



Bill Barrett Corp.

Garfield County, Colorado

MDP 23 Pad

Federal 21C-19-691

Wellbore #1

Plan: plan1 10jun10 rbw

Standard Planning Report

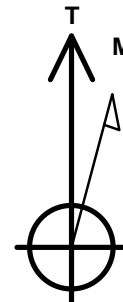
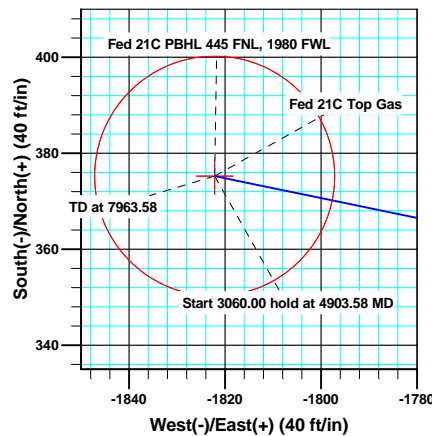
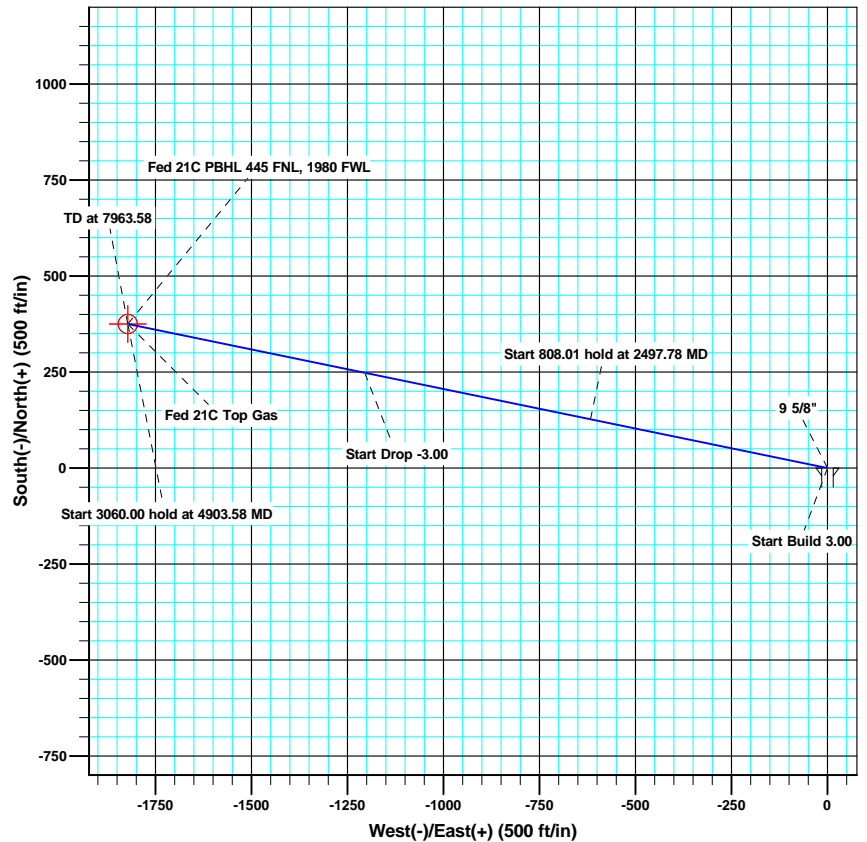
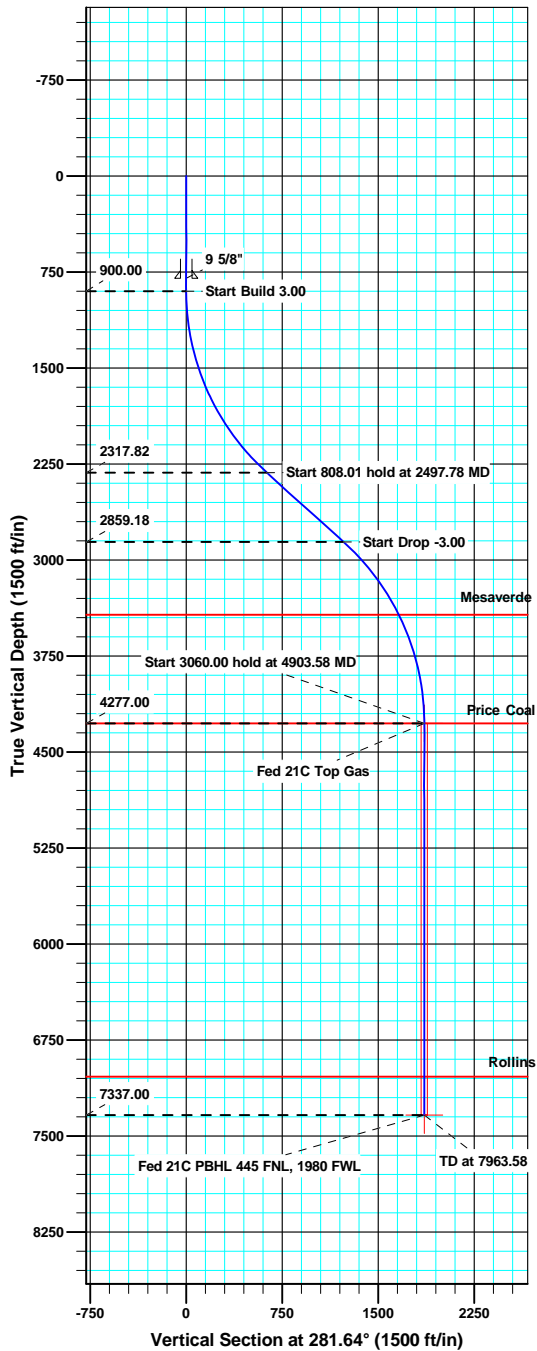
11 June, 2010



