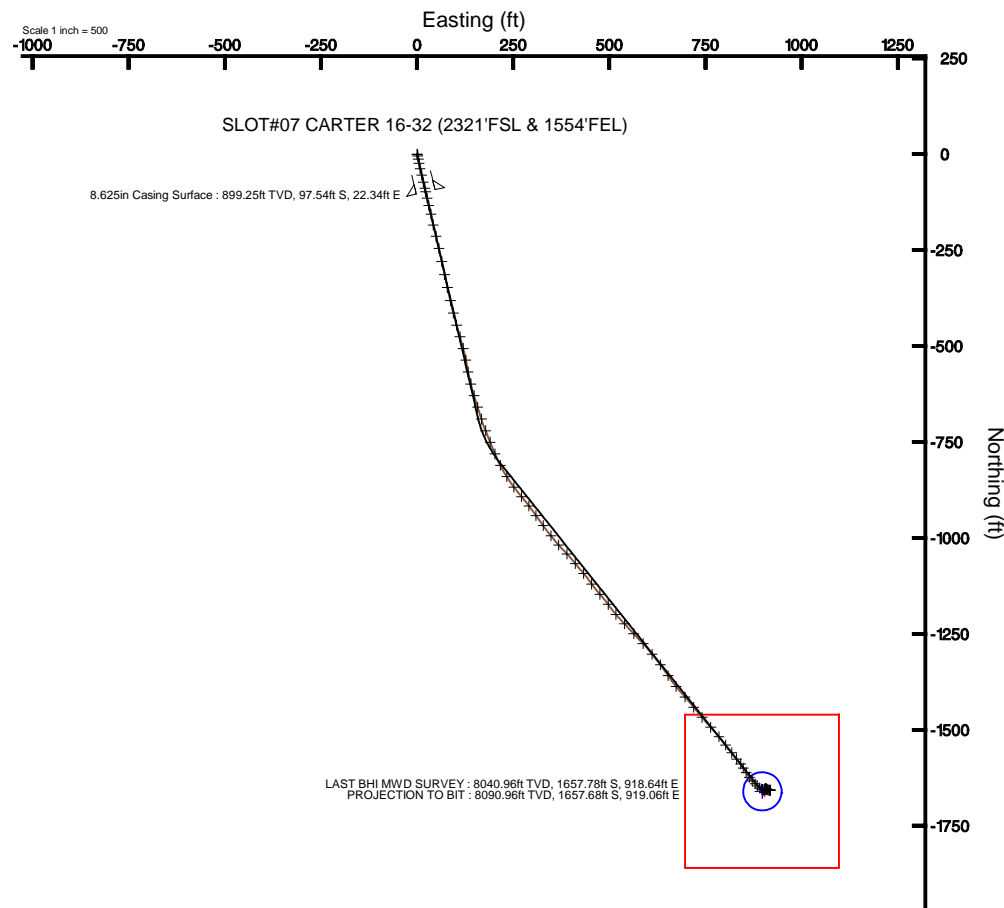
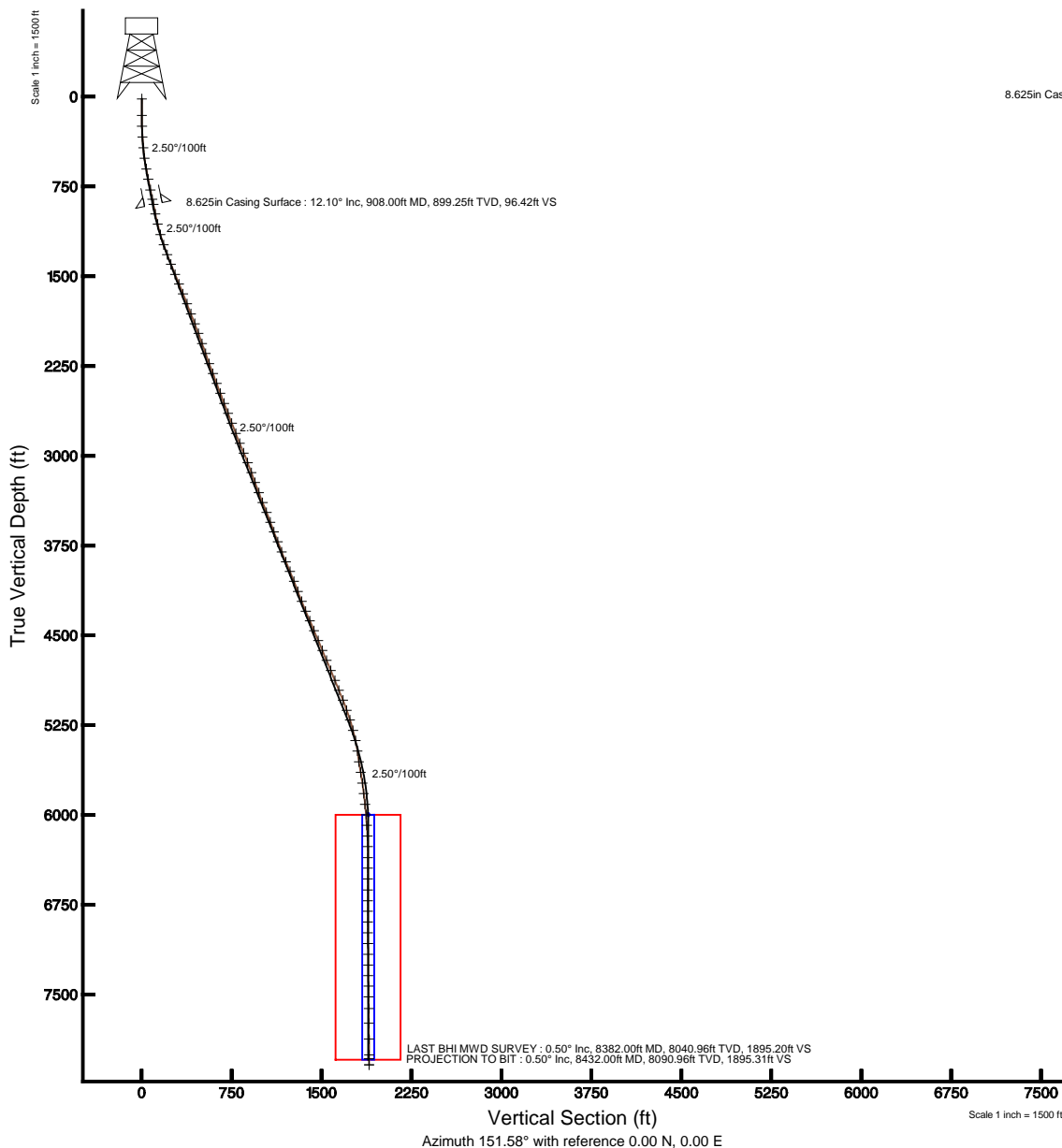


