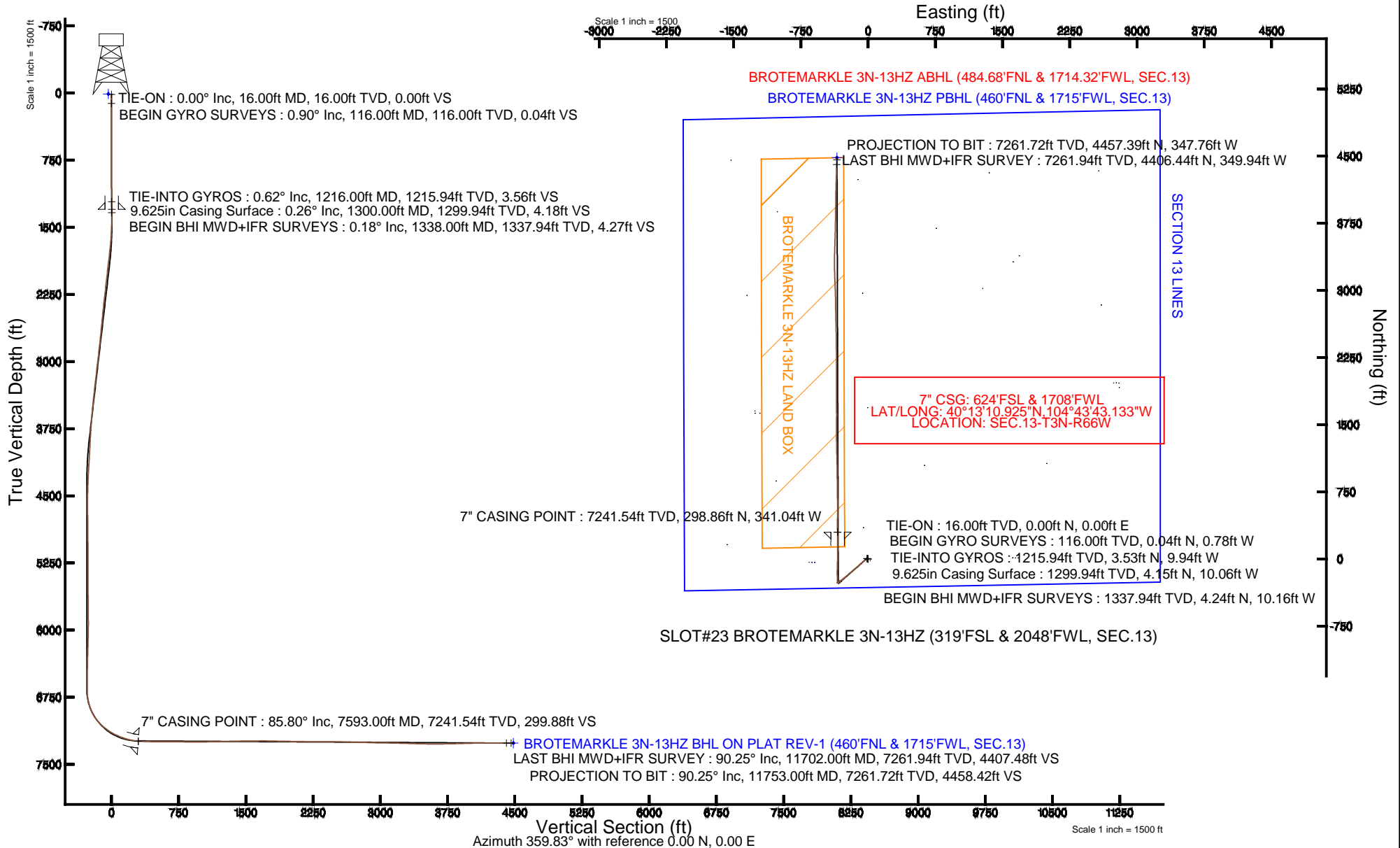


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
 Field: WELD COUNTY (KERR MCGEE) Well: BROTEMARKLE 3N-13HZ
 Facility: SEC.13-T3N-R66W Wellbore: BROTEMARKLE 3N-13HZ PWB

