

KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 CARTER 23-32 (2321'FSL & 1604'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: CARTER 23-32
 Facility: SEC.32-T2N-R66W Wellbore: CARTER 23-32 PWB

Plot reference wellpath is CARTER 23-32 (REV-A.1) PWP

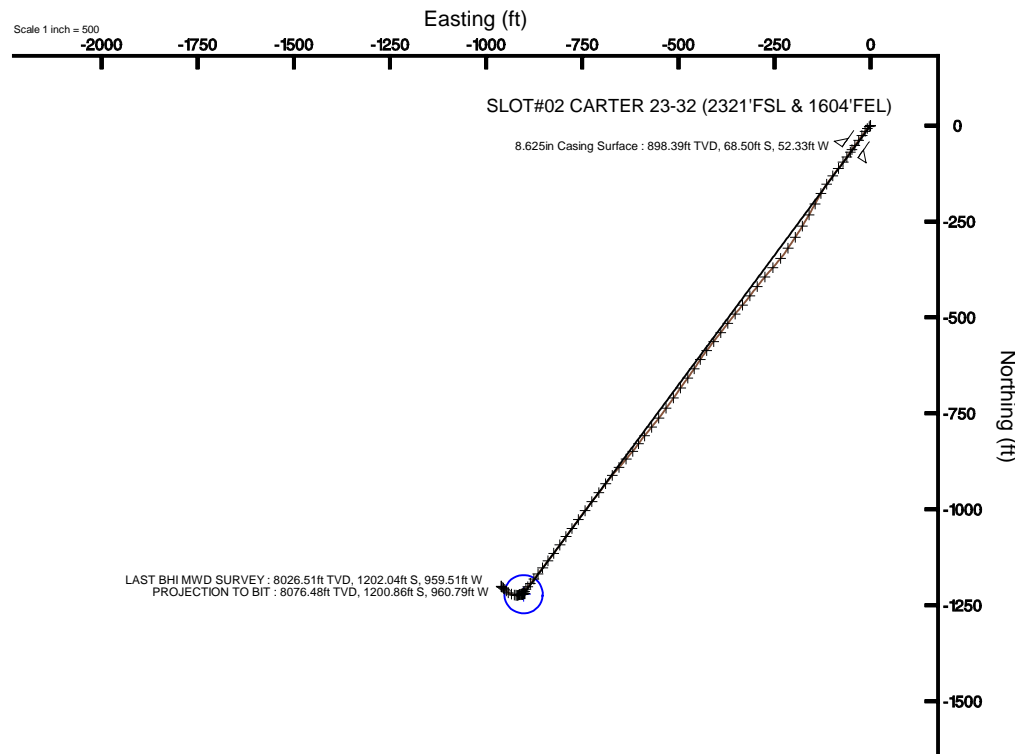
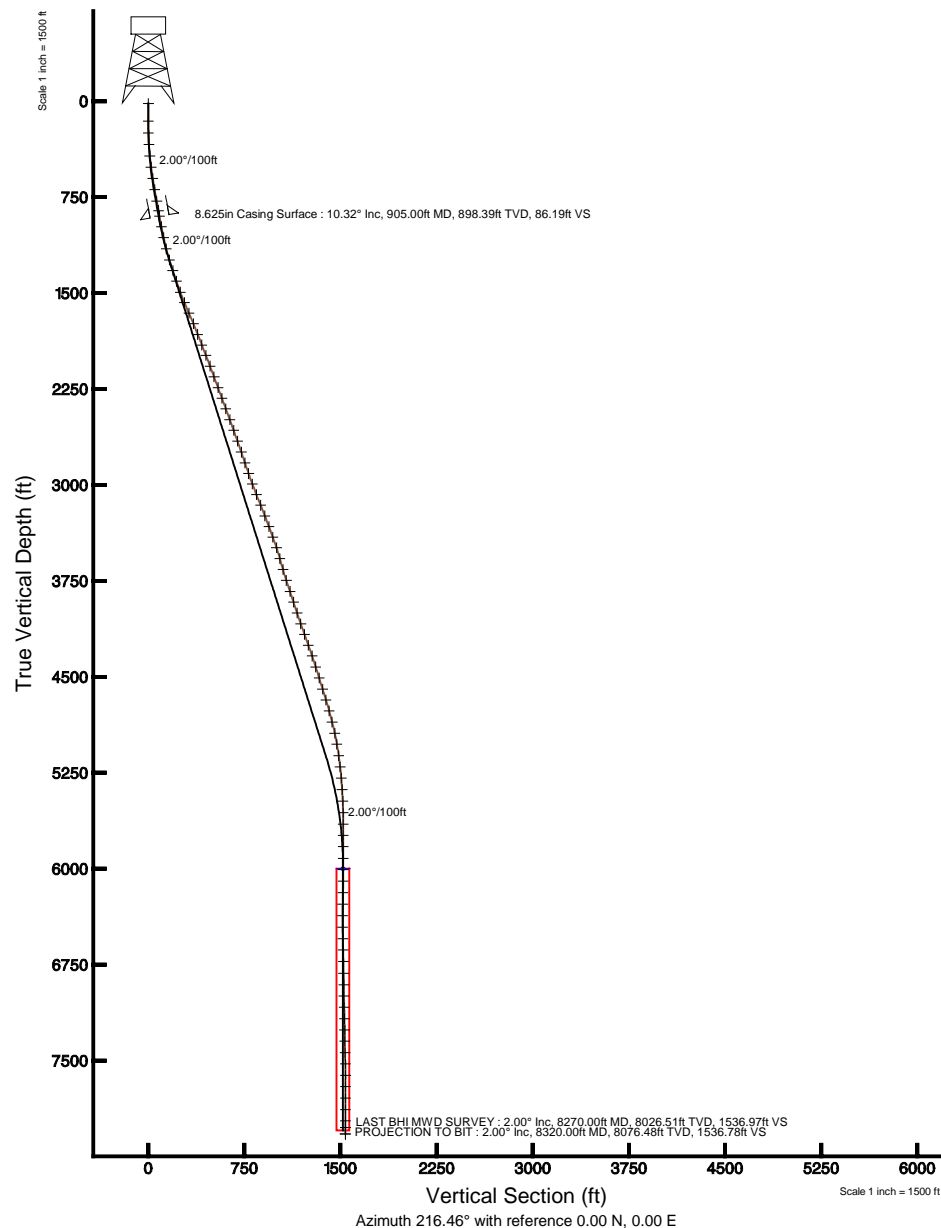
True vertical depths are referenced to XTREME 6 (RKB) Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

