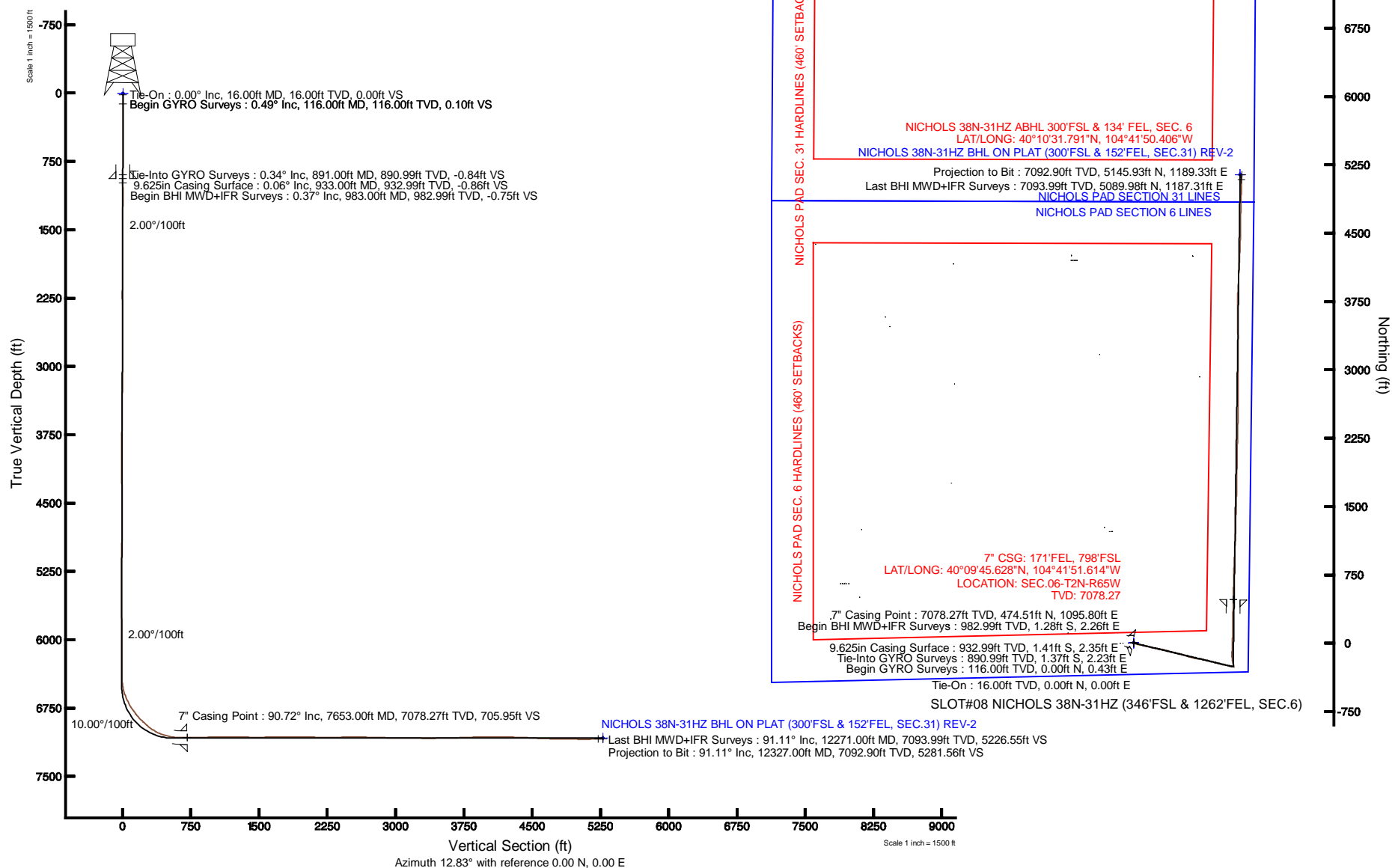


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
 Field: WELD COUNTY (KERR MCGEE) Well: NICHOLS 38N-31HZ
 Facility: SEC.06-T2N-R65W Wellbore: NICHOLS 38N-31HZ PWB

Plot reference wellpath is NICHOLS 38N-31HZ (REV-B.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#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: preacin on 2/22/2013





Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-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	2/22/2013 at 11:57:36 AM
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/NICHOLS_38N-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	-4204.37	623.54	3223144.82	1302635.53	40°09'40.939"N	104°42'05.728"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#08 NICHOLS 38N-31HZ (346'FSL & 1262'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	12.83°



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (160 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	89.580	0.00	0.00	0.00	0.00	40°09'40.939"N	104°42'05.728"W	0.00	
16.00	0.000	89.580	16.00	0.00	0.00	0.00	40°09'40.939"N	104°42'05.728"W	0.00	Tie-On
116.00	0.490	89.580	116.00	0.10	0.00	0.43	40°09'40.939"N	104°42'05.722"W	0.49	Begin GYRO Surveys
216.00	0.420	81.570	216.00	0.33	0.06	1.22	40°09'40.940"N	104°42'05.712"W	0.09	
316.00	0.430	55.420	315.99	0.74	0.33	1.89	40°09'40.942"N	104°42'05.704"W	0.19	
416.00	0.120	205.910	415.99	0.91	0.45	2.15	40°09'40.943"N	104°42'05.700"W	0.54	
516.00	0.170	201.920	515.99	0.66	0.21	2.05	40°09'40.941"N	104°42'05.702"W	0.05	
616.00	0.270	117.660	615.99	0.46	-0.03	2.20	40°09'40.939"N	104°42'05.700"W	0.30	
716.00	0.310	208.100	715.99	0.14	-0.38	2.29	40°09'40.935"N	104°42'05.699"W	0.41	
816.00	0.430	191.150	815.99	-0.50	-0.99	2.09	40°09'40.929"N	104°42'05.701"W	0.16	
891.00	0.340	118.030	890.99	-0.84	-1.37	2.23	40°09'40.925"N	104°42'05.699"W	0.62	Tie-Into GYRO Surveys
983.00	0.370	316.130	982.99	-0.75	-1.28	2.26	40°09'40.926"N	104°42'05.699"W	0.76	Begin BHI MWD+IFR Surveys
1077.00	0.120	28.220	1076.99	-0.49	-0.98	2.10	40°09'40.929"N	104°42'05.701"W	0.37	
1170.00	1.710	104.680	1169.97	-0.44	-1.24	3.49	40°09'40.927"N	104°42'05.683"W	1.81	
1264.00	3.680	106.990	1263.86	-0.70	-2.48	7.73	40°09'40.914"N	104°42'05.628"W	2.10	
1358.00	5.620	108.560	1357.55	-1.38	-4.83	14.98	40°09'40.891"N	104°42'05.535"W	2.07	
1451.00	7.210	110.170	1449.96	-2.58	-8.29	24.77	40°09'40.857"N	104°42'05.409"W	1.72	
1536.00	8.880	107.500	1534.12	-3.80	-12.10	36.04	40°09'40.819"N	104°42'05.264"W	2.01	
1622.00	10.510	105.750	1618.89	-4.74	-16.23	49.92	40°09'40.779"N	104°42'05.085"W	1.93	
