

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 THOMSEN 3N-18HZ (472'FNL & 905'FEL, SEC.07)
Area	COLORADO	Well	THOMSEN 3N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	THOMSEN 3N-18HZ AWB <16-14148>
Facility	SEC.07-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Precain
Scale	0.999958	Report Generated	1/13/2015 at 2:00:52 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/THOMSEN_3N-18HZ_AWB_16-14148_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	4303.75	3816.74	3223499.55	1301827.46	40°09'32.922"N	104°42'01.253"W
Facility Reference Pt			3219721.27	1297490.24	40°08'50.395"N	104°42'50.411"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 23 (16'KB) (RKB) to Facility Vertical Datum	4928.00ft
Horizontal Reference Pt	Slot	XTREME 23 (16'KB) (RKB) to Mean Sea Level	4928.00ft
Vertical Reference Pt	XTREME 23 (16'KB) (RKB)	XTREME 23 (16'KB) (RKB) to Mud Line at Slot (SLOT#05 THOMSEN 3N-18HZ (472'FNL & 905'FEL, SEC.07))	4928.00ft
MD Reference Pt	XTREME 23 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.71°

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WELLPATH DATA (131 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	57.900	0.00	0.00	0.00	0.00	40°09'32.922"N	104°42'01.253"W	0.00	
16.00	0.000	57.900	16.00	0.00	0.00	0.00	40°09'32.922"N	104°42'01.253"W	0.00	Tie-On
62.00	0.400	57.900	62.00	-0.08	0.09	0.14	40°09'32.923"N	104°42'01.251"W	0.87	Begin CATHEDRAL MWD Surveys
152.00	0.200	98.400	152.00	-0.23	0.23	0.56	40°09'32.924"N	104°42'01.246"W	0.31	
249.00	0.400	114.200	249.00	-0.06	0.07	1.03	40°09'32.923"N	104°42'01.240"W	0.22	
328.00	0.400	65.800	328.00	-0.06	0.07	1.54	40°09'32.923"N	104°42'01.233"W	0.42	
408.00	0.300	64.600	407.99	-0.26	0.27	1.98	40°09'32.925"N	104°42'01.227"W	0.13	
488.00	0.300	66.400	487.99	-0.43	0.44	2.36	40°09'32.926"N	104°42'01.223"W	0.01	
568.00	0.500	31.000	567.99	-0.81	0.83	2.73	40°09'32.930"N	104°42'01.218"W	0.39	
648.00	0.300	6.600	647.99	-1.32	1.33	2.94	40°09'32.935"N	104°42'01.215"W	0.32	
728.00	0.300	2.700	727.99	-1.74	1.75	2.97	40°09'32.939"N	104°42'01.215"W	0.03	
808.00	0.200	11.700	807.99	-2.08	2.10	3.01	40°09'32.943"N	104°42'01.214"W	0.13	
888.00	0.100	329.900	887.99	-2.28	2.29	3.00	40°09'32.945"N	104°42'01.214"W	0.18	
968.00	0.200	132.600	967.99	-2.24	2.26	3.07	40°09'32.944"N	104°42'01.213"W	0.37	
1048.00	0.800	192.000	1047.98	-1.60	1.62	3.06	40°09'32.938"N	104°42'01.214"W	0.90	
1128.00	0.900	193.700	1127.97	-0.45	0.46	2.79	40°09'32.927"N	104°42'01.217"W	0.13	
1208.00	0.400	218.200	1207.97	0.38	-0.37	2.47	40°09'32.918"N	104°42'01.221"W	0.70	
1314.00	0.200	199.900	1313.97	0.84	-0.83	2.18	40°09'32.914"N	104°42'01.225"W	0.21	Tie-Into CATHEDRAL MWD Surveys
