114	4.24	6.25	
m+p - Xylene	0.044	0.001	mg/L	0.0400		110	85.9-122	0.0909	5.77	
Methyl t-Butyl Ether	0.039	0.001	mg/L	0.0400		98.0	78.9-118	4.05	12.8	
Methylene chloride	0.015	0.0005	mg/L	0.0200		77.0	64.2-134	6.47	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		106	80.6-121	23.5	33.5	
n-Butylbenzene	0.021	0.0005	mg/L	0.0200		107	82.2-123	14.7	10.1	QR-04
n-Propylbenzene	0.020	0.0005	mg/L	0.0200		97.8	78.9-125	8.05	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		104	85.6-112	3.35	6.29	
p-Isopropyltoluene	0.020	0.0005	mg/L	0.0200		99.4	82.5-123	15.5	9.26	QR-04
sec-Butylbenzene	0.020	0.0005	mg/L	0.0200		98.1	82.1-128	11.3	9.85	QR-04
Styrene	0.021	0.0005	mg/L	0.0200		105	78.3-117	1.83	7.55	
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		103	79.5-129	12.5	18.6	
Tetrachloroethene	0.022	0.0005	mg/L	0.0200		110	86.6-110	3.36	6.38	
Toluene	0.021	0.0005	mg/L	0.0200		104	82.8-112	0.00	5.67	
Surrogate: Toluene-d8	*0.0254*		mg/L	*0.0250*		*102*	*87.1-110*			
Total Xylenes	0.065	0.001	mg/L	0.0600		108	86.5-118	1.03	5.83	
trans-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		108	69.2-119	1.93	19.1	
trans-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		109	77.4-131	1.76	6.26	
trans-1,4-Dichloro-2-butene	0.032	0.010	mg/L	0.0400		81.1	41.4-204	39.7	92.8	
Trichloroethene	0.021	0.0005	mg/L	0.0200		104	82.2-114	1.12	4.92	
Trichlorofluoromethane	0.020	0.0005	mg/L	0.0200		98.8	78.2-126	7.18	19.8	
Vinyl acetate	0.018	0.0005	mg/L	0.0200		88.0	56.2-148	8.91	7.84	QR-04
Vinyl chloride	0.017	0.0005	mg/L	0.0200		86.8	62-135	0.984	23	

Green Analytical Laboratories

Brenna Kampf, Project Manager

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www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	06/16/22 09:40

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Brenna Kampf, Project Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Green Analytical Laboratories
(970) 247-4220
Fax: (970) 247-4227
service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC	Bill to (if different):
Project Manager: Kyle Siesser	P.O. #:
Address: PO Box 1653	Company:
City: Durango **State:** CO **Zip:** 81302	Attn:
Phone #: 970-764-7356 **Email:** ksiesser@cottonwoodconsulting.com	Address:
Additional Report To:	City:
Project Name: Sandoval GC A #001A	State: Zip:
Project Number:	Phone #:
Sampler Name (Print): Emma Millar/Kyle Siesser	Fax or Email:

FOR LAB USE ONLY Lab I.D.	Sample Name or Location	Collected Date	Collected Time	Matrix (check one) GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	# of containers No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:	ANALYSIS REQUEST EPA Method 8260B
2206-101 -01	MW #2	6/8/22	1020	X								4				X

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	**Date:** 6/8/22 **Time:** 1700	Received By:	ADDITIONAL REMARKS: Report to State? (Circle) Yes (No)
Relinquished By:	Date: Time:	Received By:	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) (Sampler) UPS - FedEx - Kangaroo - Other:	Temperature at reciept: 10.2°C	CHECKED BY:	

† GAL cannot always accept verbal changes. Please fax or email written change requests.
* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

Sandoval GC A #001A - Compr Pit
Unit C Sec 35 T30N R9W

LABORATORY (S) USED : GAL

Date : 9/14/22

DEVELOPER / SAMPLER : EM / LO

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	–	Dry	39.00	-	-	-	-	-
2	101.78	–	36.47	37.25	1040	7.69	2150	20.4	0.5
3	99.13	–	Dry	38.73	-	-	-	-	-
4	98.96	–	–	-	-	-	-	-	-

NOTES : Volume of water purged from well prior to sampling: V = pi x r^2 x h x 7.48 gal./ft^3) x 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".
Collect sample from MW #2. Shut down SVE prior to sampling, then re-start.
MW #2 collected at 1040 hydrocarbon odor, grey, sheen, no bubbles

Top of casing MW # 1 ~ 1.00 ft., MW # 2 ~ 2.75 ft., MW # 3 ~ @ grade, MW # 4 ~ 0.25 ft below grade

on-site	0950	temp	~70
off-site		temp	
sky cond.	mostly cloudy		
wind speed	none	direct.	

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 26, 2022

Kyle Siesser

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

RE: Sandoval GC A 001A OrderNo.: 2209732

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/15/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2209732**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 001A
Collection Date: 9/14/2022 10:00:00 AM
Lab ID: 2209732-001 **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 2:21:00 PM	R91060
Toluene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Ethylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Naphthalene	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
1-Methylnaphthalene	ND	0.40		µg/L	1	9/15/2022 2:21:00 PM	R91060
2-Methylnaphthalene	ND	0.40		µg/L	1	9/15/2022 2:21:00 PM	R91060
Acetone	ND	1.0		µg/L	1	9/15/2022 2:21:00 PM	R91060
Bromobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Bromodichloromethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Bromoform	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Bromomethane	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
2-Butanone	ND	1.0		µg/L	1	9/15/2022 2:21:00 PM	R91060
Carbon disulfide	ND	1.0		µg/L	1	9/15/2022 2:21:00 PM	R91060
Carbon tetrachloride	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Chlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Chloroethane	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
Chloroform	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Chloromethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
2-Chlorotoluene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
4-Chlorotoluene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
cis-1,2-DCE	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
Dibromochloromethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Dibromomethane	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2-Dichlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,3-Dichlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,4-Dichlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Dichlorodifluoromethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1-Dichloroethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1-Dichloroethene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2-Dichloropropane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,3-Dichloropropane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
2,2-Dichloropropane	ND	0.10		µg/L	1	9/15/2022 2:21:00 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

Analytical Report
Lab Order **2209732**
Date Reported: **9/26/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 001A
Collection Date: 9/14/2022 10:00:00 AM
Lab ID: 2209732-001 **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 2:21:00 PM	R91060
Hexachlorobutadiene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
2-Hexanone	ND	1.0		µg/L	1	9/15/2022 2:21:00 PM	R91060
Isopropylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
4-Isopropyltoluene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
4-Methyl-2-pentanone	ND	1.0		µg/L	1	9/15/2022 2:21:00 PM	R91060
Methylene chloride	ND	0.30		µg/L	1	9/15/2022 2:21:00 PM	R91060
n-Butylbenzene	ND	0.30		µg/L	1	9/15/2022 2:21:00 PM	R91060
n-Propylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
sec-Butylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Styrene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
tert-Butylbenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
trans-1,2-DCE	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1,1-Trichloroethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,1,2-Trichloroethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Trichloroethene (TCE)	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Trichlorofluoromethane	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
1,2,3-Trichloropropane	ND	0.20		µg/L	1	9/15/2022 2:21:00 PM	R91060
Vinyl chloride	ND	0.10		µg/L	1	9/15/2022 2:21:00 PM	R91060
Xylenes, Total	ND	0.15		µg/L	1	9/15/2022 2:21:00 PM	R91060
Surr: Dibromofluoromethane	100	70-130		%Rec	1	9/15/2022 2:21:00 PM	R91060
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%Rec	1	9/15/2022 2:21:00 PM	R91060
Surr: Toluene-d8	90.9	70-130		%Rec	1	9/15/2022 2:21:00 PM	R91060
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	9/15/2022 2:21:00 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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ANALYTICAL SUMMARY REPORT

September 23, 2022

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

Work Order: B22091519

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
B22091519-001	2209732-001A/SVE	09/14/22 10:00	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:

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B22091519-001
Client Sample ID: 2209732-001A/SVE

Report Date: 09/23/22
Collection Date: 09/14/22 10:00
DateReceived: 09/16/22
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.86	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Nitrogen	78.09	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Carbon Dioxide	0.05	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	09/19/22 13:11 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/19/22 13:11 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	09/19/22 13:11 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	09/19/22 13:11 / jrj
Pseudo-critical Pressure, psia	545			1		GPA 2261-95	09/19/22 13:11 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-95	09/19/22 13:11 / jrj
Specific Gravity @ 60/60F	0.998			0.001		D3588-81	09/19/22 13:11 / jrj
Air, %	99.88			0.01		GPA 2261-95	09/19/22 13:11 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	09/19/22 13:11 / jrj

