BILL BARRETT CORP
STATE OF COLORADO 1S-66-36 4956 CH
Adams County, CO

Geodetic System: US State Plane 1983
Zone: Colorado Northern Zone
WELL @ 5245.0usft (Original Well Elev)
Ground Level: 5225.0
Latitude: 39° 55' 0.903 N
Longitude: 104° 43' 56.852 W
Magnetic North is 8.49° East of True North (Magnetic Declination)

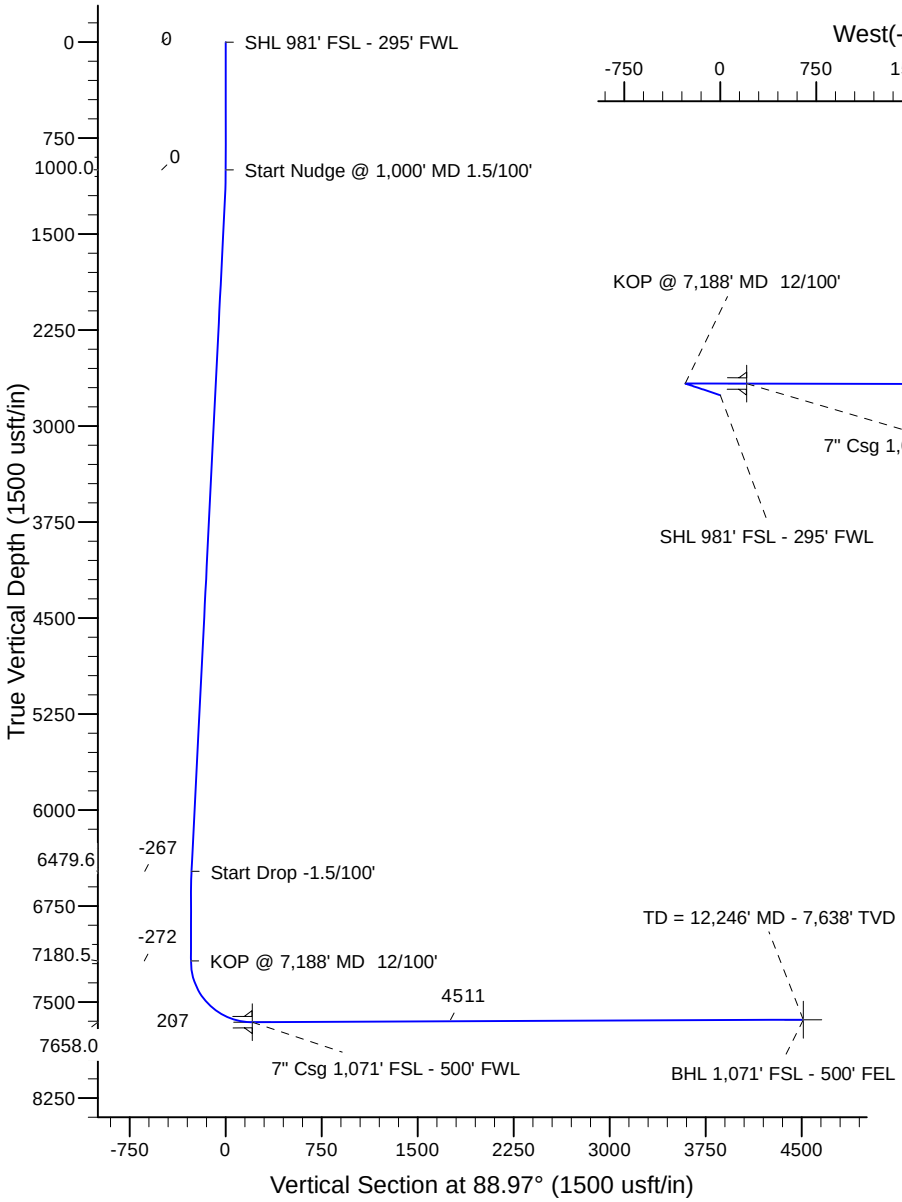
Azimuths to True North
Magnetic North: 8.49°

