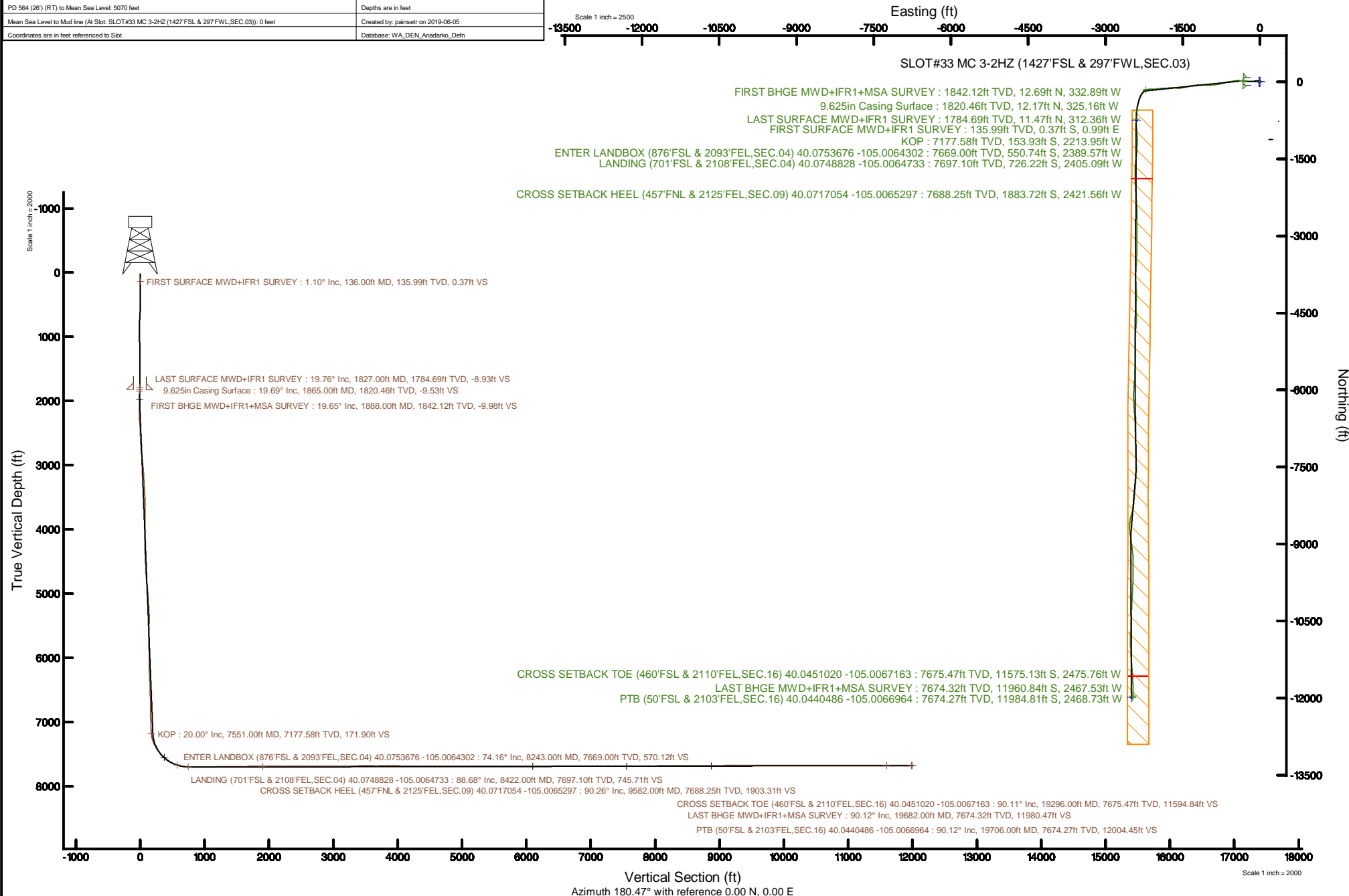


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Field: WELD COUNTY (UTM/TRUE NORTH) Well: MC 3-2HZ
Facility: SEC.03-T1N-R68W Wellbore: MC 3-2HZ PWB

Plot reference wellpath is MC 3-2HZ PWP Rev-A.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to PD 564 (26) (RT)	North Reference: True north
Measured depths are referenced to PD 564 (26) (RT)	Scale: True distance
PD 564 (26) (RT) to Mean Sea Level: 5070 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)): 0 feet	Created by: painsetr on 2019-06-05
Coordinates are in feet referenced to Slot	Database: WA_DEN, Anadarko, Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWP
Facility	SEC.03-T1N-R68W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Painsetr
Scale	0.999600	Report Generated	6/5/2019 at 8:30:22 AM
Convergence at slot	0.00°	Database/Source file	WA_DEN_Anadarko_Defn/MC_3-2HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-277.57	-881.24	1641009.99	14554753.55	40°04'37.013"N	104°59'52.364"W
Facility Reference Pt			1641890.86	14555031.06	40°04'39.756"N	104°59'41.028"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PD 564 (26') (RT) to Facility Vertical Datum	5070.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	5070.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03))	5070.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.47°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (223 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.00	110.780	0.00	0.00	0.00	0.00	1641009.99	14554753.54	40°04'37.013"N	104°59'52.364"W	0.00	
26.00	0.00	110.780	26.00	0.00	0.00	0.00	1641009.99	14554753.54	40°04'37.013"N	104°59'52.364"W	0.00	
136.00	1.100	110.780	135.99	0.37	-0.37	0.99	1641010.97	14554753.17	40°04'37.009"N	104°59'52.352"W	1.00	FIRST SURFACE MWD+IFR1 SURVEY
231.00	1.050	128.270	230.98	1.22	-1.24	2.52	1641012.51	14554752.31	40°04'37.001"N	104°59'52.332"W	0.35	
326.00	0.970	255.000	325.97	1.96	-1.98	2.43	1641012.42	14554751.56	40°04'36.993"N	104°59'52.333"W	1.90	
421.00	2.900	272.230	420.91	2.11	-2.10	-0.75	1641009.24	14554751.45	40°04'36.992"N	104°59'52.374"W	2.10	
517.00	3.160	300.440	516.78	0.71	-0.66	-5.46	1641004.53	14554752.88	40°04'37.006"N	104°59'52.435"W	1.56	
612.00	5.580	310.110	611.50	-3.55	3.64	-11.25	1640998.74	14554757.18	40°04'37.049"N	104°59'52.509"W	2.65	
707.00	7.820	292.970	705.86	-8.97	9.14	-20.73	1640989.26	14554762.68	40°04'37.103"N	104°59'52.631"W	3.14	
802.00	10.060	275.400	799.71	-12.16	12.44	-34.95	1640975.05	14554765.98	40°04'37.136"N	104°59'52.814"W	3.69	
897.00	12.130	271.260	892.93	-13.01	13.44	-53.19	1640956.82	14554766.98	40°04'37.146"N	104°59'53.049"W	2.33	
992.00	11.870	265.200	985.86	-12.25	12.84	-72.91	1640937.11	14554766.38	40°04'37.140"N	104°59'53.302"W	1.35	
1088.00	11.690	266.690	1079.84	-10.71	11.46	-92.45	1640917.57	14554764.99	40°04'37.126"N	104°59'53.554"W	0.37	
1183.00	14.020	266.520	1172.45	-9.28	10.20	-113.55	1640896.48	14554763.74	40°04'37.114"N	104°59'53.825"W	2.45	
1278.00	15.910	268.630	1264.23	-8.07	9.19	-138.06	1640871.99	14554762.73	40°04'37.104"N	104°59'54.140"W	2.07	
1373.00	17.490	269.770	1355.22	-7.48	8.82	-165.35	1640844.70	14554762.36	40°04'37.100"N	104°59'54.491"W	1.70	
1468.00	17.750	270.030	1445.76	-7.20	8.77	-194.11	1640815.96	14554762.31	40°04'37.099"N	104°59'54.861"W	0.29	
1563.00	18.980	271.000	1535.92	-7.23	9.05	-224.04	1640786.04	14554762.59	40°04'37.102"N	104°59'55.246"W	1.33	
1658.00	19.560	271.090	1625.60	-7.55	9.62	-255.38	1640754.71	14554763.16	40°04'37.108"N	104°59'55.650"W	0.61	
1753.00	19.780	271.880	1715.05	-8.12	10.45	-287.35	1640722.75	14554763.99	40°04'37.116"N	104°59'56.061"W	0.36	
1827.00	19.760	272.760	1784.69	-8.93	11.47	-312.36	1640697.76	14554765.00	40°04'37.126"N	104°59'56.383"W	0.40	LAST SURFACE MWD+IFR1 SURVEY
