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08 September 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 07/26/22 14:15-08/19/22 13:00. 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 'Jeremy D. Allen'.

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



Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
Wellhead	2207279-01	Solid	07/26/22 11:15	07/26/22 14:15	
Background	2208289-01	Solid	08/19/22 11:45	08/19/22 13:00	

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: Bryce (OWP) #1-X Project Manager: Emma Millar	Reported: 09/08/22 10:21
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Wellhead

2207279-01 (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	08/01/22 15:20	3060A/3500-Cr B		AES
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Saturated Paste Extraction

Calcium	135	0.500	0.289	mg/L	5	07/29/22 11:37	EPA200.7		AES
Conductivity	1840			umho/cm@25 C	1	07/28/22 15:30	ASA#9 10-3.3		QEB
Magnesium	1.21	0.500	0.327	mg/L	5	07/29/22 11:37	EPA200.7		AES
pH	11.0			pH Units	1	07/28/22 15:30	ASA#9 10-3.2		QEB
SAR	5.27			No Unit	1	07/29/22 11:37	Calculation		AES
Sodium	224	5.00	0.396	mg/L	5	07/29/22 11:37	EPA200.7		AES

Total Metals by ICP

Barium	280	5.00	1.10	mg/kg dry	100	07/29/22 12:25	6010B		AES
Cadmium	<5.00	5.00	2.54	mg/kg dry	100	08/01/22 15:28	6010B		AES
Chromium	87.8	5.00	1.58	mg/kg dry	100	07/29/22 12:25	6010B		AES
Copper	20.3	5.00	2.83	mg/kg dry	100	07/29/22 12:25	6010B		AES
Lead	16.4	10.0	4.02	mg/kg dry	100	07/29/22 12:25	6010B		AES
Nickel	52.2	5.00	2.41	mg/kg dry	100	08/01/22 15:28	6010B		AES
Selenium	<20.0	20.0	5.39	mg/kg dry	100	07/29/22 12:25	6010B		AES
Silver	<1.00	1.00	0.518	mg/kg dry	100	07/29/22 12:25	6010B		AES
Zinc	51.8	10.0	2.18	mg/kg dry	100	08/05/22 13:16	6010B		AES

Total Metals by ICPMS

Arsenic	2.31	1.00	0.158	mg/kg dry	1000	08/05/22 11:50	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	07/29/22 11:53	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	08/03/22 01:31	8015B		MS
DRO >C10-C28*	13.9	10.0	4.26	mg/kg	1	08/03/22 01:31	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	08/03/22 01:31	8015B		MS

Surrogate: 1-Chlorooctane			107 %	43-149		08/03/22 01:31	8015B		MS
Surrogate: 1-Chlorooctadecane			103 %	42.5-161		08/03/22 01:31	8015B		MS

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Wellhead

2207279-01 (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*	<0.0250	0.0250	0.00885	mg/kg	50	08/04/22 14:22	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	08/04/22 14:22	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	08/04/22 14:22	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	08/04/22 14:22	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	08/04/22 14:22	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0256	mg/kg	50	08/04/22 14:22	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	08/04/22 14:22	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	08/04/22 14:22	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	08/04/22 14:22	8260B		MS
Surrogate: Dibromofluoromethane			97.4 %	84.6-114		08/04/22 14:22	8260B		MS
Surrogate: Toluene-d8			99.2 %	90.4-109		08/04/22 14:22	8260B		MS
Surrogate: 4-Bromofluorobenzene			96.9 %	82.5-117		08/04/22 14:22	8260B		MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	08/11/22 14:24	8270C		MS
2-Methylnaphthalene*	0.026	0.040	0.023	mg/kg	40	08/11/22 14:24	8270C	J	MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	08/11/22 14:24	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	08/11/22 14:24	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	08/11/22 14:24	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	08/11/22 14:24	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	08/11/22 14:24	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	08/11/22 14:24	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	08/11/22 14:24	8270C		MS
Chrysene	<0.017	0.040	0.017	mg/kg	40	08/11/22 14:24	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	08/11/22 14:24	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	08/11/22 14:24	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	08/11/22 14:24	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	08/11/22 14:24	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	08/11/22 14:24	8270C		MS
Surrogate: Nitrobenzene-d5			75.8 %	39.6-121		08/11/22 14:24	8270C		MS

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Jeremy D Allen, Laboratory Director

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

Wellhead

2207279-01 (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	85.0 %	39.8-134				08/11/22 14:24	8270C		MS
Surrogate: Terphenyl-d14	92.8 %	33.3-136				08/11/22 14:24	8270C		MS

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: COGCC Table 915-1 Project Name / Number: Bryce (OWP) #1-X Project Manager: Emma Millar	Reported: 09/08/22 10:21
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Background

2208289-01 (Soil)

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

Hexavalent Chromium	0.267	0.250	0.128	mg/kg dry	25	08/30/22 10:26	3060A/3500-Cr B		HTB
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Saturated Paste Extraction

