

SVE Monitoring

RECEIVED

By Mike Buchanan at 4:14 pm, Sep 13, 2023

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H ₂ O")	Vacuum Pressure downstream of drum (H ₂ O")	Run Time (Hours)	System Operational at Arrival?	Drum H ₂ O (inches bTOD)	Drum Drained?	Comments
Atlantic	4-6-23	1	5.1	-44	-36	—	Y	30.5	N	Drum Frozen
Florance		2	104.1	Broken	—	—	Y	20.5	Y	Drum leaking from Drain Valve
Sandoval		1	10.5	Broken	Broken	1681.2	N	14.3	Y	system restarted after Draining drum
Jaquez		3	142.1	-30	—	334.3	Y	28.75	Y	
AL Elliott		5	110.5	-8	-12	1347.5	Y	30.5	Y	
GC4 H180		411	—	—	—	4005.7	Y	—	—	2.6 ps: 160° (1) 0.5 (2) 0.6 (3) 0.5 (4) 0.5
Henton		unlabeled	122.7	-56	—	—	Y	31.25	Y	
Mudge B12R		1	204.7	-44	-30	—	Y	29.25	Y	
Mudge A002	↓	2	96.5	-52	—	—	Y	30.5	Y	

Notes:

SVE - Soil Vapor Extraction

OVM - Organic Vapor Monitoring

ppm- parts per million

H₂O"- inches water

cfm- cubic feet per minute

bTOD- below top of drum

SVE Monitoring

RECEIVED

By Mike Buchanan at 4:12 pm, Sep 13, 2023

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

Notes:

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

RECEIVED

By Mike Buchanan at 3:40 pm, Sep 13, 2023

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H ₂ O")	Vacuum Pressure downstream of drum (H ₂ O")	Exhaust Rate (cfm) if known	System Operational at Arrival?	Drum H ₂ O (inches bTOD)	Drum Drained?	Comments
Atlantic ALS 9A	1-10-23	1	11.1	-46	-37	-	Y	26.5	Y	
Florence GJ16	1	2	23.1	Broken	-	-	N	31.4	N	Drum Frozen
Sandoval	1	1	62.2	-8	Broken	-	N	14	Y	Tank 80-90% Full
Jacquez	3	3	7.4	0.0	Broken	-	N	9	Y	Attempted to restart unit will not turn on
Al Elliot	5	5	165.0	-10	-10	-	Y	27.5	Y	638.8 hours run time
GCU H80	All	All	-	-	-	-	Y	-	-	2.5 PSI 154°F 1947.1 Hrs 100.0 20.0 31.0 410.0
Heaton	1	unk	106.6	-66	Broken	-	Y	26.5	Y	
Mudge B12R	1/2/23	1	-	-	-	-	N	32	N	drum frozen - unable to drain. SVE not operational.
Mudge A2	1/12/23	2	0.8	-54	-	-	Y	31	N	water in drum below drain port.

Notes:

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

RECEIVED

By Mike Buchanan at 4:18 pm, Sep 13, 2023

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H ₂ O")	Vacuum Pressure downstream of drum (H ₂ O")	Run Time (Hours)	System Operational at Arrival?	Drum H ₂ O (inches bTOD)	Drum Drained?	Comments
Atlantic	6/6/23	1	5.5	-44	0	-	Y	Dry	N	
Florence		2	99.6	Broken	-	-	Y	29"	Y	Drum leaking from drain valve
Sandoval		1	7.3	Broken	Broken	3144.4	Y	Below Port	N	3144.4 hrs
Juarez		3	123.2	-24	-	1606.7	Y	30"	Y	1606.7 hrs
Al Elliot +		5	96.8	-8	-11	2683.0	Y	Below Port	N	2683.0 hrs
GCV #180		All	-	-	-	5326.6	Y	-	-	110° 2.4 PSI 10.75 20.5 5326.6 hrs 30.5 40.5 PSI
Horton		Unk	110.5	-54	-	-	Y	Dry	N	Vacuum Pressure gauge removed (downstream)
Mudge B12R		1	101.1	-44	-29	-	Y	Dry	N	
Mudge A002		2	171.6	-50	-	-	Y	Below Port	N	

Notes:

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

RECEIVED

By Mike Buchanan at 4:13 pm, Sep 13, 2023

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H ₂ O")	Vacuum Pressure downstream of drum (H ₂ O")	Exhaust Rate (cfm) if known	System Operational at Arrival?	Drum H ₂ O (inches bTOD)	Drum Drained?	Comments
Atlantic	3/9/23	1	5.9	-36	-46	-	Y	31.25	Y	
Florence		2	131.3	broken	none	-	Y	24.5	Y	drum valve leaking
Sandoval		1	13.3	Broken	Broken	-	Y	31.0	Y	run time 1041.7 hrs Grabbed gas sample @ 1045
Jacquez		3	-	-	-	-	N	-	N	System not operational
Al Elliot		5	132.0	-8	-10	-	Y	30.25	Y	run time 971.7 hours
GCU H80		All	-	-	-	-	Y	-		2.5 psi 150°F 3339.0 hours 10.2 20.2 31.25 40.1
Heaton	3/10/23	unk	113.8	-42	-	-	Y	28.5	Y	
Mudge B12E		1	-	-	-	-	-	-	-	unable to access site
Mudge A2		2	109.1	-52	-	-	Y	31.5	N	water in drum below valve

Notes:

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

SVE Monitoring

RECEIVED

By Mike Buchanan at 4:15 pm, Sep 13, 2023

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (H2O")	Vacuum Pressure downstream of drum (H2O")	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic	5/13/23	1	38.4	-35	-45	-	Y	32	N	water below port
Florance		2	101.9	Broken	-	-	N	33	N	water below port Restarted system.
Sandoval		1	9.6	Broken	Broken	2329.0	Y	26.5	Y	2329.0 hrs
Jaquez		3	-	-	-	-	N	29	Y	System won't start.
AL Elliott		5	106.2	-8	-11	1951.3	Y	32	Y	1951.3 hrs
GCU W180		All	-	-	-	4510.2	Y	-	-	2.5 psi 165° Temp 1) 0.5 2) 0.5 3) 1.0 4) 0.5
Heaton		unk	104.3	-53	-	-	Y	Dry	N	
Mudge B12R		1	122.3	-44	-29	-	Y	31.5	Y	
Mudge A002	✓	2	69.3	-59	-	-	N	31	N	water below port. restarted system.

Notes:

SVE - Soil Vapor Extraction

OVM - Organic Vapor Monitoring

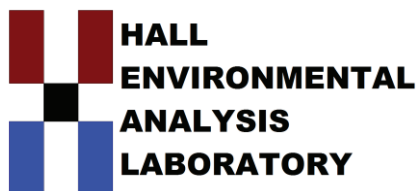
ppm- parts per million

H2O"- inches water

cfm- cubic feet per minute

bTOD- below top of drum

Prain valve
still leaking45 10.2 hrs
psi



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

RECEIVED

By Mike Buchanan at 3:53 pm, Sep 13, 2023

March 23, 2023

Kyle Siesser

Cottonwood Consulting LLC

PO BOX 1653

Durango, CO 81302

TEL: (970) 764-7356

FAX:

RE: Sandoval GCA 001A

OrderNo.: 2303591

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/10/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman'.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2303591

Date Reported: 3/23/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Client Sample ID: SVE

Project: Sandoval GCA 001A

Collection Date: 3/9/2023 10:45:00 AM

Lab ID: 2303591-001

Matrix: AIR

Received Date: 3/10/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: CCM
Benzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Toluene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Ethylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Naphthalene	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
1-Methylnaphthalene	ND	0.40		µg/L	1	3/16/2023 1:30:00 PM
2-Methylnaphthalene	ND	0.40		µg/L	1	3/16/2023 1:30:00 PM
Acetone	ND	1.0		µg/L	1	3/16/2023 1:30:00 PM
Bromobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Bromodichloromethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Bromoform	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Bromomethane	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
2-Butanone	ND	1.0		µg/L	1	3/16/2023 1:30:00 PM
Carbon disulfide	ND	1.0		µg/L	1	3/16/2023 1:30:00 PM
Carbon tetrachloride	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Chlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Chloroethane	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
Chloroform	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Chloromethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
2-Chlorotoluene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
4-Chlorotoluene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
cis-1,2-DCE	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
Dibromochloromethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Dibromomethane	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
1,2-Dichlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,3-Dichlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,4-Dichlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Dichlorodifluoromethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1-Dichloroethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1-Dichloroethene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2-Dichloropropane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,3-Dichloropropane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
2,2-Dichloropropane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of 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

Page 1 of 5

Analytical Report

Lab Order 2303591

Date Reported: 3/23/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Client Sample ID: SVE

