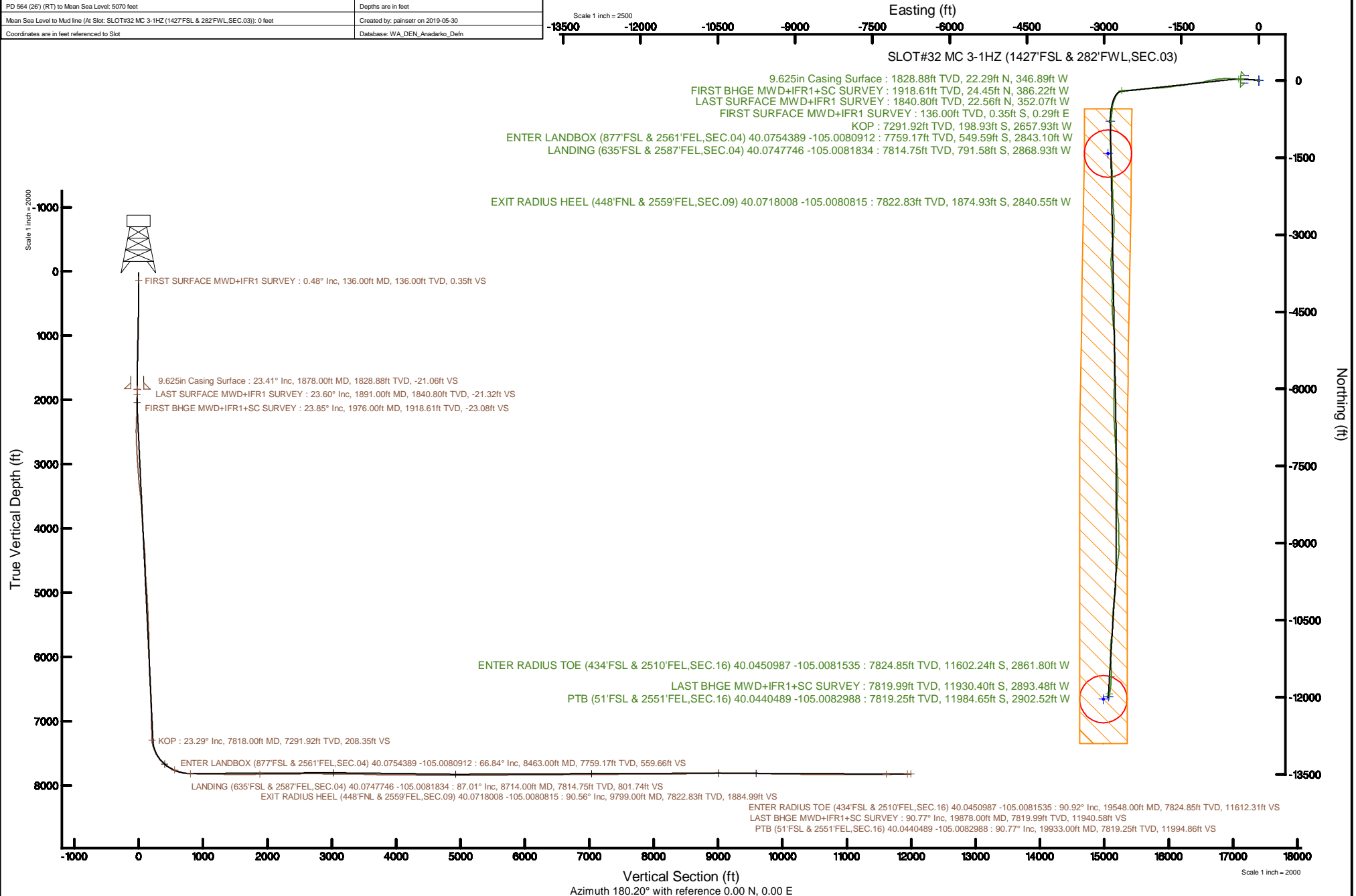


Location:	COLORADO	Slot:	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	MC 3-1HZ
Facility:	SEC.03-T1N-R68W	Wellbore:	MC 3-1HZ PWB

Plot reference wellpath is MC 3-1HZ 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#32 MC 3-1HZ (1427FSL & 282FWSL,SEC.03)): 0 feet	Created by: painseer on 2019-05-30
Coordinates are in feet referenced to Slot	Database: WA, DEN, Andariko, Delfi



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
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	5/30/2019 at 12:48:50 PM
Convergence at slot	0.00°	Database/Source file	WA_DEN_Anadarko_Defn/MC 3-1HZ_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	-896.08	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"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#32 MC 3-1HZ (1427'FSL & 282'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	180.20°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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†	0.000	140.310	0.00	0.00	0.00	0.00	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	0.00	
26.00	0.000	140.310	26.00	0.00	0.00	0.00	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	0.00	
136.00	0.480	140.310	136.00	0.35	-0.35	0.29	1640995.46	14554753.19	40°04'37.009"N	104°59'52.551"W	0.44	FIRST SURFACE MWD+IFR1 SURVEY
231.00	0.480	146.640	231.00	0.99	-0.99	0.77	1640995.93	14554752.55	40°04'37.003"N	104°59'52.545"W	0.06	
326.00	1.320	263.620	325.99	1.45	-1.45	-0.10	1640995.06	14554752.10	40°04'36.998"N	104°59'52.557"W	1.68	
421.00	3.740	281.020	420.89	0.99	-0.98	-4.23	1640990.93	14554752.57	40°04'37.003"N	104°59'52.610"W	2.64	
517.00	4.660	280.840	516.63	-0.32	0.36	-11.13	1640984.03	14554753.90	40°04'37.016"N	104°59'52.698"W	0.96	
612.00	5.450	281.370	611.26	-1.90	1.97	-19.35	1640975.82	14554755.51	40°04'37.032"N	104°59'52.804"W	0.83	
707.00	7.950	279.880	705.60	-3.88	3.99	-30.24	1640964.93	14554757.53	40°04'37.052"N	104°59'52.944"W	2.64	
802.00	8.880	279.610	799.58	-6.18	6.34	-43.95	1640951.23	14554759.88	40°04'37.075"N	104°59'53.121"W	0.98	
897.00	9.930	277.150	893.30	-8.37	8.58	-59.30	1640935.88	14554762.12	40°04'37.098"N	104°59'53.318"W	1.18	
992.00	12.000	273.110	986.56	-9.86	10.14	-77.29	1640917.90	14554763.68	40°04'37.113"N	104°59'53.550"W	2.32	
1088.00	11.910	273.810	1080.48	-10.99	11.34	-97.14	1640898.06	14554764.88	40°04'37.125"N	104°59'53.805"W	0.18	
1183.00	15.120	275.400	1172.84	-12.73	13.16	-119.27	1640875.94	14554766.69	40°04'37.143"N	104°59'54.089"W	3.40	
1278.00	16.570	274.340	1264.23	-14.83	15.35	-145.11	1640850.11	14554768.88	40°04'37.164"N	104°59'54.422"W	1.56	
1373.00	17.800	273.900	1354.98	-16.75	17.36	-173.11	1640822.13	14554770.89	40°04'37.184"N	104°59'54.782"W	1.30	
1468.00	18.240	273.550	1445.32	-18.55	19.27	-202.43	1640792.81	14554772.80	40°04'37.203"N	104°59'55.159"W	0.48	
1563.00	19.600	270.650	1535.19	-19.54	20.37	-233.21	1640762.05	14554773.90	40°04'37.214"N	104°59'55.555"W	1.74	
1658.00	20.040	270.300	1624.56	-19.69	20.64	-265.42	1640729.85	14554774.17	40°04'37.217"N	104°59'55.970"W	0.48	
1753.00	21.530	270.470	1713.38	-19.80	20.86	-299.13	1640696.16	14554774.39	40°04'37.219"N	104°59'56.403"W	1.57	
1848.00	22.980	272.320	1801.30	-20.57	21.76	-335.09	1640660.21	14554775.29	40°04'37.228"N	104°59'56.866"W	1.69	
1891.00	23.600	273.110	1840.80	-21.32	22.56	-352.07	1640643.23	14554776.09	40°04'37.236"N	104°59'57.084"W	1.61	LAST SURFACE MWD+IFR1 SURVEY
1976.00	23.850	273.210	1918.61	-23.08	24.45	-386.22	1640609.10	14554777.98	40°04'37.254"N	104°59'57.524"W	0.30	FIRST BHGE MWD+IFR1+SC SURVEY
2066.00	21.590	274.040	2001.62	-25.14	26.64	-420.91	1640574.42	14554780.16	40°04'37.276"N	104°59'57.970"W	2.54	
2155.00	19.110	273.800	2085.06	-27.15	28.75	-451.78	1640543.56	14554782.28	40°04'37.297"N	104°59'58.367"W	2.79	
