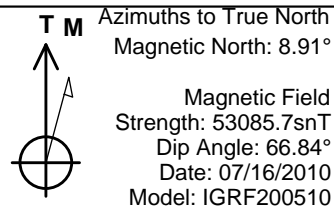


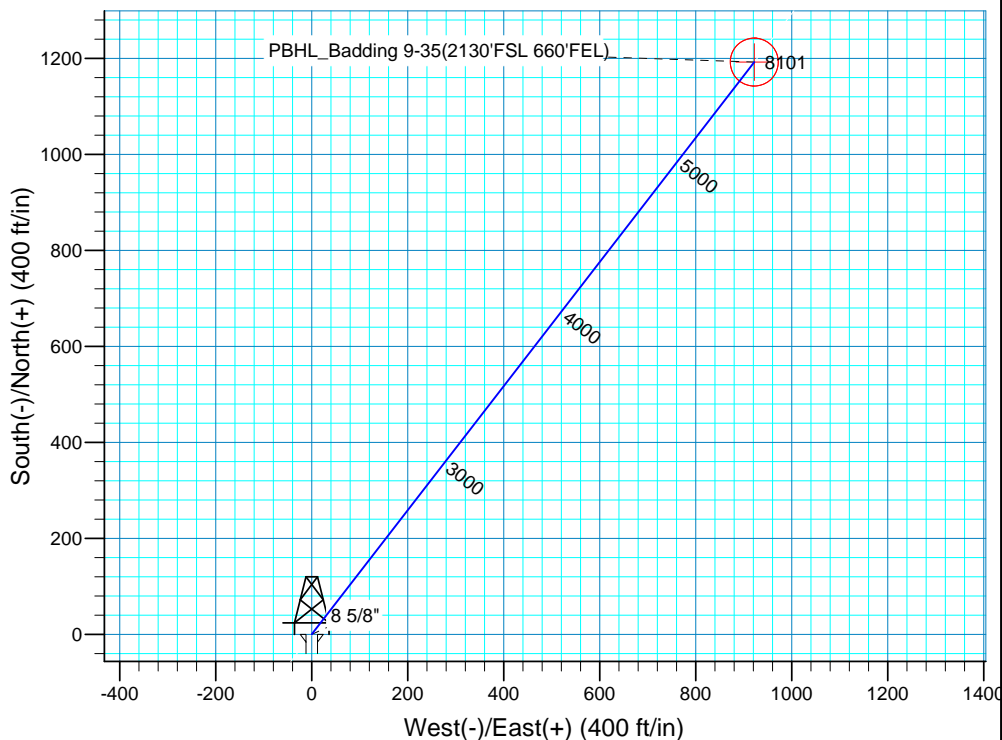
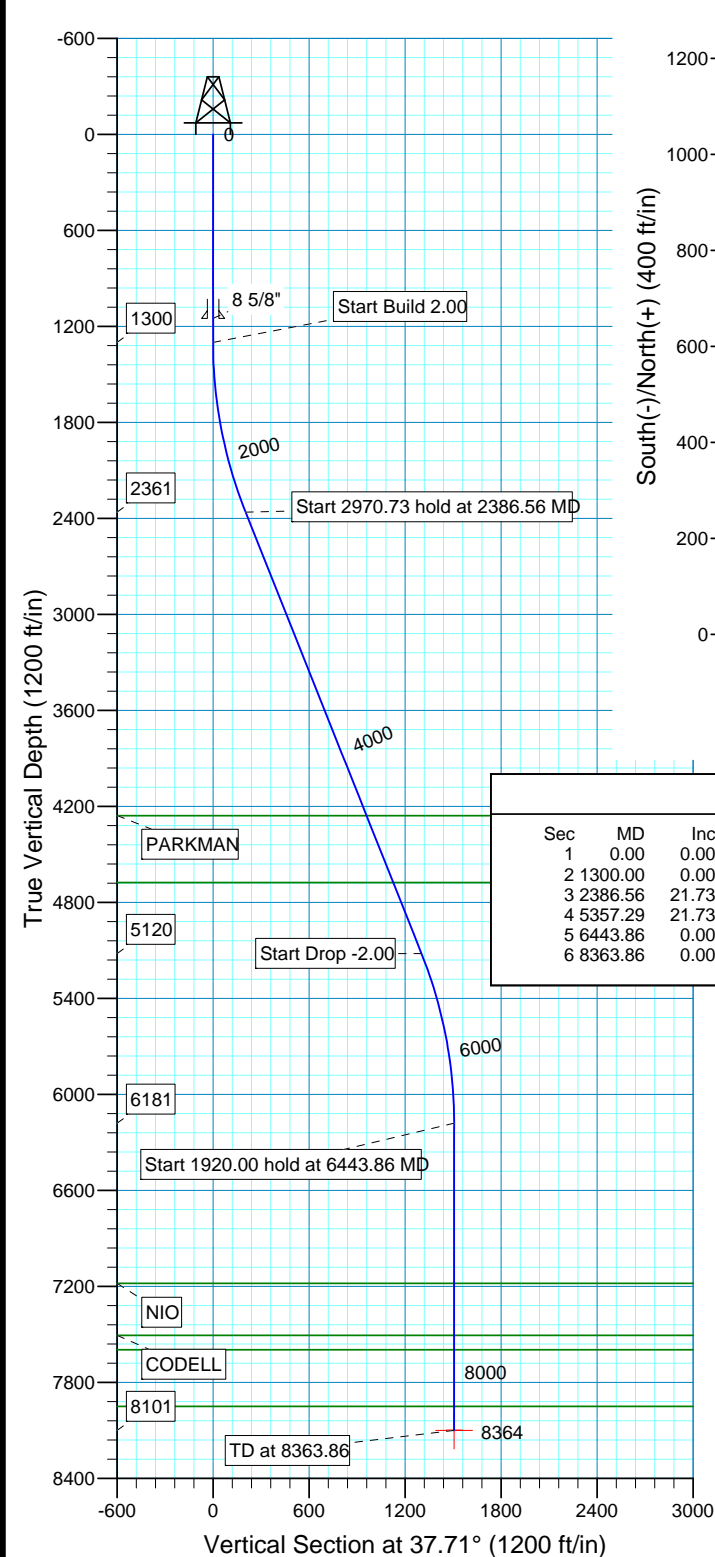
WELL DETAILS: P\_Badding 9-35

		GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)		5086.00
+N/-S	+E/-W	Northing	Easting	Latitude
0.00	0.00	1276525.21	3212493.39	40° 5' 23.838 N
				104° 44' 25.800 W



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8101.00	1192.34	921.85	1277725.40	3213404.99	40° 5' 35.621 N	104° 44' 13.938 W	Circle (Radius: 50.00)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	2386.56	21.73	37.71	2360.70	161.07	124.53	2.00	37.71	203.60	
4	5357.29	21.73	37.71	5120.30	1031.24	797.31	0.00	0.00	1303.52	
5	6443.86	0.00	0.00	6181.00	1192.31	921.85	2.00	180.00	1507.12	
6	8363.86	0.00	0.00	8101.00	1192.31	921.85	0.00	0.00	1507.12	PBHL_Badding 9-35(2130'FSL 660'FEL)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4258.00	4429.02	PARKMAN
4676.00	4879.00	SUSSEX
7181.00	7443.86	NIO
7506.00	7768.86	CODELL
7596.00	7858.86	GREENHORN
7951.00	8213.86	JSAND

PROJECT DETAILS: COLORADO NORTHERN ZONE - 83

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Northern Zone  
Location: SEC 35 T2N R66  
System Datum: Mean Sea Level  
Local North: No north reference data is available