1457.00	0.600	208.800	1456.96	1.73	-1.72	1.73	40°09'32.905"N	104°42'01.231"W	0.28	Begin BHI MWD+IFR Surveys
1551.00	0.800	356.800	1550.96	1.51	-1.50	1.46	40°09'32.907"N	104°42'01.234"W	1.43	
1642.00	2.200	350.000	1641.93	-0.85	0.86	1.12	40°09'32.930"N	104°42'01.239"W	1.55	
1735.00	4.100	355.300	1734.78	-5.92	5.93	0.54	40°09'32.981"N	104°42'01.246"W	2.06	
1826.00	6.100	1.400	1825.42	-14.00	14.00	0.39	40°09'33.060"N	104°42'01.248"W	2.27	
1917.00	7.500	357.900	1915.78	-24.77	24.77	0.29	40°09'33.167"N	104°42'01.249"W	1.60	
2009.00	8.900	357.000	2006.83	-37.88	37.88	-0.30	40°09'33.296"N	104°42'01.257"W	1.53	
2103.00	10.500	357.600	2099.49	-53.71	53.70	-1.04	40°09'33.453"N	104°42'01.266"W	1.71	
2195.00	12.700	0.400	2189.60	-72.20	72.19	-1.32	40°09'33.635"N	104°42'01.270"W	2.47	
2287.00	14.200	0.700	2279.08	-93.59	93.59	-1.11	40°09'33.847"N	104°42'01.267"W	1.63	
2380.00	15.000	2.600	2369.07	-117.02	117.02	-0.43	40°09'34.078"N	104°42'01.259"W	1.00	
2473.00	17.500	5.800	2458.35	-142.95	142.96	1.53	40°09'34.335"N	104°42'01.233"W	2.85	
2565.00	18.300	9.500	2545.90	-170.94	170.97	5.31	40°09'34.611"N	104°42'01.185"W	1.51	
2656.00	19.900	7.000	2631.89	-200.38	200.43	9.56	40°09'34.903"N	104°42'01.130"W	1.97	
2748.00	20.500	12.300	2718.24	-231.64	231.71	14.90	40°09'35.212"N	104°42'01.061"W	2.09	
2840.00	22.400	9.900	2803.87	-264.61	264.73	21.35	40°09'35.538"N	104°42'00.978"W	2.27	
2932.00	24.900	6.300	2888.14	-301.11	301.25	26.49	40°09'35.899"N	104°42'00.912"W	3.14	
3024.00	27.500	6.900	2970.68	-341.43	341.60	31.16	40°09'36.298"N	104°42'00.852"W	2.84	
3116.00	28.200	6.100	3052.02	-384.11	384.30	36.03	40°09'36.720"N	104°42'00.789"W	0.86	
3207.00	27.700	5.000	3132.41	-426.54	426.75	40.15	40°09'37.139"N	104°42'00.736"W	0.79	
3299.00	27.800	4.800	3213.83	-469.20	469.43	43.81	40°09'37.561"N	104°42'00.689"W	0.15	
3384.00	27.300	7.000	3289.19	-508.28	508.53	47.85	40°09'37.947"N	104°42'00.637"W	1.33	
3470.00	28.500	7.800	3365.19	-548.16	548.43	53.04	40°09'38.342"N	104°42'00.570"W	1.46	
3555.00	25.900	5.300	3440.79	-586.72	587.02	57.50	40°09'38.723"N	104°42'00.512"W	3.34	
3640.00	26.200	7.600	3517.16	-623.78	624.10	61.70	40°09'39.089"N	104°42'00.458"W	1.24	
3725.00	27.300	8.900	3593.06	-661.61	661.96	67.20	40°09'39.464"N	104°42'00.388"W	1.47	
3812.00	27.300	9.800	3670.37	-700.95	701.33	73.68	40°09'39.853"N	104°42'00.304"W	0.47	

Actual Wellpath Report

THOMSEN 3N-18HZ AWP

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	THOMSEN 3N-18HZ AWP <16-14148>
Facility	SEC.07-T2N-R65W		

WELLPATH DATA (131 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3897.00	27.600	7.100	3745.80	-739.67	740.08	79.43	40°09'40.236"N	104°42'00.230"W	1.51	
