

Table 1
Soil Sampling Results
Margaret Spaulding (OWP) #15
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	40.71739, -106.4946	40.71744, -106.4946	40.71745, -106.4948	40.71514, -106.4963	NA	NA
Laboratory ID	2109060-01	2109060-02	2109060-03	2107315-01	NA	NA
Depth	2	0-0.33	9	0-0.66	NA	feet bgs
PID	0.1	0.1	0.1	0.0	NA	ppm
Conductivity	0.566	0.343	0.386	0.286	<4	mmhos/cm
pH	7.03	7.11	6.85	5.60	6-8.3	pH units
SAR	0.38	0.28	0.33	0.16	<6	no units
Calcium	78.2	47.2	51.2	36.4	NA	mg/L
Magnesium	17.3	11.4	12.7	10.3	NA	mg/L
Sodium	14.2	8.28	10.1	4.22	NA	mg/L
Arsenic	4.13	3.84	4.07	2.04	0.68	mg/kg
Barium	138	121	153	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	20.8	27.3	20.3	25.0	NA	mg/kg
Copper	24.0	25.6	22.7	27.5	3100	mg/kg
Lead	<10.0	<10.0	<10.0	<10.0	400	mg/kg
Nickel	13.0	16.1	12.5	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	55.8	44.8	44.1	64.8	23000	mg/kg
Boron	<1.20	<1.20	<1.20	<1.20	2	mg/L
TPH (GRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
TPH (DRO)	<10.0	26.4	<10.0	<10.0	NA	mg/kg
TPH (EXT DRO)	<10.0	12.8	<10.0	<10.0	NA	mg/kg
Total TPH	<30.0	39.2	<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	<0.0250	<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	1800	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
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.