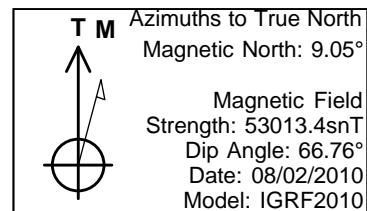


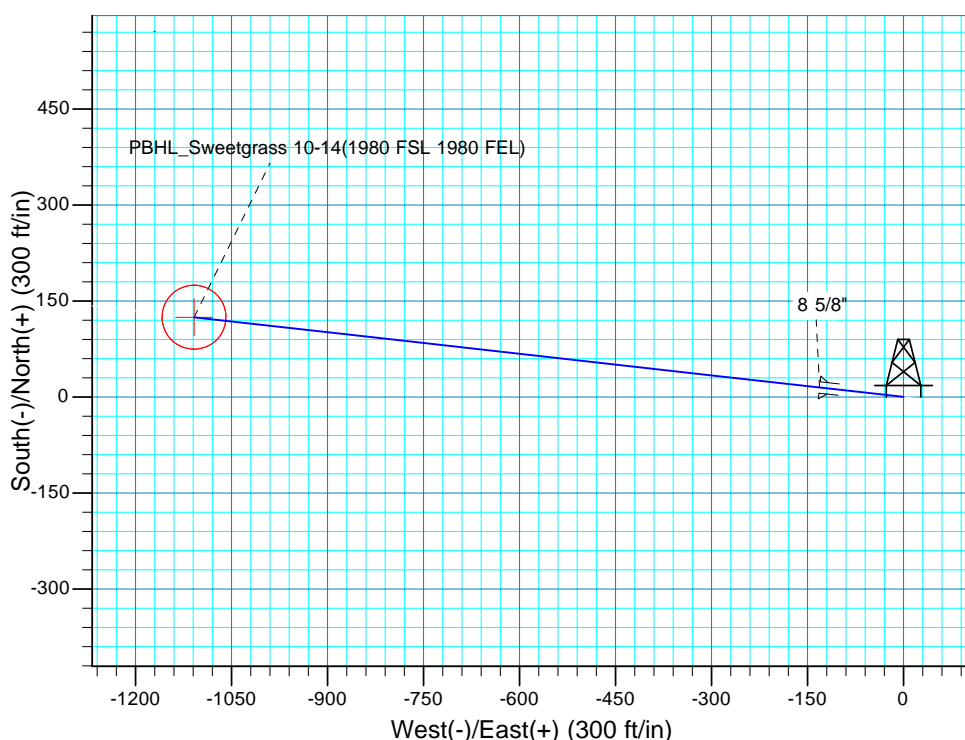
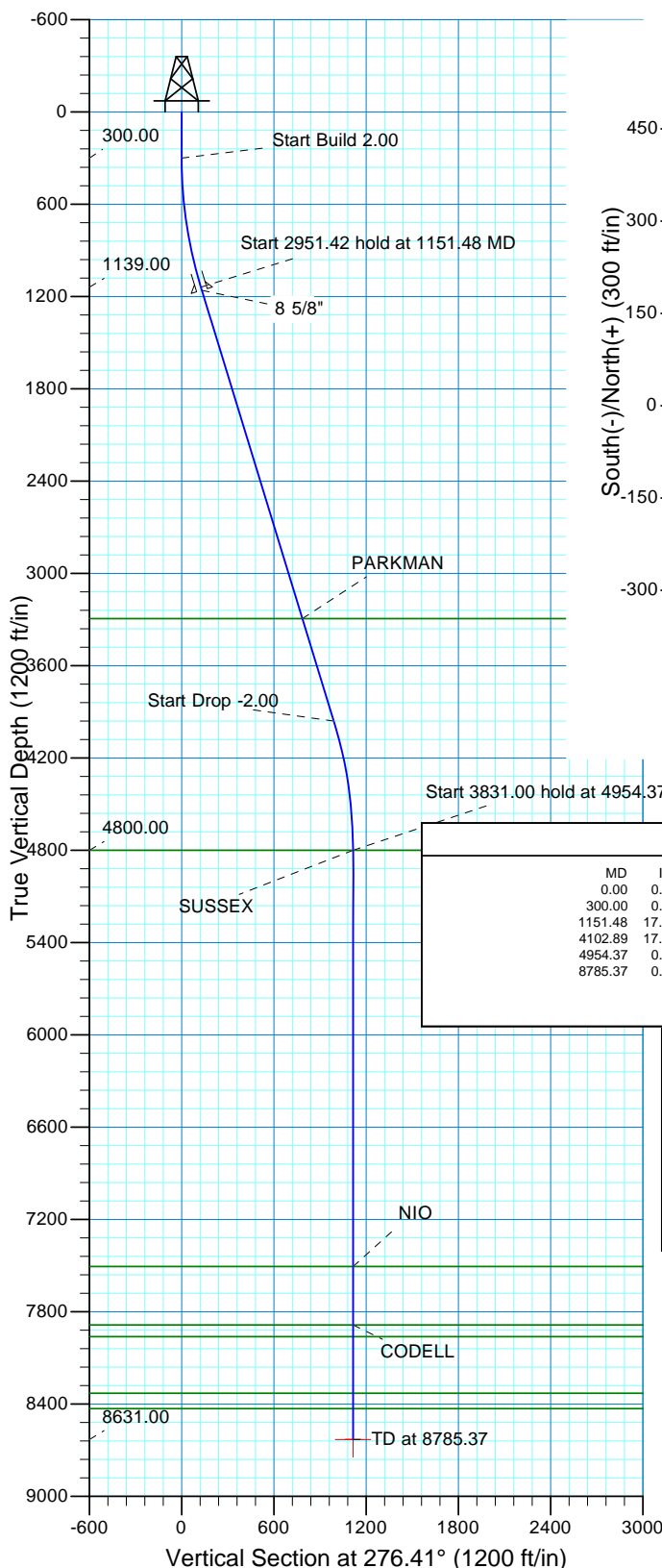
WELL DETAILS: P_Sweetgrass 10-14
GL 5136' & RKB 15' @ 5151.00ft (ASSUMED) 5136.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1261229.40	3149965.13	40° 2' 57.192 N	104° 57' 51.530 W



