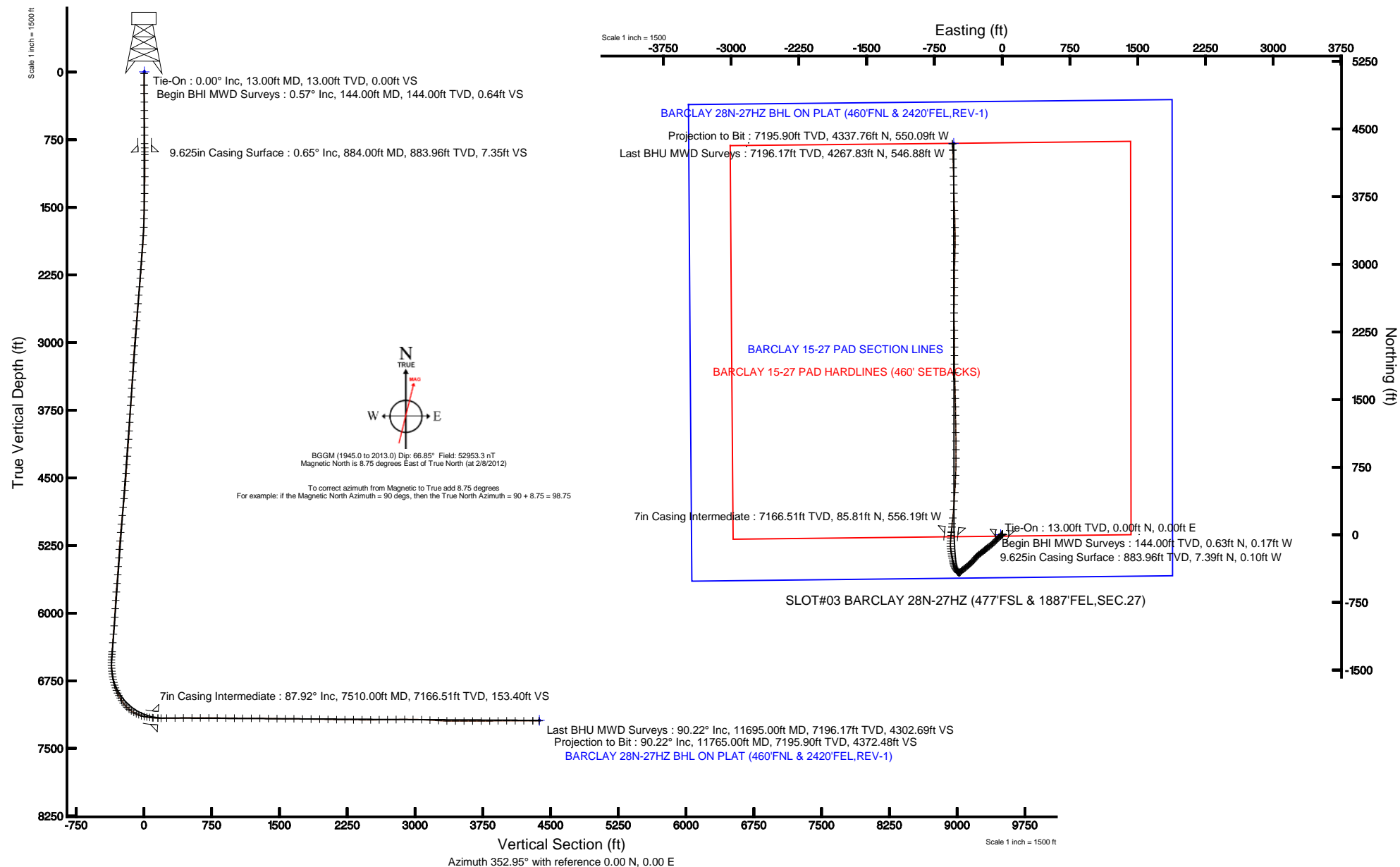


Location:	COLORADO	Slot:	SLOT#03 BARCLAY 28N-27HZ (477FSL & 1887FEL,SEC.27)
Field:	WELD COUNTY (KERR MCGEE)	Well:	BARCLAY 28N-27HZ
Facility:	SEC.27-T3N-R66W	Wellbore:	BARCLAY 28N-27HZ PWB

Location:	COLORADO	Slot:	SLOT#03 BARCLAY 28N-27HZ (477FSL & 1887FEL,SEC.27)
Field:	WELD COUNTY (KERR MCGEE)	Well:	BARCLAY 28N-27HZ
Facility:	SEC.27-T3N-R66W	Wellbore:	BARCLAY 28N-27HZ PWB

