

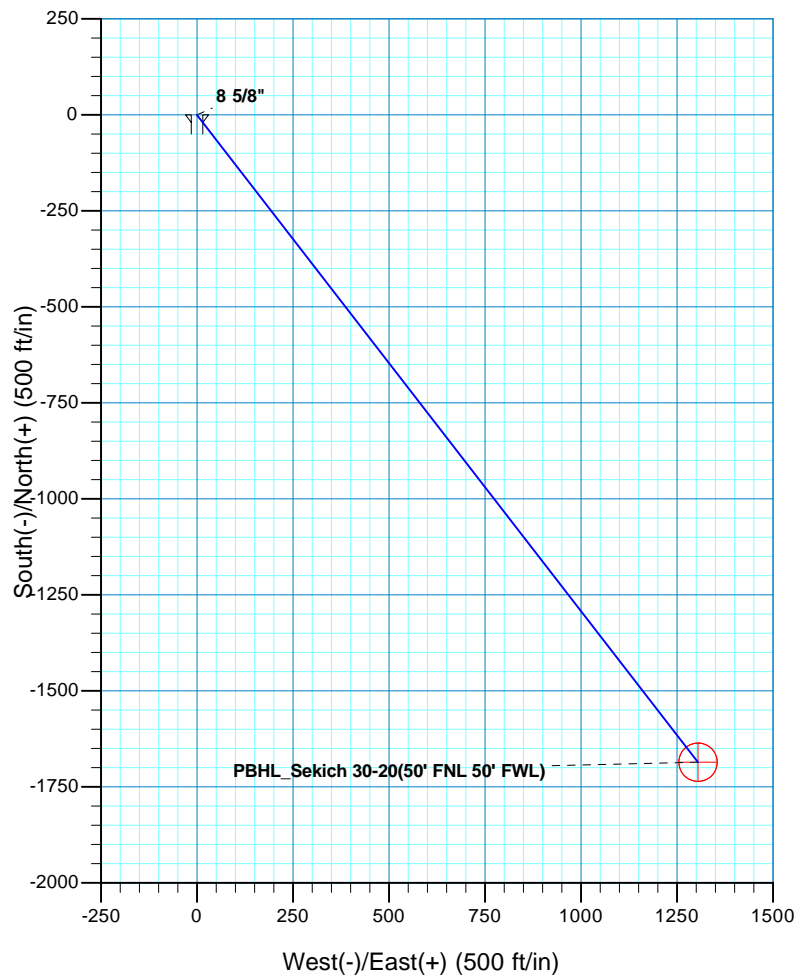
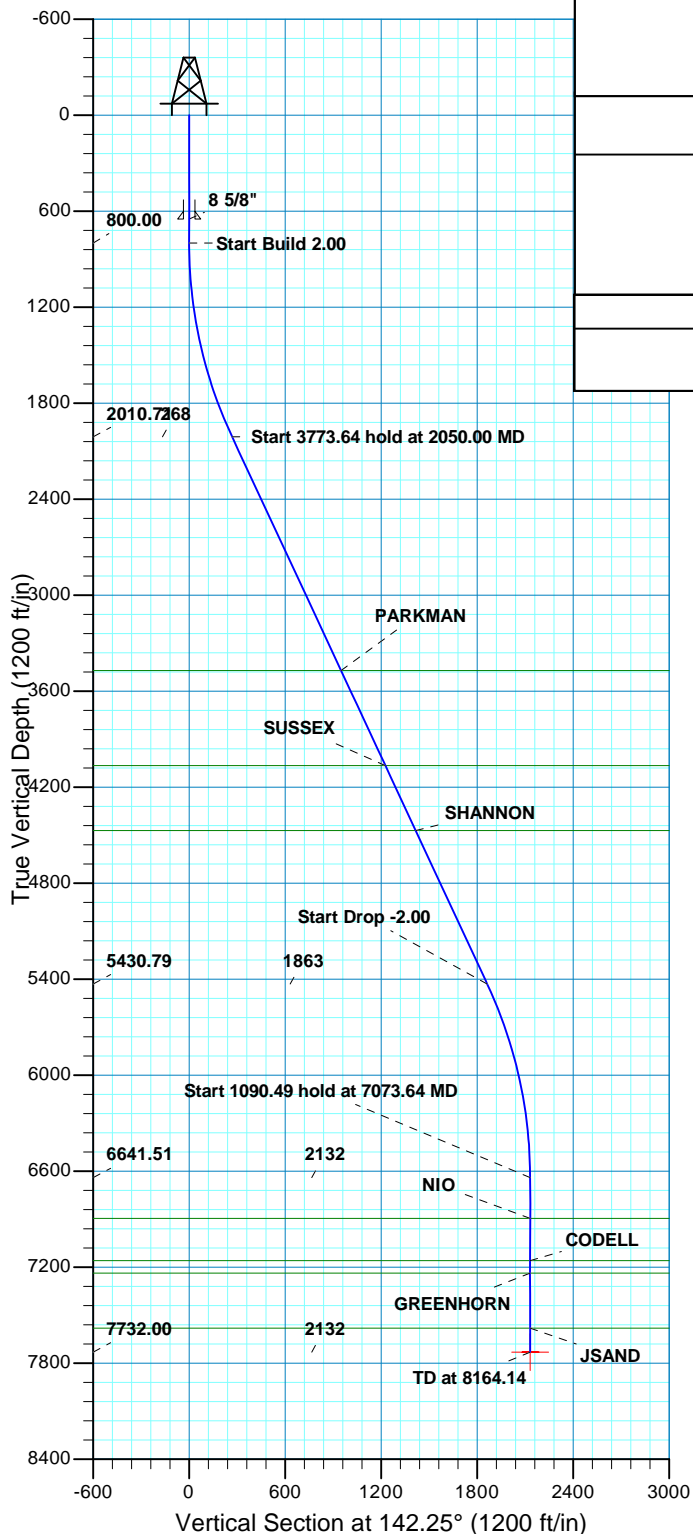
WELL DETAILS: P_Sekich 30-20					
GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)					
+N/-S 0.00	+E/-W 0.00	Northing 1324638.05	Easting 3159785.02	Latitude 40° 13' 23.210 N	Longitude 104° 55' 39.994 W