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: CARTER 16-32
 Facility: SEC.32-T2N-R66W Wellbore: CARTER 16-32 PWB

Plot reference wellpath is CARTER 16-32 (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#07 CARTER 16-32 (2321'FSL & 1554'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



Actual Wellpath Report

CARTER 16-32 AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 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 2:28:13 PM
Convergence at slot	0.45° East	Database/Source file	WA_Denver/CARTER_16-32_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	59.81	3196629.36	1277768.54	40°05'37.417"N	104°47'49.790"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#07 CARTER 16-32 (2321'FSL & 1554'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	151.58°



Actual Wellpath Report

CARTER 16-32 AWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 AWB
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	49.300	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	49.300	16.00	0.00	0.00	0.00	0.00	
155.00	0.400	49.300	155.00	-0.10	0.32	0.37	0.29	
246.00	1.400	157.200	245.99	0.94	-0.50	1.04	1.73	
336.00	3.700	168.100	335.90	4.81	-4.36	2.06	2.60	
426.00	6.100	171.600	425.56	12.09	-11.93	3.36	2.69	
515.00	8.300	171.300	513.85	22.58	-22.96	5.02	2.47	
604.00	10.700	167.400	601.63	36.58	-37.37	7.80	2.79	
693.00	11.700	165.600	688.93	53.29	-54.18	11.85	1.19	
783.00	12.000	167.000	777.01	71.16	-72.13	16.22	0.46	
863.00	12.100	166.000	855.25	87.30	-88.37	20.12	0.29	
989.00	12.100	168.100	978.45	112.75	-114.11	26.04	0.35	
1077.00	13.500	164.900	1064.26	131.59	-133.05	30.62	1.78	
1166.00	17.000	168.000	1150.12	154.18	-155.82	36.03	4.04	
1257.00	19.700	168.100	1236.48	181.65	-183.84	41.96	2.97	
1344.00	21.400	164.200	1317.95	211.21	-213.47	49.30	2.51	
1432.00	22.300	168.800	1399.63	242.82	-245.29	56.92	2.20	
1523.00	23.100	167.400	1483.58	276.49	-279.65	64.17	1.06	
1611.00	22.900	167.800	1564.59	309.54	-313.24	71.55	0.29	
1700.00	23.200	167.400	1646.48	343.03	-347.27	79.03	0.38	
1790.00	22.000	167.400	1729.57	376.31	-381.02	86.58	1.33	
1880.00	21.900	165.300	1813.05	408.83	-413.71	94.52	0.88	
1969.00	21.700	164.200	1895.68	441.01	-445.60	103.21	0.51	
2056.00	20.400	164.600	1976.87	471.48	-475.69	111.61	1.50	
2146.00	20.300	164.600	2061.26	501.98	-505.87	119.93	0.11	
2236.00	20.400	168.800	2145.64	532.17	-536.31	127.12	1.63	
2325.00	20.700	169.900	2228.98	561.92	-567.01	132.89	0.55	
2414.00	21.900	165.300	2311.90	592.98	-598.55	139.86	2.31	
2502.00	20.200	163.500	2394.03	623.79	-629.00	148.34	2.07	
2592.00	21.100	162.500	2478.25	654.90	-659.35	157.63	1.07	