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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8631.00	124.62	-1108.60	1261347.32	3148855.80	40° 2' 58.423 N	104° 58' 5.786 W	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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1151.48	17.03	276.41	1139.00	14.03	-124.82	2.00	276.41	125.61	
4102.89	17.03	276.41	3961.00	110.59	-983.78	0.00	0.00	989.98	
4954.37	0.00	0.00	4800.00	124.62	-1108.60	2.00	180.00	1115.59	
8785.37	0.00	0.00	8631.00	124.62	-1108.60	0.00	0.00	1115.59	PBHL_Sweetgrass 10-14(1980 FSL 1980 FEL)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3294.00	3405.30	PARKMAN
4800.00	4954.37	SUSSEX
7506.00	7660.37	NIO
7886.00	8040.37	CODELL
7962.00	8116.37	GREENHORN
8330.00	8484.37	JSAND
8431.00	8585.37	DAKOTA

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: SECTION 14 T1N R68W
System Datum: Mean Sea Level
Local North: True

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_SWEETGRASS 9-14 Pad

P_Sweetgrass 10-14

P_Sweetgrass 10-14

Plan: PLAN #1 8-2-10 RHS

Standard Planning Report

12 August, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sweetgrass 10-14
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Site:	WELD_SWEETGRASS 9-14 Pad	North Reference:	True
Well:	P_Sweetgrass 10-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sweetgrass 10-14		
Design:	PLAN #1 8-2-10 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_SWEETGRASS 9-14 Pad, SECTION 14 T1N R68W			
Site Position:		Northing:	1,261,248.13 usft	Latitude:	40° 2' 57.376 N
From:	Lat/Long	Easting:	3,149,988.54 usft	Longitude:	104° 57' 51.228 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.35 °

Well	P_Sweetgrass 10-14, 1834' FSL 872' FEL					
Well Position	+N/-S	-18.59 ft	Northing:	1,261,229.39 usft	Latitude:	40° 2' 57.192 N
	+E/-W	-23.52 ft	Easting:	3,149,965.13 usft	Longitude:	104° 57' 51.530 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,136.00 ft

Wellbore	P_Sweetgrass 10-14				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/02/2010	9.05	66.76	53,013

Design	PLAN #1 8-2-10 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	276.41	

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,151.48	17.03	276.41	1,139.00	14.03	-124.82	2.00	2.00	0.00	276.41	
4,102.89	17.03	276.41	3,961.00	110.59	-983.78	0.00	0.00	0.00	0.00	
4,954.37	0.00	0.00	4,800.00	124.62	-1,108.60	2.00	-2.00	0.00	180.00	
8,785.37	0.00	0.00	8,631.00	124.62	-1,108.60	0.00	0.00	0.00	0.00	PBHL_Sweetgrass 1C