DESIGN TARGET DETAILS							
Name PBHL	TVD 7732.00	+N/-S -1685.50	+E/-W 1304.97	Northing 1322961.02	Easting 3161100.84	Latitude 40° 13' 6.553 N	Longitude 104° 55' 23.171 W
Shape 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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
2050.00	25.00	142.25	2010.71	-212.23	164.32	2.00	142.25	268.41	
5823.64	25.00	142.25	5430.79	-1473.26	1140.65	0.00	0.00	1863.22	
7073.64	0.00	0.00	6641.51	-1685.50	1304.97	2.00	180.00	2131.63	
8164.14	0.00	0.00	7732.00	-1685.50	1304.97	0.00	0.00	2131.63	PBHL_Sekich 30-20(50' FNL 50' FWL)

PROJECT DETAILS: COLORADO NORTHERN ZONE - 83					FORMATION TOP DETAILS		
Geodetic System: US State Plane 1983					TVDPath	MDPath	Formation
Datum: North American Datum 1983					3472.00	3662.35	PARKMAN
Ellipsoid: GRS 1980					4066.00	4317.76	SUSSEX
Zone: Colorado Northern Zone					4472.00	4765.73	SHANNON
Location: SEC 18 T3N R67W					6896.00	7328.14	NIO
System Datum: Mean Sea Level					7160.00	7592.14	CODELL
					7238.00	7670.14	GREENHORN
					7582.00	8014.14	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 30-20

