

**Table 1**  
**Soil Sampling Results**  
**Margaret Spaulding (OWP) #4**  
**Lone Pine Well Plugging Project**  
**Colorado Oil & Gas Conservation Commission**

Parameter	SS01 09/01/2021	SS02 09/01/2021	SS03 09/01/2021	SS01 Background 07/28/2021	COGCC Table 915-1 Standard	Units
Sample Location	Wellhead	Pumping Unit	Flowline	Background	NA	NA
Latitude/Longitude	40.71859, -106.4988	40.71855, -106.4988	40.71844, -106.4988	40.71514, -106.4963	NA	NA
Laboratory ID	2109052-01	2109052-02	2109052-03	2107315-01	NA	NA
Depth	0-0.5	0-0.66	6.5	0-0.66	NA	feet bgs
PID	0.3	0.1	0.1	0.0	NA	ppm
Conductivity	0.885	0.340	0.283	0.286	<4	mmhos/cm
pH	7.75	7.78	7.85	<b>5.60</b>	6-8.3	pH units
SAR	1.33	0.53	0.38	0.16	<6	no units
Calcium	106	71.0	41.7	36.4	NA	mg/L
Magnesium	13.4	16.1	7.94	10.3	NA	mg/L
Sodium	54.7	19.1	10.1	4.22	NA	mg/L
Arsenic	<b>5.39</b>	<b>2.17</b>	<b>5.41</b>	<b>2.04</b>	0.68	mg/kg
Barium	214	121	191	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	17.1	17.8	16.2	25.0	NA	mg/kg
Copper	26.7	23.2	21.0	27.5	3100	mg/kg
Lead	16.7	<10.0	<10.0	<10.0	400	mg/kg
Nickel	12.6	10.1	12.7	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	82.0	55.3	47.8	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)	371	<10.0	<10.0	<10.0	NA	mg/kg
TPH (EXT DRO)	241	<10.0	<10.0	<10.0	NA	mg/kg
Total TPH	<b>612</b>	<30.0	<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	<0.0750	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	0.091	<0.017	<0.017	<0.017	1800	mg/kg
Fluoranthene	0.130	<0.019	<0.019	<0.019	240	mg/kg
Pyrene	0.179	<0.013	<0.013	<0.013	180	mg/kg
Benzo(a)anthracene	0.076	<0.023	<0.023	<0.023	1.1	mg/kg
Chrysene	0.342	<0.017	<0.017	<0.017	110	mg/kg
Benzo(b)fluoranthene	0.236	<0.019	<0.019	<0.019	1.1	mg/kg
Benzo(k)fluoranthene	0.051	<0.016	<0.016	<0.016	11	mg/kg
Benzo(a)pyrene	0.070	<0.018	<0.018	<0.018	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	0.062	<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.  
\*\*\*Laboratory could only analyze for Total Chromium (not Chromium (IV)) prior to September 2021.