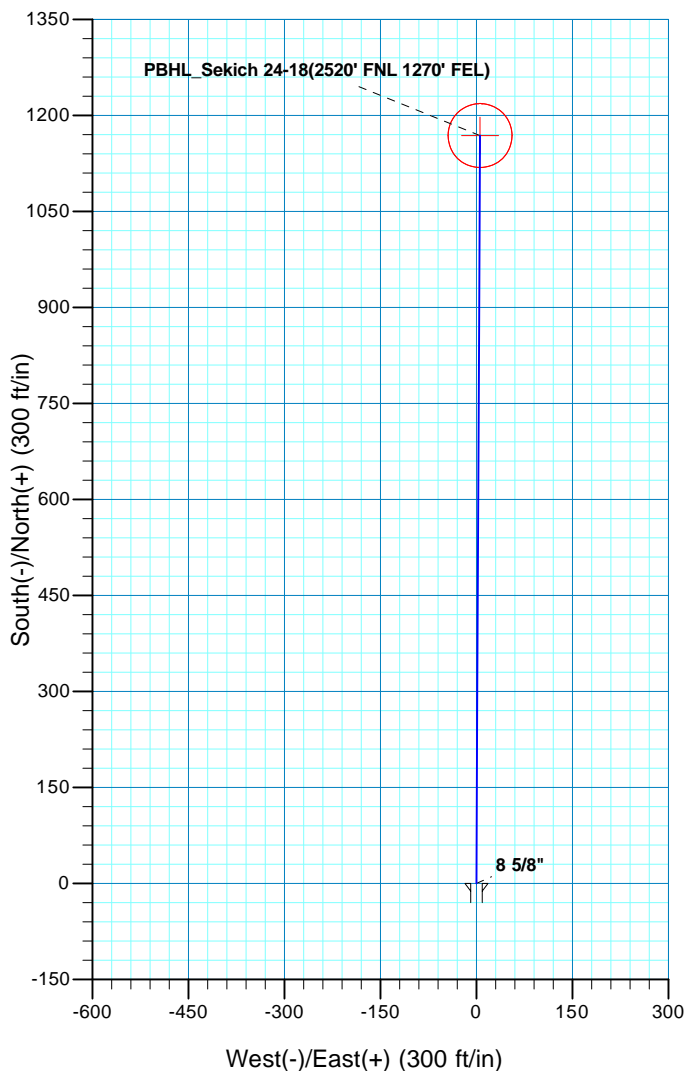
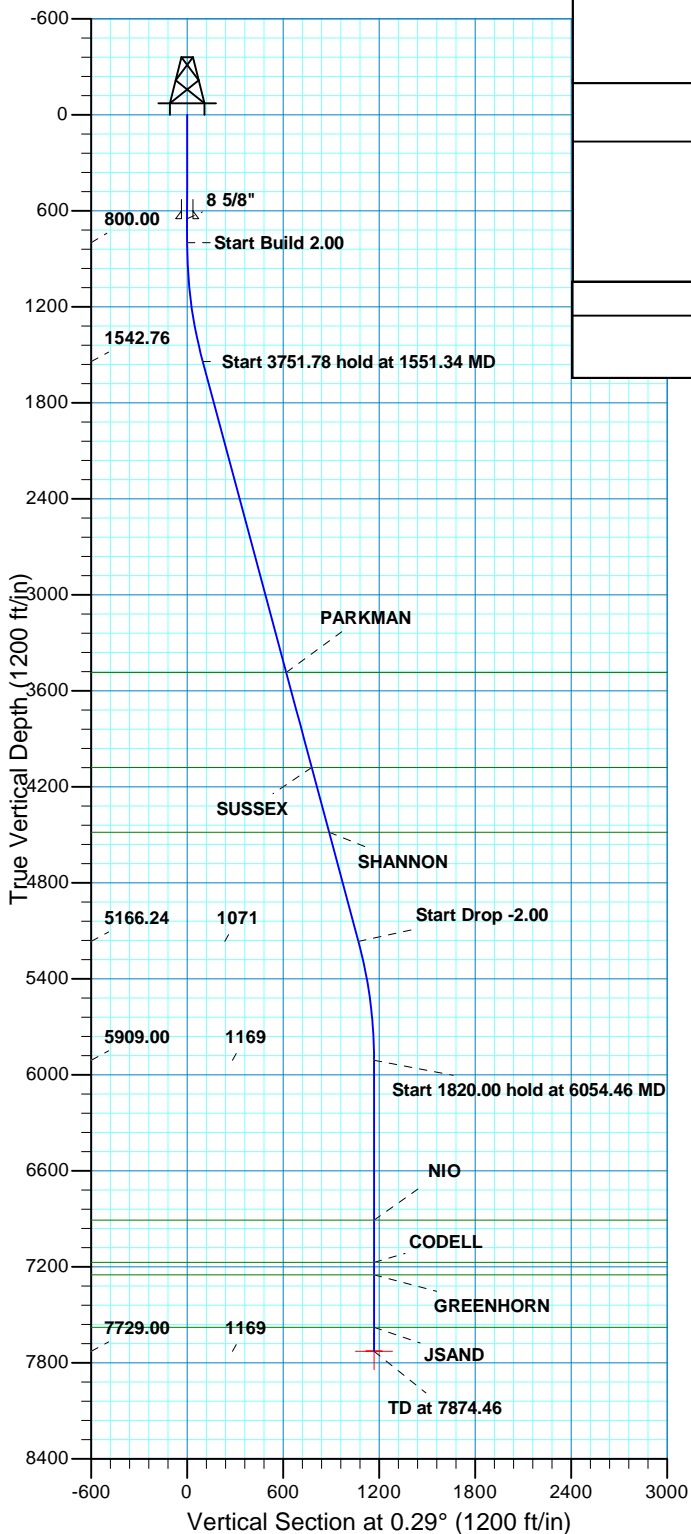


