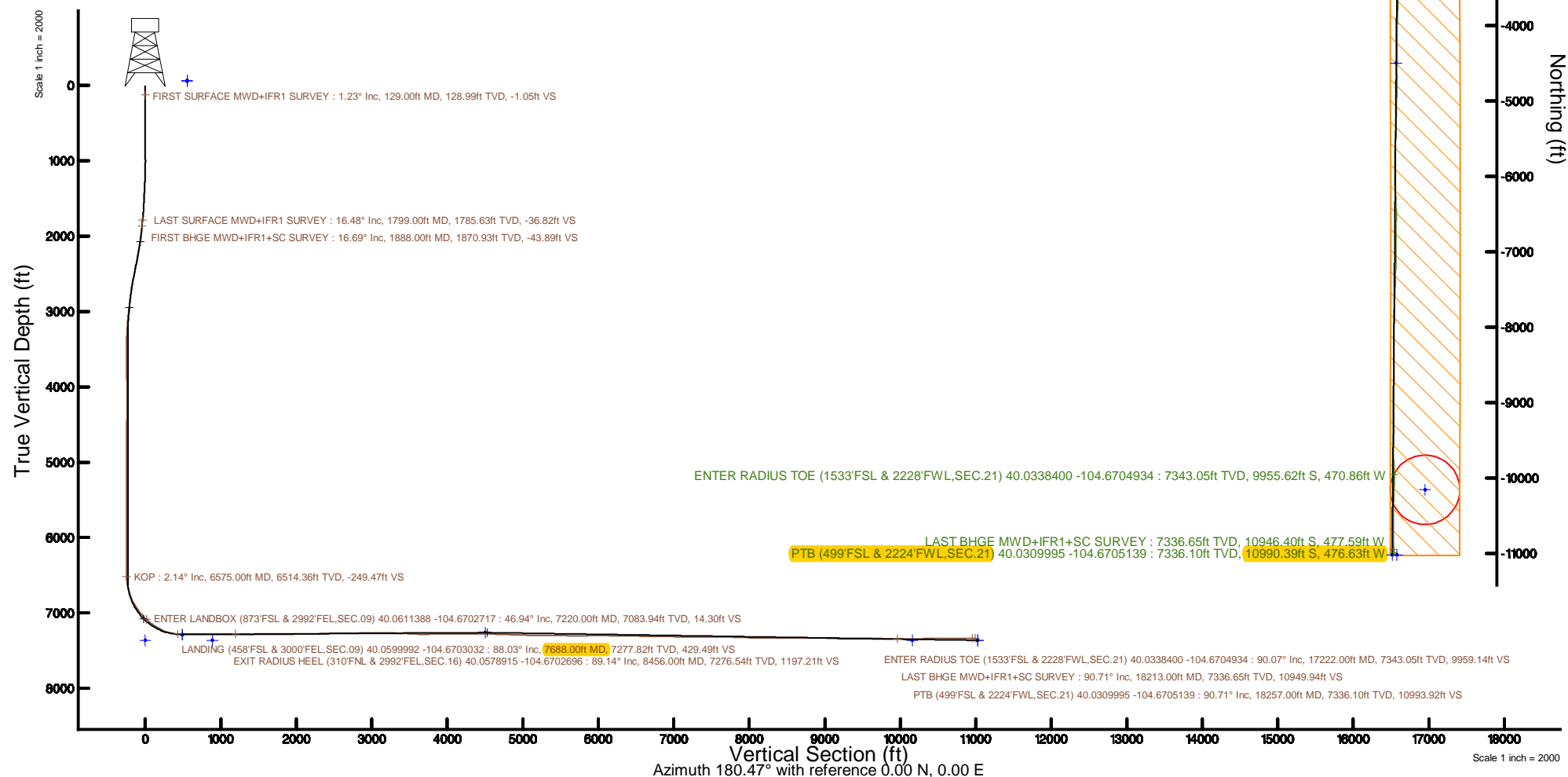


Location:	COLORADO	Slot:	SLOT#39 ROBIN 9-8HZ(884FSL & 2583FEL,SEC.09)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	ROBIN 9-8HZ
Facility:	SEC.09-T1N-R65W	Wellbore:	ROBIN 9-8HZ PWB
Plot reference wellpath is ROBIN 9-8HZ PWP Rev-B.0		Grid System: NAD83 / UTM Zone 13 North, US feet	
True vertical depths are referenced to Xreme 22 (17) (RT)		* = Wellpath was transformed from a different geodetic datum	
Measured depths are referenced to Xreme 22 (17) (RT)		North Reference: True north	
Xreme 22 (17) (RT) to Mean Sea Level: 4947 feet		Scale: True distance	
Mean Sea Level to Mud line (At Slot: SLOT#39 ROBIN 9-8HZ(884FSL & 2583FEL,SEC.09)): 0 feet		Depths are in feet	
Coordinates are in feet referenced to Slot		Created by: painstmr on 2017-12-01	
		Database: WA_DEN_Anadarko_Defn	



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWB
Facility	SEC.09-T1N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999610	Report Generated	12/1/2017 at 10:51 AM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/ROBIN_9-8HZ_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3872.74	2031.63	1733083.47	14549180.03	40°03'40.208"N	104°40'07.723"W
Facility Reference Pt			1731038.57	14553043.83	40°04'18.480"N	104°40'33.852"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	Xtreme 22 (17') (RT) to Facility Vertical Datum	4947.00ft
Horizontal Reference Pt	Slot	Xtreme 22 (17') (RT) to Mean Sea Level	4947.00ft
Vertical Reference Pt	Xtreme 22 (17') (RT)	Xtreme 22 (17') (RT) to Mud Line at Slot (SLOT#39 ROBIN 9-8HZ (884'FSL & 2583'FEL,SEC.09))	4947.00ft
MD Reference Pt	Xtreme 22 (17') (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#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWP
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 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	29.900	0.00	0.00	0.00	0.00	1733083.47	14549180.03	40°03'40.208"N	104°40'07.723"W	0.00	
17.00	0.000	29.900	17.00	0.00	0.00	0.00	1733083.47	14549180.03	40°03'40.208"N	104°40'07.723"W	0.00	
129.00	1.230	29.900	128.99	-1.05	1.04	0.60	1733084.07	14549181.07	40°03'40.218"N	104°40'07.715"W	1.10	FIRST SURFACE MWD+IFR1 SURVEY
160.00	1.050	8.630	159.99	-1.62	1.61	0.81	1733084.27	14549181.64	40°03'40.224"N	104°40'07.713"W	1.47	
192.00	0.530	82.890	191.98	-1.93	1.92	1.00	1733084.46	14549181.95	40°03'40.227"N	104°40'07.710"W	3.25	
224.00	0.530	64.170	223.98	-2.01	2.00	1.28	1733084.74	14549182.04	40°03'40.228"N	104°40'07.707"W	0.54	
255.00	0.620	52.050	254.98	-2.18	2.17	1.54	1733085.00	14549182.20	40°03'40.229"N	104°40'07.703"W	0.49	
287.00	0.790	51.690	286.98	-2.43	2.41	1.85	1733085.31	14549182.45	40°03'40.232"N	104°40'07.699"W	0.53	
318.00	0.440	40.090	317.98	-2.65	2.63	2.09	1733085.56	14549182.67	40°03'40.234"N	104°40'07.696"W	1.19	
350.00	0.400	52.400	349.97	-2.82	2.80	2.26	1733085.72	14549182.83	40°03'40.236"N	104°40'07.694"W	0.31	
381.00	0.180	98.100	380.97	-2.88	2.86	2.40	1733085.86	14549182.89	40°03'40.236"N	104°40'07.692"W	0.98	
413.00	0.310	98.100	412.97	-2.86	2.84	2.53	1733085.99	14549182.87	40°03'40.236"N	104°40'07.690"W	0.41	
444.00	0.480	126.140	443.97	-2.77	2.75	2.72	1733086.18	14549182.79	40°03'40.235"N	104°40'07.688"W	0.81	
476.00	0.790	114.100	475.97	-2.60	2.58	3.03	1733086.49	14549182.62	40°03'40.233"N	104°40'07.684"W	1.05	
507.00	0.970	106.450	506.97	-2.45	2.42	3.48	1733086.94	14549182.46	40°03'40.232"N	104°40'07.678"W	0.69	
539.00	1.140	98.100	538.96	-2.33	2.30	4.05	1733087.51	14549182.34	40°03'40.231"N	104°40'07.671"W	0.71	
571.00	0.440	132.550	570.96	-2.20	2.17	4.46	1733087.92	14549182.21	40°03'40.229"N	104°40'07.666"W	2.55	
603.00	0.570	121.740	602.96	-2.04	2.00	4.68	1733088.14	14549182.05	40°03'40.228"N	104°40'07.663"W	0.50	
635.00	0.970	108.650	634.96	-1.87	1.83	5.07	1733088.54	14549181.88	40°03'40.226"N	104°40'07.658"W	1.36	
666.00	0.350	162.350	665.95	-1.70	1.66	5.35	1733088.82	14549181.71	40°03'40.224"N	104°40'07.654"W	2.62	
698.00	0.130	234.510	697.95	-1.59	1.54	5.35	1733088.82	14549181.59	40°03'40.223"N	104°40'07.654"W	1.04	
730.00	0.620	234.150	729.95	-1.46	1.42	5.18	1733088.65	14549181.47	40°03'40.222"N	104°40'07.656"W	1.53	
762.00	1.190	245.490	761.95	-1.22	1.18	4.74	1733088.20	14549181.23	40°03'40.220"N	104°40'07.662"W	1.86	
793.00	0.880	239.250	792.94	-0.96	0.93	4.24	1733087.71	14549180.97	40°03'40.217"N	104°40'07.668"W	1.06	
825.00	0.880	250.330	824.94	-0.75	0.72	3.80	1733087.27	14549180.76	40°03'40.215"N	104°40'07.674"W	0.53	
857.00	0.880	247.340	856.94	-0.57	0.54	3.34	1733086.81	14549180.58	40°03'40.213"N	104°40'07.680"W	0.14	
889.00	1.010	244.880	888.93	-0.35	0.33	2.86	1733086.33	14549180.37	40°03'40.211"N	104°40'07.686"W	0.43	
952.00	1.190	263.600	951.92	-0.03	0.02	1.71	1733085.18	14549180.05	40°03'40.208"N	104°40'07.701"W	0.63	
984.00	1.270	254.110	983.91	0.11	-0.12	1.03	1733084.51	14549179.92	40°03'40.207"N	104°40'07.710"W	0.68	
1016.00	1.410	272.480	1015.90	0.19	-0.20	0.30	1733083.77	14549179.83	40°03'40.206"N	104°40'07.719"W	1.40	
1047.00	1.980	292.430	1046.89	-0.02	0.02	-0.58	1733082.90	14549180.05	40°03'40.208"N	104°40'07.730"W	2.62	
1079.00	2.500	310.970	1078.87	-0.68	0.69	-1.61	1733081.86	14549180.72	40°03'40.215"N	104°40'07.744"W	2.77	
1111.00	2.640	313.340	1110.83	-1.63	1.66	-2.68	1733080.79	14549181.67	40°03'40.224"N	104°40'07.757"W	0.55	
1142.00	3.210	298.930	1141.79	-2.53	2.57	-3.96	1733079.51	14549182.58	40°03'40.233"N	104°40'07.774"W	2.99	
1174.00	3.520	295.150	1173.74	-3.37	3.42	-5.63	1733077.83	14549183.42	40°03'40.242"N	104°40'07.795"W	1.19	
1206.00	4.480	289.000	1205.66	-4.18	4.24	-7.70	1733075.76	14549184.24	40°03'40.250"N	104°40'07.822"W	3.28	
1238.00	5.230	291.640	1237.55	-5.10	5.19	-10.24	1733073.22	14549185.17	40°03'40.259"N	104°40'07.855"W	2.44	
1270.00	6.500	290.050	1269.38	-6.24	6.34	-13.30	1733070.16	14549186.32	40°03'40.271"N	104°40'07.894"W	4.00	
1301.00	7.290	289.170	1300.15	-7.45	7.59	-16.80	1733066.65	14549187.56	40°03'40.283"N	104°40'07.939"W	2.57	
1333.00	8.260	288.300	1331.86	-8.81	8.98	-20.90	1733062.55	14549188.93	40°03'40.297"N	104°40'07.992"W	3.05	
1365.00	8.830	287.060	1363.50	-10.21	10.42	-25.43	1733058.01	14549190.35	40°03'40.311"N	104°40'08.050"W	1.87	
1397.00	9.400	284.600	1395.10	-11.55	11.80	-30.31	1733053.13	14549191.71	40°03'40.325"N	104°40'08.113"W	2.16	
1428.00	10.370	283.640	1425.64	-12.81	13.10	-35.47	1733047.97	14549192.99	40°03'40.337"N	104°40'08.179"W	3.17	
1460.00	11.210	285.920	1457.07	-14.29	14.63	-41.26	1733042.17	14549194.50	40°03'40.353"N	104°40'08.254"W	2.94	
1523.00	11.600	284.690	1518.83	-17.48	17.92	-53.28	1733030.15	14549197.74	40°03'40.385"N	104°40'08.408"W	0.73	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 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
1555.00	12.220	284.520	1550.14	-19.09	19.58	-59.67	1733023.76	14549199.38	40°03'40.402"N	104°40'08.490"W	1.94	
1586.00	13.360	282.140	1580.37	-20.61	21.16	-66.34	1733017.08	14549200.93	40°03'40.417"N	104°40'08.576"W	4.05	
1618.00	14.150	282.580	1611.45	-22.18	22.79	-73.78	1733009.64	14549202.53	40°03'40.433"N	104°40'08.672"W	2.49	
1650.00	14.990	285.830	1642.42	-24.10	24.77	-81.58	1733001.84	14549204.48	40°03'40.453"N	104°40'08.772"W	3.66	
1682.00	15.560	287.240	1673.29	-26.43	27.17	-89.66	1732993.75	14549206.85	40°03'40.476"N	104°40'08.876"W	2.13	
1713.00	16.000	287.770	1703.12	-28.90	29.70	-97.70	1732985.70	14549209.36	40°03'40.502"N	104°40'08.979"W	1.49	
1745.00	16.350	289.880	1733.86	-31.71	32.58	-106.13	1732977.26	14549212.20	40°03'40.530"N	104°40'09.088"W	2.14	
1777.00	16.660	290.320	1764.54	-34.77	35.71	-114.67	1732968.72	14549215.30	40°03'40.561"N	104°40'09.198"W	1.04	
1799.00	16.480	288.910	1785.63	-36.82	37.81	-120.58	1732962.80	14549217.38	40°03'40.582"N	104°40'09.274"W	2.00	LAST SURFACE MWD+IFR1 SURVEY
1888.00	16.690	284.370	1870.93	-43.89	45.08	-144.90	1732938.46	14549224.55	40°03'40.653"N	104°40'09.587"W	1.47	FIRST BHGE MWD+IFR1+SC SURVEY
1976.00	16.910	289.630	1955.18	-51.13	52.51	-169.20	1732914.15	14549231.89	40°03'40.727"N	104°40'09.899"W	1.75	
2063.00	16.630	294.880	2038.48	-60.42	62.00	-192.41	1732890.91	14549241.29	40°03'40.821"N	104°40'10.198"W	1.77	
2151.00	17.190	303.680	2122.69	-72.75	74.51	-214.66	1732868.62	14549253.71	40°03'40.944"N	104°40'10.484"W	2.97	
2239.00	17.160	309.160	2206.77	-87.99	89.92	-235.55	1732847.68	14549269.04	40°03'41.097"N	104°40'10.752"W	1.84	
2326.00	16.210	307.170	2290.11	-103.27	105.36	-255.18	1732828.00	14549284.40	40°03'41.249"N	104°40'11.005"W	1.27	
2413.00	16.610	312.630	2373.57	-118.88	121.12	-274.00	1732809.13	14549300.09	40°03'41.405"N	104°40'11.247"W	1.83	
2500.00	16.550	316.210	2456.95	-136.10	138.49	-291.73	1732791.35	14549317.38	40°03'41.577"N	104°40'11.475"W	1.18	
2588.00	15.830	316.590	2541.46	-153.73	156.26	-308.65	1732774.36	14549335.08	40°03'41.752"N	104°40'11.693"W	0.83	
2676.00	14.650	313.820	2626.37	-170.02	172.68	-324.93	1732758.03	14549351.44	40°03'41.914"N	104°40'11.902"W	1.58	
2763.00	13.310	312.390	2710.79	-184.26	187.05	-340.26	1732742.65	14549365.74	40°03'42.056"N	104°40'12.099"W	1.59	
2851.00	11.970	310.740	2796.65	-196.93	199.84	-354.66	1732728.21	14549378.47	40°03'42.183"N	104°40'12.284"W	1.58	
2938.00	10.840	309.550	2881.94	-207.92	210.94	-367.80	1732715.03	14549389.51	40°03'42.292"N	104°40'12.453"W	1.33	
3025.00	10.070	310.220	2967.49	-217.94	221.06	-379.92	1732702.88	14549399.59	40°03'42.393"N	104°40'12.609"W	0.90	
3112.00	8.840	311.870	3053.31	-227.22	230.43	-390.71	1732692.07	14549408.92	40°03'42.485"N	104°40'12.748"W	1.45	
3200.00	7.040	309.980	3140.46	-235.13	238.41	-399.87	1732682.87	14549416.86	40°03'42.564"N	104°40'12.866"W	2.07	
3287.00	4.700	317.200	3227.00	-241.12	244.45	-406.38	1732676.34	14549422.87	40°03'42.624"N	104°40'12.950"W	2.82	
3375.00	3.250	321.810	3314.79	-245.69	249.06	-410.37	1732672.34	14549427.46	40°03'42.669"N	104°40'13.001"W	1.69	
3462.00	1.880	327.560	3401.70	-248.81	252.20	-412.66	1732670.03	14549430.59	40°03'42.700"N	104°40'13.030"W	1.60	
3488.00	1.640	332.430	3427.68	-249.50	252.89	-413.07	1732669.63	14549431.28	40°03'42.707"N	104°40'13.036"W	1.09	
3575.00	0.110	140.520	3514.67	-250.53	253.93	-413.59	1732669.10	14549432.32	40°03'42.717"N	104°40'13.042"W	2.01	
3663.00	0.280	294.790	3602.67	-250.56	253.95	-413.73	1732668.96	14549432.34	40°03'42.718"N	104°40'13.044"W	0.43	
3750.00	0.680	196.140	3689.67	-250.15	253.55	-414.07	1732668.63	14549431.94	40°03'42.714"N	104°40'13.048"W	0.89	
3838.00	1.130	196.090	3777.66	-248.81	252.21	-414.45	1732668.25	14549430.60	40°03'42.700"N	104°40'13.053"W	0.51	
3925.00	1.450	210.620	3864.64	-247.03	250.44	-415.25	1732667.46	14549428.83	40°03'42.683"N	104°40'13.064"W	0.52	
4013.00	0.590	171.430	3952.62	-245.62	249.03	-415.75	1732666.96	14549427.42	40°03'42.669"N	104°40'13.070"W	1.21	
4100.00	0.680	192.750	4039.62	-244.68	248.09	-415.80	1732666.92	14549426.47	40°03'42.660"N	104°40'13.071"W	0.29	
4188.00	0.180	61.880	4127.62	-244.23	247.64	-415.79	1732666.93	14549426.03	40°03'42.655"N	104°40'13.071"W	0.92	
4275.00	0.310	332.960	4214.62	-244.51	247.92	-415.78	1732666.94	14549426.30	40°03'42.658"N	104°40'13.070"W	0.41	
4363.00	0.610	311.470	4302.61	-245.02	248.44	-416.24	1732666.48	14549426.82	40°03'42.663"N	104°40'13.076"W	0.39	
4450.00	1.200	294.440	4389.60	-245.70	249.12	-417.41	1732665.30	14549427.50	40°03'42.670"N	104°40'13.091"W	0.74	
4538.00	0.930	73.110	4477.59	-246.29	249.71	-417.57	1732665.14	14549428.09	40°03'42.676"N	104°40'13.093"W	2.27	
4625.00	1.550	76.400	4564.57	-246.78	250.19	-415.75	1732666.96	14549428.58	40°03'42.680"N	104°40'13.070"W	0.72	
4713.00	1.070	73.730	4652.55	-247.31	250.70	-413.80	1732668.90	14549429.09	40°03'42.685"N	104°40'13.045"W	0.55	
4800.00	0.920	47.920	4739.54	-248.01	251.40	-412.51	1732670.20	14549429.79	40°03'42.692"N	104°40'13.028"W	0.54	
4888.00	0.690	50.730	4827.53	-248.83	252.21	-411.57	1732671.13	14549430.61	40°03'42.700"N	104°40'13.016"W	0.27	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWP
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 stations) † = interpolated/extrapolated station												Comments
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]	
4975.00	0.400	355.640	4914.53	-249.47	252.84	-411.19	1732671.51	14549431.24	40°03'42.707"N	104°40'13.011"W	0.65	
5062.00	1.180	139.420	5001.52	-249.10	252.47	-410.63	1732672.07	14549430.87	40°03'42.703"N	104°40'13.004"W	1.75	
5150.00	0.520	176.940	5089.51	-248.01	251.38	-410.02	1732672.68	14549429.78	40°03'42.692"N	104°40'12.996"W	0.94	
5237.00	0.220	144.880	5176.51	-247.48	250.85	-409.90	1732672.80	14549429.25	40°03'42.687"N	104°40'12.995"W	0.41	
5325.00	0.190	143.870	5264.51	-247.23	250.59	-409.72	1732672.99	14549429.00	40°03'42.684"N	104°40'12.992"W	0.03	
5412.00	0.150	287.060	5351.51	-247.15	250.51	-409.74	1732672.96	14549428.91	40°03'42.684"N	104°40'12.993"W	0.37	
5500.00	0.190	349.280	5439.51	-247.32	250.69	-409.88	1732672.82	14549429.09	40°03'42.685"N	104°40'12.995"W	0.20	
5587.00	0.220	66.610	5526.51	-247.53	250.89	-409.75	1732672.95	14549429.30	40°03'42.687"N	104°40'12.993"W	0.30	
5675.00	0.470	9.900	5614.51	-247.96	251.32	-409.54	1732673.17	14549429.72	40°03'42.692"N	104°40'12.990"W	0.45	
5762.00	0.620	14.110	5701.50	-248.76	252.12	-409.36	1732673.34	14549430.53	40°03'42.700"N	104°40'12.988"W	0.18	
5849.00	0.820	3.130	5788.50	-249.84	253.20	-409.21	1732673.48	14549431.61	40°03'42.710"N	104°40'12.986"W	0.28	
5937.00	1.090	90.850	5876.49	-250.47	253.82	-408.34	1732674.35	14549432.23	40°03'42.716"N	104°40'12.975"W	1.52	
6024.00	1.740	98.620	5963.46	-250.27	253.61	-406.21	1732676.49	14549432.03	40°03'42.714"N	104°40'12.947"W	0.78	
6112.00	1.700	81.650	6051.42	-250.29	253.60	-403.59	1732679.10	14549432.03	40°03'42.714"N	104°40'12.914"W	0.58	
6200.00	1.330	74.850	6139.39	-250.76	254.05	-401.32	1732681.37	14549432.49	40°03'42.719"N	104°40'12.884"W	0.47	
6287.00	0.320	162.230	6226.38	-250.80	254.09	-400.27	1732682.42	14549432.53	40°03'42.719"N	104°40'12.871"W	1.56	
6375.00	0.480	65.860	6314.38	-250.72	254.00	-399.86	1732682.83	14549432.44	40°03'42.718"N	104°40'12.866"W	0.69	
6462.00	0.650	127.370	6401.38	-250.58	253.85	-399.13	1732683.56	14549432.30	40°03'42.717"N	104°40'12.856"W	0.69	
6550.00	1.100	111.240	6489.37	-249.98	253.24	-397.95	1732684.74	14549431.69	40°03'42.711"N	104°40'12.841"W	0.58	
6575.00†	2.140	154.695	6514.36	-249.47	252.74	-397.52	1732685.17	14549431.19	40°03'42.706"N	104°40'12.836"W	6.16	KOP
6638.00	5.840	173.770	6577.20	-245.23	248.48	-396.67	1732686.03	14549426.94	40°03'42.664"N	104°40'12.825"W	6.16	
6725.00	13.590	189.490	6662.90	-230.71	233.98	-397.88	1732684.88	14549412.43	40°03'42.520"N	104°40'12.840"W	9.33	
6813.00	18.500	191.130	6747.44	-206.77	210.07	-402.28	1732680.57	14549388.52	40°03'42.284"N	104°40'12.897"W	5.60	
6900.00	25.060	186.510	6828.19	-174.84	178.18	-407.04	1732675.93	14549356.63	40°03'41.969"N	104°40'12.958"W	7.79	
6988.00	32.460	181.370	6905.30	-132.63	135.99	-409.72	1732673.41	14549314.44	40°03'41.552"N	104°40'12.993"W	8.86	
7075.00	37.250	176.790	6976.68	-82.97	86.32	-408.81	1732674.51	14549264.80	40°03'41.061"N	104°40'12.981"W	6.27	
7163.00	43.390	180.600	7043.75	-26.11	29.44	-407.63	1732675.90	14549207.95	40°03'40.499"N	104°40'12.966"W	7.52	
7220.00†	46.941	182.144	7083.94	14.30	-10.96	-408.61	1732675.06	14549167.56	40°03'40.100"N	104°40'12.978"W	6.52	ENTER LANDBOX (873'FSL & 2992'FEL,SEC.09) 40.0611388 -104.6702717
7251.00	48.880	182.910	7104.71	37.29	-33.94	-409.63	1732674.13	14549144.58	40°03'39.873"N	104°40'12.991"W	6.52	
7338.00	54.990	182.320	7158.33	105.70	-102.33	-412.74	1732671.28	14549076.21	40°03'39.197"N	104°40'13.031"W	7.04	
7426.00	61.620	182.160	7204.54	180.50	-177.11	-415.66	1732668.64	14549001.45	40°03'38.458"N	104°40'13.069"W	7.54	
7513.00	68.230	181.430	7241.39	259.24	-255.82	-418.11	1732666.48	14548922.75	40°03'37.680"N	104°40'13.100"W	7.64	
7601.00	77.780	179.130	7267.08	343.29	-339.88	-418.48	1732666.42	14548838.73	40°03'36.849"N	104°40'13.105"W	11.14	
7688.00	88.030	179.460	7277.82	429.49	-426.09	-417.42	1732667.80	14548752.56	40°03'35.997"N	104°40'13.091"W	11.79	LANDING (458'FSL & 3000'FEL,SEC.09) 40.0599992 -104.6703032
7775.00	90.370	179.690	7279.03	516.47	-513.07	-416.78	1732668.77	14548665.61	40°03'35.138"N	104°40'13.083"W	2.70	
7862.00	89.690	178.870	7278.99	603.45	-600.06	-415.69	1732670.18	14548578.66	40°03'34.278"N	104°40'13.069"W	1.22	
7950.00	90.550	179.310	7278.80	691.42	-688.05	-414.29	1732671.91	14548490.71	40°03'33.408"N	104°40'13.051"W	1.10	
8037.00	91.050	178.980	7277.59	778.39	-775.03	-412.99	1732673.53	14548403.77	40°03'32.549"N	104°40'13.034"W	0.69	
8125.00	89.850	178.320	7276.90	866.34	-863.00	-410.92	1732675.93	14548315.84	40°03'31.680"N	104°40'13.008"W	1.56	
8212.00	89.910	178.060	7277.08	953.27	-949.96	-408.17	1732679.00	14548228.93	40°03'30.820"N	104°40'12.972"W	0.31	
8300.00	91.200	179.760	7276.22	1041.23	-1037.93	-406.50	1732681.00	14548141.00	40°03'29.951"N	104°40'12.951"W	2.42	
8387.00	89.480	180.990	7275.71	1128.22	-1124.93	-407.06	1732680.75	14548054.04	40°03'29.091"N	104°40'12.958"W	2.43	
8456.00†	89.143	180.614	7276.54	1197.21	-1193.91	-408.03	1732680.04	14547985.07	40°03'28.409"N	104°40'12.970"W	0.73	EXIT RADIUS HEEL (310'FNL & 2992'FEL,SEC.16) 40.0578915 -104.6702696
8475.00	89.050	180.510	7276.84	1216.21	-1212.91	-408.22	1732679.93	14547966.08	40°03'28.222"N	104°40'12.973"W	0.73	
8562.00	89.080	179.810	7278.26	1303.20	-1299.90	-408.46	1732680.01	14547879.13	40°03'27.362"N	104°40'12.976"W	0.81	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 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
8649.00	88.150	179.000	7280.36	1390.16	-1386.87	-407.56	1732681.24	14547792.20	40°03'26.503"N	104°40'12.964"W	1.42	
8737.00	89.140	178.270	7282.44	1478.08	-1474.82	-405.46	1732683.66	14547704.29	40°03'25.634"N	104°40'12.937"W	1.40	
8824.00	89.690	179.170	7283.33	1565.04	-1561.79	-403.52	1732685.92	14547617.36	40°03'24.774"N	104°40'12.912"W	1.21	
8912.00	90.800	179.400	7282.95	1653.01	-1649.77	-402.14	1732687.63	14547529.42	40°03'23.905"N	104°40'12.895"W	1.27	
8999.00	90.580	178.260	7281.91	1739.96	-1736.74	-400.09	1732690.00	14547442.49	40°03'23.045"N	104°40'12.868"W	0.93	
9087.00	90.000	179.240	7281.46	1827.92	-1824.72	-398.17	1732692.24	14547354.56	40°03'22.176"N	104°40'12.844"W	1.29	
9174.00	90.460	180.970	7281.11	1914.91	-1911.72	-398.33	1732692.41	14547267.60	40°03'21.316"N	104°40'12.846"W	2.06	
9262.00	90.800	180.970	7280.14	2002.90	-1999.70	-399.82	1732691.25	14547179.64	40°03'20.447"N	104°40'12.865"W	0.39	
9349.00	90.800	180.980	7278.93	2089.89	-2086.68	-401.30	1732690.09	14547092.69	40°03'19.587"N	104°40'12.884"W	0.01	
9437.00	91.200	180.780	7277.39	2177.88	-2174.65	-402.65	1732689.07	14547004.75	40°03'18.718"N	104°40'12.901"W	0.51	
9524.00	91.480	180.810	7275.36	2264.85	-2261.62	-403.86	1732688.18	14546917.81	40°03'17.858"N	104°40'12.917"W	0.32	
9612.00	91.850	180.810	7272.80	2352.81	-2349.57	-405.10	1732687.27	14546829.89	40°03'16.989"N	104°40'12.933"W	0.42	
9699.00	90.520	181.850	7271.00	2439.78	-2436.53	-407.12	1732685.57	14546742.96	40°03'16.130"N	104°40'12.959"W	1.94	
9787.00	90.890	181.220	7269.92	2527.76	-2524.49	-409.48	1732683.54	14546655.02	40°03'15.260"N	104°40'12.989"W	0.83	
9874.00	91.200	180.870	7268.33	2614.74	-2611.46	-411.07	1732682.28	14546568.08	40°03'14.401"N	104°40'13.009"W	0.54	
9962.00	90.000	181.160	7267.41	2702.73	-2699.44	-412.63	1732681.05	14546480.13	40°03'13.531"N	104°40'13.029"W	1.40	
10049.00	90.090	180.900	7267.34	2789.72	-2786.43	-414.19	1732679.81	14546393.17	40°03'12.672"N	104°40'13.049"W	0.32	
10137.00	90.180	180.440	7267.14	2877.72	-2874.42	-415.22	1732679.11	14546305.21	40°03'11.802"N	104°40'13.063"W	0.53	
10224.00	90.550	180.170	7266.58	2964.72	-2961.42	-415.68	1732678.97	14546218.25	40°03'10.943"N	104°40'13.068"W	0.53	
10312.00	90.830	179.950	7265.52	3052.71	-3049.41	-415.77	1732679.20	14546130.29	40°03'10.073"N	104°40'13.070"W	0.40	
10399.00	89.420	179.280	7265.33	3139.70	-3136.41	-415.19	1732680.11	14546043.33	40°03'09.213"N	104°40'13.062"W	1.79	
10486.00	89.780	181.090	7265.94	3226.69	-3223.40	-415.47	1732680.16	14545956.37	40°03'08.354"N	104°40'13.066"W	2.12	
10574.00	88.740	180.440	7267.08	3314.68	-3311.38	-416.65	1732679.31	14545868.42	40°03'07.484"N	104°40'13.081"W	1.39	
10661.00	86.890	179.260	7270.39	3401.61	-3398.31	-416.42	1732679.86	14545781.52	40°03'06.625"N	104°40'13.078"W	2.52	
10749.00	86.860	180.480	7275.19	3489.47	-3486.18	-416.22	1732680.38	14545693.69	40°03'05.757"N	104°40'13.075"W	1.38	
10837.00	87.780	180.910	7279.30	3577.37	-3574.08	-417.28	1732679.65	14545605.83	40°03'04.888"N	104°40'13.089"W	1.15	
10924.00	88.950	181.410	7281.79	3664.33	-3661.02	-419.05	1732678.21	14545518.91	40°03'04.029"N	104°40'13.112"W	1.46	
11011.00	91.880	183.010	7281.16	3751.27	-3747.94	-422.40	1732675.18	14545432.01	40°03'03.170"N	104°40'13.155"W	3.84	
11099.00	90.620	182.220	7279.24	3839.19	-3835.83	-426.41	1732671.49	14545344.15	40°03'02.301"N	104°40'13.206"W	1.69	
11187.00	90.490	182.040	7278.38	3927.15	-3923.76	-429.68	1732668.55	14545256.24	40°03'01.432"N	104°40'13.248"W	0.25	
11274.00	90.460	181.780	7277.66	4014.12	-4010.71	-432.58	1732665.98	14545169.31	40°03'00.573"N	104°40'13.286"W	0.30	
11362.00	89.820	180.560	7277.45	4102.11	-4098.69	-434.38	1732664.51	14545081.36	40°02'59.704"N	104°40'13.309"W	1.57	
11449.00	89.820	179.830	7277.72	4189.11	-4185.69	-434.68	1732664.53	14544994.39	40°02'58.844"N	104°40'13.312"W	0.84	
11537.00	89.820	180.270	7278.00	4277.10	-4273.69	-434.75	1732664.79	14544906.43	40°02'57.974"N	104°40'13.313"W	0.50	
11625.00	89.780	180.780	7278.31	4365.10	-4361.68	-435.56	1732664.31	14544818.47	40°02'57.105"N	104°40'13.324"W	0.58	
11716.00	89.970	181.450	7278.50	4456.10	-4452.67	-437.33	1732662.87	14544727.51	40°02'56.206"N	104°40'13.347"W	0.77	
11807.00	89.510	180.740	7278.92	4547.09	-4543.65	-439.07	1732661.48	14544636.56	40°02'55.307"N	104°40'13.369"W	0.93	
11899.00	88.370	178.820	7280.62	4639.06	-4635.63	-438.72	1732662.17	14544544.62	40°02'54.398"N	104°40'13.364"W	2.43	
11989.00	87.810	178.870	7283.62	4728.97	-4725.56	-436.90	1732664.32	14544454.73	40°02'53.509"N	104°40'13.341"W	0.62	
12080.00	88.090	179.650	7286.87	4819.90	-4816.49	-435.73	1732665.83	14544363.84	40°02'52.610"N	104°40'13.326"W	0.91	
12168.00	88.210	181.570	7289.71	4907.84	-4904.43	-436.67	1732665.22	14544275.93	40°02'51.741"N	104°40'13.338"W	2.18	
12255.00	88.210	181.550	7292.43	4994.79	-4991.36	-439.03	1732663.18	14544189.03	40°02'50.882"N	104°40'13.368"W	0.02	
12342.00	88.950	181.640	7294.59	5081.74	-5078.30	-441.45	1732661.08	14544102.12	40°02'50.023"N	104°40'13.399"W	0.86	
12430.00	88.180	180.900	7296.79	5169.70	-5166.25	-443.40	1732659.46	14544014.19	40°02'49.154"N	104°40'13.424"W	1.21	
12518.00	88.890	182.090	7299.04	5257.66	-5254.19	-445.70	1732657.49	14543926.28	40°02'48.285"N	104°40'13.454"W	1.57	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 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
12605.00	90.250	182.350	7299.69	5344.61	-5341.12	-449.07	1732654.45	14543839.37	40°02'47.426"N	104°40'13.497"W	1.59	
12692.00	90.650	182.510	7299.01	5431.56	-5428.04	-452.76	1732651.08	14543752.48	40°02'46.567"N	104°40'13.545"W	0.50	
12780.00	88.890	181.550	7299.36	5519.52	-5515.98	-455.87	1732648.29	14543664.56	40°02'45.698"N	104°40'13.585"W	2.28	
12868.00	88.890	180.710	7301.07	5607.50	-5603.94	-457.61	1732646.89	14543576.62	40°02'44.829"N	104°40'13.607"W	0.95	
12955.00	89.780	180.790	7302.08	5694.49	-5690.93	-458.75	1732646.07	14543489.67	40°02'43.969"N	104°40'13.622"W	1.03	
13042.00	90.340	181.220	7301.99	5781.49	-5777.91	-460.27	1732644.87	14543402.71	40°02'43.109"N	104°40'13.641"W	0.81	
13130.00	91.480	180.190	7300.59	5869.47	-5865.89	-461.36	1732644.11	14543314.76	40°02'42.240"N	104°40'13.655"W	1.75	
13217.00	90.460	180.060	7299.12	5956.46	-5952.88	-461.55	1732644.25	14543227.81	40°02'41.380"N	104°40'13.658"W	1.18	
13304.00	90.770	179.490	7298.18	6043.45	-6039.87	-461.20	1732644.91	14543140.85	40°02'40.521"N	104°40'13.653"W	0.75	
13392.00	87.190	177.290	7299.75	6131.35	-6127.80	-458.73	1732647.71	14543052.96	40°02'39.652"N	104°40'13.621"W	4.77	
13480.00	88.920	176.710	7302.74	6219.14	-6215.63	-454.13	1732652.64	14542965.19	40°02'38.784"N	104°40'13.562"W	2.07	
13567.00	90.120	177.220	7303.47	6305.97	-6302.50	-449.53	1732657.56	14542878.37	40°02'37.925"N	104°40'13.503"W	1.50	
13655.00	89.600	178.320	7303.68	6393.87	-6390.43	-446.10	1732661.31	14542790.49	40°02'37.056"N	104°40'13.459"W	1.38	
13742.00	88.580	179.560	7305.06	6480.83	-6477.41	-444.49	1732663.25	14542703.56	40°02'36.197"N	104°40'13.438"W	1.85	
13829.00	87.480	180.650	7308.05	6567.77	-6564.35	-444.65	1732663.41	14542616.64	40°02'35.338"N	104°40'13.440"W	1.78	
13917.00	89.010	181.330	7310.75	6655.72	-6652.29	-446.17	1732662.22	14542528.73	40°02'34.468"N	104°40'13.460"W	1.90	
14004.00	89.510	180.730	7311.87	6742.71	-6739.27	-447.73	1732660.98	14542441.78	40°02'33.609"N	104°40'13.480"W	0.90	
14092.00	89.750	180.130	7312.44	6830.71	-6827.27	-448.39	1732660.65	14542353.82	40°02'32.739"N	104°40'13.488"W	0.73	
14180.00	89.720	179.810	7312.85	6918.70	-6915.27	-448.35	1732661.02	14542265.86	40°02'31.870"N	104°40'13.488"W	0.37	
14267.00	88.620	180.130	7314.11	7005.69	-7002.26	-448.30	1732661.39	14542178.90	40°02'31.010"N	104°40'13.487"W	1.32	
14355.00	88.640	181.140	7316.21	7093.66	-7090.22	-449.28	1732660.74	14542090.96	40°02'30.141"N	104°40'13.500"W	1.15	
14443.00	88.960	180.300	7318.05	7181.64	-7178.20	-450.38	1732659.96	14542003.02	40°02'29.271"N	104°40'13.514"W	1.02	
14530.00	89.690	182.460	7319.08	7268.62	-7265.16	-452.48	1732658.19	14541916.09	40°02'28.412"N	104°40'13.541"W	2.62	
14618.00	90.280	181.430	7319.10	7356.59	-7353.11	-455.47	1732655.53	14541828.16	40°02'27.543"N	104°40'13.579"W	1.35	
14705.00	90.460	181.140	7318.54	7443.58	-7440.08	-457.42	1732653.91	14541741.21	40°02'26.683"N	104°40'13.604"W	0.39	
14792.00	90.340	182.510	7317.93	7530.55	-7527.04	-460.19	1732651.46	14541654.29	40°02'25.824"N	104°40'13.640"W	1.58	
14880.00	89.140	182.920	7318.33	7618.48	-7614.93	-464.36	1732647.62	14541566.41	40°02'24.955"N	104°40'13.693"W	1.44	
14967.00	89.630	183.100	7319.27	7705.39	-7701.81	-468.92	1732643.38	14541479.55	40°02'24.097"N	104°40'13.752"W	0.60	
15056.00	88.340	181.060	7320.84	7794.33	-7790.73	-472.15	1732640.48	14541390.65	40°02'23.218"N	104°40'13.793"W	2.71	
15143.00	88.190	180.490	7323.48	7881.29	-7877.68	-473.33	1732639.63	14541303.73	40°02'22.359"N	104°40'13.809"W	0.68	
15230.00	87.480	180.250	7326.76	7968.23	-7964.62	-473.89	1732639.39	14541216.83	40°02'21.500"N	104°40'13.816"W	0.86	
15318.00	88.280	179.400	7330.02	8056.16	-8052.55	-473.62	1732639.99	14541128.93	40°02'20.631"N	104°40'13.812"W	1.33	
15406.00	88.580	180.890	7332.43	8144.12	-8140.52	-473.84	1732640.09	14541041.00	40°02'19.761"N	104°40'13.815"W	1.73	
15493.00	89.720	180.510	7333.72	8231.11	-8227.50	-474.91	1732639.35	14540954.05	40°02'18.902"N	104°40'13.829"W	1.38	
15581.00	90.060	180.670	7333.89	8319.11	-8315.50	-475.81	1732638.77	14540866.08	40°02'18.032"N	104°40'13.840"W	0.43	
15668.00	90.430	180.520	7333.52	8406.11	-8402.49	-476.72	1732638.19	14540779.12	40°02'17.173"N	104°40'13.852"W	0.46	
15756.00	90.800	179.070	7332.57	8494.10	-8490.48	-476.40	1732638.83	14540691.16	40°02'16.303"N	104°40'13.848"W	1.70	
15843.00	91.040	178.580	7331.18	8581.05	-8577.45	-474.62	1732640.94	14540604.24	40°02'15.444"N	104°40'13.825"W	0.63	
15931.00	90.650	179.500	7329.88	8669.01	-8665.43	-473.14	1732642.74	14540516.30	40°02'14.574"N	104°40'13.806"W	1.14	
16018.00	89.940	180.570	7329.43	8756.01	-8752.43	-473.20	1732643.01	14540429.34	40°02'13.714"N	104°40'13.807"W	1.48	
16106.00	89.600	179.130	7329.78	8844.00	-8840.42	-472.97	1732643.57	14540341.38	40°02'12.845"N	104°40'13.804"W	1.68	
16193.00	89.200	180.350	7330.70	8930.98	-8927.42	-472.57	1732644.29	14540254.42	40°02'11.985"N	104°40'13.799"W	1.48	
16281.00	87.080	179.270	7333.55	9018.93	-9015.36	-472.28	1732644.91	14540166.51	40°02'11.116"N	104°40'13.795"W	2.70	
16368.00	86.860	179.800	7338.15	9105.79	-9102.24	-471.58	1732645.93	14540079.67	40°02'10.257"N	104°40'13.786"W	0.66	
16455.00	87.720	180.260	7342.26	9192.69	-9189.14	-471.62	1732646.21	14539992.80	40°02'09.399"N	104°40'13.786"W	1.12	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWP
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (247 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
16543.00	88.590	181.590	7345.10	9280.64	-9277.08	-473.04	1732645.12	14539904.89	40°02'08.530"N	104°40'13.804"W	1.81	
16630.00	89.750	182.260	7346.36	9367.60	-9364.02	-475.96	1732642.52	14539817.98	40°02'07.670"N	104°40'13.842"W	1.54	
16717.00	91.510	181.770	7345.40	9454.56	-9450.96	-479.02	1732639.79	14539731.06	40°02'06.811"N	104°40'13.881"W	2.10	
16805.00	92.120	180.800	7342.61	9542.51	-9538.89	-481.00	1732638.14	14539643.16	40°02'05.942"N	104°40'13.907"W	1.30	
16892.00	91.230	179.680	7340.07	9629.47	-9625.85	-481.36	1732638.10	14539556.23	40°02'05.083"N	104°40'13.911"W	1.64	
16980.00	89.080	178.380	7339.83	9717.43	-9713.83	-479.87	1732639.92	14539468.29	40°02'04.214"N	104°40'13.892"W	2.86	
17067.00	88.890	176.710	7341.37	9804.30	-9800.73	-476.14	1732643.97	14539381.44	40°02'03.355"N	104°40'13.844"W	1.93	
17154.00	89.350	178.410	7342.71	9891.17	-9887.64	-472.44	1732647.99	14539294.58	40°02'02.496"N	104°40'13.797"W	2.02	
17222.00†	90.069	178.920	7343.05	9959.14	-9955.62	-470.86	1732649.83	14539226.63	40°02'01.824"N	104°40'13.776"W	1.30	ENTER RADIUS TOE (1533'FSL & 2228'FWL,SEC.21) 40.0338400 -104.6704934
17242.00	90.280	179.070	7342.99	9979.13	-9975.62	-470.51	1732650.25	14539206.65	40°02'01.627"N	104°40'13.772"W	1.30	
17330.00	90.340	180.740	7342.52	10067.12	-10063.61	-470.36	1732650.72	14539118.69	40°02'00.757"N	104°40'13.770"W	1.90	
