

BILL BARRETT CORPORATION

**ADAMS COUNTY, COLORADO (NAD 83)
SW NW SEC. 36 T1S R66W 6th P.M.
STATE OF COLORADO 1S-66-36-0108CH
JOB # 2009267**

06 March, 2014

Survey: FINAL SURVEYS





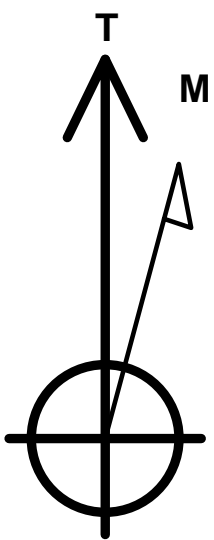
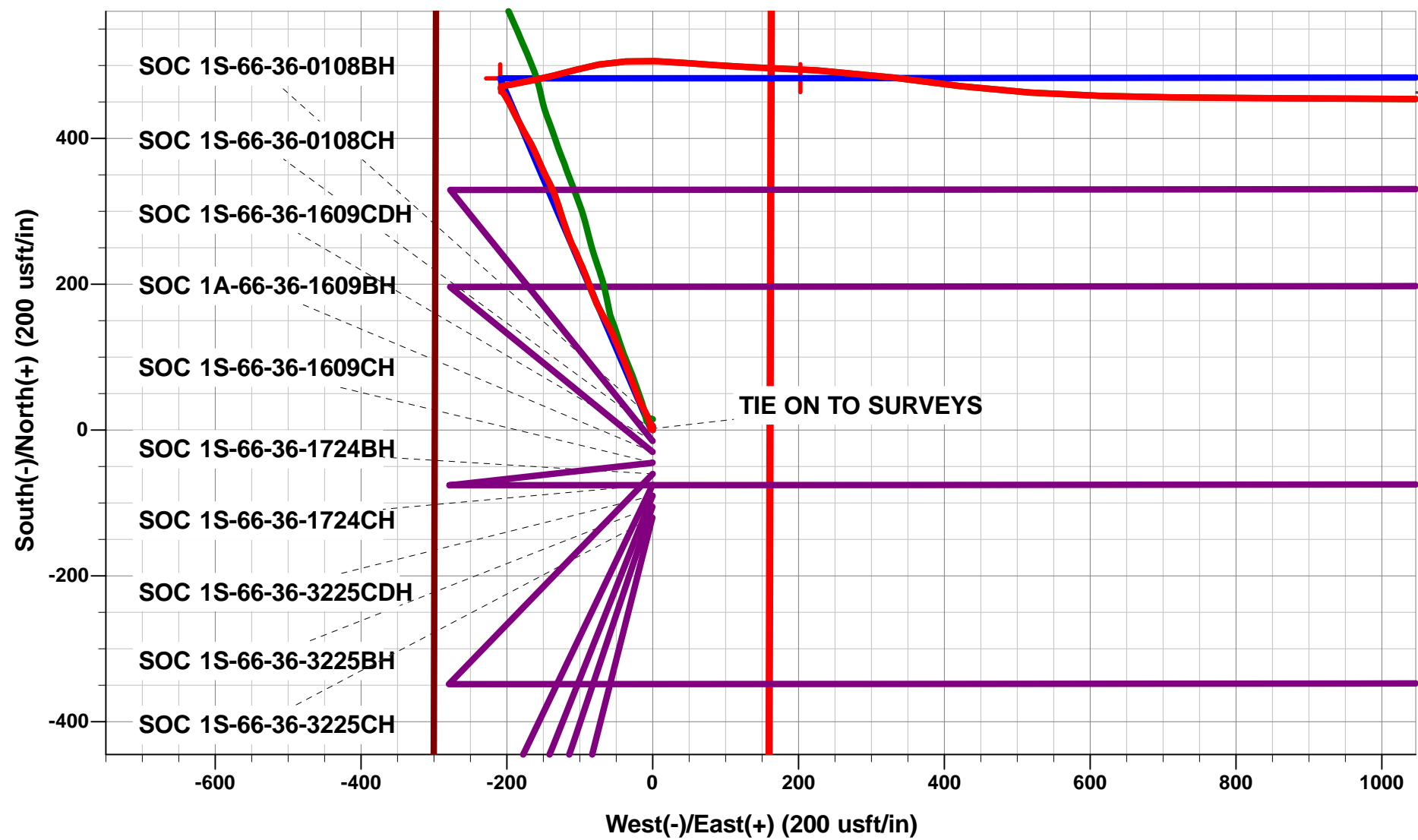
Project: ADAMS COUNTY, COLORADO (NAD 83)
Site: SW NW SEC. 36 T1S R66W 6th P.M.
Well: STATE OF COLORADO 1S-66-36-0108CH
Wellbore: JOB # 2009267
Design: FINAL SURVEYS

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
1399.9	1400.0	0.59	223.71	1.7	-2.0	-1.8	14.1	TIE ON TO SURVEYS
7585.6	12080.0	91.30	91.90	464.1	4440.9	4465.1	5186.3	LAST SURVEY - MAR 6, 2014
7584.4	12135.0	91.30	91.90	462.3	4495.9	4519.5	5241.3	EXTRAPOLATION TO TD

