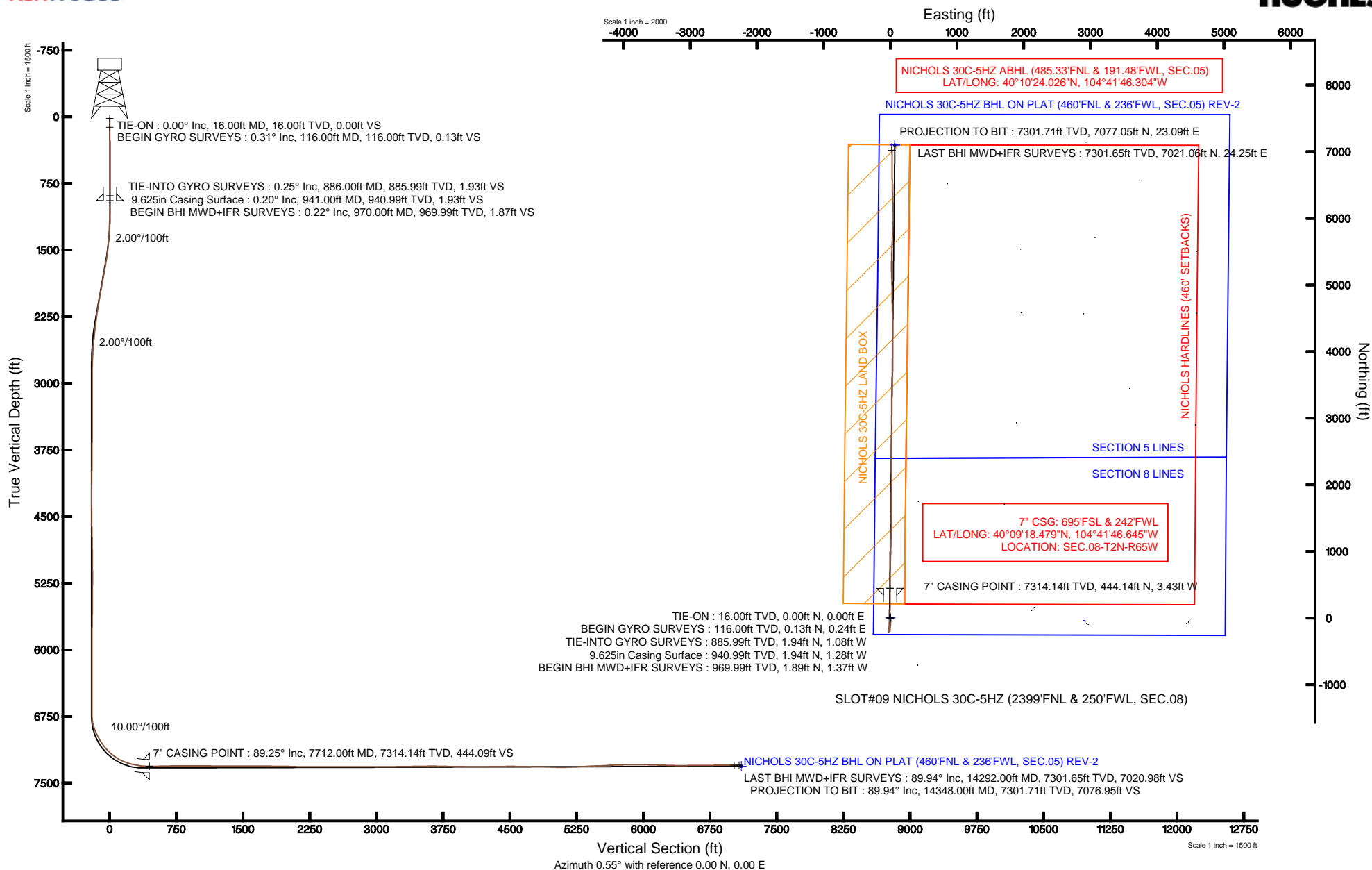


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Field: WELD COUNTY (KERR MCGEE) Well: NICHOLS 30C-5HZ
Facility: SEC.08-T2N-R65W Wellbore: NICHOLS 30C-5HZ PWB

Plot reference wellpath is NICHOLS 30C-5HZ (REV-A.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: 4962 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 4/12/2013





Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-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	Wilsjef02
Scale	0.999958	Report Generated	4/12/2013 at 09:36:01
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/NICHOLS_30C-5HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	30826.96	27130.10	3224654.34	1299932.23	40°09'14.090"N	104°41'46.601"W
Facility Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"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	4962.00ft
Horizontal Reference Pt	Slot	XTREME 20 (RKB) to Mean Sea Level	4962.00ft
Vertical Reference Pt	XTREME 20 (RKB)	XTREME 20 (RKB) to Mud Line at Slot (SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08))	4962.00ft
MD Reference Pt	XTREME 20 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.55°



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (181 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	60.680	0.00	0.00	0.00	0.00	40°09'14.090"N	104°41'46.601"W	0.00	
16.00	0.000	60.680	16.00	0.00	0.00	0.00	40°09'14.090"N	104°41'46.601"W	0.00	TIE-ON
116.00	0.310	60.680	116.00	0.13	0.13	0.24	40°09'14.091"N	104°41'46.598"W	0.31	BEGIN GYRO SURVEYS
216.00	0.160	14.380	216.00	0.40	0.40	0.51	40°09'14.094"N	104°41'46.594"W	0.23	
316.00	0.300	333.750	316.00	0.77	0.77	0.43	40°09'14.098"N	104°41'46.596"W	0.21	
416.00	0.170	264.040	416.00	0.99	0.99	0.16	40°09'14.100"N	104°41'46.599"W	0.29	
516.00	0.420	336.720	516.00	1.31	1.31	-0.13	40°09'14.103"N	104°41'46.603"W	0.40	
616.00	0.180	258.770	615.99	1.61	1.62	-0.43	40°09'14.106"N	104°41'46.607"W	0.42	
716.00	0.140	308.740	715.99	1.66	1.66	-0.68	40°09'14.106"N	104°41'46.610"W	0.14	
816.00	0.150	312.970	815.99	1.82	1.83	-0.87	40°09'14.108"N	104°41'46.612"W	0.01	
886.00	0.250	288.490	885.99	1.93	1.94	-1.08	40°09'14.109"N	104°41'46.615"W	0.18	TIE-INTO GYRO SURVEYS
970.00	0.220	226.090	969.99	1.87	1.89	-1.37	40°09'14.109"N	104°41'46.619"W	0.29	BEGIN BHI MWD+IFR SURVEYS
1062.00	1.160	203.610	1061.99	0.89	0.91	-1.87	40°09'14.099"N	104°41'46.625"W	1.04	
1154.00	2.190	205.210	1153.95	-1.56	-1.53	-2.99	40°09'14.075"N	104°41'46.640"W	1.12	
1246.00	2.510	202.430	1245.87	-5.03	-4.99	-4.51	40°09'14.041"N	104°41'46.659"W	0.37	
