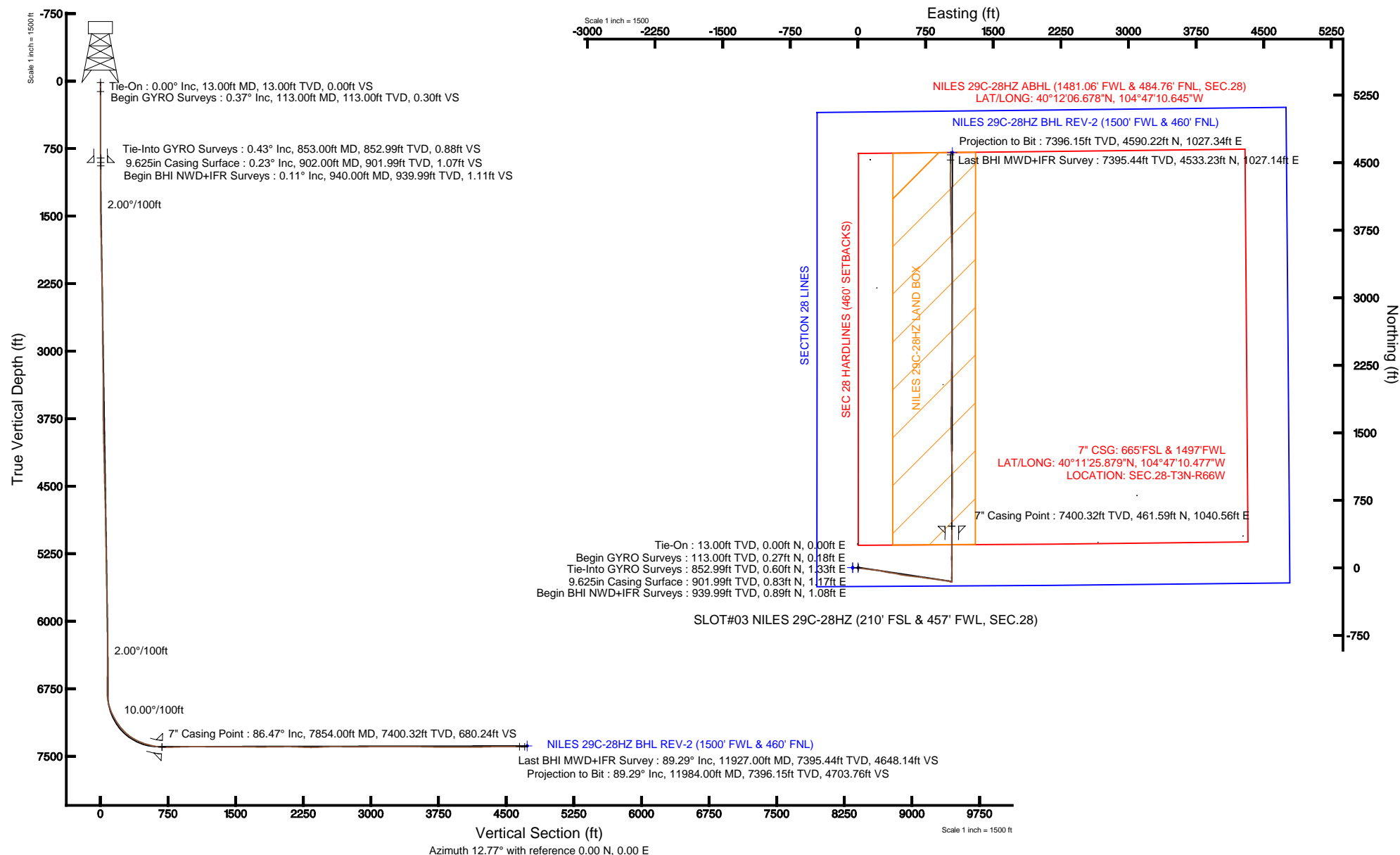


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
 Field: WELD COUNTY (KERR MCGEE) Well: NILES 29C-28HZ
 Facility: SEC.28-T3N-R66W Wellbore: NILES 29C-28HZ PWB

