

TABLE 1
Soil Sample and Field Screening Information
Yenter North Line. Logan County, CO

Sample Information				
Sample ID	Depth	Sample Date	Latitude	Longitude
Units -->	ft-bgs	mm/dd/yyyy	Decimal Degree (NAD83)	
EX01@3	3	8/16/2023	40.7942128	-103.3611309
EX02@3	3	8/16/2023	40.7942558	-103.3610782
EX03@3	3	8/16/2023	40.7943001	-103.3610914
EX04@3	3	8/16/2023	40.7943002	-103.3611501
EX05@3	3	8/16/2023	40.7942552	-103.3611955
EX06@3	3	8/16/2023	40.7942059	-103.3611998
EX07@6	6	8/16/2023	40.7942741	-103.3611208
EX08@6	6	8/16/2023	40.7942422	-103.3611603
EX09@19	19	8/24/2023	40.7942709	-103.3611554
EX10@19	19	8/24/2023	40.794247	-103.3611102
EX11@8	8	8/24/2023	40.7942516	-103.3610689
EX12@8	8	8/24/2023	40.7943132	-103.3610874
EX13@8	8	8/24/2023	40.7942038	-103.3611159
EX14@8	8	8/24/2023	40.794258	-103.3612087
EX15@8	8	8/24/2023	40.7942014	-103.3611896
EX16@8	8	8/24/2023	40.7943086	-103.3611767
BKG01@3	3	8/16/2023		
BKG01@6	6	8/16/2023		

Notes:

ft-bgs - feet below ground surface

TABLE 2
Soil Analytical Results Summary Table - Organics
Yenter North Line, Logan County, CO

Sample Information				BTEXN + TMBs							TPH			
Sample ID	Depth	Sample Date	PID Field Screening	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	1,2,4-TMB	1,3,5-TMB	GRO	DRO	ORO	TPH
Units -->	ft-bgs	mm/dd/yyyy	ppm	mg/kg							mg/kg			
COGCC RSSL -->				1.2	490	5.8	58	2	30	27	500	500	500	500
COGCC GWSSL -->				0.0026	0.69	0.78	9.9	0.0038	0.0081	0.0087	500	500	500	500
EX01@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX02@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX03@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX04@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX05@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX06@3	3	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX07@6	6	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX08@6	6	8/16/2023		<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX09@19	19	8/24/2023	57	<0.0020	0.0066	<0.0050	<0.010	<0.0038	0.0051	<0.0050	<0.50	<50	<50	<100.5
EX10@19	19	8/24/2023	32	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX11@8	8	8/24/2023	80	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX12@8	8	8/24/2023	130	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX13@8	8	8/24/2023	96	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX14@8	8	8/24/2023	76	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX15@8	8	8/24/2023	95	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
EX16@8	8	8/24/2023	55	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5

Notes:

Waste Characterization Sample
 Removed by Excavation
 GRO - Gasoline Range Organics
 DRO - Diesel Range Organics
 ORO - Oil Range Organics
 TPH - Total Petroleum Hydrocarbons
 PID - Photo Ionization Detector
 TMB - Trimethylbenzene
 ft-bgs - feet below ground surface

ppm - parts per million
 COGCC - Colorado Oil and Gas Conservation Commission
 BTEXN - Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene
 RSSL - Residential Soil Screening Level
 GWSSL - Groundwater Soil Screening Level
 < - indicates result is below the laboratory reporting limit
 mg/kg - milligrams per kilogram
 2 - Rerun result
 Red- Above COGCC Table 915-1 GWSSL

TABLE 3
Soil Analytical Results Summary Table - PAHs
Yenter North Line, Logan County, CO

Sample Information				PAHs													
Sample ID	Depth	Sample Date	PID Field Screening	Acenaphthene	Anthracene	Benz(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Benzo(a)pyrene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-methylnaphthalene	2-methylnaphthalene	Pyrene
Units -->	ft-bgs	mm/dd/yyyy	ppm	mg/kg													
COGCC RSSL -->				360	1800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
COGCC GWSSL -->				0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3
EX01@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX02@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX03@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX04@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX05@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX06@3	3	8/16/2023		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX07@6	6	8/16/2023		0.0146	0.0184	0.0199	0.0187	0.0079	0.0127	0.0150	<0.0050	0.0539	0.0095	0.00807	<0.0050	<0.0050	0.044
EX08@6	6	8/16/2023		0.0141	0.0239	0.0253	0.0243	0.0103	0.0164	0.0193	<0.0050	0.0676	0.0101	0.00838	<0.0050	<0.0050	0.051
EX09@19	19	8/24/2023	57	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX10@19	19	8/24/2023	32	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX11@8	8	8/24/2023	80	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX12@8	8	8/24/2023	130	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX13@8	8	8/24/2023	96	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX14@8	8	8/24/2023	76	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX15@8	8	8/24/2023	95	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EX16@8	8	8/24/2023	55	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Notes:

Waste Characterization Sample
 Removed by Excavation
 ft-bgs - feet below ground surface
 PID - Photo Ionization Detector
 ppm - parts per million
 mg/kg - milligrams per kilogram

Red- Above COGCC Table 915-1 GWSSL

COGCC - Colorado Oil and Gas Conservation Commission
 RSSL - Residential Soil Screening Level
 GWSSL - Groundwater Soil Screening Level
 < - indicates result is below the laboratory reporting limit
 NA - not analyzed
 1 - 5/25/22 PAH results were run out of holding time

TABLE 4
Soil Analytical Results Summary Table - Inorganics
Yenter North Line, Logan County, CO

Sample Information				Soil Suitability for Reclamation				Metals in Soils									
Sample ID	Depth	Sample Date	PID Field Screening	EC	SAR	pH	Boron	Arsenic	Barium	Cadmium	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
Units -->	ft-bgs	mm/dd/yyyy	ppm	mmhos/cm	Unitless	Unitless	mg/l	mg/kg									
COGCC RSSL -->				<4	<6	6.0 - 8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
COGCC GWSSL -->				<4	<6	6.0 - 8.3	2	0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Background -->						8.76		1.04125	253.125								
EX01@3	3	8/16/23		0.435	1.22	9.09	0.153	0.902	468	<0.200	<0.30	1.27	6.69	1.65	<0.260	0.0235	5.51
EX02@3	3	8/16/23		0.34	0.531	8.46	0.0526	0.982	280	<0.200	<0.30	1.42	7.47	1.84	<0.260	0.0298	6.27
EX03@3	3	8/16/23		0.373	0.879	8.84	0.06	0.745	251	<0.200	<0.30	1.05	4.47	1.37	<0.260	<0.0200	4.76
EX04@3	3	8/16/23		0.468	0.916	9.27	0.41	0.933	195	<0.200	<0.30	1.24	6.26	1.58	<0.260	<0.0200	5.32
EX05@3	3	8/16/23		0.687	1.69	9.62	0.54	0.855	158	<0.200	<0.30	2.18	6.04	1.6	<0.260	0.0219	5.43
EX06@3	3	8/16/23		0.48	0.928	9.05	0.117	0.766	254	<0.200	<0.30	1.24	5.95	1.58	<0.260	0.0235	5.34
EX07@6	6	8/16/23		0.291	0.519	7.85	<0.0100	0.778	146	<0.200	<0.30	1.4	7.32	1.68	<0.260	0.0290	5.78
EX08@6	6	8/16/23		1.93	11.3	8.33	0.44	0.787	133	<0.200	<0.30	1.37	6.85	1.7	<0.260	0.0259	5.72
EX09@19	19	8/24/23	57	1.1	3.16	7.83	<0.0100	5.32	55.3	<0.200	<0.30	9.09	15.3	13.8	1.38	0.0512	39.4
EX10@19	19	8/24/23	32	1.73	3.13	7.66	0.0557	5.82	41.5	<0.200	<0.30	8.54	16.6	11.7	0.44	0.0466	42
EX11@8	8	8/24/23	80	9.63	14.1	8.11	0.9430	3.34	135	<0.200	<0.30	4.78	7.88	5.69	0.306	0.0314	17.9
EX12@8	8	8/24/23	130	0.385	0.544	8.62	<0.0100	2.72	230	<0.200	<0.30	3.23	5.80	4.05	<0.260	<0.0200	13.5
EX13@8	8	8/24/23	96	0.682	3.7	9.14	0.251	3.83	265	0.210	<0.30	4.33	7.79	5.46	<0.260	0.0302	16.6
EX14@8	8	8/24/23	76	4.55	6.69	8.06	0.531	2.81	126	0.203	<0.30	4.17	7.47	4.96	<0.260	0.0300	15.5
EX15@8	8	8/24/2023	95	1.24	5.39	8.48	0.178	3.16	159	0.220	<0.30	4.43	8.15	5.63	0.295	0.0302	16.7
EX16@8	8	8/24/2023	55	0.47	1.99	9.45	0.514	3.44	156	0.212	<0.30	4.82	8.31	5.88	<0.260	0.0276	18.9
BKG01@3	3	8/16/23		0.278	0.0761	8.19	<0.0100	0.833	241	<0.200	<0.30	1.40	6.56	1.68	<0.260	0.0252	5.78
BKG01@6	6	8/16/2023		0.546	0.997	8.76	0.3480	0.833	164	<0.200	<0.30	1.08	5.15	1.39	<0.260	0.0207	5.08

Notes:

PID - Photo Ionization Detector
 EC - Electrical Conductivity
 SAR - Sodium adsorption ratio
 ft-bgs - feet below ground surface
 ppm - parts per million
 mg/l - milligrams per liter
 mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter
 RSSL - Residential Soil Screening Level
 GWSSL - Groundwater Soil Screening Level
 < - indicates result is below the laboratory reporting limit
 Red- Above COGCC Table 915-1 GWSSL
 Blue- Above standard but below background
 Green - Above Table 915-1 GWSSL, within background limits

Removed by Excavation