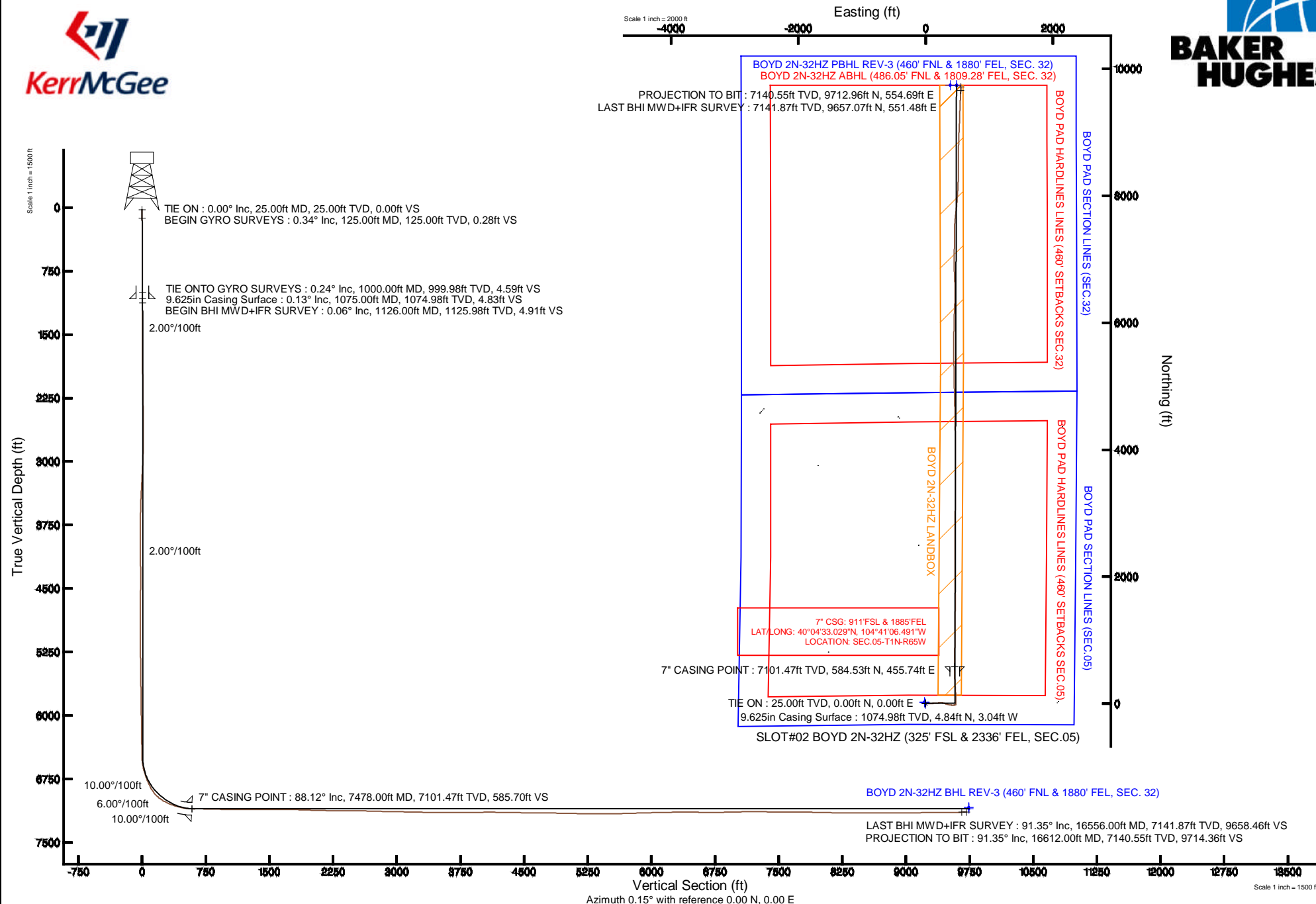


# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)  
 Field: WELD COUNTY (KERR MCGEE) Well: BOYD 2N-32HZ  
 Facility: SEC.05-T1N-R65W Wellbore: BOYD 2N-32HZ PWB

