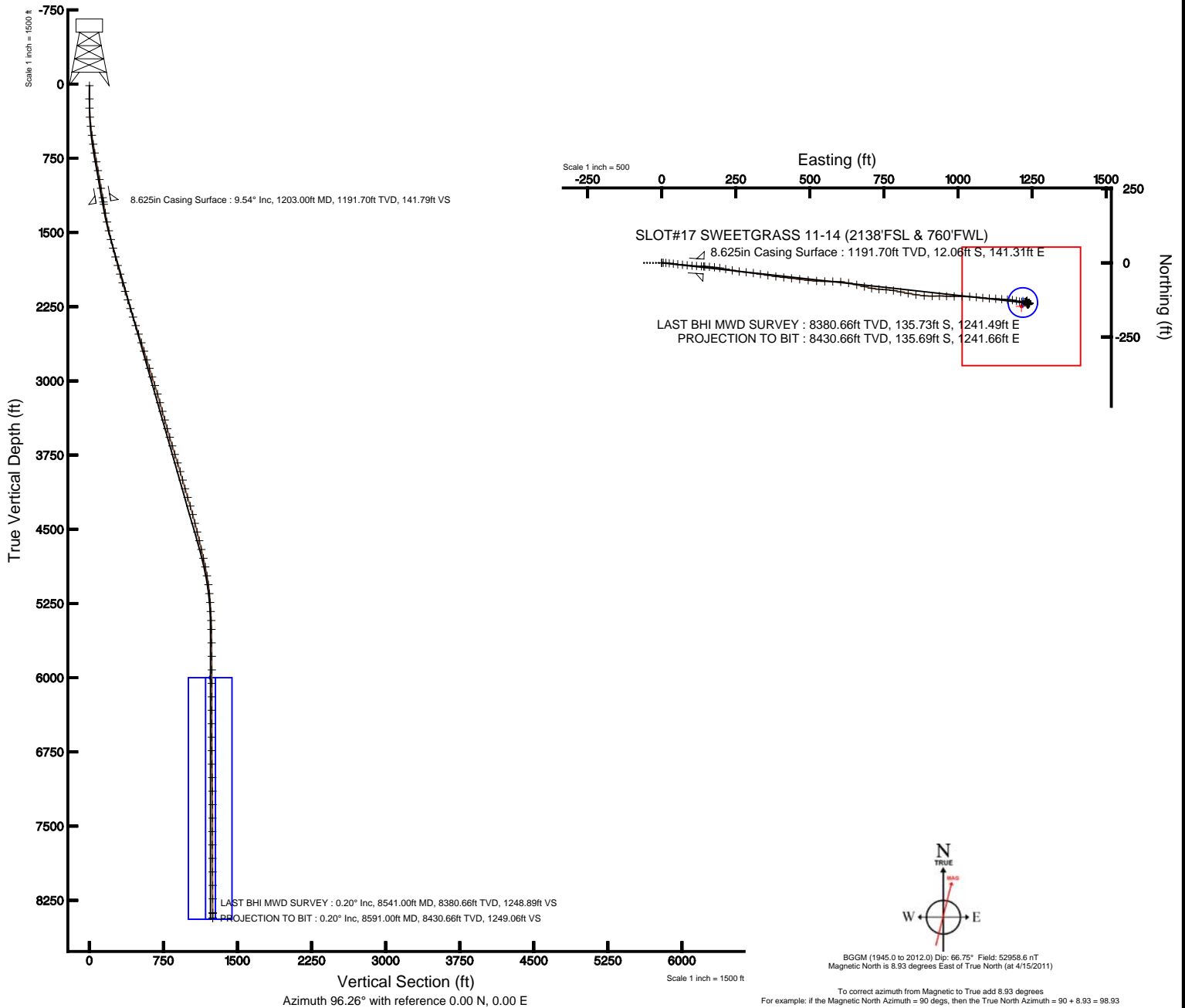




KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)
Field: WELD COUNTY (KERR MCGEE) Well: SWEETGRASS 11-14
Facility: SEC.14-T1N-R68W Wellbore: SWEETGRASS 11-14 PWB

Plot reference wellpath is SWEETGRASS 11-14 (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#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cockdam on 7/20/2011





Actual Wellpath Report

SWEETGRASS 11-14 AWP

Page 1 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)
Area	COLORADO	Well	SWEETGRASS 11-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 11-14 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	7/20/2011 at 2:41:02 PM
Convergence at slot	0.34° East	Database/Source file	WA_DENVER/SWEETGRASS_11-14_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	201.72	-3671.39	3146331.74	1261440.14	40°02'59.489"N	104°58'38.237"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#17 SWEETGRASS 11-14 (2138'FSL & 760'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	96.26°