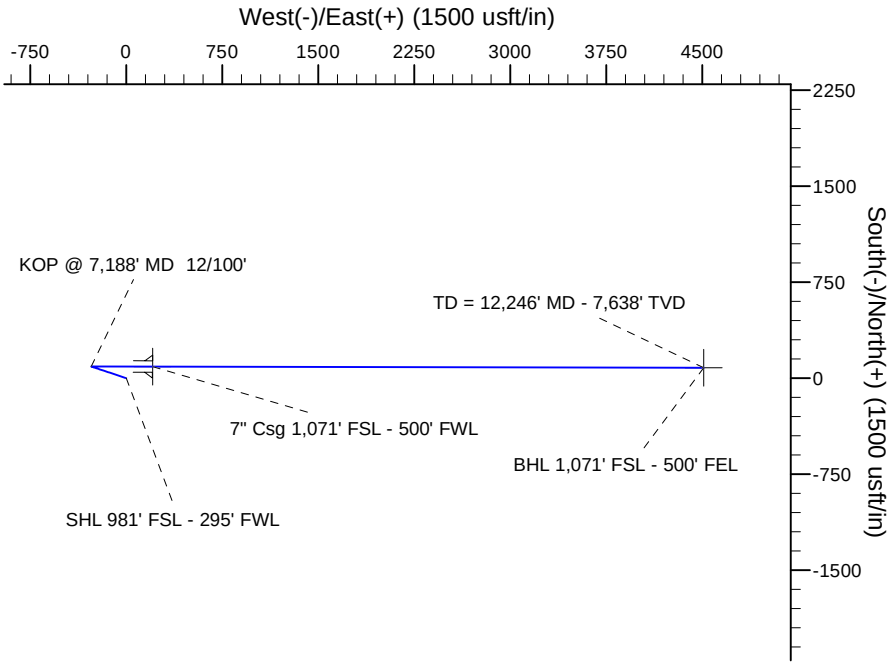
Magnetic Field
Strength: 52627.4snT
Dip Angle: 66.58°
Date: 10/28/2013
Model: IGRF2010

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0
1201.0	3.02	288.38	1200.9	1.7	-5.0	1.50	288.38	-5.0
6487.0	3.02	288.38	6479.6	89.3	-268.9	0.00	0.00	-267.2
6688.0	0.00	0.00	6680.5	91.0	-273.9	1.50	180.00	-272.2
7188.0	0.00	0.00	7180.5	91.0	-273.9	0.00	0.00	-272.2
7940.2	90.26	90.11	7658.0	90.0	205.8	12.00	90.11	207.4
12245.7	90.26	90.11	7638.0	81.5	4511.2	0.00	0.00	4511.9

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
845.0	845.0	Base Fox Hills
5001.0	5006.4	Shannon
7298.7	7307.5	Sharon Springs
7386.8	7401.4	Niobrara
7647.3	7837.0	Top C Target





Plan: Design #1 (STATE OF COLORADO 1S-66-36 4956 CH/Wellbore #

Created By:	Mike Kirby	Date:	12:39, October 28 2013
Checked:		Date:	
Reviewed:		Date:	
Approved:	x	Date:	x

Database:	Rocky Mountain R5000 Database	**Local Co-ordinate Reference:**	Well STATE OF COLORADO 1S-66-36 4956 CH
Company:	BILL BARRETT CORP	**TVD Reference:**	WELL @ 5245.0usft (Original Well Elev)
Project:	Adams County, CO	**MD Reference:**	WELL @ 5245.0usft (Original Well Elev)
Site:	State of Coloardo 36-1S-66W South Pad	**North Reference:**	True
Well:	STATE OF COLORADO 1S-66-36 4956 CH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Adams County, CO		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	State of Coloardo 36-1S-66W South Pad				
Site Position:		**Northing:**	1,213,513.90 usft	**Latitude:**	39° 55' 0.903 N
From:	Map	**Easting:**	3,215,288.70 usft	**Longitude:**	104° 43' 56.852 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.50 °

Well	STATE OF COLORADO 1S-66-36 4956 CH					
Well Position	**+N/-S**	45.0 usft	**Northing:**	1,213,558.90 usft	**Latitude:**	39° 55' 1.348 N
	+E/-W	0.1 usft	**Easting:**	3,215,288.40 usft	**Longitude:**	104° 43' 56.850 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	5,245.0 usft	**Ground Level:**	5,225.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	10/28/2013	8.49	66.58	52,627

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	88.97	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,201.0	3.02	288.38	1,200.9	1.7	-5.0	1.50	1.50	0.00	288.38	
6,487.0	3.02	288.38	6,479.6	89.3	-268.9	0.00	0.00	0.00	0.00	
6,688.0	0.00	0.00	6,680.5	91.0	-273.9	1.50	-1.50	0.00	180.00	
7,188.0	0.00	0.00	7,180.5	91.0	-273.9	0.00	0.00	0.00	0.00	
7,940.2	90.27	90.11	7,658.0	90.0	205.8	12.00	12.00	0.00	90.11	
12,245.7	90.27	90.11	7,638.0	81.5	4,511.2	0.00	0.00	0.00	0.00	SOC 1S-66-36 4956 (