Plot reference wellpath is BOYD 2N-32HZ (REV-B.0) PWP

True vertical depths are referenced to H&P 307 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (RKB)	North Reference: True north
H&P 307 (RKB) to Mean Sea Level: 4975 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 07/Feb/2014



# Actual Wellpath Report

BOYD 2N-32HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWB
Facility	SEC.05-T1N-R65W		

## 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	0.999962	Report Generated	07/Feb/2014 at 15:24
Convergence at slot	n/a	Database/Source file	WellArchitectDB/BOYD_2N-32HZ_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2307.20	282.19	3227579.51	1270933.09	40°04'27.253"N	104°41'12.354"W
Facility Reference Pt			3227276.21	1273237.51	40°04'50.053"N	104°41'15.984"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	H&P 307 (RKB) to Facility Vertical Datum	4975.00ft
Horizontal Reference Pt	Slot	H&P 307 (RKB) to Mean Sea Level	4975.00ft
Vertical Reference Pt	H&P 307 (RKB)	H&P 307 (RKB) to Mud Line at Slot (SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05))	4975.00ft
MD Reference Pt	H&P 307 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.15°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWP
Facility	SEC.05-T1N-R65W		

WELLPATH DATA (165 stations) † = interpolated/extrapolated station										Comments
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	
0.00†	0.000	340.430	0.00	0.00	0.00	0.00	40°04'27.253"N	104°41'12.354"W	0.00	
25.00	0.000	340.430	25.00	0.00	0.00	0.00	40°04'27.253"N	104°41'12.354"W	0.00	TIE ON
125.00	0.340	340.430	125.00	0.28	0.28	-0.10	40°04'27.256"N	104°41'12.355"W	0.34	BEGIN GYRO SURVEYS
225.00	0.320	346.860	225.00	0.83	0.83	-0.26	40°04'27.261"N	104°41'12.357"W	0.04	
325.00	0.310	5.130	325.00	1.37	1.37	-0.30	40°04'27.267"N	104°41'12.358"W	0.10	
425.00	0.300	343.460	424.99	1.89	1.89	-0.35	40°04'27.272"N	104°41'12.359"W	0.12	
525.00	0.250	302.440	524.99	2.26	2.26	-0.61	40°04'27.275"N	104°41'12.362"W	0.20	
625.00	0.410	314.140	624.99	2.62	2.63	-1.05	40°04'27.279"N	104°41'12.368"W	0.17	
725.00	0.330	296.020	724.99	3.00	3.00	-1.57	40°04'27.283"N	104°41'12.374"W	0.14	
825.00	0.600	303.990	824.99	3.42	3.42	-2.26	40°04'27.287"N	104°41'12.383"W	0.28	
925.00	0.510	339.850	924.98	4.12	4.13	-2.85	40°04'27.294"N	104°41'12.391"W	0.35	
1000.00	0.240	347.440	999.98	4.59	4.60	-3.00	40°04'27.298"N	104°41'12.393"W	0.37	TIE ONTO GYRO SURVEYS
1126.00	0.060	0.690	1125.98	4.91	4.92	-3.05	40°04'27.302"N	104°41'12.393"W	0.14	BEGIN BHI MWD+IFR SURVEY
1190.00	1.950	92.450	1189.97	4.90	4.91	-1.96	40°04'27.302"N	104°41'12.379"W	3.05	