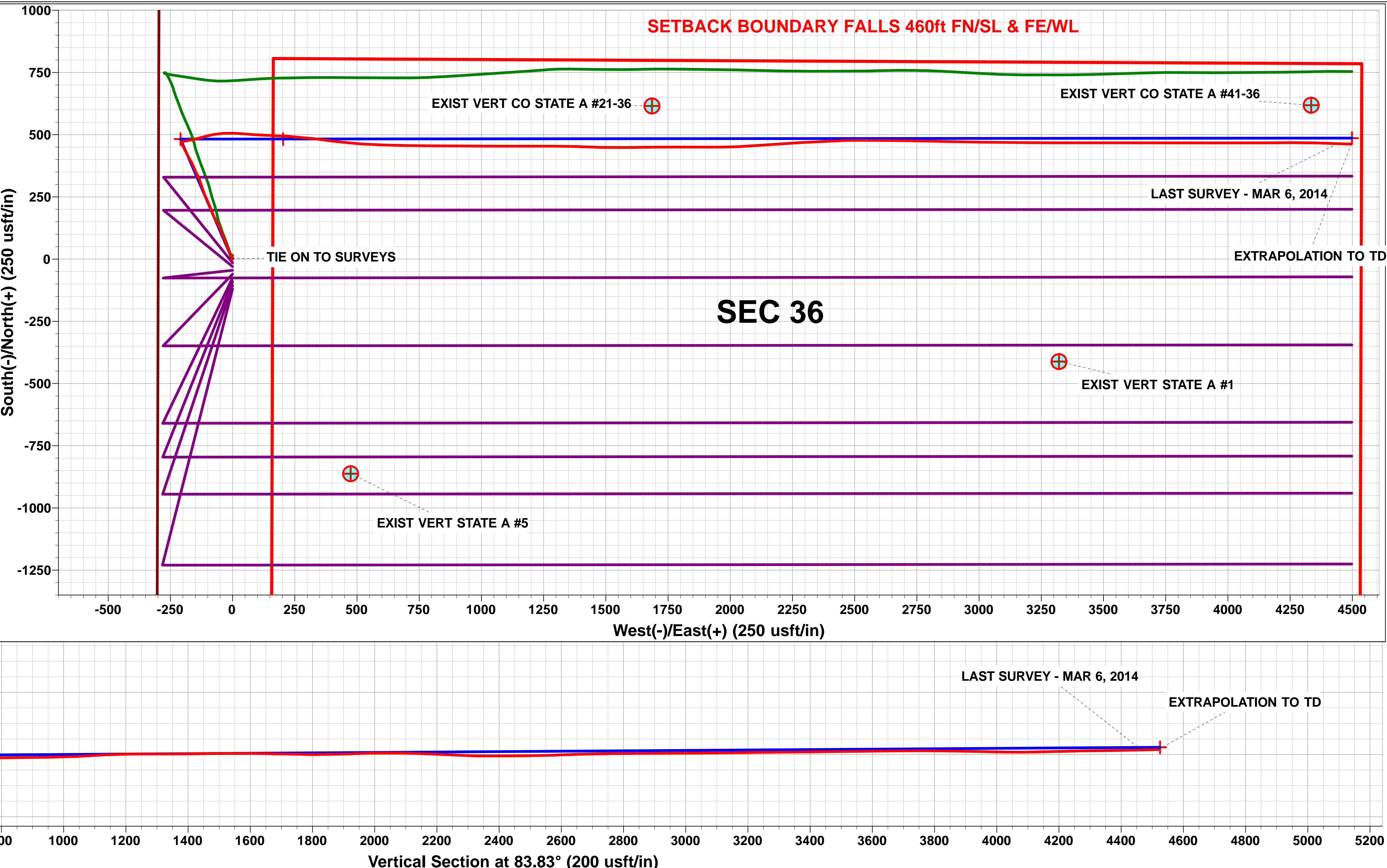
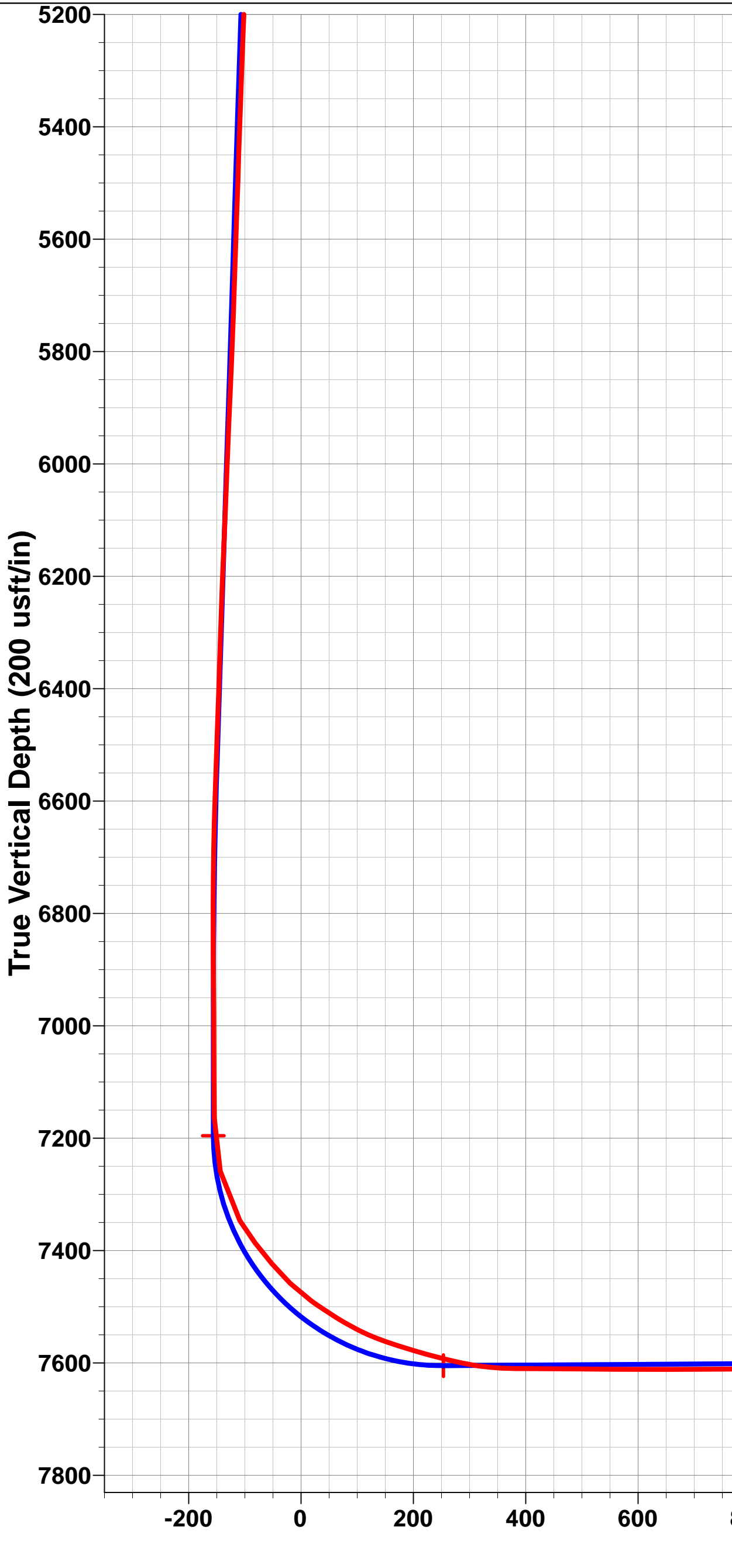
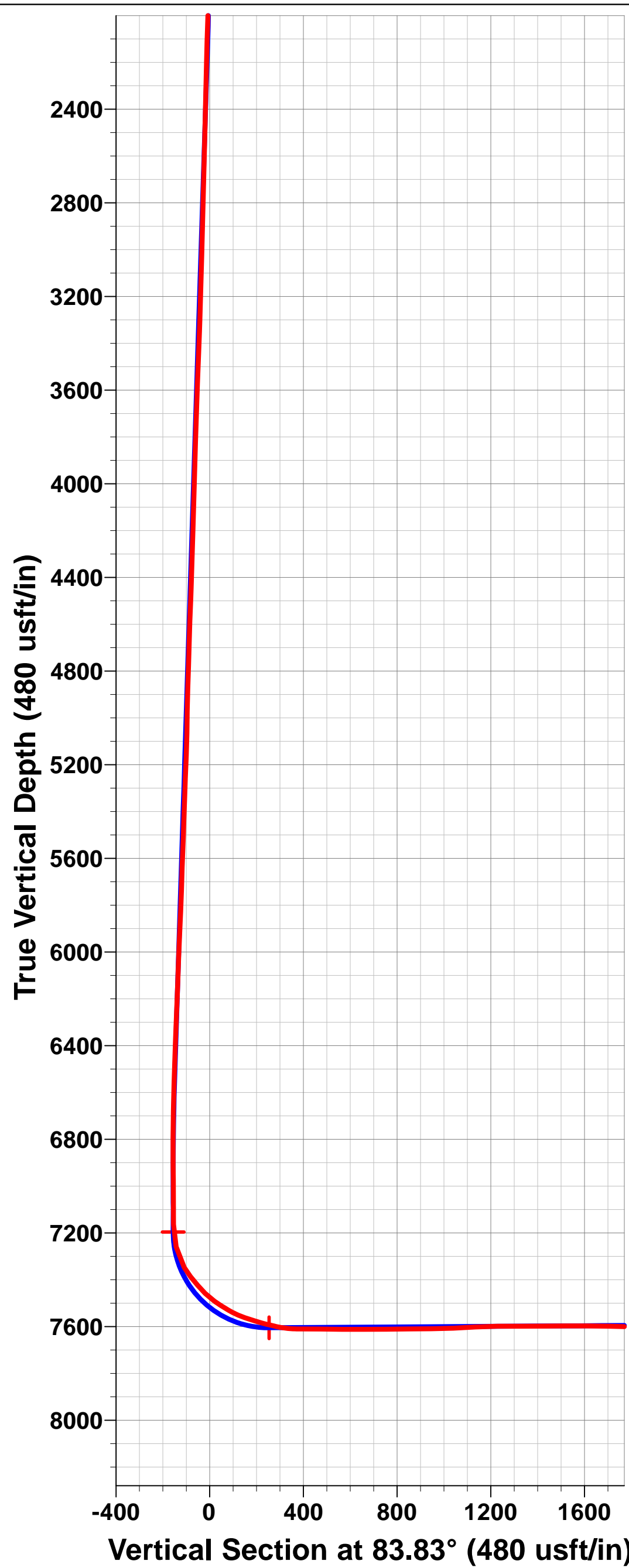
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
BHL - SOC 1S-66-36-0108CH (P3)	7577.0	486.4	4498.9	39° 55' 36.098 N	104° 42' 58.939 W	Point
BTV - SOC 1S-66-36-0108CH (P3)	7195.8	482.3	-209.1	39° 55' 36.062 N	104° 43' 59.371 W	Point
ICP - SOC 1S-66-36-0108CH (P3)	7605.0	482.7	202.8	39° 55' 36.066 N	104° 43' 54.084 W	Point



