



# **Samson Resources Company**

**La Plata County, C.O.**

**SEC 11-T32N-R7W**

**Lucero 32-7-11 #1**

**Lateral #1**

**Plan: Plan #1**

## **Standard Planning Report**

**14 February, 2011**





Project: La Plata County, C.O.  
Site: SEC 11-T32N-R7W  
Well: Lucero 32-7-11 #1  
Wellbore: Lateral #1  
Design: Plan #1



#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Lucero 32-7-11 #1, Grid North  
Vertical (TVD) Reference: AWS 507 @ 6255.0ft (12' DF + 6243' GL)  
Section (VS) Reference: Slot - (0.0N, 0.0E)  
Measured Depth Reference: AWS 507 @ 6255.0ft (12' DF + 6243' GL)  
Calculation Method: Minimum Curvature

#### PROJECT DETAILS

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Southern Zone  
System Datum: Mean Sea Level

#### WELL DETAILS: Lucero 32-7-11 #1

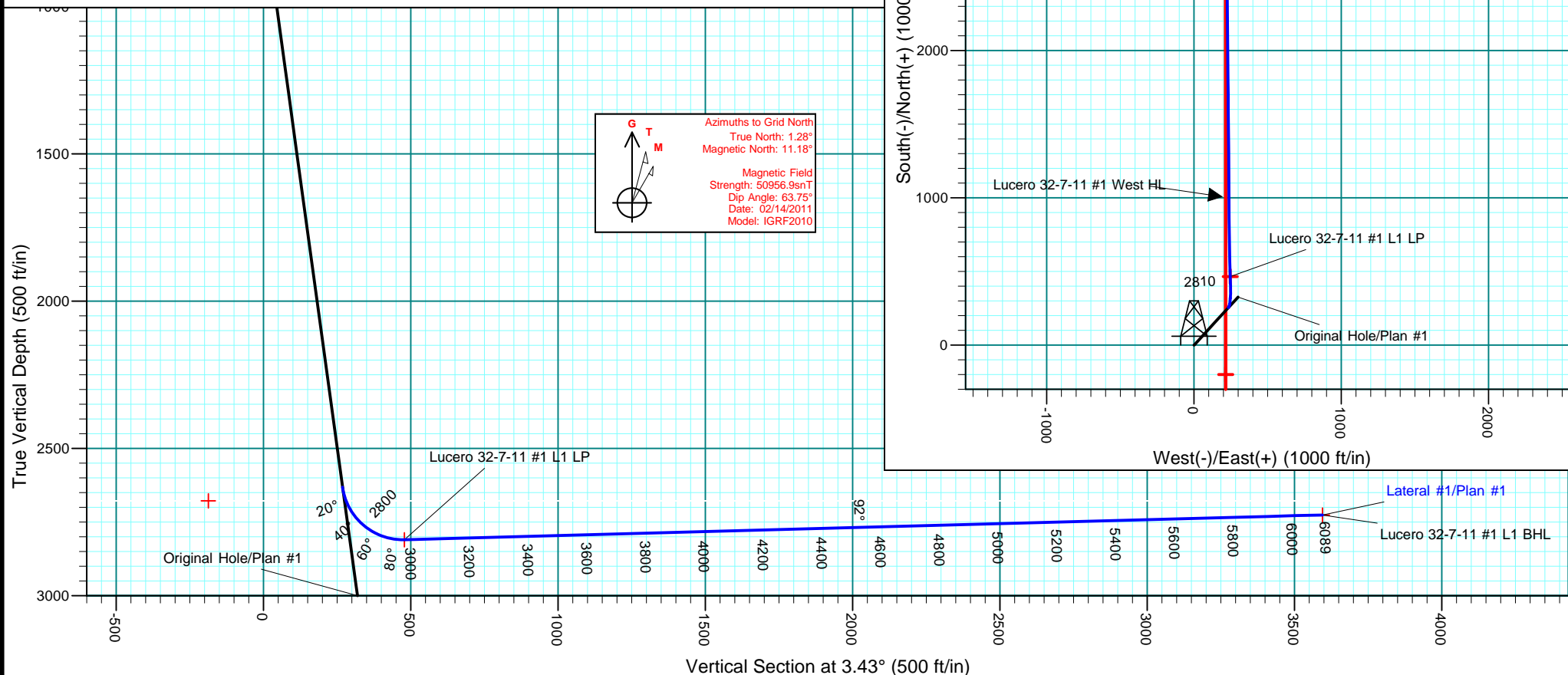
Ground Level:	6243.0			
+N/-S	+E/-W	Northing	Easting	Latitude
0.0	0.0	1138081.85	2391233.66	37° 1' 37.992 N
				Longitude
				107° 35' 7.476 W