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_Badding 20-35 Pad**

**P\_Badding 9-35**

**P\_Badding 9-35**

**Plan: Plan #1 7-16-10 RHS**

## **Standard Planning Report**

**18 July, 2010**

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_Badding 9-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Site:</b>	WELD_Badding 20-35 Pad	<b>North Reference:</b>	True
<b>Well:</b>	P_Badding 9-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Badding 9-35		
<b>Design:</b>	Plan #1 7-16-10 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_Badding 20-35 Pad, SEC 35 T2N R66			
Site Position:		Northing:	1,276,531.97 ft	Latitude:	40° 5' 23.903 N
From:	Lat/Long	Easting:	3,212,512.08 ft	Longitude:	104° 44' 25.559 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.49 °

Well	P_Badding 9-35, 945' FSL 1583' FEL					
Well Position	+N-S	0.00 ft	Northing:	1,276,525.21 ft	Latitude:	40° 5' 23.838 N
	+E-W	0.00 ft	Easting:	3,212,493.39 ft	Longitude:	104° 44' 25.800 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,086.00 ft

<b>Wellbore</b>	P_Badding 9-35				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	07/16/10	8.91	66.84	53,086

<b>Design</b>	Plan #1 7-16-10 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	37.71	

<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	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,386.56	21.73	37.71	2,360.70	161.07	124.53	2.00	2.00	0.00	37.71	
5,357.29	21.73	37.71	5,120.30	1,031.24	797.31	0.00	0.00	0.00	0.00	
6,443.86	0.00	0.00	6,181.00	1,192.31	921.85	2.00	-2.00	0.00	180.00	
8,363.86	0.00	0.00	8,101.00	1,192.31	921.85	0.00	0.00	0.00	0.00	PBHL_Badding 9-3

