



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kyle Siesser
Cottonwood Consulting LLC
PO BOX 1653
Durango, Colorado 81302

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JOB DESCRIPTION

Jacuez GC B #003E

JOB NUMBER

885-1983-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Laboratory Job ID: 885-1983-1

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Definitions/Glossary

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cottonwood Consulting LLC
Project: Jacuez GC B #003E

Job ID: 885-1983-1

Job ID: 885-1983-1

Eurofins Albuquerque

Job Narrative 885-1983-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 3/28/2024 7:08 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.1°C.

Subcontract Work

Method Natural Gases O2, CO2: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Client Sample ID: SVE

Lab Sample ID: 885-1983-1

Date Collected: 03/27/24 13:30

Matrix: Air

Date Received: 03/28/24 07:08

Sample Container: Tedlar Bag 1L

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			04/05/24 16:09	1
1,1,1-Trichloroethane	ND		0.10	ug/L			04/05/24 16:09	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			04/05/24 16:09	1
1,1,2-Trichloroethane	ND		0.10	ug/L			04/05/24 16:09	1
1,1-Dichloroethane	ND		0.10	ug/L			04/05/24 16:09	1
1,1-Dichloroethene	ND		0.10	ug/L			04/05/24 16:09	1
1,1-Dichloropropene	ND		0.10	ug/L			04/05/24 16:09	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
1,2,3-Trichloropropane	ND		0.20	ug/L			04/05/24 16:09	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			04/05/24 16:09	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			04/05/24 16:09	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			04/05/24 16:09	1
1,2-Dichlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			04/05/24 16:09	1
1,2-Dichloropropane	ND		0.10	ug/L			04/05/24 16:09	1
1,3,5-Trimethylbenzene	0.60		0.10	ug/L			04/05/24 16:09	1
1,3-Dichlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
1,3-Dichloropropane	ND		0.10	ug/L			04/05/24 16:09	1
1,4-Dichlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
1-Methylnaphthalene	ND		0.40	ug/L			04/05/24 16:09	1
2,2-Dichloropropane	ND		0.20	ug/L			04/05/24 16:09	1
2-Butanone	ND		1.0	ug/L			04/05/24 16:09	1
2-Chlorotoluene	ND		0.10	ug/L			04/05/24 16:09	1
2-Hexanone	ND		1.0	ug/L			04/05/24 16:09	1
2-Methylnaphthalene	ND		0.40	ug/L			04/05/24 16:09	1
4-Chlorotoluene	ND		0.10	ug/L			04/05/24 16:09	1
4-Isopropyltoluene	ND		0.10	ug/L			04/05/24 16:09	1
4-Methyl-2-pentanone	ND		1.0	ug/L			04/05/24 16:09	1
Acetone	ND		1.0	ug/L			04/05/24 16:09	1
Benzene	ND		0.10	ug/L			04/05/24 16:09	1
Bromobenzene	ND		0.10	ug/L			04/05/24 16:09	1
Bromodichloromethane	ND		0.10	ug/L			04/05/24 16:09	1
Dibromochloromethane	ND		0.10	ug/L			04/05/24 16:09	1
Bromoform	ND		0.10	ug/L			04/05/24 16:09	1
Bromomethane	ND		0.30	ug/L			04/05/24 16:09	1
Carbon disulfide	ND		1.0	ug/L			04/05/24 16:09	1
Carbon tetrachloride	ND		0.10	ug/L			04/05/24 16:09	1
Chlorobenzene	ND		0.10	ug/L			04/05/24 16:09	1
Chloroethane	ND		0.20	ug/L			04/05/24 16:09	1
Chloroform	ND		0.10	ug/L			04/05/24 16:09	1
Chloromethane	ND		0.30	ug/L			04/05/24 16:09	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			04/05/24 16:09	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			04/05/24 16:09	1
Dibromomethane	ND		0.10	ug/L			04/05/24 16:09	1
Dichlorodifluoromethane	ND		0.10	ug/L			04/05/24 16:09	1
Ethylbenzene	ND		0.10	ug/L			04/05/24 16:09	1
Hexachlorobutadiene	ND		0.10	ug/L			04/05/24 16:09	1

Eurofins Albuquerque

Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Client Sample ID: SVE
Date Collected: 03/27/24 13:30
Date Received: 03/28/24 07:08
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-1983-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Isopropylbenzene	ND		0.10	ug/L			04/05/24 16:09	1	
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			04/05/24 16:09	1	
Methylene Chloride	ND		0.30	ug/L			04/05/24 16:09	1	
n-Butylbenzene	ND		0.30	ug/L			04/05/24 16:09	1	
N-Propylbenzene	ND		0.10	ug/L			04/05/24 16:09	1	
Naphthalene	ND		0.20	ug/L			04/05/24 16:09	1	
sec-Butylbenzene	ND		0.10	ug/L			04/05/24 16:09	1	
Styrene	ND		0.10	ug/L			04/05/24 16:09	1	
tert-Butylbenzene	ND		0.10	ug/L			04/05/24 16:09	1	
Tetrachloroethene (PCE)	ND		0.10	ug/L			04/05/24 16:09	1	
Toluene	ND		0.10	ug/L			04/05/24 16:09	1	
trans-1,2-Dichloroethene	ND		0.10	ug/L			04/05/24 16:09	1	
trans-1,3-Dichloropropene	ND		0.10	ug/L			04/05/24 16:09	1	
Trichloroethene (TCE)	ND		0.10	ug/L			04/05/24 16:09	1	
Trichlorofluoromethane	ND		0.10	ug/L			04/05/24 16:09	1	
Vinyl chloride	ND		0.10	ug/L			04/05/24 16:09	1	
Xylenes, Total	0.21		0.15	ug/L			04/05/24 16:09	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				04/05/24 16:09	1	
Toluene-d8 (Surr)	106		70 - 130				04/05/24 16:09	1	
4-Bromofluorobenzene (Surr)	112		70 - 130				04/05/24 16:09	1	
Dibromofluoromethane (Surr)	99		70 - 130				04/05/24 16:09	1	

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-2920/3

Matrix: Air

Analysis Batch: 2920

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			04/05/24 14:07	1
1,1,1-Trichloroethane	ND		0.10	ug/L			04/05/24 14:07	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			04/05/24 14:07	1
1,1,2-Trichloroethane	ND		0.10	ug/L			04/05/24 14:07	1
1,1-Dichloroethane	ND		0.10	ug/L			04/05/24 14:07	1
1,1-Dichloroethene	ND		0.10	ug/L			04/05/24 14:07	1
1,1-Dichloropropene	ND		0.10	ug/L			04/05/24 14:07	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,2,3-Trichloropropane	ND		0.20	ug/L			04/05/24 14:07	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			04/05/24 14:07	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			04/05/24 14:07	1
1,2-Dichlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			04/05/24 14:07	1
1,2-Dichloropropane	ND		0.10	ug/L			04/05/24 14:07	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,3-Dichlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
1,3-Dichloropropane	ND		0.10	ug/L			04/05/24 14:07	1
1,4-Dichlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
1-Methylnaphthalene	ND		0.40	ug/L			04/05/24 14:07	1
2,2-Dichloropropane	ND		0.20	ug/L			04/05/24 14:07	1
2-Butanone	ND		1.0	ug/L			04/05/24 14:07	1
2-Chlorotoluene	ND		0.10	ug/L			04/05/24 14:07	1
2-Hexanone	ND		1.0	ug/L			04/05/24 14:07	1
2-Methylnaphthalene	ND		0.40	ug/L			04/05/24 14:07	1
4-Chlorotoluene	ND		0.10	ug/L			04/05/24 14:07	1
4-Isopropyltoluene	ND		0.10	ug/L			04/05/24 14:07	1
4-Methyl-2-pentanone	ND		1.0	ug/L			04/05/24 14:07	1
Acetone	ND		1.0	ug/L			04/05/24 14:07	1
Benzene	ND		0.10	ug/L			04/05/24 14:07	1
Bromobenzene	ND		0.10	ug/L			04/05/24 14:07	1
Bromodichloromethane	ND		0.10	ug/L			04/05/24 14:07	1
Dibromochloromethane	ND		0.10	ug/L			04/05/24 14:07	1
Bromoform	ND		0.10	ug/L			04/05/24 14:07	1
Bromomethane	ND		0.30	ug/L			04/05/24 14:07	1
Carbon disulfide	ND		1.0	ug/L			04/05/24 14:07	1
Carbon tetrachloride	ND		0.10	ug/L			04/05/24 14:07	1
Chlorobenzene	ND		0.10	ug/L			04/05/24 14:07	1
Chloroethane	ND		0.20	ug/L			04/05/24 14:07	1
Chloroform	ND		0.10	ug/L			04/05/24 14:07	1
Chloromethane	ND		0.30	ug/L			04/05/24 14:07	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			04/05/24 14:07	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			04/05/24 14:07	1
Dibromomethane	ND		0.10	ug/L			04/05/24 14:07	1
Dichlorodifluoromethane	ND		0.10	ug/L			04/05/24 14:07	1
Ethylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
Hexachlorobutadiene	ND		0.10	ug/L			04/05/24 14:07	1

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QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-2920/3

Matrix: Air

Analysis Batch: 2920

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			04/05/24 14:07	1
Methylene Chloride	ND		0.30	ug/L			04/05/24 14:07	1
n-Butylbenzene	ND		0.30	ug/L			04/05/24 14:07	1
N-Propylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
Naphthalene	ND		0.20	ug/L			04/05/24 14:07	1
sec-Butylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
Styrene	ND		0.10	ug/L			04/05/24 14:07	1
tert-Butylbenzene	ND		0.10	ug/L			04/05/24 14:07	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			04/05/24 14:07	1
Toluene	ND		0.10	ug/L			04/05/24 14:07	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			04/05/24 14:07	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			04/05/24 14:07	1
Trichloroethene (TCE)	ND		0.10	ug/L			04/05/24 14:07	1
Trichlorofluoromethane	ND		0.10	ug/L			04/05/24 14:07	1
Vinyl chloride	ND		0.10	ug/L			04/05/24 14:07	1
Xylenes, Total	ND		0.15	ug/L			04/05/24 14:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		04/05/24 14:07	1
Toluene-d8 (Surr)	98		70 - 130		04/05/24 14:07	1
4-Bromofluorobenzene (Surr)	99		70 - 130		04/05/24 14:07	1
Dibromofluoromethane (Surr)	102		70 - 130		04/05/24 14:07	1

Lab Sample ID: LCS 885-2920/2

Matrix: Air

Analysis Batch: 2920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.1	19.1		ug/L		95	
Benzene	20.1	20.5		ug/L		102	
Chlorobenzene	20.1	21.0		ug/L		105	
Toluene	20.2	20.7		ug/L		102	
Trichloroethene (TCE)	20.2	19.4		ug/L		96	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Toluene-d8 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Eurofins Albuquerque

QC Association Summary

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

GC/MS VOA

Analysis Batch: 2920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1983-1	SVE	Total/NA	Air	8260B	
MB 885-2920/3	Method Blank	Total/NA	Air	8260B	
LCS 885-2920/2	Lab Control Sample	Total/NA	Air	8260B	

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Lab Chronicle

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Client Sample ID: SVE
Date Collected: 03/27/24 13:30
Date Received: 03/28/24 07:08

Lab Sample ID: 885-1983-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	2920	CM	EET ALB	04/05/24 16:09

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59107

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
-----------	---------	-----------------------	-----------------

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Oregon

NELAP

NM100001

02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jacuez GC B #003E

Job ID: 885-1983-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
-----------	---------	-----------------------	-----------------