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Site:	State of Coloardo 36-1S-66W South Pad	**North Reference:**	True
Well:	STATE OF COLORADO 1S-66-36 4956 CH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
2.0	0.00	0.00	2.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 981' FSL - 295' FWL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
845.0	0.00	0.00	845.0	0.0	0.0	0.0	0.00	0.00	0.00
Base Fox Hills									
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Nudge @ 1,000' MD 1.5/100'									
1,100.0	1.50	288.38	1,100.0	0.4	-1.2	-1.2	1.50	1.50	0.00
1,200.0	3.00	288.38	1,199.9	1.7	-5.0	-4.9	1.50	1.50	0.00
1,201.0	3.02	288.38	1,200.9	1.7	-5.0	-5.0	1.50	1.50	0.00
EOB Hold 3.02 Degrees									
1,300.0	3.02	288.38	1,299.8	3.3	-10.0	-9.9	0.00	0.00	0.00
1,400.0	3.02	288.38	1,399.6	5.0	-15.0	-14.9	0.00	0.00	0.00
1,500.0	3.02	288.38	1,499.5	6.6	-19.9	-19.8	0.00	0.00	0.00
1,600.0	3.02	288.38	1,599.4	8.3	-24.9	-24.8	0.00	0.00	0.00
1,700.0	3.02	288.38	1,699.2	9.9	-29.9	-29.7	0.00	0.00	0.00
1,800.0	3.02	288.38	1,799.1	11.6	-34.9	-34.7	0.00	0.00	0.00
1,900.0	3.02	288.38	1,898.9	13.3	-39.9	-39.7	0.00	0.00	0.00
2,000.0	3.02	288.38	1,998.8	14.9	-44.9	-44.6	0.00	0.00	0.00
2,100.0	3.02	288.38	2,098.7	16.6	-49.9	-49.6	0.00	0.00	0.00
2,200.0	3.02	288.38	2,198.5	18.2	-54.9	-54.5	0.00	0.00	0.00
2,300.0	3.02	288.38	2,298.4	19.9	-59.9	-59.5	0.00	0.00	0.00
2,400.0	3.02	288.38	2,398.2	21.6	-64.9	-64.5	0.00	0.00	0.00
2,500.0	3.02	288.38	2,498.1	23.2	-69.9	-69.4	0.00	0.00	0.00
2,600.0	3.02	288.38	2,598.0	24.9	-74.9	-74.4	0.00	0.00	0.00
2,700.0	3.02	288.38	2,697.8	26.5	-79.8	-79.4	0.00	0.00	0.00
2,800.0	3.02	288.38	2,797.7	28.2	-84.8	-84.3	0.00	0.00	0.00
2,900.0	3.02	288.38	2,897.6	29.8	-89.8	-89.3	0.00	0.00	0.00
3,000.0	3.02	288.38	2,997.4	31.5	-94.8	-94.2	0.00	0.00	0.00
3,100.0	3.02	288.38	3,097.3	33.2	-99.8	-99.2	0.00	0.00	0.00
3,200.0	3.02	288.38	3,197.1	34.8	-104.8	-104.2	0.00	0.00	0.00
3,300.0	3.02	288.38	3,297.0	36.5	-109.8	-109.1	0.00	0.00	0.00
3,400.0	3.02	288.38	3,396.9	38.1	-114.8	-114.1	0.00	0.00	0.00
3,500.0	3.02	288.38	3,496.7	39.8	-119.8	-119.0	0.00	0.00	0.00
3,600.0	3.02	288.38	3,596.6	41.5	-124.8	-124.0	0.00	0.00	0.00
3,700.0	3.02	288.38	3,696.4	43.1	-129.8	-129.0	0.00	0.00	0.00
3,800.0	3.02	288.38	3,796.3	44.8	-134.8	-133.9	0.00	0.00	0.00
3,900.0	3.02	288.38	3,896.2	46.4	-139.7	-138.9	0.00	0.00	0.00
4,000.0	3.02	288.38	3,996.0	48.1	-144.7	-143.8	0.00	0.00	0.00
4,100.0	3.02	288.38	4,095.9	49.7	-149.7	-148.8	0.00	0.00	0.00
4,200.0	3.02	288.38	4,195.8	51.4	-154.7	-153.8	0.00	0.00	0.00
4,300.0	3.02	288.38	4,295.6	53.1	-159.7	-158.7	0.00	0.00	0.00
4,400.0	3.02	288.38	4,395.5	54.7	-164.7	-163.7	0.00	0.00	0.00
4,500.0	3.02	288.38	4,495.3	56.4	-169.7	-168.7	0.00	0.00	0.00