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

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

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B22091519 **Report Date:** 09/23/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R388169
Lab ID: LCS091922	11	Laboratory Control Sample				Run: GCNGA-B_220919A				09/19/22 15:12
Oxygen		0.62	Mol %	0.01	124	70	130			
Nitrogen		6.02	Mol %	0.01	100	70	130			
Carbon Dioxide		1.00	Mol %	0.01	101	70	130			
Methane		74.4	Mol %	0.01	100	70	130			
Ethane		6.06	Mol %	0.01	101	70	130			
Propane		5.10	Mol %	0.01	103	70	130			
Isobutane		2.00	Mol %	0.01	100	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.02	Mol %	0.01	102	70	130			
n-Pentane		1.02	Mol %	0.01	102	70	130			
Hexanes plus		0.78	Mol %	0.01	98	70	130			
Lab ID: B22091519-001ADUP	12	Sample Duplicate				Run: GCNGA-B_220920A				09/20/22 11:54
Oxygen		21.8	Mol %	0.01				0.1	20	
Nitrogen		78.1	Mol %	0.01				0	20	
Carbon Dioxide		0.06	Mol %	0.01				18	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: B22091515-001ADUP	12	Sample Duplicate				Run: GCNGA-B_220919A				09/19/22 12:40
Oxygen		19.5	Mol %	0.01				0.1	20	
Nitrogen		78.4	Mol %	0.01				0.0	20	
Carbon Dioxide		2.08	Mol %	0.01				1.0	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		<0.01	Mol %	0.01					20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B22091519

Login completed by: Yvonna E. Smith
Date Received: 9/16/2022

Reviewed by:
Received by: yes

Reviewed Date:
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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

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

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

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2209732-001A	SVE	TEDLAR	Air	9/14/2022 10:00:00 AM	1	Natural Gases O2, CO2

B22091519

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: CMC	Date: 9/15/2022	Time: 8:16 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: Yvonna Smith	Date: 9/16/22	Time: 0930

TAT: Standard ☒ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples _____ °C Attempt to Cool ? _____

Comments: _____

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209732**
26-Sep-22

Client: Cottonwood Consulting LLC
Project: Sandoval GC A 001A

Sample ID: **2209732-001adup** SampType: **DUP** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **SVE** Batch ID: **R91060** RunNo: **91060**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258017** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.10						0	20	
Toluene	ND	0.10						0	20	
Ethylbenzene	ND	0.10						0	20	
Methyl tert-butyl ether (MTBE)	ND	0.10						0	20	
1,2,4-Trimethylbenzene	ND	0.10						0	20	
1,3,5-Trimethylbenzene	ND	0.10						0	20	
1,2-Dichloroethane (EDC)	ND	0.10						0	20	
1,2-Dibromoethane (EDB)	ND	0.10						0	20	
Naphthalene	ND	0.20						0	20	
1-Methylnaphthalene	ND	0.40						0	20	
2-Methylnaphthalene	ND	0.40						0	20	
Acetone	ND	1.0						0	20	
Bromobenzene	ND	0.10						0	20	
Bromodichloromethane	ND	0.10						0	20	
Bromoform	ND	0.10						0	20	
Bromomethane	ND	0.20						0	20	
2-Butanone	ND	1.0						0	20	
Carbon disulfide	ND	1.0						0	20	
Carbon tetrachloride	ND	0.10						0	20	
Chlorobenzene	ND	0.10						0	20	
Chloroethane	ND	0.20						0	20	
Chloroform	ND	0.10						0	20	
Chloromethane	ND	0.10						0	20	
2-Chlorotoluene	ND	0.10						0	20	
4-Chlorotoluene	ND	0.10						0	20	
cis-1,2-DCE	ND	0.10						0	20	
cis-1,3-Dichloropropene	ND	0.10						0	20	
1,2-Dibromo-3-chloropropane	ND	0.20						0	20	
Dibromochloromethane	ND	0.10						0	20	
Dibromomethane	ND	0.20						0	20	
1,2-Dichlorobenzene	ND	0.10						0	20	
1,3-Dichlorobenzene	ND	0.10						0	20	
1,4-Dichlorobenzene	ND	0.10						0	20	
Dichlorodifluoromethane	ND	0.10						0	20	
1,1-Dichloroethane	ND	0.10						0	20	
1,1-Dichloroethene	ND	0.10						0	20	
1,2-Dichloropropane	ND	0.10						0	20	
1,3-Dichloropropane	ND	0.10						0	20	
2,2-Dichloropropane	ND	0.10						0	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209732**
26-Sep-22

Client: Cottonwood Consulting LLC
Project: Sandoval GC A 001A

Sample ID: **2209732-001adup** SampType: **DUP** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **SVE** Batch ID: **R91060** RunNo: **91060**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258017** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10						0	20	
Hexachlorobutadiene	ND	0.10						0	20	
2-Hexanone	ND	1.0						0	20	
Isopropylbenzene	ND	0.10						0	20	
4-Isopropyltoluene	ND	0.10						0	20	
4-Methyl-2-pentanone	ND	1.0						0	20	
Methylene chloride	ND	0.30						0	20	
n-Butylbenzene	ND	0.30						0	20	
n-Propylbenzene	ND	0.10						0	20	
sec-Butylbenzene	ND	0.10						0	20	
Styrene	ND	0.10						0	20	
tert-Butylbenzene	ND	0.10						0	20	
1,1,1,2-Tetrachloroethane	ND	0.10						0	20	
1,1,2,2-Tetrachloroethane	ND	0.10						0	20	
Tetrachloroethene (PCE)	ND	0.10						0	20	
trans-1,2-DCE	ND	0.10						0	20	
trans-1,3-Dichloropropene	ND	0.10						0	20	
1,2,3-Trichlorobenzene	ND	0.10						0	20	
1,2,4-Trichlorobenzene	ND	0.10						0	20	
1,1,1-Trichloroethane	ND	0.10						0	20	
1,1,2-Trichloroethane	ND	0.10						0	20	
Trichloroethene (TCE)	ND	0.10						0	20	
Trichlorofluoromethane	ND	0.10						0	20	
1,2,3-Trichloropropane	ND	0.20						0	20	
Vinyl chloride	ND	0.10						0	20	
Xylenes, Total	ND	0.15						0	20	
Surr: Dibromofluoromethane	0.98		1.000		98.4	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.95		1.000		94.9	70	130	0	0	
Surr: Toluene-d8	0.90		1.000		90.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Cottonwood Consulting LLC** Work Order Number: **2209732** RcptNo: **1**

Received By: **Juan Rojas** **9/15/2022 7:35:00 AM**

Completed By: **Cheyenne Cason** **9/15/2022 8:15:39 AM**

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SGC 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			

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: Sandoval GC A #001A

Project #:

Project Manager: Kyle Siesser

Sampler: Emma Millar
On Ice: ☐ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): N/A

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209732
9/14/22	1000	AIR	SVE	tedlar bag - 1	NA	001

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)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	CO2	O2				
							■			■	■				

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/14/22	1231				9/14/22	1231
9/14/22	1816			courier	9/15/22	7:35

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.

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

27 September 2022

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: VOC 8260

Enclosed are the results of analyses for samples received by the laboratory on 09/14/22 16:15. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-22-15

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-22-15

jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2209186-01	Water	09/14/22 10:40	09/14/22 16:15	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

GREEN Analytical Laboratories
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www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

MW #2

2209186-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dichlorodifluoromethane*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
Chloromethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Vinyl chloride*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Bromomethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Chloroethane*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
Trichlorofluoromethane*	<0.010	0.010	0.0006	mg/L	20	09/22/22 10:27	8260B		CK
1,1-Dichloroethene*	<0.010	0.010	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Carbon disulfide*	<0.020	0.020	0.006	mg/L	20	09/22/22 10:27	8260B		CK
Iodomethane	<0.020	0.020	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Acrolein*	<0.100	0.100	0.014	mg/L	20	09/22/22 10:27	8260B		CK
Methylene chloride*	<0.030	0.030	0.006	mg/L	20	09/22/22 10:27	8260B		CK
Acetone*	<0.200	0.200	0.116	mg/L	20	09/22/22 10:27	8260B		CK
trans-1,2-Dichloroethene*	<0.010	0.010	0.004	mg/L	20	09/22/22 10:27	8260B		CK
Methyl t-Butyl Ether*	<0.020	0.020	0.005	mg/L	20	09/22/22 10:27	8260B		CK
1,1-Dichloroethane*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
Acrylonitrile*	<0.040	0.040	0.030	mg/L	20	09/22/22 10:27	8260B		CK
Vinyl acetate*	<0.010	0.010	0.007	mg/L	20	09/22/22 10:27	8260B		CK
cis-1,2-Dichloroethene*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
2,2-Dichloropropane*	<0.010	0.010	0.006	mg/L	20	09/22/22 10:27	8260B		CK
Bromochloromethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Chloroform*	<0.010	0.010	0.0009	mg/L	20	09/22/22 10:27	8260B		CK
Carbon tetrachloride*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,1,1-Trichloroethane*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,1-Dichloropropene*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
2-Butanone*	<0.040	0.040	0.033	mg/L	20	09/22/22 10:27	8260B		CK
Benzene*	**0.876**	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,2-Dichloroethane*	<0.010	0.010	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Trichloroethene*	<0.010	0.010	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Dibromomethane*	<0.010	0.010	0.003	mg/L	20	09/22/22 10:27	8260B		CK
1,2-Dichloropropane*	<0.010	0.010	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Bromodichloromethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
cis-1,3-Dichloropropene*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

GREEN Analytical Laboratories
jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