1707.00	12.180	102.510	1702.23	-5.08	-20.27	66.14	40°09'40.739"N	104°42'04.876"W	2.10	
1792.00	13.190	102.980	1785.16	-5.06	-24.39	84.34	40°09'40.698"N	104°42'04.642"W	1.19	
1877.00	13.970	102.100	1867.78	-4.96	-28.72	103.82	40°09'40.655"N	104°42'04.391"W	0.95	
1963.00	14.610	102.970	1951.12	-4.85	-33.33	124.54	40°09'40.610"N	104°42'04.124"W	0.78	
2048.00	15.580	104.310	2033.18	-5.17	-38.56	146.05	40°09'40.558"N	104°42'03.847"W	1.21	
2133.00	15.120	103.790	2115.15	-5.66	-44.02	167.88	40°09'40.504"N	104°42'03.566"W	0.56	
2219.00	14.380	104.210	2198.32	-6.10	-49.32	189.12	40°09'40.452"N	104°42'03.292"W	0.87	
2304.00	14.700	98.880	2280.60	-5.61	-53.58	210.01	40°09'40.410"N	104°42'03.023"W	1.62	
2389.00	15.470	101.330	2362.67	-4.58	-57.47	231.78	40°09'40.371"N	104°42'02.743"W	1.18	
2474.00	15.280	99.660	2444.63	-3.66	-61.57	253.94	40°09'40.331"N	104°42'02.457"W	0.57	
2560.00	14.730	100.710	2527.69	-2.63	-65.51	275.85	40°09'40.292"N	104°42'02.175"W	0.71	
2645.00	15.120	101.620	2609.83	-2.00	-69.75	297.33	40°09'40.250"N	104°42'01.898"W	0.54	
2730.00	15.460	103.550	2691.82	-1.91	-74.64	319.20	40°09'40.201"N	104°42'01.617"W	0.72	
2815.00	15.410	105.170	2773.75	-2.51	-80.25	341.12	40°09'40.146"N	104°42'01.334"W	0.51	
2901.00	15.140	104.210	2856.72	-3.25	-85.99	363.03	40°09'40.089"N	104°42'01.052"W	0.43	
2986.00	14.990	104.300	2938.79	-3.80	-91.43	384.44	40°09'40.035"N	104°42'00.776"W	0.18	
3071.00	15.080	103.770	3020.88	-4.27	-96.78	405.84	40°09'39.983"N	104°42'00.501"W	0.19	
3156.00	14.150	103.710	3103.13	-4.61	-101.87	426.67	40°09'39.932"N	104°42'00.233"W	1.09	
3242.00	14.780	104.710	3186.41	-5.13	-107.15	447.49	40°09'39.880"N	104°41'59.964"W	0.79	
3327.00	15.090	104.090	3268.54	-5.73	-112.60	468.71	40°09'39.826"N	104°41'59.691"W	0.41	
3412.00	13.220	103.120	3350.95	-6.02	-117.50	488.91	40°09'39.778"N	104°41'59.431"W	2.22	
3497.00	13.320	103.890	3433.68	-6.26	-122.05	507.88	40°09'39.733"N	104°41'59.187"W	0.24	
3582.00	13.380	103.770	3516.38	-6.60	-126.75	526.94	40°09'39.686"N	104°41'58.941"W	0.08	
3668.00	14.640	109.880	3599.83	-8.10	-132.81	546.82	40°09'39.626"N	104°41'58.685"W	2.26	
3753.00	15.760	108.060	3681.85	-10.47	-140.04	567.90	40°09'39.555"N	104°41'58.413"W	1.43	
3838.00	15.340	108.320	3763.74	-12.60	-147.16	589.55	40°09'39.485"N	104°41'58.135"W	0.50	



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (160 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3923.00	14.670	103.130	3845.85	-13.73	-153.13	610.71	40°09'39.426"N	104°41'57.862"W	1.77	
4009.00	14.700	105.280	3929.04	-14.26	-158.48	631.84	40°09'39.373"N	104°41'57.590"W	0.63	
