

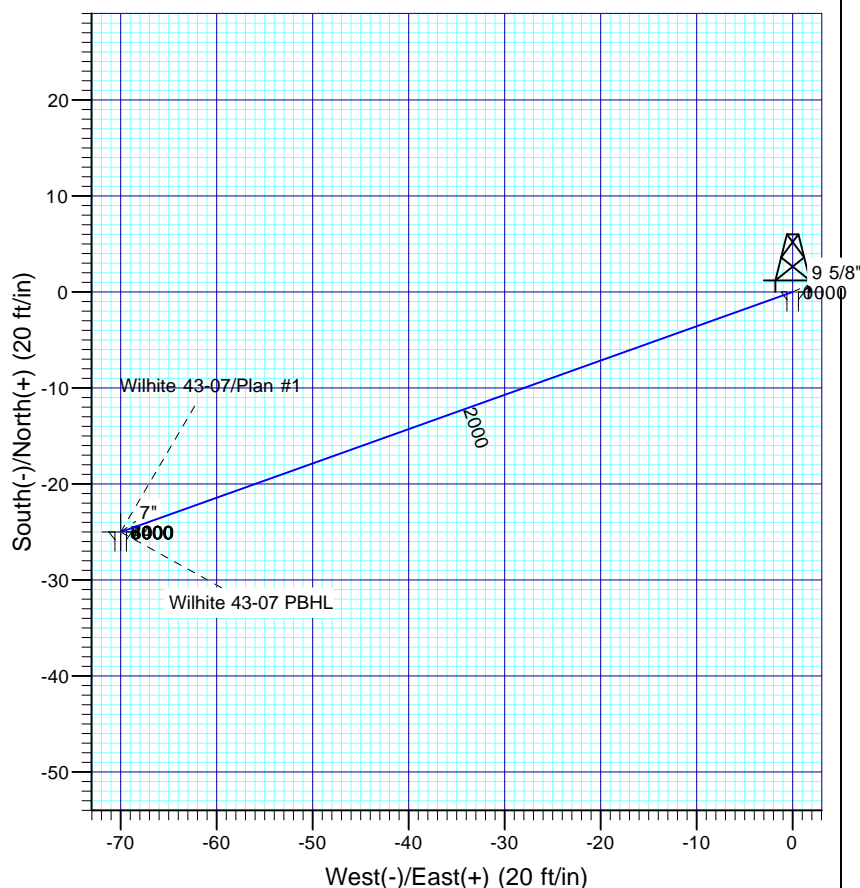
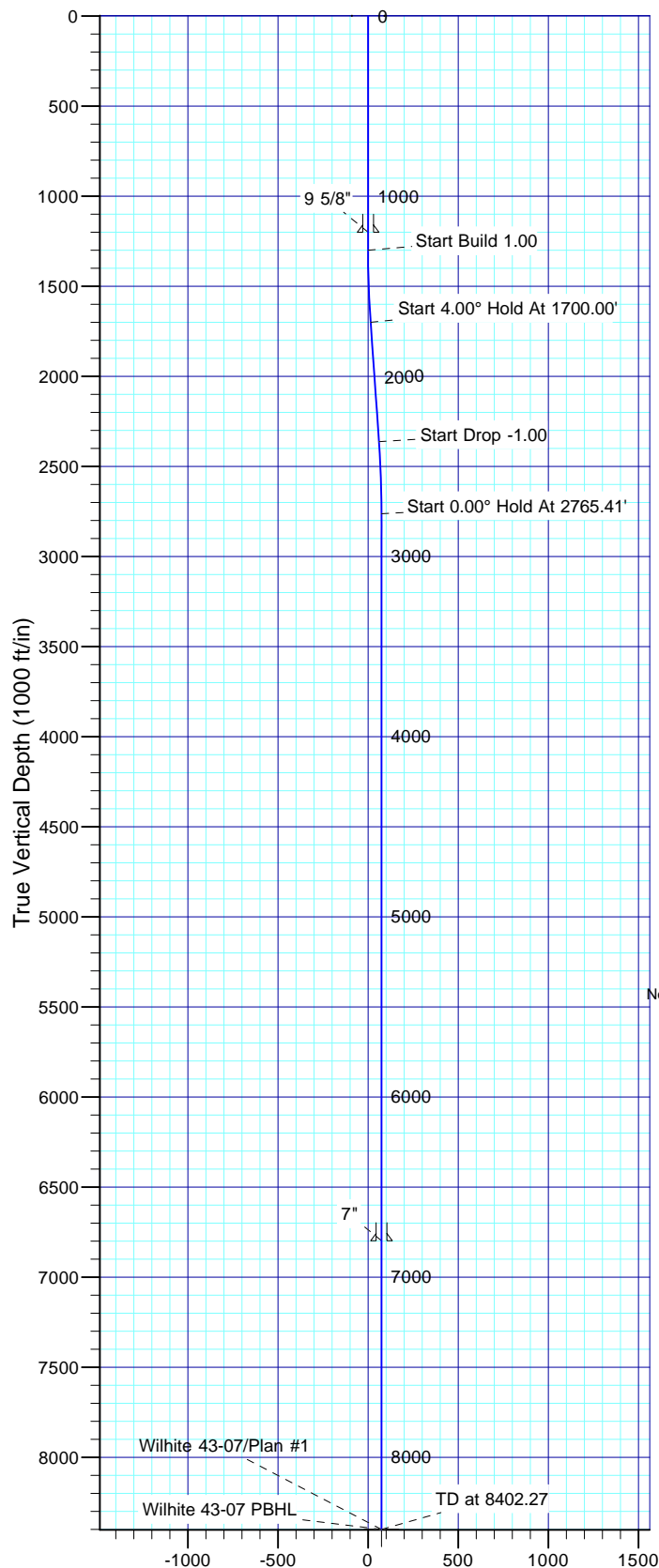
## Well Details: Wilhite 43-07

