

Samson Resources Company

La Plata County, C.O.

SEC 11-T32N-R7W

Lucero 32-7-11 #2

Original Hole

Design: Original Hole

Standard Survey Report

19 October, 2011



Company:	Samson Resources Company	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Project:	La Plata County, C.O.	TVD Reference:	AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	MD Reference:	AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
Well:	Lucero 32-7-11 #2	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Rockies Compass Server

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

Site	SEC 11-T32N-R7W				
Site Position:		Northing:	1,137,161.82 usft	Latitude:	37° 1' 29.496 N
From:	Lat/Long	Easting:	2,393,949.37 usft	Longitude:	107° 34' 33.744 W
Position Uncertainty:	0.00 usft	Slot Radius:	6-1/8 "	Grid Convergence:	-1.27 °

Well	Lucero 32-7-11 #2, FC HZ Well					
Well Position	+N/-S	0.00 usft	Northing:	1,137,241.51 usft	Latitude:	37° 1' 30.288 N
	+E/-W	0.00 usft	Easting:	2,393,968.67 usft	Longitude:	107° 34' 33.528 W
Position Uncertainty		3.50 usft	Wellhead Elevation:	usft	Ground Level:	6,303.29 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/09/30	9.82	63.73	50,894

Design	Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.00	0.00	0.00	290.50

Survey Program	Date	2011/10/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
87.00	298.00	Survey #1 - Surface (Original Hole)	MWD SDI	MWD - Standard ver 1.0.1	
387.00	3,675.00	Survey #2 - Production (Original Hole)	MWD SDI	MWD - Standard ver 1.0.1	

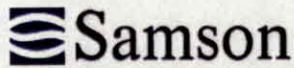
Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.00	0.53	283.18	87.00	0.09	-0.39	0.40	0.61	0.61	0.00	
First SDI MWD Survey										
117.00	0.98	282.10	117.00	0.18	-0.78	0.79	1.50	1.50	-3.60	
148.00	1.67	304.69	147.99	0.49	-1.41	1.49	2.75	2.23	72.87	
178.00	2.67	306.97	177.97	1.16	-2.33	2.58	3.35	3.33	7.60	
209.00	3.83	307.91	208.92	2.23	-3.72	4.26	3.75	3.74	3.03	
239.00	5.04	307.69	238.83	3.65	-5.55	6.48	4.03	4.03	-0.73	
267.00	6.05	308.48	266.69	5.32	-7.68	9.06	3.62	3.61	2.82	
298.00	7.32	307.83	297.48	7.55	-10.52	12.50	4.10	4.10	-2.10	

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Site:	SEC 11-T32N-R7W	MD Reference:	AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
Well:	Lucero 32-7-11 #2	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Rockies Compass Server

