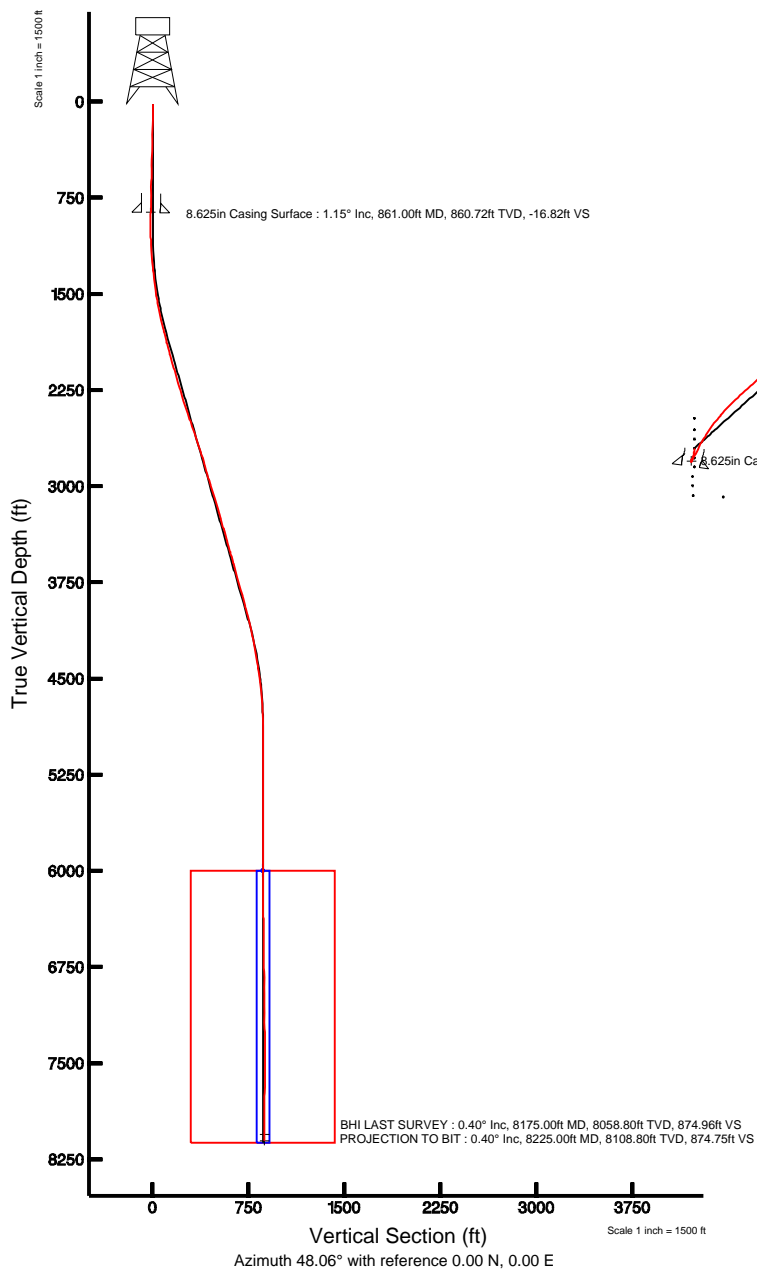
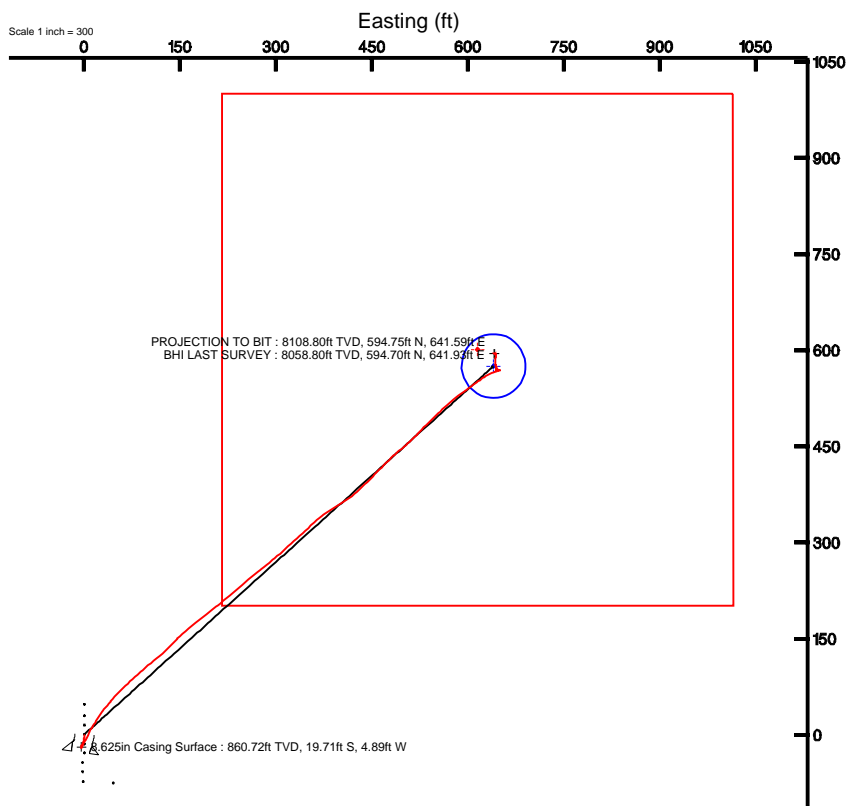