Plot reference wellpath is NILES 29C-28HZ (REV-A.1) 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: 4947.6 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wiljel02 on 4/9/2013





Actual Wellpath Report

NILES 29C-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-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	4/9/2013 at 08:16:00
Convergence at slot	0.46° East	Database/Source file	WellArchitectDB/NILES_29C-28HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.40	59.91	3198363.86	1312582.41	40°11'21.318"N	104°47'23.885"W
Facility Reference Pt			3198303.94	1312582.33	40°11'21.322"N	104°47'24.657"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	4947.60ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RKB) to Mean Sea Level	4947.60ft
Vertical Reference Pt	ENSIGN 145 (RKB)	ENSIGN 145 (RKB) to Mud Line at Slot (SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28))	4947.60ft
MD Reference Pt	ENSIGN 145 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	12.62°



Actual Wellpath Report

NILES 29C-28HZ AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (143 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	34.500	0.00	0.00	0.00	0.00	40°11'21.318"N	104°47'23.885"W	0.00	
13.00	0.000	34.500	13.00	0.00	0.00	0.00	40°11'21.318"N	104°47'23.885"W	0.00	Tie-On
113.00	0.370	34.500	113.00	0.30	0.27	0.18	40°11'21.321"N	104°47'23.883"W	0.37	Begin GYRO Surveys
213.00	0.120	164.120	213.00	0.51	0.43	0.39	40°11'21.322"N	104°47'23.880"W	0.46	
313.00	0.360	216.810	313.00	0.13	0.08	0.23	40°11'21.319"N	104°47'23.882"W	0.30	
413.00	0.310	137.730	413.00	-0.31	-0.37	0.23	40°11'21.314"N	104°47'23.882"W	0.43	
513.00	0.360	118.440	512.99	-0.55	-0.72	0.69	40°11'21.311"N	104°47'23.876"W	0.12	
613.00	0.440	60.820	612.99	-0.38	-0.68	1.30	40°11'21.311"N	104°47'23.868"W	0.39	
713.00	0.300	0.600	712.99	0.13	-0.24	1.64	40°11'21.316"N	104°47'23.864"W	0.39	
813.00	0.410	333.000	812.99	0.66	0.34	1.48	40°11'21.321"N	104°47'23.866"W	0.20	
853.00	0.430	328.850	852.99	0.88	0.60	1.33	40°11'21.324"N	104°47'23.868"W	0.09	Tie-Into GYRO Surveys
940.00	0.110	276.120	939.99	1.10	0.89	1.08	40°11'21.327"N	104°47'23.871"W	0.43	Begin BHI NWD+IFR Surveys
1033.00	0.740	142.210	1032.98	0.71	0.42	1.36	40°11'21.322"N	104°47'23.867"W	0.88	
1124.00	2.530	117.710	1123.94	-0.19	-0.97	3.50	40°11'21.308"N	104°47'23.840"W	2.07	
1217.00	3.680	111.280	1216.81	-1.17	-3.01	8.10	40°11'21.288"N	104°47'23.781"W	1.29	
1308.00	5.900	100.580	1307.49	-1.44	-4.93	15.42	40°11'21.269"N	104°47'23.686"W	2.62	