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	2661.2	10.00	42.50	2631.7	255.4	234.0	0.00	0.00	268.9	
2	2963.2	91.54	356.74	2810.0	465.0	245.3	28.00	-46.00	478.8	
3	3101.2	91.54	359.51	2806.3	602.8	240.8	2.00	89.96	616.1	
4	6088.6	91.54	359.51	2726.0	3589.0	215.0	0.00	0.00	3595.4	Lucero 32-7-11 #1 L1 BHL

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Lucero 32-7-11 #1 North HL	2678.0	3589.0	215.0	1141671.00	2391448.67	Polygon
Lucero 32-7-11 #1 West HL	2678.0	-200.0	215.0	1137881.84	2391448.67	Polygon
Lucero 32-7-11 #1 L1 BHL	2726.0	3589.0	215.0	1141671.00	2391448.67	Point
Lucero 32-7-11 #1 L1 LP	2810.0	465.0	245.3	1138546.87	2391478.97	Point



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Lucero 32-7-11 #1
<b>Company:</b>	Samson Resources Company	<b>TVD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Project:</b>	La Plata County, C.O.	<b>MD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Site:</b>	SEC 11-T32N-R7W	<b>North Reference:</b>	Grid
<b>Well:</b>	Lucero 32-7-11 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	La Plata County, C.O.		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Southern Zone		Using geodetic scale factor

<b>Site</b>	SEC 11-T32N-R7W		
<b>Site Position:</b>		<b>Northing:</b>	1,137,161.82 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,393,949.37 usft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	6-1/8 "
		<b>Latitude:</b>	37° 1' 29.496 N
		<b>Longitude:</b>	107° 34' 33.744 W
		<b>Grid Convergence:</b>	-1.27 °

<b>Well</b>	Lucero 32-7-11 #1		
<b>Well Position</b>	<b>+N/-S</b>	920.0 ft	<b>Northing:</b> 1,138,081.85 usft
	<b>+E/-W</b>	-2,715.6 ft	<b>Easting:</b> 2,391,233.66 usft
<b>Position Uncertainty</b>	3.5 ft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 37° 1' 37.992 N
			<b>Longitude:</b> 107° 35' 7.476 W
			<b>Ground Level:</b> 6,243.0 ft

<b>Wellbore</b>	Lateral #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	02/14/11	9.90	63.75	50,957

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	2,661.2
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	3.43

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
2,661.2	10.00	42.50	2,631.7	255.4	234.0	0.00	0.00	0.00	0.00	
2,963.2	91.54	356.74	2,810.0	465.0	245.3	28.00	27.00	-15.15	-46.00	
3,101.2	91.54	359.51	2,806.3	602.8	240.8	2.00	0.00	2.00	89.96	
6,088.6	91.54	359.51	2,726.0	3,589.0	215.0	0.00	0.00	0.00	0.00	Lucero 32-7-11 #1 I