1334.00	3.750	198.970	1333.73	-9.55	-9.49	-6.18	40°09'13.996"N	104°41'46.681"W	1.42	
1419.00	4.780	190.350	1418.50	-15.67	-15.60	-7.72	40°09'13.936"N	104°41'46.700"W	1.42	
1504.00	6.640	186.450	1503.07	-24.05	-23.97	-8.91	40°09'13.853"N	104°41'46.716"W	2.23	
1589.00	8.110	185.290	1587.37	-34.92	-34.82	-10.02	40°09'13.746"N	104°41'46.730"W	1.74	
1674.00	10.170	183.990	1671.28	-48.38	-48.28	-11.09	40°09'13.613"N	104°41'46.744"W	2.44	
1760.00	10.430	183.700	1755.90	-63.74	-63.62	-12.12	40°09'13.461"N	104°41'46.757"W	0.31	
1845.00	10.370	183.730	1839.50	-79.06	-78.94	-13.11	40°09'13.310"N	104°41'46.770"W	0.07	
1930.00	10.300	183.650	1923.12	-94.28	-94.15	-14.10	40°09'13.160"N	104°41'46.783"W	0.08	
2015.00	9.860	182.070	2006.81	-109.15	-109.01	-14.84	40°09'13.013"N	104°41'46.792"W	0.61	
2100.00	9.530	182.440	2090.60	-123.45	-123.31	-15.41	40°09'12.871"N	104°41'46.799"W	0.40	
2185.00	9.390	183.040	2174.44	-137.41	-137.27	-16.07	40°09'12.734"N	104°41'46.808"W	0.20	
2271.00	7.920	180.850	2259.46	-150.35	-150.20	-16.53	40°09'12.606"N	104°41'46.814"W	1.75	
2356.00	6.730	184.020	2343.76	-161.18	-161.02	-16.97	40°09'12.499"N	104°41'46.820"W	1.48	
2441.00	6.420	184.740	2428.21	-170.89	-170.73	-17.71	40°09'12.403"N	104°41'46.829"W	0.38	
2526.00	4.930	187.490	2512.79	-179.25	-179.08	-18.58	40°09'12.320"N	104°41'46.840"W	1.78	
2612.00	4.370	190.380	2598.50	-186.15	-185.97	-19.65	40°09'12.252"N	104°41'46.854"W	0.71	
2697.00	3.130	192.260	2683.32	-191.61	-191.42	-20.73	40°09'12.198"N	104°41'46.868"W	1.47	
2782.00	1.870	194.110	2768.24	-195.23	-195.04	-21.56	40°09'12.163"N	104°41'46.879"W	1.49	
2868.00	1.070	183.950	2854.21	-197.40	-197.20	-21.96	40°09'12.141"N	104°41'46.884"W	0.97	
2953.00	0.320	118.120	2939.20	-198.30	-198.10	-21.80	40°09'12.132"N	104°41'46.882"W	1.16	
3038.00	0.250	120.820	3024.20	-198.50	-198.31	-21.43	40°09'12.130"N	104°41'46.877"W	0.08	
3123.00	0.270	120.100	3109.20	-198.70	-198.51	-21.10	40°09'12.128"N	104°41'46.873"W	0.02	
3209.00	0.150	181.490	3195.20	-198.91	-198.72	-20.93	40°09'12.126"N	104°41'46.871"W	0.28	
3294.00	0.090	243.220	3280.20	-199.05	-198.86	-20.99	40°09'12.125"N	104°41'46.871"W	0.16	
3379.00	0.360	291.570	3365.20	-198.99	-198.79	-21.30	40°09'12.126"N	104°41'46.875"W	0.36	
3464.00	0.490	261.080	3450.20	-198.95	-198.75	-21.91	40°09'12.126"N	104°41'46.883"W	0.30	
3549.00	1.010	266.470	3535.19	-199.06	-198.85	-23.01	40°09'12.125"N	104°41'46.897"W	0.62	
3635.00	1.010	272.250	3621.18	-199.09	-198.87	-24.53	40°09'12.125"N	104°41'46.917"W	0.12	
