

TABLE 1
SCHELL 12&13-5 O SA FACILITY
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)
SEP-B01 @ 4'	03/02/22	4	0.1	N/S	N/O	40.248477, -104.923003	Y
SEP-B02 @ 5'	03/02/22	5	9.9	N/S	N/O	40.248449, -104.922982	Y
AST-B01 @ 3"	03/02/22	0.25	1.4	N/S	N/O	40.248187, -104.922979	Y
AST-B02 @ 3"	03/02/22	0.25	0.9	N/S	N/O	40.248181, -104.923010	N
PW-B01 @ 6'	03/02/22	6	21.5	Gray-Black	Slight Odor	40.248215, -104.922981	Y
PW-N01 @ 3'	03/02/22	3	98.7	N/S	Odor	40.248230, -104.922987	Y
PW-E01 @ 4'	03/02/22	4	0.8	N/S	N/O	40.248213, -104.922943	N
PW-S01 @ 3'	03/02/22	3	43.1	N/S	N/O	40.248203, -104.922983	N
PW-W01 @ 3.5'	03/02/22	3.5	0.8	N/S	N/O	40.248217, -104.923033	N
PW-BG01 @ 3'	03/02/22	3	0.1	N/S	N/O	40.248108, -104.923065	Y
PW-BG01 @ 6'	03/02/22	6	0.2	N/S	N/O	40.248108, -104.923065	Y
DL-B01 @ 4'	03/02/22	4	9.1	Gray	N/O	40.248328, -104.922983	N
PH-01 @ 3'	03/02/22	3	0.3	N/S	N/O	40.248317, -104.922903	N
PH-01 @ 6'	03/02/22	6	11.1	Black	N/O	40.248317, -104.922903	Y
PH-02 @ 3'	03/02/22	3	1.1	Gray	N/O	40.248248, -104.923068	N
PH-02 @ 6'	03/02/22	6	39.6	Black	Slight Odor	40.248248, -104.923068	Y
PW-N02@5'	03/30/22	5	0.0	N/S	N/O	40.248262, -104.923022	N
PW-N02@6'	03/30/22	6	2.9	N/S	N/O	40.248262, -104.923022	Y
PW-N02@7'	03/30/22	7	0.3	N/S	N/O	40.248262, -104.923022	N
PW-B02@8'	03/30/22	8	1.0	N/S	N/O	40.248239, -104.923028	Y
MH-B01@2.5'	04/21/22	0.25	0.4	N/S	N/O	40.248456, -104.923031	N

Notes:

bgs = below ground surface
PID = photoionization detector
ppm-v = parts per million by volume

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

TABLE 2
SHELL 12&13-5 O SA FACILITY
SOIL ANALYTICAL RESULTS 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)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)
COGCC standards for soil (mg/kg) ⁽¹⁾		0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
COGCC standards for soil (mg/kg) ⁽²⁾		1.2	490	5.8	58	2	500			30	27
SEP-B01 @ 4'	03/02/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
SEP-B02 @ 5'	03/02/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
AST-B01 @ 3"	03/02/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
PW-B01 @ 6'	03/02/22	<0.00200	0.00248	<0.00200	0.0155	0.00292	0.937	<25.0	<100	0.0171	0.00522
PW-N01 @ 3'	03/02/22	0.0169	0.0667	0.0265	0.276	0.0185	5.41	69.2	<100	0.144	0.0472
PH-01 @ 6'	03/02/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00335	<0.200	<25.0	<100	<0.00200	<0.00200
PH-02 @ 6'	03/02/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00067	<0.200	<25.0	<100	<0.00200	<0.00200
PW-N02@6'	03/30/22	<0.00200	NA	NA	NA	<0.00067	NA	NA	NA	<0.00200	<0.00200
PW-B02@8'	03/30/22	NA	NA	NA	NA	NA	NA	NA	NA	<0.00200	NA

Notes:

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

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

COGCC = Colorado Oil and Gas Conservation Commission

< = Analytical result is less than the laboratory reporting limit

mg/kg = milligrams per kilogram

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

TMB = Trimethylbenzene

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

NA = Not analyzed

TABLE 3
SCHELL 12&13-5 O SA FACILITY
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)
COGCC 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
COGCC 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
PW-B01 @ 6'	03/02/22	0.00504	0.0089	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335
PW-N01 @ 3'	03/02/22	0.0709	0.109	0.00736	0.000452	0.00117	0.000736	0.000686	0.000949	0.0102	<0.00067	0.00108	0.0233	<0.00067	0.00368
PH-01 @ 6'	03/02/22	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335	<0.00335
PH-02 @ 6'	03/02/22	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067
PW-N02@6'	03/30/22	<0.00067	<0.00067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

COGCC = Colorado Oil and Gas Conservation Commission

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

mg/kg = milligrams per kilogram

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

PAH = Polycyclic Aromatic Hydrocarbons

NA = Not Analyzed

TABLE 4
SCHELL 12&13-5 O SA FACILITY
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)
COGCC standards for soil (mg/kg) ⁽¹⁾		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
COGCC standards for soil (mg/kg) ⁽²⁾		0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
PW-B01 @ 6'	03/02/22	3.49	41.8	0.0732	*<0.247	7.03	9.37	8.64	0.605	0.0467	38.1
PW-N01 @ 3'	03/02/22	4.8	31.7	0.0738	*<0.245	8.96	17.3	11.6	0.449	0.0646	47.8
PW-N02@6'	03/30/22	NA	NA	NA	NA	NA	10.7	NA	NA	NA	NA
Background Soil Samples											
PW-BG01 @ 3'	03/02/22	7.45	21.8	0.0728	*<0.244	10.1	12.3	13	0.392	0.0304	52
PW-BG01 @ 6'	03/02/22	5.36	18	0.0584	*<0.244	10	12.2	12.7	0.326	0.0391	51.8
PH-01 @ 6'	03/02/22	2.09	63.9	0.0811	*<0.247	5.66	6.94	7.44	0.587	0.0275	32.3
PH-02 @ 6'	03/02/22	4.27	23.1	0.0516	*<0.253	9.89	10.8	10.1	0.365	0.0353	42.4

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

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

COGCC = Colorado Oil and Gas Conservation Commission

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

NA = Not Analyzed

mg/kg = milligrams per kilogram

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

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

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

Background soil sample PW-BG01 @ 3' was utilized to calculate a background concentration for arsenic of **9.31** mg/kg.

Background soil sample PH-01 @ 6' was utilized to calculate a background concentration for selenium of **0.733** mg/kg.

TABLE 5
SCHELL 12&13-5 O SA FACILITY
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)
COGCC standards for soil (mg/kg) ⁽¹⁾			6 - 8.3	<6	<4	2
PW-B01 @ 6'	03/02/22	6	7.63	1.39	1.21	0.693
PW-N01 @ 3'	03/02/22	3	8.27	2.70	1.02	0.802
Background Soil Samples						
PH-01 @ 6'	03/02/22	6	7.61	2.25	1.76	1.08
PH-02 @ 6'	03/02/22	6	7.95	1.85	1.06	0.663
PW-BG01 @ 3'	03/02/22	3	7.97	1.77	1.28	0.798
PW-BG01 @ 6'	03/02/22	6	7.86	2.34	0.938	0.529

Notes:

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

COGCC = Colorado Oil and Gas Conservation 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 COGCC Table 915-1 Cleanup Concentrations

TABLE 6
SCHELL 12-5 O SA
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)
COGCC Standards for Groundwater (µg/L) ⁽¹⁾		5	560	700	1400	140	67	67
GW-01	03/30/22	<1.00	<1.00	3.27	11.6	<2.00	21.7	8.73

⁽¹⁾ Standards are taken from COGCC Table 915-1:Protection of Groundwater Soil Screening Level Concentrations, effective Jan

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = micrograms per liter

< = Analytical result is less than the laboratory reporting limit

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