

Location	COLORADO	Slot	SLOT#01 HOMESTEAD 31-4 (569'FNL & 508'FWL)
Field	WELD COUNTY (KERR MCGEE)	Well	HOMESTEAD 31 4
Facility	SEC 04-T2N R87W	Wellbore	HOMESTEAD 31-4 PWB

Plot reference worksheet is HOMESTEAD S1-4 (REV. 8.0) PWP	
True vertical depths are referenced to XTREME 3 (RT)	Grid System: NAD83 / Lambert Colorado State Plane - Northern Zone (S01) US feet
Measured depths are referenced to XTREME 3 (RT)	North Reference: True north
XTREME 3 (RT) to Mean Sea Level: 4671 feet	Scale: True distance
Mean Sea Level to Mud Line (Folly): SEC.04-T2N R87W 0 feet	Depth are in feet
Coordinates are in feet referenced to Slot	Created by: wspirian on 4/14/2010



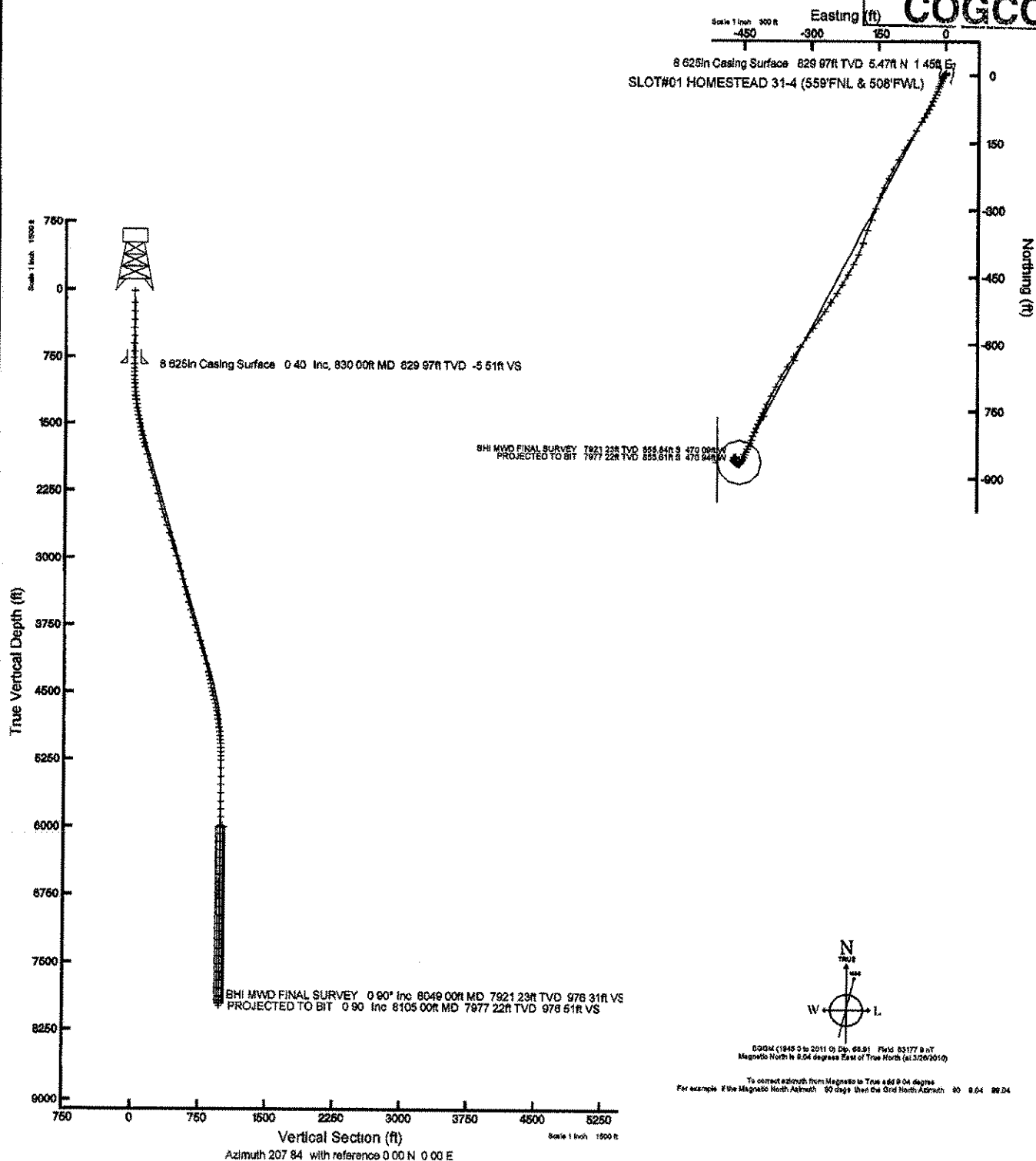
**BAKER
HUGHES**

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Actual Wellpath Report

HOMESTEAD 31-4 AWB_awp

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 HOMESTEAD 31-4 (559'FNL & 508'FWL)
Area	COLORADO	Well	HOMESTEAD 31-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB
Facility	SEC 04-T2N-R67W		

REPORT SETUP INFORMATION

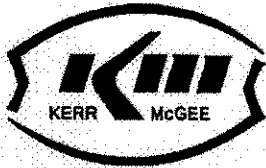
Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Wagnjam
Scale	0.999958	Report Generated	4/14/2010 at 2:54:20 PM
Convergence at slot	0.39° East	Database/Source file	WellArchitect_Denver/HOMESTEAD_31-4_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	3166950.48	1306640.54	40°10'24.888"N	104°54'09.180"W
Facility Reference Pt			3166950.48	1306640.54	40°10'24.888"N	104°54'09.180"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 8 (RT) to Facility Vertical Datum	4871.00ft
Horizontal Reference Pt	Slot	XTREME 8 (RT) to Mean Sea Level	4871.00ft
Vertical Reference Pt	XTREME 8 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 8 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	207.84°



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HOMESTEAD 31-4 AWB_awp

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	HOMESTEAD 31-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB
Facility	SEC 04-T2N-R67W		