Calcium	52.9	0.100	0.058	mg/L	1	08/26/22 16:15	EPA200.7		AES
Conductivity	496			umho/cm@25 C	1	08/26/22 08:30	ASA#9 10-3.3		QEB
Magnesium	13.5	0.100	0.065	mg/L	1	08/26/22 16:15	EPA200.7		AES
pH	7.31			pH Units	1	08/26/22 08:30	ASA#9 10-3.2		QEB
SAR	0.37			No Unit	1	08/26/22 16:15	Calculation		AES
Sodium	11.6	1.00	0.079	mg/L	1	08/26/22 16:15	EPA200.7		AES

Total Metals by ICP

Barium	135	5.00	1.10	mg/kg dry	100	08/31/22 11:47	6010B		AES
Cadmium	<5.00	5.00	2.54	mg/kg dry	100	08/31/22 11:48	6010B		AES
Chromium	14.4	5.00	1.58	mg/kg dry	100	08/31/22 11:47	6010B	SD2	AES
Copper	6.79	5.00	2.83	mg/kg dry	100	08/31/22 11:47	6010B		AES
Lead	16.7	10.0	4.02	mg/kg dry	100	08/31/22 11:48	6010B		AES
Nickel	7.66	5.00	2.41	mg/kg dry	100	08/31/22 11:48	6010B		AES
Selenium	<20.0	20.0	5.39	mg/kg dry	100	08/31/22 11:47	6010B		AES
Silver	<1.00	1.00	0.518	mg/kg dry	100	08/31/22 11:47	6010B		AES
Zinc	34.1	10.0	2.18	mg/kg dry	100	08/31/22 11:48	6010B		AES

Total Metals by ICPMS

Arsenic	2.82	1.00	0.158	mg/kg dry	1000	08/29/22 11:39	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	08/24/22 17:52	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	08/23/22 21:07	8015B		MS
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	08/23/22 21:07	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	08/23/22 21:07	8015B		MS

Surrogate: 1-Chlorooctane			77.2 %	45.3-161		08/23/22 21:07	8015B		MS
Surrogate: 1-Chlorooctadecane			90.5 %	46.3-178		08/23/22 21:07	8015B		MS

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

Background

2208289-01 (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*	<0.0250	0.0250	0.00885	mg/kg	50	08/29/22 14:59	8260B		MS
Toluene*	<0.0250	0.0250	0.00670	mg/kg	50	08/29/22 14:59	8260B	QM-07	MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	08/29/22 14:59	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	08/29/22 14:59	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	08/29/22 14:59	8260B		MS
Total Xylenes*	<0.0750	0.0750	0.0256	mg/kg	50	08/29/22 14:59	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	08/29/22 14:59	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	08/29/22 14:59	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	08/29/22 14:59	8260B		MS
<i>Surrogate: Dibromofluoromethane</i>			95.3 %	84.6-114		08/29/22 14:59	8260B		MS
<i>Surrogate: Toluene-d8</i>			100 %	90.4-109		08/29/22 14:59	8260B		MS
<i>Surrogate: 4-Bromofluorobenzene</i>			98.2 %	82.5-117		08/29/22 14:59	8260B		MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	08/24/22 18:47	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	08/24/22 18:47	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	08/24/22 18:47	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	08/24/22 18:47	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	08/24/22 18:47	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	08/24/22 18:47	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	08/24/22 18:47	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	08/24/22 18:47	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	08/24/22 18:47	8270C		MS
Chrysene	<0.017	0.040	0.017	mg/kg	40	08/24/22 18:47	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	08/24/22 18:47	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	08/24/22 18:47	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	08/24/22 18:47	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	08/24/22 18:47	8270C		MS
Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	08/24/22 18:47	8270C		MS
<i>Surrogate: Nitrobenzene-d5</i>			81.2 %	39.6-121		08/24/22 18:47	8270C		MS

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PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

Background

2208289-01 (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	95.1 %	39.8-134				08/24/22 18:47	8270C		MS
Surrogate: Terphenyl-d14	108 %	33.3-136				08/24/22 18:47	8270C		MS

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: COGCC Table 915-1 Project Name / Number: Bryce (OWP) #1-X Project Manager: Emma Millar	Reported: 09/08/22 10:21
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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 B222081 - General Prep - Wet Chem

Blank (B222081-BLK1) Prepared & Analyzed: 08/01/22										
Hexavalent Chromium	ND	0.250	mg/kg dry							
LCS (B222081-BS1) Prepared & Analyzed: 08/01/22										
Hexavalent Chromium	2.41	0.250	mg/kg dry	2.50		96.4	85-115			

Batch B222370 - General Prep - Wet Chem

Blank (B222370-BLK1) Prepared: 08/29/22 Analyzed: 08/30/22										
Hexavalent Chromium	ND	0.250	mg/kg dry							
LCS (B222370-BS1) Prepared: 08/29/22 Analyzed: 08/30/22										
Hexavalent Chromium	2.38	0.250	mg/kg dry	2.50		95.1	85-115			

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 B222046 - Paste Extract

Blank (B222046-BLK1) Prepared: 07/28/22 Analyzed: 07/29/22										
Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							
Reference (B222046-SRM1) Prepared: 07/28/22 Analyzed: 07/29/22										
SAR	10.6		No Unit	10.5		101	90-110			