1888.00	19.650	274.040	1842.12	-9.98	12.69	-332.89	1640677.23	14554766.22	40°04'37.138"N	104°59'56.647"W	0.73	FIRST BHGE MWD+IFR1+MSA SURVEY
1977.00	19.450	276.200	1925.99	-12.40	15.34	-362.55	1640647.59	14554768.87	40°04'37.164"N	104°59'57.028"W	0.84	
2066.00	19.500	275.340	2009.90	-15.14	18.32	-392.07	1640618.08	14554771.85	40°04'37.194"N	104°59'57.408"W	0.33	
2156.00	19.910	272.300	2094.63	-16.91	20.34	-422.34	1640587.82	14554773.86	40°04'37.214"N	104°59'57.797"W	1.23	
2246.00	19.750	266.100	2179.30	-16.24	19.92	-452.82	1640557.35	14554773.44	40°04'37.210"N	104°59'58.190"W	2.34	
2335.00	19.790	260.500	2263.06	-12.49	16.41	-482.69	1640527.49	14554769.93	40°04'37.175"N	104°59'58.574"W	2.13	
2425.00	19.530	259.230	2347.82	-6.92	11.08	-512.49	1640497.70	14554764.61	40°04'37.122"N	104°59'58.957"W	0.56	
2514.00	19.080	262.390	2431.82	-1.98	6.37	-541.53	1640468.68	14554759.90	40°04'37.076"N	104°59'59.331"W	1.28	
2604.00	19.660	264.320	2516.72	1.71	2.93	-571.17	1640439.04	14554756.46	40°04'37.042"N	104°59'59.712"W	0.96	
2693.00	19.770	262.940	2600.51	5.28	-0.40	-601.01	1640409.22	14554753.13	40°04'37.009"N	105°00'00.096"W	0.54	
2783.00	19.740	260.370	2685.21	9.94	-4.82	-631.10	1640379.14	14554748.71	40°04'36.965"N	105°00'00.483"W	0.97	
2873.00	19.750	255.470	2769.93	16.54	-11.18	-660.81	1640349.45	14554742.36	40°04'36.902"N	105°00'00.865"W	1.84	
2962.00	19.310	252.620	2853.81	24.94	-19.34	-689.41	1640320.86	14554734.19	40°04'36.822"N	105°00'01.233"W	1.18	
3051.00	19.510	253.310	2937.75	33.83	-28.01	-717.69	1640292.59	14554725.53	40°04'36.736"N	105°00'01.597"W	0.34	
3141.00	19.170	256.690	3022.67	41.78	-35.73	-746.46	1640263.82	14554717.82	40°04'36.660"N	105°00'01.967"W	1.30	
3231.00	19.080	257.980	3107.71	48.48	-42.19	-775.23	1640235.07	14554711.35	40°04'36.596"N	105°00'02.337"W	0.48	
3320.00	19.540	260.080	3191.70	54.31	-47.78	-804.12	1640206.19	14554705.76	40°04'36.540"N	105°00'02.709"W	0.94	
3409.00	19.610	261.890	3275.56	59.22	-52.46	-833.57	1640176.76	14554701.09	40°04'36.494"N	105°00'03.087"W	0.69	
3499.00	19.380	261.060	3360.40	63.91	-56.91	-863.27	1640147.07	14554696.64	40°04'36.450"N	105°00'03.470"W	0.40	
3588.00	19.220	262.670	3444.40	68.31	-61.07	-892.39	1640117.96	14554692.48	40°04'36.409"N	105°00'03.844"W	0.62	
3678.00	19.220	265.430	3529.38	71.62	-64.14	-921.85	1640088.51	14554689.41	40°04'36.379"N	105°00'04.223"W	1.01	
3767.00	18.820	268.860	3613.52	73.31	-65.59	-950.80	1640059.57	14554687.95	40°04'36.364"N	105°00'04.596"W	1.33	
3857.00	19.450	270.530	3698.55	73.70	-65.74	-980.30	1640030.08	14554687.80	40°04'36.363"N	105°00'04.975"W	0.93	
3946.00	19.210	269.760	3782.53	73.86	-65.67	-1009.76	1640000.63	14554687.88	40°04'36.364"N	105°00'05.354"W	0.39	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (223 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4036.00	18.890	272.250	3867.61	73.59	-65.16	-1039.13	1639971.28	14554688.39	40°04'36.369"N	105°00'05.732"W	0.97	
4125.00	19.750	272.140	3951.59	72.70	-64.03	-1068.55	1639941.87	14554689.51	40°04'36.380"N	105°00'06.110"W	0.97	
4214.00	19.560	272.020	4035.41	71.86	-62.94	-1098.46	1639911.97	14554690.60	40°04'36.391"N	105°00'06.495"W	0.22	
4304.00	19.450	273.180	4120.24	70.74	-61.58	-1128.48	1639881.96	14554691.96	40°04'36.404"N	105°00'06.881"W	0.45	
4393.00	20.140	271.140	4203.99	69.86	-60.46	-1158.60	1639851.86	14554693.09	40°04'36.415"N	105°00'07.269"W	1.10	
4483.00	20.200	265.740	4288.47	70.95	-61.30	-1189.59	1639820.88	14554692.24	40°04'36.407"N	105°00'07.667"W	2.07	
4572.00	20.150	261.840	4372.02	74.52	-64.62	-1220.08	1639790.39	14554688.92	40°04'36.374"N	105°00'08.060"W	1.51	
4661.00	19.970	261.670	4455.62	79.14	-69.00	-1250.30	1639760.20	14554684.55	40°04'36.331"N	105°00'08.448"W	0.21	
4751.00	19.750	266.110	4540.27	82.65	-72.25	-1280.68	1639729.83	14554681.29	40°04'36.298"N	105°00'08.839"W	1.69	
