

TABLE 1
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE FIELD DATA SUMMARY TABLE
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Approximate Depth (feet bgs)	PID (ppm-v)	Visual Observation	Olfactory Observation	Latitude, Longitude	Submitted for Lab Analysis (Y/N)
Initial Waste Characterization @ 3"	6/7/2023	0.25	682.8	Slight HC staining	Slight HC odor	40.21801827, -104.9812191	Y
SEP-B01 @ 6'	6/27/2023	6	7.8	Slight HC staining	Slight HC odor	40.21802656, -104.9812083	Y
SEP-N01 @ 3'	6/27/2023	3	1.1	N/S	N/O	40.21803656, -104.9812088	Y
SEP-S01 @ 3'	6/27/2023	3	0.9	N/S	N/O	40.21799863, -104.9812081	Y
SEP-E01 @ 3'	6/27/2023	3	0.9	N/S	N/O	40.21801976, -104.9811759	Y
SEP-W01 @ 3'	6/27/2023	3	0.7	N/S	N/O	40.21801911, -104.981247	Y
SEP-B02 @ 3'	6/27/2023	3	0.6	N/S	N/O	40.2180365, -104.9812964	Y
SEP-B02 @ 6'	6/27/2023	6	3.1	N/S	N/O	40.2180365, -104.9812964	Y
SEP-B03 @ 3'	6/27/2023	3	1.9	N/S	N/O	40.21806588, -104.9812172	Y
SEP-B03 @ 6'	6/27/2023	6	0.9	N/S	N/O	40.21806588, -104.9812172	Y
SEP-B04 @ 3'	6/27/2023	3	0.7	N/S	N/O	40.21802222, -104.9811208	Y
SEP-B04 @ 6'	6/27/2023	6	0.8	N/S	N/O	40.21802222, -104.9811208	Y
SEP-B05 @ 3'	6/27/2023	3	1.6	N/S	N/O	40.21793859, -104.9812313	Y
SEP-B05 @ 6'	6/27/2023	6	22.4	N/S	N/O	40.21793859, -104.9812313	Y
SEP-B06 @ 9'	7/6/2023	9	6.4	N/S	N/O	40.21801501, -104.9812295	Y
SEP-N02 @ 8'	7/6/2023	8	63.8	N/S	N/O	40.21803126, -104.9812282	Y
SEP-E02 @ 8'	7/6/2023	8	23.4	N/S	N/O	40.21801655, -104.9811769	Y
SEP-B07 @ 3"	7/31/2023	0.25	0.3	N/S	N/O	40.21794135, -104.981149	Y
SEP-B08 @ 3"	7/31/2023	0.25	0.1	N/S	N/O	40.21799175, -104.9811439	Y
SEP-B09 @ 3"	7/31/2023	0.25	0.2	N/S	N/O	40.21795449, -104.9812865	Y
SEP-B10 @ 3"	7/31/2023	0.25	0.2	N/S	N/O	40.21799572, -104.9812954	Y
SEP-B11 @ 3"	7/31/2023	0.25	0.3	N/S	N/O	40.21795429, -104.9813587	Y
SEP-B12 @ 3"	7/31/2023	0.25	0.4	N/S	N/O	40.2179917, -104.9813587	Y
SEP-B13 @ 4'	8/17/2023	4	0.3	N/S	N/O	40.21803929, -104.981396	Y
SEP-B14 @ 4'	8/17/2023	4	0.2	N/S	N/O	40.21807359, -104.981384	Y
SEP-B15 @ 4'	8/17/2023	4	0.3	N/S	N/O	40.21813238, -104.9814011	Y
