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11 April 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Mudge B #012R

Enclosed are the results of analyses for samples received by the laboratory on 03/27/24 15:45. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

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

Sincerely,

A handwritten signature in blue ink that reads 'Veronica J. Wells'. The signature is written in a cursive, flowing style.

Veronica Wells
Project Manager

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

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-23-16

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2403228-01	Water	03/27/24 11:00	03/27/24 15:45	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

MW #2

2403228-01 (Ground Water)

Sampled Date: 03/27/24 11:00

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

1,1,1,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
1,1,1-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
1,1,2,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
1,1,2-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
1,1-Dichloroethane*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
1,1-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
1,1-Dichloropropene*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
1,2,3-Trichlorobenzene*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
1,2,4-Trichlorobenzene*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
1,2,4-Trimethylbenzene*	0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
1,2-Dibromo-3-chloropropane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
1,2-Dibromoethane*	<0.0005	0.0005	0.00009	mg/L	1	04/08/24 13:52	8260B		MS
1,2-Dichlorobenzene*	<0.0005	0.0005	0.00007	mg/L	1	04/08/24 13:52	8260B		MS
1,2-Dichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
1,2-Dichloropropane*	<0.0005	0.0005	0.00008	mg/L	1	04/08/24 13:52	8260B		MS
1,3,5-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
1,3-Dichlorobenzene*	<0.0005	0.0005	0.00005	mg/L	1	04/08/24 13:52	8260B		MS
1,3-Dichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
1,4-Dichlorobenzene	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
1,4-Dioxane	<0.010	0.010	0.010	mg/L	1	04/08/24 13:52	8260B		MS
1,2,3-trichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
2,2-Dichloropropane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
2-Butanone*	<0.002	0.002	0.002	mg/L	1	04/08/24 13:52	8260B		MS
2-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
2-Hexanone*	<0.001	0.001	0.0003	mg/L	1	04/08/24 13:52	8260B		MS
4-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
4-Methyl-2-pentanone*	<0.001	0.001	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
Acetone*	<0.010	0.010	0.0009	mg/L	1	04/08/24 13:52	8260B		MS
Acrolein*	<0.005	0.005	0.001	mg/L	1	04/08/24 13:52	8260B		MS

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Veronica J Wells

Veronica Wells, Project Manager

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PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

MW #2

2403228-01 (Ground Water)

Sampled Date: 03/27/24 11:00

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Acrylonitrile*	<0.002	0.002	0.0008	mg/L	1	04/08/24 13:52	8260B		MS
Benzene*	0.004	0.0005	0.00005	mg/L	1	04/08/24 13:52	8260B		MS
Bromobenzene*	<0.0005	0.0005	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
Bromochloromethane*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
Bromodichloromethane*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
Bromoform*	<0.0005	0.0005	0.00009	mg/L	1	04/08/24 13:52	8260B		MS
Bromomethane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Carbon disulfide*	<0.005	0.005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
Carbon tetrachloride*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
Chlorobenzene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
Chloroethane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Chloroform*	<0.0005	0.0005	0.00002	mg/L	1	04/08/24 13:52	8260B		MS
Chloromethane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
cis-1,2-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
cis-1,3-Dichloropropene*	<0.0005	0.0005	0.00009	mg/L	1	04/08/24 13:52	8260B		MS
Dibromochloromethane*	<0.0005	0.0005	0.00008	mg/L	1	04/08/24 13:52	8260B		MS
Dibromomethane*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
Dichlorodifluoromethane*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Ethylbenzene*	<0.0005	0.0005	0.00003	mg/L	1	04/08/24 13:52	8260B		MS
Hexachlorobutadiene*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Iodomethane	<0.001	0.001	0.00006	mg/L	1	04/08/24 13:52	8260B		MS
Isopropylbenzene*	<0.0005	0.0005	0.00002	mg/L	1	04/08/24 13:52	8260B		MS
m+p - Xylene*	<0.001	0.001	0.00008	mg/L	1	04/08/24 13:52	8260B		MS
Methyl tert-butyl ether	<0.001	0.001	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
Methylene chloride*	<0.002	0.002	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Naphthalene*	0.0006	0.0005	0.00008	mg/L	1	04/08/24 13:52	8260B		MS
n-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	04/08/24 13:52	8260B		MS
n-Propylbenzene*	<0.0005	0.0005	0.00005	mg/L	1	04/08/24 13:52	8260B		MS
o-Xylene*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
p-Isopropyltoluene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
sec-Butylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	04/08/24 13:52	8260B		MS
Styrene*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS

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Veronica J. Wells

Veronica Wells, Project Manager

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PO Box 1653
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Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

MW #2

2403228-01 (Ground Water)

Sampled Date: 03/27/24 11:00

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

tert-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	04/08/24 13:52	8260B		MS
Tetrachloroethene*	<0.0005	0.0005	0.00009	mg/L	1	04/08/24 13:52	8260B		MS
Toluene*	<0.0005	0.0005	0.00008	mg/L	1	04/08/24 13:52	8260B		MS
Total Xylenes*	<0.001	0.001	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
trans-1,2-Dichloroethene*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
trans-1,3-Dichloropropene*	<0.0005	0.0005	0.00005	mg/L	1	04/08/24 13:52	8260B		MS
trans-1,4-Dichloro-2-butene	<0.010	0.010	0.0003	mg/L	1	04/08/24 13:52	8260B		MS
Trichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	04/08/24 13:52	8260B		MS
Trichlorofluoromethane*	<0.0005	0.0005	0.0001	mg/L	1	04/08/24 13:52	8260B		MS
Vinyl acetate*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS
Vinyl chloride*	<0.0005	0.0005	0.0005	mg/L	1	04/08/24 13:52	8260B		MS

Surrogate: 4-Bromofluorobenzene	101 %	76.4-114		04/08/24 13:52	8260B		MS
Surrogate: Dibromofluoromethane	94.7 %	82.4-141		04/08/24 13:52	8260B		MS
Surrogate: Toluene-d8	100 %	87.1-110		04/08/24 13:52	8260B		MS

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Veronica Wells, Project Manager

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Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles

Blank (4040332-BLK1)

Prepared: 04/03/24 Analyzed: 04/04/24

1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,1-Trichloroethane	ND	0.0005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0005	mg/L
1,1-Dichloroethane	ND	0.0005	mg/L
1,1-Dichloroethene	ND	0.0005	mg/L
1,1-Dichloropropene	ND	0.0005	mg/L
1,2,3-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trimethylbenzene	ND	0.0005	mg/L
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L
1,2-Dibromoethane	ND	0.0005	mg/L
1,2-Dichlorobenzene	ND	0.0005	mg/L
1,2-Dichloroethane	ND	0.0005	mg/L
1,2-Dichloropropane	ND	0.0005	mg/L
1,3,5-Trimethylbenzene	ND	0.0005	mg/L
1,3-Dichlorobenzene	ND	0.0005	mg/L
1,3-Dichloropropane	ND	0.0005	mg/L
1,4-Dichlorobenzene	ND	0.0005	mg/L
1,4-Dioxane	ND	0.010	mg/L
1,2,3-trichloropropane	ND	0.0005	mg/L
2,2-Dichloropropane	ND	0.0005	mg/L
2-Butanone	ND	0.002	mg/L
2-Chlorotoluene	ND	0.0005	mg/L
2-Hexanone	ND	0.001	mg/L

Surrogate: 4-Bromofluorobenzene	0.0523		mg/L	0.0500	105	76.4-114
4-Chlorotoluene	ND	0.0005	mg/L			
4-Methyl-2-pentanone	ND	0.001	mg/L			
Acetone	ND	0.010	mg/L			
Acrolein	ND	0.005	mg/L			
Acrylonitrile	ND	0.002	mg/L			
Benzene	ND	0.0005	mg/L			
Bromobenzene	ND	0.0005	mg/L			
Bromochloromethane	ND	0.0005	mg/L			
Bromodichloromethane	ND	0.0005	mg/L			
Bromoform	ND	0.0005	mg/L			

Green Analytical Laboratories

Veronica Wells, Project Manager

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Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles (Continued)

Blank (4040332-BLK1) (Continued)

Prepared: 04/03/24 Analyzed: 04/04/24

Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	0.001	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							

Surrogate: Dibromofluoromethane 0.0473 mg/L 0.0500 94.5 82.4-141

Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl tert-butyl ether	ND	0.001	mg/L							
Methylene chloride	0.0007	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							

Surrogate: Toluene-d8 0.0511 mg/L 0.0500 102 87.1-110

Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Veronica J. Wells

Veronica Wells, Project Manager

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Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

VOLATILES BY GC/MS - Quality Control
(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles (Continued)

LCS (4040332-BS1)

Prepared: 04/03/24 Analyzed: 04/04/24

1,1,1,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		108	82.4-120			
1,1,1-Trichloroethane	0.019	0.0005	mg/L	0.0200		93.4	80.7-121			
1,1,2,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		99.8	76.5-121			
1,1,2-Trichloroethane	0.021	0.0005	mg/L	0.0200		104	81.7-118			
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		94.7	74.8-123			
1,1-Dichloroethene	0.021	0.0005	mg/L	0.0200		103	53.9-149			
1,1-Dichloropropene	0.018	0.0005	mg/L	0.0200		92.4	85.9-115			
1,2,3-Trichlorobenzene	0.019	0.0005	mg/L	0.0200		92.8	76.1-134			
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		100	72.4-136			
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		109	67.4-138			
1,2-Dibromo-3-chloropropane	0.018	0.0005	mg/L	0.0200		89.6	71.7-124			
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		100	84.9-116			
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		98.9	82.5-119			
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		89.2	72.5-123			
1,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		97.8	79.4-117			
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		106	69-137			
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		101	84.4-120			
1,3-Dichloropropane	0.022	0.0005	mg/L	0.0200		108	82.6-117			
1,4-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		101	81.7-118			
1,4-Dioxane	0.594	0.010	mg/L	0.400		149	-34.6-193			
1,2,3-trichloropropane	0.019	0.0005	mg/L	0.0200		94.1	44.7-168			
2,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		93.4	62.9-136			
2-Butanone	0.037	0.002	mg/L	0.0400		91.4	24.1-159			
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		105	80.2-121			
2-Hexanone	0.034	0.001	mg/L	0.0400		84.5	56.3-139			
Surrogate: 4-Bromofluorobenzene	0.0506		mg/L	0.0500		101	76.4-114			
4-Chlorotoluene	0.021	0.0005	mg/L	0.0200		103	82.2-125			
4-Methyl-2-pentanone	0.035	0.001	mg/L	0.0400		87.2	60.7-139			
Acetone	0.037	0.010	mg/L	0.0400		92.8	39.1-168			
Acrolein	0.183	0.005	mg/L	0.200		91.4	26.6-161			
Acrylonitrile	0.034	0.002	mg/L	0.0400		84.7	64.9-135			
Benzene	0.020	0.0005	mg/L	0.0200		97.7	69.4-129			
Bromobenzene	0.026	0.0005	mg/L	0.0200		131	83.5-115			BS1
Bromochloromethane	0.023	0.0005	mg/L	0.0200		113	70.7-123			
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		99.6	80.3-119			
Bromoform	0.022	0.0005	mg/L	0.0200		111	71.1-141			
Bromomethane	0.017	0.0005	mg/L	0.0200		84.7	55.1-143			
Carbon disulfide	0.039	0.001	mg/L	0.0400		98.6	53.6-147			
Carbon tetrachloride	0.020	0.0005	mg/L	0.0200		101	79.5-125			

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles (Continued)

LCS (4040332-BS1) (Continued)

Prepared: 04/03/24 Analyzed: 04/04/24

Chlorobenzene	0.020	0.0005	mg/L	0.0200		101	85.1-115			
Chloroethane	0.018	0.0005	mg/L	0.0200		88.4	36.9-159			
Chloroform	0.018	0.0005	mg/L	0.0200		92.0	80.9-119			
Chloromethane	0.017	0.0005	mg/L	0.0200		85.4	54.2-142			
cis-1,2-Dichloroethene	0.019	0.0005	mg/L	0.0200		94.6	73.8-128			
cis-1,3-Dichloropropene	0.023	0.0005	mg/L	0.0200		115	82.5-122			
Dibromochloromethane	0.023	0.0005	mg/L	0.0200		114	83.1-124			
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0483</i>		mg/L	<i>0.0500</i>		<i>96.6</i>	<i>82.4-141</i>			
Dibromomethane	0.018	0.0005	mg/L	0.0200		88.8	77-118			
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		92.0	38.7-147			
Ethylbenzene	0.021	0.0005	mg/L	0.0200		104	70.2-130			
Hexachlorobutadiene	0.022	0.0005	mg/L	0.0200		108	78.9-148			
Iodomethane	0.036	0.001	mg/L	0.0400		89.2	63.5-135			
Isopropylbenzene	0.022	0.0005	mg/L	0.0200		109	85-124			
m+p - Xylene	0.043	0.001	mg/L	0.0400		108	71.9-133			
Methyl tert-butyl ether	0.035	0.001	mg/L	0.0400		86.7	57.7-137			
Methylene chloride	0.019	0.0005	mg/L	0.0200		97.2	49.3-163			
Naphthalene	0.016	0.0005	mg/L	0.0200		82.4	62.1-141			
n-Butylbenzene	0.023	0.0005	mg/L	0.0200		113	75.4-132			
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		106	79.6-124			
o-Xylene	0.022	0.0005	mg/L	0.0200		109	69.4-132			
p-Isopropyltoluene	0.021	0.0005	mg/L	0.0200		107	79.8-131			
sec-Butylbenzene	0.021	0.0005	mg/L	0.0200		104	77.6-133			
Styrene	0.022	0.0005	mg/L	0.0200		110	71.7-128			
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	78.8-128			
Tetrachloroethene	0.019	0.0005	mg/L	0.0200		94.8	74.2-128			
Toluene	0.022	0.0005	mg/L	0.0200		109	68.1-127			
<i>Surrogate: Toluene-d8</i>	<i>0.0530</i>		mg/L	<i>0.0500</i>		<i>106</i>	<i>87.1-110</i>			
Total Xylenes	0.065	0.001	mg/L	0.0600		108	71.6-132			
trans-1,2-Dichloroethene	0.018	0.0005	mg/L	0.0200		89.5	65.2-133			
trans-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		111	84-123			
trans-1,4-Dichloro-2-butene	0.138	0.010	mg/L	0.0400		345	9.3-235			BS1
Trichloroethene	0.018	0.0005	mg/L	0.0200		90.6	79.3-114			
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		91.1	28.6-162			
Vinyl acetate	0.019	0.0005	mg/L	0.0200		93.9	50.9-135			
Vinyl chloride	0.019	0.0005	mg/L	0.0200		93.9	61.6-133			