4840.00	20.160	263.840	4623.93	85.56	-74.92	-1310.93	1639699.59	14554678.62	40°04'36.272"N	105°00'09.228"W	0.98	
4930.00	20.290	259.370	4708.38	90.35	-79.46	-1341.69	1639668.84	14554674.08	40°04'36.227"N	105°00'09.624"W	1.72	
5019.00	19.580	253.250	4792.06	97.73	-86.61	-1371.14	1639639.40	14554666.94	40°04'36.157"N	105°00'10.003"W	2.48	
5109.00	19.490	252.320	4876.88	106.87	-95.51	-1399.88	1639610.67	14554658.03	40°04'36.069"N	105°00'10.373"W	0.36	
5198.00	19.410	256.770	4960.80	115.00	-103.41	-1428.43	1639582.14	14554650.14	40°04'35.990"N	105°00'10.740"W	1.67	
5287.00	19.750	260.080	5044.66	121.21	-109.38	-1457.63	1639552.94	14554644.17	40°04'35.931"N	105°00'11.115"W	1.30	
5377.00	19.570	261.210	5129.41	126.38	-114.31	-1487.51	1639523.08	14554639.25	40°04'35.883"N	105°00'11.500"W	0.47	
5467.00	19.360	260.510	5214.27	131.38	-119.07	-1517.12	1639493.48	14554634.49	40°04'35.836"N	105°00'11.881"W	0.35	
5556.00	19.490	264.960	5298.21	135.35	-122.81	-1546.46	1639464.15	14554630.75	40°04'35.799"N	105°00'12.258"W	1.67	
5645.00	19.280	270.560	5382.17	136.75	-123.97	-1575.95	1639434.68	14554629.59	40°04'35.787"N	105°00'12.637"W	2.10	
5735.00	19.480	272.910	5467.07	136.09	-123.06	-1605.79	1639404.85	14554630.50	40°04'35.796"N	105°00'13.021"W	0.89	
5825.00	19.630	273.280	5551.88	134.71	-121.43	-1635.87	1639374.78	14554632.12	40°04'35.812"N	105°00'13.408"W	0.22	
5914.00	19.730	271.210	5635.68	133.78	-120.26	-1665.82	1639344.84	14554633.29	40°04'35.824"N	105°00'13.793"W	0.79	
6004.00	19.520	270.070	5720.46	133.68	-119.92	-1696.04	1639314.63	14554633.63	40°04'35.827"N	105°00'14.182"W	0.49	
6093.00	19.680	267.800	5804.30	134.48	-120.48	-1725.88	1639284.80	14554633.07	40°04'35.822"N	105°00'14.566"W	0.87	
6183.00	19.660	267.320	5889.05	136.02	-121.77	-1756.15	1639254.55	14554631.78	40°04'35.809"N	105°00'14.956"W	0.18	
6272.00	19.270	267.010	5972.96	137.72	-123.23	-1785.77	1639224.94	14554630.32	40°04'35.794"N	105°00'15.337"W	0.45	
6362.00	19.860	267.740	6057.76	139.35	-124.61	-1815.88	1639194.84	14554628.94	40°04'35.781"N	105°00'15.724"W	0.71	
6451.00	19.480	267.710	6141.57	140.78	-125.80	-1845.81	1639164.92	14554627.75	40°04'35.769"N	105°00'16.109"W	0.43	
6541.00	19.650	267.280	6226.38	142.34	-127.12	-1875.92	1639134.82	14554626.43	40°04'35.756"N	105°00'16.496"W	0.25	
6631.00	19.590	262.090	6311.16	145.38	-129.91	-1905.98	1639104.77	14554623.64	40°04'35.728"N	105°00'16.883"W	1.94	
6720.00	19.290	261.780	6395.08	149.77	-134.07	-1935.31	1639075.46	14554619.48	40°04'35.687"N	105°00'17.260"W	0.36	
6810.00	18.210	264.760	6480.31	153.41	-137.48	-1964.03	1639046.75	14554616.07	40°04'35.653"N	105°00'17.630"W	1.60	
6899.00	18.790	268.010	6564.71	155.41	-139.25	-1992.20	1639018.59	14554614.31	40°04'35.636"N	105°00'17.992"W	1.33	
6989.00	19.610	268.710	6649.70	156.49	-140.09	-2021.79	1638989.01	14554613.46	40°04'35.628"N	105°00'18.373"W	0.95	
7079.00	19.200	268.340	6734.59	157.51	-140.86	-2051.68	1638959.13	14554612.69	40°04'35.620"N	105°00'18.757"W	0.48	
7168.00	20.280	267.120	6818.36	158.95	-142.06	-2081.72	1638929.11	14554611.49	40°04'35.608"N	105°00'19.144"W	1.30	
7258.00	20.620	265.680	6902.69	161.18	-144.04	-2113.10	1638897.74	14554609.52	40°04'35.589"N	105°00'19.547"W	0.67	
7347.00	20.260	266.260	6986.08	163.62	-146.22	-2144.10	1638866.75	14554607.33	40°04'35.567"N	105°00'19.946"W	0.46	
7437.00	20.300	264.410	7070.51	166.41	-148.76	-2175.19	1638835.68	14554604.79	40°04'35.542"N	105°00'20.346"W	0.71	
7527.00	19.930	262.210	7155.02	170.26	-152.36	-2205.92	1638804.95	14554601.20	40°04'35.506"N	105°00'20.741"W	0.94	
7551.00†	20.002	255.586	7177.58	171.90	-153.93	-2213.95	1638796.93	14554599.62	40°04'35.491"N	105°00'20.845"W	9.42	KOP
7616.00	21.380	238.630	7238.44	181.01	-162.88	-2234.86	1638776.03	14554590.68	40°04'35.402"N	105°00'21.114"W	9.42	
7706.00	27.970	219.460	7320.31	206.13	-187.78	-2262.35	1638748.55	14554565.79	40°04'35.156"N	105°00'21.467"W	11.43	
