



# **US ROCKIES REGION PLANNING**

COLORADO NORTHERN ZONE - 83

WELD\_BRYANT 37-30 PAD

P\_BRYANT 33-29

P\_BRYANT 33-29

Plan: PLAN #1 4-9-10 RHS

## **Standard Planning Report**

09 April, 2010





Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD\_BRYANT 37-30 PAD  
 Well: P\_BRYANT 33-29  
 Wellbore: P\_BRYANT 33-29  
 Section: SECTION 30 T2N R68W  
 SHL: 284 FSL 1312 FEL  
 Design: PLAN #1 4-9-10 RHS  
 Latitude: 40° 6' 11.012 N  
 Longitude: 105° 2' 29.558 W  
 GL: 4928.00  
 KB: WELL @ 4943.00ft (Original Well Elev)



**Weatherford**



Azimuths to True North  
 Magnetic North: 9.14°

Magnetic Field  
 Strength: 53068.1snT  
 Dip Angle: 66.80°  
 Date: 4/9/2010  
 Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3825.00	4005.75	PARKMAN
4365.00	4591.92	SUSSEX
4795.00	5058.68	SHANNON
7245.00	7567.59	NIO A
7538.00	7857.59	CODELL
7805.00	7927.59	GRNHRN
7970.00	8292.59	JSAND

#### CASING DETAILS

TVD	MD	Name	Size
850.00	850.00	8 5/8"	8.62

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
2094.65	22.89	51.56	2064.44	140.30	176.74	2.00	51.56	225.65	Start 3328.29 hold at 2094.65 MD
5422.94	22.89	51.56	5130.56	945.29	1190.81	0.00	0.00	1520.39	Start Drop -2.00
6567.59	0.00	0.00	6245.00	1085.59	1367.54	2.00	180.00	1746.05	Start 1875.00 hold at 6567.59 MD
8442.59	0.00	0.00	8120.00	1085.59	1367.54	0.00	0.00	1746.05	TD at 8442.59

