

WELL DETAILS: P_WILDFLOWER 16-27

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1282487.62	3144830.06	40° 6' 27.576 N	104° 58' 55.967 W

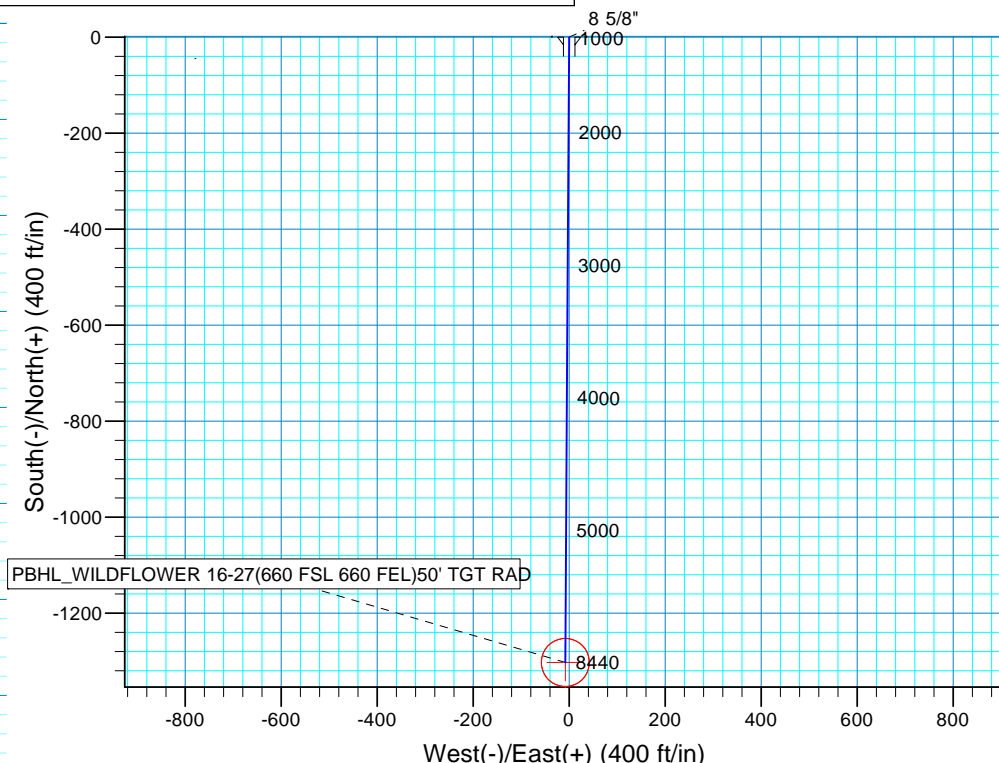
