

SAMSON RESOURCES

Location: COLORADO Slot: SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)
Field: LA PLATA COUNTY (NAD 83 GRID) Well: SOUTHERN UTE 33-7-33 #3
Facility: SEC.33-T33N-R07W Wellbore: SOUTHERN UTE 33-7-33 #3 PWB

Plot reference wellpath is SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

True vertical depths are referenced to AWS 222 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Southern Zone (503), US feet
Measured depths are referenced to AWS 222 (RKB)	North Reference: Grid north
AWS 222 (RKB) to Mean Sea Level: 6373 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: adamkat on 3/6/2014

Location Information

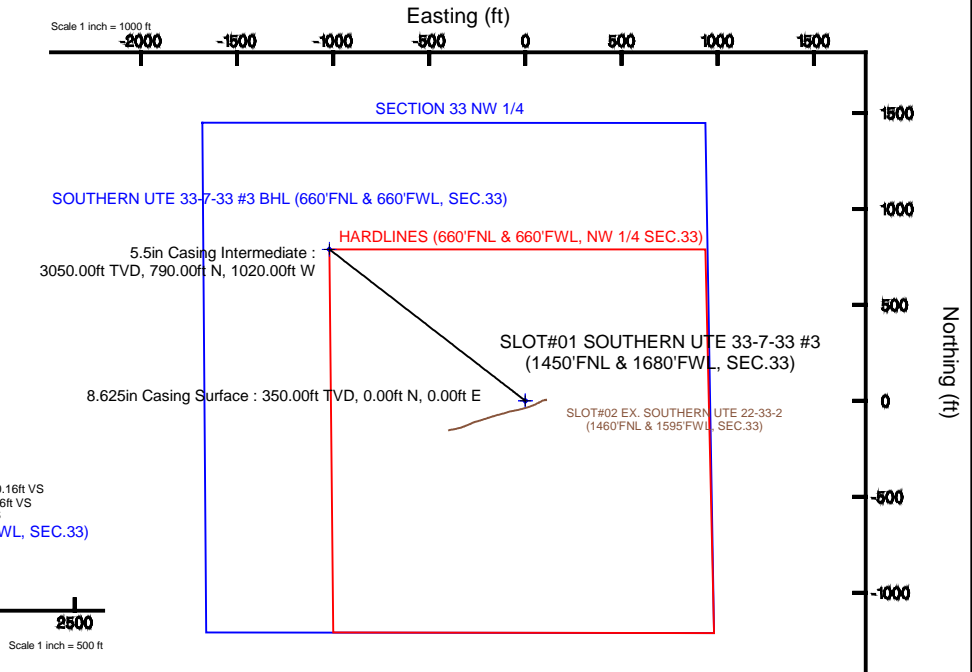
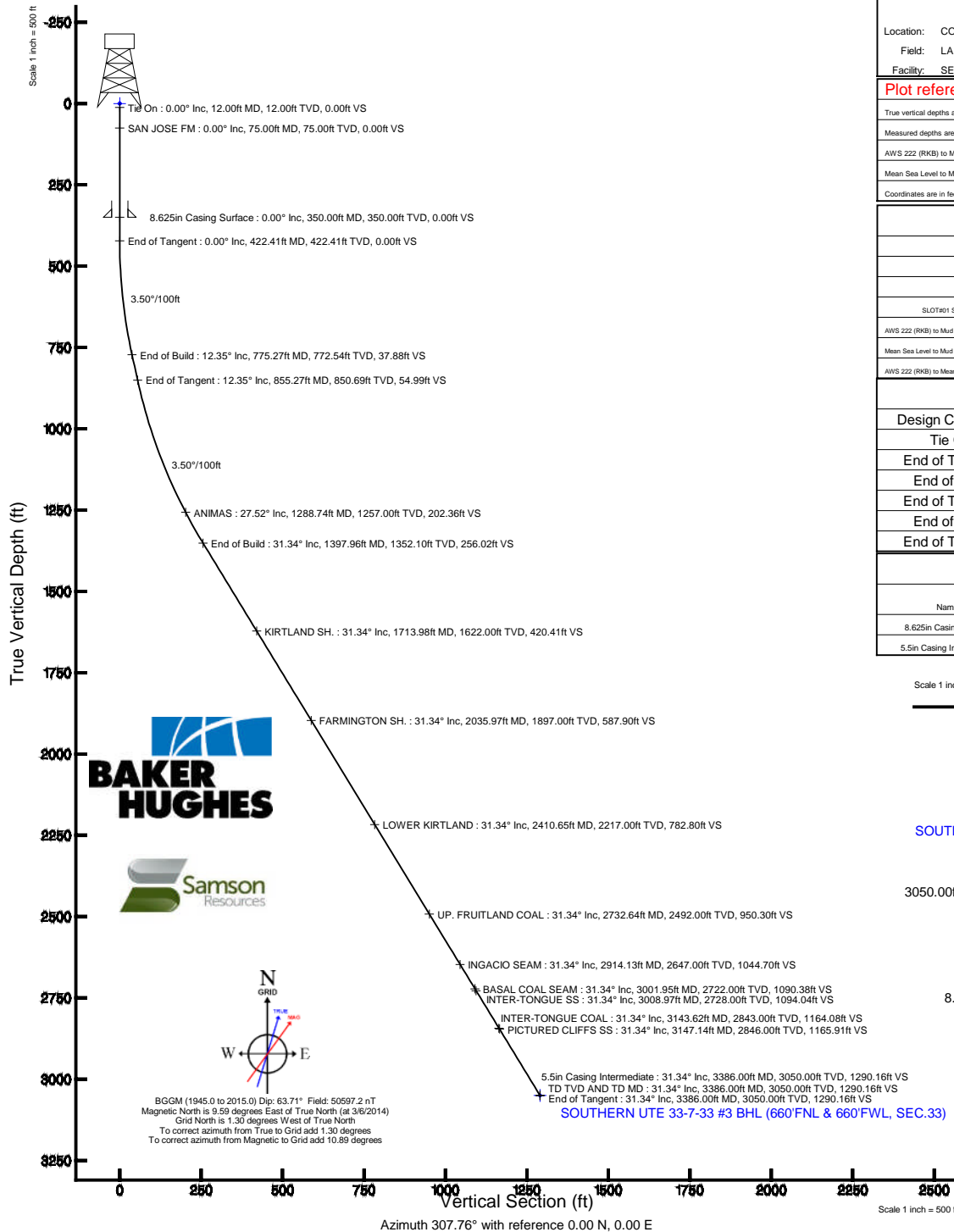
Facility Name			Grid East (US It)	Grid North (US It)	Latitude	Longitude
SEC.33-T33N-R07W			2382178.379	1151611.997	37°03'49.716"N	107°37'02.892"W
Slot	Local N (ft)	Local E (ft)	Grid East (US It)	Grid North (US It)	Latitude	Longitude
SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)	0.00	0.00	2382178.379	1151611.997	37°03'49.716"N	107°37'02.892"W
AWS 222 (RKB) to Mud line (At Slot: SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33))						6373ft
Mean Sea Level to Mud line (At Slot: SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33))						0ft
AWS 222 (RKB) to Mean Sea Level						6373ft