1400.00	7.570	94.410	1398.85	-0.41	-6.27	26.11	40°11'21.256"N	104°47'23.549"W	1.98	
1492.00	9.080	96.140	1489.88	1.27	-7.51	39.37	40°11'21.244"N	104°47'23.378"W	1.66	
1523.00	9.070	96.550	1520.49	1.81	-8.05	44.23	40°11'21.238"N	104°47'23.315"W	0.21	
1614.00	11.230	98.100	1610.06	3.26	-10.12	60.13	40°11'21.218"N	104°47'23.110"W	2.39	
1706.00	11.960	97.570	1700.18	4.81	-12.63	78.45	40°11'21.193"N	104°47'22.874"W	0.80	
1799.00	11.840	95.390	1791.18	6.85	-14.80	97.50	40°11'21.172"N	104°47'22.629"W	0.50	
1891.00	11.940	98.180	1881.21	8.78	-17.04	116.32	40°11'21.150"N	104°47'22.386"W	0.63	
1985.00	12.240	98.970	1973.12	10.16	-19.98	135.78	40°11'21.121"N	104°47'22.135"W	0.36	
2080.00	12.160	96.110	2065.98	11.94	-22.61	155.68	40°11'21.095"N	104°47'21.879"W	0.64	
2175.00	12.480	97.120	2158.79	14.05	-24.95	175.81	40°11'21.071"N	104°47'21.620"W	0.41	
2270.00	10.970	95.350	2251.81	16.18	-27.06	195.00	40°11'21.051"N	104°47'21.372"W	1.63	
2365.00	11.110	96.810	2345.05	18.25	-28.99	213.09	40°11'21.031"N	104°47'21.139"W	0.33	
2460.00	12.330	99.220	2438.07	19.77	-31.70	232.19	40°11'21.005"N	104°47'20.893"W	1.38	
2554.00	11.340	99.830	2530.07	20.82	-34.89	251.20	40°11'20.973"N	104°47'20.648"W	1.06	
2649.00	11.270	102.630	2623.23	21.27	-38.51	269.46	40°11'20.937"N	104°47'20.413"W	0.58	
2744.00	12.490	103.320	2716.19	21.14	-42.91	288.52	40°11'20.894"N	104°47'20.167"W	1.29	
2839.00	13.570	103.580	2808.74	20.83	-47.89	309.35	40°11'20.845"N	104°47'19.899"W	1.14	
2934.00	13.220	97.790	2901.16	21.55	-51.98	330.95	40°11'20.804"N	104°47'19.621"W	1.46	
3029.00	12.470	97.520	2993.78	23.38	-54.80	351.88	40°11'20.776"N	104°47'19.351"W	0.79	
3124.00	12.420	98.720	3086.55	24.98	-57.69	372.14	40°11'20.748"N	104°47'19.090"W	0.28	
3219.00	12.160	99.980	3179.37	26.14	-60.97	392.10	40°11'20.715"N	104°47'18.833"W	0.39	
3314.00	10.750	96.990	3272.48	27.47	-63.78	410.75	40°11'20.688"N	104°47'18.592"W	1.61	
3409.00	9.170	99.760	3366.05	28.71	-66.15	427.00	40°11'20.664"N	104°47'18.383"W	1.74	
3503.00	8.790	102.500	3458.89	29.10	-68.97	441.40	40°11'20.636"N	104°47'18.198"W	0.61	
3598.00	9.800	106.600	3552.65	28.55	-72.85	456.23	40°11'20.598"N	104°47'18.006"W	1.27	
3693.00	10.860	103.690	3646.11	27.82	-77.28	472.67	40°11'20.554"N	104°47'17.794"W	1.24	
3788.00	11.700	96.720	3739.28	28.64	-80.52	490.94	40°11'20.522"N	104°47'17.559"W	1.68	
3883.00	11.970	99.020	3832.26	30.25	-83.20	510.23	40°11'20.496"N	104°47'17.311"W	0.57	
3978.00	13.120	98.190	3924.99	31.70	-86.28	530.64	40°11'20.465"N	104°47'17.048"W	1.23	