Batch B222047 - Paste Extract

Reference (B222047-SRM1) Prepared & Analyzed: 07/28/22										
Conductivity	7970		umho/cm@2 5C	8340		95.6	90-110			

Batch B222048 - Paste Extract

Reference (B222048-SRM1) Prepared & Analyzed: 07/28/22										
pH	6.88		pH Units	6.93		99.3	92-108			

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**Saturated Paste Extraction - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B222325 - Paste Extract

Reference (B222325-SRM1)

Prepared: 08/25/22 Analyzed: 08/26/22

pH	6.89		pH Units	6.93		99.4	92-108			
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Batch B222326 - Paste Extract

Blank (B222326-BLK1)

Prepared: 08/24/22 Analyzed: 08/26/22

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

Reference (B222326-SRM1)

Prepared: 08/24/22 Analyzed: 08/26/22

SAR	11.4		No Unit	10.5		109	90-110			
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Batch B222327 - Paste Extract

Reference (B222327-SRM1)

Prepared: 08/25/22 Analyzed: 08/26/22

Conductivity	8970		umho/cm@25C	8340		108	90-110			
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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 B222037 - EPA 3050

Blank (B222037-BLK1)

Prepared: 07/28/22 Analyzed: 07/29/22

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							

LCS (B222037-BS1)

Prepared: 07/28/22 Analyzed: 07/29/22

Barium	164	5.00	mg/kg dry	200	81.9	80-120				
Cadmium	162	5.00	mg/kg dry	200	81.1	80-120				
Chromium	165	5.00	mg/kg dry	200	82.6	80-120				
Copper	329	5.00	mg/kg dry	400	82.2	80-120				
Lead	161	10.0	mg/kg dry	200	80.7	80-120				
Nickel	162	5.00	mg/kg dry	200	81.1	80-120				
Selenium	694	20.0	mg/kg dry	800	86.7	80-120				
Silver	8.48	1.00	mg/kg dry	10.0	84.8	80-120				

LCS Dup (B222037-BSD1)

Prepared: 07/28/22 Analyzed: 07/29/22

Barium	166	5.00	mg/kg dry	200	82.9	80-120	1.12	20		
Cadmium	162	5.00	mg/kg dry	200	81.2	80-120	0.0160	20		
Chromium	167	5.00	mg/kg dry	200	83.4	80-120	0.866	20		
Copper	332	5.00	mg/kg dry	400	82.9	80-120	0.818	20		
Lead	161	10.0	mg/kg dry	200	80.5	80-120	0.185	20		
Nickel	167	5.00	mg/kg dry	200	83.3	80-120	2.70	20		
Selenium	704	20.0	mg/kg dry	800	88.0	80-120	1.48	20		
Silver	8.60	1.00	mg/kg dry	10.0	86.0	80-120	1.47	20		

Batch B222109 - EPA 3050

Blank (B222109-BLK1)

Prepared: 08/03/22 Analyzed: 08/05/22

Zinc	ND	10.0	mg/kg dry							
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LCS (B222109-BS1)

Prepared: 08/03/22 Analyzed: 08/05/22

Zinc	170	10.0	mg/kg dry	200	85.0	80-120				
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LCS Dup (B222109-BSD1)

Prepared: 08/03/22 Analyzed: 08/05/22

Zinc	171	10.0	mg/kg dry	200	85.4	80-120	0.451	20		
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Batch B222360 - EPA 3050

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**Total Metals by ICP - Quality Control
(Continued)**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B222360 - EPA 3050 (Continued)

Blank (B222360-BLK1)

Prepared: 08/29/22 Analyzed: 08/31/22

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 (B222360-BS1)

Prepared: 08/29/22 Analyzed: 08/31/22

Barium	189	5.00	mg/kg dry	200		94.3	80-120			
Cadmium	177	5.00	mg/kg dry	200		88.5	80-120			
Chromium	190	5.00	mg/kg dry	200		95.2	80-120			
Copper	388	5.00	mg/kg dry	400		97.1	80-120			
Lead	180	10.0	mg/kg dry	200		89.9	80-120			
Nickel	180	5.00	mg/kg dry	200		90.2	80-120			
Selenium	783	20.0	mg/kg dry	800		97.9	80-120			
Silver	9.10	1.00	mg/kg dry	10.0		91.0	80-120			
Zinc	170	10.0	mg/kg dry	200		84.9	80-120			

LCS Dup (B222360-BSD1)

Prepared: 08/29/22 Analyzed: 08/31/22

Barium	191	5.00	mg/kg dry	200		95.7	80-120	1.53	20	
Cadmium	178	5.00	mg/kg dry	200		88.8	80-120	0.268	20	
Chromium	194	5.00	mg/kg dry	200		96.9	80-120	1.80	20	
Copper	395	5.00	mg/kg dry	400		98.8	80-120	1.78	20	
Lead	181	10.0	mg/kg dry	200		90.6	80-120	0.802	20	
Nickel	182	5.00	mg/kg dry	200		91.0	80-120	0.894	20	
Selenium	778	20.0	mg/kg dry	800		97.2	80-120	0.651	20	
Silver	9.12	1.00	mg/kg dry	10.0		91.2	80-120	0.324	20	
Zinc	170	10.0	mg/kg dry	200		84.8	80-120	0.0540	20	