Project: Sandoval GCA 001A

Collection Date: 3/9/2023 10:45:00 AM

Lab ID: 2303591-001

Matrix: AIR

Received Date: 3/10/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: CCM
1,1-Dichloropropene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Hexachlorobutadiene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
2-Hexanone	ND	1.0		µg/L	1	3/16/2023 1:30:00 PM
Isopropylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
4-Isopropyltoluene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
4-Methyl-2-pentanone	ND	1.0		µg/L	1	3/16/2023 1:30:00 PM
Methylene chloride	ND	0.30		µg/L	1	3/16/2023 1:30:00 PM
n-Butylbenzene	ND	0.30		µg/L	1	3/16/2023 1:30:00 PM
n-Propylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
sec-Butylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Styrene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
tert-Butylbenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
trans-1,2-DCE	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1,1-Trichloroethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,1,2-Trichloroethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Trichloroethene (TCE)	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Trichlorofluoromethane	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
1,2,3-Trichloropropane	ND	0.20		µg/L	1	3/16/2023 1:30:00 PM
Vinyl chloride	ND	0.10		µg/L	1	3/16/2023 1:30:00 PM
Xylenes, Total	ND	0.15		µg/L	1	3/16/2023 1:30:00 PM
Surr: Dibromofluoromethane	92.2	70-130		%Rec	1	3/16/2023 1:30:00 PM
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%Rec	1	3/16/2023 1:30:00 PM
Surr: Toluene-d8	101	70-130		%Rec	1	3/16/2023 1:30:00 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	3/16/2023 1:30:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		µg/L	1	3/16/2023 1:30:00 PM
Surr: BFB	100	70-130		%Rec	1	3/16/2023 1:30:00 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of 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

Page 2 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2303591

23-Mar-23

Client: Cottonwood Consulting LLC

Project: Sandoval GCA 001A

Sample ID: 2303591-001adup	SampType: DUP	TestCode: EPA Method 8260B: Volatiles								
Client ID: SVE	Batch ID: R95327	RunNo: 95327								
Prep Date:	Analysis Date: 3/16/2023	SeqNo: 3447871	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 Quantitative 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

Page 3 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2303591

23-Mar-23

Client: Cottonwood Consulting LLC

Project: Sandoval GCA 001A

Sample ID: 2303591-001adup		SampType: DUP		TestCode: EPA Method 8260B: Volatiles						
Client ID: SVE	Batch ID: R95327			RunNo: 95327						
Prep Date:	Analysis Date: 3/16/2023			SeqNo: 3447871		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	0.92		1.000		92.1	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.88		1.000		88.2	70	130	0	0	
Surr: Toluene-d8	0.99		1.000		98.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	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 Quantitative 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#: 2303591

23-Mar-23

Client: Cottonwood Consulting LLC

Project: Sandoval GCA 001A

Sample ID: 2303591-001adup		SampType: DUP		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SVE		Batch ID: G95327		RunNo: 95327						
Prep Date:		Analysis Date: 3/16/2023		SeqNo: 3447869		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0						0	20	
Surr: BFB	990		1000		99.2	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 Quantitative 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



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: 2303591

RcptNo: 1

Received By: Tracy Casarrubias 3/10/2023 7:10:00 AM

Completed By: Tracy Casarrubias 3/10/2023 8:45:27 AM

Reviewed By: *ju 3/10/23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☒ NA ☐ *3/10/23*
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☐ NA ☒
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *KPR 3-10-23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

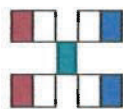
Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

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



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Chain-of-Custody Record

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Mudge B #012R - on sandoval GFA#001A

Project #:

email or Fax#: kssiesser@cottonwoodconsulting.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)[illegible]

Date	Time	Matrix	Sample Name
------	------	--------	-------------

AID		

DATE	AIR	SVE
3/9/28	1000	

Date:	Time:	Relinquished by:
-------	-------	------------------

2/10/20

Date:	Time:	Relinquished by:
-------	-------	------------------

三

Received by: _____, Via: _____

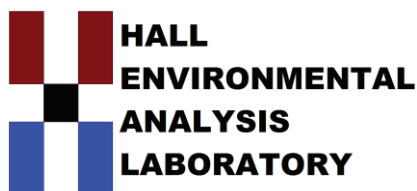
3/10

Received by: Via.