LCS Dup (4040332-BSD1)

Prepared: 04/03/24 Analyzed: 04/04/24

1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		103	82.4-120	5.22	6.88	
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Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles (Continued)

LCS Dup (4040332-BSD1) (Continued)

Prepared: 04/03/24 Analyzed: 04/04/24

1,1,1-Trichloroethane	0.018	0.0005	mg/L	0.0200		90.4	80.7-121	3.26	7.43	
1,1,2,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		108	76.5-121	8.03	8.68	
1,1,2-Trichloroethane	0.021	0.0005	mg/L	0.0200		106	81.7-118	2.53	6.82	
1,1-Dichloroethane	0.018	0.0005	mg/L	0.0200		90.2	74.8-123	4.87	4.3	QR-04
1,1-Dichloroethene	0.020	0.0005	mg/L	0.0200		98.9	53.9-149	3.87	16.5	
1,1-Dichloropropene	0.018	0.0005	mg/L	0.0200		91.8	85.9-115	0.706	5.47	
1,2,3-Trichlorobenzene	0.019	0.0005	mg/L	0.0200		96.6	76.1-134	3.91	43	
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		101	72.4-136	1.04	22.3	
1,2,4-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		105	67.4-138	3.68	8.94	
1,2-Dibromo-3-chloropropane	0.018	0.0005	mg/L	0.0200		89.0	71.7-124	0.672	15.1	
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		103	84.9-116	2.22	5.83	
1,2-Dichlorobenzene	0.019	0.0005	mg/L	0.0200		95.4	82.5-119	3.60	8.72	
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		88.0	72.5-123	1.47	8.94	
1,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		99.0	79.4-117	1.27	5.51	
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		103	69-137	2.82	16.5	
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		97.8	84.4-120	3.67	9	
1,3-Dichloropropane	0.021	0.0005	mg/L	0.0200		105	82.6-117	2.81	6.06	
1,4-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		97.7	81.7-118	3.62	7.71	
1,4-Dioxane	0.535	0.010	mg/L	0.400		134	-34.6-193	10.6	35.2	
1,2,3-trichloropropane	0.020	0.0005	mg/L	0.0200		99.9	44.7-168	5.98	49.2	
2,2-Dichloropropane	0.018	0.0005	mg/L	0.0200		90.6	62.9-136	2.99	9.62	
2-Butanone	0.040	0.002	mg/L	0.0400		101	24.1-159	9.64	14.2	
2-Chlorotoluene	0.020	0.0005	mg/L	0.0200		101	80.2-121	3.16	8.62	
2-Hexanone	0.040	0.001	mg/L	0.0400		100	56.3-139	16.8	7.28	QR-04
Surrogate: 4-Bromofluorobenzene	0.0515		mg/L	0.0500		103	76.4-114			
4-Chlorotoluene	0.020	0.0005	mg/L	0.0200		101	82.2-125	1.42	15.5	
4-Methyl-2-pentanone	0.040	0.001	mg/L	0.0400		99.8	60.7-139	13.5	7.57	QR-04
Acetone	0.040	0.010	mg/L	0.0400		101	39.1-168	8.64	30.5	
Acrolein	0.197	0.005	mg/L	0.200		98.3	26.6-161	7.24	22.4	
Acrylonitrile	0.038	0.002	mg/L	0.0400		95.7	64.9-135	12.2	7.62	QR-04
Benzene	0.019	0.0005	mg/L	0.0200		96.1	69.4-129	1.65	4.16	
Bromobenzene	0.022	0.0005	mg/L	0.0200		109	83.5-115	18.7	8.41	QR-04
Bromochloromethane	0.017	0.0005	mg/L	0.0200		85.5	70.7-123	27.4	5.16	QR-04
Bromodichloromethane	0.019	0.0005	mg/L	0.0200		96.9	80.3-119	2.75	5.36	
Bromoform	0.024	0.0005	mg/L	0.0200		118	71.1-141	6.14	14.1	
Bromomethane	0.017	0.0005	mg/L	0.0200		83.8	55.1-143	1.13	21.5	
Carbon disulfide	0.037	0.001	mg/L	0.0400		93.5	53.6-147	5.33	20.3	
Carbon tetrachloride	0.019	0.0005	mg/L	0.0200		94.9	79.5-125	6.57	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		98.0	85.1-115	3.16	5.18	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4040332 - Volatiles (Continued)

LCS Dup (4040332-BSD1) (Continued)

Prepared: 04/03/24 Analyzed: 04/04/24

Chloroethane	0.017	0.0005	mg/L	0.0200		86.1	36.9-159	2.58	24.1	
Chloroform	0.017	0.0005	mg/L	0.0200		86.3	80.9-119	6.39	5.15	QR-04
Chloromethane	0.016	0.0005	mg/L	0.0200		82.1	54.2-142	3.88	27	
cis-1,2-Dichloroethene	0.019	0.0005	mg/L	0.0200		93.9	73.8-128	0.796	5.73	
cis-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		112	82.5-122	2.78	6.09	
Dibromochloromethane	0.021	0.0005	mg/L	0.0200		106	83.1-124	7.87	7.24	QR-04
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0481</i>		mg/L	<i>0.0500</i>		<i>96.1</i>	<i>82.4-141</i>			
Dibromomethane	0.018	0.0005	mg/L	0.0200		87.8	77-118	1.19	5.75	
Dichlorodifluoromethane	0.018	0.0005	mg/L	0.0200		90.0	38.7-147	2.14	22.6	
Ethylbenzene	0.020	0.0005	mg/L	0.0200		102	70.2-130	2.27	4.83	
Hexachlorobutadiene	0.023	0.0005	mg/L	0.0200		114	78.9-148	5.52	18.4	
Iodomethane	0.035	0.001	mg/L	0.0400		88.3	63.5-135	1.01	24.3	
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		107	85-124	1.80	6.25	
m+p - Xylene	0.043	0.001	mg/L	0.0400		107	71.9-133	0.697	5.77	
Methyl tert-butyl ether	0.036	0.001	mg/L	0.0400		89.1	57.7-137	2.67	12.8	
Methylene chloride	0.019	0.0005	mg/L	0.0200		94.4	49.3-163	2.97	19.7	
Naphthalene	0.018	0.0005	mg/L	0.0200		87.8	62.1-141	6.28	33.5	
n-Butylbenzene	0.022	0.0005	mg/L	0.0200		111	75.4-132	1.74	10.1	
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		105	79.6-124	0.332	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		103	69.4-132	5.70	6.29	
p-Isopropyltoluene	0.021	0.0005	mg/L	0.0200		106	79.8-131	1.46	9.26	
sec-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	77.6-133	1.66	9.85	
Styrene	0.022	0.0005	mg/L	0.0200		108	71.7-128	2.15	7.55	
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		103	78.8-128	2.49	18.6	
Tetrachloroethene	0.019	0.0005	mg/L	0.0200		96.2	74.2-128	1.36	6.38	
Toluene	0.021	0.0005	mg/L	0.0200		105	68.1-127	3.36	5.67	
<i>Surrogate: Toluene-d8</i>	<i>0.0525</i>		mg/L	<i>0.0500</i>		<i>105</i>	<i>87.1-110</i>			
Total Xylenes	0.064	0.001	mg/L	0.0600		106	71.6-132	2.35	5.83	
trans-1,2-Dichloroethene	0.017	0.0005	mg/L	0.0200		87.0	65.2-133	2.89	19.1	
trans-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		108	84-123	2.10	6.26	
trans-1,4-Dichloro-2-butene	0.126	0.010	mg/L	0.0400		315	9.3-235	8.88	92.8	BS1
Trichloroethene	0.018	0.0005	mg/L	0.0200		89.6	79.3-114	1.17	4.92	
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		89.8	28.6-162	1.44	19.8	
Vinyl acetate	0.020	0.0005	mg/L	0.0200		97.7	50.9-135	3.97	7.84	
Vinyl chloride	0.019	0.0005	mg/L	0.0200		92.9	61.6-133	1.07	23	

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

Notes and Definitions

QR-04 The RPD for the BS/BSD was outside of historical limits.

BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis
 *Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
04/11/24 08:26

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
4040332-BS1	Volatile 8260	Bromobenzene	BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
4040332-BS1	Volatile 8260	trans-1,4-Dichloro-2-butene	BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
4040332-BSD1	Volatile 8260	1,1-Dichloroethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	2-Hexanone	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	4-Methyl-2-pentanone	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	Acrylonitrile	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	Bromobenzene	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	Bromochloromethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	Chloroform	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	Dibromochloromethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4040332-BSD1	Volatile 8260	trans-1,4-Dichloro-2-butene	BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006, R 8.0

Note: Wire-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Cottonwood Consulting LLC

Bill to (if different):

ANALYSIS REQUEST

Address: PO Box 1653

City: Durango

State: CO Zip: 81302

Phone #: 970-764-7356

Contact Person: Kyle Siesser

Email Report to: kssiesser@cottonwoodconsulting.com

Project Name(optional):

Mudge B #012R

Sampler Name (Print):

Wiley O'Brien

Collected

Matrix (check one)

of containers

P.O. #:

Rush?

TAT

Needed?

EPA Method 8260 (VOCs)

Lab I.D.

Sample Name or Location

Lab Use Only

01

MW #2

Date

Time

3/27/24

1105

GROUNDWATER

SURFACE WATER

WASTEWATER

PRODUCED WATER

DRINKING WATER

SOIL

OTHER:

No preservation

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide

OTHER:

4

✓

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Relinquished By:

Date: 3/27/24

Time: 1545

Received By:

Date: 3-27-24

Time: 1545

Temperature at receipt: 12.3 °C

Checked by: MPA

On Ice? ☒ Y ☐ N

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Temperature at receipt:

Checked by:

On Ice? ☒ Y ☐ N

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Temperature at receipt:

Checked by:

On Ice? ☒ Y ☐ N

† GAL cannot accept verbal changes. Please email changes to receiving@greenanalytical.com
* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.



SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood ConsultingWork Order # 2403-228Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ OtherCustody Seals on Box/Cooler Present: ☐ Yes ☒ NoSeals Intact: ☐ Yes ☐ NoThermometer Used: #2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 12.3°C Correction Factor: 0°C Final Temp: 12.3°C

* Temp should be above freezing to 6°C

Date/Initials of person
examining contents: CPN 3/27Labeled by initials: _____
(if different than above)

Chain of Custody Present:	☒ Yes ☐ No	1.
Chain of Custody Filled Out:	☒ Yes ☐ No	2.
Chain of Custody Relinquished:	☐ Yes ☒ No	3.
Sampler Name and Signature on COC:	☒ Yes ☐ No	4.
Samples arrived within hold time:	☐ Yes ☒ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No	7.
Sufficient Volume:	☒ Yes ☐ No	8.
Correct Containers Used:	☒ Yes ☐ No	9.
Containers Intact:	☒ Yes ☐ No	10.
Dissolved Testing Needed:	☐ Yes ☒ No	11.
Field Filtered: ☐ Yes ☐ No		
Sample Labels match COC:	☒ Yes ☐ No	12.
-Includes Date/Time/ID		
Matrix:	<u>WT</u> SL OT	
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	13.
Trip Blank Custody Seals Present:	☐ Yes ☐ No ☒ N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____



Environment Testing

- 1
- 2
- 3
- 4
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- 7
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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kyle Siesser
Cottonwood Consulting LLC
PO BOX 1653
Durango, Colorado 81302
Generated 6/17/2024 6:03:31 PM

JOB DESCRIPTION

Mudge B #012R

JOB NUMBER

885-6150-1

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

Generated
6/17/2024 6:03:31 PM

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Laboratory Job ID: 885-6150-1

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Definitions/Glossary

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Job ID: 885-6150-1

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: Mudge B #012R

Job ID: 885-6150-1

Job ID: 885-6150-1

Eurofins Albuquerque

Job Narrative 885-6150-1

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 6/13/2024 6:55 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 26.1°C.

Gasoline Range Organics

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

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: Mudge B #012R

Job ID: 885-6150-1

Client Sample ID: SVE
Date Collected: 06/12/24 15:20
Date Received: 06/13/24 06:55
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-6150-1
Matrix: Air

Method: SW846 8015D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	84		10	ug/L			06/13/24 17:59	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	115		52 - 172				06/13/24 17:59	2	

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.20	ug/L			06/13/24 17:59	2	
Ethylbenzene	ND		0.20	ug/L			06/13/24 17:59	2	
m&p-Xylene	0.43		0.20	ug/L			06/13/24 17:59	2	
o-Xylene	0.22		0.20	ug/L			06/13/24 17:59	2	
Toluene	ND		0.20	ug/L			06/13/24 17:59	2	
Xylenes, Total	0.65		0.30	ug/L			06/13/24 17:59	2	
Methyl-tert-butyl Ether (MTBE)	ND		0.20	ug/L			06/13/24 17:59	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				06/13/24 17:59	2	
Toluene-d8 (Surr)	89		70 - 130				06/13/24 17:59	2	
4-Bromofluorobenzene (Surr)	121		70 - 130				06/13/24 17:59	2	
Dibromofluoromethane (Surr)	89		70 - 130				06/13/24 17:59	2	

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Job ID: 885-6150-1

Method: 8015D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Lab Sample ID: MB 885-6752/3

Matrix: Air

Analysis Batch: 6752

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	ug/L			06/13/24 13:26	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		52 - 172				06/13/24 13:26	1

Lab Sample ID: LCS 885-6752/2

Matrix: Air

Analysis Batch: 6752

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	500	519		ug/L		104	
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	108		52 - 172				

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

Lab Sample ID: MB 885-6750/3

Matrix: Air

Analysis Batch: 6750

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.10	ug/L			06/13/24 13:26	1
Ethylbenzene	ND		0.10	ug/L			06/13/24 13:26	1
m&p-Xylene	ND		0.10	ug/L			06/13/24 13:26	1
o-Xylene	ND		0.10	ug/L			06/13/24 13:26	1
Toluene	ND		0.10	ug/L			06/13/24 13:26	1
Xylenes, Total	ND		0.15	ug/L			06/13/24 13:26	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			06/13/24 13:26	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				06/13/24 13:26	1
Toluene-d8 (Surr)	89		70 - 130				06/13/24 13:26	1
4-Bromofluorobenzene (Surr)	108		70 - 130				06/13/24 13:26	1
Dibromofluoromethane (Surr)	92		70 - 130				06/13/24 13:26	1