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: RASMUSSEN 20-29
 Facility: SEC.29-T2N-R68W Wellbore: RASMUSSEN 20-29 PWB



Plot reference wellpath is RASMUSSEN 20-29 (REV-A.0) PWP	
True vertical depths are referenced to XTREME 12 (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to XTREME 12 (RT)	North Reference: True north
XTREME 12 (RT) to Mean Sea Level: 4950 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.29-T2N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wagnjam on 7/19/2010



BGGM (1945.0 to 2011.0) Dip: 66.83° Field: 53123.1 nT
 Magnetic North is 9.09 degrees East of True North (at 5/4/2010)

To correct azimuth from Magnetic to True add 9.09 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.09 = 99.09



Actual Wellpath Report

Rasmussen 20-29 AWB_awp

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
Area	COLORADO	Well	RASMUSSEN 20-29
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Rasmussen 20-29 AWB
Facility	SEC.29-T2N-R68W		

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	0.99996	Report Generated	7/19/2010 at 1:01:34 PM
Convergence at slot	0.31° East	Database/Source file	WA_Denver/Rasmussen_20-29_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-3839.62	1440.64	3132947.01	1281218.95	40°06'15.696"N	105°01'28.992"W
Facility Reference Pt			3131486.09	1285050.71	40°06'53.640"N	105°01'47.532"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 12 (RT) to Facility Vertical Datum	4950.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RT) to Mean Sea Level	4950.00ft
Vertical Reference Pt	XTREME 12 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 12 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	48.06°



Actual Wellpath Report

Rasmussen 20-29 AWB_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
Area	COLORADO	Well	RASMUSSEN 20-29
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Rasmussen 20-29 AWB
Facility	SEC.29-T2N-R68W		