2245.00	19.500	273.650	2170.00	-28.98	30.69	-481.47	1640513.88	14554784.21	40°04'37.316"N	104°59'58.749"W	0.44	
2334.00	20.970	273.440	2253.51	-30.77	32.59	-512.19	1640483.17	14554786.11	40°04'37.335"N	104°59'59.144"W	1.65	
2424.00	22.650	275.100	2337.06	-33.16	35.10	-545.53	1640449.85	14554788.61	40°04'37.360"N	104°59'59.573"W	1.99	
2513.00	25.200	275.290	2418.41	-36.31	38.37	-581.48	1640413.92	14554791.88	40°04'37.392"N	105°00'00.035"W	2.87	
2603.00	25.160	269.140	2499.87	-37.65	39.85	-619.69	1640375.72	14554793.36	40°04'37.406"N	105°00'00.527"W	2.91	
2692.00	25.070	265.780	2580.46	-35.85	38.17	-657.41	1640338.01	14554791.69	40°04'37.390"N	105°00'01.012"W	1.61	
2782.00	22.860	264.610	2662.70	-32.67	35.13	-693.84	1640301.60	14554788.64	40°04'37.360"N	105°00'01.481"W	2.51	
2872.00	22.680	264.250	2745.68	-29.17	31.75	-728.51	1640266.95	14554785.26	40°04'37.326"N	105°00'01.927"W	0.25	
2961.00	25.160	264.700	2827.03	-25.57	28.28	-764.42	1640231.04	14554781.80	40°04'37.292"N	105°00'02.389"W	2.79	
3050.00	25.110	262.330	2907.61	-21.17	24.01	-801.98	1640193.51	14554777.53	40°04'37.250"N	105°00'02.872"W	1.13	
3140.00	24.510	260.950	2989.30	-15.55	18.53	-839.34	1640156.16	14554772.05	40°04'37.196"N	105°00'03.353"W	0.93	
3230.00	24.160	261.410	3071.30	-9.74	12.84	-875.99	1640119.53	14554766.36	40°04'37.140"N	105°00'03.824"W	0.44	
3319.00	23.620	260.710	3152.68	-4.01	7.24	-911.59	1640083.94	14554760.76	40°04'37.084"N	105°00'04.282"W	0.69	
3408.00	24.540	259.820	3233.93	2.26	1.10	-947.38	1640048.16	14554754.62	40°04'37.023"N	105°00'04.742"W	1.11	
3498.00	24.990	257.470	3315.66	9.82	-6.33	-984.33	1640011.22	14554747.19	40°04'36.950"N	105°00'05.218"W	1.20	
3587.00	22.960	253.620	3396.98	18.92	-15.31	-1019.35	1639976.23	14554738.22	40°04'36.861"N	105°00'05.668"W	2.88	
3677.00	23.120	253.290	3479.80	29.07	-25.34	-1053.11	1639942.47	14554728.19	40°04'36.762"N	105°00'06.103"W	0.23	
3766.00	22.770	256.110	3561.76	38.35	-34.50	-1086.57	1639909.03	14554719.04	40°04'36.672"N	105°00'06.533"W	1.30	
3856.00	21.180	261.590	3645.23	45.02	-41.06	-1119.56	1639876.05	14554712.48	40°04'36.607"N	105°00'06.957"W	2.88	
3945.00	22.890	262.970	3727.73	49.61	-45.53	-1152.65	1639842.98	14554708.01	40°04'36.563"N	105°00'07.383"W	2.01	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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
4035.00	23.520	262.140	3810.45	54.33	-50.12	-1187.81	1639807.83	14554703.41	40°04'36.517"N	105°00'07.835"W	0.79	
4124.00	22.350	262.230	3892.41	59.17	-54.84	-1222.17	1639773.48	14554698.70	40°04'36.471"N	105°00'08.277"W	1.32	
4213.00	23.000	263.290	3974.53	63.61	-59.16	-1256.21	1639739.46	14554694.38	40°04'36.428"N	105°00'08.715"W	0.86	
4303.00	24.170	260.910	4057.01	68.70	-64.13	-1291.86	1639703.82	14554689.41	40°04'36.379"N	105°00'09.174"W	1.68	
4392.00	24.060	259.740	4138.24	74.94	-70.24	-1327.71	1639667.99	14554683.31	40°04'36.318"N	105°00'09.635"W	0.55	
4482.00	23.520	258.210	4220.60	82.00	-77.17	-1363.34	1639632.37	14554676.37	40°04'36.250"N	105°00'10.093"W	0.91	
4571.00	23.560	259.510	4302.19	88.99	-84.04	-1398.21	1639597.51	14554669.51	40°04'36.182"N	105°00'10.542"W	0.59	
4660.00	22.190	259.630	4384.19	95.38	-90.30	-1432.24	1639563.50	14554663.24	40°04'36.120"N	105°00'10.980"W	1.54	
4750.00	21.250	265.130	4467.81	99.94	-94.75	-1465.21	1639530.54	14554658.80	40°04'36.076"N	105°00'11.404"W	2.49	
4839.00	20.850	267.220	4550.87	102.19	-96.89	-1497.10	1639498.66	14554656.66	40°04'36.055"N	105°00'11.814"W	0.96	
4929.00	23.900	267.200	4634.08	103.98	-98.55	-1531.32	1639464.46	14554654.99	40°04'36.038"N	105°00'12.254"W	3.39	
5018.00	24.150	264.380	4715.38	106.77	-101.22	-1567.44	1639428.35	14554652.33	40°04'36.012"N	105°00'12.719"W	1.32	
5108.00	24.020	260.980	4797.55	111.57	-105.89	-1603.86	1639391.95	14554647.66	40°04'35.966"N	105°00'13.187"W	1.55	
5197.00	23.160	257.900	4879.11	118.21	-112.40	-1638.86	1639356.96	14554641.15	40°04'35.901"N	105°00'13.638"W	1.69	