Actual Wellpath Report

SWEETGRASS 11-14 AWP

Page 2 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)
Area	COLORADO	Well	SWEETGRASS 11-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 11-14 AWP
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (86 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	258.700	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	258.700	15.00	0.00	0.00	0.00	0.00	
149.00	0.400	258.700	149.00	-0.45	-0.09	-0.46	0.30	
242.00	1.500	79.400	241.99	0.41	0.07	0.42	2.04	
334.00	4.500	87.200	333.85	5.13	0.47	5.21	3.28	
426.00	6.400	96.700	425.44	13.82	0.04	13.91	2.28	
518.00	8.000	97.000	516.71	25.35	-1.33	25.35	1.74	
609.00	9.400	97.400	606.66	39.11	-3.06	39.01	1.54	
699.00	9.800	96.300	695.40	54.12	-4.85	53.91	0.49	
790.00	10.300	96.000	785.00	70.00	-6.55	69.70	0.55	
881.00	10.300	95.600	874.53	86.27	-8.19	85.89	0.08	
972.00	10.000	94.600	964.11	102.30	-9.62	101.86	0.38	
1062.00	9.900	93.500	1052.76	117.84	-10.72	117.37	0.24	
1158.00	9.800	93.100	1147.34	134.24	-11.67	133.77	0.13	
1226.00	9.400	92.800	1214.39	145.56	-12.25	145.09	0.59	
1317.00	10.300	95.300	1304.05	161.12	-13.37	160.62	1.09	
1408.00	11.400	94.900	1393.42	178.24	-14.89	177.68	1.21	
1498.00	12.200	99.500	1481.52	196.63	-17.21	195.92	1.37	
1589.00	13.600	101.200	1570.22	216.89	-20.88	215.90	1.59	
1680.00	15.000	100.900	1658.40	239.29	-25.18	237.96	1.54	
1771.00	15.000	97.700	1746.30	262.80	-28.99	261.19	0.91	
1861.00	15.900	95.600	1833.05	286.77	-31.75	285.01	1.18	
1952.00	14.900	96.700	1920.78	310.93	-34.33	309.03	1.14	
2042.00	16.300	99.800	2007.46	335.11	-37.83	332.97	1.81	
2133.00	16.900	99.100	2094.67	361.07	-42.10	358.62	0.69	
2224.00	17.100	96.700	2181.69	387.66	-45.75	384.96	0.80	
2315.00	17.400	97.400	2268.60	414.64	-49.07	411.74	0.40	
2405.00	16.900	95.300	2354.60	441.17	-52.01	438.12	0.88	
2496.00	18.400	97.700	2441.31	468.76	-55.15	465.52	1.83	
2587.00	19.000	96.700	2527.51	497.93	-58.81	494.47	0.75	
2678.00	17.600	92.400	2613.91	526.47	-61.11	522.93	2.14	
2768.00	17.800	93.500	2699.65	553.79	-62.52	550.25	0.43	
2859.00	17.100	88.600	2786.47	580.94	-63.04	577.51	1.79	
2950.00	17.200	95.000	2873.43	607.66	-63.89	604.29	2.08	
3040.00	17.600	102.300	2959.32	634.49	-67.95	630.85	2.46	
3131.00	18.400	102.300	3045.87	662.46	-73.94	658.32	0.88	
3222.00	15.800	104.000	3132.84	689.02	-80.00	684.38	2.91	
3313.00	15.700	102.300	3220.42	713.54	-85.62	708.43	0.52	
3404.00	16.400	94.300	3307.88	738.63	-89.20	733.27	2.55	
3494.00	15.200	91.700	3394.48	763.09	-90.51	757.74	1.55	
3585.00	16.100	101.200	3482.12	787.55	-93.31	782.04	2.98	
3676.00	16.100	100.700	3569.55	812.71	-98.10	806.82	0.15	
3767.00	16.500	100.500	3656.89	838.17	-102.80	831.92	0.44	
3857.00	17.800	99.100	3742.89	864.66	-107.31	858.07	1.52	
3948.00	18.200	95.600	3829.44	892.76	-110.89	885.95	1.27	
4039.00	16.400	89.600	3916.33	919.74	-112.19	912.95	2.78	
4129.00	14.900	88.600	4002.99	943.83	-111.82	937.22	1.69	
4220.00	16.200	94.700	4090.66	968.11	-112.57	961.57	2.29	
4311.00	16.900	87.500	4177.90	993.88	-113.04	987.44	2.38	
4402.00	17.400	93.100	4264.86	1020.54	-113.20	1014.24	1.90	
4492.00	15.500	91.700	4351.17	1045.97	-114.28	1039.70	2.16	
4583.00	13.100	97.000	4439.35	1068.40	-115.90	1062.10	3.00	
4674.00	14.700	96.000	4527.68	1090.26	-118.36	1083.82	1.78	
4765.00	13.600	91.700	4615.92	1112.47	-119.89	1106.00	1.67	
4856.00	13.600	94.200	4704.37	1133.83	-120.99	1127.36	0.65	
4947.00	12.500	94.000	4793.02	1154.36	-122.46	1147.86	1.21	
5037.00	12.100	93.900	4880.95	1173.52	-123.78	1166.98	0.45	
5128.00	9.600	98.800	4970.32	1190.63	-125.59	1184.00	2.93	
5219.00	8.100	103.700	5060.24	1204.57	-128.27	1197.73	1.84	