Plot reference wellpath is BROTEMARKLE 3N-13HZ (REV-B.0) PWP

True vertical depths are referenced to XTREME 6 (16' RKB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (16' RKB) (RKB)	North Reference: True north
XTREME 6 (16' RKB) (RKB) to Mean Sea Level: 5048 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjef02 on 4/28/2014





Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Wilsjef02
Scale	0.999957	Report Generated	4/28/2014 at 1:44:03 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/BROTEMARKLE_3N-13HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-363.90	-1308.91	3215741.71	1323520.32	40°13'07.972"N	104°43'38.737"W
Facility Reference Pt			3217047.32	1323895.67	40°13'11.568"N	104°43'21.864"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 6 (16' RKB) (RKB) to Facility Vertical Datum	5048.00ft
Horizontal Reference Pt	Slot	XTREME 6 (16' RKB) (RKB) to Mean Sea Level	5048.00ft
Vertical Reference Pt	XTREME 6 (16' RKB) (RKB)	XTREME 6 (16' RKB) (RKB) to Mud Line at Slot (SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13))	5048.00ft
MD Reference Pt	XTREME 6 (16' RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	355.54°

Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (117 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	272.830	0.00	0.00	0.00	0.00	40°13'07.972"N	104°43'38.737"W	0.00	
16.00	0.000	272.830	16.00	0.00	0.00	0.00	40°13'07.972"N	104°43'38.737"W	0.00	TIE-ON
116.00	0.900	272.830	116.00	0.10	0.04	-0.78	40°13'07.972"N	104°43'38.747"W	0.90	BEGIN GYRO SURVEYS
216.00	0.620	263.620	215.99	0.18	0.02	-2.11	40°13'07.972"N	104°43'38.764"W	0.30	
316.00	0.520	271.780	315.98	0.21	-0.03	-3.10	40°13'07.971"N	104°43'38.777"W	0.13	
416.00	0.330	234.410	415.98	0.11	-0.18	-3.79	40°13'07.970"N	104°43'38.786"W	0.33	
516.00	0.310	254.480	515.98	-0.09	-0.42	-4.28	40°13'07.967"N	104°43'38.792"W	0.11	
616.00	0.600	298.130	615.97	0.14	-0.25	-5.00	40°13'07.969"N	104°43'38.801"W	0.43	
716.00	0.480	281.580	715.97	0.54	0.08	-5.87	40°13'07.972"N	104°43'38.813"W	0.20	
816.00	0.760	292.230	815.96	0.95	0.42	-6.90	40°13'07.976"N	104°43'38.826"W	0.30	
916.00	0.570	308.790	915.96	1.59	0.98	-7.90	40°13'07.981"N	104°43'38.839"W	0.27	
1016.00	0.620	297.020	1015.95	2.22	1.54	-8.77	40°13'07.987"N	104°43'38.850"W	0.13	
1116.00	0.790	331.230	1115.95	3.13	2.39	-9.58	40°13'07.995"N	104°43'38.861"W	0.45	
1216.00	0.620	357.280	1215.94	4.30	3.53	-9.94	40°13'08.007"N	104°43'38.865"W	0.36	TIE-INTO GYROS
1338.00	0.180	284.330	1337.94	5.02	4.24	-10.16	40°13'08.013"N	104°43'38.868"W	0.49	BEGIN BHI MWD-IFR SURVEYS
1429.00	2.360	244.020	1428.91	4.38	3.45	-11.98	40°13'08.006"N	104°43'38.891"W	2.45	