WELL DETAILS: P_Sekich 24-18					
GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1324638.68	3159769.10	40° 13' 23.217 N	104° 55' 40.199 W

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7729.00	1168.64	5.86	1325807.33	3159767.43	40° 13' 34.766 N	104° 55' 40.123 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		
	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00		
	1551.34	15.03	0.29	1542.76	97.96	0.49	2.00	0.29	97.96		
	5303.12	15.03	0.29	5166.24	1070.68	5.37	0.00	0.00	1070.69		
	6054.46	0.00	0.00	5909.00	1168.64	5.86	2.00	180.00	1168.65		
	7874.46	0.00	0.00	7729.00	1168.64	5.86	0.00	0.00	1168.65	PBHL_Sekich 24-18(2520' FNL 1270' FEL)	
PROJECT DETAILS: COLORADO NORTHERN ZONE - 83							FORMATION TOP DETAILS				
							TVDPath	MDPath	Formation		
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone Location: SEC 18 T3N R67W System Datum: Mean Sea Level							3485.00	3562.35	PARKMAN		
							4079.00	4177.38	SUSSEX		
							4485.00	4597.76	SHANNON		
							6909.00	7054.46	NIO		
							7173.00	7318.46	CODELL		
							7251.00	7396.46	GREENHORN		
							7579.00	7724.46	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 24-18**

**P\_Sekich 24-18**

**Plan: PLAN #1 9-14-10 RHS**

## **Standard Planning Report**

**15 September, 2010**

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_Sekich 24-18
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Site:</b>	WELD_SEKICH 20-18 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_Sekich 24-18	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Sekich 24-18		
<b>Design:</b>	PLAN #1 9-14-10 RHS		

<b>Project</b>	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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 24-18, 1593' FSL 1274' FEL					
Well Position	+N/-S	1.08 ft	Northing:	1,324,638.68 usft	Latitude:	40° 13' 23.217 N
	+E/-W	-32.11 ft	Easting:	3,159,769.10 usft	Longitude:	104° 55' 40.199 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,865.00 ft

<b>Wellbore</b>	P_Sekich 24-18				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	09/14/2010	9.04	66.91	53,099

<b>Design</b>	PLAN #1 9-14-10 RHS			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	0.29

<b>Plan Sections</b>										
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	
1,551.34	15.03	0.29	1,542.76	97.96	0.49	2.00	2.00	0.00	0.29	
5,303.12	15.03	0.29	5,166.24	1,070.68	5.37	0.00	0.00	0.00	0.00	
6,054.46	0.00	0.00	5,909.00	1,168.64	5.86	2.00	-2.00	0.00	180.00	
7,874.46	0.00	0.00	7,729.00	1,168.64	5.86	0.00	0.00	0.00	0.00	PBHL_Sekich 24-18(2