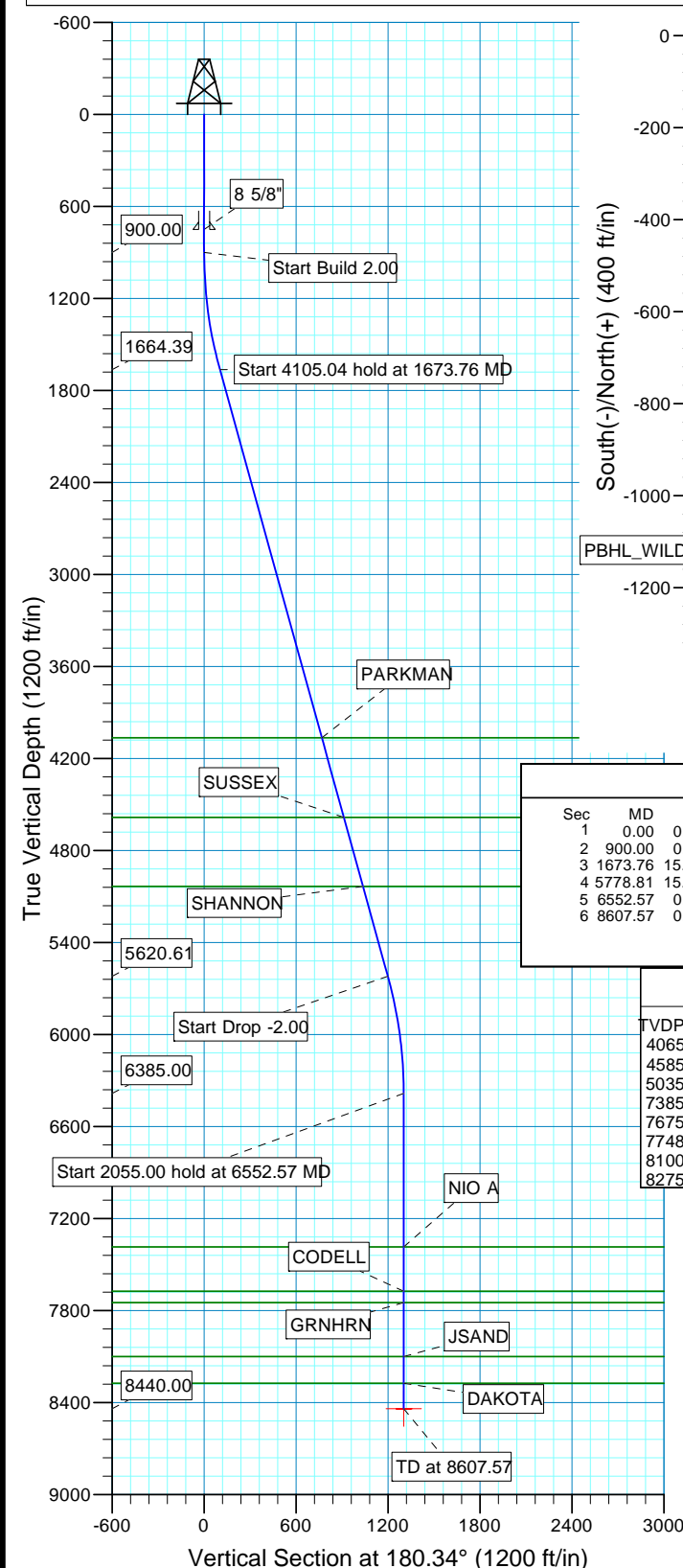
WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8440.00	-1303.02	-7.83	1281184.58	3144829.84	40° 6' 14.699 N	104° 58' 56.068 W	Circle (Radius: 50.00)



