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10 November 2022

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: COGCC Table 915-1

Enclosed are the results of analyses for samples received by the laboratory on 10/26/22 14:30. 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, reading 'Jeremy D. Allen', is written in a cursive style.

Jeremy D Allen
Laboratory Director

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

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

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



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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
BH-6 (0-5')	2210225-01	Solid	10/25/22 08:35	10/26/22 14:30	
BH-6 (5-10')	2210225-02	Solid	10/25/22 08:40	10/26/22 14:30	
BH-7 (0-5')	2210225-03	Solid	10/25/22 08:45	10/26/22 14:30	
BH-7 (5-10')	2210225-04	Solid	10/25/22 08:50	10/26/22 14:30	
BH-7 (10-12.5')	2210225-05	Solid	10/25/22 09:00	10/26/22 14:30	
BH-8 (5-10')	2210225-06	Solid	10/25/22 09:05	10/26/22 14:30	
BH-9 (0-5')	2210225-07	Solid	10/25/22 09:15	10/26/22 14:30	
BH-9 (5-10')	2210225-08	Solid	10/25/22 09:20	10/26/22 14:30	
BH-10 (0-5')	2210225-09	Solid	10/25/22 09:30	10/26/22 14:30	
BH-11 (0-5')	2210225-10	Solid	10/25/22 09:50	10/26/22 14:30	

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-6 (0-5')

2210225-01 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	11/01/22 15:05	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	11/01/22 15:05	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	11/01/22 15:05	8015B		MS
Surrogate: 1-Chlorooctane			89.9 %	45.3-161		11/01/22 15:05	8015B		MS
Surrogate: 1-Chlorooctadecane			107 %	46.3-178		11/01/22 15:05	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-6 (5-10')

2210225-02 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 17:39	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 17:39	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 17:39	8015B		MS
Surrogate: 1-Chlorooctane			91.7 %	45.3-161		10/30/22 17:39	8015B		MS
Surrogate: 1-Chlorooctadecane			104 %	46.3-178		10/30/22 17:39	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-7 (0-5')**2210225-03 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	24.4	10.0	6.25	mg/kg	1	10/30/22 18:02	8015B		MS
DRO >C10-C28*	179	10.0	4.26	mg/kg	1	10/30/22 18:02	8015B		MS
EXT DRO >C28-C36	15.4	10.0	4.26	mg/kg	1	10/30/22 18:02	8015B		MS
<i>Surrogate: 1-Chlorooctane</i>			94.7 %	45.3-161		10/30/22 18:02	8015B		MS
<i>Surrogate: 1-Chlorooctadecane</i>			105 %	46.3-178		10/30/22 18:02	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-7 (5-10')

2210225-04 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<50.0	50.0	31.2	mg/kg	5	10/30/22 18:25	8015B		MS
DRO >C10-C28*	1420	50.0	21.3	mg/kg	5	10/30/22 18:25	8015B		MS
EXT DRO >C28-C36	272	50.0	21.3	mg/kg	5	10/30/22 18:25	8015B		MS
Surrogate: 1-Chlorooctane			98.0 %	45.3-161		10/30/22 18:25	8015B		MS
Surrogate: 1-Chlorooctadecane			147 %	46.3-178		10/30/22 18:25	8015B		MS

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	11/03/22 13:17	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	11/03/22 13:17	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	11/03/22 13:17	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	11/03/22 13:17	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	11/03/22 13:17	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0256	mg/kg	50	11/03/22 13:17	8260B		MS
1,3,5-Trimethylbenzene	0.263	0.0250	0.00450	mg/kg	50	11/03/22 13:17	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	11/03/22 13:17	8260B		MS
Naphthalene*	0.0610	0.0250	0.00500	mg/kg	50	11/03/22 13:17	8260B		MS
Surrogate: Dibromofluoromethane			95.6 %	84.6-114		11/03/22 13:17	8260B		MS
Surrogate: Toluene-d8			99.9 %	90.4-109		11/03/22 13:17	8260B		MS
Surrogate: 4-Bromofluorobenzene			129 %	82.5-117		11/03/22 13:17	8260B	S-04	MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	0.032	0.040	0.015	mg/kg	40	11/04/22 17:56	8270C	J	MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	11/04/22 17:56	8270C		MS
1-Methylnaphthalene	0.030	0.040	0.016	mg/kg	40	11/04/22 17:56	8270C	J	MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	11/04/22 17:56	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	11/04/22 17:56	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	11/04/22 17:56	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/04/22 17:56	8270C		MS
Pyrene*	0.030	0.040	0.013	mg/kg	40	11/04/22 17:56	8270C	J	MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	11/04/22 17:56	8270C		MS