5286.00	22.520	259.990	4961.13	124.96	-119.03	-1672.76	1639323.07	14554634.52	40°04'35.836"N	105°00'14.074"W	1.16	
5376.00	23.220	262.680	5044.06	130.34	-124.29	-1707.33	1639288.52	14554629.27	40°04'35.784"N	105°00'14.518"W	1.40	
5466.00	23.450	264.270	5126.70	134.51	-128.34	-1742.75	1639253.11	14554625.22	40°04'35.744"N	105°00'14.974"W	0.74	
5555.00	23.140	263.310	5208.44	138.44	-132.14	-1777.74	1639218.14	14554621.41	40°04'35.706"N	105°00'15.424"W	0.55	
5644.00	23.210	263.730	5290.26	142.52	-136.10	-1812.54	1639183.35	14554617.46	40°04'35.667"N	105°00'15.872"W	0.20	
5734.00	23.330	265.010	5372.94	146.13	-139.58	-1847.92	1639147.98	14554613.97	40°04'35.633"N	105°00'16.327"W	0.58	
5824.00	23.450	265.040	5455.55	149.35	-142.68	-1883.52	1639112.40	14554610.88	40°04'35.602"N	105°00'16.785"W	0.13	
5913.00	23.400	265.280	5537.21	152.46	-145.67	-1918.77	1639077.16	14554607.89	40°04'35.573"N	105°00'17.238"W	0.12	
6003.00	23.390	264.970	5619.81	155.63	-148.70	-1954.38	1639041.57	14554604.86	40°04'35.543"N	105°00'17.696"W	0.14	
6092.00	22.370	266.110	5701.81	158.45	-151.40	-1988.88	1639007.09	14554602.16	40°04'35.516"N	105°00'18.140"W	1.25	
6182.00	23.330	268.170	5784.75	160.30	-153.13	-2023.78	1638972.20	14554600.43	40°04'35.499"N	105°00'18.589"W	1.39	
6271.00	23.150	267.860	5866.53	161.64	-154.35	-2058.87	1638937.12	14554599.21	40°04'35.487"N	105°00'19.041"W	0.24	
6361.00	23.200	266.940	5949.26	163.37	-155.96	-2094.25	1638901.75	14554597.60	40°04'35.471"N	105°00'19.496"W	0.41	
6450.00	22.280	267.700	6031.34	165.11	-157.57	-2128.62	1638867.40	14554595.99	40°04'35.455"N	105°00'19.938"W	1.09	
6540.00	22.730	266.680	6114.49	166.92	-159.26	-2163.02	1638833.01	14554594.30	40°04'35.438"N	105°00'20.380"W	0.66	
6630.00	23.270	263.770	6197.34	169.98	-162.20	-2198.06	1638797.99	14554591.36	40°04'35.409"N	105°00'20.831"W	1.40	
6719.00	22.640	263.950	6279.29	173.82	-165.91	-2232.57	1638763.50	14554587.65	40°04'35.372"N	105°00'21.275"W	0.71	
6809.00	21.330	264.130	6362.74	177.44	-169.41	-2266.08	1638730.00	14554584.15	40°04'35.338"N	105°00'21.706"W	1.46	
6898.00	21.780	263.660	6445.52	181.03	-172.89	-2298.59	1638697.50	14554580.67	40°04'35.303"N	105°00'22.124"W	0.54	
6988.00	22.380	263.730	6528.92	184.87	-176.60	-2332.22	1638663.89	14554576.96	40°04'35.266"N	105°00'22.557"W	0.67	
7167.00	23.440	264.740	6693.80	192.10	-183.59	-2401.54	1638594.59	14554569.97	40°04'35.197"N	105°00'23.449"W	0.63	
7257.00	22.930	265.720	6776.53	195.17	-186.54	-2436.85	1638559.29	14554567.02	40°04'35.168"N	105°00'23.903"W	0.71	
7346.00	22.500	267.140	6858.63	197.44	-188.68	-2471.15	1638525.01	14554564.88	40°04'35.147"N	105°00'24.344"W	0.78	
7436.00	22.670	268.580	6941.72	198.85	-189.97	-2505.69	1638490.48	14554563.59	40°04'35.134"N	105°00'24.788"W	0.64	
7526.00	24.270	268.000	7024.28	200.05	-191.05	-2541.51	1638454.67	14554562.52	40°04'35.124"N	105°00'25.249"W	1.80	
7615.00	23.760	267.160	7105.57	201.71	-192.57	-2577.70	1638418.50	14554560.99	40°04'35.108"N	105°00'25.715"W	0.69	
7705.00	23.140	265.840	7188.14	204.01	-194.75	-2613.45	1638382.77	14554558.81	40°04'35.087"N	105°00'26.175"W	0.90	
7794.00	23.430	264.760	7269.89	207.02	-197.64	-2648.51	1638347.72	14554555.92	40°04'35.058"N	105°00'26.626"W	0.58	
7818.00†	23.291	259.576	7291.92	208.35	-198.93	-2657.93	1638338.30	14554554.63	40°04'35.045"N	105°00'26.747"W	8.58	KOP
7884.00	23.790	245.420	7352.48	216.34	-206.84	-2682.89	1638313.36	14554546.73	40°04'34.967"N	105°00'27.068"W	8.58	
7973.00	28.130	227.530	7432.61	238.13	-228.51	-2714.75	1638281.50	14554525.06	40°04'34.753"N	105°00'27.478"W	10.01	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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
8063.00	34.570	217.740	7509.48	272.82	-263.09	-2746.09	1638250.19	14554490.50	40°04'34.411"N	105°00'27.881"W	9.10	
