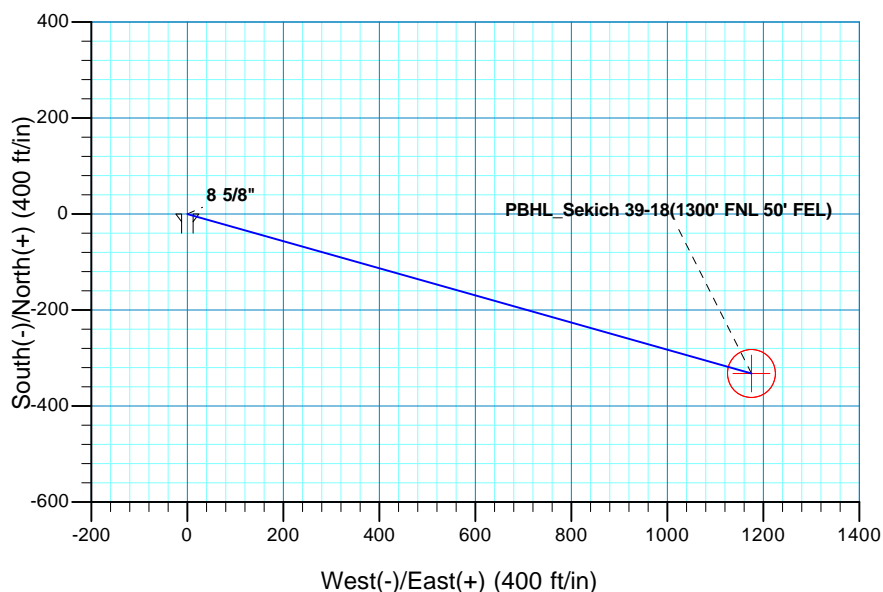
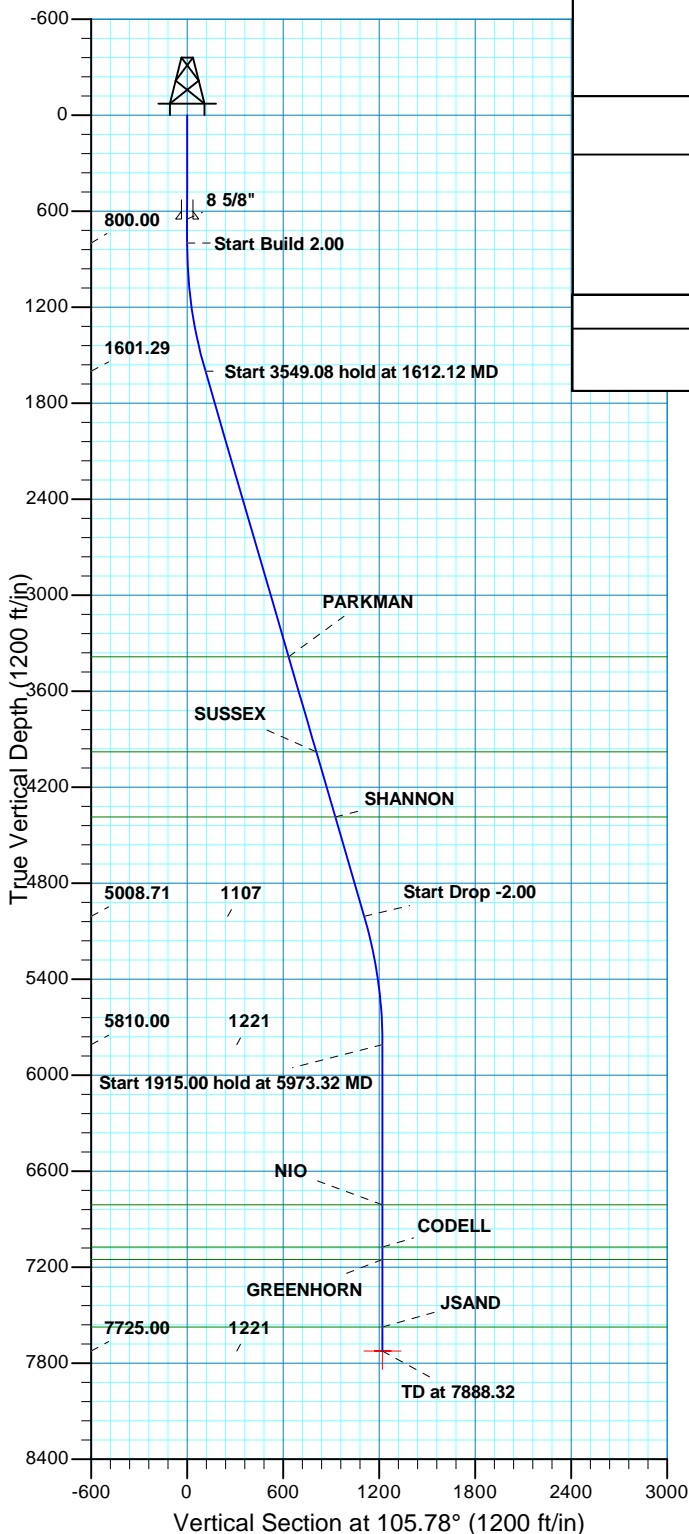


