



Bill Barrett Corp.

Garfield County, Colorado

MDP 23 Pad

Federal 41A-19-691

Wellbore #1

Plan: plan1 02jun10 rbw

Standard Planning Report

11 June, 2010

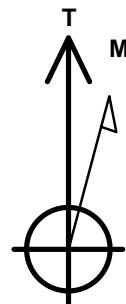
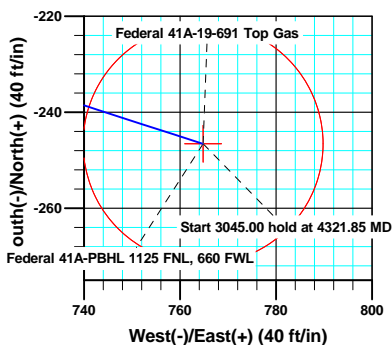
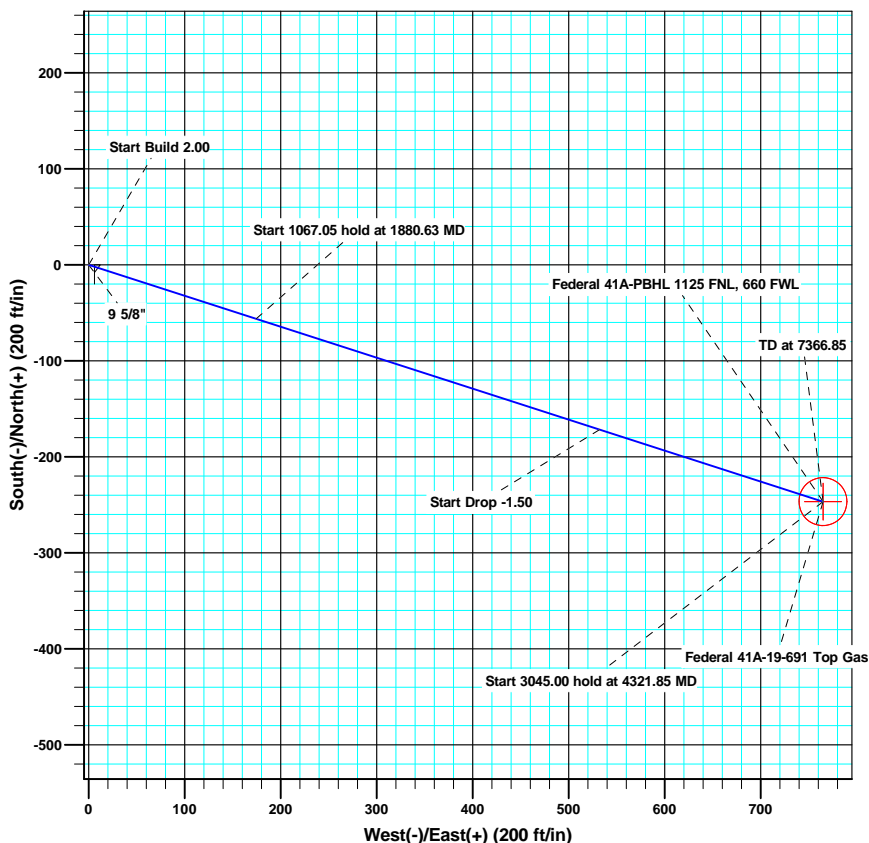
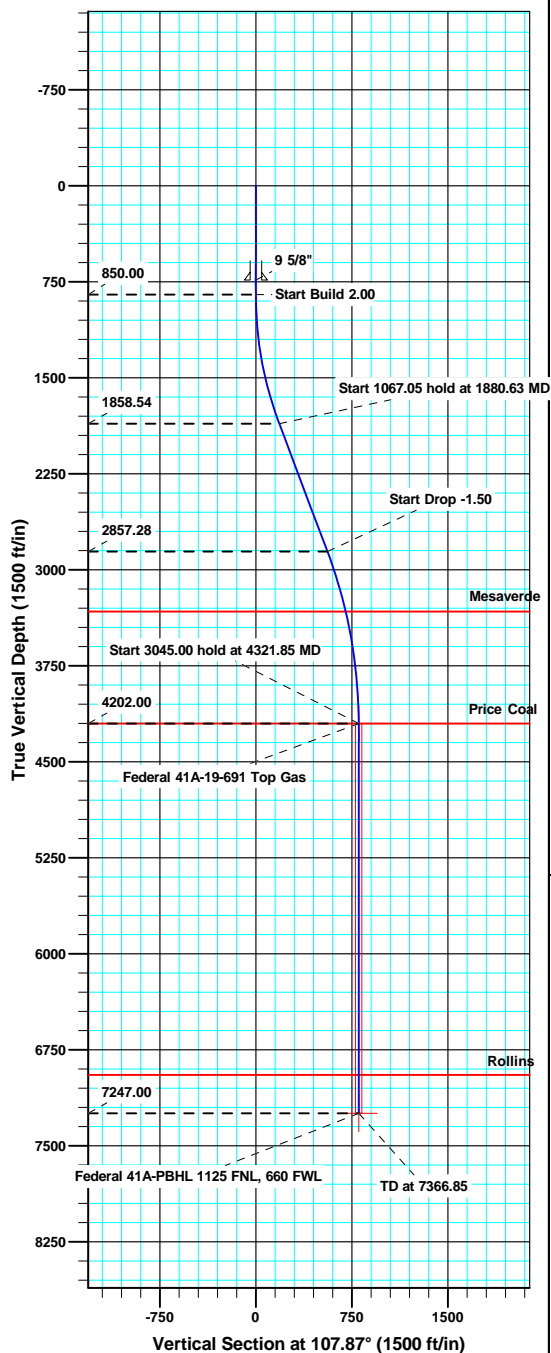