8152.00	41.410	205.570	7579.68	319.56	-309.73	-2774.32	1638221.97	14554443.87	40°04'33.950"N	105°00'28.244"W	11.37	
8242.00	50.020	202.170	7642.47	378.55	-368.63	-2800.23	1638196.07	14554384.99	40°04'33.368"N	105°00'28.577"W	9.94	
8332.00	56.180	196.110	7696.51	446.59	-436.59	-2823.65	1638172.66	14554317.06	40°04'32.697"N	105°00'28.878"W	8.70	
8421.00	63.230	186.850	7741.45	521.83	-511.77	-2838.69	1638157.62	14554241.91	40°04'31.954"N	105°00'29.072"W	11.97	
8463.00†	66.841	186.441	7759.17	559.66	-549.59	-2843.10	1638153.22	14554204.11	40°04'31.580"N	105°00'29.128"W	8.64	ENTER LANDBOX (877'FSL & 2561'FEL,SEC.04) 40.0754389 -105.0080912
8511.00	70.970	186.000	7776.45	604.18	-594.10	-2847.95	1638148.38	14554159.62	40°04'31.140"N	105°00'29.191"W	8.64	
8600.00	77.690	186.650	7800.47	689.34	-679.22	-2857.39	1638138.94	14554074.53	40°04'30.299"N	105°00'29.312"W	7.58	
8690.00	85.940	185.450	7813.27	777.88	-767.73	-2866.76	1638129.57	14553986.06	40°04'29.424"N	105°00'29.432"W	9.26	
8714.00†	87.010	184.931	7814.75	801.74	-791.58	-2868.93	1638127.41	14553962.21	40°04'29.189"N	105°00'29.460"W	4.95	LANDING (635'FSL & 2587'FEL,SEC.04) 40.0747746 -105.0081834
8779.00	89.910	183.530	7816.50	866.55	-856.37	-2873.72	1638122.62	14553897.45	40°04'28.548"N	105°00'29.522"W	4.95	
8869.00	88.650	182.550	7817.63	956.43	-946.24	-2878.49	1638117.85	14553807.62	40°04'27.660"N	105°00'29.583"W	1.77	
8959.00	88.800	179.290	7819.63	1046.39	-1036.19	-2879.94	1638116.41	14553717.70	40°04'26.771"N	105°00'29.601"W	3.63	
9048.00	89.970	177.980	7820.59	1135.35	-1125.16	-2877.82	1638118.53	14553628.77	40°04'25.892"N	105°00'29.574"W	1.97	
9138.00	89.510	180.350	7820.99	1225.32	-1215.14	-2876.50	1638119.84	14553538.83	40°04'25.003"N	105°00'29.557"W	2.68	
9227.00	87.660	178.210	7823.19	1314.28	-1304.10	-2875.39	1638120.96	14553449.91	40°04'24.124"N	105°00'29.542"W	3.18	
9316.00	89.080	175.690	7825.72	1403.09	-1392.92	-2870.65	1638125.69	14553361.11	40°04'23.246"N	105°00'29.481"W	3.25	
9406.00	90.490	175.650	7826.06	1492.80	-1482.66	-2863.86	1638132.49	14553271.41	40°04'22.359"N	105°00'29.394"W	1.57	
9495.00	90.520	175.870	7825.28	1581.53	-1571.42	-2857.28	1638139.07	14553182.69	40°04'21.482"N	105°00'29.309"W	0.25	
9585.00	90.310	176.520	7824.62	1671.31	-1661.22	-2851.31	1638145.04	14553092.93	40°04'20.595"N	105°00'29.232"W	0.76	
9674.00	90.520	177.010	7823.98	1760.15	-1750.07	-2846.28	1638150.06	14553004.11	40°04'19.717"N	105°00'29.167"W	0.60	
9763.00	90.520	177.430	7823.17	1849.02	-1838.96	-2841.97	1638154.38	14552915.25	40°04'18.838"N	105°00'29.112"W	0.47	
9799.00†	90.560	178.066	7822.83	1884.99	-1874.93	-2840.55	1638155.79	14552879.30	40°04'18.483"N	105°00'29.094"W	1.77	EXIT RADIUS HEEL (448'FNL & 2559'FEL,SEC.09) 40.0718008 -105.0080815
9853.00	90.620	179.020	7822.28	1938.96	-1928.91	-2839.18	1638157.17	14552825.34	40°04'17.949"N	105°00'29.076"W	1.77	
9942.00	90.590	179.900	7821.34	2027.95	-2017.90	-2838.34	1638158.01	14552736.39	40°04'17.070"N	105°00'29.065"W	0.99	
10032.00	90.400	179.810	7820.56	2117.94	-2107.90	-2838.11	1638158.24	14552646.43	40°04'16.181"N	105°00'29.062"W	0.23	
10122.00	90.580	178.700	7819.79	2207.92	-2197.89	-2836.94	1638159.41	14552556.48	40°04'15.291"N	105°00'29.047"W	1.25	
10211.00	90.620	177.120	7818.86	2296.85	-2286.82	-2833.70	1638162.66	14552467.58	40°04'14.412"N	105°00'29.005"W	1.78	
10301.00	90.580	176.100	7817.92	2386.66	-2376.66	-2828.38	1638167.98	14552377.78	40°04'13.525"N	105°00'28.936"W	1.13	
10390.00	90.400	176.800	7817.15	2475.47	-2465.48	-2822.87	1638173.49	14552288.99	40°04'12.647"N	105°00'28.865"W	0.81	
10479.00	90.590	175.800	7816.39	2564.26	-2554.29	-2817.12	1638179.23	14552200.21	40°04'11.769"N	105°00'28.791"W	1.14	
10569.00	90.460	177.220	7815.56	2654.06	-2644.12	-2811.64	1638184.71	14552110.42	40°04'10.882"N	105°00'28.721"W	1.58	
10659.00	90.370	178.300	7814.91	2743.98	-2734.05	-2808.13	1638188.23	14552020.53	40°04'09.993"N	105°00'28.675"W	1.20	