3721.00	0.520	147.380	3707.17	-199.40	-199.17	-25.07	40°09'12.122"N	104°41'46.924"W	1.60	
3806.00	0.920	119.810	3792.17	-200.06	-199.83	-24.27	40°09'12.115"N	104°41'46.914"W	0.61	



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3891.00	0.570	138.420	3877.16	-200.70	-200.49	-23.40	40°09'12.109"N	104°41'46.902"W	0.50	
3976.00	0.740	143.650	3962.15	-201.45	-201.25	-22.79	40°09'12.101"N	104°41'46.895"W	0.21	
4061.00	0.890	148.980	4047.14	-202.46	-202.25	-22.13	40°09'12.091"N	104°41'46.886"W	0.20	
4147.00	1.080	182.480	4133.13	-203.84	-203.64	-21.82	40°09'12.078"N	104°41'46.882"W	0.69	
4232.00	0.110	196.800	4218.13	-204.71	-204.52	-21.88	40°09'12.069"N	104°41'46.883"W	1.15	
4317.00	0.840	275.490	4303.12	-204.74	-204.53	-22.52	40°09'12.069"N	104°41'46.891"W	0.97	
4402.00	0.600	4.810	4388.12	-204.24	-204.03	-23.11	40°09'12.074"N	104°41'46.899"W	1.21	
4488.00	0.720	332.120	4474.11	-203.32	-203.10	-23.32	40°09'12.083"N	104°41'46.901"W	0.45	
4573.00	0.870	305.910	4559.11	-202.47	-202.25	-24.09	40°09'12.091"N	104°41'46.911"W	0.46	
4658.00	1.280	9.790	4644.09	-201.16	-200.94	-24.45	40°09'12.104"N	104°41'46.916"W	1.40	
4744.00	1.270	7.690	4730.07	-199.27	-199.05	-24.16	40°09'12.123"N	104°41'46.912"W	0.06	
4829.00	0.860	350.630	4815.06	-197.71	-197.49	-24.14	40°09'12.138"N	104°41'46.912"W	0.60	
4914.00	1.160	356.990	4900.04	-196.22	-196.00	-24.29	40°09'12.153"N	104°41'46.914"W	0.38	
4999.00	1.040	53.510	4985.03	-194.90	-194.68	-23.71	40°09'12.166"N	104°41'46.906"W	1.23	
5084.00	0.970	81.270	5070.02	-194.32	-194.11	-22.38	40°09'12.172"N	104°41'46.889"W	0.57	
5169.00	0.920	69.950	5155.01	-193.96	-193.77	-21.03	40°09'12.175"N	104°41'46.872"W	0.23	
5255.00	1.080	110.820	5240.99	-194.00	-193.82	-19.62	40°09'12.175"N	104°41'46.854"W	0.83	
5340.00	1.110	104.770	5325.98	-194.48	-194.31	-18.08	40°09'12.170"N	104°41'46.834"W	0.14	
5425.00	1.020	87.940	5410.96	-194.65	-194.50	-16.53	40°09'12.168"N	104°41'46.814"W	0.38	
5510.00	0.440	153.790	5495.96	-194.90	-194.76	-15.63	40°09'12.165"N	104°41'46.802"W	1.10	
5595.00	1.180	153.130	5580.95	-195.97	-195.84	-15.09	40°09'12.155"N	104°41'46.795"W	0.87	
5680.00	1.460	148.430	5665.93	-197.66	-197.54	-14.13	40°09'12.138"N	104°41'46.783"W	0.35	
5765.00	1.200	146.610	5750.90	-199.32	-199.21	-13.07	40°09'12.121"N	104°41'46.769"W	0.31	
5850.00	1.150	143.420	5835.89	-200.74	-200.63	-12.07	40°09'12.107"N	104°41'46.756"W	0.10	
5936.00	0.190	90.110	5921.88	-201.43	-201.33	-11.41	40°09'12.100"N	104°41'46.748"W	1.22	
6021.00	0.570	10.610	6006.88	-201.01	-200.91	-11.19	40°09'12.105"N	104°41'46.745"W	0.67	
