

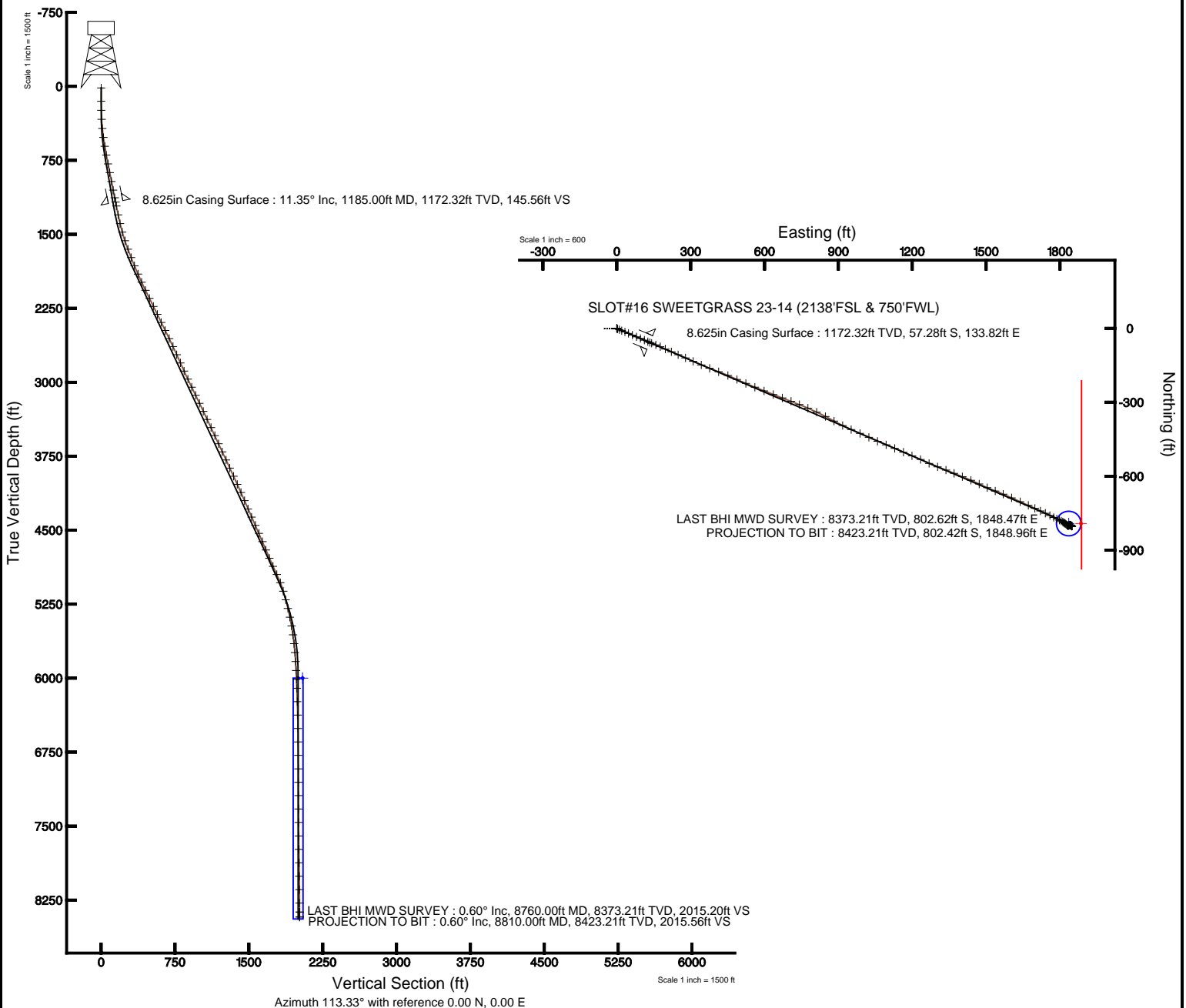


# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#16 SWEETGRASS 23-14 (2138'FSL & 750'FWL)  
Field: WELD COUNTY (KERR MCGEE) Well: SWEETGRASS 23-14  
Facility: SEC.14-T1N-R68W Wellbore: SWEETGRASS 23-14 PWB



