

BILL BARRETT CORP

GARFIELD COUNTY, COLORADO NAD 1983

Kaufman Pad #2 NENW-25-692

Kaufman 21A-25-692

Wellbore #1

Plan: Design #1

Standard Planning Report

23 September, 2011

Bill Barrett Corp

Planning Report

Database:	Compass	Local Co-ordinate Reference:	Well Kaufman 21A-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 21A-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 21A-25-692		
Well Position	+N/-S	-32.60 ft	Northing:
	+E/-W	-8.38 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			39° 30' 8.517 N
			Longitude:
			107° 37' 6.2076 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	92.14

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	
740.00	0.00	0.00	740.00	0.00	0.00	0.00	0.00	0.00	0.00	
844.26	2.61	92.14	844.23	-0.09	2.37	2.50	2.50	0.00	92.14	
4,695.31	2.61	92.14	4,691.29	-6.62	177.38	0.00	0.00	0.00	0.00	
4,869.08	0.00	0.00	4,865.00	-6.77	181.33	1.50	-1.50	0.00	180.00	
7,369.08	0.00	0.00	7,365.00	-6.77	181.33	0.00	0.00	0.00	0.00	Kaufman 21A-25-692

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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 21A-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	
740.00	0.00	0.00	740.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	1.50	92.14	799.99	-0.03	0.78	0.79	2.50	2.50	0.00	
844.26	2.61	92.14	844.23	-0.09	2.37	2.37	2.50	2.50	0.00	
900.00	2.61	92.14	899.91	-0.18	4.90	4.91	0.00	0.00	0.00	
1,000.00	2.61	92.14	999.80	-0.35	9.45	9.45	0.00	0.00	0.00	
1,100.00	2.61	92.14	1,099.70	-0.52	13.99	14.00	0.00	0.00	0.00	
1,200.00	2.61	92.14	1,199.60	-0.69	18.54	18.55	0.00	0.00	0.00	
1,300.00	2.61	92.14	1,299.49	-0.86	23.08	23.10	0.00	0.00	0.00	
1,400.00	2.61	92.14	1,399.39	-1.03	27.63	27.64	0.00	0.00	0.00	
1,500.00	2.61	92.14	1,499.29	-1.20	32.17	32.19	0.00	0.00	0.00	
1,600.00	2.61	92.14	1,599.18	-1.37	36.71	36.74	0.00	0.00	0.00	
1,700.00	2.61	92.14	1,699.08	-1.54	41.26	41.29	0.00	0.00	0.00	
1,800.00	2.61	92.14	1,798.98	-1.71	45.80	45.84	0.00	0.00	0.00	
1,900.00	2.61	92.14	1,898.87	-1.88	50.35	50.38	0.00	0.00	0.00	
2,000.00	2.61	92.14	1,998.77	-2.05	54.89	54.93	0.00	0.00	0.00	
2,100.00	2.61	92.14	2,098.66	-2.22	59.44	59.48	0.00	0.00	0.00	
2,200.00	2.61	92.14	2,198.56	-2.39	63.98	64.03	0.00	0.00	0.00	
2,300.00	2.61	92.14	2,298.46	-2.56	68.53	68.57	0.00	0.00	0.00	
2,400.00	2.61	92.14	2,398.35	-2.73	73.07	73.12	0.00	0.00	0.00	
2,500.00	2.61	92.14	2,498.25	-2.90	77.61	77.67	0.00	0.00	0.00	
2,600.00	2.61	92.14	2,598.15	-3.07	82.16	82.22	0.00	0.00	0.00	
2,700.00	2.61	92.14	2,698.04	-3.24	86.70	86.76	0.00	0.00	0.00	
2,800.00	2.61	92.14	2,797.94	-3.41	91.25	91.31	0.00	0.00	0.00	
2,900.00	2.61	92.14	2,897.84	-3.58	95.79	95.86	0.00	0.00	0.00	
3,000.00	2.61	92.14	2,997.73	-3.75	100.34	100.41	0.00	0.00	0.00	
3,100.00	2.61	92.14	3,097.63	-3.92	104.88	104.96	0.00	0.00	0.00	
3,200.00	2.61	92.14	3,197.53	-4.09	109.43	109.50	0.00	0.00	0.00	
3,300.00	2.61	92.14	3,297.42	-4.26	113.97	114.05	0.00	0.00	0.00	
3,400.00	2.61	92.14	3,397.32	-4.42	118.52	118.60	0.00	0.00	0.00	
3,500.00	2.61	92.14	3,497.22	-4.59	123.06	123.15	0.00	0.00	0.00	
3,600.00	2.61	92.14	3,597.11	-4.76	127.60	127.69	0.00	0.00	0.00	
3,700.00	2.61	92.14	3,697.01	-4.93	132.15	132.24	0.00	0.00	0.00	
3,800.00	2.61	92.14	3,796.91	-5.10	136.69	136.79	0.00	0.00	0.00	
3,900.00	2.61	92.14	3,896.80	-5.27	141.24	141.34	0.00	0.00	0.00	
4,000.00	2.61	92.14	3,996.70	-5.44	145.78	145.88	0.00	0.00	0.00	
4,100.00	2.61	92.14	4,096.60	-5.61	150.33	150.43	0.00	0.00	0.00	
4,200.00	2.61	92.14	4,196.49	-5.78	154.87	154.98	0.00	0.00	0.00	
4,300.00	2.61	92.14	4,296.39	-5.95	159.42	159.53	0.00	0.00	0.00	
4,400.00	2.61	92.14	4,396.29	-6.12	163.96	164.07	0.00	0.00	0.00	
4,500.00	2.61	92.14	4,496.18	-6.29	168.51	168.62	0.00	0.00	0.00	
4,600.00	2.61	92.14	4,596.08	-6.46	173.05	173.17	0.00	0.00	0.00	
4,695.31	2.61	92.14	4,691.29	-6.62	177.38	177.50	0.00	0.00	0.00	
4,700.00	2.54	92.14	4,695.97	-6.63	177.59	177.72	1.50	-1.50	0.00	
4,800.00	1.04	92.14	4,795.92	-6.75	180.71	180.83	1.50	-1.50	0.00	
4,869.08	0.00	0.00	4,865.00	-6.77	181.33	181.46	1.50	-1.50	0.00	

