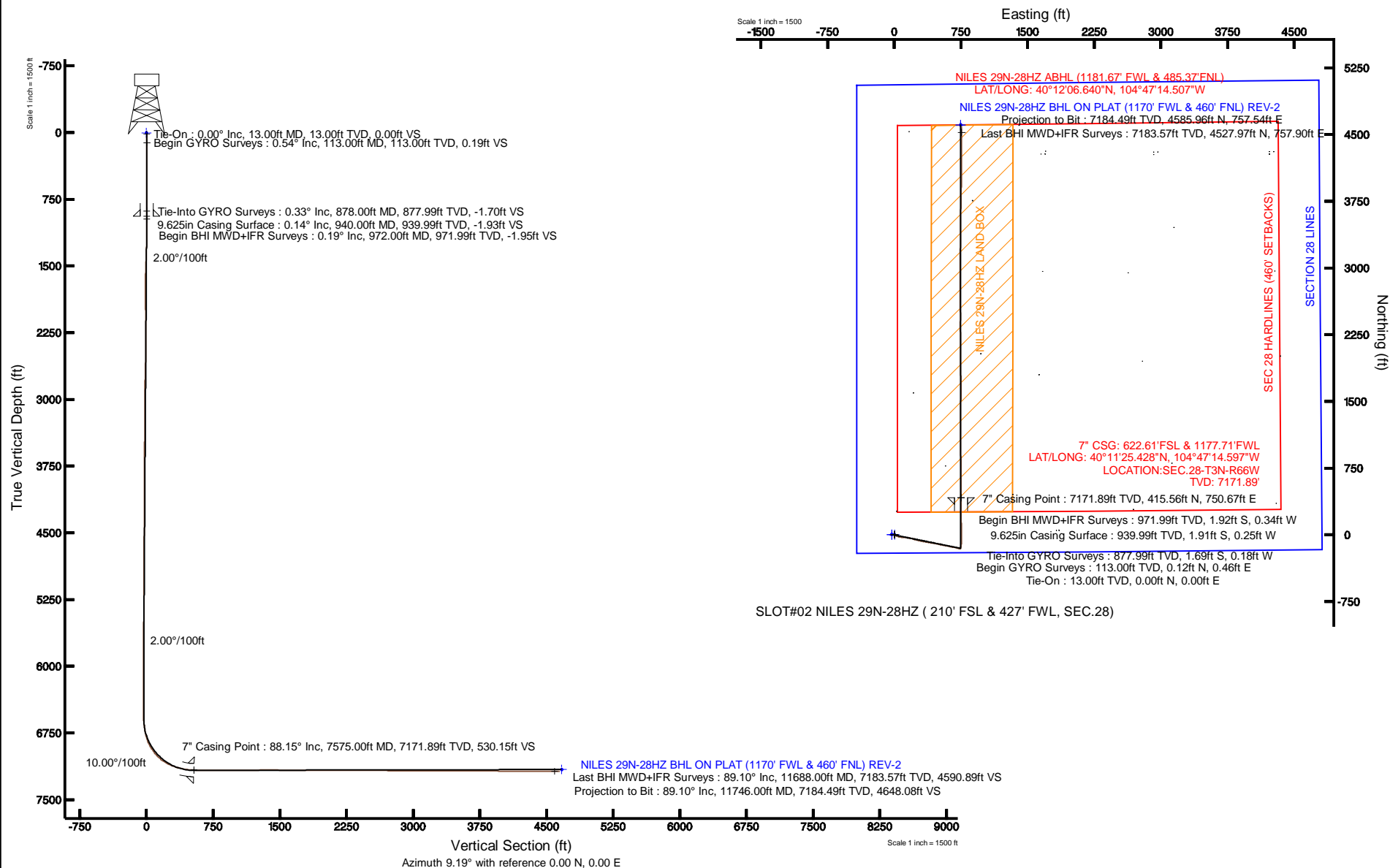


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
 Field: WELD COUNTY (KERR MCGEE) Well: NILES 29N-28HZ
 Facility: SEC.28-T3N-R66W Wellbore: NILES 29N-28HZ PWB

Plot reference wellpath is NILES 29N-28HZ (REV-B.0) PWP

True vertical depths are referenced to ENSIGN 145 (RT)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 145 (RT)	North Reference: True north
ENSIGN 145 (RT) to Mean Sea Level: 4947 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 2/24/2013





Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-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	Precain
Scale	0.999957	Report Generated	2/25/2013 at 8:26:12 PM
Convergence at slot	0.46° East	Database/Source file	WellArchitectDB/NILES_29N-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	0.00	30.03	3198333.98	1312582.57	40°11'21.322"N	104°47'24.270"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 (RT) to Facility Vertical Datum	4947.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RT) to Mean Sea Level	4947.00ft
Vertical Reference Pt	ENSIGN 145 (RT)	ENSIGN 145 (RT) to Mud Line at Slot (SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28))	4947.00ft
MD Reference Pt	ENSIGN 145 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	9.38°



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (147 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	75.740	0.00	0.00	0.00	0.00	40°11'21.322"N	104°47'24.270"W	0.00	
13.00	0.000	75.740	13.00	0.00	0.00	0.00	40°11'21.322"N	104°47'24.270"W	0.00	Tie-On
113.00	0.540	75.740	113.00	0.19	0.12	0.46	40°11'21.323"N	104°47'24.264"W	0.54	Begin GYRO Surveys
213.00	0.180	65.940	213.00	0.46	0.30	1.06	40°11'21.325"N	104°47'24.256"W	0.36	
313.00	0.210	335.160	313.00	0.70	0.53	1.12	40°11'21.327"N	104°47'24.256"W	0.28	
413.00	0.270	221.670	413.00	0.65	0.52	0.89	40°11'21.327"N	104°47'24.259"W	0.40	
513.00	0.320	263.150	512.99	0.38	0.31	0.46	40°11'21.325"N	104°47'24.264"W	0.21	
613.00	0.320	190.710	612.99	0.02	0.00	0.13	40°11'21.322"N	104°47'24.268"W	0.38	
713.00	0.570	199.260	712.99	-0.75	-0.74	-0.09	40°11'21.315"N	104°47'24.271"W	0.26	
813.00	0.210	166.200	812.99	-1.41	-1.39	-0.21	40°11'21.308"N	104°47'24.273"W	0.41	
878.00	0.330	181.100	877.99	-1.70	-1.69	-0.18	40°11'21.305"N	104°47'24.272"W	0.21	Tie-Into GYRO Surveys
972.00	0.190	287.140	971.99	-1.95	-1.92	-0.34	40°11'21.303"N	104°47'24.274"W	0.45	Begin BHI MWD+IFR Surveys