SEP-B16 @ 4'	8/17/2023	4	0.4	N/S	N/O	40.21818037, -104.9814023	Y
SEP-B17 @ 10'	9/1/2023	10	1.3	N/S	N/O	40.2179970959399, -104.981174606338	Y
SEP-B18 @ 13'	9/1/2023	13	3.7	N/S	N/O	40.2179929997125, -104.98124836707	Y
SEP-S02 @ 3'	9/1/2023	3	2.6	HC Staining	HC Odor	40.2179653649229, -104.981178655546	Y
SEP-S02 @ 9'	9/1/2023	9	4.9	N/S	N/O	40.2179653649229, -104.981178655546	Y
SEP-S03 @ 3'	9/1/2023	3	3.3	N/S	HC Odor	40.2179556215787, -104.981244343762	Y
SEP-S03 @ 9'	9/1/2023	9	19.5	N/S	N/O	40.2179556215787, -104.981244343762	Y
SEP-S04 @ 3'	9/1/2023	3	4.5	N/S	N/O	40.217964864932, -104.981307355516	Y
SEP-S04 @ 9'	9/1/2023	9	4.0	N/S	N/O	40.217964864932, -104.981307355516	Y
SEP-E03 @ 3'	9/1/2023	3	7.3	N/S	N/O	40.217988864916, -104.981126355555	Y
SEP-E03 @ 9'	9/1/2023	9	6.8	N/S	N/O	40.217988864916, -104.981126355555	Y
SEP-W03 @ 3'	9/1/2023	3	5.9	N/S	N/O	40.2179889034862, -104.981340232708	Y
SEP-W03 @ 9'	9/1/2023	9	2.1	N/S	N/O	40.2179889034862, -104.981340232708	Y
SEP-N03 @ 3'	9/5/2023	3	0.2	N/S	N/O	40.218171164, -104.98129395	Y
SEP-N03 @ 9'	9/5/2023	9	2.2	N/S	N/O	40.218171164, -104.98129395	Y
SEP-N04 @ 3'	9/5/2023	3	13.2	N/S	N/O	40.218161964, -104.98122285	Y
SEP-N04 @ 9'	9/5/2023	9	2.8	N/S	N/O	40.218161964, -104.98122285	Y
SEP-N05 @ 3'	9/5/2023	3	1.3	N/S	N/O	40.21816196, -104.98114775	Y
SEP-N05 @ 9'	9/5/2023	9	1.1	N/S	N/O	40.21816196, -104.98114775	Y
SEP-N06 @ 9'	9/8/2023	9	2.9	N/S	N/O	40.218074964917, -104.981306055503	Y
SEP-B18 @ 14'	9/8/2023	14	7.4	N/S	N/O	40.2180237649152, -104.981182655538	Y
SEP-B19 @ 14'	10/3/2023	14	5.2	N/S	N/O	40.21802676, -104.9812001	Y
SEP-B20 @ 14'	10/3/2023	14	1.1	N/S	N/O	40.21804113, -104.9813194	Y
SEP-B21 @ 18'	10/5/2023	18	1.6	N/S	N/O	40.21801446491918, -104.9812202	Y
Background Soil Samples							
SEP-BG01 @ 3"	6/7/2023	0.25	2.1	N/S	N/O	40.21769758, -104.9812861	Y
SEP-BG02 @ 3"	6/7/2023	0.25	3.6	N/S	N/O	40.21810434, -104.9808443	Y
SEP-BG03 @ 3"	6/7/2023	0.25	1.9	N/S	N/O	40.21827801, -104.981279	Y
SEP-BG04 @ 3"	6/7/2023	0.25	2.3	N/S	N/O	40.21808135, -104.9816742	Y