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Eurofins Albuquerque



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ANALYTICAL SUMMARY REPORT

April 10, 2024

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

Work Order: B24031830 Quote ID: B15626

Project Name: Jacuez GC B #003E, 88501577

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 3/29/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24031830-001	SVE (885-1983-1)	03/27/24 13:30	03/29/24	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: Jacuez GC B #003E, 88501577
Lab ID: B24031830-001
Client Sample ID: SVE (885-1983-1)

Report Date: 04/10/24
Collection Date: 03/27/24 13:30
Date Received: 03/29/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.55	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Nitrogen	78.09	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Carbon Dioxide	0.35	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Hexanes plus	0.01	Mol %		0.01		GPA 2261-95	04/01/24 01:48 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
Hexanes plus	0.004	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
GPM Total	0.004	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
GPM Pentanes plus	0.004	gpm		0.001		GPA 2261-95	04/01/24 01:48 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	04/01/24 01:48 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	04/01/24 01:48 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-95	04/01/24 01:48 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	04/01/24 01:48 / jrj
Specific Gravity @ 60/60F	0.999			0.001		D3588-81	04/01/24 01:48 / jrj
Air, %	98.47			0.01		GPA 2261-95	04/01/24 01:48 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-							04/01/24 01:48 / 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: B24031830

Report Date: 04/10/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R419039
Lab ID: B24031829-001ADUP	12	Sample Duplicate				Run: GCNGA-B_240401A				04/01/24 12:31
Oxygen		21.6	Mol %	0.01				1.7	20	
Nitrogen		78.4	Mol %	0.01				0.5	20	
Carbon Dioxide		0.04	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		0.01	Mol %	0.01				0.0	20	
Lab ID: LCS040124										
	11	Laboratory Control Sample				Run: GCNGA-B_240401A				04/01/24 02:37
Oxygen		0.65	Mol %	0.01	130	70	130			
Nitrogen		6.34	Mol %	0.01	106	70	130			
Carbon Dioxide		0.98	Mol %	0.01	99	70	130			
Methane		74.5	Mol %	0.01	100	70	130			
Ethane		6.02	Mol %	0.01	100	70	130			
Propane		5.00	Mol %	0.01	101	70	130			
Isobutane		1.74	Mol %	0.01	87	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.00	Mol %	0.01	100	70	130			
n-Pentane		1.00	Mol %	0.01	100	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)

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Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

Work Order Receipt Checklist

Hall Environmental

B24031830

Login completed by: Crystal M. Jones

Date Received: 3/29/2024

Reviewed by: dharris

Received by: CMJ

Reviewed Date: 4/1/2024

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:	15.6°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.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Contact and Corrective Action Comments:

None

Eurofins Albuquerque

4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax:

Chain of Custody Record



Environment Testing

[illegible]

ICOC No:
885-257

Containers

<u>Count</u> 1	<u>Container Type</u> Tedlar Bag 1L	<u>Preservative</u> None
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Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (Natural Gases O2, CO2)	Fixed Gases - Natural Gases O2, CO2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Login Sample Receipt Checklist

Client: Cottonwood Consulting LLC

Job Number: 885-1983-1

Login Number: 1983

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	



Environment Testing

1

2

3

4

5

6

7

8

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12

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kyle Siesser
Cottonwood Consulting LLC
PO BOX 1653
Durango, Colorado 81302

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JOB DESCRIPTION

Jaquez GC B #003E

JOB NUMBER

885-6337-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)345-3975

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Revision 1

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Laboratory Job ID: 885-6337-1

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Definitions/Glossary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⬮	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cottonwood Consulting LLC
Project: Jaquez GC B #003E

Job ID: 885-6337-1

Job ID: 885-6337-1Eurofins Albuquerque

Job Narrative
885-6337-1

REVISION

The report being provided is a revision of the original report sent on 7/5/2024. The report (revision 1) is being revised due to The MB doesn't reflect the correct reporting levels.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 6/14/2024 7:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 25.3°C.

Subcontract Work

Method Natural Gases O2, CO2: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Client Sample ID: SVE

Lab Sample ID: 885-6337-1

Date Collected: 06/13/24 12:45

Matrix: Air

Date Received: 06/14/24 07:00

Sample Container: Tedlar Bag 1L

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			06/27/24 17:33	1
1,1,1-Trichloroethane	ND		0.10	ug/L			06/27/24 17:33	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			06/27/24 17:33	1
1,1,2-Trichloroethane	ND		0.10	ug/L			06/27/24 17:33	1
1,1-Dichloroethane	ND		0.10	ug/L			06/27/24 17:33	1
1,1-Dichloroethene	ND		0.10	ug/L			06/27/24 17:33	1
1,1-Dichloropropene	ND		0.10	ug/L			06/27/24 17:33	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
1,2,3-Trichloropropane	ND		0.20	ug/L			06/27/24 17:33	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			06/27/24 17:33	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			06/27/24 17:33	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			06/27/24 17:33	1
1,2-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			06/27/24 17:33	1
1,2-Dichloropropane	ND		0.10	ug/L			06/27/24 17:33	1
1,3,5-Trimethylbenzene	0.51		0.10	ug/L			06/27/24 17:33	1
1,3-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
1,3-Dichloropropane	ND		0.10	ug/L			06/27/24 17:33	1
1,4-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
1-Methylnaphthalene	ND		0.40	ug/L			06/27/24 17:33	1
2,2-Dichloropropane	ND		0.20	ug/L			06/27/24 17:33	1
2-Butanone	ND		1.0	ug/L			06/27/24 17:33	1
2-Chlorotoluene	ND		0.10	ug/L			06/27/24 17:33	1
2-Hexanone	ND		1.0	ug/L			06/27/24 17:33	1
2-Methylnaphthalene	ND		0.40	ug/L			06/27/24 17:33	1
4-Chlorotoluene	ND		0.10	ug/L			06/27/24 17:33	1
4-Isopropyltoluene	ND		0.10	ug/L			06/27/24 17:33	1
4-Methyl-2-pentanone	ND		1.0	ug/L			06/27/24 17:33	1
Acetone	ND		1.0	ug/L			06/27/24 17:33	1
Benzene	ND		0.10	ug/L			06/27/24 17:33	1
Bromobenzene	ND		0.10	ug/L			06/27/24 17:33	1
Bromodichloromethane	ND		0.10	ug/L			06/27/24 17:33	1
Dibromochloromethane	ND		0.10	ug/L			06/27/24 17:33	1
Bromoform	ND		0.10	ug/L			06/27/24 17:33	1
Bromomethane	ND		0.30	ug/L			06/27/24 17:33	1
Carbon disulfide	ND		1.0	ug/L			06/27/24 17:33	1
Carbon tetrachloride	ND		0.10	ug/L			06/27/24 17:33	1
Chlorobenzene	ND		0.10	ug/L			06/27/24 17:33	1
Chloroethane	ND		0.20	ug/L			06/27/24 17:33	1
Chloroform	ND		0.10	ug/L			06/27/24 17:33	1
Chloromethane	ND		0.30	ug/L			06/27/24 17:33	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			06/27/24 17:33	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			06/27/24 17:33	1
Dibromomethane	ND		0.10	ug/L			06/27/24 17:33	1
Dichlorodifluoromethane	ND		0.10	ug/L			06/27/24 17:33	1
Ethylbenzene	ND		0.10	ug/L			06/27/24 17:33	1
Hexachlorobutadiene	ND		0.10	ug/L			06/27/24 17:33	1

Eurofins Albuquerque

Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Client Sample ID: SVE
Date Collected: 06/13/24 12:45
Date Received: 06/14/24 07:00
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-6337-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Isopropylbenzene	ND		0.10	ug/L			06/27/24 17:33	1	
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			06/27/24 17:33	1	
Methylene Chloride	ND		0.30	ug/L			06/27/24 17:33	1	
n-Butylbenzene	ND		0.30	ug/L			06/27/24 17:33	1	
N-Propylbenzene	ND		0.10	ug/L			06/27/24 17:33	1	
Naphthalene	ND		0.20	ug/L			06/27/24 17:33	1	
sec-Butylbenzene	ND		0.10	ug/L			06/27/24 17:33	1	
Styrene	ND		0.10	ug/L			06/27/24 17:33	1	
tert-Butylbenzene	ND		0.10	ug/L			06/27/24 17:33	1	
Tetrachloroethene (PCE)	ND		0.10	ug/L			06/27/24 17:33	1	
Toluene	ND		0.10	ug/L			06/27/24 17:33	1	
trans-1,2-Dichloroethene	ND		0.10	ug/L			06/27/24 17:33	1	
trans-1,3-Dichloropropene	ND		0.10	ug/L			06/27/24 17:33	1	
Trichloroethene (TCE)	ND		0.10	ug/L			06/27/24 17:33	1	
Trichlorofluoromethane	ND		0.10	ug/L			06/27/24 17:33	1	
Vinyl chloride	ND		0.10	ug/L			06/27/24 17:33	1	
Xylenes, Total	0.20		0.15	ug/L			06/27/24 17:33	1	

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				06/27/24 17:33	1	
Toluene-d8 (Surr)	101		70 - 130				06/27/24 17:33	1	
4-Bromofluorobenzene (Surr)	107		70 - 130				06/27/24 17:33	1	
Dibromofluoromethane (Surr)	104		70 - 130				06/27/24 17:33	1	

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-7511/28

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			06/27/24 17:09	1
1,1,1-Trichloroethane	ND		0.10	ug/L			06/27/24 17:09	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			06/27/24 17:09	1
1,1,2-Trichloroethane	ND		0.10	ug/L			06/27/24 17:09	1
1,1-Dichloroethane	ND		0.10	ug/L			06/27/24 17:09	1
1,1-Dichloroethene	ND		0.10	ug/L			06/27/24 17:09	1
1,1-Dichloropropene	ND		0.10	ug/L			06/27/24 17:09	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,2,3-Trichloropropane	ND		0.20	ug/L			06/27/24 17:09	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			06/27/24 17:09	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			06/27/24 17:09	1
1,2-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			06/27/24 17:09	1
1,2-Dichloropropane	ND		0.10	ug/L			06/27/24 17:09	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,3-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
1,3-Dichloropropane	ND		0.10	ug/L			06/27/24 17:09	1
1,4-Dichlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
1-Methylnaphthalene	ND		0.40	ug/L			06/27/24 17:09	1
2,2-Dichloropropane	ND		0.20	ug/L			06/27/24 17:09	1
2-Butanone	ND		1.0	ug/L			06/27/24 17:09	1
2-Chlorotoluene	ND		0.10	ug/L			06/27/24 17:09	1
2-Hexanone	ND		1.0	ug/L			06/27/24 17:09	1
2-Methylnaphthalene	ND		0.40	ug/L			06/27/24 17:09	1
4-Chlorotoluene	ND		0.10	ug/L			06/27/24 17:09	1
4-Isopropyltoluene	ND		0.10	ug/L			06/27/24 17:09	1
4-Methyl-2-pentanone	ND		1.0	ug/L			06/27/24 17:09	1
Acetone	ND		1.0	ug/L			06/27/24 17:09	1
Benzene	ND		0.10	ug/L			06/27/24 17:09	1
Bromobenzene	ND		0.10	ug/L			06/27/24 17:09	1
Bromodichloromethane	ND		0.10	ug/L			06/27/24 17:09	1
Dibromochloromethane	ND		0.10	ug/L			06/27/24 17:09	1
Bromoform	ND		0.10	ug/L			06/27/24 17:09	1
Bromomethane	ND		0.30	ug/L			06/27/24 17:09	1
Carbon disulfide	ND		1.0	ug/L			06/27/24 17:09	1
Carbon tetrachloride	ND		0.10	ug/L			06/27/24 17:09	1
Chlorobenzene	ND		0.10	ug/L			06/27/24 17:09	1
Chloroethane	ND		0.20	ug/L			06/27/24 17:09	1
Chloroform	ND		0.10	ug/L			06/27/24 17:09	1
Chloromethane	ND		0.30	ug/L			06/27/24 17:09	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			06/27/24 17:09	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			06/27/24 17:09	1
Dibromomethane	ND		0.10	ug/L			06/27/24 17:09	1
Dichlorodifluoromethane	ND		0.10	ug/L			06/27/24 17:09	1
Ethylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
Hexachlorobutadiene	ND		0.10	ug/L			06/27/24 17:09	1