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_Sekich 24-18
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Site:</b>	WELD_SEKICH 20-18 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_Sekich 24-18	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Sekich 24-18		
<b>Design:</b>	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	0.29	899.98	1.75	0.01	1.75	2.00	2.00	0.00	
1,000.00	4.00	0.29	999.84	6.98	0.04	6.98	2.00	2.00	0.00	
1,100.00	6.00	0.29	1,099.45	15.69	0.08	15.69	2.00	2.00	0.00	
1,200.00	8.00	0.29	1,198.70	27.88	0.14	27.88	2.00	2.00	0.00	
1,300.00	10.00	0.29	1,297.47	43.52	0.22	43.52	2.00	2.00	0.00	
1,400.00	12.00	0.29	1,395.62	62.60	0.31	62.60	2.00	2.00	0.00	
1,500.00	14.00	0.29	1,493.06	85.10	0.43	85.10	2.00	2.00	0.00	
1,551.34	15.03	0.29	1,542.76	97.96	0.49	97.96	2.00	2.00	0.00	
Start 3751.78 hold at 1551.34 MD										
1,600.00	15.03	0.29	1,589.75	110.58	0.55	110.58	0.00	0.00	0.00	
1,700.00	15.03	0.29	1,686.33	136.50	0.68	136.51	0.00	0.00	0.00	
1,800.00	15.03	0.29	1,782.91	162.43	0.82	162.43	0.00	0.00	0.00	
1,900.00	15.03	0.29	1,879.49	188.36	0.95	188.36	0.00	0.00	0.00	
2,000.00	15.03	0.29	1,976.07	214.28	1.08	214.29	0.00	0.00	0.00	
2,100.00	15.03	0.29	2,072.65	240.21	1.21	240.21	0.00	0.00	0.00	
2,200.00	15.03	0.29	2,169.24	266.14	1.34	266.14	0.00	0.00	0.00	
2,300.00	15.03	0.29	2,265.82	292.06	1.47	292.07	0.00	0.00	0.00	
2,400.00	15.03	0.29	2,362.40	317.99	1.60	318.00	0.00	0.00	0.00	
2,500.00	15.03	0.29	2,458.98	343.92	1.73	343.92	0.00	0.00	0.00	
2,600.00	15.03	0.29	2,555.56	369.85	1.86	369.85	0.00	0.00	0.00	
2,700.00	15.03	0.29	2,652.14	395.77	1.99	395.78	0.00	0.00	0.00	
2,800.00	15.03	0.29	2,748.72	421.70	2.12	421.70	0.00	0.00	0.00	
2,900.00	15.03	0.29	2,845.30	447.63	2.25	447.63	0.00	0.00	0.00	
3,000.00	15.03	0.29	2,941.88	473.55	2.38	473.56	0.00	0.00	0.00	
3,100.00	15.03	0.29	3,038.46	499.48	2.51	499.49	0.00	0.00	0.00	
3,200.00	15.03	0.29	3,135.04	525.41	2.64	525.41	0.00	0.00	0.00	
3,300.00	15.03	0.29	3,231.62	551.33	2.77	551.34	0.00	0.00	0.00	
3,400.00	15.03	0.29	3,328.20	577.26	2.90	577.27	0.00	0.00	0.00	
3,500.00	15.03	0.29	3,424.78	603.19	3.03	603.19	0.00	0.00	0.00	
3,562.35	15.03	0.29	3,485.00	619.35	3.11	619.36	0.00	0.00	0.00	
PARKMAN										
3,600.00	15.03	0.29	3,521.36	629.11	3.16	629.12	0.00	0.00	0.00	
3,700.00	15.03	0.29	3,617.94	655.04	3.29	655.05	0.00	0.00	0.00	
3,800.00	15.03	0.29	3,714.52	680.97	3.42	680.98	0.00	0.00	0.00	
3,900.00	15.03	0.29	3,811.10	706.89	3.55	706.90	0.00	0.00	0.00	
4,000.00	15.03	0.29	3,907.68	732.82	3.68	732.83	0.00	0.00	0.00	
4,100.00	15.03	0.29	4,004.26	758.75	3.81	758.76	0.00	0.00	0.00	
4,177.38	15.03	0.29	4,079.00	778.81	3.91	778.82	0.00	0.00	0.00	
SUSSEX										

