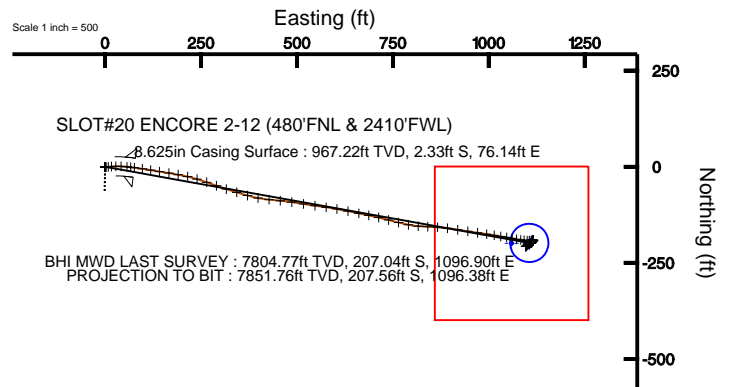
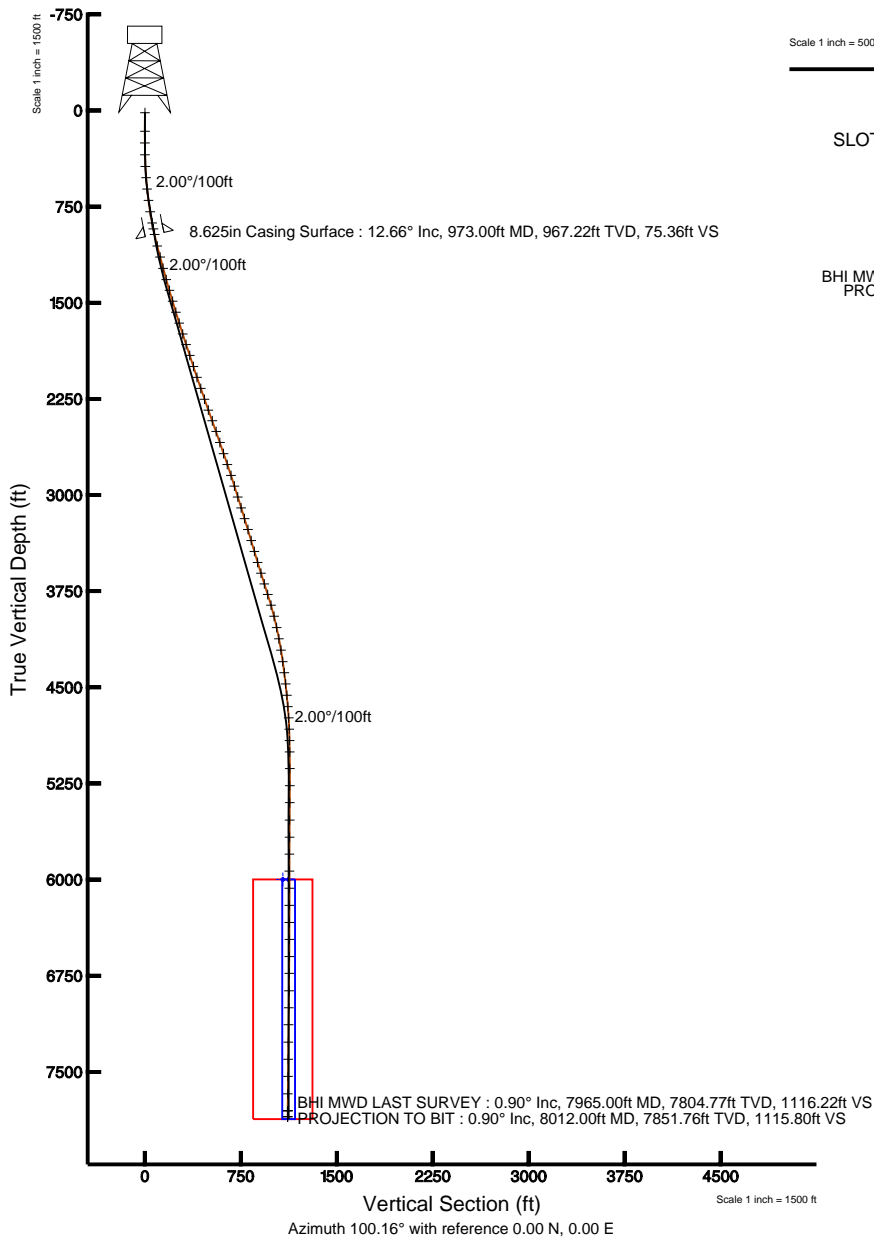