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Site:	Kaufman Pad #2 NENW-25-692	North Reference:	Grid
Well:	Kaufman 21A-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)	
4,900.00	0.00	0.00	4,895.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,995.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,095.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,195.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,295.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,395.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,495.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,595.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,695.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,795.92	-6.77	181.33	181.46	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,895.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,995.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,095.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,195.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,295.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,395.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,495.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,595.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,695.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,795.92	-6.77	181.33	181.46	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,895.92	-6.77	181.33	181.46	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,995.92	-6.77	181.33	181.46	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,095.92	-6.77	181.33	181.46	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,195.92	-6.77	181.33	181.46	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,295.92	-6.77	181.33	181.46	0.00	0.00	0.00	
7,369.08	0.00	0.00	7,365.00	-6.77	181.33	181.46	0.00	0.00	0.00	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,432.71	3,430.00	Mesaverde		0.00		
4,213.52	4,210.00	Price Coal		0.00		
4,904.08	4,900.00	Top Gas		0.00		
7,069.08	7,065.00	Rollins		0.00		
7,369.08	7,365.00	TD		0.00		

WELL DETAILS: Kaufman 21A-25-692

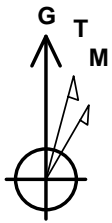
+N/-S	+E/-W	Northing	Ground Level:	5840.00		
0.00	0.00	1614834.637	Easting	2402297.302	Latitude	Longitude
					39° 30' 8.517 N	107° 37' 6.2076 W
						Slot

