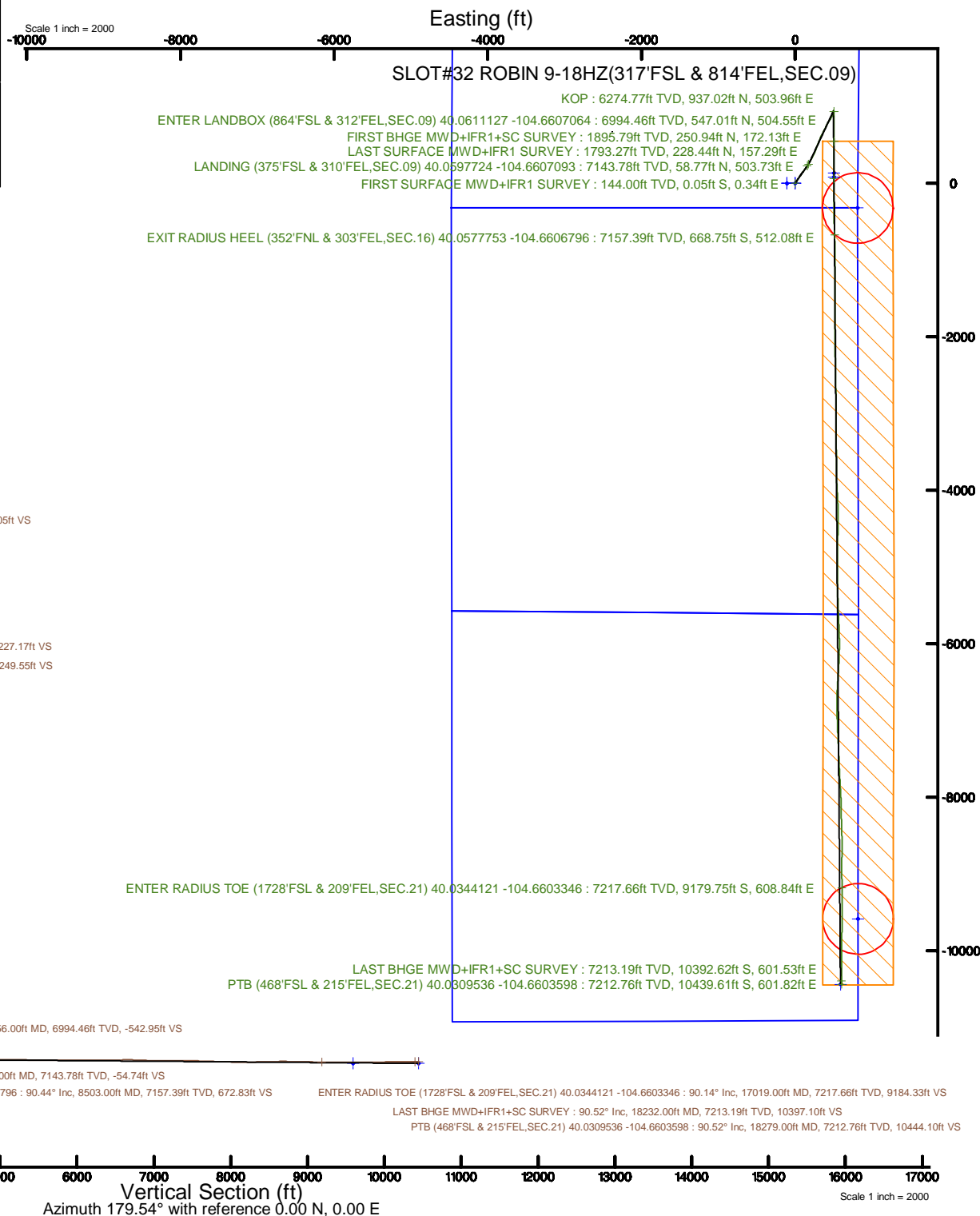


Location: COLORADO	Slot: SLOT#32 ROBIN 9-18HZ(317FSL & 814FEL,SEC.09)
Field: WELD COUNTY (UTM/TRUE NORTH)	Well: ROBIN 9-18HZ
Facility: SEC.09-T1N-R65W	Wellbore: ROBIN 9-18HZ PWB
Plot reference wellpath is ROBIN 9-18HZ PWP Rev-B.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to NABORS X22 (32) (RT)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to NABORS X22 (32) (RT)	North Reference: True north
NABORS X22 (32) (RT) to Mean Sea Level: 5006 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#32 ROBIN 9-18HZ(317FSL & 814FEL,SEC.09)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-10-30
	Database: WA DEN Anadarko Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ 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	10/31/2017 at 3:06 PM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/ROBIN_9-18HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4440.02	3796.02	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"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#32 ROBIN 9-18HZ(317'FSL & 814'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	179.54°

Actual Wellpath Report

ROBIN 9-18HZ AWP

Page 2 of 8

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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	98.100	0.00	0.00	0.00	0.00	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	0.00	
32.00	0.000	98.100	32.00	0.00	0.00	0.00	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	0.00	
144.00	0.350	98.100	144.00	0.05	-0.05	0.34	1734849.57	14548619.35	40°03'34.600"N	104°39'45.028"W	0.31	FIRST SURFACE MWD+IFR1 SURVEY
176.00	0.570	98.100	176.00	0.09	-0.08	0.59	1734849.82	14548619.31	40°03'34.599"N	104°39'45.024"W	0.69	
207.00	0.570	87.470	207.00	0.11	-0.10	0.90	1734850.13	14548619.30	40°03'34.599"N	104°39'45.020"W	0.34	
239.00	0.880	48.440	238.99	-0.06	0.07	1.24	1734850.47	14548619.47	40°03'34.601"N	104°39'45.016"W	1.77	
270.00	1.230	50.990	269.99	-0.42	0.44	1.68	1734850.91	14548619.84	40°03'34.604"N	104°39'45.010"W	1.14	
302.00	1.410	47.480	301.98	-0.90	0.92	2.24	1734851.46	14548620.32	40°03'34.609"N	104°39'45.003"W	0.62	
365.00	1.580	34.290	364.96	-2.14	2.16	3.30	1734852.52	14548621.57	40°03'34.621"N	104°39'44.990"W	0.61	
396.00	1.710	34.120	395.95	-2.87	2.90	3.80	1734853.01	14548622.31	40°03'34.629"N	104°39'44.983"W	0.42	
428.00	2.290	26.640	427.93	-3.83	3.86	4.35	1734853.56	14548623.28	40°03'34.638"N	104°39'44.976"W	1.98	
459.00	3.030	21.640	458.89	-5.14	5.18	4.93	1734854.14	14548624.59	40°03'34.651"N	104°39'44.969"W	2.50	
491.00	3.650	27.880	490.84	-6.82	6.87	5.72	1734854.92	14548626.28	40°03'34.668"N	104°39'44.958"W	2.24	
522.00	3.820	29.280	521.77	-8.59	8.64	6.69	1734855.88	14548628.06	40°03'34.685"N	104°39'44.946"W	0.62	
554.00	4.530	30.600	553.69	-10.59	10.66	7.85	1734857.04	14548630.08	40°03'34.705"N	104°39'44.931"W	2.24	
586.00	5.580	32.010	585.56	-12.99	13.06	9.32	1734858.49	14548632.49	40°03'34.729"N	104°39'44.912"W	3.30	
618.00	6.150	28.230	617.40	-15.80	15.89	10.95	1734860.12	14548635.32	40°03'34.757"N	104°39'44.891"W	2.15	
650.00	6.770	31.130	649.19	-18.92	19.02	12.74	1734861.89	14548638.45	40°03'34.788"N	104°39'44.868"W	2.19	
681.00	7.080	31.570	679.97	-22.09	22.21	14.69	1734863.82	14548641.65	40°03'34.819"N	104°39'44.843"W	1.01	
713.00	7.030	32.710	711.72	-25.40	25.54	16.78	1734865.90	14548644.99	40°03'34.852"N	104°39'44.816"W	0.46	
745.00	7.340	34.200	743.47	-28.72	28.88	18.98	1734868.09	14548648.33	40°03'34.885"N	104°39'44.788"W	1.13	
777.00	8.220	34.290	775.18	-32.28	32.46	21.42	1734870.52	14548651.92	40°03'34.921"N	104°39'44.757"W	2.75	
808.00	9.180	34.730	805.82	-36.13	36.32	24.08	1734873.16	14548655.79	40°03'34.959"N	104°39'44.722"W	3.10	
840.00	10.200	33.150	837.36	-40.57	40.79	27.08	1734876.14	14548660.27	40°03'35.003"N	104°39'44.684"W	3.29	