1064.00	0.810	117.150	1063.98	-2.13	-2.17	0.09	40°11'21.301"N	104°47'24.269"W	1.08	
1155.00	1.840	110.870	1154.96	-2.61	-2.99	2.03	40°11'21.293"N	104°47'24.244"W	1.14	
1246.00	3.540	112.420	1245.85	-3.54	-4.58	5.99	40°11'21.277"N	104°47'24.193"W	1.87	
1338.00	4.970	121.090	1337.60	-5.65	-7.72	12.03	40°11'21.246"N	104°47'24.115"W	1.70	
1430.00	6.480	116.420	1429.14	-8.65	-12.09	20.09	40°11'21.203"N	104°47'24.011"W	1.72	
1522.00	7.900	116.830	1520.41	-12.07	-17.25	30.39	40°11'21.152"N	104°47'23.878"W	1.54	
1614.00	9.680	110.410	1611.33	-15.44	-22.80	43.28	40°11'21.097"N	104°47'23.712"W	2.21	
1706.00	9.810	101.630	1702.01	-17.23	-27.08	58.21	40°11'21.054"N	104°47'23.520"W	1.62	
1798.00	10.890	96.390	1792.51	-17.09	-29.63	74.52	40°11'21.029"N	104°47'23.310"W	1.56	
1890.00	10.500	96.320	1882.91	-16.18	-31.52	91.49	40°11'21.011"N	104°47'23.091"W	0.42	
1985.00	9.570	91.920	1976.46	-14.70	-32.73	107.98	40°11'20.999"N	104°47'22.879"W	1.27	
2080.00	9.270	93.790	2070.18	-12.93	-33.50	123.51	40°11'20.991"N	104°47'22.679"W	0.45	
2175.00	10.070	97.630	2163.83	-11.93	-35.11	139.38	40°11'20.975"N	104°47'22.474"W	1.08	
2270.00	10.830	100.420	2257.25	-11.84	-37.83	156.39	40°11'20.948"N	104°47'22.255"W	0.96	
2365.00	9.790	99.060	2350.72	-11.95	-40.72	173.14	40°11'20.920"N	104°47'22.039"W	1.12	
2459.00	9.560	101.790	2443.38	-12.24	-43.57	188.68	40°11'20.891"N	104°47'21.839"W	0.55	
2554.00	10.040	103.900	2537.00	-13.22	-47.17	204.44	40°11'20.856"N	104°47'21.636"W	0.63	
2649.00	9.880	108.480	2630.57	-15.16	-51.74	220.21	40°11'20.811"N	104°47'21.433"W	0.85	
2744.00	10.510	107.580	2724.07	-17.69	-56.94	236.20	40°11'20.759"N	104°47'21.227"W	0.68	
2838.00	11.230	103.860	2816.38	-19.63	-61.73	253.26	40°11'20.712"N	104°47'21.007"W	1.07	
2933.00	10.600	103.560	2909.66	-20.99	-65.99	270.73	40°11'20.670"N	104°47'20.782"W	0.67	
3028.00	9.860	104.380	3003.15	-22.33	-70.06	287.11	40°11'20.630"N	104°47'20.571"W	0.79	
3123.00	9.500	100.820	3096.80	-23.24	-73.55	302.69	40°11'20.595"N	104°47'20.370"W	0.74	
3218.00	9.480	100.600	3190.50	-23.60	-76.46	318.08	40°11'20.566"N	104°47'20.172"W	0.04	
3313.00	9.180	100.130	3284.24	-23.87	-79.23	333.23	40°11'20.539"N	104°47'19.976"W	0.33	
3408.00	8.340	98.930	3378.13	-23.91	-81.64	347.49	40°11'20.515"N	104°47'19.792"W	0.90	
3502.00	9.000	100.570	3471.06	-24.01	-84.04	361.45	40°11'20.491"N	104°47'19.613"W	0.75	
3597.00	9.050	102.650	3564.88	-24.59	-87.04	376.05	40°11'20.462"N	104°47'19.425"W	0.35	