3984.00	26.500	10.100	3823.29	-778.75	779.19	85.33	40°09'40.622"N	104°42'00.154"W	2.01	
4070.00	28.300	12.700	3899.64	-817.49	817.97	93.17	40°09'41.005"N	104°42'00.053"W	2.51	
4155.00	29.300	10.000	3974.13	-857.59	858.11	101.22	40°09'41.402"N	104°41'59.949"W	1.93	
4240.00	28.300	8.600	4048.61	-897.96	898.52	107.84	40°09'41.801"N	104°41'59.864"W	1.42	
4327.00	29.700	7.500	4124.70	-939.69	940.28	113.74	40°09'42.214"N	104°41'59.788"W	1.72	
4412.00	28.000	6.300	4199.15	-980.38	980.99	118.68	40°09'42.616"N	104°41'59.724"W	2.11	
4497.00	28.300	5.600	4274.10	-1020.24	1020.88	122.83	40°09'43.010"N	104°41'59.671"W	0.52	
4582.00	27.900	6.300	4349.08	-1060.04	1060.70	126.98	40°09'43.404"N	104°41'59.617"W	0.61	
4668.00	28.900	9.800	4424.73	-1100.49	1101.18	132.73	40°09'43.804"N	104°41'59.543"W	2.26	
4755.00	28.500	7.900	4501.05	-1141.73	1142.46	139.16	40°09'44.212"N	104°41'59.461"W	1.15	
4842.00	27.900	6.100	4577.72	-1182.51	1183.26	144.17	40°09'44.615"N	104°41'59.396"W	1.20	
4929.00	28.700	7.600	4654.32	-1223.43	1224.20	149.10	40°09'45.020"N	104°41'59.333"W	1.23	
5014.00	28.400	7.100	4728.99	-1263.69	1264.49	154.30	40°09'45.418"N	104°41'59.266"W	0.45	
5099.00	26.000	5.900	4804.58	-1302.27	1303.09	158.71	40°09'45.799"N	104°41'59.209"W	2.90	
5185.00	25.400	6.900	4882.07	-1339.31	1340.15	162.87	40°09'46.165"N	104°41'59.155"W	0.86	
5270.00	24.000	7.000	4959.30	-1374.54	1375.41	167.16	40°09'46.514"N	104°41'59.100"W	1.65	
5355.00	22.600	8.100	5037.36	-1407.85	1408.74	171.57	40°09'46.843"N	104°41'59.043"W	1.72	
5440.00	21.300	5.800	5116.20	-1439.36	1440.27	175.43	40°09'47.155"N	104°41'58.993"W	1.83	
5527.00	20.300	9.000	5197.53	-1469.97	1470.90	179.39	40°09'47.457"N	104°41'58.942"W	1.74	
5613.00	17.200	5.500	5278.96	-1497.35	1498.29	182.94	40°09'47.728"N	104°41'58.897"W	3.83	
5700.00	15.000	8.100	5362.54	-1521.28	1522.25	185.76	40°09'47.965"N	104°41'58.860"W	2.66	
5785.00	13.800	9.400	5444.87	-1542.16	1543.14	188.97	40°09'48.171"N	104°41'58.819"W	1.46	
5870.00	10.600	8.700	5527.94	-1559.88	1560.87	191.81	40°09'48.347"N	104°41'58.782"W	3.77	
5957.00	8.700	5.900	5613.71	-1574.33	1575.33	193.69	40°09'48.489"N	104°41'58.758"W	2.25	
6042.00	7.900	14.800	5697.82	-1586.36	1587.37	195.85	40°09'48.608"N	104°41'58.730"W	1.78	
6127.00	6.700	7.800	5782.13	-1596.91	1597.93	198.01	40°09'48.713"N	104°41'58.703"W	1.75	
6215.00	6.300	1.700	5869.57	-1606.82	1607.85	198.85	40°09'48.811"N	104°41'58.692"W	0.91	
6302.00	6.200	2.900	5956.05	-1616.28	1617.31	199.23	40°09'48.904"N	104°41'58.687"W	0.19	
6387.00	5.000	0.300	6040.64	-1624.56	1625.60	199.48	40°09'48.986"N	104°41'58.684"W	1.44	
6474.00	3.700	20.000	6127.39	-1630.99	1632.03	200.46	40°09'49.050"N	104°41'58.671"W	2.26	