7795.00	33.830	211.340	7396.67	243.67	-225.10	-2288.53	1638722.38	14554528.48	40°04'34.787"N	105°00'21.804"W	8.07	
7885.00	39.250	205.720	7468.98	290.97	-272.20	-2313.95	1638696.98	14554481.40	40°04'34.322"N	105°00'22.131"W	7.07	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (223 stations) † = interpolated/extrapolated station

MD (ft)	Inclination [°]	Azimuth [°]	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	DLS "/100ft	Comments
7974.00	45.890	201.530	7534.50	346.32	-327.36	-2337.92	1638673.01	14554426.26	40°04'33.777"N	105°00'22.439"W	8.11	
8064.00	54.760	195.070	7591.94	412.21	-393.08	-2359.39	1638651.55	14554360.57	40°04'33.127"N	105°00'22.715"W	11.29	
8153.00	64.240	190.160	7637.08	487.09	-467.83	-2375.96	1638635.00	14554285.85	40°04'32.389"N	105°00'22.928"W	11.66	
8243.00	74.160	188.540	7669.00	570.12	-550.74	-2389.57	1638621.39	14554202.97	40°04'31.569"N	105°00'23.103"W	11.15	ENTER LANDBOX (876'FSL & 2093'FEL,SEC.04) 40.0753676 -105.0064302
8333.00	80.510	185.430	7688.72	657.31	-637.85	-2400.21	1638610.76	14554115.90	40°04'30.708"N	105°00'23.240"W	7.82	
8422.00	88.680	180.920	7697.10	745.71	-726.22	-2405.09	1638605.88	14554027.56	40°04'29.835"N	105°00'23.303"W	10.47	LANDING (701'FSL & 2108'FEL,SEC.04) 40.0748828 -105.0064733
8512.00	89.480	175.810	7698.55	835.61	-816.14	-2402.52	1638608.45	14553937.68	40°04'28.946"N	105°00'23.270"W	5.75	
8601.00	90.120	174.390	7698.86	924.22	-904.81	-2394.92	1638616.05	14553849.04	40°04'28.070"N	105°00'23.172"W	1.75	
8691.00	90.520	176.580	7698.36	1013.87	-994.52	-2387.84	1638623.13	14553759.36	40°04'27.184"N	105°00'23.081"W	2.47	
8780.00	90.650	178.740	7697.45	1102.75	-1083.44	-2384.20	1638626.77	14553670.48	40°04'26.305"N	105°00'23.034"W	2.43	
8870.00	90.430	180.740	7696.60	1192.74	-1173.43	-2383.79	1638627.18	14553580.53	40°04'25.416"N	105°00'23.028"W	2.24	
8960.00	90.920	182.820	7695.54	1282.70	-1263.38	-2386.59	1638624.39	14553490.62	40°04'24.527"N	105°00'23.064"W	2.37	
9049.00	90.310	182.930	7694.59	1371.62	-1352.26	-2391.05	1638619.93	14553401.77	40°04'23.648"N	105°00'23.121"W	0.70	
9139.00	91.360	187.170	7693.27	1461.30	-1441.88	-2398.97	1638612.01	14553312.19	40°04'22.763"N	105°00'23.223"W	4.85	
9228.00	90.800	186.450	7691.60	1549.74	-1530.23	-2409.52	1638601.47	14553223.87	40°04'21.890"N	105°00'23.359"W	1.02	
9317.00	90.680	183.910	7690.45	1638.42	-1618.86	-2417.56	1638593.44	14553135.28	40°04'21.014"N	105°00'23.462"W	2.86	
9407.00	90.550	181.500	7689.48	1728.34	-1708.74	-2421.80	1638589.20	14553045.43	40°04'20.126"N	105°00'23.517"W	2.68	
9496.00	90.400	179.550	7688.74	1817.33	-1797.73	-2422.62	1638588.38	14552956.48	40°04'19.246"N	105°00'23.527"W	2.20	
9582.00†	90.257	179.044	7688.25	1903.31	-1883.72	-2421.56	1638589.44	14552870.52	40°04'18.396"N	105°00'23.513"W	0.61	CROSS SETBACK HEEL (457'FNL & 2125'FEL,SEC.09) 40.0717054 -105.0065297
9586.00	90.250	179.020	7688.23	1907.31	-1887.72	-2421.50	1638589.51	14552866.52	40°04'18.357"N	105°00'23.512"W	0.61	
9675.00	90.430	177.830	7687.70	1996.25	-1976.69	-2419.05	1638591.96	14552777.59	40°04'17.478"N	105°00'23.481"W	1.35	
9764.00	90.340	176.930	7687.11	2085.12	-2065.59	-2414.98	1638596.02	14552688.73	40°04'16.599"N	105°00'23.428"W	1.02	
9854.00	90.310	176.900	7686.59	2174.95	-2155.46	-2410.14	1638600.87	14552598.89	40°04'15.711"N	105°00'23.366"W	0.05	
9943.00	90.490	176.690	7685.97	2263.76	-2244.32	-2405.16	1638605.84	14552510.07	40°04'14.833"N	105°00'23.302"W	0.31	
10033.00	90.060	176.680	7685.54	2353.51	-2334.12	-2399.18	1638611.83	14552420.31	40°04'13.945"N	105°00'23.225"W	1.22	
10123.00	90.310	176.840	7685.25	2443.27	-2423.92	-2393.30	1638617.70	14552330.54	40°04'13.058"N	105°00'23.149"W	1.32	
10212.00	90.520	178.920	7684.61	2532.17	-2512.85	-2390.01	1638621.00	14552241.64	40°04'12.179"N	105°00'23.107"W	2.35	