1284.00	4.850	94.940	1283.79	4.51	4.50	3.59	40°04'27.297"N	104°41'12.308"W	3.09	
1379.00	6.440	89.750	1378.33	4.21	4.18	12.92	40°04'27.294"N	104°41'12.188"W	1.76	
1474.00	7.940	95.240	1472.58	3.66	3.60	24.79	40°04'27.289"N	104°41'12.035"W	1.73	
1569.00	9.000	93.310	1566.54	2.67	2.57	38.74	40°04'27.278"N	104°41'11.856"W	1.16	
1663.00	11.010	87.320	1659.11	2.71	2.57	55.05	40°04'27.278"N	104°41'11.646"W	2.41	
1848.00	10.720	87.240	1840.80	4.45	4.22	89.88	40°04'27.295"N	104°41'11.198"W	0.16	
1941.00	10.830	87.820	1932.16	5.25	4.97	107.25	40°04'27.302"N	104°41'10.974"W	0.17	
2126.00	10.980	86.110	2113.82	7.19	6.83	142.19	40°04'27.320"N	104°41'10.525"W	0.19	
2312.00	10.700	85.640	2296.50	9.80	9.34	177.08	40°04'27.345"N	104°41'10.076"W	0.16	
2498.00	10.020	83.810	2479.46	12.94	12.40	210.39	40°04'27.376"N	104°41'09.648"W	0.41	
2685.00	8.490	89.780	2664.03	14.82	14.21	240.37	40°04'27.393"N	104°41'09.262"W	0.96	
2872.00	8.580	99.930	2848.97	12.54	11.85	267.91	40°04'27.370"N	104°41'08.908"W	0.81	
3058.00	10.050	105.300	3032.51	5.94	5.18	297.24	40°04'27.304"N	104°41'08.530"W	0.92	
3245.00	10.550	106.750	3216.50	-3.22	-4.06	329.37	40°04'27.213"N	104°41'08.117"W	0.30	
3432.00	9.180	108.560	3400.73	-12.82	-13.74	359.90	40°04'27.117"N	104°41'07.724"W	0.75	
3618.00	9.360	96.710	3584.32	-19.24	-20.23	388.99	40°04'27.053"N	104°41'07.350"W	1.03	
3710.00	8.900	92.110	3675.15	-20.33	-21.37	403.54	40°04'27.042"N	104°41'07.163"W	0.94	
3802.00	6.850	90.800	3766.28	-20.64	-21.71	416.13	40°04'27.038"N	104°41'07.001"W	2.24	
3894.00	5.980	90.120	3857.70	-20.70	-21.80	426.41	40°04'27.038"N	104°41'06.869"W	0.95	
3986.00	3.930	92.250	3949.36	-20.82	-21.93	434.36	40°04'27.036"N	104°41'06.767"W	2.24	
4078.00	3.920	87.600	4041.14	-20.79	-21.92	440.65	40°04'27.036"N	104°41'06.686"W	0.35	
4169.00	3.520	82.560	4131.95	-20.28	-21.43	446.53	40°04'27.041"N	104°41'06.610"W	0.57	
4261.00	1.840	75.840	4223.84	-19.55	-20.70	450.76	40°04'27.048"N	104°41'06.556"W	1.85	
4356.00	1.860	73.710	4318.80	-18.73	-19.90	453.72	40°04'27.056"N	104°41'06.518"W	0.08	
4449.00	1.130	112.440	4411.77	-18.65	-19.82	456.01	40°04'27.057"N	104°41'06.488"W	1.30	
4827.00	0.460	151.890	4789.73	-21.40	-22.58	460.17	40°04'27.030"N	104°41'06.435"W	0.22	
5204.00	0.680	41.500	5166.72	-21.06	-22.24	462.37	40°04'27.033"N	104°41'06.406"W	0.25	
5582.00	1.030	38.690	5544.68	-16.72	-17.91	465.98	40°04'27.076"N	104°41'06.360"W	0.09	
5676.00	1.390	16.110	5638.65	-14.96	-16.16	466.82	40°04'27.093"N	104°41'06.349"W	0.63	
5771.00	0.640	33.030	5733.64	-13.41	-14.61	467.43	40°04'27.109"N	104°41'06.341"W	0.84	
6054.00	1.640	40.680	6016.58	-9.00	-10.21	470.94	40°04'27.152"N	104°41'06.296"W	0.36	

