



# Actual Wellpath Report

ROBIN 9-17HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ 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	11/7/2017 at 2:17 PM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/ROBIN_9-17HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4439.72	3781.17	1734834.38	14548619.64	40°03'34.603"N	104°39'45.223"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	NABORS X22 (32') (RT) to Facility Vertical Datum	5006.00ft
Horizontal Reference Pt	Slot	NABORS X22 (32') (RT) to Mean Sea Level	5006.00ft
Vertical Reference Pt	NABORS X22 (32') (RT)	NABORS X22 (32') (RT) to Mud Line at Slot (SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09))	5006.00ft
MD Reference Pt	NABORS X22 (32') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.51°

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Facility	SEC.09-T1N-R65W		

WELLPATH DATA (238 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	87.900	0.00	0.00	0.00	0.00	1734834.38	14548619.64	40°03'34.603°N	104°39'45.223°W	0.00	
32.00	0.000	87.900	32.00	0.00	0.00	0.00	1734834.38	14548619.64	40°03'34.603°N	104°39'45.223°W	0.00	
144.00	1.140	87.900	143.99	-0.03	0.04	1.11	1734835.49	14548619.69	40°03'34.603°N	104°39'45.209°W	1.02	FIRST SURFACE MWD+IFR1 SURVEY
176.00	1.320	85.270	175.99	-0.07	0.08	1.80	1734836.18	14548619.73	40°03'34.604°N	104°39'45.200°W	0.59	
207.00	0.830	85.970	206.98	-0.11	0.13	2.38	1734836.76	14548619.78	40°03'34.604°N	104°39'45.192°W	1.58	
239.00	0.400	98.100	238.98	-0.11	0.13	2.72	1734837.10	14548619.78	40°03'34.604°N	104°39'45.188°W	1.40	
270.00	0.440	138.620	269.98	0.00	0.02	2.91	1734837.29	14548619.68	40°03'34.603°N	104°39'45.186°W	0.95	
302.00	0.220	278.100	301.98	0.08	-0.06	2.93	1734837.31	14548619.59	40°03'34.602°N	104°39'45.185°W	1.95	
333.00	0.180	203.220	332.98	0.12	-0.10	2.85	1734837.23	14548619.56	40°03'34.602°N	104°39'45.186°W	0.79	
365.00	0.130	134.490	364.98	0.19	-0.17	2.85	1734837.24	14548619.49	40°03'34.601°N	104°39'45.186°W	0.56	
396.00	0.130	98.100	395.98	0.22	-0.20	2.91	1734837.30	14548619.46	40°03'34.601°N	104°39'45.186°W	0.26	
428.00	0.350	328.200	427.98	0.14	-0.12	2.90	1734837.28	14548619.53	40°03'34.602°N	104°39'45.186°W	1.39	
459.00	0.530	345.780	458.98	-0.08	0.10	2.81	1734837.19	14548619.75	40°03'34.604°N	104°39'45.187°W	0.72	
491.00	1.010	0.980	490.97	-0.50	0.53	2.78	1734837.16	14548620.18	40°03'34.608°N	104°39'45.187°W	1.62	
522.00	1.360	9.950	521.97	-1.14	1.16	2.85	1734837.23	14548620.81	40°03'34.614°N	104°39'45.186°W	1.27	
554.00	1.320	2.830	553.96	-1.88	1.90	2.93	1734837.31	14548621.56	40°03'34.622°N	104°39'45.185°W	0.53	
586.00	1.710	3.790	585.95	-2.72	2.75	2.98	1734837.35	14548622.40	40°03'34.630°N	104°39'45.185°W	1.22	
618.00	2.070	3.440	617.93	-3.77	3.80	3.05	1734837.42	14548623.45	40°03'34.641°N	104°39'45.184°W	1.13	
