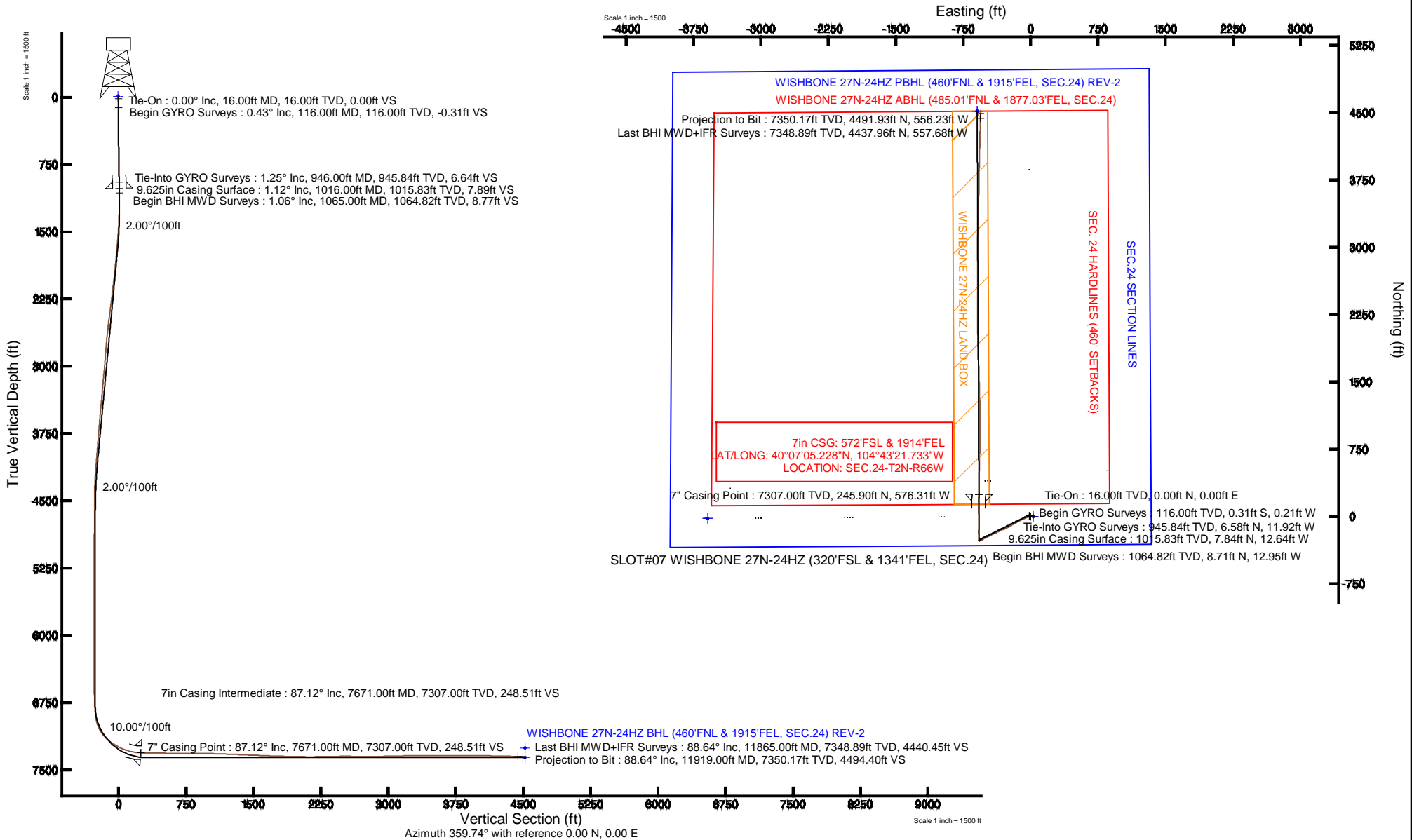


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
 Field: WELD COUNTY (KERR MCGEE) Well: WISHBONE 27N-24HZ
 Facility: SEC.24-T2N-R66W Wellbore: WISHBONE 27N-24HZ PWB

Plot reference wellpath is WISHBONE 27N-24HZ (REV-C.0) PWP	
True vertical depths are referenced to XTREME 20 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (RKB)	North Reference: True north
XTREME 20 (RKB) to Mean Sea Level: 5068 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 17/Jul/2013





Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Robiale01
Scale	0.99996	Report Generated	18/Jul/2013 at 08:36
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/WISHBONE_27N-24HZ_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	21.41	3590.58	3217960.83	1286586.67	40°07'02.798"N	104°43'14.315"W
Facility Reference Pt			3214370.72	1286534.23	40°07'02.589"N	104°44'00.532"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 20 (RKB) to Facility Vertical Datum	5068.00ft
Horizontal Reference Pt	Slot	XTREME 20 (RKB) to Mean Sea Level	5068.00ft
Vertical Reference Pt	XTREME 20 (RKB)	XTREME 20 (RKB) to Mud Line at Slot (SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24))	5068.00ft
MD Reference Pt	XTREME 20 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.74°



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	213.140	0.00	0.00	0.00	0.00	40°07'02.798"N	104°43'14.315"W	0.00	
16.00	0.000	213.140	16.00	0.00	0.00	0.00	40°07'02.798"N	104°43'14.315"W	0.00	Tie-On
116.00	0.430	213.140	116.00	-0.31	-0.31	-0.21	40°07'02.795"N	104°43'14.318"W	0.43	Begin GYRO Surveys
216.00	0.240	254.610	216.00	-0.68	-0.68	-0.61	40°07'02.791"N	104°43'14.323"W	0.30	
316.00	0.320	281.070	316.00	-0.68	-0.69	-1.09	40°07'02.791"N	104°43'14.329"W	0.15	
416.00	1.430	282.290	415.98	-0.36	-0.37	-2.58	40°07'02.794"N	104°43'14.348"W	1.11	
516.00	1.070	296.430	515.96	0.34	0.31	-4.64	40°07'02.801"N	104°43'14.375"W	0.47	
616.00	1.810	317.790	615.93	1.93	1.90	-6.53	40°07'02.817"N	104°43'14.399"W	0.90	
716.00	1.340	296.420	715.89	3.63	3.59	-8.64	40°07'02.833"N	104°43'14.426"W	0.74	
816.00	1.160	304.490	815.87	4.73	4.68	-10.52	40°07'02.844"N	104°43'14.450"W	0.25	
916.00	0.990	340.320	915.85	6.12	6.07	-11.65	40°07'02.858"N	104°43'14.465"W	0.68	
946.00	1.250	325.320	945.84	6.64	6.58	-11.92	40°07'02.863"N	104°43'14.468"W	1.30	Tie-Into GYRO Surveys
1065.00	1.060	344.510	1064.82	8.77	8.71	-12.95	40°07'02.884"N	104°43'14.482"W	0.36	Begin BHI MWD Surveys
1157.00	0.680	191.080	1156.82	9.06	9.00	-13.29	40°07'02.887"N	104°43'14.486"W	1.84	