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 B222038 - EPA 3050M

Blank (B222038-BLK1)

Prepared: 07/28/22 Analyzed: 08/05/22

Arsenic	ND	0.100	mg/kg dry							
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LCS (B222038-BS1)

Prepared: 07/28/22 Analyzed: 08/05/22

Arsenic	4.83	0.100	mg/kg dry	5.00		96.6	80-120			
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LCS Dup (B222038-BSD1)

Prepared: 07/28/22 Analyzed: 08/05/22

Arsenic	4.92	0.100	mg/kg dry	5.00		98.4	80-120	1.81	20	
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Batch B222279 - EPA 3050M

Blank (B222279-BLK1)

Prepared: 08/22/22 Analyzed: 08/29/22

Arsenic	ND	0.100	mg/kg dry							
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LCS (B222279-BS1)

Prepared: 08/22/22 Analyzed: 08/29/22

Arsenic	4.55	0.100	mg/kg dry	5.00		91.0	80-120			
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LCS Dup (B222279-BSD1)

Prepared: 08/22/22 Analyzed: 08/29/22

Arsenic	4.40	0.100	mg/kg dry	5.00		88.0	80-120	3.36	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 B222056 - Hot Water Soluble Metals Extract

Blank (B222056-BLK1)

Prepared: 07/28/22 Analyzed: 07/29/22

Boron	ND	1.20	mg/L							
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Batch B222310 - Hot Water Soluble Metals Extract

Blank (B222310-BLK1)

Prepared: 08/23/22 Analyzed: 08/24/22

Boron	ND	1.20	mg/L							
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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 2080113 - General Prep - Organics

Blank (2080113-BLK1)

Prepared: 08/01/22 Analyzed: 08/02/22

Surrogate: 1-Chlorooctadecane	50.8		mg/kg	50.0		102	42.5-161			
Surrogate: 1-Chlorooctane	52.9		mg/kg	50.0		106	43-149			
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 (2080113-BS1)

Prepared: 08/01/22 Analyzed: 08/02/22

Surrogate: 1-Chlorooctadecane	57.2		mg/kg	50.0		114	42.5-161			
Surrogate: 1-Chlorooctane	54.2		mg/kg	50.0		108	43-149			
DRO >C10-C28	252	10.0	mg/kg	200		126	75.8-135			
GRO C6-C10	243	10.0	mg/kg	200		121	78.5-128			
Total TPH C6-C28	495	10.0	mg/kg	400		124	81.5-127			

LCS Dup (2080113-BSD1)

Prepared: 08/01/22 Analyzed: 08/02/22

Surrogate: 1-Chlorooctadecane	59.1		mg/kg	50.0		118	42.5-161			
Surrogate: 1-Chlorooctane	59.6		mg/kg	50.0		119	43-149			
DRO >C10-C28	246	10.0	mg/kg	200		123	75.8-135	2.49	17.9	
GRO C6-C10	247	10.0	mg/kg	200		124	78.5-128	1.83	21.4	
Total TPH C6-C28	493	10.0	mg/kg	400		123	81.5-127	0.345	17.6	

Batch 2082320 - General Prep - Organics

Blank (2082320-BLK1)

Prepared & Analyzed: 08/23/22

Surrogate: 1-Chlorooctadecane	61.6		mg/kg	50.0		123	46.3-178			
Surrogate: 1-Chlorooctane	53.2		mg/kg	50.0		106	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 (2082320-BS1)

Prepared & Analyzed: 08/23/22

Surrogate: 1-Chlorooctadecane	71.1		mg/kg	50.0		142	46.3-178			
Surrogate: 1-Chlorooctane	59.9		mg/kg	50.0		120	45.3-161			
DRO >C10-C28	212	10.0	mg/kg	200		106	74.3-129			
GRO C6-C10	199	10.0	mg/kg	200		99.5	76.9-124			
Total TPH C6-C28	411	10.0	mg/kg	400		103	81.5-127			

LCS Dup (2082320-BSD1)

Prepared & Analyzed: 08/23/22

Surrogate: 1-Chlorooctadecane	71.4		mg/kg	50.0		143	46.3-178			
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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**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 2082320 - General Prep - Organics (Continued)

LCS Dup (2082320-BSD1) (Continued)

Prepared & Analyzed: 08/23/22

<i>Surrogate: 1-Chlorooctane</i>	57.6		mg/kg	50.0		115	45.3-161			
DRO >C10-C28	210	10.0	mg/kg	200		105	74.3-129	0.983	18.6	
GRO C6-C10	197	10.0	mg/kg	200		98.7	76.9-124	0.826	17.2	
Total TPH C6-C28	407	10.0	mg/kg	400		102	81.5-127	0.907	17.6	

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 2080324 - Volatiles

Blank (2080324-BLK1)

