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13 July 2021

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 06/24/21 15:45. The data to follow was performed, in whole or in part, by a subcontract laboratory with an additional report attached.

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

Sincerely,

A handwritten signature in black ink that reads 'Debbie Zufelt'. The script is cursive and fluid, with the first name 'Debbie' and last name 'Zufelt' clearly legible.

Debbie Zufelt
Reports Manager

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

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

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.



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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS01	2106227-01	Solid	06/24/21 10:05	06/24/21 15:45	
SS02	2106227-02	Solid	06/24/21 10:25	06/24/21 15:45	
SS03	2106227-03	Solid	06/24/21 10:40	06/24/21 15:45	
SS04	2106227-04	Solid	06/24/21 11:00	06/24/21 15:45	

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Debbie Zufelt, Reports Manager

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Cottonwood Consulting
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Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS01**2106227-01 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Saturated Paste Extraction

Calcium	38.7	0.100	0.058	mg/L	1	07/08/21 15:59	EPA200.7		AES
Conductivity	915			umho/cm @ 25.0°C	1	07/07/21 10:50	ASA#9 10-3.3		VJW
Magnesium	8.94	0.100	0.065	mg/L	1	07/08/21 15:59	EPA200.7		AES
pH	7.66			pH Units	1	07/06/21 13:10	ASA#9 10-3.2		VJW
SAR	5.80			No Unit	1	07/08/21 15:59	Calculation		AES
Sodium	154	1.00	0.079	mg/L	1	07/08/21 15:59	EPA200.7		AES

Total Metals by ICP

Barium	201	5.00	0.390	mg/kg dry	100	07/07/21 12:57	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	07/07/21 12:57	6010B		AES
Chromium	11.9	5.00	0.400	mg/kg dry	100	07/07/21 12:57	6010B		AES
Copper	15.4	5.00	2.39	mg/kg dry	100	07/07/21 12:57	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	07/07/21 12:57	6010B		AES
Nickel	11.3	5.00	0.874	mg/kg dry	100	07/07/21 12:57	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	07/07/21 12:57	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	07/07/21 12:57	6010B		AES
Zinc	31.1	10.0	1.71	mg/kg dry	100	07/07/21 12:57	6010B		AES

Total Metals by ICPMS

Arsenic	3.08	1.00	0.0950	mg/kg dry	1000	07/06/21 16:21	6020A		AES
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Hot Water Extractable

Boron	1.29	1.20	0.568	mg/L	4	07/07/21 16:10	EPA200.7		AES
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Subcontracted -- Cardinal Laboratories**Petroleum Hydrocarbons by GC FID****S-06**

GRO C6-C10*	333	50.0	9.19	mg/kg	5	06/30/21 21:19	8015B		MS
DRO >C10-C28*	3280	50.0	7.27	mg/kg	5	06/30/21 21:19	8015B		MS
EXT DRO >C28-C36	876	50.0	7.27	mg/kg	5	06/30/21 21:19	8015B		MS

Surrogate: 1-Chlorooctane	99.4 %	44.3-133	06/30/21 21:19	8015B	MS
Surrogate: 1-Chlorooctadecane	143 %	38.9-142	06/30/21 21:19	8015B	MS

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Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS01

2106227-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

VOLATILES BY GC/MS

Benzene*	<0.100	0.100	0.0354	mg/kg	200	06/30/21 18:33	8260B		MS
Toluene*	<0.100	0.100	0.0268	mg/kg	200	06/30/21 18:33	8260B		MS
Ethylbenzene*	3.00	0.100	0.0162	mg/kg	200	06/30/21 18:33	8260B	QM-07, QR-03	MS
m+p - Xylene*	<0.200	0.200	0.0744	mg/kg	200	06/30/21 18:33	8260B		MS
o-Xylene*	0.104	0.100	0.0280	mg/kg	200	06/30/21 18:33	8260B		MS
Total Xylenes*	0.180	0.100	0.100	mg/kg	200	06/30/21 18:33	8260B		MS
1,3,5-Trimethylbenzene	<0.100	0.100	0.0180	mg/kg	200	06/30/21 18:33	8260B		MS
1,2,4-Trimethylbenzene	<0.100	0.100	0.0260	mg/kg	200	06/30/21 18:33	8260B		MS
Naphthalene*	4.83	0.100	0.0200	mg/kg	200	06/30/21 18:33	8260B	QM-07	MS

