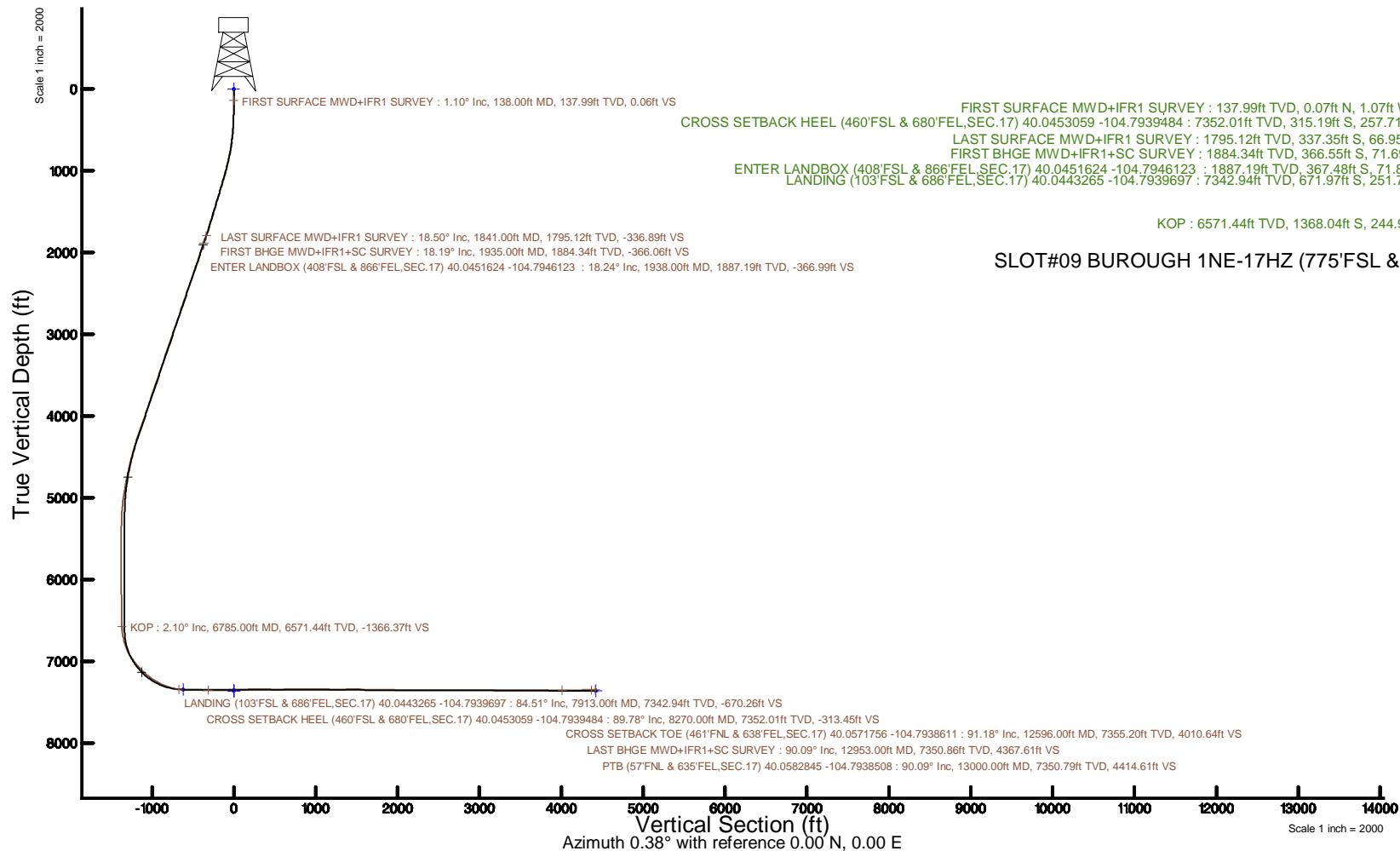


Location:	COLORADO	Slot:	SLOT#09 BURROUGH 1NE-17HZ (775'FSL & 938'FEL,SEC.17)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	BURROUGH 1NE-17HZ
Facility:	SEC.17-T1N-R66W	Wellbore:	BURROUGH 1NE-17HZ PWB
Plot reference wellbore is BUROUGH 1NE-17HZ PWP Rev-A.0		Grid System: NAD83 / UTM Zone 13 North, US feet	
True vertical depths are referenced to PD 564 (26') (RT)		* = Wellpath was transformed from a different geoidic datum	
Measured depths are referenced to PD 564 (26') (RT)		North Reference: True north	
PD 564 (26') RT to Mean Sea Level: 5005 feet		Scale: True distance	
Mean Sea Level to Mud line (At Slot: SLOT#09 BURROUGH 1NE-17HZ (775'FSL & 938'FEL,SEC.17)): 0 feet		Depths are in feet	
Coordinates are in feet referenced to Slot		Created by: painseir on 2017-11-20	
		Database: WA_DEN_Anadarko_Defn	



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL,SEC.17)
Area	COLORADO	Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	BUROUGH 1NE-17HZ AWB
Facility	SEC.17-T1N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999604	Report Generated	11/20/2017 at 3:15 PM
Convergence at slot	0.14° East	Database/Source file	WA_DEN_Anadarko_Defn/BUROUGH_1NE-17HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-8437.77	-429.92	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W
Facility Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"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	5005.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	5005.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL, SEC. 17))	5005.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.38°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL, SEC.17)
Area	COLORADO	Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	BUROUGH 1NE-17HZ AWP
Facility	SEC.17-T1N-R66W		

WELLPATH DATA (186 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	273.500	0.00	0.00	0.00	0.00	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W	0.00	
26.00	0.000	273.500	26.00	0.00	0.00	0.00	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W	0.00	
138.00	1.100	273.500	137.99	0.06	0.07	-1.07	1697824.07	14543612.49	40°02'46.217"N	104°47'41.542"W	0.98	FIRST SURFACE MWD+IFR1 SURVEY
170.00	0.830	271.570	169.99	0.08	0.09	-1.61	1697823.53	14543612.52	40°02'46.217"N	104°47'41.549"W	0.85	
202.00	0.570	232.630	201.99	-0.01	0.00	-1.97	1697823.17	14543612.43	40°02'46.216"N	104°47'41.553"W	1.65	
265.00	0.750	183.330	264.98	-0.62	-0.60	-2.24	1697822.90	14543611.82	40°02'46.210"N	104°47'41.557"W	0.91	
296.00	1.230	166.710	295.98	-1.14	-1.13	-2.18	1697822.97	14543611.30	40°02'46.205"N	104°47'41.556"W	1.79	
327.00	1.890	158.630	326.97	-1.94	-1.93	-1.92	1697823.23	14543610.50	40°02'46.197"N	104°47'41.553"W	2.24	
359.00	1.670	160.910	358.95	-2.87	-2.86	-1.57	1697823.58	14543609.57	40°02'46.188"N	104°47'41.548"W	0.72	
390.00	2.070	161.440	389.93	-3.83	-3.82	-1.24	1697823.90	14543608.61	40°02'46.178"N	104°47'41.544"W	1.29	
422.00	2.770	164.340	421.91	-5.12	-5.11	-0.85	1697824.30	14543607.32	40°02'46.166"N	104°47'41.539"W	2.22	
454.00	3.380	169.440	453.86	-6.78	-6.78	-0.47	1697824.69	14543605.65	40°02'46.149"N	104°47'41.534"W	2.09	
485.00	4.610	173.570	484.78	-8.92	-8.92	-0.16	1697825.00	14543603.52	40°02'46.128"N	104°47'41.530"W	4.07	