6106.00	0.380	12.910	6091.87	-200.32	-200.22	-11.05	40°09'12.111"N	104°41'46.743"W	0.22	
6191.00	0.420	56.220	6176.87	-199.87	-199.77	-10.73	40°09'12.116"N	104°41'46.739"W	0.35	
6276.00	0.520	57.620	6261.87	-199.48	-199.39	-10.15	40°09'12.120"N	104°41'46.732"W	0.12	
6362.00	0.600	100.040	6347.87	-199.34	-199.26	-9.37	40°09'12.121"N	104°41'46.722"W	0.48	
6447.00	0.270	100.870	6432.86	-199.45	-199.38	-8.74	40°09'12.120"N	104°41'46.714"W	0.39	
6532.00	0.370	148.340	6517.86	-199.72	-199.65	-8.40	40°09'12.117"N	104°41'46.709"W	0.32	
6618.00	0.200	150.100	6603.86	-200.08	-200.02	-8.18	40°09'12.113"N	104°41'46.706"W	0.20	
6685.00	0.460	151.630	6670.86	-200.42	-200.35	-7.99	40°09'12.110"N	104°41'46.704"W	0.39	
6703.00	0.420	126.740	6688.86	-200.52	-200.46	-7.90	40°09'12.109"N	104°41'46.703"W	1.08	
6746.00	0.390	27.210	6731.86	-200.49	-200.42	-7.71	40°09'12.109"N	104°41'46.700"W	1.44	
6788.00	4.790	7.530	6773.81	-198.62	-198.55	-7.42	40°09'12.128"N	104°41'46.697"W	10.54	
6831.00	10.640	9.050	6816.40	-192.90	-192.85	-6.56	40°09'12.184"N	104°41'46.685"W	13.61	
6873.00	16.180	4.680	6857.24	-183.22	-183.18	-5.47	40°09'12.280"N	104°41'46.671"W	13.40	
6916.00	20.060	4.120	6898.10	-169.88	-169.85	-4.45	40°09'12.412"N	104°41'46.658"W	9.03	
6958.00	24.170	3.100	6937.00	-154.10	-154.07	-3.47	40°09'12.567"N	104°41'46.646"W	9.83	
7001.00	27.110	6.940	6975.76	-135.56	-135.55	-1.81	40°09'12.750"N	104°41'46.624"W	7.85	
7044.00	30.890	6.140	7013.37	-114.83	-114.84	0.56	40°09'12.955"N	104°41'46.594"W	8.84	
7087.00	34.470	4.180	7049.55	-91.69	-91.72	2.63	40°09'13.184"N	104°41'46.567"W	8.68	
7129.00	37.400	3.560	7083.56	-67.09	-67.13	4.29	40°09'13.427"N	104°41'46.546"W	7.03	



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (181 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7172.00	41.140	0.460	7116.84	-39.89	-39.94	5.21	40°09'13.695"N	104°41'46.534"W	9.82	
7214.00	45.750	355.880	7147.34	-11.06	-11.10	4.24	40°09'13.980"N	104°41'46.546"W	13.29	
7257.00	49.780	350.820	7176.24	20.49	20.49	0.51	40°09'14.292"N	104°41'46.594"W	12.79	
7299.00	54.420	354.030	7202.04	53.29	53.33	-3.82	40°09'14.617"N	104°41'46.650"W	12.58	
7342.00	58.830	359.880	7225.70	89.10	89.16	-5.68	40°09'14.971"N	104°41'46.674"W	15.30	
7384.00	63.170	1.120	7246.06	125.82	125.88	-5.36	40°09'15.334"N	104°41'46.670"W	10.65	
7427.00	68.420	0.850	7263.69	165.03	165.08	-4.68	40°09'15.721"N	104°41'46.661"W	12.22	
7469.00	73.370	1.010	7277.43	204.70	204.75	-4.04	40°09'16.113"N	104°41'46.653"W	11.79	
7512.00	75.750	0.760	7288.88	246.14	246.19	-3.40	40°09'16.523"N	104°41'46.645"W	5.56	