Actual Wellpath Report

NILES 29C-28HZ AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (143 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4072.00	14.120	96.170	4016.34	33.81	-89.03	552.60	40°11'20.438"N	104°47'16.765"W	1.18	
4167.00	13.520	97.300	4108.59	36.14	-91.69	575.13	40°11'20.412"N	104°47'16.474"W	0.69	
4262.00	12.490	97.690	4201.15	38.05	-94.47	596.33	40°11'20.384"N	104°47'16.201"W	1.09	
4357.00	11.150	95.910	4294.14	40.01	-96.79	615.64	40°11'20.361"N	104°47'15.952"W	1.46	
4452.00	11.700	97.100	4387.26	42.00	-98.93	634.34	40°11'20.340"N	104°47'15.711"W	0.63	
4547.00	13.380	95.870	4479.99	44.22	-101.24	654.83	40°11'20.317"N	104°47'15.447"W	1.79	
4641.00	11.680	96.530	4571.74	46.51	-103.44	675.11	40°11'20.296"N	104°47'15.186"W	1.81	
4736.00	13.430	95.170	4664.47	48.96	-105.53	695.65	40°11'20.275"N	104°47'14.921"W	1.87	
4831.00	13.350	98.550	4756.89	51.16	-108.15	717.48	40°11'20.249"N	104°47'14.640"W	0.83	
4926.00	12.020	99.940	4849.57	52.40	-111.49	738.07	40°11'20.216"N	104°47'14.375"W	1.44	
5021.00	12.470	98.070	4942.41	53.68	-114.64	757.97	40°11'20.185"N	104°47'14.118"W	0.63	
5116.00	12.470	97.320	5035.16	55.44	-117.38	778.30	40°11'20.158"N	104°47'13.856"W	0.17	
5211.00	12.570	96.860	5127.91	57.42	-119.92	798.74	40°11'20.133"N	104°47'13.593"W	0.15	
5305.00	10.950	98.530	5219.93	59.08	-122.47	817.72	40°11'20.108"N	104°47'13.348"W	1.76	
5400.00	10.020	98.580	5313.34	60.31	-125.04	834.82	40°11'20.082"N	104°47'13.128"W	0.98	
5495.00	10.550	96.850	5406.82	61.76	-127.31	851.63	40°11'20.060"N	104°47'12.912"W	0.65	
5590.00	11.300	96.820	5500.09	63.58	-129.45	869.50	40°11'20.039"N	104°47'12.681"W	0.79	
5684.00	11.380	97.410	5592.26	65.35	-131.74	887.84	40°11'20.016"N	104°47'12.445"W	0.15	
5779.00	11.900	98.180	5685.30	66.95	-134.35	906.83	40°11'19.990"N	104°47'12.200"W	0.57	
5874.00	10.650	101.550	5778.47	67.88	-137.50	925.13	40°11'19.959"N	104°47'11.965"W	1.49	
5969.00	10.810	97.010	5871.81	68.91	-140.34	942.57	40°11'19.931"N	104°47'11.740"W	0.91	
6063.00	11.320	97.320	5964.06	70.62	-142.59	960.47	40°11'19.909"N	104°47'11.509"W	0.55	
6158.00	8.790	97.380	6057.60	72.14	-144.72	976.92	40°11'19.888"N	104°47'11.297"W	2.66	
6253.00	8.470	99.520	6151.52	73.18	-146.80	991.02	40°11'19.867"N	104°47'11.116"W	0.48	
6348.00	6.740	101.470	6245.68	73.67	-149.07	1003.38	40°11'19.845"N	104°47'10.956"W	1.84	
6443.00	6.010	101.900	6340.09	73.85	-151.20	1013.71	40°11'19.824"N	104°47'10.823"W	0.77	
6538.00	4.360	108.060	6434.70	73.57	-153.35	1022.01	40°11'19.802"N	104°47'10.716"W	1.83	
6632.00	3.440	103.110	6528.48	73.20	-155.10	1028.16	40°11'19.785"N	104°47'10.637"W	1.04	
6727.00	2.570	116.330	6623.35	72.67	-156.69	1032.84	40°11'19.769"N	104°47'10.577"W	1.17	
6822.00	2.330	119.810	6718.27	71.60	-158.59	1036.43	40°11'19.751"N	104°47'10.530"W	0.30	
6844.00	2.280	116.180	6740.25	71.36	-159.01	1037.21	40°11'19.746"N	104°47'10.520"W	0.70	
6917.00	1.630	40.400	6813.22	71.94	-158.86	1039.19	40°11'19.748"N	104°47'10.495"W	3.36	
6962.00	6.840	358.300	6858.08	75.11	-155.69	1039.52	40°11'19.779"N	104°47'10.491"W	12.74	
7011.00	12.740	358.520	6906.35	83.18	-147.36	1039.29	40°11'19.862"N	104°47'10.493"W	12.04	
7058.00	19.050	357.690	6951.53	95.63	-134.51	1038.85	40°11'19.989"N	104°47'10.499"W	13.43	
7106.00	22.110	359.230	6996.46	111.99	-117.64	1038.41	40°11'20.155"N	104°47'10.505"W	6.47	
7153.00	25.180	0.960	7039.51	130.39	-98.80	1038.46	40°11'20.341"N	104°47'10.504"W	6.70	
7201.00	31.410	3.970	7081.76	152.78	-76.09	1039.50	40°11'20.566"N	104°47'10.491"W	13.31	
7248.00	33.090	1.680	7121.51	177.49	-51.04	1040.72	40°11'20.813"N	104°47'10.475"W	4.42	
7296.00	37.250	359.970	7160.74	204.54	-23.40	1041.10	40°11'21.087"N	104°47'10.470"W	8.91	
7343.00	42.320	357.710	7196.84	233.73	6.65	1040.46	40°11'21.384"N	104°47'10.478"W	11.22	
7391.00	46.180	358.880	7231.22	266.18	40.12	1039.48	40°11'21.714"N	104°47'10.491"W	8.22	
7438.00	51.430	357.960	7262.17	300.45	75.46	1038.49	40°11'22.063"N	104°47'10.504"W	11.27	
7486.00	56.260	1.270	7290.48	338.20	114.20	1038.26	40°11'22.446"N	104°47'10.507"W	11.50	
7533.00	62.390	0.790	7314.45	377.78	154.59	1038.99	40°11'22.845"N	104°47'10.497"W	13.07	



