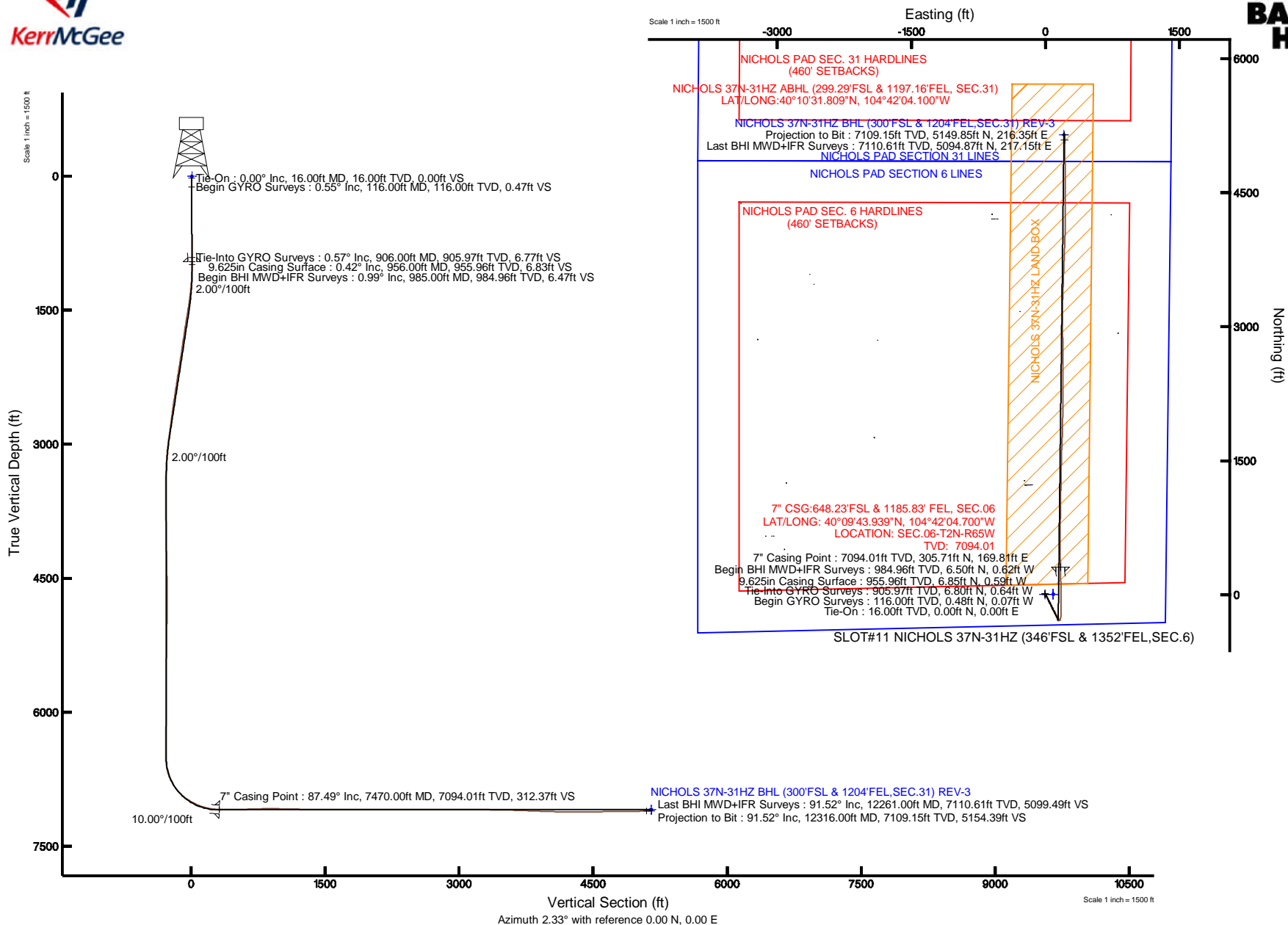


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#11 NICHOLS 37N-31HZ (346°FSL & 1352°FEL, SEC.6)
 Field: WELD COUNTY (KERR MCGEE) Well: NICHOLS 37N-31HZ
 Facility: SEC.06-T2N-R65W Wellbore: NICHOLS 37N-31HZ PWB

Plot reference wellpath is NICHOLS 37N-31HZ (REV-E.0) PWP

True vertical depths are referenced to XTREME 24 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 24 (RKB)	North Reference: True north
XTREME 24 (RKB) to Mean Sea Level: 4941 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#11 NICHOLS 37N-31HZ (346°FSL & 1352°FEL, SEC.6)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precin on 3/21/2013





Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Precain
Scale	0.999958	Report Generated	3/21/2013 at 11:46:26 AM
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/NICHOLS_37N-31HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4206.50	533.55	3223054.87	1302632.60	40°09'40.918"N	104°42'06.887"W
Facility Reference Pt			3222483.59	1306833.95	40°10'22.487"N	104°42'13.759"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 24 (RKB) to Facility Vertical Datum	4941.00ft
Horizontal Reference Pt	Slot	XTREME 24 (RKB) to Mean Sea Level	4941.00ft
Vertical Reference Pt	XTREME 24 (RKB)	XTREME 24 (RKB) to Mud Line at Slot (SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6))	4941.00ft
MD Reference Pt	XTREME 24 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	2.33°



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (155 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	351.980	0.00	0.00	0.00	0.00	40°09'40.918"N	104°42'06.887"W	0.00	
16.00	0.000	351.980	16.00	0.00	0.00	0.00	40°09'40.918"N	104°42'06.887"W	0.00	Tie-On
116.00	0.550	351.980	116.00	0.47	0.48	-0.07	40°09'40.923"N	104°42'06.888"W	0.55	Begin GYRO Surveys
216.00	0.580	331.310	215.99	1.38	1.39	-0.38	40°09'40.932"N	104°42'06.892"W	0.20	
316.00	0.630	351.000	315.99	2.35	2.38	-0.71	40°09'40.942"N	104°42'06.896"W	0.21	
416.00	0.320	341.770	415.98	3.15	3.19	-0.88	40°09'40.950"N	104°42'06.898"W	0.32	
516.00	0.290	120.390	515.98	3.29	3.33	-0.75	40°09'40.951"N	104°42'06.897"W	0.57	
616.00	0.620	337.260	615.98	3.66	3.70	-0.74	40°09'40.955"N	104°42'06.897"W	0.87	
716.00	0.600	358.200	715.98	4.68	4.72	-0.96	40°09'40.965"N	104°42'06.899"W	0.22	
816.00	0.690	11.370	815.97	5.79	5.83	-0.86	40°09'40.976"N	104°42'06.898"W	0.17	
906.00	0.570	14.930	905.97	6.77	6.80	-0.64	40°09'40.985"N	104°42'06.895"W	0.14	Tie-Into GYRO Surveys
985.00	0.990	187.150	984.96	6.47	6.50	-0.62	40°09'40.982"N	104°42'06.895"W	1.97	Begin BHI MWD+IFR Surveys