7555.00	80.040	0.250	7297.89	288.18	288.22	-3.03	40°09'16.938"N	104°41'46.640"W	10.04	
7598.00	81.040	0.480	7304.96	330.59	330.63	-2.76	40°09'17.357"N	104°41'46.637"W	2.38	
7640.00	83.730	359.410	7310.52	372.22	372.26	-2.80	40°09'17.769"N	104°41'46.637"W	6.88	
7665.00	86.900	359.540	7312.57	397.12	397.17	-3.03	40°09'18.015"N	104°41'46.640"W	12.69	
7712.00†	89.255	359.476	7314.14	444.09	444.14	-3.43	40°09'18.479"N	104°41'46.645"W	5.01	7" CASING POINT
7760.00	91.660	359.410	7313.76	492.07	492.13	-3.90	40°09'18.953"N	104°41'46.651"W	5.01	
7852.00	91.040	359.670	7311.59	584.03	584.10	-4.64	40°09'19.862"N	104°41'46.661"W	0.73	
7942.00	91.320	1.290	7309.74	674.01	674.08	-3.88	40°09'20.751"N	104°41'46.651"W	1.83	
8034.00	89.930	1.490	7308.73	765.99	766.04	-1.65	40°09'21.660"N	104°41'46.622"W	1.53	
8126.00	90.460	2.250	7308.42	857.97	857.99	1.35	40°09'22.569"N	104°41'46.584"W	1.01	
8218.00	90.240	2.290	7307.86	949.92	949.92	4.99	40°09'23.477"N	104°41'46.537"W	0.24	
8310.00	89.020	0.930	7308.45	1041.90	1041.88	7.58	40°09'24.386"N	104°41'46.503"W	1.99	
8401.00	89.600	1.550	7309.55	1132.89	1132.85	9.55	40°09'25.285"N	104°41'46.478"W	0.93	
8493.00	89.720	1.530	7310.10	1224.87	1224.81	12.02	40°09'26.194"N	104°41'46.446"W	0.13	
8585.00	90.120	0.860	7310.22	1316.87	1316.79	13.94	40°09'27.103"N	104°41'46.421"W	0.85	
8677.00	89.910	359.700	7310.20	1408.86	1408.79	14.39	40°09'28.012"N	104°41'46.416"W	1.28	
8769.00	90.400	359.960	7309.95	1500.85	1500.79	14.12	40°09'28.921"N	104°41'46.419"W	0.60	
8861.00	89.420	358.800	7310.10	1592.83	1592.78	13.12	40°09'29.830"N	104°41'46.432"W	1.65	
8953.00	89.290	359.910	7311.13	1684.81	1684.77	12.08	40°09'30.739"N	104°41'46.445"W	1.21	
9045.00	89.660	0.480	7311.97	1776.80	1776.76	12.40	40°09'31.648"N	104°41'46.441"W	0.74	
9137.00	90.000	1.440	7312.25	1868.80	1868.75	13.94	40°09'32.557"N	104°41'46.421"W	1.11	
9229.00	88.610	0.820	7313.36	1960.78	1960.72	15.75	40°09'33.466"N	104°41'46.398"W	1.65	
9320.00	88.090	0.210	7315.98	2051.74	2051.68	16.57	40°09'34.365"N	104°41'46.388"W	0.88	
9412.00	89.290	358.310	7318.09	2143.69	2143.64	15.38	40°09'35.274"N	104°41'46.403"W	2.44	
9504.00	89.540	359.390	7319.03	2235.64	2235.62	13.54	40°09'36.182"N	104°41'46.427"W	1.20	
9596.00	89.910	359.570	7319.47	2327.63	2327.61	12.70	40°09'37.092"N	104°41'46.437"W	0.45	
9687.00	90.150	0.170	7319.42	2418.62	2418.61	12.49	40°09'37.991"N	104°41'46.440"W	0.71	
9778.00	90.400	0.930	7318.98	2509.62	2509.60	13.37	40°09'38.890"N	104°41'46.429"W	0.88	
9864.00	90.460	1.490	7318.34	2595.61	2595.58	15.18	40°09'39.740"N	104°41'46.405"W	0.65	