Plot reference wellpath is BARCLAY 28N-27HZ (REV-A.0) PWP	
True vertical depths are referenced to ENSIGN 145 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 145 (RKB)	North Reference: True north
ENSIGN 145 (RKB) to Mean Sea Level: 4969 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 BARCLAY 28N-27HZ (477FSL & 1887FEL_SEC.27)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 2/29/2012







# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999957	Report Generated	2/29/2012 at 07:35:25
Convergence at slot	0.48° East	Database/Source file	WellArchitectDB/BARCLAY_28N-27HZ_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4347.35	2809.76	3206586.92	1312996.10	40°11'24.742"N	104°45'37.883"W
Facility Reference Pt			3203741.63	1317320.00	40°12'07.704"N	104°46'14.088"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	ENSIGN 145 (RKB) to Facility Vertical Datum	4969.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RKB) to Mean Sea Level	4969.00ft
Vertical Reference Pt	ENSIGN 145 (RKB)	ENSIGN 145 (RKB) to Mud Line at Slot (SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27))	4969.00ft
MD Reference Pt	ENSIGN 145 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	352.95°





# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

WELLPATH DATA (150 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	344.560	0.00	0.00	0.00	0.00	0.00	
13.00	0.000	344.560	13.00	0.00	0.00	0.00	0.00	Tie-On
144.00	0.570	344.560	144.00	0.64	0.63	-0.17	0.44	Begin BHI MWD Surveys
236.00	0.530	336.990	235.99	1.51	1.46	-0.46	0.09	
332.00	0.390	3.930	331.99	2.25	2.20	-0.61	0.26	
424.00	0.650	347.180	423.99	3.08	3.02	-0.71	0.32	
516.00	0.410	350.880	515.98	3.93	3.85	-0.88	0.26	
608.00	0.520	12.970	607.98	4.65	4.58	-0.83	0.23	
700.00	0.530	30.870	699.98	5.38	5.35	-0.52	0.18	
792.00	0.730	3.180	791.97	6.29	6.30	-0.27	0.39	
838.00	0.690	16.350	837.97	6.83	6.86	-0.18	0.36	
915.00	0.660	349.330	914.96	7.70	7.74	-0.13	0.41	
976.00	0.570	2.780	975.96	8.35	8.39	-0.18	0.28	
1068.00	0.690	128.430	1067.96	8.41	8.50	0.28	1.22	
1160.00	0.680	147.950	1159.95	7.52	7.70	1.00	0.25	
1252.00	0.860	152.030	1251.94	6.38	6.63	1.61	0.20	
1344.00	0.720	150.700	1343.93	5.20	5.51	2.22	0.15	
1436.00	1.320	193.250	1435.92	3.67	3.98	2.26	1.01	
1531.00	2.020	223.750	1530.88	1.58	1.70	0.85	1.17	
1626.00	2.600	230.870	1625.80	-0.62	-0.87	-1.98	0.68	