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_Badding 9-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Site:</b>	WELD_Badding 20-35 Pad	<b>North Reference:</b>	True
<b>Well:</b>	P_Badding 9-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Badding 9-35		
<b>Design:</b>	Plan #1 7-16-10 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
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	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
<b>8 5/8"</b>									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
1,400.00	2.00	37.71	1,399.98	1.38	1.07	1.75	2.00	2.00	0.00
1,500.00	4.00	37.71	1,499.84	5.52	4.27	6.98	2.00	2.00	0.00
1,600.00	6.00	37.71	1,599.45	12.42	9.60	15.69	2.00	2.00	0.00
1,700.00	8.00	37.71	1,698.70	22.06	17.05	27.88	2.00	2.00	0.00
1,800.00	10.00	37.71	1,797.47	34.43	26.62	43.52	2.00	2.00	0.00
1,900.00	12.00	37.71	1,895.62	49.53	38.29	62.60	2.00	2.00	0.00
2,000.00	14.00	37.71	1,993.06	67.32	52.05	85.10	2.00	2.00	0.00
2,100.00	16.00	37.71	2,089.64	87.80	67.88	110.98	2.00	2.00	0.00
2,200.00	18.00	37.71	2,185.27	110.93	85.76	140.21	2.00	2.00	0.00
2,300.00	20.00	37.71	2,279.82	136.68	105.68	172.77	2.00	2.00	0.00
2,386.56	21.73	37.71	2,360.70	161.07	124.53	203.60	2.00	2.00	0.00
<b>Start 2970.73 hold at 2386.56 MD</b>									
2,400.00	21.73	37.71	2,373.18	165.01	127.58	208.57	0.00	0.00	0.00
2,500.00	21.73	37.71	2,466.07	194.30	150.22	245.60	0.00	0.00	0.00
2,600.00	21.73	37.71	2,558.97	223.59	172.87	282.62	0.00	0.00	0.00
2,700.00	21.73	37.71	2,651.86	252.88	195.52	319.65	0.00	0.00	0.00
2,800.00	21.73	37.71	2,744.75	282.17	218.16	356.67	0.00	0.00	0.00
2,900.00	21.73	37.71	2,837.65	311.46	240.81	393.70	0.00	0.00	0.00
3,000.00	21.73	37.71	2,930.54	340.76	263.46	430.73	0.00	0.00	0.00
3,100.00	21.73	37.71	3,023.43	370.05	286.10	467.75	0.00	0.00	0.00
3,200.00	21.73	37.71	3,116.33	399.34	308.75	504.78	0.00	0.00	0.00
3,300.00	21.73	37.71	3,209.22	428.63	331.40	541.80	0.00	0.00	0.00
3,400.00	21.73	37.71	3,302.11	457.92	354.05	578.83	0.00	0.00	0.00
3,500.00	21.73	37.71	3,395.00	487.21	376.69	615.85	0.00	0.00	0.00
3,600.00	21.73	37.71	3,487.90	516.50	399.34	652.88	0.00	0.00	0.00
3,700.00	21.73	37.71	3,580.79	545.80	421.99	689.90	0.00	0.00	0.00
3,800.00	21.73	37.71	3,673.68	575.09	444.63	726.93	0.00	0.00	0.00
3,900.00	21.73	37.71	3,766.58	604.38	467.28	763.95	0.00	0.00	0.00
4,000.00	21.73	37.71	3,859.47	633.67	489.93	800.98	0.00	0.00	0.00
4,100.00	21.73	37.71	3,952.36	662.96	512.57	838.00	0.00	0.00	0.00
4,200.00	21.73	37.71	4,045.26	692.25	535.22	875.03	0.00	0.00	0.00
4,300.00	21.73	37.71	4,138.15	721.54	557.87	912.05	0.00	0.00	0.00
4,400.00	21.73	37.71	4,231.04	750.84	580.52	949.08	0.00	0.00	0.00
4,429.02	21.73	37.71	4,258.00	759.34	587.09	959.82	0.00	0.00	0.00
<b>PARKMAN</b>									
4,500.00	21.73	37.71	4,323.94	780.13	603.16	986.11	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_Badding 9-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Site:</b>	WELD_Badding 20-35 Pad	<b>North Reference:</b>	True
<b>Well:</b>	P_Badding 9-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Badding 9-35		
<b>Design:</b>	Plan #1 7-16-10 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)
4,600.00	21.73	37.71	4,416.83	809.42	625.81	1,023.13	0.00	0.00	0.00
4,700.00	21.73	37.71	4,509.72	838.71	648.46	1,060.16	0.00	0.00	0.00
4,800.00	21.73	37.71	4,602.61	868.00	671.10	1,097.18	0.00	0.00	0.00
4,879.00	21.73	37.71	4,676.00	891.14	688.99	1,126.43	0.00	0.00	0.00
<b>SUSSEX</b>									
4,900.00	21.73	37.71	4,695.51	897.29	693.75	1,134.21	0.00	0.00	0.00
5,000.00	21.73	37.71	4,788.40	926.59	716.40	1,171.23	0.00	0.00	0.00
5,100.00	21.73	37.71	4,881.29	955.88	739.04	1,208.26	0.00	0.00	0.00
5,200.00	21.73	37.71	4,974.19	985.17	761.69	1,245.28	0.00	0.00	0.00
5,300.00	21.73	37.71	5,067.08	1,014.46	784.34	1,282.31	0.00	0.00	0.00
5,357.29	21.73	37.71	5,120.30	1,031.24	797.31	1,303.52	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,400.00	20.88	37.71	5,160.09	1,043.52	806.80	1,319.04	2.00	-2.00	0.00
5,500.00	18.88	37.71	5,254.13	1,070.41	827.60	1,353.04	2.00	-2.00	0.00
