

TABLE 1
VOGL 5-8A WELLHEAD/FLOWLINE
SOIL SAMPLE FIELD DATA SUMMARY TABLE
KERR-McGEE OIL AND GAS ONSHORE LP

Soil Sample Location	Date	Depth (ft. bgs)	PID Reading (ppm)	Visual Observation	Olfactory Observation	Latitude	Longitude	GPS PDOP Value	Submitted for Lab Analysis? (Y/N)
WH-B01@6'	06/21/23	6	11.9	No Staining	Slight HC Odor	40.15431721	-104.9210709	0.9	Yes
WH-N01@5'	06/21/23	5	0.2	No Staining	No Odor	NA	NA	NA	No
WH-S01@5'	06/21/23	5	0.3	No Staining	No Odor	40.15429429	-104.9210633	1.1	No
WH-E01@5'	06/21/23	5	0.2	No Staining	No Odor	40.15432504	-104.9210551	1.1	No
WH-W01@5'	06/21/23	5	0.0	No Staining	No Odor	NA	NA	NA	No
WHS-N01@3"	06/21/23	0.25	0.1	No Staining	No Odor	40.15434501	-104.9210819	1.0	No
WHS-S01@3"	06/21/23	0.25	0.0	No Staining	No Odor	40.15428951	-104.921057	1.3	No
WHS-E01@3"	06/21/23	0.25	0.0	No Staining	No Odor	40.15432617	-104.9210353	1.2	No
WHS-W01@3"	06/21/23	0.25	0.1	No Staining	No Odor	40.15430308	-104.9211109	1.3	No
FL-B01@4'	06/21/23	4	0.5	No Staining	No Odor	40.1543231	-104.9210789	0.9	Yes
FL-B02@4'	06/21/23	4	0.2	No Staining	No Odor	40.15781213	-104.9148912	1.0	Yes
BACKGROUND SOIL SAMPLING									
BG01@3'	06/21/23	3	0.0	No Staining	No Odor	40.15442457	-104.9211651	1.0	Yes
BG01@6'	06/21/23	6	0.0	No Staining	No Odor	40.15442457	-104.9211651	1.0	Yes
BG02@3'	06/21/23	3	0.0	No Staining	No Odor	40.15416357	-104.9210256	1.0	Yes
BG02@6'	06/21/23	6	0.0	No Staining	No Odor	40.15416357	-104.9210256	1.0	Yes

Notes:

ft. bgs = Feet below ground surface

PID = Photoionization detector

ppm = Parts per million

HC = Hydrocarbon

GPS = Global positioning system

PDOP = Position dilution of precision

NA = GPS data not available

TABLE 2
VOGL 5-8A WELLHEAD/FLOWLINE
SOIL SAMPLE RESULTS SUMMARY TABLE - VOCs
KERR-McGEE OIL AND GAS ONSHORE LP

Soil Sample Location	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TVPH-GRO (mg/kg)	TEPH-DRO (mg/kg)	TEPH-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
WH-B01@6'	06/21/23	<0.00200	<0.00200	<0.00200	0.0120	0.00788	10.9	119	<100	0.0770	0.0180
FL-B01@4'	06/21/23	<0.00200	<0.00200	<0.00200	<0.00200	0.314	2.77	798	1,430	<0.00200	<0.00200
FL-B02@4'	06/21/23	<0.00200	<0.00200	<0.00200	<0.00200	0.0148	<0.200	<25.0	<100	<0.00200	<0.00200

Notes:

(1) Standards for soil 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

TVPH - GRO = Total volatile petroleum hydrocarbons - gasoline range organics

TEPH - DRO = Total extractable petroleum hydrocarbons - diesel range organics

TEPH - ORO = Total extractable petroleum hydrocarbons - oil range organics

1,2,4 - TMB = 1,2,4 - Trimethylbenzene

1,3,5 - TMB = 1,3,5 - Trimethylbenzene

BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards

TABLE 3
VOGL 5-8A WELLHEAD/FLOWLINE
SOIL SAMPLE RESULTS SUMMARY TABLE - PAHs
KERR-McGEE OIL AND GAS ONSHORE LP

Soil Sample Location	Date	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)A (mg/kg)	Benzo(b)F (mg/kg)	Benzo(k)F (mg/kg)	Benzo(a)P (mg/kg)	Chrysene (mg/kg)	D (a,h) A (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Naphthalene (mg/kg)	Pyrene (mg/kg)
COGCC standards for soil (mg/kg) ⁽¹⁾		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	0.0038	1.3
COGCC standards for soil (mg/kg) ⁽²⁾		360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	2	180
FL-B01@4'	06/21/23	<0.020	<0.020	<0.010	<0.040	<0.040	<0.040	<0.040	<0.040	<0.020	<0.020	<0.040	0.029	0.070	0.137	<0.040
FL-B02@4'	06/21/23	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.005	0.010	0.028	<0.020

Notes:

(1) Standards for soil 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

Benzo(a)A = Benzo(a)anthracene

Benzo(b)F = Benzo(b)fluoranthene

Benzo(k)F = Benzo(k)fluoranthene

Benzo(a)P = Benzo(a)pyrene

D (a,h) A = Dibenz(a,h)anthracene

1,2,3-CD = Indeno(1,2,3-cd)pyrene

1-M = 1-Methylnaphthalene

2-M = 2-Methylnaphthalene

BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards

TABLE 4
VOGL 5-8A WELLHEAD/FLOWLINE
SOIL SAMPLE RESULTS SUMMARY TABLE - METALS
KERR-McGEE OIL AND GAS ONSHORE LP

Soil 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
FL-B01@4'	06/21/23	2.84*	495	0.161	<0.51	11.5	25.8	<9.61	0.108	<0.0961	<96.1
FL-B02@4'	06/21/23	2.00*	56.7	<0.0958	<0.5	<9.58	<9.58	<9.58	<0.0958	<0.0958	<95.8
BACKGROUND SOIL SAMPLING											
BG01@3'	06/21/2023	2.51	80.8	0.107	<0.51	<8.77	<8.77	<8.77	0.151	<0.0877	<87.7
BG01@6'	06/21/2023	2.67	148	0.460	<0.501	10.2	8.85	11.1	0.117	<0.0874	<87.4
BG02@3'	06/21/2023	2.40	64.3	<0.0875	<0.5	<8.75	<8.75	<8.75	<0.0875	<0.0875	<87.5
BG02@6'	06/21/2023	3.32	108	0.153	<0.502	11.8	<9.81	12.8	<0.0981	<0.0981	<98.1

Notes:

(1) Standards for soil 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 minimum detection limit or laboratory reporting limit

mg/kg = Milligrams per kilogram

BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards

* Result exceeded the COGCC Table 915-1 standard, but was within the range of site-specific background concentrations

Italics = Laboratory minimum detection limit exceeds the COGCC Table 915-1 standard

TABLE 5
VOGL 5-8A WELLHEAD/FLOWLINE
SOIL SAMPLE RESULTS SUMMARY TABLE - SOIL SUITABILITY FOR RECLAMATION
KERR-McGEE OIL AND GAS ONSHORE LP

Soil 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
WH-B01@6'	06/21/2023	6	11.0	0.750	0.846	0.369
FL-B01@4'	06/21/2023	4	8.35*	0.650	0.449	0.460
FL-B02@4'	06/21/2023	4	9.10	0.136	0.216	<0.0980
BACKGROUND SOIL SAMPLING						
BG01@3'	06/21/2023	3	7.98	3.21	5.34	0.203
BG01@6'	06/21/2023	6	8.22	9.95	4.62	0.760
BG02@3'	06/21/2023	3	8.27	14.7	4.49	0.511
BG02@6'	06/21/2023	6	8.68	8.56	2.25	0.397

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 = Millmhos per centimeter

mg/L = Milligrams per liter

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards

* Result exceeded the COGCC Table 915-1 standard, but was within the range of site-specific background levels