Lab Sample ID: LCS 885-6750/2

Matrix: Air

Analysis Batch: 6750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.1	21.0		ug/L		105	
Toluene	20.2	19.8		ug/L		98	
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				
Toluene-d8 (Surr)	90		70 - 130				

Eurofins Albuquerque

QC Sample Results

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Job ID: 885-6150-1

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

Lab Sample ID: LCS 885-6750/2
Matrix: Air
Analysis Batch: 6750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
Dibromofluoromethane (Surr)	91		70 - 130

QC Association Summary

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Job ID: 885-6150-1

GC/MS VOA

Analysis Batch: 6750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6150-1	SVE	Total/NA	Air	8260B	
MB 885-6750/3	Method Blank	Total/NA	Air	8260B	
LCS 885-6750/2	Lab Control Sample	Total/NA	Air	8260B	

Analysis Batch: 6752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6150-1	SVE	Total/NA	Air	8015D	
MB 885-6752/3	Method Blank	Total/NA	Air	8015D	
LCS 885-6752/2	Lab Control Sample	Total/NA	Air	8015D	

Lab Chronicle

Client: Cottonwood Consulting LLC
Project/Site: Mudge B #012R

Job ID: 885-6150-1

Client Sample ID: SVE
Date Collected: 06/12/24 15:20
Date Received: 06/13/24 06:55

Lab Sample ID: 885-6150-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		2	6752	CM	EET ALB	06/13/24 17:59
Total/NA	Analysis	8260B		2	6750	CM	EET ALB	06/13/24 17:59

Laboratory References:
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: Mudge B #012R

Job ID: 885-6150-1

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
8015D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	Benzene
8260B		Air	Ethylbenzene
8260B		Air	m&p-Xylene
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	o-Xylene
8260B		Air	Toluene
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
8015D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	Benzene
8260B		Air	Ethylbenzene
8260B		Air	m&p-Xylene
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	o-Xylene
8260B		Air	Toluene
8260B		Air	Xylenes, Total

Login Sample Receipt Checklist

Client: Cottonwood Consulting LLC

Job Number: 885-6150-1

Login Number: 6150

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

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.	True	
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	



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

25 June 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Mudge B #012R

Enclosed are the results of analyses for samples received by the laboratory on 06/13/24 09:20. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

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

Sincerely,

A handwritten signature in blue ink that reads 'Veronica J. Wells'. The signature is written in a cursive, flowing style.

Veronica Wells
Project Manager

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

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2406165-01	Water	06/12/24 15:25	06/13/24 09:20	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

MW #2

2406165-01 (Ground Water)

Sampled Date: 06/12/24 15:25

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

1,1,1,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
1,1,1-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
1,1,2,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
1,1,2-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
1,1-Dichloroethane*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
1,1-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
1,1-Dichloropropene*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
1,2,3-Trichlorobenzene*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
1,2,4-Trichlorobenzene*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
1,2,4-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
1,2-Dibromo-3-chloropropane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
1,2-Dibromoethane*	<0.0005	0.0005	0.00009	mg/L	1	06/19/24 19:54	8260B		CK
1,2-Dichlorobenzene*	<0.0005	0.0005	0.00007	mg/L	1	06/19/24 19:54	8260B		CK
1,2-Dichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
1,2-Dichloropropane*	<0.0005	0.0005	0.00008	mg/L	1	06/19/24 19:54	8260B		CK
1,3,5-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
1,3-Dichlorobenzene*	<0.0005	0.0005	0.00005	mg/L	1	06/19/24 19:54	8260B		CK
1,3-Dichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
1,4-Dichlorobenzene	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
1,4-Dioxane	<0.010	0.010	0.010	mg/L	1	06/19/24 19:54	8260B		CK
1,2,3-trichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
2,2-Dichloropropane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
2-Butanone*	<0.002	0.002	0.002	mg/L	1	06/19/24 19:54	8260B		CK
2-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
2-Hexanone*	<0.001	0.001	0.0003	mg/L	1	06/19/24 19:54	8260B		CK
4-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
4-Methyl-2-pentanone*	<0.001	0.001	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
Acetone*	<0.010	0.010	0.0009	mg/L	1	06/19/24 19:54	8260B		CK
Acrolein*	<0.005	0.005	0.001	mg/L	1	06/19/24 19:54	8260B		CK

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

MW #2

2406165-01 (Ground Water)

Sampled Date: 06/12/24 15:25

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

Acrylonitrile*	<0.002	0.002	0.0008	mg/L	1	06/19/24 19:54	8260B		CK
Benzene*	0.003	0.0005	0.00005	mg/L	1	06/19/24 19:54	8260B		CK
Bromobenzene*	<0.0005	0.0005	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
Bromochloromethane*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
Bromodichloromethane*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
Bromoform*	<0.0005	0.0005	0.00009	mg/L	1	06/19/24 19:54	8260B		CK
Bromomethane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Carbon disulfide*	<0.001	0.001	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
Carbon tetrachloride*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
Chlorobenzene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
Chloroethane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Chloroform*	<0.0005	0.0005	0.00002	mg/L	1	06/19/24 19:54	8260B		CK
Chloromethane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
cis-1,2-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
cis-1,3-Dichloropropene*	<0.0005	0.0005	0.00009	mg/L	1	06/19/24 19:54	8260B		CK
Dibromochloromethane*	<0.0005	0.0005	0.00008	mg/L	1	06/19/24 19:54	8260B		CK
Dibromomethane*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
Dichlorodifluoromethane*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Ethylbenzene*	<0.0005	0.0005	0.00003	mg/L	1	06/19/24 19:54	8260B		CK
Hexachlorobutadiene*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Iodomethane	<0.001	0.001	0.00006	mg/L	1	06/19/24 19:54	8260B		CK
Isopropylbenzene*	<0.0005	0.0005	0.00002	mg/L	1	06/19/24 19:54	8260B		CK
m+p - Xylene*	<0.001	0.001	0.00008	mg/L	1	06/19/24 19:54	8260B		CK
Methyl tert-butyl ether	<0.001	0.001	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
Methylene chloride*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Naphthalene*	<0.0005	0.0005	0.00008	mg/L	1	06/19/24 19:54	8260B		CK
n-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	06/19/24 19:54	8260B		CK
n-Propylbenzene*	<0.0005	0.0005	0.00005	mg/L	1	06/19/24 19:54	8260B		CK
o-Xylene*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
p-Isopropyltoluene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
sec-Butylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	06/19/24 19:54	8260B		CK
Styrene*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK

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Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

MW #2

2406165-01 (Ground Water)

Sampled Date: 06/12/24 15:25

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

tert-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	06/19/24 19:54	8260B		CK
Tetrachloroethene*	<0.0005	0.0005	0.00009	mg/L	1	06/19/24 19:54	8260B		CK
Toluene*	<0.0005	0.0005	0.00008	mg/L	1	06/19/24 19:54	8260B		CK
Total Xylenes*	<0.001	0.001	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
trans-1,2-Dichloroethene*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
trans-1,3-Dichloropropene*	<0.0005	0.0005	0.00005	mg/L	1	06/19/24 19:54	8260B		CK
trans-1,4-Dichloro-2-butene	<0.010	0.010	0.0003	mg/L	1	06/19/24 19:54	8260B		CK
Trichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	06/19/24 19:54	8260B		CK
Trichlorofluoromethane*	<0.0005	0.0005	0.0001	mg/L	1	06/19/24 19:54	8260B		CK
Vinyl acetate*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK
Vinyl chloride*	<0.0005	0.0005	0.0005	mg/L	1	06/19/24 19:54	8260B		CK

Surrogate: 4-Bromofluorobenzene	92.4 %	76.4-114	06/19/24 19:54	8260B	CK
Surrogate: Dibromofluoromethane	106 %	82.4-141	06/19/24 19:54	8260B	CK
Surrogate: Toluene-d8	102 %	87.1-110	06/19/24 19:54	8260B	CK

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Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles

Blank (4061719-BLK1)

Prepared: 06/17/24 Analyzed: 06/19/24

1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,1-Trichloroethane	ND	0.0005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0005	mg/L
1,1-Dichloroethane	ND	0.0005	mg/L
1,1-Dichloroethene	ND	0.0005	mg/L
1,1-Dichloropropene	ND	0.0005	mg/L
1,2,3-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trimethylbenzene	ND	0.0005	mg/L
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L
1,2-Dibromoethane	ND	0.0005	mg/L
1,2-Dichlorobenzene	ND	0.0005	mg/L
1,2-Dichloroethane	ND	0.0005	mg/L
1,2-Dichloropropane	ND	0.0005	mg/L
1,3,5-Trimethylbenzene	ND	0.0005	mg/L
1,3-Dichlorobenzene	ND	0.0005	mg/L
1,3-Dichloropropane	ND	0.0005	mg/L
1,4-Dichlorobenzene	ND	0.0005	mg/L
1,4-Dioxane	ND	0.010	mg/L
1,2,3-trichloropropane	ND	0.0005	mg/L
2,2-Dichloropropane	ND	0.0005	mg/L
2-Butanone	ND	0.002	mg/L
2-Chlorotoluene	ND	0.0005	mg/L
2-Hexanone	ND	0.001	mg/L

Surrogate: 4-Bromofluorobenzene	0.0236		mg/L	0.0250	94.3	76.4-114
4-Chlorotoluene	ND	0.0005	mg/L			
4-Methyl-2-pentanone	ND	0.001	mg/L			
Acetone	ND	0.010	mg/L			
Acrolein	ND	0.005	mg/L			
Acrylonitrile	ND	0.002	mg/L			
Benzene	ND	0.0005	mg/L			
Bromobenzene	ND	0.0005	mg/L			
Bromochloromethane	ND	0.0005	mg/L			
Bromodichloromethane	ND	0.0005	mg/L			
Bromoform	ND	0.0005	mg/L			

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Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles (Continued)

Blank (4061719-BLK1) (Continued)

Prepared: 06/17/24 Analyzed: 06/19/24

Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							

Surrogate: Dibromofluoromethane 0.0269 mg/L 0.0250 107 82.4-141

Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl tert-butyl ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							

Surrogate: Toluene-d8 0.0249 mg/L 0.0250 99.5 87.1-110

Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles (Continued)

LCS (4061719-BS1)

Prepared: 06/17/24 Analyzed: 06/19/24

1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		105	82.4-120			
1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		104	80.7-121			
1,1,2,2-Tetrachloroethane	0.019	0.0005	mg/L	0.0200		94.5	76.5-121			
1,1,2-Trichloroethane	0.018	0.0005	mg/L	0.0200		91.8	81.7-118			
1,1-Dichloroethane	0.019	0.0005	mg/L	0.0200		96.6	74.8-123			
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		108	53.9-149			
1,1-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	85.9-115			
1,2,3-Trichlorobenzene	0.022	0.0005	mg/L	0.0200		109	76.1-134			
1,2,4-Trichlorobenzene	0.022	0.0005	mg/L	0.0200		108	72.4-136			
1,2,4-Trimethylbenzene	0.020	0.0005	mg/L	0.0200		99.8	67.4-138			
1,2-Dibromo-3-chloropropane	0.021	0.0005	mg/L	0.0200		106	71.7-124			
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		100	84.9-116			
1,2-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		108	82.5-119			
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		90.0	72.5-123			
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		95.0	79.4-117			
1,3,5-Trimethylbenzene	0.020	0.0005	mg/L	0.0200		101	69-137			
1,3-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		110	84.4-120			
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		99.8	82.6-117			
1,4-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		106	81.7-118			
1,4-Dioxane	0.432	0.010	mg/L	0.400		108	-34.6-193			
1,2,3-trichloropropane	0.014	0.0005	mg/L	0.0200		71.2	44.7-168			
2,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		102	62.9-136			
2-Butanone	0.041	0.002	mg/L	0.0400		102	24.1-159			
2-Chlorotoluene	0.022	0.0005	mg/L	0.0200		110	80.2-121			
2-Hexanone	0.036	0.001	mg/L	0.0400		89.5	56.3-139			
Surrogate: 4-Bromofluorobenzene	0.0252		mg/L	0.0250		101	76.4-114			
4-Chlorotoluene	0.023	0.0005	mg/L	0.0200		113	82.2-125			
4-Methyl-2-pentanone	0.035	0.001	mg/L	0.0400		87.7	60.7-139			
Acetone	0.043	0.010	mg/L	0.0400		107	39.1-168			
Acrolein	0.228	0.005	mg/L	0.200		114	26.6-161			
Acrylonitrile	0.040	0.002	mg/L	0.0400		100	64.9-135			
Benzene	0.019	0.0005	mg/L	0.0200		96.0	69.4-129			
Bromobenzene	0.020	0.0005	mg/L	0.0200		101	83.5-115			
Bromochloromethane	0.024	0.0005	mg/L	0.0200		119	70.7-123			
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		101	80.3-119			
Bromoform	0.022	0.0005	mg/L	0.0200		108	71.1-141			
Bromomethane	0.023	0.0005	mg/L	0.0200		116	55.1-143			
Carbon disulfide	0.045	0.001	mg/L	0.0400		113	53.6-147			
Carbon tetrachloride	0.023	0.0005	mg/L	0.0200		115	79.5-125			

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles (Continued)

LCS (4061719-BS1) (Continued)