Surrogate: Dibromofluoromethane 122 % 84.6-114 06/30/21 18:33 8260B S-04 MS

Surrogate: Toluene-d8 91.6 % 90.4-109 06/30/21 18:33 8260B MS

Surrogate: 4-Bromofluorobenzene 150 % 82.5-117 06/30/21 18:33 8260B S-04 MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	2.79	0.400	0.153	mg/kg	400	07/09/21 13:18	8270C		MS
2-Methylnaphthalene*	10.1	0.400	0.226	mg/kg	400	07/09/21 13:18	8270C		MS
1-Methylnaphthalene	6.95	0.400	0.161	mg/kg	400	07/09/21 13:18	8270C		MS
Acenaphthylene*	<0.196	0.400	0.196	mg/kg	400	07/09/21 13:18	8270C		MS
Acenaphthene*	<0.235	0.400	0.235	mg/kg	400	07/09/21 13:18	8270C		MS
Fluorene*	1.46	0.400	0.142	mg/kg	400	07/09/21 13:18	8270C		MS
Phenanthrene*	2.29	0.400	0.214	mg/kg	400	07/09/21 13:18	8270C		MS
Anthracene*	<0.172	0.400	0.172	mg/kg	400	07/09/21 13:18	8270C		MS
Carbazole*	<0.190	0.400	0.190	mg/kg	400	07/09/21 13:18	8270C		MS
Fluoranthene*	<0.185	0.400	0.185	mg/kg	400	07/09/21 13:18	8270C		MS
Pyrene*	<0.132	0.400	0.132	mg/kg	400	07/09/21 13:18	8270C		MS
Benzo[a]anthracene*	<0.230	0.400	0.230	mg/kg	400	07/09/21 13:18	8270C		MS
Chrysene*	0.447	0.400	0.172	mg/kg	400	07/09/21 13:18	8270C		MS
Benzo[b]fluoranthene*	<0.192	0.400	0.192	mg/kg	400	07/09/21 13:18	8270C		MS
Benzo[k]fluoranthene*	<0.157	0.400	0.157	mg/kg	400	07/09/21 13:18	8270C		MS
Benzo[a]pyrene*	<0.182	0.400	0.182	mg/kg	400	07/09/21 13:18	8270C		MS

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Debbie Zufelt, Reports Manager

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Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS01

2106227-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

Polynuclear Aromatic Compounds by GC/MS

Indeno[1,2,3-cd]pyrene*	<0.168	0.400	0.168	mg/kg	400	07/09/21 13:18	8270C		MS
Dibenz[a,h]anthracene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 13:18	8270C		MS
Benzo[g,h,i]perylene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 13:18	8270C		MS
Surrogate: Nitrobenzene-d5			70.8 %	39.6-121		07/09/21 13:18	8270C		MS
Surrogate: 2-Fluorobiphenyl			59.6 %	39.8-134		07/09/21 13:18	8270C		MS
Surrogate: Terphenyl-d14			59.8 %	33.3-136		07/09/21 13:18	8270C		MS

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Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS02**2106227-02 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Saturated Paste Extraction

Calcium	36.9	0.100	0.058	mg/L	1	07/08/21 16:02	EPA200.7		AES
Conductivity	553			umho/cm @ 25.0°C	1	07/07/21 10:50	ASA#9 10-3.3		VJW
Magnesium	11.1	0.100	0.065	mg/L	1	07/08/21 16:03	EPA200.7		AES
pH	7.60			pH Units	1	07/06/21 13:10	ASA#9 10-3.2		VJW
SAR	2.58			No Unit	1	07/08/21 16:02	Calculation		AES
Sodium	69.5	1.00	0.079	mg/L	1	07/08/21 16:02	EPA200.7		AES

Total Metals by ICP

Barium	180	5.00	0.390	mg/kg dry	100	07/07/21 13:14	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	07/07/21 13:14	6010B		AES
Chromium	13.9	5.00	0.400	mg/kg dry	100	07/07/21 13:14	6010B		AES
Copper	21.5	5.00	2.39	mg/kg dry	100	07/07/21 13:14	6010B		AES
Lead	5150	100	9.06	mg/kg dry	1000	07/08/21 15:44	6010B		AES
Nickel	11.3	5.00	0.874	mg/kg dry	100	07/07/21 13:14	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	07/07/21 13:14	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	07/07/21 13:14	6010B		AES
Zinc	32.9	10.0	1.71	mg/kg dry	100	07/07/21 13:14	6010B		AES

Total Metals by ICPMS

Arsenic	3.86	1.00	0.0950	mg/kg dry	1000	07/06/21 16:28	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	07/07/21 16:15	EPA200.7		AES
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Subcontracted -- Cardinal Laboratories**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	864	10.0	1.84	mg/kg	1	06/30/21 18:20	8015B		MS
DRO >C10-C28*	<10.0	10.0	1.45	mg/kg	1	06/30/21 18:20	8015B		MS
EXT DRO >C28-C36	<10.0	10.0	1.45	mg/kg	1	06/30/21 18:20	8015B		MS

Surrogate: 1-Chlorooctane	90.6 %	44.3-133	06/30/21 18:20	8015B	MS
Surrogate: 1-Chlorooctadecane	90.9 %	38.9-142	06/30/21 18:20	8015B	MS

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Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS02

2106227-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

VOLATILES BY GC/MS

Benzene*	0.300	0.0250	0.00885	mg/kg	50	06/30/21 19:00	8260B		MS
Toluene*	27.2	1.00	0.268	mg/kg	2000	07/01/21 13:45	8260B		MS
Ethylbenzene*	<0.0250	0.0250	0.00405	mg/kg	50	06/30/21 19:00	8260B		MS
m+p - Xylene*	<0.0500	0.0500	0.0186	mg/kg	50	06/30/21 19:00	8260B		MS
o-Xylene*	<0.0250	0.0250	0.00700	mg/kg	50	06/30/21 19:00	8260B		MS
Total Xylenes*	<0.0250	0.0250	0.0250	mg/kg	50	06/30/21 19:00	8260B		MS
1,3,5-Trimethylbenzene	<0.0250	0.0250	0.00450	mg/kg	50	06/30/21 19:00	8260B		MS
1,2,4-Trimethylbenzene	<0.0250	0.0250	0.00650	mg/kg	50	06/30/21 19:00	8260B		MS
Naphthalene*	<0.0250	0.0250	0.00500	mg/kg	50	06/30/21 19:00	8260B		MS