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-7511/28

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			06/27/24 17:09	1
Methylene Chloride	ND		0.30	ug/L			06/27/24 17:09	1
n-Butylbenzene	ND		0.30	ug/L			06/27/24 17:09	1
N-Propylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
Naphthalene	ND		0.20	ug/L			06/27/24 17:09	1
sec-Butylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
Styrene	ND		0.10	ug/L			06/27/24 17:09	1
tert-Butylbenzene	ND		0.10	ug/L			06/27/24 17:09	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			06/27/24 17:09	1
Toluene	ND		0.10	ug/L			06/27/24 17:09	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			06/27/24 17:09	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			06/27/24 17:09	1
Trichloroethene (TCE)	ND		0.10	ug/L			06/27/24 17:09	1
Trichlorofluoromethane	ND		0.10	ug/L			06/27/24 17:09	1
Vinyl chloride	ND		0.10	ug/L			06/27/24 17:09	1
Xylenes, Total	ND		0.15	ug/L			06/27/24 17:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		06/27/24 17:09	1
Toluene-d8 (Surr)	95		70 - 130		06/27/24 17:09	1
4-Bromofluorobenzene (Surr)	95		70 - 130		06/27/24 17:09	1
Dibromofluoromethane (Surr)	105		70 - 130		06/27/24 17:09	1

Lab Sample ID: MB 885-7511/5

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			06/27/24 17:09	1
1,1,1-Trichloroethane	ND		1.0	ug/L			06/27/24 17:09	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			06/27/24 17:09	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/27/24 17:09	1
1,1-Dichloroethane	ND		1.0	ug/L			06/27/24 17:09	1
1,1-Dichloroethene	ND		1.0	ug/L			06/27/24 17:09	1
1,1-Dichloropropene	ND		1.0	ug/L			06/27/24 17:09	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,2,3-Trichloropropane	ND		2.0	ug/L			06/27/24 17:09	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/27/24 17:09	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			06/27/24 17:09	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			06/27/24 17:09	1
1,2-Dichloropropane	ND		1.0	ug/L			06/27/24 17:09	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
1,3-Dichloropropane	ND		1.0	ug/L			06/27/24 17:09	1

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-7511/5

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
1-Methylnaphthalene	ND		4.0	ug/L			06/27/24 17:09	1
2,2-Dichloropropane	ND		2.0	ug/L			06/27/24 17:09	1
2-Butanone	ND		10	ug/L			06/27/24 17:09	1
2-Chlorotoluene	ND		1.0	ug/L			06/27/24 17:09	1
2-Hexanone	ND		10	ug/L			06/27/24 17:09	1
2-Methylnaphthalene	ND		4.0	ug/L			06/27/24 17:09	1
4-Chlorotoluene	ND		1.0	ug/L			06/27/24 17:09	1
4-Isopropyltoluene	ND		1.0	ug/L			06/27/24 17:09	1
4-Methyl-2-pentanone	ND		10	ug/L			06/27/24 17:09	1
Acetone	ND		10	ug/L			06/27/24 17:09	1
Benzene	ND		1.0	ug/L			06/27/24 17:09	1
Bromobenzene	ND		1.0	ug/L			06/27/24 17:09	1
Bromodichloromethane	ND		1.0	ug/L			06/27/24 17:09	1
Dibromochloromethane	ND		1.0	ug/L			06/27/24 17:09	1
Bromoform	ND		1.0	ug/L			06/27/24 17:09	1
Bromomethane	ND		3.0	ug/L			06/27/24 17:09	1
Carbon disulfide	ND		10	ug/L			06/27/24 17:09	1
Carbon tetrachloride	ND		1.0	ug/L			06/27/24 17:09	1
Chlorobenzene	ND		1.0	ug/L			06/27/24 17:09	1
Chloroethane	ND		2.0	ug/L			06/27/24 17:09	1
Chloroform	ND		1.0	ug/L			06/27/24 17:09	1
Chloromethane	ND		3.0	ug/L			06/27/24 17:09	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/27/24 17:09	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			06/27/24 17:09	1
Dibromomethane	ND		1.0	ug/L			06/27/24 17:09	1
Dichlorodifluoromethane	ND		1.0	ug/L			06/27/24 17:09	1
Ethylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
Hexachlorobutadiene	ND		1.0	ug/L			06/27/24 17:09	1
Isopropylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			06/27/24 17:09	1
Methylene Chloride	ND		3.0	ug/L			06/27/24 17:09	1
n-Butylbenzene	ND		3.0	ug/L			06/27/24 17:09	1
N-Propylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
Naphthalene	ND		2.0	ug/L			06/27/24 17:09	1
sec-Butylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
Styrene	ND		1.0	ug/L			06/27/24 17:09	1
tert-Butylbenzene	ND		1.0	ug/L			06/27/24 17:09	1
Tetrachloroethene (PCE)	ND		1.0	ug/L			06/27/24 17:09	1
Toluene	ND		1.0	ug/L			06/27/24 17:09	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/27/24 17:09	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			06/27/24 17:09	1
Trichloroethene (TCE)	ND		1.0	ug/L			06/27/24 17:09	1
Trichlorofluoromethane	ND		1.0	ug/L			06/27/24 17:09	1
Vinyl chloride	ND		1.0	ug/L			06/27/24 17:09	1
Xylenes, Total	ND		1.5	ug/L			06/27/24 17:09	1

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-7511/5

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		06/27/24 17:09	1
Toluene-d8 (Surr)	95		70 - 130		06/27/24 17:09	1
4-Bromofluorobenzene (Surr)	95		70 - 130		06/27/24 17:09	1
Dibromofluoromethane (Surr)	105		70 - 130		06/27/24 17:09	1

Lab Sample ID: LCS 885-7511/3

Matrix: Air

Analysis Batch: 7511

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.1	21.9		ug/L		109	
Benzene	20.1	22.8		ug/L		113	
Chlorobenzene	20.1	22.9		ug/L		114	
Toluene	20.2	21.9		ug/L		108	
Trichloroethene (TCE)	20.2	22.1		ug/L		110	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
Toluene-d8 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130

Lab Sample ID: 885-6337-1 DU

Matrix: Air

Analysis Batch: 7511

Client Sample ID: SVE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,1-Trichloroethane	ND		ND		ug/L		NC	20
1,1,2,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,2-Trichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethene	ND		ND		ug/L		NC	20
1,1-Dichloropropene	ND		ND		ug/L		NC	20
1,2,3-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,3-Trichloropropane	ND		ND		ug/L		NC	20
1,2,4-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,4-Trimethylbenzene	ND		ND		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	ND		ND		ug/L		NC	20
1,2-Dibromoethane (EDB)	ND		ND		ug/L		NC	20
1,2-Dichlorobenzene	ND		ND		ug/L		NC	20
1,2-Dichloroethane (EDC)	ND		ND		ug/L		NC	20
1,2-Dichloropropane	ND		ND		ug/L		NC	20
1,3,5-Trimethylbenzene	0.51		0.482		ug/L		5	20
1,3-Dichlorobenzene	ND		ND		ug/L		NC	20
1,3-Dichloropropane	ND		ND		ug/L		NC	20
1,4-Dichlorobenzene	ND		ND		ug/L		NC	20
1-Methylnaphthalene	ND		ND		ug/L		NC	20

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 885-6337-1 DU
Matrix: Air
Analysis Batch: 7511

Client Sample ID: SVE
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
2,2-Dichloropropane	ND		ND		ug/L		NC	20
2-Butanone	ND		ND		ug/L		NC	20
2-Chlorotoluene	ND		ND		ug/L		NC	20
2-Hexanone	ND		ND		ug/L		NC	20
2-Methylnaphthalene	ND		ND		ug/L		NC	20
4-Chlorotoluene	ND		ND		ug/L		NC	20
4-Isopropyltoluene	ND		ND		ug/L		NC	20
4-Methyl-2-pentanone	ND		ND		ug/L		NC	20
Acetone	ND		ND		ug/L		NC	20
Benzene	ND		ND		ug/L		NC	20
Bromobenzene	ND		ND		ug/L		NC	20
Bromodichloromethane	ND		ND		ug/L		NC	20
Dibromochloromethane	ND		ND		ug/L		NC	20
Bromoform	ND		ND		ug/L		NC	20
Bromomethane	ND		ND		ug/L		NC	20
Carbon disulfide	ND		ND		ug/L		NC	20
Carbon tetrachloride	ND		ND		ug/L		NC	20
Chlorobenzene	ND		ND		ug/L		NC	20
Chloroethane	ND		ND		ug/L		NC	20
Chloroform	ND		ND		ug/L		NC	20
Chloromethane	ND		ND		ug/L		NC	20
cis-1,2-Dichloroethene	ND		ND		ug/L		NC	20
cis-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Dibromomethane	ND		ND		ug/L		NC	20
Dichlorodifluoromethane	ND		ND		ug/L		NC	20
Ethylbenzene	ND		ND		ug/L		NC	20
Hexachlorobutadiene	ND		ND		ug/L		NC	20
Isopropylbenzene	ND		ND		ug/L		NC	20
Methyl-tert-butyl Ether (MTBE)	ND		ND		ug/L		NC	20
Methylene Chloride	ND		ND		ug/L		NC	20
n-Butylbenzene	ND		ND		ug/L		NC	20
N-Propylbenzene	ND		ND		ug/L		NC	20
Naphthalene	ND		ND		ug/L		NC	20
sec-Butylbenzene	ND		ND		ug/L		NC	20
Styrene	ND		ND		ug/L		NC	20
tert-Butylbenzene	ND		ND		ug/L		NC	20
Tetrachloroethene (PCE)	ND		ND		ug/L		NC	20
Toluene	ND		ND		ug/L		NC	20
trans-1,2-Dichloroethene	ND		ND		ug/L		NC	20
trans-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Trichloroethene (TCE)	ND		ND		ug/L		NC	20
Trichlorofluoromethane	ND		ND		ug/L		NC	20
Vinyl chloride	ND		ND		ug/L		NC	20
Xylenes, Total	0.20		0.192		ug/L		4	20
DU DU								
Surrogate	%Recovery	Qualifier	Limits					
1,2-Dichloroethane-d4 (Surr)	99		70 - 130					
Toluene-d8 (Surr)	101		70 - 130					

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 885-6337-1 DU
Matrix: Air
Analysis Batch: 7511

Client Sample ID: SVE
Prep Type: Total/NA

Surrogate	DU		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

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QC Association Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