Azimuths to True North
Magnetic North: 8.45°

Magnetic Field
Strength: 52606.8snT
Dip Angle: 66.58°
Date: 24/01/2014
Model: IGRF2010



Survey Report



Company:	BILL BARRETT CORPORATION	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36-0108CH
Project:	ADAMS COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Site:	SW NW SEC. 36 T1S R66W 6th P.M.	MD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Well:	STATE OF COLORADO 1S-66-36-0108CH	North Reference:	True
Wellbore:	JOB # 2009267	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Project	ADAMS COUNTY, COLORADO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	SW NW SEC. 36 T1S R66W 6th P.M.				
Site Position:		Northing:	1,216,544.45 usft	Latitude:	39° 55' 30.853 N
From:	Lat/Long	Easting:	3,215,275.31 usft	Longitude:	104° 43' 56.687 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.50 °

Well	STATE OF COLORADO 1S-66-36-0108CH					
Well Position	+N/-S	0.0 usft	Northing:	1,216,589.24 usft	Latitude:	39° 55' 31.296 N
	+E/-W	0.0 usft	Easting:	3,215,274.92 usft	Longitude:	104° 43' 56.687 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	5,180.0 usft

Wellbore	JOB # 2009267				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	24/01/2014	8.46	66.58	52,607

Design	FINAL SURVEYS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	83.83	

Survey Program	Date	06/03/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	12,135.0	FINAL SURVEYS (JOB # 2009267)	MWD	MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea 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	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.67	315.96	100.0	5,100.0	0.4	-0.4	-0.4	0.67	0.67	0.00
200.0	0.68	335.39	200.0	5,000.0	1.4	-1.1	-0.9	0.23	0.01	19.43
300.0	0.52	336.08	300.0	4,900.0	2.3	-1.5	-1.2	0.16	-0.16	0.69
400.0	0.40	352.65	400.0	4,800.0	3.1	-1.7	-1.4	0.18	-0.12	16.57
500.0	0.80	358.76	500.0	4,700.0	4.1	-1.8	-1.3	0.40	0.40	6.11
600.0	0.63	23.13	600.0	4,600.0	5.3	-1.6	-1.0	0.34	-0.17	24.37
700.0	0.44	7.14	700.0	4,500.0	6.2	-1.3	-0.6	0.24	-0.19	-15.99
800.0	0.22	42.60	800.0	4,400.0	6.8	-1.1	-0.4	0.29	-0.22	35.46
900.0	0.88	139.86	900.0	4,300.0	6.3	-0.5	0.2	0.93	0.66	97.26
1,000.0	0.70	168.34	999.9	4,200.1	5.1	0.1	0.7	0.43	-0.18	28.48
1,100.0	0.63	195.75	1,099.9	4,100.1	4.0	0.1	0.5	0.32	-0.07	27.41
1,200.0	0.57	218.95	1,199.9	4,000.1	3.1	-0.4	0.0	0.25	-0.06	23.20