Azimuths to True North
Magnetic North: 9.07°

Magnetic Field
Strength: 53043.2snT
Dip Angle: 66.81°
Date: 08/03/2010
Model: IGRF2010



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	900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	
3	1673.76	15.48	180.34	1664.39	-103.86	-0.62	2.00	180.34	103.86	
4	5778.81	15.48	180.34	5620.61	-1199.16	-7.21	0.00	0.00	1199.18	
5	6552.57	0.00	0.00	6385.00	-1303.02	-7.83	2.00	180.00	1303.04	
6	8607.57	0.00	0.00	8440.00	-1303.02	-7.83	0.00	0.00	1303.04	PBHL_WILDFLOWER 16-27(660 FSL 660 FEL)50' TGT RAD

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4065.00	4164.68	PARKMAN
4585.00	4704.24	SUSSEX
5035.00	5171.17	SHANNON
7385.00	7552.57	NIO A
7675.00	7842.57	CODELL
7748.00	7915.57	GRNHRN
8100.00	8267.57	JSAND
8275.00	8442.57	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 27 T2N R68W
System Datum: Mean Sea Level
Local North: True

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WILDFLOWER 9-27 PAD

P_WILDFLOWER 16-27

P_WILDFLOWER 16-27

Plan: PLAN #1 8-3-10 RHS

Standard Planning Report

03 August, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_WILDFLOWER 16-27
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5018.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5018.00ft (Original Well Elev)
Site:	WELD_WILDFLOWER 9-27 PAD	North Reference:	True
Well:	P_WILDFLOWER 16-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WILDFLOWER 16-27		
Design:	PLAN #1 8-3-10 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_WILDFLOWER 9-27 PAD, SECTION 27 T2N R68W			
Site Position:		Northing:	1,282,487.51 usft	Latitude: 40° 6' 27.576 N
From:	Lat/Long	Easting:	3,144,809.93 usft	Longitude: 104° 58' 56.226 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.33 °

