

Table 1
Soil Sampling Results
McDaniel (OWP) #1-11
Piceance 7 Well Plugging Project
COGCC

Parameter	SS01 4/20/2023 Wellhead	BG01 4/20/2023 Background	COGCC Table 915-1 Standard	COGCC Table 915-1 Standard*	Units
Laboratory ID	2304256-01	2304256-02	NA	NA	NA
Depth	6	0 - 0.67	NA	NA	feet bgs
PID	45.7	0.0	NA	NA	ppm
Conductivity	2.040	0.428	<4	<4	mmhos/cm
pH	8.49	7.83	6-8.3	6-8.3	pH units
SAR	6.62	1.15	<6	<6	no units
Calcium	22.3	47.4	NA	NA	mg/L
Magnesium	4.23	9.76	NA	NA	mg/L
Sodium	130	33.3	NA	NA	mg/L
Arsenic	6.26	4.60	0.68 or 1.25x BG	0.29	mg/kg
Barium	12,900	9,170	15,000 or 1.25x BG	82	mg/kg
Cadmium	8.53	6.55	71 or 1.25x BG	0.38	mg/kg
Chromium (VI)	<0.250	<0.250	0.3 or 1.25x BG	0.00067	mg/kg
Total Chromium	24.0	19.9	NA	NA	mg/kg
Copper	45.8	34.1	3,100 or 1.25x BG	46	mg/kg
Lead	178	<10.0	400 or 1.25x BG	14	mg/kg
Nickel	20.8	24.5	1,500 or 1.25x BG	26	mg/kg
Selenium	<20.0	<20.0	390 or 1.25x BG	0.26	mg/kg
Silver	<1.00	<1.00	390 or 1.25x BG	0.8	mg/kg
Zinc	200	52.2	23,000 or 1.25x BG	370	mg/kg
Boron	<0.300	0.328	2	2	mg/L
TPH (GRO)	11.9	-	NA	NA	mg/kg
TPH (DRO)	146	-	NA	NA	mg/kg
TPH (EXT DRO)	164	-	NA	NA	mg/kg
Total TPH	321.9	-	500	500	mg/kg
Benzene	0.0336	-	1.2	0.0026	mg/kg
Toluene	0.0136**	-	490	0.69	mg/kg
Ethylbenzene	0.383	-	5.8	0.78	mg/kg
Total Xylenes	1.79	-	58	9.9	mg/kg
1,3,5-trimethylbenzene	0.0185**	-	27	0.0087	mg/kg
1,2,4-trimethylbenzene	0.0906	-	30	0.0081	mg/kg
Naphthalene	0.148	-	2	0.0038	mg/kg
2-methylnaphthalene	0.248	-	24	0.019	mg/kg
1-methylnaphthalene	0.188	-	18	0.006	mg/kg
Acenaphthene	0.142	-	360	0.55	mg/kg
Fluorene	0.210	-	240	0.54	mg/kg
Anthracene	0.110	-	1800	5.8	mg/kg
Fluoranthene	0.302	-	240	8.9	mg/kg
Pyrene	0.308	-	180	1.3	mg/kg
Benzo(a)anthracene	0.065	-	1.1	0.011	mg/kg
Chrysene	0.074	-	110	9	mg/kg
Benzo(b)fluoranthene	0.041	-	1.1	0.3	mg/kg
Benzo(k)fluoranthene	0.028**	-	11	2.9	mg/kg
Benzo(a)pyrene	0.037**	-	0.11	0.24	mg/kg
Indeno(1,2,3-cd)pyrene	0.019**	-	1.1	0.98	mg/kg
Dibenz(a,h)anthracene	<0.019	-	0.11	0.096	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
**-Values reported below the laboratory detection limit are considered zero in Total TPH calculations.

BG - background
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
Values reported below the laboratory detection limit are considered zero in Total TPH calculations.
Bold values exceed COGCC Standard
* - COGCC Table 915 Protection of groundwater soil screening level concentrations.