1248.00	1.890	227.480	1247.79	7.52	7.45	-14.50	40°07'02.872"N	104°43'14.502"W	1.54	
1336.00	3.450	234.190	1335.69	5.00	4.92	-17.71	40°07'02.847"N	104°43'14.543"W	1.80	
1421.00	5.300	242.340	1420.44	1.71	1.60	-23.27	40°07'02.814"N	104°43'14.614"W	2.29	
1506.00	7.290	238.810	1504.93	-2.87	-3.01	-31.36	40°07'02.768"N	104°43'14.719"W	2.38	
1591.00	9.120	239.970	1589.05	-8.99	-9.18	-41.80	40°07'02.707"N	104°43'14.853"W	2.16	
1676.00	10.920	242.950	1672.75	-15.96	-16.21	-54.81	40°07'02.638"N	104°43'15.020"W	2.20	
1761.00	12.510	245.480	1755.98	-23.37	-23.69	-70.35	40°07'02.564"N	104°43'15.221"W	1.97	
1846.00	14.180	246.530	1838.68	-31.26	-31.66	-88.28	40°07'02.485"N	104°43'15.451"W	1.99	
1931.00	14.120	244.320	1921.11	-39.81	-40.30	-107.18	40°07'02.400"N	104°43'15.695"W	0.64	
2016.00	14.350	242.770	2003.50	-49.04	-49.61	-125.89	40°07'02.308"N	104°43'15.935"W	0.52	
2101.00	14.370	242.720	2085.84	-58.61	-59.27	-144.63	40°07'02.212"N	104°43'16.177"W	0.03	
2186.00	14.450	242.530	2168.17	-68.25	-68.99	-163.41	40°07'02.116"N	104°43'16.418"W	0.11	
2271.00	14.490	241.130	2250.47	-78.19	-79.02	-182.13	40°07'02.017"N	104°43'16.659"W	0.41	
2356.00	14.190	239.750	2332.82	-88.49	-89.40	-200.44	40°07'01.914"N	104°43'16.895"W	0.54	
2441.00	13.690	238.500	2415.32	-98.92	-99.91	-218.02	40°07'01.811"N	104°43'17.121"W	0.69	
2526.00	13.660	238.920	2497.91	-109.28	-110.34	-235.19	40°07'01.708"N	104°43'17.342"W	0.12	
2611.00	13.870	243.190	2580.47	-118.97	-120.12	-252.88	40°07'01.611"N	104°43'17.570"W	1.22	
2697.00	13.510	246.780	2664.03	-127.50	-128.73	-271.31	40°07'01.526"N	104°43'17.807"W	1.07	
2782.00	12.420	245.770	2746.86	-135.09	-136.40	-288.77	40°07'01.450"N	104°43'18.032"W	1.31	
2867.00	11.270	247.300	2830.05	-141.97	-143.35	-304.77	40°07'01.381"N	104°43'18.238"W	1.40	
2952.00	11.130	245.200	2913.43	-148.55	-150.00	-319.88	40°07'01.316"N	104°43'18.432"W	0.51	
3037.00	11.330	244.090	2996.80	-155.57	-157.09	-334.84	40°07'01.246"N	104°43'18.625"W	0.35	
3122.00	12.530	245.460	3079.97	-162.98	-164.57	-350.74	40°07'01.172"N	104°43'18.830"W	1.45	
3208.00	11.670	246.550	3164.05	-170.24	-171.90	-367.20	40°07'01.099"N	104°43'19.042"W	1.03	
3293.00	12.400	244.540	3247.19	-177.51	-179.25	-383.33	40°07'01.027"N	104°43'19.249"W	0.99	
3378.00	11.630	243.430	3330.32	-185.19	-187.00	-399.23	40°07'00.950"N	104°43'19.454"W	0.95	
3463.00	11.810	243.760	3413.55	-192.80	-194.68	-414.70	40°07'00.874"N	104°43'19.653"W	0.23	
3548.00	12.000	245.780	3496.72	-200.20	-202.15	-430.56	40°07'00.800"N	104°43'19.857"W	0.54	