872.00	10.850	34.200	868.83	-45.41	45.65	30.32	1734879.37	14548665.15	40°03'35.051"N	104°39'44.642"W	2.12	
904.00	11.290	31.570	900.23	-50.54	50.81	33.66	1734882.68	14548670.32	40°03'35.102"N	104°39'44.599"W	2.09	
935.00	11.820	33.850	930.60	-55.74	56.04	37.01	1734886.02	14548675.55	40°03'35.154"N	104°39'44.556"W	2.26	
967.00	12.700	33.150	961.87	-61.37	61.70	40.76	1734889.74	14548681.23	40°03'35.210"N	104°39'44.508"W	2.79	
999.00	13.710	33.500	993.03	-67.45	67.81	44.78	1734893.73	14548687.35	40°03'35.270"N	104°39'44.456"W	3.17	
1031.00	13.840	30.160	1024.11	-73.89	74.28	48.80	1734897.72	14548693.83	40°03'35.334"N	104°39'44.404"W	2.52	
1062.00	13.800	32.090	1054.21	-80.20	80.62	52.62	1734901.53	14548700.18	40°03'35.397"N	104°39'44.355"W	1.49	
1094.00	13.450	31.390	1085.31	-86.57	87.03	56.59	1734905.47	14548706.61	40°03'35.460"N	104°39'44.304"W	1.21	
1126.00	13.490	33.850	1116.43	-92.82	93.31	60.61	1734909.46	14548712.89	40°03'35.522"N	104°39'44.253"W	1.79	
1157.00	13.270	35.610	1146.59	-98.68	99.20	64.69	1734913.52	14548718.80	40°03'35.580"N	104°39'44.200"W	1.49	
1189.00	12.740	35.350	1177.77	-104.51	105.07	68.87	1734917.67	14548724.68	40°03'35.638"N	104°39'44.146"W	1.67	
1221.00	12.880	37.630	1208.97	-110.18	110.77	73.09	1734921.87	14548730.40	40°03'35.695"N	104°39'44.092"W	1.64	
1253.00	12.960	36.750	1240.16	-115.84	116.47	77.42	1734926.17	14548736.11	40°03'35.751"N	104°39'44.036"W	0.66	
1285.00	13.270	36.230	1271.32	-121.65	122.31	81.73	1734930.47	14548741.96	40°03'35.809"N	104°39'43.981"W	1.04	
1317.00	13.710	36.660	1302.44	-127.62	128.31	86.17	1734934.88	14548747.98	40°03'35.868"N	104°39'43.924"W	1.41	
1348.00	13.670	34.120	1332.56	-133.56	134.29	90.42	1734939.10	14548753.98	40°03'35.927"N	104°39'43.869"W	1.94	
1380.00	13.580	33.680	1363.66	-139.78	140.55	94.62	1734943.28	14548760.25	40°03'35.989"N	104°39'43.815"W	0.43	
1412.00	13.710	37.370	1394.76	-145.89	146.69	99.01	1734947.64	14548766.40	40°03'36.050"N	104°39'43.759"W	2.75	
1443.00	13.230	39.210	1424.90	-151.52	152.36	103.48	1734952.09	14548772.08	40°03'36.106"N	104°39'43.701"W	2.08	
1475.00	13.230	37.370	1456.06	-157.23	158.10	108.02	1734956.60	14548777.84	40°03'36.162"N	104°39'43.643"W	1.32	
1507.00	13.320	37.810	1487.20	-163.02	163.93	112.50	1734961.06	14548783.68	40°03'36.220"N	104°39'43.585"W	0.42	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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
1538.00	13.710	34.820	1517.34	-168.82	169.76	116.78	1734965.32	14548789.53	40°03'36.278"N	104°39'43.530"W	2.58	
1570.00	14.020	35.260	1548.41	-175.06	176.04	121.19	1734969.70	14548795.83	40°03'36.340"N	104°39'43.473"W	1.02	
1601.00	14.370	34.910	1578.46	-181.25	182.26	125.56	1734974.04	14548802.06	40°03'36.401"N	104°39'43.417"W	1.16	
1633.00	14.370	34.910	1609.46	-187.73	188.77	130.10	1734978.56	14548808.59	40°03'36.466"N	104°39'43.359"W	0.00	
1665.00	14.460	36.050	1640.46	-194.18	195.26	134.73	1734983.16	14548815.09	40°03'36.530"N	104°39'43.299"W	0.93	
1697.00	14.550	35.080	1671.44	-200.66	201.78	139.39	1734987.80	14548821.62	40°03'36.594"N	104°39'43.239"W	0.81	
1729.00	14.850	33.410	1702.39	-207.33	208.49	143.96	1734992.34	14548828.35	40°03'36.660"N	104°39'43.181"W	1.62	
1760.00	14.990	32.970	1732.34	-213.98	215.17	148.32	1734996.68	14548835.04	40°03'36.726"N	104°39'43.124"W	0.58	
1792.00	14.680	34.730	1763.28	-220.74	221.98	152.89	1735001.21	14548841.86	40°03'36.794"N	104°39'43.066"W	1.71	
1823.00	14.550	33.760	1793.27	-227.17	228.44	157.29	1735005.59	14548848.34	40°03'36.858"N	104°39'43.009"W	0.89	LAST SURFACE MWD+IFR1 SURVEY
1929.00	14.910	33.090	1895.79	-249.55	250.94	172.13	1735020.34	14548870.88	40°03'37.080"N	104°39'42.818"W	0.38	FIRST BHGE MWD+IFR1+SC SURVEY
2022.00	16.910	29.610	1985.22	-271.23	272.72	185.35	1735033.47	14548892.71	40°03'37.295"N	104°39'42.648"W	2.38	
2117.00	16.740	28.700	2076.16	-295.13	296.74	198.75	1735046.77	14548916.77	40°03'37.532"N	104°39'42.476"W	0.33	