10748.00	88.150	179.880	7816.06	2832.95	-2823.02	-2806.71	1638189.64	14551931.59	40°04'09.114"N	105°00'28.657"W	3.06	
10838.00	88.770	182.410	7818.48	2922.89	-2912.96	-2808.51	1638187.85	14551841.69	40°04'08.225"N	105°00'28.680"W	2.89	
10927.00	89.510	187.150	7819.81	3011.57	-3001.62	-2815.92	1638180.44	14551753.07	40°04'07.349"N	105°00'28.775"W	5.39	
11017.00	89.380	190.420	7820.69	3100.55	-3090.54	-2829.67	1638166.70	14551664.18	40°04'06.470"N	105°00'28.952"W	3.64	
11106.00	90.580	185.390	7820.72	3188.72	-3178.67	-2841.90	1638154.47	14551576.09	40°04'05.599"N	105°00'29.109"W	5.81	
11196.00	90.460	181.030	7819.90	3278.57	-3268.50	-2846.94	1638149.44	14551486.29	40°04'04.711"N	105°00'29.174"W	4.85	
11285.00	90.220	186.090	7819.37	3367.38	-3357.30	-2852.47	1638143.92	14551397.53	40°04'03.834"N	105°00'29.245"W	5.69	
11375.00	86.980	186.420	7821.57	3456.84	-3446.72	-2862.27	1638134.12	14551308.14	40°04'02.950"N	105°00'29.371"W	3.62	
11464.00	87.010	178.490	7826.24	3545.58	-3535.45	-2866.07	1638130.32	14551219.45	40°04'02.073"N	105°00'29.419"W	8.90	
11554.00	89.140	175.960	7829.27	3635.40	-3625.28	-2861.72	1638134.68	14551129.65	40°04'01.185"N	105°00'29.363"W	3.67	
11643.00	89.350	175.350	7830.44	3724.11	-3714.02	-2854.97	1638141.42	14551040.95	40°04'00.309"N	105°00'29.276"W	0.72	
11733.00	89.420	176.830	7831.41	3813.87	-3803.80	-2848.84	1638147.56	14550951.21	40°03'59.421"N	105°00'29.197"W	1.65	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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
11822.00	89.480	177.750	7832.26	3902.75	-3892.69	-2844.63	1638151.77	14550862.35	40°03'58.543"N	105°00'29.143"W	1.04	
11912.00	89.410	179.800	7833.13	3992.71	-3982.67	-2842.71	1638153.69	14550772.41	40°03'57.654"N	105°00'29.118"W	2.28	
12002.00	89.450	179.960	7834.03	4082.71	-4072.66	-2842.52	1638153.88	14550682.46	40°03'56.764"N	105°00'29.116"W	0.18	
12091.00	89.320	181.810	7834.98	4171.69	-4161.64	-2843.89	1638152.51	14550593.51	40°03'55.885"N	105°00'29.133"W	2.08	
12180.00	89.350	181.030	7836.02	4260.66	-4250.61	-2846.10	1638150.31	14550504.58	40°03'55.006"N	105°00'29.161"W	0.88	
12270.00	89.350	178.520	7837.04	4350.65	-4340.59	-2845.74	1638150.66	14550414.63	40°03'54.117"N	105°00'29.157"W	2.79	
12360.00	89.290	178.440	7838.10	4440.60	-4430.56	-2843.36	1638153.05	14550324.70	40°03'53.228"N	105°00'29.126"W	0.11	
12449.00	89.420	177.450	7839.11	4529.53	-4519.49	-2840.17	1638156.24	14550235.80	40°03'52.349"N	105°00'29.085"W	1.12	
12539.00	89.540	175.960	7839.92	4619.35	-4609.34	-2834.99	1638161.42	14550146.00	40°03'51.461"N	105°00'29.018"W	1.66	
12628.00	89.380	174.460	7840.76	4708.01	-4698.02	-2827.56	1638168.85	14550057.35	40°03'50.584"N	105°00'28.922"W	1.69	
12718.00	89.350	174.050	7841.76	4797.52	-4787.56	-2818.55	1638177.85	14549967.84	40°03'49.700"N	105°00'28.806"W	0.46	
12807.00	89.480	175.480	7842.67	4886.11	-4876.18	-2810.43	1638185.97	14549879.26	40°03'48.824"N	105°00'28.702"W	1.61	
12897.00	90.310	176.370	7842.83	4975.86	-4965.95	-2804.04	1638192.37	14549789.52	40°03'47.937"N	105°00'28.619"W	1.35	
12986.00	90.430	177.800	7842.26	5064.72	-5054.83	-2799.51	1638196.89	14549700.68	40°03'47.058"N	105°00'28.561"W	1.61	
13076.00	90.280	179.820	7841.70	5154.69	-5144.81	-2797.64	1638198.76	14549610.74	40°03'46.169"N	105°00'28.537"W	2.25	
13165.00	90.370	180.080	7841.20	5243.69	-5233.81	-2797.57	1638198.84	14549521.78	40°03'45.290"N	105°00'28.536"W	0.31	
13254.00	90.180	179.580	7840.77	5332.68	-5322.80	-2797.30	1638199.11	14549432.81	40°03'44.410"N	105°00'28.532"W	0.60	
13344.00	90.830	180.060	7839.98	5422.68	-5412.80	-2797.02	1638199.39	14549342.86	40°03'43.521"N	105°00'28.528"W	0.90	
13434.00	90.460	181.940	7838.96	5512.66	-5502.78	-2798.59	1638197.83	14549252.91	40°03'42.632"N	105°00'28.549"W	2.13	