Actual Wellpath Report

NILES 29C-28HZ AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7580.00	66.740	0.710	7334.63	419.31	197.03	1039.54	40°11'23.265"N	104°47'10.490"W	9.26	
7628.00	69.090	0.310	7352.67	462.80	241.50	1039.94	40°11'23.704"N	104°47'10.485"W	4.96	
7675.00	73.440	0.300	7367.77	506.27	286.00	1040.17	40°11'24.144"N	104°47'10.482"W	9.26	
7723.00	76.680	0.590	7380.14	551.60	332.37	1040.53	40°11'24.602"N	104°47'10.477"W	6.78	
7770.00	78.960	0.930	7390.06	596.56	378.30	1041.14	40°11'25.056"N	104°47'10.469"W	4.90	
7802.00	81.830	359.960	7395.39	627.40	409.85	1041.39	40°11'25.368"N	104°47'10.466"W	9.45	
7825.00	84.710	358.660	7398.09	649.62	432.68	1041.11	40°11'25.594"N	104°47'10.470"W	13.72	
7854.00†	86.475	359.158	7400.32	677.71	461.59	1040.56	40°11'25.879"N	104°47'10.477"W	6.32	7" Casing Point
7929.00	91.040	0.440	7401.94	750.81	536.55	1040.30	40°11'26.620"N	104°47'10.480"W	6.32	
7993.00	91.690	1.490	7400.42	813.47	600.52	1041.38	40°11'27.252"N	104°47'10.466"W	1.93	
8088.00	91.940	1.920	7397.41	906.71	695.43	1044.20	40°11'28.190"N	104°47'10.430"W	0.52	
8183.00	90.430	0.730	7395.45	999.84	790.38	1046.40	40°11'29.128"N	104°47'10.401"W	2.02	
8277.00	89.870	0.380	7395.20	1091.77	884.38	1047.31	40°11'30.057"N	104°47'10.390"W	0.70	
8372.00	89.190	359.340	7395.98	1184.42	979.37	1047.08	40°11'30.996"N	104°47'10.393"W	1.31	
8467.00	90.300	358.630	7396.40	1276.74	1074.36	1045.39	40°11'31.935"N	104°47'10.414"W	1.39	
8562.00	89.960	358.090	7396.19	1368.81	1169.32	1042.67	40°11'32.873"N	104°47'10.449"W	0.67	
8657.00	89.750	358.120	7396.43	1460.78	1264.26	1039.53	40°11'33.811"N	104°47'10.490"W	0.22	
8751.00	89.470	358.200	7397.07	1551.80	1358.21	1036.51	40°11'34.740"N	104°47'10.528"W	0.31	
8846.00	89.810	359.720	7397.66	1644.11	1453.19	1034.79	40°11'35.678"N	104°47'10.551"W	1.64	
8941.00	89.410	358.260	7398.31	1736.44	1548.17	1033.12	40°11'36.617"N	104°47'10.572"W	1.59	
9036.00	90.550	1.330	7398.34	1829.06	1643.16	1032.78	40°11'37.555"N	104°47'10.577"W	3.45	
9131.00	90.800	1.160	7397.22	1922.18	1738.13	1034.84	40°11'38.494"N	104°47'10.550"W	0.32	