3633.00	12.030	245.160	3579.86	-207.47	-209.50	-446.66	40°07'00.728"N	104°43'20.064"W	0.16	
3718.00	10.410	242.140	3663.23	-214.71	-216.81	-461.49	40°07'00.655"N	104°43'20.255"W	2.03	
3803.00	10.960	243.640	3746.76	-221.83	-223.99	-475.52	40°07'00.584"N	104°43'20.436"W	0.73	



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (152 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3888.00	11.240	246.800	3830.17	-228.61	-230.84	-490.37	40°07'00.517"N	104°43'20.627"W	0.79	
3973.00	10.450	243.540	3913.65	-235.24	-237.54	-504.89	40°07'00.451"N	104°43'20.814"W	1.18	
4059.00	9.090	239.230	3998.41	-242.14	-244.49	-517.71	40°07'00.382"N	104°43'20.979"W	1.79	
4144.00	7.900	235.050	4082.47	-248.87	-251.27	-528.26	40°07'00.315"N	104°43'21.115"W	1.58	
4229.00	7.570	241.360	4166.70	-254.85	-257.30	-537.97	40°07'00.255"N	104°43'21.239"W	1.07	
4314.00	7.050	240.560	4251.01	-260.06	-262.55	-547.42	40°07'00.203"N	104°43'21.361"W	0.62	
4399.00	6.630	248.810	4335.41	-264.36	-266.88	-556.54	40°07'00.161"N	104°43'21.479"W	1.26	
4484.00	4.930	252.720	4419.97	-267.18	-269.74	-564.60	40°07'00.132"N	104°43'21.582"W	2.05	
4569.00	3.370	275.440	4504.75	-268.00	-270.59	-570.58	40°07'00.124"N	104°43'21.659"W	2.63	
4654.00	2.190	278.650	4589.65	-267.50	-270.11	-574.67	40°07'00.129"N	104°43'21.712"W	1.40	
4739.00	1.030	298.130	4674.62	-266.88	-269.51	-576.95	40°07'00.135"N	104°43'21.741"W	1.49	
4824.00	0.680	194.700	4759.61	-267.01	-269.63	-577.75	40°07'00.133"N	104°43'21.752"W	1.60	
4909.00	1.240	177.280	4844.60	-268.41	-271.04	-577.84	40°07'00.119"N	104°43'21.753"W	0.74	
4994.00	1.280	198.080	4929.58	-270.23	-272.86	-578.09	40°07'00.101"N	104°43'21.756"W	0.54	
5079.00	0.360	230.130	5014.57	-271.31	-273.93	-578.59	40°07'00.091"N	104°43'21.762"W	1.17	
5164.00	0.070	340.690	5099.57	-271.43	-274.06	-578.81	40°07'00.090"N	104°43'21.765"W	0.46	
5249.00	0.710	32.690	5184.56	-270.94	-273.56	-578.54	40°07'00.095"N	104°43'21.762"W	0.79	
5334.00	0.590	49.790	5269.56	-270.21	-272.84	-577.92	40°07'00.102"N	104°43'21.754"W	0.27	
5419.00	0.500	71.120	5354.56	-269.81	-272.44	-577.24	40°07'00.106"N	104°43'21.745"W	0.26	
5504.00	0.570	88.310	5439.55	-269.68	-272.30	-576.46	40°07'00.107"N	104°43'21.735"W	0.20	
5590.00	0.340	112.320	5525.55	-269.77	-272.39	-575.80	40°07'00.106"N	104°43'21.726"W	0.34	
5675.00	0.610	128.750	5610.55	-270.15	-272.77	-575.22	40°07'00.102"N	104°43'21.719"W	0.35	
5760.00	0.240	146.350	5695.54	-270.59	-273.20	-574.76	40°07'00.098"N	104°43'21.713"W	0.46	
5845.00	0.740	232.900	5780.54	-271.06	-273.68	-575.10	40°07'00.093"N	104°43'21.717"W	0.90	