Prepared: 08/03/22 Analyzed: 08/04/22

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
<i>Surrogate: 4-Bromofluorobenzene</i>	1.19		mg/kg	1.25		95.6	82.5-117			
Benzene	ND	0.0250	mg/kg							
<i>Surrogate: Dibromofluoromethane</i>	1.21		mg/kg	1.25		96.9	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							
<i>Surrogate: Toluene-d8</i>	1.23		mg/kg	1.25		98.3	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (2080324-BS1)

Prepared: 08/03/22 Analyzed: 08/04/22

1,2,4-Trimethylbenzene	0.476	0.0250	mg/kg	0.500		95.1	62.4-140			
1,3,5-Trimethylbenzene	0.488	0.0250	mg/kg	0.500		97.5	64.4-138			
<i>Surrogate: 4-Bromofluorobenzene</i>	1.24		mg/kg	1.25		98.8	82.5-117			
Benzene	0.460	0.0250	mg/kg	0.500		92.0	73-130			
<i>Surrogate: Dibromofluoromethane</i>	1.26		mg/kg	1.25		100	84.6-114			
Ethylbenzene	0.463	0.0250	mg/kg	0.500		92.5	75.4-127			
m+p - Xylene	0.953	0.0500	mg/kg	1.00		95.3	71.8-133			
Naphthalene	0.470	0.0250	mg/kg	0.500		94.1	28.7-158			
o-Xylene	0.461	0.0250	mg/kg	0.500		92.2	78.6-125			
Toluene	0.452	0.0250	mg/kg	0.500		90.5	79-122			
<i>Surrogate: Toluene-d8</i>	1.24		mg/kg	1.25		99.1	90.4-109			
Total Xylenes	1.41	0.0750	mg/kg	1.50		94.3	74.6-130			

LCS Dup (2080324-BSD1)

Prepared: 08/03/22 Analyzed: 08/04/22

1,2,4-Trimethylbenzene	0.463	0.0250	mg/kg	0.500		92.5	62.4-140	2.74	38.2	
1,3,5-Trimethylbenzene	0.466	0.0250	mg/kg	0.500		93.3	64.4-138	4.49	39.1	
<i>Surrogate: 4-Bromofluorobenzene</i>	1.22		mg/kg	1.25		97.5	82.5-117			
Benzene	0.457	0.0250	mg/kg	0.500		91.4	73-130	0.632	17.1	
<i>Surrogate: Dibromofluoromethane</i>	1.25		mg/kg	1.25		100	84.6-114			
Ethylbenzene	0.457	0.0250	mg/kg	0.500		91.3	75.4-127	1.33	16.5	
m+p - Xylene	0.941	0.0500	mg/kg	1.00		94.1	71.8-133	1.35	19.1	
Naphthalene	0.441	0.0250	mg/kg	0.500		88.2	28.7-158	6.47	64	
o-Xylene	0.455	0.0250	mg/kg	0.500		91.0	78.6-125	1.31	13.2	
Toluene	0.447	0.0250	mg/kg	0.500		89.5	79-122	1.11	18.3	

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 2080324 - Volatiles (Continued)

LCS Dup (2080324-BSD1) (Continued)

Prepared: 08/03/22 Analyzed: 08/04/22

Surrogate: Toluene-d8	1.22		mg/kg	1.25		97.9	90.4-109			
Total Xylenes	1.40	0.0750	mg/kg	1.50		93.0	74.6-130	1.34	16.5	

Batch 2082916 - Volatiles

Blank (2082916-BLK1)

Prepared & Analyzed: 08/29/22

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.23		mg/kg	1.25		98.8	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	ND	0.0250	mg/kg							
o-Xylene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	mg/kg							
Surrogate: Toluene-d8	1.25		mg/kg	1.25		100	90.4-109			
Total Xylenes	ND	0.0750	mg/kg							

LCS (2082916-BS1)

Prepared & Analyzed: 08/29/22

1,2,4-Trimethylbenzene	0.531	0.0250	mg/kg	0.500		106	62.4-140			
1,3,5-Trimethylbenzene	0.528	0.0250	mg/kg	0.500		106	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.24		mg/kg	1.25		99.3	82.5-117			
Benzene	0.527	0.0250	mg/kg	0.500		105	73-130			
Surrogate: Dibromofluoromethane	1.23		mg/kg	1.25		98.6	84.6-114			
Ethylbenzene	0.533	0.0250	mg/kg	0.500		107	75.4-127			
m+p - Xylene	1.04	0.0500	mg/kg	1.00		104	71.8-133			
Naphthalene	0.538	0.0250	mg/kg	0.500		108	28.7-158			
o-Xylene	0.523	0.0250	mg/kg	0.500		105	78.6-125			
Toluene	0.519	0.0250	mg/kg	0.500		104	79-122			
Surrogate: Toluene-d8	1.25		mg/kg	1.25		100	90.4-109			
Total Xylenes	1.56	0.0750	mg/kg	1.50		104	74.6-130			

LCS Dup (2082916-BSD1)

