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09 February 2023

Jake Harter
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 01/25/23 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, 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: T104704514-23-16

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



Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS10	2301164-01	Solid	01/23/23 08:55	01/25/23 16:20	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Project: COGCC Table 915-1
Project Name / Number: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

SS10

2301164-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

Hexavalent Chromium	<0.250	0.250	0.128	mg/kg dry	25	02/08/23 12:00	3060A/3500-Cr B		AES
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Saturated Paste Extraction

Calcium	128	0.200	0.116	mg/L	2	02/08/23 15:46	EPA200.7		AES
Conductivity	1160			umho/cm@25 C	1	02/08/23 09:00	ASA#9 10-3.3		KRW
Magnesium	23.2	0.200	0.131	mg/L	2	02/08/23 15:46	EPA200.7		AES
pH	9.70			pH Units	1	02/08/23 09:00	ASA#9 10-3.2		KRW
SAR	2.09			No Unit	1	02/08/23 15:46	Calculation		AES
Sodium	97.9	2.00	0.159	mg/L	2	02/08/23 15:46	EPA200.7		AES

Total Metals by ICP

Barium	91.1	5.00	1.10	mg/kg dry	100	02/07/23 13:06	6010B		AES
Cadmium	<5.00	5.00	2.54	mg/kg dry	100	02/07/23 13:06	6010B		AES
Chromium	13.0	5.00	1.58	mg/kg dry	100	02/07/23 13:06	6010B		AES
Copper	5.06	5.00	2.83	mg/kg dry	100	02/07/23 13:06	6010B		AES
Lead	<10.0	10.0	4.02	mg/kg dry	100	02/07/23 13:06	6010B		AES
Nickel	7.00	5.00	2.41	mg/kg dry	100	02/07/23 13:06	6010B		AES
Selenium	<20.0	20.0	5.39	mg/kg dry	100	02/07/23 13:06	6010B		AES
Silver	<1.00	1.00	0.518	mg/kg dry	100	02/07/23 13:06	6010B		AES
Zinc	25.5	10.0	2.18	mg/kg dry	100	02/07/23 13:06	6010B		AES

Total Metals by ICPMS

Arsenic	2.35	1.00	0.158	mg/kg dry	1000	02/03/23 15:12	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	02/07/23 19:52	EPA200.7		AES
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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	01/30/23 20:30	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	01/30/23 20:30	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	01/30/23 20:30	8015B		MS

Surrogate: 1-Chlorooctane 83.9 % 48.2-134 01/30/23 20:30 8015B MS

Surrogate: 1-Chlorooctadecane 86.9 % 49.1-148 01/30/23 20:30 8015B MS

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Project Manager: Jake Harter

Reported:
02/09/23 12:46

SS10

2301164-01 (Soil)

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

VOLATILES BY GC/MS

Benzene*	<0.00885	0.0250	0.00885	mg/kg	50	01/30/23 15:55	8260B		MS
Toluene*	<0.00670	0.0250	0.00670	mg/kg	50	01/30/23 15:55	8260B		MS
Ethylbenzene*	<0.00405	0.0250	0.00405	mg/kg	50	01/30/23 15:55	8260B		MS
m+p - Xylene*	<0.0186	0.0500	0.0186	mg/kg	50	01/30/23 15:55	8260B		MS
o-Xylene*	<0.00700	0.0250	0.00700	mg/kg	50	01/30/23 15:55	8260B		MS
Total Xylenes*	<0.0256	0.0750	0.0256	mg/kg	50	01/30/23 15:55	8260B		MS
1,3,5-Trimethylbenzene	<0.00450	0.0250	0.00450	mg/kg	50	01/30/23 15:55	8260B		MS
1,2,4-Trimethylbenzene	0.0231	0.0250	0.00650	mg/kg	50	01/30/23 15:55	8260B	J	MS
Naphthalene*	<0.00500	0.0250	0.00500	mg/kg	50	01/30/23 15:55	8260B		MS