Survey Report



Company:	BILL BARRETT CORPORATION	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36-0108CH
Project:	ADAMS COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Site:	SW NW SEC. 36 T1S R66W 6th P.M.	MD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Well:	STATE OF COLORADO 1S-66-36-0108CH	North Reference:	True
Wellbore:	JOB # 2009267	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,300.0	0.63	237.70	1,299.9	3,900.1	2.4	-1.2	-0.9	0.20	0.06	18.75
1,397.0	0.59	223.71	1,396.9	3,803.1	1.8	-2.0	-1.8	0.16	-0.04	-14.42
TIE ON TO SURVEYS										
1,400.0	0.59	223.71	1,399.9	3,800.1	1.7	-2.0	-1.8	0.00	0.00	0.00
1,635.0	1.10	353.10	1,634.9	3,565.1	3.1	-3.1	-2.7	0.66	0.22	55.06
1,729.0	2.50	355.30	1,728.9	3,471.1	6.0	-3.4	-2.7	1.49	1.49	2.34
1,824.0	4.20	344.00	1,823.7	3,376.3	11.4	-4.5	-3.2	1.91	1.79	-11.89
1,919.0	5.10	335.80	1,918.4	3,281.6	18.6	-7.2	-5.1	1.18	0.95	-8.63
2,016.0	5.10	333.10	2,015.0	3,185.0	26.4	-10.9	-8.0	0.25	0.00	-2.78
2,112.0	5.40	329.80	2,110.6	3,089.4	34.1	-15.1	-11.3	0.44	0.31	-3.44
2,207.0	5.00	341.30	2,205.2	2,994.8	41.9	-18.7	-14.1	1.17	-0.42	12.11
2,302.0	5.10	339.70	2,299.8	2,900.2	49.8	-21.5	-16.0	0.18	0.11	-1.68
2,399.0	5.50	338.80	2,396.4	2,803.6	58.2	-24.6	-18.2	0.42	0.41	-0.93
2,495.0	5.40	337.90	2,492.0	2,708.0	66.6	-28.0	-20.7	0.14	-0.10	-0.94
2,591.0	5.20	337.70	2,587.6	2,612.4	74.9	-31.4	-23.1	0.21	-0.21	-0.21
2,687.0	5.20	338.60	2,683.2	2,516.8	82.9	-34.6	-25.5	0.08	0.00	0.94
2,782.0	4.80	338.90	2,777.8	2,422.2	90.6	-37.6	-27.6	0.42	-0.42	0.32
2,878.0	5.80	337.20	2,873.4	2,326.6	98.9	-40.9	-30.1	1.05	1.04	-1.77
2,973.0	5.50	337.10	2,968.0	2,232.0	107.5	-44.6	-32.7	0.32	-0.32	-0.11
3,069.0	5.30	337.00	3,063.5	2,136.5	115.8	-48.1	-35.4	0.21	-0.21	-0.10
3,164.0	5.40	335.90	3,158.1	2,041.9	123.9	-51.6	-38.0	0.15	0.11	-1.16
3,260.0	5.20	337.80	3,253.7	1,946.3	132.1	-55.1	-40.6	0.28	-0.21	1.98
3,356.0	6.40	332.30	3,349.2	1,850.8	140.8	-59.2	-43.8	1.38	1.25	-5.73
3,451.0	5.80	330.10	3,443.7	1,756.3	149.7	-64.1	-47.6	0.68	-0.63	-2.32
3,547.0	5.40	332.40	3,539.2	1,660.8	157.9	-68.6	-51.2	0.48	-0.42	2.40
3,643.0	4.90	330.90	3,634.8	1,565.2	165.5	-72.7	-54.5	0.54	-0.52	-1.56
3,738.0	6.20	334.50	3,729.4	1,470.6	173.7	-76.9	-57.8	1.42	1.37	3.79
3,834.0	7.30	340.20	3,824.7	1,375.3	184.1	-81.2	-60.9	1.34	1.15	5.94
3,931.0	6.80	340.00	3,921.0	1,279.0	195.3	-85.2	-63.7	0.52	-0.52	-0.21
4,027.0	6.10	338.30	4,016.4	1,183.6	205.4	-89.0	-66.5	0.76	-0.73	-1.77
4,124.0	5.30	336.90	4,112.9	1,087.1	214.3	-92.7	-69.1	0.84	-0.82	-1.44
4,220.0	6.20	338.00	4,208.4	991.6	223.1	-96.4	-71.9	0.94	0.94	1.15
4,315.0	5.70	335.60	4,302.9	897.1	232.2	-100.3	-74.7	0.59	-0.53	-2.53
4,411.0	5.80	337.30	4,398.4	801.6	241.0	-104.1	-77.6	0.21	0.10	1.77
4,506.0	7.30	332.40	4,492.8	707.2	250.8	-108.8	-81.2	1.68	1.58	-5.16
4,603.0	8.20	340.30	4,588.9	611.1	262.8	-113.9	-85.0	1.44	0.93	8.14
4,698.0	7.60	341.30	4,683.0	517.0	275.1	-118.2	-88.0	0.65	-0.63	1.05
4,796.0	7.40	341.30	4,780.2	419.8	287.2	-122.3	-90.8	0.20	-0.20	0.00
4,892.0	7.00	340.00	4,875.4	324.6	298.6	-126.3	-93.5	0.45	-0.42	-1.35
4,987.0	6.20	343.70	4,969.8	230.2	308.9	-129.7	-95.8	0.95	-0.84	3.89
5,084.0	5.90	343.70	5,066.2	133.8	318.7	-132.6	-97.6	0.31	-0.31	0.00
5,180.0	6.40	333.00	5,161.7	38.3	328.2	-136.4	-100.4	1.30	0.52	-11.15
5,276.0	6.20	333.60	5,257.1	-57.1	337.7	-141.2	-104.1	0.22	-0.21	0.62
5,371.0	6.10	333.50	5,351.6	-151.6	346.8	-145.7	-107.6	0.11	-0.11	-0.11
5,467.0	5.70	336.00	5,447.1	-247.1	355.7	-149.9	-110.8	0.50	-0.42	2.60
5,565.0	6.90	336.20	5,544.5	-344.5	365.5	-154.3	-114.1	1.22	1.22	0.20
5,659.0	6.20	335.90	5,637.8	-437.8	375.3	-158.6	-117.4	0.75	-0.74	-0.32
5,756.0	5.70	335.90	5,734.3	-534.3	384.5	-162.7	-120.5	0.52	-0.52	0.00
5,851.0	6.70	330.40	5,828.8	-628.8	393.6	-167.4	-124.1	1.22	1.05	-5.79
5,948.0	6.30	330.00	5,925.1	-725.1	403.2	-172.8	-128.5	0.42	-0.41	-0.41
6,044.0	5.40	331.40	6,020.6	-820.6	411.7	-177.6	-132.4	0.95	-0.94	1.46
6,140.0	6.80	333.00	6,116.1	-916.1	420.7	-182.4	-136.1	1.47	1.46	1.67
6,236.0	6.00	331.10	6,211.5	-1,011.5	430.2	-187.4	-140.1	0.86	-0.83	-1.98

