



# **US ROCKIES REGION PLANNING**

COLORADO NORTHERN ZONE - 83

WELD\_BADDING 17-26 PAD

P\_Badding 1-26

P\_Badding 1-26

Plan: PLAN #1 6-23-10 RHS

## **Standard Planning Report**

23 June, 2010





Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD\_BADDING 17-26 PAD  
 Well: P\_Badding 1-26  
 Wellbore: P\_Badding 1-26  
 Section: SECTION 26 T2N R66W  
 SHL: 1464 FNL 1209 FEL  
 Design: PLAN #1 6-23-10 RHS  
 Latitude: 40° 6' 44.896 N  
 Longitude: 104° 44' 21.332 W  
 GL: 5067.00  
 KB: WELL @ 5082.00ft (Original Well Elev)



**Weatherford®**



Azimuths to True North  
 Magnetic North: 8.96°  
 Magnetic Field  
 Strength: 53084.0snT  
 Dip Angle: 66.85°  
 Date: 6/23/2010  
 Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4246.00	4330.23	PARKMAN
4664.00	4761.68	SUSSEX
7167.00	7297.67	NIO
7482.00	7622.67	CODELL
7582.00	7712.67	GREENHORN
7937.00	8067.67	JSAND

#### CASING DETAILS

TVD	MD	Name	Size
1050.00	1050.00	8 5/8"	8.62

#### SECTION DETAILS

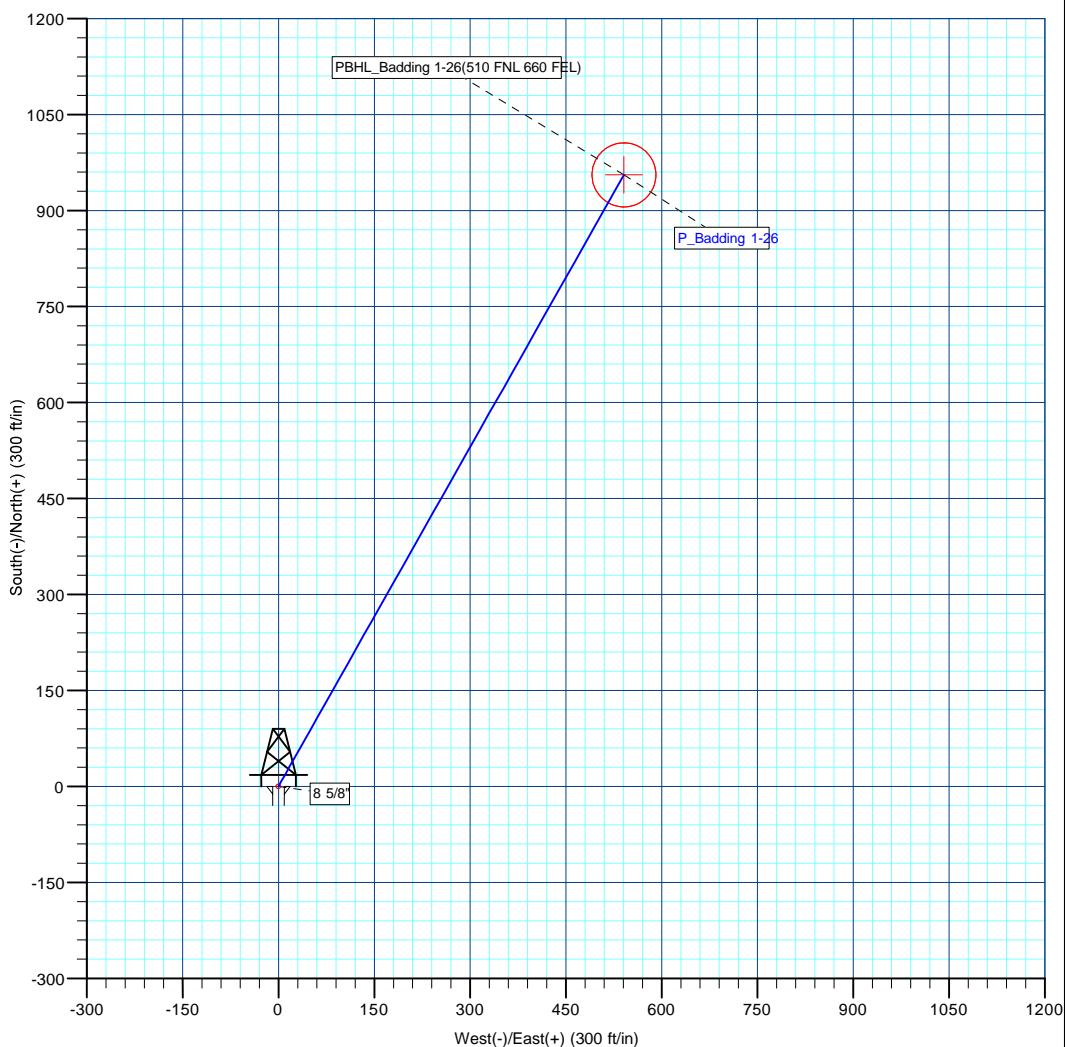
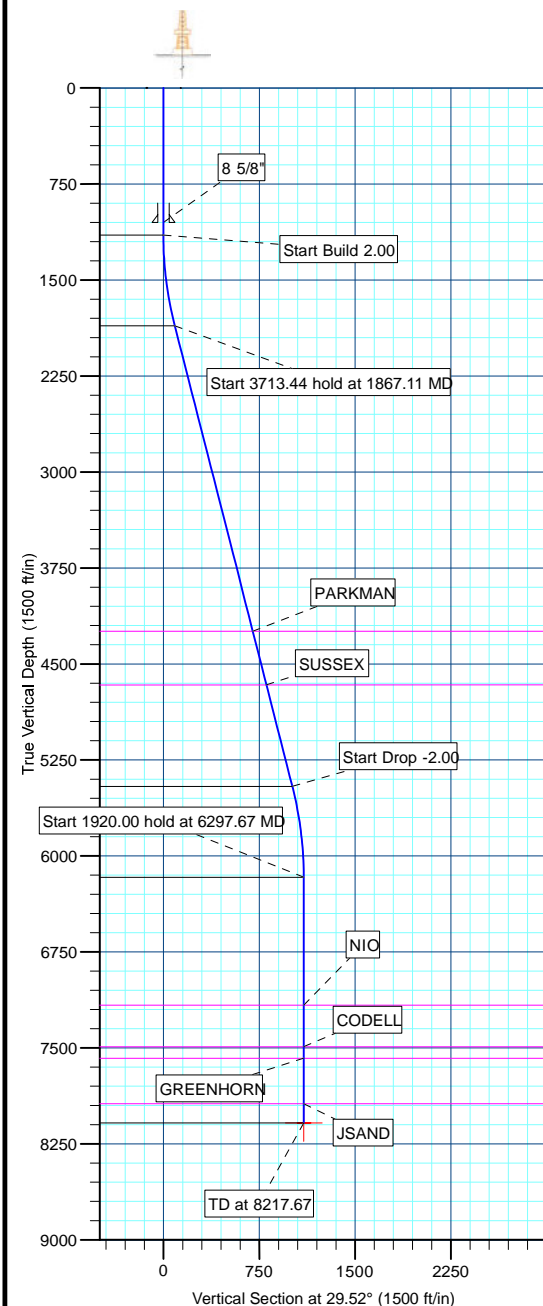
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1867.11	14.34	29.52	1859.65	77.70	43.99	2.00	29.52	89.29	Start 3713.44 hold at 1867.11 MD
5580.55	14.34	29.52	5457.35	878.18	497.19	0.00	0.00	1009.16	Start Drop -2.00
6297.67	0.00	0.00	6167.00	955.87	541.18	2.00	180.00	1098.44	Start 1920.00 hold at 6297.67 MD
8217.67	0.00	0.00	8087.00	955.87	541.18	0.00	0.00	1098.44	TD at 8217.67