Notes:

bgs = below ground surface
 PID = photoionization detector
 ppm-v = parts per million by volume
BOLD = exceeds ECMC Table 915-1

N/S = No Staining
 N/O = No Odor
 HC = Hydrocarbon



**TABLE 2
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - VOCs
KERR-McGEE OIL AND GAS ONSHORE LP**

Sample Location	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Naphthalene (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)
<i>ECMC standards for soil (mg/kg) ⁽¹⁾</i>		0.0026	0.69	0.78	9.9	500			0.0038	0.0081	0.0087
<i>ECMC standards for soil (mg/kg) ⁽²⁾</i>		1.2	490	5.8	58	500			2	30	27
Initial Waste Characterization @ 3"	6/7/2023	0.192	2.74	0.116	0.681	287	494	181	0.0191	0.205	0.156
SEP-B01 @ 6'	6/27/2023	<0.00200	<0.00200	0.00326	0.0152	1.74	<25.0	<100	0.004	<0.00200	0.0200
SEP-N01 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S01 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-E01 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	0.00428
SEP-W01 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	0.007	<0.00200	<0.00200
SEP-B02 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B02 @ 6'	6/27/2023	0.0300	<0.00200	<0.00200	0.00470	<0.200	<25.0	<100	<0.00380	0.00390	<0.00200
SEP-B03 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B03 @ 6'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B04 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B04 @ 6'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B05 @ 3'	6/27/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B05 @ 6'	6/27/2023	0.00408	<0.00200	0.00256	0.00222	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B06 @ 9'	7/6/2023	0.385	0.0162	0.00722	0.109	0.893	<25.0	<100	0.004	0.0252	0.0127
SEP-N02 @ 8'	7/6/2023	0.0890	0.00512	0.0212	0.169	0.379	<25.0	<100	0.003	0.0273	0.00726
SEP-E02 @ 8'	7/6/2023	0.0575	<0.00200	0.00256	0.0279	<0.200	<25.0	<100	<0.002	0.00268	0.00304
SEP-B07 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B08 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B09 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B10 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B11 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B12 @ 3"	7/31/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
SEP-B13 @ 4'	8/17/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B14 @ 4'	8/17/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B15 @ 4'	8/17/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B16 @ 4'	8/17/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B17 @ 10'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B18 @ 13'	9/1/2023	0.0241	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S02 @ 3'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S02 @ 9'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S03 @ 3'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S03 @ 9'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S04 @ 3'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-S04 @ 9'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-E03 @ 3'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-E03 @ 9'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-W03 @ 3'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-W03 @ 9'	9/1/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N03 @ 3'	9/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200

TABLE 2
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - VOCs
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Naphthalene (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)
<i>ECMC standards for soil (mg/kg) ⁽¹⁾</i>		0.0026	0.69	0.78	9.9	500			0.0038	0.0081	0.0087
SEP-N03 @ 9'	9/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N04 @ 3'	9/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N04 @ 9'	9/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N05 @ 3'	9/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N05 @ 9'	9/5/2023	0.0565	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-N06 @ 9'	9/8/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B18 @ 14'	9/8/2023	0.324	<0.00200	0.0102	0.0266	0.436	<25.0	<100	0.015	0.0106	0.00298
SEP-B19 @ 14'	10/3/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B20 @ 14'	10/3/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200
SEP-B21 @ 18'	10/5/2023	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.002	<0.00200	<0.00200

Notes:

⁽¹⁾ ECMC Table 915-1: Protection of Groundwater Soil Screening Level Concentrations, effective January 15, 2021

⁽²⁾ ECMC Table 915-1: Residential Soil Screening Level Concentrations, effective January 15, 2021

ECMC = Energy and Carbon Management Commission

< = Analytical result is less than the laboratory reporting limit

mg/kg = milligrams per kilogram

Values presented in **BOLD** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