10302.00	90.120	180.530	7684.10	2622.16	-2602.85	-2389.58	1638621.43	14552151.69	40°04'11.290"N	105°00'23.101"W	1.84	
10391.00	90.090	180.160	7683.94	2711.15	-2691.85	-2390.12	1638620.90	14552062.72	40°04'10.410"N	105°00'23.108"W	0.42	
10480.00	89.780	180.290	7684.04	2800.15	-2780.85	-2390.47	1638620.55	14551973.76	40°04'09.531"N	105°00'23.112"W	0.38	
10570.00	90.180	180.970	7684.07	2890.15	-2870.84	-2391.46	1638619.56	14551883.80	40°04'08.641"N	105°00'23.125"W	0.88	
10660.00	90.120	180.770	7683.84	2980.15	-2960.83	-2392.82	1638618.20	14551793.85	40°04'07.752"N	105°00'23.142"W	0.23	
10749.00	89.940	179.740	7683.79	3069.15	-3049.83	-2393.22	1638617.80	14551704.89	40°04'06.873"N	105°00'23.147"W	1.17	
10839.00	89.940	178.520	7683.88	3159.12	-3139.81	-2391.85	1638619.17	14551614.94	40°04'05.983"N	105°00'23.130"W	1.36	
10928.00	90.060	180.300	7683.88	3248.10	-3228.81	-2390.94	1638620.09	14551525.98	40°04'05.104"N	105°00'23.118"W	2.00	
11018.00	90.340	180.830	7683.57	3338.10	-3318.80	-2391.82	1638619.21	14551436.02	40°04'04.215"N	105°00'23.129"W	0.67	
11107.00	90.340	181.620	7683.04	3427.09	-3407.78	-2393.73	1638617.31	14551347.08	40°04'03.335"N	105°00'23.153"W	0.89	
11197.00	89.750	182.510	7682.97	3517.06	-3497.72	-2396.97	1638614.07	14551257.18	40°04'02.447"N	105°00'23.195"W	1.19	
11286.00	89.850	184.560	7683.28	3605.92	-3586.54	-2402.46	1638608.58	14551168.39	40°04'01.569"N	105°00'23.265"W	2.31	
11376.00	90.090	184.020	7683.33	3695.72	-3676.29	-2409.19	1638601.86	14551078.67	40°04'00.682"N	105°00'23.352"W	0.66	
11465.00	89.970	180.680	7683.28	3784.66	-3765.20	-2412.84	1638598.21	14550989.80	40°03'59.803"N	105°00'23.399"W	3.76	
11555.00	90.280	178.040	7683.09	3874.64	-3855.19	-2411.83	1638599.22	14550899.85	40°03'58.914"N	105°00'23.386"W	2.95	
11644.00	89.780	177.270	7683.04	3963.53	-3944.11	-2408.19	1638602.86	14550810.96	40°03'58.035"N	105°00'23.339"W	1.03	
11734.00	89.630	176.000	7683.50	4053.32	-4033.96	-2402.91	1638608.14	14550721.15	40°03'57.147"N	105°00'23.271"W	1.42	
11823.00	89.690	179.370	7684.03	4142.21	-4122.87	-2399.31	1638611.74	14550632.28	40°03'56.269"N	105°00'23.224"W	3.79	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (223 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11913.00	89.850	181.530	7684.39	4232.20	-4212.86	-2400.02	1638611.03	14550542.32	40°03'55.379"N	105°00'23.233"W	2.41	
12003.00	89.660	182.800	7684.78	4322.16	-4302.79	-2403.42	1638607.64	14550452.42	40°03'54.491"N	105°00'23.277"W	1.43	
12092.00	89.510	180.030	7685.42	4411.13	-4391.75	-2405.62	1638605.44	14550363.50	40°03'53.611"N	105°00'23.305"W	3.12	
12181.00	89.540	176.090	7686.16	4500.03	-4480.68	-2402.61	1638608.45	14550274.61	40°03'52.733"N	105°00'23.266"W	4.43	
12271.00	89.910	175.720	7686.59	4589.75	-4570.45	-2396.18	1638614.88	14550184.87	40°03'51.846"N	105°00'23.183"W	0.58	
12361.00	90.580	184.310	7686.21	4679.66	-4660.37	-2396.20	1638614.86	14550094.99	40°03'50.957"N	105°00'23.184"W	9.57	
12450.00	89.880	186.750	7685.85	4768.30	-4748.94	-2404.78	1638606.29	14550006.45	40°03'50.082"N	105°00'23.294"W	2.85	
12540.00	89.660	184.940	7686.21	4857.90	-4838.47	-2413.94	1638597.13	14549916.96	40°03'49.197"N	105°00'23.412"W	2.03	
12629.00	89.630	182.410	7686.76	4946.75	-4927.28	-2419.65	1638591.43	14549828.19	40°03'48.319"N	105°00'23.485"W	2.84	
12719.00	89.780	180.750	7687.23	5036.73	-5017.24	-2422.13	1638588.95	14549738.26	40°03'47.430"N	105°00'23.517"W	1.85	
12808.00	89.820	180.570	7687.54	5125.73	-5106.23	-2423.15	1638587.93	14549649.30	40°03'46.551"N	105°00'23.530"W	0.21	
12898.00	89.970	179.190	7687.70	5215.73	-5196.23	-2422.96	1638588.12	14549559.34	40°03'45.661"N	105°00'23.527"W	1.54	
12987.00	89.910	180.160	7687.79	5304.72	-5285.23	-2422.46	1638588.63	14549470.38	40°03'44.782"N	105°00'23.521"W	1.09	
13077.00	89.450	180.870	7688.30	5394.71	-5375.22	-2423.27	1638587.82	14549380.42	40°03'43.893"N	105°00'23.531"W	0.94	