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Last Survey in 12 1/4" Hole									
387.00	9.13	311.92	385.56	15.74	-20.25	24.48	2.14	2.03	4.60
First Survey in 7 7/8" Hole									
419.00	9.07	310.83	417.16	19.09	-24.05	29.21	0.57	-0.19	-3.41
449.00	9.39	313.31	446.77	22.31	-27.62	33.69	1.70	1.07	8.27
480.00	10.75	312.72	477.29	26.01	-31.59	38.69	4.40	4.39	-1.90
511.00	12.02	310.93	507.68	30.09	-36.15	44.39	4.25	4.10	-5.77
541.00	12.85	308.31	536.98	34.20	-41.13	50.50	3.34	2.77	-8.73
571.00	13.64	303.86	566.18	38.24	-46.68	57.12	4.30	2.63	-14.83
602.00	14.54	300.60	596.25	42.26	-53.07	64.50	3.87	2.90	-10.52
633.00	15.62	298.05	626.18	46.20	-60.10	72.47	4.09	3.48	-8.23
664.00	16.64	296.70	655.96	50.16	-67.75	81.02	3.51	3.29	-4.35
694.00	17.34	295.55	684.65	54.02	-75.62	89.75	2.59	2.33	-3.83
725.00	18.16	293.42	714.18	57.93	-84.22	99.17	3.37	2.65	-6.87
754.00	19.18	293.25	741.65	61.61	-92.74	108.44	3.52	3.52	-0.59
785.00	19.91	293.06	770.86	65.68	-102.28	118.80	2.36	2.35	-0.61
816.00	20.68	292.54	799.94	69.85	-112.19	129.55	2.55	2.48	-1.68
847.00	21.85	291.08	828.83	74.02	-122.63	140.79	4.14	3.77	-4.71
879.00	23.62	289.45	858.34	78.30	-134.23	153.15	5.87	5.53	-5.09
910.00	25.38	288.77	886.55	82.51	-146.38	166.00	5.75	5.68	-2.19
941.00	26.49	288.25	914.43	86.81	-159.24	179.55	3.65	3.58	-1.68
972.00	27.20	288.38	942.09	91.21	-172.53	193.54	2.30	2.29	0.42
1,003.00	28.15	289.22	969.54	95.85	-186.16	207.93	3.31	3.06	2.71
1,035.00	29.21	288.76	997.61	100.85	-200.68	223.28	3.38	3.31	-1.44
1,066.00	30.60	288.09	1,024.48	105.73	-215.34	238.73	4.61	4.48	-2.16
1,098.00	31.51	287.51	1,051.90	110.77	-231.06	255.22	2.99	2.84	-1.81
1,129.00	31.79	287.46	1,078.29	115.66	-246.57	271.46	0.91	0.90	-0.16
1,160.00	31.76	287.52	1,104.64	120.57	-262.14	287.76	0.14	-0.10	0.19
1,192.00	31.59	287.49	1,131.87	125.62	-278.17	304.54	0.53	-0.53	-0.09
1,223.00	31.31	287.50	1,158.32	130.48	-293.59	320.70	0.90	-0.90	0.03
1,254.00	31.73	287.82	1,184.75	135.40	-309.04	336.88	1.46	1.35	1.03
1,285.00	31.64	287.88	1,211.13	140.39	-324.54	353.15	0.31	-0.29	0.19
1,317.00	31.36	287.63	1,238.41	145.49	-340.46	369.85	0.97	-0.88	-0.78
1,348.00	31.07	287.91	1,264.92	150.39	-355.76	385.90	1.05	-0.94	0.90
1,379.00	31.67	288.28	1,291.39	155.41	-371.10	402.02	2.03	1.94	1.19
1,411.00	31.88	288.30	1,318.59	160.69	-387.10	418.86	0.66	0.66	0.06
1,442.00	31.66	287.94	1,344.95	165.77	-402.61	435.17	0.94	-0.71	-1.16
1,474.00	32.45	288.50	1,372.07	171.08	-418.74	452.14	2.64	2.47	1.75
1,506.00	32.53	288.71	1,399.06	176.57	-435.03	469.31	0.43	0.25	0.66
1,537.00	32.18	288.45	1,425.25	181.85	-450.76	485.90	1.21	-1.13	-0.84
1,568.00	32.08	288.90	1,451.50	187.13	-466.37	502.37	0.84	-0.32	1.45
1,600.00	31.72	289.10	1,478.67	192.64	-482.36	519.28	1.17	-1.13	0.83
1,631.00	31.45	289.39	1,505.08	197.99	-497.69	535.51	1.00	-0.87	0.94

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Well:	Lucero 32-7-11 #2	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Rockies Compass Server

