

Table 2
Background Soil Sampling Results
Red Mesa Field
Colorado Energy and Carbon Management Commission

Parameter	SS09	SS04	SS06	SS09	ECMC Table 915-1 Standard	Units
	6/17/2021	7/20/2021	7/23/2021	09/28/2022		
Sample Location	Background	Background	Background	Background	NA	NA
Latitude/Longitude	37.066988, -108.129035	37.109761, -108.117091	37.080166, -108.138952	37.084357, -108.148278	NA	NA
Depth	0-0.67	0-0.67	0-0.5	0-2	NA	feet bgs
PID	3.8	0.2	0.3	0.4	NA	ppm
Conductivity	0.257	1.760	0.690	1.780	<4	mmhos/cm
pH	6.41	7.06	7.33	7.85	6-8.3	pH units
SAR	0.35	0.41	0.15	3.82	<6	no units
Calcium	34.3	109	125	99.4	NA	mg/L
Magnesium	8.66	24.1	17.9	73.3	NA	mg/L
Sodium	8.79	18.0	6.96	206	NA	mg/L
Arsenic	2.52	4.82	4.27	9.26	0.68 or 1.25x BG	mg/kg
Barium	149	186	190	64.8	15,000 or 1.25x BG	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	71 or 1.25x BG	mg/kg
Chromium (VI)	-	-	-	0.298	0.3 or 1.25x BG	mg/kg
Total Chromium	11.2	12.0	10.0	13.4	NA	mg/kg
Copper	15.7	22.4	13.5	37.8	3,100 or 1.25x BG	mg/kg
Lead	<10.0	11.6	<10.0	11.9	400 or 1.25x BG	mg/kg
Nickel	8.95	10.0	8.23	<5.00	1,500 or 1.25x BG	mg/kg
Selenium	<20.0	<20.0	<20.0	<20.0	390 or 1.25x BG	mg/kg
Silver	<1.00	<1.00	<1.00	<1.00	390 or 1.25x BG	mg/kg
Zinc	29.8	44.7	27.0	30.2	23,000 or 1.25x BG	mg/kg
Boron	<1.20	1.59	1.34	1.70	2	mg/L
TPH (GRO)	<10.0	<10.0	<10.0	-	NA	mg/kg
TPH (DRO)	<10.0	<10.0	13.2	-	NA	mg/kg
TPH (EXT DRO)	<10.0	<10.0	16.2	-	NA	mg/kg
Total TPH	<30.0	<30.0	29.4	-	500	mg/kg
Benzene	0.0661	<0.0250	<0.0250	-	1.2	mg/kg
Toluene	0.689	<0.0250	0.152	-	490	mg/kg
Ethylbenzene	0.0954	<0.0250	0.0439	-	5.8	mg/kg
Total Xylenes	0.259	<0.0750	0.191	-	58	mg/kg
1,3,5-trimethylbenzene	<0.0250	<0.0250	<0.0250	-	27	mg/kg
1,2,4-trimethylbenzene	0.0307	<0.0250	<0.0250	-	30	mg/kg
Naphthalene	<0.0250	<0.0250	<0.0250	-	2	mg/kg
2-methylnaphthalene	<0.023	<0.023	<0.023	-	24	mg/kg
1-methylnaphthalene	<0.016	<0.016	<0.016	-	18	mg/kg
Acenaphthene	<0.024	<0.024	<0.024	-	360	mg/kg
Fluorene	<0.014	<0.014	<0.014	-	240	mg/kg
Anthracene	<0.017	<0.017	<0.017	-	1800	mg/kg
Fluoranthene	<0.019	<0.019	<0.019	-	240	mg/kg
Pyrene	<0.013	<0.013	<0.013	-	180	mg/kg
Benzo(a)anthracene	<0.023	<0.023	<0.023	-	1.1	mg/kg
Chrysene	<0.017	<0.017	<0.017	-	110	mg/kg
Benzo(b)fluoranthene	<0.019	<0.019	<0.019	-	1.1	mg/kg
Benzo(k)fluoranthene	<0.016	<0.016	<0.016	-	11	mg/kg
Benzo(a)pyrene	<0.018	<0.018	<0.018	-	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	<0.017	<0.017	<0.017	-	1.1	mg/kg
Dibenz(a,h)anthracene	<0.019	<0.019	<0.019	-	0.11	mg/kg

Notes: Background samples collected in the Red Mesa area.