Prepared & Analyzed: 08/29/22

1,2,4-Trimethylbenzene	0.509	0.0250	mg/kg	0.500		102	62.4-140	4.15	38.2	
1,3,5-Trimethylbenzene	0.515	0.0250	mg/kg	0.500		103	64.4-138	2.44	39.1	
Surrogate: 4-Bromofluorobenzene	1.25		mg/kg	1.25		100	82.5-117			
Benzene	0.515	0.0250	mg/kg	0.500		103	73-130	2.45	17.1	

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**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 2082916 - Volatiles (Continued)

LCS Dup (2082916-BSD1) (Continued)

Prepared & Analyzed: 08/29/22

<i>Surrogate: Dibromofluoromethane</i>	1.23		mg/kg	1.25		98.7	84.6-114			
Ethylbenzene	0.519	0.0250	mg/kg	0.500		104	75.4-127	2.64	16.5	
m+p - Xylene	1.02	0.0500	mg/kg	1.00		102	71.8-133	0.985	19.1	
Naphthalene	0.502	0.0250	mg/kg	0.500		100	28.7-158	6.80	64	
o-Xylene	0.510	0.0250	mg/kg	0.500		102	78.6-125	2.57	13.2	
Toluene	0.502	0.0250	mg/kg	0.500		100	79-122	3.28	18.3	
<i>Surrogate: Toluene-d8</i>	1.26		mg/kg	1.25		100	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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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

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 2080212 - SW-846 3550

Blank (2080212-BLK1)

Prepared: 08/02/22 Analyzed: 08/11/22

1-Methylnaphthalene	ND	0.040	mg/kg							
<i>Surrogate: 2-Fluorobiphenyl</i>	1.51		mg/kg	2.00		75.4	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]flouranthene	ND	0.040	mg/kg							
Benzo[k]flouranthene	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							
<i>Surrogate: Nitrobenzene-d5</i>	1.28		mg/kg	2.00		63.9	39.6-121			
Pyrene	ND	0.040	mg/kg							
<i>Surrogate: Terphenyl-d14</i>	1.52		mg/kg	2.00		76.1	33.3-136			

LCS (2080212-BS1)

Prepared: 08/02/22 Analyzed: 08/11/22

1-Methylnaphthalene	0.334	0.040	mg/kg	0.400		83.4	57.6-108			
<i>Surrogate: 2-Fluorobiphenyl</i>	2.44		mg/kg	2.00		122	39.8-134			
2-Methylnaphthalene	0.333	0.040	mg/kg	0.400		83.2	59-106			
Acenaphthene	0.339	0.040	mg/kg	0.400		84.8	60.9-105			
Acenaphthylene	0.343	0.040	mg/kg	0.400		85.6	57.4-107			
Anthracene	0.348	0.040	mg/kg	0.400		87.1	60.8-105			
Benzo[a]anthracene	0.348	0.040	mg/kg	0.400		87.0	56.1-121			
Benzo[a]pyrene	0.347	0.040	mg/kg	0.400		86.8	56.7-115			
Benzo[b]flouranthene	0.190	0.040	mg/kg	0.400		47.5	45.4-128			
Benzo[g,h,i]perylene	0.371	0.040	mg/kg	0.400		92.8	56.5-107			
Benzo[k]flouranthene	0.291	0.040	mg/kg	0.400		72.9	49.6-119			
Carbazole	0.358	0.040	mg/kg	0.400		89.5	59.7-107			
Chrysene	0.361	0.040	mg/kg	0.400		90.2	12.2-190			
Dibenz[a,h]anthracene	0.355	0.040	mg/kg	0.400		88.8	59.1-111			
Fluoranthene	0.323	0.040	mg/kg	0.400		80.7	60.6-111			
Fluorene	0.345	0.040	mg/kg	0.400		86.1	59.3-108			
Indeno[1,2,3-cd]pyrene	0.334	0.040	mg/kg	0.400		83.5	53.4-116			
Naphthalene	0.345	0.040	mg/kg	0.400		86.3	56.5-106			

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**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 2080212 - SW-846 3550 (Continued)

LCS (2080212-BS1) (Continued)

Prepared: 08/02/22 Analyzed: 08/11/22

<i>Surrogate: Nitrobenzene-d5</i>	2.07		mg/kg	2.00		103	39.6-121			
Phenanthrene	0.355	0.040	mg/kg	0.400		88.8	59.9-107			
Pyrene	0.357	0.040	mg/kg	0.400		89.2	51.5-122			
<i>Surrogate: Terphenyl-dl4</i>	2.58		mg/kg	2.00		129	33.3-136			

LCS Dup (2080212-BSD1)