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,663.00	31.55	289.06	1,532.36	203.49	-513.48	552.23	0.62	0.31	-1.03
1,694.00	31.73	289.42	1,558.75	208.85	-528.83	568.48	0.84	0.58	1.16
1,725.00	31.72	289.75	1,585.12	214.32	-544.19	584.78	0.56	-0.03	1.06
1,757.00	31.64	290.22	1,612.35	220.06	-559.99	601.59	0.81	-0.25	1.47
1,789.00	31.62	290.65	1,639.60	225.92	-575.71	618.37	0.71	-0.06	1.34
1,820.00	31.43	291.08	1,666.02	231.69	-590.86	634.58	0.95	-0.61	1.39
1,852.00	31.21	291.00	1,693.36	237.66	-606.38	651.21	0.70	-0.69	-0.25
1,883.00	31.60	290.18	1,719.82	243.34	-621.50	667.37	1.87	1.26	-2.65
1,914.00	31.70	289.93	1,746.21	248.92	-636.78	683.63	0.53	0.32	-0.81
1,945.00	31.78	290.08	1,772.57	254.50	-652.11	699.94	0.36	0.26	0.48
1,976.00	32.30	289.55	1,798.85	260.08	-667.58	716.38	1.91	1.68	-1.71
2,007.00	32.31	289.58	1,825.05	265.62	-683.19	732.95	0.06	0.03	0.10
2,038.00	31.98	289.37	1,851.30	271.12	-698.74	749.44	1.12	-1.06	-0.68
2,069.00	31.51	289.76	1,877.66	276.58	-714.11	765.75	1.65	-1.52	1.26
2,100.00	30.66	289.58	1,904.21	281.97	-729.18	781.75	2.76	-2.74	-0.58
2,131.00	30.93	289.34	1,930.84	287.26	-744.15	797.62	0.96	0.87	-0.77
2,162.00	31.85	289.56	1,957.30	292.64	-759.37	813.76	2.99	2.97	0.71
2,224.00	32.44	289.21	2,009.80	303.58	-790.49	846.75	1.00	0.95	-0.56
2,255.00	32.70	288.90	2,035.92	309.03	-806.26	863.43	1.00	0.84	-1.00
2,286.00	33.45	289.59	2,061.90	314.61	-822.23	880.34	2.71	2.42	2.23
2,317.00	33.50	289.84	2,087.76	320.38	-838.33	897.44	0.47	0.16	0.81
2,348.00	33.22	290.14	2,113.65	326.21	-854.35	914.48	1.05	-0.90	0.97
2,379.00	32.77	289.78	2,139.65	331.97	-870.22	931.37	1.58	-1.45	-1.16
2,410.00	32.64	290.00	2,165.74	337.67	-885.97	948.11	0.57	-0.42	0.71
2,441.00	32.44	289.98	2,191.87	343.37	-901.64	964.79	0.65	-0.65	-0.06
2,477.00	31.73	289.67	2,222.37	349.85	-919.63	983.91	2.02	-1.97	-0.86
2,508.00	31.35	290.08	2,248.79	355.37	-934.88	1,000.12	1.41	-1.23	1.32
2,539.00	30.97	289.92	2,275.32	360.85	-949.95	1,016.16	1.25	-1.23	-0.52
2,570.00	31.29	290.19	2,301.85	366.35	-965.00	1,032.19	1.13	1.03	0.87
2,601.00	31.08	290.28	2,328.37	371.90	-980.07	1,048.24	0.69	-0.68	0.29
2,632.00	30.70	290.54	2,354.98	377.45	-994.98	1,064.16	1.30	-1.23	0.84
2,663.00	30.96	290.68	2,381.60	383.04	-1,009.85	1,080.04	0.87	0.84	0.45
2,694.00	30.99	291.16	2,408.18	388.74	-1,024.75	1,096.00	0.80	0.10	1.55
2,725.00	30.56	291.01	2,434.81	394.44	-1,039.55	1,111.86	1.41	-1.39	-0.48
2,756.00	30.80	291.24	2,461.47	400.15	-1,054.31	1,127.67	0.86	0.77	0.74
2,787.00	31.21	291.53	2,488.04	405.97	-1,069.18	1,143.64	1.41	1.32	0.94
2,818.00	30.99	291.51	2,514.59	411.84	-1,084.07	1,159.65	0.71	-0.71	-0.06
2,849.00	31.59	291.07	2,541.08	417.69	-1,099.08	1,175.75	2.07	1.94	-1.42
2,880.00	32.22	290.66	2,567.39	423.52	-1,114.38	1,192.13	2.15	2.03	-1.32
2,911.00	32.23	290.33	2,593.62	429.31	-1,129.87	1,208.66	0.57	0.03	-1.06
2,942.00	31.93	290.08	2,619.89	435.00	-1,145.32	1,225.13	1.06	-0.97	-0.81
2,972.00	31.56	289.87	2,645.40	440.39	-1,160.15	1,240.91	1.29	-1.23	-0.70
3,003.00	31.32	289.72	2,671.85	445.87	-1,175.37	1,257.08	0.81	-0.77	-0.48
3,034.00	31.62	289.92	2,698.29	451.35	-1,190.59	1,273.26	1.02	0.97	0.65



Scientific Drilling
Survey Report



Company:	Samson Resources Company	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Project:	La Plata County, C.O.	TVD Reference:	AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	MD Reference:	AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
Well:	Lucero 32-7-11 #2	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Rockies Compass Server