Plot reference wellpath is SWEETGRASS 23-14 (REV-A-0) PWB	
True vertical depths are referenced to XTREME 12 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 12 (RKB)	North Reference: True north
XTREME 12 (RKB) to Mean Sea Level: 5119 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#16 SWEETGRASS 23-14 (2138'FSL & 750'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 7/21/2011





# Actual Wellpath Report

SWEETGRASS 23-14 awp

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 SWEETGRASS 23-14 (2138'FSL & 750'FWL)
Area	COLORADO	Well	SWEETGRASS 23-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 23-14 awb
Facility	SEC.14-T1N-R68W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.0
North Reference	True	User	Cookdanm
Scale	0.999963	Report Generated	7/21/2011 at 9:24:55 AM
Convergence at slot	0.34° East	Database/Source file	WA_DENVER/SWEETGRASS_23-14_awb.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	201.73	-3681.19	3146321.94	1261440.08	40°02'59.489"N	104°58'38.363"W
Facility Reference Pt			3150004.14	1261260.61	40°02'57.498"N	104°57'51.026"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 (RKB) to Facility Vertical Datum	5119.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RKB) to Mean Sea Level	5119.00ft
Vertical Reference Pt	XTREME 12 (RKB)	XTREME 12 (RKB) to Mud Line at Slot (SLOT#16 SWEETGRASS 23-14 (2138'FSL & 750'FWL))	5119.00ft
MD Reference Pt	XTREME 12 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	113.33°



# Actual Wellpath Report

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## REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	SWEETGRASS 23-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 23-14 awb
Facility	SEC.14-T1N-R68W		