TVD Reference: GL 6184' @ 6184.00ft (Ungraded GL) Ground Level: 6184.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1428018.63	2436349.02	40° 29' 26.270 N	107° 31' 36.091 W	

**T M** Azimuths to True North  
Magnetic North: 10.22°

Magnetic Field  
Strength: 52808.9snT  
Dip Angle: 66.63°  
Date: 10/20/2011  
Model: IGRF2010



### FORMATION TOP DETAILS

No formation data is available

### Plan: Plan #1

**14:17, October 21 2011**  
**Created By: Rex Hall**

PROJECT DETAILS: Moffat County, CO NAD83

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

System Datum: Mean Sea Level

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	1700.00	4.00	250.35	1699.68	-4.69	-13.14	1.00	250.35	13.96	
4	2365.41	4.00	250.35	2363.46	-20.31	-56.86	0.00	0.00	60.37	
5	2765.41	0.00	0.00	2763.14	-25.00	-70.00	1.00	180.00	74.33	
6	8402.27	0.00	0.00	8400.00	-25.00	-70.00	0.00	0.00	74.33	Wilhite 43-07 PBHL

# **Quicksilver Resources, Inc.**

**Moffat County, CO NAD83**

**Wilhite**

**Wilhite 43-07**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**21 October, 2011**

# Scientific Drilling International

## Planning Report

<b>Database:</b>	Rockies Compass Server	<b>Local Co-ordinate Reference:</b>	Well Wilhite 43-07
<b>Company:</b>	Quicksilver Resources, Inc.	<b>TVD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Project:</b>	Moffat County, CO NAD83	<b>MD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Site:</b>	Wilhite	<b>North Reference:</b>	True
<b>Well:</b>	Wilhite 43-07	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Moffat County, CO NAD83		
<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 Northern Zone		

Site	Wilhite					
Site Position:		Northing:	1,428,018.63 usft	Latitude:	40° 29' 26.270 N	
From:	Map	Easting:	2,436,349.02 usft	Longitude:	107° 31' 36.091 W	
Position Uncertainty:		0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.31 °