5,600.00	16.88	37.71	5,349.29	1,094.70	846.37	1,383.73	2.00	-2.00	0.00
5,700.00	14.88	37.71	5,445.47	1,116.34	863.11	1,411.09	2.00	-2.00	0.00
5,800.00	12.88	37.71	5,542.55	1,135.31	877.78	1,435.07	2.00	-2.00	0.00
5,900.00	10.88	37.71	5,640.40	1,151.59	890.36	1,455.65	2.00	-2.00	0.00
6,000.00	8.88	37.71	5,738.92	1,165.16	900.86	1,472.80	2.00	-2.00	0.00
6,100.00	6.88	37.71	5,837.97	1,176.01	909.24	1,486.51	2.00	-2.00	0.00
6,200.00	4.88	37.71	5,937.44	1,184.11	915.50	1,496.75	2.00	-2.00	0.00
6,300.00	2.88	37.71	6,037.20	1,189.46	919.64	1,503.51	2.00	-2.00	0.00
6,400.00	0.88	37.71	6,137.15	1,192.05	921.64	1,506.78	2.00	-2.00	0.00
6,443.86	0.00	0.00	6,181.00	1,192.31	921.85	1,507.12	2.00	-2.00	-85.98
<b>Start 1920.00 hold at 6443.86 MD</b>									
6,500.00	0.00	0.00	6,237.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
6,600.00	0.00	0.00	6,337.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
6,700.00	0.00	0.00	6,437.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
6,800.00	0.00	0.00	6,537.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
6,900.00	0.00	0.00	6,637.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,000.00	0.00	0.00	6,737.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,100.00	0.00	0.00	6,837.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,200.00	0.00	0.00	6,937.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,300.00	0.00	0.00	7,037.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,400.00	0.00	0.00	7,137.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,443.86	0.00	0.00	7,181.00	1,192.31	921.85	1,507.12	0.00	0.00	0.00
<b>NIO</b>									
7,500.00	0.00	0.00	7,237.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,600.00	0.00	0.00	7,337.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,700.00	0.00	0.00	7,437.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,768.86	0.00	0.00	7,506.00	1,192.31	921.85	1,507.12	0.00	0.00	0.00
<b>CODELL</b>									
7,800.00	0.00	0.00	7,537.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
7,858.86	0.00	0.00	7,596.00	1,192.31	921.85	1,507.12	0.00	0.00	0.00
<b>GREENHORN</b>									
7,900.00	0.00	0.00	7,637.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
8,000.00	0.00	0.00	7,737.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
8,100.00	0.00	0.00	7,837.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
8,200.00	0.00	0.00	7,937.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
8,213.86	0.00	0.00	7,951.00	1,192.31	921.85	1,507.12	0.00	0.00	0.00
<b>JSAND</b>									
8,300.00	0.00	0.00	8,037.14	1,192.31	921.85	1,507.12	0.00	0.00	0.00
8,363.86	0.00	0.00	8,101.00	1,192.31	921.85	1,507.12	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well P_Badding 9-35
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5086' & RKB 15' @ 5101.00ft (ASSUMED)
<b>Site:</b>	WELD_Badding 20-35 Pad	<b>North Reference:</b>	True
<b>Well:</b>	P_Badding 9-35	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_Badding 9-35		
<b>Design:</b>	Plan #1 7-16-10 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)
PBHL_Badding 9-35(2130'FSL 660'FEL)									

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	
- Shape								Latitude	Longitude
PBHL_Badding 9-35(2130'FSL 660'FEL)	- plan hits target center - Circle (radius 50.00)	0.00	0.00	8,101.00	1,192.34	921.85	1,277,725.40	3,213,404.99	40° 5' 35.621 N 104° 44' 13.938 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,150.00	1,150.00	8 5/8"	8.62	11.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,429.02	4,258.00	PARKMAN				
8,213.86	7,951.00	JSAND				
7,443.86	7,181.00	NIO				
7,858.86	7,596.00	GREENHORN				
7,768.86	7,506.00	CODELL				
4,879.00	4,676.00	SUSSEX				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,300.00	1,300.00	0.00	0.00	Start Build 2.00	
2,386.56	2,360.70	161.07	124.53	Start 2970.73 hold at 2386.56 MD	
5,357.29	5,120.30	1,031.24	797.31	Start Drop -2.00	
6,443.86	6,181.00	1,192.31	921.85	Start 1920.00 hold at 6443.86 MD	
8,363.86	8,101.00	1,192.31	921.85	TD at 8363.86	