Surrogate: Dibromofluoromethane 104 % 84.6-114 06/30/21 19:00 8260B MS

Surrogate: Toluene-d8 96.5 % 90.4-109 06/30/21 19:00 8260B MS

Surrogate: 4-Bromofluorobenzene 99.6 % 82.5-117 06/30/21 19:00 8260B MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	<0.015	0.040	0.015	mg/kg	40	07/09/21 13:47	8270C		MS
2-Methylnaphthalene*	<0.023	0.040	0.023	mg/kg	40	07/09/21 13:47	8270C		MS
1-Methylnaphthalene	<0.016	0.040	0.016	mg/kg	40	07/09/21 13:47	8270C		MS
Acenaphthylene*	<0.020	0.040	0.020	mg/kg	40	07/09/21 13:47	8270C		MS
Acenaphthene*	<0.024	0.040	0.024	mg/kg	40	07/09/21 13:47	8270C		MS
Fluorene*	<0.014	0.040	0.014	mg/kg	40	07/09/21 13:47	8270C		MS
Phenanthrene*	<0.021	0.040	0.021	mg/kg	40	07/09/21 13:47	8270C		MS
Anthracene*	<0.017	0.040	0.017	mg/kg	40	07/09/21 13:47	8270C		MS
Carbazole*	<0.019	0.040	0.019	mg/kg	40	07/09/21 13:47	8270C		MS
Fluoranthene*	<0.019	0.040	0.019	mg/kg	40	07/09/21 13:47	8270C		MS
Pyrene*	<0.013	0.040	0.013	mg/kg	40	07/09/21 13:47	8270C		MS
Benzo[a]anthracene*	<0.023	0.040	0.023	mg/kg	40	07/09/21 13:47	8270C		MS
Chrysene*	<0.017	0.040	0.017	mg/kg	40	07/09/21 13:47	8270C		MS
Benzo[b]fluoranthene*	<0.019	0.040	0.019	mg/kg	40	07/09/21 13:47	8270C		MS
Benzo[k]fluoranthene*	<0.016	0.040	0.016	mg/kg	40	07/09/21 13:47	8270C		MS
Benzo[a]pyrene*	<0.018	0.040	0.018	mg/kg	40	07/09/21 13:47	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.017	0.040	0.017	mg/kg	40	07/09/21 13:47	8270C		MS

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Debbie Zufelt, Reports Manager

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Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS02

2106227-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

Polynuclear Aromatic Compounds by GC/MS

Dibenz[a,h]anthracene*	<0.019	0.040	0.019	mg/kg	40	07/09/21 13:47	8270C		MS
Benzo[g,h,i]perylene*	<0.019	0.040	0.019	mg/kg	40	07/09/21 13:47	8270C		MS
Surrogate: Nitrobenzene-d5			67.6 %	39.6-121		07/09/21 13:47	8270C		MS
Surrogate: 2-Fluorobiphenyl			72.4 %	39.8-134		07/09/21 13:47	8270C		MS
Surrogate: Terphenyl-d14			79.3 %	33.3-136		07/09/21 13:47	8270C		MS

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Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS03**2106227-03 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Saturated Paste Extraction

Calcium	25.3	0.100	0.058	mg/L	1	07/08/21 16:04	EPA200.7		AES
Conductivity	544			umho/cm @ 25.0°C	1	07/07/21 10:50	ASA#9 10-3.3		VJW
Magnesium	9.34	0.100	0.065	mg/L	1	07/08/21 16:04	EPA200.7		AES
pH	7.79			pH Units	1	07/06/21 13:10	ASA#9 10-3.2		VJW
SAR	3.28			No Unit	1	07/08/21 16:04	Calculation		AES
Sodium	75.9	1.00	0.079	mg/L	1	07/08/21 16:04	EPA200.7		AES

Total Metals by ICP

Barium	185	5.00	0.390	mg/kg dry	100	07/07/21 13:19	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	07/07/21 13:19	6010B		AES
Chromium	11.3	5.00	0.400	mg/kg dry	100	07/07/21 13:19	6010B		AES
Copper	15.2	5.00	2.39	mg/kg dry	100	07/07/21 13:19	6010B		AES
Lead	<10.0	10.0	0.906	mg/kg dry	100	07/07/21 13:19	6010B		AES
Nickel	10.5	5.00	0.874	mg/kg dry	100	07/07/21 13:19	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	07/07/21 13:18	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	07/07/21 13:18	6010B		AES
Zinc	29.4	10.0	1.71	mg/kg dry	100	07/07/21 13:19	6010B		AES

Total Metals by ICPMS

Arsenic	3.14	1.00	0.0950	mg/kg dry	1000	07/06/21 16:45	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	07/07/21 16:17	EPA200.7		AES
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Subcontracted -- Cardinal Laboratories**Petroleum Hydrocarbons by GC FID****S-06**

GRO C6-C10*	6380	50.0	9.19	mg/kg	5	06/30/21 21:44	8015B		MS
DRO >C10-C28*	29400	50.0	7.27	mg/kg	5	06/30/21 21:44	8015B		MS
EXT DRO >C28-C36	6360	50.0	7.27	mg/kg	5	06/30/21 21:44	8015B		MS

Surrogate: 1-Chlorooctane	379 %	44.3-133	06/30/21 21:44	8015B	MS
Surrogate: 1-Chlorooctadecane	846 %	38.9-142	06/30/21 21:44	8015B	MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS03