13166.00	89.880	180.620	7688.82	5483.71	-5464.21	-2424.43	1638586.67	14549291.47	40°03'43.013"N	105°00'23.546"W	0.56	
13255.00	89.690	181.160	7689.15	5572.71	-5553.20	-2425.81	1638585.29	14549202.52	40°03'42.134"N	105°00'23.563"W	0.64	
13345.00	89.970	182.140	7689.42	5662.69	-5643.16	-2428.40	1638582.70	14549112.59	40°03'41.245"N	105°00'23.596"W	1.13	
13435.00	90.220	181.950	7689.27	5752.65	-5733.11	-2431.61	1638579.49	14549022.68	40°03'40.356"N	105°00'23.638"W	0.35	
13524.00	89.940	183.620	7689.15	5841.58	-5822.00	-2435.94	1638575.17	14548933.83	40°03'39.477"N	105°00'23.693"W	1.90	
13613.00	90.030	184.770	7689.17	5930.39	-5910.76	-2442.45	1638568.66	14548845.10	40°03'38.600"N	105°00'23.777"W	1.30	
13703.00	90.180	184.260	7689.00	6020.16	-6000.48	-2449.53	1638561.58	14548755.42	40°03'37.714"N	105°00'23.868"W	0.59	
13793.00	90.250	180.700	7688.67	6110.09	-6090.38	-2453.42	1638557.69	14548665.56	40°03'36.825"N	105°00'23.918"W	3.96	
13882.00	90.520	178.240	7688.07	6199.07	-6179.37	-2452.60	1638558.52	14548576.60	40°03'35.946"N	105°00'23.907"W	2.78	
13971.00	90.000	176.960	7687.66	6287.95	-6268.29	-2448.87	1638562.25	14548487.72	40°03'35.067"N	105°00'23.859"W	1.55	
14061.00	90.340	175.430	7687.40	6377.70	-6358.08	-2442.90	1638568.22	14548397.96	40°03'34.180"N	105°00'23.782"W	1.74	
14150.00	90.120	174.650	7687.04	6466.30	-6446.75	-2435.21	1638575.91	14548309.33	40°03'33.304"N	105°00'23.683"W	0.91	
14240.00	90.250	178.160	7686.75	6556.06	-6536.56	-2429.57	1638581.55	14548219.56	40°03'32.416"N	105°00'23.610"W	3.90	
14329.00	90.180	178.160	7686.42	6644.99	-6625.51	-2426.71	1638584.41	14548130.64	40°03'31.537"N	105°00'23.573"W	0.08	
14419.00	90.150	176.780	7686.16	6734.86	-6715.42	-2422.73	1638588.39	14548040.77	40°03'30.648"N	105°00'23.522"W	1.53	
14509.00	89.970	178.030	7686.06	6824.73	-6805.33	-2418.66	1638592.46	14547950.90	40°03'29.760"N	105°00'23.470"W	1.40	
14598.00	90.280	178.690	7685.87	6913.67	-6894.29	-2416.11	1638595.01	14547861.97	40°03'28.881"N	105°00'23.437"W	0.82	
14687.00	90.030	179.130	7685.63	7002.64	-6983.27	-2414.42	1638596.70	14547773.02	40°03'28.002"N	105°00'23.415"W	0.57	
14777.00	90.220	179.730	7685.43	7092.62	-7073.27	-2413.52	1638597.60	14547683.06	40°03'27.112"N	105°00'23.403"W	0.70	
14866.00	90.180	179.660	7685.12	7181.61	-7162.27	-2413.05	1638598.08	14547594.10	40°03'26.233"N	105°00'23.397"W	0.09	
14956.00	90.030	178.620	7684.95	7271.59	-7252.25	-2411.70	1638599.43	14547504.15	40°03'25.343"N	105°00'23.380"W	1.17	
15045.00	90.150	176.540	7684.81	7360.47	-7341.17	-2407.94	1638603.19	14547415.27	40°03'24.465"N	105°00'23.331"W	2.34	
15135.00	90.250	177.530	7684.50	7450.31	-7431.05	-2403.29	1638607.84	14547325.43	40°03'23.577"N	105°00'23.271"W	1.11	
15224.00	89.720	179.600	7684.52	7539.25	-7520.01	-2401.06	1638610.07	14547236.50	40°03'22.697"N	105°00'23.243"W	2.40	
15314.00	90.180	182.440	7684.60	7629.24	-7609.99	-2402.66	1638608.47	14547146.56	40°03'21.808"N	105°00'23.263"W	3.20	
15403.00	90.120	184.540	7684.37	7718.11	-7698.82	-2408.08	1638603.06	14547057.76	40°03'20.930"N	105°00'23.333"W	2.36	
15493.00	90.090	184.590	7684.20	7807.88	-7788.53	-2415.24	1638595.90	14546968.08	40°03'20.044"N	105°00'23.425"W	0.06	
15582.00	90.180	184.520	7683.99	7896.65	-7877.25	-2422.31	1638588.84	14546879.40	40°03'19.167"N	105°00'23.515"W	0.13	
15671.00	90.340	185.380	7683.59	7985.38	-7965.92	-2429.99	1638581.17	14546790.77	40°03'18.291"N	105°00'23.614"W	0.98	
15761.00	90.120	184.590	7683.23	8075.10	-8055.58	-2437.81	1638573.35	14546701.15	40°03'17.405"N	105°00'23.714"W	0.91	
15850.00	89.750	184.300	7683.33	8163.88	-8144.31	-2444.71	1638566.46	14546612.45	40°03'16.528"N	105°00'23.803"W	0.53	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (223 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS "/100ft	Comments