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,065.00	31.31	289.34	2,724.73	456.79	-1,205.83	1,289.44	1.40	-1.00	-1.87
3,096.00	30.78	289.67	2,751.29	462.13	-1,220.90	1,305.43	1.80	-1.71	1.06
3,127.00	30.20	289.48	2,778.00	467.40	-1,235.72	1,321.15	1.90	-1.87	-0.61
3,158.00	30.20	289.58	2,804.79	472.61	-1,250.42	1,336.74	0.16	0.00	0.32
3,189.00	30.38	289.56	2,831.56	477.85	-1,265.15	1,352.38	0.58	0.58	-0.06
3,220.00	29.78	289.48	2,858.39	483.04	-1,279.80	1,367.91	1.94	-1.94	-0.26
3,251.00	28.53	289.10	2,885.46	488.03	-1,294.05	1,383.01	4.08	-4.03	-1.23
3,282.00	28.15	289.05	2,912.74	492.84	-1,307.96	1,397.72	1.23	-1.23	-0.16
3,313.00	29.18	288.90	2,939.94	497.67	-1,322.02	1,412.59	3.33	3.32	-0.48
3,344.00	30.43	289.50	2,966.84	502.74	-1,336.57	1,427.99	4.15	4.03	1.94
3,375.00	30.14	289.14	2,993.61	507.91	-1,351.32	1,443.62	1.10	-0.94	-1.16
3,406.00	30.02	289.37	3,020.44	513.04	-1,365.99	1,459.16	0.54	-0.39	0.74
3,437.00	29.93	289.33	3,047.29	518.17	-1,380.61	1,474.64	0.30	-0.29	-0.13
3,468.00	29.98	289.24	3,074.15	523.28	-1,395.22	1,490.12	0.22	0.16	-0.29
3,499.00	30.09	289.43	3,100.99	528.42	-1,409.86	1,505.63	0.47	0.35	0.61
3,530.00	30.19	289.61	3,127.80	533.62	-1,424.53	1,521.19	0.43	0.32	0.58
3,561.00	30.09	289.77	3,154.60	538.86	-1,439.18	1,536.76	0.41	-0.32	0.52
3,592.00	29.94	289.69	3,181.45	544.10	-1,453.78	1,552.26	0.50	-0.48	-0.26
3,618.00	29.73	289.57	3,204.00	548.44	-1,465.96	1,565.20	0.84	-0.81	-0.46
Last SDI MWD Survey									
3,675.00	29.73	289.57	3,253.50	557.91	-1,492.60	1,593.46	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
87.00	87.00	0.09	-0.39	First SDI MWD Survey
298.00	297.48	7.55	-10.52	Last Survey in 12 1/4" Hole
387.00	385.56	15.74	-20.25	First Survey in 7 7/8" Hole
3,618.00	3,204.00	548.44	-1,465.96	Last SDI MWD Survey
3,675.00	3,253.50	557.91	-1,492.60	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