650.00	2.640	12.230	649.90	-5.07	5.10	3.24	1734837.60	14548624.75	40°03'34.653°N	104°39'45.181°W	2.10	
681.00	3.120	8.280	680.86	-6.60	6.63	3.51	1734837.87	14548626.28	40°03'34.669°N	104°39'45.178°W	1.67	
713.00	3.470	9.420	712.81	-8.42	8.45	3.80	1734838.15	14548628.10	40°03'34.686°N	104°39'45.174°W	1.11	
745.00	3.870	12.060	744.74	-10.42	10.46	4.18	1734838.52	14548630.11	40°03'34.706°N	104°39'45.169°W	1.36	
777.00	4.700	10.390	776.65	-12.76	12.81	4.64	1734838.98	14548632.46	40°03'34.730°N	104°39'45.163°W	2.62	
808.00	5.230	9.770	807.54	-15.40	15.45	5.11	1734839.43	14548635.10	40°03'34.756°N	104°39'45.157°W	1.72	
840.00	5.670	11.620	839.39	-18.38	18.43	5.68	1734839.99	14548638.09	40°03'34.785°N	104°39'45.150°W	1.48	
872.00	5.890	11.620	871.23	-21.53	21.59	6.33	1734840.63	14548641.25	40°03'34.816°N	104°39'45.142°W	0.69	
904.00	6.330	12.230	903.05	-24.86	24.92	7.03	1734841.32	14548644.58	40°03'34.849°N	104°39'45.133°W	1.39	
935.00	6.720	13.370	933.85	-28.29	28.36	7.81	1734842.09	14548648.02	40°03'34.883°N	104°39'45.123°W	1.33	
967.00	7.560	15.480	965.60	-32.13	32.21	8.81	1734843.07	14548651.87	40°03'34.921°N	104°39'45.110°W	2.75	
999.00	8.310	16.270	997.29	-36.37	36.46	10.02	1734844.26	14548656.12	40°03'34.963°N	104°39'45.094°W	2.37	
1031.00	8.790	17.680	1028.94	-40.90	41.00	11.41	1734845.63	14548660.67	40°03'35.008°N	104°39'45.076°W	1.64	
1062.00	9.270	15.130	1059.55	-45.56	45.67	12.78	1734846.98	14548665.34	40°03'35.054°N	104°39'45.059°W	2.02	
1094.00	9.890	18.030	1091.11	-50.65	50.77	14.30	1734848.49	14548670.45	40°03'35.105°N	104°39'45.039°W	2.45	
1126.00	10.500	17.150	1122.60	-56.03	56.17	16.01	1734850.18	14548675.85	40°03'35.158°N	104°39'45.017°W	1.97	
1157.00	11.120	19.610	1153.05	-61.53	61.69	17.85	1734851.99	14548681.37	40°03'35.213°N	104°39'44.993°W	2.49	
1189.00	12.080	20.840	1184.40	-67.55	67.72	20.08	1734854.19	14548687.42	40°03'35.272°N	104°39'44.965°W	3.10	
1221.00	12.700	19.350	1215.65	-73.98	74.17	22.43	1734856.53	14548693.87	40°03'35.336°N	104°39'44.934°W	2.18	
1253.00	13.400	19.000	1246.82	-80.78	81.00	24.81	1734858.87	14548700.70	40°03'35.403°N	104°39'44.904°W	2.20	
1285.00	14.460	19.090	1277.88	-88.04	88.28	27.32	1734861.36	14548707.99	40°03'35.475°N	104°39'44.872°W	3.31	
1317.00	15.210	16.890	1308.82	-95.81	96.07	29.85	1734863.85	14548715.79	40°03'35.552°N	104°39'44.839°W	2.93	
1348.00	15.210	16.540	1338.73	-103.58	103.86	32.19	1734866.16	14548723.58	40°03'35.629°N	104°39'44.809°W	0.30	
1380.00	15.250	16.190	1369.61	-111.62	111.93	34.55	1734868.50	14548731.66	40°03'35.709°N	104°39'44.779°W	0.31	
1412.00	15.340	15.390	1400.47	-119.73	120.05	36.85	1734870.76	14548739.78	40°03'35.789°N	104°39'44.749°W	0.72	
1443.00	15.510	15.220	1430.36	-127.66	128.00	39.03	1734872.91	14548747.74	40°03'35.868°N	104°39'44.721°W	0.57	
1475.00	15.250	19.090	1461.21	-135.74	136.11	41.53	1734875.38	14548755.85	40°03'35.948°N	104°39'44.689°W	3.31	

