

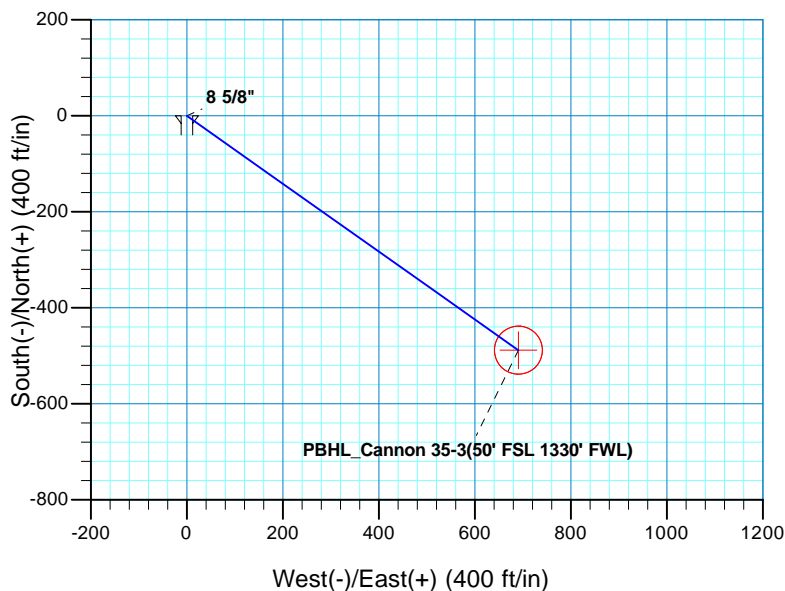
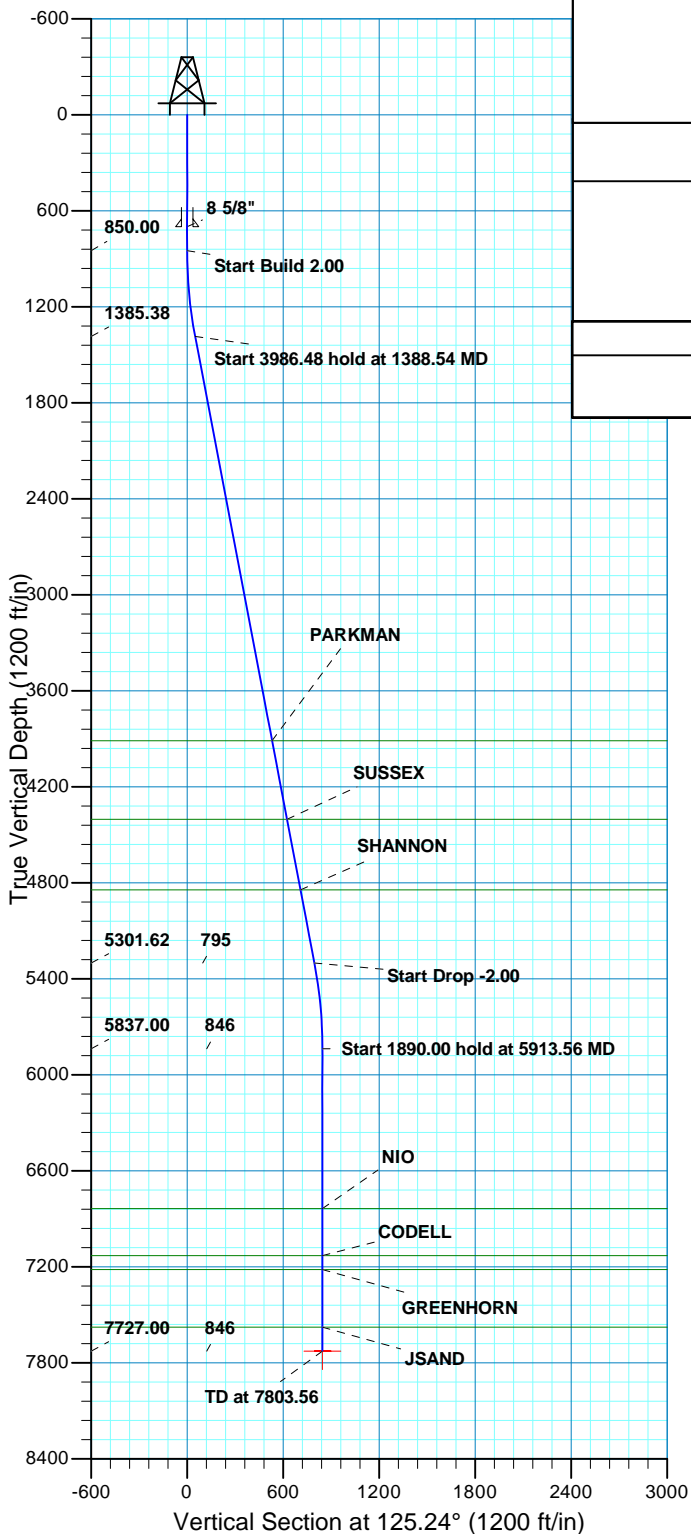
WELL DETAILS: P_Cannon 35-3					
GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1302967.90	3235596.08	40° 9' 43.085 N	104° 39' 25.315 W