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Jeremy D Allen, Laboratory Director

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PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-7 (5-10')**2210225-04 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories 101 East Marland Hobbs, NM 88240**Polynuclear Aromatic Compounds by GC/MS**

Chrysene	0.095	0.040	0.017	mg/kg	40	11/04/22 17:56	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	11/04/22 17:56	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	11/04/22 17:56	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	11/04/22 17:56	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	11/04/22 17:56	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	11/04/22 17:56	8270C		MS
Surrogate: Nitrobenzene-d5			51.6 %	39.6-121		11/04/22 17:56	8270C		MS
Surrogate: 2-Fluorobiphenyl			72.1 %	39.8-134		11/04/22 17:56	8270C		MS
Surrogate: Terphenyl-d14			78.5 %	33.3-136		11/04/22 17:56	8270C		MS

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Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-7 (10-12.5')

2210225-05 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 18:49	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 18:49	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 18:49	8015B		MS
Surrogate: 1-Chlorooctane			84.4 %	45.3-161		10/30/22 18:49	8015B		MS
Surrogate: 1-Chlorooctadecane			94.5 %	46.3-178		10/30/22 18:49	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-8 (5-10')

2210225-06 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 19:12	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:12	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:12	8015B		MS
<i>Surrogate: 1-Chlorooctane</i>			87.4 %	45.3-161		10/30/22 19:12	8015B		MS
<i>Surrogate: 1-Chlorooctadecane</i>			99.8 %	46.3-178		10/30/22 19:12	8015B		MS

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Jeremy D Allen, Laboratory Director

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-9 (0-5')

2210225-07 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 19:36	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:36	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:36	8015B		MS
Surrogate: 1-Chlorooctane			75.6 %	45.3-161		10/30/22 19:36	8015B		MS
Surrogate: 1-Chlorooctadecane			89.4 %	46.3-178		10/30/22 19:36	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-9 (5-10')

2210225-08 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 19:59	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:59	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 19:59	8015B		MS
Surrogate: 1-Chlorooctane			89.1 %	45.3-161		10/30/22 19:59	8015B		MS
Surrogate: 1-Chlorooctadecane			99.4 %	46.3-178		10/30/22 19:59	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-10 (0-5')

2210225-09 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 20:21	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 20:21	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 20:21	8015B		MS
Surrogate: 1-Chlorooctane			86.1 %	45.3-161		10/30/22 20:21	8015B		MS
Surrogate: 1-Chlorooctadecane			98.4 %	46.3-178		10/30/22 20:21	8015B		MS

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

BH-11 (0-5')

2210225-10 (Soil)

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

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	10/30/22 20:43	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	10/30/22 20:43	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	10/30/22 20:43	8015B		MS
<i>Surrogate: 1-Chlorooctane</i>			77.8 %	45.3-161		10/30/22 20:43	8015B		MS
<i>Surrogate: 1-Chlorooctadecane</i>			88.1 %	46.3-178		10/30/22 20:43	8015B		MS

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2102833 - General Prep - Organics

Blank (2102833-BLK1)

Prepared: 10/28/22 Analyzed: 11/01/22

Surrogate: 1-Chlorooctadecane	59.8		mg/kg	50.0		120	46.3-178			
Surrogate: 1-Chlorooctane	51.0		mg/kg	50.0		102	45.3-161			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							

LCS (2102833-BS1)