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWB
Facility	SEC.05-T1N-R65W		

### WELLPATH DATA (165 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6149.00	0.740	44.760	6111.56	-7.53	-8.74	472.25	40°04'27.167"N	104°41'06.279"W	0.95	
6432.00	1.180	15.380	6394.52	-3.42	-4.64	474.31	40°04'27.207"N	104°41'06.253"W	0.23	
6526.00	1.370	355.280	6488.50	-1.37	-2.58	474.48	40°04'27.227"N	104°41'06.251"W	0.51	
6574.00	4.650	351.830	6536.42	1.13	-0.08	474.15	40°04'27.252"N	104°41'06.255"W	6.84	
6621.00	9.220	353.750	6583.07	6.76	5.55	473.47	40°04'27.308"N	104°41'06.263"W	9.73	
6669.00	13.820	0.360	6630.09	16.32	15.11	473.09	40°04'27.402"N	104°41'06.268"W	9.95	
6716.00	17.120	4.140	6675.38	28.84	27.63	473.62	40°04'27.526"N	104°41'06.261"W	7.34	
6763.00	19.400	5.670	6720.01	43.51	42.29	474.90	40°04'27.671"N	104°41'06.245"W	4.96	
6810.00	21.440	2.210	6764.06	59.87	58.65	476.00	40°04'27.833"N	104°41'06.231"W	5.04	
6857.00	24.960	359.420	6807.25	78.38	77.15	476.23	40°04'28.015"N	104°41'06.228"W	7.84	
6904.00	28.720	357.220	6849.18	99.58	98.36	475.58	40°04'28.225"N	104°41'06.236"W	8.27	
6951.00	33.520	356.440	6889.41	123.82	122.60	474.23	40°04'28.465"N	104°41'06.254"W	10.25	
6999.00	40.450	355.370	6927.73	152.60	151.39	472.14	40°04'28.749"N	104°41'06.281"W	14.50	
7046.00	48.280	355.350	6961.30	185.32	184.12	469.49	40°04'29.072"N	104°41'06.315"W	16.66	
7093.00	55.730	355.640	6990.21	222.21	221.02	466.58	40°04'29.437"N	104°41'06.352"W	15.86	
7140.00	61.930	355.870	7014.53	262.29	261.10	463.61	40°04'29.833"N	104°41'06.390"W	13.20	
7187.00	66.050	356.070	7035.13	304.41	303.23	460.64	40°04'30.250"N	104°41'06.428"W	8.77	
7234.00	69.790	357.060	7052.80	347.87	346.69	458.04	40°04'30.679"N	104°41'06.462"W	8.19	
7282.00	72.560	359.260	7068.29	393.27	392.10	456.59	40°04'31.128"N	104°41'06.481"W	7.22	
7329.00	74.920	359.430	7081.45	438.38	437.21	456.07	40°04'31.574"N	104°41'06.487"W	5.03	
7376.00	80.460	0.050	7091.46	484.28	483.11	455.87	40°04'32.027"N	104°41'06.490"W	11.86	
7423.00	83.880	0.060	7097.86	530.83	529.67	455.91	40°04'32.487"N	104°41'06.489"W	7.28	
7448.00	86.290	359.750	7100.01	555.74	554.57	455.87	40°04'32.733"N	104°41'06.490"W	9.72	
7478.00†	88.117	359.754	7101.47	585.70	584.53	455.74	40°04'33.029"N	104°41'06.491"W	6.09	7" CASING POINT
7525.00	90.980	359.760	7101.84	632.69	631.53	455.54	40°04'33.494"N	104°41'06.494"W	6.09	
7618.00	88.790	0.370	7102.03	725.69	724.52	455.65	40°04'34.413"N	104°41'06.493"W	2.44	
7712.00	88.570	359.980	7104.19	819.66	818.50	455.94	40°04'35.341"N	104°41'06.489"W	0.48	
7805.00	88.180	2.180	7106.83	912.61	911.44	457.69	40°04'36.260"N	104°41'06.466"W	2.40	
7899.00	88.700	359.880	7109.39	1006.55	1005.38	459.38	40°04'37.188"N	104°41'06.445"W	2.51	
7992.00	89.900	359.950	7110.53	1099.54	1098.37	459.24	40°04'38.107"N	104°41'06.446"W	1.29	
8084.00	89.440	0.400	7111.06	1191.54	1190.37	459.52	40°04'39.016"N	104°41'06.443"W	0.70	
8175.00	90.860	0.960	7110.82	1282.54	1281.36	460.60	40°04'39.916"N	104°41'06.429"W	1.68	
8359.00	89.900	0.940	7109.60	1466.51	1465.33	463.65	40°04'41.734"N	104°41'06.389"W	0.52	
8543.00	90.150	359.450	7109.52	1650.51	1649.32	464.28	40°04'43.552"N	104°41'06.381"W	0.82	
8635.00	89.720	359.580	7109.62	1742.50	1741.32	463.50	40°04'44.461"N	104°41'06.391"W	0.49	
8729.00	88.010	359.200	7111.48	1836.47	1835.29	462.50	40°04'45.390"N	104°41'06.404"W	1.86	
8823.00	87.650	359.430	7115.04	1930.39	1929.22	461.37	40°04'46.318"N	104°41'06.419"W	0.45	
8918.00	88.110	359.300	7118.56	2025.32	2024.14	460.32	40°04'47.256"N	104°41'06.432"W	0.50	
9012.00	88.890	359.650	7121.02	2119.28	2118.11	459.46	40°04'48.184"N	104°41'06.443"W	0.91	
9107.00	88.910	359.270	7122.84	2214.25	2213.08	458.57	40°04'49.123"N	104°41'06.455"W	0.40	
9201.00	89.100	359.890	7124.47	2308.23	2307.07	457.88	40°04'50.052"N	104°41'06.464"W	0.69	
9296.00	89.100	359.800	7125.97	2403.22	2402.06	457.62	40°04'50.991"N	104°41'06.467"W	0.09	
9390.00	90.670	1.090	7126.15	2497.22	2496.05	458.35	40°04'51.919"N	104°41'06.457"W	2.16	
9485.00	89.290	0.870	7126.19	2592.20	2591.03	459.97	40°04'52.858"N	104°41'06.436"W	1.47	
9579.00	88.550	0.430	7127.96	2686.18	2685.01	461.04	40°04'53.787"N	104°41'06.423"W	0.92	