15940.00	91.140	186.390	7682.63	8253.55	-8233.91	-2453.09	1638558.08	14546522.89	40°03'15.642"N	105°00'23.911"W	2.79	
16029.00	90.520	191.780	7681.34	8341.50	-8321.75	-2467.14	1638544.04	14546435.08	40°03'14.774"N	105°00'24.091"W	6.10	
16119.00	91.050	197.900	7680.11	8428.63	-8408.70	-2490.17	1638521.02	14546348.17	40°03'13.915"N	105°00'24.387"W	6.82	
16208.00	90.150	192.730	7679.17	8514.62	-8494.50	-2513.67	1638497.53	14546262.40	40°03'13.067"N	105°00'24.689"W	5.90	
16298.00	90.060	183.300	7679.01	8603.74	-8583.52	-2526.21	1638485.00	14546173.41	40°03'12.187"N	105°00'24.851"W	10.48	
16387.00	90.280	179.640	7678.75	8692.71	-8672.48	-2528.49	1638482.72	14546084.49	40°03'11.308"N	105°00'24.880"W	4.12	
16477.00	90.430	175.360	7678.19	8782.57	-8762.37	-2524.56	1638486.65	14545994.64	40°03'10.420"N	105°00'24.829"W	4.76	
16566.00	90.400	172.070	7677.54	8870.94	-8850.82	-2514.82	1638496.39	14545906.22	40°03'09.546"N	105°00'24.704"W	3.70	
16656.00	90.250	171.600	7677.03	8959.92	-8939.91	-2502.04	1638509.17	14545817.17	40°03'08.666"N	105°00'24.539"W	0.55	
16745.00	90.120	172.710	7676.74	9047.98	-9028.07	-2489.89	1638521.31	14545729.04	40°03'07.794"N	105°00'24.383"W	1.26	
16835.00	90.180	172.030	7676.51	9137.08	-9117.27	-2477.94	1638533.26	14545639.88	40°03'06.913"N	105°00'24.229"W	0.76	
16924.00	90.150	174.050	7676.25	9225.33	-9205.61	-2467.16	1638544.04	14545551.57	40°03'06.040"N	105°00'24.090"W	2.27	
17014.00	90.030	178.610	7676.11	9315.07	-9295.40	-2461.40	1638549.80	14545461.82	40°03'05.152"N	105°00'24.016"W	5.07	
17104.00	89.940	180.480	7676.13	9405.06	-9385.40	-2460.68	1638550.52	14545371.86	40°03'04.263"N	105°00'24.007"W	2.08	
17193.00	90.250	181.020	7675.99	9494.06	-9474.39	-2461.85	1638549.35	14545282.91	40°03'03.384"N	105°00'24.022"W	0.70	
17283.00	90.250	180.540	7675.59	9584.05	-9564.38	-2463.07	1638548.13	14545192.95	40°03'02.494"N	105°00'24.037"W	0.53	
17372.00	90.150	181.040	7675.28	9673.05	-9653.37	-2464.30	1638546.91	14545104.00	40°03'01.615"N	105°00'24.053"W	0.57	
17462.00	90.150	182.260	7675.05	9763.03	-9743.33	-2466.89	1638544.32	14545014.07	40°03'00.726"N	105°00'24.086"W	1.36	
17551.00	90.090	182.690	7674.86	9851.98	-9832.25	-2470.74	1638540.48	14544925.19	40°02'59.847"N	105°00'24.136"W	0.49	
17641.00	90.150	182.870	7674.67	9941.90	-9922.14	-2475.10	1638536.12	14544835.33	40°02'58.959"N	105°00'24.192"W	0.21	
17730.00	90.250	182.920	7674.36	10030.82	-10011.03	-2479.60	1638531.63	14544746.48	40°02'58.080"N	105°00'24.249"W	0.13	
17820.00	90.150	182.920	7674.05	10120.74	-10100.91	-2484.18	1638527.05	14544656.64	40°02'57.192"N	105°00'24.308"W	0.11	
17909.00	90.220	183.180	7673.76	10209.65	-10189.78	-2488.92	1638522.31	14544567.80	40°02'56.314"N	105°00'24.369"W	0.30	
17999.00	90.060	182.950	7673.54	10299.55	-10279.65	-2493.73	1638517.51	14544477.96	40°02'55.426"N	105°00'24.431"W	0.31	
18089.00	89.750	182.360	7673.69	10389.49	-10369.56	-2497.90	1638513.34	14544388.10	40°02'54.537"N	105°00'24.484"W	0.74	
18268.00	90.250	182.180	7673.69	10568.40	-10548.42	-2504.99	1638506.26	14544209.31	40°02'52.770"N	105°00'24.575"W	0.30	
18357.00	91.080	182.190	7672.66	10657.35	-10637.34	-2508.38	1638502.87	14544120.42	40°02'51.891"N	105°00'24.619"W	0.93	
18447.00	89.380	181.000	7672.30	10747.33	-10727.30	-2510.89	1638500.37	14544030.49	40°02'51.002"N	105°00'24.651"W	2.31	
18537.00	89.480	180.540	7673.19	10837.32	-10817.29	-2512.09	1638499.16	14543940.54	40°02'50.113"N	105°00'24.666"W	0.52	
18626.00	89.480	179.580	7674.00	10926.32	-10906.29	-2512.19	1638499.07	14543851.58	40°02'49.233"N	105°00'24.667"W	1.08	
18805.00	89.260	177.610	7675.97	11105.20	-11085.21	-2507.80	1638503.46	14543672.73	40°02'47.465"N	105°00'24.611"W	1.11	
18895.00	90.250	176.810	7676.35	11195.05	-11175.10	-2503.42	1638507.84	14543582.87	40°02'46.577"N	105°00'24.554"W	1.41	