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
 Field: LARIMER COUNTY Well: ENCORE 2-12
 Facility: SEC.12-T5N-R68W Wellbore: ENCORE 2-12 PWB



Plot reference wellpath is ENCORE 2-12 (REV-A.0) PWP	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 6 (RKB)	North Reference: True north
Measured depths are referenced to XTREME 6 (RKB)	Scale: True distance
XTREME 6 (RKB) to Mean Sea Level: 4996 feet	Depths are in feet
Mean Sea Level to Mud line (Facility: SEC.12-T5N-R68W): 0 feet	Created by: cookdamm on 11/1/2010
Coordinates are in feet referenced to Slot	



BGGM (1945.0 to 2012.0) Dip: 67.07° Field: 53215.5 nT
 Magnetic North is 9.02 degrees East of True North (at 10/13/2010)

To correct azimuth from Magnetic to True add 9.02 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.02 = 99.02



Actual Wellpath Report

ENCORE 2-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
Area	COLORADO	Well	ENCORE 2-12
Field	LARIMER COUNTY	Wellbore	ENCORE 2-12 AWB
Facility	SEC.12-T5N-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	Cookdanm
Scale	0.999961	Report Generated	11/1/2010 at 5:09:24 PM
Convergence at slot	0.35° East	Database/Source file	Denver Server/ENCORE_2-12_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	2348.16	-2786.06	3151619.95	1396394.23	40°25'12.814"N	104°57'19.577"W
Facility Reference Pt			3154420.53	1394063.64	40°24'49.612"N	104°56'43.555"W
Field Reference Pt			3154420.53	1394063.64	40°24'49.612"N	104°56'43.555"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 6 (RKB) to Facility Vertical Datum	4996.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	4996.00ft
Vertical Reference Pt	XTREME 6 (RKB)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	100.16°