WELL DETAILS: Federal 21C-19-691

North American Datum 1983 US State Plane 1983 Colorado Central Zone
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 1620330.23 2409656.86 39.517918 -107.592765

Ground Level: 5904.00 MDP 23 Pad



Azimuths to True North
 Magnetic North: 10.28°

Magnetic Field
 Strength: 52446.6snT
 Dip Angle: 65.87°
 Date: 6/10/2010
 Model: IGRF200510

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V	Sect	Departure	Annotation
900.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
2317.82	2497.78	47.93	281.64	127.13	-617.31	630.27	630.27		Start 808.01 hold at 2497.78 MD
2859.18	3305.80	47.93	281.64	248.12	-1204.83	1230.11	1230.11		Start Drop -3.00
4277.00	4903.58	0.00	0.00	375.25	-1822.14	1860.38	1860.38		Start 3060.00 hold at 4903.58 MD
7337.00	7963.58	0.00	0.00	375.25	-1822.14	1860.38	1860.38		TD at 7963.58



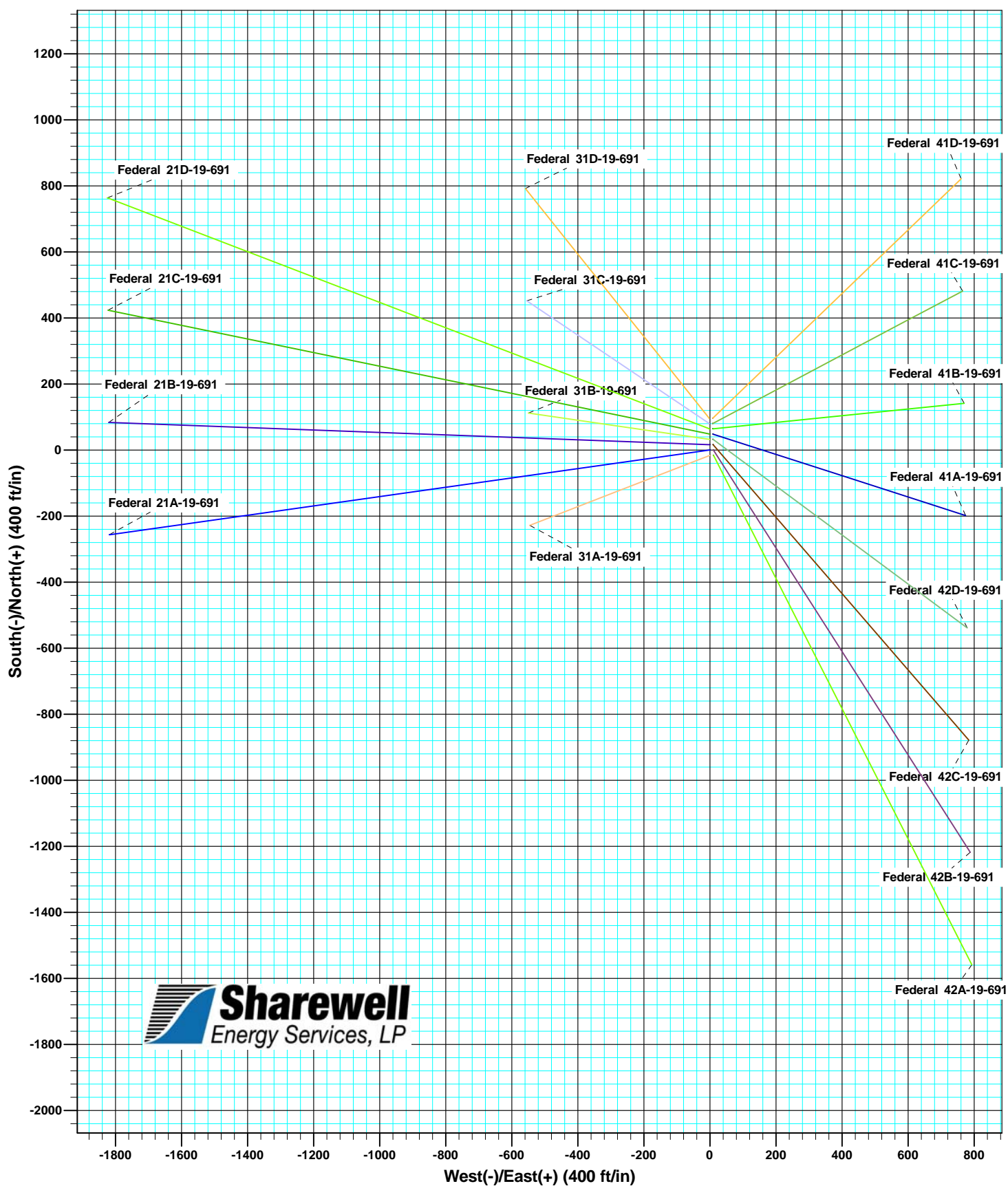


MDP 23 Pad

North American Datum 1983 US State Plane 1983 Colorado Central Zone

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1620282.13	2409656.60	39.517786	-107.592762

Ground Level: 5904.00



Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 21C-19-691
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 5927.00ft
Project:	Garfield County, Colorado	MD Reference:	KB @ 5927.00ft
Site:	MDP 23 Pad	North Reference:	True
Well:	Federal 21C-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10jun10 rbw		