5310.00	5.100	102.300	5150.62	1214.95	-130.65	1207.91	3.30
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Actual Wellpath Report

SWEETGRASS 11-14 AWP

Page 3 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)
Area	COLORADO	Well	SWEETGRASS 11-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 11-14 AWB
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (86 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5400.00	4.500	97.400	5240.31	1222.46	-131.96	1215.32	0.81	
5491.00	3.700	86.500	5331.08	1228.93	-132.24	1221.79	1.22	
5582.00	2.100	82.600	5421.96	1233.44	-131.84	1226.38	1.77	
5673.00	1.000	56.900	5512.92	1235.67	-131.19	1228.69	1.40	
5809.00	1.000	65.300	5648.90	1237.61	-130.05	1230.77	0.11	
5945.00	0.500	68.100	5784.89	1239.15	-129.33	1232.40	0.37	
6082.00	0.300	41.800	5921.89	1239.89	-128.84	1233.19	0.19	
6218.00	0.100	123.400	6057.89	1240.20	-128.64	1233.53	0.22	
6354.00	0.200	227.900	6193.89	1240.15	-128.87	1233.45	0.18	
6490.00	0.700	170.100	6329.88	1240.22	-129.85	1233.42	0.45	
6626.00	1.100	188.800	6465.86	1240.39	-131.95	1233.36	0.36	
6762.00	1.100	190.800	6601.84	1240.23	-134.53	1232.91	0.03	
6899.00	1.300	177.100	6738.81	1240.37	-137.37	1232.75	0.25	
7035.00	1.200	139.500	6874.78	1241.66	-139.99	1233.75	0.60	
7171.00	1.200	89.600	7010.75	1244.11	-141.07	1236.10	0.74	
7308.00	1.400	44.300	7147.72	1246.57	-139.86	1238.70	0.74	
7444.00	1.000	340.600	7283.70	1247.08	-137.55	1239.47	0.96	
7580.00	0.700	306.900	7419.68	1245.85	-135.93	1238.41	0.42	
7716.00	0.400	350.100	7555.68	1245.00	-134.97	1237.66	0.36	
7852.00	0.400	117.700	7691.67	1245.31	-134.72	1238.00	0.53	
7988.00	0.600	97.000	7827.67	1246.46	-135.03	1239.13	0.20	
8125.00	0.400	109.000	7964.66	1247.65	-135.27	1240.29	0.16	
8261.00	0.300	105.500	8100.66	1248.46	-135.52	1241.09	0.08	
8397.00	0.100	228.500	8236.66	1248.73	-135.69	1241.34	0.27	
8541.00	0.200	78.700	8380.66	1248.89	-135.73	1241.49	0.20	LAST BHI MWD SURVEY
8591.00	0.200	78.700	8430.66	1249.06	-135.69	1241.66	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: SWEETGRASS 11-14 AWB Ref Wellpath: SWEETGRASS 11-14 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	1213.00	1198.00	15.00	1201.57	0.00	0.00	-12.15	142.96
8.625in Casing Surface	15.00	1203.00	1188.00	15.00	1191.70	0.00	0.00	-12.06	141.31
7.875in Open Hole	1213.00	8591.00	7378.00	1201.57	8430.66	-12.15	142.96	-135.69	1241.66

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SWEETGRASS 11-14 GEO TARGET 50' RADIUS (1980'FSL & 1980'FWL, REV-1)		6000.00	-133.62	1219.22	3147551.67	1261313.71	40°02'58.168"N	104°58'22.559"W	circle
SWEETGRASS 11-14 LEGAL BOX (187'N,213'S,195'E,205'W OF GEO TARGET)		6000.00	-146.66	1214.23	3147546.76	1261300.64	40°02'58.039"N	104°58'22.623"W	square

WELLPATH COMPOSITION - Ref Wellbore: SWEETGRASS 11-14 AWB Ref Wellpath: SWEETGRASS 11-14 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8541.00	NaviTrak (Standard)	BHI MWD SURVEYS <149-8541>	SWEETGRASS 11-14 AWB
8541.00	8591.00	Blind Drilling (std)	Projection to bit	SWEETGRASS 11-14 AWB



Actual Wellpath Report

SWEETGRASS 11-14 AWP

Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 SWEETGRASS 11-14 (2138'FSL & 760'FWL)
Area	COLORADO	Well	SWEETGRASS 11-14
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SWEETGRASS 11-14 AWB
Facility	SEC.14-T1N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8541.00	0.200	78.700	8380.66	LAST BHI MWD SURVEY
8591.00	0.200	78.700	8430.66	PROJECTION TO BIT