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

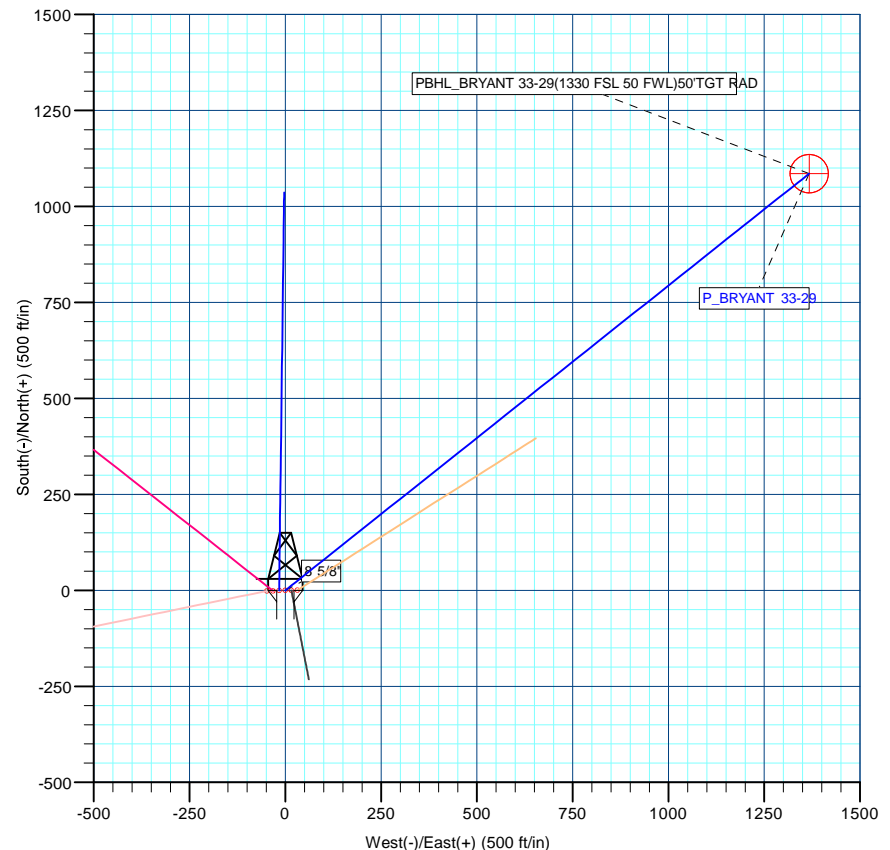
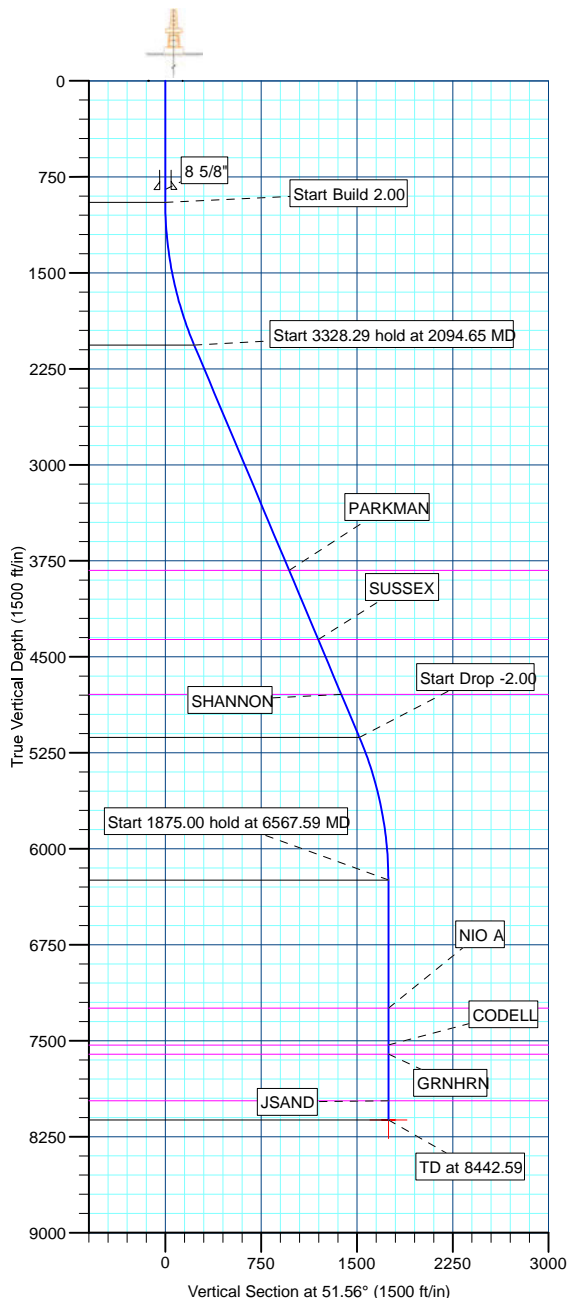
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8120.00	1085.59	1367.54	40° 6' 21.740 N	105° 2' 11.958 W	Circle (Radius: 50.00)

#### WELL DETAILS: P\_BRYANT 33-29

+N/-S	+E/-W	Northing	Ground Level: Easting	4928.00 Latitude	Longitude	Slot
0.00	0.00	1280720.26	3128243.43	40° 6' 11.012 N	105° 2' 29.558 W	

#### LEGEND

- P\_BRYANT 16-30, P\_BRYANT 16-30, PLAN #1 4-9-10 RHS V0
- P\_BRYANT 20-30, P\_BRYANT 20-30, PLAN #1 4-9-10 RHS V0
- P\_BRYANT 23-30, P\_BRYANT 23-30, PLAN #1 4-9-10 RHS V0
- P\_BRYANT 36-30, P\_BRYANT 36-30, PLAN #1 4-9-10 RHS V0
- P\_BRYANT 37-30, P\_BRYANT 37-30, PLAN #1 4-9-10 RHS V0
- PLAN #1 4-9-10 RHS



Plan: PLAN #1 4-9-10 RHS (P\_BRYANT 33-29/P\_BRYANT 33-29)