GC/MS VOA

Analysis Batch: 7511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6337-1	SVE	Total/NA	Air	8260B	
MB 885-7511/28	Method Blank	Total/NA	Air	8260B	
MB 885-7511/5	Method Blank	Total/NA	Air	8260B	
LCS 885-7511/3	Lab Control Sample	Total/NA	Air	8260B	
885-6337-1 DU	SVE	Total/NA	Air	8260B	

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Lab Chronicle

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Client Sample ID: SVE
Date Collected: 06/13/24 12:45
Date Received: 06/14/24 07:00

Lab Sample ID: 885-6337-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	7511	CM	EET ALB	06/27/24 17:33

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59101, TEL (406)252-6325

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Oregon

NELAP

NM100001

02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-6337-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total



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ANALYTICAL SUMMARY REPORT

June 21, 2024

Hall Environmental

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

Work Order: B24061614 Quote ID: B15626

Project Name: Jaquez GC B #003E, 88501577

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 6/18/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24061614-001	SVE (885-6337-1)	06/13/24 12:45	06/18/24	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 So. 27th Street, 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.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

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



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LABORATORY ANALYTICAL REPORT
Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Jaquez GC B #003E, 88501577
Lab ID: B24061614-001
Client Sample ID: SVE (885-6337-1)

Report Date: 06/21/24
Collection Date: 06/13/24 12:45
Date Received: 06/18/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	22.03	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Nitrogen	77.71	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Carbon Dioxide	0.22	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Hexanes plus	0.04	Mol %		0.01		GPA 2261-95	06/20/24 12:56 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
Hexanes plus	0.017	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
GPM Total	0.017	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
GPM Pentanes plus	0.017	gpm		0.001		GPA 2261-95	06/20/24 12:56 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	2			1		GPA 2261-95	06/20/24 12:56 / jrj
Net BTU per cu ft @ std cond. (LHV)	2			1		GPA 2261-95	06/20/24 12:56 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-95	06/20/24 12:56 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	06/20/24 12:56 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	06/20/24 12:56 / jrj
Air, %	100.67			0.01		GPA 2261-95	06/20/24 12:56 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-							06/20/24 12:56 / 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 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: B24061614

Report Date: 06/21/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R423193
Lab ID:	B24061715-001ADUP	12 Sample Duplicate			Run: GCNGA-B_240620A				06/20/24 11:19	
Oxygen		22.1	Mol %	0.01				0.5	20	
Nitrogen		77.7	Mol %	0.01				0.1	20	
Carbon Dioxide		0.20	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		0.05	Mol %	0.01				0.0	20	
Lab ID:	LCS062024	11 Laboratory Control Sample			Run: GCNGA-B_240620A				06/20/24 03:27	
Oxygen		0.64	Mol %	0.01	128	70	130			
Nitrogen		6.08	Mol %	0.01	101	70	130			
Carbon Dioxide		0.99	Mol %	0.01	100	70	130			
Methane		75.1	Mol %	0.01	100	70	130			
Ethane		6.09	Mol %	0.01	101	70	130			
Propane		5.04	Mol %	0.01	102	70	130			
Isobutane		1.45	Mol %	0.01	72	70	130			
n-Butane		1.99	Mol %	0.01	99	70	130			
Isopentane		0.95	Mol %	0.01	95	70	130			
n-Pentane		0.97	Mol %	0.01	97	70	130			
Hexanes plus		0.74	Mol %	0.01	93	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Work Order Receipt Checklist

Hall Environmental

B24061614

Login completed by: Danielle N. Harris

Date Received: 6/18/2024

Reviewed by: cindy

Received by: CMJ

Reviewed Date: 6/21/2024

Carrier name: FedEx NDA

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:	13.0°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.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Chain of Custody Record



Environment Testing

[illegible]

Ver: 04/02/2024

[illegible]

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.

Login Sample Receipt Checklist

Client: Cottonwood Consulting LLC

Job Number: 885-6337-1

Login Number: 6337
List Number: 1
Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kyle Siesser
Cottonwood Consulting LLC
PO BOX 1653
Durango, Colorado 81302
Generated 10/3/2024 12:29:49 PM

JOB DESCRIPTION

Jaquez GC B #003E

JOB NUMBER

885-12106-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Cheyenne Cason, Project Manager
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(505)345-3975

Generated
10/3/2024 12:29:49 PM

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Laboratory Job ID: 885-12106-1

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Definitions/Glossary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cottonwood Consulting LLC
Project: Jaquez GC B #003E

Job ID: 885-12106-1

Job ID: 885-12106-1

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Job Narrative 885-12106-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 9/19/2024 7:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 15.0°C.

Subcontract Work

Method Natural Gases O2, CO2: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Client Sample ID: SVE

Lab Sample ID: 885-12106-1

Date Collected: 09/18/24 12:30

Matrix: Air

Date Received: 09/19/24 07:00

Sample Container: Tedlar Bag 1L

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/26/24 16:36	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/26/24 16:36	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			09/26/24 16:36	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/26/24 16:36	1
1,1-Dichloroethane	ND		1.0	ug/L			09/26/24 16:36	1
1,1-Dichloroethene	ND		1.0	ug/L			09/26/24 16:36	1
1,1-Dichloropropene	ND		1.0	ug/L			09/26/24 16:36	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
1,2,3-Trichloropropane	ND		2.0	ug/L			09/26/24 16:36	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/26/24 16:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			09/26/24 16:36	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/26/24 16:36	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			09/26/24 16:36	1
1,2-Dichloropropane	ND		1.0	ug/L			09/26/24 16:36	1
1,3,5-Trimethylbenzene	3.3		1.0	ug/L			09/26/24 16:36	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
1,3-Dichloropropane	ND		1.0	ug/L			09/26/24 16:36	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
1-Methylnaphthalene	ND		4.0	ug/L			09/26/24 16:36	1
2,2-Dichloropropane	ND		2.0	ug/L			09/26/24 16:36	1
2-Butanone	ND		10	ug/L			09/26/24 16:36	1
2-Chlorotoluene	ND		1.0	ug/L			09/26/24 16:36	1
2-Hexanone	ND		10	ug/L			09/26/24 16:36	1
2-Methylnaphthalene	ND		4.0	ug/L			09/26/24 16:36	1
4-Chlorotoluene	ND		1.0	ug/L			09/26/24 16:36	1
4-Isopropyltoluene	ND		1.0	ug/L			09/26/24 16:36	1
4-Methyl-2-pentanone	ND		10	ug/L			09/26/24 16:36	1
Acetone	ND		10	ug/L			09/26/24 16:36	1
Benzene	ND		1.0	ug/L			09/26/24 16:36	1
Bromobenzene	ND		1.0	ug/L			09/26/24 16:36	1
Bromodichloromethane	ND		1.0	ug/L			09/26/24 16:36	1
Dibromochloromethane	ND		1.0	ug/L			09/26/24 16:36	1
Bromoform	ND		1.0	ug/L			09/26/24 16:36	1
Bromomethane	ND		3.0	ug/L			09/26/24 16:36	1
Carbon disulfide	ND		10	ug/L			09/26/24 16:36	1
Carbon tetrachloride	ND		1.0	ug/L			09/26/24 16:36	1
Chlorobenzene	ND		1.0	ug/L			09/26/24 16:36	1
Chloroethane	ND		2.0	ug/L			09/26/24 16:36	1
Chloroform	ND		1.0	ug/L			09/26/24 16:36	1
Chloromethane	ND		3.0	ug/L			09/26/24 16:36	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/26/24 16:36	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			09/26/24 16:36	1
Dibromomethane	ND		1.0	ug/L			09/26/24 16:36	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/26/24 16:36	1
Ethylbenzene	ND		1.0	ug/L			09/26/24 16:36	1
Hexachlorobutadiene	ND		1.0	ug/L			09/26/24 16:36	1

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Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Client Sample ID: SVE
Date Collected: 09/18/24 12:30
Date Received: 09/19/24 07:00
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-12106-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Isopropylbenzene	ND		1.0	ug/L			09/26/24 16:36	1	
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			09/26/24 16:36	1	
Methylene Chloride	ND		3.0	ug/L			09/26/24 16:36	1	
n-Butylbenzene	ND		3.0	ug/L			09/26/24 16:36	1	
N-Propylbenzene	ND		1.0	ug/L			09/26/24 16:36	1	
Naphthalene	ND		2.0	ug/L			09/26/24 16:36	1	
sec-Butylbenzene	ND		1.0	ug/L			09/26/24 16:36	1	
Styrene	ND		1.0	ug/L			09/26/24 16:36	1	
tert-Butylbenzene	ND		1.0	ug/L			09/26/24 16:36	1	
Tetrachloroethene (PCE)	ND		1.0	ug/L			09/26/24 16:36	1	
Toluene	ND		1.0	ug/L			09/26/24 16:36	1	
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/26/24 16:36	1	
trans-1,3-Dichloropropene	ND		1.0	ug/L			09/26/24 16:36	1	
Trichloroethene (TCE)	ND		1.0	ug/L			09/26/24 16:36	1	
Trichlorofluoromethane	ND		1.0	ug/L			09/26/24 16:36	1	
Vinyl chloride	ND		1.0	ug/L			09/26/24 16:36	1	
Xylenes, Total	ND		1.5	ug/L			09/26/24 16:36	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	97		70 - 130				09/26/24 16:36	1	
Toluene-d8 (Surr)	104		70 - 130				09/26/24 16:36	1	
4-Bromofluorobenzene (Surr)	104		70 - 130				09/26/24 16:36	1	
Dibromofluoromethane (Surr)	102		70 - 130				09/26/24 16:36	1	

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-13097/1006

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1,1-Trichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1,2,2-Tetrachloroethane	ND		20	ug/L			09/26/24 16:12	10
1,1,2-Trichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
1,2,3-Trichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2,3-Trichloropropane	ND		20	ug/L			09/26/24 16:12	10
1,2,4-Trichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2,4-Trimethylbenzene	ND		10	ug/L			09/26/24 16:12	10
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			09/26/24 16:12	10
1,2-Dibromoethane (EDB)	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichloroethane (EDC)	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichloropropane	ND		10	ug/L			09/26/24 16:12	10
1,3,5-Trimethylbenzene	ND		10	ug/L			09/26/24 16:12	10
1,3-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,3-Dichloropropane	ND		10	ug/L			09/26/24 16:12	10
1,4-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1-Methylnaphthalene	ND		40	ug/L			09/26/24 16:12	10
2,2-Dichloropropane	ND		20	ug/L			09/26/24 16:12	10
2-Butanone	ND		100	ug/L			09/26/24 16:12	10
2-Chlorotoluene	ND		10	ug/L			09/26/24 16:12	10
2-Hexanone	ND		100	ug/L			09/26/24 16:12	10
2-Methylnaphthalene	ND		40	ug/L			09/26/24 16:12	10
4-Chlorotoluene	ND		10	ug/L			09/26/24 16:12	10
4-Isopropyltoluene	ND		10	ug/L			09/26/24 16:12	10
4-Methyl-2-pentanone	ND		100	ug/L			09/26/24 16:12	10
Acetone	ND		100	ug/L			09/26/24 16:12	10
Benzene	ND		10	ug/L			09/26/24 16:12	10
Bromobenzene	ND		10	ug/L			09/26/24 16:12	10
Bromodichloromethane	ND		10	ug/L			09/26/24 16:12	10
Dibromochloromethane	ND		10	ug/L			09/26/24 16:12	10
Bromoform	ND		10	ug/L			09/26/24 16:12	10
Bromomethane	ND		30	ug/L			09/26/24 16:12	10
Carbon disulfide	ND		100	ug/L			09/26/24 16:12	10
Carbon tetrachloride	ND		10	ug/L			09/26/24 16:12	10
Chlorobenzene	ND		10	ug/L			09/26/24 16:12	10
Chloroethane	ND		20	ug/L			09/26/24 16:12	10
Chloroform	ND		10	ug/L			09/26/24 16:12	10
Chloromethane	ND		30	ug/L			09/26/24 16:12	10
cis-1,2-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
cis-1,3-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
Dibromomethane	ND		10	ug/L			09/26/24 16:12	10
Dichlorodifluoromethane	ND		10	ug/L			09/26/24 16:12	10
Ethylbenzene	ND		10	ug/L			09/26/24 16:12	10
Hexachlorobutadiene	ND		10	ug/L			09/26/24 16:12	10

