

TABLE 1
Waste Characterization and Background Soil Analytical Results
Pierce Unit Kennedy #3 Wellhead, Weld County, Colorado

Analyte	COGCC Table 915-1 RSSL	COGCC Table 915-1 GWSSL	SS1-4	BG1-2	BG2-7	BG3-5	BG3-10	BG4-5	BG4-10	Units
Sample Information										
Sample Date	NA	NA	4/26/2021	4/26/2021	5/27/2021	10/13/2021	10/13/2021	10/13/2021	10/13/2021	mm/dd/yyyy
Sample Depth	NA	NA	4	2	7	5	10	5	10	ft-bgs
Field Screening	NA	NA	496	0	0.2	NA	NA	NA	NA	ppm
Total Petroleum Hydrocarbons (TPH)										
Gasoline Range Organics	500	500	466	-	-	-	-	-	-	mg/kg
Diesel Range Organics	500	500	6,260	-	-	-	-	-	-	mg/kg
Oil Range Organics	500	500	1,770	-	-	-	-	-	-	mg/kg
TPH	500	500	8,496	-	-	-	-	-	-	mg/kg
Organic Compounds in Soils										
Benzene	1.2	0.0026	<0.0500	-	-	-	-	-	-	mg/kg
Toluene	490	0.69	<0.0500	-	-	-	-	-	-	mg/kg
Ethylbenzene	5.8	0.78	1.52	-	-	-	-	-	-	mg/kg
Total Xylenes	58	9.9	2.51	-	-	-	-	-	-	mg/kg
1,2,4-Trimethylbenzene	30	0.0081	0.431	-	-	-	-	-	-	mg/kg
1,3,5-Trimethylbenzene	27	0.0087	0.210	-	-	-	-	-	-	mg/kg
acenaphthene	360	0.55	<0.00067	-	-	-	-	-	-	mg/kg
anthracene	1,800	5.8	<0.00067	-	-	-	-	-	-	mg/kg
benz(a)anthracene	1.1	0.011	<0.00067	-	-	-	-	-	-	mg/kg
benzo(b)fluoranthene	1.1	0.3	<0.00067	-	-	-	-	-	-	mg/kg
benzo(k)fluoranthene	11	2.9	<0.00067	-	-	-	-	-	-	mg/kg
benzo(a)pyrene	0.11	0.24	<0.00067	-	-	-	-	-	-	mg/kg
chrysene	110	9	<0.00067	-	-	-	-	-	-	mg/kg
dibenzo(a,h)anthracene	0.11	0.096	<0.00067	-	-	-	-	-	-	mg/kg
fluoranthene	240	8.9	<0.00067	-	-	-	-	-	-	mg/kg
fluorene	240	0.54	<0.00067	-	-	-	-	-	-	mg/kg
indeno(1,2,3-cd)pyrene	1.1	0.98	<0.00067	-	-	-	-	-	-	mg/kg
1-methylnaphthalene	18	0.006	<0.00067	-	-	-	-	-	-	mg/kg
2-methylnaphthalene	24	0.019	<0.00067	-	-	-	-	-	-	mg/kg
naphthalene	2	0.0038	<0.00067	-	-	-	-	-	-	mg/kg
pyrene	180	1.3	<0.00067	-	-	-	-	-	-	mg/kg
Metals in Soils										
arsenic	0.68	0.29	4.65	2.25	-	3.37	0.502	1.42	0.719	mg/kg
barium	15,000	82	78.8	-	-	-	-	-	-	mg/kg
cadmium	71	0.38	0.25	-	-	-	-	-	-	mg/kg
chromium (VI)	0.3	0.00067	<1	-	-	-	-	-	-	mg/kg
copper	3,100	46	9.01	-	-	-	-	-	-	mg/kg
lead	400	14	10.6	-	-	-	-	-	-	mg/kg
nickel	1,500	26	9.56	-	-	-	-	-	-	mg/kg
selenium	390	0.26	0.414	0.207	0.18	0.307	<0.25	0.18	<0.25	mg/kg
silver	390	0.8	0.0409	-	-	-	-	-	-	mg/kg
zinc	23,000	370	35.4	-	-	-	-	-	-	mg/kg
Soil Suitability for Reclamation										
pH	6 - 8.3		7.24	7.38	-	-	-	-	-	su
EC	4		1.61	0.369	-	-	-	-	-	mmhos/cm
Boron	2		1.4	0.3	-	-	-	-	-	mg/kg
SAR	6		6.80	0.86	0.904	0.452	0.845	0.402	0.615	unitless

Notes:

COGCC - Colorado Oil and Gas Conservation Commission

SS#-#: sample name - depth in ft. bgs

ft-bgs - feet below ground surface

ppm - parts per million

mg/kg - milligrams per kilogram

su - standard units

mmhos/cm - millimhos per centimeter

EC - electrical conductivity

SAR - sodium adsorption ratio

GWSSL - Groundwater Soil Screening Level

< - indicates result is below the laboratory reporting limit

Bold - indicates result is above the COGCC Table 915-1 GWSSL