Measured depths are referenced to XTREME 6 (RKB) North Reference: True north

XTREME 6 (RKB) to Mean Sea Level: 4928 feet Scale: True distance

Mean Sea Level to Mud line (At Slot: SLOT#02 CARTER 23-32 (2321'FSL & 1604'FEL)): 0 feet Depths are in feet

Coordinates are in feet referenced to Slot Created by: painsetr on 7/20/2011



BGGM (1945.0 to 2012.0) Dip: 66.81° Field: 52986.4 nT
 Magnetic North is 8.82 degrees East of True North (at 5/26/2011)

To correct azimuth from Magnetic to True add 8.82 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.82 = 98.82



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REFERENCE WELLPATH IDENTIFICATION

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 23-32 AWB
Facility	SEC.32-T2N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.0
North Reference	True	User	Painsetr
Scale	0.999961	Report Generated	7/20/2011 at 2:56:49 PM
Convergence at slot	0.45° East	Database/Source file	WA_Denver/CARTER_23-32_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.28	9.73	3196579.28	1277768.15	40°05'37.417"N	104°47'50.435"W
Facility Reference Pt			3196569.55	1277768.35	40°05'37.420"N	104°47'50.560"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 (RKB) to Facility Vertical Datum	4928.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	4928.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#02 CARTER 23-32 (2321'FSL & 1604'FEL))	4928.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	216.46°