2106227-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

VOLATILES BY GC/MS

Benzene*	3.44	1.00	0.354	mg/kg	2000	07/01/21 14:37	8260B		MS
Toluene*	57.0	1.00	0.268	mg/kg	2000	07/01/21 14:37	8260B		MS
Ethylbenzene*	29.2	1.00	0.162	mg/kg	2000	07/01/21 14:37	8260B		MS
m+p - Xylene*	204	2.00	0.744	mg/kg	2000	07/01/21 14:37	8260B		MS
o-Xylene*	68.9	1.00	0.280	mg/kg	2000	07/01/21 14:37	8260B		MS
Total Xylenes*	273	1.00	1.00	mg/kg	2000	07/01/21 14:37	8260B		MS
1,3,5-Trimethylbenzene	41.6	1.00	0.180	mg/kg	2000	07/01/21 14:37	8260B		MS
1,2,4-Trimethylbenzene	138	1.00	0.260	mg/kg	2000	07/01/21 14:37	8260B		MS
Naphthalene*	26.0	1.00	0.200	mg/kg	2000	07/01/21 14:37	8260B		MS

Surrogate: Dibromofluoromethane 105 % 84.6-114 07/01/21 14:37 8260B MS

Surrogate: Toluene-d8 101 % 90.4-109 07/01/21 14:37 8260B MS

Surrogate: 4-Bromofluorobenzene 125 % 82.5-117 07/01/21 14:37 8260B S-04 MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	19.0	0.400	0.153	mg/kg	400	07/09/21 16:13	8270C		MS
2-Methylnaphthalene*	55.1	0.400	0.226	mg/kg	400	07/09/21 16:13	8270C		MS
1-Methylnaphthalene	32.9	0.400	0.161	mg/kg	400	07/09/21 16:13	8270C		MS
Acenaphthylene*	0.370	0.400	0.196	mg/kg	400	07/09/21 16:13	8270C	J	MS
Acenaphthene*	0.603	0.400	0.235	mg/kg	400	07/09/21 16:13	8270C		MS
Fluorene*	6.60	0.400	0.142	mg/kg	400	07/09/21 16:13	8270C		MS
Phenanthrene*	9.47	0.400	0.214	mg/kg	400	07/09/21 16:13	8270C		MS
Anthracene*	3.13	0.400	0.172	mg/kg	400	07/09/21 16:13	8270C		MS
Carbazole*	<0.190	0.400	0.190	mg/kg	400	07/09/21 16:13	8270C		MS
Fluoranthene*	0.426	0.400	0.185	mg/kg	400	07/09/21 16:13	8270C		MS
Pyrene*	0.989	0.400	0.132	mg/kg	400	07/09/21 16:13	8270C		MS
Benzo[a]anthracene*	<0.230	0.400	0.230	mg/kg	400	07/09/21 16:13	8270C		MS
Chrysene*	1.56	0.400	0.172	mg/kg	400	07/09/21 16:13	8270C		MS
Benzo[b]fluoranthene*	0.200	0.400	0.192	mg/kg	400	07/09/21 16:13	8270C	J	MS
Benzo[k]fluoranthene*	<0.157	0.400	0.157	mg/kg	400	07/09/21 16:13	8270C		MS
Benzo[a]pyrene*	<0.182	0.400	0.182	mg/kg	400	07/09/21 16:13	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.168	0.400	0.168	mg/kg	400	07/09/21 16:13	8270C		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS03**2106227-03 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories**Polynuclear Aromatic Compounds by GC/MS**

Dibenz[a,h]anthracene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 16:13	8270C		MS
Benzo[g,h,i]perylene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 16:13	8270C		MS
<i>Surrogate: Nitrobenzene-d5</i>			42.0 %	39.6-121		07/09/21 16:13	8270C		MS
<i>Surrogate: 2-Fluorobiphenyl</i>			68.0 %	39.8-134		07/09/21 16:13	8270C		MS
<i>Surrogate: Terphenyl-d14</i>			73.4 %	33.3-136		07/09/21 16:13	8270C		MS

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS04**2106227-04 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Saturated Paste Extraction

Calcium	24.9	0.200	0.116	mg/L	2	07/08/21 16:06	EPA200.7		AES
Conductivity	2260			umho/cm @ 25.0°C	1	07/07/21 10:50	ASA#9 10-3.3		VJW
Magnesium	4.45	0.200	0.131	mg/L	2	07/08/21 16:06	EPA200.7		AES
pH	6.00			pH Units	1	07/06/21 13:10	ASA#9 10-3.2		VJW
SAR	15.8			No Unit	1	07/08/21 16:06	Calculation		AES
Sodium	325	2.00	0.159	mg/L	2	07/08/21 16:06	EPA200.7		AES

Total Metals by ICP

Barium	148	5.00	0.390	mg/kg dry	100	07/07/21 13:23	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	07/07/21 13:23	6010B		AES
Chromium	12.6	5.00	0.400	mg/kg dry	100	07/07/21 13:23	6010B		AES
Copper	18.6	5.00	2.39	mg/kg dry	100	07/07/21 13:23	6010B		AES
Lead	13.9	10.0	0.906	mg/kg dry	100	07/07/21 13:23	6010B		AES
Nickel	13.4	5.00	0.874	mg/kg dry	100	07/07/21 13:23	6010B		AES
Selenium	<20.0	20.0	4.70	mg/kg dry	100	07/07/21 13:23	6010B		AES
Silver	<1.00	1.00	0.688	mg/kg dry	100	07/07/21 13:23	6010B		AES
Zinc	45.7	10.0	1.71	mg/kg dry	100	07/07/21 13:23	6010B		AES

Total Metals by ICPMS

Arsenic	2.62	1.00	0.0950	mg/kg dry	1000	07/06/21 16:48	6020A		AES
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Hot Water Extractable