MW #2

2209186-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Toluene*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
4-Methyl-2-pentanone*	<0.020	0.020	0.003	mg/L	20	09/22/22 10:27	8260B		CK
Tetrachloroethene*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
trans-1,3-Dichloropropene*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,1,2-Trichloroethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Dibromochloromethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
1,3-Dichloropropane*	<0.010	0.010	0.0002	mg/L	20	09/22/22 10:27	8260B		CK
1,2-Dibromoethane*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
2-Hexanone*	<0.020	0.020	0.002	mg/L	20	09/22/22 10:27	8260B		CK
Chlorobenzene*	<0.010	0.010	0.0004	mg/L	20	09/22/22 10:27	8260B		CK
Ethylbenzene*	**0.132**	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,1,1,2-Tetrachloroethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
m+p - Xylene*	**0.798**	0.020	0.009	mg/L	20	09/22/22 10:27	8260B		CK
o-Xylene*	**0.211**	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Total Xylenes*	**1.01**	0.020	0.011	mg/L	20	09/22/22 10:27	8260B		CK
Bromoform*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
Styrene*	<0.010	0.010	0.0003	mg/L	20	09/22/22 10:27	8260B		CK
Isopropylbenzene*	**0.017**	0.010	0.0005	mg/L	20	09/22/22 10:27	8260B		CK
Bromobenzene*	<0.010	0.010	0.0007	mg/L	20	09/22/22 10:27	8260B		CK
n-Propylbenzene*	**0.018**	0.010	0.0002	mg/L	20	09/22/22 10:27	8260B		CK
1,1,2,2-Tetrachloroethane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
2-Chlorotoluene*	<0.010	0.010	0.0008	mg/L	20	09/22/22 10:27	8260B		CK
1.2.3-trichloropropane*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
1,3,5-Trimethylbenzene*	**0.173**	0.010	0.0007	mg/L	20	09/22/22 10:27	8260B		CK
trans-1,4-Dichloro-2-butene	<0.200	0.200	0.118	mg/L	20	09/22/22 10:27	8260B		CK
4-Chlorotoluene*	<0.010	0.010	0.0006	mg/L	20	09/22/22 10:27	8260B		CK
tert-Butylbenzene*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
1,2,4-Trimethylbenzene*	**0.342**	0.010	0.0007	mg/L	20	09/22/22 10:27	8260B		CK
sec-Butylbenzene*	<0.010	0.010	0.0004	mg/L	20	09/22/22 10:27	8260B		CK
p-Isopropyltoluene*	**0.023**	0.010	0.0006	mg/L	20	09/22/22 10:27	8260B		CK
1,3-Dichlorobenzene*	<0.010	0.010	0.0007	mg/L	20	09/22/22 10:27	8260B		CK
1,4 Dichlorobenzene*	<0.010	0.010	0.0008	mg/L	20	09/22/22 10:27	8260B		CK

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

GREEN Analytical Laboratories

jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

MW #2

2209186-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
n-Butylbenzene*	<0.010	0.010	0.0006	mg/L	20	09/22/22 10:27	8260B		CK
1,2-Dichlorobenzene*	<0.010	0.010	0.001	mg/L	20	09/22/22 10:27	8260B		CK
1,2-Dibromo-3-chloropropane*	<0.010	0.010	0.005	mg/L	20	09/22/22 10:27	8260B		CK
Hexachlorobutadiene*	<0.020	0.020	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,2,4-Trichlorobenzene*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
Naphthalene*	**0.024**	0.010	0.0007	mg/L	20	09/22/22 10:27	8260B		CK
1,2,3-Trichlorobenzene*	<0.010	0.010	0.002	mg/L	20	09/22/22 10:27	8260B		CK
1,4-Dioxane	<2.00	2.00	0.574	mg/L	20	09/22/22 10:27	8260B		CK
Surrogate: Dibromofluoromethane			*97.6 %*	*82.4-141*		*09/22/22 10:27*	*8260B*		CK
Surrogate: Toluene-d8			*100 %*	*87.1-110*		*09/22/22 10:27*	*8260B*		CK
Surrogate: 4-Bromofluorobenzene			*108 %*	*76.4-114*		*09/22/22 10:27*	*8260B*		CK

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles										
Blank (2091620-BLK1)			Prepared & Analyzed: 09/21/22							
1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,1-Trichloroethane	ND	0.0005	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethene	ND	0.0005	mg/L							
1,1-Dichloropropene	ND	0.0005	mg/L							
1,2,3-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trimethylbenzene	ND	0.0005	mg/L							
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L							
1,2-Dibromoethane	ND	0.0005	mg/L							
1,2-Dichlorobenzene	ND	0.0005	mg/L							
1,2-Dichloroethane	ND	0.0005	mg/L							
1,2-Dichloropropane	ND	0.0005	mg/L							
1,3,5-Trimethylbenzene	ND	0.0005	mg/L							
1,3-Dichlorobenzene	ND	0.0005	mg/L							
1,3-Dichloropropane	ND	0.0005	mg/L							
1,4 Dichlorobenzene	ND	0.0005	mg/L							
1,4-Dioxane	ND	0.100	mg/L							
1.2.3-trichloropropane	ND	0.0005	mg/L							
2,2-Dichloropropane	ND	0.0005	mg/L							
2-Butanone	ND	0.002	mg/L							
2-Chlorotoluene	ND	0.0005	mg/L							
2-Hexanone	ND	0.001	mg/L							
Surrogate: 4-Bromofluorobenzene	*0.0264*		mg/L	*0.0250*		*106*	*76.4-114*			
4-Chlorotoluene	ND	0.0005	mg/L							
4-Methyl-2-pentanone	ND	0.001	mg/L							
Acetone	ND	0.010	mg/L							
Acrolein	ND	0.005	mg/L							
Acrylonitrile	ND	0.002	mg/L							
Benzene	ND	0.0005	mg/L							
Bromobenzene	ND	0.0005	mg/L							
Bromochloromethane	ND	0.0005	mg/L							
Bromodichloromethane	ND	0.0005	mg/L							
Bromoform	ND	0.0005	mg/L							

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles (Continued)										
Blank (2091620-BLK1) (Continued)			Prepared & Analyzed: 09/21/22							
Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
Surrogate: Dibromofluoromethane	*0.0243*		mg/L	*0.0250*		*97.1*	*82.4-141*			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	0.0006	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl t-Butyl Ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
Surrogate: Toluene-d8	*0.0252*		mg/L	*0.0250*		*101*	*87.1-110*			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles (Continued)										
LCS (2091620-BS1)			Prepared & Analyzed: 09/21/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		105	77.2-132			
1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		103	84.9-121			
1,1,2,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		102	83-118			
1,1,2-Trichloroethane	0.021	0.0005	mg/L	0.0200		103	85.8-121			
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		95.2	82.3-134			
1,1-Dichloroethene	0.018	0.0005	mg/L	0.0200		89.8	69.4-135			
1,1-Dichloropropene	0.021	0.0005	mg/L	0.0200		105	79-126			
1,2,3-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		117	66-144			
1,2,4-Trichlorobenzene	0.026	0.0005	mg/L	0.0200		130	66-139			
1,2,4-Trimethylbenzene	0.024	0.0005	mg/L	0.0200		118	85.2-120			
1,2-Dibromo-3-chloropropane	0.021	0.0005	mg/L	0.0200		104	85.9-113			
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		99.8	84.9-118			
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		102	85.1-112			
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		91.4	80.8-125			
1,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		99.7	83.2-124			
1,3,5-Trimethylbenzene	0.023	0.0005	mg/L	0.0200		114	84.3-120			
1,3-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		105	84.9-110			
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		101	88.8-117			
1,4 Dichlorobenzene	0.020	0.0005	mg/L	0.0200		101	80.9-112			
1,4-Dioxane	0.389	0.100	mg/L	2.00		19.5	-99.5-195			
1.2.3-trichloropropane	0.030	0.0005	mg/L	0.0200		150	6.02-213			
2,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		106	59.7-146			
2-Butanone	0.041	0.002	mg/L	0.0400		102	69.2-152			
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		107	84.7-117			
2-Hexanone	0.047	0.001	mg/L	0.0400		116	66-142			
Surrogate: 4-Bromofluorobenzene	*0.0270*		mg/L	*0.0250*		*108*	*76.4-114*			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		112	81.8-122			
4-Methyl-2-pentanone	0.042	0.001	mg/L	0.0400		105	75.9-139			
Acetone	0.039	0.010	mg/L	0.0400		97.2	47.7-194			
Acrolein	0.170	0.005	mg/L	0.200		85.2	46.2-182			
Acrylonitrile	0.039	0.002	mg/L	0.0400		97.4	69.5-152			
Benzene	0.019	0.0005	mg/L	0.0200		96.0	85.9-114			
Bromobenzene	0.021	0.0005	mg/L	0.0200		105	85.7-113			
Bromochloromethane	0.018	0.0005	mg/L	0.0200		91.4	74.2-140			
Bromodichloromethane	0.019	0.0005	mg/L	0.0200		97.0	82-126			
Bromoform	0.020	0.0005	mg/L	0.0200		99.8	80.3-140			
Bromomethane	0.018	0.0005	mg/L	0.0200		89.2	69.3-136			
Carbon disulfide	0.038	0.001	mg/L	0.0400		96.1	74.2-141			
Carbon tetrachloride	0.022	0.0005	mg/L	0.0200		111	85.8-125			