1079.00	2.940	144.670	1078.91	3.75	3.73	0.67	40°09'40.955"N	104°42'06.878"W	2.46	
1173.00	4.500	146.840	1172.71	-1.16	-1.33	4.08	40°09'40.905"N	104°42'06.834"W	1.67	
1267.00	6.010	155.350	1266.31	-8.55	-8.89	8.15	40°09'40.830"N	104°42'06.782"W	1.80	
1360.00	8.060	153.590	1358.60	-18.60	-19.15	13.08	40°09'40.729"N	104°42'06.719"W	2.22	
1454.00	10.350	155.160	1451.39	-31.90	-32.72	19.56	40°09'40.595"N	104°42'06.635"W	2.45	
1552.00	10.240	153.800	1547.81	-47.38	-48.52	27.10	40°09'40.438"N	104°42'06.538"W	0.27	
1646.00	10.250	153.940	1640.31	-62.08	-63.53	34.47	40°09'40.290"N	104°42'06.443"W	0.03	
1740.00	10.240	153.170	1732.81	-76.73	-78.50	41.91	40°09'40.142"N	104°42'06.347"W	0.15	
1834.00	9.470	151.020	1825.42	-90.63	-92.72	49.43	40°09'40.002"N	104°42'06.250"W	0.91	
1928.00	9.520	149.510	1918.14	-103.77	-106.19	57.12	40°09'39.869"N	104°42'06.151"W	0.27	
2023.00	9.970	155.890	2011.77	-117.74	-120.46	64.47	40°09'39.728"N	104°42'06.057"W	1.23	
2117.00	10.250	155.270	2104.31	-132.47	-135.49	71.29	40°09'39.579"N	104°42'05.969"W	0.32	
2211.00	10.300	153.630	2196.80	-147.29	-150.61	78.52	40°09'39.430"N	104°42'05.876"W	0.32	
2305.00	10.520	151.000	2289.26	-161.99	-165.65	86.41	40°09'39.281"N	104°42'05.774"W	0.56	
2399.00	10.140	148.600	2381.73	-176.20	-180.22	94.89	40°09'39.137"N	104°42'05.665"W	0.61	
2493.00	10.170	148.290	2474.26	-189.96	-194.34	103.56	40°09'38.998"N	104°42'05.553"W	0.07	
2588.00	9.310	154.020	2567.89	-203.67	-208.38	111.33	40°09'38.859"N	104°42'05.453"W	1.36	
2682.00	9.160	153.720	2660.67	-216.94	-221.93	117.98	40°09'38.725"N	104°42'05.367"W	0.17	
2776.00	8.730	148.230	2753.53	-229.41	-234.70	125.05	40°09'38.599"N	104°42'05.276"W	1.02	
2870.00	8.770	155.640	2846.44	-241.72	-247.29	131.76	40°09'38.474"N	104°42'05.190"W	1.20	
2964.00	8.770	154.910	2939.34	-254.48	-260.31	137.75	40°09'38.346"N	104°42'05.113"W	0.12	
3058.00	7.060	156.990	3032.44	-266.07	-272.12	143.05	40°09'38.229"N	104°42'05.045"W	1.84	
3153.00	4.850	163.020	3126.92	-275.13	-281.33	146.50	40°09'38.138"N	104°42'05.000"W	2.41	
3247.00	3.360	163.850	3220.68	-281.50	-287.78	148.43	40°09'38.074"N	104°42'04.975"W	1.59	
3341.00	1.520	150.910	3314.59	-285.17	-291.52	149.80	40°09'38.037"N	104°42'04.958"W	2.03	
3430.00	0.340	207.830	3403.58	-286.42	-292.78	150.25	40°09'38.025"N	104°42'04.952"W	1.53	
3515.00	0.720	256.340	3488.58	-286.79	-293.13	149.62	40°09'38.021"N	104°42'04.960"W	0.65	
3600.00	0.720	254.590	3573.57	-287.10	-293.40	148.58	40°09'38.019"N	104°42'04.973"W	0.03	
3686.00	0.630	286.280	3659.56	-287.15	-293.41	147.61	40°09'38.019"N	104°42'04.986"W	0.44	
3771.00	0.650	313.200	3744.56	-286.73	-292.95	146.81	40°09'38.023"N	104°42'04.996"W	0.35	