Surrogate: Dibromofluoromethane 96.3 % 84.6-114 01/30/23 15:55 8260B MS

Surrogate: Toluene-d8 98.5 % 90.4-109 01/30/23 15:55 8260B MS

Surrogate: 4-Bromofluorobenzene 102 % 82.5-117 01/30/23 15:55 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	02/01/23 20:41	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	02/01/23 20:41	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	02/01/23 20:41	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	02/01/23 20:41	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	02/01/23 20:41	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	02/01/23 20:41	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	02/01/23 20:41	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	02/01/23 20:41	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	02/01/23 20:41	8270C		MS
Chrysene	<0.017	0.040	0.017	mg/kg	40	02/01/23 20:41	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	02/01/23 20:41	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	02/01/23 20:41	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	02/01/23 20:41	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	02/01/23 20:41	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	02/01/23 20:41	8270C		MS

Surrogate: Nitrobenzene-d5 82.8 % 39.6-121 02/01/23 20:41 8270C MS

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Project: COGCC Table 915-1
Project Name / Number: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

SS10

2301164-01 (Soil)

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

Polynuclear Aromatic Compounds by GC/MS

Surrogate: 2-Fluorobiphenyl	81.7 %	39.8-134				02/01/23 20:41	8270C		MS
Surrogate: Terphenyl-d14	89.4 %	33.3-136				02/01/23 20:41	8270C		MS

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Project Manager: Jake Harter

Reported:
02/09/23 12:46

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B230285 - General Prep - Wet Chem

Blank (B230285-BLK1)

Prepared & Analyzed: 02/08/23

Hexavalent Chromium	ND	0.250	mg/kg dry							
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LCS (B230285-BS1)

Prepared & Analyzed: 02/08/23

Hexavalent Chromium	2.26	0.250	mg/kg dry	2.50		90.3	85-115			
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Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B230274 - Paste Extract

Blank (B230274-BLK1)

Prepared: 02/07/23 Analyzed: 02/08/23

Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

Reference (B230274-SRM1)

Prepared: 02/07/23 Analyzed: 02/08/23

SAR	2.71		No Unit	2.93		92.4	90-110			
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Batch B230275 - Paste Extract

Reference (B230275-SRM1)

Prepared: 02/07/23 Analyzed: 02/08/23

pH	6.90		pH Units	7.08		97.5	92-108			
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Batch B230276 - Paste Extract

Reference (B230276-SRM1)

Prepared: 02/07/23 Analyzed: 02/08/23

Conductivity	3940		umho/cm@2 5C	4000		98.5	90-110			
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Project: COGCC Table 915-1
Project Name / Number: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

Total Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B230234 - EPA 3050

Blank (B230234-BLK1)

Prepared: 02/01/23 Analyzed: 02/07/23

Barium	ND	5.00	mg/kg dry
Cadmium	ND	5.00	mg/kg dry
Chromium	ND	5.00	mg/kg dry
Copper	ND	5.00	mg/kg dry
Lead	ND	10.0	mg/kg dry
Nickel	ND	5.00	mg/kg dry
Selenium	ND	20.0	mg/kg dry
Silver	ND	1.00	mg/kg dry
Zinc	ND	10.0	mg/kg dry

LCS (B230234-BS1)

Prepared: 02/01/23 Analyzed: 02/07/23

Barium	95.0	5.00	mg/kg dry	100	95.0	80-120
Cadmium	90.9	5.00	mg/kg dry	100	90.9	80-120
Chromium	96.3	5.00	mg/kg dry	100	96.3	80-120
Copper	198	5.00	mg/kg dry	200	99.1	80-120
Lead	92.0	10.0	mg/kg dry	100	92.0	80-120
Nickel	92.9	5.00	mg/kg dry	100	92.9	80-120
Selenium	391	20.0	mg/kg dry	400	97.6	80-120
Silver	4.70	1.00	mg/kg dry	5.00	94.0	80-120
Zinc	86.8	10.0	mg/kg dry	100	86.8	80-120

LCS Dup (B230234-BSD1)

Prepared: 02/01/23 Analyzed: 02/07/23

Barium	94.4	5.00	mg/kg dry	100	94.4	80-120	0.607	20
Cadmium	90.7	5.00	mg/kg dry	100	90.7	80-120	0.258	20
Chromium	95.8	5.00	mg/kg dry	100	95.8	80-120	0.466	20
Copper	198	5.00	mg/kg dry	200	98.8	80-120	0.321	20
Lead	91.9	10.0	mg/kg dry	100	91.9	80-120	0.145	20
Nickel	92.6	5.00	mg/kg dry	100	92.6	80-120	0.298	20
Selenium	397	20.0	mg/kg dry	400	99.2	80-120	1.60	20
Silver	4.73	1.00	mg/kg dry	5.00	94.6	80-120	0.592	20
Zinc	86.6	10.0	mg/kg dry	100	86.6	80-120	0.257	20