Well	P_WILDFLOWER 16-27, 1963' FSL 657' FEL			
Well Position	+N/-S	-0.01 ft	Northing:	1,282,487.62 usft
	+E/-W	20.14 ft	Easting:	3,144,830.07 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,003.00 ft

Wellbore	P_WILDFLOWER 16-27				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/03/2010	9.07	66.81	53,043

Design	PLAN #1 8-3-10 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	180.34

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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,673.76	15.48	180.34	1,664.39	-103.86	-0.62	2.00	2.00	0.00	180.34	
5,778.81	15.48	180.34	5,620.61	-1,199.16	-7.21	0.00	0.00	0.00	0.00	
6,552.57	0.00	0.00	6,385.00	-1,303.02	-7.83	2.00	-2.00	0.00	180.00	
8,607.57	0.00	0.00	8,440.00	-1,303.02	-7.83	0.00	0.00	0.00	0.00	PBHL_WILDFLOWEF

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well P_WILDFLOWER 16-27
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5018.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5018.00ft (Original Well Elev)
Site:	WELD_WILDFLOWER 9-27 PAD	North Reference:	True
Well:	P_WILDFLOWER 16-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WILDFLOWER 16-27		
Design:	PLAN #1 8-3-10 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
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
8 5/8"									
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
Start Build 2.00									
1,000.00	2.00	180.34	999.98	-1.75	-0.01	1.75	2.00	2.00	0.00
1,100.00	4.00	180.34	1,099.84	-6.98	-0.04	6.98	2.00	2.00	0.00
1,200.00	6.00	180.34	1,199.45	-15.69	-0.09	15.69	2.00	2.00	0.00
1,300.00	8.00	180.34	1,298.70	-27.88	-0.17	27.88	2.00	2.00	0.00
1,400.00	10.00	180.34	1,397.47	-43.52	-0.26	43.52	2.00	2.00	0.00
1,500.00	12.00	180.34	1,495.62	-62.60	-0.38	62.60	2.00	2.00	0.00
1,600.00	14.00	180.34	1,593.06	-85.09	-0.51	85.10	2.00	2.00	0.00
1,673.76	15.48	180.34	1,664.39	-103.86	-0.62	103.86	2.00	2.00	0.00
Start 4105.04 hold at 1673.76 MD									
1,700.00	15.48	180.34	1,689.68	-110.86	-0.67	110.86	0.00	0.00	0.00
1,800.00	15.48	180.34	1,786.05	-137.54	-0.83	137.54	0.00	0.00	0.00
1,900.00	15.48	180.34	1,882.42	-164.22	-0.99	164.23	0.00	0.00	0.00
2,000.00	15.48	180.34	1,978.80	-190.90	-1.15	190.91	0.00	0.00	0.00
2,100.00	15.48	180.34	2,075.17	-217.59	-1.31	217.59	0.00	0.00	0.00
2,200.00	15.48	180.34	2,171.55	-244.27	-1.47	244.27	0.00	0.00	0.00
2,300.00	15.48	180.34	2,267.92	-270.95	-1.63	270.95	0.00	0.00	0.00
2,400.00	15.48	180.34	2,364.30	-297.63	-1.79	297.64	0.00	0.00	0.00
2,500.00	15.48	180.34	2,460.67	-324.31	-1.95	324.32	0.00	0.00	0.00
2,600.00	15.48	180.34	2,557.05	-351.00	-2.11	351.00	0.00	0.00	0.00
2,700.00	15.48	180.34	2,653.42	-377.68	-2.27	377.68	0.00	0.00	0.00
2,800.00	15.48	180.34	2,749.80	-404.36	-2.43	404.37	0.00	0.00	0.00
2,900.00	15.48	180.34	2,846.17	-431.04	-2.59	431.05	0.00	0.00	0.00
3,000.00	15.48	180.34	2,942.54	-457.72	-2.75	457.73	0.00	0.00	0.00
3,100.00	15.48	180.34	3,038.92	-484.40	-2.91	484.41	0.00	0.00	0.00
3,200.00	15.48	180.34	3,135.29	-511.09	-3.07	511.10	0.00	0.00	0.00
3,300.00	15.48	180.34	3,231.67	-537.77	-3.23	537.78	0.00	0.00	0.00
3,400.00	15.48	180.34	3,328.04	-564.45	-3.39	564.46	0.00	0.00	0.00
3,500.00	15.48	180.34	3,424.42	-591.13	-3.55	591.14	0.00	0.00	0.00
3,600.00	15.48	180.34	3,520.79	-617.81	-3.71	617.82	0.00	0.00	0.00
3,700.00	15.48	180.34	3,617.17	-644.50	-3.87	644.51	0.00	0.00	0.00
3,800.00	15.48	180.34	3,713.54	-671.18	-4.03	671.19	0.00	0.00	0.00
3,900.00	15.48	180.34	3,809.92	-697.86	-4.19	697.87	0.00	0.00	0.00
4,000.00	15.48	180.34	3,906.29	-724.54	-4.36	724.55	0.00	0.00	0.00
4,100.00	15.48	180.34	4,002.66	-751.22	-4.52	751.24	0.00	0.00	0.00
4,164.68	15.48	180.34	4,065.00	-768.48	-4.62	768.49	0.00	0.00	0.00
PARKMAN									
4,200.00	15.48	180.34	4,099.04	-777.90	-4.68	777.92	0.00	0.00	0.00
4,300.00	15.48	180.34	4,195.41	-804.59	-4.84	804.60	0.00	0.00	0.00
4,400.00	15.48	180.34	4,291.79	-831.27	-5.00	831.28	0.00	0.00	0.00
4,500.00	15.48	180.34	4,388.16	-857.95	-5.16	857.96	0.00	0.00	0.00
4,600.00	15.48	180.34	4,484.54	-884.63	-5.32	884.65	0.00	0.00	0.00