2210.00	16.520	27.870	2165.27	-318.47	320.17	211.36	1735059.29	14548940.24	40°03'37.764"N	104°39'42.314"W	0.35	
2304.00	16.120	27.220	2255.48	-341.79	343.59	223.58	1735071.41	14548963.70	40°03'37.995"N	104°39'42.157"W	0.47	
2397.00	15.570	26.560	2344.95	-364.34	366.24	235.06	1735082.81	14548986.38	40°03'38.219"N	104°39'42.009"W	0.62	
2491.00	14.980	25.880	2435.63	-386.47	388.45	246.01	1735093.66	14549008.62	40°03'38.439"N	104°39'41.868"W	0.66	
2585.00	16.110	21.520	2526.19	-409.45	411.52	256.09	1735103.66	14549031.72	40°03'38.667"N	104°39'41.738"W	1.73	
2679.00	15.530	20.790	2616.63	-433.27	435.41	265.34	1735112.82	14549055.64	40°03'38.903"N	104°39'41.619"W	0.65	
2773.00	16.120	22.460	2707.07	-457.02	459.24	274.80	1735122.17	14549079.49	40°03'39.138"N	104°39'41.498"W	0.79	
2867.00	15.060	21.290	2797.61	-480.38	482.68	284.22	1735131.50	14549102.96	40°03'39.370"N	104°39'41.377"W	1.18	
2960.00	15.630	21.450	2887.29	-503.23	505.59	293.18	1735140.38	14549125.90	40°03'39.596"N	104°39'41.261"W	0.61	
3055.00	16.760	18.740	2978.52	-528.04	530.48	302.26	1735149.36	14549150.81	40°03'39.842"N	104°39'41.145"W	1.43	
3149.00	16.600	25.170	3068.57	-552.95	555.47	312.33	1735159.33	14549175.82	40°03'40.089"N	104°39'41.015"W	1.97	
3243.00	15.750	23.730	3158.85	-576.69	579.30	323.18	1735170.08	14549199.69	40°03'40.325"N	104°39'40.876"W	1.00	
3337.00	14.530	21.650	3249.59	-599.25	601.94	332.66	1735179.48	14549222.36	40°03'40.548"N	104°39'40.754"W	1.42	
3430.00	15.490	30.190	3339.42	-620.75	623.52	343.21	1735189.94	14549243.97	40°03'40.762"N	104°39'40.618"W	2.59	
3524.00	16.000	25.470	3429.90	-643.20	646.07	355.10	1735201.73	14549266.55	40°03'40.985"N	104°39'40.465"W	1.47	
3618.00	15.710	25.830	3520.32	-666.26	669.22	366.21	1735212.76	14549289.73	40°03'41.213"N	104°39'40.322"W	0.33	
3712.00	16.680	28.530	3610.59	-689.47	692.52	378.20	1735224.65	14549313.08	40°03'41.444"N	104°39'40.168"W	1.31	
3806.00	15.730	27.220	3700.86	-712.56	715.71	390.47	1735236.83	14549336.30	40°03'41.673"N	104°39'40.010"W	1.08	
3899.00	16.410	23.950	3790.23	-735.68	738.92	401.57	1735247.84	14549359.55	40°03'41.902"N	104°39'39.867"W	1.22	
3993.00	16.410	23.390	3880.40	-759.92	763.25	412.23	1735258.40	14549383.90	40°03'42.143"N	104°39'39.730"W	0.17	
4088.00	16.430	27.890	3971.53	-784.02	787.44	423.84	1735269.92	14549408.13	40°03'42.382"N	104°39'39.581"W	1.34	
4182.00	16.990	34.090	4061.56	-807.03	810.56	437.76	1735283.74	14549431.29	40°03'42.610"N	104°39'39.402"W	1.99	
4277.00	16.430	33.070	4152.55	-829.66	833.32	452.87	1735298.76	14549454.10	40°03'42.835"N	104°39'39.207"W	0.67	
4370.00	16.000	32.220	4241.85	-851.41	855.18	466.88	1735312.68	14549476.01	40°03'43.051"N	104°39'39.027"W	0.53	
4465.00	14.360	27.710	4333.54	-872.82	876.69	479.34	1735325.06	14549497.55	40°03'43.264"N	104°39'38.867"W	2.13	
4582.00	11.620	19.590	4447.54	-896.69	900.64	490.04	1735335.66	14549521.54	40°03'43.500"N	104°39'38.729"W	2.81	
4676.00	10.090	9.150	4539.87	-913.70	917.69	494.53	1735340.08	14549538.60	40°03'43.669"N	104°39'38.672"W	2.64	
4770.00	8.210	12.420	4632.67	-928.37	932.38	497.28	1735342.78	14549553.29	40°03'43.814"N	104°39'38.636"W	2.07	
4865.00	4.280	19.490	4727.09	-938.31	942.35	499.92	1735345.38	14549563.26	40°03'43.912"N	104°39'38.602"W	4.21	
4959.00	2.830	322.950	4820.93	-943.48	947.51	499.69	1735345.13	14549568.42	40°03'43.963"N	104°39'38.605"W	3.83	
5053.00	0.800	78.720	4914.89	-945.46	949.49	498.94	1735344.37	14549570.40	40°03'43.983"N	104°39'38.615"W	3.47	
5147.00	0.770	180.940	5008.89	-944.96	948.99	499.57	1735345.01	14549569.90	40°03'43.978"N	104°39'38.607"W	1.30	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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
5242.00	0.810	179.640	5103.88	-943.65	947.68	499.57	1735345.01	14549568.59	40°03'43.965"N	104°39'38.607"W	0.05	