WELLPATH DATA (114 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	37.900	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	37.900	17.00	0.00	0.00	0.00	0.00	
152.00	0.400	37.900	152.00	-0.46	0.37	0.29	0.30	
245.00	0.900	41.400	244.99	-1.49	1.18	0.97	0.54	
338.00	0.700	22.800	337.98	-2.77	2.25	1.68	0.35	
429.00	0.600	32.200	428.98	-3.80	3.16	2.14	0.16	
519.00	0.300	6.600	518.98	-4.49	3.80	2.42	0.39	
608.00	0.400	353.200	607.97	-4.96	4.34	2.41	0.14	
697.00	0.400	307.200	696.97	-5.27	4.83	2.13	0.35	
767.00	0.400	314.600	766.97	-5.38	5.15	1.76	0.07	
839.00	0.400	316.700	838.97	-5.53	5.51	1.41	0.02	
884.00	0.400	312.400	883.97	-5.62	5.73	1.18	0.07	
927.00	0.800	249.900	926.96	-5.44	5.73	0.79	1.65	
972.00	1.900	227.700	971.95	-4.50	5.12	-0.05	2.66	
1018.00	2.600	221.000	1017.92	-2.77	3.82	-1.30	1.62	
1061.00	3.200	218.900	1060.86	0.64	2.15	-2.70	1.42	
1107.00	4.000	213.300	1106.77	2.22	-0.19	-4.38	1.90	
1152.00	4.900	201.700	1151.63	5.69	-3.29	5.96	2.82	
1197.00	5.600	200.300	1196.45	9.78	-7.13	-7.43	1.58	
1243.00	6.800	203.800	1242.18	14.72	-11.73	-9.31	2.73	
1288.00	7.500	202.800	1286.83	20.30	-16.88	-11.52	1.58	
1333.00	8.200	202.400	1331.40	26.42	-22.55	-13.88	1.56	
1376.00	8.900	201.000	1373.93	32.78	-28.49	-16.24	1.70	
1420.00	9.600	197.500	1417.35	39.77	-35.17	-18.56	2.04	
1465.00	10.100	203.000	1461.69	47.39	-42.38	-21.23	2.37	
1510.00	10.600	203.500	1505.96	55.45	-49.81	-24.43	1.13	
1556.00	11.500	205.000	1551.11	64.25	-57.84	-28.05	2.05	
1601.00	12.100	207.300	1595.15	73.44	-66.10	-32.11	1.69	
1646.00	12.400	210.500	1639.13	82.99	-74.45	-36.73	1.65	
1689.00	13.500	211.500	1681.04	92.61	-82.71	-41.69	2.61	
1735.00	14.300	212.000	1725.69	103.63	-92.11	-47.51	1.76	
1780.00	15.000	209.800	1769.23	115.00	-101.87	-53.35	1.99	
1868.00	16.000	211.000	1854.02	138.49	-122.15	-65.25	1.19	
1959.00	15.400	213.700	1941.63	163.03	-142.96	-78.42	1.04	
2050.00	16.800	209.100	2029.06	188.20	-164.50	-91.52	2.08	
2141.00	16.500	209.400	2116.25	214.27	-187.25	-104.26	0.34	
2231.00	15.400	208.000	2202.78	238.99	-208.94	-116.14	1.29	
2322.00	15.000	208.400	2290.60	262.85	-229.96	-127.42	0.45	
2412.00	14.400	203.100	2377.66	285.65	-250.50	-137.35	1.64	
2502.00	16.000	202.000	2464.50	309.15	-272.30	-146.38	1.81	
2593.00	18.000	199.000	2551.53	335.52	-297.23	-155.66	2.40	

2683 00	17 700	200 000	2637 19	362 81	-323 23	-164 87	0 48	
2773 00	18 300	199 000	2722 79	390 33	-349 45	-174 15	0 75	
2863 00	17 800	199 200	2808 36	417 89	-375 80	-183 27	0 56	
2953 00	17 000	205 200	2894 25	444 64	-400 70	-193 40	2 18	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 HOMESTEAD 31-4 (559'FNL & 508'FWL)
Area	COLORADO	Well	HOMESTEAD 31-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB
Facility	SEC 04-T2N-R67W		