WELL DETAILS: P_Sekich 39-18					
GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1324637.17	3159817.14	40° 13' 23.199 N	104° 55' 39.580 W

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBH	7725.00	-332.19	1175.33	1324312.58	3160994.59	40° 13' 19.916 N	104° 55' 24.427 W
- plan hits target center							
Shape							
Circle (Radius: 50.00)							

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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
1612.12	16.24	105.78	1601.29	-31.10	110.03	2.00	105.78	114.34	
5161.20	16.24	105.78	5008.71	-301.09	1065.29	0.00	0.00	1107.03	
5973.32	0.00	0.00	5810.00	-332.19	1175.33	2.00	180.00	1221.37	
7888.32	0.00	0.00	7725.00	-332.19	1175.33	0.00	0.00	1221.37	PBHL_Sekich 39-18(1300' FNL 50' FEL)
PROJECT DETAILS: COLORADO NORTHERN ZONE - 83							FORMATION TOP DETAILS		
Geodetic System: US State Plane 1983							TVDPath	MDPath	Formation
Datum: North American Datum 1983							3386.00	3471.03	PARKMAN
Ellipsoid: GRS 1980							3980.00	4089.72	SUSSEX
Zone: Colorado Northern Zone							4386.00	4512.60	SHANNON
Location: SEC 18 T3N R67W							6810.00	6973.32	NIO
System Datum: Mean Sea Level							7074.00	7237.32	CODELL
							7152.00	7315.32	GREENHORN
							7575.00	7738.32	JSAND
CASING DETAILS									
TVD	MD	Name	Size						
650.00	650.00	8 5/8"	8.625						



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_SEKICH 20-18 PAD

P_Sekich 39-18

P_Sekich 39-18

Plan: PLAN #1 9-14-10 RHS

Standard Planning Report

15 September, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 39-18
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Site:	WELD_SEKICH 20-18 PAD	North Reference:	True
Well:	P_Sekich 39-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 39-18		
Design:	PLAN #1 9-14-10 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_SEKICH 20-18 PAD, SEC 18 T3N R67W		
Site Position:		Northing:	1,324,637.81 usft
From:	Lat/Long	Easting:	3,159,801.22 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	40° 13' 23.207 N
		Longitude:	104° 55' 39.785 W
		Grid Convergence:	0.37 °

Well	P_Sekich 39-18, 1592' FSL & 1226' FEL		
Well Position	+N/-S	-0.74 ft	Northing: 1,324,637.17 usft
	+E/-W	15.92 ft	Easting: 3,159,817.14 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	Latitude: 40° 13' 23.199 N
			Longitude: 104° 55' 39.580 W
			Ground Level: 4,865.00 ft

Wellbore	P_Sekich 39-18				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	09/14/2010	9.04	66.91	53,099

Design	PLAN #1 9-14-10 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	105.78

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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,612.12	16.24	105.78	1,601.29	-31.10	110.03	2.00	2.00	0.00	105.78	
5,161.20	16.24	105.78	5,008.71	-301.09	1,065.29	0.00	0.00	0.00	0.00	
5,973.32	0.00	0.00	5,810.00	-332.19	1,175.33	2.00	-2.00	0.00	180.00	
7,888.32	0.00	0.00	7,725.00	-332.19	1,175.33	0.00	0.00	0.00	0.00	PBHL_Sekich 39-18(