1721.00	3.870	232.090	1720.65	-3.41	-4.20	-6.18	1.34	
1816.00	4.930	226.000	1815.37	-7.51	-9.00	-11.64	1.22	
1911.00	7.070	224.600	1909.84	-13.59	-16.00	-18.69	2.26	
2005.00	7.840	228.360	2003.05	-20.82	-24.38	-27.54	0.97	
2100.00	7.650	227.640	2097.18	-28.15	-32.95	-37.05	0.22	
2195.00	7.280	227.780	2191.38	-35.28	-41.25	-46.18	0.39	
2290.00	7.900	228.100	2285.54	-42.47	-49.66	-55.50	0.65	
2385.00	8.060	224.610	2379.62	-50.34	-58.76	-65.04	0.54	
2480.00	7.440	220.070	2473.76	-58.65	-68.21	-73.67	0.92	
2575.00	7.940	220.080	2567.90	-67.30	-77.93	-81.86	0.53	
2670.00	8.090	227.130	2661.98	-75.68	-87.50	-90.98	1.05	
2765.00	7.740	230.550	2756.07	-83.02	-96.12	-100.82	0.62	
2859.00	8.890	229.870	2849.08	-90.38	-104.82	-111.26	1.23	
2954.00	9.130	229.600	2942.91	-98.53	-114.44	-122.61	0.26	
3049.00	8.220	232.960	3036.82	-106.07	-123.41	-133.78	1.10	
3144.00	8.040	233.590	3130.87	-112.72	-131.45	-144.54	0.21	
3239.00	7.350	232.190	3225.01	-119.09	-139.11	-154.69	0.75	
3334.00	7.280	233.600	3319.24	-125.15	-146.41	-164.34	0.20	
3429.00	6.040	231.370	3413.59	-130.71	-153.10	-173.09	1.33	
3524.00	5.830	224.430	3508.09	-136.34	-159.67	-180.37	0.79	
3619.00	6.670	231.420	3602.52	-142.23	-166.56	-188.06	1.19	
3714.00	7.000	230.600	3696.85	-148.21	-173.67	-196.85	0.36	
3809.00	7.110	230.370	3791.13	-154.47	-181.10	-205.85	0.12	
3904.00	6.440	232.990	3885.46	-160.30	-188.05	-214.63	0.78	
3998.00	7.280	234.010	3978.79	-165.82	-194.73	-223.66	0.90	
4093.00	7.940	233.900	4072.95	-171.92	-202.13	-233.83	0.69	
4188.00	8.610	235.050	4166.96	-178.43	-210.07	-244.96	0.73	
4283.00	7.860	228.530	4260.99	-185.43	-218.44	-255.66	1.26	
4378.00	6.560	227.540	4355.23	-192.25	-226.41	-264.53	1.37	
4473.00	6.480	226.590	4449.62	-198.57	-233.76	-272.43	0.14	
4568.00	6.920	222.120	4543.97	-205.49	-241.69	-280.16	0.72	
4662.00	7.640	220.800	4637.21	-213.39	-250.62	-288.04	0.79	
4757.00	8.150	220.630	4731.31	-222.16	-260.51	-296.55	0.54	
4852.00	8.680	220.180	4825.29	-231.56	-271.09	-305.56	0.56	
4947.00	8.770	221.440	4919.19	-241.23	-282.00	-314.98	0.22	
5042.00	7.860	221.060	5013.19	-250.37	-292.33	-324.04	0.96	
5136.00	8.020	225.120	5106.29	-258.68	-301.80	-332.91	0.62	
5231.00	7.310	225.750	5200.44	-266.40	-310.70	-341.93	0.75	
5326.00	6.690	227.390	5294.73	-273.27	-318.66	-350.33	0.69	
5421.00	6.650	229.280	5389.09	-279.54	-325.99	-358.58	0.23	





# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

## WELLPATH DATA (150 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5516.00	7.350	229.790	5483.38	-285.92	-333.51	-367.39	0.74	
5611.00	7.680	230.570	5577.56	-292.64	-341.46	-376.93	0.36	
5706.00	8.010	225.960	5671.67	-300.02	-350.09	-386.59	0.75	
5801.00	8.000	228.000	5765.75	-307.79	-359.12	-396.26	0.30	
5895.00	7.700	235.400	5858.87	-314.45	-367.07	-406.31	1.12	
5990.00	7.450	237.720	5953.04	-320.02	-373.97	-416.75	0.42	
6085.00	7.330	231.600	6047.25	-325.80	-381.03	-426.71	0.84	
6180.00	7.440	230.540	6141.47	-332.25	-388.70	-436.21	0.18	
6275.00	7.560	227.950	6235.65	-339.13	-396.80	-445.60	0.38	
6370.00	7.490	225.130	6329.84	-346.52	-405.35	-454.62	0.40	
6472.00	7.460	225.000	6430.97	-354.66	-414.72	-464.02	0.03	
6498.00	7.300	226.490	6456.75	-356.68	-417.05	-466.41	0.96	
6529.00	7.220	226.300	6487.50	-359.02	-419.75	-469.25	0.27	
6561.00	6.940	237.750	6519.26	-361.04	-422.18	-472.34	4.49	
6593.00	6.650	267.050	6551.05	-361.73	-423.30	-475.82	10.75	
6624.00	6.500	286.990	6581.85	-360.89	-422.88	-479.29	7.34	
6656.00	7.400	302.550	6613.61	-358.84	-421.24	-482.76	6.49	
6688.00	8.670	304.040	6645.30	-355.94	-418.79	-486.50	4.02	
6719.00	9.620	313.170	6675.91	-352.41	-415.71	-490.32	5.59	
6751.00	10.800	318.260	6707.40	-347.89	-411.64	-494.27	4.64	
6783.00	13.440	322.100	6738.68	-342.23	-406.47	-498.55	8.62	
6815.00	15.960	324.050	6769.64	-335.19	-399.97	-503.42	8.02	
6846.00	18.250	328.450	6799.26	-327.04	-392.38	-508.46	8.48	
6878.00	21.300	330.950	6829.37	-317.09	-383.03	-513.91	9.89	
6910.00	24.580	332.400	6858.84	-305.47	-372.05	-519.82	10.40	
6941.00	25.990	332.140	6886.87	-293.08	-360.33	-525.98	4.56	
6973.00	27.720	335.530	6915.42	-279.42	-347.35	-532.34	7.22	
7004.00	29.290	342.440	6942.67	-265.08	-333.56	-537.61	11.77	
7036.00	31.510	346.610	6970.27	-249.07	-317.95	-541.91	9.57	
7068.00	35.340	350.020	6996.97	-231.51	-300.70	-545.45	13.33	
7099.00	39.760	350.340	7021.54	-212.64	-282.08	-548.67	14.27	
7131.00	44.450	349.280	7045.28	-191.23	-260.97	-552.48	14.82	
7163.00	50.030	348.310	7067.00	-167.80	-237.94	-557.05	17.58	
7195.00	55.450	349.270	7086.36	-142.41	-212.96	-561.99	17.10	
7227.00	60.450	351.670	7103.34	-115.33	-186.23	-566.46	16.87	
7258.00	66.090	353.450	7117.28	-87.65	-158.78	-570.04	18.90	
7289.00	69.280	357.480	7129.05	-59.01	-130.20	-572.29	15.83	
7321.00	72.740	1.530	7139.47	-28.97	-99.96	-572.54	16.13	
7353.00	76.620	3.360	7147.92	1.47	-69.13	-571.22	13.32	
7384.00	80.820	4.180	7153.98	31.32	-38.80	-569.22	13.79	
7416.00	83.150	5.800	7158.45	62.31	-7.24	-566.46	8.84	
7448.00	83.800	6.940	7162.08	93.23	24.36	-562.94	4.08	
7455.00	84.350	6.900	7162.81	99.99	31.27	-562.10	7.88	
7510.00†	87.915	5.465	7166.51	153.40	85.81	-556.19	6.99	7" Casing Point
7546.00	90.250	4.530	7167.09	188.60	121.67	-553.06	6.99	
7609.00	90.680	6.090	7166.58	250.13	184.39	-547.23	2.57	
7704.00	90.890	4.410	7165.28	342.94	278.98	-538.53	1.78	
7799.00	90.460	4.050	7164.16	436.10	373.72	-531.53	0.59	
7894.00	90.220	3.720	7163.59	529.38	468.50	-525.09	0.43	
7989.00	89.410	2.820	7163.90	622.84	563.34	-519.67	1.27	
8084.00	90.460	2.540	7164.01	716.47	658.24	-515.23	1.14	
8179.00	89.290	0.950	7164.22	810.35	753.19	-512.34	2.08	
8274.00	89.010	0.570	7165.63	904.46	848.17	-511.08	0.50	
8369.00	89.690	359.880	7166.70	998.69	943.16	-510.70	1.02	
8464.00	89.260	359.450	7167.57	1093.03	1038.15	-511.26	0.64	
8559.00	90.030	358.700	7168.16	1187.49	1133.14	-512.79	1.13	
8654.00	89.540	358.910	7168.52	1281.99	1228.12	-514.77	0.56	
8749.00	88.710	359.460	7169.97	1376.42	1323.09	-516.13	1.05	
8844.00	89.010	359.030	7171.86	1470.83	1418.07	-517.38	0.55	
8938.00	89.660	358.330	7172.95	1564.35	1512.03	-519.54	1.02	





# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

## WELLPATH DATA (150 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
9033.00	89.540	358.300	7173.61	1658.93	1606.99	-522.34	0.13	
9128.00	88.800	359.240	7174.99	1753.43	1701.96	-524.37	1.26	
9223.00	89.200	358.550	7176.65	1847.91	1796.92	-526.21	0.84	
9318.00	89.040	359.780	7178.11	1942.33	1891.90	-527.59	1.31	
9413.00	88.490	359.970	7180.15	2036.62	1986.88	-527.80	0.61	
9508.00	88.890	0.160	7182.33	2130.86	2081.85	-527.69	0.47	
9602.00	89.420	359.700	7183.71	2224.16	2175.84	-527.81	0.75	
9697.00	89.880	357.910	7184.29	2318.66	2270.82	-529.79	1.95	
9792.00	89.690	359.240	7184.65	2413.20	2365.78	-532.15	1.41	
9887.00	90.030	0.090	7184.88	2507.54	2460.78	-532.70	0.96	
9982.00	90.830	1.200	7184.17	2601.68	2555.77	-531.63	1.44	
10077.00	90.770	0.790	7182.84	2695.74	2650.75	-529.99	0.44	
10172.00	90.120	1.480	7182.10	2789.77	2745.72	-528.10	1.00	
10267.00	90.860	359.100	7181.29	2883.98	2840.71	-527.62	2.62	
10362.00	89.380	0.600	7181.09	2978.29	2935.71	-527.87	2.22	
10456.00	88.090	1.860	7183.17	3071.28	3029.66	-525.85	1.92	
10551.00	86.150	1.320	7187.94	3165.08	3124.50	-523.22	2.12	
10646.00	87.040	0.410	7193.58	3259.01	3219.32	-521.79	1.34	
10741.00	88.490	359.710	7197.29	3353.21	3314.24	-521.69	1.69	
10836.00	89.540	359.240	7198.92	3447.58	3409.22	-522.56	1.21	
10931.00	90.550	357.720	7198.85	3542.13	3504.18	-525.08	1.92	
11026.00	90.520	358.440	7197.96	3636.75	3599.12	-528.26	0.76	
11121.00	89.540	358.410	7197.91	3731.31	3694.09	-530.88	1.03	
11216.00	91.080	358.540	7197.40	3825.87	3789.05	-533.40	1.63	
11310.00	90.380	358.530	7196.20	3919.41	3883.01	-535.81	0.74	
11405.00	90.460	358.550	7195.50	4013.96	3977.98	-538.23	0.09	
11500.00	89.540	358.910	7195.50	4108.47	4072.95	-540.33	1.04	
11595.00	89.720	358.030	7196.12	4203.03	4167.92	-542.87	0.95	
11695.00	90.220	357.370	7196.17	4302.69	4267.83	-546.88	0.83	Last BHU MWD Surveys
11765.00	90.220	357.370	7195.90	4372.48	4337.76	-550.09	0.00	Projection to Bit

## HOLE & CASING SECTIONS - Ref Wellbore: BARCLAY 28N-27HZ AWP Ref Wellpath: BARCLAY 28N-27HZ 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	13.00	884.00	871.00	13.00	883.96	0.00	0.00	7.39	-0.10
9.625in Casing Surface	13.00	884.00	871.00	13.00	883.96	0.00	0.00	7.39	-0.10
8.75in Open Hole	884.00	7520.00	6636.00	883.96	7166.82	7.39	-0.10	95.77	-555.26
7in Casing Intermediate	13.00	7510.00	7497.00	13.00	7166.51	0.00	0.00	85.81	-556.19
6.125in Open Hole	7510.00	11765.00	4255.00	7166.51	7195.90	85.81	-556.19	4337.76	-550.09





# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BARCLAY 15-27 PAD SECTION LINES		-5.00	0.32	-16.19	3206570.73	1312996.29	40°11'24.745"N	104°45'38.092"W	polygon
BARCLAY 28N-27HZ BHL ON PLAT (460'FNL & 2420'FEL,REV-1)		7191.00	4343.16	-536.87	3206013.88	1317334.44	40°12'07.661"N	104°45'44.802"W	point
BARCLAY 15-27 PAD HARDLINES (460' SETBACKS)		7417.00	0.32	-16.19	3206570.73	1312996.29	40°11'24.745"N	104°45'38.092"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: BARCLAY 28N-27HZ AWP					Ref Wellpath: BARCLAY 28N-27HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
13.00	838.00	NaviTrak (Standard)	BHI MWD SURVEYS 13 1/2" HOLE <144-838>		BARCLAY 28N-27HZ AWP	
838.00	7455.00	NaviTrak (Standard)	BHI MWD SURVEYS 8 3/4" HOLE <915-7455>		BARCLAY 28N-27HZ AWP	
7455.00	11695.00	NaviTrak (Standard)	BHI MWD SURVEYS 6 1/8" HOLE <7546-11695>		BARCLAY 28N-27HZ AWP	
11695.00	11765.00	Blind Drilling (std)	Projection to bit		BARCLAY 28N-27HZ AWP	





# Actual Wellpath Report

BARCLAY 28N-27HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BARCLAY 28N-27HZ (477'FSL & 1887'FEL,SEC.27)
Area	COLORADO	Well	BARCLAY 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 28N-27HZ AWP
Facility	SEC.27-T3N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	344.560	13.00	Tie-On
144.00	0.570	344.560	144.00	Begin BHI MWD Surveys
7510.00	87.915	5.465	7166.51	7" Casing Point
11695.00	90.220	357.370	7196.17	Last BHU MWD Surveys
11765.00	90.220	357.370	7195.90	Projection to Bit