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles (Continued)										
LCS (2091620-BS1) (Continued)			Prepared & Analyzed: 09/21/22							
Chlorobenzene	0.020	0.0005	mg/L	0.0200		99.8	88.8-112			
Chloroethane	0.016	0.0005	mg/L	0.0200		81.5	73.8-135			
Chloroform	0.019	0.0005	mg/L	0.0200		95.5	88.1-124			
Chloromethane	0.018	0.0005	mg/L	0.0200		88.9	59.9-154			
cis-1,2-Dichloroethene	0.019	0.0005	mg/L	0.0200		96.8	85.8-117			
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		105	84.6-125			
Dibromochloromethane	0.020	0.0005	mg/L	0.0200		102	88.2-121			
Surrogate: Dibromofluoromethane	*0.0244*		mg/L	*0.0250*		*97.7*	*82.4-141*			
Dibromomethane	0.018	0.0005	mg/L	0.0200		91.1	73.5-132			
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		91.9	63.3-132			
Ethylbenzene	0.021	0.0005	mg/L	0.0200		105	81.8-127			
Hexachlorobutadiene	0.024	0.0005	mg/L	0.0200		122	52.9-152			
Iodomethane	0.039	0.001	mg/L	0.0400		98.5	72.5-133			
Isopropylbenzene	0.023	0.0005	mg/L	0.0200		114	75.7-136			
m+p - Xylene	0.042	0.001	mg/L	0.0400		106	72.4-134			
Methyl t-Butyl Ether	0.041	0.001	mg/L	0.0400		102	75.3-137			
Methylene chloride	0.020	0.0005	mg/L	0.0200		97.8	74.8-131			
Naphthalene	0.024	0.0005	mg/L	0.0200		119	59.3-140			
n-Butylbenzene	0.024	0.0005	mg/L	0.0200		119	70.1-136			
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		112	83-121			
o-Xylene	0.021	0.0005	mg/L	0.0200		107	76.2-135			
p-Isopropyltoluene	0.025	0.0005	mg/L	0.0200		125	81.8-124			BS1
sec-Butylbenzene	0.024	0.0005	mg/L	0.0200		121	78.4-128			
Styrene	0.021	0.0005	mg/L	0.0200		106	75.7-128			
tert-Butylbenzene	0.023	0.0005	mg/L	0.0200		116	90.8-119			
Tetrachloroethene	0.022	0.0005	mg/L	0.0200		110	66.8-126			
Toluene	0.020	0.0005	mg/L	0.0200		99.6	78.8-121			
Surrogate: Toluene-d8	*0.0257*		mg/L	*0.0250*		*103*	*87.1-110*			
Total Xylenes	0.064	0.001	mg/L	0.0600		106	74.3-134			
trans-1,2-Dichloroethene	0.018	0.0005	mg/L	0.0200		91.8	80.4-125			
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		103	84-128			
trans-1,4-Dichloro-2-butene	0.033	0.010	mg/L	0.0400		83.2	18.7-238			
Trichloroethene	0.019	0.0005	mg/L	0.0200		97.4	73.1-117			
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		90.4	71.9-138			
Vinyl acetate	0.017	0.0005	mg/L	0.0200		84.4	39.5-167			
Vinyl chloride	0.018	0.0005	mg/L	0.0200		90.6	73.4-137			
LCS Dup (2091620-BSD1)			Prepared & Analyzed: 09/21/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		103	77.2-132	1.39	6.88	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles (Continued)										
LCS Dup (2091620-BSD1) (Continued)			Prepared & Analyzed: 09/21/22							
1,1,1-Trichloroethane	0.020	0.0005	mg/L	0.0200		102	84.9-121	0.633	7.43	
1,1,2,2-Tetrachloroethane	0.019	0.0005	mg/L	0.0200		97.4	83-118	4.76	8.68	
1,1,2-Trichloroethane	0.020	0.0005	mg/L	0.0200		101	85.8-121	1.76	6.82	
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		94.5	82.3-134	0.791	4.3	
1,1-Dichloroethene	0.018	0.0005	mg/L	0.0200		90.3	69.4-135	0.500	16.5	
1,1-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	79-126	1.00	5.47	
1,2,3-Trichlorobenzene	0.021	0.0005	mg/L	0.0200		106	66-144	9.88	43	
1,2,4-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		117	66-139	10.1	22.3	
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		110	85.2-120	6.95	8.94	
1,2-Dibromo-3-chloropropane	0.020	0.0005	mg/L	0.0200		102	85.9-113	1.70	15.1	
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		98.2	84.9-118	1.72	5.83	
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		99.0	85.1-112	3.33	8.72	
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		91.0	80.8-125	0.439	8.94	
1,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		97.7	83.2-124	2.03	5.51	
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		104	84.3-120	9.63	16.5	
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		100	84.9-110	4.57	9	
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		98.8	88.8-117	1.81	6.06	
1,4 Dichlorobenzene	0.019	0.0005	mg/L	0.0200		95.8	80.9-112	5.33	7.71	
1,4-Dioxane	0.416	0.100	mg/L	2.00		20.8	-99.5-195	6.73	35.2	
1.2.3-trichloropropane	0.028	0.0005	mg/L	0.0200		141	6.02-213	6.70	49.2	
2,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		103	59.7-146	3.39	9.62	
2-Butanone	0.041	0.002	mg/L	0.0400		102	69.2-152	0.270	14.2	
2-Chlorotoluene	0.020	0.0005	mg/L	0.0200		102	84.7-117	4.41	8.62	
2-Hexanone	0.045	0.001	mg/L	0.0400		113	66-142	3.17	7.28	
Surrogate: 4-Bromofluorobenzene	*0.0266*		mg/L	*0.0250*		*106*	*76.4-114*			
4-Chlorotoluene	0.021	0.0005	mg/L	0.0200		106	81.8-122	5.72	15.5	
4-Methyl-2-pentanone	0.041	0.001	mg/L	0.0400		102	75.9-139	3.09	7.57	
Acetone	0.040	0.010	mg/L	0.0400		99.6	47.7-194	2.46	30.5	
Acrolein	0.170	0.005	mg/L	0.200		84.8	46.2-182	0.453	22.4	
Acrylonitrile	0.039	0.002	mg/L	0.0400		96.3	69.5-152	1.11	7.62	
Benzene	0.019	0.0005	mg/L	0.0200		96.4	85.9-114	0.364	4.16	
Bromobenzene	0.020	0.0005	mg/L	0.0200		101	85.7-113	3.89	8.41	
Bromochloromethane	0.018	0.0005	mg/L	0.0200		91.2	74.2-140	0.219	5.16	
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		97.9	82-126	0.872	5.36	
Bromoform	0.019	0.0005	mg/L	0.0200		96.8	80.3-140	3.05	14.1	
Bromomethane	0.018	0.0005	mg/L	0.0200		89.7	69.3-136	0.559	21.5	
Carbon disulfide	0.038	0.001	mg/L	0.0400		95.7	74.2-141	0.417	20.3	
Carbon tetrachloride	0.022	0.0005	mg/L	0.0200		110	85.8-125	0.408	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		98.1	88.8-112	1.72	5.18	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091620 - Volatiles (Continued)										
LCS Dup (2091620-BSD1) (Continued)			Prepared & Analyzed: 09/21/22							
Chloroethane	0.016	0.0005	mg/L	0.0200		81.6	73.8-135	0.184	24.1	
Chloroform	0.019	0.0005	mg/L	0.0200		95.8	88.1-124	0.366	5.15	
Chloromethane	0.018	0.0005	mg/L	0.0200		89.5	59.9-154	0.673	27	
cis-1,2-Dichloroethene	0.019	0.0005	mg/L	0.0200		97.1	85.8-117	0.309	5.73	
cis-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		102	84.6-125	2.99	6.09	
Dibromochloromethane	0.020	0.0005	mg/L	0.0200		99.0	88.2-121	2.59	7.24	
Surrogate: Dibromofluoromethane	*0.0246*		mg/L	*0.0250*		*98.6*	*82.4-141*			
Dibromomethane	0.018	0.0005	mg/L	0.0200		89.4	73.5-132	1.94	5.75	
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		92.2	63.3-132	0.380	22.6	
Ethylbenzene	0.021	0.0005	mg/L	0.0200		104	81.8-127	1.39	4.83	
Hexachlorobutadiene	0.023	0.0005	mg/L	0.0200		113	52.9-152	7.16	18.4	
Iodomethane	0.040	0.001	mg/L	0.0400		99.3	72.5-133	0.784	24.3	
Isopropylbenzene	0.022	0.0005	mg/L	0.0200		110	75.7-136	3.83	6.25	
m+p - Xylene	0.041	0.001	mg/L	0.0400		103	72.4-134	2.61	5.77	
Methyl t-Butyl Ether	0.041	0.001	mg/L	0.0400		102	75.3-137	0.245	12.8	
Methylene chloride	0.019	0.0005	mg/L	0.0200		96.5	74.8-131	1.29	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		107	59.3-140	10.3	33.5	
n-Butylbenzene	0.021	0.0005	mg/L	0.0200		107	70.1-136	10.3	10.1	QR-04
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		104	83-121	7.15	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		104	76.2-135	2.09	6.29	
p-Isopropyltoluene	0.023	0.0005	mg/L	0.0200		114	81.8-124	9.28	9.26	QR-04
sec-Butylbenzene	0.022	0.0005	mg/L	0.0200		110	78.4-128	9.76	9.85	
Styrene	0.021	0.0005	mg/L	0.0200		103	75.7-128	2.67	7.55	
tert-Butylbenzene	0.019	0.0005	mg/L	0.0200		96.8	90.8-119	17.8	18.6	
Tetrachloroethene	0.021	0.0005	mg/L	0.0200		106	66.8-126	4.08	6.38	
Toluene	0.020	0.0005	mg/L	0.0200		97.7	78.8-121	1.93	5.67	
Surrogate: Toluene-d8	*0.0253*		mg/L	*0.0250*		*101*	*87.1-110*			
Total Xylenes	0.062	0.001	mg/L	0.0600		103	74.3-134	2.44	5.83	
trans-1,2-Dichloroethene	0.018	0.0005	mg/L	0.0200		91.6	80.4-125	0.164	19.1	
trans-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		100	84-128	2.71	6.26	
trans-1,4-Dichloro-2-butene	0.028	0.010	mg/L	0.0400		69.8	18.7-238	17.5	92.8	
Trichloroethene	0.019	0.0005	mg/L	0.0200		95.8	73.1-117	1.66	4.92	
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		90.3	71.9-138	0.0553	19.8	
Vinyl acetate	0.016	0.0005	mg/L	0.0200		82.4	39.5-167	2.34	7.84	
Vinyl chloride	0.018	0.0005	mg/L	0.0200		89.9	73.4-137	0.776	23	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/27/22 09:35