4094.00	13.970	104.670	4011.39	-15.05	-163.92	652.17	40°09'39.319"N	104°41'57.328"W	0.88	
4179.00	14.590	101.900	4093.77	-15.20	-168.73	672.57	40°09'39.272"N	104°41'57.065"W	1.09	
4265.00	15.870	99.360	4176.75	-14.32	-172.88	694.77	40°09'39.231"N	104°41'56.779"W	1.68	
4350.00	14.380	94.810	4258.80	-12.14	-175.65	716.76	40°09'39.203"N	104°41'56.496"W	2.24	
4435.00	13.680	96.460	4341.27	-9.56	-177.67	737.26	40°09'39.183"N	104°41'56.232"W	0.95	
4520.00	14.700	99.710	4423.67	-7.85	-180.62	757.88	40°09'39.154"N	104°41'55.967"W	1.52	
4605.00	14.810	105.150	4505.87	-7.71	-185.28	779.00	40°09'39.108"N	104°41'55.695"W	1.63	
4690.00	14.890	105.230	4588.03	-8.61	-190.98	800.02	40°09'39.052"N	104°41'55.424"W	0.10	
4776.00	16.050	103.850	4670.92	-9.28	-196.73	822.23	40°09'38.995"N	104°41'55.138"W	1.42	
4861.00	15.360	103.580	4752.74	-9.64	-202.19	844.58	40°09'38.941"N	104°41'54.850"W	0.82	
4946.00	13.100	105.050	4835.13	-10.16	-207.33	864.83	40°09'38.890"N	104°41'54.589"W	2.69	
5031.00	13.410	105.780	4917.87	-11.04	-212.52	883.61	40°09'38.839"N	104°41'54.347"W	0.41	
5117.00	13.870	104.900	5001.44	-11.93	-217.88	903.17	40°09'38.786"N	104°41'54.095"W	0.59	
5202.00	14.320	106.460	5083.88	-12.96	-223.48	923.10	40°09'38.730"N	104°41'53.839"W	0.69	
5287.00	14.730	104.550	5166.17	-13.96	-229.17	943.64	40°09'38.674"N	104°41'53.574"W	0.74	
5372.00	14.270	103.470	5248.46	-14.40	-234.33	964.29	40°09'38.623"N	104°41'53.308"W	0.63	
5458.00	12.270	100.280	5332.16	-14.11	-238.43	983.59	40°09'38.583"N	104°41'53.059"W	2.48	
5543.00	12.570	100.750	5415.17	-13.37	-241.76	1001.56	40°09'38.550"N	104°41'52.828"W	0.37	
5628.00	10.880	100.320	5498.39	-12.69	-244.93	1018.54	40°09'38.518"N	104°41'52.609"W	1.99	
5713.00	10.640	104.280	5581.90	-12.54	-248.30	1034.04	40°09'38.485"N	104°41'52.410"W	0.91	
5798.00	9.330	102.470	5665.61	-12.69	-251.72	1048.37	40°09'38.451"N	104°41'52.225"W	1.58	
5883.00	7.990	94.740	5749.64	-11.82	-253.70	1060.99	40°09'38.432"N	104°41'52.063"W	2.08	
5969.00	7.000	89.690	5834.91	-9.79	-254.16	1072.19	40°09'38.427"N	104°41'51.918"W	1.38	
6054.00	6.490	94.490	5919.32	-7.91	-254.51	1082.15	40°09'38.424"N	104°41'51.790"W	0.89	
6139.00	5.290	104.500	6003.87	-7.33	-255.87	1090.74	40°09'38.410"N	104°41'51.679"W	1.85	
6225.00	3.560	109.020	6089.61	-7.73	-257.73	1097.10	40°09'38.392"N	104°41'51.597"W	2.05	
6310.00	1.960	107.750	6174.51	-8.14	-259.03	1100.98	40°09'38.379"N	104°41'51.548"W	1.88	
6395.00	0.350	78.600	6259.49	-8.16	-259.43	1102.62	40°09'38.375"N	104°41'51.526"W	1.96	
6480.00	0.300	329.010	6344.49	-7.89	-259.18	1102.76	40°09'38.377"N	104°41'51.525"W	0.63	