Survey Report



Company:	BILL BARRETT CORPORATION	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36-0108CH
Project:	ADAMS COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Site:	SW NW SEC. 36 T1S R66W 6th P.M.	MD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Well:	STATE OF COLORADO 1S-66-36-0108CH	North Reference:	True
Wellbore:	JOB # 2009267	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,332.0	5.10	333.00	6,307.0	-1,107.0	438.4	-191.7	-143.5	0.96	-0.94	1.98
6,428.0	5.60	335.10	6,402.6	-1,202.6	446.4	-195.7	-146.5	0.56	0.52	2.19
6,523.0	4.80	330.10	6,497.2	-1,297.2	454.1	-199.6	-149.6	0.97	-0.84	-5.26
6,618.0	4.20	324.60	6,591.9	-1,391.9	460.3	-203.6	-152.9	0.78	-0.63	-5.79
6,714.0	2.70	333.10	6,687.8	-1,487.8	465.2	-206.6	-155.4	1.65	-1.56	8.85
6,810.0	1.60	344.40	6,783.7	-1,583.7	468.5	-208.0	-156.5	1.22	-1.15	11.77
6,904.0	0.80	38.90	6,877.7	-1,677.7	470.3	-208.0	-156.2	1.39	-0.85	57.98
6,999.0	0.50	28.10	6,972.7	-1,772.7	471.2	-207.4	-155.5	0.34	-0.32	-11.37
7,094.0	0.40	43.30	7,067.7	-1,867.7	471.8	-206.9	-155.0	0.16	-0.11	16.00
7,133.0	0.30	52.50	7,106.7	-1,906.7	472.0	-206.8	-154.8	0.29	-0.26	23.59
7,190.0	0.40	118.30	7,163.7	-1,963.7	472.0	-206.5	-154.5	0.68	0.18	115.44
7,286.0	12.80	81.20	7,258.9	-2,058.9	473.4	-195.6	-143.6	13.00	12.92	-38.65
7,381.0	30.40	77.70	7,346.8	-2,146.8	480.2	-161.5	-108.9	18.57	18.53	-3.68
7,429.0	38.70	76.40	7,386.3	-2,186.3	486.3	-135.0	-81.9	17.36	17.29	-2.71
7,477.0	40.00	73.70	7,423.5	-2,223.5	494.2	-105.6	-51.8	4.48	2.71	-5.62
7,525.0	46.20	80.90	7,458.5	-2,258.5	501.3	-73.6	-19.3	16.47	12.92	15.00
7,573.0	54.40	85.60	7,489.2	-2,289.2	505.5	-37.0	17.6	18.66	17.08	9.79
7,621.0	57.90	92.50	7,515.9	-2,315.9	506.1	2.8	57.2	13.98	7.29	14.37
7,669.0	62.70	94.90	7,539.7	-2,339.7	503.4	44.4	98.3	10.90	10.00	5.00
7,717.0	70.20	93.50	7,558.9	-2,358.9	500.2	88.3	141.5	15.85	15.62	-2.92
7,765.0	73.10	92.70	7,574.0	-2,374.0	497.8	133.8	186.5	6.25	6.04	-1.67
7,860.0	77.30	92.80	7,598.2	-2,398.2	493.4	225.5	277.2	4.42	4.42	0.11
7,964.0	89.60	97.80	7,610.1	-2,410.1	483.8	328.1	378.2	12.75	11.83	4.81
8,059.0	89.70	96.70	7,610.7	-2,410.7	471.8	422.4	470.6	1.16	0.11	-1.16
8,155.0	89.40	94.00	7,611.4	-2,411.4	462.8	517.9	564.7	2.83	-0.31	-2.81
8,251.0	90.30	91.30	7,611.7	-2,411.7	458.4	613.8	659.5	2.96	0.94	-2.81
8,347.0	90.30	91.10	7,611.2	-2,411.2	456.4	709.8	754.7	0.21	0.00	-0.21
8,443.0	90.90	90.00	7,610.2	-2,410.2	455.5	805.8	850.1	1.31	0.62	-1.15
8,538.0	90.30	90.60	7,609.2	-2,409.2	455.0	900.8	944.5	0.89	-0.63	0.63
8,634.0	92.80	90.20	7,606.6	-2,406.6	454.3	996.7	1,039.8	2.64	2.60	-0.42
8,729.0	93.70	90.10	7,601.2	-2,401.2	454.1	1,091.6	1,134.1	0.95	0.95	-0.11
8,825.0	89.70	89.80	7,598.3	-2,398.3	454.1	1,187.5	1,229.5	4.18	-4.17	-0.31
8,921.0	90.20	90.20	7,598.4	-2,398.4	454.1	1,283.5	1,324.9	0.67	0.52	0.42
9,017.0	90.40	91.60	7,597.9	-2,397.9	452.6	1,379.5	1,420.2	1.47	0.21	1.46
9,114.0	90.80	92.10	7,596.9	-2,396.9	449.5	1,476.5	1,516.2	0.66	0.41	0.52
9,209.0	89.30	89.00	7,596.8	-2,396.8	448.6	1,571.4	1,610.5	3.63	-1.58	-3.26
9,304.0	88.70	89.60	7,598.5	-2,398.5	449.7	1,666.4	1,705.1	0.89	-0.63	0.63
9,400.0	89.00	89.70	7,600.4	-2,400.4	450.3	1,762.4	1,800.6	0.33	0.31	0.10
9,494.0	92.60	90.50	7,599.1	-2,399.1	450.2	1,856.4	1,894.0	3.92	3.83	0.85
9,590.0	91.40	89.60	7,595.7	-2,395.7	450.1	1,952.3	1,989.4	1.56	-1.25	-0.94
9,686.0	88.80	86.70	7,595.6	-2,395.6	453.2	2,048.2	2,085.1	4.06	-2.71	-3.02
9,782.0	87.60	86.20	7,598.6	-2,398.6	459.1	2,144.0	2,180.9	1.35	-1.25	-0.52
9,879.0	87.20	86.10	7,603.0	-2,403.0	465.6	2,240.7	2,277.7	0.43	-0.41	-0.10
9,975.0	90.50	87.50	7,604.9	-2,404.9	471.0	2,336.5	2,373.6	3.73	3.44	1.46
10,070.0	90.20	86.90	7,604.3	-2,404.3	475.6	2,431.4	2,468.4	0.71	-0.32	-0.63
10,167.0	91.50	90.60	7,602.9	-2,402.9	477.7	2,528.3	2,565.0	4.04	1.34	3.81
10,263.0	92.30	90.40	7,599.7	-2,399.7	476.9	2,624.3	2,660.3	0.86	0.83	-0.21
10,358.0	90.50	90.90	7,597.4	-2,397.4	475.8	2,719.2	2,754.6	1.97	-1.89	0.53
10,455.0	90.20	91.30	7,596.8	-2,396.8	474.0	2,816.2	2,850.8	0.52	-0.31	0.41
10,551.0	90.40	91.20	7,596.3	-2,396.3	471.9	2,912.2	2,946.0	0.23	0.21	-0.10
10,647.0	90.50	90.80	7,595.5	-2,395.5	470.2	3,008.2	3,041.3	0.43	0.10	-0.42
10,743.0	90.60	90.60	7,594.6	-2,394.6	469.0	3,104.2	3,136.6	0.23	0.10	-0.21
10,839.0	90.70	90.40	7,593.5	-2,393.5	468.2	3,200.1	3,231.9	0.23	0.10	-0.21