5335.00	0.740	153.520	5196.87	-942.45	946.48	499.84	1735345.28	14549567.40	40°03'43.953"N	104°39'38.603"W	0.38	
5429.00	0.640	153.690	5290.86	-941.43	945.47	500.34	1735345.79	14549566.38	40°03'43.943"N	104°39'38.597"W	0.11	
5617.00	0.280	164.720	5478.86	-940.04	944.08	500.93	1735346.38	14549565.00	40°03'43.930"N	104°39'38.589"W	0.20	
5804.00	0.110	136.870	5665.86	-939.47	943.51	501.17	1735346.63	14549564.43	40°03'43.924"N	104°39'38.586"W	0.10	
5990.00	0.170	332.140	5851.86	-939.58	943.63	501.16	1735346.62	14549564.54	40°03'43.925"N	104°39'38.586"W	0.15	
6085.00	1.000	178.890	5946.85	-938.88	942.92	501.12	1735346.57	14549563.84	40°03'43.918"N	104°39'38.587"W	1.22	
6179.00	1.270	168.350	6040.83	-937.04	941.08	501.34	1735346.80	14549562.00	40°03'43.900"N	104°39'38.584"W	0.36	
6273.00	0.910	140.910	6134.82	-935.43	939.48	502.02	1735347.49	14549560.41	40°03'43.884"N	104°39'38.575"W	0.66	
6366.00	1.020	110.560	6227.80	-934.56	938.62	503.26	1735348.73	14549559.55	40°03'43.876"N	104°39'38.559"W	0.56	
6413.00†	3.606	168.170	6274.77	-932.96	937.02	503.96	1735349.43	14549557.96	40°03'43.860"N	104°39'38.550"W	6.76	KOP
6460.00	6.720	175.550	6321.57	-928.76	932.84	504.47	1735349.97	14549553.77	40°03'43.818"N	104°39'38.544"W	6.76	
6555.00	17.100	182.000	6414.40	-909.21	913.28	504.42	1735349.98	14549534.22	40°03'43.625"N	104°39'38.545"W	11.00	
6649.00	19.630	178.280	6503.61	-879.61	883.68	504.41	1735350.09	14549504.64	40°03'43.333"N	104°39'38.545"W	2.96	
6743.00	20.640	179.650	6591.86	-847.26	851.33	504.98	1735350.79	14549472.30	40°03'43.013"N	104°39'38.537"W	1.19	
6838.00	24.680	181.880	6679.51	-810.68	814.75	504.44	1735350.38	14549435.73	40°03'42.651"N	104°39'38.544"W	4.35	
6931.00	31.150	180.940	6761.65	-767.19	771.25	503.40	1735349.51	14549392.24	40°03'42.222"N	104°39'38.558"W	6.97	
7024.00	41.320	179.060	6836.57	-712.30	716.35	503.51	1735349.83	14549337.37	40°03'41.679"N	104°39'38.556"W	11.00	
7118.00	45.480	179.400	6904.85	-647.73	651.79	504.37	1735350.93	14549272.83	40°03'41.041"N	104°39'38.545"W	4.43	
7212.00	50.550	180.290	6967.71	-577.88	581.94	504.54	1735351.36	14549203.01	40°03'40.351"N	104°39'38.543"W	5.44	
7256.00†	54.560	179.706	6994.46	-542.95	547.01	504.55	1735351.50	14549168.10	40°03'40.006"N	104°39'38.543"W	9.17	ENTER LANDBOX (864'FSL & 312'FEL,SEC.09) 40.0611127 -104.6607064
7306.00	59.120	179.110	7021.80	-501.11	505.17	504.98	1735352.10	14549126.28	40°03'39.592"N	104°39'38.537"W	9.17	
7400.00	65.420	179.220	7065.52	-417.95	422.02	506.19	1735353.62	14549043.16	40°03'38.770"N	104°39'38.522"W	6.70	
7494.00	69.000	180.680	7101.92	-331.31	335.37	506.26	1735354.01	14548956.55	40°03'37.914"N	104°39'38.521"W	4.07	
7587.00	80.220	180.270	7126.56	-241.80	245.85	505.52	1735353.62	14548867.07	40°03'37.030"N	104°39'38.531"W	12.07	
7681.00	85.870	180.650	7137.94	-148.54	152.59	504.77	1735353.22	14548773.83	40°03'36.108"N	104°39'38.540"W	6.02	
7775.00	87.010	180.620	7143.78	-54.74	58.77	503.73	1735352.54	14548680.06	40°03'35.181"N	104°39'38.554"W	1.21	LANDING (375'FSL & 310'FEL,SEC.09) 40.0597724 -104.6607093
7869.00	87.570	180.560	7148.22	39.14	-35.12	502.76	1735351.93	14548586.20	40°03'34.253"N	104°39'38.566"W	0.60	
7963.00	87.970	180.060	7151.88	133.06	-129.04	502.26	1735351.77	14548492.31	40°03'33.325"N	104°39'38.573"W	0.68	
8057.00	88.150	179.520	7155.06	227.01	-222.99	502.60	1735352.47	14548398.40	40°03'32.396"N	104°39'38.568"W	0.61	
8150.00	88.490	179.490	7157.79	319.97	-315.94	503.40	1735353.63	14548305.49	40°03'31.478"N	104°39'38.558"W	0.37	
8244.00	88.520	179.090	7160.24	413.93	-409.90	504.57	1735355.15	14548211.57	40°03'30.549"N	104°39'38.543"W	0.43	
8338.00	90.990	178.190	7160.64	507.91	-503.87	506.80	1735357.73	14548117.65	40°03'29.621"N	104°39'38.514"W	2.80	
8432.00	91.510	178.050	7158.59	601.86	-597.80	509.88	1735361.17	14548023.77	40°03'28.692"N	104°39'38.475"W	0.57	