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8087.00	955.87	541.18	40° 6' 54.342 N	104° 44' 14.366 W	Circle (Radius: 50.00)

#### WELL DETAILS: P\_Badding 1-26

+N/-S	+E/-W	Northing	Ground Level: Easting	5067.00 Latitude	Longitude	Slot
0.00	0.00	1284730.01	3212770.23	40° 6' 44.896 N	104° 44' 21.332 W	



Plan: PLAN #1 6-23-10 RHS (P\_Badding 1-26/P\_Badding 1-26)

Created By: Robert H. Scott Date: 13:11, June 23 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 1-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 1-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 1-26		
Design:	PLAN #1 6-23-10 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_BADDING 17-26 PAD, SECTION 26 T2N R66W			
Site Position:		Northing:	1,284,730.01 ft	Latitude:	40° 6' 44.896 N
From:	Lat/Long	Easting:	3,212,770.23ft	Longitude:	104° 44' 21.332 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.49 °

Well	P_Badding 1-26					
Well Position	+N/-S	0.00 ft	Northing:	1,284,730.01 ft	Latitude:	40° 6' 44.896 N
	+E/-W	0.00 ft	Easting:	3,212,770.23 ft	Longitude:	104° 44' 21.332 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,067.00 ft	

Wellbore	P_Badding 1-26				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/23/2010	8.96	66.86	53,084

Design	PLAN #1 6-23-10 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	29.52

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	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,867.11	14.34	29.52	1,859.65	77.70	43.99	2.00	2.00	0.00	29.52	
5,580.55	14.34	29.52	5,457.35	878.18	497.19	0.00	0.00	0.00	0.00	
6,297.67	0.00	0.00	6,167.00	955.87	541.18	2.00	-2.00	0.00	180.00	
8,217.67	0.00	0.00	8,087.00	955.87	541.18	0.00	0.00	0.00	0.00	PBHL_Badding 1-2