TMB = Trimethylbenzene

TABLE 3
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - SOIL SUITABILITY FOR RECLAMATION
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Depth (ft. bgs)	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
ECMC standards for soil (mg/kg) ⁽¹⁾			6 - 8.3	<6	<4	2
Site Specific Background Limits			8.45			
Facility Soil Samples						
Initial Waste Characterization @ 3"	6/7/2023	0.25	8.06	58.8	8.96	3.44
SEP-B01 @ 6'	6/27/2023	6	NA	5.76	3.37	0.987
SEP-N01 @ 3'	6/27/2023	3	NA	8.85	4.53	1.85
SEP-S01 @ 3'	6/27/2023	3	NA	23.6	7.31	4.47
SEP-E01 @ 3'	6/27/2023	3	NA	7.11	3.49	1.93
SEP-W01 @ 3'	6/27/2023	3	NA	16.4	5.66	3.89
SEP-B06 @ 9'	7/6/2023	9	NA	25.9	11.8	4.09
SEP-N02 @ 8'	7/6/2023	8	NA	38.4	10.8	5.64
SEP-E02 @ 8'	7/6/2023	8	NA	34.1	8.48	5.48
SEP-B07 @ 3"	7/31/2023	0.25	NA	1.38	0.203	<0.100
SEP-B08 @ 3"	7/31/2023	0.25	NA	1.38	0.234	<0.100
SEP-B09 @ 3"	7/31/2023	0.25	NA	1.74	0.212	0.516
SEP-B10 @ 3"	7/31/2023	0.25	NA	0.763	0.212	<0.0989
SEP-B11 @ 3"	7/31/2023	0.25	8.12	5.39	0.497	0.140
SEP-B12 @ 3"	7/31/2023	0.25	8.31*	1.14	0.209	<0.100
SEP-B13 @ 4'	8/17/2023	4	NA	2.07	1.67	0.780
SEP-B14 @ 4'	8/17/2023	4	NA	1.53	1.24	0.679
SEP-B15 @ 4'	8/17/2023	4	NA	1.34	1.31	0.767
SEP-B16 @ 4'	8/17/2023	4	NA	1.34	1.87	1.22
SEP-B17 @ 10'	9/1/2023	10	NA	0.598	3.13	1.43
SEP-B18 @ 13'	9/1/2023	13	NA	1.36	5.31	1.25
SEP-S02 @ 3'	9/1/2023	3	NA	1.79	0.661	0.718
SEP-S02 @ 9'	9/1/2023	9	NA	0.684	2.05	2.04
SEP-S03 @ 3'	9/1/2023	3	NA	2.06	0.867	0.906
SEP-S03 @ 9'	9/1/2023	9	NA	0.568	2.13	2.21
SEP-S04 @ 3'	9/1/2023	3	NA	1.49	0.761	0.873
SEP-S04 @ 9'	9/1/2023	9	NA	0.802	1.80	2.65
SEP-E03 @ 3'	9/1/2023	3	NA	6.19	0.878	1.73
SEP-E03 @ 9'	9/1/2023	9	NA	15.9	5.70	3.68
SEP-W03 @ 3'	9/1/2023	3	NA	1.44	0.924	1.08
SEP-W03 @ 9'	9/1/2023	9	NA	1.60	5.75	2.57
SEP-N03 @ 3'	9/5/2023	3	NA	11.6	4.70	0.991
SEP-N03 @ 9'	9/5/2023	9	NA	1.13	2.11	2.01
SEP-N04 @ 3'	9/5/2023	3	NA	1.61	1.24	0.684
SEP-N04 @ 9'	9/5/2023	9	NA	1.97	3.62	2.27
SEP-N05 @ 3'	9/5/2023	3	NA	1.32	0.691	0.674
SEP-N05 @ 9'	9/5/2023	9	NA	1.43	2.18	2.24

TABLE 3
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - SOIL SUITABILITY FOR RECLAMATION
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Depth (ft. bgs)	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
ECMC standards for soil (mg/kg) ⁽¹⁾			6 - 8.3	<6	<4	2
SEP-N06 @ 9'	9/8/2023	9	NA	0.947	2.72	3.17
SEP-B18 @ 14'	9/8/2023	14	NA	17.2	7.83	4.24
SEP-B19 @ 14'	10/3/2023	14	NA	4.73	3.28	1.23
SEP-B20 @ 14'	10/3/2023	14	NA	4.58	2.16	0.199
SEP-B21 @ 18'	10/5/2023	18	NA	9.92	5.20	1.41
Background Soil Samples						
SEP-BG01 @ 3"	6/7/2023	0.25	8.45	0.297	0.344	0.660
SEP-BG02 @ 3"	6/7/2023	0.25	8.37	0.194	0.344	0.702
SEP-BG03 @ 3"	6/7/2023	0.25	8.33	1.60	0.515	0.301
SEP-BG04 @ 3"	6/7/2023	0.25	8.36	0.486	0.262	0.380