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QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-13097/1006

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		10	ug/L			09/26/24 16:12	10
Methyl-tert-butyl Ether (MTBE)	ND		10	ug/L			09/26/24 16:12	10
Methylene Chloride	ND		30	ug/L			09/26/24 16:12	10
n-Butylbenzene	ND		30	ug/L			09/26/24 16:12	10
N-Propylbenzene	ND		10	ug/L			09/26/24 16:12	10
Naphthalene	ND		20	ug/L			09/26/24 16:12	10
sec-Butylbenzene	ND		10	ug/L			09/26/24 16:12	10
Styrene	ND		10	ug/L			09/26/24 16:12	10
tert-Butylbenzene	ND		10	ug/L			09/26/24 16:12	10
Tetrachloroethene (PCE)	ND		10	ug/L			09/26/24 16:12	10
Toluene	ND		10	ug/L			09/26/24 16:12	10
trans-1,2-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
trans-1,3-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
Trichloroethene (TCE)	ND		10	ug/L			09/26/24 16:12	10
Trichlorofluoromethane	ND		10	ug/L			09/26/24 16:12	10
Vinyl chloride	ND		10	ug/L			09/26/24 16:12	10
Xylenes, Total	ND		15	ug/L			09/26/24 16:12	10

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		09/26/24 16:12	10
Toluene-d8 (Surr)	98		70 - 130		09/26/24 16:12	10
4-Bromofluorobenzene (Surr)	90		70 - 130		09/26/24 16:12	10
Dibromofluoromethane (Surr)	103		70 - 130		09/26/24 16:12	10

Lab Sample ID: MB 885-13097/6

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1,1-Trichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1,2,2-Tetrachloroethane	ND		20	ug/L			09/26/24 16:12	10
1,1,2-Trichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloroethane	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
1,1-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
1,2,3-Trichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2,3-Trichloropropane	ND		20	ug/L			09/26/24 16:12	10
1,2,4-Trichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2,4-Trimethylbenzene	ND		10	ug/L			09/26/24 16:12	10
1,2-Dibromo-3-Chloropropane	ND		20	ug/L			09/26/24 16:12	10
1,2-Dibromoethane (EDB)	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichloroethane (EDC)	ND		10	ug/L			09/26/24 16:12	10
1,2-Dichloropropane	ND		10	ug/L			09/26/24 16:12	10
1,3,5-Trimethylbenzene	ND		10	ug/L			09/26/24 16:12	10
1,3-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1,3-Dichloropropane	ND		10	ug/L			09/26/24 16:12	10

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QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-13097/6

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,4-Dichlorobenzene	ND		10	ug/L			09/26/24 16:12	10
1-Methylnaphthalene	ND		40	ug/L			09/26/24 16:12	10
2,2-Dichloropropane	ND		20	ug/L			09/26/24 16:12	10
2-Butanone	ND		100	ug/L			09/26/24 16:12	10
2-Chlorotoluene	ND		10	ug/L			09/26/24 16:12	10
2-Hexanone	ND		100	ug/L			09/26/24 16:12	10
2-Methylnaphthalene	ND		40	ug/L			09/26/24 16:12	10
4-Chlorotoluene	ND		10	ug/L			09/26/24 16:12	10
4-Isopropyltoluene	ND		10	ug/L			09/26/24 16:12	10
4-Methyl-2-pentanone	ND		100	ug/L			09/26/24 16:12	10
Acetone	ND		100	ug/L			09/26/24 16:12	10
Benzene	ND		10	ug/L			09/26/24 16:12	10
Bromobenzene	ND		10	ug/L			09/26/24 16:12	10
Bromodichloromethane	ND		10	ug/L			09/26/24 16:12	10
Dibromochloromethane	ND		10	ug/L			09/26/24 16:12	10
Bromoform	ND		10	ug/L			09/26/24 16:12	10
Bromomethane	ND		30	ug/L			09/26/24 16:12	10
Carbon disulfide	ND		100	ug/L			09/26/24 16:12	10
Carbon tetrachloride	ND		10	ug/L			09/26/24 16:12	10
Chlorobenzene	ND		10	ug/L			09/26/24 16:12	10
Chloroethane	ND		20	ug/L			09/26/24 16:12	10
Chloroform	ND		10	ug/L			09/26/24 16:12	10
Chloromethane	ND		30	ug/L			09/26/24 16:12	10
cis-1,2-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
cis-1,3-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
Dibromomethane	ND		10	ug/L			09/26/24 16:12	10
Dichlorodifluoromethane	ND		10	ug/L			09/26/24 16:12	10
Ethylbenzene	ND		10	ug/L			09/26/24 16:12	10
Hexachlorobutadiene	ND		10	ug/L			09/26/24 16:12	10
Isopropylbenzene	ND		10	ug/L			09/26/24 16:12	10
Methyl-tert-butyl Ether (MTBE)	ND		10	ug/L			09/26/24 16:12	10
Methylene Chloride	ND		30	ug/L			09/26/24 16:12	10
n-Butylbenzene	ND		30	ug/L			09/26/24 16:12	10
N-Propylbenzene	ND		10	ug/L			09/26/24 16:12	10
Naphthalene	ND		20	ug/L			09/26/24 16:12	10
sec-Butylbenzene	ND		10	ug/L			09/26/24 16:12	10
Styrene	ND		10	ug/L			09/26/24 16:12	10
tert-Butylbenzene	ND		10	ug/L			09/26/24 16:12	10
Tetrachloroethene (PCE)	ND		10	ug/L			09/26/24 16:12	10
Toluene	ND		10	ug/L			09/26/24 16:12	10
trans-1,2-Dichloroethene	ND		10	ug/L			09/26/24 16:12	10
trans-1,3-Dichloropropene	ND		10	ug/L			09/26/24 16:12	10
Trichloroethene (TCE)	ND		10	ug/L			09/26/24 16:12	10
Trichlorofluoromethane	ND		10	ug/L			09/26/24 16:12	10
Vinyl chloride	ND		10	ug/L			09/26/24 16:12	10
Xylenes, Total	ND		15	ug/L			09/26/24 16:12	10

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QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-13097/6

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		09/26/24 16:12	10
Toluene-d8 (Surr)	98		70 - 130		09/26/24 16:12	10
4-Bromofluorobenzene (Surr)	90		70 - 130		09/26/24 16:12	10
Dibromofluoromethane (Surr)	103		70 - 130		09/26/24 16:12	10

Lab Sample ID: LCS 885-13097/5

Matrix: Air

Analysis Batch: 13097

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.1	21.3		ug/L		106	70 - 130
Benzene	20.1	23.5		ug/L		117	70 - 130
Chlorobenzene	20.1	20.5		ug/L		102	70 - 130
Toluene	20.2	20.6		ug/L		102	70 - 130
Trichloroethene (TCE)	20.2	21.5		ug/L		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
Toluene-d8 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

Lab Sample ID: 885-12106-1 DU

Matrix: Air

Analysis Batch: 13097

Client Sample ID: SVE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,1-Trichloroethane	ND		ND		ug/L		NC	20
1,1,2,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,2-Trichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethene	ND		ND		ug/L		NC	20
1,1-Dichloropropene	ND		ND		ug/L		NC	20
1,2,3-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,3-Trichloropropane	ND		ND		ug/L		NC	20
1,2,4-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,4-Trimethylbenzene	ND		ND		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	ND		ND		ug/L		NC	20
1,2-Dibromoethane (EDB)	ND		ND		ug/L		NC	20
1,2-Dichlorobenzene	ND		ND		ug/L		NC	20
1,2-Dichloroethane (EDC)	ND		ND		ug/L		NC	20
1,2-Dichloropropane	ND		ND		ug/L		NC	20
1,3,5-Trimethylbenzene	3.3		3.26		ug/L		2	20
1,3-Dichlorobenzene	ND		ND		ug/L		NC	20
1,3-Dichloropropane	ND		ND		ug/L		NC	20
1,4-Dichlorobenzene	ND		ND		ug/L		NC	20
1-Methylnaphthalene	ND		ND		ug/L		NC	20

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 885-12106-1 DU
Matrix: Air
Analysis Batch: 13097

Client Sample ID: SVE
Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,2-Dichloropropane	ND		ND		ug/L		NC	20
2-Butanone	ND		ND		ug/L		NC	20
2-Chlorotoluene	ND		ND		ug/L		NC	20
2-Hexanone	ND		ND		ug/L		NC	20
2-Methylnaphthalene	ND		ND		ug/L		NC	20
4-Chlorotoluene	ND		ND		ug/L		NC	20
4-Isopropyltoluene	ND		ND		ug/L		NC	20
4-Methyl-2-pentanone	ND		ND		ug/L		NC	20
Acetone	ND		ND		ug/L		NC	20
Benzene	ND		ND		ug/L		NC	20
Bromobenzene	ND		ND		ug/L		NC	20
Bromodichloromethane	ND		ND		ug/L		NC	20
Dibromochloromethane	ND		ND		ug/L		NC	20
Bromoform	ND		ND		ug/L		NC	20
Bromomethane	ND		ND		ug/L		NC	20
Carbon disulfide	ND		ND		ug/L		NC	20
Carbon tetrachloride	ND		ND		ug/L		NC	20
Chlorobenzene	ND		ND		ug/L		NC	20
Chloroethane	ND		ND		ug/L		NC	20
Chloroform	ND		ND		ug/L		NC	20
Chloromethane	ND		ND		ug/L		NC	20
cis-1,2-Dichloroethene	ND		ND		ug/L		NC	20
cis-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Dibromomethane	ND		ND		ug/L		NC	20
Dichlorodifluoromethane	ND		ND		ug/L		NC	20
Ethylbenzene	ND		ND		ug/L		NC	20
Hexachlorobutadiene	ND		ND		ug/L		NC	20
Isopropylbenzene	ND		ND		ug/L		NC	20
Methyl-tert-butyl Ether (MTBE)	ND		ND		ug/L		NC	20
Methylene Chloride	ND		ND		ug/L		NC	20
n-Butylbenzene	ND		ND		ug/L		NC	20
N-Propylbenzene	ND		ND		ug/L		NC	20
Naphthalene	ND		ND		ug/L		NC	20
sec-Butylbenzene	ND		ND		ug/L		NC	20
Styrene	ND		ND		ug/L		NC	20
tert-Butylbenzene	ND		ND		ug/L		NC	20
Tetrachloroethene (PCE)	ND		ND		ug/L		NC	20
Toluene	ND		ND		ug/L		NC	20
trans-1,2-Dichloroethene	ND		ND		ug/L		NC	20
trans-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Trichloroethene (TCE)	ND		ND		ug/L		NC	20
Trichlorofluoromethane	ND		ND		ug/L		NC	20
Vinyl chloride	ND		ND		ug/L		NC	20
Xylenes, Total	ND		ND		ug/L		NC	20
DU DU								
Surrogate	%Recovery	Qualifier	Limits					
1,2-Dichloroethane-d4 (Surr)	98		70 - 130					
Toluene-d8 (Surr)	103		70 - 130					