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Well:	STATE OF COLORADO 1S-66-36 4956 CH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	3.02	288.38	4,595.2	58.0	-174.7	-173.6	0.00	0.00	0.00
4,700.0	3.02	288.38	4,695.1	59.7	-179.7	-178.6	0.00	0.00	0.00
4,800.0	3.02	288.38	4,794.9	61.4	-184.7	-183.5	0.00	0.00	0.00
4,900.0	3.02	288.38	4,894.8	63.0	-189.7	-188.5	0.00	0.00	0.00
5,000.0	3.02	288.38	4,994.6	64.7	-194.7	-193.5	0.00	0.00	0.00
5,006.4	3.02	288.38	5,001.0	64.8	-195.0	-193.8	0.00	0.00	0.00
Shannon									
5,100.0	3.02	288.38	5,094.5	66.3	-199.6	-198.4	0.00	0.00	0.00
5,200.0	3.02	288.38	5,194.4	68.0	-204.6	-203.4	0.00	0.00	0.00
5,300.0	3.02	288.38	5,294.2	69.6	-209.6	-208.3	0.00	0.00	0.00
5,400.0	3.02	288.38	5,394.1	71.3	-214.6	-213.3	0.00	0.00	0.00
5,500.0	3.02	288.38	5,494.0	73.0	-219.6	-218.3	0.00	0.00	0.00
5,600.0	3.02	288.38	5,593.8	74.6	-224.6	-223.2	0.00	0.00	0.00
5,700.0	3.02	288.38	5,693.7	76.3	-229.6	-228.2	0.00	0.00	0.00
5,800.0	3.02	288.38	5,793.5	77.9	-234.6	-233.1	0.00	0.00	0.00
5,900.0	3.02	288.38	5,893.4	79.6	-239.6	-238.1	0.00	0.00	0.00
6,000.0	3.02	288.38	5,993.3	81.3	-244.6	-243.1	0.00	0.00	0.00
6,100.0	3.02	288.38	6,093.1	82.9	-249.6	-248.0	0.00	0.00	0.00
6,200.0	3.02	288.38	6,193.0	84.6	-254.6	-253.0	0.00	0.00	0.00
6,300.0	3.02	288.38	6,292.8	86.2	-259.5	-257.9	0.00	0.00	0.00
6,400.0	3.02	288.38	6,392.7	87.9	-264.5	-262.9	0.00	0.00	0.00
6,487.0	3.02	288.38	6,479.6	89.3	-268.9	-267.2	0.00	0.00	0.00
Start Drop -1.5/100'									
6,500.0	2.82	288.38	6,492.6	89.5	-269.5	-267.8	1.50	-1.50	0.00
6,600.0	1.32	288.38	6,592.5	90.7	-272.9	-271.3	1.50	-1.50	0.00
6,688.0	0.00	0.00	6,680.5	91.0	-273.9	-272.2	1.50	-1.50	81.39
End Drop									
6,700.0	0.00	0.00	6,692.5	91.0	-273.9	-272.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,792.5	91.0	-273.9	-272.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,892.5	91.0	-273.9	-272.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,992.5	91.0	-273.9	-272.2	0.00	0.00	0.00
7,100.0	0.00	0.00	7,092.5	91.0	-273.9	-272.2	0.00	0.00	0.00
7,188.0	0.00	0.00	7,180.5	91.0	-273.9	-272.2	0.00	0.00	0.00
KOP @ 7,188' MD 12/100'									
7,200.0	1.44	90.11	7,192.5	91.0	-273.7	-272.1	12.00	12.00	0.00
7,300.0	13.44	90.11	7,291.5	91.0	-260.8	-259.1	12.00	12.00	0.00
7,307.5	14.33	90.11	7,298.7	91.0	-259.0	-257.4	12.00	12.00	0.00
Sharon Springs									
7,400.0	25.44	90.11	7,385.6	90.9	-227.6	-225.9	12.00	12.00	0.00
7,401.4	25.61	90.11	7,386.8	90.9	-227.0	-225.3	12.00	12.00	0.00
Niobrara									
7,500.0	37.44	90.11	7,470.8	90.8	-175.5	-173.9	12.00	12.00	0.00
7,600.0	49.44	90.11	7,543.2	90.7	-106.9	-105.3	12.00	12.00	0.00
7,700.0	61.44	90.11	7,599.9	90.5	-24.7	-23.1	12.00	12.00	0.00
7,800.0	73.44	90.11	7,638.2	90.3	67.5	69.1	12.00	12.00	0.00
7,837.0	77.88	90.11	7,647.3	90.2	103.3	105.0	12.00	12.00	0.00
Top C Target									
7,900.0	85.44	90.11	7,656.5	90.1	165.6	167.2	12.00	12.00	0.00
7,940.2	90.26	90.11	7,658.0	90.0	205.8	207.4	12.00	12.00	0.00
7" Csg 1,071' FSL - 500' FWL - 7"									
8,000.0	90.27	90.11	7,657.7	89.9	265.6	267.1	0.00	0.00	0.00
8,100.0	90.27	90.11	7,657.2	89.7	365.6	367.1	0.00	0.00	0.00

