

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

Kaufman Pad #2 NENW-25-692

Kaufman 21D-25-692

Wellbore #1

Plan: Design #1

Standard Planning Report

26 September, 2011

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Kaufman 21D-25-692
Company:	BILL BARRETT CORP	TVD Reference:	WELL @ 5863.00ft (Original Well Elev)
Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 5863.00ft (Original Well Elev)
Site:	Kaufman Pad #2 NENW-25-692	North Reference:	Grid
Well:	Kaufman 21D-25-692	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	GARFIELD COUNTY, COLORADO NAD 1983		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Kaufman Pad #2 NENW-25-692		
Site Position:		Northing:	1,614,867.241 ft
From:	Lat/Long	Easting:	2,402,305.683 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	39° 30' 8.842 N
		Longitude:	107° 37' 6.1104 W
		Grid Convergence:	-1.34 °

Well	Kaufman 21D-25-692		
Well Position	+N/-S	-13.66 ft	Northing:
	+E/-W	-8.50 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 30' 8.705 N
			Longitude:
			107° 37' 6.2148 W
			Ground Level:
			5,840.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	10.35	65.87	52,479

Design	Design #1			
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	11.67

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	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,369.72	14.24	11.67	1,363.87	68.99	14.26	2.50	2.50	0.00	11.67	
4,574.58	14.24	11.67	4,470.22	841.18	173.81	0.00	0.00	0.00	0.00	
5,524.11	0.00	0.00	5,410.00	956.17	197.57	1.50	-1.50	0.00	180.00	
7,524.11	0.00	0.00	7,410.00	956.17	197.57	0.00	0.00	0.00	0.00	Kaufman 21D-25-692