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Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (238 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
1507.00	14.990	21.280	1492.10	-143.55	143.94	44.41	1734878.22	14548763.69	40°03'36.025"N	104°39'44.652"W	1.96	
1538.00	15.250	19.350	1522.03	-151.11	151.52	47.21	1734881.00	14548771.28	40°03'36.100"N	104°39'44.616"W	1.83	
1570.00	15.160	16.100	1552.91	-159.08	159.51	49.77	1734883.52	14548779.28	40°03'36.179"N	104°39'44.583"W	2.68	
1601.00	15.290	16.100	1582.82	-166.88	167.34	52.02	1734885.75	14548787.11	40°03'36.257"N	104°39'44.554"W	0.42	
1633.00	15.560	16.360	1613.67	-175.03	175.51	54.40	1734888.10	14548795.29	40°03'36.337"N	104°39'44.523"W	0.87	
1665.00	15.640	16.100	1644.49	-183.27	183.77	56.81	1734890.47	14548803.56	40°03'36.419"N	104°39'44.492"W	0.33	
1697.00	15.910	16.540	1675.29	-191.60	192.12	59.25	1734892.88	14548811.91	40°03'36.502"N	104°39'44.461"W	0.92	
1729.00	15.860	16.360	1706.06	-199.98	200.52	61.73	1734895.33	14548820.32	40°03'36.585"N	104°39'44.429"W	0.22	
1760.00	16.080	16.190	1735.87	-208.15	208.71	64.12	1734897.69	14548828.51	40°03'36.665"N	104°39'44.398"W	0.73	
1792.00	16.350	16.630	1766.60	-216.70	217.28	66.65	1734900.18	14548837.09	40°03'36.750"N	104°39'44.366"W	0.93	
1824.00	16.660	14.960	1797.28	-225.42	226.03	69.12	1734902.62	14548845.84	40°03'36.837"N	104°39'44.334"W	1.77	
1848.00	15.600	15.040	1820.33	-231.85	232.47	70.85	1734904.32	14548852.28	40°03'36.900"N	104°39'44.312"W	4.42	LAST SURFACE MWD+IFR1 SURVEY
1929.00	14.690	15.640	1898.52	-252.21	252.87	76.44	1734909.83	14548872.71	40°03'37.102"N	104°39'44.240"W	1.14	FIRST BHGE MWD+IFR1+SC SURVEY
2022.00	15.060	20.660	1988.40	-274.80	275.54	83.88	1734917.19	14548895.39	40°03'37.326"N	104°39'44.144"W	1.44	
2117.00	16.210	14.620	2079.89	-299.12	299.92	91.59	1734924.79	14548919.79	40°03'37.567"N	104°39'44.045"W	2.10	
2210.00	15.830	11.580	2169.28	-324.05	324.90	97.41	1734930.52	14548944.79	40°03'37.814"N	104°39'43.970"W	0.99	
2304.00	15.800	12.170	2259.73	-349.08	349.97	102.68	1734935.70	14548969.87	40°03'38.062"N	104°39'43.902"W	0.17	
2397.00	17.140	11.820	2348.91	-374.82	375.77	108.16	1734941.07	14548995.67	40°03'38.316"N	104°39'43.832"W	1.44	
2491.00	16.760	9.290	2438.83	-401.71	402.70	113.18	1734945.99	14549022.61	40°03'38.583"N	104°39'43.767"W	0.88	
2585.00	16.300	7.160	2528.94	-428.14	429.16	117.01	1734949.72	14549049.08	40°03'38.844"N	104°39'43.718"W	0.81	
2679.00	16.910	12.030	2619.03	-454.56	455.62	121.51	1734954.11	14549075.54	40°03'39.106"N	104°39'43.660"W	1.62	
2773.00	16.790	9.800	2708.99	-481.26	482.37	126.67	1734959.17	14549102.30	40°03'39.370"N	104°39'43.594"W	0.70	
2867.00	16.140	15.010	2799.14	-507.21	508.37	132.36	1734964.77	14549128.31	40°03'39.627"N	104°39'43.521"W	1.72	
2960.00	15.420	13.650	2888.63	-531.66	532.87	138.63	1734970.94	14549152.83	40°03'39.869"N	104°39'43.440"W	0.87	
3055.00	15.150	17.560	2980.28	-555.71	556.98	145.35	1734977.57	14549176.95	40°03'40.107"N	104°39'43.354"W	1.12	
3149.00	16.390	18.870	3070.74	-579.90	581.24	153.35	1734985.47	14549201.24	40°03'40.347"N	104°39'43.251"W	1.37	
3243.00	15.550	17.090	3161.11	-604.42	605.84	161.34	1734993.36	14549225.85	40°03'40.590"N	104°39'43.148"W	1.03	
3337.00	16.520	15.790	3251.45	-629.26	630.74	168.68	1735000.61	14549250.77	40°03'40.836"N	104°39'43.054"W	1.10	
3430.00	15.700	13.500	3340.80	-654.17	655.70	175.22	1735007.05	14549275.75	40°03'41.083"N	104°39'42.969"W	1.12	
3524.00	15.810	11.610	3431.27	-679.03	680.61	180.76	1735012.49	14549300.67	40°03'41.329"N	104°39'42.898"W	0.56	
3618.00	15.030	7.740	3521.89	-703.61	705.23	184.98	1735016.62	14549325.29	40°03'41.572"N	104°39'42.844"W	1.37	
3712.00	13.990	3.700	3612.89	-727.01	728.65	187.36	1735018.90	14549348.71	40°03'41.804"N	104°39'42.813"W	1.54	
3806.00	13.030	1.080	3704.29	-748.93	750.58	188.29	1735019.75	14549370.64	40°03'42.020"N	104°39'42.801"W	1.21	
3899.00	11.810	9.750	3795.12	-768.78	770.45	190.10	1735021.49	14549390.50	40°03'42.217"N	104°39'42.778"W	2.39	
3993.00	10.050	8.110	3887.41	-786.36	788.05	192.89	1735024.21	14549408.11	40°03'42.391"N	104°39'42.742"W	1.90	
4088.00	9.130	5.020	3981.08	-802.06	803.76	194.71	1735025.97	14549423.82	40°03'42.546"N	104°39'42.719"W	1.11	
4182.00	7.990	12.290	4074.04	-815.85	817.58	196.76	1735027.96	14549437.64	40°03'42.682"N	104°39'42.692"W	1.67	
4277.00	6.790	21.940	4168.25	-827.48	829.24	200.26	1735031.42	14549449.31	40°03'42.798"N	104°39'42.647"W	1.81	
4370.00	5.040	26.270	4260.75	-836.21	838.00	204.12	1735035.25	14549458.08	40°03'42.884"N	104°39'42.598"W	1.94	
4491.00	2.400	18.550	4381.48	-843.35	845.17	207.28	1735038.38	14549465.26	40°03'42.955"N	104°39'42.557"W	2.22	
4585.00	0.800	50.300	4475.45	-845.63	847.46	208.41	1735039.50	14549467.55	40°03'42.978"N	104°39'42.543"W	1.88	
4679.00	1.000	51.780	4569.43	-846.54	848.38	209.56	1735040.65	14549468.48	40°03'42.987"N	104°39'42.528"W	0.21	
4773.00	0.700	175.130	4663.43	-846.47	848.32	210.26	1735041.34	14549468.42	40°03'42.986"N	104°39'42.519"W	1.60	
4868.00	0.390	193.780	4758.43	-845.58	847.43	210.23	1735041.32	14549467.53	40°03'42.977"N	104°39'42.519"W	0.37	
4961.00	0.400	182.010	4851.42	-844.95	846.79	210.14	1735041.23	14549466.90	40°03'42.971"N	104°39'42.520"W	0.09	