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 1-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 1-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 1-26		
Design:	PLAN #1 6-23-10 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									
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	1.00	29.52	1,200.00	0.38	0.21	0.44	2.00	2.00	0.00
1,300.00	3.00	29.52	1,299.93	3.42	1.93	3.93	2.00	2.00	0.00
1,400.00	5.00	29.52	1,399.68	9.49	5.37	10.90	2.00	2.00	0.00
1,500.00	7.00	29.52	1,499.13	18.58	10.52	21.35	2.00	2.00	0.00
1,600.00	9.00	29.52	1,598.15	30.69	17.38	35.27	2.00	2.00	0.00
1,700.00	11.00	29.52	1,696.63	45.80	25.93	52.63	2.00	2.00	0.00
1,800.00	13.00	29.52	1,794.44	63.89	36.17	73.42	2.00	2.00	0.00
Start 3713.44 hold at 1867.11 MD									
1,867.11	14.34	29.52	1,859.65	77.70	43.99	89.29	2.00	2.00	0.00
1,900.00	14.34	29.52	1,891.51	84.79	48.00	97.43	0.00	0.00	0.00
2,000.00	14.34	29.52	1,988.39	106.34	60.21	122.20	0.00	0.00	0.00
2,100.00	14.34	29.52	2,085.28	127.90	72.41	146.98	0.00	0.00	0.00
2,200.00	14.34	29.52	2,182.16	149.46	84.62	171.75	0.00	0.00	0.00
2,300.00	14.34	29.52	2,279.04	171.01	96.82	196.52	0.00	0.00	0.00
2,400.00	14.34	29.52	2,375.93	192.57	109.03	221.29	0.00	0.00	0.00
2,500.00	14.34	29.52	2,472.81	214.12	121.23	246.06	0.00	0.00	0.00
2,600.00	14.34	29.52	2,569.69	235.68	133.43	270.83	0.00	0.00	0.00
2,700.00	14.34	29.52	2,666.58	257.24	145.64	295.60	0.00	0.00	0.00
2,800.00	14.34	29.52	2,763.46	278.79	157.84	320.38	0.00	0.00	0.00
2,900.00	14.34	29.52	2,860.34	300.35	170.05	345.15	0.00	0.00	0.00
3,000.00	14.34	29.52	2,957.23	321.91	182.25	369.92	0.00	0.00	0.00
3,100.00	14.34	29.52	3,054.11	343.46	194.46	394.69	0.00	0.00	0.00
3,200.00	14.34	29.52	3,150.99	365.02	206.66	419.46	0.00	0.00	0.00
3,300.00	14.34	29.52	3,247.88	386.57	218.87	444.23	0.00	0.00	0.00
3,400.00	14.34	29.52	3,344.76	408.13	231.07	469.00	0.00	0.00	0.00
3,500.00	14.34	29.52	3,441.64	429.69	243.27	493.77	0.00	0.00	0.00
3,600.00	14.34	29.52	3,538.53	451.24	255.48	518.55	0.00	0.00	0.00
3,700.00	14.34	29.52	3,635.41	472.80	267.68	543.32	0.00	0.00	0.00
3,800.00	14.34	29.52	3,732.29	494.36	279.89	568.09	0.00	0.00	0.00
3,900.00	14.34	29.52	3,829.18	515.91	292.09	592.86	0.00	0.00	0.00
4,000.00	14.34	29.52	3,926.06	537.47	304.30	617.63	0.00	0.00	0.00
4,100.00	14.34	29.52	4,022.94	559.02	316.50	642.40	0.00	0.00	0.00
4,200.00	14.34	29.52	4,119.83	580.58	328.71	667.17	0.00	0.00	0.00
4,300.00	14.34	29.52	4,216.71	602.14	340.91	691.95	0.00	0.00	0.00
PARKMAN									
4,330.23	14.34	29.52	4,246.00	608.65	344.60	699.43	0.00	0.00	0.00
4,400.00	14.34	29.52	4,313.59	623.69	353.11	716.72	0.00	0.00	0.00
4,500.00	14.34	29.52	4,410.48	645.25	365.32	741.49	0.00	0.00	0.00
4,600.00	14.34	29.52	4,507.36	666.81	377.52	766.26	0.00	0.00	0.00
4,700.00	14.34	29.52	4,604.24	688.36	389.73	791.03	0.00	0.00	0.00
SUSSEX									
4,761.68	14.34	29.52	4,664.00	701.66	397.25	806.31	0.00	0.00	0.00
4,800.00	14.34	29.52	4,701.13	709.92	401.93	815.80	0.00	0.00	0.00
4,900.00	14.34	29.52	4,798.01	731.48	414.14	840.57	0.00	0.00	0.00
5,000.00	14.34	29.52	4,894.89	753.03	426.34	865.35	0.00	0.00	0.00
5,100.00	14.34	29.52	4,991.78	774.59	438.54	890.12	0.00	0.00	0.00
5,200.00	14.34	29.52	5,088.66	796.14	450.75	914.89	0.00	0.00	0.00
5,300.00	14.34	29.52	5,185.54	817.70	462.95	939.66	0.00	0.00	0.00
5,400.00	14.34	29.52	5,282.43	839.26	475.16	964.43	0.00	0.00	0.00
5,500.00	14.34	29.52	5,379.31	860.81	487.36	989.20	0.00	0.00	0.00
Start Drop -2.00									