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Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 5863.00ft (Original Well Elev)
Site:	Kaufman Pad #2 NENW-25-692	North Reference:	Grid
Well:	Kaufman 21D-25-692	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	2.50	11.67	899.97	2.14	0.44	2.18	2.50	2.50	0.00	
1,000.00	5.00	11.67	999.75	8.54	1.76	8.72	2.50	2.50	0.00	
1,100.00	7.50	11.67	1,099.14	19.20	3.97	19.61	2.50	2.50	0.00	
1,200.00	10.00	11.67	1,197.97	34.10	7.05	34.82	2.50	2.50	0.00	
1,300.00	12.50	11.67	1,296.04	53.20	10.99	54.33	2.50	2.50	0.00	
1,369.72	14.24	11.67	1,363.87	68.99	14.26	70.45	2.50	2.50	0.00	
1,400.00	14.24	11.67	1,393.22	76.29	15.76	77.90	0.00	0.00	0.00	
1,500.00	14.24	11.67	1,490.15	100.38	20.74	102.50	0.00	0.00	0.00	
1,600.00	14.24	11.67	1,587.07	124.48	25.72	127.11	0.00	0.00	0.00	
1,700.00	14.24	11.67	1,684.00	148.57	30.70	151.71	0.00	0.00	0.00	
1,800.00	14.24	11.67	1,780.92	172.66	35.68	176.31	0.00	0.00	0.00	
1,900.00	14.24	11.67	1,877.85	196.76	40.66	200.92	0.00	0.00	0.00	
2,000.00	14.24	11.67	1,974.78	220.85	45.63	225.52	0.00	0.00	0.00	
2,100.00	14.24	11.67	2,071.70	244.95	50.61	250.12	0.00	0.00	0.00	
2,200.00	14.24	11.67	2,168.63	269.04	55.59	274.73	0.00	0.00	0.00	
2,300.00	14.24	11.67	2,265.55	293.14	60.57	299.33	0.00	0.00	0.00	
2,400.00	14.24	11.67	2,362.48	317.23	65.55	323.93	0.00	0.00	0.00	
2,500.00	14.24	11.67	2,459.41	341.32	70.53	348.54	0.00	0.00	0.00	
2,600.00	14.24	11.67	2,556.33	365.42	75.51	373.14	0.00	0.00	0.00	
2,700.00	14.24	11.67	2,653.26	389.51	80.49	397.74	0.00	0.00	0.00	
2,800.00	14.24	11.67	2,750.19	413.61	85.46	422.35	0.00	0.00	0.00	
2,900.00	14.24	11.67	2,847.11	437.70	90.44	446.95	0.00	0.00	0.00	
3,000.00	14.24	11.67	2,944.04	461.80	95.42	471.55	0.00	0.00	0.00	
3,100.00	14.24	11.67	3,040.96	485.89	100.40	496.16	0.00	0.00	0.00	
3,200.00	14.24	11.67	3,137.89	509.99	105.38	520.76	0.00	0.00	0.00	
3,300.00	14.24	11.67	3,234.82	534.08	110.36	545.36	0.00	0.00	0.00	
3,400.00	14.24	11.67	3,331.74	558.17	115.34	569.97	0.00	0.00	0.00	
3,500.00	14.24	11.67	3,428.67	582.27	120.31	594.57	0.00	0.00	0.00	
3,600.00	14.24	11.67	3,525.59	606.36	125.29	619.17	0.00	0.00	0.00	
3,700.00	14.24	11.67	3,622.52	630.46	130.27	643.78	0.00	0.00	0.00	
3,800.00	14.24	11.67	3,719.45	654.55	135.25	668.38	0.00	0.00	0.00	
3,900.00	14.24	11.67	3,816.37	678.65	140.23	692.98	0.00	0.00	0.00	
4,000.00	14.24	11.67	3,913.30	702.74	145.21	717.59	0.00	0.00	0.00	
4,100.00	14.24	11.67	4,010.23	726.83	150.19	742.19	0.00	0.00	0.00	
4,200.00	14.24	11.67	4,107.15	750.93	155.16	766.79	0.00	0.00	0.00	
4,300.00	14.24	11.67	4,204.08	775.02	160.14	791.40	0.00	0.00	0.00	
4,400.00	14.24	11.67	4,301.00	799.12	165.12	816.00	0.00	0.00	0.00	
4,500.00	14.24	11.67	4,397.93	823.21	170.10	840.60	0.00	0.00	0.00	
4,574.58	14.24	11.67	4,470.22	841.18	173.81	858.95	0.00	0.00	0.00	
4,600.00	13.86	11.67	4,494.88	847.23	175.06	865.12	1.50	-1.50	0.00	
4,700.00	12.36	11.67	4,592.27	869.44	179.65	887.81	1.50	-1.50	0.00	
4,800.00	10.86	11.67	4,690.22	889.15	183.73	907.94	1.50	-1.50	0.00	
4,900.00	9.36	11.67	4,788.66	906.35	187.28	925.49	1.50	-1.50	0.00	
5,000.00	7.86	11.67	4,887.53	921.01	190.31	940.46	1.50	-1.50	0.00	