9226.00	90.800	1.630	7395.90	2015.36	1833.09	1037.15	40°11'39.432"N	104°47'10.520"W	0.49	
9321.00	89.560	359.940	7395.60	2108.34	1928.08	1038.45	40°11'40.371"N	104°47'10.503"W	2.21	
9416.00	87.020	358.860	7398.43	2200.77	2023.02	1037.46	40°11'41.309"N	104°47'10.516"W	2.91	
9510.00	88.010	0.880	7402.51	2292.36	2116.93	1037.25	40°11'42.237"N	104°47'10.519"W	2.39	
9605.00	92.580	1.490	7402.02	2385.45	2211.88	1039.21	40°11'43.176"N	104°47'10.493"W	4.85	
9700.00	92.710	1.250	7397.64	2478.53	2306.75	1041.48	40°11'44.113"N	104°47'10.464"W	0.29	
9795.00	90.550	0.550	7394.94	2571.50	2401.69	1042.97	40°11'45.051"N	104°47'10.445"W	2.39	
9890.00	88.920	0.250	7395.37	2664.35	2496.69	1043.64	40°11'45.990"N	104°47'10.436"W	1.74	
9985.00	89.470	359.430	7396.71	2756.99	2591.68	1043.37	40°11'46.929"N	104°47'10.439"W	1.04	
10079.00	90.400	359.190	7396.82	2848.46	2685.67	1042.24	40°11'47.858"N	104°47'10.454"W	1.02	
10174.00	90.640	359.760	7395.95	2940.97	2780.66	1041.37	40°11'48.796"N	104°47'10.465"W	0.65	
10269.00	90.800	1.490	7394.76	3033.89	2875.64	1042.40	40°11'49.735"N	104°47'10.452"W	1.83	
10364.00	90.300	0.820	7393.85	3126.99	2970.62	1044.32	40°11'50.673"N	104°47'10.427"W	0.88	
10459.00	89.130	0.870	7394.32	3219.99	3065.61	1045.72	40°11'51.612"N	104°47'10.409"W	1.23	
10554.00	89.900	0.120	7395.12	3312.87	3160.60	1046.54	40°11'52.551"N	104°47'10.398"W	1.13	
10648.00	90.150	359.360	7395.08	3404.50	3254.60	1046.11	40°11'53.480"N	104°47'10.404"W	0.85	
10743.00	89.750	359.490	7395.17	3496.99	3349.59	1045.16	40°11'54.418"N	104°47'10.416"W	0.44	
10838.00	89.160	358.400	7396.07	3589.30	3444.57	1043.41	40°11'55.357"N	104°47'10.438"W	1.30	
10932.00	88.420	358.270	7398.06	3680.37	3538.51	1040.68	40°11'56.285"N	104°47'10.474"W	0.80	
11028.00	90.240	358.350	7399.18	3773.39	3634.46	1037.85	40°11'57.233"N	104°47'10.510"W	1.90	
11123.00	90.460	358.930	7398.60	3865.57	3729.43	1035.59	40°11'58.172"N	104°47'10.539"W	0.65	
11217.00	89.260	358.210	7398.83	3956.76	3823.39	1033.25	40°11'59.101"N	104°47'10.569"W	1.49	
11312.00	89.410	358.680	7399.93	4048.86	3918.35	1030.67	40°12'00.039"N	104°47'10.602"W	0.52	