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_Sekich 24-18
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Site:</b>	WELD_SEKICH 20-18 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_Sekich 24-18	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Sekich 24-18		
<b>Design:</b>	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	15.03	0.29	4,100.84	784.67	3.94	784.68	0.00	0.00	0.00	
4,300.00	15.03	0.29	4,197.42	810.60	4.07	810.61	0.00	0.00	0.00	
4,400.00	15.03	0.29	4,294.00	836.53	4.20	836.54	0.00	0.00	0.00	
4,500.00	15.03	0.29	4,390.59	862.45	4.33	862.47	0.00	0.00	0.00	
4,597.76	15.03	0.29	4,485.00	887.80	4.45	887.81	0.00	0.00	0.00	
SHANNON										
4,600.00	15.03	0.29	4,487.17	888.38	4.46	888.39	0.00	0.00	0.00	
4,700.00	15.03	0.29	4,583.75	914.31	4.59	914.32	0.00	0.00	0.00	
4,800.00	15.03	0.29	4,680.33	940.24	4.72	940.25	0.00	0.00	0.00	
4,900.00	15.03	0.29	4,776.91	966.16	4.85	966.17	0.00	0.00	0.00	
5,000.00	15.03	0.29	4,873.49	992.09	4.98	992.10	0.00	0.00	0.00	
5,100.00	15.03	0.29	4,970.07	1,018.02	5.11	1,018.03	0.00	0.00	0.00	
5,200.00	15.03	0.29	5,066.65	1,043.94	5.24	1,043.96	0.00	0.00	0.00	
5,300.00	15.03	0.29	5,163.23	1,069.87	5.37	1,069.88	0.00	0.00	0.00	
5,303.12	15.03	0.29	5,166.24	1,070.68	5.37	1,070.69	0.00	0.00	0.00	
Start Drop -2.00										
5,400.00	13.09	0.29	5,260.22	1,094.21	5.49	1,094.22	2.00	-2.00	0.00	
5,500.00	11.09	0.29	5,357.99	1,115.15	5.60	1,115.17	2.00	-2.00	0.00	
5,600.00	9.09	0.29	5,456.44	1,132.67	5.68	1,132.68	2.00	-2.00	0.00	
5,700.00	7.09	0.29	5,555.44	1,146.74	5.75	1,146.75	2.00	-2.00	0.00	
5,800.00	5.09	0.29	5,654.87	1,157.35	5.81	1,157.36	2.00	-2.00	0.00	
5,900.00	3.09	0.29	5,754.61	1,164.48	5.84	1,164.49	2.00	-2.00	0.00	
6,000.00	1.09	0.29	5,854.54	1,168.12	5.86	1,168.14	2.00	-2.00	0.00	
6,054.46	0.00	0.00	5,909.00	1,168.64	5.86	1,168.65	2.00	-2.00	0.00	
Start 1820.00 hold at 6054.46 MD										
6,100.00	0.00	0.00	5,954.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,054.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,154.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,254.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,354.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,454.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,554.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,654.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,754.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,854.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,054.46	0.00	0.00	6,909.00	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
NIO										
7,100.00	0.00	0.00	6,954.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,054.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,154.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,318.46	0.00	0.00	7,173.00	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
CODELL										
7,396.46	0.00	0.00	7,251.00	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
GREENHORN										
7,400.00	0.00	0.00	7,254.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,354.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,454.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,554.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
7,724.46	0.00	0.00	7,579.00	1,168.64	5.86	1,168.65	0.00	0.00	0.00	
JSAND										
7,800.00	0.00	0.00	7,654.54	1,168.64	5.86	1,168.65	0.00	0.00	0.00	

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_Sekich 24-18
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 4865' & RKB 15' @ 4880.00ft (ASSUMED)
<b>Site:</b>	WELD_SEKICH 20-18 PAD	<b>North Reference:</b>	True
<b>Well:</b>	P_Sekich 24-18	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Sekich 24-18		
<b>Design:</b>	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)
7,874.46	0.00	0.00	7,729.00	1,168.64	5.86	1,168.65	0.00	0.00	0.00
PBHL_Sekich 24-18(2520' FNL 1270' 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 24-18(2520' FNL 1270' FEL) - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,729.00	1,168.64	5.86	1,325,807.33	3,159,767.43	40° 13' 34.766 N	104° 55' 40.123 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 (°)	
3,562.35	3,485.00	PARKMAN				
4,177.38	4,079.00	SUSSEX				
4,597.76	4,485.00	SHANNON				
7,054.46	6,909.00	NIO				
7,318.46	7,173.00	CODELL				
7,396.46	7,251.00	GREENHORN				
7,724.46	7,579.00	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
1,551.34	1,542.76	97.96	0.49	Start 3751.78 hold at 1551.34 MD
5,303.12	5,166.24	1,070.68	5.37	Start Drop -2.00
6,054.46	5,909.00	1,168.64	5.86	Start 1820.00 hold at 6054.46 MD
7,874.46	7,729.00	1,168.64	5.86	TD at 7874.46