

TABLE 1
SAKATA RED W 6-1A
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)
Wellhead Soil Samples							
WH-B01 @ 6'	1/4/23	6	2.6	N/S	N/O	40.1727171487184, -104.812051193485	Y
WH-N01 @ 5'	1/4/23	5	5.2	N/S	N/O	40.1727218170813, -104.812038997893	N
WH-S01 @ 5'	1/4/23	5	2.3	N/S	N/O	40.1727061631902, -104.812036274604	N
WH-E01 @ 5'	1/4/23	5	5.5	N/S	N/O	40.1727209973397, -104.812026244073	N
WH-W01 @ 5'	1/4/23	5	4.9	N/S	N/O	40.1727151101705, -104.812063826846	N
WHS-N01 @ 3"	1/4/23	0.25	5.9	N/S	N/O	40.1727390194857, -104.812058947126	N
WHS-S01 @ 0.25'	1/4/23	0.25	2.6	N/S	N/O	40.1726756657482, -104.812044281078	N
WHS-E01 @ 0.25'	1/4/23	0.25	1.6	N/S	N/O	40.1727188678604, -104.811991973604	N
WHS-W01 @ 0.25'	1/4/23	0.25	2.1	N/S	N/O	40.1727150223152, -104.812102926022	N
Flowline Soil Samples							
FL-B01 @ 5'	1/4/23	5	1.6	N/S	N/O	40.1727083938089, -104.812025899286	Y
FL-B02 @ 6'	1/11/23	6	9.9	N/S	N/O	40.1735647862252, -104.815066328387	Y
FL-B03 @ 4'	1/11/23	4	15.4	N/S	N/O	40.1728407594181, -104.812053816434	N
FL-B04 @ 4'	1/11/23	4	2.2	N/S	N/O	40.1730581141993, -104.812061930135	N
FL-B05 @ 4'	1/11/23	4	11.2	N/S	N/O	40.1732685313262, -104.812059434006	N
FL-B06 @ 4'	1/11/23	4	8.3	N/S	N/O	40.1735482395461, -104.812116819979	N
FL-B07 @ 5'	1/12/23	5	1.2	N/S	N/O	40.173774, -104.814859	Y
FL-B08 @ 4'	1/12/23	4	0.6	N/S	N/O	40.173809, -104.814666	N
FL-B09 @ 4'	1/12/23	4	0.6	N/S	N/O	40.173829, -104.814346	N
FL-B10 @ 5'	1/12/23	5	0.7	N/S	N/O	40.173845, -104.813921	N
FL-B11 @ 5'	1/12/23	5	0.4	N/S	N/O	40.173853, -104.813483	N
FL-B12 @ 5'	1/12/23	5	0.5	N/S	N/O	40.173864, -104.813024	N
FL-B13 @ 5'	1/13/23	5	4.1	N/S	N/O	40.173861, -104.812718	N
FL-B14 @ 6'	1/13/23	6	8.0	N/S	N/O	40.173877, -104.812460	N
FL-B15 @ 5'	1/13/23	5	7.1	N/S	N/O	40.173863, -104.812192	Y
FL-B07 @ 8'	2/3/23	8	1.3	N/S	N/O	40.17376276, -104.814802	Y
FL-N01 @ 5'	2/3/23	5	2.1	N/S	N/O	40.17378592, -104.8148052	Y
FL-S01 @ 5'	2/3/23	5	1.2	N/S	N/O	40.17374707, -104.814793	Y
FL-E01 @ 5'	2/3/23	5	0.7	N/S	N/O	40.1737728, -104.8147689	Y
FL-W01 @ 5'	2/3/23	5	0.5	N/S	N/O	40.17376066, -104.8148301	Y
Wellhead Background Soil Samples							
WH-BG01 @ 3'	1/4/23	3	6.6	N/S	N/O	40.1727061547607, -104.81196225348	Y
WH-BG01 @ 6'	1/4/23	6	6.2	N/S	N/O	40.1727061547607, -104.81196225348	Y
WH-BG02 @ 3'	1/4/23	3	4.4	N/S	N/O	40.1725991992651, -104.811956375739	Y
WH-BG02 @ 6'	1/4/23	6	2.5	N/S	N/O	40.1725991992651, -104.811956375739	Y

bgs = below ground surface

N/S = No Staining

PID = photoionization detector

N/O = No Odor

ppm-v = parts per million by volume

BOLD = exceedance of ECOM Table 915-1 standard

TABLE 2
SAKATA RED W 6-1A
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)
ECMC standards for soil (mg/kg) ⁽¹⁾		0.0026	0.69	0.78	9.9	500			0.0038	0.0081	0.0087
ECMC standards for soil (mg/kg) ⁽²⁾		1.2	490	5.8	58	500			2	30	27
Wellhead Soil Samples											
WH-B01 @ 6'	1/4/23	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
Flowline Soil Samples											
FL-B01 @ 5'	1/4/23	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
FL-B02 @ 6'	1/11/23	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
FL-B07 @ 5'	1/12/23	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	0.00572	<0.00200	<0.00200
FL-B15 @ 5'	1/13/23	<0.00200	<0.00200	<0.00200	<0.00200	<0.200	<25.0	<100	<0.00380	<0.00200	<0.00200
FL-B07 @ 8'	2/3/23	NA	NA	NA	NA	NA	NA	NA	<0.00380	NA	NA
FL-N01 @ 5'	2/3/23	NA	NA	NA	NA	NA	NA	NA	<0.00380	NA	NA
FL-S01 @ 5'	2/3/23	NA	NA	NA	NA	NA	NA	NA	<0.00380	NA	NA
FL-E01 @ 5'	2/3/23	NA	NA	NA	NA	NA	NA	NA	<0.00380	NA	NA
FL-W01 @ 5'	2/3/23	NA	NA	NA	NA	NA	NA	NA	<0.00380	NA	NA