WELL DETAILS: Federal 41A-19-691

North American Datum 1983		US State Plane 1983		Colorado Central Zone	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1620329.99	2409666.73	39.517918	-107.592730

Ground Level: 5904.00

MDP 23 Pad



Azimuths to True North
Magnetic North: 10.28°

Magnetic Field
Strength: 52448.8snT
Dip Angle: 65.87°
Date: 6/2/2010
Model: IGRF200510

ANNOTATIONS

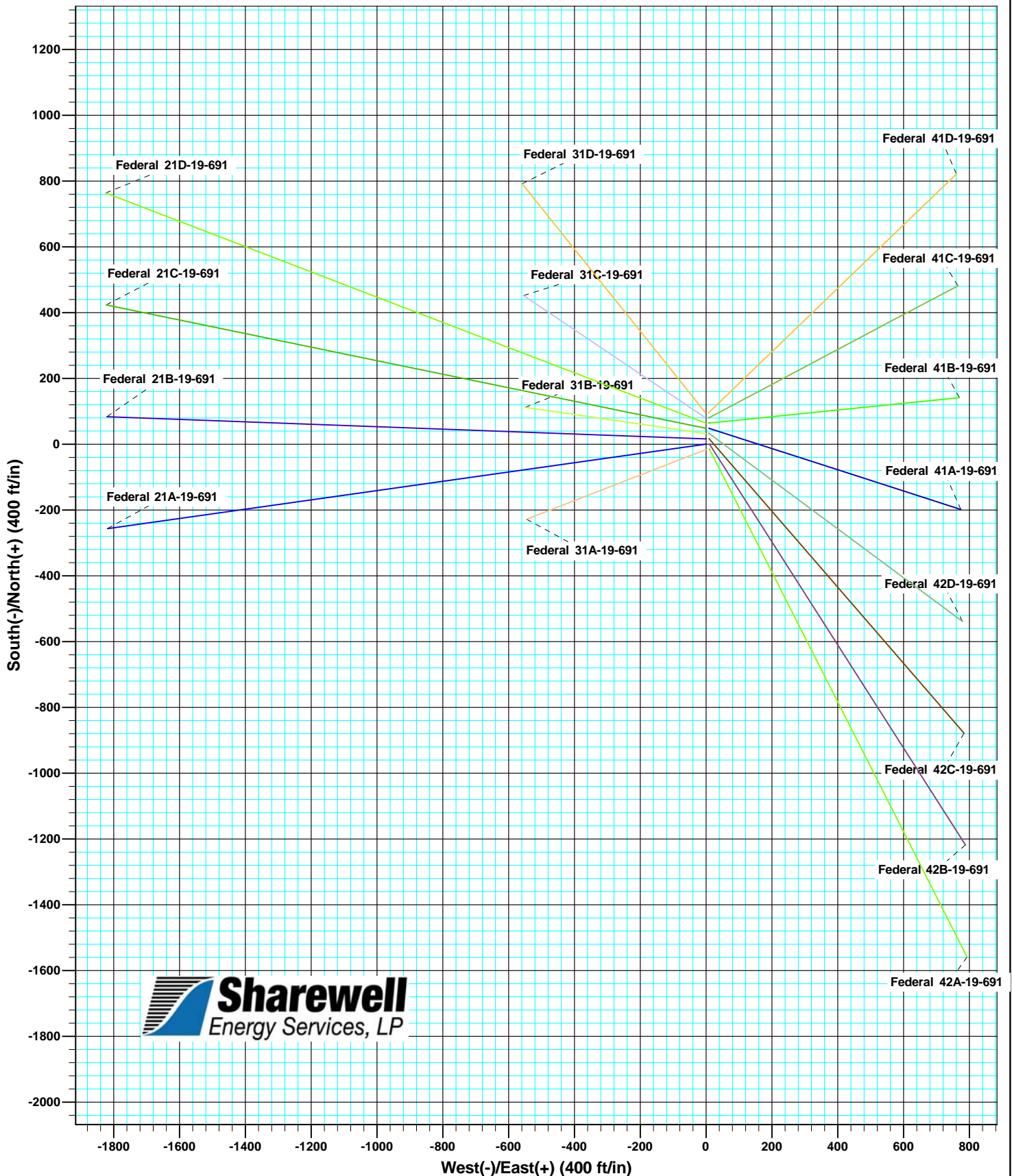
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
850.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1858.54	1880.63	20.61	107.87	-56.27	174.55	183.40	183.40	Start 1067.05 hold at 1880.63 MD
2857.28	2947.68	20.61	107.87	-171.53	532.08	559.05	559.05	Start Drop -1.50
4202.00	4321.85	0.00	0.00	-246.56	764.82	803.58	803.58	Start 3045.00 hold at 4321.85 MD
7247.00	7366.85	0.00	0.00	-246.56	764.82	803.58	803.58	TD at 7366.85



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 41A-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 41A-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 02jun10 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 41A-19-691					
Well Position	+N/-S	-48.10 ft	Northing:	1,620,329.99 usft	Latitude:	39.517918
	+E/-W	0.85 ft	Easting:	2,409,666.73 usft	Longitude:	-107.592730
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	6/2/2010	10.28	65.87	52,449

Design	plan1 02jun10 rbw			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	107.87

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	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,880.62	20.61	107.87	1,858.54	-56.27	174.55	2.00	2.00	0.00	107.87	
2,947.68	20.61	107.87	2,857.28	-171.53	532.08	0.00	0.00	0.00	0.00	
4,321.85	0.00	0.00	4,202.00	-246.56	764.82	1.50	-1.50	0.00	180.00	Federal 41A-19-691 T
7,366.85	0.00	0.00	7,247.00	-246.56	764.82	0.00	0.00	0.00	0.00	Federal 41A-PBHL 11



Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 41A-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 41A-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 02jun10 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)
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
736.00	0.00	0.00	736.00	0.00	0.00	0.00	0.00	0.00	0.00
5 1/2"									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
900.00	1.00	107.87	900.00	-0.13	0.42	0.44	2.00	2.00	0.00
1,000.00	3.00	107.87	999.93	-1.20	3.74	3.93	2.00	2.00	0.00
1,100.00	5.00	107.87	1,099.68	-3.34	10.38	10.90	2.00	2.00	0.00
1,200.00	7.00	107.87	1,199.13	-6.55	20.32	21.35	2.00	2.00	0.00
1,300.00	9.00	107.87	1,298.15	-10.82	33.57	35.27	2.00	2.00	0.00
1,400.00	11.00	107.87	1,396.63	-16.15	50.10	52.63	2.00	2.00	0.00
1,500.00	13.00	107.87	1,494.44	-22.53	69.88	73.42	2.00	2.00	0.00
1,600.00	15.00	107.87	1,591.46	-29.95	92.91	97.62	2.00	2.00	0.00
1,700.00	17.00	107.87	1,687.58	-38.41	119.14	125.18	2.00	2.00	0.00
1,800.00	19.00	107.87	1,782.68	-47.89	148.55	156.08	2.00	2.00	0.00
1,880.63	20.61	107.87	1,858.54	-56.27	174.55	183.40	2.00	2.00	0.00
Start 1067.05 hold at 1880.63 MD									
1,900.00	20.61	107.87	1,876.67	-58.36	181.04	190.22	0.00	0.00	0.00
2,000.00	20.61	107.87	1,970.27	-69.17	214.55	225.42	0.00	0.00	0.00
2,100.00	20.61	107.87	2,063.87	-79.97	248.05	260.63	0.00	0.00	0.00
2,200.00	20.61	107.87	2,157.47	-90.77	281.56	295.83	0.00	0.00	0.00
2,300.00	20.61	107.87	2,251.06	-101.57	315.07	331.04	0.00	0.00	0.00
2,400.00	20.61	107.87	2,344.66	-112.37	348.57	366.24	0.00	0.00	0.00
2,500.00	20.61	107.87	2,438.26	-123.17	382.08	401.44	0.00	0.00	0.00
2,600.00	20.61	107.87	2,531.86	-133.98	415.59	436.65	0.00	0.00	0.00
2,700.00	20.61	107.87	2,625.46	-144.78	449.09	471.85	0.00	0.00	0.00
2,800.00	20.61	107.87	2,719.06	-155.58	482.60	507.06	0.00	0.00	0.00
2,900.00	20.61	107.87	2,812.65	-166.38	516.11	542.26	0.00	0.00	0.00
2,947.68	20.61	107.87	2,857.28	-171.53	532.08	559.05	0.00	0.00	0.00
Start Drop -1.50									
3,000.00	19.83	107.87	2,906.38	-177.08	549.29	577.13	1.50	-1.50	0.00
3,100.00	18.33	107.87	3,000.88	-187.11	580.40	609.82	1.50	-1.50	0.00
3,200.00	16.83	107.87	3,096.21	-196.37	609.14	640.01	1.50	-1.50	0.00
3,300.00	15.33	107.87	3,192.30	-204.87	635.50	667.71	1.50	-1.50	0.00
3,400.00	13.83	107.87	3,289.07	-212.59	659.46	692.88	1.50	-1.50	0.00
3,439.01	13.24	107.87	3,327.00	-215.39	668.14	702.01	1.50	-1.50	0.00
Mesaverde									
3,500.00	12.33	107.87	3,386.48	-219.54	680.99	715.50	1.50	-1.50	0.00
3,600.00	10.83	107.87	3,484.44	-225.69	700.09	735.57	1.50	-1.50	0.00
3,700.00	9.33	107.87	3,582.89	-231.06	716.75	753.07	1.50	-1.50	0.00
3,800.00	7.83	107.87	3,681.77	-235.64	730.94	767.98	1.50	-1.50	0.00
3,900.00	6.33	107.87	3,781.01	-239.42	742.67	780.31	1.50	-1.50	0.00
4,000.00	4.83	107.87	3,880.53	-242.40	751.92	790.03	1.50	-1.50	0.00
4,100.00	3.33	107.87	3,980.28	-244.58	758.69	797.14	1.50	-1.50	0.00
4,200.00	1.83	107.87	4,080.17	-245.96	762.97	801.63	1.50	-1.50	0.00
4,300.00	0.33	107.87	4,180.15	-246.54	764.76	803.51	1.50	-1.50	0.00



Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 41A-19-691
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Project:	Garfield County, Colorado	MD Reference:	KB @ 5927.00ft
Site:	MDP 23 Pad	North Reference:	True
Well:	Federal 41A-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 02jun10 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)
4,321.85	0.00	0.00	4,202.00	-246.56	764.82	803.58	1.50	-1.50	0.00
Start 3045.00 hold at 4321.85 MD - Price Coal - Federal 41A-19-691 Top Gas									
4,400.00	0.00	0.00	4,280.15	-246.56	764.82	803.58	0.00	0.00	0.00
4,500.00	0.00	0.00	4,380.15	-246.56	764.82	803.58	0.00	0.00	0.00
4,600.00	0.00	0.00	4,480.15	-246.56	764.82	803.58	0.00	0.00	0.00
4,700.00	0.00	0.00	4,580.15	-246.56	764.82	803.58	0.00	0.00	0.00
4,800.00	0.00	0.00	4,680.15	-246.56	764.82	803.58	0.00	0.00	0.00
4,900.00	0.00	0.00	4,780.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,000.00	0.00	0.00	4,880.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,100.00	0.00	0.00	4,980.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,200.00	0.00	0.00	5,080.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,300.00	0.00	0.00	5,180.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,400.00	0.00	0.00	5,280.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,500.00	0.00	0.00	5,380.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,600.00	0.00	0.00	5,480.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,700.00	0.00	0.00	5,580.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,800.00	0.00	0.00	5,680.15	-246.56	764.82	803.58	0.00	0.00	0.00
5,900.00	0.00	0.00	5,780.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,000.00	0.00	0.00	5,880.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,100.00	0.00	0.00	5,980.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,200.00	0.00	0.00	6,080.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,300.00	0.00	0.00	6,180.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,400.00	0.00	0.00	6,280.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,500.00	0.00	0.00	6,380.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,600.00	0.00	0.00	6,480.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,700.00	0.00	0.00	6,580.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,800.00	0.00	0.00	6,680.15	-246.56	764.82	803.58	0.00	0.00	0.00
6,900.00	0.00	0.00	6,780.15	-246.56	764.82	803.58	0.00	0.00	0.00
7,000.00	0.00	0.00	6,880.15	-246.56	764.82	803.58	0.00	0.00	0.00
7,066.85	0.00	0.00	6,947.00	-246.56	764.82	803.58	0.00	0.00	0.00
Rollins									
7,100.00	0.00	0.00	6,980.15	-246.56	764.82	803.58	0.00	0.00	0.00
7,200.00	0.00	0.00	7,080.15	-246.56	764.82	803.58	0.00	0.00	0.00
7,300.00	0.00	0.00	7,180.15	-246.56	764.82	803.58	0.00	0.00	0.00
7,366.85	0.00	0.00	7,247.00	-246.56	764.82	803.58	0.00	0.00	0.00
Federal 41A-PBHL 1125 FNL, 660 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									
Federal 41A-19-691 Top - plan hits target center - Circle (radius 25.00)	0.00	0.00	4,202.00	-246.56	764.82	1,620,065.88	2,410,425.66	39.517241	-107.590019
Federal 41A-PBHL 1125 - plan hits target center - Point	0.00	0.00	7,247.00	-246.56	764.82	1,620,065.88	2,410,425.66	39.517241	-107.590019

Database:	SWFS01 Compass DB	Local Co-ordinate Reference:	Well Federal 41A-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 41A-19-691	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 02jun10 rbw		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)	
736.00	736.00	5 1/2"	0.46	0.50	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,439.01	3,327.00	Mesaverde		0.00	
4,321.85	4,202.00	Price Coal		0.00	
7,066.85	6,947.00	Rollins		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
850.00	850.00	0.00	0.00	Start Build 2.00	
1,880.63	1,858.54	-56.27	174.55	Start 1067.05 hold at 1880.63 MD	
2,947.68	2,857.28	-171.53	532.08	Start Drop -1.50	
4,321.85	4,202.00	-246.56	764.82	Start 3045.00 hold at 4321.85 MD	
7,366.85	7,247.00	-246.56	764.82	TD at 7366.85	