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Facility	SEC.32-T2N-R66W		

WELLPATH DATA (95 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	25.000	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	25.000	16.00	0.00	0.00	0.00	0.00	
155.00	0.700	25.000	155.00	-0.83	0.77	0.36	0.50	
246.00	1.100	233.500	245.99	-0.54	0.75	-0.11	1.92	
336.00	3.700	225.800	335.91	3.15	-1.79	-2.89	2.90	
427.00	5.500	221.500	426.61	10.39	-7.10	-7.88	2.01	
515.00	7.400	216.600	514.05	20.26	-14.81	-14.05	2.25	
604.00	9.400	215.900	602.09	33.26	-25.30	-21.73	2.25	
694.00	10.200	214.900	690.78	48.58	-37.79	-30.60	0.91	
785.00	10.500	217.000	780.29	64.92	-51.02	-40.20	0.53	
860.00	10.000	213.500	854.10	78.26	-61.91	-47.91	1.06	
988.00	10.900	215.200	979.97	101.46	-81.06	-61.02	0.74	
1076.00	11.500	215.200	1066.30	118.55	-95.03	-70.87	0.68	
1165.00	14.700	219.700	1152.97	138.70	-110.97	-83.20	3.77	
1255.00	16.800	215.200	1239.59	163.10	-130.39	-98.00	2.70	
1343.00	18.800	215.200	1323.38	190.00	-152.37	-113.50	2.27	
1431.00	19.000	209.300	1406.64	218.39	-176.45	-128.69	2.18	
1522.00	21.400	209.200	1492.04	249.56	-203.87	-144.04	2.64	
1610.00	22.100	208.900	1573.77	281.90	-232.37	-159.87	0.81	
1699.00	22.800	212.000	1656.03	315.69	-261.66	-177.10	1.55	
1789.00	22.200	212.400	1739.18	350.03	-290.80	-195.45	0.69	
1879.00	22.100	214.200	1822.53	383.91	-319.16	-214.08	0.76	
1968.00	21.500	218.400	1905.17	416.94	-345.79	-233.62	1.88	
2055.00	21.000	221.900	1986.26	448.39	-369.89	-253.94	1.57	
2145.00	20.700	219.000	2070.37	480.34	-394.25	-274.72	1.19	
2235.00	20.500	217.700	2154.62	511.99	-419.08	-294.37	0.55	
2324.00	20.300	218.000	2238.04	543.00	-443.58	-313.40	0.25	
2413.00	20.300	219.400	2321.51	573.85	-467.68	-332.71	0.55	
2501.00	19.800	219.400	2404.17	603.98	-490.99	-351.86	0.57	
2591.00	20.200	218.000	2488.75	634.74	-515.01	-371.10	0.69	



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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CARTER 23-32 (2321'FSL & 1604'FEL)
Area	COLORADO	Well	CARTER 23-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 23-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (95 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2680.00	19.600	217.000	2572.43	665.03	-539.04	-389.54	0.78	
2770.00	19.400	218.000	2657.27	695.06	-562.88	-407.83	0.43	
2861.00	18.900	217.700	2743.23	724.91	-586.45	-426.15	0.56	
2950.00	18.600	213.100	2827.52	753.49	-609.75	-442.71	1.69	
3038.00	19.100	213.800	2910.80	781.88	-633.47	-458.39	0.62	
3125.00	20.700	215.900	2992.60	811.48	-657.75	-475.32	2.01	
3214.00	21.200	215.600	3075.72	843.30	-683.58	-493.91	0.57	
3303.00	21.400	214.900	3158.64	875.62	-709.98	-512.57	0.36	
3392.00	21.600	215.600	3241.44	908.23	-736.62	-531.40	0.37	
3481.00	20.300	218.000	3324.56	940.04	-762.10	-550.44	1.75	
3570.00	19.900	219.100	3408.14	970.61	-786.02	-569.50	0.62	
3658.00	18.500	219.100	3491.24	999.52	-808.48	-587.75	1.59	
3746.00	16.000	214.900	3575.28	1025.59	-829.27	-603.50	3.17	
3835.00	16.000	219.800	3660.84	1050.10	-848.75	-618.37	1.52	
3925.00	18.400	219.800	3746.81	1076.67	-869.20	-635.40	2.67	
4015.00	18.400	221.200	3832.20	1105.00	-890.80	-653.85	0.49	
4103.00	18.000	219.400	3915.80	1132.42	-911.76	-671.63	0.78	
4192.00	18.300	216.600	4000.38	1160.13	-933.60	-688.69	1.04	
4282.00	19.400	218.400	4085.55	1189.20	-956.66	-706.40	1.38	
4371.00	19.300	217.300	4169.52	1218.68	-979.94	-724.49	0.42	
4461.00	19.600	217.300	4254.39	1248.64	-1003.78	-742.65	0.33	
4549.00	19.100	216.300	4337.41	1277.80	-1027.13	-760.12	0.68	
4639.00	17.400	215.200	4422.88	1305.98	-1049.99	-776.60	1.93	
4729.00	16.600	216.300	4508.95	1332.29	-1071.35	-791.96	0.96	
4820.00	17.800	215.900	4595.88	1359.20	-1093.09	-807.82	1.33	
4910.00	17.200	217.000	4681.71	1386.26	-1114.86	-823.89	0.76	
4999.00	14.900	218.000	4767.24	1410.86	-1134.39	-838.86	2.60	
5090.00	14.400	216.600	4855.28	1433.87	-1152.70	-852.81	0.67	
5179.00	12.100	217.700	4941.91	1454.27	-1168.96	-865.11	2.60	
5266.00	10.200	219.400	5027.26	1471.08	-1182.13	-875.58	2.22	