Prepared: 10/28/22 Analyzed: 11/01/22

Surrogate: 1-Chlorooctadecane	61.4		mg/kg	50.0		123	46.3-178			
Surrogate: 1-Chlorooctane	48.3		mg/kg	50.0		96.5	45.3-161			
DRO >C10-C28	193	10.0	mg/kg	200		96.5	74.9-127			
GRO C6-C10	192	10.0	mg/kg	200		96.1	76.8-124			
Total TPH C6-C28	385	10.0	mg/kg	400		96.3	77.5-124			

LCS Dup (2102833-BSD1)

Prepared: 10/28/22 Analyzed: 11/01/22

Surrogate: 1-Chlorooctadecane	69.8		mg/kg	50.0		140	46.3-178			
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	45.3-161			
DRO >C10-C28	201	10.0	mg/kg	200		101	74.9-127	4.15	18.6	
GRO C6-C10	197	10.0	mg/kg	200		98.3	76.8-124	2.23	17.2	
Total TPH C6-C28	398	10.0	mg/kg	400		99.5	77.5-124	3.20	17.6	

Batch 2102834 - General Prep - Organics

Blank (2102834-BLK1)

Prepared: 10/28/22 Analyzed: 10/30/22

Surrogate: 1-Chlorooctadecane	68.1		mg/kg	50.0		136	46.3-178			
Surrogate: 1-Chlorooctane	58.6		mg/kg	50.0		117	45.3-161			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							

LCS (2102834-BS1)

Prepared: 10/28/22 Analyzed: 10/30/22

Surrogate: 1-Chlorooctadecane	73.8		mg/kg	50.0		148	46.3-178			
Surrogate: 1-Chlorooctane	61.6		mg/kg	50.0		123	45.3-161			
DRO >C10-C28	187	10.0	mg/kg	200		93.3	74.9-127			
GRO C6-C10	171	10.0	mg/kg	200		85.3	76.8-124			
Total TPH C6-C28	357	10.0	mg/kg	400		89.3	77.5-124			

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

**Petroleum Hydrocarbons by GC FID - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2102834 - General Prep - Organics (Continued)

LCS Dup (2102834-BSD1)

Prepared: 10/28/22 Analyzed: 10/30/22

Surrogate: 1-Chlorooctadecane	62.0		mg/kg	50.0		124	46.3-178			
Surrogate: 1-Chlorooctane	55.0		mg/kg	50.0		110	45.3-161			
DRO >C10-C28	168	10.0	mg/kg	200		84.0	74.9-127	10.5	18.6	
GRO C6-C10	164	10.0	mg/kg	200		82.0	76.8-124	3.93	17.2	
Total TPH C6-C28	332	10.0	mg/kg	400		83.0	77.5-124	7.29	17.6	

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

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 2110239 - Volatiles**Blank (2110239-BLK1)**

Prepared: 11/02/22 Analyzed: 11/03/22

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.27		mg/kg	1.25		101	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.22		mg/kg	1.25		97.3	84.6-114			
Ethylbenzene	ND	0.0250	mg/kg							
m+p - Xylene	ND	0.0500	mg/kg							
Naphthalene	ND	0.0250	mg/kg							
o-Xylene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	mg/kg							
Surrogate: Toluene-d8	1.20		mg/kg	1.25		96.4	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (2110239-BS1)

Prepared: 11/02/22 Analyzed: 11/03/22

1,2,4-Trimethylbenzene	0.523	0.0250	mg/kg	0.500		105	62.4-140			
1,3,5-Trimethylbenzene	0.521	0.0250	mg/kg	0.500		104	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.28		mg/kg	1.25		103	82.5-117			
Benzene	0.471	0.0250	mg/kg	0.500		94.1	73-130			
Surrogate: Dibromofluoromethane	1.23		mg/kg	1.25		98.1	84.6-114			
Ethylbenzene	0.494	0.0250	mg/kg	0.500		98.9	75.4-127			
m+p - Xylene	1.01	0.0500	mg/kg	1.00		101	71.8-133			
Naphthalene	0.470	0.0250	mg/kg	0.500		94.1	28.7-158			
o-Xylene	0.500	0.0250	mg/kg	0.500		99.9	78.6-125			
Toluene	0.475	0.0250	mg/kg	0.500		94.9	79-122			
Surrogate: Toluene-d8	1.24		mg/kg	1.25		99.4	90.4-109			
Total Xylenes	1.51	0.0750	mg/kg	1.50		101	74.6-130			