8503.00†	90.437	178.405	7157.39	672.83	-668.75	512.08	1735363.64	14547952.85	40°03'27.991"N	104°39'38.446"W	1.59	EXIT RADIUS HEEL (352'FNL & 303'FEL,SEC.16) 40.0577753 -104.6606796
8526.00	90.090	178.520	7157.28	695.83	-691.74	512.69	1735364.34	14547929.87	40°03'27.764"N	104°39'38.439"W	1.59	
8620.00	90.830	178.210	7156.53	789.80	-785.70	515.38	1735367.38	14547835.96	40°03'26.835"N	104°39'38.404"W	0.85	
8714.00	90.090	180.660	7155.77	883.79	-879.68	516.30	1735368.66	14547742.02	40°03'25.907"N	104°39'38.392"W	2.72	
8807.00	90.520	180.230	7155.28	976.78	-972.68	515.58	1735368.29	14547649.06	40°03'24.988"N	104°39'38.401"W	0.65	
8901.00	90.490	180.410	7154.45	1070.77	-1066.67	515.06	1735368.12	14547555.10	40°03'24.059"N	104°39'38.408"W	0.19	
8995.00	88.280	179.790	7155.46	1164.75	-1160.66	514.89	1735368.31	14547461.15	40°03'23.130"N	104°39'38.410"W	2.44	
9090.00	88.340	179.930	7158.26	1259.71	-1255.62	515.12	1735368.91	14547366.23	40°03'22.192"N	104°39'38.407"W	0.16	
9184.00	88.430	179.680	7160.91	1353.67	-1349.58	515.44	1735369.58	14547272.30	40°03'21.263"N	104°39'38.403"W	0.28	
9278.00	88.430	179.900	7163.48	1447.63	-1443.55	515.79	1735370.28	14547178.38	40°03'20.334"N	104°39'38.399"W	0.23	
9372.00	88.680	179.610	7165.85	1541.60	-1537.52	516.19	1735371.04	14547084.45	40°03'19.406"N	104°39'38.394"W	0.41	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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
9467.00	89.110	179.800	7167.69	1636.58	-1632.50	516.68	1735371.89	14546989.51	40°03'18.467"N	104°39'38.388"W	0.49	
9561.00	89.080	179.900	7169.17	1730.57	-1726.48	516.93	1735372.49	14546895.56	40°03'17.538"N	104°39'38.384"W	0.11	
9654.00	89.660	179.730	7170.19	1823.56	-1819.48	517.23	1735373.14	14546802.60	40°03'16.619"N	104°39'38.381"W	0.65	
9747.00	90.150	180.470	7170.35	1916.56	-1912.48	517.06	1735373.33	14546709.64	40°03'15.700"N	104°39'38.383"W	0.95	
9841.00	88.640	179.130	7171.34	2010.55	-2006.47	517.39	1735374.02	14546615.69	40°03'14.772"N	104°39'38.378"W	2.15	
9935.00	89.080	179.310	7173.21	2104.53	-2100.44	518.67	1735375.65	14546521.76	40°03'13.843"N	104°39'38.362"W	0.51	
10029.00	89.230	179.060	7174.60	2198.51	-2194.42	520.01	1735377.34	14546427.82	40°03'12.914"N	104°39'38.345"W	0.31	
10123.00	89.200	179.330	7175.88	2292.50	-2288.40	521.33	1735379.02	14546333.88	40°03'11.985"N	104°39'38.328"W	0.29	
10217.00	89.230	179.160	7177.17	2386.49	-2382.38	522.57	1735380.61	14546239.94	40°03'11.057"N	104°39'38.312"W	0.18	
10311.00	89.910	179.250	7177.88	2480.49	-2476.37	523.87	1735382.27	14546146.00	40°03'10.128"N	104°39'38.295"W	0.73	
10405.00	89.170	178.660	7178.63	2574.48	-2570.35	525.58	1735384.34	14546052.06	40°03'09.199"N	104°39'38.273"W	1.01	
10499.00	89.110	178.840	7180.04	2668.46	-2664.32	527.64	1735386.75	14545958.14	40°03'08.271"N	104°39'38.247"W	0.20	
10593.00	89.350	178.930	7181.31	2762.45	-2758.29	529.46	1735388.93	14545864.21	40°03'07.342"N	104°39'38.223"W	0.27	
10686.00	89.510	179.200	7182.23	2855.44	-2851.28	530.98	1735390.80	14545771.27	40°03'06.423"N	104°39'38.204"W	0.34	
10779.00	90.030	179.460	7182.60	2948.44	-2944.27	532.07	1735392.24	14545678.32	40°03'05.504"N	104°39'38.190"W	0.63	
10872.00	90.120	179.930	7182.48	3041.43	-3037.27	532.56	1735393.09	14545585.36	40°03'04.585"N	104°39'38.184"W	0.51	
10966.00	88.520	179.500	7183.60	3135.42	-3131.26	533.03	1735393.91	14545491.41	40°03'03.656"N	104°39'38.178"W	1.76	
11059.00	88.550	179.640	7185.98	3228.39	-3224.22	533.73	1735394.96	14545398.48	40°03'02.737"N	104°39'38.169"W	0.15	
11153.00	89.510	180.030	7187.57	3322.38	-3318.21	534.00	1735395.59	14545304.54	40°03'01.809"N	104°39'38.165"W	1.10	
11246.00	89.540	179.800	7188.34	3415.37	-3411.20	534.14	1735396.08	14545211.58	40°03'00.890"N	104°39'38.163"W	0.25	
11341.00	90.000	179.780	7188.72	3510.37	-3506.20	534.49	1735396.79	14545116.62	40°02'59.951"N	104°39'38.159"W	0.48	