6560.00	1.000	59.800	6213.32	-1633.97	1635.01	202.06	40°09'49.079"N	104°41'58.650"W	3.49	
6645.00	0.600	85.100	6298.31	-1634.37	1635.43	203.15	40°09'49.083"N	104°41'58.636"W	0.62	
6732.00	2.700	182.600	6385.28	-1632.36	1633.42	203.51	40°09'49.063"N	104°41'58.632"W	3.27	
6819.00	2.500	180.000	6472.19	-1628.42	1629.47	203.41	40°09'49.025"N	104°41'58.633"W	0.27	
6906.00	10.200	166.300	6558.59	-1619.01	1620.08	205.24	40°09'48.932"N	104°41'58.609"W	8.96	
6991.00	17.300	167.900	6641.10	-1599.30	1600.38	209.68	40°09'48.737"N	104°41'58.552"W	8.36	
7076.00	23.300	182.000	6720.83	-1570.08	1571.18	211.74	40°09'48.448"N	104°41'58.526"W	9.06	
7163.00	28.600	186.800	6799.04	-1532.20	1533.28	208.68	40°09'48.074"N	104°41'58.565"W	6.55	
7248.00	38.600	182.400	6869.76	-1485.40	1486.46	205.15	40°09'47.611"N	104°41'58.611"W	12.10	
7333.00	48.400	180.200	6931.35	-1426.98	1428.04	203.92	40°09'47.034"N	104°41'58.626"W	11.66	
7418.00	55.600	180.200	6983.64	-1360.05	1361.10	203.69	40°09'46.372"N	104°41'58.629"W	8.47	
7503.00	62.900	177.600	7027.08	-1287.07	1288.13	205.15	40°09'45.651"N	104°41'58.611"W	8.98	
7589.00	74.100	177.200	7058.55	-1207.24	1208.32	208.79	40°09'44.863"N	104°41'58.564"W	13.03	
7674.00	84.100	178.800	7074.60	-1123.92	1125.01	211.68	40°09'44.039"N	104°41'58.527"W	11.91	

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7691.00	86.800	179.200	7075.95	-1106.98	1108.07	211.97	40°09'43.872"N	104°41'58.523"W	16.05	
7728.00†	88.361	179.574	7077.51	-1070.01	1071.11	212.37	40°09'43.507"N	104°41'58.518"W	4.34	7" Casing Point
7800.00	91.400	180.300	7077.66	-998.02	999.12	212.45	40°09'42.795"N	104°41'58.517"W	4.34	
7983.00	91.000	181.000	7073.83	-815.09	816.17	210.37	40°09'40.987"N	104°41'58.543"W	0.44	
8167.00	90.900	180.000	7070.78	-631.14	632.20	208.77	40°09'39.169"N	104°41'58.564"W	0.55	
8351.00	91.300	179.600	7067.25	-447.17	448.24	209.41	40°09'37.352"N	104°41'58.556"W	0.31	
8534.00	91.300	178.800	7063.10	-264.23	265.31	211.96	40°09'35.544"N	104°41'58.523"W	0.44	
8711.00	90.500	178.800	7060.32	-87.27	88.37	215.67	40°09'33.795"N	104°41'58.475"W	0.45	
8882.00	89.100	178.500	7060.91	83.69	-82.58	219.70	40°09'32.106"N	104°41'58.423"W	0.84	
9056.00	88.500	178.600	7064.56	257.62	-256.48	224.10	40°09'30.387"N	104°41'58.367"W	0.35	
9226.00	89.200	179.500	7067.97	427.57	-426.42	226.92	40°09'28.708"N	104°41'58.330"W	0.67	
9399.00	90.500	180.300	7068.42	600.56	-599.42	227.22	40°09'26.999"N	104°41'58.327"W	0.88	
9571.00	90.500	179.900	7066.92	772.55	-771.41	226.92	40°09'25.299"N	104°41'58.330"W	0.23	
9743.00	90.500	180.200	7065.42	944.54	-943.40	226.77	40°09'23.599"N	104°41'58.332"W	0.17	
9914.00	89.000	181.000	7066.17	1115.51	-1114.39	224.98	40°09'21.910"N	104°41'58.355"W	0.99	