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7727.00	-488.12	690.91	1302486.38	3236291.60	40° 9' 38.261 N	104° 39' 16.416 W	Circle (Radius: 50.00)
- plan hits target center								

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	
1388.54	10.77	125.24	1385.38	-29.12	41.22	2.00	125.24	50.47	
5375.02	10.77	125.24	5301.62	-458.99	649.69	0.00	0.00	795.47	
5913.56	0.00	0.00	5837.00	-488.12	690.91	2.00	180.00	845.94	
7803.56	0.00	0.00	7727.00	-488.12	690.91	0.00	0.00	845.94	PBHL_Cannon 35-3(50' FSL 1330' FWL)

PROJECT DETAILS: COLORADO NORTHERN ZONE - 83			FORMATION TOP DETAILS		
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone Location: SECTION 3 T2N R65W System Datum: Mean Sea Level			TVDPath	MDPath	Formation
			3912.00	3960.48	PARKMAN
			4403.00	4460.28	SUSSEX
			4845.00	4910.21	SHANNON
			6837.00	6913.56	NIO
			7131.00	7207.56	CODELL
			7217.00	7293.56	GREENHORN
			7577.00	7653.56	JSAND

CASING DETAILS			
TVD	MD	Name	Size
700.00	700.00	8 5/8"	8.625





Scientific Drilling
Rocky Mountain Operations

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_CANNON 13-3 Pad

P_Cannon 35-3

P_Cannon 35-3

Plan: PLAN #1 8-18-10 RHS

Standard Planning Report

18 August, 2010



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 35-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Site:	WELD_CANNON 13-3 Pad	North Reference:	True
Well:	P_Cannon 35-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 35-3		
Design:	PLAN #1 8-18-10 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_CANNON 13-3 Pad, SECTION 3 T2N R65W				
Site Position:		Northing:	1,302,979.10 usft	Latitude:	40° 9' 43.196 N
From:	Lat/Long	Easting:	3,235,584.80 usft	Longitude:	104° 39' 25.459 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.54 °

Well	P_Cannon 35-3, 561' FSL 612' FWL					
Well Position	+N/-S	-11.31 ft	Northing:	1,302,967.90 usft	Latitude:	40° 9' 43.085 N
	+E/-W	11.18 ft	Easting:	3,235,596.08 usft	Longitude:	104° 39' 25.315 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,852.00 ft

Wellbore	P_Cannon 35-3				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/18/2010	8.90	66.90	53,105

Design	PLAN #1 8-18-10 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	125.24

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	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,388.54	10.77	125.24	1,385.38	-29.12	41.22	2.00	2.00	0.00	125.24	
5,375.02	10.77	125.24	5,301.62	-458.99	649.69	0.00	0.00	0.00	0.00	
5,913.56	0.00	0.00	5,837.00	-488.12	690.91	2.00	-2.00	0.00	180.00	
7,803.56	0.00	0.00	7,727.00	-488.12	690.91	0.00	0.00	0.00	0.00	PBHL_Cannon 35-3(€