WELLPATH DATA (114 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3044 00	16 100	206 000	2981 48	470 54	-424 07	-204 59	1 02	
3134 00	16 400	211 000	3067 88	495 70	-446 18	-216 61	1 59	
3223 00	15 400	211 000	3153 48	520 04	-467 08	-229 17	1 12	
3313 00	15 300	209 100	3240 27	543 84	-487 70	-241 10	0 57	
3404 00	15 300	217 000	3328 05	567 70	-507 78	-254 16	2 29	
3494 00	15 000	214 000	3414 93	591 01	-526 92	-267 82	0 93	
3585 00	15 100	215 800	3502 80	614 45	-546 30	-281 34	0 53	
3674 00	15 600	214 400	3588 63	637 82	-565 57	-294 88	0 70	
3763 00	16 100	213 000	3674 25	662 00	-585 80	-308 37	0 71	
3852 00	17 500	215 400	3759 45	687 56	-607 06	-322 84	1 76	
3943 00	16 600	210 500	3846 45	714 11	-629 41	-337 36	1 86	
4033 00	17 000	213 300	3932 61	740 05	-651 49	-351 11	1 00	
4124 00	17 800	209 400	4019 45	767 20	-674 72	-365 24	1 55	
4213 00	15 600	205 900	4104 69	792 76	-697 34	-377 15	2 72	
4304 00	13 900	208 400	4192 69	815 92	-717 97	-387 70	1 99	
4394 00	13 400	201 700	4280 15	837 10	-737 17	-396 69	1 84	
4439 00	13 100	204 900	4323 96	847 38	-746 64	-400 77	1 76	
4485 00	12 600	204 500	4368 80	857 59	-755 93	-405 04	1 10	
4529 00	12 000	207 700	4411 79	866 96	-764 35	-409 16	2 06	
4573 00	12 200	203 800	4454 82	876 17	-772 65	-413 16	1 91	
4618 00	12 400	204 500	4498 79	885 74	-781 40	-417 09	0 55	
4664 00	12 400	202 100	4543 71	895 58	-790 47	-420 99	1 12	
4708 00	12 100	202 400	4586 71	904 87	-799 11	-424 53	0 70	
4753 00	11 400	201 700	4630 77	913 99	-807 60	-427 97	1 59	
4799 00	10 700	200 300	4675 91	922 74	-815 83	-431 13	1 63	
4843 00	10 500	198 900	4719 16	930 75	-823 46	-433 85	0 74	
4888 00	9 700	203 100	4763 47	938 58	-830 82	-436 66	2 42	
4934 00	9 200	207 300	4808 84	946 12	-837 65	-439 87	1 85	
4979 00	8 400	202 100	4853 31	952 99	-843 90	-442 76	2 51	
5025 00	8 200	202 500	4898 83	959 60	-850 04	-445 27	0 45	
5071 00	7 400	209 000	4944 41	965 83	-855 66	-447 97	2 59	
5116 00	5 700	212 300	4989 11	970 95	-860 09	-450 57	3 87	
5161 00	5 100	210 800	5033 91	975 18	-863 69	-452 78	1 37	
5206 00	4 100	214 400	5078 77	978 77	-866 74	-454 72	2 31	
5251 00	2 800	214 400	5123 68	981 46	-868 97	-456 25	2 89	
5297 00	1 900	228 100	5169 64	983 29	-870 41	-457 45	2 29	
5343 00	1 700	268 500	5215 62	984 34	-870 94	-458 70	2 73	
5388 00	1 900	287 500	5260 60	984 81	-870 73	-460 08	1 39	
5479 00	1 900	292 800	5351 55	985 21	-869 69	-462 91	0 19	
5569 00	1 200	308 200	5441 52	985 17	-868 53	-465 02	0 90	
5660 00	1 000	292 800	5532 50	985 07	-867 63	-466 50	0 39	

5751 00	1 300	292 800	5623 48	985 23	-866 93	-468 19	0 33	
5841 00	0 900	349 000	5713 47	984 77	-865 84	-469 26	1 22	
5932 00	0 800	314 600	5804 46	984 03	-864 69	-469 85	0 56	
6022 00	1 500	288 900	5894 44	984 03	-863 87	-471 41	0 95	



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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 HOMESTEAD 31-4 (559'FNL & 508'FWL)
Area	COLORADO	Well	HOMESTEAD 31-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB
Facility	SEC 04-T2N-R67W		