Project	Garfield County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	MDP 23 Pad				
Site Position:		Northing:	1,620,378.10 usft	Latitude:	39.518050
From:	Lat/Long	Easting:	2,409,666.99 usft	Longitude:	-107.592733
Position Uncertainty:	0.00 ft	Slot Radius:	1.10 ft	Grid Convergence:	-1.32 °

Well	Federal 21C-19-691					
Well Position	+N/-S	-48.09 ft	Northing:	1,620,330.22 usft	Latitude:	39.517918
	+E/-W	-9.03 ft	Easting:	2,409,656.86 usft	Longitude:	-107.592765
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,904.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/10/2010	10.28	65.87	52,447

Design	plan1 10jun10 rbw			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	281.64

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	
2,497.78	47.93	281.64	2,317.82	127.13	-617.31	3.00	3.00	0.00	281.64	
3,305.80	47.93	281.64	2,859.18	248.12	-1,204.83	0.00	0.00	0.00	0.00	
4,903.58	0.00	0.00	4,277.00	375.25	-1,822.14	3.00	-3.00	0.00	180.00	Fed 21C Top Gas
7,963.58	0.00	0.00	7,337.00	375.25	-1,822.14	0.00	0.00	0.00	0.00	Fed 21C PBHL 445 F



Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 21C-19-691
Company:	Bill Barrett Corp.	TVD Reference:	KB @ 5927.00ft
Project:	Garfield County, Colorado	MD Reference:	KB @ 5927.00ft
Site:	MDP 23 Pad	North Reference:	True
Well:	Federal 21C-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10jun10 rbw		