9949.00	90.520	2.170	7317.61	2680.58	2680.54	17.90	40°09'40.579"N	104°41'46.370"W	0.80	
10034.00	89.290	1.110	7317.75	2765.57	2765.50	20.33	40°09'41.419"N	104°41'46.339"W	1.91	
10119.00	89.110	0.110	7318.94	2850.56	2850.48	21.24	40°09'42.259"N	104°41'46.327"W	1.20	
10204.00	89.970	359.500	7319.62	2935.55	2935.48	20.95	40°09'43.099"N	104°41'46.331"W	1.24	
10290.00	90.520	359.200	7319.25	3021.53	3021.47	19.97	40°09'43.948"N	104°41'46.344"W	0.73	
10375.00	90.550	359.640	7318.46	3106.50	3106.46	19.11	40°09'44.788"N	104°41'46.355"W	0.52	
10460.00	90.730	0.250	7317.51	3191.49	3191.46	19.03	40°09'45.628"N	104°41'46.356"W	0.75	



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10545.00	91.040	0.740	7316.20	3276.48	3276.44	19.76	40°09'46.468"N	104°41'46.346"W	0.68	
10631.00	90.490	1.360	7315.05	3362.47	3362.42	21.34	40°09'47.318"N	104°41'46.326"W	0.96	
10715.00	90.830	1.740	7314.08	3446.45	3446.38	23.61	40°09'48.147"N	104°41'46.297"W	0.61	
10801.00	90.980	2.760	7312.72	3532.40	3532.31	26.99	40°09'48.996"N	104°41'46.253"W	1.20	
10886.00	90.210	2.970	7311.84	3617.33	3617.20	31.24	40°09'49.835"N	104°41'46.199"W	0.94	
10971.00	88.860	1.910	7312.53	3702.28	3702.11	34.85	40°09'50.674"N	104°41'46.152"W	2.02	
11056.00	88.820	0.180	7314.25	3787.25	3787.08	36.40	40°09'51.514"N	104°41'46.132"W	2.04	
11142.00	89.100	0.970	7315.81	3873.24	3873.06	37.27	40°09'52.364"N	104°41'46.121"W	0.97	
11227.00	89.480	359.170	7316.87	3958.22	3958.05	37.37	40°09'53.204"N	104°41'46.120"W	2.16	
11312.00	89.540	359.540	7317.59	4043.20	4043.04	36.41	40°09'54.044"N	104°41'46.132"W	0.44	
11398.00	90.250	358.940	7317.75	4129.18	4129.03	35.27	40°09'54.893"N	104°41'46.147"W	1.08	
11483.00	90.180	359.000	7317.43	4214.15	4214.02	33.74	40°09'55.733"N	104°41'46.166"W	0.11	
11568.00	90.860	359.540	7316.66	4299.12	4299.00	32.66	40°09'56.573"N	104°41'46.180"W	1.02	
11653.00	90.800	0.050	7315.43	4384.10	4384.00	32.36	40°09'57.413"N	104°41'46.184"W	0.60	
11739.00	90.340	359.720	7314.57	4470.09	4469.99	32.19	40°09'58.263"N	104°41'46.186"W	0.66	
11824.00	89.570	359.140	7314.64	4555.08	4554.99	31.34	40°09'59.103"N	104°41'46.197"W	1.13	
11909.00	88.590	358.160	7316.00	4640.02	4639.95	29.34	40°09'59.942"N	104°41'46.223"W	1.63	
11994.00	89.200	359.400	7317.64	4724.96	4724.91	27.53	40°10'00.782"N	104°41'46.246"W	1.63	
12079.00	90.340	0.310	7317.98	4809.95	4809.91	27.31	40°10'01.622"N	104°41'46.249"W	1.72	
12164.00	87.530	358.990	7319.56	4894.91	4894.88	26.79	40°10'02.461"N	104°41'46.256"W	3.65	