Actual Wellpath Report

ENCORE 2-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
Area	COLORADO	Well	ENCORE 2-12
Field	LARIMER COUNTY	Wellbore	ENCORE 2-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH DATA (81 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	228.000	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	228.000	16.00	0.00	0.00	0.00	0.00	
161.00	0.500	228.000	161.00	-0.39	-0.42	-0.47	0.34	
252.00	0.400	189.400	252.00	-0.63	-1.00	-0.82	0.34	
345.00	1.000	86.000	344.99	0.16	-1.27	-0.06	1.25	
436.00	2.800	80.000	435.94	3.02	-0.82	2.92	1.99	
524.00	4.500	83.600	523.76	8.35	-0.07	8.47	1.95	
613.00	6.300	86.400	612.36	16.44	0.63	16.81	2.04	
702.00	8.100	87.400	700.65	27.30	1.22	27.95	2.03	
792.00	9.300	93.000	789.62	40.70	1.13	41.55	1.63	
881.00	11.100	96.000	877.21	56.38	-0.14	57.25	2.11	
928.00	12.000	96.600	923.25	65.77	-1.18	66.60	1.93	
1065.00	14.000	98.000	1056.74	96.54	-5.12	97.17	1.48	
1154.00	14.300	100.000	1143.04	118.29	-8.53	118.65	0.64	
1245.00	15.600	99.400	1230.95	141.77	-12.48	141.79	1.44	
1336.00	16.100	98.300	1318.49	166.61	-16.30	166.35	0.64	
1424.00	16.500	100.400	1402.96	191.31	-20.32	190.71	0.81	
1512.00	16.300	103.600	1487.38	216.13	-25.48	215.01	1.05	
1602.00	16.700	107.100	1573.67	241.58	-32.25	239.65	1.19	
1691.00	17.800	108.200	1658.67	267.74	-40.26	264.79	1.29	
1780.00	17.800	111.000	1743.41	294.57	-49.38	290.41	0.96	
1867.00	18.600	106.800	1826.06	321.42	-58.16	316.11	1.77	
1956.00	18.700	107.500	1910.39	349.66	-66.55	343.31	0.28	
2047.00	18.500	105.400	1996.64	378.51	-74.77	371.14	0.77	
2137.00	18.200	101.100	2082.06	406.78	-81.27	398.70	1.54	
2228.00	19.200	95.600	2168.27	435.91	-85.47	427.54	2.23	
2317.00	19.000	95.200	2252.37	464.93	-88.21	456.53	0.27	
2407.00	20.300	98.700	2337.13	495.14	-91.90	486.56	1.95	
2496.00	20.300	98.700	2420.60	526.01	-96.57	517.08	0.00	
2585.00	19.700	99.000	2504.23	556.44	-101.25	547.16	0.68	
2676.00	18.000	97.000	2590.35	585.81	-105.36	576.26	2.00	
2767.00	18.500	100.800	2676.77	614.29	-109.78	604.40	1.42	
2857.00	19.300	101.500	2761.92	643.44	-115.42	633.00	0.92	
2947.00	18.200	102.000	2847.14	672.36	-121.31	661.33	1.24	
3034.00	17.100	100.800	2930.05	698.73	-126.53	687.18	1.33	
3123.00	17.400	102.900	3015.04	725.10	-131.96	713.01	0.78	
3212.00	17.800	105.400	3099.88	751.94	-138.54	739.09	0.96	
3300.00	17.500	102.900	3183.74	778.55	-145.06	764.96	0.93	
3389.00	17.100	102.900	3268.71	804.99	-150.97	790.76	0.45	
3479.00	16.300	92.700	3354.93	830.73	-154.52	816.28	3.37	
3568.00	16.500	93.400	3440.31	855.67	-155.86	841.37	0.32	
3657.00	16.500	93.800	3525.65	880.78	-157.45	866.60	0.13	
3745.00	17.800	97.600	3609.74	906.64	-160.06	892.40	1.95	
3833.00	17.800	98.700	3693.52	933.52	-163.87	919.03	0.38	
3920.00	17.700	98.300	3776.38	960.03	-167.79	945.26	0.18	