517.00	5.010	170.930	516.67	-11.57	-11.58	0.20	1697825.37	14543600.86	40°02'46.102"N	104°47'41.525"W	1.43	
548.00	5.800	169.790	547.53	-14.45	-14.45	0.69	1697825.87	14543597.98	40°02'46.073"N	104°47'41.519"W	2.57	
580.00	6.720	169.530	579.34	-17.88	-17.89	1.32	1697826.50	14543594.55	40°02'46.039"N	104°47'41.511"W	2.88	
613.00	6.900	169.000	612.11	-21.72	-21.73	2.05	1697827.24	14543590.71	40°02'46.001"N	104°47'41.502"W	0.58	
644.00	7.250	168.030	642.87	-25.45	-25.47	2.81	1697828.01	14543586.97	40°02'45.964"N	104°47'41.492"W	1.19	
676.00	8.040	166.890	674.59	-29.60	-29.63	3.74	1697828.94	14543582.82	40°02'45.923"N	104°47'41.480"W	2.51	
708.00	8.660	169.000	706.25	-34.14	-34.17	4.70	1697829.92	14543578.28	40°02'45.878"N	104°47'41.468"W	2.16	
740.00	9.580	171.550	737.84	-39.13	-39.17	5.55	1697830.78	14543573.29	40°02'45.829"N	104°47'41.457"W	3.14	
771.00	10.590	172.600	768.36	-44.50	-44.55	6.30	1697831.54	14543567.92	40°02'45.776"N	104°47'41.447"W	3.31	
803.00	11.340	170.760	799.78	-50.52	-50.57	7.18	1697832.44	14543561.90	40°02'45.716"N	104°47'41.436"W	2.59	
835.00	11.950	173.310	831.12	-56.91	-56.96	8.07	1697833.34	14543555.51	40°02'45.653"N	104°47'41.424"W	2.49	
867.00	12.390	169.440	862.40	-63.57	-63.63	9.09	1697834.37	14543548.85	40°02'45.587"N	104°47'41.411"W	2.90	
898.00	13.490	168.740	892.62	-70.37	-70.45	10.41	1697835.70	14543542.04	40°02'45.520"N	104°47'41.394"W	3.58	
930.00	14.410	169.260	923.67	-77.94	-78.02	11.88	1697837.19	14543534.47	40°02'45.445"N	104°47'41.375"W	2.90	
962.00	14.940	167.770	954.63	-85.87	-85.96	13.49	1697838.82	14543526.53	40°02'45.367"N	104°47'41.355"W	2.03	
994.00	15.470	167.950	985.51	-94.06	-94.17	15.26	1697840.61	14543518.34	40°02'45.285"N	104°47'41.332"W	1.66	
1025.00	16.080	168.210	1015.34	-102.30	-102.41	17.00	1697842.37	14543510.10	40°02'45.204"N	104°47'41.309"W	1.98	
1057.00	16.300	167.330	1046.07	-111.00	-111.13	18.89	1697844.28	14543501.39	40°02'45.118"N	104°47'41.285"W	1.03	
1089.00	16.000	167.240	1076.81	-119.67	-119.81	20.85	1697846.25	14543492.71	40°02'45.032"N	104°47'41.260"W	0.94	
1120.00	16.170	165.400	1106.59	-128.00	-128.16	22.88	1697848.30	14543484.38	40°02'44.950"N	104°47'41.234"W	1.73	
1152.00	16.610	167.950	1137.29	-136.77	-136.94	24.96	1697850.40	14543475.60	40°02'44.863"N	104°47'41.207"W	2.64	
1184.00	16.960	167.590	1167.93	-145.79	-145.98	26.91	1697852.38	14543466.58	40°02'44.773"N	104°47'41.182"W	1.14	
1216.00	16.960	166.010	1198.54	-154.86	-155.06	29.05	1697854.53	14543457.50	40°02'44.684"N	104°47'41.155"W	1.44	
1247.00	16.520	166.980	1228.23	-163.53	-163.74	31.13	1697856.64	14543448.82	40°02'44.598"N	104°47'41.128"W	1.68	
1279.00	17.180	168.300	1258.85	-172.58	-172.80	33.12	1697858.64	14543439.77	40°02'44.508"N	104°47'41.102"W	2.38	
1311.00	17.310	169.260	1289.41	-181.87	-182.11	34.96	1697860.51	14543430.47	40°02'44.416"N	104°47'41.078"W	0.98	
1343.00	17.400	168.380	1319.96	-191.22	-191.47	36.81	1697862.38	14543421.12	40°02'44.324"N	104°47'41.055"W	0.87	
1374.00	17.180	168.030	1349.56	-200.23	-200.49	38.69	1697864.28	14543412.11	40°02'44.235"N	104°47'41.030"W	0.79	
1406.00	16.920	167.420	1380.15	-209.38	-209.66	40.69	1697866.30	14543402.95	40°02'44.144"N	104°47'41.005"W	0.99	
1438.00	16.960	167.240	1410.76	-218.47	-218.76	42.73	1697868.36	14543393.86	40°02'44.054"N	104°47'40.979"W	0.21	
1469.00	16.960	168.300	1440.41	-227.29	-227.59	44.65	1697870.30	14543385.03	40°02'43.967"N	104°47'40.954"W	1.00	