Sample SS09 collected 6/17/2021 and SS09 collected 9/28/2022 are unique samples collected within the Red Mesa area.

PID - Photoionization Detector

SAR - Sodium Adsorption Ratio

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

NA - Not Applicable

ppm - parts per million

bgs - below ground surface

mmhos/cm - millihos per centimeter

mg/L - milligrams per liter

mg/kg - milligrams per kilogram

ECMC - Colorado Energy and Carbon Management Commission

Bold values exceed ECMC Standard

Values reported below the laboratory detection limit are considered zero in Total TPH calculations.

BG - Background

"-" - No Data

Table 2 (continued)
Background Soil Sampling Results
Red Mesa Field
Colorado Energy & Carbon Management Commission

Parameter	SS10	SS11	SS12	BG01	ECMC Table 915-1	Units
	10/11/2022	10/11/2022	10/11/2022	6/16/2023	Standard	
Sample Location	Background	Background	Background	Background	NA	NA
Latitude/Longitude	37.0843791, -108.148399	37.084086, -108.148113	37.084325, -108.148131	37.050030, -108.168348	NA	NA
Depth	5	7	5	0-1	NA	feet bgs
PID	0.1	0.2	0.1	0.0	NA	ppm
Conductivity	-	-	-	0.180	<4	mmhos/cm
pH	-	-	-	6.92	6-8.3	pH units
SAR	2.00	4.02	4.03	0.15	<6	no units
Calcium	76.2	116	250	28.4	NA	mg/L
Magnesium	28.4	46.0	166	7.34	NA	mg/L
Sodium	80.6	202	355	3.42	NA	mg/L
Arsenic	-	-	-	3.59	0.68 or 1.25x BG	mg/kg
Barium	-	-	-	172	15,000 or 1.25x BG	mg/kg
Cadmium	-	-	-	<5.00	71 or 1.25x BG	mg/kg
Chromium (VI)	<0.250	0.267	0.329	<0.250	0.3 or 1.25x BG	mg/kg
Total Chromium	-	-	-	12.4	NA	mg/kg
Copper	-	-	-	18.9	3,100 or 1.25x BG	mg/kg
Lead	-	-	-	<10.0	400 or 1.25x BG	mg/kg
Nickel	-	-	-	8.01	1,500 or 1.25x BG	mg/kg
Selenium	-	-	-	<20.0	390 or 1.25x BG	mg/kg
Silver	-	-	-	<1.00	390 or 1.25x BG	mg/kg
Zinc	-	-	-	33.7	23,000 or 1.25x BG	mg/kg
Boron	-	-	-	<1.20	2	mg/L
TPH (GRO)	-	-	-	-	NA	mg/kg
TPH (DRO)	-	-	-	-	NA	mg/kg
TPH (EXT DRO)	-	-	-	-	NA	mg/kg
Total TPH	-	-	-	-	500	mg/kg
Benzene	-	-	-	-	1.2	mg/kg
Toluene	-	-	-	-	490	mg/kg
Ethylbenzene	-	-	-	-	5.8	mg/kg
Total Xylenes	-	-	-	-	58	mg/kg
1,3,5-trimethylbenzene	-	-	-	-	27	mg/kg
1,2,4-trimethylbenzene	-	-	-	-	30	mg/kg
Naphthalene	-	-	-	-	2	mg/kg
2-methylnaphthalene	-	-	-	-	24	mg/kg
1-methylnaphthalene	-	-	-	-	18	mg/kg
Acenaphthene	-	-	-	-	360	mg/kg
Fluorene	-	-	-	-	240	mg/kg
Anthracene	-	-	-	-	1800	mg/kg
Fluoranthene	-	-	-	-	240	mg/kg
Pyrene	-	-	-	-	180	mg/kg
Benzo(a)anthracene	-	-	-	-	1.1	mg/kg
Chrysene	-	-	-	-	110	mg/kg
Benzo(b)fluoranthene	-	-	-	-	1.1	mg/kg
Benzo(k)fluoranthene	-	-	-	-	11	mg/kg
Benzo(a)pyrene	-	-	-	-	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	-	-	-	-	1.1	mg/kg
Dibenz(a,h)anthracene	-	-	-	-	0.11	mg/kg

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