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Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (238 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
5056.00	0.750	279.740	4946.42	-844.73	846.57	209.52	1735040.61	14549466.67	40°03'42.969"N	104°39'42.528"W	0.94	
5150.00	1.410	291.010	5040.40	-845.26	847.09	207.83	1735038.92	14549467.18	40°03'42.974"N	104°39'42.550"W	0.73	
5244.00	2.180	0.320	5134.37	-847.48	849.29	206.76	1735037.84	14549469.38	40°03'42.996"N	104°39'42.564"W	2.27	
5338.00	2.240	36.120	5228.30	-850.74	852.56	207.86	1735038.92	14549472.65	40°03'43.028"N	104°39'42.550"W	1.45	
5432.00	2.830	85.630	5322.22	-852.37	854.22	211.25	1735042.31	14549474.33	40°03'43.045"N	104°39'42.506"W	2.33	
5526.00	2.230	88.940	5416.13	-852.54	854.43	215.39	1735046.45	14549474.55	40°03'43.047"N	104°39'42.453"W	0.66	
5619.00	2.320	140.960	5509.06	-851.09	853.00	218.39	1735049.45	14549473.13	40°03'43.033"N	104°39'42.414"W	2.15	
5713.00	1.910	136.570	5603.00	-848.46	850.39	220.67	1735051.74	14549470.53	40°03'43.007"N	104°39'42.385"W	0.47	
5807.00	1.580	170.130	5696.96	-846.03	847.97	221.96	1735053.04	14549468.12	40°03'42.983"N	104°39'42.368"W	1.12	
5900.00	1.260	172.410	5789.93	-843.75	845.70	222.32	1735053.41	14549465.85	40°03'42.960"N	104°39'42.364"W	0.35	
5993.00	0.950	165.460	5882.91	-841.99	843.94	222.65	1735053.74	14549464.09	40°03'42.943"N	104°39'42.359"W	0.36	
6087.00	0.810	202.040	5976.90	-840.62	842.57	222.59	1735053.69	14549462.72	40°03'42.929"N	104°39'42.360"W	0.60	
6181.00	0.280	82.260	6070.90	-840.03	841.98	222.57	1735053.68	14549462.13	40°03'42.924"N	104°39'42.360"W	1.04	
6275.00	0.500	28.840	6164.90	-840.42	842.37	223.00	1735054.10	14549462.52	40°03'42.928"N	104°39'42.355"W	0.43	
6368.00	0.770	13.180	6257.89	-841.38	843.34	223.34	1735054.43	14549463.49	40°03'42.937"N	104°39'42.351"W	0.34	
6463.00	0.550	19.710	6352.88	-842.43	844.39	223.64	1735054.73	14549464.54	40°03'42.947"N	104°39'42.347"W	0.24	
6557.00	0.540	17.990	6446.88	-843.27	845.23	223.92	1735055.01	14549465.39	40°03'42.956"N	104°39'42.343"W	0.02	
6651.00	0.720	15.160	6540.87	-844.26	846.23	224.22	1735055.30	14549466.38	40°03'42.966"N	104°39'42.339"W	0.19	
6674.00†	1.268	192.484	6563.87	-844.15	846.12	224.20	1735055.28	14549466.27	40°03'42.964"N	104°39'42.340"W	8.64	KOP
6746.00	7.490	193.290	6635.63	-838.81	840.77	222.95	1735054.05	14549460.92	40°03'42.912"N	104°39'42.356"W	8.64	
6841.00	20.780	188.730	6727.55	-816.06	817.98	218.95	1735050.14	14549438.13	40°03'42.686"N	104°39'42.407"W	14.03	
6934.00	27.100	187.390	6812.50	-778.76	780.63	213.71	1735045.05	14549400.77	40°03'42.317"N	104°39'42.474"W	6.82	
7027.00	31.560	187.530	6893.56	-733.65	735.47	207.80	1735039.31	14549355.61	40°03'41.871"N	104°39'42.550"W	4.80	
7121.00	36.440	183.700	6971.48	-681.41	683.19	202.77	1735034.48	14549303.33	40°03'41.354"N	104°39'42.615"W	5.67	
7215.00	45.250	179.830	7042.53	-620.06	621.82	201.06	1735033.01	14549241.98	40°03'40.748"N	104°39'42.637"W	9.75	
7309.00	47.290	180.480	7107.50	-552.15	553.90	200.87	1735033.07	14549174.08	40°03'40.077"N	104°39'42.640"W	2.23	
7313.00†	47.590	180.433	7110.21	-549.20	550.95	200.85	1735033.06	14549171.14	40°03'40.048"N	104°39'42.640"W	7.56	ENTER LANDBOX (868'FSL & 629'FEL,SEC.09) 40.0611243 -104.6618444
7403.00	54.350	179.480	7166.85	-479.33	481.08	200.93	1735033.41	14549101.29	40°03'39.357"N	104°39'42.639"W	7.56	
7496.00	60.700	178.180	7216.76	-400.92	402.68	202.56	1735035.34	14549022.93	40°03'38.582"N	104°39'42.618"W	6.93	
7589.00	66.550	177.540	7258.06	-317.68	319.46	205.68	1735038.77	14548939.75	40°03'37.760"N	104°39'42.578"W	6.32	
7684.00	73.960	178.820	7290.13	-228.35	230.15	208.50	1735041.92	14548850.50	40°03'36.877"N	104°39'42.542"W	7.90	
7777.00	79.970	178.150	7311.10	-137.80	139.63	210.90	1735044.67	14548760.01	40°03'35.983"N	104°39'42.511"W	6.50	
7872.00	85.340	178.610	7323.24	-43.63	45.48	213.56	1735047.68	14548665.91	40°03'35.052"N	104°39'42.476"W	5.67	
7966.00	89.420	178.330	7327.53	50.23	-48.37	216.07	1735050.54	14548572.11	40°03'34.125"N	104°39'42.444"W	4.35	LANDING (269'FSL & 613'FEL,SEC.09) 40.0594792 -104.6617901
8059.00	91.080	178.040	7327.13	143.20	-141.32	219.01	1735053.84	14548479.21	40°03'33.206"N	104°39'42.406"W	1.81	
8153.00	91.910	178.040	7324.68	237.14	-235.23	222.22	1735057.41	14548385.35	40°03'32.278"N	104°39'42.365"W	0.88	
8246.00	90.740	178.010	7322.53	330.08	-328.15	225.43	1735060.96	14548292.48	40°03'31.360"N	104°39'42.324"W	1.26	
8341.00	89.970	179.990	7321.94	425.07	-423.13	227.09	1735062.98	14548197.54	40°03'30.422"N	104°39'42.303"W	2.24	
8435.00	90.930	179.130	7321.20	519.07	-517.12	227.81	1735064.06	14548103.59	40°03'29.493"N	104°39'42.293"W	1.37	
8529.00	89.690	180.500	7320.69	613.06	-611.12	228.11	1735064.72	14548009.64	40°03'28.564"N	104°39'42.289"W	1.97	
8623.00	90.770	180.250	7320.31	707.05	-705.11	227.50	1735064.46	14547915.67	40°03'27.635"N	104°39'42.297"W	1.18	
8695.00†	89.399	179.990	7320.21	779.04	-777.11	227.35	1735064.58	14547843.70	40°03'26.923"N	104°39'42.299"W	1.94	CROSS SETBACK HEEL (460'FNL & 602'FEL,SEC.16) 40.0574787 -104.6617498
8717.00	88.980	179.910	7320.52	801.04	-799.11	227.36	1735064.68	14547821.72	40°03'26.706"N	104°39'42.299"W	1.94	
8810.00	89.820	179.370	7321.49	894.03	-892.10	227.95	1735065.62	14547728.76	40°03'25.787"N	104°39'42.291"W	1.07	
8904.00	90.280	178.780	7321.41	988.03	-986.09	229.47	1735067.49	14547634.82	40°03'24.858"N	104°39'42.272"W	0.80	