3692.00	9.290	101.170	3658.67	-25.26	-90.16	390.86	40°11'20.431"N	104°47'19.234"W	0.35	
3787.00	9.860	97.260	3752.35	-25.20	-92.68	406.45	40°11'20.406"N	104°47'19.033"W	0.91	
3882.00	10.290	96.950	3845.88	-24.54	-94.73	422.94	40°11'20.386"N	104°47'18.820"W	0.46	
3977.00	10.440	99.710	3939.33	-24.23	-97.21	439.85	40°11'20.361"N	104°47'18.602"W	0.55	
4072.00	11.120	101.650	4032.65	-24.64	-100.51	457.31	40°11'20.329"N	104°47'18.377"W	0.81	



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4166.00	11.180	100.470	4124.88	-25.17	-104.00	475.15	40°11'20.294"N	104°47'18.148"W	0.25	
4261.00	9.260	101.550	4218.37	-25.64	-107.20	491.69	40°11'20.263"N	104°47'17.934"W	2.03	
4356.00	8.420	100.600	4312.24	-26.07	-110.01	506.02	40°11'20.235"N	104°47'17.750"W	0.90	
4451.00	9.000	104.000	4406.14	-26.82	-113.09	520.07	40°11'20.204"N	104°47'17.569"W	0.82	
4546.00	9.300	104.670	4499.93	-28.13	-116.83	534.70	40°11'20.167"N	104°47'17.380"W	0.34	
4641.00	10.520	101.510	4593.52	-29.16	-120.51	550.63	40°11'20.131"N	104°47'17.175"W	1.41	
4736.00	11.110	100.080	4686.83	-29.59	-123.84	568.14	40°11'20.098"N	104°47'16.949"W	0.68	
4831.00	10.330	100.510	4780.17	-29.87	-127.00	585.52	40°11'20.067"N	104°47'16.725"W	0.83	
4926.00	9.310	99.950	4873.78	-30.11	-129.88	601.47	40°11'20.038"N	104°47'16.520"W	1.08	
5020.00	9.220	103.780	4966.55	-30.77	-132.98	616.27	40°11'20.008"N	104°47'16.329"W	0.66	
5115.00	9.440	99.960	5060.29	-31.43	-136.14	631.34	40°11'19.977"N	104°47'16.135"W	0.69	
5210.00	10.210	101.000	5153.90	-31.75	-139.10	647.27	40°11'19.947"N	104°47'15.930"W	0.83	
5305.00	9.100	100.390	5247.55	-32.12	-142.06	662.93	40°11'19.918"N	104°47'15.728"W	1.17	
5400.00	8.740	99.900	5341.40	-32.32	-144.66	677.43	40°11'19.892"N	104°47'15.541"W	0.39	
5494.00	9.480	102.460	5434.22	-32.80	-147.55	692.02	40°11'19.864"N	104°47'15.353"W	0.90	
5589.00	8.210	103.370	5528.09	-33.69	-150.81	706.26	40°11'19.832"N	104°47'15.170"W	1.34	
5684.00	7.160	103.930	5622.23	-34.63	-153.80	718.61	40°11'19.802"N	104°47'15.011"W	1.11	
5779.00	5.970	104.790	5716.61	-35.57	-156.49	729.13	40°11'19.775"N	104°47'14.875"W	1.26	
5874.00	5.040	106.640	5811.17	-36.56	-158.95	737.91	40°11'19.751"N	104°47'14.762"W	1.00	
5968.00	3.360	88.870	5904.92	-36.58	-160.08	744.62	40°11'19.740"N	104°47'14.675"W	2.24	
6063.00	1.170	58.070	5999.84	-35.43	-159.51	748.22	40°11'19.746"N	104°47'14.629"W	2.56	
6158.00	0.590	60.090	6094.83	-34.48	-158.75	749.47	40°11'19.753"N	104°47'14.613"W	0.61	