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

GAL Analytical Laboratories
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Fax: (970) 247-4227
service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC
Project Manager: Kyle Siesser
Address: PO Box 1653
City: Durango State: CO Zip: 81302
Phone #: 970-764-7356 Email: ksiesser@cottonwoodconsulting.com
Additional Report To:
Project Name: Sandoval GC A #001A
Project Number:
Sampler Name (Print): Emma Millar

Bill to (if different):
P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax or Email:

FOR LAB USE ONLY Lab I.D.	Sample Name or Location	Collected Date	Collected Time	Matrix (check one) GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	# of containers No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:	ANALYSIS REQUEST EPA Method 8260B
2209-186 -01	MW #2	9/14/22	1040	X								4				X

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 9/14/22 Time: 1615	Received By:
Relinquished By:	Date: Time:	Received By:
Relinquished By:	Date: Time:	Received By:

ADDITIONAL REMARKS: on ice Laser #2

Report to State? (Circle) Yes (No)

Delivered By: (Circle One) (Sampler) UPS - FedEx - Kangaroo - Other:

Temperature at reciept: 18.1°C

CHECKED BY: VJW

† GAL cannot always accept verbal changes. Please fax or email written change requests.
* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

Sandoval GC A #001A - Compr Pit
Unit C Sec 35 T30N R9W

LABORATORY (S) USED : GAL

Date : 12/14/22

DEVELOPER / SAMPLER : EM / AL

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	103.19	dry	-	39.00	-	-	-	-	-
2	101.78	36.65	-	37.25	1044	7.92	2.74	10.1	0.5
3	99.13	dry	-	38.73	-	-	-	-	-
4	98.96	-	-	-	-	-	-	-	-

NOTES : Volume of water purged from well prior to sampling: V = pi x r^2 x h x 7.48 gal./ft^3) x 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes: 2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".
Collect sample from MW #2. Shut down SVE prior to sampling, then re-start.
Water grey tint, HC odor, sheen

Top of casing MW # 1 ~ 1.00 ft., MW # 2 ~ 2.75 ft., MW # 3 ~ @ grade, MW # 4 ~ 0.25 ft below grade

on-site	1000	temp	30°F
off-site	1100	temp	30°
sky cond.	mostly sunny		
wind speed	none	direct.	

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 30, 2022

Kyle Siesser

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

RE: Sandoval GC A 001A OrderNo.: 2212A22

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/16/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212A22**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 001A
Collection Date: 12/14/2022 10:12:00 AM
Lab ID: 2212A22-001 **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)	ND	5.0		µg/L	1	12/19/2022 9:36:02 AM
Surr: BFB	89.8	15-380		%Rec	1	12/19/2022 9:36:02 AM
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Toluene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Ethylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Naphthalene	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
1-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 1:55:00 PM
2-Methylnaphthalene	ND	0.40		µg/L	1	12/27/2022 1:55:00 PM
Acetone	ND	1.0		µg/L	1	12/27/2022 1:55:00 PM
Bromobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Bromodichloromethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Bromoform	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Bromomethane	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
2-Butanone	ND	1.0		µg/L	1	12/27/2022 1:55:00 PM
Carbon disulfide	ND	1.0		µg/L	1	12/27/2022 1:55:00 PM
Carbon tetrachloride	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Chlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Chloroethane	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
Chloroform	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Chloromethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
2-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
4-Chlorotoluene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
cis-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
Dibromochloromethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Dibromomethane	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
1,2-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,3-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,4-Dichlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Dichlorodifluoromethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1-Dichloroethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1-Dichloroethene	ND	0.10		µg/L	1	12/27/2022 1:55:00 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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2212A22**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC
Client Sample ID: SVE
Project: Sandoval GC A 001A
Collection Date: 12/14/2022 10:12:00 AM
Lab ID: 2212A22-001 **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 1:55:00 PM
1,3-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
2,2-Dichloropropane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Hexachlorobutadiene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
2-Hexanone	ND	1.0		µg/L	1	12/27/2022 1:55:00 PM
Isopropylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
4-Isopropyltoluene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
4-Methyl-2-pentanone	ND	1.0		µg/L	1	12/27/2022 1:55:00 PM
Methylene chloride	ND	0.30		µg/L	1	12/27/2022 1:55:00 PM
n-Butylbenzene	ND	0.30		µg/L	1	12/27/2022 1:55:00 PM
n-Propylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
sec-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Styrene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
tert-Butylbenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
trans-1,2-DCE	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1,1-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,1,2-Trichloroethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Trichloroethene (TCE)	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Trichlorofluoromethane	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
1,2,3-Trichloropropane	ND	0.20		µg/L	1	12/27/2022 1:55:00 PM
Vinyl chloride	ND	0.10		µg/L	1	12/27/2022 1:55:00 PM
Xylenes, Total	ND	0.15		µg/L	1	12/27/2022 1:55:00 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/27/2022 1:55:00 PM
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	12/27/2022 1:55:00 PM
Surr: Toluene-d8	95.1	70-130		%Rec	1	12/27/2022 1:55:00 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	12/27/2022 1:55:00 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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A22**

30-Dec-22

Client: Cottonwood Consulting LLC

Project: Sandoval GC A 001A

Sample ID: **2212A22-001adup**	SampType: **DUP**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **SVE**	Batch ID: **R93544**	RunNo: **93544**
Prep Date:	Analysis Date: **12/27/2022**	SeqNo: **3375063** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.10						0	20	
Toluene	ND	0.10						0	20	
Ethylbenzene	ND	0.10						0	20	
Methyl tert-butyl ether (MTBE)	ND	0.10						0	20	
1,2,4-Trimethylbenzene	ND	0.10						0	20	
1,3,5-Trimethylbenzene	ND	0.10						0	20	
1,2-Dichloroethane (EDC)	ND	0.10						0	20	
1,2-Dibromoethane (EDB)	ND	0.10						0	20	
Naphthalene	ND	0.20						0	20	
1-Methylnaphthalene	ND	0.40						0	20	
2-Methylnaphthalene	ND	0.40						0	20	
Acetone	ND	1.0						0	20	
Bromobenzene	ND	0.10						0	20	
Bromodichloromethane	ND	0.10						0	20	
Bromoform	ND	0.10						0	20	
Bromomethane	ND	0.20						0	20	
2-Butanone	ND	1.0						0	20	
Carbon disulfide	ND	1.0						0	20	
Carbon tetrachloride	ND	0.10						0	20	
Chlorobenzene	ND	0.10						0	20	
Chloroethane	ND	0.20						0	20	
Chloroform	ND	0.10						0	20	
Chloromethane	ND	0.10						0	20	
2-Chlorotoluene	ND	0.10						0	20	
4-Chlorotoluene	ND	0.10						0	20	
cis-1,2-DCE	ND	0.10						0	20	
cis-1,3-Dichloropropene	ND	0.10						0	20	
1,2-Dibromo-3-chloropropane	ND	0.20						0	20	
Dibromochloromethane	ND	0.10						0	20	
Dibromomethane	ND	0.20						0	20	
1,2-Dichlorobenzene	ND	0.10						0	20	
1,3-Dichlorobenzene	ND	0.10						0	20	
1,4-Dichlorobenzene	ND	0.10						0	20	
Dichlorodifluoromethane	ND	0.10						0	20	
1,1-Dichloroethane	ND	0.10						0	20	
1,1-Dichloroethene	ND	0.10						0	20	
1,2-Dichloropropane	ND	0.10						0	20	
1,3-Dichloropropane	ND	0.10						0	20	
2,2-Dichloropropane	ND	0.10						0	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A22**