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sweetgrass 10-14
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Site:	WELD_SWEETGRASS 9-14 Pad	North Reference:	True
Well:	P_Sweetgrass 10-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sweetgrass 10-14		
Design:	PLAN #1 8-2-10 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
Start Build 2.00									
400.00	2.00	276.41	399.98	0.19	-1.73	1.75	2.00	2.00	0.00
500.00	4.00	276.41	499.84	0.78	-6.93	6.98	2.00	2.00	0.00
600.00	6.00	276.41	599.45	1.75	-15.60	15.69	2.00	2.00	0.00
700.00	8.00	276.41	698.70	3.11	-27.71	27.88	2.00	2.00	0.00
800.00	10.00	276.41	797.47	4.86	-43.25	43.52	2.00	2.00	0.00
900.00	12.00	276.41	895.62	6.99	-62.21	62.60	2.00	2.00	0.00
1,000.00	14.00	276.41	993.06	9.51	-84.56	85.10	2.00	2.00	0.00
1,100.00	16.00	276.41	1,089.64	12.40	-110.28	110.98	2.00	2.00	0.00
1,151.48	17.03	276.41	1,139.00	14.03	-124.82	125.61	2.00	2.00	0.00
Start 2951.42 hold at 1151.48 MD									
1,173.44	17.03	276.41	1,160.00	14.75	-131.22	132.04	0.00	0.00	0.00
8 5/8"									
1,200.00	17.03	276.41	1,185.39	15.62	-138.95	139.82	0.00	0.00	0.00
1,300.00	17.03	276.41	1,281.01	18.89	-168.05	169.11	0.00	0.00	0.00
1,400.00	17.03	276.41	1,376.62	22.16	-197.15	198.39	0.00	0.00	0.00
1,500.00	17.03	276.41	1,472.24	25.43	-226.26	227.68	0.00	0.00	0.00
1,600.00	17.03	276.41	1,567.85	28.71	-255.36	256.97	0.00	0.00	0.00
1,700.00	17.03	276.41	1,663.47	31.98	-284.46	286.25	0.00	0.00	0.00
1,800.00	17.03	276.41	1,759.08	35.25	-313.56	315.54	0.00	0.00	0.00
1,900.00	17.03	276.41	1,854.70	38.52	-342.67	344.83	0.00	0.00	0.00
2,000.00	17.03	276.41	1,950.31	41.79	-371.77	374.11	0.00	0.00	0.00
2,100.00	17.03	276.41	2,045.93	45.06	-400.87	403.40	0.00	0.00	0.00
2,200.00	17.03	276.41	2,141.54	48.33	-429.98	432.69	0.00	0.00	0.00
2,300.00	17.03	276.41	2,237.16	51.61	-459.08	461.97	0.00	0.00	0.00
2,400.00	17.03	276.41	2,332.78	54.88	-488.18	491.26	0.00	0.00	0.00
2,500.00	17.03	276.41	2,428.39	58.15	-517.29	520.55	0.00	0.00	0.00
2,600.00	17.03	276.41	2,524.01	61.42	-546.39	549.83	0.00	0.00	0.00
2,700.00	17.03	276.41	2,619.62	64.69	-575.49	579.12	0.00	0.00	0.00
2,800.00	17.03	276.41	2,715.24	67.96	-604.60	608.40	0.00	0.00	0.00
2,900.00	17.03	276.41	2,810.85	71.24	-633.70	637.69	0.00	0.00	0.00
3,000.00	17.03	276.41	2,906.47	74.51	-662.80	666.98	0.00	0.00	0.00
3,100.00	17.03	276.41	3,002.08	77.78	-691.91	696.26	0.00	0.00	0.00
3,200.00	17.03	276.41	3,097.70	81.05	-721.01	725.55	0.00	0.00	0.00
3,300.00	17.03	276.41	3,193.31	84.32	-750.11	754.84	0.00	0.00	0.00
3,400.00	17.03	276.41	3,288.93	87.59	-779.22	784.12	0.00	0.00	0.00
3,405.30	17.03	276.41	3,294.00	87.77	-780.76	785.68	0.00	0.00	0.00
PARKMAN									
3,500.00	17.03	276.41	3,384.54	90.86	-808.32	813.41	0.00	0.00	0.00
3,600.00	17.03	276.41	3,480.16	94.14	-837.42	842.70	0.00	0.00	0.00
3,700.00	17.03	276.41	3,575.78	97.41	-866.53	871.98	0.00	0.00	0.00
3,800.00	17.03	276.41	3,671.39	100.68	-895.63	901.27	0.00	0.00	0.00
3,900.00	17.03	276.41	3,767.01	103.95	-924.73	930.56	0.00	0.00	0.00
4,000.00	17.03	276.41	3,862.62	107.22	-953.84	959.84	0.00	0.00	0.00
4,100.00	17.03	276.41	3,958.24	110.49	-982.94	989.13	0.00	0.00	0.00
4,102.89	17.03	276.41	3,961.00	110.59	-983.78	989.98	0.00	0.00	0.00
Start Drop -2.00									