1520.00	4.880	240.170	1519.72	2.03	0.71	-17.02	40°13'07.979"N	104°43'38.956"W	2.78	
1610.00	6.630	239.400	1609.26	-1.90	-3.84	-24.82	40°13'07.934"N	104°43'39.057"W	1.95	
1702.00	8.640	231.950	1700.44	-8.06	-10.81	-34.83	40°13'07.865"N	104°43'39.186"W	2.43	
1793.00	9.710	225.860	1790.28	-16.74	-20.36	-45.72	40°13'07.770"N	104°43'39.326"W	1.59	
1886.00	9.270	225.950	1882.01	-26.53	-31.03	-56.74	40°13'07.665"N	104°43'39.468"W	0.47	
1977.00	9.380	226.350	1971.80	-35.88	-41.25	-67.37	40°13'07.564"N	104°43'39.605"W	0.14	
2067.00	9.240	226.140	2060.62	-45.10	-51.32	-77.89	40°13'07.464"N	104°43'39.741"W	0.16	
2158.00	9.100	225.880	2150.46	-54.33	-61.39	-88.32	40°13'07.365"N	104°43'39.876"W	0.16	
2249.00	9.140	224.310	2240.31	-63.69	-71.57	-98.53	40°13'07.264"N	104°43'40.007"W	0.28	
2340.00	8.900	222.300	2330.18	-73.27	-81.95	-108.32	40°13'07.162"N	104°43'40.133"W	0.44	
2430.00	9.190	232.060	2419.07	-82.01	-91.52	-118.67	40°13'07.067"N	104°43'40.267"W	1.73	
2521.00	9.650	235.010	2508.84	-89.89	-100.36	-130.65	40°13'06.980"N	104°43'40.421"W	0.73	
2612.00	9.530	232.870	2598.57	-97.83	-109.28	-142.91	40°13'06.892"N	104°43'40.579"W	0.41	
2703.00	8.820	230.870	2688.40	-105.87	-118.23	-154.33	40°13'06.803"N	104°43'40.726"W	0.86	
2788.00	10.150	231.670	2772.24	-113.75	-126.99	-165.26	40°13'06.717"N	104°43'40.867"W	1.57	
2874.00	9.990	230.290	2856.92	-122.28	-136.45	-176.94	40°13'06.623"N	104°43'41.018"W	0.34	
2958.00	10.130	230.050	2939.62	-130.77	-145.85	-188.21	40°13'06.530"N	104°43'41.163"W	0.17	
3043.00	10.070	229.440	3023.31	-139.49	-155.48	-199.58	40°13'06.435"N	104°43'41.310"W	0.14	
3128.00	9.940	228.000	3107.01	-148.34	-165.22	-210.68	40°13'06.339"N	104°43'41.453"W	0.33	
3213.00	10.060	228.340	3190.72	-157.29	-175.07	-221.68	40°13'06.242"N	104°43'41.595"W	0.16	
3298.00	9.520	228.500	3274.48	-166.02	-184.66	-232.49	40°13'06.147"N	104°43'41.734"W	0.64	
3383.00	9.530	229.900	3358.31	-174.35	-193.85	-243.14	40°13'06.056"N	104°43'41.871"W	0.27	
3468.00	9.110	229.730	3442.19	-182.39	-202.73	-253.65	40°13'05.968"N	104°43'42.007"W	0.50	
3554.00	8.280	229.970	3527.20	-189.97	-211.12	-263.59	40°13'05.885"N	104°43'42.135"W	0.97	
3639.00	7.400	230.360	3611.41	-196.69	-218.55	-272.49	40°13'05.812"N	104°43'42.250"W	1.04	
3724.00	7.090	232.180	3695.73	-202.73	-225.25	-280.85	40°13'05.746"N	104°43'42.357"W	0.45	
3808.00	6.660	233.930	3779.12	-208.13	-231.30	-288.88	40°13'05.686"N	104°43'42.461"W	0.57	
3891.00	6.360	236.910	3861.59	-212.85	-236.64	-296.63	40°13'05.633"N	104°43'42.561"W	0.54	
3976.00	5.810	243.100	3946.11	-216.75	-241.16	-304.41	40°13'05.588"N	104°43'42.661"W	1.01	

Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (117 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4061.00	5.030	229.670	4030.73	-220.58	-245.52	-311.09	40°13'05.545"N	104°43'42.747"W	1.75	
4147.00	4.960	228.350	4116.41	-225.03	-250.43	-316.74	40°13'05.497"N	104°43'42.820"W	0.16	
4232.00	5.090	228.130	4201.08	-229.55	-255.39	-322.29	40°13'05.448"N	104°43'42.892"W	0.15	
4317.00	3.620	219.180	4285.83	-233.78	-259.99	-326.79	40°13'05.402"N	104°43'42.950"W	1.90	
4402.00	2.420	213.630	4370.71	-237.13	-263.56	-329.48	40°13'05.367"N	104°43'42.984"W	1.45	
4488.00	1.240	187.260	4456.67	-239.47	-266.00	-330.61	40°13'05.343"N	104°43'42.999"W	1.65	
4573.00	0.180	27.740	4541.66	-240.26	-266.79	-330.66	40°13'05.335"N	104°43'42.999"W	1.66	
4744.00	0.210	5.870	4712.66	-239.73	-266.24	-330.50	40°13'05.341"N	104°43'42.997"W	0.05	
4914.00	0.440	325.770	4882.66	-238.85	-265.39	-330.84	40°13'05.349"N	104°43'43.002"W	0.18	
5083.00	1.200	354.410	5051.64	-236.52	-263.09	-331.38	40°13'05.372"N	104°43'43.009"W	0.50	
5254.00	0.510	108.280	5222.63	-235.02	-261.55	-330.83	40°13'05.387"N	104°43'43.002"W	0.87	
5424.00	0.170	68.990	5392.63	-235.24	-261.70	-329.87	40°13'05.386"N	104°43'42.989"W	0.23	
5594.00	0.150	33.410	5562.63	-235.00	-261.42	-329.52	40°13'05.388"N	104°43'42.985"W	0.06	
5764.00	0.730	356.100	5732.62	-233.74	-260.15	-329.47	40°13'05.401"N	104°43'42.984"W	0.36	
5935.00	1.000	284.580	5903.60	-232.16	-258.69	-330.99	40°13'05.415"N	104°43'43.004"W	0.60	
6105.00	1.890	216.360	6073.56	-233.80	-260.58	-334.08	40°13'05.397"N	104°43'43.044"W	1.05	
6275.00	2.050	220.510	6243.46	-238.07	-265.15	-337.72	40°13'05.351"N	104°43'43.090"W	0.13	
6445.00	0.920	223.510	6413.40	-241.14	-268.45	-340.64	40°13'05.319"N	104°43'43.128"W	0.67	
6615.00	0.980	214.730	6583.38	-243.18	-270.63	-342.40	40°13'05.297"N	104°43'43.151"W	0.09	
6699.00	0.830	267.490	6667.37	-243.71	-271.25	-343.42	40°13'05.291"N	104°43'43.164"W	0.97	
6742.00	3.460	5.280	6710.34	-242.42	-269.97	-343.61	40°13'05.304"N	104°43'43.166"W	8.53	
6784.00	8.210	1.940	6752.11	-238.19	-265.71	-343.39	40°13'05.346"N	104°43'43.164"W	11.33	
6827.00	12.260	0.530	6794.42	-230.59	-258.07	-343.25	40°13'05.421"N	104°43'43.162"W	9.44	
6870.00	15.300	2.610	6836.18	-220.41	-247.84	-342.95	40°13'05.522"N	104°43'43.158"W	7.16	
6912.00	20.160	0.110	6876.17	-207.69	-235.05	-342.68	40°13'05.649"N	104°43'43.154"W	11.71	
6955.00	24.910	358.580	6915.87	-191.25	-218.58	-342.89	40°13'05.812"N	104°43'43.157"W	11.13	
6997.00	30.200	358.280	6953.10	-171.85	-199.17	-343.43	40°13'06.003"N	104°43'43.164"W	12.60	
7040.00	35.750	359.340	6989.16	-148.50	-175.78	-343.90	40°13'06.235"N	104°43'43.170"W	12.98	
7083.00	41.600	0.030	7022.71	-121.71	-148.92	-344.04	40°13'06.500"N	104°43'43.172"W	13.64	
7125.00	45.800	0.840	7053.07	-92.81	-119.91	-343.81	40°13'06.787"N	104°43'43.169"W	10.09	
7168.00	49.620	1.420	7082.00	-61.15	-88.11	-343.17	40°13'07.101"N	104°43'43.161"W	8.94	
7210.00	52.710	1.780	7108.33	-28.63	-55.42	-342.26	40°13'07.424"N	104°43'43.149"W	7.39	
7253.00	58.000	1.930	7132.77	6.52	-20.07	-341.11	40°13'07.773"N	104°43'43.134"W	12.31	
7296.00	61.330	0.530	7154.48	43.45	17.03	-340.32	40°13'08.140"N	104°43'43.124"W	8.24	
7336.00	65.210	359.340	7172.47	79.06	52.74	-340.37	40°13'08.493"N	104°43'43.125"W	10.06	
7379.00	67.420	359.440	7189.75	118.35	92.12	-340.79	40°13'08.882"N	104°43'43.130"W	5.14	
7422.00	70.800	359.540	7205.08	158.42	132.28	-341.15	40°13'09.279"N	104°43'43.135"W	7.86	
7464.00	73.850	0.100	7217.83	198.32	172.30	-341.27	40°13'09.674"N	104°43'43.136"W	7.37	
7507.00	77.160	0.570	7228.59	239.80	213.92	-341.03	40°13'10.086"N	104°43'43.133"W	7.77	
7548.00	80.980	359.930	7236.36	279.91	254.17	-340.85	40°13'10.483"N	104°43'43.131"W	9.44	
7593.00†	85.799	359.602	7241.54	324.48	298.86	-341.04	40°13'10.925"N	104°43'43.133"W	10.73	7" CASING POINT
7610.00	87.620	359.480	7242.52	341.41	315.83	-341.17	40°13'11.093"N	104°43'43.135"W	10.73	
7654.00	88.030	359.790	7244.18	385.26	359.79	-341.45	40°13'11.527"N	104°43'43.139"W	1.17	
7738.00	89.170	0.330	7246.24	468.98	443.77	-341.36	40°13'12.357"N	104°43'43.138"W	1.50	
7821.00	89.410	0.100	7247.27	551.69	526.76	-341.05	40°13'13.177"N	104°43'43.134"W	0.40	

Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (117 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7906.00	89.930	359.850	7247.76	636.44	611.76	-341.09	40°13'14.017"N	104°43'43.134"W	0.68	
7992.00	89.780	359.400	7247.97	722.22	697.76	-341.65	40°13'14.867"N	104°43'43.141"W	0.55	
8078.00	89.630	359.650	7248.42	808.01	783.75	-342.36	40°13'15.717"N	104°43'43.151"W	0.34	
8163.00	89.440	358.880	7249.11	892.82	868.74	-343.46	40°13'16.556"N	104°43'43.165"W	0.93	
8248.00	90.150	359.140	7249.41	977.67	953.73	-344.92	40°13'17.396"N	104°43'43.184"W	0.89	
8419.00	90.930	358.920	7247.80	1148.34	1124.69	-347.82	40°13'19.086"N	104°43'43.221"W	0.47	
8590.00	91.580	358.860	7244.05	1319.01	1295.62	-351.13	40°13'20.775"N	104°43'43.264"W	0.38	
8760.00	90.710	0.540	7240.66	1488.52	1465.58	-352.02	40°13'22.454"N	104°43'43.275"W	1.11	
8930.00	90.620	359.920	7238.68	1657.94	1635.56	-351.34	40°13'24.134"N	104°43'43.266"W	0.37	
9101.00	88.570	359.720	7239.89	1828.44	1806.55	-351.87	40°13'25.824"N	104°43'43.273"W	1.20	
9271.00	89.070	359.770	7243.39	1997.95	1976.51	-352.63	40°13'27.503"N	104°43'43.283"W	0.30	
9442.00	89.220	359.860	7245.94	2168.46	2147.49	-353.18	40°13'29.193"N	104°43'43.290"W	0.10	
9612.00	89.870	359.770	7247.29	2337.98	2317.48	-353.73	40°13'30.873"N	104°43'43.297"W	0.39	
9782.00	89.900	358.990	7247.63	2507.59	2487.47	-355.57	40°13'32.553"N	104°43'43.321"W	0.46	
9952.00	88.150	358.640	7250.53	2677.28	2657.40	-359.09	40°13'34.232"N	104°43'43.366"W	1.05	
10122.00	88.510	359.350	7255.48	2846.90	2827.30	-362.07	40°13'35.911"N	104°43'43.405"W	0.47	
10292.00	88.850	358.090	7259.40	3016.59	2997.21	-365.86	40°13'37.590"N	104°43'43.454"W	0.77	
10462.00	89.010	357.450	7262.57	3186.43	3167.05	-372.48	40°13'39.268"N	104°43'43.539"W	0.39	
10632.00	88.140	0.710	7266.80	3356.03	3336.95	-375.21	40°13'40.947"N	104°43'43.574"W	1.98	
10802.00	89.000	2.180	7271.04	3525.07	3506.84	-370.92	40°13'42.626"N	104°43'43.519"W	1.00	
10972.00	90.610	1.360	7271.62	3694.06	3676.75	-365.67	40°13'44.305"N	104°43'43.452"W	1.06	
11143.00	91.510	0.840	7268.46	3864.22	3847.69	-362.39	40°13'45.994"N	104°43'43.409"W	0.61	
11311.00	91.670	0.610	7263.80	4031.47	4015.61	-360.26	40°13'47.654"N	104°43'43.382"W	0.17	
11480.00	89.660	1.480	7261.84	4199.67	4184.56	-357.18	40°13'49.323"N	104°43'43.342"W	1.30	
11651.00	90.150	2.040	7262.12	4369.66	4355.48	-351.93	40°13'51.012"N	104°43'43.274"W	0.44	
11702.00	90.250	2.440	7261.94	4420.31	4406.44	-349.94	40°13'51.516"N	104°43'43.249"W	0.81	LAST BHI MWD+IFR SURVEY
11753.00	90.250	2.440	7261.72	4470.94	4457.39	-347.76	40°13'52.019"N	104°43'43.221"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: BROTEMARKLE 3N-13HZ PWB Ref Wellpath: BROTEMARKLE 3N-13HZ PWP

