

TABLE 1
BENSON FARMS 12N-23HZ WELLHEAD
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'	08/05/21	6	7.0	No Staining	No Odor	40.21006954	-104.9605742	1.3	Yes
WH-N01@5'	08/05/21	5	1.8	No Staining	No Odor	40.21006649	-104.9605672	1.4	No
WH-S01@5'	08/05/21	5	4.4	No Staining	No Odor	40.21005896	-104.9605595	1.2	No
WH-E01@5'	08/05/21	5	2.1	No Staining	No Odor	40.21007010	-104.9605505	1.3	No
WH-W01@5'	08/05/21	5	1.5	No Staining	No Odor	40.21007275	-104.9605762	1.2	No
WHS-N01@3"	08/05/21	0.25	2.6	No Staining	No Odor	40.21008822	-104.9605803	1.1	No
WHS-S01@3"	08/05/21	0.25	2.0	No Staining	No Odor	40.21004052	-104.9605838	1.0	No
WHS-E01@3"	08/05/21	0.25	0.8	No Staining	No Odor	40.21008764	-104.9607048	1.1	No
WHS-W01@3"	08/05/21	0.25	0.7	No Staining	No Odor	40.21005874	-104.9606179	1.1	No
WH-BG01@3'	08/05/21	3	0.6	No Staining	No Odor	40.21007210	-104.9603902	1.0	Yes
WH-BG01@6'	08/05/21	6	1.6	No Staining	No Odor	40.21007210	-104.9603902	1.0	Yes
WH-BG02@3'	08/05/21	3	1.6	No Staining	No Odor	40.21008101	-104.9605298	1.1	Yes
WH-BG02@6'	08/05/21	6	1.0	No Staining	No Odor	40.21008101	-104.9605298	1.1	Yes
WH-N02@5'	08/06/21	5	1.7	No Staining	No Odor	NA	NA	NA	Yes
WH-S02@5'	08/06/21	5	3.7	No Staining	No Odor	NA	NA	NA	Yes
WH-E02@5'	08/06/21	5	1.7	No Staining	No Odor	NA	NA	NA	Yes
WH-W02@5'	08/06/21	5	1.2	No Staining	No Odor	NA	NA	NA	Yes
WH-B02@9'	10/22/21	9	3.4	No Staining	No Odor	NA	NA	NA	Yes
WH-S03@8'	10/22/21	8	2.0	No Staining	No Odor	40.21006069	-104.9605747	1.1	Yes
WH-E03@8'	10/22/21	8	1.6	No Staining	No Odor	40.21006887	-104.9605499	1.1	Yes
WH-W03@8'	10/22/21	8	4.6	No Staining	No Odor	40.21006478	-104.9605979	1.1	Yes

Notes:

ft. bgs = Feet below ground surface

PID = Photoionization detector

ppm = Parts per million

GPS = Global positioning system

PDOP = Position dilution of precision

NA = GPS data not available; sample location inaccessible

TABLE 2
BENSON FARMS 12N-23HZ WELLHEAD
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'	08/05/21	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	931	2,830	<0.00200	<0.00200
WH-N02@5'	08/06/21	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
WH-S02@5'	08/06/21	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	1,040	3,110	NA	NA
WH-E02@5'	08/06/21	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
WH-W02@5'	08/06/21	<0.00200	<0.00200	<0.00200	<0.00200	<0.00380	<0.200	<25.0	<100	NA	NA
WH-B02@9'	10/22/21	NA	NA	NA	NA	NA	<0.200	<25.0	<100	NA	NA
WH-S03@8'	10/22/21	NA	NA	NA	NA	NA	<0.200	<25.0	<100	NA	NA
WH-E03@8'	10/22/21	NA	NA	NA	NA	NA	<0.200	<25.0	<100	NA	NA
WH-W03@8'	10/22/21	NA	NA	NA	NA	NA	<0.200	<25.0	<100	NA	NA

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
NA = Constituent not analyzed

TABLE 3
BENSON FARMS 12N-23HZ WELLHEAD
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	0.96	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
WH-B01@6'	08/05/21	<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	<0.00335

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 = Dibenzo(a,h)anthracene

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

1-M = 1-Methylnaphthalene

2-M = 2-Methylnaphthalene

TABLE 4
BENSON FARMS 12N-23HZ WELLHEAD
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
WH-B01@6'	08/05/21	2.95*	736	0.189 J	<0.5	10.9	9.28	12.7	0.526*	0.0605 J	43.3
WH-N02@5'	08/06/21	NA	154*	NA	NA	NA	NA	NA	NA	NA	NA
WH-S02@5'	08/06/21	NA	1,110	NA	NA	NA	NA	NA	NA	NA	NA
WH-E02@5'	08/06/21	NA	1,150	NA	NA	NA	NA	NA	NA	NA	NA
WH-W02@5'	08/06/21	NA	221	NA	NA	NA	NA	NA	NA	NA	NA
WH-B02@9'	10/22/21	NA	21.7	NA	NA	NA	NA	NA	NA	NA	NA
WH-S03@8'	10/22/21	NA	189*	NA	NA	NA	NA	NA	NA	NA	NA
WH-E03@8'	10/22/21	NA	143*	NA	NA	NA	NA	NA	NA	NA	NA
WH-W03@8'	10/22/21	NA	188*	NA	NA	NA	NA	NA	NA	NA	NA
BACKGROUND SOIL SAMPLING											
WH-BG01@3'	08/05/21	1.76	32.7	0.0562 J	<0.5	4.35	3.57	5.15	0.359	0.0125 J	16.6
WH-BG01@6'	08/05/21	2.86	141	0.151 J	<0.5	9.28	8.34	11	0.401	0.04 J	38.1
WH-BG02@3'	08/05/21	7.39	122	0.231 J	<0.5	15.7	14.2	20.1	0.59	0.0895 J	74.3
WH-BG02@6'	08/05/21	2.84	157	0.168 J	<0.5	10.2	9.56	13.5	0.499	0.0419 J	45.6

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
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 reporting limit exceeds the COGCC Table 915-1 standard
J = Estimated value; analytical result is below laboratory quantitation limit
NA = Constituent not analyzed

TABLE 5
BENSON FARMS 12N-23HZ WELLHEAD
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'	08/05/21	6	8.41	2.47	0.682	0.516
WH-N02@5'	08/06/21	5	8.25	NA	NA	NA
WH-S02@5'	08/06/21	5	7.62	NA	NA	NA
WH-E02@5'	08/06/21	5	8.12	NA	NA	NA
WH-W02@5'	08/06/21	5	8.09	NA	NA	NA
WH-B02@9'	10/22/21	9	8.21	NA	NA	NA
WH-S03@8'	10/22/21	8	8.10	NA	NA	NA
WH-E03@8'	10/22/21	8	8.24	NA	NA	NA
WH-W03@8'	10/22/21	8	8.09	NA	NA	NA
BACKGROUND SOIL SAMPLING						
WH-BG01@3'	08/05/21	3	8.13	1.26	0.784	0.418
WH-BG01@6'	08/05/21	6	8.26	1.18	0.643	1.34
WH-BG02@3'	08/05/21	3	7.98	2.10	1.56	0.278
WH-BG02@6'	08/05/21	6	8.27	1.34	0.902	0.545

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

NA = Constituent not analyzed