

TABLE 1
Soil Sample and Field Screening Information
Lancaster 1 Wellhead and Production Facility, Kiowa County, CO

Sample Information					
Sample ID	Depth	Sample Date	PID Field Screening	Latitude	Longitude
Units -->	ft-bgs	mm/dd/yyyy	ppm	Decimal Degree (NAD83)	
AST01@4	4	1/23/2024	0.0	38.54191003	-102.099915
AST02@4	4	1/23/2024	0.0	38.54192665	-102.099878
SEP01@0.5	0.5	1/23/2024	0.0	38.54199261	-102.099811
WH01@6	6	1/23/2024	0.0	38.5420366	-102.099830
WH01-N@3	3	1/23/2024	0.0	38.54205442	-102.099839
WH01-W@3	3	1/23/2024	0.0	38.54203971	-102.099809
WH01-E@3	3	1/23/2024	0.0	38.54203208	-102.099857
FLR01@3	3	1/23/2024	0.0	38.54201732	-102.099818
FS01@3	3	1/23/2024	0.0	38.54196243	-102.099842
BKG01@3	3	1/23/2024	0.0	38.54187282	-102.100714
BKG01@6	6	1/23/2024	0.0	38.54187282	-102.100714

Notes:

ft-bgs - feet below ground surface

PID - Photo Ionization Detector

ppm - parts per million

AST - Above Ground Storage Tank

SEP - Separator

WH - Wellhead

FLR - Flowline Riser

FS - Flowline Fieldscreening

BKG - Background

TABLE 2
Soil Analytical Results Summary Table - Organics
Lancaster 1 Wellhead and Production Facility, Kiowa County, CO

Sample Information			BTEXN + TMBs							TPH			
Sample ID	Depth	Sample Date	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	mg/kg							mg/kg			
ECMC RSSL -->			1.2	490	5.8	58	2	30	27	500	500	500	500
ECMC GWSSL -->			0.0026	0.69	0.78	9.9	0.0038	0.0081	0.0087	500	500	500	500
AST01@4	4	1/23/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	110	<50	110
AST02@4	4	1/23/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
SEP01@0.5	0.5	1/23/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
WH01@6	6	1/23/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5
FLR01@3	3	1/23/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.0050	<0.0050	<0.50	<50	<50	<100.5

Notes:

ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram
TMB - Trimethylbenzene
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
ORO - Oil Range Organics
TPH - Total Petroleum Hydrocarbons

ECMC - Energy and Carbon Management 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

AST - Above Ground Storage Tank
SEP - Separator
WH - Wellhead
FLR - Flowline Riser

TABLE 3
Soil Analytical Results Summary Table - PAHs
Lancaster 1 Wellhead and Production Facility, Kiowa County, CO

Sample Information			PAHs													
Sample ID	Depth	Sample Date	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	mg/kg													
ECMC RSSL -->			360	1800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
ECMC 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
AST01@4	4	1/23/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
AST02@4	4	1/23/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP01@0.5	0.5	1/23/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
WH01@6	6	1/23/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FLR01@3	3	1/23/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Notes:

PAH - Polycyclic aromatic hydrocarbons
ft-bgs - feet below ground surface
mg/kg - milligrams per kilogram

ECMC - Energy and Carbon Management Commission
RSSL - Residential Soil Screening Level
GWSSL - Groundwater Soil Screening Level
< - indicates result is below the laboratory reporting limit

AST - Above Ground Storage Tank
SEP - Separator
WH - Wellhead
FLR - Flowline Riser

TABLE 4
Soil Analytical Results Summary Table - Inorganics
Lancaster 1 Wellhead and Production Facility, Kiowa County, CO

Sample Information			Soil Suitability for Reclamation				Metals in Soils									
Sample ID	Depth	Sample Date	EC	SAR	pH	Boron	Arsenic	Barium	Cadmium	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
Units -->	ft-bgs	mm/dd/yyyy	mmhos/cm	Unitless	Unitless	mg/l	mg/kg									
ECMC RSSL -->			<4	<6	6.0 - 8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC GWSSL -->			<4	<6	6.0 - 8.3	2	0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Background Levels -->			NA	NA	8.77		1.84	263	NA	NA	NA	NA	NA	NA	NA	NA
AST01@4	4	1/23/2024	1.57	1.20	9.03	<2.00	1.10	141	<0.200	<0.30	1.93	4.92	2.29	<0.260	0.0233	5.93
AST02@4	4	1/23/2024	1.26	0.951	8.77	<2.00	0.975	129	<0.200	<0.30	1.74	4.67	2.09	<0.260	0.0236	5.09
SEP01@0.5	0.5	1/23/2024	1.19	5.54	7.77	<2.00	0.745	60.0	<0.200	<0.30	1.98	9.34	1.71	<0.260	0.0227	5.97
WH01@6	6	1/23/2024	1.84	0.689	8.88	<2.00	0.934	128	<0.200	<0.30	1.53	2.63	1.74	<0.260	<0.0200	4.16
FLR01@3	3	1/23/2024	1.76	1.09	8.81	<2.00	1.04	137	<0.200	<0.30	1.78	5.20	2.15	<0.260	0.0257	5.21
BKG01@3	3	1/23/2024	0.406	0.0416	8.77	<2.00	1.04	154	<0.200	<0.30	1.82	6.12	2.14	<0.260	0.0274	5.76
BKG01@6	6	1/23/2024	0.152	0.038	8.73	<2.00	1.90	267	0.233	<0.30	2.00	5.40	2.97	<0.260	<0.0200	6.37

Notes:

EC - Electrical Conductivity
SAR - Sodium adsorption ratio
ft-bgs - feet below ground surface
mg/l - milligrams per liter
mg/kg - milligrams per kilogram

mmhos/cm - millimeters of mercury per centimeter
ECMC - Energy and Carbon Management Commission
RSSL - Residential Soil Screening Level
GWSSL - Groundwater Soil Screening Level
< - indicates result is below the laboratory reporting limit
Red- Above ECMC Table 915-1 GWSSL

Green- Above ECMC Table 915-1 GWSSL, representative of background levels
AST - Above Ground Storage Tank
SEP - Separator
WH - Wellhead
FLR - Flowline Riser
BKG - Background