Created By: Robert H. Scott Date: 15:27, April 09 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_BRYANT 33-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4943.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4943.00ft (Original Well Elev)
Site:	WELD_BRYANT 37-30 PAD	North Reference:	True
Well:	P_BRYANT 33-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_BRYANT 33-29		
Design:	PLAN #1 4-9-10 RHS		

Project	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	WELD_BRYANT 37-30 PAD, SECTION 30 T2N R68W				
Site Position:		Northing:	1,280,720.26ft	Latitude:	40° 6' 11.012 N
From:	Lat/Long	Easting:	3,128,243.43ft	Longitude:	105° 2' 29.558 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.30 °

Well	P_BRYANT 33-29					
Well Position	+N/-S	0.00 ft	Northing:	1,280,720.26 ft	Latitude:	40° 6' 11.012 N
	+E/-W	0.00 ft	Easting:	3,128,243.43 ft	Longitude:	105° 2' 29.558 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,928.00 ft	

Wellbore	P_BRYANT 33-29				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/9/2010	9.14	66.80	53,068

Design	PLAN #1 4-9-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	51.56

Plan Sections										
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	
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,094.65	22.89	51.56	2,064.44	140.30	176.74	2.00	2.00	0.00	51.56	
5,422.94	22.89	51.56	5,130.56	945.29	1,190.81	0.00	0.00	0.00	0.00	
6,567.59	0.00	0.00	6,245.00	1,085.59	1,367.54	2.00	-2.00	0.00	180.00	
8,442.59	0.00	0.00	8,120.00	1,085.59	1,367.54	0.00	0.00	0.00	0.00	PBHL_BRYANT 33

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_BRYANT 33-29
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4943.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4943.00ft (Original Well Elev)
Site:	WELD_BRYANT 37-30 PAD	North Reference:	True
Well:	P_BRYANT 33-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_BRYANT 33-29		
Design:	PLAN #1 4-9-10 RHS		