## WELLPATH DATA (91 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	251.700	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	251.700	15.00	0.00	0.00	0.00	0.00	
150.00	0.600	251.700	150.00	-0.53	-0.22	-0.67	0.44	
242.00	1.200	125.100	241.99	0.05	-0.93	-0.34	1.77	
334.00	3.700	111.400	333.90	3.97	-2.56	3.21	2.77	
426.00	5.500	113.200	425.60	11.34	-5.38	10.03	1.96	
518.00	7.700	112.100	516.98	21.91	-9.44	19.79	2.40	
609.00	9.400	110.700	606.97	35.43	-14.36	32.39	1.88	
699.00	10.800	113.200	695.57	51.21	-20.28	47.02	1.63	
790.00	11.300	113.900	784.89	68.65	-27.25	63.01	0.57	
881.00	11.400	112.800	874.11	86.56	-34.35	79.45	0.26	
972.00	10.600	112.100	963.43	103.92	-40.98	95.50	0.89	
1062.00	11.600	113.500	1051.75	121.24	-47.71	111.46	1.15	
1140.00	11.300	113.200	1128.20	136.73	-53.84	125.68	0.39	
1226.00	11.400	112.100	1212.52	153.65	-60.36	141.30	0.28	
1317.00	11.500	110.700	1301.70	171.70	-66.95	158.12	0.32	
1408.00	13.200	114.200	1390.60	191.16	-74.42	176.08	2.04	
1498.00	16.100	113.900	1477.66	213.91	-83.69	196.87	3.22	
1589.00	18.400	114.600	1564.56	240.89	-94.78	221.47	2.54	
1680.00	20.100	113.200	1650.47	270.89	-106.92	248.90	1.94	
1771.00	21.600	113.900	1735.51	303.28	-119.87	278.58	1.67	
1861.00	23.300	113.900	1818.69	337.64	-133.79	310.01	1.89	
1952.00	22.900	113.900	1902.39	373.34	-148.25	342.65	0.44	
2043.00	24.700	110.400	1985.65	410.04	-162.06	376.66	2.51	
2134.00	26.500	111.100	2067.72	449.32	-175.99	413.42	2.01	
2225.00	26.500	112.500	2149.16	489.91	-191.07	451.12	0.69	
2316.00	26.200	114.900	2230.70	530.29	-207.30	488.10	1.22	
2406.00	25.800	113.500	2311.60	569.73	-223.47	524.08	0.81	
2497.00	26.000	111.800	2393.46	609.48	-238.78	560.76	0.85	
2588.00	26.400	112.100	2475.11	649.64	-253.80	598.03	0.46	
2679.00	26.100	111.100	2556.72	689.87	-268.61	635.45	0.59	
2769.00	25.700	110.000	2637.68	729.14	-282.42	672.26	0.69	
2860.00	23.600	111.100	2720.39	767.04	-295.72	707.80	2.36	
2951.00	23.800	112.500	2803.71	803.60	-309.31	741.75	0.66	
3042.00	25.100	113.200	2886.55	841.26	-323.94	776.46	1.46	
3132.00	25.800	114.900	2967.82	879.93	-339.70	811.77	1.12	
3223.00	25.800	118.800	3049.75	919.44	-357.58	847.09	1.86	
3314.00	25.900	117.400	3131.65	958.98	-376.27	882.09	0.68	
3405.00	25.400	116.400	3213.68	998.29	-394.09	917.21	0.73	
3495.00	25.300	114.600	3295.01	1036.80	-410.68	951.99	0.86	
3586.00	25.700	112.800	3377.15	1075.97	-426.42	987.86	0.96	
3677.00	25.600	114.600	3459.18	1115.35	-442.25	1023.93	0.86	
3767.00	25.100	113.900	3540.52	1153.88	-458.08	1059.06	0.65	
3858.00	24.300	111.400	3623.19	1191.90	-472.73	1094.14	1.45	
3949.00	24.800	113.200	3705.97	1229.69	-487.09	1129.11	0.99	
4040.00	25.100	113.900	3788.48	1268.08	-502.42	1164.30	0.46	
4130.00	24.800	111.800	3870.08	1306.04	-517.17	1199.28	1.04	
4221.00	24.600	114.900	3952.76	1344.05	-532.23	1234.18	1.44	
4312.00	24.700	114.600	4035.46	1381.99	-548.12	1268.65	0.18	
4402.00	24.400	109.700	4117.34	1419.35	-562.22	1303.25	2.29	
4493.00	22.900	111.800	4200.69	1455.81	-575.13	1337.39	1.89	
4584.00	22.800	112.100	4284.55	1491.14	-588.34	1370.16	0.17	
4675.00	24.400	111.800	4367.94	1527.56	-601.95	1403.96	1.76	
4766.00	24.900	113.500	4450.65	1565.50	-616.57	1438.98	0.95	
4856.00	23.300	115.300	4532.80	1602.24	-631.73	1472.45	1.96	
4947.00	22.800	113.900	4616.53	1637.86	-646.57	1504.84	0.82	
5038.00	22.400	111.100	4700.55	1672.82	-659.95	1537.14	1.26	
5129.00	23.400	112.100	4784.38	1708.21	-673.00	1570.06	1.18	
5219.00	25.000	115.300	4866.47	1745.09	-687.85	1603.81	2.30	

5310.00	25.000	113.500	4948.94	1783.54	-703.73	1638.83	0.84
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# Actual Wellpath Report