Actual Wellpath Report

NILES 29C-28HZ AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (143 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11407.00	90.830	359.220	7399.73	4141.17	4013.33	1028.93	40°12'00.978"N	104°47'10.625"W	1.60	
11502.00	90.860	358.870	7398.33	4233.51	4108.31	1027.35	40°12'01.916"N	104°47'10.645"W	0.37	
11596.00	91.910	359.630	7396.06	4324.93	4202.27	1026.12	40°12'02.845"N	104°47'10.661"W	1.38	
11691.00	90.610	359.690	7393.97	4417.49	4297.25	1025.55	40°12'03.783"N	104°47'10.668"W	1.37	
11786.00	89.440	0.810	7393.93	4510.28	4392.24	1025.97	40°12'04.722"N	104°47'10.663"W	1.70	
11881.00	89.380	0.340	7394.91	4603.19	4487.23	1026.92	40°12'05.661"N	104°47'10.650"W	0.50	
11927.00	89.290	0.200	7395.44	4648.12	4533.23	1027.14	40°12'06.115"N	104°47'10.648"W	0.36	Last BHI MWD+IFR Survey
11984.00	89.290	0.200	7396.15	4703.78	4590.22	1027.34	40°12'06.678"N	104°47'10.645"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: NILES 29C-28HZ AWB Ref Wellpath: NILES 29C-28HZ 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	902.00	889.00	13.00	901.99	0.00	0.00	0.83	1.17
9.625in Casing Surface	13.00	902.00	889.00	13.00	901.99	0.00	0.00	0.83	1.17
8.75in Open Hole	902.00	7879.00	6977.00	901.99	7401.52	0.83	1.17	486.56	1040.29
7in Casing Intermediate	13.00	7854.00	7841.00	13.00	7400.32	0.00	0.00	461.59	1040.56
6.125in Open Hole	7854.00	11948.00	4094.00	7400.32	7395.70	461.59	1040.56	4554.23	1027.21



Actual Wellpath Report

NILES 29C-28HZ AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 28 LINES		0.30	0.40	-59.76	3198304.10	1312582.33	40°11'21.322"N	104°47'24.655"W	polygon
SEC 28 HARDLINES (460' SETBACKS)		7300.60	0.40	-59.76	3198304.10	1312582.33	40°11'21.322"N	104°47'24.655"W	polygon
NILES 29C-28HZ BHL ON PLAT REV-1 (1430' FWL & 460' FNL)		7387.00	4614.98	976.28	3199303.11	1317204.85	40°12'06.923"N	104°47'11.303"W	point
NILES 29C-28HZ BHL REV-2 (1500' FWL & 460' FNL)		7387.00	4614.98	1046.28	3199373.10	1317205.41	40°12'06.923"N	104°47'10.401"W	point
NILES 29C-28HZ LAND BOX		7399.00	0.00	0.00	3198363.86	1312582.41	40°11'21.318"N	104°47'23.885"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NILES 29C-28HZ AWB Ref Wellpath: NILES 29C-28HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	853.00	Generic gyro - continuous (Standard)	LIGHTNING WIRELINE GYRO <113-853>	NILES 29C-28HZ AWB
853.00	7825.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <940-7825>	NILES 29C-28HZ AWB
7825.00	11927.00	OnTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7929-11927>	NILES 29C-28HZ AWB
11927.00	11984.00	Blind Drilling (std)	Projection to bit	NILES 29C-28HZ AWB



Actual Wellpath Report

NILES 29C-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NILES 29C-8HZ (210' FSL & 457' FWL, SEC.28)
Area	COLORADO	Well	NILES 29C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29C-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
13.00	0.000	34.500	13.00	Tie-On	
113.00	0.370	34.500	113.00	Begin GYRO Surveys	
853.00	0.430	328.850	852.99	Tie-Into GYRO Surveys	
940.00	0.110	276.120	939.99	Begin BHI NWD+IFR Surveys	
7854.00	86.475	359.158	7400.32	7" Casing Point	
11927.00	89.290	0.200	7395.44	Last BHI MWD+IFR Survey	
11984.00	89.290	0.200	7396.15	Projection to Bit	