Prepared: 06/17/24 Analyzed: 06/19/24

Chlorobenzene	0.020	0.0005	mg/L	0.0200		100	85.1-115			
Chloroethane	0.021	0.0005	mg/L	0.0200		107	36.9-159			
Chloroform	0.020	0.0005	mg/L	0.0200		99.6	80.9-119			
Chloromethane	0.019	0.0005	mg/L	0.0200		96.9	54.2-142			
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		98.8	73.8-128			
cis-1,3-Dichloropropene	0.023	0.0005	mg/L	0.0200		113	82.5-122			
Dibromochloromethane	0.022	0.0005	mg/L	0.0200		108	83.1-124			
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0248</i>		mg/L	<i>0.0250</i>		<i>99.4</i>	<i>82.4-141</i>			
Dibromomethane	0.021	0.0005	mg/L	0.0200		103	77-118			
Dichlorodifluoromethane	0.021	0.0005	mg/L	0.0200		103	38.7-147			
Ethylbenzene	0.021	0.0005	mg/L	0.0200		105	70.2-130			
Hexachlorobutadiene	0.022	0.0005	mg/L	0.0200		112	78.9-148			
Iodomethane	0.045	0.001	mg/L	0.0400		114	63.5-135			
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		104	85-124			
m+p - Xylene	0.041	0.001	mg/L	0.0400		103	71.9-133			
Methyl tert-butyl ether	0.040	0.001	mg/L	0.0400		99.8	57.7-137			
Methylene chloride	0.022	0.0005	mg/L	0.0200		108	49.3-163			
Naphthalene	0.022	0.0005	mg/L	0.0200		112	62.1-141			
n-Butylbenzene	0.022	0.0005	mg/L	0.0200		111	75.4-132			
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		112	79.6-124			
o-Xylene	0.021	0.0005	mg/L	0.0200		103	69.4-132			
p-Isopropyltoluene	0.024	0.0005	mg/L	0.0200		121	79.8-131			
sec-Butylbenzene	0.021	0.0005	mg/L	0.0200		103	77.6-133			
Styrene	0.021	0.0005	mg/L	0.0200		106	71.7-128			
tert-Butylbenzene	0.020	0.0005	mg/L	0.0200		102	78.8-128			
Tetrachloroethene	0.020	0.0005	mg/L	0.0200		102	74.2-128			
Toluene	0.019	0.0005	mg/L	0.0200		96.7	68.1-127			
<i>Surrogate: Toluene-d8</i>	<i>0.0253</i>		mg/L	<i>0.0250</i>		<i>101</i>	<i>87.1-110</i>			
Total Xylenes	0.062	0.001	mg/L	0.0600		103	71.6-132			
trans-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		110	65.2-133			
trans-1,3-Dichloropropene	0.025	0.0005	mg/L	0.0200		123	84-123			
trans-1,4-Dichloro-2-butene	0.077	0.010	mg/L	0.0400		193	9.3-235			
Trichloroethene	0.020	0.0005	mg/L	0.0200		101	79.3-114			
Trichlorofluoromethane	0.023	0.0005	mg/L	0.0200		114	28.6-162			
Vinyl acetate	0.016	0.0005	mg/L	0.0200		79.0	50.9-135			
Vinyl chloride	0.020	0.0005	mg/L	0.0200		102	61.6-133			

LCS Dup (4061719-BSD1)

Prepared: 06/17/24 Analyzed: 06/19/24

1,1,1,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		105	82.4-120	0.00	6.88	
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Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles (Continued)

LCS Dup (4061719-BSD1) (Continued)

Prepared: 06/17/24 Analyzed: 06/19/24

1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		104	80.7-121	0.0482	7.43	
1,1,2,2-Tetrachloroethane	0.018	0.0005	mg/L	0.0200		90.7	76.5-121	4.16	8.68	
1,1,2-Trichloroethane	0.019	0.0005	mg/L	0.0200		92.6	81.7-118	0.976	6.82	
1,1-Dichloroethane	0.020	0.0005	mg/L	0.0200		98.1	74.8-123	1.49	4.3	
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		112	53.9-149	3.32	16.5	
1,1-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	85.9-115	0.00	5.47	
1,2,3-Trichlorobenzene	0.021	0.0005	mg/L	0.0200		103	76.1-134	5.89	43	
1,2,4-Trichlorobenzene	0.020	0.0005	mg/L	0.0200		102	72.4-136	6.15	22.3	
1,2,4-Trimethylbenzene	0.019	0.0005	mg/L	0.0200		96.6	67.4-138	3.36	8.94	
1,2-Dibromo-3-chloropropane	0.019	0.0005	mg/L	0.0200		97.0	71.7-124	8.49	15.1	
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		103	84.9-116	2.51	5.83	
1,2-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	82.5-119	3.44	8.72	
1,2-Dichloroethane	0.019	0.0005	mg/L	0.0200		92.6	72.5-123	2.85	8.94	
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		96.4	79.4-117	1.36	5.51	
1,3,5-Trimethylbenzene	0.019	0.0005	mg/L	0.0200		96.9	69-137	4.39	16.5	
1,3-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		105	84.4-120	4.23	9	
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		99.6	82.6-117	0.251	6.06	
1,4-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		101	81.7-118	4.50	7.71	
1,4-Dioxane	0.429	0.010	mg/L	0.400		107	-34.6-193	0.678	35.2	
1,2,3-trichloropropane	0.020	0.0005	mg/L	0.0200		98.2	44.7-168	31.8	49.2	
2,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		102	62.9-136	0.489	9.62	
2-Butanone	0.042	0.002	mg/L	0.0400		104	24.1-159	1.60	14.2	
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		105	80.2-121	4.62	8.62	
2-Hexanone	0.037	0.001	mg/L	0.0400		91.3	56.3-139	1.94	7.28	
Surrogate: 4-Bromofluorobenzene	0.0253		mg/L	0.0250		101	76.4-114			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		109	82.2-125	4.15	15.5	
4-Methyl-2-pentanone	0.035	0.001	mg/L	0.0400		88.3	60.7-139	0.653	7.57	
Acetone	0.044	0.010	mg/L	0.0400		109	39.1-168	2.03	30.5	
Acrolein	0.229	0.005	mg/L	0.200		115	26.6-161	0.757	22.4	
Acrylonitrile	0.041	0.002	mg/L	0.0400		102	64.9-135	2.22	7.62	
Benzene	0.019	0.0005	mg/L	0.0200		96.2	69.4-129	0.156	4.16	
Bromobenzene	0.019	0.0005	mg/L	0.0200		96.8	83.5-115	4.69	8.41	
Bromochloromethane	0.024	0.0005	mg/L	0.0200		119	70.7-123	0.168	5.16	
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		102	80.3-119	1.19	5.36	
Bromoform	0.021	0.0005	mg/L	0.0200		104	71.1-141	3.63	14.1	
Bromomethane	0.024	0.0005	mg/L	0.0200		118	55.1-143	1.67	21.5	
Carbon disulfide	0.045	0.001	mg/L	0.0400		112	53.6-147	0.713	20.3	
Carbon tetrachloride	0.024	0.0005	mg/L	0.0200		118	79.5-125	2.87	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		102	85.1-115	1.53	5.18	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4061719 - Volatiles (Continued)

LCS Dup (4061719-BSD1) (Continued)

Prepared: 06/17/24 Analyzed: 06/19/24

Chloroethane	0.022	0.0005	mg/L	0.0200		109	36.9-159	2.45	24.1	
Chloroform	0.020	0.0005	mg/L	0.0200		101	80.9-119	1.25	5.15	
Chloromethane	0.019	0.0005	mg/L	0.0200		94.1	54.2-142	2.88	27	
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		101	73.8-128	1.90	5.73	
cis-1,3-Dichloropropene	0.022	0.0005	mg/L	0.0200		112	82.5-122	0.842	6.09	
Dibromochloromethane	0.021	0.0005	mg/L	0.0200		106	83.1-124	1.45	7.24	
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0247</i>		mg/L	<i>0.0250</i>		<i>99.0</i>	<i>82.4-141</i>			
Dibromomethane	0.021	0.0005	mg/L	0.0200		106	77-118	2.78	5.75	
Dichlorodifluoromethane	0.021	0.0005	mg/L	0.0200		105	38.7-147	2.26	22.6	
Ethylbenzene	0.021	0.0005	mg/L	0.0200		105	70.2-130	0.00	4.83	
Hexachlorobutadiene	0.022	0.0005	mg/L	0.0200		108	78.9-148	3.18	18.4	
Iodomethane	0.045	0.001	mg/L	0.0400		114	63.5-135	0.176	24.3	
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		105	85-124	0.573	6.25	
m+p - Xylene	0.042	0.001	mg/L	0.0400		104	71.9-133	0.338	5.77	
Methyl tert-butyl ether	0.041	0.001	mg/L	0.0400		102	57.7-137	2.62	12.8	
Methylene chloride	0.021	0.0005	mg/L	0.0200		107	49.3-163	0.742	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		105	62.1-141	6.86	33.5	
n-Butylbenzene	0.021	0.0005	mg/L	0.0200		105	75.4-132	5.28	10.1	
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		108	79.6-124	4.00	9.09	
o-Xylene	0.020	0.0005	mg/L	0.0200		102	69.4-132	0.244	6.29	
p-Isopropyltoluene	0.025	0.0005	mg/L	0.0200		127	79.8-131	5.32	9.26	
sec-Butylbenzene	0.020	0.0005	mg/L	0.0200		98.8	77.6-133	3.92	9.85	
Styrene	0.021	0.0005	mg/L	0.0200		105	71.7-128	0.427	7.55	
tert-Butylbenzene	0.020	0.0005	mg/L	0.0200		97.8	78.8-128	4.26	18.6	
Tetrachloroethene	0.021	0.0005	mg/L	0.0200		104	74.2-128	2.18	6.38	
Toluene	0.019	0.0005	mg/L	0.0200		96.4	68.1-127	0.311	5.67	
<i>Surrogate: Toluene-d8</i>	<i>0.0251</i>		mg/L	<i>0.0250</i>		<i>100</i>	<i>87.1-110</i>			
Total Xylenes	0.062	0.001	mg/L	0.0600		103	71.6-132	0.145	5.83	
trans-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		112	65.2-133	1.80	19.1	
trans-1,3-Dichloropropene	0.024	0.0005	mg/L	0.0200		121	84-123	1.39	6.26	
trans-1,4-Dichloro-2-butene	0.060	0.010	mg/L	0.0400		150	9.3-235	25.2	92.8	
Trichloroethene	0.021	0.0005	mg/L	0.0200		103	79.3-114	1.57	4.92	
Trichlorofluoromethane	0.023	0.0005	mg/L	0.0200		115	28.6-162	1.40	19.8	
Vinyl acetate	0.016	0.0005	mg/L	0.0200		80.9	50.9-135	2.31	7.84	
Vinyl chloride	0.020	0.0005	mg/L	0.0200		101	61.6-133	0.197	23	

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012R
Project Manager: Kyle Siesser

Reported:
06/25/24 16:41

Notes and Definitions

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

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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**75 Suttle Street
Durango, CO 81303
(970) 247-4220**

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
FORM-006, R 8.0

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

Bill to (if different)

ANALYSIS REQUEST

Address: PO Box 1653

City:	Durango	State:	CO	Zip:	81302
-------	---------	--------	----	------	-------

Phone #: 970-764-7356

Contact Person: Kyle Siesser

Email Report to: ksiesser@cottonwoodconsulting.com

Project Name(optional)

Mudge B #012R

Sampler Name (Print): Kelsey O'Brien

	Rush?	TAT Needed?
Y	☐	☐
N	☐	☐

Matrix (check one)	# of containers
--------------------	-----------------

EPA Method (8260)

[illegible]

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

Relinquished By:	Date: 6/12/24	Received By:	Date:	ADDITIONAL REMARKS:
	Time: 1700		Time:	
Relinquished By:	Date: 6/12/24	Received By:	Date: 6/13/24	
	Time: 0915		Time: 920	
Relinquished By:	Date:	Received By:	Date:	Temperature at receipt:
	Time:		Time:	4.9 °C
				Checked by: JMB
				On Ice? ☒ N
				Therm. used: 1 user 3

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.



SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood ConsultingWork Order # 2406-165Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ OtherCustody Seals on Box/Cooler Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ NoThermometer Used: #2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 4.9 °C Correction Factor: 0 °C Final Temp: 4.9 °C

* Temp should be above freezing to 6°C

Date/Initials of person
examining contents: CDV
6.13.24Labeled by initials: _____
(if different than above)

Chain of Custody Present:	☒ Yes ☐ No	1.
Chain of Custody Filled Out:	☒ Yes ☐ No	2.
Chain of Custody Relinquished:	☒ Yes ☐ No	3.
Sampler Name and Signature on COC:	☒ Yes ☐ No	4.
Samples arrived within hold time:	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No	7.
Sufficient Volume:	☒ Yes ☐ No	8.
Correct Containers Used:	☒ Yes ☐ No	9.
Containers Intact:	☒ Yes ☐ No	10.
Dissolved Testing Needed:	☐ Yes ☒ No	11.
Field Filtered: ☐ Yes ☐ No		
Sample Labels match COC: -Includes Date/Time/ID	☒ Yes ☐ No	12.
Matrix: <u>WT</u> SL OT		
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	13.
Trip Blank Custody Seals Present:	☐ Yes ☐ No ☒ N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

26 September 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Mudge B #012 R

Enclosed are the results of analyses for samples received by the laboratory on 09/17/24 16:20. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

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

Sincerely,

A handwritten signature in blue ink that reads 'Veronica J. Wells'. The signature is written in a cursive, flowing style.