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	12.00	0.000	307.758	12.00	0.00	0.00	0.00	0.00
End of Tangent	422.41	0.000	307.758	422.41	0.00	0.00	0.00	0.00
End of Build	775.27	12.350	307.758	772.54	23.20	-29.95	3.50	37.88
End of Tangent	855.27	12.350	307.758	850.69	33.67	-43.48	0.00	54.99
End of Build	1397.96	31.344	307.758	1352.10	156.77	-202.41	3.50	256.02
End of Tangent	3386.00	31.344	307.758	3050.00	790.00	-1020.00	0.00	1290.16

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
8.625in Casing Surface	12.00	350.00	338.00	12.00	350.00	0.00	0.00	0.00	0.00	SOUTHERN UTE 33-7-33 #3 PWB
5.5in Casing Intermediate	12.00	3386.00	3374.00	12.00	3050.00	0.00	0.00	790.00	-1020.00	SOUTHERN UTE 33-7-33 #3 PWB





Planned Wellpath Report

SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

Page 1 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	SAMSON RESOURCES	Slot	SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)
Area	COLORADO	Well	SOUTHERN UTE 33-7-33 #3
Field	LA PLATA COUNTY (NAD 83 GRID)	Wellbore	SOUTHERN UTE 33-7-33 #3 PWB
Facility	SEC.33-T33N-R07W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Southern Zone (503), US feet	Software System	WellArchitect® 4.0.0
North Reference	Grid	User	Adamkat
Scale	1.00004	Report Generated	3/6/2014 at 2:57:39 PM
Convergence at slot	1.30° West	Database/Source file	WA_DENVER/SOUTHERN_UTE_33-7-33_#3_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	2382178.38	1151612.00	37°03'49.716"N	107°37'02.892"W
Facility Reference Pt			2382178.38	1151612.00	37°03'49.716"N	107°37'02.892"W
Field Reference Pt			2382178.38	1151612.00	37°03'49.716"N	107°37'02.892"W