SECTION DETAILS

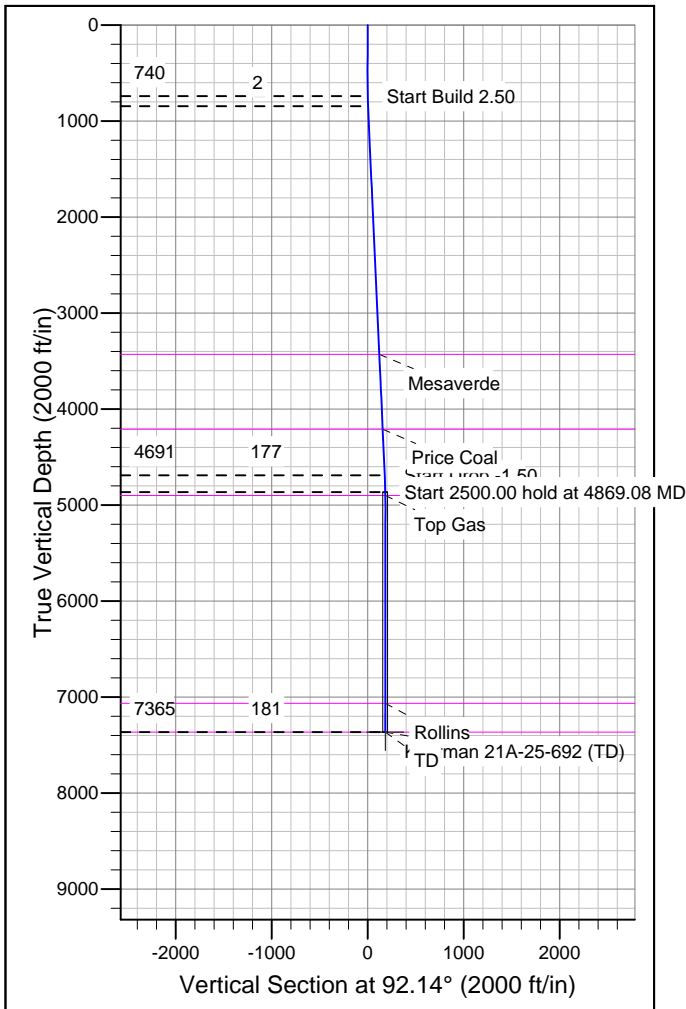
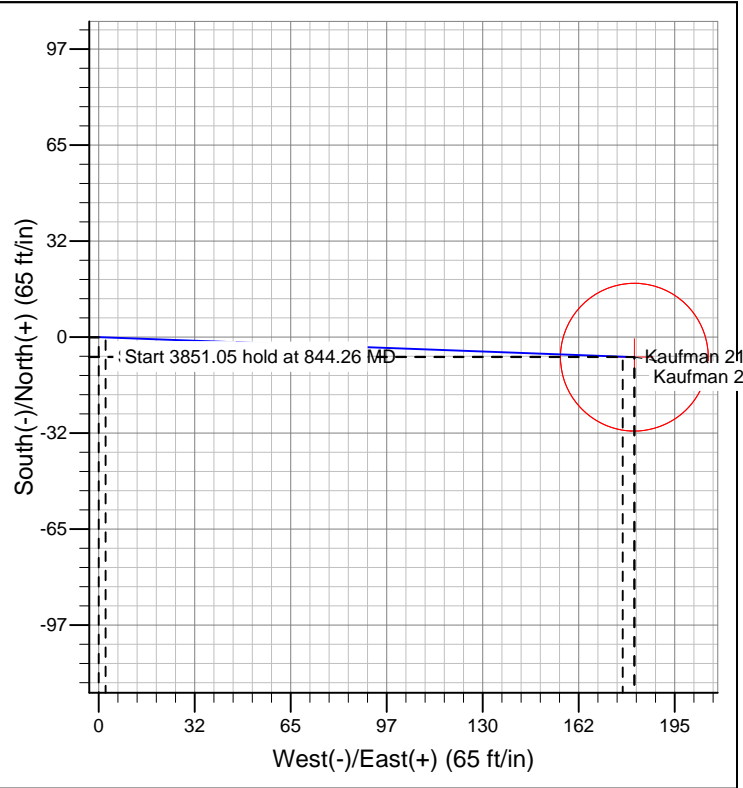
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	740.00	0.00	0.00	740.00	0.00	0.00	0.00	0.00	0.00	
3	844.26	2.61	92.14	844.23	-0.09	2.37	2.50	92.14	2.37	
4	4695.31	2.61	92.14	4691.29	-6.62	177.38	0.00	0.00	177.50	
5	4869.08	0.00	0.00	4865.00	-6.77	181.33	1.50	180.00	181.46	
6	7369.08	0.00	0.00	7365.00	-6.77	181.33	0.00	0.00	181.46	Kaufman 21A-25-692 (TD)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Kaufman 21A-25-692 (TD)	7365.00	-6.77	181.33	Circle (Radius: 25.00)



Azimuths to Grid North
 True North: 1.34°
 Magnetic North: 11.68°
 Magnetic Field
 Strength: 52478.6snT
 Dip Angle: 65.87°
 Date: 12/31/2009
 Model: IGRF200510



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3430.00	3432.71	Mesaverde
4210.00	4213.52	Price Coal
4900.00	4904.08	Top Gas
7065.00	7069.08	Rollins
7365.00	7369.08	TD

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Kaufman 21A-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