Veronica Wells
Project Manager

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

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2409200-01	Water	09/17/24 14:55	09/17/24 16:20	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

MW #2

2409200-01 (Ground Water)

Sampled Date: 09/17/24 14:55

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

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

VOLATILES BY GC/MS

1,1,1,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
1,1,1-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
1,1,2,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
1,1,2-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
1,1-Dichloroethane*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
1,1-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
1,1-Dichloropropene*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
1,2,3-Trichlorobenzene*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
1,2,4-Trichlorobenzene*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
1,2,4-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
1,2-Dibromo-3-chloropropane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
1,2-Dibromoethane*	<0.0005	0.0005	0.00009	mg/L	1	09/24/24 15:49	8260B		MS
1,2-Dichlorobenzene*	<0.0005	0.0005	0.00007	mg/L	1	09/24/24 15:49	8260B		MS
1,2-Dichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
1,2-Dichloropropane*	<0.0005	0.0005	0.00008	mg/L	1	09/24/24 15:49	8260B		MS
1,3,5-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
1,3-Dichlorobenzene*	<0.0005	0.0005	0.00005	mg/L	1	09/24/24 15:49	8260B		MS
1,3-Dichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
1,4-Dichlorobenzene	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
1,4-Dioxane	<0.010	0.010	0.010	mg/L	1	09/24/24 15:49	8260B		MS
1,2,3-trichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
2,2-Dichloropropane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
2-Butanone*	<0.002	0.002	0.002	mg/L	1	09/24/24 15:49	8260B		MS
2-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
2-Hexanone*	<0.001	0.001	0.0003	mg/L	1	09/24/24 15:49	8260B		MS
4-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
4-Methyl-2-pentanone*	<0.001	0.001	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
Acetone*	<0.010	0.010	0.0009	mg/L	1	09/24/24 15:49	8260B		MS
Acrolein*	<0.005	0.005	0.001	mg/L	1	09/24/24 15:49	8260B		MS

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

MW #2

2409200-01 (Ground Water)

Sampled Date: 09/17/24 14:55

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

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

VOLATILES BY GC/MS

Acrylonitrile*	<0.002	0.002	0.0008	mg/L	1	09/24/24 15:49	8260B		MS
Benzene*	0.003	0.0005	0.00005	mg/L	1	09/24/24 15:49	8260B		MS
Bromobenzene*	<0.0005	0.0005	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
Bromochloromethane*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
Bromodichloromethane*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
Bromoform*	<0.0005	0.0005	0.00009	mg/L	1	09/24/24 15:49	8260B		MS
Bromomethane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Carbon disulfide*	<0.001	0.001	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
Carbon tetrachloride*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
Chlorobenzene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
Chloroethane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Chloroform*	<0.0005	0.0005	0.00002	mg/L	1	09/24/24 15:49	8260B		MS
Chloromethane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
cis-1,2-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
cis-1,3-Dichloropropene*	<0.0005	0.0005	0.00009	mg/L	1	09/24/24 15:49	8260B		MS
Dibromochloromethane*	<0.0005	0.0005	0.00008	mg/L	1	09/24/24 15:49	8260B		MS
Dibromomethane*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
Dichlorodifluoromethane*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Ethylbenzene*	<0.0005	0.0005	0.00003	mg/L	1	09/24/24 15:49	8260B		MS
Hexachlorobutadiene*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Iodomethane	<0.001	0.001	0.00006	mg/L	1	09/24/24 15:49	8260B		MS
Isopropylbenzene*	<0.0005	0.0005	0.00002	mg/L	1	09/24/24 15:49	8260B		MS
m+p - Xylene*	<0.001	0.001	0.00008	mg/L	1	09/24/24 15:49	8260B		MS
Methyl tert-butyl ether	<0.001	0.001	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
Methylene chloride*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Naphthalene*	<0.0005	0.0005	0.00008	mg/L	1	09/24/24 15:49	8260B		MS
n-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	09/24/24 15:49	8260B		MS
n-Propylbenzene*	<0.0005	0.0005	0.00005	mg/L	1	09/24/24 15:49	8260B		MS
o-Xylene*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
p-Isopropyltoluene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
sec-Butylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	09/24/24 15:49	8260B		MS
Styrene*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

MW #2

2409200-01 (Ground Water)

Sampled Date: 09/17/24 14:55

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

tert-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	09/24/24 15:49	8260B		MS
Tetrachloroethene*	<0.0005	0.0005	0.00009	mg/L	1	09/24/24 15:49	8260B		MS
Toluene*	<0.0005	0.0005	0.00008	mg/L	1	09/24/24 15:49	8260B		MS
Total Xylenes*	<0.001	0.001	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
trans-1,2-Dichloroethene*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
trans-1,3-Dichloropropene*	<0.0005	0.0005	0.00005	mg/L	1	09/24/24 15:49	8260B		MS
trans-1,4-Dichloro-2-butene	<0.010	0.010	0.0003	mg/L	1	09/24/24 15:49	8260B		MS
Trichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	09/24/24 15:49	8260B		MS
Trichlorofluoromethane*	<0.0005	0.0005	0.0001	mg/L	1	09/24/24 15:49	8260B		MS
Vinyl acetate*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Vinyl chloride*	<0.0005	0.0005	0.0005	mg/L	1	09/24/24 15:49	8260B		MS
Surrogate: 4-Bromofluorobenzene			92.8 %	76.4-114		09/24/24 15:49	8260B		MS
Surrogate: Dibromofluoromethane			106 %	82.4-141		09/24/24 15:49	8260B		MS
Surrogate: Toluene-d8			101 %	87.1-110		09/24/24 15:49	8260B		MS

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Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4091935 - Volatiles

Blank (4091935-BLK1)

Prepared: 09/19/24 Analyzed: 09/24/24

1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,1-Trichloroethane	ND	0.0005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0005	mg/L
1,1-Dichloroethane	ND	0.0005	mg/L
1,1-Dichloroethene	ND	0.0005	mg/L
1,1-Dichloropropene	ND	0.0005	mg/L
1,2,3-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trimethylbenzene	ND	0.0005	mg/L
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L
1,2-Dibromoethane	ND	0.0005	mg/L
1,2-Dichlorobenzene	ND	0.0005	mg/L
1,2-Dichloroethane	ND	0.0005	mg/L
1,2-Dichloropropane	ND	0.0005	mg/L
1,3,5-Trimethylbenzene	ND	0.0005	mg/L
1,3-Dichlorobenzene	ND	0.0005	mg/L
1,3-Dichloropropane	ND	0.0005	mg/L
1,4-Dichlorobenzene	ND	0.0005	mg/L
1,4-Dioxane	ND	0.010	mg/L
1,2,3-trichloropropane	ND	0.0005	mg/L
2,2-Dichloropropane	ND	0.0005	mg/L
2-Butanone	ND	0.002	mg/L
2-Chlorotoluene	ND	0.0005	mg/L
2-Hexanone	ND	0.001	mg/L

Surrogate: 4-Bromofluorobenzene	0.0246		mg/L	0.0250	98.4	76.4-114
4-Chlorotoluene	ND	0.0005	mg/L			
4-Methyl-2-pentanone	ND	0.001	mg/L			
Acetone	ND	0.010	mg/L			
Acrolein	ND	0.005	mg/L			
Acrylonitrile	ND	0.002	mg/L			
Benzene	ND	0.0005	mg/L			
Bromobenzene	ND	0.0005	mg/L			
Bromochloromethane	ND	0.0005	mg/L			
Bromodichloromethane	ND	0.0005	mg/L			
Bromoform	ND	0.0005	mg/L			

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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4091935 - Volatiles (Continued)

Blank (4091935-BLK1) (Continued)

Prepared: 09/19/24 Analyzed: 09/24/24

Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0254</i>		mg/L	<i>0.0250</i>		<i>102</i>	<i>82.4-141</i>			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl tert-butyl ether	ND	0.001	mg/L							
Methylene chloride	ND	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
<i>Surrogate: Toluene-d8</i>	<i>0.0249</i>		mg/L	<i>0.0250</i>		<i>99.7</i>	<i>87.1-110</i>			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4091935 - Volatiles (Continued)

LCS (4091935-BS1)

Prepared: 09/19/24 Analyzed: 09/24/24

1,1,1,2-Tetrachloroethane	0.017	0.0005	mg/L	0.0200		87.2	82.4-120			
1,1,1-Trichloroethane	0.019	0.0005	mg/L	0.0200		95.6	80.7-121			
1,1,2,2-Tetrachloroethane	0.021	0.0005	mg/L	0.0200		105	76.5-121			
1,1,2-Trichloroethane	0.019	0.0005	mg/L	0.0200		93.4	81.7-118			
1,1-Dichloroethane	0.020	0.0005	mg/L	0.0200		100	74.8-123			
1,1-Dichloroethene	0.021	0.0005	mg/L	0.0200		105	53.9-149			
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		100	85.9-115			
1,2,3-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		114	76.1-134			
1,2,4-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		117	72.4-136			
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		112	67.4-138			
1,2-Dibromo-3-chloropropane	0.021	0.0005	mg/L	0.0200		106	71.7-124			
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		100	84.9-116			
1,2-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		97.8	82.5-119			
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		87.8	72.5-123			
1,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		105	79.4-117			
1,3,5-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		110	69-137			
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		97.6	84.4-120			
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		101	82.6-117			
1,4-Dichlorobenzene	0.019	0.0005	mg/L	0.0200		96.4	81.7-118			
1,4-Dioxane	0.350	0.010	mg/L	0.400		87.4	-34.6-193			
1,2,3-trichloropropane	0.023	0.0005	mg/L	0.0200		116	44.7-168			
2,2-Dichloropropane	0.015	0.0005	mg/L	0.0200		73.0	62.9-136			
2-Butanone	0.036	0.002	mg/L	0.0400		89.1	24.1-159			
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		107	80.2-121			
2-Hexanone	0.036	0.001	mg/L	0.0400		90.8	56.3-139			
Surrogate: 4-Bromofluorobenzene	0.0251		mg/L	0.0250		101	76.4-114			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		111	82.2-125			
4-Methyl-2-pentanone	0.041	0.001	mg/L	0.0400		103	60.7-139			
Acetone	0.045	0.010	mg/L	0.0400		112	39.1-168			
Acrolein	0.185	0.005	mg/L	0.200		92.7	26.6-161			
Acrylonitrile	0.041	0.002	mg/L	0.0400		103	64.9-135			
Benzene	0.020	0.0005	mg/L	0.0200		98.6	69.4-129			
Bromobenzene	0.020	0.0005	mg/L	0.0200		98.4	83.5-115			
Bromochloromethane	0.020	0.0005	mg/L	0.0200		101	70.7-123			
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		97.7	80.3-119			
Bromoform	0.019	0.0005	mg/L	0.0200		96.8	71.1-141			
Bromomethane	0.017	0.0005	mg/L	0.0200		87.4	55.1-143			
Carbon disulfide	0.042	0.001	mg/L	0.0400		104	53.6-147			
Carbon tetrachloride	0.019	0.0005	mg/L	0.0200		93.9	79.5-125			

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4091935 - Volatiles (Continued)

LCS (4091935-BS1) (Continued)

Prepared: 09/19/24 Analyzed: 09/24/24

Chlorobenzene	0.019	0.0005	mg/L	0.0200		95.4	85.1-115			
Chloroethane	0.019	0.0005	mg/L	0.0200		94.1	36.9-159			
Chloroform	0.018	0.0005	mg/L	0.0200		92.2	80.9-119			
Chloromethane	0.020	0.0005	mg/L	0.0200		102	54.2-142			
cis-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		101	73.8-128			
cis-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		102	82.5-122			
Dibromochloromethane	0.019	0.0005	mg/L	0.0200		96.8	83.1-124			
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0241</i>		mg/L	<i>0.0250</i>		<i>96.4</i>	<i>82.4-141</i>			
Dibromomethane	0.019	0.0005	mg/L	0.0200		94.0	77-118			
Dichlorodifluoromethane	0.021	0.0005	mg/L	0.0200		104	38.7-147			
Ethylbenzene	0.020	0.0005	mg/L	0.0200		100	70.2-130			
Hexachlorobutadiene	0.025	0.0005	mg/L	0.0200		123	78.9-148			
Iodomethane	0.036	0.001	mg/L	0.0400		90.3	63.5-135			
Isopropylbenzene	0.020	0.0005	mg/L	0.0200		100	85-124			
m+p - Xylene	0.040	0.001	mg/L	0.0400		101	71.9-133			
Methyl tert-butyl ether	0.037	0.001	mg/L	0.0400		93.6	57.7-137			
Methylene chloride	0.021	0.0005	mg/L	0.0200		103	49.3-163			
Naphthalene	0.021	0.0005	mg/L	0.0200		105	62.1-141			
n-Butylbenzene	0.022	0.0005	mg/L	0.0200		108	75.4-132			
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		111	79.6-124			
o-Xylene	0.021	0.0005	mg/L	0.0200		104	69.4-132			
p-Isopropyltoluene	0.021	0.0005	mg/L	0.0200		107	79.8-131			
sec-Butylbenzene	0.023	0.0005	mg/L	0.0200		117	77.6-133			
Styrene	0.020	0.0005	mg/L	0.0200		98.8	71.7-128			
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	78.8-128			
Tetrachloroethene	0.018	0.0005	mg/L	0.0200		89.8	74.2-128			
Toluene	0.018	0.0005	mg/L	0.0200		92.0	68.1-127			
<i>Surrogate: Toluene-d8</i>	<i>0.0254</i>		mg/L	<i>0.0250</i>		<i>101</i>	<i>87.1-110</i>			
Total Xylenes	0.061	0.001	mg/L	0.0600		102	71.6-132			
trans-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		98.6	65.2-133			
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	84-123			
trans-1,4-Dichloro-2-butene	0.069	0.010	mg/L	0.0400		172	9.3-235			
Trichloroethene	0.019	0.0005	mg/L	0.0200		95.2	79.3-114			
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		89.2	28.6-162			
Vinyl acetate	0.013	0.0005	mg/L	0.0200		66.4	50.9-135			
Vinyl chloride	0.021	0.0005	mg/L	0.0200		106	61.6-133			

LCS Dup (4091935-BSD1)

Prepared: 09/19/24 Analyzed: 09/24/24

1,1,1,2-Tetrachloroethane	0.017	0.0005	mg/L	0.0200		85.5	82.4-120	1.97	6.88	
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Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4091935 - Volatiles (Continued)

LCS Dup (4091935-BSD1) (Continued)