WELLPATH DATUM

Calculation method	Minimum curvature	AWS 222 (RKB) to Facility Vertical Datum	6373.00ft
Horizontal Reference Pt	Slot	AWS 222 (RKB) to Mean Sea Level	6373.00ft
Vertical Reference Pt	AWS 222 (RKB)	AWS 222 (RKB) to Mud Line at Slot (SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33))	6373.00ft
MD Reference Pt	AWS 222 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	307.76°



Planned Wellpath Report

SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

Page 2 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	SAMSON RESOURCES	Slot	SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)
Area	COLORADO	Well	SOUTHERN UTE 33-7-33 #3
Field	LA PLATA COUNTY (NAD 83 GRID)	Wellbore	SOUTHERN UTE 33-7-33 #3 PWB
Facility	SEC.33-T33N-R07W		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station								Comments
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	
0.00†	0.000	307.758	0.00	0.00	0.00	0.00	0.00	
12.00	0.000	307.758	12.00	0.00	0.00	0.00	0.00	Tie On
75.00†	0.000	307.758	75.00	0.00	0.00	0.00	0.00	SAN JOSE FM
112.00†	0.000	307.758	112.00	0.00	0.00	0.00	0.00	
212.00†	0.000	307.758	212.00	0.00	0.00	0.00	0.00	
312.00†	0.000	307.758	312.00	0.00	0.00	0.00	0.00	
412.00†	0.000	307.758	412.00	0.00	0.00	0.00	0.00	
422.41	0.000	307.758	422.41	0.00	0.00	0.00	0.00	End of Tangent
512.00†	3.136	307.758	511.96	2.45	1.50	-1.94	3.50	
612.00†	6.636	307.758	611.58	10.97	6.71	-8.67	3.50	
712.00†	10.136	307.758	710.49	25.55	15.64	-20.20	3.50	
775.27	12.350	307.758	772.54	37.88	23.20	-29.95	3.50	End of Build
812.00†	12.350	307.758	808.42	45.74	28.01	-36.16	0.00	
855.27	12.350	307.758	850.69	54.99	33.67	-43.48	0.00	End of Tangent
912.00†	14.336	307.758	905.89	68.08	41.69	-53.83	3.50	
1012.00†	17.836	307.758	1001.96	95.79	58.65	-75.73	3.50	
1112.00†	21.336	307.758	1096.16	129.30	79.18	-102.23	3.50	
1212.00†	24.836	307.758	1188.14	168.51	103.18	-133.22	3.50	
1288.74†	27.522	307.758	1257.00	202.36	123.91	-159.99	3.50	ANIMAS
1312.00†	28.336	307.758	1277.55	213.26	130.58	-168.60	3.50	
1397.96	31.344	307.758	1352.10	256.02	156.77	-202.41	3.50	End of Build
1412.00†	31.344	307.758	1364.09	263.33	161.24	-208.19	0.00	
1512.00†	31.344	307.758	1449.50	315.34	193.09	-249.31	0.00	
1612.00†	31.344	307.758	1534.91	367.36	224.95	-290.44	0.00	
1712.00†	31.344	307.758	1620.31	419.38	256.80	-331.56	0.00	
1713.98†	31.344	307.758	1622.00	420.41	257.43	-332.38	0.00	KIRTLAND SH.
1812.00†	31.344	307.758	1705.72	471.40	288.65	-372.69	0.00	
1912.00†	31.344	307.758	1791.12	523.41	320.50	-413.81	0.00	
2012.00†	31.344	307.758	1876.53	575.43	352.35	-454.94	0.00	
2035.97†	31.344	307.758	1897.00	587.90	359.99	-464.80	0.00	FARMINGTON SH.
2112.00†	31.344	307.758	1961.93	627.45	384.21	-496.06	0.00	
2212.00†	31.344	307.758	2047.34	679.47	416.06	-537.19	0.00	
2312.00†	31.344	307.758	2132.75	731.49	447.91	-578.31	0.00	
2410.65†	31.344	307.758	2217.00	782.80	479.33	-618.89	0.00	LOWER KIRTLAND
2412.00†	31.344	307.758	2218.15	783.50	479.76	-619.44	0.00	
2512.00†	31.344	307.758	2303.56	835.52	511.61	-660.57	0.00	
2612.00†	31.344	307.758	2388.96	887.54	543.47	-701.69	0.00	
2712.00†	31.344	307.758	2474.37	939.56	575.32	-742.82	0.00	
2732.64†	31.344	307.758	2492.00	950.30	581.89	-751.31	0.00	UP. FRUITLAND COAL
2812.00†	31.344	307.758	2559.77	991.58	607.17	-783.94	0.00	
2912.00†	31.344	307.758	2645.18	1043.59	639.02	-825.07	0.00	
2914.13†	31.344	307.758	2647.00	1044.70	639.70	-825.94	0.00	INGACIO SEAM
3001.95†	31.344	307.758	2722.00	1090.38	667.67	-862.06	0.00	BASAL COAL SEAM
3008.97†	31.344	307.758	2728.00	1094.04	669.91	-864.95	0.00	INTER-TONGUE SS
3012.00†	31.344	307.758	2730.59	1095.61	670.87	-866.19	0.00	