Well	Wilhite 43-07, 2053' FNL & 568' FEL					
Well Position	+N/-S	0.00 ft	Northing:	1,428,018.63 usft	Latitude:	40° 29' 26.270 N
	+E/-W	0.00 ft	Easting:	2,436,349.02 usft	Longitude:	107° 31' 36.091 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	6,184.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	10/20/11	10.22	66.63	52,809

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	250.35

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	4.00	250.35	1,699.68	-4.69	-13.14	1.00	1.00	0.00	250.35	
2,365.41	4.00	250.35	2,363.46	-20.31	-56.86	0.00	0.00	0.00	0.00	
2,765.41	0.00	0.00	2,763.14	-25.00	-70.00	1.00	-1.00	0.00	180.00	
8,402.27	0.00	0.00	8,400.00	-25.00	-70.00	0.00	0.00	0.00	0.00	Wilhite 43-07 PBHL

# Scientific Drilling International

## Planning Report

<b>Database:</b>	Rockies Compass Server	<b>Local Co-ordinate Reference:</b>	Well Wilhite 43-07
<b>Company:</b>	Quicksilver Resources, Inc.	<b>TVD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Project:</b>	Moffat County, CO NAD83	<b>MD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Site:</b>	Wilhite	<b>North Reference:</b>	True
<b>Well:</b>	Wilhite 43-07	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 1.00</b>									
1,400.00	1.00	250.35	1,399.99	-0.29	-0.82	0.87	1.00	1.00	0.00
1,500.00	2.00	250.35	1,499.96	-1.17	-3.29	3.49	1.00	1.00	0.00
1,600.00	3.00	250.35	1,599.86	-2.64	-7.39	7.85	1.00	1.00	0.00
1,700.00	4.00	250.35	1,699.68	-4.69	-13.14	13.96	1.00	1.00	0.00
<b>Start 4.00° Hold At 1700.00'</b>									
1,800.00	4.00	250.35	1,799.43	-7.04	-19.71	20.93	0.00	0.00	0.00
1,900.00	4.00	250.35	1,899.19	-9.39	-26.28	27.91	0.00	0.00	0.00
2,000.00	4.00	250.35	1,998.94	-11.73	-32.85	34.88	0.00	0.00	0.00
2,100.00	4.00	250.35	2,098.70	-14.08	-39.42	41.86	0.00	0.00	0.00
2,200.00	4.00	250.35	2,198.46	-16.43	-45.99	48.84	0.00	0.00	0.00
2,300.00	4.00	250.35	2,298.21	-18.77	-52.56	55.81	0.00	0.00	0.00
2,365.41	4.00	250.35	2,363.46	-20.31	-56.86	60.37	0.00	0.00	0.00
<b>Start Drop -1.00</b>									
2,400.00	3.65	250.35	2,397.98	-21.08	-59.03	62.68	1.00	-1.00	0.00
2,500.00	2.65	250.35	2,497.82	-22.93	-64.21	68.18	1.00	-1.00	0.00
2,600.00	1.65	250.35	2,597.75	-24.20	-67.75	71.94	1.00	-1.00	0.00
2,700.00	0.65	250.35	2,697.73	-24.87	-69.65	73.96	1.00	-1.00	0.00
2,765.41	0.00	0.00	2,763.14	-25.00	-70.00	74.33	1.00	-1.00	0.00
<b>Start 0.00° Hold At 2765.41'</b>									
2,800.00	0.00	0.00	2,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
2,900.00	0.00	0.00	2,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,000.00	0.00	0.00	2,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,100.00	0.00	0.00	3,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,200.00	0.00	0.00	3,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,300.00	0.00	0.00	3,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,400.00	0.00	0.00	3,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,500.00	0.00	0.00	3,497.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,600.00	0.00	0.00	3,597.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,700.00	0.00	0.00	3,697.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,800.00	0.00	0.00	3,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
3,900.00	0.00	0.00	3,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,000.00	0.00	0.00	3,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,100.00	0.00	0.00	4,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,200.00	0.00	0.00	4,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,300.00	0.00	0.00	4,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,400.00	0.00	0.00	4,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,500.00	0.00	0.00	4,497.73	-25.00	-70.00	74.33	0.00	0.00	0.00