6253.00	0.330	123.990	6189.83	-34.29	-158.66	750.12	40°11'19.754"N	104°47'14.605"W	0.56	
6348.00	0.500	321.280	6284.82	-34.12	-158.49	750.09	40°11'19.756"N	104°47'14.605"W	0.86	
6443.00	0.730	299.770	6379.82	-33.63	-157.87	749.31	40°11'19.762"N	104°47'14.615"W	0.34	
6538.00	0.680	257.240	6474.81	-33.64	-157.69	748.23	40°11'19.764"N	104°47'14.629"W	0.54	
6596.00	1.070	245.330	6532.81	-34.07	-157.99	747.40	40°11'19.761"N	104°47'14.640"W	0.74	
6632.00	1.080	246.510	6568.80	-34.44	-158.27	746.79	40°11'19.758"N	104°47'14.648"W	0.07	
6695.00	4.970	354.830	6631.72	-32.12	-155.78	745.99	40°11'19.782"N	104°47'14.658"W	8.58	
6727.00	7.740	1.590	6663.52	-28.64	-152.25	745.93	40°11'19.817"N	104°47'14.659"W	8.95	
6759.00	7.420	10.250	6695.24	-24.44	-148.06	746.36	40°11'19.859"N	104°47'14.653"W	3.70	
6790.00	8.790	10.370	6725.93	-20.07	-143.76	747.14	40°11'19.901"N	104°47'14.643"W	4.42	
6822.00	11.900	8.090	6757.41	-14.33	-138.09	748.04	40°11'19.957"N	104°47'14.631"W	9.80	
6853.00	15.390	9.420	6787.53	-7.02	-130.86	749.17	40°11'20.029"N	104°47'14.617"W	11.30	
6886.00	18.720	12.360	6819.08	2.65	-121.37	751.02	40°11'20.123"N	104°47'14.593"W	10.42	
6917.00	21.190	8.130	6848.21	13.23	-110.96	752.88	40°11'20.225"N	104°47'14.569"W	9.22	
6948.00	24.990	4.240	6876.73	25.35	-98.88	754.15	40°11'20.345"N	104°47'14.553"W	13.20	
6980.00	28.750	4.230	6905.27	39.76	-84.46	755.22	40°11'20.487"N	104°47'14.539"W	11.75	
7011.00	32.500	4.090	6931.94	55.48	-68.71	756.37	40°11'20.643"N	104°47'14.524"W	12.10	
7043.00	36.070	4.100	6958.37	73.43	-50.73	757.65	40°11'20.821"N	104°47'14.507"W	11.16	
7075.00	39.110	0.670	6983.73	92.79	-31.24	758.44	40°11'21.013"N	104°47'14.497"W	11.53	
7106.00	42.640	358.790	7007.17	112.78	-10.96	758.34	40°11'21.214"N	104°47'14.499"W	12.06	
7138.00	47.110	357.840	7029.84	134.93	11.61	757.67	40°11'21.437"N	104°47'14.507"W	14.12	
7170.00	51.820	357.360	7050.63	158.73	35.90	756.64	40°11'21.677"N	104°47'14.520"W	14.76	
7201.00	56.440	357.790	7068.79	183.32	60.99	755.58	40°11'21.925"N	104°47'14.534"W	14.95	



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7233.00	60.770	357.880	7085.46	210.07	88.28	754.55	40°11'22.194"N	104°47'14.547"W	13.53	
7264.00	63.360	358.600	7099.98	236.94	115.65	753.71	40°11'22.465"N	104°47'14.558"W	8.60	
7296.00	66.200	358.720	7113.61	265.38	144.59	753.04	40°11'22.751"N	104°47'14.567"W	8.88	
7328.00	69.000	358.820	7125.80	294.46	174.16	752.40	40°11'23.043"N	104°47'14.575"W	8.75	