Notes:

⁽¹⁾Standards for soil are taken from ECMC Table 915-1, effective January 15, 2021

ECMC = Energy and Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit

ft. bgs = Feet below ground surface

mmhos/cm = Millimhos per centimeter

mg/L = Milligrams per liter

SAR = Sodium Absorption Ratio

EC = Electrical Conductivity

NA = Not Analyzed

Values presented in **BOLD** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations

Values presented in **BOLD*** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations, but are within site-specific background concentrations.

TABLE 4
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - PAHS
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	1-Methyl-naphthalene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)-anthracene (mg/kg)	Benzo(a)-pyrene (mg/kg)	Benzo(b)-fluoranthene (mg/kg)	Benzo(k)-fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Ideno(1,2,3-cd)-pyrene (mg/kg)	Pyrene (mg/kg)
ECMC standards for soil (mg/kg)⁽¹⁾		0.006	0.019	0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3
ECMC standards for soil (mg/kg)⁽²⁾		18	24	360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180
Initial Waste Characterization @ 3"	6/7/2023	0.436	0.219	0.0553	0.00947	0.0197	<0.0067	<0.0067	<0.0067	0.0317	0.00138	0.000954	0.122	0.00109	0.0147
SEP-B01 @ 6"	6/27/2023	0.012	0.017	<0.002	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N01 @ 3'	6/27/2023	<0.002	<0.002	<0.002	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S01 @ 3'	6/27/2023	<0.002	0.002	<0.002	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-E01 @ 3'	6/27/2023	<0.002	<0.002	<0.002	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-W01 @ 3'	6/27/2023	0.008	0.011	<0.002	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B06 @ 9'	7/6/2023	0.004	0.006	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N02 @ 8'	7/6/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-E02 @ 8'	7/6/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B07 @ 3"	7/31/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B08 @ 3"	7/31/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B09 @ 3"	7/31/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B10 @ 3"	7/31/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B13 @ 4'	8/17/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B14 @ 4'	8/17/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B15 @ 4'	8/17/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B16 @ 4'	8/17/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B17 @ 10'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B18 @ 13'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S02 @ 3'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S02 @ 9'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S03 @ 3'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S03 @ 9'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S04 @ 3'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-S04 @ 9'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-E03 @ 3'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-E03 @ 9'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-W03 @ 3'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-W03 @ 9'	9/1/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N03 @ 3'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N03 @ 9'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N04 @ 3'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N04 @ 9'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N05 @ 3'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N05 @ 9'	9/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-N06 @ 9'	9/8/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B18 @ 14'	9/8/2023	0.023	0.038	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B19 @ 14'	10/3/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B20 @ 14'	10/3/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SEP-B21 @ 18'	10/5/2023	<0.002	<0.002	<0.020	<0.020	<0.005	NA	NA	NA	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Notes:
⁽¹⁾ Standards are taken from ECMC Table 915-1: Protection of Groundwater Soil Screening Level Concentrations, effective January 15, 2021
⁽²⁾ Standards for soil are taken from ECMC Table 915-1: Residential Soil Screening Level Concentrations, effective January 15, 2021

ECMC = Energy and Carbon Management Commission
 (<) = Analytical result is less than the indicated laboratory reporting limit
 mg/kg = milligrams per kilogram
 PAH = Polycyclic Aromatic Hydrocarbons
 NA = Not Analyzed

Values presented in **BOLD** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations

TABLE 5
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - METALS
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC standards for soil (mg/kg) ⁽¹⁾		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Site-Specific Background Limits		6.76	213.75						0.356		
Initial Waste Characterization @ 3"	6/7/2023	2.07*	65.8	<0.0982	*<0.5	<9.82	<9.82	<9.82	0.153	<0.0982	<98.2
SEP-B01 @ 6'	6/27/2023	3.73	110	NA	NA	NA	NA	NA	0.167	NA	NA
SEP-N01 @ 3'	6/27/2023	4.20	130	NA	NA	NA	NA	NA	0.168	NA	NA
SEP- S01 @ 3'	6/27/2023	5.29	152	NA	NA	NA	NA	NA	0.244	NA	NA
SEP- E01 @ 3'	6/27/2023	4.57*	141	NA	NA	NA	NA	NA	0.159	NA	NA
SEP-W01 @ 3'	6/27/2023	4.75	137	NA	NA	NA	NA	NA	0.178	NA	NA
SEP-B06 @ 9'	7/6/2023	4.97	151	NA	NA	NA	NA	NA	0.330	NA	NA
SEP-N02 @ 8'	7/6/2023	5.24	157	NA	NA	NA	NA	NA	0.166	NA	NA
SEP-E02 @ 8'	7/6/2023	5.92	207	NA	NA	NA	NA	NA	0.272	NA	NA
SEP-B07 @ 3"	7/31/2023	1.93*	32.3	NA	NA	NA	NA	NA	<0.0935	NA	NA
SEP-B08 @ 3"	7/31/2023	3.92*	44.5	NA	NA	NA	NA	NA	0.121	NA	NA
SEP-B09 @ 3"	7/31/2023	15.0	145*	NA	NA	NA	NA	NA	0.219	NA	NA
SEP-B10 @ 3"	7/31/2023	3.72*	46.4	NA	NA	NA	NA	NA	0.175	NA	NA
SEP-B13 @ 4'	8/17/2023	5.05	140	NA	NA	NA	NA	NA	0.135	NA	NA
SEP-B14 @ 4'	8/17/2023	4.93	148	NA	NA	NA	NA	NA	0.152	NA	NA
SEP-B15 @ 4'	8/17/2023	4.22	117	NA	NA	NA	NA	NA	0.123	NA	NA
SEP-B16 @ 4'	8/17/2023	5.40	145	NA	NA	NA	NA	NA	0.160	NA	NA
SEP-B17 @ 10'	9/1/2023	4.57	164	NA	NA	NA	NA	NA	0.165	NA	NA
SEP-B18 @ 13'	9/1/2023	4.49	83	NA	NA	NA	NA	NA	0.152	NA	NA
SEP-S02 @ 3'	9/1/2023	5.27	141	NA	NA	NA	NA	NA	0.245	NA	NA
SEP-S02 @ 9'	9/1/2023	5.17	148	NA	NA	NA	NA	NA	0.190	NA	NA
SEP-S03 @ 3'	9/1/2023	5.46	144	NA	NA	NA	NA	NA	0.259	NA	NA
SEP-S03 @ 9'	9/1/2023	5.34	118	NA	NA	NA	NA	NA	0.107	NA	NA
SEP-S04 @ 3'	9/1/2023	5.23	152	NA	NA	NA	NA	NA	0.309	NA	NA
SEP-S04 @ 9'	9/1/2023	5.55	102	NA	NA	NA	NA	NA	0.199	NA	NA
SEP-E03 @ 3'	9/1/2023	4.34	131	NA	NA	NA	NA	NA	0.174	NA	NA
SEP-E03 @ 9'	9/1/2023	5.13	149	NA	NA	NA	NA	NA	0.123	NA	NA
SEP-W03 @ 3'	9/1/2023	5.09	148	NA	NA	NA	NA	NA	0.238	NA	NA
SEP-W03 @ 9'	9/1/2023	5.72	169	NA	NA	NA	NA	NA	0.218	NA	NA
SEP-N03 @ 3'	9/5/2023	4.16	134	NA	NA	NA	NA	NA	0.128	NA	NA
SEP-N03 @ 9'	9/5/2023	7.03	129	NA	NA	NA	NA	NA	0.198	NA	NA
SEP-N04 @ 3'	9/5/2023	6.78	179*	NA	NA	NA	NA	NA	0.159	NA	NA
SEP-N04 @ 9'	9/5/2023	7.56	132	NA	NA	NA	NA	NA	0.174	NA	NA
SEP-N05 @ 3'	9/5/2023	6.16	149	NA	NA	NA	NA	NA	0.246	NA	NA
SEP-N05 @ 9'	9/5/2023	7.55	112	NA	NA	NA	NA	NA	0.260	NA	NA