6519.00	0.290	285.100	6383.49	-7.82	-259.07	1102.61	40°09'38.379"N	104°41'51.527"W	0.57	
6566.00	0.460	326.360	6430.49	-7.68	-258.88	1102.39	40°09'38.380"N	104°41'51.529"W	0.66	
6609.00	4.670	342.200	6473.44	-6.06	-257.07	1101.76	40°09'38.398"N	104°41'51.537"W	9.84	
6652.00	10.760	345.100	6516.03	-0.99	-251.52	1100.19	40°09'38.453"N	104°41'51.558"W	14.19	
6694.00	17.010	345.460	6556.78	7.94	-241.78	1097.64	40°09'38.550"N	104°41'51.591"W	14.88	
6737.00	21.340	344.930	6597.38	20.45	-228.13	1094.02	40°09'38.684"N	104°41'51.637"W	10.08	
6779.00	24.440	346.910	6636.07	35.02	-212.28	1090.07	40°09'38.841"N	104°41'51.688"W	7.60	
6822.00	27.280	351.620	6674.77	52.21	-193.86	1086.62	40°09'39.023"N	104°41'51.732"W	8.15	
6865.00	30.410	354.060	6712.43	71.71	-173.28	1084.05	40°09'39.226"N	104°41'51.765"W	7.78	
6907.00	33.380	356.780	6748.09	92.89	-151.17	1082.30	40°09'39.445"N	104°41'51.788"W	7.85	
6950.00	36.060	359.640	6783.43	116.58	-126.70	1081.56	40°09'39.687"N	104°41'51.798"W	7.29	
6992.00	38.830	2.820	6816.77	141.59	-101.18	1082.13	40°09'39.939"N	104°41'51.790"W	8.04	
7035.00	41.870	3.320	6849.54	169.03	-73.38	1083.62	40°09'40.214"N	104°41'51.771"W	7.11	
7078.00	44.910	2.690	6880.78	198.13	-43.88	1085.17	40°09'40.505"N	104°41'51.751"W	7.14	



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (160 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7120.00	47.570	1.430	6909.83	227.92	-13.57	1086.25	40°09'40.805"N	104°41'51.737"W	6.69	
7163.00	47.790	1.020	6938.78	259.07	18.21	1086.93	40°09'41.119"N	104°41'51.728"W	0.87	
7206.00	52.340	2.140	6966.38	291.40	51.16	1087.85	40°09'41.444"N	104°41'51.716"W	10.77	
7248.00	57.580	1.810	6990.48	325.16	85.52	1089.03	40°09'41.784"N	104°41'51.701"W	12.49	
7291.00	63.070	0.650	7011.76	361.74	122.85	1089.82	40°09'42.153"N	104°41'51.691"W	12.98	
7333.00	67.580	0.240	7029.29	399.01	161.01	1090.12	40°09'42.530"N	104°41'51.687"W	10.77	
7376.00	71.630	0.300	7044.28	438.34	201.30	1090.31	40°09'42.928"N	104°41'51.685"W	9.42	
7418.00	74.780	1.110	7056.41	477.65	241.50	1090.80	40°09'43.325"N	104°41'51.678"W	7.72	
7461.00	78.760	1.460	7066.25	518.65	283.34	1091.74	40°09'43.739"N	104°41'51.666"W	9.29	
7504.00	82.900	1.740	7073.10	560.28	325.77	1092.93	40°09'44.158"N	104°41'51.651"W	9.65	
7546.00	86.450	1.360	7077.00	601.28	367.57	1094.06	40°09'44.571"N	104°41'51.636"W	8.50	
7589.00	89.320	0.750	7078.58	643.35	410.52	1094.85	40°09'44.996"N	104°41'51.626"W	6.82	
7607.00	90.240	0.780	7078.65	660.95	428.52	1095.09	40°09'45.173"N	104°41'51.623"W	5.11	