Boron	<1.20	1.20	0.568	mg/L	4	07/07/21 16:24	EPA200.7		AES
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Subcontracted -- Cardinal Laboratories**Petroleum Hydrocarbons by GC FID****S-06**

GRO C6-C10*	543	50.0	9.19	mg/kg	5	06/30/21 22:09	8015B		MS
DRO >C10-C28*	3710	50.0	7.27	mg/kg	5	06/30/21 22:09	8015B		MS
EXT DRO >C28-C36	847	50.0	7.27	mg/kg	5	06/30/21 22:09	8015B		MS

Surrogate: 1-Chlorooctane	120 %	44.3-133	06/30/21 22:09	8015B	MS
Surrogate: 1-Chlorooctadecane	170 %	38.9-142	06/30/21 22:09	8015B	MS

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS04

2106227-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories

VOLATILES BY GC/MS

Benzene*	<0.0250	0.0250	0.00885	mg/kg	50	06/30/21 19:50	8260B		MS
Toluene*	0.0435	0.0250	0.00670	mg/kg	50	06/30/21 19:50	8260B		MS
Ethylbenzene*	0.714	0.0250	0.00405	mg/kg	50	06/30/21 19:50	8260B		MS
m+p - Xylene*	8.21	0.0500	0.0186	mg/kg	50	06/30/21 19:50	8260B		MS
o-Xylene*	2.73	0.0250	0.00700	mg/kg	50	06/30/21 19:50	8260B		MS
Total Xylenes*	10.9	0.0250	0.0250	mg/kg	50	06/30/21 19:50	8260B		MS
1,3,5-Trimethylbenzene	4.18	0.0250	0.00450	mg/kg	50	06/30/21 19:50	8260B		MS
1,2,4-Trimethylbenzene	9.94	0.0250	0.00650	mg/kg	50	06/30/21 19:50	8260B		MS
Naphthalene*	2.14	0.0250	0.00500	mg/kg	50	06/30/21 19:50	8260B		MS

Surrogate: Dibromofluoromethane 103 % 84.6-114 06/30/21 19:50 8260B MS

Surrogate: Toluene-d8 103 % 90.4-109 06/30/21 19:50 8260B MS

Surrogate: 4-Bromofluorobenzene 169 % 82.5-117 06/30/21 19:50 8260B S-04 MS

Polynuclear Aromatic Compounds by GC/MS

Naphthalene*	1.95	0.400	0.153	mg/kg	400	07/09/21 14:45	8270C		MS
2-Methylnaphthalene*	6.83	0.400	0.226	mg/kg	400	07/09/21 14:45	8270C		MS
1-Methylnaphthalene	4.27	0.400	0.161	mg/kg	400	07/09/21 14:45	8270C		MS
Acenaphthylene*	<0.196	0.400	0.196	mg/kg	400	07/09/21 14:45	8270C		MS
Acenaphthene*	<0.235	0.400	0.235	mg/kg	400	07/09/21 14:45	8270C		MS
Fluorene*	0.952	0.400	0.142	mg/kg	400	07/09/21 14:45	8270C		MS
Phenanthrene*	1.23	0.400	0.214	mg/kg	400	07/09/21 14:45	8270C		MS
Anthracene*	<0.172	0.400	0.172	mg/kg	400	07/09/21 14:45	8270C		MS
Carbazole*	<0.190	0.400	0.190	mg/kg	400	07/09/21 14:45	8270C		MS
Fluoranthene*	<0.185	0.400	0.185	mg/kg	400	07/09/21 14:45	8270C		MS
Pyrene*	<0.132	0.400	0.132	mg/kg	400	07/09/21 14:45	8270C		MS
Benzo[a]anthracene*	<0.230	0.400	0.230	mg/kg	400	07/09/21 14:45	8270C		MS
Chrysene*	<0.172	0.400	0.172	mg/kg	400	07/09/21 14:45	8270C		MS
Benzo[b]fluoranthene*	<0.192	0.400	0.192	mg/kg	400	07/09/21 14:45	8270C		MS
Benzo[k]fluoranthene*	<0.157	0.400	0.157	mg/kg	400	07/09/21 14:45	8270C		MS
Benzo[a]pyrene*	<0.182	0.400	0.182	mg/kg	400	07/09/21 14:45	8270C		MS
Indeno[1,2,3-cd]pyrene*	<0.168	0.400	0.168	mg/kg	400	07/09/21 14:45	8270C		MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

SS04**2106227-04 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Subcontracted -- Cardinal Laboratories**Polynuclear Aromatic Compounds by GC/MS**

Dibenz[a,h]anthracene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 14:45	8270C		MS
Benzo[g,h,i]perylene*	<0.186	0.400	0.186	mg/kg	400	07/09/21 14:45	8270C		MS
<i>Surrogate: Nitrobenzene-d5</i>			113 %	39.6-121		07/09/21 14:45	8270C		MS
<i>Surrogate: 2-Fluorobiphenyl</i>			78.2 %	39.8-134		07/09/21 14:45	8270C		MS
<i>Surrogate: Terphenyl-d14</i>			79.5 %	33.3-136		07/09/21 14:45	8270C		MS