13523.00	90.580	181.010	7838.15	5601.63	-5591.74	-2800.88	1638195.54	14549163.98	40°03'41.753"N	105°00'28.578"W	1.05	
13612.00	90.580	180.130	7837.25	5690.62	-5680.73	-2801.77	1638194.65	14549075.03	40°03'40.873"N	105°00'28.589"W	0.99	
13702.00	90.710	179.130	7836.24	5780.61	-5770.72	-2801.18	1638195.24	14548985.08	40°03'39.984"N	105°00'28.582"W	1.12	
13792.00	90.550	180.050	7835.25	5870.60	-5860.72	-2800.54	1638195.88	14548895.12	40°03'39.094"N	105°00'28.573"W	1.04	
13881.00	90.710	182.190	7834.27	5959.58	-5949.69	-2802.28	1638194.15	14548806.18	40°03'38.215"N	105°00'28.595"W	2.41	
13970.00	90.090	183.210	7833.65	6048.49	-6038.59	-2806.47	1638189.96	14548717.32	40°03'37.337"N	105°00'28.649"W	1.34	
14060.00	90.280	180.450	7833.36	6138.44	-6128.53	-2809.35	1638187.09	14548627.41	40°03'36.448"N	105°00'28.686"W	3.07	
14149.00	90.430	180.030	7832.81	6227.44	-6217.53	-2809.72	1638186.72	14548538.45	40°03'35.568"N	105°00'28.691"W	0.50	
14238.00	90.590	180.610	7831.22	6316.43	-6306.52	-2810.72	1638185.72	14548449.53	40°03'34.800"N	105°00'28.703"W	0.34	
14328.00	90.220	179.480	7830.58	6406.43	-6396.52	-2810.72	1638185.72	14548359.53	40°03'33.800"N	105°00'28.703"W	0.34	
14418.00	90.220	179.480	7830.58	6496.43	-6486.51	-2810.79	1638185.65	14548269.57	40°03'32.910"N	105°00'28.704"W	1.32	
14508.00	90.370	176.610	7830.12	6586.36	-6576.45	-2807.72	1638188.72	14548179.67	40°03'32.021"N	105°00'28.664"W	3.19	
14597.00	90.400	177.090	7829.52	6675.20	-6665.31	-2802.83	1638193.61	14548090.85	40°03'31.143"N	105°00'28.601"W	0.54	
14686.00	90.520	177.220	7828.80	6764.07	-6754.20	-2798.41	1638198.03	14548001.99	40°03'30.265"N	105°00'28.544"W	0.20	
14776.00	90.460	176.560	7828.03	6853.92	-6844.06	-2793.53	1638202.91	14547912.17	40°03'29.377"N	105°00'28.482"W	0.74	
14865.00	90.490	176.270	7827.30	6942.72	-6932.89	-2787.96	1638208.48	14547823.38	40°03'28.499"N	105°00'28.410"W	0.33	
14955.00	90.460	176.570	7826.55	7032.52	-7022.71	-2782.34	1638214.10	14547733.59	40°03'27.611"N	105°00'28.337"W	0.33	
15044.00	90.650	176.660	7825.69	7121.34	-7111.55	-2777.09	1638219.35	14547644.79	40°03'26.733"N	105°00'28.270"W	0.24	
15134.00	90.220	176.580	7825.00	7211.16	-7201.39	-2771.78	1638224.66	14547554.99	40°03'25.846"N	105°00'28.201"W	0.49	
15223.00	90.430	175.570	7824.50	7299.93	-7290.18	-2765.69	1638230.75	14547466.23	40°03'24.968"N	105°00'28.123"W	1.16	
15313.00	90.400	175.830	7823.85	7389.65	-7379.92	-2758.94	1638237.50	14547376.53	40°03'24.081"N	105°00'28.036"W	0.29	
15402.00	90.550	175.490	7823.11	7478.37	-7468.66	-2752.21	1638244.23	14547287.82	40°03'23.204"N	105°00'27.949"W	0.42	
15492.00	90.280	177.120	7822.46	7568.15	-7558.47	-2746.41	1638250.03	14547198.05	40°03'22.317"N	105°00'27.875"W	1.84	
15581.00	90.180	177.290	7822.10	7657.03	-7647.36	-2742.07	1638254.37	14547109.19	40°03'21.438"N	105°00'27.819"W	0.22	
15670.00	90.220	177.240	7821.79	7745.91	-7736.26	-2737.82	1638258.62	14547020.33	40°03'20.560"N	105°00'27.764"W	0.07	
15760.00	90.310	178.280	7821.37	7835.83	-7826.19	-2734.30	1638262.14	14546930.44	40°03'19.671"N	105°00'27.718"W	1.16	
15849.00	90.310	180.440	7820.89	7924.81	-7915.18	-2733.31	1638263.13	14546841.48	40°03'18.792"N	105°00'27.706"W	2.43	

Actual Wellpath Report

MC 3-1HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWP
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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
15939.00	90.280	183.630	7820.43	8014.75	-8005.11	-2736.51	1638259.94	14546751.59	40°03'17.903"N	105°00'27.747"W	3.54	
16028.00	90.310	183.950	7819.97	8103.58	-8093.91	-2742.39	1638254.06	14546662.82	40°03'17.026"N	105°00'27.822"W	0.36	
16118.00	90.150	181.690	7819.61	8193.48	-8183.80	-2746.82	1638249.64	14546572.97	40°03'16.137"N	105°00'27.879"W	2.52	
16207.00	90.060	180.390	7819.45	8282.47	-8272.78	-2748.43	1638248.03	14546484.02	40°03'15.258"N	105°00'27.900"W	1.46	