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 885-12106-1 DU
Matrix: Air
Analysis Batch: 13097

Client Sample ID: SVE
Prep Type: Total/NA

Surrogate	DU %Recovery	DU Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

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QC Association Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

GC/MS VOA

Analysis Batch: 13097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12106-1	SVE	Total/NA	Air	8260B	
MB 885-13097/1006	Method Blank	Total/NA	Air	8260B	
MB 885-13097/6	Method Blank	Total/NA	Air	8260B	
LCS 885-13097/5	Lab Control Sample	Total/NA	Air	8260B	
885-12106-1 DU	SVE	Total/NA	Air	8260B	

Lab Chronicle

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Client Sample ID: SVE
Date Collected: 09/18/24 12:30
Date Received: 09/19/24 07:00

Lab Sample ID: 885-12106-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13097	CM	EET ALB	09/26/24 16:36

Laboratory References:
= , 1120 South 27th Street, Billings, MT 59101, TEL (406)252-6325
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Oregon NELAP NM100001 02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-12106-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Eurofins Albuquerque



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ANALYTICAL SUMMARY REPORT

September 27, 2024

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

Work Order: B24091884 Quote ID: B15626

Project Name: Jaquez GC B #003E 88501577

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 9/20/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24091884-001	SVE (885-12106-1)	09/18/24 12:30	09/20/24	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 So. 27th Street, 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.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

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



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Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Jaquez GC B #003E 88501577
Lab ID: B24091884-001
Client Sample ID: SVE (885-12106-1)

Report Date: 09/27/24
Collection Date: 09/18/24 12:30
Date Received: 09/20/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	19.30	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Nitrogen	80.41	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Carbon Dioxide	0.25	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Hexanes plus	0.04	Mol %		0.01		GPA 2261-95	09/24/24 12:23 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
Hexanes plus	0.017	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
GPM Total	0.017	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj
GPM Pentanes plus	0.017	gpm		0.001		GPA 2261-95	09/24/24 12:23 / jrj

CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	2		1		GPA 2261-95	09/24/24 12:23 / jrj
Net BTU per cu ft @ std cond. (LHV)	2		1		GPA 2261-95	09/24/24 12:23 / jrj
Pseudo-critical Pressure, psia	540		1		GPA 2261-95	09/24/24 12:23 / jrj
Pseudo-critical Temperature, deg R	238		1		GPA 2261-95	09/24/24 12:23 / jrj
Specific Gravity @ 60/60F	0.996		0.001		D3588-81	09/24/24 12:23 / jrj
Air, %	88.19		0.01		GPA 2261-95	09/24/24 12:23 / jrj

- The analysis was not corrected for air.

COMMENTS

-						09/24/24 12:23 / 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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Billings, MT **406.252.6325** • Casper, WY **307.235.0515**
 Gillette, WY **307.686.7175** • Helena, MT **406.442.0711**

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Work Order: B24091884

Report Date: 09/27/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R429654
Lab ID:	B24092283-001ADUP	12 Sample Duplicate			Run: GCNGA-B_240927A				09/27/24 10:45	
Oxygen		21.6	Mol %	0.01				1.2	20	
Nitrogen		77.9	Mol %	0.01				0.3	20	
Carbon Dioxide		0.48	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		0.04	Mol %	0.01				0.0	20	
Lab ID:	LCS092724	11 Laboratory Control Sample			Run: GCNGA-B_240927A				09/27/24 02:03	
Oxygen		0.62	Mol %	0.01	124	70	130			
Nitrogen		6.03	Mol %	0.01	100	70	130			
Carbon Dioxide		0.99	Mol %	0.01	100	70	130			
Methane		74.9	Mol %	0.01	100	70	130			
Ethane		6.05	Mol %	0.01	101	70	130			
Propane		5.05	Mol %	0.01	102	70	130			
Isobutane		1.54	Mol %	0.01	77	70	130			
n-Butane		2.01	Mol %	0.01	100	70	130			
Isopentane		1.02	Mol %	0.01	102	70	130			
n-Pentane		1.01	Mol %	0.01	101	70	130			
Hexanes plus		0.81	Mol %	0.01	101	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

Work Order Receipt Checklist

Hall Environmental

B24091884

Login completed by: Danielle N. Harris

Date Received: 9/20/2024

Reviewed by: lleprorowse

Received by: KLP

Reviewed Date: 9/27/2024

Carrier name: FedEx NDA

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:	17.9°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.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-3456

Chain of Custody Record



Environment Testing

[illegible]

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Cottonwood Consulting LLC

Job Number: 885-12106-1

Login Number: 12106

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kyle Siesser
Cottonwood Consulting LLC
PO BOX 1653
Durango, Colorado 81302
Generated 12/19/2024 3:17:01 PM

JOB DESCRIPTION

Jaquez GC B #003E

JOB NUMBER

885-16881-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)345-3975

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12/19/2024 3:17:01 PM

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Laboratory Job ID: 885-16881-1

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Definitions/Glossary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cottonwood Consulting LLC
Project: Jaquez GC B #003E

Job ID: 885-16881-1

Job ID: 885-16881-1

Eurofins Albuquerque

Job Narrative 885-16881-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 12/12/2024 6:35 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.1°C.

Subcontract Work

Method Natural Gases O2, CO2: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA

Method 8260B: The continuing calibration verification (CCV) associated with batch 885-17948 recovered outside acceptance criteria, low biased, for Bromomethane. CCV meets 8260B criteria. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Client Sample ID: SVE

Lab Sample ID: 885-16881-1

Date Collected: 12/11/24 14:00

Matrix: Air

Date Received: 12/12/24 06:35

Sample Container: Tedlar Bag 1L

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			12/16/24 17:59	1
1,1,1-Trichloroethane	ND		0.10	ug/L			12/16/24 17:59	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			12/16/24 17:59	1
1,1,2-Trichloroethane	ND		0.10	ug/L			12/16/24 17:59	1
1,1-Dichloroethane	ND		0.10	ug/L			12/16/24 17:59	1
1,1-Dichloroethene	ND		0.10	ug/L			12/16/24 17:59	1
1,1-Dichloropropene	ND		0.10	ug/L			12/16/24 17:59	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
1,2,3-Trichloropropane	ND		0.20	ug/L			12/16/24 17:59	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			12/16/24 17:59	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			12/16/24 17:59	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			12/16/24 17:59	1
1,2-Dichlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			12/16/24 17:59	1
1,2-Dichloropropane	ND		0.10	ug/L			12/16/24 17:59	1
1,3,5-Trimethylbenzene	0.24		0.10	ug/L			12/16/24 17:59	1
1,3-Dichlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
1,3-Dichloropropane	ND		0.10	ug/L			12/16/24 17:59	1
1,4-Dichlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
1-Methylnaphthalene	ND		0.40	ug/L			12/16/24 17:59	1
2,2-Dichloropropane	ND		0.20	ug/L			12/16/24 17:59	1
2-Butanone	ND		1.0	ug/L			12/16/24 17:59	1
2-Chlorotoluene	ND		0.10	ug/L			12/16/24 17:59	1
2-Hexanone	ND		1.0	ug/L			12/16/24 17:59	1
2-Methylnaphthalene	ND		0.40	ug/L			12/16/24 17:59	1
4-Chlorotoluene	ND		0.10	ug/L			12/16/24 17:59	1
4-Isopropyltoluene	ND		0.10	ug/L			12/16/24 17:59	1
4-Methyl-2-pentanone	ND		1.0	ug/L			12/16/24 17:59	1
Acetone	ND		1.0	ug/L			12/16/24 17:59	1
Benzene	ND		0.10	ug/L			12/16/24 17:59	1
Bromobenzene	ND		0.10	ug/L			12/16/24 17:59	1
Bromodichloromethane	ND		0.10	ug/L			12/16/24 17:59	1
Dibromochloromethane	ND		0.10	ug/L			12/16/24 17:59	1
Bromoform	ND		0.10	ug/L			12/16/24 17:59	1
Bromomethane	ND		0.30	ug/L			12/16/24 17:59	1
Carbon disulfide	ND		1.0	ug/L			12/16/24 17:59	1
Carbon tetrachloride	ND		0.10	ug/L			12/16/24 17:59	1
Chlorobenzene	ND		0.10	ug/L			12/16/24 17:59	1
Chloroethane	ND		0.20	ug/L			12/16/24 17:59	1
Chloroform	ND		0.10	ug/L			12/16/24 17:59	1
Chloromethane	ND		0.30	ug/L			12/16/24 17:59	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			12/16/24 17:59	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			12/16/24 17:59	1
Dibromomethane	ND		0.10	ug/L			12/16/24 17:59	1
Dichlorodifluoromethane	ND		0.10	ug/L			12/16/24 17:59	1
Ethylbenzene	ND		0.10	ug/L			12/16/24 17:59	1
Hexachlorobutadiene	ND		0.10	ug/L			12/16/24 17:59	1

Eurofins Albuquerque

Client Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Client Sample ID: SVE
Date Collected: 12/11/24 14:00
Date Received: 12/12/24 06:35
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-16881-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Isopropylbenzene	ND		0.10	ug/L			12/16/24 17:59	1	
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			12/16/24 17:59	1	
Methylene Chloride	ND		0.30	ug/L			12/16/24 17:59	1	
n-Butylbenzene	ND		0.30	ug/L			12/16/24 17:59	1	
N-Propylbenzene	ND		0.10	ug/L			12/16/24 17:59	1	
Naphthalene	ND		0.20	ug/L			12/16/24 17:59	1	
sec-Butylbenzene	ND		0.10	ug/L			12/16/24 17:59	1	
Styrene	ND		0.10	ug/L			12/16/24 17:59	1	
tert-Butylbenzene	ND		0.10	ug/L			12/16/24 17:59	1	
Tetrachloroethene (PCE)	ND		0.10	ug/L			12/16/24 17:59	1	
Toluene	ND		0.10	ug/L			12/16/24 17:59	1	
trans-1,2-Dichloroethene	ND		0.10	ug/L			12/16/24 17:59	1	
trans-1,3-Dichloropropene	ND		0.10	ug/L			12/16/24 17:59	1	
Trichloroethene (TCE)	ND		0.10	ug/L			12/16/24 17:59	1	
Trichlorofluoromethane	ND		0.10	ug/L			12/16/24 17:59	1	
Vinyl chloride	ND		0.10	ug/L			12/16/24 17:59	1	
Xylenes, Total	ND		0.15	ug/L			12/16/24 17:59	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				12/16/24 17:59	1	
Toluene-d8 (Surr)	101		70 - 130				12/16/24 17:59	1	
4-Bromofluorobenzene (Surr)	98		70 - 130				12/16/24 17:59	1	
Dibromofluoromethane (Surr)	101		70 - 130				12/16/24 17:59	1	