Prepared: 09/19/24 Analyzed: 09/24/24

1,1,1-Trichloroethane	0.020	0.0005	mg/L	0.0200		97.9	80.7-121	2.38	7.43	
1,1,2,2-Tetrachloroethane	0.022	0.0005	mg/L	0.0200		109	76.5-121	4.21	8.68	
1,1,2-Trichloroethane	0.019	0.0005	mg/L	0.0200		96.2	81.7-118	2.95	6.82	
1,1-Dichloroethane	0.020	0.0005	mg/L	0.0200		102	74.8-123	1.98	4.3	
1,1-Dichloroethene	0.021	0.0005	mg/L	0.0200		103	53.9-149	2.31	16.5	
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		99.4	85.9-115	0.602	5.47	
1,2,3-Trichlorobenzene	0.022	0.0005	mg/L	0.0200		111	76.1-134	2.89	43	
1,2,4-Trichlorobenzene	0.022	0.0005	mg/L	0.0200		112	72.4-136	4.68	22.3	
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		111	67.4-138	1.30	8.94	
1,2-Dibromo-3-chloropropane	0.020	0.0005	mg/L	0.0200		101	71.7-124	4.68	15.1	
1,2-Dibromoethane	0.020	0.0005	mg/L	0.0200		101	84.9-116	0.299	5.83	
1,2-Dichlorobenzene	0.019	0.0005	mg/L	0.0200		96.0	82.5-119	1.86	8.72	
1,2-Dichloroethane	0.018	0.0005	mg/L	0.0200		92.4	72.5-123	5.05	8.94	
1,2-Dichloropropane	0.021	0.0005	mg/L	0.0200		107	79.4-117	1.42	5.51	
1,3,5-Trimethylbenzene	0.023	0.0005	mg/L	0.0200		113	69-137	2.33	16.5	
1,3-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		100	84.4-120	2.73	9	
1,3-Dichloropropane	0.020	0.0005	mg/L	0.0200		98.6	82.6-117	2.50	6.06	
1,4-Dichlorobenzene	0.020	0.0005	mg/L	0.0200		98.6	81.7-118	2.26	7.71	
1,4-Dioxane	0.372	0.010	mg/L	0.400		93.1	-34.6-193	6.28	35.2	
1,2,3-trichloropropane	0.024	0.0005	mg/L	0.0200		118	44.7-168	1.97	49.2	
2,2-Dichloropropane	0.015	0.0005	mg/L	0.0200		73.0	62.9-136	0.137	9.62	
2-Butanone	0.043	0.002	mg/L	0.0400		109	24.1-159	19.6	14.2	QR-04
2-Chlorotoluene	0.021	0.0005	mg/L	0.0200		104	80.2-121	2.23	8.62	
2-Hexanone	0.040	0.001	mg/L	0.0400		99.3	56.3-139	8.92	7.28	QR-04
Surrogate: 4-Bromofluorobenzene	0.0251		mg/L	0.0250		100	76.4-114			
4-Chlorotoluene	0.022	0.0005	mg/L	0.0200		110	82.2-125	0.902	15.5	
4-Methyl-2-pentanone	0.043	0.001	mg/L	0.0400		107	60.7-139	3.63	7.57	
Acetone	0.047	0.010	mg/L	0.0400		119	39.1-168	5.43	30.5	
Acrolein	0.196	0.005	mg/L	0.200		98.2	26.6-161	5.72	22.4	
Acrylonitrile	0.043	0.002	mg/L	0.0400		107	64.9-135	4.13	7.62	
Benzene	0.020	0.0005	mg/L	0.0200		101	69.4-129	2.31	4.16	
Bromobenzene	0.020	0.0005	mg/L	0.0200		98.3	83.5-115	0.102	8.41	
Bromochloromethane	0.019	0.0005	mg/L	0.0200		97.4	70.7-123	3.23	5.16	
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		99.7	80.3-119	2.03	5.36	
Bromoform	0.020	0.0005	mg/L	0.0200		101	71.1-141	4.64	14.1	
Bromomethane	0.017	0.0005	mg/L	0.0200		85.0	55.1-143	2.79	21.5	
Carbon disulfide	0.042	0.001	mg/L	0.0400		105	53.6-147	0.671	20.3	
Carbon tetrachloride	0.019	0.0005	mg/L	0.0200		94.6	79.5-125	0.690	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		97.6	85.1-115	2.23	5.18	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 4091935 - Volatiles (Continued)

LCS Dup (4091935-BSD1) (Continued)

Prepared: 09/19/24 Analyzed: 09/24/24

Chloroethane	0.019	0.0005	mg/L	0.0200		95.9	36.9-159	1.89	24.1	
Chloroform	0.018	0.0005	mg/L	0.0200		90.8	80.9-119	1.48	5.15	
Chloromethane	0.020	0.0005	mg/L	0.0200		101	54.2-142	0.785	27	
cis-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		105	73.8-128	3.15	5.73	
cis-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		106	82.5-122	3.93	6.09	
Dibromochloromethane	0.020	0.0005	mg/L	0.0200		98.6	83.1-124	1.84	7.24	
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0244</i>		mg/L	<i>0.0250</i>		<i>97.5</i>	<i>82.4-141</i>			
Dibromomethane	0.019	0.0005	mg/L	0.0200		96.8	77-118	2.88	5.75	
Dichlorodifluoromethane	0.020	0.0005	mg/L	0.0200		102	38.7-147	1.02	22.6	
Ethylbenzene	0.020	0.0005	mg/L	0.0200		99.8	70.2-130	0.200	4.83	
Hexachlorobutadiene	0.025	0.0005	mg/L	0.0200		124	78.9-148	0.731	18.4	
Iodomethane	0.036	0.001	mg/L	0.0400		90.5	63.5-135	0.249	24.3	
Isopropylbenzene	0.020	0.0005	mg/L	0.0200		100	85-124	0.0499	6.25	
m+p - Xylene	0.040	0.001	mg/L	0.0400		101	71.9-133	0.447	5.77	
Methyl tert-butyl ether	0.039	0.001	mg/L	0.0400		97.0	57.7-137	3.57	12.8	
Methylene chloride	0.021	0.0005	mg/L	0.0200		104	49.3-163	1.21	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		105	62.1-141	0.476	33.5	
n-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	75.4-132	1.35	10.1	
n-Propylbenzene	0.022	0.0005	mg/L	0.0200		112	79.6-124	0.850	9.09	
o-Xylene	0.021	0.0005	mg/L	0.0200		103	69.4-132	0.727	6.29	
p-Isopropyltoluene	0.023	0.0005	mg/L	0.0200		114	79.8-131	5.65	9.26	
sec-Butylbenzene	0.023	0.0005	mg/L	0.0200		117	77.6-133	0.384	9.85	
Styrene	0.020	0.0005	mg/L	0.0200		99.4	71.7-128	0.606	7.55	
tert-Butylbenzene	0.021	0.0005	mg/L	0.0200		106	78.8-128	0.283	18.6	
Tetrachloroethene	0.018	0.0005	mg/L	0.0200		89.1	74.2-128	0.783	6.38	
Toluene	0.019	0.0005	mg/L	0.0200		93.3	68.1-127	1.40	5.67	
<i>Surrogate: Toluene-d8</i>	<i>0.0253</i>		mg/L	<i>0.0250</i>		<i>101</i>	<i>87.1-110</i>			
Total Xylenes	0.061	0.001	mg/L	0.0600		101	71.6-132	0.541	5.83	
trans-1,2-Dichloroethene	0.019	0.0005	mg/L	0.0200		95.4	65.2-133	3.25	19.1	
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		104	84-123	0.672	6.26	
trans-1,4-Dichloro-2-butene	0.069	0.010	mg/L	0.0400		172	9.3-235	0.218	92.8	
Trichloroethene	0.020	0.0005	mg/L	0.0200		99.8	79.3-114	4.62	4.92	
Trichlorofluoromethane	0.018	0.0005	mg/L	0.0200		89.0	28.6-162	0.224	19.8	
Vinyl acetate	0.014	0.0005	mg/L	0.0200		70.6	50.9-135	6.13	7.84	
Vinyl chloride	0.021	0.0005	mg/L	0.0200		105	61.6-133	1.14	23	

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

Notes and Definitions

QR-04 The RPD for the BS/BSD was outside of historical limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis
*Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
09/26/24 10:00

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
4091935-BSD1	Volatile 8260	2-Butanone	QR-04	The RPD for the BS/BSD was outside of historical limits.
4091935-BSD1	Volatile 8260	2-Hexanone	QR-04	The RPD for the BS/BSD was outside of historical limits.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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**75 Suttle Street
Durango, CO 81303
(970) 247-4220**

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
FORM-006, R 8.0

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

[illegible]



SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood ConsultingWork Order # 2409-200Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ OtherCustody Seals on Box/Cooler Present: ☐ Yes ☒ NoSeals Intact: ☐ Yes ☐ NoThermometer Used: #2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 18.2 °C Correction Factor: 0 °C Final Temp: 18.2 °C

*Temp should be above freezing to 6°C

Date/Initials of person
examining contents: 9.17.24
CANLabeled by initials: _____
(if different than above)

Chain of Custody Present:	☒ Yes ☐ No	1.
Chain of Custody Filled Out:	☒ Yes ☐ No	2.
Chain of Custody Relinquished:	☒ Yes ☐ No	3.
Sampler Name and Signature on COC:	☒ Yes ☐ No	4.
Samples arrived within hold time:	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No	7.
Sufficient Volume:	☒ Yes ☐ No	8.
Correct Containers Used:	☒ Yes ☐ No	9.
Containers Intact:	☒ Yes ☐ No	10.
Dissolved Testing Needed:	☐ Yes ☒ No	11.
Field Filtered: ☐ Yes ☐ No		
Sample Labels match COC: -Includes Date/Time/ID	☒ Yes ☐ No	12.
Matrix:	☒ WT ☐ SL ☐ OT	
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	13.
Trip Blank Custody Seals Present:	☐ Yes ☐ No ☒ N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

 Comments/Resolution: _____



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

18 December 2024

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Mudge B #012 R

Enclosed are the results of analyses for samples received by the laboratory on 12/10/24 16:55. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

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

Sincerely,

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells
Project Manager

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

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW #2	2412101-01	Water	12/10/24 15:30	12/10/24 16:55	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

MW #2

2412101-01 (Ground Water)

Sampled Date: 12/10/24 15:30

Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

1,1,1,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
1,1,1-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
1,1,2,2-Tetrachloroethane*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
1,1,2-Trichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
1,1-Dichloroethane*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
1,1-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
1,1-Dichloropropene*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
1,2,3-Trichlorobenzene*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
1,2,4-Trichlorobenzene*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
1,2,4-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
1,2-Dibromo-3-chloropropane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
1,2-Dibromoethane*	<0.0005	0.0005	0.00009	mg/L	1	12/15/24 19:26	8260B		SK
1,2-Dichlorobenzene*	<0.0005	0.0005	0.00007	mg/L	1	12/15/24 19:26	8260B		SK
1,2-Dichloroethane*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
1,2-Dichloropropane*	<0.0005	0.0005	0.00008	mg/L	1	12/15/24 19:26	8260B		SK
1,3,5-Trimethylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
1,3-Dichlorobenzene*	<0.0005	0.0005	0.00005	mg/L	1	12/15/24 19:26	8260B		SK
1,3-Dichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
1,4-Dichlorobenzene	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
1,4-Dioxane	<0.020	0.020	0.020	mg/L	1	12/15/24 19:26	8260B		SK
1,2,3-trichloropropane*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
2,2-Dichloropropane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
2-Butanone*	<0.002	0.002	0.002	mg/L	1	12/15/24 19:26	8260B		SK
2-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
2-Hexanone*	<0.001	0.001	0.0003	mg/L	1	12/15/24 19:26	8260B		SK
4-Chlorotoluene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
4-Methyl-2-pentanone*	<0.001	0.001	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
Acetone*	<0.010	0.010	0.0009	mg/L	1	12/15/24 19:26	8260B		SK

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

MW #2

2412101-01 (Ground Water)

Sampled Date: 12/10/24 15:30

Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

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

VOLATILES BY GC/MS

Acrolein*	<0.005	0.005	0.001	mg/L	1	12/15/24 19:26	8260B		SK
Acrylonitrile*	<0.002	0.002	0.0008	mg/L	1	12/15/24 19:26	8260B		SK
Benzene*	0.002	0.0005	0.00005	mg/L	1	12/15/24 19:26	8260B		SK
Bromobenzene*	<0.0005	0.0005	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
Bromochloromethane*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
Bromodichloromethane*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
Bromoform*	<0.0005	0.0005	0.00009	mg/L	1	12/15/24 19:26	8260B		SK
Bromomethane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Carbon disulfide*	<0.001	0.001	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
Carbon tetrachloride*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
Chlorobenzene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
Chloroethane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Chloroform*	<0.0005	0.0005	0.00002	mg/L	1	12/15/24 19:26	8260B		SK
Chloromethane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
cis-1,2-Dichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
cis-1,3-Dichloropropene*	<0.0005	0.0005	0.00009	mg/L	1	12/15/24 19:26	8260B		SK
Dibromochloromethane*	<0.0005	0.0005	0.00008	mg/L	1	12/15/24 19:26	8260B		SK
Dibromomethane*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
Dichlorodifluoromethane*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Ethylbenzene*	<0.0005	0.0005	0.00003	mg/L	1	12/15/24 19:26	8260B		SK
Hexachlorobutadiene*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Iodomethane	<0.001	0.001	0.00006	mg/L	1	12/15/24 19:26	8260B		SK
Isopropylbenzene*	<0.0005	0.0005	0.00002	mg/L	1	12/15/24 19:26	8260B		SK
m+p - Xylene*	<0.001	0.001	0.00008	mg/L	1	12/15/24 19:26	8260B		SK
Methyl tert-butyl ether	<0.001	0.001	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
Methylene chloride*	<0.010	0.010	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Naphthalene*	<0.0005	0.0005	0.00008	mg/L	1	12/15/24 19:26	8260B		SK
n-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	12/15/24 19:26	8260B		SK
n-Propylbenzene*	<0.0005	0.0005	0.00005	mg/L	1	12/15/24 19:26	8260B		SK
o-Xylene*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
p-Isopropyltoluene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK

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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

MW #2

2412101-01 (Ground Water)

Sampled Date: 12/10/24 15:30

Sampled By: Dylan Songer & Kelsey O'Brien

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240

VOLATILES BY GC/MS

sec-Butylbenzene*	<0.0005	0.0005	0.00004	mg/L	1	12/15/24 19:26	8260B		SK
Styrene*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
tert-Butylbenzene*	<0.0005	0.0005	0.00007	mg/L	1	12/15/24 19:26	8260B		SK
Tetrachloroethene*	<0.0005	0.0005	0.00009	mg/L	1	12/15/24 19:26	8260B		SK
Toluene*	<0.0005	0.0005	0.00008	mg/L	1	12/15/24 19:26	8260B		SK
Total Xylenes*	<0.001	0.001	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
trans-1,2-Dichloroethene*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
trans-1,3-Dichloropropene*	<0.0005	0.0005	0.00005	mg/L	1	12/15/24 19:26	8260B		SK
trans-1,4-Dichloro-2-butene	<0.010	0.010	0.0003	mg/L	1	12/15/24 19:26	8260B		SK
Trichloroethene*	<0.0005	0.0005	0.0002	mg/L	1	12/15/24 19:26	8260B		SK
Trichlorofluoromethane*	<0.0005	0.0005	0.0001	mg/L	1	12/15/24 19:26	8260B		SK
Vinyl acetate*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Vinyl chloride*	<0.0005	0.0005	0.0005	mg/L	1	12/15/24 19:26	8260B		SK
Surrogate: 4-Bromofluorobenzene			94.0 %	76.4-114		12/15/24 19:26	8260B		SK
Surrogate: Dibromofluoromethane			103 %	82.4-141		12/15/24 19:26	8260B		SK
Surrogate: Toluene-d8			98.5 %	87.1-110		12/15/24 19:26	8260B		SK