12250.00	87.410	358.390	7323.36	4980.79	4980.77	24.83	40°10'03.310"N	104°41'46.281"W	0.71	
12335.00	89.600	357.790	7325.58	5065.67	5065.69	22.00	40°10'04.149"N	104°41'46.318"W	2.67	
12420.00	92.310	358.120	7324.16	5150.57	5150.62	18.97	40°10'04.989"N	104°41'46.357"W	3.21	
12505.00	92.950	359.340	7320.26	5235.43	5235.51	17.08	40°10'05.828"N	104°41'46.381"W	1.62	
12590.00	92.770	0.870	7316.02	5320.32	5320.40	17.24	40°10'06.666"N	104°41'46.379"W	1.81	
12676.00	92.520	0.980	7312.05	5406.23	5406.30	18.63	40°10'07.515"N	104°41'46.361"W	0.32	
12761.00	92.090	1.880	7308.63	5491.15	5491.20	20.75	40°10'08.354"N	104°41'46.334"W	1.17	
12847.00	93.170	2.260	7304.69	5577.03	5577.05	23.85	40°10'09.203"N	104°41'46.294"W	1.33	
12932.00	92.560	3.410	7300.44	5661.85	5661.84	28.05	40°10'10.041"N	104°41'46.240"W	1.53	
13017.00	91.320	2.180	7297.56	5746.73	5746.69	32.19	40°10'10.879"N	104°41'46.186"W	2.05	
13102.00	90.400	2.920	7296.28	5831.67	5831.59	35.97	40°10'11.718"N	104°41'46.138"W	1.39	
13179.00	89.810	2.030	7296.14	5908.62	5908.52	39.30	40°10'12.478"N	104°41'46.095"W	1.39	
13264.00	89.960	1.240	7296.31	5993.61	5993.48	41.72	40°10'13.318"N	104°41'46.064"W	0.95	
13350.00	88.480	358.320	7297.48	6079.58	6079.46	41.39	40°10'14.168"N	104°41'46.068"W	3.81	
13435.00	88.320	358.510	7299.86	6164.49	6164.40	39.04	40°10'15.007"N	104°41'46.098"W	0.29	
13520.00	88.620	358.490	7302.13	6249.40	6249.34	36.82	40°10'15.846"N	104°41'46.127"W	0.35	
13606.00	88.610	357.280	7304.21	6335.28	6335.25	33.64	40°10'16.695"N	104°41'46.168"W	1.41	
13691.00	89.870	357.680	7305.33	6420.15	6420.16	29.91	40°10'17.534"N	104°41'46.216"W	1.56	
13776.00	91.110	359.720	7304.61	6505.10	6505.13	27.98	40°10'18.374"N	104°41'46.241"W	2.81	
13861.00	90.550	359.870	7303.38	6590.08	6590.12	27.67	40°10'19.214"N	104°41'46.244"W	0.68	
13947.00	89.410	358.570	7303.41	6676.06	6676.11	26.50	40°10'20.064"N	104°41'46.260"W	2.01	
14032.00	91.420	1.130	7302.79	6761.04	6761.09	26.28	40°10'20.903"N	104°41'46.262"W	3.83	
14117.00	90.030	359.240	7301.71	6846.02	6846.08	26.56	40°10'21.743"N	104°41'46.259"W	2.76	
14203.00	90.060	359.470	7301.65	6932.00	6932.07	25.59	40°10'22.593"N	104°41'46.271"W	0.27	
14292.00	89.940	358.810	7301.65	7020.98	7021.06	24.25	40°10'23.472"N	104°41'46.289"W	0.75	LAST BHI MWD+IFR SURVEYS



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (181 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14348.00	89.940	358.810	7301.71	7076.95	7077.05	23.09	40°10'24.026"N	104°41'46.304"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 30C-5HZ AWB Ref Wellpath: NICHOLS 30C-5HZ 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	941.00	925.00	16.00	940.99	0.00	0.00	1.94	-1.28