7359.00	71.800	358.820	7136.20	323.17	203.36	751.80	40°11'23.331"N	104°47'14.583"W	9.03	
7391.00	75.040	358.970	7145.33	353.32	234.02	751.21	40°11'23.634"N	104°47'14.590"W	10.13	
7423.00	77.120	359.480	7153.03	383.89	265.07	750.79	40°11'23.941"N	104°47'14.596"W	6.68	
7454.00	78.270	359.290	7159.64	413.72	295.36	750.47	40°11'24.241"N	104°47'14.600"W	3.76	
7486.00	81.590	359.720	7165.23	444.76	326.86	750.19	40°11'24.552"N	104°47'14.603"W	10.46	
7517.00	85.000	0.470	7168.85	475.14	357.64	750.25	40°11'24.856"N	104°47'14.603"W	11.26	
7538.00	86.980	0.600	7170.32	495.83	378.59	750.44	40°11'25.063"N	104°47'14.600"W	9.45	
7575.00†	88.149	0.106	7171.89	532.34	415.56	750.67	40°11'25.428"N	104°47'14.597"W	3.43	7" Casing Point
7613.00	89.350	359.600	7172.72	569.81	453.55	750.57	40°11'25.804"N	104°47'14.598"W	3.43	
7708.00	89.530	0.270	7173.65	663.52	548.54	750.46	40°11'26.743"N	104°47'14.600"W	0.73	
7803.00	89.530	0.300	7174.43	757.32	643.54	750.94	40°11'27.681"N	104°47'14.594"W	0.03	
7897.00	89.630	359.550	7175.12	850.04	737.53	750.81	40°11'28.610"N	104°47'14.595"W	0.80	
7992.00	90.120	358.400	7175.32	943.47	832.52	749.11	40°11'29.549"N	104°47'14.617"W	1.32	
8087.00	90.210	358.960	7175.05	1036.82	927.49	746.93	40°11'30.487"N	104°47'14.645"W	0.60	
8182.00	90.700	358.550	7174.30	1130.19	1022.46	744.86	40°11'31.426"N	104°47'14.672"W	0.67	
8277.00	91.110	0.160	7172.79	1223.72	1117.44	743.79	40°11'32.364"N	104°47'14.686"W	1.75	
8372.00	90.270	359.170	7171.65	1317.35	1212.43	743.24	40°11'33.303"N	104°47'14.693"W	1.37	
8467.00	90.090	0.900	7171.35	1411.09	1307.43	743.29	40°11'34.242"N	104°47'14.692"W	1.83	
8562.00	88.920	1.270	7172.17	1505.09	1402.41	745.09	40°11'35.180"N	104°47'14.669"W	1.29	
8657.00	89.650	1.810	7173.36	1599.19	1497.36	747.65	40°11'36.119"N	104°47'14.636"W	0.96	
8752.00	88.820	359.930	7174.63	1693.13	1592.34	749.09	40°11'37.057"N	104°47'14.617"W	2.16	
8846.00	89.960	0.370	7175.63	1785.91	1686.33	749.33	40°11'37.986"N	104°47'14.614"W	1.30	
8941.00	89.930	358.300	7175.72	1879.45	1781.32	748.23	40°11'38.925"N	104°47'14.628"W	2.18	
9036.00	89.780	358.200	7175.96	1972.66	1876.28	745.33	40°11'39.863"N	104°47'14.665"W	0.19	
9131.00	89.560	359.890	7176.51	2066.11	1971.26	743.75	40°11'40.802"N	104°47'14.686"W	1.79	
9226.00	89.870	0.060	7176.98	2159.84	2066.26	743.71	40°11'41.741"N	104°47'14.686"W	0.37	
9320.00	90.300	0.350	7176.84	2252.63	2160.25	744.04	40°11'42.670"N	104°47'14.682"W	0.55	