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 39-18
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Site:	WELD_SEKICH 20-18 PAD	North Reference:	True
Well:	P_Sekich 39-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 39-18		
Design:	PLAN #1 9-14-10 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	
650.00	0.00	0.00	650.00	0.00	0.00	0.00	0.00	0.00	0.00	
8 5/8"										
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	
Start Build 2.00										
900.00	2.00	105.78	899.98	-0.47	1.68	1.75	2.00	2.00	0.00	
1,000.00	4.00	105.78	999.84	-1.90	6.72	6.98	2.00	2.00	0.00	
1,100.00	6.00	105.78	1,099.45	-4.27	15.10	15.69	2.00	2.00	0.00	
1,200.00	8.00	105.78	1,198.70	-7.58	26.83	27.88	2.00	2.00	0.00	
1,300.00	10.00	105.78	1,297.47	-11.84	41.88	43.52	2.00	2.00	0.00	
1,400.00	12.00	105.78	1,395.62	-17.03	60.24	62.60	2.00	2.00	0.00	
1,500.00	14.00	105.78	1,493.06	-23.14	81.89	85.10	2.00	2.00	0.00	
1,600.00	16.00	105.78	1,589.64	-30.18	106.79	110.98	2.00	2.00	0.00	
1,612.12	16.24	105.78	1,601.29	-31.10	110.03	114.34	2.00	2.00	0.00	
Start 3549.08 hold at 1612.12 MD										
1,700.00	16.24	105.78	1,685.66	-37.78	133.69	138.92	0.00	0.00	0.00	
1,800.00	16.24	105.78	1,781.67	-45.39	160.60	166.89	0.00	0.00	0.00	
1,900.00	16.24	105.78	1,877.68	-53.00	187.52	194.86	0.00	0.00	0.00	
2,000.00	16.24	105.78	1,973.68	-60.61	214.43	222.83	0.00	0.00	0.00	
2,100.00	16.24	105.78	2,069.69	-68.21	241.35	250.80	0.00	0.00	0.00	
2,200.00	16.24	105.78	2,165.70	-75.82	268.26	278.77	0.00	0.00	0.00	
2,300.00	16.24	105.78	2,261.71	-83.43	295.18	306.74	0.00	0.00	0.00	
2,400.00	16.24	105.78	2,357.72	-91.04	322.10	334.71	0.00	0.00	0.00	
2,500.00	16.24	105.78	2,453.73	-98.64	349.01	362.68	0.00	0.00	0.00	
2,600.00	16.24	105.78	2,549.74	-106.25	375.93	390.65	0.00	0.00	0.00	
2,700.00	16.24	105.78	2,645.75	-113.86	402.84	418.62	0.00	0.00	0.00	
2,800.00	16.24	105.78	2,741.75	-121.46	429.76	446.59	0.00	0.00	0.00	
2,900.00	16.24	105.78	2,837.76	-129.07	456.67	474.56	0.00	0.00	0.00	
3,000.00	16.24	105.78	2,933.77	-136.68	483.59	502.53	0.00	0.00	0.00	
3,100.00	16.24	105.78	3,029.78	-144.29	510.51	530.50	0.00	0.00	0.00	
3,200.00	16.24	105.78	3,125.79	-151.89	537.42	558.48	0.00	0.00	0.00	
3,300.00	16.24	105.78	3,221.80	-159.50	564.34	586.45	0.00	0.00	0.00	
3,400.00	16.24	105.78	3,317.81	-167.11	591.25	614.42	0.00	0.00	0.00	
3,471.03	16.24	105.78	3,386.00	-172.51	610.37	634.28	0.00	0.00	0.00	
PARKMAN										
3,500.00	16.24	105.78	3,413.82	-174.72	618.17	642.39	0.00	0.00	0.00	
3,600.00	16.24	105.78	3,509.82	-182.32	645.09	670.36	0.00	0.00	0.00	
3,700.00	16.24	105.78	3,605.83	-189.93	672.00	698.33	0.00	0.00	0.00	
3,800.00	16.24	105.78	3,701.84	-197.54	698.92	726.30	0.00	0.00	0.00	
3,900.00	16.24	105.78	3,797.85	-205.15	725.83	754.27	0.00	0.00	0.00	
4,000.00	16.24	105.78	3,893.86	-212.75	752.75	782.24	0.00	0.00	0.00	
4,089.72	16.24	105.78	3,980.00	-219.58	776.90	807.33	0.00	0.00	0.00	
SUSSEX										
4,100.00	16.24	105.78	3,989.87	-220.36	779.66	810.21	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 39-18
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Site:	WELD_SEKICH 20-18 PAD	North Reference:	True
Well:	P_Sekich 39-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 39-18		
Design:	PLAN #1 9-14-10 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)	
4,200.00	16.24	105.78	4,085.88	-227.97	806.58	838.18	0.00	0.00	0.00	
4,300.00	16.24	105.78	4,181.88	-235.57	833.50	866.15	0.00	0.00	0.00	
4,400.00	16.24	105.78	4,277.89	-243.18	860.41	894.12	0.00	0.00	0.00	
4,500.00	16.24	105.78	4,373.90	-250.79	887.33	922.09	0.00	0.00	0.00	
4,512.60	16.24	105.78	4,386.00	-251.75	890.72	925.61	0.00	0.00	0.00	
SHANNON										
4,600.00	16.24	105.78	4,469.91	-258.40	914.24	950.06	0.00	0.00	0.00	
4,700.00	16.24	105.78	4,565.92	-266.00	941.16	978.03	0.00	0.00	0.00	
4,800.00	16.24	105.78	4,661.93	-273.61	968.07	1,006.00	0.00	0.00	0.00	
4,900.00	16.24	105.78	4,757.94	-281.22	994.99	1,033.97	0.00	0.00	0.00	