11434.00	89.970	179.590	7188.74	3603.37	-3599.20	535.00	1735397.65	14545023.66	40°02'59.032"N	104°39'38.152"W	0.21	
11528.00	90.400	179.360	7188.44	3697.37	-3693.20	535.86	1735398.87	14544929.70	40°02'58.103"N	104°39'38.141"W	0.52	
11621.00	90.800	179.140	7187.47	3790.36	-3786.18	537.08	1735400.44	14544836.76	40°02'57.184"N	104°39'38.126"W	0.49	
11715.00	88.710	177.380	7187.87	3884.33	-3880.13	539.93	1735403.65	14544742.86	40°02'56.256"N	104°39'38.089"W	2.91	
11808.00	88.890	177.080	7189.82	3977.23	-3973.00	544.42	1735408.49	14544650.04	40°02'55.338"N	104°39'38.031"W	0.38	
11901.00	89.080	176.910	7191.46	4070.13	-4065.86	549.30	1735413.71	14544557.24	40°02'54.420"N	104°39'37.969"W	0.27	
11992.00	89.010	177.160	7192.98	4161.03	-4156.72	554.00	1735418.76	14544466.43	40°02'53.522"N	104°39'37.908"W	0.29	
12085.00	90.120	177.210	7193.69	4253.95	-4249.61	558.57	1735423.68	14544373.60	40°02'52.604"N	104°39'37.850"W	1.19	
12177.00	91.260	181.100	7192.58	4345.92	-4341.57	559.93	1735425.39	14544281.68	40°02'51.696"N	104°39'37.832"W	4.41	
12269.00	90.980	181.560	7190.78	4437.85	-4433.53	557.79	1735423.60	14544189.75	40°02'50.787"N	104°39'37.860"W	0.59	
12362.00	90.490	181.180	7189.59	4530.80	-4526.49	555.57	1735421.73	14544096.81	40°02'49.868"N	104°39'37.888"W	0.67	
12453.00	90.370	181.120	7188.90	4621.76	-4617.47	553.74	1735420.25	14544005.86	40°02'48.969"N	104°39'37.912"W	0.15	
12546.00	90.280	181.040	7188.38	4714.73	-4710.45	551.99	1735418.85	14543912.91	40°02'48.050"N	104°39'37.934"W	0.13	
12638.00	90.220	180.800	7187.97	4806.70	-4802.44	550.51	1735417.72	14543820.96	40°02'47.141"N	104°39'37.953"W	0.27	
12730.00	90.120	180.270	7187.70	4898.68	-4894.44	549.65	1735417.21	14543728.99	40°02'46.232"N	104°39'37.964"W	0.59	
12917.00	90.680	180.140	7186.40	5085.67	-5081.43	548.99	1735417.25	14543542.07	40°02'44.384"N	104°39'37.973"W	0.31	
13011.00	88.680	179.050	7186.92	5179.66	-5175.42	549.65	1735418.27	14543448.12	40°02'43.455"N	104°39'37.964"W	2.42	
13104.00	88.920	178.750	7188.87	5272.63	-5268.38	551.43	1735420.41	14543355.20	40°02'42.537"N	104°39'37.942"W	0.41	
13198.00	89.320	179.050	7190.31	5366.61	-5362.35	553.24	1735422.57	14543261.28	40°02'41.608"N	104°39'37.918"W	0.53	
13292.00	88.550	177.950	7192.06	5460.58	-5456.30	555.70	1735425.38	14543167.38	40°02'40.679"N	104°39'37.887"W	1.43	
13387.00	88.740	177.550	7194.31	5555.51	-5551.20	559.43	1735429.47	14543072.53	40°02'39.742"N	104°39'37.839"W	0.47	
13481.00	89.260	177.280	7195.95	5649.43	-5645.09	563.67	1735434.06	14542978.69	40°02'38.814"N	104°39'37.784"W	0.62	
13575.00	90.090	178.420	7196.48	5743.38	-5739.02	567.19	1735437.94	14542884.81	40°02'37.886"N	104°39'37.739"W	1.50	
13669.00	90.220	178.050	7196.23	5837.36	-5832.98	570.09	1735441.19	14542790.91	40°02'36.957"N	104°39'37.702"W	0.42	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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
13762.00	90.430	177.230	195.70	5930.30	-5925.90	573.92	1735445.37	14542698.04	40°02'36.039"N	104°39'37.653"W	0.91	
13855.00	90.650	180.960	194.82	6023.28	-6018.86	575.39	1735447.19	14542605.11	40°02'35.120"N	104°39'37.634"W	4.02	
13949.00	91.230	180.840	193.28	6117.24	-6112.84	573.91	1735446.07	14542511.17	40°02'34.191"N	104°39'37.653"W	0.63	
14044.00	88.950	182.730	193.13	6212.16	-6207.78	570.95	1735443.48	14542416.25	40°02'33.253"N	104°39'37.691"W	3.12	
14138.00	89.350	183.080	194.52	6305.98	-6301.65	566.19	1735439.07	14542322.40	40°02'32.326"N	104°39'37.752"W	0.57	
14232.00	90.520	183.820	194.63	6399.76	-6395.48	560.53	1735433.77	14542228.59	40°02'31.398"N	104°39'37.825"W	1.47	
14326.00	91.480	183.430	192.99	6493.51	-6489.28	554.59	1735428.19	14542134.81	40°02'30.471"N	104°39'37.901"W	1.10	
14420.00	92.060	183.390	190.09	6587.25	-6583.06	549.00	1735422.96	14542041.04	40°02'29.545"N	104°39'37.973"W	0.62	