Planned Wellpath Report

SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

Page 3 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	SAMSON RESOURCES	Slot	SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)
Area	COLORADO	Well	SOUTHERN UTE 33-7-33 #3
Field	LA PLATA COUNTY (NAD 83 GRID)	Wellbore	SOUTHERN UTE 33-7-33 #3 PWB
Facility	SEC.33-T33N-R07W		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3112.00†	31.344	307.758	2815.99	1147.63	702.73	-907.32	0.00	
3143.62†	31.344	307.758	2843.00	1164.08	712.80	-920.32	0.00	INTER-TONGUE COAL
3147.14†	31.344	307.758	2846.00	1165.91	713.92	-921.77	0.00	PICTURED CLIFFS SS
3212.00†	31.344	307.758	2901.40	1199.65	734.58	-948.44	0.00	
3312.00†	31.344	307.758	2986.80	1251.66	766.43	-989.57	0.00	
3386.00	31.344	307.758	3050.00 ¹	1290.16	790.00	-1020.00	0.00	End of Tangent; TD TVD AND TD MD

HOLE & CASING SECTIONS -

Ref Wellbore: SOUTHERN UTE 33-7-33 #3 PWB Ref Wellpath: SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

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	12.00	350.00	338.00	12.00	350.00	0.00	0.00	0.00	0.00
5.5in Casing Intermediate	12.00	3386.00	3374.00	12.00	3050.00	0.00	0.00	790.00	-1020.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SOUTHERN UTE 33-7-33 #3 SECTION 33 NW 1/4		0.00	0.00	0.00	2382178.38	1151612.00	37°03'49.716"N	107°37'02.892"W	polygon
1) SOUTHERN UTE 33-7-33 #3 BHL (660'FNL & 660'FWL, SEC.33)	3386.00	3050.00	790.00	-1020.00	2381158.35	1152402.02	37°03'57.296"N	107°37'15.694"W	point
SOUTHERN UTE 33-7-33 #3 HARDLINES (660'FNL & 660'FWL, NE 1/4 SEC.33)		3050.00	0.00	0.00	2382178.38	1151612.00	37°03'49.716"N	107°37'02.892"W	polygon

SURVEY PROGRAM - Ref Wellbore: SOUTHERN UTE 33-7-33 #3 PWB Ref Wellpath: SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	3386.00	NaviTrak (Standard)		SOUTHERN UTE 33-7-33 #3 PWB



Planned Wellpath Report

SOUTHERN UTE 33-7-33 #3 (REV-A.0) PWP

Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	SAMSON RESOURCES	Slot	SLOT#01 SOUTHERN UTE 33-7-33 #3 (1450'FNL & 1680'FWL, SEC.33)
Area	COLORADO	Well	SOUTHERN UTE 33-7-33 #3
Field	LA PLATA COUNTY (NAD 83 GRID)	Wellbore	SOUTHERN UTE 33-7-33 #3 PWB
Facility	SEC.33-T33N-R07W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
75.00	0.000	307.758	75.00	SAN JOSE FM
1288.74	27.522	307.758	1257.00	ANIMAS
1713.98	31.344	307.758	1622.00	KIRTLAND SH.
2035.97	31.344	307.758	1897.00	FARMINGTON SH.
2410.65	31.344	307.758	2217.00	LOWER KIRTLAND
2732.64	31.344	307.758	2492.00	UP. FRUITLAND COAL
2914.13	31.344	307.758	2647.00	INGACIO SEAM
3001.95	31.344	307.758	2722.00	BASAL COAL SEAM
3008.97	31.344	307.758	2728.00	INTER-TONGUE SS
3143.62	31.344	307.758	2843.00	INTER-TONGUE COAL
3147.14	31.344	307.758	2846.00	PICTURED CLIFFS SS
3386.00	31.344	307.758	3050.00	TD TVD AND TD MD

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
12.00	0.000	307.758	12.00	Tie On
422.41	0.000	307.758	422.41	End of Tangent
775.27	12.350	307.758	772.54	End of Build
855.27	12.350	307.758	850.69	End of Tangent
1397.96	31.344	307.758	1352.10	End of Build
3386.00	31.344	307.758	3050.00	End of Tangent