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 23-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (95 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5357.00	8.100	219.000	5117.10	1485.53	-1193.34	-884.73	2.31	
5445.00	6.200	215.900	5204.41	1496.48	-1202.01	-891.42	2.20	
5533.00	4.800	212.400	5292.00	1504.90	-1208.97	-896.17	1.64	
5623.00	3.800	222.900	5381.75	1511.62	-1214.33	-900.22	1.41	
5714.00	2.600	213.100	5472.61	1516.68	-1218.27	-903.40	1.44	
5804.00	1.400	213.800	5562.55	1519.81	-1220.89	-905.13	1.33	
5893.00	0.300	300.600	5651.54	1520.92	-1221.68	-905.93	1.59	
5981.00	0.300	291.900	5739.54	1521.01	-1221.48	-906.35	0.05	
6070.00	0.300	138.600	5828.54	1521.11	-1221.56	-906.41	0.66	
6161.00	0.100	132.600	5919.54	1521.17	-1221.80	-906.19	0.22	
6250.00	0.600	82.700	6008.54	1520.86	-1221.79	-905.67	0.61	
6340.00	0.700	58.800	6098.53	1520.02	-1221.44	-904.74	0.32	
6429.00	1.300	72.500	6187.52	1518.70	-1220.86	-903.31	0.72	
6520.00	1.900	81.300	6278.48	1516.80	-1220.32	-900.83	0.71	
6610.00	0.300	51.700	6368.46	1515.51	-1219.95	-899.17	1.83	
6700.00	0.900	263.700	6458.46	1515.77	-1219.88	-899.69	1.29	
6791.00	1.700	253.200	6549.44	1517.33	-1220.35	-901.69	0.91	
6879.00	2.200	259.200	6637.38	1519.62	-1221.04	-904.60	0.61	
6969.00	1.400	227.800	6727.34	1521.97	-1222.10	-907.11	1.38	
7060.00	1.900	275.700	6818.31	1523.83	-1222.70	-909.44	1.56	
7151.00	1.200	291.500	6909.27	1524.85	-1222.20	-911.83	0.89	
7238.00	1.400	226.500	6996.26	1526.13	-1222.60	-913.44	1.62	
7326.00	1.700	245.100	7084.22	1528.33	-1223.89	-915.41	0.66	
7415.00	1.800	253.200	7173.18	1530.61	-1224.85	-917.94	0.30	
7504.00	0.900	304.900	7262.16	1531.75	-1224.85	-919.85	1.61	
7592.00	2.000	279.200	7350.13	1532.47	-1224.21	-921.94	1.42	
7681.00	4.100	278.800	7439.00	1534.66	-1223.48	-926.62	2.36	
7770.00	6.200	290.100	7527.64	1537.49	-1221.34	-934.27	2.61	
7860.00	4.900	303.800	7617.22	1539.04	-1217.53	-942.03	2.05	
7949.00	4.100	317.900	7705.95	1538.59	-1213.06	-947.32	1.53	



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 23-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (95 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8039.00	3.400	312.200	7795.75	1537.68	-1208.88	-951.46	0.88	
8128.00	2.600	308.400	7884.63	1537.35	-1205.85	-955.00	0.93	
8215.00	2.400	310.500	7971.55	1537.16	-1203.44	-957.93	0.25	
8270.00	2.000	312.600	8026.51	1536.97	-1202.04	-959.51	0.74	LAST BHI MWD SURVEY
8320.00	2.000	312.600	8076.48	1536.78	-1200.86	-960.79	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: CARTER 23-32 AWB Ref Wellpath: CARTER 23-32 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]
8.625in Casing Surface	16.00	905.00	889.00	16.00	898.39	0.00	0.00	-68.50	-52.33

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CARTER 23-32 GEO TARGET 50' RADIUS (1100'FSL & 2510'FEL, REV-1)		6000.00	-1221.50	-902.58	3195686.44	1276539.59	40°05'25.346"N	104°48'02.048"W	circle
CARTER 23-32 HARDLINES 136'W OF GEO TARGET		6000.00	-1221.46	-1038.00	3195551.03	1276538.55	40°05'25.346"N	104°48'03.790"W	point

WELLPATH COMPOSITION - Ref Wellbore: CARTER 23-32 AWB Ref Wellpath: CARTER 23-32 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	860.00	NaviTrak (Standard)	BHI MWD SURVEYS 12 1/4 HOLE<155-860>	CARTER 23-32 AWB
860.00	8270.00	NaviTrak (Standard)	BHI MWD SURVEYS 7 7/8 HOLE<988-8270>	CARTER 23-32 AWB
8270.00	8320.00	Blind Drilling (std)	Projection to bit	CARTER 23-32 AWB



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WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8270.00	2.000	312.600	8026.51	LAST BHI MWD SURVEY
8320.00	2.000	312.600	8076.48	PROJECTION TO BIT