

Table 1
Soil Sampling Results
Margaret Spaulding (OWP) #5
Lone Pine Well Plugging Project
Colorado Oil & Gas Conservation Commission

Parameter	SS01 08/31/2021	SS02 08/31/2021	SS03 08/31/2021	SS01 Background 07/28/2021	COGCC Table 915-1 Standard	Units
Sample Location	Wellhead	Pumping Unit	Flowline	Background	NA	NA
Latitude/Longitude	40.71855, -106.4941	40.71849, -106.4942	40.71839, -106.4938	40.71514, -106.4963	NA	NA
Laboratory ID	2109054-01	2109054-02	2109054-03	2107315-01	NA	NA
Depth	3.5	0-0.33	7	0-0.66	NA	feet bgs
PID	2.4	0.1	0.1	0.0	NA	ppm
Conductivity	1.130	2.030	0.306	0.286	<4	mmhos/cm
pH	8.23	7.75	7.71	5.60	6-8.3	pH units
SAR	8.99	1.58	0.74	0.16	<6	no units
Calcium	28.1	256	38.1	36.4	NA	mg/L
Magnesium	5.51	39.4	6.39	10.3	NA	mg/L
Sodium	199	103	18.7	4.22	NA	mg/L
Arsenic	8.26	4.61	5.05	2.04	0.68	mg/kg
Barium	416	139	290	146	15000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	71	mg/kg
Chromium (VI)***	<0.250	<0.250	<0.250	Not Analyzed	0.3	mg/kg
Total Chromium	16.7	14.4	25.7	25.0	NA	mg/kg
Copper	36.6	24.0	42.1	27.5	3100	mg/kg
Lead	60.0	10.4	<10.0	<10.0	400	mg/kg
Nickel	11.6	10.4	16.5	13.0	1500	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	71.8	60.4	69.4	64.8	23000	mg/kg
Boron	<1.20	1.36	<1.20	<1.20	2	mg/L
TPH (GRO)	<50.0	<10.0	<10.0	<10.0	NA	mg/kg
TPH (DRO)	2410	12.7	<10.0	<10.0	NA	mg/kg
TPH (EXT DRO)	926	<10.0	<10.0	<10.0	NA	mg/kg
Total TPH	3336	12.7	<30.0	<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	<0.0250	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	0.0909	<0.0250	<0.0250	<0.0250	2	mg/kg
2-methylnaphthalene	<0.226	<0.023	<0.023	<0.023	24	mg/kg
1-methylnaphthalene	<0.161	<0.016	<0.016	<0.016	18	mg/kg
Acenaphthene	<0.235	<0.024	<0.024	<0.024	360	mg/kg
Fluorene	0.771	<0.014	<0.014	<0.014	240	mg/kg
Anthracene	<0.172	<0.017	<0.017	<0.017	1800	mg/kg
Fluoranthene	0.254	<0.019	<0.019	<0.019	240	mg/kg
Pyrene	0.564	<0.013	<0.013	<0.013	180	mg/kg
Benzo(a)anthracene	<0.230	<0.023	<0.023	<0.023	1.1	mg/kg
Chrysene	0.800	<0.017	<0.017	<0.017	110	mg/kg
Benzo(b)fluoranthene	<0.192	<0.019	<0.019	<0.019	1.1	mg/kg
Benzo(k)fluoranthene	<0.157	<0.016	<0.016	<0.016	11	mg/kg
Benzo(a)pyrene	<0.182*	<0.018	<0.018	<0.018	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	<0.168	<0.017	<0.017	<0.017	1.1	mg/kg
Dibenz(a,h)anthracene	<0.186*	<0.019	<0.019	<0.019	0.11	mg/kg

Notes:

PID - Photoionization Detector
SAR - Sodium Adsorption Ratio
BTX - 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.

***Laboratory could only analyze for Total Chromium (not Chromium (IV)) prior to September 2021.