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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

VOLATILES BY GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4121202 - Volatiles

Blank (4121202-BLK1)

Prepared: 12/12/24 Analyzed: 12/15/24

1,1,1,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,1-Trichloroethane	ND	0.0005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0005	mg/L
1,1-Dichloroethane	ND	0.0005	mg/L
1,1-Dichloroethene	ND	0.0005	mg/L
1,1-Dichloropropene	ND	0.0005	mg/L
1,2,3-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trichlorobenzene	ND	0.0005	mg/L
1,2,4-Trimethylbenzene	ND	0.0005	mg/L
1,2-Dibromo-3-chloropropane	ND	0.0005	mg/L
1,2-Dibromoethane	ND	0.0005	mg/L
1,2-Dichlorobenzene	ND	0.0005	mg/L
1,2-Dichloroethane	ND	0.0005	mg/L
1,2-Dichloropropane	ND	0.0005	mg/L
1,3,5-Trimethylbenzene	ND	0.0005	mg/L
1,3-Dichlorobenzene	ND	0.0005	mg/L
1,3-Dichloropropane	ND	0.0005	mg/L
1,4-Dichlorobenzene	ND	0.0005	mg/L
1,4-Dioxane	ND	0.020	mg/L
1,2,3-trichloropropane	ND	0.0005	mg/L
2,2-Dichloropropane	ND	0.0005	mg/L
2-Butanone	ND	0.002	mg/L
2-Chlorotoluene	ND	0.0005	mg/L
2-Hexanone	ND	0.001	mg/L

Surrogate: 4-Bromofluorobenzene	0.0477		mg/L	0.0500	95.4	76.4-114
4-Chlorotoluene	ND	0.0005	mg/L			
4-Methyl-2-pentanone	ND	0.001	mg/L			
Acetone	ND	0.010	mg/L			
Acrolein	ND	0.005	mg/L			
Acrylonitrile	ND	0.002	mg/L			
Benzene	ND	0.0005	mg/L			
Bromobenzene	ND	0.0005	mg/L			
Bromochloromethane	ND	0.0005	mg/L			
Bromodichloromethane	ND	0.0005	mg/L			
Bromoform	ND	0.0005	mg/L			

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Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4121202 - Volatiles (Continued)

Blank (4121202-BLK1) (Continued)

Prepared: 12/12/24 Analyzed: 12/15/24

Bromomethane	ND	0.0005	mg/L							
Carbon disulfide	ND	0.001	mg/L							
Carbon tetrachloride	ND	0.0005	mg/L							
Chlorobenzene	ND	0.0005	mg/L							
Chloroethane	ND	0.0005	mg/L							
Chloroform	ND	0.0005	mg/L							
Chloromethane	ND	0.0005	mg/L							
cis-1,2-Dichloroethene	ND	0.0005	mg/L							
cis-1,3-Dichloropropene	ND	0.0005	mg/L							
Dibromochloromethane	ND	0.0005	mg/L							
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0499</i>		mg/L	<i>0.0500</i>		<i>99.8</i>	<i>82.4-141</i>			
Dibromomethane	ND	0.0005	mg/L							
Dichlorodifluoromethane	ND	0.0005	mg/L							
Ethylbenzene	ND	0.0005	mg/L							
Hexachlorobutadiene	ND	0.0005	mg/L							
Iodomethane	ND	0.001	mg/L							
Isopropylbenzene	ND	0.0005	mg/L							
m+p - Xylene	ND	0.001	mg/L							
Methyl tert-butyl ether	ND	0.001	mg/L							
Methylene chloride	0.007	0.0005	mg/L							
Naphthalene	ND	0.0005	mg/L							
n-Butylbenzene	ND	0.0005	mg/L							
n-Propylbenzene	ND	0.0005	mg/L							
o-Xylene	ND	0.0005	mg/L							
p-Isopropyltoluene	ND	0.0005	mg/L							
sec-Butylbenzene	ND	0.0005	mg/L							
Styrene	ND	0.0005	mg/L							
tert-Butylbenzene	ND	0.0005	mg/L							
Tetrachloroethene	ND	0.0005	mg/L							
Toluene	ND	0.0005	mg/L							
<i>Surrogate: Toluene-d8</i>	<i>0.0510</i>		mg/L	<i>0.0500</i>		<i>102</i>	<i>87.1-110</i>			
Total Xylenes	ND	0.001	mg/L							
trans-1,2-Dichloroethene	ND	0.0005	mg/L							
trans-1,3-Dichloropropene	ND	0.0005	mg/L							
trans-1,4-Dichloro-2-butene	ND	0.010	mg/L							
Trichloroethene	ND	0.0005	mg/L							
Trichlorofluoromethane	ND	0.0005	mg/L							
Vinyl acetate	ND	0.0005	mg/L							
Vinyl chloride	ND	0.0005	mg/L							

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4121202 - Volatiles (Continued)

LCS (4121202-BS1)

Prepared: 12/12/24 Analyzed: 12/15/24

1,1,1,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		102	82.4-120			
1,1,1-Trichloroethane	0.022	0.0005	mg/L	0.0200		109	80.7-121			
1,1,2,2-Tetrachloroethane	0.014	0.0005	mg/L	0.0200		71.0	76.5-121			BS2
1,1,2-Trichloroethane	0.018	0.0005	mg/L	0.0200		88.6	81.7-118			
1,1-Dichloroethane	0.021	0.0005	mg/L	0.0200		107	74.8-123			
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		110	53.9-149			
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		102	85.9-115			
1,2,3-Trichlorobenzene	0.024	0.0005	mg/L	0.0200		118	76.1-134			
1,2,4-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		113	72.4-136			
1,2,4-Trimethylbenzene	0.022	0.0005	mg/L	0.0200		109	67.4-138			
1,2-Dibromo-3-chloropropane	0.013	0.0005	mg/L	0.0200		67.0	71.7-124			BS2
1,2-Dibromoethane	0.019	0.0005	mg/L	0.0200		92.6	84.9-116			
1,2-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	82.5-119			
1,2-Dichloroethane	0.022	0.0005	mg/L	0.0200		110	72.5-123			
1,2-Dichloropropane	0.019	0.0005	mg/L	0.0200		95.0	79.4-117			
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		104	69-137			
1,3-Dichlorobenzene	0.022	0.0005	mg/L	0.0200		109	84.4-120			
1,3-Dichloropropane	0.018	0.0005	mg/L	0.0200		88.7	82.6-117			
1,4-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	81.7-118			
1,4-Dioxane	1.09	0.020	mg/L	2.00		54.4	-34.6-193			
1,2,3-trichloropropane	0.015	0.0005	mg/L	0.0200		73.2	44.7-168			
2,2-Dichloropropane	0.022	0.0005	mg/L	0.0200		112	62.9-136			
2-Butanone	0.042	0.002	mg/L	0.0400		104	24.1-159			
2-Chlorotoluene	0.019	0.0005	mg/L	0.0200		96.6	80.2-121			
2-Hexanone	0.024	0.001	mg/L	0.0400		59.2	56.3-139			
Surrogate: 4-Bromofluorobenzene	0.0484		mg/L	0.0500		96.8	76.4-114			
4-Chlorotoluene	0.019	0.0005	mg/L	0.0200		97.2	82.2-125			
4-Methyl-2-pentanone	0.028	0.001	mg/L	0.0400		70.2	60.7-139			
Acetone	0.071	0.010	mg/L	0.0400		178	39.1-168			BS1
Acrolein	0.248	0.005	mg/L	0.200		124	26.6-161			
Acrylonitrile	0.042	0.002	mg/L	0.0400		106	64.9-135			
Benzene	0.020	0.0005	mg/L	0.0200		101	69.4-129			
Bromobenzene	0.021	0.0005	mg/L	0.0200		104	83.5-115			
Bromochloromethane	0.020	0.0005	mg/L	0.0200		99.0	70.7-123			
Bromodichloromethane	0.022	0.0005	mg/L	0.0200		110	80.3-119			
Bromoform	0.019	0.0005	mg/L	0.0200		95.2	71.1-141			
Bromomethane	0.022	0.0005	mg/L	0.0200		111	55.1-143			
Carbon disulfide	0.054	0.001	mg/L	0.0400		135	53.6-147			
Carbon tetrachloride	0.023	0.0005	mg/L	0.0200		114	79.5-125			

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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4121202 - Volatiles (Continued)

LCS (4121202-BS1) (Continued)

Prepared: 12/12/24 Analyzed: 12/15/24

Chlorobenzene	0.020	0.0005	mg/L	0.0200		100	85.1-115			
Chloroethane	0.021	0.0005	mg/L	0.0200		104	36.9-159			
Chloroform	0.020	0.0005	mg/L	0.0200		102	80.9-119			
Chloromethane	0.019	0.0005	mg/L	0.0200		93.4	54.2-142			
cis-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		109	73.8-128			
cis-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		102	82.5-122			
Dibromochloromethane	0.020	0.0005	mg/L	0.0200		101	83.1-124			
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0537</i>		mg/L	<i>0.0500</i>		<i>107</i>	<i>82.4-141</i>			
Dibromomethane	0.020	0.0005	mg/L	0.0200		98.6	77-118			
Dichlorodifluoromethane	0.022	0.0005	mg/L	0.0200		110	38.7-147			
Ethylbenzene	0.019	0.0005	mg/L	0.0200		97.4	70.2-130			
Hexachlorobutadiene	0.024	0.0005	mg/L	0.0200		121	78.9-148			
Iodomethane	0.045	0.001	mg/L	0.0400		112	63.5-135			
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		104	85-124			
m+p - Xylene	0.041	0.001	mg/L	0.0400		102	71.9-133			
Methyl tert-butyl ether	0.041	0.001	mg/L	0.0400		101	57.7-137			
Methylene chloride	0.025	0.0005	mg/L	0.0200		126	49.3-163			
Naphthalene	0.017	0.0005	mg/L	0.0200		86.8	62.1-141			
n-Butylbenzene	0.025	0.0005	mg/L	0.0200		123	75.4-132			
n-Propylbenzene	0.020	0.0005	mg/L	0.0200		102	79.6-124			
o-Xylene	0.020	0.0005	mg/L	0.0200		102	69.4-132			
p-Isopropyltoluene	0.022	0.0005	mg/L	0.0200		110	79.8-131			
sec-Butylbenzene	0.022	0.0005	mg/L	0.0200		108	77.6-133			
Styrene	0.020	0.0005	mg/L	0.0200		97.5	71.7-128			
tert-Butylbenzene	0.020	0.0005	mg/L	0.0200		98.8	78.8-128			
Tetrachloroethene	0.021	0.0005	mg/L	0.0200		105	74.2-128			
Toluene	0.019	0.0005	mg/L	0.0200		96.6	68.1-127			
<i>Surrogate: Toluene-d8</i>	<i>0.0508</i>		mg/L	<i>0.0500</i>		<i>102</i>	<i>87.1-110</i>			
Total Xylenes	0.061	0.001	mg/L	0.0600		102	71.6-132			
trans-1,2-Dichloroethene	0.022	0.0005	mg/L	0.0200		108	65.2-133			
trans-1,3-Dichloropropene	0.021	0.0005	mg/L	0.0200		103	84-123			
trans-1,4-Dichloro-2-butene	0.044	0.010	mg/L	0.0400		110	9.3-235			
Trichloroethene	0.020	0.0005	mg/L	0.0200		101	79.3-114			
Trichlorofluoromethane	0.024	0.0005	mg/L	0.0200		119	28.6-162			
Vinyl acetate	0.019	0.0005	mg/L	0.0200		93.8	50.9-135			
Vinyl chloride	0.021	0.0005	mg/L	0.0200		107	61.6-133			

LCS Dup (4121202-BSD1)

Prepared: 12/12/24 Analyzed: 12/15/24

1,1,1,2-Tetrachloroethane	0.020	0.0005	mg/L	0.0200		101	82.4-120	1.23	6.88	
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Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

VOLATILES BY GC/MS - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4121202 - Volatiles (Continued)

LCS Dup (4121202-BSD1) (Continued)