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Project:	GARFIELD COUNTY, COLORADO NAD 1983	MD Reference:	WELL @ 5863.00ft (Original Well Elev)
Site:	Kaufman Pad #2 NENW-25-692	North Reference:	Grid
Well:	Kaufman 21D-25-692	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
5,100.00	6.36	11.67	4,986.76	933.13	192.81	952.84	1.50	-1.50	0.00
5,200.00	4.86	11.67	5,086.28	942.71	194.79	962.62	1.50	-1.50	0.00
5,300.00	3.36	11.67	5,186.02	949.73	196.24	969.79	1.50	-1.50	0.00
5,400.00	1.86	11.67	5,285.91	954.19	197.16	974.35	1.50	-1.50	0.00
5,500.00	0.36	11.67	5,385.89	956.09	197.56	976.29	1.50	-1.50	0.00
5,524.11	0.00	0.00	5,410.00	956.17	197.57	976.37	1.50	-1.50	0.00
5,600.00	0.00	0.00	5,485.89	956.17	197.57	976.37	0.00	0.00	0.00
5,700.00	0.00	0.00	5,585.89	956.17	197.57	976.37	0.00	0.00	0.00
5,800.00	0.00	0.00	5,685.89	956.17	197.57	976.37	0.00	0.00	0.00
5,900.00	0.00	0.00	5,785.89	956.17	197.57	976.37	0.00	0.00	0.00
6,000.00	0.00	0.00	5,885.89	956.17	197.57	976.37	0.00	0.00	0.00
6,100.00	0.00	0.00	5,985.89	956.17	197.57	976.37	0.00	0.00	0.00
6,200.00	0.00	0.00	6,085.89	956.17	197.57	976.37	0.00	0.00	0.00
6,300.00	0.00	0.00	6,185.89	956.17	197.57	976.37	0.00	0.00	0.00
6,400.00	0.00	0.00	6,285.89	956.17	197.57	976.37	0.00	0.00	0.00
6,500.00	0.00	0.00	6,385.89	956.17	197.57	976.37	0.00	0.00	0.00
6,600.00	0.00	0.00	6,485.89	956.17	197.57	976.37	0.00	0.00	0.00
6,700.00	0.00	0.00	6,585.89	956.17	197.57	976.37	0.00	0.00	0.00
6,800.00	0.00	0.00	6,685.89	956.17	197.57	976.37	0.00	0.00	0.00
6,900.00	0.00	0.00	6,785.89	956.17	197.57	976.37	0.00	0.00	0.00
7,000.00	0.00	0.00	6,885.89	956.17	197.57	976.37	0.00	0.00	0.00
7,100.00	0.00	0.00	6,985.89	956.17	197.57	976.37	0.00	0.00	0.00
7,200.00	0.00	0.00	7,085.89	956.17	197.57	976.37	0.00	0.00	0.00
7,300.00	0.00	0.00	7,185.89	956.17	197.57	976.37	0.00	0.00	0.00
7,400.00	0.00	0.00	7,285.89	956.17	197.57	976.37	0.00	0.00	0.00
7,500.00	0.00	0.00	7,385.89	956.17	197.57	976.37	0.00	0.00	0.00
7,524.11	0.00	0.00	7,410.00	956.17	197.57	976.37	0.00	0.00	0.00

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,542.64	3,470.00	Mesaverde		0.00	
4,275.16	4,180.00	Price Coal		0.00	
5,012.58	4,900.00	Top Gas		0.00	
7,224.11	7,110.00	Rollins		0.00	
7,524.11	7,410.00	TD		0.00	

WELL DETAILS: Kaufman 21D-25-692

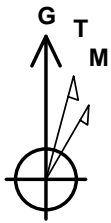
+N/-S	+E/-W	Northing	Ground Level:	5840.00		
0.00	0.00	1614853.586	Easting	2402297.179	Latitude	Longitude
					39° 30' 8.705 N	107° 37' 6.2148 W
						Slot