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Well:	STATE OF COLORADO 1S-66-36 4956 CH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,200.0	90.27	90.11	7,656.8	89.5	465.6	467.1	0.00	0.00	0.00
8,300.0	90.27	90.11	7,656.3	89.3	565.6	567.1	0.00	0.00	0.00
8,400.0	90.27	90.11	7,655.8	89.1	665.6	667.1	0.00	0.00	0.00
8,500.0	90.27	90.11	7,655.4	88.9	765.6	767.0	0.00	0.00	0.00
8,600.0	90.27	90.11	7,654.9	88.7	865.6	867.0	0.00	0.00	0.00
8,700.0	90.27	90.11	7,654.4	88.5	965.6	967.0	0.00	0.00	0.00
8,800.0	90.27	90.11	7,654.0	88.3	1,065.5	1,067.0	0.00	0.00	0.00
8,900.0	90.27	90.11	7,653.5	88.1	1,165.5	1,166.9	0.00	0.00	0.00
9,000.0	90.27	90.11	7,653.1	87.9	1,265.5	1,266.9	0.00	0.00	0.00
9,100.0	90.27	90.11	7,652.6	87.7	1,365.5	1,366.9	0.00	0.00	0.00
9,200.0	90.27	90.11	7,652.1	87.5	1,465.5	1,466.9	0.00	0.00	0.00
9,300.0	90.27	90.11	7,651.7	87.3	1,565.5	1,566.9	0.00	0.00	0.00
9,400.0	90.27	90.11	7,651.2	87.1	1,665.5	1,666.8	0.00	0.00	0.00
9,500.0	90.27	90.11	7,650.7	86.9	1,765.5	1,766.8	0.00	0.00	0.00
9,600.0	90.27	90.11	7,650.3	86.7	1,865.5	1,866.8	0.00	0.00	0.00
9,700.0	90.27	90.11	7,649.8	86.5	1,965.5	1,966.8	0.00	0.00	0.00
9,800.0	90.27	90.11	7,649.4	86.3	2,065.5	2,066.8	0.00	0.00	0.00
9,900.0	90.27	90.11	7,648.9	86.1	2,165.5	2,166.7	0.00	0.00	0.00
10,000.0	90.27	90.11	7,648.4	85.9	2,265.5	2,266.7	0.00	0.00	0.00
10,100.0	90.27	90.11	7,648.0	85.7	2,365.5	2,366.7	0.00	0.00	0.00
10,200.0	90.27	90.11	7,647.5	85.5	2,465.5	2,466.7	0.00	0.00	0.00
10,300.0	90.27	90.11	7,647.0	85.4	2,565.5	2,566.7	0.00	0.00	0.00
10,400.0	90.27	90.11	7,646.6	85.2	2,665.5	2,666.6	0.00	0.00	0.00
10,500.0	90.27	90.11	7,646.1	85.0	2,765.5	2,766.6	0.00	0.00	0.00
10,600.0	90.27	90.11	7,645.7	84.8	2,865.5	2,866.6	0.00	0.00	0.00
10,700.0	90.27	90.11	7,645.2	84.6	2,965.5	2,966.6	0.00	0.00	0.00
10,800.0	90.27	90.11	7,644.7	84.4	3,065.5	3,066.5	0.00	0.00	0.00
10,900.0	90.27	90.11	7,644.3	84.2	3,165.5	3,166.5	0.00	0.00	0.00
11,000.0	90.27	90.11	7,643.8	84.0	3,265.5	3,266.5	0.00	0.00	0.00
11,100.0	90.27	90.11	7,643.3	83.8	3,365.5	3,366.5	0.00	0.00	0.00
11,200.0	90.27	90.11	7,642.9	83.6	3,465.5	3,466.5	0.00	0.00	0.00
11,300.0	90.27	90.11	7,642.4	83.4	3,565.5	3,566.4	0.00	0.00	0.00
11,400.0	90.27	90.11	7,642.0	83.2	3,665.5	3,666.4	0.00	0.00	0.00
11,500.0	90.27	90.11	7,641.5	83.0	3,765.5	3,766.4	0.00	0.00	0.00
11,600.0	90.27	90.11	7,641.0	82.8	3,865.5	3,866.4	0.00	0.00	0.00
11,700.0	90.27	90.11	7,640.6	82.6	3,965.5	3,966.4	0.00	0.00	0.00
11,800.0	90.27	90.11	7,640.1	82.4	4,065.5	4,066.3	0.00	0.00	0.00
11,900.0	90.27	90.11	7,639.6	82.2	4,165.5	4,166.3	0.00	0.00	0.00
12,000.0	90.27	90.11	7,639.2	82.0	4,265.5	4,266.3	0.00	0.00	0.00
12,100.0	90.27	90.11	7,638.7	81.8	4,365.5	4,366.3	0.00	0.00	0.00
12,200.0	90.27	90.11	7,638.3	81.6	4,465.5	4,466.3	0.00	0.00	0.00
12,245.0	90.27	90.11	7,638.0	81.5	4,510.5	4,511.2	0.00	0.00	0.00
TD = 12,246' MD - 7,638' TVD - BHL 1,071' FSL - 500' FEL									
12,245.7	90.27	90.11	7,638.0	81.5	4,511.2	4,511.9	0.00	0.00	0.00