Prepared: 12/12/24 Analyzed: 12/15/24

1,1,1-Trichloroethane	0.021	0.0005	mg/L	0.0200		107	80.7-121	1.62	7.43	
1,1,2,2-Tetrachloroethane	0.018	0.0005	mg/L	0.0200		88.7	76.5-121	22.2	8.68	QR-04
1,1,2-Trichloroethane	0.019	0.0005	mg/L	0.0200		96.9	81.7-118	8.90	6.82	QR-04
1,1-Dichloroethane	0.021	0.0005	mg/L	0.0200		105	74.8-123	2.32	4.3	
1,1-Dichloroethene	0.022	0.0005	mg/L	0.0200		110	53.9-149	0.00	16.5	
1,1-Dichloropropene	0.020	0.0005	mg/L	0.0200		98.5	85.9-115	3.59	5.47	
1,2,3-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		116	76.1-134	1.54	43	
1,2,4-Trichlorobenzene	0.023	0.0005	mg/L	0.0200		115	72.4-136	1.75	22.3	
1,2,4-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		104	67.4-138	4.37	8.94	
1,2-Dibromo-3-chloropropane	0.020	0.0005	mg/L	0.0200		98.4	71.7-124	37.9	15.1	QR-04
1,2-Dibromoethane	0.021	0.0005	mg/L	0.0200		103	84.9-116	10.9	5.83	QR-04
1,2-Dichlorobenzene	0.019	0.0005	mg/L	0.0200		95.8	82.5-119	8.45	8.72	
1,2-Dichloroethane	0.024	0.0005	mg/L	0.0200		118	72.5-123	6.84	8.94	
1,2-Dichloropropane	0.020	0.0005	mg/L	0.0200		102	79.4-117	7.10	5.51	QR-04
1,3,5-Trimethylbenzene	0.021	0.0005	mg/L	0.0200		104	69-137	0.433	16.5	
1,3-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		106	84.4-120	2.73	9	
1,3-Dichloropropane	0.019	0.0005	mg/L	0.0200		92.6	82.6-117	4.36	6.06	
1,4-Dichlorobenzene	0.021	0.0005	mg/L	0.0200		104	81.7-118	0.385	7.71	
1,4-Dioxane	0.990	0.020	mg/L	2.00		49.5	-34.6-193	9.49	35.2	
1,2,3-trichloropropane	0.020	0.0005	mg/L	0.0200		97.6	44.7-168	28.6	49.2	
2,2-Dichloropropane	0.023	0.0005	mg/L	0.0200		114	62.9-136	2.43	9.62	
2-Butanone	0.044	0.002	mg/L	0.0400		109	24.1-159	4.54	14.2	
2-Chlorotoluene	0.019	0.0005	mg/L	0.0200		94.6	80.2-121	2.09	8.62	
2-Hexanone	0.036	0.001	mg/L	0.0400		89.5	56.3-139	40.8	7.28	QR-04
Surrogate: 4-Bromofluorobenzene	0.0488		mg/L	0.0500		97.7	76.4-114			
4-Chlorotoluene	0.019	0.0005	mg/L	0.0200		97.2	82.2-125	0.103	15.5	
4-Methyl-2-pentanone	0.037	0.001	mg/L	0.0400		93.2	60.7-139	28.2	7.57	QR-04
Acetone	0.061	0.010	mg/L	0.0400		152	39.1-168	16.2	30.5	
Acrolein	0.258	0.005	mg/L	0.200		129	26.6-161	3.97	22.4	
Acrylonitrile	0.048	0.002	mg/L	0.0400		120	64.9-135	12.4	7.62	QR-04
Benzene	0.020	0.0005	mg/L	0.0200		97.8	69.4-129	3.07	4.16	
Bromobenzene	0.022	0.0005	mg/L	0.0200		109	83.5-115	4.36	8.41	
Bromochloromethane	0.019	0.0005	mg/L	0.0200		96.6	70.7-123	2.50	5.16	
Bromodichloromethane	0.020	0.0005	mg/L	0.0200		102	80.3-119	7.29	5.36	QR-04
Bromoform	0.021	0.0005	mg/L	0.0200		105	71.1-141	10.2	14.1	
Bromomethane	0.021	0.0005	mg/L	0.0200		104	55.1-143	6.63	21.5	
Carbon disulfide	0.052	0.001	mg/L	0.0400		130	53.6-147	3.87	20.3	
Carbon tetrachloride	0.021	0.0005	mg/L	0.0200		107	79.5-125	6.22	11.4	
Chlorobenzene	0.020	0.0005	mg/L	0.0200		97.5	85.1-115	2.73	5.18	

Green Analytical Laboratories

Veronica J Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

**VOLATILES BY GC/MS - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 4121202 - Volatiles (Continued)

LCS Dup (4121202-BSD1) (Continued)

Prepared: 12/12/24 Analyzed: 12/15/24

Chloroethane	0.020	0.0005	mg/L	0.0200		101	36.9-159	3.12	24.1	
Chloroform	0.021	0.0005	mg/L	0.0200		105	80.9-119	2.17	5.15	
Chloromethane	0.017	0.0005	mg/L	0.0200		84.3	54.2-142	10.3	27	
cis-1,2-Dichloroethene	0.021	0.0005	mg/L	0.0200		106	73.8-128	2.61	5.73	
cis-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		101	82.5-122	0.590	6.09	
Dibromochloromethane	0.021	0.0005	mg/L	0.0200		104	83.1-124	2.39	7.24	
<i>Surrogate: Dibromofluoromethane</i>	<i>0.0513</i>		mg/L	<i>0.0500</i>		<i>103</i>	<i>82.4-141</i>			
Dibromomethane	0.021	0.0005	mg/L	0.0200		103	77-118	4.46	5.75	
Dichlorodifluoromethane	0.021	0.0005	mg/L	0.0200		106	38.7-147	4.30	22.6	
Ethylbenzene	0.019	0.0005	mg/L	0.0200		94.1	70.2-130	3.50	4.83	
Hexachlorobutadiene	0.024	0.0005	mg/L	0.0200		120	78.9-148	1.08	18.4	
Iodomethane	0.042	0.001	mg/L	0.0400		106	63.5-135	5.28	24.3	
Isopropylbenzene	0.021	0.0005	mg/L	0.0200		104	85-124	0.336	6.25	
m+p - Xylene	0.039	0.001	mg/L	0.0400		98.4	71.9-133	3.96	5.77	
Methyl tert-butyl ether	0.042	0.001	mg/L	0.0400		105	57.7-137	3.37	12.8	
Methylene chloride	0.023	0.0005	mg/L	0.0200		113	49.3-163	10.8	19.7	
Naphthalene	0.021	0.0005	mg/L	0.0200		107	62.1-141	20.9	33.5	
n-Butylbenzene	0.023	0.0005	mg/L	0.0200		113	75.4-132	8.04	10.1	
n-Propylbenzene	0.021	0.0005	mg/L	0.0200		104	79.6-124	1.26	9.09	
o-Xylene	0.020	0.0005	mg/L	0.0200		99.3	69.4-132	3.12	6.29	
p-Isopropyltoluene	0.021	0.0005	mg/L	0.0200		107	79.8-131	3.45	9.26	
sec-Butylbenzene	0.021	0.0005	mg/L	0.0200		103	77.6-133	4.31	9.85	
Styrene	0.018	0.0005	mg/L	0.0200		92.0	71.7-128	5.80	7.55	
tert-Butylbenzene	0.020	0.0005	mg/L	0.0200		98.9	78.8-128	0.0506	18.6	
Tetrachloroethene	0.021	0.0005	mg/L	0.0200		107	74.2-128	2.74	6.38	
Toluene	0.019	0.0005	mg/L	0.0200		97.4	68.1-127	0.928	5.67	
<i>Surrogate: Toluene-d8</i>	<i>0.0483</i>		mg/L	<i>0.0500</i>		<i>96.6</i>	<i>87.1-110</i>			
Total Xylenes	0.059	0.001	mg/L	0.0600		98.7	71.6-132	3.68	5.83	
trans-1,2-Dichloroethene	0.020	0.0005	mg/L	0.0200		101	65.2-133	6.69	19.1	
trans-1,3-Dichloropropene	0.020	0.0005	mg/L	0.0200		97.5	84-123	5.53	6.26	
trans-1,4-Dichloro-2-butene	0.052	0.010	mg/L	0.0400		130	9.3-235	16.2	92.8	
Trichloroethene	0.021	0.0005	mg/L	0.0200		103	79.3-114	1.32	4.92	
Trichlorofluoromethane	0.023	0.0005	mg/L	0.0200		113	28.6-162	4.75	19.8	
Vinyl acetate	0.021	0.0005	mg/L	0.0200		105	50.9-135	11.4	7.84	QR-04
Vinyl chloride	0.020	0.0005	mg/L	0.0200		102	61.6-133	5.65	23	

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

Notes and Definitions

QR-04 The RPD for the BS/BSD was outside of historical limits.

BS2 Blank spike recovery below laboratory acceptance criteria. Results for analyte potentially biased low.

BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis
 *Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: VOC 8260
Project Name / Number: Mudge B #012 R
Project Manager: Kyle Siesser

Reported:
12/18/24 13:08

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
4121202-BS1	Volatile 8260	1,1,2,2-Tetrachloroethane	BS2	Blank spike recovery below laboratory acceptance criteria. Results for analyte potentially biased low.
4121202-BS1	Volatile 8260	1,2-Dibromo-3-chloropropane	BS2	Blank spike recovery below laboratory acceptance criteria. Results for analyte potentially biased low.
4121202-BS1	Volatile 8260	Acetone	BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
4121202-BSD1	Volatile 8260	1,1,2,2-Tetrachloroethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	1,1,2-Trichloroethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	1,2-Dibromo-3-chloropropane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	1,2-Dibromoethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	1,2-Dichloropropane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	2-Hexanone	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	4-Methyl-2-pentanone	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	Acrylonitrile	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	Bromodichloromethane	QR-04	The RPD for the BS/BSD was outside of historical limits.
4121202-BSD1	Volatile 8260	Vinyl acetate	QR-04	The RPD for the BS/BSD was outside of historical limits.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, Project Manager

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75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
FORM-006, R 8.0

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Cottonwood Consulting LLC

Address: PO Box 1653

City: Durango

State: CO Zip: 81302

Phone #: 970-764-7356

Contact Person: Kyle Siesser

Email Report to: ksiesser@cottonwoodconsulting.com

Project Name(optional):

Mudge B #012 R

Sampler Name (Print):

Dylan Sawyer / Kelsey O'Brien

Lab Use Only

2412-161

Lab I.D.

Sample Name or Location

2412-161

Lab Use Only

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Table of Contents

 Date/Initials of person examining contents: 12/31/24
CAV

 Labeled by initials: _____
 (If different than above)

SAMPLE CONDITION RECEIPT FORM

Client Name: Attorney ConsultingWork Order # 2412-101
 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ Other

 Custody Seals on Box/Cooler Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ No GAL Cooler #: _____

 Thermometer Used: 42 Samples on ice, cooling process has begun: ☒ Yes ☐ No

 Type of Ice: ☒ Wet ☐ Blue ☐ None Cooler Temp: Observed Temp: 10.3 °C Correction Factor: 0 °C Final Temp: 10.3 °C
Compliance: ☐ Yes ☒ No

*Temp should be above freezing 6°C

Chain of Custody Filled Out:	☒ Yes ☐ No	1.
COC Signed when Relinquished and Received:	☒ Yes ☐ No	2.
Sampler Name and Signature on COC: *Required for compliance	☒ Yes ☐ No	3.
Samples arrived within hold time:	☒ Yes ☐ No	4.
Correct Containers Used & Intact:	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested: *3 day TAT or less requires supervisor approval	☐ Yes ☒ No	7. Approved By:
Sufficient Volume:	☒ Yes ☐ No	8.
pH's acceptable upon receipt, where applicable: *Not including metals bottles	☐ Yes ☐ No ☒ N/A	9.
Dissolved Testing Needed:	☐ Yes ☒ No	10.
Field Filtered: ☐ Yes ☐ No		
Sample Labels match COC: -Includes Date/Time/ID	☒ Yes ☐ No	11.
Matrix:	☒ SL ☐ OT	
Trip Blank Present:	☐ Yes ☐ No ☐ N/A	12.
Trip Blank Custody Seals Present:	☐ Yes ☐ No ☐ N/A	
VOA's meet headspace requirement (<6mm bubbles)	☒ Yes ☐ No ☐ N/A	
Non-Conformance(s):	☐ Yes ☒ No	13.

Client Notification/Resolution:

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

MUDGE B # 12R
 UNIT A, SEC. 17, T31N, R11W

LABORATORY (S) USED :

GAL

Date :

3/27/24

DEVELOPER / SAMPLER :

DS/KO

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	-	-	<u>44.00</u>	49.90	-	-	-	-	-
2	-	-	<u>43.93</u>	46.40	<u>1100</u>	<u>8.20</u>	<u>8160</u>	<u>10.1</u>	<u>-</u>
3	-	-	<u>43.92</u>	44.00	-	-	-	-	-

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

Ideally a minimum of three (3) wellbore volumes:

1.50" well diameter = 0.28 gal./ft. of water.

2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2".

Purged available water in MW #2 using 1.5 inch submersible electrical pump and new / clear vinyl tubing.

low volume did not purge.

Top of casing MW #1 ~ 3.00 ft. , MW #2 ~ 3.04 ft. , MW #3 ~ 3.00 ft. above grade .

on-site	<u>1000</u>	temp	<u>40°F</u>
off-site	<u>1115</u>	temp	<u>40°F</u>
sky cond.	<u>clear</u>		
wind speed	<u>5-10 mph</u>	direct.	<u>W</u>

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

MUDGE B # 12R
UNIT A, SEC. 17, T31N, R11W

LABORATORY (S) USED : GAL

Date : 6/12/24

DEVELOPER / SAMPLER : DS/KO

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	-	-	44.12	49.90	-	-	-	-	-
2	-	-	43.00	46.40	1525	7.55	7890	30.6	--
3	-	-	42.85	44.00	-	-	-	-	-

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

Ideally a minimum of three (3) wellbore volumes:

1.50" well diameter = 0.28 gal./ft. of water.
2.00" well diameter = 0.49 gal./ft. of water.

Comments or note well diameter if not standard 2 ".

Purged available water in MW #2 using 1.5 inch submersible electrical pump and new / clear vinyl tubing.

Top of casing MW # 1 ~ 3.00 ft. , MW # 2 ~ 3.04 ft. , MW # 3 ~ 3.00 ft. above grade .

on-site	_____	temp	_____
off-site	_____	temp	_____
sky cond.	_____		
wind speed	_____	direct.	_____

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

MUDGE B # 12R UNIT A, SEC. 17, T31N, R11W
--

LABORATORY (S) USED :

GAL

Date :

9/17/24

DEVELOPER / SAMPLER :

VOIDS

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	-	-	44.05	49.90	-	-	-	-	-
2	-	-	42.94	46.40	1455	4.80	7.78		
3	-	-	44.05	44.00	-	-	-	-	-

42.84

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

Ideally a minimum of three (3) wellbore volumes:

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on-site	temp	
off-site	temp	
sky cond.		
wind speed	direct.	

COTTONWOOD CONSULTING LLC

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : SIMCOE LLC

MUDGE B #12R
 UNIT A, SEC. 17, T31N, R11W

LABORATORY (S) USED :

UAL

Date :

12/10/24

DEVELOPER / SAMPLER :

LO/DS

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1	-	-	43.97	49.90	-	-	-	-	-
2	-	-	43.06	46.40	1530	7.92	2.9	12.5	-
3	-	-	DRY	44.00	-	-	-	-	-

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

Ideally a minimum of three (3) wellbore volumes:

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Comments or note well diameter if not standard 2".

Purged available water in MW #2 using 1.5 inch submersible electrical pump and new / clear vinyl tubing.

Top of casing MW #1 ~ 3.00 ft. , MW #2 ~ 3.04 ft. , MW #3 ~ 3.00 ft. above grade .

on-site	_____	temp	_____
off-site	_____	temp	_____
sky cond.	_____		
wind speed	_____	direct.	_____

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 (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*	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
Heaton LS 5*		Unk	98.9	-2.5	-2.5	-	Y	27.3	Y	run time gauge not connected
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 H ₂ O (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/oed/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 415786

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 415786
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Mudge B #012R Groundwater Monitoring Lab Results and Field Forms submitted for the incident record, includes data from 2024. App ID: 415786.	1/9/2025