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

Saturated Paste Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B211459 - Paste Extract										
Duplicate (B211459-DUP1)		Source: 2106228-01		Prepared: 07/02/21		Analyzed: 07/06/21				
pH	7.34		pH Units		7.43			1.22	20	
Reference (B211459-SRM1)				Prepared: 07/02/21		Analyzed: 07/06/21				
pH	8.55		pH Units	9.14		93.5	95-105			
Batch B211460 - Paste Extract										
Duplicate (B211460-DUP1)		Source: 2106228-01		Prepared: 07/02/21		Analyzed: 07/07/21				
Conductivity	1060		umho/cm @ 25.0°C		1140			7.02	20	
Reference (B211460-SRM1)				Prepared: 07/02/21		Analyzed: 07/07/21				
Conductivity	7610		umho/cm @ 25.0°C	6720		113	90-110			
Batch B211461 - Paste Extract										
Blank (B211461-BLK1)				Prepared: 07/02/21		Analyzed: 07/08/21				
Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							
Duplicate (B211461-DUP1)		Source: 2106228-01		Prepared: 07/02/21		Analyzed: 07/08/21				
Calcium	109	0.200	mg/L		119			9.43	20	
Magnesium	24.2	0.200	mg/L		26.2			8.19	20	
Sodium	58.5	2.00	mg/L		61.4			4.86	20	

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Debbie Zufelt

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 B211457 - EPA 3050

Blank (B211457-BLK1)

Prepared: 07/02/21 Analyzed: 07/07/21

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 (B211457-BS1)

Prepared: 07/02/21 Analyzed: 07/07/21

Barium	179	5.00	mg/kg dry	200	89.7	80-120
Cadmium	166	5.00	mg/kg dry	200	83.0	80-120
Chromium	179	5.00	mg/kg dry	200	89.4	80-120
Copper	383	5.00	mg/kg dry	400	95.8	80-120
Lead	172	10.0	mg/kg dry	200	85.8	80-120
Nickel	172	5.00	mg/kg dry	200	85.8	80-120
Selenium	759	20.0	mg/kg dry	800	94.8	80-120
Silver	9.22	1.00	mg/kg dry	10.0	92.2	80-120
Zinc	162	10.0	mg/kg dry	200	80.8	80-120

LCS Dup (B211457-BSD1)

Prepared: 07/02/21 Analyzed: 07/07/21

Barium	176	5.00	mg/kg dry	200	88.0	80-120	1.94	20
Cadmium	162	5.00	mg/kg dry	200	81.2	80-120	2.25	20
Chromium	176	5.00	mg/kg dry	200	88.0	80-120	1.63	20
Copper	376	5.00	mg/kg dry	400	94.0	80-120	1.95	20
Lead	171	10.0	mg/kg dry	200	85.7	80-120	0.0547	20
Nickel	171	5.00	mg/kg dry	200	85.3	80-120	0.602	20
Selenium	738	20.0	mg/kg dry	800	92.2	80-120	2.79	20
Silver	9.31	1.00	mg/kg dry	10.0	93.1	80-120	0.908	20
Zinc	161	10.0	mg/kg dry	200	80.4	80-120	0.576	20

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 B211458 - EPA 3050M

Blank (B211458-BLK1)

Prepared: 07/02/21 Analyzed: 07/06/21

Arsenic	ND	0.100	mg/kg dry							
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LCS (B211458-BS1)

Prepared: 07/02/21 Analyzed: 07/06/21

Arsenic	4.50	0.100	mg/kg dry	5.00		90.1	80-120			
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LCS Dup (B211458-BSD1)

Prepared: 07/02/21 Analyzed: 07/06/21

Arsenic	4.44	0.100	mg/kg dry	5.00		88.8	80-120	1.43	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 B211462 - Hot Water Soluble Metals Extract

Blank (B211462-BLK1)

Prepared: 07/02/21 Analyzed: 07/07/21

Boron	ND	1.20	mg/L							
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Duplicate (B211462-DUP1)

Source: 2106227-01 Prepared: 07/02/21 Analyzed: 07/07/21

Boron	1.29	1.20	mg/L		1.29			0.0944	200	
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Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 1063001 - General Prep - Organics

Blank (1063001-BLK1)

Prepared & Analyzed: 06/30/21

Surrogate: 1-Chlorooctadecane	41.7		mg/kg	50.0		83.4	38.9-142			
Surrogate: 1-Chlorooctane	41.8		mg/kg	50.0		83.6	44.3-133			
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 (1063001-BS1)

Prepared & Analyzed: 06/30/21

Surrogate: 1-Chlorooctadecane	48.2		mg/kg	50.0		96.3	38.9-142			
Surrogate: 1-Chlorooctane	46.9		mg/kg	50.0		93.8	44.3-133			
DRO >C10-C28	234	10.0	mg/kg	200		117	79.3-136			
GRO C6-C10	223	10.0	mg/kg	200		112	83.4-129			
Total TPH C6-C28	457	10.0	mg/kg	400		114	85.3-130			

LCS Dup (1063001-BSD1)

Prepared & Analyzed: 06/30/21

Surrogate: 1-Chlorooctadecane	45.5		mg/kg	50.0		91.0	38.9-142			
Surrogate: 1-Chlorooctane	45.1		mg/kg	50.0		90.1	44.3-133			
DRO >C10-C28	230	10.0	mg/kg	200		115	79.3-136	2.12	12.1	
GRO C6-C10	211	10.0	mg/kg	200		106	83.4-129	5.39	12.6	
Total TPH C6-C28	441	10.0	mg/kg	400		110	85.3-130	3.70	11.6	

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Cottonwood Consulting
PO Box 1653
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Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 1063007 - Volatiles

Blank (1063007-BLK1)