SECTION DETAILS

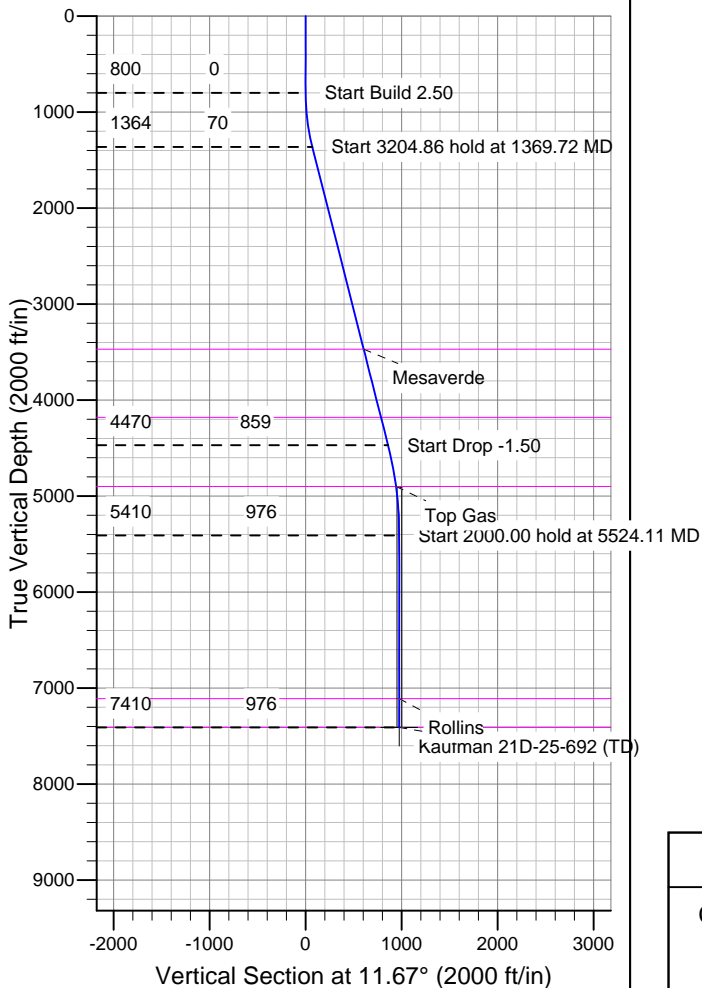
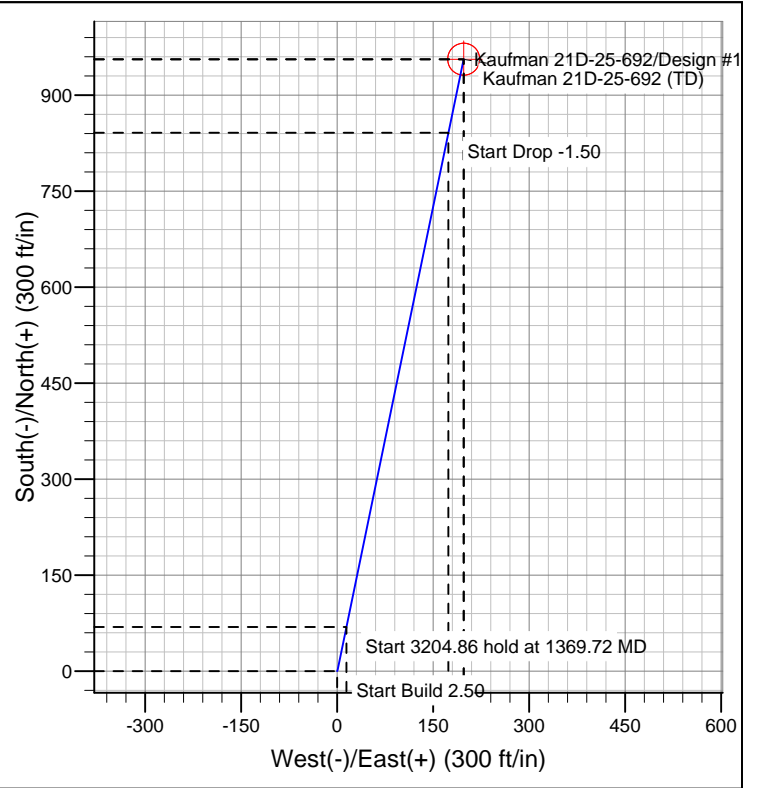
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	
3	1369.72	14.24	11.67	1363.87	68.99	14.26	2.50	11.67	70.45	
4	4574.58	14.24	11.67	4470.22	841.18	173.81	0.00	0.00	858.95	
5	5524.11	0.00	0.00	5410.00	956.17	197.57	1.50	180.00	976.37	
6	7524.11	0.00	0.00	7410.00	956.17	197.57	0.00	0.00	976.37	Kaufman 21D-25-692 (TD)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Kaufman 21D-25-692 (TD)	7410.00	956.17	197.57	Circle (Radius: 25.00)



Azimuths to Grid North
 True North: 1.34°
 Magnetic North: 11.68°
 Magnetic Field
 Strength: 52478.7snT
 Dip Angle: 65.87°
 Date: 12/31/2009
 Model: IGRF200510



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3470.00	3542.64	Mesaverde
4180.00	4275.16	Price Coal
4900.00	5012.58	Top Gas
7110.00	7224.11	Rollins
7410.00	7524.11	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Kaufman 21D-25-692, Grid North
 Vertical (TVD) Reference: WELL @ 5863.00ft (Original Well Elev)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: WELL @ 5863.00ft (Original Well Elev)
 Calculation Method: Minimum Curvature