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sweetgrass 10-14
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Site:	WELD_SWEETGRASS 9-14 Pad	North Reference:	True
Well:	P_Sweetgrass 10-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sweetgrass 10-14		
Design:	PLAN #1 8-2-10 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	15.09	276.41	4,054.32	113.59	-1,010.47	1,016.84	2.00	-2.00	0.00
4,300.00	13.09	276.41	4,151.30	116.31	-1,034.66	1,041.18	2.00	-2.00	0.00
4,400.00	11.09	276.41	4,249.08	118.65	-1,055.47	1,062.11	2.00	-2.00	0.00
4,500.00	9.09	276.41	4,347.53	120.60	-1,072.87	1,079.63	2.00	-2.00	0.00
4,600.00	7.09	276.41	4,446.53	122.17	-1,086.85	1,093.70	2.00	-2.00	0.00
4,700.00	5.09	276.41	4,545.96	123.36	-1,097.39	1,104.30	2.00	-2.00	0.00
4,800.00	3.09	276.41	4,645.70	124.16	-1,104.47	1,111.43	2.00	-2.00	0.00
4,900.00	1.09	276.41	4,745.63	124.56	-1,108.09	1,115.07	2.00	-2.00	0.00
4,954.37	0.00	0.00	4,800.00	124.62	-1,108.60	1,115.59	2.00	-2.00	0.00
Start 3831.00 hold at 4954.37 MD - SUSSEX									
5,000.00	0.00	0.00	4,845.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,100.00	0.00	0.00	4,945.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,200.00	0.00	0.00	5,045.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,300.00	0.00	0.00	5,145.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,400.00	0.00	0.00	5,245.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,500.00	0.00	0.00	5,345.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,600.00	0.00	0.00	5,445.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,700.00	0.00	0.00	5,545.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,800.00	0.00	0.00	5,645.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
5,900.00	0.00	0.00	5,745.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,000.00	0.00	0.00	5,845.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,100.00	0.00	0.00	5,945.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,200.00	0.00	0.00	6,045.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,300.00	0.00	0.00	6,145.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,400.00	0.00	0.00	6,245.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,500.00	0.00	0.00	6,345.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,600.00	0.00	0.00	6,445.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,700.00	0.00	0.00	6,545.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,800.00	0.00	0.00	6,645.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
6,900.00	0.00	0.00	6,745.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,000.00	0.00	0.00	6,845.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,100.00	0.00	0.00	6,945.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,200.00	0.00	0.00	7,045.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,300.00	0.00	0.00	7,145.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,400.00	0.00	0.00	7,245.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,500.00	0.00	0.00	7,345.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,600.00	0.00	0.00	7,445.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,660.37	0.00	0.00	7,506.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
NIO									
7,700.00	0.00	0.00	7,545.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,800.00	0.00	0.00	7,645.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
7,900.00	0.00	0.00	7,745.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,000.00	0.00	0.00	7,845.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,040.37	0.00	0.00	7,886.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
CODELL									
8,100.00	0.00	0.00	7,945.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,116.37	0.00	0.00	7,962.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
GREENHORN									
8,200.00	0.00	0.00	8,045.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,300.00	0.00	0.00	8,145.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,400.00	0.00	0.00	8,245.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,484.37	0.00	0.00	8,330.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_Sweetgrass 10-14
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5136' & RKB 15' @ 5151.00ft (ASSUMED)
Site:	WELD_SWEETGRASS 9-14 Pad	North Reference:	True
Well:	P_Sweetgrass 10-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_Sweetgrass 10-14		
Design:	PLAN #1 8-2-10 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									
8,500.00	0.00	0.00	8,345.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,585.37	0.00	0.00	8,431.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
DAKOTA									
8,600.00	0.00	0.00	8,445.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,700.00	0.00	0.00	8,545.63	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
8,785.37	0.00	0.00	8,631.00	124.62	-1,108.60	1,115.59	0.00	0.00	0.00
TD at 8785.37 - PBHL_Sweetgrass 10-14(1980 FSL 1980 FEL)									

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_Sweetgrass 10-1-	0.00	0.00	8,631.00	124.62	-1,108.60	1,261,347.31	3,148,855.80	40° 2' 58.423 N	104° 58' 5.786 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,173.44	1,160.00	8 5/8"	8.625	11.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,405.30	3,294.00	PARKMAN				
4,954.37	4,800.00	SUSSEX				
7,660.37	7,506.00	NIO				
8,040.37	7,886.00	CODELL				
8,116.37	7,962.00	GREENHORN				
8,484.37	8,330.00	JSAND				
8,585.37	8,431.00	DAKOTA		0.00		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
1,151.48	1,139.00	14.03	-124.82	Start 2951.42 hold at 1151.48 MD
4,102.89	3,961.00	110.59	-983.78	Start Drop -2.00
4,954.37	4,800.00	124.62	-1,108.60	Start 3831.00 hold at 4954.37 MD
8,785.37	8,631.00	124.62	-1,108.60	TD at 8785.37