16297.00	90.090	175.530	7819.33	8372.37	-8362.70	-2745.23	1638251.23	14546394.15	40°03'14.369"N	105°00'27.858"W	5.40	
16386.00	91.450	174.660	7818.13	8461.01	-8451.36	-2737.62	1638258.84	14546305.52	40°03'13.493"N	105°00'27.760"W	1.81	
16476.00	91.480	173.800	7815.83	8550.49	-8540.87	-2728.58	1638267.88	14546216.04	40°03'12.609"N	105°00'27.644"W	0.96	
16565.00	90.950	174.850	7813.94	8639.00	-8629.42	-2719.78	1638276.68	14546127.53	40°03'11.734"N	105°00'27.531"W	1.32	
16655.00	90.620	179.420	7812.71	8728.84	-8719.27	-2715.28	1638281.18	14546037.71	40°03'10.846"N	105°00'27.473"W	5.09	
16744.00	90.250	180.560	7812.03	8817.83	-8808.27	-2715.26	1638281.19	14545948.75	40°03'09.966"N	105°00'27.472"W	1.35	
16834.00	91.380	180.230	7810.75	8907.82	-8898.25	-2715.88	1638280.58	14545858.80	40°03'09.077"N	105°00'27.480"W	1.31	
16923.00	89.780	178.200	7809.85	8996.80	-8987.23	-2714.67	1638281.80	14545769.86	40°03'08.198"N	105°00'27.464"W	2.90	
17013.00	89.780	178.060	7810.20	9086.74	-9077.19	-2711.73	1638284.73	14545679.94	40°03'07.309"N	105°00'27.426"W	0.16	
17103.00	89.970	184.430	7810.40	9176.67	-9167.12	-2713.68	1638282.78	14545590.05	40°03'06.420"N	105°00'27.451"W	7.08	
17193.00	89.290	188.180	7810.98	9266.15	-9256.56	-2723.56	1638272.91	14545500.65	40°03'05.536"N	105°00'27.578"W	4.23	
17282.00	89.510	187.430	7811.91	9354.36	-9344.73	-2735.65	1638260.83	14545412.51	40°03'04.665"N	105°00'27.734"W	0.88	
17372.00	89.630	187.200	7812.58	9443.66	-9433.99	-2747.11	1638249.38	14545323.28	40°03'03.783"N	105°00'27.881"W	0.29	
17461.00	89.660	187.970	7813.14	9531.92	-9522.21	-2758.86	1638237.64	14545235.10	40°03'02.911"N	105°00'28.032"W	0.87	
17551.00	89.380	185.670	7813.89	9621.32	-9611.56	-2769.54	1638226.95	14545145.78	40°03'02.028"N	105°00'28.169"W	2.57	
17640.00	88.920	181.200	7815.21	9710.14	-9700.37	-2774.87	1638221.63	14545057.01	40°03'01.150"N	105°00'28.238"W	5.05	
17730.00	89.570	178.970	7816.40	9800.13	-9790.36	-2775.01	1638221.50	14544967.06	40°03'00.261"N	105°00'28.239"W	2.58	
17819.00	88.830	183.810	7817.64	9889.07	-9879.29	-2777.16	1638219.34	14544878.16	40°02'59.382"N	105°00'28.267"W	5.50	
17909.00	88.890	187.640	7819.43	9978.62	-9968.81	-2786.14	1638210.37	14544788.68	40°02'58.497"N	105°00'28.382"W	4.26	
17998.00	88.800	188.440	7821.23	10066.77	-10056.92	-2798.58	1638197.94	14544700.60	40°02'57.627"N	105°00'28.542"W	0.90	
18088.00	89.600	186.560	7822.48	10156.03	-10146.13	-2810.33	1638186.20	14544611.42	40°02'56.745"N	105°00'28.693"W	2.27	
18178.00	89.600	185.820	7823.11	10245.53	-10235.61	-2820.03	1638176.50	14544521.99	40°02'55.861"N	105°00'28.817"W	0.82	
18267.00	89.600	185.820	7823.73	10334.10	-10324.15	-2829.06	1638167.48	14544433.48	40°02'54.986"N	105°00'28.933"W	0.00	
18357.00	90.030	178.710	7824.02	10423.99	-10414.02	-2832.61	1638163.93	14544343.65	40°02'54.098"N	105°00'28.979"W	7.91	
18447.00	89.850	180.840	7824.12	10513.98	-10504.01	-2832.26	1638164.28	14544253.69	40°02'53.208"N	105°00'28.974"W	2.38	
18536.00	90.090	181.780	7824.16	10602.96	-10592.99	-2834.29	1638162.25	14544164.75	40°02'52.329"N	105°00'29.000"W	1.09	
18626.00	89.910	184.760	7824.16	10692.82	-10682.83	-2839.43	1638157.12	14544074.94	40°02'51.441"N	105°00'29.066"W	3.32	
18715.00	89.750	187.730	7824.43	10781.32	-10771.29	-2849.11	1638147.45	14543986.52	40°02'50.567"N	105°00'29.191"W	3.34	
18805.00	90.000	187.900	7824.62	10870.53	-10860.46	-2861.35	1638135.22	14543897.39	40°02'49.686"N	105°00'29.348"W	0.34	
18895.00	89.880	184.850	7824.72	10959.99	-10949.89	-2871.34	1638125.23	14543807.99	40°02'48.802"N	105°00'29.476"W	3.39	
18984.00	90.030	182.000	7824.79	11048.84	-11038.72	-2876.65	1638119.92	14543719.19	40°02'47.924"N	105°00'29.544"W	3.21	
19073.00	89.970	179.500	7824.79	11137.83	-11127.71	-2877.82	1638118.76	14543630.25	40°02'47.045"N	105°00'29.559"W	2.81	
19163.00	89.820	177.550	7824.95	11227.79	-11217.67	-2875.50	1638121.08	14543540.32	40°02'46.156"N	105°00'29.529"W	2.17	