5,000.00	16.24	105.78	4,853.95	-288.83	1,021.91	1,061.94	0.00	0.00	0.00	
5,100.00	16.24	105.78	4,949.95	-296.43	1,048.82	1,089.91	0.00	0.00	0.00	
5,161.20	16.24	105.78	5,008.71	-301.09	1,065.29	1,107.03	0.00	0.00	0.00	
Start Drop -2.00										
5,200.00	15.47	105.78	5,046.04	-303.97	1,075.49	1,117.63	2.00	-2.00	0.00	
5,300.00	13.47	105.78	5,142.86	-310.77	1,099.53	1,142.61	2.00	-2.00	0.00	
5,400.00	11.47	105.78	5,240.50	-316.64	1,120.30	1,164.19	2.00	-2.00	0.00	
5,500.00	9.47	105.78	5,338.83	-321.58	1,137.79	1,182.36	2.00	-2.00	0.00	
5,600.00	7.47	105.78	5,437.73	-325.58	1,151.95	1,197.08	2.00	-2.00	0.00	
5,700.00	5.47	105.78	5,537.09	-328.64	1,162.79	1,208.34	2.00	-2.00	0.00	
5,800.00	3.47	105.78	5,636.78	-330.76	1,170.28	1,216.13	2.00	-2.00	0.00	
5,900.00	1.47	105.78	5,736.69	-331.93	1,174.42	1,220.43	2.00	-2.00	0.00	
5,973.32	0.00	0.00	5,810.00	-332.19	1,175.33	1,221.37	2.00	-2.00	0.00	
Start 1915.00 hold at 5973.32 MD										
6,000.00	0.00	0.00	5,836.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,100.00	0.00	0.00	5,936.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,036.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,136.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,236.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,336.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,436.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,536.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,636.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,736.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
6,973.32	0.00	0.00	6,810.00	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
NIO										
7,000.00	0.00	0.00	6,836.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,936.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,036.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,237.32	0.00	0.00	7,074.00	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
CODELL										
7,300.00	0.00	0.00	7,136.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,315.32	0.00	0.00	7,152.00	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
GREENHORN										
7,400.00	0.00	0.00	7,236.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,336.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,436.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,536.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
7,738.32	0.00	0.00	7,575.00	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	
JSAND										
7,800.00	0.00	0.00	7,636.68	-332.19	1,175.33	1,221.37	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 39-18
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
Site:	WELD_SEKICH 20-18 PAD	North Reference:	True
Well:	P_Sekich 39-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 39-18		
Design:	PLAN #1 9-14-10 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)
7,888.32	0.00	0.00	7,725.00	-332.19	1,175.33	1,221.37	0.00	0.00	0.00
PBHL_Sekich 39-18(1300' FNL 50' FEL)									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_Sekich 39-18(1300' FNL 50' FEL) - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,725.00	-332.19	1,175.33	1,324,312.58	3,160,994.59	40° 13' 19.916 N	104° 55' 24.427 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
650.00	650.00	8 5/8"	8.625	11.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,471.03	3,386.00	PARKMAN				
4,089.72	3,980.00	SUSSEX				
4,512.60	4,386.00	SHANNON				
6,973.32	6,810.00	NIO				
7,237.32	7,074.00	CODELL				
7,315.32	7,152.00	GREENHORN				
7,738.32	7,575.00	JSAND				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
800.00	800.00	0.00	0.00	Start Build 2.00
1,612.12	1,601.29	-31.10	110.03	Start 3549.08 hold at 1612.12 MD
5,161.20	5,008.71	-301.09	1,065.29	Start Drop -2.00
5,973.32	5,810.00	-332.19	1,175.33	Start 1915.00 hold at 5973.32 MD
7,888.32	7,725.00	-332.19	1,175.33	TD at 7888.32