1

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 9/13/2023 4:28:24 PM



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

RECEIVED

By Mike Buchanan at 3:56 pm, Sep 13, 2023

July 07, 2023

Kyle Siesser

Cottonwood Consulting LLC

PO BOX 1653

Durango, CO 81302

TEL: (970) 764-7356

FAX

RE: Sandoval GCA 001A

OrderNo.: 2306D65

Dear Kyle Siesser:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/27/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2306D65

Date Reported: 7/7/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Client Sample ID: SVE

Project: Sandoval GCA 001A

Collection Date: 6/21/2023 3:20:00 PM

Lab ID: 2306D65-001

Matrix: AIR

Received Date: 6/27/2023 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: CCM
Benzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Toluene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Ethylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2,4-Trimethylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,3,5-Trimethylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2-Dichloroethane (EDC)	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2-Dibromoethane (EDB)	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Naphthalene	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
1-Methylnaphthalene	ND	0.40		µg/L	1	6/28/2023 1:48:00 PM
2-Methylnaphthalene	ND	0.40		µg/L	1	6/28/2023 1:48:00 PM
Acetone	ND	1.0		µg/L	1	6/28/2023 1:48:00 PM
Bromobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Bromodichloromethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Bromoform	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Bromomethane	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
2-Butanone	ND	1.0		µg/L	1	6/28/2023 1:48:00 PM
Carbon disulfide	ND	1.0		µg/L	1	6/28/2023 1:48:00 PM
Carbon tetrachloride	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Chlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Chloroethane	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
Chloroform	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Chloromethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
2-Chlorotoluene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
4-Chlorotoluene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
cis-1,2-DCE	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
cis-1,3-Dichloropropene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2-Dibromo-3-chloropropane	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
Dibromochloromethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Dibromomethane	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
1,2-Dichlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,3-Dichlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,4-Dichlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Dichlorodifluoromethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1-Dichloroethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1-Dichloroethene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2-Dichloropropane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,3-Dichloropropane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
2,2-Dichloropropane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM

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

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

Page 1 of 2

Analytical Report

Lab Order 2306D65

Date Reported: 7/7/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cottonwood Consulting LLC

Client Sample ID: SVE

Project: Sandoval GCA 001A

Collection Date: 6/21/2023 3:20:00 PM

Lab ID: 2306D65-001

Matrix: AIR

Received Date: 6/27/2023 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: CCM
1,1-Dichloropropene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Hexachlorobutadiene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
2-Hexanone	ND	1.0		µg/L	1	6/28/2023 1:48:00 PM
Isopropylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
4-Isopropyltoluene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
4-Methyl-2-pentanone	ND	1.0		µg/L	1	6/28/2023 1:48:00 PM
Methylene chloride	ND	0.30		µg/L	1	6/28/2023 1:48:00 PM
n-Butylbenzene	ND	0.30		µg/L	1	6/28/2023 1:48:00 PM
n-Propylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
sec-Butylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Styrene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
tert-Butylbenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1,1,2-Tetrachloroethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1,2,2-Tetrachloroethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Tetrachloroethene (PCE)	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
trans-1,2-DCE	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
trans-1,3-Dichloropropene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2,3-Trichlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2,4-Trichlorobenzene	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1,1-Trichloroethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,1,2-Trichloroethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Trichloroethene (TCE)	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Trichlorofluoromethane	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
1,2,3-Trichloropropane	ND	0.20		µg/L	1	6/28/2023 1:48:00 PM
Vinyl chloride	ND	0.10		µg/L	1	6/28/2023 1:48:00 PM
Xylenes, Total	0.16	0.15		µg/L	1	6/28/2023 1:48:00 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/28/2023 1:48:00 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	6/28/2023 1:48:00 PM
Surr: Toluene-d8	96.3	70-130		%Rec	1	6/28/2023 1:48:00 PM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/28/2023 1:48:00 PM

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

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

Page 2 of 2



ANALYTICAL SUMMARY REPORT

July 06, 2023

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

Work Order: B23062505 Quote ID: B15626

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 6/29/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B23062505-001	2306D65-001A, SVE	06/21/23 15:20	06/29/23	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond./1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

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

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

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

Report Approved By:

Cindy Rohrer
Laboratory Manager

Digitally signed by
Cindy Rohrer
Date: 2023.07.06 14:15:45 -06:00



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

Billings, MT 406.252.6325 • Casper, WY 307.235.0515
Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B23062505-001
Client Sample ID: 2306D65-001A, SVE

Report Date: 07/06/23
Collection Date: 06/21/23 15:20
Date Received: 06/29/23
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.88	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Nitrogen	78.07	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Carbon Dioxide	0.05	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	06/30/23 09:56 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	06/30/23 09:56 / jrj

CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	ND		1		GPA 2261-95	06/30/23 09:56 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND		1		GPA 2261-95	06/30/23 09:56 / jrj
Pseudo-critical Pressure, psia	545		1		GPA 2261-95	06/30/23 09:56 / jrj
Pseudo-critical Temperature, deg R	239		1		GPA 2261-95	06/30/23 09:56 / jrj
Specific Gravity @ 60/60F	0.998		0.001		D3588-81	06/30/23 09:56 / jrj
Air, %	99.95		0.01		GPA 2261-95	06/30/23 09:56 / jrj

- The analysis was not corrected for air.