Prepared & Analyzed: 06/30/21

1,2,4-Trimethylbenzene	ND	0.0250	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0250	mg/kg							
Surrogate: 4-Bromofluorobenzene	1.19		mg/kg	1.25		95.4	82.5-117			
Benzene	ND	0.0250	mg/kg							
Surrogate: Dibromofluoromethane	1.54		mg/kg	1.25		123	84.6-114			S-HI2
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	1.21		mg/kg	1.25		96.5	90.4-109			
Total Xylenes	ND	0.0250	mg/kg							

LCS (1063007-BS1)

Prepared & Analyzed: 06/30/21

1,2,4-Trimethylbenzene	0.518	0.0250	mg/kg	0.500		104	62.4-140			
1,3,5-Trimethylbenzene	0.494	0.0250	mg/kg	0.500		98.7	64.4-138			
Surrogate: 4-Bromofluorobenzene	1.30		mg/kg	1.25		104	82.5-117			
Benzene	0.471	0.0250	mg/kg	0.500		94.2	73-130			
Surrogate: Dibromofluoromethane	1.55		mg/kg	1.25		124	84.6-114			S-HI2
Ethylbenzene	0.511	0.0250	mg/kg	0.500		102	75.4-127			
m+p - Xylene	1.07	0.0500	mg/kg	1.00		107	71.8-133			
Naphthalene	0.440	0.0250	mg/kg	0.500		87.9	28.7-158			
o-Xylene	0.485	0.0250	mg/kg	0.500		97.1	78.6-125			
Toluene	0.466	0.0250	mg/kg	0.500		93.2	79-122			
Surrogate: Toluene-d8	1.17		mg/kg	1.25		93.5	90.4-109			
Total Xylenes	1.56	0.0250	mg/kg	1.50		104	74.6-130			

LCS Dup (1063007-BSD1)

Prepared & Analyzed: 06/30/21

1,2,4-Trimethylbenzene	0.477	0.0250	mg/kg	0.500		95.4	62.4-140	8.26	38.2	
1,3,5-Trimethylbenzene	0.473	0.0250	mg/kg	0.500		94.7	64.4-138	4.18	39.1	
Surrogate: 4-Bromofluorobenzene	1.28		mg/kg	1.25		102	82.5-117			
Benzene	0.459	0.0250	mg/kg	0.500		91.8	73-130	2.64	17.1	
Surrogate: Dibromofluoromethane	1.53		mg/kg	1.25		122	84.6-114			S-HI2
Ethylbenzene	0.480	0.0250	mg/kg	0.500		96.1	75.4-127	6.16	16.5	
m+p - Xylene	1.04	0.0500	mg/kg	1.00		104	71.8-133	3.58	19.1	
Naphthalene	0.398	0.0250	mg/kg	0.500		79.6	28.7-158	9.98	64	
o-Xylene	0.461	0.0250	mg/kg	0.500		92.1	78.6-125	5.23	13.2	
Toluene	0.453	0.0250	mg/kg	0.500		90.6	79-122	2.81	18.3	

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Debbie Zufelt

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 1063007 - Volatiles (Continued)

LCS Dup (1063007-BSD1) (Continued)

Prepared & Analyzed: 06/30/21

Surrogate: Toluene-d8	1.18		mg/kg	1.25		94.6	90.4-109			
Total Xylenes	1.50	0.0250	mg/kg	1.50		99.8	74.6-130	4.09	16.5	

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 1063005 - SW846-3510

Blank (1063005-BLK1)

Prepared: 07/01/21 Analyzed: 07/09/21

1-Methylnaphthalene	ND	0.040	mg/kg							
Surrogate: 2-Fluorobiphenyl	1.74		mg/kg	2.00		86.8	39.8-134			
2-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Acenaphthylene	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[g,h,i]perylene	ND	0.040	mg/kg							
Benzo[k]fluoranthene	ND	0.040	mg/kg							
Carbazole	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	1.67		mg/kg	2.00		83.3	39.6-121			
Phenanthrene	ND	0.040	mg/kg							
Pyrene	ND	0.040	mg/kg							
Surrogate: Terphenyl-dl4	1.75		mg/kg	2.00		87.7	33.3-136			

LCS (1063005-BS1)

Prepared: 07/01/21 Analyzed: 07/09/21

1-Methylnaphthalene	0.268	0.040	mg/kg	0.400		67.0	57.6-108			
Surrogate: 2-Fluorobiphenyl	1.50		mg/kg	2.00		75.0	39.8-134			
2-Methylnaphthalene	0.263	0.040	mg/kg	0.400		65.8	59-106			
Acenaphthene	0.299	0.040	mg/kg	0.400		74.9	60.9-105			
Acenaphthylene	0.284	0.040	mg/kg	0.400		70.9	57.4-107			
Anthracene	0.280	0.040	mg/kg	0.400		70.0	60.8-105			
Benzo[a]anthracene	0.278	0.040	mg/kg	0.400		69.5	56.1-121			
Benzo[a]pyrene	0.243	0.040	mg/kg	0.400		60.8	56.7-115			
Benzo[b]fluoranthene	0.289	0.040	mg/kg	0.400		72.1	45.4-128			
Benzo[g,h,i]perylene	0.286	0.040	mg/kg	0.400		71.5	56.5-107			
Benzo[k]fluoranthene	0.275	0.040	mg/kg	0.400		68.8	49.6-119			
Carbazole	0.271	0.040	mg/kg	0.400		67.9	59.7-107			
Chrysene	0.265	0.040	mg/kg	0.400		66.2	12.2-190			
Dibenz[a,h]anthracene	0.269	0.040	mg/kg	0.400		67.3	59.1-111			
Fluoranthene	0.274	0.040	mg/kg	0.400		68.5	60.6-111			

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Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