# Actual Wellpath Report

ROBIN 9-17HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (238 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
8998.00	90.860	179.260	7320.47	1082.02	-1080.07	231.07	1735069.46	14547540.88	40°03'23.930"N	104°39'42.251"W	0.80	
9092.00	92.030	178.870	7318.10	1175.98	-1174.02	232.61	1735071.35	14547446.97	40°03'23.001"N	104°39'42.232"W	1.31	
9187.00	89.510	179.380	7316.83	1270.97	-1269.00	234.06	1735073.15	14547352.04	40°03'22.062"N	104°39'42.213"W	2.71	
9281.00	89.690	178.820	7317.48	1364.96	-1362.98	235.53	1735074.99	14547258.10	40°03'21.134"N	104°39'42.194"W	0.63	
9375.00	90.340	178.730	7317.46	1458.95	-1456.96	237.54	1735077.35	14547164.17	40°03'20.205"N	104°39'42.168"W	0.70	
9469.00	90.150	177.320	7317.06	1552.92	-1550.90	240.78	1735080.95	14547070.27	40°03'19.277"N	104°39'42.127"W	1.51	
9563.00	90.340	177.280	7316.66	1646.85	-1644.79	245.21	1735085.73	14546976.43	40°03'18.349"N	104°39'42.070"W	0.21	
9657.00	89.970	176.900	7316.40	1740.76	-1738.67	249.98	1735090.85	14546882.61	40°03'17.421"N	104°39'42.008"W	0.56	
9750.00	91.540	178.640	7315.18	1833.71	-1831.59	253.60	1735094.82	14546789.75	40°03'16.503"N	104°39'41.962"W	2.52	
9844.00	91.660	181.360	7312.55	1927.66	-1925.54	253.60	1735095.18	14546695.83	40°03'15.574"N	104°39'41.962"W	2.90	
9938.00	90.120	181.100	7311.09	2021.60	-2019.51	251.58	1735093.52	14546601.90	40°03'14.646"N	104°39'41.988"W	1.66	
10032.00	90.400	180.920	7310.66	2115.57	-2113.49	249.93	1735092.22	14546507.94	40°03'13.717"N	104°39'42.009"W	0.35	
10126.00	89.660	181.640	7310.61	2209.52	-2207.47	247.83	1735090.47	14546414.00	40°03'12.788"N	104°39'42.036"W	1.10	
10220.00	90.550	181.280	7310.44	2303.46	-2301.43	245.43	1735088.44	14546320.06	40°03'11.860"N	104°39'42.067"W	1.02	
10313.00	88.920	180.800	7310.87	2396.43	-2394.41	243.75	1735087.10	14546227.11	40°03'10.941"N	104°39'42.089"W	1.83	
10407.00	89.260	181.590	7312.37	2490.37	-2488.38	241.78	1735085.50	14546133.17	40°03'10.012"N	104°39'42.114"W	0.91	
10501.00	90.370	181.190	7312.67	2584.32	-2582.35	239.50	1735083.58	14546039.23	40°03'09.084"N	104°39'42.143"W	1.26	
10595.00	89.570	180.640	7312.72	2678.29	-2676.34	238.00	1735082.43	14545945.27	40°03'08.155"N	104°39'42.162"W	1.03	
10689.00	90.220	179.510	7312.89	2772.28	-2770.34	237.88	1735082.66	14545851.31	40°03'07.226"N	104°39'42.164"W	1.39	
10782.00	91.450	179.560	7311.54	2865.27	-2863.32	238.64	1735083.77	14545758.37	40°03'06.307"N	104°39'42.154"W	1.32	
10875.00	89.170	178.180	7311.03	2958.26	-2956.29	240.47	1735085.96	14545665.44	40°03'05.388"N	104°39'42.131"W	2.87	
10968.00	88.550	178.070	7312.88	3051.21	-3049.22	243.51	1735089.35	14545572.56	40°03'04.470"N	104°39'42.092"W	0.68	
11061.00	88.950	177.940	7314.91	3144.16	-3142.15	246.75	1735092.94	14545479.69	40°03'03.552"N	104°39'42.050"W	0.45	
11155.00	88.740	177.520	7316.81	3238.09	-3236.05	250.47	1735097.01	14545385.83	40°03'02.624"N	104°39'42.002"W	0.50	
11249.00	90.710	176.920	7317.26	3332.01	-3329.94	255.03	1735101.93	14545292.00	40°03'01.696"N	104°39'41.944"W	2.19	
11343.00	90.460	177.960	7316.30	3425.94	-3423.84	259.23	1735106.48	14545198.15	40°03'00.768"N	104°39'41.890"W	1.14	
11437.00	89.050	178.560	7316.70	3519.92	-3517.79	262.08	1735109.69	14545104.25	40°02'59.839"N	104°39'41.853"W	1.63	
11531.00	89.720	178.130	7317.71	3613.89	-3611.74	264.80	1735112.76	14545010.34	40°02'58.911"N	104°39'41.818"W	0.85	
11624.00	90.120	180.780	7317.84	3706.88	-3704.73	265.68	1735113.99	14544917.40	40°02'57.992"N	104°39'41.807"W	2.88	
11718.00	89.050	182.710	7318.52	3800.80	-3798.68	262.82	1735111.49	14544823.48	40°02'57.064"N	104°39'41.843"W	2.35	
11811.00	87.630	181.340	7321.21	3893.67	-3891.58	259.53	1735108.56	14544730.60	40°02'56.146"N	104°39'41.886"W	2.12	
11903.00	87.810	180.760	7324.87	3985.56	-3983.49	257.85	1735107.22	14544638.72	40°02'55.237"N	104°39'41.907"W	0.66	
11995.00	88.610	179.950	7327.75	4077.51	-4075.44	257.28	1735107.00	14544546.80	40°02'54.329"N	104°39'41.915"W	1.24	
12087.00	88.890	180.710	7329.75	4169.48	-4167.42	256.75	1735106.82	14544454.86	40°02'53.420"N	104°39'41.922"W	0.88	
12180.00	87.660	180.330	7332.55	4262.42	-4260.37	255.91	1735106.33	14544361.94	40°02'52.501"N	104°39'41.932"W	1.38	
12272.00	86.860	181.740	7336.95	4354.28	-4352.25	254.25	1735105.02	14544270.10	40°02'51.593"N	104°39'41.954"W	1.76	
12364.00	86.860	181.390	7341.99	4446.08	-4444.07	251.74	1735102.86	14544178.30	40°02'50.686"N	104°39'41.986"W	0.38	
12456.00	88.770	179.860	7345.50	4537.99	-4535.99	250.74	1735102.20	14544086.41	40°02'49.777"N	104°39'41.999"W	2.66	
12549.00	89.600	179.830	7346.82	4630.97	-4628.98	250.99	1735102.81	14543993.46	40°02'48.858"N	104°39'41.996"W	0.89	
12641.00	89.380	179.660	7347.64	4722.97	-4720.98	251.40	1735103.57	14543901.50	40°02'47.949"N	104°39'41.990"W	0.30	
12733.00	89.570	178.460	7348.48	4814.96	-4812.96	252.91	1735105.42	14543809.56	40°02'47.040"N	104°39'41.971"W	1.32	
12826.00	90.220	177.730	7348.65	4907.93	-4905.91	256.00	1735108.87	14543716.66	40°02'46.122"N	104°39'41.931"W	1.05	
12920.00	91.330	178.110	7347.38	5001.89	-4999.84	259.41	1735112.63	14543622.79	40°02'45.193"N	104°39'41.887"W	1.25	
13014.00	88.270	175.100	7347.71	5095.74	-5093.65	264.97	1735118.55	14543529.03	40°02'44.266"N	104°39'41.816"W	4.57	
13107.00	90.150	177.320	7348.99	5188.57	-5186.43	271.12	1735125.04	14543436.31	40°02'43.350"N	104°39'41.737"W	3.13	