30-Dec-22

Client: Cottonwood Consulting LLC

Project: Sandoval GC A 001A

Sample ID: **2212A22-001adup**	SampType: **DUP**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **SVE**	Batch ID: **R93544**	RunNo: **93544**
Prep Date:	Analysis Date: **12/27/2022**	SeqNo: **3375063** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10						0	20	
Hexachlorobutadiene	ND	0.10						0	20	
2-Hexanone	ND	1.0						0	20	
Isopropylbenzene	ND	0.10						0	20	
4-Isopropyltoluene	ND	0.10						0	20	
4-Methyl-2-pentanone	ND	1.0						0	20	
Methylene chloride	ND	0.30						0	20	
n-Butylbenzene	ND	0.30						0	20	
n-Propylbenzene	ND	0.10						0	20	
sec-Butylbenzene	ND	0.10						0	20	
Styrene	ND	0.10						0	20	
tert-Butylbenzene	ND	0.10						0	20	
1,1,1,2-Tetrachloroethane	ND	0.10						0	20	
1,1,2,2-Tetrachloroethane	ND	0.10						0	20	
Tetrachloroethene (PCE)	ND	0.10						0	20	
trans-1,2-DCE	ND	0.10						0	20	
trans-1,3-Dichloropropene	ND	0.10						0	20	
1,2,3-Trichlorobenzene	ND	0.10						0	20	
1,2,4-Trichlorobenzene	ND	0.10						0	20	
1,1,1-Trichloroethane	ND	0.10						0	20	
1,1,2-Trichloroethane	ND	0.10						0	20	
Trichloroethene (TCE)	ND	0.10						0	20	
Trichlorofluoromethane	ND	0.10						0	20	
1,2,3-Trichloropropane	ND	0.20						0	20	
Vinyl chloride	ND	0.10						0	20	
Xylenes, Total	ND	0.15						0	20	
Surr: Dibromofluoromethane	1.0		1.000		105	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	1.0		1.000		99.6	70	130	0	0	
Surr: Toluene-d8	0.96		1.000		95.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130	0	0	

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Cottonwood Consulting LLC Work Order Number: 2212A22 RcptNo: 1

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

Completed By: Tracy Casarrubias 12/16/2022 9:27:23 AM

Reviewed By: JH 12.16.22

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SGR 12/16/22

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	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:
Sandoval GC A #001A

Project #:

Project Manager:
Kyle Siesser

Sampler: Emma Millar

On Ice: ☒ Yes ☐ No

# of Coolers: 1 TMK 12/16 N/A

Cooler Temp(including CF): ~~1.6~~ 0.1 = 1.5

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212A22	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)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TPH (8015)
12/14/22	1012	AIR	SVE	tedlar bag - 1	NA	001								■			■

Date: 12/15/22 Time: 1205 Relinquished by: _____ Received by: _____ Via: _____ Date: 12/15/22 Time: 1205

Date: 12/15/22 Time: 1814 Relinquished by: _____ Received by: _____ Via: courier Date: 12/16/22 Time: 7:40

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.

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

03 January 2023

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: VOC 8260

Enclosed are the results of analyses for samples received by the laboratory on 12/14/22 17:20. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-22-15

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-22-15

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2212189-01	Water	12/14/22 10:44	12/14/22 17:20	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

MW #2

2212189-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Dichlorodifluoromethane*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
Chloromethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Vinyl chloride*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Bromomethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Chloroethane*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
Trichlorofluoromethane*	<0.010	0.010	0.0006	mg/L	20	12/28/22 00:11	8260B		MS
1,1-Dichloroethene*	<0.010	0.010	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Carbon disulfide*	<0.040	0.040	0.006	mg/L	20	12/28/22 00:11	8260B		MS
Iodomethane	<0.020	0.020	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Acrolein*	<0.100	0.100	0.014	mg/L	20	12/28/22 00:11	8260B		MS
Methylene chloride*	<0.010	0.010	0.006	mg/L	20	12/28/22 00:11	8260B		MS
Acetone*	<0.200	0.200	0.116	mg/L	20	12/28/22 00:11	8260B		MS
trans-1,2-Dichloroethene*	<0.010	0.010	0.004	mg/L	20	12/28/22 00:11	8260B		MS
Methyl t-Butyl Ether*	<0.020	0.020	0.005	mg/L	20	12/28/22 00:11	8260B		MS
1,1-Dichloroethane*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
Acrylonitrile*	<0.040	0.040	0.030	mg/L	20	12/28/22 00:11	8260B		MS
Vinyl acetate*	<0.010	0.010	0.007	mg/L	20	12/28/22 00:11	8260B		MS
cis-1,2-Dichloroethene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
2,2-Dichloropropane*	<0.010	0.010	0.006	mg/L	20	12/28/22 00:11	8260B		MS
Bromochloromethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Chloroform*	<0.010	0.010	0.0009	mg/L	20	12/28/22 00:11	8260B		MS
Carbon tetrachloride*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,1,1-Trichloroethane*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,1-Dichloropropene*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
2-Butanone*	<0.040	0.040	0.033	mg/L	20	12/28/22 00:11	8260B		MS
Benzene*	**2.13**	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,2-Dichloroethane*	<0.010	0.010	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Trichloroethene*	<0.010	0.010	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Dibromomethane*	<0.010	0.010	0.003	mg/L	20	12/28/22 00:11	8260B		MS
1,2-Dichloropropane*	<0.010	0.010	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Bromodichloromethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
cis-1,3-Dichloropropene*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

MW #2

2212189-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

VOLATILES BY GC/MS

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Toluene*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
4-Methyl-2-pentanone*	<0.020	0.020	0.003	mg/L	20	12/28/22 00:11	8260B		MS
Tetrachloroethene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
trans-1,3-Dichloropropene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,1,2-Trichloroethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Dibromochloromethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
1,3-Dichloropropane*	<0.010	0.010	0.0002	mg/L	20	12/28/22 00:11	8260B		MS
1,2-Dibromoethane*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
2-Hexanone*	<0.020	0.020	0.002	mg/L	20	12/28/22 00:11	8260B		MS
Chlorobenzene*	<0.010	0.010	0.0004	mg/L	20	12/28/22 00:11	8260B		MS
Ethylbenzene*	**0.589**	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,1,1,2-Tetrachloroethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
m+p - Xylene*	**4.46**	0.020	0.009	mg/L	20	12/28/22 00:11	8260B		MS
o-Xylene*	**0.708**	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Total Xylenes*	**5.17**	0.020	0.011	mg/L	20	12/28/22 00:11	8260B		MS
Bromoform*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
Styrene*	<0.010	0.010	0.0003	mg/L	20	12/28/22 00:11	8260B		MS
Isopropylbenzene*	**0.054**	0.010	0.0005	mg/L	20	12/28/22 00:11	8260B		MS
Bromobenzene*	<0.010	0.010	0.0007	mg/L	20	12/28/22 00:11	8260B		MS
n-Propylbenzene*	**0.057**	0.010	0.0002	mg/L	20	12/28/22 00:11	8260B		MS
1,1,2,2-Tetrachloroethane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
2-Chlorotoluene*	<0.010	0.010	0.0008	mg/L	20	12/28/22 00:11	8260B		MS
1.2.3-trichloropropane*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
1,3,5-Trimethylbenzene*	**0.629**	0.010	0.0007	mg/L	20	12/28/22 00:11	8260B		MS
trans-1,4-Dichloro-2-butene	<0.200	0.200	0.118	mg/L	20	12/28/22 00:11	8260B		MS
4-Chlorotoluene*	<0.010	0.010	0.0006	mg/L	20	12/28/22 00:11	8260B		MS
tert-Butylbenzene*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
1,2,4-Trimethylbenzene*	**1.18**	0.010	0.0007	mg/L	20	12/28/22 00:11	8260B		MS
sec-Butylbenzene*	<0.010	0.010	0.0004	mg/L	20	12/28/22 00:11	8260B		MS
p-Isopropyltoluene*	**0.061**	0.010	0.0006	mg/L	20	12/28/22 00:11	8260B		MS
1,3-Dichlorobenzene*	<0.010	0.010	0.0007	mg/L	20	12/28/22 00:11	8260B		MS
1,4 Dichlorobenzene*	<0.010	0.010	0.0008	mg/L	20	12/28/22 00:11	8260B		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

MW #2

2212189-01 (Ground Water)

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
VOLATILES BY GC/MS									
n-Butylbenzene*	<0.010	0.010	0.0006	mg/L	20	12/28/22 00:11	8260B		MS
1,2-Dichlorobenzene*	<0.010	0.010	0.001	mg/L	20	12/28/22 00:11	8260B		MS
1,2-Dibromo-3-chloropropane*	<0.010	0.010	0.005	mg/L	20	12/28/22 00:11	8260B		MS
Hexachlorobutadiene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,2,4-Trichlorobenzene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
Naphthalene*	**0.074**	0.010	0.0007	mg/L	20	12/28/22 00:11	8260B		MS
1,2,3-Trichlorobenzene*	<0.010	0.010	0.002	mg/L	20	12/28/22 00:11	8260B		MS
1,4-Dioxane	<2.00	2.00	0.574	mg/L	20	12/28/22 00:11	8260B		MS
Surrogate: Dibromofluoromethane			*107 %*	*82.4-141*		*12/28/22 00:11*	*8260B*		MS
Surrogate: Toluene-d8			*100 %*	*87.1-110*		*12/28/22 00:11*	*8260B*		MS
Surrogate: 4-Bromofluorobenzene			*104 %*	*76.4-114*		*12/28/22 00:11*	*8260B*		MS