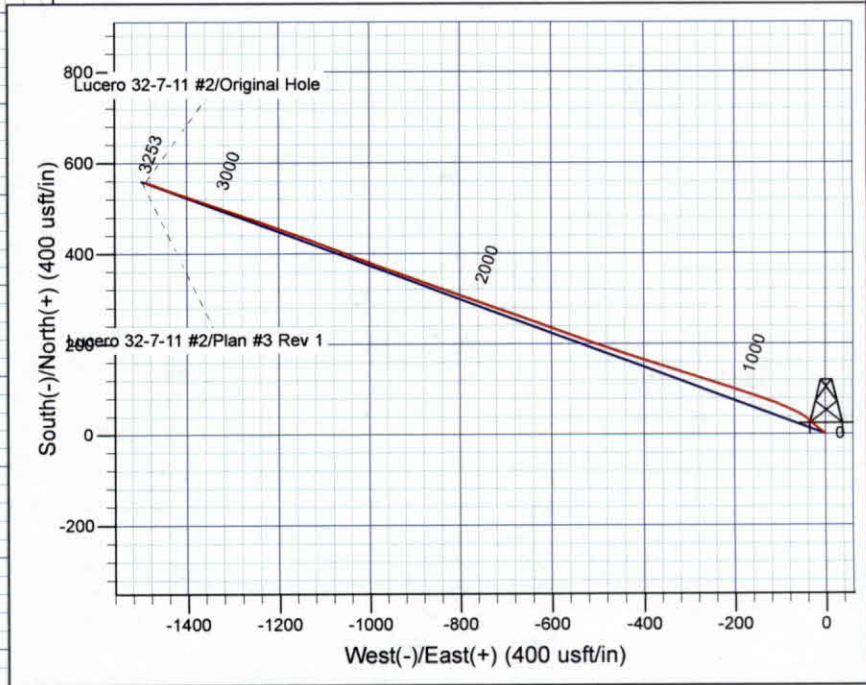
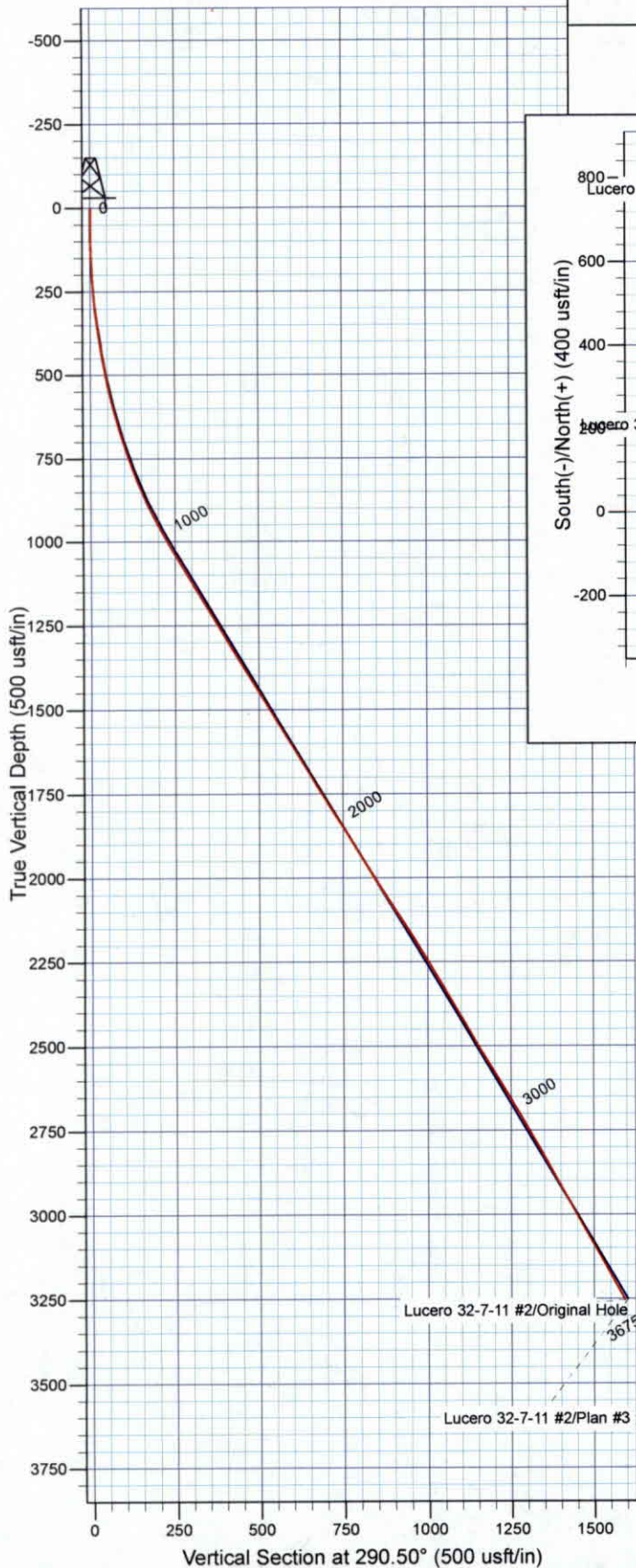


Project: La Plata County, C.O.
 Site: SEC 11-T32N-R7W
 Well: Lucero 32-7-11 #2
 Wellbore: Original Hole
 Design: Original Hole



WELL DETAILS: Lucero 32-7-11 #2

Ground Level: AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
 Northing Easting Latitude Longitude
 1137241.51 2393968.66 37° 1' 30.288 N 107° 34' 33.528 W



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Lucero 32-7-11 #2, Grid North
 Vertical (TVD) Reference: AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: AWS 507 @ 6315.29usft (12' DF + 6303.3' GL)
 Calculation Method: Minimum Curvature
 Local North: Grid
 Location:

PROJECT DETAILS: La Plata County, C.O.

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

Design: Original Hole (Lucero 32-7-11 #2/Original Hole)

Created By: Julie Cruse Date: 2011-10-19