9415.00	90.540	358.740	7176.14	2346.23	2255.25	743.29	40°11'43.608"N	104°47'14.692"W	1.71	
9510.00	90.790	0.290	7175.04	2439.82	2350.23	742.48	40°11'44.547"N	104°47'14.702"W	1.65	
9605.00	89.930	0.050	7174.44	2533.59	2445.23	742.77	40°11'45.486"N	104°47'14.698"W	0.94	
9700.00	88.510	359.520	7175.74	2627.25	2540.22	742.41	40°11'46.424"N	104°47'14.703"W	1.60	
9794.00	89.350	359.370	7177.49	2719.82	2634.20	741.50	40°11'47.353"N	104°47'14.715"W	0.91	
9889.00	89.720	359.660	7178.26	2813.42	2729.19	740.70	40°11'48.292"N	104°47'14.725"W	0.49	
9984.00	89.840	1.340	7178.63	2907.27	2824.18	741.52	40°11'49.230"N	104°47'14.714"W	1.77	
10079.00	89.660	359.930	7179.04	3001.17	2919.17	742.58	40°11'50.169"N	104°47'14.701"W	1.50	
10174.00	89.720	358.900	7179.56	3094.73	3014.16	741.61	40°11'51.108"N	104°47'14.713"W	1.09	
10269.00	89.900	0.640	7179.87	3188.39	3109.16	741.23	40°11'52.047"N	104°47'14.718"W	1.84	
10363.00	89.960	0.770	7179.99	3281.32	3203.15	742.38	40°11'52.975"N	104°47'14.703"W	0.15	
10458.00	90.090	1.280	7179.94	3375.31	3298.14	744.08	40°11'53.914"N	104°47'14.681"W	0.55	
10553.00	90.030	0.390	7179.85	3469.25	3393.13	745.47	40°11'54.853"N	104°47'14.663"W	0.94	
10648.00	90.180	0.570	7179.67	3563.11	3488.12	746.26	40°11'55.791"N	104°47'14.653"W	0.25	



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10743.00	90.210	0.510	7179.35	3656.98	3583.12	747.16	40°11'56.730"N	104°47'14.641"W	0.07	
10838.00	89.660	0.530	7179.46	3750.85	3678.11	748.02	40°11'57.669"N	104°47'14.630"W	0.58	
10933.00	89.290	1.510	7180.33	3844.83	3773.09	749.71	40°11'58.608"N	104°47'14.608"W	1.10	
11028.00	88.420	1.500	7182.22	3938.92	3868.04	752.21	40°11'59.546"N	104°47'14.576"W	0.92	
11123.00	89.900	0.920	7183.62	4032.94	3963.01	754.21	40°12'00.484"N	104°47'14.550"W	1.67	
11217.00	89.260	0.450	7184.31	4125.86	4057.00	755.33	40°12'01.413"N	104°47'14.536"W	0.84	
11312.00	90.670	0.850	7184.36	4219.75	4151.99	756.41	40°12'02.352"N	104°47'14.522"W	1.54	
11407.00	90.430	359.870	7183.45	4313.57	4246.98	757.01	40°12'03.290"N	104°47'14.514"W	1.06	
11502.00	90.270	0.080	7182.87	4407.29	4341.98	756.97	40°12'04.229"N	104°47'14.515"W	0.28	
11597.00	89.870	0.710	7182.76	4501.13	4436.97	757.62	40°12'05.168"N	104°47'14.506"W	0.79	
11688.00	89.100	359.640	7183.57	4590.95	4527.97	757.90	40°12'06.067"N	104°47'14.502"W	1.45	Last BHI MWD+IFR Surveys