Prepared: 08/02/22 Analyzed: 08/11/22

1-Methylnaphthalene	0.342	0.040	mg/kg	0.400		85.4	57.6-108	2.44	6.22	
<i>Surrogate: 2-Fluorobiphenyl</i>	2.40		mg/kg	2.00		120	39.8-134			
2-Methylnaphthalene	0.343	0.040	mg/kg	0.400		85.9	59-106	3.10	6.23	
Acenaphthene	0.346	0.040	mg/kg	0.400		86.5	60.9-105	2.01	8.18	
Acenaphthylene	0.342	0.040	mg/kg	0.400		85.6	57.4-107	0.0409	5	
Anthracene	0.347	0.040	mg/kg	0.400		86.9	60.8-105	0.293	3.68	
Benzo[a]anthracene	0.348	0.040	mg/kg	0.400		87.0	56.1-121	0.0575	9.01	
Benzo[a]pyrene	0.341	0.040	mg/kg	0.400		85.1	56.7-115	1.96	4.92	
Benzo[b]flouranthene	0.344	0.040	mg/kg	0.400		86.0	45.4-128	57.6	7.63	QR-04
Benzo[g,h,i]perylene	0.376	0.040	mg/kg	0.400		94.1	56.5-107	1.41	12.5	
Benzo[k]flouranthene	0.334	0.040	mg/kg	0.400		83.5	49.6-119	13.6	10.6	QR-04
Carbazole	0.367	0.040	mg/kg	0.400		91.8	59.7-107	2.48	8.65	
Chrysene	0.366	0.040	mg/kg	0.400		91.4	12.2-190	1.30	21.8	
Dibenz[a,h]anthracene	0.353	0.040	mg/kg	0.400		88.2	59.1-111	0.715	11.6	
Fluoranthene	0.317	0.040	mg/kg	0.400		79.3	60.6-111	1.84	7.54	
Fluorene	0.338	0.040	mg/kg	0.400		84.5	59.3-108	1.95	5.49	
Indeno[1,2,3-cd]pyrene	0.314	0.040	mg/kg	0.400		78.5	53.4-116	6.21	22.3	
Naphthalene	0.351	0.040	mg/kg	0.400		87.7	56.5-106	1.60	4.56	
<i>Surrogate: Nitrobenzene-d5</i>	2.03		mg/kg	2.00		102	39.6-121			
Phenanthrene	0.341	0.040	mg/kg	0.400		85.2	59.9-107	4.13	5.21	
Pyrene	0.358	0.040	mg/kg	0.400		89.6	51.5-122	0.425	10.6	
<i>Surrogate: Terphenyl-dl4</i>	2.56		mg/kg	2.00		128	33.3-136			

Batch 2081508 - SW846-3510

Blank (2081508-BLK1)

Prepared: 08/15/22 Analyzed: 08/23/22

1-Methylnaphthalene	ND	0.040	mg/kg							
<i>Surrogate: 2-Fluorobiphenyl</i>	1.10		mg/kg	2.00		54.9	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							

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**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 2081508 - SW846-3510 (Continued)

Blank (2081508-BLK1) (Continued)

Prepared: 08/15/22 Analyzed: 08/23/22

Benzo[b]flouranthene	ND	0.040	mg/kg							
Benzo[k]flouranthene	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							
<i>Surrogate: Nitrobenzene-d5</i>	0.976		mg/kg	2.00		48.8	39.6-121			
Pyrene	ND	0.040	mg/kg							
<i>Surrogate: Terphenyl-d14</i>	1.11		mg/kg	2.00		55.7	33.3-136			

LCS (2081508-BS1)

Prepared: 08/15/22 Analyzed: 08/24/22

1-Methylnaphthalene	0.337	0.040	mg/kg	0.400		84.3	57.6-108			
<i>Surrogate: 2-Fluorobiphenyl</i>	1.56		mg/kg	2.00		77.8	39.8-134			
2-Methylnaphthalene	0.343	0.040	mg/kg	0.400		85.7	59-106			
Acenaphthene	0.306	0.040	mg/kg	0.400		76.6	60.9-105			
Acenaphthylene	0.327	0.040	mg/kg	0.400		81.6	57.4-107			
Anthracene	0.328	0.040	mg/kg	0.400		82.0	60.8-105			
Benzo[a]anthracene	0.368	0.040	mg/kg	0.400		91.9	56.1-121			
Benzo[a]pyrene	0.344	0.040	mg/kg	0.400		86.0	56.7-115			
Benzo[b]flouranthene	0.365	0.040	mg/kg	0.400		91.2	45.4-128			
Benzo[g,h,i]perylene	0.360	0.040	mg/kg	0.400		89.9	56.5-107			
Benzo[k]flouranthene	0.353	0.040	mg/kg	0.400		88.3	49.6-119			
Carbazole	0.347	0.040	mg/kg	0.400		86.7	59.7-107			
Chrysene	0.372	0.040	mg/kg	0.400		93.1	12.2-190			
Dibenz[a,h]anthracene	0.363	0.040	mg/kg	0.400		90.8	59.1-111			
Fluoranthene	0.331	0.040	mg/kg	0.400		82.7	60.6-111			
Fluorene	0.359	0.040	mg/kg	0.400		89.8	59.3-108			
Indeno[1,2,3-cd]pyrene	0.325	0.040	mg/kg	0.400		81.2	53.4-116			
Naphthalene	0.332	0.040	mg/kg	0.400		83.1	56.5-106			
<i>Surrogate: Nitrobenzene-d5</i>	1.09		mg/kg	2.00		54.4	39.6-121			
Phenanthrene	0.332	0.040	mg/kg	0.400		83.1	59.9-107			
Pyrene	0.431	0.040	mg/kg	0.400		108	51.5-122			
<i>Surrogate: Terphenyl-d14</i>	2.35		mg/kg	2.00		117	33.3-136			