5930.00	0.220	357.950	5865.54	-271.23	-273.85	-575.55	40°07'00.092"N	104°43'21.723"W	1.04	
6015.00	0.330	298.310	5950.54	-270.95	-273.57	-575.77	40°07'00.095"N	104°43'21.726"W	0.34	
6100.00	0.810	238.660	6035.53	-271.14	-273.76	-576.50	40°07'00.093"N	104°43'21.735"W	0.83	
6185.00	0.480	278.350	6120.53	-271.40	-274.02	-577.36	40°07'00.090"N	104°43'21.747"W	0.63	
6270.00	0.580	58.800	6205.53	-271.13	-273.75	-577.35	40°07'00.093"N	104°43'21.746"W	1.17	
6355.00	0.990	56.150	6290.52	-270.50	-273.12	-576.37	40°07'00.099"N	104°43'21.734"W	0.48	
6441.00	0.820	46.200	6376.51	-269.66	-272.28	-575.31	40°07'00.107"N	104°43'21.720"W	0.27	
6526.00	0.400	85.830	6461.50	-269.22	-271.83	-574.57	40°07'00.112"N	104°43'21.711"W	0.67	
6611.00	0.540	82.410	6546.50	-269.15	-271.76	-573.88	40°07'00.112"N	104°43'21.702"W	0.17	
6696.00	0.380	70.230	6631.50	-269.01	-271.61	-573.22	40°07'00.114"N	104°43'21.693"W	0.22	
6781.00	0.750	10.610	6716.49	-268.37	-270.97	-572.85	40°07'00.120"N	104°43'21.688"W	0.76	
6824.00	3.640	8.410	6759.46	-266.74	-269.34	-572.60	40°07'00.136"N	104°43'21.685"W	6.72	
6866.00	4.140	6.060	6801.36	-263.92	-266.52	-572.24	40°07'00.164"N	104°43'21.681"W	1.25	
6909.00	5.090	5.910	6844.22	-260.48	-263.08	-571.88	40°07'00.198"N	104°43'21.676"W	2.21	
6951.00	6.870	356.780	6885.99	-256.12	-258.71	-571.83	40°07'00.241"N	104°43'21.675"W	4.79	
6993.00	9.950	354.870	6927.54	-249.99	-252.59	-572.30	40°07'00.302"N	104°43'21.681"W	7.36	
7035.00	14.670	353.480	6968.56	-241.08	-243.69	-573.23	40°07'00.390"N	104°43'21.693"W	11.26	
7078.00	21.320	354.400	7009.43	-227.87	-230.48	-574.61	40°07'00.520"N	104°43'21.711"W	15.48	
7120.00	27.090	356.150	7047.72	-210.71	-213.33	-576.00	40°07'00.690"N	104°43'21.729"W	13.84	
7163.00	33.930	358.850	7084.75	-188.91	-191.53	-576.90	40°07'00.905"N	104°43'21.741"W	16.22	
7205.00	39.840	1.190	7118.33	-163.72	-166.34	-576.85	40°07'01.154"N	104°43'21.740"W	14.46	



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7248.00	46.160	1.680	7149.76	-134.42	-137.04	-576.11	40°07'01.444"N	104°43'21.730"W	14.72	
7290.00	51.310	0.450	7177.46	-102.87	-105.49	-575.54	40°07'01.756"N	104°43'21.723"W	12.46	
7333.00	55.910	359.580	7202.96	-68.27	-70.88	-575.54	40°07'02.097"N	104°43'21.723"W	10.82	
7375.00	60.830	359.450	7224.98	-32.52	-35.13	-575.84	40°07'02.451"N	104°43'21.727"W	11.72	
7418.00	63.300	359.340	7245.12	5.47	2.85	-576.24	40°07'02.826"N	104°43'21.732"W	5.75	
7460.00	66.700	358.950	7262.87	43.52	40.91	-576.81	40°07'03.202"N	104°43'21.740"W	8.14	