LCS Dup (2110239-BS1)

Prepared: 11/02/22 Analyzed: 11/03/22

1,2,4-Trimethylbenzene	0.527	0.0250	mg/kg	0.500		105	62.4-140	0.775	38.2	
1,3,5-Trimethylbenzene	0.537	0.0250	mg/kg	0.500		107	64.4-138	3.13	39.1	
Surrogate: 4-Bromofluorobenzene	1.27		mg/kg	1.25		101	82.5-117			
Benzene	0.482	0.0250	mg/kg	0.500		96.4	73-130	2.37	17.1	
Surrogate: Dibromofluoromethane	1.21		mg/kg	1.25		97.1	84.6-114			
Ethylbenzene	0.499	0.0250	mg/kg	0.500		99.8	75.4-127	0.978	16.5	
m+p - Xylene	1.03	0.0500	mg/kg	1.00		103	71.8-133	1.75	19.1	
Naphthalene	0.453	0.0250	mg/kg	0.500		90.5	28.7-158	3.82	64	
o-Xylene	0.505	0.0250	mg/kg	0.500		101	78.6-125	1.02	13.2	
Toluene	0.484	0.0250	mg/kg	0.500		96.8	79-122	2.01	18.3	

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

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 2110239 - Volatiles (Continued)

LCS Dup (2110239-BSD1) (Continued)

Prepared: 11/02/22 Analyzed: 11/03/22

Surrogate: Toluene-d8	1.24		mg/kg	1.25		99.3	90.4-109			
Total Xylenes	1.53	0.0750	mg/kg	1.50		102	74.6-130	1.51	16.5	

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Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

Polynuclear Aromatic Compounds 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 2102542 - SW846-3510

Blank (2102542-BLK1)

Prepared: 10/25/22 Analyzed: 11/04/22

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	1.33		mg/kg	2.00		66.6	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Anthracene	ND	0.040	mg/kg							
Benzo[a]anthracene	ND	0.040	mg/kg							
Benzo[a]pyrene	ND	0.040	mg/kg							
Benzo[b]fluoranthene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Chrysene	ND	0.040	mg/kg							
Dibenz[a,h]anthracene	ND	0.040	mg/kg							
Fluoranthene	ND	0.040	mg/kg							
Fluorene	ND	0.040	mg/kg							
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg							
Naphthalene	ND	0.040	mg/kg							
Surrogate: Nitrobenzene-d5	0.929		mg/kg	2.00		46.5	39.6-121			
Pyrene	ND	0.040	mg/kg							
Surrogate: Terphenyl-d14	1.55		mg/kg	2.00		77.6	33.3-136			

LCS (2102542-BS1)

Prepared: 10/25/22 Analyzed: 11/04/22

1-Methylnaphthalene	0.308	0.040	mg/kg	0.400		76.9	57.6-108			
Surrogate: 2-Fluorobiphenyl	1.32		mg/kg	2.00		65.8	39.8-134			
2-Methylnaphthalene	0.305	0.040	mg/kg	0.400		76.2	59-106			
Acenaphthene	0.332	0.040	mg/kg	0.400		83.0	60.9-105			
Acenaphthylene	0.309	0.040	mg/kg	0.400		77.1	57.4-107			
Anthracene	0.307	0.040	mg/kg	0.400		76.9	60.8-105			
Benzo[a]anthracene	0.290	0.040	mg/kg	0.400		72.5	56.1-121			
Benzo[a]pyrene	0.301	0.040	mg/kg	0.400		75.2	56.7-115			
Benzo[b]fluoranthene	0.140	0.040	mg/kg	0.400		35.0	45.4-128			
Benzo[g,h,i]perylene	0.318	0.040	mg/kg	0.400		79.4	56.5-107			BS2
Benzo[k]fluoranthene	0.270	0.040	mg/kg	0.400		67.4	49.6-119			
Carbazole	0.338	0.040	mg/kg	0.400		84.6	59.7-107			
Chrysene	0.298	0.040	mg/kg	0.400		74.5	12.2-190			
Dibenz[a,h]anthracene	0.305	0.040	mg/kg	0.400		76.3	59.1-111			
Fluoranthene	0.306	0.040	mg/kg	0.400		76.4	60.6-111			
Fluorene	0.297	0.040	mg/kg	0.400		74.2	59.3-108			
Indeno[1,2,3-cd]pyrene	0.319	0.040	mg/kg	0.400		79.8	53.4-116			
Naphthalene	0.303	0.040	mg/kg	0.400		75.8	56.5-106			