Survey Report



Company:	BILL BARRETT CORPORATION	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36-0108CH
Project:	ADAMS COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Site:	SW NW SEC. 36 T1S R66W 6th P.M.	MD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Well:	STATE OF COLORADO 1S-66-36-0108CH	North Reference:	True
Wellbore:	JOB # 2009267	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,934.0	90.60	90.30	7,592.4	-2,392.4	467.6	3,295.1	3,326.3	0.15	-0.11	-0.11
11,030.0	90.60	89.80	7,591.4	-2,391.4	467.5	3,391.1	3,421.7	0.52	0.00	-0.52
11,125.0	90.70	90.10	7,590.4	-2,390.4	467.6	3,486.1	3,516.2	0.33	0.11	0.32
11,220.0	90.70	90.20	7,589.2	-2,389.2	467.4	3,581.1	3,610.6	0.11	0.00	0.11
11,317.0	90.40	89.90	7,588.3	-2,388.3	467.3	3,678.1	3,707.0	0.44	-0.31	-0.31
11,412.0	89.40	90.10	7,588.4	-2,388.4	467.3	3,773.1	3,801.5	1.07	-1.05	0.21
11,509.0	89.20	90.20	7,589.6	-2,389.6	467.0	3,870.1	3,897.9	0.23	-0.21	0.10
11,606.0	88.40	89.80	7,591.7	-2,391.7	467.0	3,967.1	3,994.3	0.92	-0.82	-0.41
11,701.0	90.40	90.20	7,592.6	-2,392.6	467.0	4,062.1	4,088.7	2.15	2.11	0.42
11,798.0	92.00	89.80	7,590.6	-2,390.6	467.0	4,159.1	4,185.2	1.70	1.65	-0.41
11,894.0	90.50	89.00	7,588.5	-2,388.5	468.0	4,255.0	4,280.7	1.77	-1.56	-0.83
11,989.0	90.90	92.00	7,587.4	-2,387.4	467.2	4,350.0	4,375.0	3.19	0.42	3.16
LAST SURVEY - MAR 6, 2014										
12,080.0	91.30	91.90	7,585.6	-2,385.6	464.1	4,440.9	4,465.1	0.45	0.44	-0.11
EXTRAPOLATION TO TD										
12,135.0	91.30	91.90	7,584.4	-2,384.4	462.3	4,495.9	4,519.5	0.00	0.00	0.00