3856.00	0.980	312.790	3829.55	-285.94	-292.12	145.92	40°09'38.031"N	104°42'05.008"W	0.39	
3941.00	1.240	309.770	3914.53	-284.91	-291.04	144.68	40°09'38.042"N	104°42'05.023"W	0.31	
4026.00	1.310	312.070	3999.51	-283.73	-289.80	143.26	40°09'38.054"N	104°42'05.042"W	0.10	



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (155 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4111.00	1.420	314.310	4084.49	-282.40	-288.42	141.78	40°09'38.068"N	104°42'05.061"W	0.14	
4197.00	1.570	309.790	4170.46	-280.97	-286.92	140.11	40°09'38.083"N	104°42'05.082"W	0.22	
4282.00	1.420	341.440	4255.43	-279.28	-285.17	138.88	40°09'38.100"N	104°42'05.098"W	0.97	
4367.00	0.800	34.460	4340.42	-277.79	-283.69	138.88	40°09'38.115"N	104°42'05.098"W	1.34	
4453.00	1.270	23.530	4426.40	-276.40	-282.32	139.60	40°09'38.128"N	104°42'05.089"W	0.59	
4538.00	1.250	12.850	4511.38	-274.61	-280.55	140.19	40°09'38.146"N	104°42'05.081"W	0.28	
4623.00	1.040	61.150	4596.37	-273.30	-279.27	141.07	40°09'38.158"N	104°42'05.070"W	1.12	
4708.00	1.200	48.010	4681.35	-272.27	-278.31	142.41	40°09'38.168"N	104°42'05.053"W	0.35	
4793.00	0.760	70.000	4766.34	-271.44	-277.52	143.60	40°09'38.176"N	104°42'05.037"W	0.67	
4879.00	1.440	137.640	4852.33	-271.99	-278.12	144.86	40°09'38.170"N	104°42'05.021"W	1.57	
4964.00	1.720	134.810	4937.29	-273.61	-279.81	146.49	40°09'38.153"N	104°42'05.000"W	0.34	
5049.00	2.090	126.360	5022.25	-275.34	-281.63	148.64	40°09'38.135"N	104°42'04.973"W	0.55	
5134.00	2.280	114.710	5107.19	-276.85	-283.25	151.42	40°09'38.119"N	104°42'04.937"W	0.57	
5219.00	1.960	126.350	5192.13	-278.31	-284.82	154.13	40°09'38.103"N	104°42'04.902"W	0.63	
5305.00	0.960	135.990	5278.10	-279.63	-286.21	155.81	40°09'38.090"N	104°42'04.880"W	1.19	
5390.00	0.760	110.340	5363.09	-280.29	-286.92	156.84	40°09'38.083"N	104°42'04.867"W	0.50	
5475.00	0.710	113.090	5448.08	-280.65	-287.32	157.85	40°09'38.079"N	104°42'04.854"W	0.07	
5560.00	0.630	155.740	5533.08	-281.26	-287.95	158.53	40°09'38.072"N	104°42'04.845"W	0.58	
5645.00	0.460	109.980	5618.07	-281.78	-288.50	159.04	40°09'38.067"N	104°42'04.839"W	0.53	
5731.00	0.210	154.050	5704.07	-282.02	-288.76	159.43	40°09'38.064"N	104°42'04.834"W	0.40	
5816.00	0.460	199.880	5789.07	-282.49	-289.22	159.39	40°09'38.060"N	104°42'04.834"W	0.41	
5901.00	0.440	147.860	5874.07	-283.08	-289.82	159.44	40°09'38.054"N	104°42'04.833"W	0.46	
5986.00	0.620	203.140	5959.07	-283.78	-290.51	159.44	40°09'38.047"N	104°42'04.833"W	0.61	
6071.00	0.430	164.370	6044.06	-284.51	-291.24	159.34	40°09'38.040"N	104°42'04.835"W	0.46	
6157.00	0.780	147.090	6130.06	-285.30	-292.05	159.75	40°09'38.032"N	104°42'04.829"W	0.45	