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)
Start Build 2.00									
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	1.00	51.56	1,000.00	0.27	0.34	0.44	2.00	2.00	0.00
1,100.00	3.00	51.56	1,099.93	2.44	3.08	3.93	2.00	2.00	0.00
1,200.00	5.00	51.56	1,199.68	6.78	8.54	10.90	2.00	2.00	0.00
1,300.00	7.00	51.56	1,299.13	13.28	16.72	21.35	2.00	2.00	0.00
1,400.00	9.00	51.56	1,398.15	21.93	27.62	35.27	2.00	2.00	0.00
1,500.00	11.00	51.56	1,496.63	32.72	41.22	52.63	2.00	2.00	0.00
1,600.00	13.00	51.56	1,594.44	45.65	57.51	73.42	2.00	2.00	0.00
1,700.00	15.00	51.56	1,691.46	60.69	76.45	97.62	2.00	2.00	0.00
1,800.00	17.00	51.56	1,787.58	77.83	98.04	125.18	2.00	2.00	0.00
1,900.00	19.00	51.56	1,882.68	97.04	122.24	156.08	2.00	2.00	0.00
2,000.00	21.00	51.56	1,976.65	118.30	149.03	190.28	2.00	2.00	0.00
Start 3328.29 hold at 2094.65 MD									
2,094.65	22.89	51.56	2,064.44	140.30	176.74	225.65	2.00	2.00	0.00
2,100.00	22.89	51.56	2,069.36	141.59	178.37	227.73	0.00	0.00	0.00
2,200.00	22.89	51.56	2,161.49	165.78	208.83	266.63	0.00	0.00	0.00
2,300.00	22.89	51.56	2,253.61	189.96	239.30	305.53	0.00	0.00	0.00
2,400.00	22.89	51.56	2,345.73	214.15	269.77	344.44	0.00	0.00	0.00
2,500.00	22.89	51.56	2,437.86	238.34	300.24	383.34	0.00	0.00	0.00
2,600.00	22.89	51.56	2,529.98	262.52	330.71	422.24	0.00	0.00	0.00
2,700.00	22.89	51.56	2,622.10	286.71	361.18	461.14	0.00	0.00	0.00
2,800.00	22.89	51.56	2,714.23	310.90	391.64	500.04	0.00	0.00	0.00
2,900.00	22.89	51.56	2,806.35	335.08	422.11	538.94	0.00	0.00	0.00
3,000.00	22.89	51.56	2,898.47	359.27	452.58	577.84	0.00	0.00	0.00
3,100.00	22.89	51.56	2,990.60	383.46	483.05	616.74	0.00	0.00	0.00
3,200.00	22.89	51.56	3,082.72	407.64	513.52	655.65	0.00	0.00	0.00
3,300.00	22.89	51.56	3,174.84	431.83	543.98	694.55	0.00	0.00	0.00
3,400.00	22.89	51.56	3,266.97	456.01	574.45	733.45	0.00	0.00	0.00
3,500.00	22.89	51.56	3,359.09	480.20	604.92	772.35	0.00	0.00	0.00
3,600.00	22.89	51.56	3,451.21	504.39	635.39	811.25	0.00	0.00	0.00
3,700.00	22.89	51.56	3,543.34	528.57	665.86	850.15	0.00	0.00	0.00
3,800.00	22.89	51.56	3,635.46	552.76	696.33	889.05	0.00	0.00	0.00
3,900.00	22.89	51.56	3,727.58	576.95	726.79	927.95	0.00	0.00	0.00
4,000.00	22.89	51.56	3,819.71	601.13	757.26	966.86	0.00	0.00	0.00
PARKMAN									
4,005.75	22.89	51.56	3,825.00	602.52	759.01	969.09	0.00	0.00	0.00
4,100.00	22.89	51.56	3,911.83	625.32	787.73	1,005.76	0.00	0.00	0.00
4,200.00	22.89	51.56	4,003.95	649.51	818.20	1,044.66	0.00	0.00	0.00
4,300.00	22.89	51.56	4,096.08	673.69	848.67	1,083.56	0.00	0.00	0.00
4,400.00	22.89	51.56	4,188.20	697.88	879.14	1,122.46	0.00	0.00	0.00
4,500.00	22.89	51.56	4,280.32	722.07	909.60	1,161.36	0.00	0.00	0.00
SUSSEX									
4,591.92	22.89	51.56	4,365.00	744.30	937.61	1,197.12	0.00	0.00	0.00
4,600.00	22.89	51.56	4,372.45	746.25	940.07	1,200.26	0.00	0.00	0.00
4,700.00	22.89	51.56	4,464.57	770.44	970.54	1,239.16	0.00	0.00	0.00
4,800.00	22.89	51.56	4,556.69	794.63	1,001.01	1,278.06	0.00	0.00	0.00
4,900.00	22.89	51.56	4,648.82	818.81	1,031.48	1,316.97	0.00	0.00	0.00
5,000.00	22.89	51.56	4,740.94	843.00	1,061.95	1,355.87	0.00	0.00	0.00
SHANNON									
5,058.68	22.89	51.56	4,795.00	857.19	1,079.83	1,378.70	0.00	0.00	0.00
5,100.00	22.89	51.56	4,833.06	867.18	1,092.41	1,394.77	0.00	0.00	0.00
5,200.00	22.89	51.56	4,925.19	891.37	1,122.88	1,433.67	0.00	0.00	0.00
5,300.00	22.89	51.56	5,017.31	915.56	1,153.35	1,472.57	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4943.00ft (Original Well Elev)
Site:	WELD_BRYANT 37-30 PAD	North Reference:	True
Well:	P_BRYANT 33-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_BRYANT 33-29		
Design:	PLAN #1 4-9-10 RHS		