19252.00	89.780	175.750	7825.26	11316.61	-11306.51	-2870.30	1638126.28	14543451.51	40°02'45.278"N	105°00'29.462"W	2.02	
19342.00	89.750	177.090	7825.63	11406.41	-11396.34	-2864.68	1638131.90	14543361.72	40°02'44.390"N	105°00'29.390"W	1.49	
19431.00	89.880	178.540	7825.92	11495.33	-11485.27	-2861.29	1638135.29	14543272.83	40°02'43.511"N	105°00'29.346"W	1.64	
19520.00	90.920	181.200	7825.30	11584.32	-11574.26	-2861.09	1638135.49	14543183.87	40°02'42.632"N	105°00'29.343"W	3.21	
19548.00†	90.920	181.698	7824.85	11612.31	-11602.24	-2861.80	1638134.79	14543155.90	40°02'42.355"N	105°00'29.352"W	1.78	ENTER RADIUS TOE (434'FSL & 2510'FEL,SEC.16) 40.0450987 -105.0081535
19610.00	90.920	182.800	7823.85	11674.26	-11664.19	-2864.23	1638132.36	14543093.98	40°02'41.743"N	105°00'29.384"W	1.78	
19700.00	90.800	185.230	7822.50	11764.05	-11753.95	-2870.53	1638126.06	14543004.25	40°02'40.856"N	105°00'29.465"W	2.70	
19789.00	90.830	187.480	7821.24	11852.52	-11842.39	-2880.38	1638116.22	14542915.85	40°02'39.982"N	105°00'29.591"W	2.53	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH DATA (227 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
19878.00	90.770	189.460	7819.99	11940.58	-11930.40	-2893.48	1638103.12	14542827.87	40°02'39.112"N	105°00'29.759"W	2.23	LAST BHGE MWD+IFR1+SC SURVEY
19933.00	90.770	189.460	7819.25	11994.86	-11984.65	-2902.52	1638094.08	14542773.64	40°02'38.576"N	105°00'29.876"W	0.00	PTB (51'FSL & 2551'FEL,SEC.16) 40.0440489 -105.0082988

HOLE & CASING SECTIONS - Ref Wellbore: MC 3-1HZ AWB Ref Wellpath: MC 3-1HZ 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	1878.00	1852.00	26.00	1828.88	0.00	0.00	22.29	-346.89

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	0.00	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	polygon
SEC.16-T1N-R68W	26.00	0.00	0.00	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	polygon
MC 3-1HZ HEEL REV-1(630'FSL & 2595'FEL,SEC.04)	7813.00	-793.26	-2880.03	1638116.31	14553960.54	40°04'29.172"N	105°00'29.603"W	point
MC 3-1HZ BHL REV-1(50'FSL & 2568'FEL,SEC.16)	7822.00	-11986.49	-2919.67	1638076.95	14542771.81	40°02'38.558"N	105°00'30.096"W	point
MC 3-1HZ LANDBOX	7841.00	0.00	0.00	1640995.16	14554753.54	40°04'37.013"N	104°59'52.555"W	polygon
MC 3-1HZ RADIUS 1	7841.00	-12036.01	-3013.75	1637982.90	14542722.30	40°02'38.068"N	105°00'31.306"W	polygon
MC 3-1HZ RADIUS 2	7841.00	-1423.15	-2925.17	1638071.20	14553330.90	40°04'22.947"N	105°00'30.183"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: MC 3-1HZ AWB Ref Wellpath: MC 3-1HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	1891.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <136 - 1891>	MC 3-1HZ AWB
1891.00	19878.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1976 - 19878>	MC 3-1HZ AWB
19878.00	19933.00	Blind Drilling (std)	Projection to bit	MC 3-1HZ AWB

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 MC 3-1HZ (1427'FSL & 282'FWL,SEC.03)
Area	COLORADO	Well	MC 3-1HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	MC 3-1HZ AWB
Facility	SEC.03-T1N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
136.00	0.480	140.310	136.00	FIRST SURFACE MWD+IFR1 SURVEY
1891.00	23.600	273.110	1840.80	LAST SURFACE MWD+IFR1 SURVEY
1976.00	23.850	273.210	1918.61	FIRST BHGE MWD+IFR1+SC SURVEY
7818.00	23.291	259.576	7291.92	KOP
8463.00	66.841	186.441	7759.17	ENTER LANDBOX (877'FSL & 2561'FEL,SEC.04) 40.0754389 -105.0080912
8714.00	87.010	184.931	7814.75	LANDING (635'FSL & 2587'FEL,SEC.04) 40.0747746 -105.0081834
9799.00	90.560	178.066	7822.83	EXIT RADIUS HEEL (448'FNL & 2559'FEL,SEC.09) 40.0718008 -105.0080815
19548.00	90.920	181.698	7824.85	ENTER RADIUS TOE (434'FSL & 2510'FEL,SEC.16) 40.0450987 -105.0081535
19878.00	90.770	189.460	7819.99	LAST BHGE MWD+IFR1+SC SURVEY
19933.00	90.770	189.460	7819.25	PTB (51'FSL & 2551'FEL,SEC.16) 40.0440489 -105.0082988