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-17948/13

Matrix: Air

Analysis Batch: 17948

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			12/16/24 16:21	1
1,1,1-Trichloroethane	ND		0.10	ug/L			12/16/24 16:21	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			12/16/24 16:21	1
1,1,2-Trichloroethane	ND		0.10	ug/L			12/16/24 16:21	1
1,1-Dichloroethane	ND		0.10	ug/L			12/16/24 16:21	1
1,1-Dichloroethene	ND		0.10	ug/L			12/16/24 16:21	1
1,1-Dichloropropene	ND		0.10	ug/L			12/16/24 16:21	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,2,3-Trichloropropane	ND		0.20	ug/L			12/16/24 16:21	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			12/16/24 16:21	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			12/16/24 16:21	1
1,2-Dichlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			12/16/24 16:21	1
1,2-Dichloropropane	ND		0.10	ug/L			12/16/24 16:21	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,3-Dichlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
1,3-Dichloropropane	ND		0.10	ug/L			12/16/24 16:21	1
1,4-Dichlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
1-Methylnaphthalene	ND		0.40	ug/L			12/16/24 16:21	1
2,2-Dichloropropane	ND		0.20	ug/L			12/16/24 16:21	1
2-Butanone	ND		1.0	ug/L			12/16/24 16:21	1
2-Chlorotoluene	ND		0.10	ug/L			12/16/24 16:21	1
2-Hexanone	ND		1.0	ug/L			12/16/24 16:21	1
2-Methylnaphthalene	ND		0.40	ug/L			12/16/24 16:21	1
4-Chlorotoluene	ND		0.10	ug/L			12/16/24 16:21	1
4-Isopropyltoluene	ND		0.10	ug/L			12/16/24 16:21	1
4-Methyl-2-pentanone	ND		1.0	ug/L			12/16/24 16:21	1
Acetone	ND		1.0	ug/L			12/16/24 16:21	1
Benzene	ND		0.10	ug/L			12/16/24 16:21	1
Bromobenzene	ND		0.10	ug/L			12/16/24 16:21	1
Bromodichloromethane	ND		0.10	ug/L			12/16/24 16:21	1
Dibromochloromethane	ND		0.10	ug/L			12/16/24 16:21	1
Bromoform	ND		0.10	ug/L			12/16/24 16:21	1
Bromomethane	ND		0.30	ug/L			12/16/24 16:21	1
Carbon disulfide	ND		1.0	ug/L			12/16/24 16:21	1
Carbon tetrachloride	ND		0.10	ug/L			12/16/24 16:21	1
Chlorobenzene	ND		0.10	ug/L			12/16/24 16:21	1
Chloroethane	ND		0.20	ug/L			12/16/24 16:21	1
Chloroform	ND		0.10	ug/L			12/16/24 16:21	1
Chloromethane	ND		0.30	ug/L			12/16/24 16:21	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			12/16/24 16:21	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			12/16/24 16:21	1
Dibromomethane	ND		0.10	ug/L			12/16/24 16:21	1
Dichlorodifluoromethane	ND		0.10	ug/L			12/16/24 16:21	1
Ethylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
Hexachlorobutadiene	ND		0.10	ug/L			12/16/24 16:21	1

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 885-17948/13

Matrix: Air

Analysis Batch: 17948

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			12/16/24 16:21	1
Methylene Chloride	ND		0.30	ug/L			12/16/24 16:21	1
n-Butylbenzene	ND		0.30	ug/L			12/16/24 16:21	1
N-Propylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
Naphthalene	ND		0.20	ug/L			12/16/24 16:21	1
sec-Butylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
Styrene	ND		0.10	ug/L			12/16/24 16:21	1
tert-Butylbenzene	ND		0.10	ug/L			12/16/24 16:21	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			12/16/24 16:21	1
Toluene	ND		0.10	ug/L			12/16/24 16:21	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			12/16/24 16:21	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			12/16/24 16:21	1
Trichloroethene (TCE)	ND		0.10	ug/L			12/16/24 16:21	1
Trichlorofluoromethane	ND		0.10	ug/L			12/16/24 16:21	1
Vinyl chloride	ND		0.10	ug/L			12/16/24 16:21	1
Xylenes, Total	ND		0.15	ug/L			12/16/24 16:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		12/16/24 16:21	1
Toluene-d8 (Surr)	98		70 - 130		12/16/24 16:21	1
4-Bromofluorobenzene (Surr)	97		70 - 130		12/16/24 16:21	1
Dibromofluoromethane (Surr)	100		70 - 130		12/16/24 16:21	1

Lab Sample ID: LCS 885-17948/12

Matrix: Air

Analysis Batch: 17948

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.1	19.0		ug/L		94	70 - 130
Benzene	20.1	21.1		ug/L		105	70 - 130
Chlorobenzene	20.1	19.7		ug/L		98	70 - 130
Toluene	20.2	19.7		ug/L		98	70 - 130
Trichloroethene (TCE)	20.2	18.5		ug/L		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
Toluene-d8 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130

Eurofins Albuquerque

QC Association Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

GC/MS VOA

Analysis Batch: 17948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16881-1	SVE	Total/NA	Air	8260B	
MB 885-17948/13	Method Blank	Total/NA	Air	8260B	
LCS 885-17948/12	Lab Control Sample	Total/NA	Air	8260B	

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Lab Chronicle

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Client Sample ID: SVE
Date Collected: 12/11/24 14:00
Date Received: 12/12/24 06:35

Lab Sample ID: 885-16881-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17948	CM	EET ALB	12/16/24 17:59

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59101, TEL (406)252-6325

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Oregon

NELAP

NM100001

02-25-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Cottonwood Consulting LLC
Project/Site: Jaquez GC B #003E

Job ID: 885-16881-1

Laboratory: Eurofins Albuquerque (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Eurofins Albuquerque



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ANALYTICAL SUMMARY REPORT

December 19, 2024

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

Work Order: B24121323 Quote ID: B15626

Project Name: Jaquez GC B #003E 88501577

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 12/17/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24121323-001	SVE (885-16881-1)	12/11/24 14:00	12/17/24	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 So. 27th Street, 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.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

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



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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Jaquez GC B #003E 88501577
Lab ID: B24121323-001
Client Sample ID: SVE (885-16881-1)

Report Date: 12/19/24
Collection Date: 12/11/24 14:00
Date Received: 12/17/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	19.04	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Nitrogen	80.70	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Carbon Dioxide	0.25	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Hexanes plus	0.01	Mol %		0.01		GPA 2261-13	12/18/24 10:34 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
Hexanes plus	0.004	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
GPM Total	0.004	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj
GPM Pentanes plus	0.004	gpm		0.001		GPA 2261-13	12/18/24 10:34 / jrj

CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	ND		1		GPA 2261-13	12/18/24 10:34 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND		1		GPA 2261-13	12/18/24 10:34 / jrj
Pseudo-critical Pressure, psia	539		1		GPA 2261-13	12/18/24 10:34 / jrj
Pseudo-critical Temperature, deg R	238		1		GPA 2261-13	12/18/24 10:34 / jrj
Specific Gravity @ 60/60F	0.995		0.001		D3588-81	12/18/24 10:34 / jrj
Air, %	87.00		0.01		GPA 2261-13	12/18/24 10:34 / jrj

- The analysis was not corrected for air.

COMMENTS

-					-	12/18/24 10:34 / 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

Work Order: B24121323

Report Date: 12/19/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-13									Batch: R434175	
Lab ID: B24121324-001ADUP	12	Sample Duplicate				Run: GCNGA-B_241218A			12/18/24 12:12	
Oxygen		19.3	Mol %	0.01				1.9	20	
Nitrogen		80.6	Mol %	0.01				0.4	20	
Carbon Dioxide		0.05	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		0.01	Mol %	0.01				0.0	20	
Lab ID: LCS121824									Batch: R434175	
	11	Laboratory Control Sample				Run: GCNGA-B_241218A			12/18/24 13:50	
Oxygen		0.63	Mol %	0.01	126	70	130			
Nitrogen		6.11	Mol %	0.01	102	70	130			
Carbon Dioxide		0.98	Mol %	0.01	99	70	130			
Methane		74.6	Mol %	0.01	100	70	130			
Ethane		6.01	Mol %	0.01	100	70	130			
Propane		5.03	Mol %	0.01	102	70	130			
Isobutane		1.69	Mol %	0.01	84	70	130			
n-Butane		1.99	Mol %	0.01	99	70	130			
Isopentane		1.12	Mol %	0.01	112	70	130			
n-Pentane		1.00	Mol %	0.01	100	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)



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Work Order Receipt Checklist

Hall Environmental

B24121323

Login completed by: Danielle N. Harris

Date Received: 12/17/2024

Reviewed by: darcy

Received by: KLP

Reviewed Date: 12/18/2024

Carrier name: FedEx NDA

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:	14.7°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.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

Custody seal affixed to cooler unsigned and undated. DEC 12/18/24



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Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-3976

Chain of Custody Record



Environment Testing

[illegible]

Ver: 10/10/2024

- 1
- 2
- 3
- 4
- 5
- 6
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- 8
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- 11
- 12

ICOC No:
885-3212

Containers

<u>Count</u>	<u>Container Type</u>	<u>Preservative</u>
1	Tedlar Bag 1L	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (Natural Gases O2, CO2)	Fixed Gases - Natural Gases O2, CO2

- 1
- 2
- 3
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- 6
- 7
- 8
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- 10
- 11
- 12

[illegible]

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.

Login Sample Receipt Checklist

Client: Cottonwood Consulting LLC

Job Number: 885-16881-1

Login Number: 16881

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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 A LS 9A	1-15-24	1	6.4	-38	-48	-	Y	22	N	Drum Frozen
Florance GC J 16		2	41.4	-6	-	-	Y	12.5	Y	Gasket leaking
Sandoval GC A 1A		3	124.8	-10 (H ₂ O)	Broken	7397.7	N	25	N	Drain Valve is broken (Needs replace) Restarted System, Drum Frozen,
Jacquez GC B 3E		1	0.1	-6	-	5520.1	Y	Dry	N	Run time gauge has condensation and is hard to read.
Al Elliot D 002		5	-	-	-	-	N	12.7	N	Drum Frozen and full, generator was running, attempted to restart, would not start.
GCU H180		All	-	-	-	8675.6	N	-	-	System not operational on arrival, attempted to start, could not start, would not start after drying.
Heaton LS 5		Unk	82.3	-	-54	-	Y	25.5	N	Drum Frozen
Mudge B12 R		1	84.4	-28	-8	-	N	32	N	Restarted System Drum Frozen.
Mudge A 002 MV	✓	2	32.0	-50	-	-	Y	Dry	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

(in hg) SVE Monitoring

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 A LS 9A*	2-5-24	1	6.2	-3.75	-3.75	-	Y	23.6	Y	
Florance GC J 16*	2-14-24	2	42.6	-2.1	-2.1	-	N	16.4	Y	Drum leaking, needs new gasket.
Sandoval GC A 1A*	2-5-24	3	41.0	-2.5	-2.5	7507.5	Y	31.75	Y	Valve Fixed Gauge Replaced
Jacquez GC B 3E*		1	0.8	-0.2	-	7031.1	Y	32.5	N	Water Frozen
Al Elliot D 002*		5	65.7	-0.5	-0.5	6664.1	Y	30.1	Y	B6T ≈ 90% Full
GCU H180		All	-	-	-	-	Y	-	-	2 PSI) 110°F) 1) 2.5 2) 2.5 3) 2.5 4) 1.5 psi
Heaton LS 5*		Unk	98.9	-2.5	-2.5	-	Y	27.3	Y	
Mudge B12 R*	2-14-24	1	36.7	-2.2	-2.5	-	Y		N	Drum Frozen
Mudge A 002 MV*	2-14-24	2	22.0	-5.0	-4.0	-	Y	32.0	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