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWP
Facility	SEC.05-T1N-R65W		

### WELLPATH DATA (165 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9674.00	88.110	0.370	7130.73	2781.14	2779.96	461.70	40°04'54.725"N	104°41'06.414"W	0.47	
9768.00	88.580	0.570	7133.44	2875.10	2873.92	462.47	40°04'55.654"N	104°41'06.404"W	0.54	
9863.00	89.290	0.280	7135.21	2970.08	2968.90	463.18	40°04'56.592"N	104°41'06.395"W	0.81	
9957.00	88.830	0.290	7136.75	3064.07	3062.89	463.65	40°04'57.521"N	104°41'06.389"W	0.49	
10052.00	89.010	0.250	7138.54	3159.05	3157.87	464.09	40°04'58.460"N	104°41'06.383"W	0.19	
10146.00	88.580	359.930	7140.52	3253.03	3251.85	464.24	40°04'59.388"N	104°41'06.381"W	0.57	
10241.00	88.640	359.950	7142.82	3348.00	3346.82	464.14	40°05'00.327"N	104°41'06.383"W	0.07	
10335.00	89.750	0.340	7144.14	3441.99	3440.81	464.38	40°05'01.256"N	104°41'06.380"W	1.25	
10429.00	90.490	0.810	7143.95	3535.99	3534.80	465.32	40°05'02.185"N	104°41'06.367"W	0.93	
10524.00	90.430	0.620	7143.18	3630.98	3629.79	466.51	40°05'03.123"N	104°41'06.352"W	0.21	
10618.00	90.060	0.330	7142.78	3724.98	3723.79	467.29	40°05'04.052"N	104°41'06.342"W	0.50	
10713.00	89.870	359.200	7142.84	3819.97	3818.79	466.90	40°05'04.991"N	104°41'06.347"W	1.21	
10808.00	89.750	359.370	7143.15	3914.96	3913.78	465.71	40°05'05.930"N	104°41'06.362"W	0.22	
10902.00	91.570	359.880	7142.07	4008.95	4007.77	465.10	40°05'06.858"N	104°41'06.370"W	2.01	
10997.00	89.290	359.900	7141.36	4103.94	4102.76	464.92	40°05'07.797"N	104°41'06.373"W	2.40	
11092.00	89.500	359.660	7142.36	4198.93	4197.75	464.55	40°05'08.736"N	104°41'06.377"W	0.34	
11186.00	89.320	359.360	7143.33	4292.92	4291.74	463.75	40°05'09.665"N	104°41'06.388"W	0.37	
11280.00	88.420	358.650	7145.18	4386.88	4385.71	462.11	40°05'10.593"N	104°41'06.409"W	1.22	
11375.00	88.980	358.590	7147.34	4481.82	4480.66	459.83	40°05'11.532"N	104°41'06.438"W	0.59	
11469.00	89.870	359.550	7148.28	4575.80	4574.64	458.30	40°05'12.460"N	104°41'06.458"W	1.39	
11564.00	89.840	358.800	7148.52	4670.78	4669.63	456.93	40°05'13.399"N	104°41'06.475"W	0.79	
11658.00	89.190	358.770	7149.32	4764.75	4763.60	454.94	40°05'14.328"N	104°41'06.501"W	0.69	