WELLPATH DATA (82 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	182.400	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	182.400	15.00	0.00	0.00	0.00	0.00	
151.00	1.400	182.400	150.99	-1.16	-1.66	-0.07	1.03	
244.00	1.800	186.700	243.95	-3.05	-4.25	-0.29	0.45	
337.00	1.900	189.800	336.90	-5.36	-7.22	-0.72	0.15	
430.00	1.500	187.400	429.86	-7.49	-9.94	-1.14	0.44	
520.00	1.700	201.800	519.83	-9.58	-12.35	-1.79	0.50	
611.00	1.900	202.800	610.78	-12.16	-14.99	-2.87	0.22	
701.00	1.100	209.900	700.75	-14.33	-17.12	-3.88	0.91	
816.00	0.900	198.600	815.73	-16.16	-18.93	-4.72	0.24	
903.00	1.400	181.400	902.71	-17.49	-20.64	-4.96	0.69	
994.00	0.100	10.500	993.71	-18.19	-21.67	-4.98	1.65	
1084.00	2.600	26.500	1083.67	-16.23	-19.77	-4.05	2.78	
1174.00	4.500	26.000	1173.50	-11.06	-14.77	-1.59	2.11	
1263.00	5.700	28.500	1262.14	-3.66	-7.75	2.05	1.37	
1353.00	7.700	25.300	1351.52	6.12	1.63	6.76	2.26	
1443.00	7.700	33.400	1440.72	17.51	12.12	12.65	1.20	
1534.00	9.700	29.900	1530.66	30.69	23.85	19.83	2.27	
1624.00	11.300	39.000	1619.16	46.61	37.28	29.16	2.56	
1712.00	12.800	40.400	1705.22	64.79	51.41	40.91	1.74	
1803.00	14.200	44.300	1793.70	85.91	67.07	55.24	1.83	
1893.00	14.500	47.100	1880.90	108.20	82.64	71.20	0.84	
1982.00	15.700	48.900	1966.82	131.38	98.14	88.44	1.45	
2071.00	17.100	51.300	2052.20	156.48	114.24	107.72	1.75	
2161.00	16.300	46.400	2138.41	182.32	131.23	127.20	1.80	
2251.00	16.000	43.900	2224.86	207.32	148.87	144.94	0.84	
2341.00	17.100	51.000	2311.14	232.91	166.14	163.83	2.56	
2431.00	18.400	51.700	2396.85	260.30	183.27	185.26	1.46	
2521.00	19.800	51.700	2481.89	289.69	201.52	208.37	1.56	
2611.00	18.800	49.600	2566.84	319.40	220.37	231.38	1.35	
2701.00	18.700	49.600	2652.06	348.32	239.12	253.41	0.11	
2791.00	17.800	51.700	2737.53	376.47	257.00	275.19	1.24	
2879.00	15.300	50.600	2821.88	401.49	272.71	294.72	2.86	
2970.00	16.700	48.100	2909.35	426.56	289.06	313.73	1.71	
3060.00	17.900	47.800	2995.28	453.33	306.99	333.61	1.34	
3150.00	17.800	46.700	3080.95	480.91	325.71	353.86	0.39	
3240.00	16.100	52.700	3167.04	507.11	342.71	373.81	2.71	
3330.00	15.900	59.700	3253.56	531.62	356.49	394.38	2.15	
3420.00	16.200	53.800	3340.06	556.19	370.13	415.16	1.84	
3510.00	15.700	45.700	3426.61	580.85	386.05	434.00	2.53	
3600.00	16.000	45.300	3513.19	605.41	403.28	451.54	0.35	
3690.00	14.900	43.900	3599.93	629.34	420.34	468.38	1.29	
3778.00	15.400	48.500	3684.88	652.31	436.24	484.97	1.48	
3868.00	16.500	49.900	3771.41	677.03	452.39	503.70	1.29	
3957.00	14.900	43.200	3857.10	701.07	468.87	521.20	2.71	



Actual Wellpath Report

Rasmussen 20-29 AWB_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
Area	COLORADO	Well	RASMUSSEN 20-29
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Rasmussen 20-29 AWB
Facility	SEC.29-T2N-R68W		