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 1063005 - SW846-3510 (Continued)

LCS (1063005-BS1) (Continued)

Prepared: 07/01/21 Analyzed: 07/09/21

Fluorene	0.292	0.040	mg/kg	0.400		73.0	59.3-108			
Indeno[1,2,3-cd]pyrene	0.287	0.040	mg/kg	0.400		71.8	53.4-116			
Naphthalene	0.256	0.040	mg/kg	0.400		63.9	56.5-106			
Surrogate: Nitrobenzene-d5	1.39		mg/kg	2.00		69.7	39.6-121			
Phenanthrene	0.267	0.040	mg/kg	0.400		66.7	59.9-107			
Pyrene	0.276	0.040	mg/kg	0.400		68.9	51.5-122			
Surrogate: Terphenyl-d14	1.60		mg/kg	2.00		79.9	33.3-136			

LCS Dup (1063005-BSD1)

Prepared: 07/01/21 Analyzed: 07/09/21

1-Methylnaphthalene	0.262	0.040	mg/kg	0.400		65.4	57.6-108	2.32	6.22	
Surrogate: 2-Fluorobiphenyl	1.49		mg/kg	2.00		74.3	39.8-134			
2-Methylnaphthalene	0.257	0.040	mg/kg	0.400		64.3	59-106	2.39	6.23	
Acenaphthene	0.303	0.040	mg/kg	0.400		75.8	60.9-105	1.26	8.18	
Acenaphthylene	0.277	0.040	mg/kg	0.400		69.2	57.4-107	2.40	5	
Anthracene	0.269	0.040	mg/kg	0.400		67.3	60.8-105	3.99	3.68	QR-04
Benzo[a]anthracene	0.286	0.040	mg/kg	0.400		71.4	56.1-121	2.78	9.01	
Benzo[a]pyrene	0.238	0.040	mg/kg	0.400		59.5	56.7-115	2.25	4.92	
Benzo[b]fluoranthene	0.276	0.040	mg/kg	0.400		68.9	45.4-128	4.55	7.63	
Benzo[g,h,i]perylene	0.277	0.040	mg/kg	0.400		69.2	56.5-107	3.34	12.5	
Benzo[k]fluoranthene	0.274	0.040	mg/kg	0.400		68.5	49.6-119	0.419	10.6	
Carbazole	0.270	0.040	mg/kg	0.400		67.4	59.7-107	0.695	8.65	
Chrysene	0.291	0.040	mg/kg	0.400		72.7	12.2-190	9.37	21.8	
Dibenz[a,h]anthracene	0.265	0.040	mg/kg	0.400		66.3	59.1-111	1.52	11.6	
Fluoranthene	0.266	0.040	mg/kg	0.400		66.6	60.6-111	2.86	7.54	
Fluorene	0.269	0.040	mg/kg	0.400		67.3	59.3-108	8.16	5.49	QR-04
Indeno[1,2,3-cd]pyrene	0.286	0.040	mg/kg	0.400		71.6	53.4-116	0.279	22.3	
Naphthalene	0.252	0.040	mg/kg	0.400		62.9	56.5-106	1.58	4.56	
Surrogate: Nitrobenzene-d5	1.38		mg/kg	2.00		68.9	39.6-121			
Phenanthrene	0.262	0.040	mg/kg	0.400		65.5	59.9-107	1.89	5.21	
Pyrene	0.278	0.040	mg/kg	0.400		69.6	51.5-122	0.917	10.6	
Surrogate: Terphenyl-d14	1.59		mg/kg	2.00		79.3	33.3-136			

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Debbie Zufelt

Debbie Zufelt, Reports Manager

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Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: COGCC Table 915-1
Project Name / Number: Ferguson No 1 (OWP) F35-1
Project Manager: Jake Harter

Reported:
07/13/21 13:22

Notes and Definitions

S-HI2	Surrogate recovery was bias high in QC and corresponding samples. All quality control within method limits for target analytes. Data was not negatively effected.
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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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75 Suttle St Durango, CO 81303

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Cottonwood Consulting

Project Manager: Jacob Harter

Address: PO Box 1653

City: Durango

State: CO Zip: 81302

Phone #: (970) 946-3761

Email: jharter@cottonwoodconsulting.com

Additional Report To:

Project Name: Ferguson NO 1 (Camp) F35-1

Project Number:

Sampler Name (Print): Jacob Harter

FOR LAB USE ONLY

Bill to (if different):

P.O. #:

Company:

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax or Email:

ANALYSIS REQUEST

Lab I.D.

Sample Name or Location

Collected

Matrix (check one)

of containers

GROUNDWATER
SURFACEWATER
WASTEWATER
PRODUCEDWATER
SOIL
OTHER :
No preservation (general)
HNO₃
HCl
H₂SO₄
Other:
Other:

COGCC Table 915-1

2106227-01 SS01 6/24/21 1005
-02 SS02 1025
-03 SS03 1040
-04 SS04 1100

X 3
X 3
X 3
X 3

X
X
X
X

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Relinquished By:

Date: 6/24/21
Time: 1500

Received By:

ADDITIONAL REMARKS:

Report to State? (Circle)

Yes

No

Relinquished By:

Date: 6/24/21
Time: 1545

Received By:

ADDITIONAL REMARKS:

Relinquished By:

Date: 6/24/21
Time: 1545

Received By:

ADDITIONAL REMARKS:

Delivered By: (Circle One)

Temperature at receipt:

CHECKED BY:

Sampler: UPS - FedEx - Kangaroo - Other:

35°C

35°C

on Dec 3

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