Actual Wellpath Report

ENCORE 2-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
Area	COLORADO	Well	ENCORE 2-12
Field	LARIMER COUNTY	Wellbore	ENCORE 2-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH DATA (81 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4007.00	17.100	99.400	3859.40	986.04	-171.79	970.97	0.79	
4097.00	13.600	98.000	3946.18	1009.86	-175.42	994.51	3.91	
4187.00	11.900	99.000	4033.95	1029.71	-178.35	1014.15	1.90	
4277.00	10.700	99.700	4122.21	1047.34	-181.21	1031.55	1.34	
4366.00	9.500	100.400	4209.83	1062.95	-183.92	1046.92	1.36	
4457.00	8.300	100.100	4299.73	1077.03	-186.43	1060.77	1.32	
4544.00	7.700	100.100	4385.88	1089.13	-188.56	1072.69	0.69	
4633.00	6.300	99.000	4474.22	1099.98	-190.36	1083.39	1.58	
4722.00	5.400	94.100	4562.75	1109.03	-191.43	1092.39	1.16	
4811.00	4.900	93.400	4651.39	1116.96	-191.95	1100.36	0.57	
4898.00	4.100	89.500	4738.13	1123.71	-192.15	1107.18	0.98	
4987.00	2.500	64.200	4826.98	1128.41	-191.27	1112.11	2.39	
5076.00	0.900	99.700	4915.94	1130.68	-190.55	1114.55	2.07	
5165.00	0.500	124.000	5004.93	1131.73	-190.88	1115.56	0.55	
5295.00	0.300	127.900	5134.93	1132.55	-191.41	1116.29	0.16	
5428.00	0.500	205.200	5267.93	1132.71	-192.15	1116.32	0.39	
5561.00	0.400	231.200	5400.92	1132.26	-192.96	1115.71	0.17	
5696.00	0.500	261.000	5535.92	1131.39	-193.35	1114.76	0.19	
5830.00	0.400	231.600	5669.91	1130.53	-193.73	1113.82	0.19	
5962.00	0.400	247.000	5801.91	1129.84	-194.20	1113.04	0.08	
6095.00	0.400	230.200	5934.91	1129.15	-194.68	1112.25	0.09	
6229.00	0.100	192.200	6068.91	1128.85	-195.09	1111.87	0.24	
6362.00	0.300	196.400	6201.91	1128.80	-195.54	1111.74	0.15	
6496.00	0.400	153.000	6335.90	1129.05	-196.29	1111.86	0.21	
6628.00	0.400	190.800	6467.90	1129.32	-197.15	1111.98	0.20	
6761.00	0.400	213.300	6600.90	1129.13	-198.00	1111.64	0.12	
6893.00	0.700	257.000	6732.89	1128.21	-198.57	1110.60	0.38	
7029.00	0.900	251.300	6868.88	1126.51	-199.09	1108.78	0.16	
7161.00	1.000	249.500	7000.86	1124.61	-199.83	1106.72	0.08	
7293.00	1.100	236.100	7132.84	1122.71	-200.94	1104.59	0.20	
7429.00	0.800	238.200	7268.82	1121.07	-202.17	1102.70	0.22	
7563.00	0.800	228.000	7402.81	1119.80	-203.29	1101.21	0.11	
7697.00	0.800	235.100	7536.79	1118.56	-204.45	1099.74	0.07	
7833.00	0.800	225.600	7672.78	1117.34	-205.66	1098.29	0.10	
7965.00	0.900	224.900	7804.77	1116.22	-207.04	1096.90	0.08	BHI MWD LAST SURVEY
8012.00	0.900	224.900	7851.76	1115.80	-207.56	1096.38	0.00	PROJECTION TO BIT



Actual Wellpath Report

ENCORE 2-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
Area	COLORADO	Well	ENCORE 2-12
Field	LARIMER COUNTY	Wellbore	ENCORE 2-12 AWB
Facility	SEC.12-T5N-R68W		

HOLE & CASING SECTIONS Ref Wellbore: ENCORE 2-12 AWB Ref Wellpath: ENCORE 2-12 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	16.00	983.00	967.00	16.00	976.97	0.00	0.00	-2.60	78.33
8.625in Casing Surface	16.00	973.00	957.00	16.00	967.22	0.00	0.00	-2.33	76.14
7.875in Open Hole	973.00	8012.00	7039.00	967.22	7851.76	-2.33	76.14	-207.56	1096.38

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
ENCORE 2-12 GEO TARGET 50' RADIUS (660'FNL & 1980'FEL, REV-1)		6000.00	-198.16	1105.69	3152726.79	1396202.87	40°25'10.855"N	104°57'05.281"W	circle
ENCORE 2-12 LEGAL BOX (199'N,201'S,246'W,154'E OF GEO TARGET)		6000.00	-199.16	1059.69	3152680.80	1396201.59	40°25'10.845"N	104°57'05.876"W	square

WELLPATH COMPOSITION Ref Wellbore: ENCORE 2-12 AWB Ref Wellpath: ENCORE 2-12 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	928.00	NaviTrak (Standard)	BHI MWD SURVEYS 12.25 HOLE <161-928>	ENCORE 2-12 AWB
928.00	7965.00	NaviTrak (Standard)	BHI MWD SURVEYS 7.875 HOLE <1065-7965>	ENCORE 2-12 AWB
7965.00	8012.00	Blind Drilling (std)	Projection to bit	ENCORE 2-12 AWB



Actual Wellpath Report

ENCORE 2-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 ENCORE 2-12 (480'FNL & 2410'FWL)
Area	COLORADO	Well	ENCORE 2-12
Field	LARIMER COUNTY	Wellbore	ENCORE 2-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7965.00	0.900	224.900	7804.77	BHI MWD LAST SURVEY
8012.00	0.900	224.900	7851.76	PROJECTION TO BIT