7653.00†	90.724	0.990	7078.27	705.95	474.51	1095.80	40°09'45.628"N	104°41'51.614"W	1.15	7" Casing Point
7701.00	91.230	1.210	7077.45	752.94	522.50	1096.72	40°09'46.102"N	104°41'51.602"W	1.15	
7787.00	90.830	1.200	7075.90	837.16	608.47	1098.53	40°09'46.952"N	104°41'51.579"W	0.47	
7872.00	91.530	1.170	7074.15	920.40	693.43	1100.29	40°09'47.791"N	104°41'51.556"W	0.82	
7957.00	90.180	1.860	7072.88	1003.73	778.39	1102.54	40°09'48.631"N	104°41'51.527"W	1.78	
8042.00	89.720	2.400	7072.96	1087.26	863.33	1105.70	40°09'49.470"N	104°41'51.486"W	0.83	
8127.00	90.330	2.530	7072.92	1170.87	948.25	1109.35	40°09'50.309"N	104°41'51.439"W	0.73	
8213.00	90.150	2.750	7072.56	1255.51	1034.16	1113.31	40°09'51.158"N	104°41'51.388"W	0.33	
8298.00	88.920	2.410	7073.25	1339.15	1119.07	1117.14	40°09'51.997"N	104°41'51.339"W	1.50	
8383.00	89.750	1.170	7074.24	1422.57	1204.02	1119.79	40°09'52.837"N	104°41'51.304"W	1.76	
8468.00	90.210	1.510	7074.27	1505.87	1288.99	1121.78	40°09'53.677"N	104°41'51.279"W	0.67	
8554.00	90.650	1.430	7073.62	1590.18	1374.96	1123.99	40°09'54.526"N	104°41'51.250"W	0.52	
8639.00	90.740	1.710	7072.59	1673.54	1459.92	1126.32	40°09'55.366"N	104°41'51.220"W	0.35	
8724.00	90.960	1.670	7071.33	1756.93	1544.88	1128.82	40°09'56.205"N	104°41'51.188"W	0.26	
8809.00	89.820	1.290	7070.75	1840.27	1629.85	1131.02	40°09'57.045"N	104°41'51.160"W	1.41	
8894.00	89.810	1.800	7071.02	1923.62	1714.81	1133.31	40°09'57.885"N	104°41'51.130"W	0.60	
8980.00	88.860	359.910	7072.02	2007.74	1800.79	1134.59	40°09'58.734"N	104°41'51.113"W	2.46	
9065.00	89.070	0.840	7073.56	2090.73	1885.78	1135.15	40°09'59.574"N	104°41'51.106"W	1.12	
9150.00	89.540	1.030	7074.59	2173.90	1970.76	1136.54	40°10'00.414"N	104°41'51.088"W	0.60	
9235.00	89.910	0.910	7075.00	2257.08	2055.75	1137.97	40°10'01.254"N	104°41'51.070"W	0.46	
9320.00	90.490	1.310	7074.70	2340.31	2140.73	1139.62	40°10'02.094"N	104°41'51.048"W	0.83	
9406.00	90.930	1.140	7073.63	2424.55	2226.70	1141.46	40°10'02.943"N	104°41'51.025"W	0.55	
9491.00	90.990	1.870	7072.21	2507.88	2311.66	1143.69	40°10'03.783"N	104°41'50.996"W	0.86	
9576.00	89.500	1.240	7071.85	2591.24	2396.63	1146.00	40°10'04.622"N	104°41'50.966"W	1.90	
9661.00	88.180	359.570	7073.57	2674.23	2481.60	1146.60	40°10'05.462"N	104°41'50.958"W	2.50	
9746.00	88.600	359.910	7075.96	2756.99	2566.57	1146.21	40°10'06.302"N	104°41'50.963"W	0.64	
9831.00	88.760	0.220	7077.91	2839.86	2651.54	1146.31	40°10'07.141"N	104°41'50.962"W	0.41	
9917.00	88.820	0.730	7079.73	2923.85	2737.52	1147.02	40°10'07.991"N	104°41'50.953"W	0.60	
10002.00	88.760	0.640	7081.53	3006.93	2822.50	1148.04	40°10'08.831"N	104°41'50.940"W	0.13	