6242.00	0.860	131.270	6215.05	-286.17	-292.95	160.54	40°09'38.023"N	104°42'04.819"W	0.28	
6327.00	0.350	153.430	6300.04	-286.80	-293.61	161.14	40°09'38.017"N	104°42'04.812"W	0.65	
6412.00	0.570	144.100	6385.04	-287.36	-294.18	161.50	40°09'38.011"N	104°42'04.807"W	0.27	
6489.00	0.650	124.010	6462.04	-287.89	-294.74	162.09	40°09'38.005"N	104°42'04.799"W	0.29	
6533.00	0.310	56.870	6506.04	-287.95	-294.81	162.39	40°09'38.005"N	104°42'04.795"W	1.37	
6576.00	3.900	17.100	6549.00	-286.47	-293.35	162.92	40°09'38.019"N	104°42'04.789"W	8.53	
6618.00	7.610	22.180	6590.78	-282.47	-289.41	164.39	40°09'38.058"N	104°42'04.770"W	8.91	
6661.00	11.450	21.320	6633.18	-275.75	-282.79	167.02	40°09'38.123"N	104°42'04.736"W	8.94	
6704.00	16.040	15.970	6674.94	-265.94	-273.10	170.21	40°09'38.219"N	104°42'04.695"W	11.07	
6746.00	20.610	10.430	6714.80	-252.97	-260.24	173.14	40°09'38.346"N	104°42'04.657"W	11.63	
6789.00	24.780	5.540	6754.47	-236.48	-243.82	175.38	40°09'38.509"N	104°42'04.628"W	10.64	
6832.00	28.550	3.700	6792.89	-217.20	-224.59	176.92	40°09'38.699"N	104°42'04.608"W	8.97	
6874.00	32.880	1.370	6828.99	-195.75	-203.17	177.84	40°09'38.910"N	104°42'04.596"W	10.69	
6917.00	37.950	359.650	6864.02	-170.86	-178.26	178.04	40°09'39.156"N	104°42'04.594"W	12.02	
6959.00	43.180	358.340	6895.92	-143.60	-150.96	177.54	40°09'39.426"N	104°42'04.600"W	12.62	
7002.00	47.620	358.290	6926.10	-113.07	-120.37	176.64	40°09'39.729"N	104°42'04.612"W	10.33	
7044.00	51.380	0.410	6953.38	-81.19	-88.44	176.30	40°09'40.044"N	104°42'04.616"W	9.74	
7087.00	55.550	0.740	6978.97	-46.66	-53.90	176.64	40°09'40.385"N	104°42'04.612"W	9.72	
7130.00	59.620	359.920	7002.01	-10.39	-17.61	176.85	40°09'40.744"N	104°42'04.609"W	9.60	
7172.00	63.530	359.210	7022.00	26.50	19.32	176.56	40°09'41.109"N	104°42'04.613"W	9.43	



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7215.00	66.600	358.770	7040.13	65.42	58.30	175.87	40°09'41.494"N	104°42'04.622"W	7.20	
7258.00	69.810	359.590	7056.09	105.28	98.22	175.31	40°09'41.889"N	104°42'04.629"W	7.67	
7300.00	73.420	358.220	7069.34	145.05	138.06	174.54	40°09'42.282"N	104°42'04.639"W	9.14	
7343.00	78.160	357.830	7079.89	186.61	179.71	173.10	40°09'42.694"N	104°42'04.657"W	11.06	
7385.00	81.950	358.180	7087.14	227.85	221.04	171.66	40°09'43.102"N	104°42'04.676"W	9.06	
7425.00	85.840	358.780	7091.40	267.53	260.79	170.61	40°09'43.495"N	104°42'04.690"W	9.84	
7470.00†	87.494	359.187	7094.01	312.37	305.71	169.81	40°09'43.939"N	104°42'04.700"W	3.78	7" Casing Point
7539.00	90.030	359.810	7095.50	381.27	374.68	169.21	40°09'44.621"N	104°42'04.708"W	3.78	