* - Gauge replaced with (in hg) vacuum pressure gauge

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	3-11-24	1	0.6	3.75	3.75	-	Y	29.5	Y	
Florance GC J 16		2	28.1	3.20	3.30 2.30	-	Y	18.2	Y	* - See below
Sandoval GC A 1A		3	89.1	2.50	2.50	7653.0	N	28.3	Y	
Jacquez GC B 3E		1	1.2	0.2	0.2	7869.8	Y	Dry	N	
Al Elliot D 002		5	26.5	0.5	0.5	6849.7	N	32.5	N	Water Level below drain valve
GCU H180		All	-	-	-	9003.0	Y	-	-	Temp 125°F System Pressure 1.8 psi SVE Point (psi): (1) 2.5 (2) 2.5 (3) 2.5 (4) 2.5
Heaton LS 5		Unk	70.8	2.7	2.5	-	Y	31.8	N	Water Level below drain valve
Mudge B12 R		1	41.3	2.5	2.5	-	Y	24.8	Y	Drum has hole, needs to be replaced
Mudge A 002 MV		2	47.2	4.75	3.75	-	Y	Dry	N	

Notes:

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

* - No leaks when system was running. Turned off system and discovered leaks. After investigation a small pinhole is present at the bottom of the drum

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	4/8/24	1	66.1	3.75	3.75	—	Y	29.5	Y	
Florance GC J 16		2	202.8	-4.0	-4.0	—	Y	14	Y	Small leak when system is off
Sandoval GC A 1A		3	148.3	2.5	2.5	7612.9	N	30.5	Y	
Jacquez GC B 3E		1	6.0	0.2	0.2	8543.6	Y	Dry	N	
Al Elliot D 002		5	49.8	0.4	0.4	7181.6	Y	29	Y	
GCU H180		All	-	-	-	9177.0	Y	-	-	Temp 125 F System Pressure 20 psi SVE Point (psi): (1) 1.0 (2) 1.0 (3) 1.0 (4) 1.0
Heaton LS 5		Unk	107.5	2.75	2.5	—	Y	Dry	N	
Mudge B12 R		1	256.3	2.5	2.5	—	Y	28.5	Y	Small leak when system is off
Mudge A 002 MV		2	104.3	4.75	3.00	—	Y	Dry	N	

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	5-6-24	1	1.3	3.75	3.75	-	Y	31.5	N	Water level below drain valve
Florance GC J 16		2	23.3	3.5	3.5	-	Y	24.2	Y	Tightened gasket, no leaks after tightening.
Sandoval GC A 1A		3	2.8	2.5	2.5	7745.2	N	32.5 32.5	N	Water level below drain valve, restarted system. MW connection was disconnected on arrival.
Jacquez GC B 3E		1	1.1	0.2	0.2	10,215.4	Y	Dry	N	Drum is dry.
Al Elliot D 002		5	29.5	0.4	0.4	8154.0	Y	30.3	Y	Drum dry
GCU H180		All	-	-	-	9331.1	Y	-	-	Temp 127 F System Pressure 215 psi SVE Point (psi): (1) 1.5 (2) 2.5 (3) 2.0 (4) 1.0
Heaton LS 5		Unk	89.6	2.5	2.5	-	Y	Dry	N	Drum dry
Mudge B12 R		1	26.7	2.5	2.5	-	Y	27.5	Y	Tightened gasket, gasket is cracked. Minor condensation observed after tightening.
Mudge A 002 MV		2	52.0	5.0	3.75	-	Y	Dry	N	Drum dry

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	6/14/24	1	3.4	4.0	3.75	—	Y	Dry	N	
Florance GC J 16	6/13/24	2	35.8	3.0	3.5	—	Y	Dry	N	
Sandoval GC A 1A	6/13/24	3	10.0	5.0	2.0	792.4	N	Dry	N	
Jacquez GC B 3E	6/13/24	1	6.2	0.1	0.1	1264.0	Y	Dry	N	
Al Elliot D 002	6/13/24	5	37.3	0.1	0.1	906.2	Y	Dry	N	
GCU H180	6/12/24	All	-	-	-	Broken	N	-	-	Temp 145F System Pressure 2.5 psi SVE Point (psi): (1) 0.1 (2) 2.5 (3) 2.7 (4) 0
Heaton LS 5	6/12/24	Unk	102.0	1.0	1.0	—	Y	Dry	N	
Mudge B12 R	6/12/24	1	36.7	2.5	2.5	—	Y	Dry	N	
Mudge A 002 MV	6/13/24	2	150.5	5.0	5.0	—	Y	Dry	NO	

Notes:

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

system off
on arrival.
Reset.



SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	7-5-24	1	48.3	3.75	3.75	-	Y	32	N	Drum dry
Florance GC J 16		2	14.0	3.75	3.75	-	Y	32	N	Drum dry
Sandoval GC A 1A		3	3.3	2.5	2.5	8209.3	Y	32	N	Drum dry
Jacquez GC B 3E		1	1.6	0.1	0.1	651.7	Y	32	N	Hours appear to be reset from previous inspection
Al Elliot D 002		5	-	-	-	-	N	32	N	Attempted to start, no power to system. Generator not on.
GCU H180		All	-	-	-	-	Y	-	-	Temp 130F System Pressure 2.5psi SVE Point (psi): (1) 1.25 (2) 2.5 (3) 2.5 (4) 2.1
Heaton LS 5		Unk	80.5	2.5	2.5	-	Y	32	N	Drum dry
Mudge B12 R		1	25.3	2.5	2.5	-	Y	32	N	Drum dry
Mudge A 002 MV		2	123.8	5.0	3.75	-	Y	32	N	Drum dry
	↓									

Drum dry
Run time
large disconnected

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	8-7-24	1	0.2	3.75	3.75	—	Y	32	N	Drum dry
Florance GC J 16		2	21.5	4.0	4.0	—	Y	32	N	Drum dry
Sandoval GC A 1A		3	3.1	2.5	2.5	8922.6	N	32	N	Drum dry
Jacquez GC B 3E		1	3.0	0.1	0.1	1440.3	Y	32	N	Drum dry
Al Elliot D 002		5	—	—	—	—	N	32	N	System not running. Attempted to restart. Would not turn on.
GCU H180		All	-	-	-	—	N	-	-	Temp 105 F System Pressure 2.6 psi SVE Point (psi): (1) 1.8 (2) 2.5 (3) 2.5 (4) 1.2
Heaton LS 5		Unk	68.5	2.5	2.5	—	Y	32	N	Drum dry
Mudge B12 R		1	19.5	2.5	2.5	—	Y	32	N	Drum dry
Mudge A 002 MV		2	268.2	5.0	3.75	—	Y	32	N	Drum dry

Generator not running.
Run time gauge is connected

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H ₂ O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	9/16/24	1	12.1	4.5	4.5	-	Y	Dry	No	
Florance GC J 16	9/16/24	2	90.2	4.0	4.0	-	Y	Dry	No	
Sandoval GC A 1A	9/18/24	3	5.3	1	2	5543.1	No	Dry	No	SVE restarted before departure
Jacquez GC B 3E	9/18/24	1	7.3	0.1	0.1	2449.7	Yes	Dry	No	
Al Elliot D 002	9/18/24	5	46.2	0.1	0.1	4156.3	Yes	Dry	No	
GCU H180	9/17/24	All	-	-	-	Dis-Connected	No	-	-	Temp 60 F System Pressure 2.4 psi SVE Point (psi): (1) 3.75 (2) 2.5 (3) 2.4 (4) 2.6
Heaton LS 5	9/17/24	Unk	77.3	3.9	2.5	-	Yes	Dry	No	
Mudge B12 R	9/17/24	1	19.9	2.5	2.5	-	Yes	Dry	No	
Mudge A 002 MV	9/18/24	2	284.0	5.0	4.8	-	Yes	Dry	No	

Notes:

SVE - Soil Vapor Extraction

OVM - Organic Vapor Monitoring

ppm- parts per million

inHg- inches of mercury

cfm- cubic feet per minute

bTOD- below top of drum

SVE restarted before departure

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	10-3-24	1	0.9	3.75	3.75	-	Y	Dry	N	
Florance GC J 16		2	15.1	3.75	3.75	=	Y	30"	Y	
Sandoval GC A 1A		3	35.8	2.25	2.25	9602.8	N	Dry	N	
Jacquez GC B 3E		1	14.7	1.25	1.25	2809.9	Y	Dry	N	Crack in PVC OR monitoring well SVE point
Al Elliot D 002		5	-	-	-	???	N	Dry	N	System not operational on arrival, attempted to restart, would not turn on
GCU H180		All	-	-	-	Gauge disconnected	N	-	-	Temp 110 F System Pressure 2.75 psi SVE Point (psi): (1) 2.5 (2) 2.5 (3) 2.5 (4) 2.5 Generator not running
Heaton LS 5		Unk	69.1	2.5	2.5	-	Y	Dry	N	
Mudge B12 R		1	7.6	2.5	2.5	-	Y	Dry	N	
Mudge A 002 MV	✓	2	217.1	5.0	3.75	-	Y	Dry	N	

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	11/11/24	1	0.8	3.75	3.75	-	Y	2"	Y	
Florance GC J 16		2	8.4	3.75	3.75	-	Y	12"	Y	
Sandoval GC A 1A		3	1.3	2.25	2.25	9669.9	N	Dry	N	
Jacquez GC B 3E		1	17.8	1.25	1.25	3717.9	Y	21"	Y	
Al Elliot D 002		5	-	-	-	-	N	24"	Y	No Power, system would not start.
GCU H180		All	-	-	-	Gauge disconnected	Y	-	-	Temp 30 F System Pressure 2.75 psi SVE Point (psi): (1) 2.5 (2) 2.5 (3) 2.5 (4) 2.5
Heaton LS 5		Unk	68.9	2.5	2.5	-	Y	29"	Y	
Mudge B12 R		1	19.8	2.5	2.5	-	N	16"	Y	
Mudge A 002 MV	✓	2	144.3	5.0	4.75	-	Y	Dry	N	

Notes:

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

SVE Monitoring

Location	Date	SVE Point(s)	Exhaust OVM (ppm)	Vacuum Pressure upstream of drum (inHg)	Vacuum Pressure downstream of drum (inHg)	Run Time (Hours)	System Operational at Arrival?	Drum H2O (inches bTOD)	Drum Drained?	Comments
Atlantic A LS 9A	12/11/24	1	1.9	4.0	4.0	-	Y	26	Y	
Florance GC J 16	12/11/24	2	27.5	4.0	4.0	-	Y	13	Y	Fluid leaking from Drain gasket on Drum
Sandoval GC A 1A	12/11/24	3	1.4	2.23	2.25	38.1	N	Dry	N	
Jacquez GC B 3E	12/11/24	1	4.3	0	0	4461.9	Y	Dry	N	Missing PVC cap on down stream pipe 2" fitting
Al Elliot D 002	12/11/24	5	-	-	-	-	N	Dry	N	SVE non operational, unable to reset
GCU H180	12/10/24	All	-	-	-	-	Y	-	-	Temp 98 F System Pressure 1.75 psi SVE Point (psi): (1) 1.75 (2) 1.75 (3) 1.75 (4) 1.75
Heaton LS 5	12/11/24	Unk	-	-	-	-	N	23"	N	Frozen Fluid, SVE would not turn on
Mudge B12 R	12/10/24	1	30.0	2.5	2.5	-	Y	29"	Y	
Mudge A 002 MV	12/11/24	2	74.6	5.0	4.75	-	Y	Dry	N	

Plastic hose failing on SVE point #1

Notes:

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

CONDITIONS

Action 415782

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 415782
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Jacquez GC B #003E Gas Monitoring Lab Results and field forms are accepted for the record for 2024. App ID: 415782	1/13/2025