10087.00	89.560	0.310	7082.77	3089.96	2907.48	1148.74	40°10'09.671"N	104°41'50.930"W	1.02	
10172.00	89.310	359.770	7083.61	3172.84	2992.48	1148.80	40°10'10.511"N	104°41'50.930"W	0.70	
10257.00	89.690	359.950	7084.35	3255.67	3077.47	1148.60	40°10'11.350"N	104°41'50.932"W	0.49	



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH DATA (160 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10342.00	89.870	359.460	7084.68	3338.45	3162.47	1148.16	40°10'12.190"N	104°41'50.938"W	0.61	
10427.00	90.190	359.510	7084.63	3421.16	3247.47	1147.39	40°10'13.030"N	104°41'50.948"W	0.38	
10512.00	90.890	359.470	7083.83	3503.86	3332.46	1146.64	40°10'13.870"N	104°41'50.957"W	0.82	
10598.00	91.360	359.450	7082.14	3587.52	3418.44	1145.83	40°10'14.720"N	104°41'50.968"W	0.55	
10683.00	91.820	359.420	7079.78	3670.17	3503.40	1144.99	40°10'15.560"N	104°41'50.978"W	0.54	
10768.00	92.030	359.460	7076.93	3752.82	3588.35	1144.16	40°10'16.399"N	104°41'50.989"W	0.25	
10853.00	91.390	359.770	7074.39	3835.53	3673.31	1143.59	40°10'17.239"N	104°41'50.996"W	0.84	
10938.00	91.630	0.520	7072.15	3918.43	3758.28	1143.80	40°10'18.078"N	104°41'50.994"W	0.93	
11023.00	91.330	2.390	7069.96	4001.73	3843.22	1145.96	40°10'18.918"N	104°41'50.966"W	2.23	
11108.00	89.870	3.090	7069.07	4085.40	3928.12	1150.02	40°10'19.757"N	104°41'50.913"W	1.90	
11193.00	89.190	2.270	7069.76	4169.07	4013.02	1154.00	40°10'20.596"N	104°41'50.862"W	1.25	
11278.00	87.740	2.760	7072.04	4252.67	4097.90	1157.73	40°10'21.434"N	104°41'50.814"W	1.80	
11363.00	88.020	2.890	7075.19	4336.32	4182.74	1161.91	40°10'22.273"N	104°41'50.760"W	0.36	
11448.00	88.020	2.940	7078.12	4420.00	4267.58	1166.23	40°10'23.111"N	104°41'50.704"W	0.06	
11534.00	87.260	2.150	7081.66	4504.54	4353.42	1170.05	40°10'23.959"N	104°41'50.655"W	1.27	
11619.00	87.130	1.270	7085.82	4587.85	4438.28	1172.58	40°10'24.798"N	104°41'50.622"W	1.05	
11704.00	88.540	0.990	7089.03	4671.02	4523.20	1174.26	40°10'25.637"N	104°41'50.601"W	1.69	
11789.00	88.790	0.550	7091.02	4754.12	4608.17	1175.40	40°10'26.477"N	104°41'50.586"W	0.60	
11875.00	89.130	1.550	7092.58	4838.30	4694.14	1176.97	40°10'27.326"N	104°41'50.566"W	1.23	
11959.00	89.010	1.520	7093.94	4920.66	4778.10	1179.22	40°10'28.156"N	104°41'50.537"W	0.15	
12045.00	89.480	1.210	7095.07	5004.94	4864.07	1181.27	40°10'29.006"N	104°41'50.510"W	0.65	
12130.00	90.220	1.630	7095.30	5088.26	4949.04	1183.38	40°10'29.845"N	104°41'50.483"W	1.00	
12215.00	90.490	1.390	7094.77	5171.60	5034.01	1185.62	40°10'30.685"N	104°41'50.454"W	0.42	
12271.00	91.110	2.070	7093.99	5226.55	5089.98	1187.31	40°10'31.238"N	104°41'50.432"W	1.64	Last BHI MWD+IFR Surveys