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Project: COGCC Table 915-1
Project Name / Number: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

Total Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B230236 - EPA 3050M

Blank (B230236-BLK1)

Prepared: 02/01/23 Analyzed: 02/03/23

Arsenic	ND	1.00	mg/kg dry							
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LCS (B230236-BS1)

Prepared: 02/01/23 Analyzed: 02/03/23

Arsenic	4.51	1.00	mg/kg dry	5.00		90.2	80-120			
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LCS Dup (B230236-BSD1)

Prepared: 02/01/23 Analyzed: 02/03/23

Arsenic	4.88	1.00	mg/kg dry	5.00		97.7	80-120	7.95	20	
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Hot Water Extractable - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B230271 - Hot Water Soluble Metals Extract

Blank (B230271-BLK1)

Prepared: 02/06/23 Analyzed: 02/07/23

Boron	ND	1.20	mg/L							
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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 3012729 - General Prep - Organics

Blank (3012729-BLK1)

Prepared: 01/27/23 Analyzed: 01/30/23

Surrogate: 1-Chlorooctadecane	44.0		mg/kg	50.0		87.9	49.1-148			
Surrogate: 1-Chlorooctane	41.4		mg/kg	50.0		82.8	48.2-134			
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 (3012729-BS1)

Prepared: 01/27/23 Analyzed: 01/30/23

Surrogate: 1-Chlorooctadecane	57.8		mg/kg	50.0		116	49.1-148			
Surrogate: 1-Chlorooctane	51.9		mg/kg	50.0		104	48.2-134			
DRO >C10-C28	230	10.0	mg/kg	200		115	72.5-126			
GRO C6-C10	230	10.0	mg/kg	200		115	78.5-124			
Total TPH C6-C28	460	10.0	mg/kg	400		115	77.6-123			

LCS Dup (3012729-BSD1)

Prepared: 01/27/23 Analyzed: 01/30/23

Surrogate: 1-Chlorooctadecane	46.3		mg/kg	50.0		92.7	49.1-148			
Surrogate: 1-Chlorooctane	42.6		mg/kg	50.0		85.3	48.2-134			
DRO >C10-C28	177	10.0	mg/kg	200		88.3	72.5-126	26.2	21	QR-04
GRO C6-C10	178	10.0	mg/kg	200		89.2	78.5-124	25.0	17.7	QR-04
Total TPH C6-C28	355	10.0	mg/kg	400		88.8	77.6-123	25.6	18.5	QR-04

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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 3012721 - Volatiles**Blank (3012721-BLK1)**

Prepared: 01/27/23 Analyzed: 01/30/23

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.24		mg/kg	1.25		99.1	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.20		mg/kg	1.25		96.0	84.6-114			
Ethylbenzene	ND	0.0250	mg/kg							
m+p - Xylene	ND	0.0500	mg/kg							
Naphthalene	0.00605	0.0250	mg/kg							J
o-Xylene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	mg/kg							
Surrogate: Toluene-d8	1.28		mg/kg	1.25		103	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (3012721-BS1)

Prepared: 01/27/23 Analyzed: 01/30/23

1,2,4-Trimethylbenzene	0.498	0.0250	mg/kg	0.500		99.5	62.4-140			
1,3,5-Trimethylbenzene	0.521	0.0250	mg/kg	0.500		104	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.27		mg/kg	1.25		102	82.5-117			
Benzene	0.496	0.0250	mg/kg	0.500		99.2	73-130			
Surrogate: Dibromofluoromethane	1.23		mg/kg	1.25		98.6	84.6-114			
Ethylbenzene	0.514	0.0250	mg/kg	0.500		103	75.4-127			
m+p - Xylene	1.03	0.0500	mg/kg	1.00		103	71.8-133			
Naphthalene	0.448	0.0250	mg/kg	0.500		89.7	28.7-158			
o-Xylene	0.504	0.0250	mg/kg	0.500		101	78.6-125			
Toluene	0.506	0.0250	mg/kg	0.500		101	79-122			
Surrogate: Toluene-d8	1.26		mg/kg	1.25		101	90.4-109			
Total Xylenes	1.53	0.0750	mg/kg	1.50		102	74.6-130			