Actual Wellpath Report

CARTER 16-32 AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 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
2681.00	21.500	162.500	2561.17	686.65	-690.18	167.35	0.45	
2770.00	20.800	157.900	2644.18	718.37	-720.38	178.20	2.02	
2860.00	21.300	158.300	2728.17	750.49	-750.37	190.25	0.58	
2951.00	21.600	156.900	2812.87	783.58	-781.13	202.94	0.65	
3040.00	22.000	152.900	2895.51	816.56	-811.04	216.96	1.73	
3128.00	22.800	148.100	2976.88	850.06	-840.20	233.48	2.27	
3215.00	21.500	143.100	3057.46	882.66	-867.26	251.96	2.63	
3304.00	20.400	140.000	3140.58	913.99	-892.19	271.73	1.75	
3393.00	20.700	142.800	3223.92	944.73	-916.60	291.21	1.15	
3482.00	20.300	145.000	3307.28	975.61	-941.77	309.57	0.98	
3571.00	22.000	144.200	3390.28	1007.48	-967.94	328.18	1.94	
3660.00	21.700	141.400	3472.89	1040.21	-994.32	348.20	1.22	
3748.00	20.700	137.900	3554.94	1071.34	-1018.58	368.78	1.83	
3836.00	21.400	136.500	3637.07	1101.95	-1041.77	390.25	0.98	
3925.00	22.300	141.000	3719.68	1134.23	-1066.67	412.06	2.14	
4015.00	21.700	140.300	3803.12	1167.33	-1092.74	433.43	0.73	
4105.00	23.400	144.500	3886.25	1201.39	-1120.10	454.44	2.60	
4193.00	22.800	137.900	3967.20	1235.30	-1146.98	476.03	3.02	
4282.00	22.000	144.200	4049.50	1268.60	-1173.30	497.34	2.84	
4372.00	21.300	139.600	4133.16	1301.31	-1199.42	517.80	2.04	
4461.00	22.200	136.100	4215.82	1333.33	-1223.85	539.94	1.77	
4551.00	23.700	138.100	4298.70	1367.30	-1249.56	563.81	1.88	
4639.00	24.000	136.500	4379.18	1401.78	-1275.71	587.94	0.81	
4729.00	23.000	141.700	4461.73	1436.78	-1302.79	611.44	2.56	
4819.00	23.100	142.800	4544.54	1471.55	-1330.65	633.01	0.49	
4909.00	22.400	146.700	4627.54	1506.09	-1359.05	653.10	1.85	
4999.00	23.800	140.700	4710.34	1541.01	-1387.44	674.02	3.04	
5090.00	23.000	138.600	4793.85	1576.37	-1414.98	697.41	1.27	
5180.00	22.700	140.700	4876.79	1610.56	-1441.61	720.03	0.97	
5269.00	22.400	139.600	4958.99	1644.01	-1467.81	741.90	0.58	