# Actual Wellpath Report

ROBIN 9-17HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (238 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
13201.00	91.020	180.170	7348.03	5282.55	-5280.39	273.18	1735127.46	14543342.40	40°02'42.421"N	104°39'41.710"W	3.17	
13295.00	89.170	177.830	7347.88	5376.53	-5374.36	274.82	1735129.45	14543248.47	40°02'41.492"N	104°39'41.689"W	3.17	
13390.00	89.480	177.070	7349.00	5471.46	-5469.26	279.05	1735134.04	14543153.62	40°02'40.554"N	104°39'41.635"W	0.86	
13484.00	90.120	178.900	7349.32	5565.43	-5563.20	282.35	1735137.70	14543059.73	40°02'39.626"N	104°39'41.593"W	2.06	
13577.00	90.430	178.230	7348.88	5658.41	-5656.17	284.68	1735140.38	14542966.81	40°02'38.707"N	104°39'41.563"W	0.79	
13672.00	90.220	179.970	7348.34	5753.40	-5751.15	286.17	1735142.23	14542871.87	40°02'37.769"N	104°39'41.543"W	1.84	
13765.00	90.740	179.610	7347.56	5846.40	-5844.15	286.51	1735142.92	14542778.91	40°02'36.850"N	104°39'41.539"W	0.68	
13858.00	88.890	181.140	7347.86	5939.38	-5937.14	285.90	1735142.67	14542685.96	40°02'35.931"N	104°39'41.547"W	2.58	
13952.00	88.950	179.580	7349.63	6033.35	-6031.11	285.31	1735142.43	14542592.02	40°02'35.002"N	104°39'41.554"W	1.66	
14046.00	88.800	178.090	7351.48	6127.32	-6125.07	287.22	1735144.70	14542498.10	40°02'34.074"N	104°39'41.530"W	1.59	
14140.00	89.450	178.330	7352.91	6221.29	-6219.02	290.16	1735147.99	14542404.21	40°02'33.145"N	104°39'41.492"W	0.74	
14235.00	90.520	177.450	7352.94	6316.25	-6313.95	293.66	1735151.84	14542309.32	40°02'32.207"N	104°39'41.447"W	1.46	
14329.00	90.920	181.020	7351.76	6410.22	-6407.92	294.91	1735153.46	14542215.40	40°02'31.278"N	104°39'41.431"W	3.82	
14423.00	91.290	180.010	7349.94	6504.19	-6501.90	294.07	1735152.97	14542121.45	40°02'30.350"N	104°39'41.442"W	1.14	
14517.00	89.140	180.440	7349.59	6598.18	-6595.89	293.70	1735152.95	14542027.50	40°02'29.421"N	104°39'41.447"W	2.33	
14610.00	90.650	180.540	7349.76	6691.16	-6688.88	292.90	1735152.51	14541934.54	40°02'28.502"N	104°39'41.457"W	1.63	
14704.00	88.550	180.190	7350.42	6785.14	-6782.87	292.30	1735152.27	14541840.58	40°02'27.573"N	104°39'41.465"W	2.26	
14798.00	88.770	179.100	7352.62	6879.11	-6876.84	292.89	1735153.21	14541746.65	40°02'26.644"N	104°39'41.457"W	1.18	
14892.00	88.250	180.520	7355.06	6973.08	-6970.81	293.20	1735153.87	14541652.73	40°02'25.716"N	104°39'41.453"W	1.61	
14985.00	88.800	180.440	7357.45	7066.03	-7063.78	292.42	1735153.45	14541559.79	40°02'24.797"N	104°39'41.463"W	0.60	
15079.00	87.910	180.140	7360.15	7159.99	-7157.73	291.94	1735153.33	14541465.87	40°02'23.869"N	104°39'41.469"W	1.00	
15172.00	89.880	179.640	7361.95	7252.96	-7250.71	292.12	1735153.86	14541372.93	40°02'22.950"N	104°39'41.467"W	2.19	
15266.00	88.490	181.950	7363.28	7346.92	-7344.68	290.82	1735152.91	14541278.99	40°02'22.021"N	104°39'41.484"W	2.87	