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)
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
1,000.00	3.00	281.64	999.95	0.53	-2.56	2.62	3.00	3.00	0.00
1,100.00	6.00	281.64	1,099.63	2.11	-10.25	10.46	3.00	3.00	0.00
1,200.00	9.00	281.64	1,198.77	4.74	-23.03	23.51	3.00	3.00	0.00
1,300.00	12.00	281.64	1,297.08	8.42	-40.88	41.74	3.00	3.00	0.00
1,400.00	15.00	281.64	1,394.31	13.13	-63.74	65.08	3.00	3.00	0.00
1,500.00	18.00	281.64	1,490.18	18.85	-91.55	93.48	3.00	3.00	0.00
1,600.00	21.00	281.64	1,584.43	25.59	-124.24	126.85	3.00	3.00	0.00
1,700.00	24.00	281.64	1,676.81	33.30	-161.72	165.12	3.00	3.00	0.00
1,800.00	27.00	281.64	1,767.06	41.99	-203.88	208.16	3.00	3.00	0.00
1,900.00	30.00	281.64	1,854.93	51.61	-250.61	255.87	3.00	3.00	0.00
2,000.00	33.00	281.64	1,940.18	62.15	-301.78	308.12	3.00	3.00	0.00
2,100.00	36.00	281.64	2,022.59	73.57	-357.25	364.75	3.00	3.00	0.00
2,200.00	39.00	281.64	2,101.91	85.85	-416.87	425.62	3.00	3.00	0.00
2,300.00	42.00	281.64	2,177.95	98.95	-480.47	490.56	3.00	3.00	0.00
2,400.00	45.00	281.64	2,250.47	112.83	-547.89	559.38	3.00	3.00	0.00
2,497.78	47.93	281.64	2,317.82	127.13	-617.31	630.27	3.00	3.00	0.00
Start 808.01 hold at 2497.78 MD									
2,500.00	47.93	281.64	2,319.30	127.46	-618.93	631.91	0.00	0.00	0.00
2,600.00	47.93	281.64	2,386.30	142.43	-691.64	706.15	0.00	0.00	0.00
2,700.00	47.93	281.64	2,453.30	157.41	-764.35	780.39	0.00	0.00	0.00
2,800.00	47.93	281.64	2,520.30	172.38	-837.06	854.62	0.00	0.00	0.00
2,900.00	47.93	281.64	2,587.30	187.36	-909.77	928.86	0.00	0.00	0.00
3,000.00	47.93	281.64	2,654.30	202.33	-982.48	1,003.10	0.00	0.00	0.00
3,100.00	47.93	281.64	2,721.30	217.30	-1,055.19	1,077.33	0.00	0.00	0.00
3,200.00	47.93	281.64	2,788.30	232.28	-1,127.90	1,151.57	0.00	0.00	0.00
3,300.00	47.93	281.64	2,855.30	247.25	-1,200.61	1,225.81	0.00	0.00	0.00
3,305.80	47.93	281.64	2,859.18	248.12	-1,204.83	1,230.11	0.00	0.00	0.00
Start Drop -3.00									
3,400.00	45.11	281.64	2,923.99	261.91	-1,271.77	1,298.46	3.00	-3.00	0.00
3,500.00	42.11	281.64	2,996.39	275.82	-1,339.32	1,367.42	3.00	-3.00	0.00
3,600.00	39.11	281.64	3,072.30	288.94	-1,403.06	1,432.50	3.00	-3.00	0.00
3,700.00	36.11	281.64	3,151.52	301.25	-1,462.82	1,493.52	3.00	-3.00	0.00
3,800.00	33.11	281.64	3,233.81	312.71	-1,518.44	1,550.31	3.00	-3.00	0.00
3,900.00	30.11	281.64	3,318.97	323.28	-1,569.77	1,602.71	3.00	-3.00	0.00
4,000.00	27.11	281.64	3,406.75	332.93	-1,616.66	1,650.59	3.00	-3.00	0.00
4,022.68	26.43	281.64	3,427.00	334.99	-1,626.67	1,660.80	3.00	-3.00	0.00
Mesaverde									
4,100.00	24.11	281.64	3,496.92	341.65	-1,658.99	1,693.80	3.00	-3.00	0.00
4,200.00	21.11	281.64	3,589.22	349.40	-1,696.64	1,732.24	3.00	-3.00	0.00
4,300.00	18.11	281.64	3,683.42	356.17	-1,729.50	1,765.79	3.00	-3.00	0.00
4,400.00	15.11	281.64	3,779.23	361.93	-1,757.49	1,794.37	3.00	-3.00	0.00
4,500.00	12.11	281.64	3,876.41	366.68	-1,780.53	1,817.90	3.00	-3.00	0.00
4,600.00	9.11	281.64	3,974.69	370.39	-1,798.56	1,836.30	3.00	-3.00	0.00
4,700.00	6.11	281.64	4,073.80	373.06	-1,811.52	1,849.54	3.00	-3.00	0.00
4,800.00	3.11	281.64	4,173.47	374.68	-1,819.39	1,857.57	3.00	-3.00	0.00
4,900.00	0.11	281.64	4,273.42	375.25	-1,822.14	1,860.38	3.00	-3.00	0.00
4,903.58	0.00	0.00	4,277.00	375.25	-1,822.14	1,860.38	3.00	-3.00	0.00
Start 3060.00 hold at 4903.58 MD - Price Coal - Fed 21C Top Gas									
5,000.00	0.00	0.00	4,373.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,100.00	0.00	0.00	4,473.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,200.00	0.00	0.00	4,573.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00