18985.00	90.250	175.540	7675.96	11284.80	-11264.90	-2497.41	1638513.84	14543493.11	40°02'45.689"N	105°00'24.477"W	1.41	
19074.00	89.880	175.180	7675.86	11373.44	-11353.61	-2490.22	1638521.04	14543404.44	40°02'44.813"N	105°00'24.384"W	0.58	
19163.00	90.150	176.460	7675.84	11462.15	-11442.37	-2483.73	1638527.53	14543315.72	40°02'43.936"N	105°00'24.301"W	1.47	
19253.00	90.180	176.600	7675.58	11551.94	-11532.20	-2478.28	1638532.98	14543225.92	40°02'43.048"N	105°00'24.230"W	0.16	
19296.00†	90.108	176.682	7675.47	11594.84	-11575.13	-2475.76	1638535.50	14543183.01	40°02'42.624"N	105°00'24.198"W	0.25	CROSS SETBACK TOE (460'FSL & 2110'FEL,SEC.16) 40.0451020 -105.0067163
19342.00	90.030	176.770	7675.41	11640.74	-11621.06	-2473.13	1638538.12	14543137.10	40°02'42.170"N	105°00'24.164"W	0.25	
19431.00	90.220	177.170	7675.22	11729.58	-11709.93	-2468.43	1638542.83	14543048.26	40°02'41.292"N	105°00'24.104"W	0.50	
19521.00	90.220	179.120	7674.87	11819.50	-11799.88	-2465.52	1638545.74	14542958.35	40°02'40.403"N	105°00'24.066"W	2.17	
19610.00	90.220	180.630	7674.53	11908.49	-11888.87	-2465.32	1638545.94	14542869.39	40°02'39.523"N	105°00'24.063"W	1.70	
19682.00	90.120	182.880	7674.32	11980.47	-11960.84	-2467.53	1638543.74	14542797.46	40°02'38.812"N	105°00'24.092"W	3.13	LAST BHGE MWD+IFR1+MSA SURVEY
19706.00	90.120	182.880	7674.27	12004.45	-11984.81	-2468.73	1638542.53	14542773.50	40°02'38.575"N	105°00'24.107"W	0.00	PTB (50'FSL & 2103'FEL,SEC.16) 40.0440486 -105.0066964

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

HOLE & CASING SECTIONS - Ref Wellbore: MC 3-2HZ AWB Ref Wellpath: MC 3-2HZ AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	26.00	1865.00	1839.00	26.00	1820.46	0.00	0.00	12.17	-325.16

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.09-T1N-R68W	26.00	0.00	-14.83	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	polygon
SEC.16-T1N-R68W	26.00	0.00	-14.83	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	polygon
MC 3-2HZ BHL REV-1(50'FSL & 2127'FEL,SEC.16)	7678.00	-11985.42	-2492.99	1638518.29	14542772.88	40°02'38.569"N	105°00'24.419"W	point
MC 3-2HZ LANDBOX	7691.00	0.00	0.00	1641009.99	14554753.54	40°04'37.013"N	104°59'52.364"W	polygon
MC 3-2HZ SETBACK 1	7691.00	0.00	0.00	1641009.99	14554753.54	40°04'37.013"N	104°59'52.364"W	polygon
MC 3-2HZ SETBACK 2	7691.00	0.00	0.00	1641009.99	14554753.54	40°04'37.013"N	104°59'52.364"W	polygon
MC 3-2HZ HEEL REV-1(673'FSL & 2102'FEL,SEC.04)	7702.00	-750.71	-2401.77	1638609.20	14554003.08	40°04'29.593"N	105°00'23.260"W	point

WELLPATH COMPOSITION - Ref Wellbore: MC 3-2HZ AWB Ref Wellpath: MC 3-2HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	1827.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <136 - 1827>	MC 3-2HZ AWB
1827.00	19682.00	Custom APC_ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+MSA <1888 - 19682>	MC 3-2HZ AWB
19682.00	19706.00	Blind Drilling (std)	Projection to bit	MC 3-2HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 MC 3-2HZ (1427'FSL & 297'FWL,SEC.03)
Area	COLORADO	Well	MC 3-2HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-2HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
136.00	1.100	110.780	135.99	FIRST SURFACE MWD+IFR1 SURVEY
1827.00	19.760	272.760	1784.69	LAST SURFACE MWD+IFR1 SURVEY
1888.00	19.650	274.040	1842.12	FIRST BHGE MWD+IFR1+MSA SURVEY
7551.00	20.002	255.586	7177.58	KOP
8243.00	74.160	188.540	7669.00	ENTER LANDBOX (876'FSL & 2093'FEL,SEC.04) 40.0753676 -105.0064302
8422.00	88.680	180.920	7697.10	LANDING (701'FSL & 2108'FEL,SEC.04) 40.0748828 -105.0064733
9582.00	90.257	179.044	7688.25	CROSS SETBACK HEEL (457'FNL & 2125'FEL,SEC.09) 40.0717054 -105.0065297
19296.00	90.108	176.682	7675.47	CROSS SETBACK TOE (460'FSL & 2110'FEL,SEC.16) 40.0451020 -105.0067163
19682.00	90.120	182.880	7674.32	LAST BHGE MWD+IFR1+MSA SURVEY
19706.00	90.120	182.880	7674.27	PTB (50'FSL & 2103'FEL,SEC.16) 40.0440486 -105.0066964