TABLE 5
MCKINSTRY 28N 21N 7C 2N OSA
SOIL SAMPLE RESULTS SUMMARY TABLE - METALS
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC standards for soil (mg/kg) ⁽¹⁾		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
SEP-N06 @ 9'	9/8/2023	4.93	165	NA	NA	NA	NA	NA	0.156	NA	NA
SEP-B18 @ 14'	9/8/2023	13.0	168	NA	NA	NA	NA	NA	0.779	NA	NA
SEP-B19 @ 14'	10/3/2023	4.33	104	NA	NA	NA	NA	NA	0.618	NA	NA
SEP-B20 @ 14'	10/3/2023	1.01	40.7	NA	NA	NA	NA	NA	0.590	NA	NA
SEP-B21 @ 18'	10/5/2023	2.83	83.4	NA	NA	NA	NA	NA	0.566	NA	NA
Background Soil Samples											
SEP-BG01 @ 3"	6/7/2023	5.41	171	0.202	<0.5	11.6	10.6	13.0	0.241	<0.0876	<87.6
SEP-BG02 @ 3"	6/7/2023	5.30	157	0.238	<0.5	13.8	12.5	13.6	0.285	<0.0944	<94.4
SEP-BG03 @ 3"	6/7/2023	4.68	113	0.147	<0.5	8.96	<8.68	10.6	0.212	<0.0868	<86.8
SEP-BG04 @ 3"	6/7/2023	3.13	84.7	0.0921	<0.5	<8.86	<8.86	<8.86	0.115	<0.0886	<88.6

Notes:

⁽¹⁾ Standards are taken from ECMC Table 915-1: Protection of Groundwater Soil Screening Level Concentrations, effective January 15, 2021

⁽²⁾ Standards for soil are taken from ECMC Table 915-1: Residential Soil Screening Level Concentrations, effective January 15, 2021

ECMC = Energy and Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit

mg/kg = milligrams per kilogram

NA = Not Analyzed

* = compound is in accordance with the ECMC Table 915-1 Footnote 9.

Values presented in **BOLD** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations and background concentrations.

Values presented in **BOLD*** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations, but are within site-specific background concentrations.

TABLE 6
MCKINSTRY 28N 21N 7C 2N OSA
GROUNDWATER RESULTS SUMMARY TABLE - VOCs
KERR-McGEE OIL AND GAS ONSHORE LP

Sample Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4- Trimethylbenzene (µg/L)	1,3,5- Trimethylbenzene (µg/L)
ECMC Standards for Groundwater (µg/L) ⁽¹⁾		5	560	700	1400	140	67	67
Groundwater Samples								
GW-01	09/05/23	37.3	14.0	2.83	48.2	<2.00	<2.00	3.80

⁽¹⁾ Standards are taken from ECMC Table 915-1: Protection of Groundwater Soil Screening Level Concentrations, effective January 15, 2021

ECMC = Energy & Carbon Management Commission

µg/L = micrograms per liter

< = Analytical result is less than the laboratory reporting limit

Values presented in **BOLD** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations

