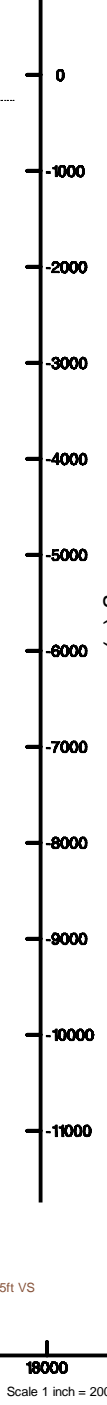
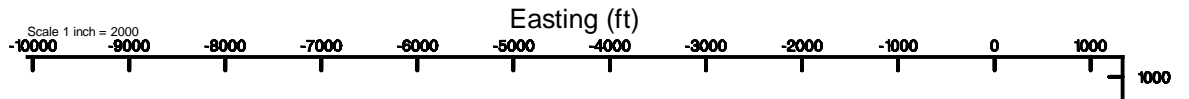
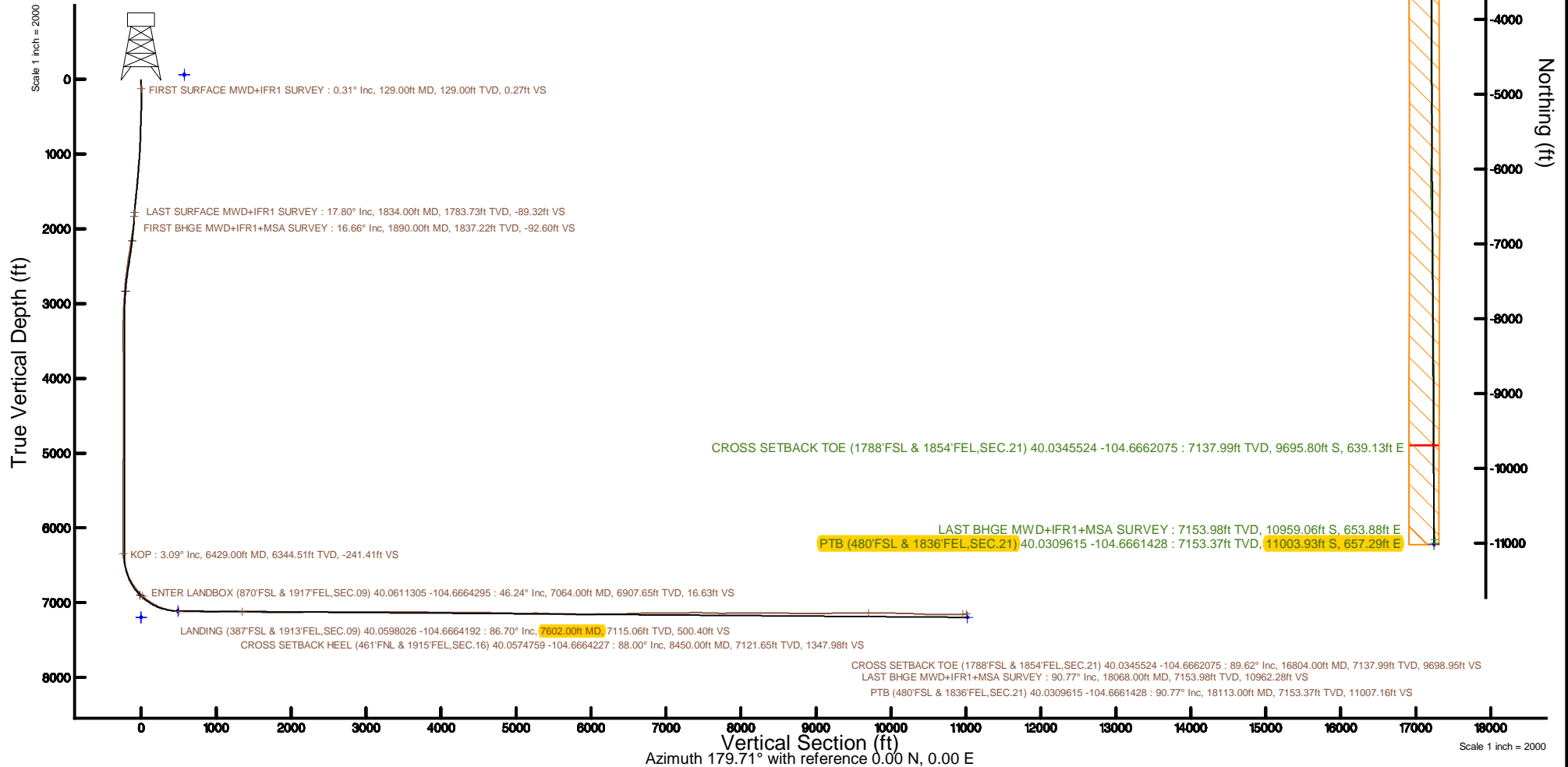


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO	Slot: SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Field: WELD COUNTY (UTM/TRUE NORTH)	Well: ROBIN 9-12HZ
Facility: SEC.09-T1N-R65W	Wellbore: ROBIN 9-12HZ PWB
Plot reference wellpath is ROBIN 9-12HZ PWP Rev-A.0	Grid System: NAD83 / UTM,Zone 13 North, US feet
True vertical depths are referenced to Xtrme 22 (17) (RT)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Xtrme 22 (17) (RT)	North Reference: True north
Xtrme 22 (17) (RT) to Mean Sea Level: 4947 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2018-01-02
	Database: WA_DEN_Anadarko_Dein



Scale 1 inch = 2000

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ 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	1/2/2018 at 10:21 AM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/ROBIN_9-12HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3873.03	2121.74	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"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#25 ROBIN 9-12HZ(884'FSL & 2493'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	179.71°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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	151.360	0.00	0.00	0.00	0.00	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"W	0.00	
17.00	0.000	151.360	17.00	0.00	0.00	0.00	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"W	0.00	
129.00	0.310	151.360	129.00	0.27	-0.27	0.15	1733173.70	14549179.80	40°03'40.202"N	104°40'06.562"W	0.28	FIRST SURFACE MWD+IFR1 SURVEY
161.00	0.480	132.290	161.00	0.43	-0.43	0.29	1733173.84	14549179.63	40°03'40.201"N	104°40'06.560"W	0.66	
192.00	0.750	131.940	192.00	0.66	-0.66	0.53	1733174.09	14549179.41	40°03'40.199"N	104°40'06.557"W	0.87	
224.00	0.700	145.740	223.99	0.96	-0.96	0.80	1733174.36	14549179.11	40°03'40.196"N	104°40'06.554"W	0.57	
255.00	1.050	88.430	254.99	1.11	-1.11	1.19	1733174.75	14549178.96	40°03'40.194"N	104°40'06.549"W	2.88	
287.00	0.920	82.720	286.99	1.07	-1.06	1.74	1733175.29	14549179.00	40°03'40.194"N	104°40'06.542"W	0.51	
318.00	1.100	78.320	317.98	0.98	-0.97	2.28	1733175.83	14549179.10	40°03'40.195"N	104°40'06.535"W	0.63	
350.00	1.230	91.680	349.98	0.94	-0.92	2.92	1733176.48	14549179.15	40°03'40.196"N	104°40'06.526"W	0.94	
381.00	1.320	69.620	380.97	0.82	-0.81	3.59	1733177.14	14549179.27	40°03'40.197"N	104°40'06.518"W	1.60	
413.00	2.370	70.590	412.95	0.48	-0.46	4.56	1733178.11	14549179.62	40°03'40.200"N	104°40'06.505"W	3.28	
444.00	3.300	64.700	443.91	-0.11	0.14	5.97	1733179.52	14549180.22	40°03'40.206"N	104°40'06.487"W	3.14	
507.00	4.750	66.990	506.76	-1.88	1.93	10.01	1733183.55	14549182.03	40°03'40.224"N	104°40'06.435"W	2.32	
539.00	5.410	65.580	538.63	-3.01	3.07	12.60	1733186.14	14549183.18	40°03'40.235"N	104°40'06.402"W	2.10	
571.00	5.930	68.480	570.47	-4.22	4.30	15.51	1733189.04	14549184.42	40°03'40.248"N	104°40'06.364"W	1.85	
603.00	6.460	68.480	602.29	-5.47	5.57	18.73	1733192.25	14549185.70	40°03'40.260"N	104°40'06.323"W	1.66	
635.00	6.810	72.790	634.07	-6.68	6.79	22.21	1733195.73	14549186.93	40°03'40.272"N	104°40'06.278"W	1.90	
666.00	7.290	75.510	664.84	-7.69	7.83	25.87	1733199.39	14549187.98	40°03'40.282"N	104°40'06.231"W	1.89	
698.00	7.820	79.380	696.56	-8.58	8.74	29.98	1733203.49	14549188.91	40°03'40.291"N	104°40'06.178"W	2.30	
730.00	8.390	81.400	728.24	-9.31	9.49	34.43	1733207.93	14549189.67	40°03'40.299"N	104°40'06.121"W	1.99	
762.00	8.570	81.310	759.89	-10.00	10.20	39.09	1733212.59	14549190.40	40°03'40.306"N	104°40'06.061"W	0.56	
793.00	9.930	79.990	790.49	-10.78	11.01	44.01	1733217.50	14549191.23	40°03'40.314"N	104°40'05.998"W	4.44	
825.00	10.940	77.890	821.96	-11.87	12.13	49.69	1733223.18	14549192.37	40°03'40.325"N	104°40'05.925"W	3.37	
857.00	11.430	77.010	853.35	-13.19	13.48	55.75	1733229.23	14549193.74	40°03'40.338"N	104°40'05.847"W	1.62	
920.00	13.320	77.360	914.88	-16.11	16.47	68.92	1733242.38	14549196.78	40°03'40.368"N	104°40'05.678"W	3.00	
952.00	14.500	76.740	945.94	-17.80	18.19	76.41	1733249.87	14549198.53	40°03'40.385"N	104°40'05.581"W	3.72	
984.00	14.900	76.040	976.90	-19.67	20.10	84.30	1733257.75	14549200.47	40°03'40.404"N	104°40'05.480"W	1.37	
1016.00	14.900	74.460	1007.82	-21.73	22.20	92.26	1733265.70	14549202.59	40°03'40.424"N	104°40'05.377"W	1.27	
1047.00	15.510	73.580	1037.73	-23.92	24.44	100.08	1733273.50	14549204.86	40°03'40.447"N	104°40'05.277"W	2.10	
1079.00	15.290	74.110	1068.59	-26.25	26.80	108.24	1733281.65	14549207.26	40°03'40.470"N	104°40'05.172"W	0.82	
1111.00	16.130	73.840	1099.39	-28.60	29.20	116.57	1733289.97	14549209.68	40°03'40.494"N	104°40'05.065"W	2.63	
1142.00	16.390	74.370	1129.15	-30.93	31.57	124.91	1733298.30	14549212.09	40°03'40.517"N	104°40'04.957"W	0.97	
1174.00	17.010	75.780	1159.80	-33.25	33.94	133.80	1733307.17	14549214.48	40°03'40.540"N	104°40'04.843"W	2.31	
1206.00	17.970	77.080	1190.32	-35.46	36.19	143.15	1733316.51	14549216.77	40°03'40.563"N	104°40'04.723"W	3.24	
1238.00	17.670	76.390	1220.79	-37.65	38.44	152.68	1733326.03	14549219.05	40°03'40.585"N	104°40'04.600"W	1.15	
1270.00	18.150	75.780	1251.23	-39.97	40.81	162.23	1733335.57	14549221.45	40°03'40.608"N	104°40'04.478"W	1.61	
1302.00	19.070	76.220	1281.56	-42.39	43.28	172.14	1733345.46	14549223.96	40°03'40.633"N	104°40'04.350"W	2.91	
1333.00	19.030	75.780	1310.86	-44.79	45.72	181.96	1733355.27	14549226.44	40°03'40.657"N	104°40'04.224"W	0.48	
1365.00	18.900	74.550	1341.13	-47.40	48.39	192.01	1733365.31	14549229.14	40°03'40.683"N	104°40'04.095"W	1.31	
1397.00	18.060	73.750	1371.48	-50.12	51.15	201.77	1733375.05	14549231.95	40°03'40.711"N	104°40'03.969"W	2.74	
1428.00	18.410	72.700	1400.92	-52.87	53.95	211.06	1733384.32	14549234.78	40°03'40.738"N	104°40'03.850"W	1.55	
1460.00	19.470	73.400	1431.19	-55.85	56.98	220.99	1733394.24	14549237.84	40°03'40.768"N	104°40'03.722"W	3.39	
1523.00	19.510	73.580	1490.58	-61.72	62.95	241.14	1733414.37	14549243.89	40°03'40.827"N	104°40'03.463"W	0.11	
1555.00	19.640	73.050	1520.73	-64.74	66.03	251.41	1733424.62	14549247.00	40°03'40.858"N	104°40'03.331"W	0.69	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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
1586.00	19.640	72.700	1549.92	-67.76	69.10	261.37	1733434.56	14549250.11	40°03'40.888"N	104°40'03.202"W	0.38	
1650.00	19.510	73.840	1610.23	-73.83	75.27	281.90	1733455.07	14549256.35	40°03'40.949"N	104°40'02.938"W	0.63	
1682.00	19.640	73.930	1640.38	-76.75	78.25	292.20	1733465.35	14549259.37	40°03'40.978"N	104°40'02.806"W	0.42	
1714.00	19.910	73.930	1670.49	-79.69	81.25	302.61	1733475.74	14549262.40	40°03'41.008"N	104°40'02.672"W	0.84	
1745.00	19.470	74.550	1699.68	-82.48	84.08	312.66	1733485.78	14549265.28	40°03'41.036"N	104°40'02.543"W	1.57	
1777.00	19.690	75.600	1729.83	-85.19	86.84	323.02	1733496.12	14549268.07	40°03'41.063"N	104°40'02.410"W	1.30	
1809.00	19.070	76.920	1760.01	-87.66	89.37	333.34	1733506.42	14549270.64	40°03'41.088"N	104°40'02.277"W	2.37	
1834.00	17.800	78.240	1783.73	-89.32	91.07	341.05	1733514.13	14549272.37	40°03'41.105"N	104°40'02.178"W	5.35	LAST SURFACE MWD+IFR1 SURVEY
1890.00	16.660	78.400	1837.22	-92.60	94.43	357.30	1733530.36	14549275.78	40°03'41.138"N	104°40'01.969"W	2.04	FIRST BHGE MWD+IFR1+MSA SURVEY
1977.00	17.640	69.980	1920.36	-99.49	101.45	381.90	1733554.93	14549282.89	40°03'41.208"N	104°40'01.652"W	3.06	
2065.00	16.770	61.850	2004.43	-109.93	112.01	405.63	1733578.61	14549293.53	40°03'41.312"N	104°40'01.347"W	2.90	
2153.00	16.180	59.620	2088.82	-122.00	124.20	427.40	1733600.32	14549305.80	40°03'41.432"N	104°40'01.067"W	0.98	
2240.00	14.880	52.500	2172.65	-134.84	137.13	446.72	1733619.59	14549318.80	40°03'41.560"N	104°40'00.819"W	2.65	
2328.00	14.190	51.010	2257.83	-148.41	150.80	464.07	1733636.88	14549332.52	40°03'41.695"N	104°40'00.595"W	0.89	
2415.00	13.280	49.090	2342.34	-161.58	164.05	479.91	1733652.66	14549345.83	40°03'41.826"N	104°40'00.392"W	1.17	
2502.00	12.560	47.020	2427.14	-174.50	177.04	494.38	1733667.08	14549358.87	40°03'41.955"N	104°40'00.206"W	0.98	
2590.00	12.410	52.990	2513.06	-186.64	189.26	508.94	1733681.58	14549371.14	40°03'42.075"N	104°40'00.018"W	1.48	
2677.00	11.770	50.180	2598.14	-197.88	200.57	523.22	1733695.81	14549382.50	40°03'42.187"N	104°39'59.835"W	1.00	
2765.00	10.470	55.560	2684.48	-208.08	210.84	536.70	1733709.26	14549392.81	40°03'42.288"N	104°39'59.661"W	1.89	
2852.00	8.780	62.130	2770.26	-215.59	218.41	549.10	1733721.62	14549400.43	40°03'42.363"N	104°39'59.502"W	2.31	
2940.00	8.050	60.300	2857.31	-221.73	224.61	560.38	1733732.88	14549406.66	40°03'42.425"N	104°39'59.357"W	0.88	
3026.00	6.150	54.950	2942.65	-227.31	230.24	569.39	1733741.86	14549412.32	40°03'42.480"N	104°39'59.241"W	2.34	
3114.00	4.880	49.520	3030.24	-232.41	235.37	576.09	1733748.54	14549417.48	40°03'42.531"N	104°39'59.155"W	1.56	
3201.00	2.990	55.420	3117.03	-236.08	239.06	580.78	1733753.21	14549421.19	40°03'42.567"N	104°39'59.094"W	2.22	
3289.00	1.980	18.340	3204.95	-238.81	241.81	583.15	1733755.57	14549423.94	40°03'42.595"N	104°39'59.064"W	2.10	
3376.00	1.210	287.210	3291.93	-240.51	243.51	582.74	1733755.16	14549425.64	40°03'42.611"N	104°39'59.069"W	2.69	
3490.00	1.240	274.680	3405.90	-240.98	243.96	580.36	1733752.78	14549426.09	40°03'42.616"N	104°39'59.100"W	0.24	
3577.00	1.470	272.620	3492.88	-241.12	244.09	578.31	1733750.72	14549426.21	40°03'42.617"N	104°39'59.126"W	0.27	
3665.00	1.070	204.230	3580.86	-240.43	243.39	576.84	1733749.26	14549425.51	40°03'42.610"N	104°39'59.145"W	1.67	
3752.00	1.210	135.070	3667.85	-239.04	242.00	577.16	1733749.58	14549424.12	40°03'42.596"N	104°39'59.141"W	1.49	
3839.00	1.090	144.480	3754.83	-237.71	240.68	578.29	1733750.72	14549422.80	40°03'42.583"N	104°39'59.126"W	0.26	
3927.00	1.300	159.730	3842.81	-236.09	239.06	579.12	1733751.55	14549421.18	40°03'42.567"N	104°39'59.116"W	0.43	
4015.00	1.880	102.670	3930.78	-234.82	237.81	580.88	1733753.31	14549419.94	40°03'42.555"N	104°39'59.093"W	1.82	
4102.00	2.420	67.210	4017.72	-235.21	238.21	583.96	1733756.40	14549420.35	40°03'42.559"N	104°39'59.054"W	1.62	
4190.00	0.560	57.750	4105.69	-236.15	239.16	586.04	1733758.47	14549421.30	40°03'42.568"N	104°39'59.027"W	2.12	
4277.00	0.260	52.360	4192.69	-236.49	239.50	586.55	1733758.98	14549421.65	40°03'42.572"N	104°39'59.020"W	0.35	
4364.00	0.280	313.180	4279.69	-236.76	239.77	586.55	1733758.98	14549421.92	40°03'42.574"N	104°39'59.020"W	0.47	
4452.00	0.400	262.150	4367.69	-236.86	239.87	586.09	1733758.52	14549422.02	40°03'42.575"N	104°39'59.026"W	0.35	
4540.00	0.170	289.940	4455.69	-236.87	239.88	585.67	1733758.09	14549422.02	40°03'42.575"N	104°39'59.032"W	0.30	
4627.00	0.440	285.340	4542.68	-237.00	240.01	585.22	1733757.65	14549422.15	40°03'42.577"N	104°39'59.037"W	0.31	
4715.00	0.400	277.150	4630.68	-237.13	240.14	584.59	1733757.02	14549422.28	40°03'42.578"N	104°39'59.045"W	0.08	
4802.00	0.530	250.980	4717.68	-237.04	240.04	583.91	1733756.34	14549422.18	40°03'42.577"N	104°39'59.054"W	0.28	
4889.00	0.710	258.620	4804.67	-236.81	239.81	583.00	1733755.43	14549421.94	40°03'42.575"N	104°39'59.066"W	0.23	
4977.00	1.010	278.450	4892.66	-236.82	239.81	581.70	1733754.13	14549421.94	40°03'42.575"N	104°39'59.083"W	0.48	
5064.00	0.830	21.280	4979.66	-237.53	240.51	581.17	1733753.60	14549422.64	40°03'42.582"N	104°39'59.089"W	1.66	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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
5152.00	1.260	6.630	5067.64	-239.08	242.07	581.51	1733753.93	14549424.20	40°03'42.597"N	104°39'59.085"W	0.57	
5239.00	1.360	13.650	5154.62	-241.03	244.02	581.87	1733754.28	14549426.15	40°03'42.616"N	104°39'59.080"W	0.22	
5326.00	0.400	311.730	5241.61	-242.24	245.23	581.88	1733754.29	14549427.36	40°03'42.628"N	104°39'59.080"W	1.41	
5414.00	0.440	324.130	5329.61	-242.72	245.70	581.46	1733753.86	14549427.83	40°03'42.633"N	104°39'59.086"W	0.11	
5501.00	0.680	319.160	5416.60	-243.38	246.37	580.92	1733753.33	14549428.49	40°03'42.640"N	104°39'59.093"W	0.28	
5589.00	0.330	193.860	5504.60	-243.53	246.52	580.52	1733752.93	14549428.64	40°03'42.641"N	104°39'59.098"W	1.04	
5676.00	0.160	308.060	5591.60	-243.37	246.35	580.37	1733752.77	14549428.47	40°03'42.639"N	104°39'59.100"W	0.48	
5764.00	0.370	299.670	5679.60	-243.58	246.56	580.02	1733752.43	14549428.69	40°03'42.642"N	104°39'59.104"W	0.24	
5851.00	0.940	120.010	5766.60	-243.36	246.35	580.40	1733752.80	14549428.47	40°03'42.639"N	104°39'59.099"W	1.51	
5939.00	0.780	97.730	5854.59	-242.92	245.90	581.62	1733754.02	14549428.03	40°03'42.635"N	104°39'59.084"W	0.42	
6026.00	0.970	81.660	5941.58	-242.94	245.93	582.93	1733755.34	14549428.06	40°03'42.635"N	104°39'59.067"W	0.35	
6114.00	1.200	80.560	6029.56	-243.19	246.19	584.58	1733756.98	14549428.33	40°03'42.638"N	104°39'59.046"W	0.26	
6201.00	0.400	49.190	6116.55	-243.53	246.54	585.70	1733758.11	14549428.68	40°03'42.641"N	104°39'59.031"W	1.02	
6289.00	0.350	106.180	6204.55	-243.65	246.66	586.20	1733758.60	14549428.81	40°03'42.643"N	104°39'59.025"W	0.41	
6376.00	1.040	125.580	6291.54	-243.11	246.13	587.09	1733759.50	14549428.28	40°03'42.637"N	104°39'59.013"W	0.83	
6429.00†	3.086	176.405	6344.51	-241.41	244.43	587.57	1733759.98	14549426.58	40°03'42.620"N	104°39'59.007"W	4.83	KOP
6464.00	4.720	182.890	6379.43	-239.03	242.05	587.56	1733759.98	14549424.20	40°03'42.597"N	104°39'59.007"W	4.83	
6552.00	12.050	191.670	6466.43	-226.41	229.42	585.52	1733757.98	14549411.57	40°03'42.472"N	104°39'59.034"W	8.43	
6639.00	17.700	191.390	6550.48	-204.56	207.54	581.06	1733753.61	14549389.68	40°03'42.256"N	104°39'59.091"W	6.49	
6727.00	22.690	187.310	6633.05	-174.61	177.57	576.26	1733748.92	14549359.71	40°03'41.960"N	104°39'59.153"W	5.89	
6815.00	29.680	179.440	6711.99	-135.94	138.89	574.31	1733747.12	14549321.04	40°03'41.578"N	104°39'59.178"W	8.85	
6902.00	35.400	179.530	6785.30	-89.17	92.12	574.73	1733747.71	14549274.28	40°03'41.115"N	104°39'59.172"W	6.57	
6990.00	41.370	179.590	6854.25	-34.55	37.50	575.15	1733748.33	14549219.69	40°03'40.576"N	104°39'59.167"W	6.78	
7064.00†	46.239	176.897	6907.65	16.63	-13.67	576.77	1733750.14	14549168.54	40°03'40.070"N	104°39'59.146"W	7.04	ENTER LANDBOX (870'FSL & 1917'FEL,SEC.09) 40.0611305 -104.6664295
7077.00	47.100	176.470	6916.57	26.07	-23.11	577.31	1733750.72	14549159.11	40°03'39.977"N	104°39'59.139"W	7.04	
7165.00	53.850	175.980	6972.54	93.79	-90.80	581.80	1733755.46	14549091.46	40°03'39.308"N	104°39'59.081"W	7.68	
7253.00	61.690	178.740	7019.44	168.10	-165.10	585.14	1733759.08	14549017.21	40°03'38.573"N	104°39'59.038"W	9.29	
7340.00	66.750	182.820	7057.28	246.38	-243.38	584.02	1733758.25	14548938.95	40°03'37.800"N	104°39'59.053"W	7.19	
7427.00	73.850	181.490	7086.59	328.16	-325.18	580.96	1733755.49	14548857.18	40°03'36.991"N	104°39'59.092"W	8.29	
7515.00	81.000	178.500	7105.74	413.98	-411.00	581.00	1733755.85	14548771.39	40°03'36.143"N	104°39'59.092"W	8.77	
7602.00	86.700	183.240	7115.06	500.40	-497.43	579.67	1733754.84	14548684.99	40°03'35.289"N	104°39'59.109"W	8.50	LANDING (387'FSL & 1913'FEL,SEC.09) 40.0598026 -104.6664192
7689.00	90.220	182.370	7117.40	587.22	-584.28	575.41	1733750.91	14548598.16	40°03'34.431"N	104°39'59.164"W	4.17	
7777.00	89.170	180.660	7117.87	675.17	-672.24	573.09	1733748.91	14548510.22	40°03'33.562"N	104°39'59.194"W	2.28	
7864.00	88.180	179.730	7119.88	762.15	-759.22	572.79	1733748.94	14548423.28	40°03'32.702"N	104°39'59.197"W	1.56	
7951.00	89.410	180.700	7121.71	849.12	-846.19	572.46	1733748.94	14548336.34	40°03'31.843"N	104°39'59.202"W	1.80	
8039.00	90.370	181.240	7121.88	937.10	-934.18	570.97	1733747.78	14548248.38	40°03'30.973"N	104°39'59.221"W	1.25	
8127.00	91.050	178.740	7120.79	1025.08	-1022.17	570.99	1733748.12	14548160.43	40°03'30.104"N	104°39'59.221"W	2.94	
8214.00	90.710	178.740	7119.45	1112.06	-1109.13	572.90	1733750.36	14548073.50	40°03'29.244"N	104°39'59.196"W	0.39	
8301.00	90.000	178.680	7118.91	1199.04	-1196.11	574.86	1733752.64	14547986.57	40°03'28.385"N	104°39'59.171"W	0.82	
8389.00	88.710	178.500	7119.90	1287.02	-1284.08	577.03	1733755.13	14547898.65	40°03'27.515"N	104°39'59.143"W	1.48	
8450.00†	88.003	178.375	7121.65	1347.98	-1345.03	578.69	1733757.02	14547837.72	40°03'26.913"N	104°39'59.122"W	1.18	CROSS SETBACK HEEL (461'FNL & 1915'FEL,SEC.16) 40.0574759 -104.6664227
8477.00	87.690	178.320	7122.67	1374.95	-1372.00	579.47	1733757.90	14547810.77	40°03'26.647"N	104°39'59.112"W	1.18	
8564.00	88.610	178.460	7125.48	1461.88	-1458.92	581.91	1733760.66	14547723.89	40°03'25.788"N	104°39'59.080"W	1.07	
8651.00	89.690	178.440	7126.77	1548.85	-1545.87	584.26	1733763.34	14547636.98	40°03'24.928"N	104°39'59.050"W	1.24	
8738.00	88.980	177.580	7127.78	1635.81	-1632.81	587.28	1733766.68	14547550.08	40°03'24.069"N	104°39'59.011"W	1.28	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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
8826.00	88.980	178.870	7129.34	1723.76	-1720.76	590.01	1733769.73	14547462.19	40°03'23.200"N	104°39'58.976"W	1.47	
8914.00	89.510	180.870	7130.50	1811.75	-1808.74	590.21	1733770.26	14547374.24	40°03'22.331"N	104°39'58.974"W	2.35	
9001.00	90.770	180.520	7130.29	1898.73	-1895.74	589.15	1733769.53	14547287.28	40°03'21.471"N	104°39'58.987"W	1.50	
9089.00	90.860	179.950	7129.04	1986.72	-1983.73	588.79	1733769.50	14547199.32	40°03'20.601"N	104°39'58.992"W	0.66	
9176.00	90.250	179.330	7128.20	2073.72	-2070.72	589.34	1733770.37	14547112.36	40°03'19.742"N	104°39'58.985"W	1.00	
9263.00	91.200	180.420	7127.10	2160.71	-2157.71	589.53	1733770.88	14547025.41	40°03'18.882"N	104°39'58.983"W	1.66	
9351.00	89.690	179.160	7126.41	2248.70	-2245.70	589.85	1733771.53	14546937.45	40°03'18.012"N	104°39'58.979"W	2.23	
9438.00	89.820	179.140	7126.78	2335.69	-2332.69	591.14	1733773.14	14546850.50	40°03'17.153"N	104°39'58.962"W	0.15	
9526.00	89.970	178.250	7126.95	2423.68	-2420.67	593.15	1733775.47	14546762.57	40°03'16.283"N	104°39'58.936"W	1.03	
9613.00	90.830	178.630	7126.34	2510.65	-2507.63	595.51	1733778.17	14546675.65	40°03'15.424"N	104°39'58.906"W	1.08	
9701.00	91.020	177.700	7124.92	2598.61	-2595.57	598.33	1733781.31	14546587.75	40°03'14.555"N	104°39'58.870"W	1.08	
9789.00	90.180	178.990	7124.00	2686.58	-2683.53	600.87	1733784.18	14546499.84	40°03'13.686"N	104°39'58.837"W	1.75	
9876.00	90.590	178.790	7123.41	2773.57	-2770.51	602.56	1733786.19	14546412.90	40°03'12.826"N	104°39'58.815"W	0.52	
9964.00	89.420	179.900	7123.40	2861.56	-2858.50	603.56	1733787.52	14546324.95	40°03'11.957"N	104°39'58.802"W	1.83	
10051.00	89.320	179.870	7124.36	2948.56	-2945.50	603.74	1733788.02	14546237.99	40°03'11.097"N	104°39'58.800"W	0.12	
10138.00	89.260	179.630	7125.44	3035.55	-3032.49	604.12	1733788.72	14546151.03	40°03'10.237"N	104°39'58.795"W	0.28	
10226.00	90.370	179.890	7125.72	3123.55	-3120.49	604.49	1733789.42	14546063.07	40°03'09.368"N	104°39'58.791"W	1.30	
10314.00	90.920	179.570	7124.73	3211.54	-3208.48	604.90	1733790.16	14545975.11	40°03'08.498"N	104°39'58.785"W	0.72	
10401.00	90.990	178.630	7123.28	3298.52	-3295.46	606.27	1733791.85	14545888.18	40°03'07.638"N	104°39'58.768"W	1.08	
10488.00	89.260	179.120	7123.09	3385.51	-3382.44	607.98	1733793.88	14545801.24	40°03'06.779"N	104°39'58.746"W	2.07	
10575.00	89.510	179.530	7124.03	3472.50	-3469.42	609.00	1733795.23	14545714.29	40°03'05.919"N	104°39'58.733"W	0.55	
10663.00	90.060	178.600	7124.36	3560.50	-3557.41	610.44	1733796.99	14545626.34	40°03'05.050"N	104°39'58.714"W	1.23	
10751.00	89.140	179.360	7124.97	3648.49	-3645.39	612.00	1733798.88	14545538.40	40°03'04.180"N	104°39'58.694"W	1.36	
10838.00	89.290	178.790	7126.16	3735.47	-3732.37	613.41	1733800.61	14545451.46	40°03'03.321"N	104°39'58.676"W	0.68	
10926.00	89.410	180.690	7127.16	3823.46	-3820.36	613.81	1733801.34	14545363.51	40°03'02.451"N	104°39'58.671"W	2.16	
11013.00	89.630	180.460	7127.89	3910.45	-3907.36	612.93	1733800.79	14545276.55	40°03'01.592"N	104°39'58.682"W	0.37	
11101.00	89.380	179.910	7128.65	3998.44	-3995.35	612.65	1733800.83	14545188.59	40°03'00.722"N	104°39'58.686"W	0.69	
11188.00	90.150	180.380	7129.01	4085.44	-4082.35	612.43	1733800.94	14545101.62	40°02'59.862"N	104°39'58.689"W	1.04	
11276.00	90.280	179.890	7128.68	4173.43	-4170.35	612.22	1733801.06	14545013.66	40°02'58.993"N	104°39'58.691"W	0.58	
11363.00	90.120	179.770	7128.37	4260.43	-4257.35	612.48	1733801.64	14544926.69	40°02'58.133"N	104°39'58.688"W	0.23	
11451.00	90.090	180.070	7128.21	4348.43	-4345.35	612.60	1733802.09	14544838.73	40°02'57.263"N	104°39'58.687"W	0.34	
11539.00	89.290	179.740	7128.69	4436.43	-4433.34	612.75	1733802.56	14544750.77	40°02'56.394"N	104°39'58.685"W	0.98	
11626.00	89.140	179.500	7129.88	4523.42	-4520.33	613.33	1733803.46	14544663.81	40°02'55.534"N	104°39'58.677"W	0.33	
11716.00	87.750	178.980	7132.32	4613.38	-4610.29	614.52	1733804.99	14544573.90	40°02'54.645"N	104°39'58.662"W	1.65	
11808.00	89.540	180.240	7134.50	4705.35	-4702.26	615.15	1733805.96	14544481.97	40°02'53.736"N	104°39'58.654"W	2.38	
11899.00	89.020	180.090	7135.64	4796.34	-4793.25	614.88	1733806.03	14544391.01	40°02'52.837"N	104°39'58.657"W	0.59	
11990.00	87.720	180.070	7138.23	4887.30	-4884.21	614.76	1733806.25	14544300.09	40°02'51.938"N	104°39'58.659"W	1.43	
12081.00	88.310	180.520	7141.38	4978.24	-4975.15	614.29	1733806.12	14544209.18	40°02'51.039"N	104°39'58.665"W	0.82	
12169.00	89.940	181.490	7142.73	5066.20	-5063.13	612.74	1733804.90	14544121.24	40°02'50.170"N	104°39'58.685"W	2.16	
12256.00	91.420	181.120	7141.69	5153.16	-5150.10	610.76	1733803.24	14544034.30	40°02'49.311"N	104°39'58.710"W	1.75	
12344.00	90.430	178.720	7140.27	5241.14	-5238.08	610.89	1733803.70	14543946.35	40°02'48.441"N	104°39'58.709"W	2.95	
12432.00	87.410	178.090	7141.93	5329.09	-5326.02	613.34	1733806.47	14543858.45	40°02'47.572"N	104°39'58.677"W	3.51	
12607.00	87.630	179.400	7149.50	5503.90	-5500.81	617.16	1733810.95	14543683.75	40°02'45.845"N	104°39'58.628"W	0.76	
12694.00	88.430	181.630	7152.49	5590.83	-5587.74	616.38	1733810.49	14543596.84	40°02'44.986"N	104°39'58.638"W	2.72	
12782.00	88.400	180.950	7154.93	5678.77	-5675.69	614.40	1733808.84	14543508.93	40°02'44.116"N	104°39'58.664"W	0.77	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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
12869.00	88.030	180.510	7157.64	5765.71	-5762.64	613.29	1733808.05	14543422.01	40°02'43.257"N	104°39'58.678"W	0.66	
12957.00	89.320	181.990	7159.67	5853.65	-5850.59	611.37	1733806.46	14543334.08	40°02'42.388"N	104°39'58.703"W	2.23	
13044.00	92.280	183.570	7158.46	5940.50	-5937.47	607.16	1733802.57	14543247.22	40°02'41.530"N	104°39'58.757"W	3.86	
13131.00	92.370	183.050	7154.93	6027.26	-6024.25	602.14	1733797.88	14543160.46	40°02'40.672"N	104°39'58.822"W	0.61	
13219.00	90.250	180.240	7152.92	6115.17	-6112.18	599.61	1733795.68	14543072.56	40°02'39.803"N	104°39'58.854"W	4.00	
13306.00	89.260	179.080	7153.29	6202.17	-6199.17	600.13	1733796.52	14542985.60	40°02'38.943"N	104°39'58.848"W	1.75	
13394.00	90.180	179.070	7153.72	6290.16	-6287.16	601.55	1733798.27	14542897.65	40°02'38.074"N	104°39'58.829"W	1.05	
13481.00	92.280	178.150	7151.85	6377.12	-6374.11	603.66	1733800.70	14542810.75	40°02'37.215"N	104°39'58.802"W	2.64	
13569.00	92.340	177.780	7148.31	6465.01	-6461.98	606.78	1733804.15	14542722.92	40°02'36.346"N	104°39'58.762"W	0.43	
13656.00	92.590	177.200	7144.56	6551.86	-6548.82	610.59	1733808.28	14542636.13	40°02'35.488"N	104°39'58.713"W	0.73	
13744.00	91.570	178.060	7141.37	6639.74	-6636.68	614.22	1733812.24	14542548.32	40°02'34.620"N	104°39'58.666"W	1.52	
13831.00	91.630	177.390	7138.94	6726.66	-6723.58	617.68	1733816.01	14542461.47	40°02'33.761"N	104°39'58.622"W	0.77	
13918.00	89.630	177.380	7137.98	6813.58	-6810.48	621.65	1733820.30	14542374.62	40°02'32.902"N	104°39'58.571"W	2.30	
14006.00	90.150	178.690	7138.15	6901.54	-6898.42	624.66	1733823.65	14542286.72	40°02'32.033"N	104°39'58.532"W	1.60	
14094.00	90.890	180.410	7137.35	6989.53	-6986.41	625.35	1733824.66	14542198.76	40°02'31.164"N	104°39'58.523"W	2.13	
14182.00	90.710	179.250	7136.13	7077.52	-7074.40	625.62	1733825.25	14542110.81	40°02'30.294"N	104°39'58.520"W	1.33	