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 35-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Site:	WELD_CANNON 13-3 Pad	North Reference:	True
Well:	P_Cannon 35-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 35-3		
Design:	PLAN #1 8-18-10 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)	
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	
8 5/8"										
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
900.00	1.00	125.24	900.00	-0.25	0.36	0.44	2.00	2.00	0.00	
1,000.00	3.00	125.24	999.93	-2.27	3.21	3.93	2.00	2.00	0.00	
1,100.00	5.00	125.24	1,099.68	-6.29	8.90	10.90	2.00	2.00	0.00	
1,200.00	7.00	125.24	1,199.13	-12.32	17.44	21.35	2.00	2.00	0.00	
1,300.00	9.00	125.24	1,298.15	-20.35	28.81	35.27	2.00	2.00	0.00	
1,388.54	10.77	125.24	1,385.38	-29.12	41.22	50.47	2.00	2.00	0.00	
Start 3986.48 hold at 1388.54 MD										
1,400.00	10.77	125.24	1,396.63	-30.36	42.97	52.61	0.00	0.00	0.00	
1,500.00	10.77	125.24	1,494.87	-41.14	58.23	71.30	0.00	0.00	0.00	
1,600.00	10.77	125.24	1,593.11	-51.92	73.50	89.99	0.00	0.00	0.00	
1,700.00	10.77	125.24	1,691.35	-62.71	88.76	108.68	0.00	0.00	0.00	
1,800.00	10.77	125.24	1,789.58	-73.49	104.02	127.36	0.00	0.00	0.00	
1,900.00	10.77	125.24	1,887.82	-84.27	119.29	146.05	0.00	0.00	0.00	
2,000.00	10.77	125.24	1,986.06	-95.06	134.55	164.74	0.00	0.00	0.00	
2,100.00	10.77	125.24	2,084.30	-105.84	149.81	183.43	0.00	0.00	0.00	
2,200.00	10.77	125.24	2,182.54	-116.62	165.08	202.12	0.00	0.00	0.00	
2,300.00	10.77	125.24	2,280.78	-127.41	180.34	220.80	0.00	0.00	0.00	
2,400.00	10.77	125.24	2,379.01	-138.19	195.60	239.49	0.00	0.00	0.00	
2,500.00	10.77	125.24	2,477.25	-148.97	210.87	258.18	0.00	0.00	0.00	
2,600.00	10.77	125.24	2,575.49	-159.76	226.13	276.87	0.00	0.00	0.00	
2,700.00	10.77	125.24	2,673.73	-170.54	241.39	295.56	0.00	0.00	0.00	
2,800.00	10.77	125.24	2,771.97	-181.32	256.66	314.25	0.00	0.00	0.00	
2,900.00	10.77	125.24	2,870.21	-192.11	271.92	332.93	0.00	0.00	0.00	
3,000.00	10.77	125.24	2,968.44	-202.89	287.18	351.62	0.00	0.00	0.00	
3,100.00	10.77	125.24	3,066.68	-213.67	302.45	370.31	0.00	0.00	0.00	
3,200.00	10.77	125.24	3,164.92	-224.46	317.71	389.00	0.00	0.00	0.00	
3,300.00	10.77	125.24	3,263.16	-235.24	332.97	407.69	0.00	0.00	0.00	
3,400.00	10.77	125.24	3,361.40	-246.02	348.24	426.37	0.00	0.00	0.00	
3,500.00	10.77	125.24	3,459.64	-256.81	363.50	445.06	0.00	0.00	0.00	
3,600.00	10.77	125.24	3,557.87	-267.59	378.76	463.75	0.00	0.00	0.00	
3,700.00	10.77	125.24	3,656.11	-278.37	394.03	482.44	0.00	0.00	0.00	
3,800.00	10.77	125.24	3,754.35	-289.16	409.29	501.13	0.00	0.00	0.00	
3,900.00	10.77	125.24	3,852.59	-299.94	424.55	519.81	0.00	0.00	0.00	
3,960.48	10.77	125.24	3,912.00	-306.46	433.78	531.12	0.00	0.00	0.00	
PARKMAN										
4,000.00	10.77	125.24	3,950.83	-310.72	439.82	538.50	0.00	0.00	0.00	
4,100.00	10.77	125.24	4,049.06	-321.50	455.08	557.19	0.00	0.00	0.00	
4,200.00	10.77	125.24	4,147.30	-332.29	470.34	575.88	0.00	0.00	0.00	
4,300.00	10.77	125.24	4,245.54	-343.07	485.61	594.57	0.00	0.00	0.00	
4,400.00	10.77	125.24	4,343.78	-353.85	500.87	613.26	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 35-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Site:	WELD_CANNON 13-3 Pad	North Reference:	True
Well:	P_Cannon 35-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 35-3		
Design:	PLAN #1 8-18-10 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)	
4,460.28	10.77	125.24	4,403.00	-360.35	510.07	624.52	0.00	0.00	0.00	
SUSSEX										
4,500.00	10.77	125.24	4,442.02	-364.64	516.13	631.94	0.00	0.00	0.00	
4,600.00	10.77	125.24	4,540.26	-375.42	531.39	650.63	0.00	0.00	0.00	
4,700.00	10.77	125.24	4,638.49	-386.20	546.66	669.32	0.00	0.00	0.00	
4,800.00	10.77	125.24	4,736.73	-396.99	561.92	688.01	0.00	0.00	0.00	
4,900.00	10.77	125.24	4,834.97	-407.77	577.18	706.70	0.00	0.00	0.00	