7503.00	71.660	359.180	7278.15	83.70	81.08	-577.47	40°07'03.599"N	104°43'21.748"W	11.55	
7545.00	75.240	0.070	7290.11	123.95	121.33	-577.73	40°07'03.997"N	104°43'21.751"W	8.76	
7588.00	79.930	0.660	7299.35	165.93	163.32	-577.46	40°07'04.412"N	104°43'21.748"W	10.99	
7625.00	85.500	0.900	7304.04	202.62	200.00	-576.96	40°07'04.774"N	104°43'21.741"W	15.07	
7671.00†	87.119	0.703	7307.00	248.51	245.90	-576.31	40°07'05.228"N	104°43'21.733"W	3.55	7" Casing Point
7723.00	88.950	0.480	7308.79	300.47	297.86	-575.78	40°07'05.741"N	104°43'21.726"W	3.55	
7808.00	88.890	0.740	7310.39	385.45	382.84	-574.87	40°07'06.581"N	104°43'21.715"W	0.31	
7893.00	89.660	2.010	7311.46	470.40	467.81	-572.83	40°07'07.421"N	104°43'21.689"W	1.75	
7978.00	88.520	1.520	7312.81	555.34	552.76	-570.22	40°07'08.260"N	104°43'21.655"W	1.46	
8063.00	89.570	1.270	7314.23	640.29	637.72	-568.15	40°07'09.100"N	104°43'21.628"W	1.27	
8149.00	90.310	1.770	7314.32	726.25	723.69	-565.87	40°07'09.949"N	104°43'21.599"W	1.04	
8233.00	90.370	1.260	7313.82	810.20	807.66	-563.65	40°07'10.779"N	104°43'21.570"W	0.61	
8319.00	89.070	359.800	7314.24	896.19	893.65	-562.85	40°07'11.629"N	104°43'21.560"W	2.27	
8404.00	89.200	0.100	7315.53	981.18	978.64	-562.92	40°07'12.469"N	104°43'21.561"W	0.38	
8489.00	88.210	359.350	7317.45	1066.16	1063.61	-563.33	40°07'13.309"N	104°43'21.566"W	1.46	
8574.00	88.000	359.510	7320.26	1151.11	1148.56	-564.18	40°07'14.148"N	104°43'21.577"W	0.31	
8659.00	87.930	358.900	7323.28	1236.05	1233.50	-565.36	40°07'14.988"N	104°43'21.592"W	0.72	
8744.00	87.160	358.560	7326.92	1320.96	1318.40	-567.24	40°07'15.827"N	104°43'21.617"W	0.99	
8829.00	87.530	358.570	7330.85	1405.85	1403.28	-569.36	40°07'16.665"N	104°43'21.644"W	0.44	
8914.00	87.720	358.630	7334.38	1490.76	1488.18	-571.44	40°07'17.504"N	104°43'21.671"W	0.23	
8999.00	87.470	358.470	7337.94	1575.67	1573.08	-573.59	40°07'18.343"N	104°43'21.699"W	0.35	
9085.00	87.750	358.530	7341.53	1661.57	1658.98	-575.84	40°07'19.192"N	104°43'21.728"W	0.33	
9170.00	88.090	358.510	7344.61	1746.50	1743.89	-578.03	40°07'20.031"N	104°43'21.756"W	0.40	
9255.00	88.920	358.360	7346.83	1831.45	1828.83	-580.35	40°07'20.871"N	104°43'21.786"W	0.99	
9340.00	88.950	358.150	7348.41	1916.40	1913.78	-582.94	40°07'21.710"N	104°43'21.819"W	0.25	
9425.00	88.560	357.650	7350.26	2001.34	1998.70	-586.05	40°07'22.549"N	104°43'21.859"W	0.75	
9510.00	88.610	358.410	7352.36	2086.27	2083.62	-588.98	40°07'23.389"N	104°43'21.897"W	0.90	
9595.00	91.350	359.760	7352.39	2171.26	2168.60	-590.33	40°07'24.228"N	104°43'21.914"W	3.59	