10084.00	89.000	181.000	7069.13	1285.45	-1284.33	222.01	40°09'20.230"N	104°41'58.394"W	0.00	
10254.00	90.200	181.400	7070.32	1455.38	-1454.29	218.45	40°09'18.551"N	104°41'58.440"W	0.74	
10426.00	91.300	182.000	7068.07	1627.26	-1626.20	213.35	40°09'16.852"N	104°41'58.505"W	0.73	
10597.00	91.700	180.900	7063.59	1798.12	-1797.08	209.03	40°09'15.163"N	104°41'58.561"W	0.68	
10769.00	89.100	181.600	7062.39	1970.04	-1969.02	205.27	40°09'13.464"N	104°41'58.609"W	1.57	
10942.00	89.400	182.400	7064.66	2142.88	-2141.90	199.24	40°09'11.756"N	104°41'58.687"W	0.49	
11114.00	89.500	179.100	7066.31	2314.82	-2313.85	196.99	40°09'10.056"N	104°41'58.716"W	1.92	
11285.00	90.800	180.300	7065.86	2485.81	-2484.84	197.88	40°09'08.367"N	104°41'58.705"W	1.03	
11457.00	89.300	178.500	7065.71	2657.80	-2656.82	199.68	40°09'06.667"N	104°41'58.681"W	1.36	
11630.00	89.900	178.500	7066.92	2830.76	-2829.76	204.21	40°09'04.958"N	104°41'58.623"W	0.35	
11800.00	90.600	179.600	7066.18	3000.74	-2999.73	207.03	40°09'03.279"N	104°41'58.587"W	0.77	
11971.00	90.500	178.400	7064.53	3171.72	-3170.69	210.01	40°09'01.589"N	104°41'58.548"W	0.70	
12143.00	90.800	177.900	7062.58	3343.64	-3342.59	215.57	40°08'59.890"N	104°41'58.477"W	0.34	
12315.00	89.700	178.800	7061.83	3515.59	-3514.51	220.52	40°08'58.191"N	104°41'58.413"W	0.83	
12487.00	90.200	179.000	7061.98	3687.57	-3686.48	223.82	40°08'56.492"N	104°41'58.371"W	0.31	
12659.00	89.800	180.500	7061.98	3859.56	-3858.47	224.57	40°08'54.792"N	104°41'58.361"W	0.90	
12832.00	89.100	181.400	7063.64	4032.51	-4031.44	221.70	40°08'53.083"N	104°41'58.398"W	0.66	
13004.00	89.100	180.900	7066.34	4204.43	-4203.38	218.25	40°08'51.384"N	104°41'58.442"W	0.29	
13174.00	89.600	181.400	7068.27	4374.37	-4373.33	214.84	40°08'49.704"N	104°41'58.486"W	0.42	
13260.00	90.700	181.700	7068.05	4460.32	-4459.30	212.51	40°08'48.855"N	104°41'58.516"W	1.33	
13430.00	89.400	180.000	7067.90	4630.28	-4629.27	209.99	40°08'47.175"N	104°41'58.549"W	1.26	
13604.00	89.500	179.300	7069.57	4804.27	-4803.26	211.05	40°08'45.456"N	104°41'58.535"W	0.41	
13779.00	88.800	178.900	7072.17	4979.24	-4978.22	213.80	40°08'43.727"N	104°41'58.500"W	0.46	
13951.00	89.800	178.200	7074.27	5151.19	-5150.15	218.15	40°08'42.028"N	104°41'58.444"W	0.71	
14095.00	90.200	178.800	7074.27	5295.15	-5294.10	221.92	40°08'40.605"N	104°41'58.395"W	0.50	Last BHI MWD+IFR Surveys
14148.00	90.200	178.800	7074.08	5348.15	-5347.08	223.03	40°08'40.082"N	104°41'58.381"W	0.00	Projection to Bit

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 THOMSEN 3N-18HZ (472'FNL & 905'FEL, SEC.07)
Area	COLORADO	Well	THOMSEN 3N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	THOMSEN 3N-18HZ AWB <16-14148>