15360.00	87.410	181.860	7366.65	7440.78	-7438.57	287.70	1735150.15	14541185.13	40°02'21.093"N	104°39'41.524"W	1.15	
15454.00	87.190	181.530	7371.07	7534.60	-7532.43	284.92	1735147.73	14541091.30	40°02'20.166"N	104°39'41.560"W	0.42	
15549.00	87.410	179.830	7375.55	7629.47	-7627.31	283.79	1735146.96	14540996.45	40°02'19.228"N	104°39'41.574"W	1.80	
15642.00	87.850	180.210	7379.40	7722.39	-7720.23	283.76	1735147.28	14540903.57	40°02'18.310"N	104°39'41.575"W	0.62	
15736.00	87.810	179.500	7382.95	7816.32	-7814.16	284.00	1735147.87	14540809.67	40°02'17.382"N	104°39'41.572"W	0.76	
15831.00	88.180	179.350	7386.28	7911.26	-7909.10	284.95	1735149.19	14540714.78	40°02'16.443"N	104°39'41.559"W	0.42	
15924.00	89.200	179.830	7388.40	8004.24	-8002.07	285.62	1735150.20	14540621.85	40°02'15.525"N	104°39'41.551"W	1.21	
16018.00	90.000	179.520	7389.06	8098.23	-8096.07	286.15	1735151.09	14540527.89	40°02'14.596"N	104°39'41.544"W	0.91	
16112.00	91.380	179.080	7387.93	8192.22	-8190.05	287.30	1735152.60	14540433.95	40°02'13.667"N	104°39'41.529"W	1.54	
16206.00	90.340	180.020	7386.52	8286.21	-8284.03	288.04	1735153.69	14540340.01	40°02'12.738"N	104°39'41.520"W	1.49	
16301.00	90.650	179.390	7385.70	8381.20	-8379.03	288.52	1735154.54	14540245.05	40°02'11.799"N	104°39'41.513"W	0.74	
16395.00	91.510	178.660	7383.93	8475.18	-8473.00	290.12	1735156.49	14540151.13	40°02'10.871"N	104°39'41.493"W	1.20	
16489.00	90.310	179.830	7382.43	8569.17	-8566.97	291.36	1735158.09	14540057.19	40°02'09.942"N	104°39'41.477"W	1.78	
16583.00	90.550	180.120	7381.73	8663.16	-8660.97	291.40	1735158.48	14539963.23	40°02'09.013"N	104°39'41.477"W	0.40	
16677.00	91.200	180.000	7380.29	8757.14	-8754.96	291.30	1735158.74	14539869.28	40°02'08.084"N	104°39'41.478"W	0.70	
16771.00	90.280	179.490	7379.08	8851.13	-8848.95	291.72	1735159.52	14539775.33	40°02'07.156"N	104°39'41.472"W	1.12	
16866.00	90.800	179.040	7378.18	8946.13	-8943.94	292.94	1735161.09	14539680.39	40°02'06.217"N	104°39'41.457"W	0.72	
16959.00	89.420	179.580	7378.00	9039.13	-9036.93	294.06	1735162.57	14539587.44	40°02'05.298"N	104°39'41.442"W	1.59	
17048.00†	90.111	179.268	7378.37	9128.12	-9125.92	294.96	1735163.80	14539498.48	40°02'04.418"N	104°39'41.431"W	0.85	CROSS SETBACK TOE (1783'FSL & 538'FEL, SEC.21) 40.0345607 -104.6615086
17053.00	90.150	179.250	7378.36	9133.12	-9130.92	295.02	1735163.88	14539493.48	40°02'04.369"N	104°39'41.430"W	0.85	
17147.00	88.180	179.550	7379.73	9227.11	-9224.90	296.01	1735165.22	14539399.54	40°02'03.440"N	104°39'41.417"W	2.12	
17241.00	87.750	179.010	7383.06	9321.05	-9318.83	297.19	1735166.76	14539305.65	40°02'02.512"N	104°39'41.402"W	0.73	

# Actual Wellpath Report

ROBIN 9-17HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWP
Facility	SEC.09-T1N-R65W		