COMMENTS

-	-	06/30/23 09:56 / 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 RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Work Order: B23062505

Report Date: 07/06/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95									Batch: R404747	
Lab ID: B23062510-001ADUP	12 Sample Duplicate					Run: GCNGA-B_230630A			06/30/23 12:12	
Oxygen		21.6	Mol %	0.01				0	20	
Nitrogen		77.8	Mol %	0.01				0	20	
Carbon Dioxide		0.38	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		0.25	Mol %	0.01				4.1	20	
Lab ID: LCS063023	11 Laboratory Control Sample					Run: GCNGA-B_230630A			06/30/23 12:48	
Oxygen		0.59	Mol %	0.01	118	70	130			
Nitrogen		6.05	Mol %	0.01	101	70	130			
Carbon Dioxide		1.00	Mol %	0.01	101	70	130			
Methane		74.4	Mol %	0.01	99	70	130			
Ethane		6.02	Mol %	0.01	100	70	130			
Propane		5.20	Mol %	0.01	105	70	130			
Isobutane		1.99	Mol %	0.01	99	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.00	Mol %	0.01	100	70	130			
n-Pentane		1.01	Mol %	0.01	101	70	130			
Hexanes plus		0.79	Mol %	0.01	99	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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

Billings, MT 406.252.6325 • Casper, WY 307.235.0515
Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

Work Order Receipt Checklist

Hall Environmental

B23062505

Login completed by: Yvonna E. Smith

Date Received: 6/29/2023

Reviewed by: cindy

Received by: htm

Reviewed Date: 7/5/2023

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☒	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☒	Not Applicable ☐
Container/Temp Blank temperature:	17.8°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Standard Reporting Procedures:

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

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

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

Contact and Corrective Action Comments:

None



CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

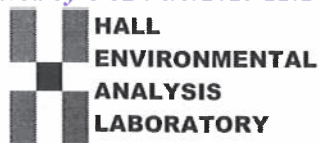
Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRACTOR: Energy Labs -Billings		COMPANY: Energy Laboratories		PHONE: (406) 869-6253	FAX: (406) 252-6069
ADDRESS: 1120 South 27th Street		ACCOUNT #:			
CITY, STATE, ZIP: Billings, MT 59107					
ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE
1	2306D65-001A	SVE	TEDLAR	Air	6/21/2023 3:20:00 PM
# CONTAINERS					1
ANALYTICAL COMMENTS					B23002505
1 Natural Gas Analysis 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: 6/27/2023	Time: 10:48 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 6/29/23	Time: 10:05
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
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: 2306D65

RcptNo: 1

Received By: Joseph Alderette 6/27/2023 8:40:00 AM

Completed By: Desiree Dominguez 6/27/2023 10:46:54 AM

Reviewed By: *SM 6/27/23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

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

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by *SM 06/27/23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Yes	NA		

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 GCA #001A

Project #:

Project Manager:

Kyle Siesser

Sampler: Joseph LaFortune

On Ice: ☐ Yes ☒ No

of Coolers: 1

Cooler Temp (including CF): N/A

Container Type and #

tedlar bag - 1

Preservative Type

NA

HEAL No.

2306D05

-001

TPH:8015D(GRO / DRO / MRO)

BTEX / MTBE / TMB's (8021)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

TPH (8015) / CO₂

02

X

Date: 6/26/23 0900

Time: 0900

Relinquished by: Joseph LaFortune

Relinquished by: Joseph LaFortune

Received by: J LaFortune

Via: FedEx

Date: 6-27-23

Time: 8:40

Received by: J LaFortune

Via: FedEx

Date: 6-27-23

Time: 8:40

Remarks:

please cc emillar@cottonwoodconsulting.com

jlafortune@cottonwoodconsulting.com

Custody Seal present and intact

6-27-23

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 247793

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID:
	329736
	Action Number:
	247793
Action Type:	
[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)	

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	SVE Field Forms received for SIMCOE LLC multiple sights, January through June of 2023. First quarter and second quarter volatile lab analysis received for SVE System. Continue to operate SVE system and perform O&M maintenance as needed. Submit next quarter reports by March 2024.	9/13/2023