LCS Dup (3012721-BS1)

Prepared: 01/27/23 Analyzed: 01/30/23

1,2,4-Trimethylbenzene	0.502	0.0250	mg/kg	0.500		100	62.4-140	0.835	38.2	
1,3,5-Trimethylbenzene	0.519	0.0250	mg/kg	0.500		104	64.4-138	0.377	39.1	
Surrogate: 4-Bromofluorobenzene	1.26		mg/kg	1.25		101	82.5-117			
Benzene	0.492	0.0250	mg/kg	0.500		98.5	73-130	0.741	17.1	
Surrogate: Dibromofluoromethane	1.25		mg/kg	1.25		100	84.6-114			
Ethylbenzene	0.515	0.0250	mg/kg	0.500		103	75.4-127	0.311	16.5	
m+p - Xylene	1.04	0.0500	mg/kg	1.00		104	71.8-133	0.687	19.1	
Naphthalene	0.472	0.0250	mg/kg	0.500		94.5	28.7-158	5.23	64	
o-Xylene	0.506	0.0250	mg/kg	0.500		101	78.6-125	0.386	13.2	
Toluene	0.508	0.0250	mg/kg	0.500		102	79-122	0.408	18.3	

Green Analytical Laboratories

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: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

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 3012721 - Volatiles (Continued)

LCS Dup (3012721-BSD1) (Continued)

Prepared: 01/27/23 Analyzed: 01/30/23

Surrogate: Toluene-d8	1.26		mg/kg	1.25		101	90.4-109			
Total Xylenes	1.54	0.0750	mg/kg	1.50		103	74.6-130	0.588	16.5	

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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: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

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 3012724 - SW846-3510

Blank (3012724-BLK1)

Prepared: 01/27/23 Analyzed: 02/01/23

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	2.37		mg/kg	2.00		119	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	2.31		mg/kg	2.00		116	39.6-121			
Pyrene	ND	0.040	mg/kg							
Surrogate: Terphenyl-d14	1.84		mg/kg	2.00		91.8	33.3-136			

LCS (3012724-BS1)

Prepared: 01/27/23 Analyzed: 02/01/23

1-Methylnaphthalene	0.343	0.040	mg/kg	0.400		85.8	57.6-108			
Surrogate: 2-Fluorobiphenyl	2.54		mg/kg	2.00		127	39.8-134			
2-Methylnaphthalene	0.328	0.040	mg/kg	0.400		81.9	59-106			
Acenaphthene	0.321	0.040	mg/kg	0.400		80.3	60.9-105			
Acenaphthylene	0.345	0.040	mg/kg	0.400		86.2	57.4-107			
Anthracene	0.338	0.040	mg/kg	0.400		84.4	60.8-105			
Benzo[a]anthracene	0.349	0.040	mg/kg	0.400		87.3	56.1-121			
Benzo[a]pyrene	0.320	0.040	mg/kg	0.400		79.9	56.7-115			
Benzo[b]fluoranthene	0.326	0.040	mg/kg	0.400		81.4	45.4-128			
Benzo[g,h,i]perylene	0.329	0.040	mg/kg	0.400		82.1	56.5-107			
Benzo[k]fluoranthene	0.321	0.040	mg/kg	0.400		80.3	49.6-119			
Carbazole	0.335	0.040	mg/kg	0.400		83.7	59.7-107			
Chrysene	0.350	0.040	mg/kg	0.400		87.6	12.2-190			
Dibenz[a,h]anthracene	0.324	0.040	mg/kg	0.400		80.9	59.1-111			
Fluoranthene	0.338	0.040	mg/kg	0.400		84.5	60.6-111			
Fluorene	0.341	0.040	mg/kg	0.400		85.2	59.3-108			
Indeno[1,2,3-cd]pyrene	0.326	0.040	mg/kg	0.400		81.4	53.4-116			
Naphthalene	0.339	0.040	mg/kg	0.400		84.8	56.5-106			