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Lucero 32-7-11 #1
<b>Company:</b>	Samson Resources Company	<b>TVD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Project:</b>	La Plata County, C.O.	<b>MD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Site:</b>	SEC 11-T32N-R7W	<b>North Reference:</b>	Grid
<b>Well:</b>	Lucero 32-7-11 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	3.00	42.50	600.0	1.9	1.8	2.0	3.00	3.00	0.00
700.0	6.00	42.50	699.6	7.7	7.1	8.1	3.00	3.00	0.00
800.0	9.00	42.50	798.8	17.3	15.9	18.3	3.00	3.00	0.00
833.3	10.00	42.50	831.6	21.4	19.6	22.5	3.00	3.00	0.00
900.0	10.00	42.50	897.3	29.9	27.4	31.5	0.00	0.00	0.00
1,000.0	10.00	42.50	995.8	42.7	39.2	45.0	0.00	0.00	0.00
1,100.0	10.00	42.50	1,094.3	55.5	50.9	58.5	0.00	0.00	0.00
1,200.0	10.00	42.50	1,192.7	68.3	62.6	72.0	0.00	0.00	0.00
1,300.0	10.00	42.50	1,291.2	81.1	74.3	85.4	0.00	0.00	0.00
1,400.0	10.00	42.50	1,389.7	93.9	86.1	98.9	0.00	0.00	0.00
1,500.0	10.00	42.50	1,488.2	106.7	97.8	112.4	0.00	0.00	0.00
1,600.0	10.00	42.50	1,586.7	119.5	109.5	125.9	0.00	0.00	0.00
1,700.0	10.00	42.50	1,685.1	132.3	121.3	139.4	0.00	0.00	0.00
1,800.0	10.00	42.50	1,783.6	145.2	133.0	152.8	0.00	0.00	0.00
1,900.0	10.00	42.50	1,882.1	158.0	144.7	166.3	0.00	0.00	0.00
2,000.0	10.00	42.50	1,980.6	170.8	156.5	179.8	0.00	0.00	0.00
2,100.0	10.00	42.50	2,079.1	183.6	168.2	193.3	0.00	0.00	0.00
2,200.0	10.00	42.50	2,177.5	196.4	179.9	206.8	0.00	0.00	0.00
2,300.0	10.00	42.50	2,276.0	209.2	191.7	220.3	0.00	0.00	0.00
2,400.0	10.00	42.50	2,374.5	222.0	203.4	233.7	0.00	0.00	0.00
2,500.0	10.00	42.50	2,473.0	234.8	215.1	247.2	0.00	0.00	0.00
2,600.0	10.00	42.50	2,571.5	247.6	226.9	260.7	0.00	0.00	0.00
2,646.2	10.00	42.50	2,617.0	253.5	232.3	266.9	0.00	0.00	0.00
<b>Lucero 32-7-11 #1 West HL</b>									
2,661.2	10.00	42.50	2,631.7	255.4	234.0	268.9	0.00	0.00	0.00
2,680.0	14.17	26.86	2,650.1	258.7	236.2	272.3	28.00	22.16	-83.21
2,700.0	19.19	18.14	2,669.3	264.0	238.3	277.8	28.00	25.13	-43.57
2,720.0	24.46	13.01	2,687.8	271.1	240.3	285.0	28.00	26.35	-25.69
2,740.0	29.85	9.61	2,705.6	280.1	242.0	294.1	28.00	26.92	-16.96
2,760.0	35.29	7.18	2,722.5	290.7	243.6	304.8	28.00	27.23	-12.15
2,780.0	40.77	5.33	2,738.2	303.0	244.9	317.1	28.00	27.42	-9.26
2,800.0	46.28	3.85	2,752.7	316.7	246.0	330.9	28.00	27.53	-7.40
2,820.0	51.80	2.62	2,765.8	331.8	246.9	345.9	28.00	27.61	-6.15
2,840.0	57.34	1.57	2,777.4	348.1	247.4	362.2	28.00	27.67	-5.28
2,860.0	62.88	0.64	2,787.4	365.4	247.8	379.6	28.00	27.71	-4.66
2,880.0	68.43	359.79	2,795.6	383.6	247.8	397.7	28.00	27.74	-4.22
2,900.0	73.98	359.01	2,802.1	402.5	247.6	416.6	28.00	27.75	-3.91
2,920.0	79.53	358.27	2,806.6	422.0	247.2	436.0	28.00	27.77	-3.69
2,940.0	85.09	357.56	2,809.3	441.8	246.5	455.7	28.00	27.78	-3.56
2,960.0	90.64	356.86	2,810.1	461.7	245.5	475.6	28.00	27.78	-3.51
2,963.3	91.54	356.74	2,810.0	465.0	245.3	478.8	27.67	27.45	-3.46
<b>Lucero 32-7-11 #1 L1 LP</b>									
3,000.0	91.54	357.48	2,809.0	501.7	243.5	515.3	2.00	0.00	2.00
3,101.2	91.54	359.51	2,806.3	602.8	240.8	616.1	2.00	0.00	2.00
3,200.0	91.54	359.51	2,803.6	701.6	239.9	714.6	0.00	0.00	0.00
3,300.0	91.54	359.51	2,801.0	801.5	239.1	814.4	0.00	0.00	0.00
3,400.0	91.54	359.51	2,798.3	901.5	238.2	914.1	0.00	0.00	0.00
3,500.0	91.54	359.51	2,795.6	1,001.4	237.3	1,013.8	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Lucero 32-7-11 #1
<b>Company:</b>	Samson Resources Company	<b>TVD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Project:</b>	La Plata County, C.O.	<b>MD Reference:</b>	AWS 507 @ 6255.0ft (12' DF + 6243' GL)
<b>Site:</b>	SEC 11-T32N-R7W	<b>North Reference:</b>	Grid
<b>Well:</b>	Lucero 32-7-11 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #1		
<b>Design:</b>	Plan #1		