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles										
Blank (2121632-BLK1)			Prepared & Analyzed: 12/19/22							
1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,1-Trichloroethane	ND	0.0005	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethane	ND	0.0005	mg/L							
1,1-Dichloroethene	ND	0.0005	mg/L							
1,1-Dichloropropene	ND	0.0005	mg/L							
1,2,3-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trichlorobenzene	ND	0.0005	mg/L							
1,2,4-Trimethylbenzene	ND	0.0005	mg/L							
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L							
1,2-Dibromoethane	ND	0.0005	mg/L							
1,2-Dichlorobenzene	ND	0.0005	mg/L							
1,2-Dichloroethane	ND	0.0005	mg/L							
1,2-Dichloropropane	ND	0.0005	mg/L							
1,3,5-Trimethylbenzene	ND	0.0005	mg/L							
1,3-Dichlorobenzene	ND	0.0005	mg/L							
1,3-Dichloropropane	ND	0.0005	mg/L							
1,4 Dichlorobenzene	ND	0.0005	mg/L							
1,4-Dioxane	ND	0.100	mg/L							
1.2.3-trichloropropane	ND	0.0005	mg/L							
2,2-Dichloropropane	ND	0.0005	mg/L							
2-Butanone	ND	0.002	mg/L							
2-Chlorotoluene	ND	0.0005	mg/L							
2-Hexanone	ND	0.001	mg/L							
Surrogate: 4-Bromofluorobenzene	*0.0243*		mg/L	*0.0250*		*97.1*	*76.4-114*			
4-Chlorotoluene	ND	0.0005	mg/L							
4-Methyl-2-pentanone	ND	0.001	mg/L							
Acetone	ND	0.010	mg/L							
Acrolein	ND	0.005	mg/L							
Acrylonitrile	ND	0.002	mg/L							
Benzene	ND	0.0005	mg/L							
Bromobenzene	ND	0.0005	mg/L							
Bromochloromethane	ND	0.0005	mg/L							
Bromodichloromethane	ND	0.0005	mg/L							
Bromoform	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles (Continued)										
Blank (2121632-BLK1) (Continued)			Prepared & Analyzed: 12/19/22							
Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	0.002	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
Surrogate: Dibromofluoromethane	*0.0250*		mg/L	*0.0250*		*100*	*82.4-141*			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl t-Butyl Ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
Surrogate: Toluene-d8	*0.0250*		mg/L	*0.0250*		*100*	*87.1-110*			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles (Continued)										
LCS (2121632-BS1)			Prepared & Analyzed: 12/19/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		106	89.5-111			
1,1,1-Trichloroethane	0.020	0.0005	mg/L	0.0200		101	85.1-117			
1,1,2,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		109	68.8-127			
1,1,2-Trichloroethane	0.021	0.0005	mg/L	0.0200		104	77.4-118			
1,1-Dichloroethane	0.022	0.0005	mg/L	0.0200		111	78.1-121			
1,1-Dichloroethene	0.024	0.0005	mg/L	0.0200		118	64-124			
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		99.4	81-122			
1,2,3-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		99.6	85.7-115			
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		102	83.5-117			
1,2,4-Trimethylbenzene	0.023	0.0005	mg/L	0.0200		114	78.4-126			
1,2-Dibromo-3-chloropropane	0.019	0.0005	mg/L	0.0200		97.4	77.2-116			
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		106	88.6-113			
1,2-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		105	86.5-111			
1,2-Dichloroethane	0.019	0.0005	mg/L	0.0200		96.7	75.6-120			
1,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		103	76.8-121			
1,3,5-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		112	79.2-127			
1,3-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		107	87.7-112			
1,3-Dichloropropane	0.021	0.0005	mg/L	0.0200		105	82.1-119			
1,4 Dichlorobenzene	0.021	0.0005	mg/L	0.0200		105	85.2-111			
1,4-Dioxane	0.423	0.100	mg/L	0.400		106	-34.9-102			BS1
1.2.3-trichloropropane	0.022	0.0005	mg/L	0.0200		112	53.2-135			
2,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		97.4	74.3-136			
2-Butanone	0.042	0.002	mg/L	0.0400		106	65.6-132			
2-Chlorotoluene	0.022	0.0005	mg/L	0.0200		110	78.3-123			
2-Hexanone	0.046	0.001	mg/L	0.0400		115	66.6-126			
Surrogate: 4-Bromofluorobenzene	*0.0249*		mg/L	*0.0250*		*99.5*	*76.4-114*			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		111	76.8-129			
4-Methyl-2-pentanone	0.045	0.001	mg/L	0.0400		114	67.7-128			
Acetone	0.050	0.010	mg/L	0.0400		126	54.3-140			
Acrolein	0.173	0.005	mg/L	0.200		86.5	29.4-149			
Acrylonitrile	0.044	0.002	mg/L	0.0400		109	60.8-143			
Benzene	0.020	0.0005	mg/L	0.0200		102	82.7-115			
Bromobenzene	0.020	0.0005	mg/L	0.0200		102	85.1-112			
Bromochloromethane	0.022	0.0005	mg/L	0.0200		108	77.8-118			
Bromodichloromethane	0.021	0.0005	mg/L	0.0200		104	82.7-118			
Bromoform	0.021	0.0005	mg/L	0.0200		105	76.1-133			
Bromomethane	0.022	0.0005	mg/L	0.0200		110	61.1-126			
Carbon disulfide	0.046	0.001	mg/L	0.0400		114	67.2-128			
Carbon tetrachloride	0.021	0.0005	mg/L	0.0200		103	89.7-117			