SWEETGRASS 23-14 awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 SWEETGRASS 23-14 (2138'FSL & 750'FWL)
Area	COLORADO	Well	SWEETGRASS 23-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 23-14 awb
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (91 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5401.00	21.500	113.900	5032.54	1819.45	-718.16	1671.72	3.85	
5492.00	16.600	115.300	5118.53	1849.14	-730.48	1698.74	5.41	
5583.00	14.800	114.600	5206.13	1873.75	-740.87	1721.06	1.99	
5673.00	13.700	115.700	5293.36	1895.89	-750.28	1741.11	1.26	
5764.00	12.400	118.100	5382.01	1916.39	-759.56	1759.44	1.55	
5855.00	9.700	116.400	5471.32	1933.79	-767.57	1774.93	2.99	
5946.00	8.200	114.200	5561.20	1947.93	-773.64	1787.72	1.69	
6036.00	6.200	113.900	5650.49	1959.21	-778.24	1798.02	2.22	
6127.00	4.700	117.800	5741.08	1967.84	-781.97	1805.81	1.70	
6218.00	3.600	123.400	5831.84	1974.37	-785.28	1811.49	1.29	
6309.00	3.000	125.800	5922.69	1979.51	-788.25	1815.81	0.68	
6399.00	2.300	126.900	6012.59	1983.57	-790.71	1819.16	0.78	
6490.00	2.100	124.800	6103.52	1986.98	-792.76	1821.99	0.24	
6626.00	1.900	131.800	6239.44	1991.56	-795.68	1825.72	0.23	
6762.00	2.000	133.100	6375.36	1995.93	-798.81	1829.13	0.08	
6898.00	0.600	93.100	6511.32	1998.83	-800.47	1831.58	1.17	
7034.00	0.600	90.300	6647.32	2000.15	-800.51	1833.00	0.02	
7170.00	0.600	70.800	6783.31	2001.33	-800.28	1834.38	0.15	
7307.00	0.500	69.300	6920.30	2002.29	-799.83	1835.62	0.07	
7443.00	0.500	72.400	7056.30	2003.17	-799.44	1836.74	0.02	
7579.00	0.500	66.800	7192.29	2004.02	-799.03	1837.85	0.04	
7715.00	0.400	60.100	7328.29	2004.72	-798.56	1838.81	0.08	
7851.00	0.300	47.100	7464.29	2005.14	-798.08	1839.48	0.09	
7988.00	0.800	83.300	7601.28	2006.12	-797.72	1840.69	0.43	
8124.00	1.000	107.900	7737.26	2008.12	-797.98	1842.77	0.32	
8260.00	0.900	124.400	7873.24	2010.35	-798.95	1844.78	0.21	
8396.00	0.800	146.200	8009.23	2012.20	-800.34	1846.19	0.25	
8532.00	0.400	145.900	8145.22	2013.39	-801.52	1846.98	0.29	
8668.00	0.600	138.900	8281.22	2014.44	-802.45	1847.71	0.15	
8760.00	0.600	66.800	8373.21	2015.20	-802.62	1848.47	0.77	LAST BHI MWD SURVEY
8810.00	0.600	66.800	8423.21	2015.56	-802.42	1848.96	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: SWEETGRASS 23-14 awb      Ref Wellpath: SWEETGRASS 23-14 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	1195.00	1180.00	15.00	1182.13	0.00	0.00	-58.04	135.64
8.625in Casing Surface	15.00	1185.00	1170.00	15.00	1172.32	0.00	0.00	-57.28	133.82
7.875in Open Hole	1195.00	8810.00	7615.00	1182.13	8423.21	-58.04	135.64	-802.42	1848.96



# Actual Wellpath Report

SWEETGRASS 23-14 awp

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	SWEETGRASS 23-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 23-14 awb
Facility	SEC.14-T1N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SWEETGRASS 23-14 GEO TARGET 50' RADIUS (1310'FSL & 2590'FWL, REV-1)		6000.00	-791.94	1836.03	3148162.54	1260659.00	40°02'51.662"N	104°58'14.754"W	circle
SWEETGRASS 23-14 HARDLINE 50'E OF GEO TARGET		6000.00	-791.90	1886.03	3148212.53	1260659.34	40°02'51.662"N	104°58'14.111"W	point

WELLPATH COMPOSITION - Ref Wellbore: SWEETGRASS 23-14 awb					Ref Wellpath: SWEETGRASS 23-14 awp	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
15.00	8760.00	NaviTrak (Standard)	bhi mwd surveys <150-8760>		SWEETGRASS 23-14 awb	
8760.00	8810.00	Blind Drilling (std)	Projection to bit		SWEETGRASS 23-14 awb	



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SWEETGRASS 23-14 awp

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 23-14 awb
Facility	SEC.14-T1N-R68W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8760.00	0.600	66.800	8373.21	LAST BHI MWD SURVEY
8810.00	0.600	66.800	8423.21	PROJECTION TO BIT