WELLPATH DATA (114 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6111.00	0.500	346.500	5983.43	983.92	-863.11	-472.61	1.46	
6202.00	0.800	55.100	6074.42	983.06	-862.36	-472.18	0.85	
6292.00	2.100	44.600	6164.39	980.92	-860.83	-470.51	1.47	
6382.00	1.900	35.400	6254.34	977.86	-858.44	-468.48	0.42	
6473.00	1.000	43.500	6345.31	975.60	-856.63	-467.06	1.01	
6563.00	1.200	41.000	6435.29	973.93	-855.35	-465.90	0.23	
6654.00	0.300	313.500	6526.28	972.94	-854.47	-465.45	1.35	
6744.00	0.620	173.200	6616.28	973.27	-854.79	-465.57	0.97	
6834.00	0.700	170.800	6706.28	974.11	-855.82	-465.42	0.09	
6924.00	0.500	176.000	6796.27	974.88	-856.75	-465.30	0.23	
7015.00	0.500	179.600	6887.27	975.57	-857.54	-465.27	0.03	
7105.00	0.300	179.200	6977.27	976.12	-858.17	-465.27	0.22	
7195.00	0.300	155.300	7067.27	976.47	-858.62	-465.17	0.14	
7285.00	0.400	224.200	7157.26	976.92	-859.06	-465.29	0.45	
7376.00	0.200	237.600	7248.26	977.36	-859.37	-465.64	0.23	
7466.00	0.200	308.600	7338.26	977.47	-859.36	-465.90	0.26	
7556.00	0.200	281.900	7428.26	977.48	-859.23	-466.17	0.10	
7643.00	0.300	351.800	7515.26	977.34	-858.97	-466.36	0.34	
7732.00	0.500	337.400	7604.26	976.90	-858.38	-466.54	0.25	
7823.00	0.700	318.800	7695.25	976.45	-857.60	-467.06	0.30	
7911.00	1.000	299.100	7783.24	976.24	-856.82	-468.08	0.47	
8002.00	0.900	297.700	7874.23	976.23	-856.10	-469.41	0.11	
8049.00	0.900	284.700	7921.23	976.31	-855.84	-470.09	0.43	BHI MWD FINAL SURVEY
8105.00†	0.900	284.700	7977.22	976.51	-855.61	-470.94	0.00	PROJECTED TO BIT

HOLE & CASING SECTIONS

Ref Wellbore HOMESTEAD 31-4 AWB

Ref Wellpath HOMESTEAD 31-4 AWB_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]
12.25in Open Hole	17.00	830.00	813.00	17.00	829.97	0.00	0.00	5.47	1.45
8.625in Casing Surface	0.00	830.00	830.00	0.00	829.97	0.00	0.00	5.47	1.45
7.875in Open Hole	830.00	8105.00	7275.00	829.97	7977.22	5.47	1.45	-855.61	-470.94



Actual Wellpath Report

HOMESTEAD 31-4 AWB_awp

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Area	COLORADO	Well	HOMESTEAD 31-4	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB	
Facility	SEC 04-T2N-R67W			

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
HOMESTEAD 31-4 BHL ON PLAT (1430'FNL & 44'FWL, REV-1)		6000 00	-867 02	-463 91	3166492 44	1305770 45	40°10'16 320"N	104°54'15 156"W	point
HOMESTEAD 31-4 GEO TARGET 50' RADIUS (1430'FNL & 50'FWL, REV-2)		6000 00	-867 02	-457 91	3166498 44	1305770 49	40°10'16 320"N	104°54'15 079"W	circle
HOMESTEAD 31-4 HARDLINE 50'W OF GEO TARGET		6000 00	-867 02	-507 91	3166448 44	1305770 15	40°10'16 320"N	104°54'15 723"W	point

WELLPATH COMPOSITION				
Ref Wellbore HOMESTEAD 31-4 AWB		Ref Wellpath HOMESTEAD 31-4 AWB_awp		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17 00	767 00	NaviTrak (Standard)	BHI MWD/NAVITRACK 12 25 HOLE <152-767>	HOMESTEAD 31-4 AWB
767 00	8049 00	NaviTrak (Standard)	BHI MWD/NAVITRACK 7 875 HOLE <839-8049>	HOMESTEAD 31-4 AWB
8049 00	8105 00	Blind Drilling (std)	Projection to bit	HOMESTEAD 31-4 AWB



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	HOMESTEAD 31-4 AWB
Facility	SEC 04-T2N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8049.00	0.900	284.700	7921.23	BHI MWD FINAL SURVEY
8105.00	0.900	284.700	7977.22	PROJECTED TO BIT