## WELLPATH DATA (238 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
17335.00	88.490	178.840	7386.15	9414.99	-9412.77	298.95	1735168.87	14539211.77	40°02'01.584"N	104°39'41.380"W	0.81	
17428.00	89.450	178.200	7387.82	9507.96	-9505.72	301.35	1735171.63	14539118.86	40°02'00.665"N	104°39'41.349"W	1.24	
17523.00	89.970	177.780	7388.30	9602.93	-9600.66	304.68	1735175.32	14539023.97	40°01'59.727"N	104°39'41.306"W	0.70	
17616.00	90.460	177.620	7387.95	9695.88	-9693.58	308.41	1735179.40	14538931.10	40°01'58.809"N	104°39'41.258"W	0.55	
17710.00	91.750	177.990	7386.14	9789.82	-9787.49	312.01	1735183.35	14538837.24	40°01'57.881"N	104°39'41.212"W	1.43	
17803.00	90.860	178.670	7384.02	9882.77	-9880.43	314.72	1735186.42	14538744.35	40°01'56.962"N	104°39'41.177"W	1.20	
17897.00	91.570	178.560	7382.03	9976.74	-9974.38	316.99	1735189.04	14538650.44	40°01'56.034"N	104°39'41.148"W	0.76	
17991.00	89.420	178.630	7381.22	10070.72	-10068.34	319.30	1735191.70	14538556.53	40°01'55.105"N	104°39'41.118"W	2.29	
18084.00	89.170	177.180	7382.36	10163.67	-10161.27	322.70	1735195.45	14538463.65	40°01'54.187"N	104°39'41.074"W	1.58	
18179.00	88.460	177.700	7384.32	10258.59	-10256.15	326.94	1735200.05	14538368.82	40°01'53.249"N	104°39'41.020"W	0.93	
18273.00	89.010	176.670	7386.40	10352.49	-10350.02	331.56	1735205.02	14538275.01	40°01'52.322"N	104°39'40.961"W	1.24	
18317.00	88.680	176.010	7387.29	10396.41	-10393.92	334.36	1735207.99	14538231.14	40°01'51.888"N	104°39'40.924"W	1.68	LAST BHGE MWD+IFR1+SC SURVEY
18363.00	88.680	176.010	7388.35	10442.32	-10439.79	337.56	1735211.37	14538185.29	40°01'51.434"N	104°39'40.883"W	0.00	PTB (469'FSL & 494'FEL,SEC.21) 40.0309540 -104.6613565



# Actual Wellpath Report

ROBIN 9-17HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ 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	0.00	0.00	-90.12	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.09-T1N-R65W SESE 1/4	0.00	-0.30	14.85	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	polygon
SEC.09-T1N-R65W SESW 1/4	0.00	-0.30	14.85	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	polygon
SEC.16-T1N-R65W	0.00	0.00	-90.12	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.21-T1N-R65W	0.00	0.00	-90.12	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
ROBIN 9-17HZ INT. TARGET@3500'VS	7320.00	-3497.95	252.48	1735100.01	14545124.05	40°03'00.035"N	104°39'41.976"W	point
ROBIN 9-17HZ HEEL REV-1(400'FSL & 608'FEL,SEC.09)	7331.00	82.35	221.40	1735055.38	14548702.80	40°03'35.417"N	104°39'42.376"W	point
ROBIN 9-17HZ HEEL REV-2(440'FSL & 608'FEL,SEC.09)	7331.00	122.37	221.37	1735055.20	14548742.80	40°03'35.812"N	104°39'42.376"W	point
ROBIN 9-17HZ BHL REV-1(467'FSL & 520'FEL,SEC.21)	7390.00	-10441.98	312.21	1735186.03	14538183.01	40°01'51.413"N	104°39'41.209"W	point
ROBIN 9-17HZ INT. TARGET@7700'VS	7390.00	-7697.80	288.58	1735152.01	14540926.01	40°02'18.531"N	104°39'41.513"W	point
ROBIN 9-17HZ LANDBOX	7390.00	0.00	0.00	1734834.38	14548619.64	40°03'34.603"N	104°39'45.223"W	polygon
ROBIN 9-17HZ SETBACK 1	7390.00	0.00	0.00	1734834.38	14548619.64	40°03'34.603"N	104°39'45.223"W	polygon
ROBIN 9-17HZ SETBACK 2	7390.00	0.00	0.00	1734834.38	14548619.64	40°03'34.603"N	104°39'45.223"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ROBIN 9-17HZ AWB Ref Wellpath: ROBIN 9-17HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	1848.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <144 - 1848>	ROBIN 9-17HZ AWB
1848.00	18317.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1929 - 18317>	ROBIN 9-17HZ AWB
18317.00	18363.00	Blind Drilling (std)	Projection to bit	ROBIN 9-17HZ AWB

# Actual Wellpath Report

ROBIN 9-17HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#31 ROBIN 9-17HZ(317'FSL & 829'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-17HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-17HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
144.00	1.140	87.900	143.99	FIRST SURFACE MWD+IFR1 SURVEY
1848.00	15.600	15.040	1820.33	LAST SURFACE MWD+IFR1 SURVEY
1929.00	14.690	15.640	1898.52	FIRST BHGE MWD+IFR1+SC SURVEY
6674.00	1.268	192.484	6563.87	KOP
7313.00	47.590	180.433	7110.21	ENTER LANDBOX (868'FSL & 629'FEL,SEC.09) 40.0611243 -104.6618444
7966.00	89.420	178.330	7327.53	LANDING (269'FSL & 613'FEL,SEC.09) 40.0594792 -104.6617901
8695.00	89.399	179.990	7320.21	CROSS SETBACK HEEL (460'FNL & 602'FEL,SEC.16) 40.0574787 -104.6617498
17048.00	90.111	179.268	7378.37	CROSS SETBACK TOE (1783'FSL & 538'FEL,SEC.21) 40.0345607 -104.6615086
18317.00	88.680	176.010	7387.29	LAST BHGE MWD+IFR1+SC SURVEY
18363.00	88.680	176.010	7388.35	PTB (469'FSL & 494'FEL,SEC.21) 40.0309540 -104.6613565