Survey Report



Company:	BILL BARRETT CORPORATION	Local Co-ordinate Reference:	Well STATE OF COLORADO 1S-66-36-0108CH
Project:	ADAMS COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Site:	SW NW SEC. 36 T1S R66W 6th P.M.	MD Reference:	KB-EST @ 5200.0usft (Original Well Elev)
Well:	STATE OF COLORADO 1S-66-36-0108CH	North Reference:	True
Wellbore:	JOB # 2009267	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
BTV - SOC 1S-66-36-01	0.00	0.00	7,195.7	482.3	-276.9	1,217,069.12	3,214,993.87	39° 55' 36.062 N	104° 44' 0.241 W
- survey misses target center by 72.4usft at 7214.1usft MD (7187.7 TVD, 472.0 N, -205.7 E)									
- Point									
BHL - SOC 1S-66-36-01	0.00	0.00	7,577.0	486.4	4,498.9	1,217,114.53	3,219,769.32	39° 55' 36.098 N	104° 42' 58.939 W
- survey misses target center by 25.4usft at 12135.0usft MD (7584.4 TVD, 462.3 N, 4495.9 E)									
- Point									
BHL - SOC 1S-66-36-01	0.00	0.00	7,575.0	486.4	4,498.9	1,217,114.53	3,219,769.32	39° 55' 36.098 N	104° 42' 58.939 W
- survey misses target center by 26.0usft at 12135.0usft MD (7584.4 TVD, 462.3 N, 4495.9 E)									
- Point									
ENTRY PNT - SOC 1S-66-36-01	0.00	0.00	7,595.0	482.7	202.8	1,217,073.65	3,215,473.51	39° 55' 36.066 N	104° 43' 54.084 W
- survey misses target center by 11.9usft at 7837.7usft MD (7593.1 TVD, 494.4 N, 203.8 E)									
- Point									
BTV - SOC 1S-66-36-01	0.00	0.00	7,117.5	482.3	-276.9	1,217,069.12	3,214,993.87	39° 55' 36.062 N	104° 44' 0.241 W
- survey misses target center by 70.9usft at 7143.5usft MD (7117.1 TVD, 472.0 N, -206.7 E)									
- Point									
BHL - SOC 1S-66-36-01	0.00	0.00	7,577.0	486.4	4,498.9	1,217,114.53	3,219,769.32	39° 55' 36.098 N	104° 42' 58.939 W
- survey misses target center by 25.4usft at 12135.0usft MD (7584.4 TVD, 462.3 N, 4495.9 E)									
- Point									
EXIST VERT CO STATE	0.00	0.00	8,329.0	615.6	1,685.4	1,217,219.40	3,216,954.90	39° 55' 37.379 N	104° 43' 35.053 W
- survey misses target center by 748.5usft at 9338.7usft MD (7599.2 TVD, 450.0 N, 1701.1 E)									
- Circle (radius 30.0)									
ENTRY PNT - SOC 1S-66-36-01	0.00	0.00	7,605.0	482.7	135.0	1,217,073.07	3,215,405.74	39° 55' 36.066 N	104° 43' 54.954 W
- survey misses target center by 32.8usft at 7774.8usft MD (7576.8 TVD, 497.3 N, 143.2 E)									
- Point									
EXIST VERT CO STATE	0.00	0.00	8,291.0	618.7	4,334.7	1,217,245.40	3,219,604.00	39° 55' 37.406 N	104° 43' 1.046 W
- survey misses target center by 719.3usft at 11963.8usft MD (7587.7 TVD, 467.9 N, 4324.8 E)									
- Circle (radius 30.0)									
BTV - SOC 1S-66-36-01	0.00	0.00	7,195.8	482.3	-209.1	1,217,069.71	3,215,061.66	39° 55' 36.062 N	104° 43' 59.371 W
- survey misses target center by 11.0usft at 7221.8usft MD (7195.5 TVD, 472.0 N, -205.1 E)									
- Point									
EXIST VERT STATE A #	0.00	0.00	8,312.0	-862.3	474.3	1,215,731.10	3,215,756.70	39° 55' 22.774 N	104° 43' 50.598 W
- survey misses target center by 1499.1usft at 8174.6usft MD (7611.6 TVD, 461.6 N, 537.5 E)									
- Circle (radius 30.0)									
EXIST VERT STATE A #	0.00	0.00	8,333.0	-411.7	3,321.1	1,216,206.30	3,218,599.40	39° 55' 27.225 N	104° 43' 14.059 W
- survey misses target center by 1149.7usft at 10953.0usft MD (7592.2 TVD, 467.5 N, 3314.1 E)									
- Circle (radius 30.0)									
ICP - SOC 1S-66-36-01	0.00	0.00	7,605.0	482.7	202.8	1,217,073.65	3,215,473.51	39° 55' 36.066 N	104° 43' 54.084 W
- survey misses target center by 16.5usft at 7840.3usft MD (7593.7 TVD, 494.3 N, 206.3 E)									
- Point									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,400.0	1,399.9	1.7	-2.0	TIE ON TO SURVEYS
12,080.0	7,585.6	464.1	4,440.9	LAST SURVEY - MAR 6, 2014
12,135.0	7,584.4	462.3	4,495.9	EXTRAPOLATION TO TD

Checked By: _____ Approved By: _____ Date: _____