11746.00	89.100	359.640	7184.49	4648.11	4585.96	757.54	40°12'06.640"N	104°47'14.507"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: NILES 29N-28HZ AWB Ref Wellpath: NILES 29N-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	940.00	927.00	13.00	939.99	0.00	0.00	-1.91	-0.25
9.625in Casing Surface	13.00	940.00	927.00	13.00	939.99	0.00	0.00	-1.91	-0.25
8.75in Open Hole	940.00	7592.00	6652.00	939.99	7172.36	-1.91	-0.25	432.55	750.67
7in Casing Intermediate	13.00	7575.00	7562.00	13.00	7171.89	0.00	0.00	415.56	750.67
6.125in Open Hole	7575.00	11736.00	4161.00	7171.89	7184.33	415.56	750.67	4575.96	757.60



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-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	0.00	-29.88	3198304.10	1312582.33	40°11'21.322"N	104°47'24.655"W	polygon
NILES 29N-28HZ BHL ON PLAT (1170' FWL & 460' FNL) REV-2		7165.00	4611.63	746.37	3199043.37	1317199.83	40°12'06.894"N	104°47'14.651"W	point
NILES 29N-28HZ BHL ON PLAT (1170' FWL & 460' FNL) REV-1		7168.00	4611.63	746.37	3199043.37	1317199.83	40°12'06.894"N	104°47'14.651"W	point
NILES 29N-28HZ LAND BOX		7168.00	0.00	0.00	3198333.98	1312582.57	40°11'21.322"N	104°47'24.270"W	polygon
SEC 28 HARDLINES (460' SETBACKS)		7300.00	0.00	-29.88	3198304.10	1312582.33	40°11'21.322"N	104°47'24.655"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NILES 29N-28HZ AWB Ref Wellpath: NILES 29N-28HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	878.00	Generic gyro - continuous (Standard)	LIGHTNING WIRELINE GYRO <113-878>	NILES 29N-28HZ AWB
878.00	7538.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <972-7358>	NILES 29N-28HZ AWB
7538.00	11688.00	Unknown Tool (Standard)	BHI MWD +IFR SURVEYS 6 1/8" HOLE <7613-11688>	NILES 29N-28HZ AWB
11688.00	11746.00	Blind Drilling (std)	Projection to bit	NILES 29N-28HZ AWB



Actual Wellpath Report

NILES 29N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 NILES 29N-28HZ (210' FSL & 427' FWL, SEC.28)
Area	COLORADO	Well	NILES 29N-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NILES 29N-28HZ AWB
Facility	SEC.28-T3N-R66W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]		Azimuth [°]	TVD [ft]	Comment
13.00		0.000	75.740	13.00	Tie-On
113.00		0.540	75.740	113.00	Begin GYRO Surveys
878.00		0.330	181.100	877.99	Tie-Into GYRO Surveys
972.00		0.190	287.140	971.99	Begin BHI MWD+IFR Surveys
7575.00		88.149	0.106	7171.89	7" Casing Point
11688.00		89.100	359.640	7183.57	Last BHI MWD+IFR Surveys
11746.00		89.100	359.640	7184.49	Projection to Bit