11752.00	88.450	358.470	7151.25	4858.70	4857.55	452.68	40°05'15.256"N	104°41'06.530"W	0.85	
11847.00	89.250	358.720	7153.16	4953.64	4952.50	450.35	40°05'16.195"N	104°41'06.560"W	0.88	
11941.00	88.420	358.750	7155.07	5047.60	5046.46	448.27	40°05'17.123"N	104°41'06.586"W	0.88	
12036.00	88.760	358.790	7157.41	5142.54	5141.41	446.24	40°05'18.061"N	104°41'06.613"W	0.36	
12131.00	90.640	359.300	7157.91	5237.52	5236.39	444.65	40°05'19.000"N	104°41'06.633"W	2.05	
12225.00	90.180	359.270	7157.23	5331.50	5330.38	443.48	40°05'19.929"N	104°41'06.648"W	0.49	
12320.00	89.160	359.130	7157.78	5426.49	5425.37	442.15	40°05'20.867"N	104°41'06.665"W	1.08	
12414.00	89.840	0.030	7158.60	5520.48	5519.36	441.46	40°05'21.796"N	104°41'06.674"W	1.20	
12508.00	90.830	0.070	7158.05	5614.47	5613.36	441.55	40°05'22.725"N	104°41'06.673"W	1.05	
12603.00	92.160	0.320	7155.57	5709.44	5708.32	441.87	40°05'23.664"N	104°41'06.669"W	1.42	
12697.00	91.820	0.820	7152.31	5803.38	5802.26	442.80	40°05'24.592"N	104°41'06.657"W	0.64	
12792.00	91.420	1.180	7149.62	5898.33	5897.21	444.46	40°05'25.530"N	104°41'06.635"W	0.57	
12886.00	91.840	1.420	7146.95	5992.27	5991.15	446.59	40°05'26.459"N	104°41'06.608"W	0.51	
12980.00	91.660	1.370	7144.08	6086.21	6085.08	448.88	40°05'27.387"N	104°41'06.578"W	0.20	
13075.00	90.400	1.480	7142.37	6181.17	6180.03	451.24	40°05'28.325"N	104°41'06.548"W	1.33	
13168.00	90.670	3.490	7141.50	6274.08	6272.93	455.27	40°05'29.243"N	104°41'06.496"W	2.18	
13263.00	90.150	0.910	7140.82	6369.01	6367.85	458.92	40°05'30.181"N	104°41'06.449"W	2.77	
13358.00	89.750	0.710	7140.91	6464.00	6462.84	460.26	40°05'31.120"N	104°41'06.432"W	0.47	
13452.00	88.880	358.290	7142.03	6557.98	6556.82	459.44	40°05'32.049"N	104°41'06.442"W	2.74	
13546.00	89.010	357.810	7143.76	6651.90	6650.75	456.25	40°05'32.977"N	104°41'06.483"W	0.53	
13664.00	90.980	357.660	7143.77	6769.79	6768.65	451.58	40°05'34.142"N	104°41'06.543"W	1.67	
13758.00	91.510	359.480	7141.73	6863.73	6862.60	449.24	40°05'35.070"N	104°41'06.574"W	2.02	
13852.00	91.720	359.610	7139.08	6957.69	6956.56	448.49	40°05'35.999"N	104°41'06.583"W	0.26	