14515.00	89.140	183.060	189.09	6682.04	-6677.90	543.66	1735417.97	14541946.22	40°02'28.607"N	104°39'38.042"W	3.09	
14608.00	87.570	179.390	191.76	6774.94	-6770.82	541.67	1735416.34	14541853.33	40°02'27.689"N	104°39'38.068"W	4.29	
14701.00	87.850	177.890	195.48	6867.85	-6863.72	543.87	1735418.90	14541760.48	40°02'26.771"N	104°39'38.039"W	1.64	
14795.00	88.490	178.300	198.48	6961.77	-6957.62	547.00	1735422.37	14541666.63	40°02'25.843"N	104°39'37.999"W	0.81	
14889.00	88.890	177.770	200.63	7055.72	-7051.53	550.22	1735425.95	14541572.76	40°02'24.915"N	104°39'37.958"W	0.71	
14983.00	90.310	177.690	201.29	7149.66	-7145.46	553.94	1735430.03	14541478.89	40°02'23.987"N	104°39'37.910"W	1.51	
15076.00	91.810	177.240	199.57	7242.58	-7238.35	558.06	1735434.49	14541386.05	40°02'23.069"N	104°39'37.857"W	1.68	
15169.00	89.540	177.760	198.47	7335.51	-7331.25	562.11	1735438.90	14541293.21	40°02'22.151"N	104°39'37.805"W	2.50	
15263.00	89.720	177.320	199.08	7429.45	-7425.16	566.15	1735443.29	14541199.35	40°02'21.223"N	104°39'37.753"W	0.51	
15358.00	88.060	178.150	200.92	7524.38	-7520.06	569.90	1735447.40	14541104.50	40°02'20.285"N	104°39'37.705"W	1.95	
15452.00	87.720	177.510	204.38	7618.28	-7613.93	573.46	1735451.31	14541010.68	40°02'19.357"N	104°39'37.659"W	0.77	
15546.00	88.250	177.300	207.68	7712.15	-7707.77	577.71	1735455.92	14540916.89	40°02'18.430"N	104°39'37.604"W	0.61	
15640.00	88.220	176.830	210.58	7806.02	-7801.61	582.52	1735461.08	14540823.11	40°02'17.503"N	104°39'37.543"W	0.50	
15734.00	88.150	176.780	213.56	7899.87	-7895.41	587.76	1735466.67	14540729.36	40°02'16.576"N	104°39'37.475"W	0.09	
15828.00	88.210	176.580	216.54	7993.70	-7989.21	593.20	1735472.46	14540635.62	40°02'15.649"N	104°39'37.405"W	0.22	
15922.00	89.510	178.800	218.41	8087.63	-8083.10	596.99	1735476.61	14540541.78	40°02'14.721"N	104°39'37.357"W	2.74	
16015.00	90.280	178.940	221.58	8180.62	-8176.09	598.82	1735478.79	14540448.84	40°02'13.802"N	104°39'37.333"W	0.84	
16110.00	90.710	178.630	224.76	8275.61	-8271.06	600.83	1735481.17	14540353.91	40°02'12.863"N	104°39'37.307"W	0.56	
16204.00	91.570	178.300	227.89	8369.57	-8365.01	603.35	1735484.04	14540260.01	40°02'11.935"N	104°39'37.275"W	0.98	
16298.00	92.460	177.980	231.09	8463.48	-8458.90	606.40	1735487.44	14540166.17	40°02'11.007"N	104°39'37.236"W	1.01	
16392.00	90.090	179.720	234.49	8557.44	-8552.85	608.29	1735489.68	14540072.27	40°02'10.079"N	104°39'37.212"W	3.13	
16486.00	90.680	179.900	237.86	8651.44	-8646.84	608.60	1735490.35	14539978.31	40°02'09.150"N	104°39'37.208"W	0.66	
16580.00	88.670	180.810	241.40	8745.42	-8740.83	608.01	1735490.12	14539884.35	40°02'08.221"N	104°39'37.215"W	2.35	
16674.00	88.890	180.320	244.40	8839.39	-8834.81	607.09	1735489.55	14539790.41	40°02'07.292"N	104°39'37.227"W	0.57	
16769.00	88.890	179.950	247.24	8934.36	-8929.79	606.86	1735489.69	14539695.47	40°02'06.354"N	104°39'37.230"W	0.39	
16863.00	88.980	179.630	250.99	9028.35	-9023.77	607.21	1735490.39	14539601.52	40°02'05.425"N	104°39'37.226"W	0.35	
16956.00	89.320	179.280	254.36	9121.34	-9116.76	608.09	1735491.63	14539508.58	40°02'04.506"N	104°39'37.214"W	0.52	
17019.00†	90.144	179.360	257.66	9184.33	-9179.75	608.84	1735492.61	14539445.61	40°02'03.883"N	104°39'37.205"W	1.31	ENTER RADIUS TOE (1728'FSL & 209'FEL,SEC.21) 40.0344121 -104.6603346
17050.00	90.550	179.400	260.47	9215.33	-9210.75	609.18	1735493.07	14539414.63	40°02'03.577"N	104°39'37.200"W	1.31	
17144.00	89.780	179.610	263.20	9309.33	-9304.74	609.99	1735494.23	14539320.68	40°02'02.648"N	104°39'37.190"W	0.85	
17238.00	90.180	178.580	266.23	9403.33	-9398.73	611.47	1735496.07	14539226.73	40°02'01.719"N	104°39'37.171"W	1.18	
17332.00	89.230	180.620	269.72	9497.32	-9492.72	612.13	1735497.09	14539132.78	40°02'00.791"N	104°39'37.162"W	2.39	
17426.00	90.400	181.070	272.82	9591.29	-9586.71	610.74	1735496.06	14539038.83	40°01'59.862"N	104°39'37.180"W	1.33	