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	1300.00	1284.00	16.00	1299.94	0.00	0.00	4.15	-10.06
9.625in Casing Surface	16.00	1300.00	1284.00	16.00	1299.94	0.00	0.00	4.15	-10.06
8.75in Open Hole	1300.00	7605.00	6305.00	1299.94	7242.28	4.15	-10.06	310.83	-341.13
7in Casing Intermediate	16.00	7593.00	7577.00	16.00	7241.54	0.00	0.00	298.86	-341.04
6.125in Open Hole	7593.00	11753.00	4160.00	7241.54	7261.72	298.86	-341.04	4457.39	-347.76



Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T3N-R66W SECTION LINES		11.00	-36.79	-657.13	3215084.96	1323477.82	40°13'07.608"N	104°43'47.208"W	polygon
BROTEMARKLE 3N-13HZ BHL ON PLAT REV-1 (460'FNL & 1715'FWL, SEC.13)		7263.00	4483.07	-347.08	3215355.60	1328000.00	40°13'52.273"N	104°43'43.212"W	point
BROTEMARKLE 29N-13HZ/3N-13HZ LAND BOX		7263.00	-37.19	-597.09	3215145.00	1323477.93	40°13'07.604"N	104°43'46.434"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: BROTEMARKLE 3N-13HZ PWB Ref Wellpath: BROTEMARKLE 3N-13HZ PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1216.00	Generic gyro - continuous (Standard)	MS ENERGY GYRODATA SURVEYS <116-1216>	BROTEMARKLE 3N-13HZ PWB
1216.00	7548.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1338-7548>	BROTEMARKLE 3N-13HZ PWB
7548.00	11702.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7610-11702>	BROTEMARKLE 3N-13HZ PWB
11702.00	11753.00	Blind Drilling (std)	Projection to bit	BROTEMARKLE 3N-13HZ PWB



Actual Wellpath Report

BROTEMARKLE 3N-13HZ PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 BROTEMARKLE 3N-13HZ (319'FSL & 2048'FWL, SEC.13)
Area	COLORADO	Well	BROTEMARKLE 3N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BROTEMARKLE 3N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	272.830	16.00	TIE-ON
116.00	0.900	272.830	116.00	BEGIN GYRO SURVEYS
1216.00	0.620	357.280	1215.94	TIE-INTO GYROS
1338.00	0.180	284.330	1337.94	BEGIN BHI MWD+IFR SURVEYS
7593.00	85.799	359.602	7241.54	7" CASING POINT
11702.00	90.250	2.440	7261.94	LAST BHI MWD+IFR SURVEY
11753.00	90.250	2.440	7261.72	PROJECTION TO BIT