Actual Wellpath Report

CARTER 16-32 AWP

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 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
5360.00	21.800	138.200	5043.30	1677.41	-1493.61	764.40	0.88	
5450.00	20.400	140.300	5127.27	1709.05	-1518.14	785.56	1.77	
5536.00	17.800	141.700	5208.53	1736.71	-1539.99	803.29	3.07	
5627.00	15.000	142.400	5295.82	1762.04	-1560.24	819.10	3.08	
5715.00	12.000	141.400	5381.37	1782.29	-1576.42	831.75	3.42	
5803.00	9.400	141.000	5467.84	1798.36	-1589.16	841.99	2.96	
5893.00	7.400	154.000	5556.88	1811.38	-1600.08	849.15	3.05	
5984.00	10.400	146.300	5646.77	1825.42	-1612.18	856.28	3.54	
6074.00	8.000	143.500	5735.61	1839.71	-1623.98	864.52	2.71	
6163.00	7.800	135.800	5823.77	1851.65	-1633.29	872.41	1.21	
6252.00	6.000	136.500	5912.12	1861.96	-1640.99	879.82	2.02	
6340.00	5.000	131.200	5999.71	1869.99	-1646.85	885.87	1.27	
6429.00	4.500	129.100	6088.41	1876.86	-1651.61	891.50	0.59	
6520.00	2.900	116.100	6179.22	1882.03	-1654.87	896.34	1.97	
6608.00	2.800	91.100	6267.11	1884.90	-1655.90	900.49	1.41	
6699.00	1.100	71.100	6358.06	1886.14	-1655.65	903.54	1.98	
6788.00	0.200	27.100	6447.05	1886.19	-1655.24	904.42	1.09	
6878.00	0.400	65.400	6537.05	1886.13	-1654.97	904.77	0.30	
6969.00	0.500	68.300	6628.04	1886.19	-1654.69	905.43	0.11	
7059.00	0.500	54.900	6718.04	1886.19	-1654.32	906.12	0.13	
7149.00	0.300	73.900	6808.04	1886.20	-1654.03	906.66	0.26	
7238.00	0.400	77.400	6897.04	1886.33	-1653.90	907.19	0.11	
7328.00	0.300	118.500	6987.04	1886.62	-1653.94	907.71	0.29	
7419.00	0.300	110.400	7078.03	1887.00	-1654.14	908.14	0.05	
7509.00	0.400	116.400	7168.03	1887.43	-1654.36	908.64	0.12	
7597.00	0.600	132.200	7256.03	1888.11	-1654.80	909.26	0.27	
7685.00	0.600	131.500	7344.02	1888.98	-1655.42	909.94	0.01	
7774.00	1.000	108.300	7433.02	1889.99	-1655.97	911.03	0.57	
7864.00	1.000	113.600	7523.00	1891.18	-1656.53	912.50	0.10	
7961.00	1.000	107.300	7619.99	1892.45	-1657.12	914.08	0.11	



Actual Wellpath Report

CARTER 16-32 AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 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
8085.00	0.700	114.000	7743.97	1893.82	-1657.75	915.80	0.25	
8217.00	0.500	92.200	7875.97	1894.76	-1658.10	917.12	0.23	
8350.00	0.600	68.600	8008.96	1895.14	-1657.87	918.34	0.18	
8382.00	0.500	77.400	8040.96	1895.20	-1657.78	918.64	0.41	LAST BHI MWD SURVEY
8432.00	0.500	77.400	8090.96	1895.31	-1657.68	919.06	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: CARTER 16-32 AWB Ref Wellpath: CARTER 16-32 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	908.00	892.00	16.00	899.25	0.00	0.00	-97.54	22.34

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CARTER 16-32 GEO TARGET 50' RADIUS (660'FSL & 660'FEL, REV-1)		6000.00	-1660.77	898.73	3197541.18	1276115.01	40°05'21.005"N	104°47'38.227"W	circle
CARTER 16-32 LEGAL BOX (200'N,200'S,199'E,201'W OF GEO TARGET)		6000.00	-1660.79	897.71	3197540.16	1276114.99	40°05'21.005"N	104°47'38.240"W	square

WELLPATH COMPOSITION - Ref Wellbore: CARTER 16-32 AWB Ref Wellpath: CARTER 16-32 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	863.00	NaviTrak (Standard)	BHI MWD SURVEYS 12 1/4 HOLE<155-863>	CARTER 16-32 AWB
863.00	8382.00	NaviTrak (Standard)	BHI MWD SURVEYS 7 7/8 HOLE<989-8382>	CARTER 16-32 AWB
8382.00	8432.00	Blind Drilling (std)	Projection to bit	CARTER 16-32 AWB



Actual Wellpath Report

CARTER 16-32 AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 CARTER 16-32 (2321'FSL & 1554'FEL)
Area	COLORADO	Well	CARTER 16-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CARTER 16-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8382.00	0.500	77.400	8040.96	LAST BHI MWD SURVEY
8432.00	0.500	77.400	8090.96	PROJECTION TO BIT