17417.00	90.220	182.080	7342.09	10154.11	-10150.58	-472.50	1732648.91	14539031.74	40°01'59.897"N	104°40'13.797"W	1.55	
17505.00	90.710	182.070	7341.38	10242.07	-10238.52	-475.69	1732646.05	14538943.83	40°01'59.028"N	104°40'13.838"W	0.56	
17592.00	91.050	181.260	7340.04	10329.04	-10325.47	-478.21	1732643.85	14538856.90	40°01'58.169"N	104°40'13.871"W	1.01	
17680.00	91.140	181.010	7338.36	10417.02	-10413.44	-479.96	1732642.43	14538768.96	40°01'57.300"N	104°40'13.893"W	0.30	
17767.00	90.280	179.260	7337.28	10504.01	-10500.43	-480.16	1732642.55	14538682.01	40°01'56.440"N	104°40'13.896"W	2.24	
17855.00	89.850	180.480	7337.18	10592.00	-10588.43	-479.96	1732643.08	14538594.04	40°01'55.571"N	104°40'13.893"W	1.47	
17942.00	89.970	180.090	7337.32	10679.00	-10675.43	-480.39	1732642.97	14538507.08	40°01'54.711"N	104°40'13.899"W	0.47	
18030.00	89.970	179.820	7337.37	10767.00	-10763.42	-480.33	1732643.37	14538419.11	40°01'53.841"N	104°40'13.898"W	0.31	
18117.00	90.090	179.030	7337.32	10853.98	-10850.42	-479.45	1732644.56	14538332.16	40°01'52.981"N	104°40'13.886"W	0.92	
18213.00	90.710	178.750	7336.65	10949.94	-10946.40	-477.59	1732646.78	14538236.22	40°01'52.033"N	104°40'13.863"W	0.71	LAST BHGE MWD+IFR1+SC SURVEY
18257.00	90.710	178.750	7336.10	10993.92	-10990.39	-476.63	1732647.90	14538192.26	40°01'51.598"N	104°40'13.850"W	0.00	PTB (499'FSL & 2224'FWL,SEC.21) 40.0309995 -104.6705139

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWB
Facility	SEC.09-T1N-R65W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.09-T1N-R65W	-59.00	-567.13	1659.38	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.16-T1N-R65W	-59.00	-567.13	1659.38	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.21-T1N-R65W	-59.00	-567.13	1659.38	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
ROBIN 9-8HZ INT. TARGET@4500'VS	7260.00	-4496.52	-443.15	1732657.22	14544683.66	40°02'55.772"N	104°40'13.421"W	point
ROBIN 9-8HZ HEEL REV-1(400'FSL & 2268'FWL,SEC.09)	7287.00	-485.19	-440.33	1732645.12	14548693.39	40°03'35.413"N	104°40'13.386"W	point
ROBIN 9-8HZ HEEL REV-2(400'FSL & 2298'FWL,SEC.09)	7287.00	-485.19	-410.33	1732675.11	14548693.51	40°03'35.413"N	104°40'13.000"W	point
ROBIN 9-8HZ BHL REV-1(468'FSL & 2267'FWL,SEC.21)	7363.00	-11020.81	-433.53	1732691.10	14538162.00	40°01'51.298"N	104°40'13.296"W	point
ROBIN 9-8HZ BHL REV-2(468'FSL & 2204'FWL,SEC.21)	7363.00	-11020.81	-496.53	1732628.13	14538161.77	40°01'51.298"N	104°40'14.106"W	point
ROBIN 9-8HZ LANDBOX	7363.00	0.00	0.00	1733083.47	14549180.03	40°03'40.208"N	104°40'07.723"W	polygon
ROBIN 9-8HZ RADIUS 1	7363.00	-10157.76	-61.17	1733060.10	14539026.10	40°01'59.827"N	104°40'08.509"W	polygon
ROBIN 9-8HZ RADIUS 2	7363.00	-886.34	-64.69	1733022.10	14548293.80	40°03'31.449"N	104°40'08.555"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ROBIN 9-8HZ AWB Ref Wellpath: ROBIN 9-8HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1799.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC_ISCWSA Rev-2 MWD+IFR1 <129 - 1799>	ROBIN 9-8HZ AWB
1799.00	18213.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC_ISCWSA Rev-2 MWD+IFR1+SC <1888 - 18213>	ROBIN 9-8HZ AWB
18213.00	18257.00	Blind Drilling (std)	Projection to bit	ROBIN 9-8HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#39 ROBIN 9-8HZ(884'FSL & 2583'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-8HZ AWP
Facility	SEC.09-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
129.00	1.230	29.900	128.99	FIRST SURFACE MWD+IFR1 SURVEY
1799.00	16.480	288.910	1785.63	LAST SURFACE MWD+IFR1 SURVEY
1888.00	16.690	284.370	1870.93	FIRST BHGE MWD+IFR1+SC SURVEY
6575.00	2.140	154.695	6514.36	KOP
7220.00	46.941	182.144	7083.94	ENTER LANDBOX (873'FSL & 2992'FEL,SEC.09) 40.0611388 -104.6702717
7688.00	88.030	179.460	7277.82	LANDING (458'FSL & 3000'FEL,SEC.09) 40.0599992 -104.6703032
8456.00	89.143	180.614	7276.54	EXIT RADIUS HEEL (310'FNL & 2992'FEL,SEC.16) 40.0578915 -104.6702696
17222.00	90.069	178.920	7343.05	ENTER RADIUS TOE (1533'FSL & 2228'FWL,SEC.21) 40.0338400 -104.6704934
18213.00	90.710	178.750	7336.65	LAST BHGE MWD+IFR1+SC SURVEY
18257.00	90.710	178.750	7336.10	PTB (499'FSL & 2224'FWL,SEC.21) 40.0309995 -104.6705139