P_Sekich 30-20

Plan: PLAN #1 9-14-10 RHS

Standard Planning Report

15 September, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 30-20
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 30-20	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 30-20		
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	Latitude:	40° 13' 23.207 N
From:	Lat/Long	Easting:	3,159,801.22 usft	Longitude:	104° 55' 39.785 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.37 °

Well	P_Sekich 30-20, 1593' FSL 1258' FEL					
Well Position	+N/-S	0.35 ft	Northing:	1,324,638.05 usft	Latitude:	40° 13' 23.210 N
	+E/-W	-16.20 ft	Easting:	3,159,785.02 usft	Longitude:	104° 55' 39.994 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,865.00 ft

Wellbore	P_Sekich 30-20				
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	142.25

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	
2,050.00	25.00	142.25	2,010.71	-212.23	164.32	2.00	2.00	0.00	142.25	
5,823.64	25.00	142.25	5,430.79	-1,473.26	1,140.65	0.00	0.00	0.00	0.00	
7,073.64	0.00	0.00	6,641.51	-1,685.50	1,304.97	2.00	-2.00	0.00	180.00	
8,164.14	0.00	0.00	7,732.00	-1,685.50	1,304.97	0.00	0.00	0.00	0.00	PBHL_Sekich 30-20(

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 30-20
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 30-20	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 30-20		
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	142.25	899.98	-1.38	1.07	1.75	2.00	2.00	0.00
1,000.00	4.00	142.25	999.84	-5.52	4.27	6.98	2.00	2.00	0.00
1,100.00	6.00	142.25	1,099.45	-12.41	9.61	15.69	2.00	2.00	0.00
1,200.00	8.00	142.25	1,198.70	-22.04	17.07	27.88	2.00	2.00	0.00
1,300.00	10.00	142.25	1,297.47	-34.41	26.64	43.52	2.00	2.00	0.00
1,400.00	12.00	142.25	1,395.62	-49.50	38.32	62.60	2.00	2.00	0.00
1,500.00	14.00	142.25	1,493.06	-67.29	52.10	85.10	2.00	2.00	0.00
1,600.00	16.00	142.25	1,589.64	-87.75	67.94	110.98	2.00	2.00	0.00
1,700.00	18.00	142.25	1,685.27	-110.87	85.84	140.21	2.00	2.00	0.00
1,800.00	20.00	142.25	1,779.82	-136.61	105.77	172.77	2.00	2.00	0.00
1,900.00	22.00	142.25	1,873.17	-164.94	127.71	208.60	2.00	2.00	0.00
2,000.00	24.00	142.25	1,965.21	-195.84	151.62	247.67	2.00	2.00	0.00
2,050.00	25.00	142.25	2,010.71	-212.23	164.32	268.41	2.00	2.00	0.00
Start 3773.64 hold at 2050.00 MD									
2,100.00	25.00	142.25	2,056.03	-228.94	177.25	289.54	0.00	0.00	0.00
2,200.00	25.00	142.25	2,146.66	-262.36	203.13	331.80	0.00	0.00	0.00
2,300.00	25.00	142.25	2,237.29	-295.77	229.00	374.06	0.00	0.00	0.00
2,400.00	25.00	142.25	2,327.92	-329.19	254.87	416.32	0.00	0.00	0.00
2,500.00	25.00	142.25	2,418.55	-362.61	280.74	458.59	0.00	0.00	0.00
2,600.00	25.00	142.25	2,509.18	-396.03	306.62	500.85	0.00	0.00	0.00
2,700.00	25.00	142.25	2,599.81	-429.44	332.49	543.11	0.00	0.00	0.00
2,800.00	25.00	142.25	2,690.44	-462.86	358.36	585.37	0.00	0.00	0.00
2,900.00	25.00	142.25	2,781.07	-496.28	384.23	627.63	0.00	0.00	0.00
3,000.00	25.00	142.25	2,871.70	-529.69	410.11	669.90	0.00	0.00	0.00