# Actual Wellpath Report

BOYD 2N-32HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWB
Facility	SEC.05-T1N-R65W		

## WELLPATH DATA (165 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13945.00	90.830	0.350	7137.01	7050.66	7049.53	448.46	40°05'36.918"N	104°41'06.584"W	1.24	
14040.00	90.610	1.340	7135.82	7145.65	7144.52	449.86	40°05'37.856"N	104°41'06.566"W	1.07	
14135.00	89.780	0.100	7135.49	7240.64	7239.50	451.05	40°05'38.795"N	104°41'06.550"W	1.57	
14229.00	88.980	359.560	7136.51	7334.63	7333.50	450.77	40°05'39.724"N	104°41'06.554"W	1.03	
14323.00	89.840	1.770	7137.48	7428.61	7427.48	451.86	40°05'40.653"N	104°41'06.540"W	2.52	
14418.00	89.350	2.490	7138.15	7523.55	7522.41	455.40	40°05'41.591"N	104°41'06.494"W	0.92	
14513.00	89.780	5.860	7138.87	7618.30	7617.14	462.31	40°05'42.527"N	104°41'06.405"W	3.58	
14607.00	90.300	6.590	7138.81	7711.77	7710.59	472.50	40°05'43.450"N	104°41'06.274"W	0.95	
14702.00	88.670	5.130	7139.66	7806.29	7805.08	482.20	40°05'44.384"N	104°41'06.149"W	2.30	
14796.00	88.210	5.260	7142.22	7899.89	7898.66	490.71	40°05'45.309"N	104°41'06.040"W	0.51	
14891.00	88.730	4.170	7144.75	7994.55	7993.30	498.52	40°05'46.244"N	104°41'05.939"W	1.27	
14985.00	89.190	3.340	7146.46	8088.35	8087.08	504.67	40°05'47.171"N	104°41'05.860"W	1.01	
15079.00	89.350	1.840	7147.66	8182.26	8180.98	508.92	40°05'48.099"N	104°41'05.805"W	1.60	
15174.00	88.670	1.370	7149.30	8277.21	8275.93	511.58	40°05'49.037"N	104°41'05.771"W	0.87	
15268.00	89.780	0.550	7150.57	8371.19	8369.90	513.15	40°05'49.966"N	104°41'05.751"W	1.47	
15363.00	90.670	0.070	7150.20	8466.19	8464.90	513.67	40°05'50.905"N	104°41'05.744"W	1.06	
15457.00	90.400	1.140	7149.32	8560.18	8558.89	514.66	40°05'51.833"N	104°41'05.731"W	1.17	
15552.00	89.660	0.450	7149.27	8655.17	8653.88	515.98	40°05'52.772"N	104°41'05.714"W	1.07	
15646.00	89.260	0.130	7150.16	8749.17	8747.87	516.45	40°05'53.701"N	104°41'05.708"W	0.54	
15740.00	89.870	1.640	7150.87	8843.15	8841.85	517.91	40°05'54.630"N	104°41'05.690"W	1.73	
15835.00	90.860	2.430	7150.27	8938.10	8936.79	521.28	40°05'55.568"N	104°41'05.646"W	1.33	
15929.00	90.980	2.550	7148.76	9032.01	9030.69	525.36	40°05'56.496"N	104°41'05.594"W	0.18	
16024.00	90.610	2.580	7147.44	9126.91	9125.58	529.61	40°05'57.434"N	104°41'05.539"W	0.39	
16118.00	90.340	1.880	7146.66	9220.85	9219.51	533.27	40°05'58.362"N	104°41'05.492"W	0.80	
16212.00	90.000	1.800	7146.38	9314.81	9313.46	536.29	40°05'59.290"N	104°41'05.453"W	0.37	
16306.00	90.490	1.930	7145.98	9408.76	9407.41	539.35	40°06'00.219"N	104°41'05.413"W	0.54	
16401.00	90.680	2.860	7145.01	9503.68	9502.32	543.32	40°06'01.157"N	104°41'05.362"W	1.00	
16496.00	91.380	3.010	7143.30	9598.55	9597.18	548.18	40°06'02.094"N	104°41'05.300"W	0.75	
16556.00	91.350	3.290	7141.87	9658.46	9657.07	551.48	40°06'02.686"N	104°41'05.257"W	0.47	LAST BHI MWD+IFR SURVEY
16612.00	91.350	3.290	7140.55	9714.36	9712.96	554.69	40°06'03.238"N	104°41'05.216"W	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS - Ref Wellbore: BOYD 2N-32HZ AWP Ref Wellpath: BOYD 2N-32HZ 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	25.00	1075.00	1050.00	25.00	1074.98	0.00	0.00	4.84	-3.04
9.625in Casing Surface	25.00	1075.00	1050.00	25.00	1074.98	0.00	0.00	4.84	-3.04
8.75in Open Hole	1075.00	7494.00	6419.00	1074.98	7101.86	4.84	-3.04	600.53	455.67
7in Casing Intermediate	25.00	7478.00	7453.00	25.00	7101.47	0.00	0.00	584.53	455.74
6.125in Open Hole	7494.00	16612.00	9118.00	7101.86	7140.55	600.53	455.67	9712.96	554.69