**Planned Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,600.0	91.54	359.51	2,792.9	1,101.4	236.5	1,113.6	0.00	0.00	0.00
3,700.0	91.54	359.51	2,790.2	1,201.4	235.6	1,213.3	0.00	0.00	0.00
3,800.0	91.54	359.51	2,787.5	1,301.3	234.8	1,313.0	0.00	0.00	0.00
3,900.0	91.54	359.51	2,784.8	1,401.3	233.9	1,412.8	0.00	0.00	0.00
4,000.0	91.54	359.51	2,782.1	1,501.2	233.0	1,512.5	0.00	0.00	0.00
4,100.0	91.54	359.51	2,779.5	1,601.2	232.2	1,612.2	0.00	0.00	0.00
4,200.0	91.54	359.51	2,776.8	1,701.2	231.3	1,711.9	0.00	0.00	0.00
4,300.0	91.54	359.51	2,774.1	1,801.1	230.4	1,811.7	0.00	0.00	0.00
4,400.0	91.54	359.51	2,771.4	1,901.1	229.6	1,911.4	0.00	0.00	0.00
4,500.0	91.54	359.51	2,768.7	2,001.0	228.7	2,011.1	0.00	0.00	0.00
4,600.0	91.54	359.51	2,766.0	2,101.0	227.9	2,110.9	0.00	0.00	0.00
4,700.0	91.54	359.51	2,763.3	2,201.0	227.0	2,210.6	0.00	0.00	0.00
4,800.0	91.54	359.51	2,760.6	2,300.9	226.1	2,310.3	0.00	0.00	0.00
4,900.0	91.54	359.51	2,757.9	2,400.9	225.3	2,410.0	0.00	0.00	0.00
5,000.0	91.54	359.51	2,755.3	2,500.8	224.4	2,509.8	0.00	0.00	0.00
5,100.0	91.54	359.51	2,752.6	2,600.8	223.5	2,609.5	0.00	0.00	0.00
5,200.0	91.54	359.51	2,749.9	2,700.8	222.7	2,709.2	0.00	0.00	0.00
5,300.0	91.54	359.51	2,747.2	2,800.7	221.8	2,809.0	0.00	0.00	0.00
5,400.0	91.54	359.51	2,744.5	2,900.7	220.9	2,908.7	0.00	0.00	0.00
5,500.0	91.54	359.51	2,741.8	3,000.6	220.1	3,008.4	0.00	0.00	0.00
5,600.0	91.54	359.51	2,739.1	3,100.6	219.2	3,108.2	0.00	0.00	0.00
5,700.0	91.54	359.51	2,736.4	3,200.6	218.4	3,207.9	0.00	0.00	0.00
5,800.0	91.54	359.51	2,733.8	3,300.5	217.5	3,307.6	0.00	0.00	0.00
5,900.0	91.54	359.51	2,731.1	3,400.5	216.6	3,407.3	0.00	0.00	0.00
6,000.0	91.54	359.51	2,728.4	3,500.4	215.8	3,507.1	0.00	0.00	0.00
6,088.6	91.54	359.51	2,726.0	3,589.0	215.0	3,595.4	0.00	0.00	0.00

**Lucero 32-7-11 #1 North HL - Lucero 32-7-11 #1 L1 BHL**
**Design Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Lucero 32-7-11 #1 No	0.00	360.00	2,678.0	3,589.0	215.0	1,141,671.00	2,391,448.67	37° 2' 13.516 N	107° 35' 5.813 W
- plan misses target center by 48.0ft at 6088.6ft MD (2726.0 TVD, 3589.0 N, 215.0 E)									
- Polygon									
Point 1			2,678.0	0.0	0.0	1,141,671.00	2,391,448.67		
Point 2			2,678.0	0.0	800.0	1,141,671.00	2,392,248.70		
Lucero 32-7-11 #1 W€	0.00	360.00	2,678.0	-200.0	215.0	1,137,881.84	2,391,448.67	37° 1' 36.062 N	107° 35' 4.770 W
- plan misses target center by 457.9ft at 2646.2ft MD (2617.0 TVD, 253.5 N, 232.3 E)									
- Polygon									
Point 1			2,678.0	3,789.0	0.0	1,141,671.00	2,391,448.67		
Point 2			2,678.0	-400.0	0.0	1,137,481.82	2,391,448.67		
Lucero 32-7-11 #1 L1	0.00	360.00	2,726.0	3,589.0	215.0	1,141,671.00	2,391,448.67	37° 2' 13.516 N	107° 35' 5.813 W
- plan hits target center									
- Point									
Lucero 32-7-11 #1 L1	0.00	360.00	2,810.0	465.0	245.3	1,138,546.87	2,391,478.97	37° 1' 42.642 N	107° 35' 4.580 W
- plan hits target center									
- Point									