Facility	SEC.07-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: THOMSEN 3N-18HZ AWB <16-14148> Ref Wellpath: THOMSEN 3N-18HZ 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	1359.00	1343.00	16.00	1358.97	0.00	0.00	-1.02	2.10
9.625in Casing Surface	16.00	1349.00	1333.00	16.00	1348.97	0.00	0.00	-0.97	2.12
8.75in Open Hole	1359.00	7738.00	6379.00	1358.97	7077.76	-1.02	2.10	1061.11	212.43
7in Casing Intermediate	16.00	7728.00	7712.00	16.00	7077.51	0.00	0.00	1071.11	212.37
6.125in Open Hole	7738.00	14148.00	6410.00	7077.76	7074.08	1061.11	212.43	-5347.08	223.03

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.07-T2N-R65W SECTION LINES		-1.00	-2.23	-89.99	3223409.59	1301824.42	40°09'32.900"N	104°42'02.412"W	polygon
SEC.18-T2N-R65W SECTION LINES		-1.00	-2.23	-89.99	3223409.59	1301824.42	40°09'32.900"N	104°42'02.412"W	polygon
THOMSEN 3N-18HZ BHL REV-3 (543'FNL & 611'FEL, SEC.18)	7078.00	-5348.82	241.60		3223789.36	1296481.27	40°08'40.065"N	104°41'58.142"W	point
THOMSEN 3N-18HZ BHL REV-4 (543'FNL & 611'FEL, SEC.18)	7078.00	-5348.82	241.60		3223789.36	1296481.27	40°08'40.065"N	104°41'58.142"W	point
THOMSEN 3N-18HZ BHL ON PLAT REV-1 (953'FNL & 611'FEL, SEC.18)	7087.00	-5758.82	241.60		3223793.06	1296071.31	40°08'36.013"N	104°41'58.142"W	point
THOMSEN 3N-18HZ BHL REV-2 (543'FNL & 611'FEL, SEC.18)	7087.00	-5348.82	241.60		3223789.36	1296481.27	40°08'40.065"N	104°41'58.142"W	point
THOMSEN 3N-18HZ LANDBOX	7087.00	0.00	0.00		3223499.55	1301827.46	40°09'32.922"N	104°42'01.253"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: THOMSEN 3N-18HZ AWB <16-14148> Ref Wellpath: THOMSEN 3N-18HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1314.00	ISCWSA MWD, Rev. 2 (Standard)	CATHEDRAL ENERGY MWD SURVEYS <62-1314>	THOMSEN 3N-18HZ AWB <16-14148>
1314.00	7691.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1457-7691>	THOMSEN 3N-18HZ AWB <16-14148>
7691.00	14095.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7800-14095>	THOMSEN 3N-18HZ AWB <16-14148>
14095.00	14148.00	Blind Drilling (std)	Projection to bit	THOMSEN 3N-18HZ AWB <16-14148>

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 THOMSEN 3N-18HZ (472'FNL & 905'FEL, SEC.07)
Area	COLORADO	Well	THOMSEN 3N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	THOMSEN 3N-18HZ AWP <16-14148>
Facility	SEC.07-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	57.900	16.00	Tie-On
62.00	0.400	57.900	62.00	Begin CATHEDRAL MWD Surveys
1314.00	0.200	199.900	1313.97	Tie-Into CATHEDRAL MWD Surveys
1457.00	0.600	208.800	1456.96	Begin BHI MWD+IFR Surveys
7728.00	88.361	179.574	7077.51	7" Casing Point
14095.00	90.200	178.800	7074.27	Last BHI MWD+IFR Surveys
14148.00	90.200	178.800	7074.08	Projection to Bit