7624.00	90.870	359.900	7094.84	466.18	459.68	168.99	40°09'45.461"N	104°42'04.710"W	0.99	
7709.00	91.480	359.240	7093.09	551.07	544.66	168.36	40°09'46.300"N	104°42'04.719"W	1.06	
7794.00	91.820	359.530	7090.64	635.92	629.62	167.44	40°09'47.140"N	104°42'04.730"W	0.53	
7880.00	92.010	0.320	7087.77	721.79	715.57	167.33	40°09'47.989"N	104°42'04.732"W	0.94	
7965.00	91.450	1.090	7085.20	806.72	800.52	168.38	40°09'48.829"N	104°42'04.718"W	1.12	
8050.00	89.660	1.100	7084.38	891.69	885.50	170.00	40°09'49.669"N	104°42'04.697"W	2.11	
8135.00	88.340	0.730	7085.86	976.65	970.48	171.36	40°09'50.508"N	104°42'04.680"W	1.61	
8220.00	88.610	1.080	7088.13	1061.59	1055.43	172.70	40°09'51.348"N	104°42'04.663"W	0.52	
8306.00	88.730	0.990	7090.12	1147.55	1141.40	174.25	40°09'52.197"N	104°42'04.643"W	0.17	
8391.00	88.910	1.100	7091.87	1232.51	1226.37	175.80	40°09'53.037"N	104°42'04.623"W	0.25	
8476.00	89.130	1.110	7093.33	1317.48	1311.34	177.44	40°09'53.877"N	104°42'04.601"W	0.26	
8561.00	89.380	0.990	7094.43	1402.45	1396.32	179.00	40°09'54.716"N	104°42'04.581"W	0.33	
8647.00	89.590	1.430	7095.21	1488.43	1482.29	180.82	40°09'55.566"N	104°42'04.558"W	0.57	
8732.00	90.150	1.900	7095.40	1573.42	1567.26	183.29	40°09'56.406"N	104°42'04.526"W	0.86	
8817.00	90.370	1.660	7095.01	1658.42	1652.21	185.93	40°09'57.245"N	104°42'04.492"W	0.38	
8902.00	90.670	2.920	7094.24	1743.41	1737.14	189.32	40°09'58.084"N	104°42'04.448"W	1.52	
8987.00	90.090	1.850	7093.68	1828.41	1822.06	192.86	40°09'58.924"N	104°42'04.403"W	1.43	
9073.00	89.870	0.590	7093.71	1914.39	1908.04	194.69	40°09'59.773"N	104°42'04.379"W	1.49	
9158.00	90.120	1.040	7093.71	1999.36	1993.03	195.90	40°10'00.613"N	104°42'04.364"W	0.61	
9243.00	89.500	359.430	7094.00	2084.30	2078.03	196.25	40°10'01.453"N	104°42'04.359"W	2.03	
9328.00	90.490	359.840	7094.00	2169.20	2163.03	195.71	40°10'02.293"N	104°42'04.366"W	1.26	
9413.00	90.800	0.640	7093.05	2254.14	2248.02	196.06	40°10'03.133"N	104°42'04.361"W	1.01	
9499.00	89.960	0.220	7092.48	2340.09	2334.01	196.71	40°10'03.983"N	104°42'04.353"W	1.09	
9584.00	89.320	359.480	7093.01	2425.01	2419.01	196.48	40°10'04.823"N	104°42'04.356"W	1.15	
9669.00	89.500	359.530	7093.89	2509.90	2504.00	195.75	40°10'05.663"N	104°42'04.365"W	0.22	
9754.00	89.720	0.320	7094.46	2594.82	2589.00	195.64	40°10'06.503"N	104°42'04.367"W	0.96	
9839.00	89.960	0.120	7094.70	2679.76	2674.00	195.97	40°10'07.343"N	104°42'04.363"W	0.37	
9925.00	90.220	359.860	7094.57	2765.69	2760.00	195.95	40°10'08.192"N	104°42'04.363"W	0.43	
10010.00	89.630	359.800	7094.68	2850.61	2845.00	195.70	40°10'09.032"N	104°42'04.366"W	0.70	