4,910.21	10.77	125.24	4,845.00	-408.87	578.74	708.60	0.00	0.00	0.00	
SHANNON										
5,000.00	10.77	125.24	4,933.21	-418.55	592.45	725.38	0.00	0.00	0.00	
5,100.00	10.77	125.24	5,031.45	-429.34	607.71	744.07	0.00	0.00	0.00	
5,200.00	10.77	125.24	5,129.69	-440.12	622.97	762.76	0.00	0.00	0.00	
5,300.00	10.77	125.24	5,227.92	-450.90	638.24	781.45	0.00	0.00	0.00	
5,375.02	10.77	125.24	5,301.62	-458.99	649.69	795.47	0.00	0.00	0.00	
Start Drop -2.00										
5,400.00	10.27	125.24	5,326.18	-461.63	653.41	800.03	2.00	-2.00	0.00	
5,500.00	8.27	125.24	5,424.87	-470.92	666.57	816.14	2.00	-2.00	0.00	
5,600.00	6.27	125.24	5,524.06	-478.22	676.91	828.80	2.00	-2.00	0.00	
5,700.00	4.27	125.24	5,623.63	-483.52	684.41	837.98	2.00	-2.00	0.00	
5,800.00	2.27	125.24	5,723.47	-486.82	689.07	843.69	2.00	-2.00	0.00	
5,900.00	0.27	125.24	5,823.44	-488.10	690.88	845.91	2.00	-2.00	0.00	
5,913.56	0.00	0.00	5,837.00	-488.12	690.91	845.94	2.00	-2.00	0.00	
Start 1890.00 hold at 5913.56 MD										
6,000.00	0.00	0.00	5,923.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,023.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,123.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,223.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,323.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,423.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,523.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,623.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,723.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,823.44	-488.12	690.91	845.94	0.00	0.00	0.00	
6,913.56	0.00	0.00	6,837.00	-488.12	690.91	845.94	0.00	0.00	0.00	
NIO										
7,000.00	0.00	0.00	6,923.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,023.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,123.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,207.56	0.00	0.00	7,131.00	-488.12	690.91	845.94	0.00	0.00	0.00	
CODELL										
7,293.56	0.00	0.00	7,217.00	-488.12	690.91	845.94	0.00	0.00	0.00	
GREENHORN										
7,300.00	0.00	0.00	7,223.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,323.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,423.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,523.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,653.56	0.00	0.00	7,577.00	-488.12	690.91	845.94	0.00	0.00	0.00	
JSAND										
7,700.00	0.00	0.00	7,623.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,723.44	-488.12	690.91	845.94	0.00	0.00	0.00	
7,803.56	0.00	0.00	7,727.00	-488.12	690.91	845.94	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Cannon 35-3
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4852' & RKB 15' @ 4867.00ft (ASSUMED)
Site:	WELD_CANNON 13-3 Pad	North Reference:	True
Well:	P_Cannon 35-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Cannon 35-3		
Design:	PLAN #1 8-18-10 RHS		

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)
PBHL_Cannon 35-3(50' FSL 1330' FWL)									

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_Cannon 35-3(50' - hit/miss target - Shape - Circle (radius 50.00)	0.00	0.00	7,727.00	-488.12	690.91	1,302,486.38	3,236,291.60	40° 9' 38.261 N	104° 39' 16.416 W

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
700.00	700.00	8 5/8"	8.625	11.000

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,960.48	3,912.00	PARKMAN			
4,460.28	4,403.00	SUSSEX			
4,910.21	4,845.00	SHANNON			
6,913.56	6,837.00	NIO			
7,207.56	7,131.00	CODELL			
7,293.56	7,217.00	GREENHORN			
7,653.56	7,577.00	JSAND			

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
850.00	850.00	0.00	0.00	Start Build 2.00
1,388.54	1,385.38	-29.12	41.22	Start 3986.48 hold at 1388.54 MD
5,375.02	5,301.62	-458.99	649.69	Start Drop -2.00
5,913.56	5,837.00	-488.12	690.91	Start 1890.00 hold at 5913.56 MD
7,803.56	7,727.00	-488.12	690.91	TD at 7803.56