12327.00	91.110	2.070	7092.90	5281.56	5145.93	1189.33	40°10'31.791"N	104°41'50.406"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 38N-31HZ AWB Ref Wellpath: NICHOLS 38N-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	933.00	917.00	16.00	932.99	0.00	0.00	-1.41	2.35
9.625in Casing Surface	16.00	933.00	917.00	16.00	932.99	0.00	0.00	-1.41	2.35
8.75in Open Hole	933.00	7663.00	6730.00	932.99	7078.13	-1.41	2.35	484.51	1095.98
7in Casing Intermediate	16.00	7653.00	7637.00	16.00	7078.27	0.00	0.00	474.51	1095.80
6.125in Open Hole	7653.00	12327.00	4674.00	7078.27	7092.90	474.51	1095.80	5145.93	1189.33



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-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	0.02	0.03	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS PAD SECTION 6 LINES		-1.00	0.02	0.03	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS 38N-31HZ BHL ON PLAT (300'FSL & 152'FEL, SEC.31) REV-2		7083.00	5146.13	1171.73	3224270.12	1307791.78	40°10'31.793"N	104°41'50.633"W	point
NICHOLS 38N-31HZ BHL ON PLAT (300'FSL & 152'FEL, SEC.31) REV-1		7116.00	5146.13	1171.73	3224270.12	1307791.78	40°10'31.793"N	104°41'50.633"W	point
NICHOLS PAD SEC. 31 HARDLINES (460' SETBACKS)		7117.00	0.02	0.03	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon
NICHOLS PAD SEC. 6 HARDLINES (460' SETBACKS)		7117.00	0.02	0.03	3223144.85	1302635.55	40°09'40.939"N	104°42'05.728"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NICHOLS 38N-31HZ AWB Ref Wellpath: NICHOLS 38N-31HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	891.00	Generic gyro - continuous (Standard)	MS ENERGY SURVEYS <116-891>	NICHOLS 38N-31HZ AWB
891.00	7607.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <983-7607>	NICHOLS 38N-31HZ AWB
7607.00	12271.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7701-12271>	NICHOLS 38N-31HZ AWB
12271.00	12327.00	Blind Drilling (std)	Projection to bit	NICHOLS 38N-31HZ AWB



Actual Wellpath Report

NICHOLS 38N-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 NICHOLS 38N-31HZ (346'FSL & 1262'FEL, SEC.6)
Area	COLORADO	Well	NICHOLS 38N-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 38N-31HZ AWB
Facility	SEC.06-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	89.580	16.00	Tie-On
116.00	0.490	89.580	116.00	Begin GYRO Surveys
891.00	0.340	118.030	890.99	Tie-Into GYRO Surveys
983.00	0.370	316.130	982.99	Begin BHI MWD+IFR Surveys
7653.00	90.724	0.990	7078.27	7" Casing Point
12271.00	91.110	2.070	7093.99	Last BHI MWD+IFR Surveys
12327.00	91.110	2.070	7092.90	Projection to Bit