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

Polynuclear Aromatic Compounds 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 2102542 - SW846-3510 (Continued)

LCS (2102542-BS1) (Continued)

Prepared: 10/25/22 Analyzed: 11/04/22

Surrogate: Nitrobenzene-d5	0.986		mg/kg	2.00		49.3	39.6-121			
Phenanthrene	0.324	0.040	mg/kg	0.400		81.0	59.9-107			
Pyrene	0.326	0.040	mg/kg	0.400		81.6	51.5-122			
Surrogate: Terphenyl-d14	1.48		mg/kg	2.00		73.9	33.3-136			

LCS Dup (2102542-BS1)

Prepared: 10/25/22 Analyzed: 11/04/22

1-Methylnaphthalene	0.310	0.040	mg/kg	0.400		77.5	57.6-108	0.777	6.22	
Surrogate: 2-Fluorobiphenyl	1.31		mg/kg	2.00		65.4	39.8-134			
2-Methylnaphthalene	0.304	0.040	mg/kg	0.400		76.0	59-106	0.269	6.23	
Acenaphthene	0.322	0.040	mg/kg	0.400		80.6	60.9-105	2.97	8.18	
Acenaphthylene	0.311	0.040	mg/kg	0.400		77.6	57.4-107	0.636	5	
Anthracene	0.322	0.040	mg/kg	0.400		80.5	60.8-105	4.60	3.68	QR-04
Benzo[a]anthracene	0.298	0.040	mg/kg	0.400		74.4	56.1-121	2.63	9.01	
Benzo[a]pyrene	0.300	0.040	mg/kg	0.400		75.0	56.7-115	0.213	4.92	
Benzo[b]fluoranthene	0.284	0.040	mg/kg	0.400		71.1	45.4-128	68.1	7.63	QR-04
Benzo[g,h,i]perylene	0.329	0.040	mg/kg	0.400		82.3	56.5-107	3.53	12.5	
Benzo[k]fluoranthene	0.287	0.040	mg/kg	0.400		71.8	49.6-119	6.27	10.6	
Carbazole	0.347	0.040	mg/kg	0.400		86.8	59.7-107	2.66	8.65	
Chrysene	0.291	0.040	mg/kg	0.400		72.7	12.2-190	2.41	21.8	
Dibenz[a,h]anthracene	0.318	0.040	mg/kg	0.400		79.6	59.1-111	4.21	11.6	
Fluoranthene	0.308	0.040	mg/kg	0.400		77.1	60.6-111	0.922	7.54	
Fluorene	0.298	0.040	mg/kg	0.400		74.5	59.3-108	0.407	5.49	
Indeno[1,2,3-cd]pyrene	0.327	0.040	mg/kg	0.400		81.8	53.4-116	2.40	22.3	
Naphthalene	0.304	0.040	mg/kg	0.400		75.9	56.5-106	0.0626	4.56	
Surrogate: Nitrobenzene-d5	0.981		mg/kg	2.00		49.1	39.6-121			
Phenanthrene	0.329	0.040	mg/kg	0.400		82.2	59.9-107	1.44	5.21	
Pyrene	0.338	0.040	mg/kg	0.400		84.6	51.5-122	3.59	10.6	
Surrogate: Terphenyl-d14	1.52		mg/kg	2.00		75.8	33.3-136			

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Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: MS #2
Project Manager: Kyle Siesser

Reported:
11/10/22 14:13

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

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

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

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

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

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† GAL cannot always accept verbal changes. Please fax or email written change requests.