17520.00	90.150	180.840	275.57	9685.26	-9680.69	609.18	1735494.85	14538944.87	40°01'58.933"N	104°39'37.200"W	0.36	
17613.00	90.180	181.140	278.30	9778.23	-9773.68	607.57	1735493.59	14538851.92	40°01'58.014"N	104°39'37.221"W	0.32	
17707.00	90.090	180.840	281.08	9872.20	-9867.67	605.94	1735492.32	14538757.96	40°01'57.085"N	104°39'37.242"W	0.33	
17800.00	90.120	180.850	284.91	9965.18	-9960.66	604.57	1735491.31	14538665.00	40°01'56.166"N	104°39'37.260"W	0.03	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH DATA (230 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
17894.00	90.520	180.750	7216.39	10059.15	-10054.64	603.26	1735490.35	14538571.05	40°01'55.237"N	104°39'37.277"W	0.44	
17988.00	90.430	180.740	7215.61	10153.13	-10148.63	602.04	1735489.48	14538477.09	40°01'54.309"N	104°39'37.292"W	0.10	
18082.00	90.650	180.170	7214.72	10247.11	-10242.63	601.29	1735489.09	14538383.13	40°01'53.380"N	104°39'37.302"W	0.65	
18232.00	90.520	179.650	7213.19	10397.10	-10392.62	601.53	1735489.90	14538233.20	40°01'51.898"N	104°39'37.299"W	0.36	LAST BHGE MWD+IFR1+SC SURVEY
18279.00	90.520	179.650	7212.76	10444.10	-10439.61	601.82	1735490.36	14538186.23	40°01'51.433"N	104°39'37.295"W	0.00	PTB (468'FSL & 215'FEL,SEC.21) 40.0309536 -104.6603598

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	0.30	-104.97	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.09-T1N-R65W SESE 1/4	0.00	0.00	0.00	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	polygon
SEC.09-T1N-R65W SESW 1/4	0.00	0.00	0.00	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	polygon
SEC.16-T1N-R65W	0.00	0.30	-104.97	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
SEC.21-T1N-R65W	0.00	0.30	-104.97	1734744.30	14548619.30	40°03'34.603"N	104°39'46.382"W	polygon
ROBIN 9-18HZ HEEL REV-1(400'FSL & 310'FEL,SEC.09)	7149.00	82.66	504.66	1735353.38	14548703.93	40°03'35.417"N	104°39'38.542"W	point
ROBIN 9-18HZ HEEL REV-2(450'FSL & 310'FEL,SEC.09)	7149.00	132.66	504.66	1735353.19	14548753.91	40°03'35.911"N	104°39'38.542"W	point
ROBIN 9-18HZ BHL REV-1(468'FSL & 228'FEL,SEC.21)	7235.00	-10439.85	589.44	1735477.99	14538185.95	40°01'51.431"N	104°39'37.454"W	point
ROBIN 9-18HZ LANDBOX	7235.00	0.00	0.00	1734849.23	14548619.40	40°03'34.600"N	104°39'45.032"W	polygon
ROBIN 9-18HZ RADIUS 1	7235.00	-9586.62	817.87	1735703.10	14539039.70	40°01'59.863"N	104°39'34.517"W	polygon
ROBIN 9-18HZ RADIUS 2	7235.00	-320.01	813.68	1735663.80	14548302.60	40°03'31.437"N	104°39'34.567"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ROBIN 9-18HZ AWB Ref Wellpath: ROBIN 9-18HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	1823.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <144 - 1823>	ROBIN 9-18HZ AWB
1823.00	18232.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1929 - 18232>	ROBIN 9-18HZ AWB
18232.00	18279.00	Blind Drilling (std)	Projection to bit	ROBIN 9-18HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 ROBIN 9-18HZ(317'FSL & 814'FEL,SEC.09)
Area	COLORADO	Well	ROBIN 9-18HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ROBIN 9-18HZ AWB
Facility	SEC.09-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
144.00	0.350	98.100	144.00	FIRST SURFACE MWD+IFR1 SURVEY
1823.00	14.550	33.760	1793.27	LAST SURFACE MWD+IFR1 SURVEY
1929.00	14.910	33.090	1895.79	FIRST BHGE MWD+IFR1+SC SURVEY
6413.00	3.606	168.170	6274.77	KOP
7256.00	54.560	179.706	6994.46	ENTER LANDBOX (864'FSL & 312'FEL,SEC.09) 40.0611127 -104.6607064
7775.00	87.010	180.620	7143.78	LANDING (375'FSL & 310'FEL,SEC.09) 40.0597724 -104.6607093
8503.00	90.437	178.405	7157.39	EXIT RADIUS HEEL (352'FNL & 303'FEL,SEC.16) 40.0577753 -104.6606796
17019.00	90.144	179.360	7217.66	ENTER RADIUS TOE (1728'FSL & 209'FEL,SEC.21) 40.0344121 -104.6603346
18232.00	90.520	179.650	7213.19	LAST BHGE MWD+IFR1+SC SURVEY
18279.00	90.520	179.650	7212.76	PTB (468'FSL & 215'FEL,SEC.21) 40.0309536 -104.6603598