3,100.00	25.00	142.25	2,962.34	-563.11	435.98	712.16	0.00	0.00	0.00
3,200.00	25.00	142.25	3,052.97	-596.53	461.85	754.42	0.00	0.00	0.00
3,300.00	25.00	142.25	3,143.60	-629.94	487.72	796.68	0.00	0.00	0.00
3,400.00	25.00	142.25	3,234.23	-663.36	513.59	838.94	0.00	0.00	0.00
3,500.00	25.00	142.25	3,324.86	-696.78	539.47	881.20	0.00	0.00	0.00
3,600.00	25.00	142.25	3,415.49	-730.19	565.34	923.47	0.00	0.00	0.00
3,662.35	25.00	142.25	3,472.00	-751.03	581.47	949.82	0.00	0.00	0.00
PARKMAN									
3,700.00	25.00	142.25	3,506.12	-763.61	591.21	965.73	0.00	0.00	0.00
3,800.00	25.00	142.25	3,596.75	-797.03	617.08	1,007.99	0.00	0.00	0.00
3,900.00	25.00	142.25	3,687.38	-830.44	642.96	1,050.25	0.00	0.00	0.00
4,000.00	25.00	142.25	3,778.01	-863.86	668.83	1,092.51	0.00	0.00	0.00
4,100.00	25.00	142.25	3,868.64	-897.28	694.70	1,134.78	0.00	0.00	0.00
4,200.00	25.00	142.25	3,959.27	-930.69	720.57	1,177.04	0.00	0.00	0.00
4,300.00	25.00	142.25	4,049.90	-964.11	746.45	1,219.30	0.00	0.00	0.00
4,317.76	25.00	142.25	4,066.00	-970.05	751.04	1,226.80	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 30-20
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 30-20	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 30-20		
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)
SUSSEX									
4,400.00	25.00	142.25	4,140.54	-997.53	772.32	1,261.56	0.00	0.00	0.00
4,500.00	25.00	142.25	4,231.17	-1,030.94	798.19	1,303.82	0.00	0.00	0.00
4,600.00	25.00	142.25	4,321.80	-1,064.36	824.06	1,346.09	0.00	0.00	0.00
4,700.00	25.00	142.25	4,412.43	-1,097.78	849.94	1,388.35	0.00	0.00	0.00
4,765.73	25.00	142.25	4,472.00	-1,119.74	866.94	1,416.13	0.00	0.00	0.00
SHANNON									
4,800.00	25.00	142.25	4,503.06	-1,131.19	875.81	1,430.61	0.00	0.00	0.00
4,900.00	25.00	142.25	4,593.69	-1,164.61	901.68	1,472.87	0.00	0.00	0.00
5,000.00	25.00	142.25	4,684.32	-1,198.03	927.55	1,515.13	0.00	0.00	0.00
5,100.00	25.00	142.25	4,774.95	-1,231.45	953.42	1,557.39	0.00	0.00	0.00
5,200.00	25.00	142.25	4,865.58	-1,264.86	979.30	1,599.66	0.00	0.00	0.00
5,300.00	25.00	142.25	4,956.21	-1,298.28	1,005.17	1,641.92	0.00	0.00	0.00
5,400.00	25.00	142.25	5,046.84	-1,331.70	1,031.04	1,684.18	0.00	0.00	0.00
5,500.00	25.00	142.25	5,137.47	-1,365.11	1,056.91	1,726.44	0.00	0.00	0.00
5,600.00	25.00	142.25	5,228.10	-1,398.53	1,082.79	1,768.70	0.00	0.00	0.00
5,700.00	25.00	142.25	5,318.74	-1,431.95	1,108.66	1,810.97	0.00	0.00	0.00
5,800.00	25.00	142.25	5,409.37	-1,465.36	1,134.53	1,853.23	0.00	0.00	0.00
5,823.64	25.00	142.25	5,430.79	-1,473.26	1,140.65	1,863.22	0.00	0.00	0.00
Start Drop -2.00									
5,900.00	23.47	142.25	5,500.42	-1,498.05	1,159.84	1,894.56	2.00	-2.00	0.00
6,000.00	21.47	142.25	5,592.82	-1,528.27	1,183.24	1,932.79	2.00	-2.00	0.00
6,100.00	19.47	142.25	5,686.50	-1,555.93	1,204.65	1,967.76	2.00	-2.00	0.00
6,200.00	17.47	142.25	5,781.34	-1,580.98	1,224.04	1,999.44	2.00	-2.00	0.00
6,300.00	15.47	142.25	5,877.23	-1,603.40	1,241.40	2,027.80	2.00	-2.00	0.00
6,400.00	13.47	142.25	5,974.05	-1,623.16	1,256.70	2,052.79	2.00	-2.00	0.00