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 5018.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5018.00ft (Original Well Elev)
Site:	WELD_WILDFLOWER 9-27 PAD	North Reference:	True
Well:	P_WILDFLOWER 16-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WILDFLOWER 16-27		
Design:	PLAN #1 8-3-10 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)
4,700.00	15.48	180.34	4,580.91	-911.31	-5.48	911.33	0.00	0.00	0.00
4,704.24	15.48	180.34	4,585.00	-912.44	-5.48	912.46	0.00	0.00	0.00
SUSSEX									
4,800.00	15.48	180.34	4,677.29	-937.99	-5.64	938.01	0.00	0.00	0.00
4,900.00	15.48	180.34	4,773.66	-964.68	-5.80	964.69	0.00	0.00	0.00
5,000.00	15.48	180.34	4,870.04	-991.36	-5.96	991.38	0.00	0.00	0.00
5,100.00	15.48	180.34	4,966.41	-1,018.04	-6.12	1,018.06	0.00	0.00	0.00
5,171.17	15.48	180.34	5,035.00	-1,037.03	-6.23	1,037.05	0.00	0.00	0.00
SHANNON									
5,200.00	15.48	180.34	5,062.79	-1,044.72	-6.28	1,044.74	0.00	0.00	0.00
5,300.00	15.48	180.34	5,159.16	-1,071.40	-6.44	1,071.42	0.00	0.00	0.00
5,400.00	15.48	180.34	5,255.53	-1,098.09	-6.60	1,098.11	0.00	0.00	0.00
5,500.00	15.48	180.34	5,351.91	-1,124.77	-6.76	1,124.79	0.00	0.00	0.00
5,600.00	15.48	180.34	5,448.28	-1,151.45	-6.92	1,151.47	0.00	0.00	0.00
5,700.00	15.48	180.34	5,544.66	-1,178.13	-7.08	1,178.15	0.00	0.00	0.00
5,778.81	15.48	180.34	5,620.61	-1,199.16	-7.21	1,199.18	0.00	0.00	0.00
Start Drop -2.00									
5,800.00	15.05	180.34	5,641.05	-1,204.74	-7.24	1,204.76	2.00	-2.00	0.00
5,900.00	13.05	180.34	5,738.06	-1,229.01	-7.39	1,229.04	2.00	-2.00	0.00
6,000.00	11.05	180.34	5,835.85	-1,249.89	-7.51	1,249.91	2.00	-2.00	0.00
6,100.00	9.05	180.34	5,934.31	-1,267.34	-7.62	1,267.37	2.00	-2.00	0.00
6,200.00	7.05	180.34	6,033.32	-1,281.35	-7.70	1,281.37	2.00	-2.00	0.00
6,300.00	5.05	180.34	6,132.75	-1,291.89	-7.77	1,291.91	2.00	-2.00	0.00
6,400.00	3.05	180.34	6,232.50	-1,298.96	-7.81	1,298.98	2.00	-2.00	0.00
6,500.00	1.05	180.34	6,332.43	-1,302.54	-7.83	1,302.56	2.00	-2.00	0.00
6,552.57	0.00	0.00	6,385.00	-1,303.02	-7.83	1,303.04	2.00	-2.00	0.00
Start 2055.00 hold at 6552.57 MD									
6,600.00	0.00	0.00	6,432.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,532.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,632.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,732.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,832.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,100.00	0.00	0.00	6,932.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,200.00	0.00	0.00	7,032.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,132.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,400.00	0.00	0.00	7,232.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,500.00	0.00	0.00	7,332.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,552.57	0.00	0.00	7,385.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
NIO A									
7,600.00	0.00	0.00	7,432.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,700.00	0.00	0.00	7,532.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,800.00	0.00	0.00	7,632.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,842.57	0.00	0.00	7,675.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
CODELL									
7,900.00	0.00	0.00	7,732.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
7,915.57	0.00	0.00	7,748.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
GRNHRN									
8,000.00	0.00	0.00	7,832.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,100.00	0.00	0.00	7,932.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,200.00	0.00	0.00	8,032.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,267.57	0.00	0.00	8,100.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
JSAND									
8,300.00	0.00	0.00	8,132.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 5018.00ft (Original Well Elev)
Site:	WELD_WILDFLOWER 9-27 PAD	North Reference:	True
Well:	P_WILDFLOWER 16-27	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_WILDFLOWER 16-27		
Design:	PLAN #1 8-3-10 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)
8,400.00	0.00	0.00	8,232.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,442.57	0.00	0.00	8,275.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
DAKOTA									
8,500.00	0.00	0.00	8,332.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,600.00	0.00	0.00	8,432.43	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
8,607.57	0.00	0.00	8,440.00	-1,303.02	-7.83	1,303.04	0.00	0.00	0.00
TD at 8607.57 - PBHL_WILDFLOWER 16-27(660 FSL 660 FEL)50' TGT RAD									

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_WILDFLOWER 1	0.00	0.00	8,440.00	-1,303.02	-7.83	1,281,184.58	3,144,829.84	40° 6' 14.699 N	104° 58' 56.068 W
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
750.00	750.00	8 5/8"	8.620	11.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,164.68	4,065.00	PARKMAN			
4,704.24	4,585.00	SUSSEX			
5,171.17	5,035.00	SHANNON			
7,552.57	7,385.00	NIO A			
7,842.57	7,675.00	CODELL			
7,915.57	7,748.00	GRNHRN			
8,267.57	8,100.00	JSAND			
8,442.57	8,275.00	DAKOTA			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
900.00	900.00	0.00	0.00	Start Build 2.00
1,673.76	1,664.39	-103.86	-0.62	Start 4105.04 hold at 1673.76 MD
5,778.81	5,620.61	-1,199.16	-7.21	Start Drop -2.00
6,552.57	6,385.00	-1,303.02	-7.83	Start 2055.00 hold at 6552.57 MD
8,607.57	8,440.00	-1,303.02	-7.83	TD at 8607.57