

TABLE 1
MILLER 23-24 WELLHEAD RECLAMATION
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)
SS01@3"	12/08/22	0.25	16.4	Organic Content	Organic Odor	40.20928871	-104.7273679	0.9	Yes
SS02@3"	12/08/22	0.25	1.1	Organic Content	Organic Odor	40.20922746	-104.7273004	0.9	Yes
SS03@3"	12/08/22	0.25	0.6	Organic Content	Organic Odor	40.20923617	-104.7272223	0.9	Yes
BACKGROUND SOIL SAMPLING									
REC-BG01@1'	12/08/22	1	0.1	No Staining	No Odor	40.20932329	-104.7273034	0.9	Yes
REC-BG02@1'	12/08/22	1	0.2	No Staining	No Odor	40.20911932	-104.7273136	0.9	Yes
REC-BG03@1'	12/08/22	1	0.0	No Staining	No Odor	40.20924148	-104.7271544	0.9	Yes
REC-BG04@3"	12/08/22	0.25	0.2	No Staining	No Odor	40.20913255	-104.7277194	1.0	Yes

Notes:

ft. bgs = Feet below ground surface

PID = Photoionization detector

ppm = Parts per million

GPS = Global positioning system

PDOP = Position dilution of precision

TABLE 2
MILLER 23-24 WELLHEAD RECLAMATION
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
SS01@3"	12/08/22	<0.00200	<0.00200	<0.00200	0.00654	0.0834	0.255	117	<100	0.00648	0.00344
SS02@3"	12/08/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	<0.00200	<0.00200
SS03@3"	12/08/22	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	54.4	104	0.00250	0.00286

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
MILLER 23-24 WELLHEAD RECLAMATION
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
SS01@3"	12/08/22	0.0343	<0.00335	0.0116	0.0122	0.0036	0.00766	0.0293	0.0049	0.0096	0.0638	0.00582	0.154	0.285	0.0834	0.0241

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
MILLER 23-24 WELLHEAD RECLAMATION
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
SS01@3"	12/08/22	6.42	2,780*	0.533*	<1.22	15.7	11.9	18.0	1.14	0.125	<87.8
BACKGROUND SOIL SAMPLING											
REC-BG01@1'	12/08/22	4.45	1,630	0.112	<0.502	<9.86	<9.86	<9.86	0.351	<0.0986	<98.6
REC-BG02@1'	12/08/22	3.84	2,740	0.434	<1.26	10.3	9.48	11.7	0.742	<0.0912	<91.2
REC-BG03@1'	12/08/22	4.96	2,980	0.290	<0.488	<9.29	<9.29	10.1	0.646	<0.0929	<92.9
REC-BG04@3"	12/08/22	2.26	1,360	0.199	<1.23	<9.42	<9.42	<9.42	0.318	<0.0942	<94.2

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 range of site-specific background concentrations x 1.25
Italics = Laboratory minimum detection limit exceeds the COGCC Table 915-1 standard

TABLE 5
MILLER 23-24 WELLHEAD RECLAMATION
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
SS01@3"	12/08/22	0.25	8.31	16.3	4.12*	0.504
SS02@3"	12/08/22	0.25	8.12	8.26	6.05	<0.993
SS03@3"	12/08/22	0.25	8.42	15.9	2.95	0.541
BACKGROUND SOIL SAMPLING						
REC-BG01@1'	12/08/22	1	8.03	6.17	4.94	0.171
REC-BG02@1'	12/08/22	1	8.05	5.06	4.79	0.513
REC-BG03@1'	12/08/22	1	7.91	2.65	2.75	0.363
REC-BG04@3"	12/08/22	0.25	8.13	0.227	0.967	0.321

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 range of site-specific background levels