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)
5,400.00	22.89	51.56	5,109.43	939.74	1,183.82	1,511.47	0.00	0.00	0.00
Start Drop -2.00									
5,422.94	22.89	51.56	5,130.56	945.29	1,190.81	1,520.39	0.00	0.00	0.00
5,500.00	21.35	51.56	5,201.95	963.33	1,213.54	1,549.41	2.00	-2.00	0.00
5,600.00	19.35	51.56	5,295.70	984.96	1,240.78	1,584.19	2.00	-2.00	0.00
5,700.00	17.35	51.56	5,390.61	1,004.53	1,265.43	1,615.67	2.00	-2.00	0.00
5,800.00	15.35	51.56	5,486.56	1,022.03	1,287.48	1,643.83	2.00	-2.00	0.00
5,900.00	13.35	51.56	5,583.44	1,037.45	1,306.90	1,668.61	2.00	-2.00	0.00
6,000.00	11.35	51.56	5,681.12	1,050.74	1,323.65	1,690.00	2.00	-2.00	0.00
6,100.00	9.35	51.56	5,779.48	1,061.92	1,337.72	1,707.97	2.00	-2.00	0.00
6,200.00	7.35	51.56	5,878.42	1,070.95	1,349.10	1,722.50	2.00	-2.00	0.00
6,300.00	5.35	51.56	5,977.80	1,077.82	1,357.76	1,733.56	2.00	-2.00	0.00
6,400.00	3.35	51.56	6,077.51	1,082.54	1,363.71	1,741.15	2.00	-2.00	0.00
6,500.00	1.35	51.56	6,177.42	1,085.09	1,366.92	1,745.25	2.00	-2.00	0.00
Start 1875.00 hold at 6567.59 MD									
6,567.59	0.00	0.00	6,245.00	1,085.59	1,367.54	1,746.05	2.00	-2.00	0.00
6,600.00	0.00	0.00	6,277.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
6,700.00	0.00	0.00	6,377.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
6,800.00	0.00	0.00	6,477.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
6,900.00	0.00	0.00	6,577.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,000.00	0.00	0.00	6,677.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,100.00	0.00	0.00	6,777.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,200.00	0.00	0.00	6,877.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,300.00	0.00	0.00	6,977.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,400.00	0.00	0.00	7,077.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,500.00	0.00	0.00	7,177.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
NIO A									
7,567.59	0.00	0.00	7,245.00	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,600.00	0.00	0.00	7,277.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,700.00	0.00	0.00	7,377.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,800.00	0.00	0.00	7,477.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
CODELL									
7,857.59	0.00	0.00	7,535.00	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
7,900.00	0.00	0.00	7,577.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
GRNHRN									
7,927.59	0.00	0.00	7,605.00	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
8,000.00	0.00	0.00	7,677.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
8,100.00	0.00	0.00	7,777.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
8,200.00	0.00	0.00	7,877.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
JSAND									
8,292.59	0.00	0.00	7,970.00	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
8,300.00	0.00	0.00	7,977.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
8,400.00	0.00	0.00	8,077.41	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00
PBHL_BRYANT 33-29(1330 FSL 50 FWL)50'TGT RAD									
8,442.59	0.00	0.00	8,120.00	1,085.59	1,367.54	1,746.05	0.00	0.00	0.00

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4943.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4943.00ft (Original Well Elev)
Site:	WELD_BRYANT 37-30 PAD	North Reference:	True
Well:	P_BRYANT 33-29	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_BRYANT 33-29		
Design:	PLAN #1 4-9-10 RHS		

#### Design Targets

##### Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
PBHL_BRYANT 33-29	0.00	0.00	8,120.00	1,085.59	1,367.54	1,281,812.90	3,129,605.34	40° 6' 21.740 N	105° 2' 11.958 W
- plan hits target center									
- Circle (radius 50.00)									

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
850.00	850.00	8 5/8"	8.62	11.00

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,005.75	3,825.00	PARKMAN			
4,591.92	4,365.00	SUSSEX			
5,058.68	4,795.00	SHANNON			
7,567.59	7,245.00	NIO A			
7,857.59	7,535.00	CODELL			
7,927.59	7,605.00	GRNHRN			
8,292.59	7,970.00	JSAND			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
950.00	950.00	0.00	0.00	Start Build 2.00
2,094.65	2,064.44	140.30	176.74	Start 3328.29 hold at 2094.65 MD
5,422.94	5,130.56	945.29	1,190.81	Start Drop -2.00
6,567.59	6,245.00	1,085.59	1,367.54	Start 1875.00 hold at 6567.59 MD
8,442.59	8,120.00	1,085.59	1,367.54	TD at 8442.59