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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: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

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 3012724 - SW846-3510 (Continued)

LCS (3012724-BS1) (Continued)

Prepared: 01/27/23 Analyzed: 02/01/23

Surrogate: Nitrobenzene-d5	2.50		mg/kg	2.00		125	39.6-121			S-04
Phenanthrene	0.344	0.040	mg/kg	0.400		86.1	59.9-107			
Pyrene	0.361	0.040	mg/kg	0.400		90.3	51.5-122			
Surrogate: Terphenyl-d14	1.81		mg/kg	2.00		90.4	33.3-136			

LCS Dup (3012724-BSD1)

Prepared: 01/27/23 Analyzed: 02/01/23

1-Methylnaphthalene	0.356	0.040	mg/kg	0.400		89.1	57.6-108	3.74	6.22	
Surrogate: 2-Fluorobiphenyl	2.51		mg/kg	2.00		125	39.8-134			
2-Methylnaphthalene	0.338	0.040	mg/kg	0.400		84.5	59-106	3.06	6.23	
Acenaphthene	0.330	0.040	mg/kg	0.400		82.6	60.9-105	2.84	8.18	
Acenaphthylene	0.340	0.040	mg/kg	0.400		85.1	57.4-107	1.25	5	
Anthracene	0.343	0.040	mg/kg	0.400		85.8	60.8-105	1.70	3.68	
Benzo[a]anthracene	0.340	0.040	mg/kg	0.400		85.1	56.1-121	2.49	9.01	
Benzo[a]pyrene	0.317	0.040	mg/kg	0.400		79.3	56.7-115	0.741	4.92	
Benzo[b]fluoranthene	0.339	0.040	mg/kg	0.400		84.7	45.4-128	3.97	7.63	
Benzo[g,h,i]perylene	0.304	0.040	mg/kg	0.400		76.0	56.5-107	7.71	12.5	
Benzo[k]fluoranthene	0.343	0.040	mg/kg	0.400		85.6	49.6-119	6.46	10.6	
Carbazole	0.364	0.040	mg/kg	0.400		90.9	59.7-107	8.25	8.65	
Chrysene	0.352	0.040	mg/kg	0.400		88.1	12.2-190	0.592	21.8	
Dibenz[a,h]anthracene	0.308	0.040	mg/kg	0.400		77.1	59.1-111	4.87	11.6	
Fluoranthene	0.369	0.040	mg/kg	0.400		92.1	60.6-111	8.59	7.54	QR-04
Fluorene	0.341	0.040	mg/kg	0.400		85.3	59.3-108	0.0791	5.49	
Indeno[1,2,3-cd]pyrene	0.312	0.040	mg/kg	0.400		78.0	53.4-116	4.25	22.3	
Naphthalene	0.344	0.040	mg/kg	0.400		86.1	56.5-106	1.50	4.56	
Surrogate: Nitrobenzene-d5	2.46		mg/kg	2.00		123	39.6-121			S-04
Phenanthrene	0.345	0.040	mg/kg	0.400		86.3	59.9-107	0.191	5.21	
Pyrene	0.340	0.040	mg/kg	0.400		85.1	51.5-122	6.00	10.6	
Surrogate: Terphenyl-d14	1.70		mg/kg	2.00		84.8	33.3-136			

Green Analytical Laboratories

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: Box Elder J-1
Project Manager: Jake Harter

Reported:
02/09/23 12:46

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).

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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ANALYSIS REQUEST

* 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

Work Order # 2301-110
-1101
-1102
-1103
-1104
-1105
-1106
-1107
-1108
-1109
-1170

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client

Custody Seals on Box/Cooler Present: ☐ Yes ☒ No

Seals Intact: ☐ Yes ☐ No

Thermometer Used: 2 Samples on Ice, cooling process has begun: ☒ Yes ☐ No

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: Observed Temp: 2.9 °C Correction Factor: 0 °C Final Temp: 2.9 °C

*Temp should be above freezing to 6°C

Date/Initials of person
examining contents: VTW/MRN 1/25/12
Labeled by Initials: ↓
(If different than above)

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

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____