6,500.00	11.47	142.25	6,071.69	-1,640.24	1,269.92	2,074.39	2.00	-2.00	0.00
6,600.00	9.47	142.25	6,170.02	-1,654.61	1,281.05	2,092.56	2.00	-2.00	0.00
6,700.00	7.47	142.25	6,268.92	-1,666.26	1,290.07	2,107.30	2.00	-2.00	0.00
6,800.00	5.47	142.25	6,368.28	-1,675.17	1,296.97	2,118.57	2.00	-2.00	0.00
6,900.00	3.47	142.25	6,467.97	-1,681.34	1,301.75	2,126.37	2.00	-2.00	0.00
7,000.00	1.47	142.25	6,567.87	-1,684.75	1,304.39	2,130.68	2.00	-2.00	0.00
7,073.64	0.00	0.00	6,641.51	-1,685.50	1,304.97	2,131.63	2.00	-2.00	0.00
Start 1090.49 hold at 7073.64 MD									
7,100.00	0.00	0.00	6,667.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,200.00	0.00	0.00	6,767.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,300.00	0.00	0.00	6,867.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,328.14	0.00	0.00	6,896.00	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
NIO									
7,400.00	0.00	0.00	6,967.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,500.00	0.00	0.00	7,067.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,592.14	0.00	0.00	7,160.00	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
CODELL									
7,600.00	0.00	0.00	7,167.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,670.14	0.00	0.00	7,238.00	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
GREENHORN									
7,700.00	0.00	0.00	7,267.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,800.00	0.00	0.00	7,367.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
7,900.00	0.00	0.00	7,467.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
8,000.00	0.00	0.00	7,567.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
8,014.14	0.00	0.00	7,582.00	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sekich 30-20
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 30-20	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sekich 30-20		
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)
JSAND									
8,100.00	0.00	0.00	7,667.86	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
8,164.14	0.00	0.00	7,732.00	-1,685.50	1,304.97	2,131.63	0.00	0.00	0.00
PBHL_Sekich 30-20(50' FNL 50' FWL)									

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									
PBHL_Sekich 30-20(50' - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,732.00	-1,685.50	1,304.97	1,322,961.02	3,161,100.84	40° 13' 6.553 N	104° 55' 23.171 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 (°)	
3,662.35	3,472.00	PARKMAN				
4,317.76	4,066.00	SUSSEX				
4,765.73	4,472.00	SHANNON				
7,328.14	6,896.00	NIO				
7,592.14	7,160.00	CODELL				
7,670.14	7,238.00	GREENHORN				
8,014.14	7,582.00	JSAND				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.00	800.00	0.00	0.00	Start Build 2.00	
2,050.00	2,010.71	-212.23	164.32	Start 3773.64 hold at 2050.00 MD	
5,823.64	5,430.79	-1,473.26	1,140.65	Start Drop -2.00	
7,073.64	6,641.51	-1,685.50	1,304.97	Start 1090.49 hold at 7073.64 MD	
8,164.14	7,732.00	-1,685.50	1,304.97	TD at 8164.14	