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

█ = excavated and disposed of offsite

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
SAKATA RED W 6-1A
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)
<i>ECMC standards for soil (mg/kg)</i> ⁽¹⁾			6 - 8.3	<6	<4	2
<i>Site-Specific Background Limits</i>			8.07	2.29	2.71	0.243
<i>Wellhead Soil Samples</i>						
WH-B01 @ 6'	1/4/23	6	9.51	2.22	0.564	0.221
<i>Flowline Soil Samples</i>						
FL-B01 @ 5'	1/4/23	5	8.25	1.66	0.514	0.234
FL-B02 @ 6'	1/11/23	6	8.09	0.345	0.198	<0.100
FL-B07 @ 5'	1/12/23	5	8.25	1.94	0.381	<0.0999
FL-B15 @ 5'	1/13/23	5	7.99	2.44	0.689	0.301
FL-B07 @ 8'	2/3/23	8	8.37	NA	NA	NA
FL-N01 @ 5'	2/3/23	5	8.07	NA	NA	NA
FL-S01 @ 5'	2/3/23	5	7.99	NA	NA	NA
FL-E01 @ 5'	2/3/23	5	8.08	NA	NA	NA
FL-W01 @ 5'	2/3/23	5	7.97	NA	NA	NA
<i>Wellhead Background Soil Samples</i>						
WH-BG01 @ 3'	1/4/23	3	7.53	0.964	2.71	0.243
WH-BG01 @ 6'	1/4/23	6	7.74	1.10	1.35	<0.0981
WH-BG02 @ 3'	1/4/23	3	8.02	2.29	0.618	0.199
WH-BG02 @ 6'	1/4/23	6	8.07	1.93	0.539	0.119

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

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

 = excavated and disposed of offsite

TABLE 4
SAKATA RED W 6-1A
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
FL-B07 @ 5'	1/12/23	<0.00201	<0.00201	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	0.000691	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067

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

TABLE 5
SAKATA RED W 6-1A
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)
<i>ECMC standards for soil (mg/kg) ⁽¹⁾</i>		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
<i>Site-Specific Background Limits (1.25x buffer)</i>		4.76	170	0.272	NA	NA	13.0	NA	0.163	NA	NA
FL-B07 @ 5'	1/12/23	1.31*	117*	<0.0937	<0.509	<9.37	<9.37	<9.37	<0.0937	<0.0937	<93.7
FL-B07 @ 8'	2/3/23	0.433*	10.3	NA	NA	NA	NA	NA	NA	NA	NA
FL-N01 @ 5'	2/3/23	1.47*	<9.83	NA	NA	NA	NA	NA	NA	NA	NA
FL-S01 @ 5'	2/3/23	1.05*	18.6	NA	NA	NA	NA	NA	NA	NA	NA
FL-E01 @ 5'	2/3/23	1.24*	44.1	NA	NA	NA	NA	NA	NA	NA	NA
FL-W01 @ 5'	2/3/23	1.99*	71.3	NA	NA	NA	NA	NA	NA	NA	NA
<i>Background Soil Samples</i>											
WH-BG01 @ 3'	1/4/23	3.81	116	0.218	<0.5	<9.87	<9.87	<9.87	0.121	<0.0987	<98.7
WH-BG01 @ 6'	1/4/23	2.04	82.9	<0.0938	<0.501	<9.38	<9.38	<9.38	<0.0938	<0.0938	<93.8
WH-BG02 @ 3'	1/4/23	3.41	119	0.202	<0.516	<9.37	9.91	<9.37	0.114	<0.0937	<93.7
WH-BG02 @ 6'	1/4/23	3.18	136	0.120	<0.5	9.59	10.4	<9.15	0.131	<0.0915	<91.5

Notes:

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

ECMC = Energy and Carbon Management Commission

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

Values presented with an **BOLD*** contained concentrations exceeding ECMC Table 915-1 Cleanup Concentrations but are within background concentrations.

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



TABLE 6
SAKATA RED W 6-1A
SOIL VAPOR DATA SUMMARY TABLE
KERR-McGEE OIL AND GAS ONSHORE LP

Soil Vapor Point ID	Date	Time	Methane (%)	Carbon Dioxide (%)	Carbon Monoxide (PPM)	Oxygen (%)	Hydrogen Sulfide (PPM)	Sample Collected (Y or N)
SVP-01 @ 8'	01/05/23	919	0.0	0.0	0	21.8	0	N
SVP-02 @ 8'	01/05/23	921	0.0	0.1	0	21.7	0	N
SVP-03 @ 5'	01/05/23	923	0.0	1.0	0	20.9	0	N
SVP-04 @ 5'	01/05/23	925	0.0	0.9	0	20.9	0	N
SVP-05 @ 5'	01/05/23	927	0.0	0.1	0	21.7	0	N

% = percentage

ppm = parts per million