14269.00	90.120	180.100	7135.49	7164.52	-7161.40	626.11	1733826.07	14542023.85	40°02'29.434"N	104°39'58.514"W	1.19	
14357.00	91.020	179.580	7134.62	7252.51	-7249.39	626.35	1733826.64	14541935.89	40°02'28.565"N	104°39'58.511"W	1.18	
14444.00	90.030	180.400	7133.82	7339.50	-7336.39	626.37	1733826.98	14541848.94	40°02'27.705"N	104°39'58.510"W	1.48	
14532.00	90.310	180.280	7133.56	7427.50	-7424.38	625.85	1733826.79	14541760.97	40°02'26.835"N	104°39'58.517"W	0.35	
14619.00	87.780	179.680	7135.01	7514.48	-7511.36	625.88	1733827.14	14541674.02	40°02'25.976"N	104°39'58.517"W	2.99	
14707.00	88.030	178.990	7138.23	7602.42	-7599.30	626.90	1733828.49	14541586.13	40°02'25.107"N	104°39'58.504"W	0.83	
14794.00	89.010	179.470	7140.48	7689.38	-7686.26	628.07	1733829.98	14541499.21	40°02'24.247"N	104°39'58.489"W	1.25	
14881.00	90.650	179.840	7140.73	7776.38	-7773.26	628.59	1733830.83	14541412.25	40°02'23.388"N	104°39'58.482"W	1.93	
14969.00	90.950	179.470	7139.50	7864.37	-7861.25	629.12	1733831.69	14541324.30	40°02'22.518"N	104°39'58.475"W	0.54	
15057.00	91.720	179.270	7137.45	7952.34	-7949.22	630.09	1733832.98	14541236.36	40°02'21.649"N	104°39'58.463"W	0.90	
15145.00	90.520	179.580	7135.73	8040.32	-8037.19	630.97	1733834.19	14541148.43	40°02'20.779"N	104°39'58.452"W	1.41	
15232.00	89.480	179.480	7135.73	8127.32	-8124.19	631.68	1733835.23	14541061.47	40°02'19.920"N	104°39'58.442"W	1.20	
15319.00	89.140	179.180	7136.78	8214.31	-8211.18	632.70	1733836.57	14540974.52	40°02'19.060"N	104°39'58.429"W	0.52	
15407.00	89.050	179.070	7138.17	8302.30	-8299.15	634.05	1733838.24	14540886.58	40°02'18.191"N	104°39'58.412"W	0.16	
15494.00	89.910	178.560	7138.96	8389.28	-8386.13	635.84	1733840.36	14540799.64	40°02'17.331"N	104°39'58.389"W	1.15	
15582.00	90.000	179.890	7139.03	8477.28	-8474.12	637.03	1733841.88	14540711.69	40°02'16.462"N	104°39'58.374"W	1.51	
15669.00	89.290	179.640	7139.57	8564.28	-8561.12	637.39	1733842.56	14540624.73	40°02'15.602"N	104°39'58.369"W	0.87	
15757.00	89.140	178.470	7140.78	8652.26	-8649.10	638.84	1733844.34	14540536.79	40°02'14.733"N	104°39'58.351"W	1.34	
15844.00	88.400	178.980	7142.64	8739.23	-8736.05	640.78	1733846.60	14540449.88	40°02'13.873"N	104°39'58.326"W	1.03	
15932.00	89.200	179.680	7144.49	8827.20	-8824.03	641.81	1733847.95	14540361.94	40°02'13.004"N	104°39'58.312"W	1.21	
16019.00	89.110	179.150	7145.77	8914.19	-8911.01	642.69	1733849.16	14540275.00	40°02'12.144"N	104°39'58.301"W	0.62	
16107.00	90.090	180.520	7146.38	9002.19	-8999.01	642.95	1733849.74	14540187.04	40°02'11.275"N	104°39'58.298"W	1.91	
16194.00	91.230	180.690	7145.38	9089.17	-9086.00	642.03	1733849.15	14540100.08	40°02'10.415"N	104°39'58.310"W	1.32	
16282.00	92.840	180.600	7142.26	9177.10	-9173.93	641.04	1733848.49	14540012.18	40°02'09.546"N	104°39'58.322"W	1.83	
16369.00	91.940	180.900	7138.63	9264.01	-9260.85	639.90	1733847.67	14539925.29	40°02'08.687"N	104°39'58.337"W	1.09	
16456.00	90.860	179.800	7136.50	9350.97	-9347.82	639.37	1733847.47	14539838.36	40°02'07.828"N	104°39'58.344"W	1.77	
16544.00	89.570	179.730	7136.17	9438.97	-9435.81	639.73	1733848.15	14539750.39	40°02'06.958"N	104°39'58.339"W	1.47	
16631.00	89.970	180.020	7136.52	9525.97	-9522.81	639.92	1733848.67	14539663.43	40°02'06.098"N	104°39'58.337"W	0.57	
16718.00	89.230	180.700	7137.13	9612.96	-9609.81	639.37	1733848.45	14539576.47	40°02'05.239"N	104°39'58.344"W	1.16	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (243 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
16804.00†	89.621	179.625	7137.99	9698.95	-9695.80	639.13	1733848.52	14539490.51	40°02'04.389"N	104°39'58.347"W	1.33	CROSS SETBACK TOE (1788'FSL & 1854'FEL,SEC.21) 40.0345524 -104.6662075
16806.00	89.630	179.600	7138.00	9700.95	-9697.80	639.14	1733848.54	14539488.51	40°02'04.369"N	104°39'58.347"W	1.33	
16893.00	89.880	179.350	7138.38	9787.95	-9784.80	639.94	1733849.66	14539401.55	40°02'03.509"N	104°39'58.337"W	0.41	
16981.00	88.460	179.320	7139.65	9875.94	-9872.78	640.96	1733851.01	14539313.61	40°02'02.640"N	104°39'58.324"W	1.61	