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Site:	MDP 23 Pad	North Reference:	True
Well:	Federal 21C-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10jun10 rbw		

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)
5,300.00	0.00	0.00	4,673.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,400.00	0.00	0.00	4,773.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,500.00	0.00	0.00	4,873.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,600.00	0.00	0.00	4,973.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,700.00	0.00	0.00	5,073.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,800.00	0.00	0.00	5,173.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
5,900.00	0.00	0.00	5,273.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,000.00	0.00	0.00	5,373.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,100.00	0.00	0.00	5,473.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,200.00	0.00	0.00	5,573.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,300.00	0.00	0.00	5,673.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,400.00	0.00	0.00	5,773.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,500.00	0.00	0.00	5,873.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,600.00	0.00	0.00	5,973.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,700.00	0.00	0.00	6,073.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,800.00	0.00	0.00	6,173.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
6,900.00	0.00	0.00	6,273.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,000.00	0.00	0.00	6,373.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,100.00	0.00	0.00	6,473.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,200.00	0.00	0.00	6,573.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,300.00	0.00	0.00	6,673.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,400.00	0.00	0.00	6,773.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,500.00	0.00	0.00	6,873.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,600.00	0.00	0.00	6,973.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,663.58	0.00	0.00	7,037.00	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
Rollins									
7,700.00	0.00	0.00	7,073.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,800.00	0.00	0.00	7,173.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,900.00	0.00	0.00	7,273.42	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
7,963.58	0.00	0.00	7,337.00	375.25	-1,822.14	1,860.38	0.00	0.00	0.00
TD at 7963.58 - Fed 21C PBHL 445 FNL, 1980 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									
Fed 21C Top Gas	0.00	0.00	4,277.00	375.25	-1,822.14	1,620,747.34	2,407,843.85	39.518948	-107.599224
- plan hits target center									
- Circle (radius 25.00)									
Fed 21C PBHL 445 FNL	0.00	0.00	7,337.00	375.25	-1,822.14	1,620,747.34	2,407,843.85	39.518948	-107.599224
- plan hits target center									
- Point									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
800.00	800.00	9 5/8"	0.80	1.02

Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 21C-19-691
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Project:	Garfield County, Colorado	MD Reference:	KB @ 5927.00ft
Site:	MDP 23 Pad	North Reference:	True
Well:	Federal 21C-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 10jun10 rbw		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,022.68	3,427.00	Mesaverde		0.00	
4,903.58	4,277.00	Price Coal		0.00	
7,663.58	7,037.00	Rollins		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
900.00	900.00	0.00	0.00	Start Build 3.00
2,497.78	2,317.82	127.13	-617.31	Start 808.01 hold at 2497.78 MD
3,305.80	2,859.18	248.12	-1,204.83	Start Drop -3.00
4,903.58	4,277.00	375.25	-1,822.14	Start 3060.00 hold at 4903.58 MD
7,963.58	7,337.00	375.25	-1,822.14	TD at 7963.58