9.625in Casing Surface	16.00	941.00	925.00	16.00	940.99	0.00	0.00	1.94	-1.28
8.75in Open Hole	941.00	7720.00	6779.00	940.99	7314.22	1.94	-1.28	452.14	-3.51
7in Casing Intermediate	16.00	7712.00	7696.00	16.00	7314.14	0.00	0.00	444.14	-3.43
6.125in Open Hole	7712.00	14348.00	6636.00	7314.14	7301.71	444.14	-3.43	7077.05	23.09

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
NICHOLS SECTION 5 LINES		34.00	-44.96	2895.43	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS SECTION 8 LINES		34.00	-44.96	2895.43	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
B&M 12-5 150' CIRCLE		7083.00	5410.27	252.54	3224857.82	1305344.33	40°10'07.555"N	104°41'43.348"W	circle
B&M 11-5 150' CIRCLE		7198.50	7061.92	242.56	3224832.87	1306995.75	40°10'23.876"N	104°41'43.476"W	circle
NICHOLS HARDLINES (460' SETBACKS)		7234.00	-44.96	2895.43	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS 30C-5HZ BHL ON PLAT (460'FNL & 236'FWL, SEC.05) REV-2		7313.00	7102.38	67.61	3224657.57	1307034.62	40°10'24.276"N	104°41'45.730"W	point
NICHOLS 30C-5HZ BHL ON PLAT (460'FNL & 236'FWL, SEC.05) REV-1		7314.00	7102.38	67.61	3224657.57	1307034.62	40°10'24.276"N	104°41'45.730"W	point
NICHOLS 30C-5HZ LAND BOX		7314.00	0.00	0.00	3224654.34	1299932.23	40°09'14.090"N	104°41'46.601"W	polygon



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH COMPOSITION - Ref Wellbore: NICHOLS 30C-5HZ AWB Ref Wellpath: NICHOLS 30C-5HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	886.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <116-886>	NICHOLS 30C-5HZ AWB
886.00	7665.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <970-7665>	NICHOLS 30C-5HZ AWB
7665.00	14292.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7760-14292>	NICHOLS 30C-5HZ AWB
14292.00	14348.00	Blind Drilling (std)	Projection to bit	NICHOLS 30C-5HZ AWB



Actual Wellpath Report

NICHOLS 30C-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 NICHOLS 30C-5HZ (2399'FNL & 250'FWL, SEC.08)
Area	COLORADO	Well	NICHOLS 30C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 30C-5HZ AWB
Facility	SEC.08-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	60.680	16.00	TIE-ON
116.00	0.310	60.680	116.00	BEGIN GYRO SURVEYS
886.00	0.250	288.490	885.99	TIE-INTO GYRO SURVEYS
970.00	0.220	226.090	969.99	BEGIN BHI MWD+IFR SURVEYS
7712.00	89.255	359.476	7314.14	7" CASING POINT
14292.00	89.940	358.810	7301.65	LAST BHI MWD+IFR SURVEYS
14348.00	89.940	358.810	7301.71	PROJECTION TO BIT