9680.00	91.330	0.220	7350.40	2256.23	2253.58	-590.35	40°07'25.068"N	104°43'21.914"W	0.54	
9765.00	90.950	359.980	7348.71	2341.22	2338.56	-590.20	40°07'25.908"N	104°43'21.913"W	0.53	
9850.00	90.680	359.580	7347.50	2426.21	2423.55	-590.53	40°07'26.748"N	104°43'21.917"W	0.57	
9935.00	90.030	0.150	7346.97	2511.20	2508.55	-590.73	40°07'27.588"N	104°43'21.919"W	1.02	
10020.00	89.510	0.500	7347.31	2596.20	2593.55	-590.24	40°07'28.428"N	104°43'21.913"W	0.74	
10105.00	89.380	359.810	7348.14	2681.19	2678.54	-590.01	40°07'29.268"N	104°43'21.910"W	0.83	
10191.00	90.250	359.770	7348.41	2767.19	2764.54	-590.33	40°07'30.117"N	104°43'21.914"W	1.01	
10276.00	90.090	0.590	7348.16	2852.19	2849.54	-590.06	40°07'30.957"N	104°43'21.911"W	0.98	
10361.00	90.930	0.570	7347.41	2937.17	2934.53	-589.20	40°07'31.797"N	104°43'21.900"W	0.99	
10446.00	91.230	0.880	7345.80	3022.15	3019.51	-588.13	40°07'32.637"N	104°43'21.886"W	0.51	
10531.00	91.540	0.650	7343.75	3107.11	3104.47	-586.99	40°07'33.477"N	104°43'21.872"W	0.45	



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWB
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (152 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10617.00	91.300	0.920	7341.62	3193.07	3190.44	-585.81	40°07'34.326"N	104°43'21.856"W	0.42	
10702.00	91.660	2.060	7339.42	3278.00	3275.38	-583.60	40°07'35.166"N	104°43'21.828"W	1.41	
10787.00	90.340	1.300	7337.94	3362.93	3360.33	-581.11	40°07'36.005"N	104°43'21.796"W	1.79	
10872.00	89.850	1.310	7337.80	3447.90	3445.31	-579.18	40°07'36.845"N	104°43'21.771"W	0.58	
10957.00	89.630	1.040	7338.18	3532.87	3530.29	-577.43	40°07'37.685"N	104°43'21.749"W	0.41	
11042.00	89.080	1.260	7339.14	3617.84	3615.27	-575.73	40°07'38.524"N	104°43'21.727"W	0.70	
11127.00	89.910	0.820	7339.89	3702.81	3700.25	-574.19	40°07'39.364"N	104°43'21.707"W	1.11	
11212.00	90.220	0.830	7339.79	3787.80	3785.24	-572.96	40°07'40.204"N	104°43'21.691"W	0.36	
11297.00	89.880	0.880	7339.72	3872.78	3870.23	-571.69	40°07'41.044"N	104°43'21.675"W	0.40	
11383.00	89.690	1.190	7340.04	3958.76	3956.21	-570.14	40°07'41.894"N	104°43'21.655"W	0.42	
11468.00	89.540	1.570	7340.61	4043.72	4041.19	-568.09	40°07'42.733"N	104°43'21.629"W	0.48	
11553.00	88.920	1.360	7341.76	4128.68	4126.15	-565.92	40°07'43.573"N	104°43'21.601"W	0.77	
11638.00	88.640	1.540	7343.57	4213.62	4211.10	-563.77	40°07'44.413"N	104°43'21.573"W	0.39	
11723.00	88.650	1.490	7345.58	4298.56	4296.05	-561.52	40°07'45.252"N	104°43'21.544"W	0.06	
11808.00	88.680	1.590	7347.56	4383.49	4381.00	-559.24	40°07'46.091"N	104°43'21.515"W	0.12	