Database:	Rocky Mountain R5000 Database	**Local Co-ordinate Reference:**	Well STATE OF COLORADO 1S-66-36 4956 CH
Company:	BILL BARRETT CORP	**TVD Reference:**	WELL @ 5245.0usft (Original Well Elev)
Project:	Adams County, CO	**MD Reference:**	WELL @ 5245.0usft (Original Well Elev)
Site:	State of Coloardo 36-1S-66W South Pad	**North Reference:**	True
Well:	STATE OF COLORADO 1S-66-36 4956 CH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SOC 1S-66-36 4956 CH - plan misses target center by 0.1usft at 12245.7usft MD (7638.0 TVD, 81.5 N, 4511.2 E) - Point	0.00	0.00	7,638.0	81.5	4,511.2	1,213,679.40	3,219,798.70	39° 55' 2.149 N	104° 42' 58.952 W
SOC 1S-66-36 4956 CH - plan misses target center by 0.1usft at 7940.2usft MD (7658.0 TVD, 90.0 N, 205.8 E) - Point	0.00	0.00	7,658.0	90.0	205.8	1,213,650.67	3,215,493.40	39° 55' 2.237 N	104° 43' 54.209 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,940.2	7,658.0	7"	7	8-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
845.0	845.0	Base Fox Hills		-0.27	288.38
5,006.4	5,001.0	Shannon		-0.27	288.38
7,307.5	7,298.7	Sharon Springs		-0.27	288.38
7,401.4	7,386.8	Niobrara		-0.27	288.38
7,837.0	7,647.3	Top C Target		-0.27	288.38

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2.0	2.0	0.0	0.0	SHL 981' FSL - 295' FWL
1,000.0	1,000.0	0.0	0.0	Start Nudge @ 1,000' MD 1.5/100'
1,201.0	1,200.9	1.7	-5.0	EOB Hold 3.02 Degrees
6,487.0	6,479.6	89.3	-268.9	Start Drop -1.5/100'
6,688.0	6,680.5	91.0	-273.9	End Drop
7,188.0	7,180.5	91.0	-273.9	KOP @ 7,188' MD 12/100'
7,940.2	7,658.0	90.0	205.8	7" Csg 1,071' FSL - 500' FWL
12,245.0	7,638.0	81.5	4,510.5	TD = 12,246' MD - 7,638' TVD
12,245.0	7,638.0	81.5	4,510.5	BHL 1,071' FSL - 500' FEL