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 1-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 1-26		
Design:	PLAN #1 6-23-10 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)
5,580.55	14.34	29.52	5,457.35	878.18	497.19	1,009.16	0.00	0.00	0.00
5,600.00	13.95	29.52	5,476.21	882.31	499.54	1,013.91	2.00	-2.00	0.00
5,700.00	11.95	29.52	5,573.66	901.82	510.58	1,036.32	2.00	-2.00	0.00
5,800.00	9.95	29.52	5,671.83	918.35	519.94	1,055.32	2.00	-2.00	0.00
5,900.00	7.95	29.52	5,770.61	931.90	527.61	1,070.89	2.00	-2.00	0.00
6,000.00	5.95	29.52	5,869.87	942.43	533.57	1,082.99	2.00	-2.00	0.00
6,100.00	3.95	29.52	5,969.49	949.94	537.82	1,091.63	2.00	-2.00	0.00
6,200.00	1.95	29.52	6,069.35	954.43	540.36	1,096.78	2.00	-2.00	0.00
Start 1920.00 hold at 6297.67 MD									
6,297.67	0.00	0.00	6,167.00	955.87	541.18	1,098.44	2.00	-2.00	0.00
6,300.00	0.00	0.00	6,169.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,400.00	0.00	0.00	6,269.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,500.00	0.00	0.00	6,369.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,600.00	0.00	0.00	6,469.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,700.00	0.00	0.00	6,569.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,800.00	0.00	0.00	6,669.33	955.87	541.18	1,098.44	0.00	0.00	0.00
6,900.00	0.00	0.00	6,769.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,000.00	0.00	0.00	6,869.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,100.00	0.00	0.00	6,969.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,200.00	0.00	0.00	7,069.33	955.87	541.18	1,098.44	0.00	0.00	0.00
NIO									
7,297.67	0.00	0.00	7,167.00	955.87	541.18	1,098.44	0.00	0.00	0.00
7,300.00	0.00	0.00	7,169.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,400.00	0.00	0.00	7,269.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,500.00	0.00	0.00	7,369.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,600.00	0.00	0.00	7,469.33	955.87	541.18	1,098.44	0.00	0.00	0.00
CODELL									
7,622.67	0.00	0.00	7,492.00	955.87	541.18	1,098.44	0.00	0.00	0.00
7,700.00	0.00	0.00	7,569.33	955.87	541.18	1,098.44	0.00	0.00	0.00
GREENHORN									
7,712.67	0.00	0.00	7,582.00	955.87	541.18	1,098.44	0.00	0.00	0.00
7,800.00	0.00	0.00	7,669.33	955.87	541.18	1,098.44	0.00	0.00	0.00
7,900.00	0.00	0.00	7,769.33	955.87	541.18	1,098.44	0.00	0.00	0.00
8,000.00	0.00	0.00	7,869.33	955.87	541.18	1,098.44	0.00	0.00	0.00
JSAND									
8,067.67	0.00	0.00	7,937.00	955.87	541.18	1,098.44	0.00	0.00	0.00
8,100.00	0.00	0.00	7,969.33	955.87	541.18	1,098.44	0.00	0.00	0.00
8,200.00	0.00	0.00	8,069.33	955.87	541.18	1,098.44	0.00	0.00	0.00
PBHL_Badding 1-26(510 FNL 660 FEL)									
8,217.67	0.00	0.00	8,087.00	955.87	541.18	1,098.44	0.00	0.00	0.00

#### Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_Badding 1-26(510 FNL 660 FEL)	0.00	0.00	8,087.00	955.87	541.18	1,285,690.49	3,213,303.19	40° 6' 54.342 N	104° 44' 14.366 W
- plan hits target center									
- Circle (radius 50.00)									

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_Badding 1-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5082.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5082.00ft (Original Well Elev)
Site:	WELD_BADDING 17-26 PAD	North Reference:	True
Well:	P_Badding 1-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Badding 1-26		
Design:	PLAN #1 6-23-10 RHS		

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,050.00	1,050.00	8 5/8"	8.62	11.00

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,330.23	4,246.00	PARKMAN			
4,761.68	4,664.00	SUSSEX			
7,297.67	7,167.00	NIO			
7,622.67	7,492.00	CODELL			
7,712.67	7,582.00	GREENHORN			
8,067.67	7,937.00	JSAND			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,150.00	1,150.00	0.00	0.00	Start Build 2.00
1,867.11	1,859.65	77.70	43.99	Start 3713.44 hold at 1867.11 MD
5,580.55	5,457.35	878.18	497.19	Start Drop -2.00
6,297.67	6,167.00	955.87	541.18	Start 1920.00 hold at 6297.67 MD
8,217.67	8,087.00	955.87	541.18	TD at 8217.67