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles (Continued)										
LCS (2121632-BS1) (Continued)			Prepared & Analyzed: 12/19/22							
Chlorobenzene	0.021	0.0005	mg/L	0.0200		106	86.2-112			
Chloroethane	0.024	0.0005	mg/L	0.0200		118	62.4-125			
Chloroform	0.021	0.0005	mg/L	0.0200		106	86.7-115			
Chloromethane	0.023	0.0005	mg/L	0.0200		114	47.1-145			
cis-1,2-Dichloroethene	0.023	0.0005	mg/L	0.0200		116	76-117			
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	80.9-123			
Dibromochloromethane	0.021	0.0005	mg/L	0.0200		104	88.7-121			
Surrogate: Dibromofluoromethane	*0.0247*		mg/L	*0.0250*		*98.8*	*82.4-141*			
Dibromomethane	0.020	0.0005	mg/L	0.0200		102	86.4-114			
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		90.0	36.1-160			
Ethylbenzene	0.021	0.0005	mg/L	0.0200		106	84.3-117			
Hexachlorobutadiene	0.022	0.0005	mg/L	0.0200		112	94.3-116			
Iodomethane	0.040	0.001	mg/L	0.0400		101	77.4-124			
Isopropylbenzene	0.022	0.0005	mg/L	0.0200		111	88.1-114			
m+p - Xylene	0.043	0.001	mg/L	0.0400		108	85.9-122			
Methyl t-Butyl Ether	0.042	0.001	mg/L	0.0400		105	78.9-118			
Methylene chloride	0.024	0.0005	mg/L	0.0200		119	64.2-134			
Naphthalene	0.022	0.0005	mg/L	0.0200		108	80.6-121			
n-Butylbenzene	0.022	0.0005	mg/L	0.0200		108	82.2-123			
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		112	78.9-125			
o-Xylene	0.021	0.0005	mg/L	0.0200		105	85.6-112			
p-Isopropyltoluene	0.023	0.0005	mg/L	0.0200		113	82.5-123			
sec-Butylbenzene	0.023	0.0005	mg/L	0.0200		116	82.1-128			
Styrene	0.023	0.0005	mg/L	0.0200		116	78.3-117			
tert-Butylbenzene	0.023	0.0005	mg/L	0.0200		114	79.5-129			
Tetrachloroethene	0.019	0.0005	mg/L	0.0200		96.8	86.6-110			
Toluene	0.020	0.0005	mg/L	0.0200		102	82.8-112			
Surrogate: Toluene-d8	*0.0252*		mg/L	*0.0250*		*101*	*87.1-110*			
Total Xylenes	0.064	0.001	mg/L	0.0600		107	86.5-118			
trans-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		104	69.2-119			
trans-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		109	77.4-131			
trans-1,4-Dichloro-2-butene	0.044	0.010	mg/L	0.0400		110	41.4-204			
Trichloroethene	0.020	0.0005	mg/L	0.0200		98.1	82.2-114			
Trichlorofluoromethane	0.014	0.0005	mg/L	0.0200		69.4	78.2-126			BS2
Vinyl acetate	0.021	0.0005	mg/L	0.0200		103	56.2-148			
Vinyl chloride	0.022	0.0005	mg/L	0.0200		110	62-135			
LCS Dup (2121632-BSD1)			Prepared & Analyzed: 12/19/22							
1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		106	89.5-111	0.189	6.88	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles (Continued)										
LCS Dup (2121632-BSD1) (Continued)			Prepared & Analyzed: 12/19/22							
1,1,1-Trichloroethane	0.020	0.0005	mg/L	0.0200		100	85.1-117	0.348	7.43	
1,1,2,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		111	68.8-127	1.68	8.68	
1,1,2-Trichloroethane	0.021	0.0005	mg/L	0.0200		103	77.4-118	0.580	6.82	
1,1-Dichloroethane	0.022	0.0005	mg/L	0.0200		109	78.1-121	1.05	4.3	
1,1-Dichloroethene	0.023	0.0005	mg/L	0.0200		117	64-124	0.341	16.5	
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		98.3	81-122	1.06	5.47	
1,2,3-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		97.8	85.7-115	1.87	43	
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		97.7	83.5-117	4.45	22.3	
1,2,4-Trimethylbenzene	0.023	0.0005	mg/L	0.0200		115	78.4-126	0.392	8.94	
1,2-Dibromo-3-chloropropane	0.019	0.0005	mg/L	0.0200		95.0	77.2-116	2.50	15.1	
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		105	88.6-113	0.616	5.83	
1,2-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	86.5-111	0.955	8.72	
1,2-Dichloroethane	0.020	0.0005	mg/L	0.0200		98.8	75.6-120	2.15	8.94	
1,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		103	76.8-121	0.0485	5.51	
1,3,5-Trimethylbenzene	0.023	0.0005	mg/L	0.0200		113	79.2-127	1.33	16.5	
1,3-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		108	87.7-112	0.881	9	
1,3-Dichloropropane	0.021	0.0005	mg/L	0.0200		106	82.1-119	0.142	6.06	
1,4 Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	85.2-111	0.431	7.71	
1,4-Dioxane	0.412	0.100	mg/L	0.400		103	-34.9-102	2.78	35.2	BS1
1.2.3-trichloropropane	0.022	0.0005	mg/L	0.0200		112	53.2-135	0.447	49.2	
2,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		96.9	74.3-136	0.566	9.62	
2-Butanone	0.042	0.002	mg/L	0.0400		106	65.6-132	0.118	14.2	
2-Chlorotoluene	0.022	0.0005	mg/L	0.0200		109	78.3-123	0.457	8.62	
2-Hexanone	0.047	0.001	mg/L	0.0400		116	66.6-126	0.884	7.28	
Surrogate: 4-Bromofluorobenzene	*0.0250*		mg/L	*0.0250*		*99.8*	*76.4-114*			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		112	76.8-129	0.943	15.5	
4-Methyl-2-pentanone	0.046	0.001	mg/L	0.0400		115	67.7-128	0.723	7.57	
Acetone	0.048	0.010	mg/L	0.0400		119	54.3-140	5.37	30.5	
Acrolein	0.166	0.005	mg/L	0.200		83.1	29.4-149	4.01	22.4	
Acrylonitrile	0.044	0.002	mg/L	0.0400		109	60.8-143	0.275	7.62	
Benzene	0.020	0.0005	mg/L	0.0200		102	82.7-115	0.0982	4.16	
Bromobenzene	0.020	0.0005	mg/L	0.0200		101	85.1-112	1.23	8.41	
Bromochloromethane	0.022	0.0005	mg/L	0.0200		110	77.8-118	1.78	5.16	
Bromodichloromethane	0.021	0.0005	mg/L	0.0200		104	82.7-118	0.0964	5.36	
Bromoform	0.020	0.0005	mg/L	0.0200		98.9	76.1-133	6.13	14.1	
Bromomethane	0.022	0.0005	mg/L	0.0200		110	61.1-126	0.409	21.5	
Carbon disulfide	0.045	0.001	mg/L	0.0400		112	67.2-128	2.41	20.3	
Carbon tetrachloride	0.020	0.0005	mg/L	0.0200		100	89.7-117	2.86	11.4	
Chlorobenzene	0.021	0.0005	mg/L	0.0200		105	86.2-112	0.809	5.18	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2121632 - Volatiles (Continued)										
LCS Dup (2121632-BSD1) (Continued)			Prepared & Analyzed: 12/19/22							
Chloroethane	0.024	0.0005	mg/L	0.0200		122	62.4-125	3.43	24.1	
Chloroform	0.021	0.0005	mg/L	0.0200		103	86.7-115	2.30	5.15	
Chloromethane	0.023	0.0005	mg/L	0.0200		116	47.1-145	1.82	27	
cis-1,2-Dichloroethene	0.023	0.0005	mg/L	0.0200		117	76-117	0.386	5.73	
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		103	80.9-123	1.11	6.09	
Dibromochloromethane	0.020	0.0005	mg/L	0.0200		102	88.7-121	2.24	7.24	
Surrogate: Dibromofluoromethane	*0.0245*		mg/L	*0.0250*		*98.2*	*82.4-141*			
Dibromomethane	0.020	0.0005	mg/L	0.0200		102	86.4-114	0.686	5.75	
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		88.8	36.1-160	1.45	22.6	
Ethylbenzene	0.021	0.0005	mg/L	0.0200		105	84.3-117	1.05	4.83	
Hexachlorobutadiene	0.022	0.0005	mg/L	0.0200		110	94.3-116	1.58	18.4	
Iodomethane	0.040	0.001	mg/L	0.0400		101	77.4-124	0.149	24.3	
Isopropylbenzene	0.022	0.0005	mg/L	0.0200		111	88.1-114	0.675	6.25	
m+p - Xylene	0.043	0.001	mg/L	0.0400		108	85.9-122	0.0232	5.77	
Methyl t-Butyl Ether	0.042	0.001	mg/L	0.0400		105	78.9-118	0.119	12.8	
Methylene chloride	0.024	0.0005	mg/L	0.0200		119	64.2-134	0.0420	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		104	80.6-121	3.44	33.5	
n-Butylbenzene	0.022	0.0005	mg/L	0.0200		108	82.2-123	0.186	10.1	
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		112	78.9-125	0.269	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		105	85.6-112	0.191	6.29	
p-Isopropyltoluene	0.022	0.0005	mg/L	0.0200		110	82.5-123	2.55	9.26	
sec-Butylbenzene	0.023	0.0005	mg/L	0.0200		116	82.1-128	0.173	9.85	
Styrene	0.023	0.0005	mg/L	0.0200		114	78.3-117	1.48	7.55	
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		103	79.5-129	9.75	18.6	
Tetrachloroethene	0.019	0.0005	mg/L	0.0200		95.2	86.6-110	1.62	6.38	
Toluene	0.020	0.0005	mg/L	0.0200		102	82.8-112	0.295	5.67	
Surrogate: Toluene-d8	*0.0249*		mg/L	*0.0250*		*99.6*	*87.1-110*			
Total Xylenes	0.064	0.001	mg/L	0.0600		107	86.5-118	0.0781	5.83	
trans-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		104	69.2-119	0.674	19.1	
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		106	77.4-131	2.00	6.26	
trans-1,4-Dichloro-2-butene	0.036	0.010	mg/L	0.0400		89.9	41.4-204	20.4	92.8	
Trichloroethene	0.020	0.0005	mg/L	0.0200		98.2	82.2-114	0.102	4.92	
Trichlorofluoromethane	0.014	0.0005	mg/L	0.0200		71.2	78.2-126	2.56	19.8	BS2
Vinyl acetate	0.020	0.0005	mg/L	0.0200		101	56.2-148	1.42	7.84	
Vinyl chloride	0.021	0.0005	mg/L	0.0200		106	62-135	2.82	23	

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Cottonwood Consulting	Project: VOC 8260	
PO Box 1653	Project Name / Number: Sandoval GC A #001A	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	01/03/23 17:07

Notes and Definitions

BS2	Blank spike recovery below laboratory acceptance criteria. Results for analyte potentially biased low.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Green Analytical Laboratories
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75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC
Project Manager: Kyle Siesser
Address: PO Box 1653
City: Durango State: CO Zip: 81302
Phone #: 970-764-7356 Email: ksiesser@cottonwoodconsulting.com
Additional Report To:
Project Name: Sandoval GC A #001A
Project Number:
Sampler Name (Print): Emma Millar

Bill to (if different):
P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax or Email:

ANALYSIS REQUEST: EPA Method 8260B

FOR LAB USE ONLY Lab I.D.	Sample Name or Location	Collected Date	Collected Time	Matrix (check one) GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER:	# of containers No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:	EPA Method 8260B
2212-189 -01	MW #2	12/14/22	1044	X								4				X

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

	Date	Time		
Relinquished By:	12/14/22	1720	Received By:	
Relinquished By:			Received By:	
Relinquished By:			Received By:	

Delivered By: (Circle One)
Sampler - UPS - FedEx - Kangaroo - Other: Lasership

Temperature at reciept: 12.2°C

CHECKED BY: LLG

ADDITIONAL REMARKS:

Report to State? (Circle)
Yes (No)

† GAL cannot always accept verbal changes. Please fax or email written change requests.
* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

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1625 N. French Dr., Hobbs, NM 88240
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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 187026

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 187026
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Received the Sandoval Gas Com A 001 A 2022 Annual SVE & GWMW Report: Content Satisfactory 1. Continue to operate SVE system and conduct regular O&M 2. Please continue to send any updates or reporting for 2023.	10/16/2023