10095.00	90.680	359.350	7094.45	2935.51	2929.99	195.07	40°10'09.872"N	104°42'04.374"W	1.34	
10180.00	91.180	359.360	7093.07	3020.38	3014.98	194.11	40°10'10.712"N	104°42'04.387"W	0.59	
10265.00	89.660	359.410	7092.45	3105.26	3099.97	193.20	40°10'11.552"N	104°42'04.398"W	1.79	
10350.00	88.760	0.460	7093.62	3190.18	3184.96	193.10	40°10'12.392"N	104°42'04.400"W	1.63	
10436.00	88.890	1.800	7095.38	3276.14	3270.92	194.80	40°10'13.241"N	104°42'04.378"W	1.57	
10521.00	89.140	1.950	7096.84	3361.13	3355.86	197.58	40°10'14.081"N	104°42'04.342"W	0.34	
10606.00	88.980	2.130	7098.24	3446.11	3440.80	200.60	40°10'14.920"N	104°42'04.303"W	0.28	
10691.00	88.700	1.810	7099.96	3531.09	3525.73	203.53	40°10'15.759"N	104°42'04.265"W	0.50	



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (155 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10777.00	88.390	2.270	7102.14	3617.06	3611.65	206.59	40°10'16.608"N	104°42'04.226"W	0.64	
10863.00	88.180	2.110	7104.72	3703.03	3697.55	209.87	40°10'17.457"N	104°42'04.183"W	0.31	
10948.00	87.850	2.030	7107.66	3787.97	3782.44	212.94	40°10'18.296"N	104°42'04.144"W	0.40	
11033.00	87.710	2.410	7110.95	3872.91	3867.31	216.23	40°10'19.135"N	104°42'04.102"W	0.48	
11118.00	87.470	2.490	7114.53	3957.83	3952.16	219.86	40°10'19.973"N	104°42'04.055"W	0.30	
11204.00	88.980	0.670	7117.19	4043.78	4038.08	222.23	40°10'20.822"N	104°42'04.024"W	2.75	
11289.00	89.070	0.470	7118.64	4128.73	4123.06	223.07	40°10'21.662"N	104°42'04.013"W	0.26	
11374.00	89.170	0.230	7119.94	4213.67	4208.05	223.59	40°10'22.502"N	104°42'04.007"W	0.31	
11459.00	89.220	0.250	7121.14	4298.60	4293.04	223.95	40°10'23.342"N	104°42'04.002"W	0.06	
11544.00	90.550	0.370	7121.31	4383.54	4378.04	224.41	40°10'24.182"N	104°42'03.996"W	1.57	
11629.00	91.260	0.620	7119.96	4468.49	4463.02	225.14	40°10'25.022"N	104°42'03.987"W	0.89	
11714.00	90.890	359.210	7118.37	4553.40	4548.01	225.02	40°10'25.862"N	104°42'03.988"W	1.71	
11800.00	91.140	359.300	7116.85	4639.26	4633.98	223.90	40°10'26.711"N	104°42'04.003"W	0.31	
11885.00	90.120	359.980	7115.91	4724.16	4718.98	223.37	40°10'27.551"N	104°42'04.010"W	1.44	
11970.00	90.550	359.030	7115.41	4809.05	4803.97	222.63	40°10'28.391"N	104°42'04.019"W	1.23	
12055.00	90.700	358.920	7114.49	4893.90	4888.95	221.11	40°10'29.231"N	104°42'04.039"W	0.22	
12140.00	90.890	358.970	7113.31	4978.74	4973.93	219.55	40°10'30.071"N	104°42'04.059"W	0.23	
12225.00	91.480	358.700	7111.55	5063.57	5058.89	217.82	40°10'30.910"N	104°42'04.081"W	0.76	
12261.00	91.520	359.170	7110.61	5099.49	5094.87	217.15	40°10'31.266"N	104°42'04.090"W	1.31	Last BHI MWD+IFR Surveys