# Scientific Drilling International

## Planning Report

<b>Database:</b>	Rockies Compass Server	<b>Local Co-ordinate Reference:</b>	Well Wilhite 43-07
<b>Company:</b>	Quicksilver Resources, Inc.	<b>TVD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Project:</b>	Moffat County, CO NAD83	<b>MD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Site:</b>	Wilhite	<b>North Reference:</b>	True
<b>Well:</b>	Wilhite 43-07	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	0.00	0.00	4,597.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,700.00	0.00	0.00	4,697.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,800.00	0.00	0.00	4,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
4,900.00	0.00	0.00	4,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,000.00	0.00	0.00	4,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,100.00	0.00	0.00	5,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,200.00	0.00	0.00	5,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,300.00	0.00	0.00	5,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,400.00	0.00	0.00	5,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,500.00	0.00	0.00	5,497.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,600.00	0.00	0.00	5,597.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,700.00	0.00	0.00	5,697.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,800.00	0.00	0.00	5,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
5,900.00	0.00	0.00	5,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,000.00	0.00	0.00	5,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,100.00	0.00	0.00	6,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,200.00	0.00	0.00	6,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,300.00	0.00	0.00	6,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,400.00	0.00	0.00	6,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,500.00	0.00	0.00	6,497.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,600.00	0.00	0.00	6,597.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,700.00	0.00	0.00	6,697.73	-25.00	-70.00	74.33	0.00	0.00	0.00
6,800.00	0.00	0.00	6,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7"									
6,900.00	0.00	0.00	6,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,000.00	0.00	0.00	6,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,100.00	0.00	0.00	7,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,200.00	0.00	0.00	7,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,300.00	0.00	0.00	7,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,400.00	0.00	0.00	7,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,500.00	0.00	0.00	7,497.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,600.00	0.00	0.00	7,597.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,700.00	0.00	0.00	7,697.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,800.00	0.00	0.00	7,797.73	-25.00	-70.00	74.33	0.00	0.00	0.00
7,900.00	0.00	0.00	7,897.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,000.00	0.00	0.00	7,997.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,100.00	0.00	0.00	8,097.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,200.00	0.00	0.00	8,197.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,300.00	0.00	0.00	8,297.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,400.00	0.00	0.00	8,397.73	-25.00	-70.00	74.33	0.00	0.00	0.00
8,402.27	0.00	0.00	8,400.00	-25.00	-70.00	74.33	0.00	0.00	0.00
TD at 8402.27									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Wilhite 43-07 PBHL	0.00	0.00	8,400.00	-25.00	-70.00	1,427,995.24	2,436,278.47	40° 29' 26.023 N	107° 31' 36.997 W
- plan hits target center									
- Point									

# Scientific Drilling International

## Planning Report

<b>Database:</b>	Rockies Compass Server	<b>Local Co-ordinate Reference:</b>	Well Wilhite 43-07
<b>Company:</b>	Quicksilver Resources, Inc.	<b>TVD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Project:</b>	Moffat County, CO NAD83	<b>MD Reference:</b>	GL 6184' @ 6184.00ft (Ungraded GL)
<b>Site:</b>	Wilhite	<b>North Reference:</b>	True
<b>Well:</b>	Wilhite 43-07	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,200.00	1,200.00	9 5/8"	9.625	12.250	
6,800.00	6,797.73	7"	7.000	8.750	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,300.00	1,300.00	0.00	0.00	Start Build 1.00	
1,700.00	1,699.68	-4.69	-13.14	Start 4.00° Hold At 1700.00'	
2,365.41	2,363.46	-20.31	-56.86	Start Drop -1.00	
2,765.41	2,763.14	-25.00	-70.00	Start 0.00° Hold At 2765.41'	
8,402.27	8,400.00	-25.00	-70.00	TD at 8402.27	