WELLPATH DATA (82 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4047.00	15.100	45.300	3944.03	724.31	485.56	537.46	0.64	
4138.00	14.300	46.000	4032.05	747.38	501.70	553.97	0.90	
4227.00	13.100	48.100	4118.52	768.45	516.07	569.38	1.46	
4316.00	11.100	53.800	4205.54	787.06	527.87	583.80	2.62	
4406.00	9.500	52.400	4294.09	803.09	537.52	596.68	1.80	
4494.00	9.600	55.500	4380.87	817.61	546.11	608.48	0.60	
4586.00	8.500	54.100	4471.72	831.97	554.44	620.31	1.22	
4675.00	7.100	59.700	4559.90	843.90	561.07	630.39	1.79	
4765.00	4.800	71.700	4649.41	852.80	565.06	638.77	2.89	
4856.00	3.700	68.500	4740.16	859.04	567.33	645.11	1.24	
4945.00	2.100	61.500	4829.04	863.32	569.16	649.22	1.84	
5035.00	0.300	236.900	4919.02	864.69	569.82	650.47	2.67	
5124.00	0.300	253.800	5008.02	864.25	569.63	650.05	0.10	
5259.00	1.000	273.000	5143.01	863.10	569.59	648.54	0.54	
5395.00	1.200	287.600	5278.99	861.54	570.08	645.99	0.25	
5530.00	0.000	94.600	5413.98	860.82	570.51	644.65	0.89	
5665.00	0.400	32.700	5548.98	861.27	570.91	644.90	0.30	
5801.00	0.600	356.800	5684.97	862.18	572.02	645.12	0.27	
5936.00	0.500	2.400	5819.96	863.03	573.31	645.10	0.08	
6071.00	0.400	319.600	5954.96	863.45	574.26	644.82	0.25	
6206.00	0.700	3.900	6089.96	864.06	575.44	644.57	0.37	
6342.00	0.800	316.700	6225.94	864.63	576.96	643.98	0.45	
6477.00	0.900	358.600	6360.93	865.30	578.71	643.31	0.46	
6612.00	1.000	6.300	6495.91	866.87	580.94	643.41	0.12	
6747.00	1.000	358.900	6630.89	868.52	583.29	643.52	0.10	
6882.00	1.100	4.600	6765.87	870.23	585.76	643.60	0.11	
7017.00	0.900	6.000	6900.85	871.96	588.10	643.81	0.15	
7151.00	0.900	15.100	7034.83	873.62	590.16	644.20	0.11	
7287.00	0.700	356.500	7170.82	875.03	592.02	644.42	0.24	
7420.00	0.200	318.100	7303.81	875.54	593.01	644.22	0.42	
7555.00	0.400	11.600	7438.81	875.92	593.65	644.16	0.24	
7689.00	0.400	312.520	7572.81	876.25	594.42	643.91	0.29	
7823.00	0.600	265.100	7706.81	875.64	594.68	642.86	0.33	
7958.00	0.300	280.500	7841.80	874.86	594.68	641.81	0.24	
8093.00	0.400	97.000	7976.80	874.96	594.69	641.93	0.52	
8175.00	0.400	279.100	8058.80	874.96	594.70	641.93	0.98	BHI LAST SURVEY
8225.00	0.400	279.100	8108.80	874.75	594.75	641.59	0.00	PROJECTION TO BIT



Actual Wellpath Report

Rasmussen 20-29 AWB_awp

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
Area	COLORADO	Well	RASMUSSEN 20-29
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Rasmussen 20-29 AWB
Facility	SEC.29-T2N-R68W		

HOLE & CASING SECTIONS Ref Wellbore: Rasmussen 20-29 AWB Ref Wellpath: Rasmussen 20-29 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	15.00	856.00	841.00	15.00	855.73	0.00	0.00	-19.61	-4.88
8.625in Casing Surface	15.00	861.00	846.00	15.00	860.72	0.00	0.00	-19.71	-4.89
7.875in Open Hole	861.00	8255.00	7394.00	860.72	NA	-19.71	-4.89	NA	NA

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
RASMUSSEN 20-29 GEO TARGET 50' RADIUS (1320'FSL & 1320'FEL, REV-1)		6000.00	575.59	640.58	3133584.47	1281797.94	40°06'21.384"N	105°01'20.748"W	circle
RASMUSSEN 20-29 LEGAL BOX (374'S,426'N,375'E,425'W OF GEO TARGET)		6000.00	601.59	615.58	3133559.33	1281823.81	40°06'21.641"N	105°01'21.070"W	square

WELLPATH COMPOSITION Ref Wellbore: Rasmussen 20-29 AWB Ref Wellpath: Rasmussen 20-29 AWB_awp				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	816.00	NaviTrak (Standard)	BHI MWD NAVI 12.25 HOLE <151-816>	Rasmussen 20-29 AWB
816.00	8175.00	NaviTrak (Standard)	BHI MWD NAVI 7.875 HOLE <903-8175>	Rasmussen 20-29 AWB
8175.00	8225.00	Blind Drilling (std)	Projection to bit	Rasmussen 20-29 AWB



Actual Wellpath Report

Rasmussen 20-29 AWB_awp

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 RASMUSSEN 20-29 (742'FSL & 1962'FEL)
Area	COLORADO	Well	RASMUSSEN 20-29
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Rasmussen 20-29 AWB
Facility	SEC.29-T2N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8175.00	0.400	279.100	8058.80	BHI LAST SURVEY
8225.00	0.400	279.100	8108.80	PROJECTION TO BIT