12316.00	91.520	359.170	7109.15	5154.39	5149.85	216.35	40°10'31.809"N	104°42'04.100"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 37N-31HZ AWB Ref Wellpath: NICHOLS 37N-31HZ 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	956.00	940.00	16.00	955.96	0.00	0.00	6.85	-0.59
9.625in Casing Surface	16.00	956.00	940.00	16.00	955.96	0.00	0.00	6.85	-0.59
8.75in Open Hole	16.00	7480.00	7464.00	16.00	7094.42	0.00	0.00	315.70	169.68
7in Casing Intermediate	16.00	7470.00	7454.00	16.00	7094.01	0.00	0.00	305.71	169.81
6.125in Open Hole	7470.00	12316.00	4846.00	7094.01	7109.15	305.71	169.81	5149.85	216.35



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
NICHOLS PAD SECTION 31 LINES		-1.00	2.15	90.02	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS PAD SECTION 6 LINES		-1.00	2.15	90.02	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS 37N-31HZ BHL ON PLAT (300'FSL & 1488'FEL,SEC.31) REV-1		7091.00	5151.17	-74.29	3222934.23	1307782.66	40°10'31.822"N	104°42'07.844"W	point
NICHOLS 37N-31HZ BHL (300'FSL & 1204'FEL,SEC.31) REV-3		7096.00	5151.17	210.00	3223218.49	1307785.22	40°10'31.822"N	104°42'04.182"W	point
NICHOLS 37N-31HZ BHL ON PLAT (300'FSL & 1488'FEL,SEC.31) REV-2		7096.00	5151.17	-74.29	3222934.23	1307782.66	40°10'31.822"N	104°42'07.844"W	point
NICHOLS 37N-31HZ LAND BOX		7096.00	0.00	0.00	3223054.87	1302632.60	40°09'40.918"N	104°42'06.887"W	polygon
NICHOLS PAD SEC. 31 HARDLINES (460' SETBACKS)		7117.00	2.15	90.02	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS PAD SEC. 6 HARDLINES (460' SETBACKS)		7117.00	2.15	90.02	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NICHOLS 37N-31HZ AWB Ref Wellpath: NICHOLS 37N-31HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	906.00	Generic gyro - continuous (Standard)	MS ENERGY SURVEYS <116-906>	NICHOLS 37N-31HZ AWB
906.00	7425.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <985-7425>	NICHOLS 37N-31HZ AWB
7425.00	12261.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7539-12261>	NICHOLS 37N-31HZ AWB
12261.00	12316.00	Blind Drilling (std)	Projection to bit	NICHOLS 37N-31HZ AWB



Actual Wellpath Report

NICHOLS 37N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 37N-31HZ (346'FSL & 1352'FEL,SEC.6)
Area	COLORADO	Well	NICHOLS 37N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 37N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	351.980	16.00	Tie-On
116.00	0.550	351.980	116.00	Begin GYRO Surveys
906.00	0.570	14.930	905.97	Tie-Into GYRO Surveys
985.00	0.990	187.150	984.96	Begin BHI MWD+IFR Surveys
7470.00	87.494	359.187	7094.01	7" Casing Point
12261.00	91.520	359.170	7110.61	Last BHI MWD+IFR Surveys
12316.00	91.520	359.170	7109.15	Projection to Bit