1501.00	17.050	169.180	1471.01	-236.46	-236.77	46.48	1697872.14	14543375.86	40°02'43.876"N	104°47'40.930"W	0.85	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)		Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL, SEC.17)
Area	COLORADO		Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)		Wellbore	BUROUGH 1NE-17HZ AWP
Facility	SEC.17-T1N-R66W			

WELLPATH DATA (186 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
1533.00	16.740	169.000	1501.63	-245.58	-245.90	48.24	1697873.92	14543366.74	40°02'43.786"N	104°47'40.908"W	0.98	
1564.00	16.660	168.300	1531.32	-254.30	-254.64	49.99	1697875.70	14543358.01	40°02'43.700"N	104°47'40.885"W	0.70	
1596.00	17.090	167.150	1561.95	-263.36	-263.71	51.97	1697877.69	14543348.94	40°02'43.610"N	104°47'40.860"W	1.70	
1628.00	17.490	165.130	1592.50	-272.58	-272.95	54.25	1697879.99	14543339.72	40°02'43.519"N	104°47'40.831"W	2.25	
1659.00	17.490	165.660	1622.07	-281.58	-281.96	56.59	1697882.36	14543330.71	40°02'43.430"N	104°47'40.800"W	0.51	
1691.00	17.620	169.090	1652.58	-290.98	-291.38	58.70	1697884.49	14543321.31	40°02'43.337"N	104°47'40.773"W	3.26	
1723.00	17.800	170.320	1683.06	-300.54	-300.95	60.44	1697886.25	14543311.74	40°02'43.242"N	104°47'40.751"W	1.30	
1755.00	18.060	169.880	1713.51	-310.23	-310.66	62.14	1697887.97	14543302.04	40°02'43.146"N	104°47'40.729"W	0.92	
1787.00	18.370	169.790	1743.90	-320.07	-320.50	63.90	1697889.75	14543292.20	40°02'43.049"N	104°47'40.706"W	0.97	
1818.00	18.540	169.530	1773.31	-329.71	-330.16	65.66	1697891.54	14543282.56	40°02'42.953"N	104°47'40.684"W	0.61	
1841.00	18.500	170.230	1795.12	-336.89	-337.35	66.95	1697892.84	14543275.37	40°02'42.882"N	104°47'40.667"W	0.98	LAST SURFACE MWD+IFR1 SURVEY
1935.00	18.190	171.310	1884.34	-366.06	-366.55	71.69	1697897.65	14543246.19	40°02'42.594"N	104°47'40.606"W	0.49	FIRST BHGE MWD+IFR1+SC SURVEY
1938.00†	18.236	171.399	1887.19	-366.99	-367.48	71.83	1697897.79	14543245.27	40°02'42.585"N	104°47'40.604"W	1.80	ENTER LANDBOX (408'FSL & 866'FEL, SEC.17) 40.0451624 -104.7946123
2024.00	19.580	173.780	1968.55	-394.59	-395.11	75.41	1697901.43	14543217.65	40°02'42.311"N	104°47'40.558"W	1.80	
2114.00	18.890	173.170	2053.53	-424.03	-424.57	78.78	1697904.86	14543188.22	40°02'42.020"N	104°47'40.515"W	0.80	
2203.00	19.910	172.760	2137.47	-453.34	-453.91	82.40	1697908.55	14543158.90	40°02'41.730"N	104°47'40.469"W	1.16	
2293.00	19.100	171.580	2222.31	-483.08	-483.67	86.49	1697912.70	14543129.15	40°02'41.436"N	104°47'40.416"W	1.00	
2382.00	18.430	169.980	2306.58	-511.31	-511.93	91.07	1697917.35	14543100.91	40°02'41.157"N	104°47'40.357"W	0.95	
2472.00	19.870	170.680	2391.59	-540.38	-541.04	96.02	1697922.37	14543071.83	40°02'40.869"N	104°47'40.293"W	1.62	
2561.00	18.570	169.870	2475.63	-569.23	-569.91	100.96	1697927.37	14543042.98	40°02'40.584"N	104°47'40.230"W	1.49	
2650.00	19.000	166.350	2559.89	-597.22	-597.95	106.87	1697933.35	14543014.97	40°02'40.307"N	104°47'40.154"W	1.36	
2740.00	19.660	169.760	2644.82	-626.31	-627.08	113.02	1697939.56	14542985.86	40°02'40.019"N	104°47'40.075"W	1.45	
2830.00	18.400	169.280	2729.90	-655.13	-655.94	118.36	1697944.96	14542957.03	40°02'39.734"N	104°47'40.006"W	1.41	
2919.00	19.150	169.350	2814.16	-683.24	-684.09	123.67	1697950.33	14542928.90	40°02'39.456"N	104°47'39.938"W	0.84	
3008.00	18.840	171.600	2898.32	-711.77	-712.65	128.46	1697955.19	14542900.36	40°02'39.173"N	104°47'39.876"W	0.89	
3097.00	19.540	170.040	2982.37	-740.62	-741.52	133.14	1697959.93	14542871.51	40°02'38.888"N	104°47'39.816"W	0.97	
3187.00	19.940	172.290	3067.09	-770.62	-771.56	137.80	1697964.66	14542841.50	40°02'38.591"N	104°47'39.756"W	0.95	
3277.00	18.770	172.740	3152.00	-800.16	-801.13	141.69	1697968.62	14542811.95	40°02'38.299"N	104°47'39.706"W	1.31	
3366.00	18.400	167.980	3236.36	-828.07	-829.07	146.42	1697973.41	14542784.03	40°02'38.023"N	104°47'39.645"W	1.75	
3456.00	18.770	168.750	3321.67	-856.13	-857.17	152.21	1697979.26	14542755.96	40°02'37.745"N	104°47'39.571"W	0.49	
3545.00	19.870	165.850	3405.66	-884.80	-885.88	158.70	1697985.81	14542727.27	40°02'37.462"N	104°47'39.488"W	1.64	
3635.00	19.460	165.910	3490.41	-914.12	-915.25	166.09	1697993.27	14542697.93	40°02'37.171"N	104°47'39.392"W	0.46	
3725.00	19.290	166.300	3575.31	-943.05	-944.23	173.26	1698000.50	14542668.97	40°02'36.885"N	104°47'39.300"W	0.24	
3814.00	19.390	164.940	3659.29	-971.55	-972.78	180.58	1698007.88	14542640.45	40°02'36.603"N	104°47'39.206"W	0.52	
3904.00	19.420	166.890	3744.18	-1000.50	-1001.78	187.85	1698015.22	14542611.48	40°02'36.316"N	104°47'39.113"W	0.72	
3993.00	17.660	165.900	3828.56	-1027.96	-1029.29	194.50	1698021.93	14542584.00	40°02'36.044"N	104°47'39.027"W	2.01	
4083.00	18.420	172.940	3914.14	-1055.28	-1056.64	199.57	1698027.06	14542556.67	40°02'35.774"N	104°47'38.962"W	2.56	
4172.00	18.610	172.840	3998.53	-1083.30	-1084.69	203.07	1698030.63	14542528.64	40°02'35.497"N	104°47'38.917"W	0.22	
4262.00	21.300	170.100	4083.12	-1113.63	-1115.05	207.67	1698035.29	14542498.31	40°02'35.197"N	104°47'38.858"W	3.16	
4352.00	19.980	168.800	4167.35	-1144.78	-1146.23	213.47	1698041.16	14542467.15	40°02'34.889"N	104°47'38.783"W	1.55	
4441.00	18.420	167.840	4251.39	-1173.40	-1174.90	219.38	1698047.14	14542438.51	40°02'34.605"N	104°47'38.707"W	1.79	
4531.00	17.360	167.820	4337.04	-1200.39	-1201.92	225.21	1698053.03	14542411.51	40°02'34.338"N	104°47'38.632"W	1.18	
4620.00	16.530	167.420	4422.18	-1225.68	-1227.26	230.77	1698058.64	14542386.19	40°02'34.088"N	104°47'38.561"W	0.94	
4709.00	15.140	165.770	4507.80	-1249.27	-1250.88	236.39	1698064.31	14542362.59	40°02'33.854"N	104°47'38.489"W	1.64	
4799.00	13.970	165.020	4594.91	-1271.12	-1272.77	242.08	1698070.06	14542340.73	40°02'33.638"N	104°47'38.415"W	1.32	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL, SEC.17)
Area	COLORADO	Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	BUROUGH 1NE-17HZ AWP
Facility	SEC.17-T1N-R66W		

WELLPATH DATA (186 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
4889.00	12.900	163.270	4682.44	-1291.20	-1292.89	247.78	1698075.80	14542320.63	40°02'33.439"N	104°47'38.342"W	1.27	
5002.00	11.850	164.270	4792.82	-1314.40	-1316.13	254.56	1698082.63	14542297.41	40°02'33.210"N	104°47'38.255"W	0.95	
5092.00	9.630	166.890	4881.23	-1330.60	-1332.36	258.77	1698086.88	14542281.20	40°02'33.049"N	104°47'38.201"W	2.52	
5181.00	8.960	171.770	4969.07	-1344.69	-1346.47	261.45	1698089.59	14542267.10	40°02'32.910"N	104°47'38.166"W	1.16	
5270.00	5.780	182.320	5057.32	-1356.03	-1357.81	262.26	1698090.43	14542255.76	40°02'32.798"N	104°47'38.156"W	3.87	
5360.00	5.230	180.920	5146.91	-1364.66	-1366.44	262.02	1698090.20	14542247.14	40°02'32.712"N	104°47'38.159"W	0.63	
5449.00	2.740	145.960	5235.70	-1370.47	-1372.26	263.14	1698091.34	14542241.32	40°02'32.655"N	104°47'38.145"W	3.79	
5539.00	1.560	247.850	5325.66	-1372.71	-1374.51	263.21	1698091.41	14542239.08	40°02'32.633"N	104°47'38.144"W	3.80	
5628.00	1.440	256.510	5414.63	-1373.45	-1375.23	261.00	1698089.20	14542238.36	40°02'32.626"N	104°47'38.172"W	0.29	
5717.00	1.080	255.000	5503.61	-1373.94	-1375.70	259.10	1698087.31	14542237.87	40°02'32.621"N	104°47'38.197"W	0.41	
5807.00	1.330	259.130	5593.59	-1374.37	-1376.12	257.26	1698085.46	14542237.45	40°02'32.617"N	104°47'38.220"W	0.29	
5896.00	0.940	268.770	5682.57	-1374.59	-1376.33	255.51	1698083.72	14542237.24	40°02'32.615"N	104°47'38.243"W	0.49	
5986.00	0.760	254.680	5772.56	-1374.77	-1376.50	254.20	1698082.41	14542237.06	40°02'32.613"N	104°47'38.260"W	0.31	
6076.00	0.700	276.750	5862.55	-1374.87	-1376.60	253.08	1698081.29	14542236.97	40°02'32.612"N	104°47'38.274"W	0.32	
6165.00	0.730	299.800	5951.54	-1374.53	-1376.25	252.05	1698080.26	14542237.31	40°02'32.616"N	104°47'38.287"W	0.32	
6255.00	0.710	301.220	6041.54	-1373.96	-1375.68	251.07	1698079.28	14542237.88	40°02'32.621"N	104°47'38.300"W	0.03	
6344.00	0.580	322.000	6130.53	-1373.33	-1375.04	250.32	1698078.53	14542238.52	40°02'32.628"N	104°47'38.309"W	0.30	
6434.00	1.200	325.910	6220.52	-1372.19	-1373.90	249.52	1698077.72	14542239.66	40°02'32.639"N	104°47'38.320"W	0.69	
6523.00	0.940	329.530	6309.50	-1370.80	-1372.50	248.62	1698076.82	14542241.06	40°02'32.653"N	104°47'38.331"W	0.30	
6613.00	1.160	306.020	6399.49	-1369.64	-1371.33	247.51	1698075.71	14542242.22	40°02'32.664"N	104°47'38.346"W	0.53	
6703.00	1.200	321.400	6489.47	-1368.37	-1370.05	246.19	1698074.38	14542243.49	40°02'32.677"N	104°47'38.363"W	0.35	
6785.00†	2.101	333.238	6571.44	-1366.37	-1368.04	244.97	1698073.17	14542245.50	40°02'32.697"N	104°47'38.378"W	1.17	KOP
6792.00	2.180	333.790	6578.43	-1366.13	-1367.81	244.86	1698073.05	14542245.74	40°02'32.699"N	104°47'38.380"W	1.17	
6882.00	9.290	29.740	6667.96	-1358.26	-1359.95	247.71	1698075.88	14542253.60	40°02'32.777"N	104°47'38.343"W	9.19	
6971.00	16.370	15.790	6754.71	-1339.88	-1341.62	254.70	1698082.82	14542271.94	40°02'32.958"N	104°47'38.253"W	8.63	
7061.00	20.360	9.160	6840.11	-1312.16	-1313.94	260.64	1698088.70	14542299.62	40°02'33.231"N	104°47'38.177"W	5.00	
7150.00	29.530	5.850	6920.73	-1274.95	-1276.76	265.35	1698093.33	14542336.80	40°02'33.599"N	104°47'38.116"W	10.42	
7240.00	39.670	358.300	6994.75	-1224.01	-1225.82	266.77	1698094.62	14542387.72	40°02'34.102"N	104°47'38.098"W	12.21	
7329.00	40.670	354.090	7062.77	-1166.78	-1168.57	262.94	1698090.66	14542444.94	40°02'34.668"N	104°47'38.147"W	3.25	
7419.00	46.570	355.610	7127.90	-1105.01	-1106.76	257.41	1698085.00	14542506.71	40°02'35.279"N	104°47'38.218"W	6.66	
7508.00	51.800	355.870	7186.05	-1037.89	-1039.61	252.42	1698079.85	14542573.82	40°02'35.942"N	104°47'38.282"W	5.88	
7598.00	58.850	357.930	7237.22	-964.06	-965.75	248.47	1698075.74	14542647.64	40°02'36.672"N	104°47'38.333"W	8.06	
7687.00	63.940	359.270	7279.82	-885.99	-887.67	246.59	1698073.67	14542725.69	40°02'37.444"N	104°47'38.357"W	5.87	
7776.00	71.330	1.960	7313.67	-803.76	-805.43	247.52	1698074.42	14542807.89	40°02'38.257"N	104°47'38.345"W	8.76	
7866.00	79.420	1.930	7336.37	-716.78	-718.47	250.47	1698077.17	14542894.82	40°02'39.116"N	104°47'38.307"W	8.99	
7913.00†	84.505	1.206	7342.94	-670.26	-671.97	251.74	1698078.33	14542941.31	40°02'39.575"N	104°47'38.291"W	10.93	LANDING (103'FSL & 686'FEL,SEC.17) 40.0443265 -104.7939697
7955.00	89.050	0.570	7345.30	-628.34	-630.05	252.39	1698078.88	14542983.22	40°02'39.990"N	104°47'38.283"W	10.93	
8045.00	88.280	0.900	7347.40	-538.37	-540.08	253.55	1698079.83	14543073.15	40°02'40.879"N	104°47'38.268"W	0.93	
8134.00	88.030	0.770	7350.26	-449.42	-451.14	254.84	1698080.92	14543162.06	40°02'41.758"N	104°47'38.251"W	0.32	
8224.00	89.910	1.430	7351.88	-359.44	-361.17	256.57	1698082.44	14543251.99	40°02'42.647"N	104°47'38.229"W	2.21	
8270.00†	89.781	1.414	7352.01	-313.45	-315.19	257.71	1698083.48	14543297.96	40°02'43.101"N	104°47'38.214"W	0.28	CROSS SETBACK HEEL (460'FSL & 680'FEL,SEC.17) 40.0453059 -104.7939484
8313.00	89.660	1.400	7352.22	-270.46	-272.20	258.77	1698084.43	14543340.94	40°02'43.526"N	104°47'38.201"W	0.28	
8403.00	89.450	0.850	7352.91	-180.47	-182.22	260.54	1698085.99	14543430.88	40°02'44.415"N	104°47'38.178"W	0.65	
8492.00	91.320	1.160	7352.32	-91.48	-93.24	262.10	1698087.35	14543519.83	40°02'45.295"N	104°47'38.158"W	2.13	
8582.00	91.390	0.930	7350.19	-1.51	-3.28	263.74	1698088.78	14543609.76	40°02'46.184"N	104°47'38.137"W	0.27	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)		Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL, SEC.17)
Area	COLORADO		Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)		Wellbore	BUROUGH 1NE-17HZ AWP
Facility	SEC.17-T1N-R66W			

WELLPATH DATA (186 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
8671.00	91.660	0.710	7347.82	87.45	85.68	265.01	1698089.85	14543698.68	40°02'47.063"N	104°47'38.120"W	0.39	
8761.00	91.880	0.600	7345.04	177.41	175.63	266.04	1698090.67	14543788.60	40°02'47.952"N	104°47'38.107"W	0.27	
8850.00	89.630	1.570	7343.87	266.39	264.60	267.72	1698092.15	14543877.54	40°02'48.831"N	104°47'38.085"W	2.75	
8940.00	89.690	1.730	7344.40	356.36	354.56	270.32	1698094.53	14543967.47	40°02'49.720"N	104°47'38.052"W	0.19	
9029.00	89.630	1.950	7344.93	445.33	443.51	273.17	1698097.18	14544056.39	40°02'50.599"N	104°47'38.015"W	0.26	
9118.00	90.030	1.670	7345.19	534.31	532.47	275.98	1698099.79	14544145.32	40°02'51.478"N	104°47'37.979"W	0.55	
9208.00	90.310	2.260	7344.93	624.27	622.41	279.07	1698102.67	14544235.24	40°02'52.367"N	104°47'37.940"W	0.73	
9297.00	90.340	359.220	7344.42	713.26	711.39	280.22	1698103.61	14544324.19	40°02'53.246"N	104°47'37.925"W	3.42	
9386.00	90.550	359.360	7343.73	802.24	800.38	279.12	1698102.30	14544413.14	40°02'54.126"N	104°47'37.939"W	0.28	
9476.00	90.060	359.540	7343.25	892.22	890.38	278.25	1698101.23	14544503.09	40°02'55.015"N	104°47'37.950"W	0.58	
9565.00	89.570	359.210	7343.54	981.21	979.37	277.28	1698100.06	14544592.05	40°02'55.894"N	104°47'37.962"W	0.66	
9654.00	89.600	359.180	7344.18	1070.19	1068.36	276.03	1698098.60	14544681.00	40°02'56.774"N	104°47'37.979"W	0.05	
9744.00	89.570	0.260	7344.84	1160.18	1158.36	275.59	1698097.95	14544770.96	40°02'57.663"N	104°47'37.984"W	1.20	
9834.00	89.910	0.290	7345.24	1250.18	1248.36	276.02	1698098.18	14544860.92	40°02'58.553"N	104°47'37.979"W	0.38	
9923.00	90.090	0.740	7345.24	1339.18	1337.35	276.82	1698098.77	14544949.88	40°02'59.432"N	104°47'37.968"W	0.54	
10013.00	91.540	1.060	7343.96	1429.16	1427.33	278.24	1698099.98	14545039.83	40°03'00.321"N	104°47'37.950"W	1.65	
10102.00	88.490	359.380	7343.94	1518.15	1516.31	278.58	1698100.12	14545128.78	40°03'01.201"N	104°47'37.946"W	3.91	
10192.00	88.950	359.450	7345.95	1608.11	1606.29	277.66	1698098.99	14545218.71	40°03'02.090"N	104°47'37.958"W	0.52	
10281.00	89.110	359.150	7347.46	1697.08	1695.27	276.57	1698097.70	14545307.65	40°03'02.969"N	104°47'37.971"W	0.38	
10371.00	89.040	359.090	7348.91	1787.05	1785.24	275.19	1698096.11	14545397.59	40°03'03.858"N	104°47'37.989"W	0.10	
10461.00	89.140	358.690	7350.34	1877.01	1875.22	273.45	1698094.16	14545487.52	40°03'04.747"N	104°47'38.012"W	0.46	
10550.00	89.170	358.620	7351.65	1965.96	1964.18	271.36	1698091.87	14545576.45	40°03'05.627"N	104°47'38.038"W	0.09	
10640.00	89.750	359.080	7352.50	2055.92	2054.16	269.55	1698089.86	14545666.39	40°03'06.516"N	104°47'38.062"W	0.82	
10729.00	89.540	358.620	7353.05	2144.89	2143.14	267.77	1698087.86	14545755.33	40°03'07.395"N	104°47'38.085"W	0.57	
10819.00	89.450	358.750	7353.85	2234.84	2233.11	265.70	1698085.59	14545845.26	40°03'08.284"N	104°47'38.111"W	0.18	
10908.00	89.540	358.880	7354.63	2323.81	2322.09	263.86	1698083.55	14545934.20	40°03'09.163"N	104°47'38.135"W	0.18	
10998.00	89.780	358.830	7355.16	2413.77	2412.07	262.06	1698081.54	14546024.14	40°03'10.053"N	104°47'38.158"W	0.27	
11087.00	89.600	358.580	7355.65	2502.73	2501.05	260.05	1698079.33	14546113.07	40°03'10.932"N	104°47'38.184"W	0.35	
11177.00	90.060	358.350	7355.91	2592.68	2591.01	257.64	1698076.71	14546203.00	40°03'11.821"N	104°47'38.215"W	0.57	
11266.00	90.430	358.230	7355.53	2681.62	2679.97	254.98	1698073.85	14546291.92	40°03'12.700"N	104°47'38.249"W	0.44	
11356.00	91.480	358.110	7354.03	2771.54	2769.91	252.11	1698070.77	14546381.81	40°03'13.589"N	104°47'38.286"W	1.17	
11445.00	90.950	358.580	7352.14	2860.46	2858.86	249.54	1698068.00	14546470.71	40°03'14.468"N	104°47'38.319"W	0.80	
11535.00	88.890	359.020	7352.27	2950.42	2948.83	247.66	1698065.91	14546560.65	40°03'15.357"N	104°47'38.343"W	2.34	
11624.00	88.150	0.900	7354.57	3039.39	3037.80	247.59	1698065.64	14546649.58	40°03'16.236"N	104°47'38.344"W	2.27	
11713.00	88.310	359.970	7357.32	3128.34	3126.75	248.27	1698066.11	14546738.50	40°03'17.115"N	104°47'38.335"W	1.06	
11803.00	88.670	2.820	7359.69	3218.29	3216.68	250.46	1698068.09	14546828.40	40°03'18.004"N	104°47'38.307"W	3.19	
11893.00	88.920	2.560	7361.58	3308.20	3306.56	254.68	1698072.11	14546918.25	40°03'18.892"N	104°47'38.253"W	0.40	
11982.00	89.850	2.980	7362.54	3397.11	3395.45	258.98	1698076.20	14547007.12	40°03'19.771"N	104°47'38.197"W	1.15	
12072.00	90.120	3.160	7362.56	3487.01	3485.32	263.80	1698080.81	14547096.96	40°03'20.659"N	104°47'38.135"W	0.36	
12161.00	91.450	4.290	7361.34	3575.85	3574.12	269.58	1698086.39	14547185.74	40°03'21.536"N	104°47'38.061"W	1.96	
12251.00	90.120	1.860	7360.11	3665.73	3663.98	274.41	1698091.00	14547275.57	40°03'22.424"N	104°47'37.999"W	3.08	
12340.00	90.860	1.840	7359.35	3754.70	3752.93	277.28	1698093.67	14547364.49	40°03'23.303"N	104°47'37.962"W	0.83	
12430.00	90.920	1.130	7357.95	3844.67	3842.89	279.62	1698095.80	14547454.42	40°03'24.192"N	104°47'37.932"W	0.79	
12519.00	90.860	0.810	7356.57	3933.66	3931.86	281.12	1698097.10	14547543.36	40°03'25.072"N	104°47'37.913"W	0.37	
12596.00†	91.177	0.647	7355.20	4010.64	4008.84	282.10	1698097.90	14547620.32	40°03'25.832"N	104°47'37.900"W	0.46	CROSS SETBACK TOE (461'FNL & 638'FEL, SEC.17) 40.0571756 -104.7938611