11865.00	88.640	1.540	7348.89	4440.45	4437.96	-557.68	40°07'46.654"N	104°43'21.495"W	0.11	Last BHI MWD+IFR Surveys
11919.00	88.640	1.540	7350.17	4494.40	4491.93	-556.23	40°07'47.188"N	104°43'21.476"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: WISHBONE 27N-24HZ AWB Ref Wellpath: WISHBONE 27N-24HZ AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	16.00	1026.00	1010.00	16.00	1025.83	0.00	0.00	8.02	-12.71
9.625in Casing Surface	16.00	1016.00	1000.00	16.00	1015.83	0.00	0.00	7.84	-12.64
8.75in Open Hole	1026.00	7681.00	6655.00	1025.83	7307.47	8.02	-12.71	255.89	-576.20
7in Casing Intermediate	16.00	7671.00	7655.00	16.00	7307.00	0.00	0.00	245.90	-576.31
6.125in Open Hole	7681.00	11919.00	4238.00	7307.47	7350.17	255.89	-576.20	4491.93	-556.23



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.24 SECTION LINES		-9.00	-20.79	-3590.59	3214370.72	1286534.33	40°07'02.590"N	104°44'00.532"W	polygon
WISHBONE 27N-24HZ LAND BOX		5068.00	0.40	29.91	3217990.74	1286587.34	40°07'02.802"N	104°43'13.930"W	polygon
WISHBONE 27N-24HZ BHL ON PLAT (460'FNL & 1915'FEL, SEC.24)		7253.00	4516.96	-594.22	3217326.97	1291098.04	40°07'47.435"N	104°43'21.965"W	point
WISHBONE 27N-24HZ BHL (460'FNL & 1915'FEL, SEC.24) REV-2		7362.00	4516.96	-594.22	3217326.97	1291098.04	40°07'47.435"N	104°43'21.965"W	point
SEC. 24 HARDLINES (460' SETBACKS)		7591.00	-20.79	-3590.59	3214370.72	1286534.33	40°07'02.590"N	104°44'00.532"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: WISHBONE 27N-24HZ AWP Ref Wellpath: WISHBONE 27N-24HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	946.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO SURVEYS <116-946>	WISHBONE 27N-24HZ AWP
946.00	7625.00	NaviTrak (MagCorr)	BHI MWD SURVEYS 8 3/4" HOLE <1065-7625>	WISHBONE 27N-24HZ AWP
7625.00	11865.00	NaviTrak (MagCorr)	BHI MWD SURVEYS 6 1/8" HOLE <7723-11865>	WISHBONE 27N-24HZ AWP
11865.00	11919.00	Blind Drilling (std)	Projection to bit	WISHBONE 27N-24HZ AWP



Actual Wellpath Report

WISHBONE 27N-24HZ AWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 WISHBONE 27N-24HZ (320'FSL & 1341'FEL, SEC.24)
Area	COLORADO	Well	WISHBONE 27N-24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 27N-24HZ AWP
Facility	SEC.24-T2N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	213.140	16.00	Tie-On
116.00	0.430	213.140	116.00	Begin GYRO Surveys
946.00	1.250	325.320	945.84	Tie-Into GYRO Surveys
1065.00	1.060	344.510	1064.82	Begin BHI MWD Surveys
7671.00	87.119	0.703	7307.00	7" Casing Point
11865.00	88.640	1.540	7348.89	Last BHI MWD+IFR Surveys
11919.00	88.640	1.540	7350.17	Projection to Bit