

**Table 1**  
**Soil Sampling Results**  
**Margaret Spaulding (OWP) #11**  
**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	40.71996, -106.5004	40.71989, -106.5004	40.72004, -106.5002	40.71514, -106.4963	NA	NA
Laboratory ID	2109057-01	2109057-02	2109057-03	2107315-01	NA	NA
Depth	0-0.33	0-0.33	5	0-0.66	NA	feet bgs
PID	8.4	0.0	2.5	0.0	NA	ppm
Conductivity	1.260	0.757	0.655	0.286	<4	mmhos/cm
pH	<b>8.34</b>	8.10	7.87	<b>5.60</b>	6-8.3	pH units
SAR	1.80	4.97	0.66	0.16	<6	no units
Calcium	139	33.5	70.4	36.4	NA	mg/L
Magnesium	22.2	6.99	27.0	10.3	NA	mg/L
Sodium	86.6	121	25.6	4.22	NA	mg/L
Arsenic	<b>5.40</b>	<b>6.23</b>	<b>6.28</b>	<b>2.04</b>	0.68	mg/kg
Barium	257	143	237	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	23.3	18.8	24.0	25.0	NA	mg/kg
Copper	25.6	25.5	20.2	27.5	3100	mg/kg
Lead	101	18.1	14.6	<10.0	400	mg/kg
Nickel	11.2	14.2	15.0	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	52.2	47.6	37.2	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)	232	11.5	115	<10.0	NA	mg/kg
TPH (EXT DRO)	91.8	<10.0	<10.0	<10.0	NA	mg/kg
Total TPH	323.8	11.5	115	<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	0.0295	<0.0250	0.0436	<0.0250	2	mg/kg
2-methylnaphthalene	0.068	<0.023	0.034	<0.023	24	mg/kg
1-methylnaphthalene	0.073	<0.016	0.107	<0.016	18	mg/kg
Acenaphthene	<0.024	<0.024	<0.024	<0.024	360	mg/kg
Fluorene	<0.014	<0.014	0.098	<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	0.063	<0.013	0.018	<0.013	180	mg/kg
Benzo(a)anthracene	<0.023	<0.023	<0.023	<0.023	1.1	mg/kg
Chrysene	0.089	<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	0.106	<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.

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