# Actual Wellpath Report

BOYD 2N-32HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWB
Facility	SEC.05-T1N-R65W		

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.05)		7019.00	21.86	-20.13	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.32)		7019.00	21.86	-20.13	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD SECTION LINES (SEC.05)		7019.00	21.86	-20.13	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD SECTION LINES (SEC.32)		7019.00	21.86	-20.13	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD 2N-32HZ BHL (460' FNL & 1880' FEL, SEC. 32) REV-2		7085.00	9739.01	483.82	3227973.98	1280675.73	40°06'03.496"N	104°41'06.128"W	point
BOYD 2N-32HZ BHL ON PLAT (460' FNL & 1980' FEL, SEC. 32) REV-1		7085.00	9739.01	383.80	3227873.97	1280674.81	40°06'03.496"N	104°41'07.415"W	point
BOYD 2N-32HZ LANDBOX		7085.00	0.00	0.00	3227579.51	1270933.08	40°04'27.253"N	104°41'12.354"W	polygon
BOYD 2N-32HZ BHL REV-3 (460' FNL & 1880' FEL, SEC. 32)		7100.00	9739.01	483.97	3227974.12	1280675.73	40°06'03.496"N	104°41'06.126"W	point

## WELLPATH COMPOSITION - Ref Wellbore: BOYD 2N-32HZ AWB Ref Wellpath: BOYD 2N-32HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1000.00	Generic gyro - continuous (Standard)	GYRO SURVEYS <125-1000>	BOYD 2N-32HZ AWB
1000.00	7448.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" HOLE <1126-7448>	BOYD 2N-32HZ AWB
7448.00	16556.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" HOLE <7525-16556>	BOYD 2N-32HZ AWB
16556.00	16612.00	Blind Drilling (std)	Projection to bit	BOYD 2N-32HZ AWB

# Actual Wellpath Report

BOYD 2N-32HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BOYD 2N-32HZ (325' FSL & 2336' FEL, SEC.05)
Area	COLORADO	Well	BOYD 2N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 2N-32HZ AWP
Facility	SEC.05-T1N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	340.430	25.00	TIE ON
125.00	0.340	340.430	125.00	BEGIN GYRO SURVEYS
1000.00	0.240	347.440	999.98	TIE ONTO GYRO SURVEYS
1126.00	0.060	0.690	1125.98	BEGIN BHI MWD+IFR SURVEY
7478.00	88.117	359.754	7101.47	7" CASING POINT
16556.00	91.350	3.290	7141.87	LAST BHI MWD+IFR SURVEY
16612.00	91.350	3.290	7140.55	PROJECTION TO BIT