17088.00	91.110	180.670	7139.98	9962.93	-9959.77	640.97	1733851.34	14539226.65	40°02'01.780"N	104°39'58.324"W	3.42	
17155.00	88.370	179.290	7140.37	10049.91	-10046.76	641.00	1733851.70	14539139.70	40°02'00.920"N	104°39'58.323"W	3.53	
17243.00	89.320	178.590	7142.15	10137.89	-10134.72	642.63	1733853.65	14539051.78	40°02'00.051"N	104°39'58.302"W	1.34	
17331.00	87.940	179.440	7144.25	10225.85	-10222.68	644.14	1733855.49	14538963.86	40°01'59.182"N	104°39'58.283"W	1.84	
17419.00	87.170	181.000	7148.00	10313.77	-10310.60	643.80	1733855.48	14538875.97	40°01'58.313"N	104°39'58.287"W	1.98	
17506.00	87.350	180.720	7152.16	10400.65	-10397.49	642.50	1733854.50	14538789.11	40°01'57.454"N	104°39'58.304"W	0.38	
17594.00	88.090	180.260	7155.66	10488.57	-10485.41	641.75	1733854.08	14538701.22	40°01'56.586"N	104°39'58.314"W	0.99	
17681.00	89.910	180.170	7157.18	10575.55	-10572.40	641.42	1733854.07	14538614.27	40°01'55.726"N	104°39'58.318"W	2.09	
17769.00	90.710	179.810	7156.71	10663.55	-10660.40	641.44	1733854.42	14538526.31	40°01'54.856"N	104°39'58.318"W	1.00	
17856.00	90.590	178.320	7155.72	10750.53	-10747.38	642.86	1733856.16	14538439.37	40°01'53.997"N	104°39'58.300"W	1.72	
17943.00	90.220	177.130	7155.10	10837.48	-10834.30	646.31	1733859.94	14538352.49	40°01'53.138"N	104°39'58.255"W	1.43	
18031.00	90.650	176.360	7154.44	10925.36	-10922.16	651.31	1733865.26	14538264.69	40°01'52.270"N	104°39'58.191"W	1.00	
18068.00	90.770	175.660	7153.98	10962.28	-10959.06	653.88	1733867.97	14538227.80	40°01'51.905"N	104°39'58.158"W	1.92	LAST BHGE MWD+IFR1+MSA SURVEY
18113.00	90.770	175.660	7153.37	11007.16	-11003.93	657.29	1733871.54	14538182.97	40°01'51.461"N	104°39'58.114"W	0.00	PTB (480'FSL & 1836'FEL,SEC.21) 40.0309615 -104.6661428

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	-566.83	1569.26	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.16-T1N-R65W	-59.00	-566.83	1569.26	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.21-T1N-R65W	-59.00	-566.83	1569.26	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
ROBIN 9-12HZ HEEL REV-1(400'FSL & 1900'FEL,SEC.09)	7111.00	-484.16	588.67	1733763.79	14548698.29	40°03'35.420"N	104°39'58.993"W	point
ROBIN 9-12HZ BHL REV-1(468'FSL & 1850'FEL,SEC.21)	7196.00	-11015.77	642.67	1733856.98	14538171.08	40°01'51.344"N	104°39'58.302"W	point
ROBIN 9-12HZ LANDBOX	7196.00	0.00	0.00	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"W	polygon
ROBIN 9-12HZ SETBACK 1	7196.00	0.00	0.00	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"W	polygon
ROBIN 9-12HZ SETBACK 2	7196.00	0.00	0.00	1733173.55	14549180.06	40°03'40.205"N	104°40'06.564"W	polygon

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH COMPOSITION - Ref Wellbore: ROBIN 9-12HZ AWB Ref Wellpath: ROBIN 9-12HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1834.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <129 - 1834>	ROBIN 9-12HZ AWB
1834.00	18068.00	Custom APC ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+MSA <1890 - 18068>	ROBIN 9-12HZ AWB
18068.00	18113.00	Blind Drilling (std)	Projection to bit	ROBIN 9-12HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ROBIN 9-12HZ(884'FSL & 2493'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-12HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
129.00	0.310	151.360	129.00	FIRST SURFACE MWD+IFR1 SURVEY
1834.00	17.800	78.240	1783.73	LAST SURFACE MWD+IFR1 SURVEY
1890.00	16.660	78.400	1837.22	FIRST BHGE MWD+IFR1+MSA SURVEY
6429.00	3.086	176.405	6344.51	KOP
7064.00	46.239	176.897	6907.65	ENTER LANDBOX (870'FSL & 1917'FEL,SEC.09) 40.0611305 -104.6664295
7602.00	86.700	183.240	7115.06	LANDING (387'FSL & 1913'FEL,SEC.09) 40.0598026 -104.6664192
8450.00	88.003	178.375	7121.65	CROSS SETBACK HEEL (461'FNL & 1915'FEL,SEC.16) 40.0574759 -104.6664227
16804.00	89.621	179.625	7137.99	CROSS SETBACK TOE (1788'FSL & 1854'FEL,SEC.21) 40.0345524 -104.6662075
18068.00	90.770	175.660	7153.98	LAST BHGE MWD+IFR1+MSA SURVEY
18113.00	90.770	175.660	7153.37	PTB (480'FSL & 1836'FEL,SEC.21) 40.0309615 -104.6661428