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL,SEC.17)
Area	COLORADO	Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	BUROUGH 1NE-17HZ AWB
Facility	SEC.17-T1N-R66W		

WELLPATH DATA (186 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
12609.00	91.230	0.620	7354.93	4023.64	4021.84	282.25	1698098.01	14547633.31	40°03'25.961"N	104°47'37.898"W	0.46	
12699.00	91.230	0.600	7352.99	4113.62	4111.81	283.20	1698098.76	14547723.25	40°03'26.850"N	104°47'37.886"W	0.02	
12788.00	90.180	0.360	7351.90	4202.61	4200.80	283.95	1698099.30	14547812.20	40°03'27.729"N	104°47'37.876"W	1.21	
12878.00	90.580	0.450	7351.30	4292.61	4290.80	284.59	1698099.73	14547902.16	40°03'28.619"N	104°47'37.868"W	0.46	
12953.00	90.090	0.070	7350.86	4367.61	4365.80	284.93	1698099.90	14547977.13	40°03'29.360"N	104°47'37.864"W	0.83	LAST BHGE MWD+IFR1+SC SURVEY
13000.00	90.090	0.070	7350.79	4414.61	4412.80	284.98	1698099.85	14548024.11	40°03'29.824"N	104°47'37.863"W	0.00	PTB (57'FNL & 635'FEL,SEC.17) 40.0582845 -104.7938508

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.17-T1N-R66W	0.00	0.00	-104.99	1697720.19	14543612.19	40°02'46.216"N	104°47'42.878"W	polygon
BUROUGH 1NE-17HZ HEEL REV-1(152'FSL & 688'FEL,SEC.17)	7345.00	-621.15	251.95	1698078.42	14542992.11	40°02'40.078"N	104°47'38.288"W	point
BUROUGH 1NE-17HZ BHL REV-1(50'FNL & 634'FEL,SEC.17)	7360.00	4419.89	285.77	1698100.62	14548031.21	40°03'29.894"N	104°47'37.853"W	point
BUROUGH 1NE-17HZ LANDBOX	7360.00	0.00	0.00	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W	polygon
BUROUGH 1NE-17HZ SETBACK 1	7360.00	0.00	0.00	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W	polygon
BUROUGH 1NE-17HZ SETBACK 2	7360.00	0.00	0.00	1697825.14	14543612.43	40°02'46.216"N	104°47'41.528"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: BUROUGH 1NE-17HZ AWP					Ref Wellpath: BUROUGH 1NE-17HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore
26.00	1841.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)		Custom APC ISCWSA Rev-2 MWD+IFR1 <138 - 1841>		BUROUGH 1NE-17HZ AWB
1841.00	12953.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)		BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1935 - 12953>		BUROUGH 1NE-17HZ AWB
12953.00	13000.00	Blind Drilling (std)		Projection to bit		BUROUGH 1NE-17HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#09 BUROUGH 1NE-17HZ (775'FSL & 938'FEL,SEC.17)
Area	COLORADO	Well	BUROUGH 1NE-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	BUROUGH 1NE-17HZ AWB
Facility	SEC.17-T1N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
138.00	1.100	273.500	137.99	FIRST SURFACE MWD+IFR1 SURVEY
1841.00	18.500	170.230	1795.12	LAST SURFACE MWD+IFR1 SURVEY
1935.00	18.190	171.310	1884.34	FIRST BHGE MWD+IFR1+SC SURVEY
1938.00	18.236	171.399	1887.19	ENTER LANDBOX (408'FSL & 866'FEL,SEC.17) 40.0451624 -104.7946123
6785.00	2.101	333.238	6571.44	KOP
7913.00	84.505	1.206	7342.94	LANDING (103'FSL & 686'FEL,SEC.17) 40.0443265 -104.7939697
8270.00	89.781	1.414	7352.01	CROSS SETBACK HEEL (460'FSL & 680'FEL,SEC.17) 40.0453059 -104.7939484
12596.00	91.177	0.647	7355.20	CROSS SETBACK TOE (461'FNL & 638'FEL,SEC.17) 40.0571756 -104.7938611
12953.00	90.090	0.070	7350.86	LAST BHGE MWD+IFR1+SC SURVEY
13000.00	90.090	0.070	7350.79	PTB (57'FNL & 635'FEL,SEC.17) 40.0582845 -104.7938508