

Table 1
Soil Sampling Results
COGCC Form 27 Sampling and Mapping
Red Mesa 12 Well Plugging Project
Colorado Oil and Gas Conservation Commission

Parameter	Haun-Delaney (OWP) #1 SS01	Haun-Delaney (OWP) #1 SS02	Haun-Delaney (OWP) #1 SS03	Background (Haun-Delaney (OWP) #1 SS04)	COGCC Table 915-1 Standard	Units
	7/20/2021	7/20/2021	7/20/2021	7/20/2021		
Sample Location	Wellhead	Flowline	Flowline	Background	NA	NA
Latitude/Longitude	37.10947/-108.11683	37.109213/-108.116912	37.109479/-108.116914	37.109761/-108.117091	NA	NA
Depth	7	3	3	0-0.67	NA	feet bgs
PID	1.0	0.3	0.4	0.2	NA	ppm
Conductivity	2.490	0.930	0.840	1.760	<4	mmhos/cm
pH	9.83	7.90	7.60	7.06	6-8.3	pH units
SAR	6.44	0.67	0.28	0.41	<6	no units
Calcium	143	89.0	112	109	NA	mg/L
Magnesium	16.6	35.7	23.7	24.1	NA	mg/L
Sodium	305	29.6	12.7	18.0	NA	mg/L
Arsenic	5.65	4.40	5.47	4.82	0.68	mg/kg
Barium	319	209	229	186	15,000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	71	mg/kg
Total Chromium	12.5	11.9	14.0	12.0	NA	mg/kg
Copper	16.1	15.0	17.6	22.4	3,100	mg/kg
Lead	<10.0	<10.0	<10.0	11.6	400	mg/kg
Nickel	8.45	8.94	11.9	10.0	1,500	mg/kg
Selenium	<20.0	<20.0	<20.0	<20.0	390	mg/kg
Silver	<1.00	<1.00	<1.00	<1.00	390	mg/kg
Zinc	27.7	29.7	34.4	44.7	23,000	mg/kg
Boron	<1.20	<1.20	<1.20	1.59	2	mg/L
TPH (GRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
TPH (DRO)	18.3	<10.0	10.8	<10.0	NA	mg/kg
TPH (EXT DRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
Total TPH	18.3	<30.0	10.8	<30.0	500	mg/kg
Benzene	<0.0250	<0.0250	<0.0250	<0.0250	1.2	mg/kg
Toluene	<0.0250	<0.0250	<0.0250	<0.0250	490	mg/kg
Ethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	5.8	mg/kg
Total Xylenes	<0.0750	<0.0750	<0.0750	<0.0750	58	mg/kg
1,3,5-trimethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	27	mg/kg
1,2,4-trimethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	30	mg/kg
Naphthalene	<0.0250	<0.0250	<0.0250	<0.0250	2	mg/kg
2-methylnaphthalene	<0.023	<0.023	<0.023	<0.023	24	mg/kg
1-methylnaphthalene	<0.016	<0.016	<0.016	<0.016	18	mg/kg
Acenaphthene	<0.024	<0.024	<0.024	<0.024	360	mg/kg
Fluorene	<0.014	<0.014	<0.014	<0.014	240	mg/kg
Anthracene	<0.017	<0.017	<0.017	<0.017	1,800	mg/kg
Fluoranthene	<0.019	<0.019	<0.019	<0.019	240	mg/kg
Pyrene	<0.013	<0.013	<0.013	<0.013	180	mg/kg
Benzo(a)anthracene	<0.023	<0.023	<0.023	<0.023	1.1	mg/kg
Chrysene	<0.017	<0.017	<0.017	<0.017	110	mg/kg
Benzo(b)fluoranthene	<0.019	<0.019	<0.019	<0.019	1.1	mg/kg
Benzo(k)fluoranthene	<0.016	<0.016	<0.016	<0.016	11	mg/kg
Benzo(a)pyrene	<0.018	<0.018	<0.018	<0.018	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	<0.017	<0.017	<0.017	<0.017	1.1	mg/kg
Dibenz(a,h)anthracene	<0.019	<0.019	<0.019	<0.019	0.11	mg/kg

Notes:

PID - Photoionization Detector
SAR - Sodium Adsorption Ratio
BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes
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
COGCC - Colorado Oil & Gas Conservation Commission

* - Laboratory detection limit exceeds COGCC Standard
** - Value detected below the reporting limit; result is an estimate.
Bold values exceed COGCC Standard
Values reported below the laboratory detection limit are considered zero in Total TPH calculations.