LCS Dup (2081508-BSD1)

Prepared: 08/15/22 Analyzed: 08/24/22

1-Methylnaphthalene	0.350	0.040	mg/kg	0.400		87.6	57.6-108	3.83	6.22	
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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

**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 2081508 - SW846-3510 (Continued)

LCS Dup (2081508-BSD1) (Continued)

Prepared: 08/15/22 Analyzed: 08/24/22

<i>Surrogate: 2-Fluorobiphenyl</i>	1.53		mg/kg	2.00		76.3	39.8-134			
2-Methylnaphthalene	0.350	0.040	mg/kg	0.400		87.4	59-106	1.94	6.23	
Acenaphthene	0.326	0.040	mg/kg	0.400		81.4	60.9-105	6.12	8.18	
Acenaphthylene	0.324	0.040	mg/kg	0.400		80.9	57.4-107	0.867	5	
Anthracene	0.323	0.040	mg/kg	0.400		80.8	60.8-105	1.41	3.68	
Benzo[a]anthracene	0.368	0.040	mg/kg	0.400		92.0	56.1-121	0.0788	9.01	
Benzo[a]pyrene	0.346	0.040	mg/kg	0.400		86.5	56.7-115	0.626	4.92	
Benzo[b]flouranthene	0.362	0.040	mg/kg	0.400		90.5	45.4-128	0.680	7.63	
Benzo[g,h,i]perylene	0.352	0.040	mg/kg	0.400		88.0	56.5-107	2.15	12.5	
Benzo[k]flouranthene	0.359	0.040	mg/kg	0.400		89.8	49.6-119	1.68	10.6	
Carbazole	0.343	0.040	mg/kg	0.400		85.9	59.7-107	0.974	8.65	
Chrysene	0.385	0.040	mg/kg	0.400		96.1	12.2-190	3.25	21.8	
Dibenz[a,h]anthracene	0.356	0.040	mg/kg	0.400		88.9	59.1-111	2.11	11.6	
Fluoranthene	0.336	0.040	mg/kg	0.400		84.0	60.6-111	1.65	7.54	
Fluorene	0.353	0.040	mg/kg	0.400		88.1	59.3-108	1.91	5.49	
Indeno[1,2,3-cd]pyrene	0.327	0.040	mg/kg	0.400		81.6	53.4-116	0.485	22.3	
Naphthalene	0.323	0.040	mg/kg	0.400		80.7	56.5-106	2.96	4.56	
<i>Surrogate: Nitrobenzene-d5</i>	1.09		mg/kg	2.00		54.3	39.6-121			
Phenanthrene	0.331	0.040	mg/kg	0.400		82.8	59.9-107	0.250	5.21	
Pyrene	0.443	0.040	mg/kg	0.400		111	51.5-122	2.62	10.6	
<i>Surrogate: Terphenyl-d14</i>	2.33		mg/kg	2.00		117	33.3-136			

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Cottonwood Consulting	Project: COGCC Table 915-1	
PO Box 1653	Project Name / Number: Bryce (OWP) #1-X	Reported:
Durango CO, 81302	Project Manager: Emma Millar	09/08/22 10:21

Notes and Definitions

- SD2 Serial Dilution RPD exceeded the laboratory control limit. All other QC for analyte acceptable.
- QR-04 The RPD for the BS/BSD was outside of historical limits.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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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 Fax: (970) 247-4227 75 Suttle St Durango, CO 81303

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST

Company Name: Cottonwood Consulting LLC
 Project Manager: Kyle Slessor
 Address: PO Box 1653
 City: Durango State: CO Zip: 81302
 Phone #: 970-764-7356 Email: kslessor@cottonwoodconsulting.com
 Project Name: Bryce (OWP) #1-X
 Project Number:
 Sampler Name (Print): Emma Millar
 FOR LAB USE ONLY

Lab I.D.	Sample Name or Location	Collected		Matrix (check one)					# of containers						
		Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	No preservation (general)	HNO ₃	HCl	H ₂ SO ₄	Other:	
2207-279	Wellhead	7/26/12	1115					X							X
-02	background	8/19/22	1145					X							X

Bill to (if different):
 P.O. #: _____
 Company: _____
 Attn: _____
 Address: _____
 City: _____
 State: _____ Zip: _____
 Phone #: _____
 Fax or Email: _____

Received By: *Tracie Stillman*
 Date/Time: 7/26/12 1415
 Received By: *Tracie Stillman*
 Date/Time: 8/19/22 1300
 Received By: *Tracie Stillman*

Relinquished By: _____
 Relinquished By: _____

Delivered By: (Circle One)
 UPS - FedEx - Kangaroo - Other: *on ice* Temperature at receipt: *B₂C* CHECKED BY: *PMS*

ADDITIONAL REMARKS: ** 116.80C on the Papan #2 LLC*

Report to State? (Circle)
 Yes No

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 analysis. 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. 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.

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

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

