



Ursa Operating Company, LLC

**Rockies Region
Monument Ridge
BAT 24B-18-07-95
Wellbore #1**

Design: Actual

End of Well Report

18 June, 2015



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well BAT 24B-18-07-95
Project:	Rockies Region	TVD Reference:	BAT 24B-18-07-95 @ 5458.2usft (Capstar 321)
Site:	Monument Ridge	MD Reference:	BAT 24B-18-07-95 @ 5458.2usft (Capstar 321)
Well:	BAT 24B-18-07-95	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Project		Rockies Region	
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Monument Ridge			
Site Position:		Northing:		1,592,015.87	usft
From:	Lat/Long	Easting:		2,284,550.92	usft
Position Uncertainty:	0.0	Slot Radius:		13-3/16	"
		Grid Convergence:		-1.60	°

Well		BAT 24B-18-07-95, SHL: 39° 25' 52.055 -108° 1' 59.678				
Well Position	+N/-S	0.0 usft	Northing:	1,591,893.25 usft	Latitude:	39° 25' 52.055 N
	+E/-W	0.0 usft	Easting:	2,284,551.18 usft	Longitude:	108° 1' 59.678 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,458.2 usft	Ground Level:	5,441.2 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/23/2015	9.86	65.57	51,826

Design		Actual			
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	283.47

Survey Program		Date	6/18/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
99.0	6,986.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
99.0	0.57	315.63	99.0	0.4	0.4	-0.3	0.58	0.58	0.00	
127.0	0.44	312.42	127.0	0.6	0.5	-0.5	0.47	-0.46	-11.46	
156.0	0.66	303.94	156.0	0.9	0.7	-0.7	0.81	0.76	-29.24	
186.0	1.17	296.56	186.0	1.3	0.9	-1.2	1.74	1.70	-24.60	
216.0	1.85	295.59	216.0	2.1	1.3	-1.9	2.27	2.27	-3.23	
246.0	2.55	290.41	246.0	3.3	1.7	-2.9	2.42	2.33	-17.27	
276.0	3.56	287.11	275.9	4.8	2.2	-4.4	3.42	3.37	-11.00	
306.0	4.60	283.44	305.8	7.0	2.8	-6.5	3.57	3.47	-12.23	
336.0	5.58	284.69	335.7	9.6	3.4	-9.1	3.29	3.27	4.17	
366.0	6.42	284.91	365.6	12.8	4.2	-12.1	2.80	2.80	0.73	
396.0	7.38	284.08	395.3	16.4	5.1	-15.6	3.22	3.20	-2.77	
426.0	8.35	284.65	425.1	20.5	6.1	-19.6	3.24	3.23	1.90	
456.0	9.36	284.91	454.7	25.1	7.3	-24.1	3.37	3.37	0.87	
486.0	10.33	284.25	484.3	30.2	8.6	-29.0	3.26	3.23	-2.20	
516.0	11.25	282.80	513.7	35.8	9.9	-34.5	3.20	3.07	-4.83	
546.0	12.21	282.38	543.1	41.9	11.3	-40.4	3.21	3.20	-1.40	
576.0	13.14	282.72	572.4	48.5	12.7	-46.9	3.11	3.10	1.13	
606.0	14.14	282.73	601.5	55.6	14.2	-53.8	3.33	3.33	0.03	
636.0	15.16	282.72	630.5	63.2	15.9	-61.2	3.40	3.40	-0.03	
666.0	16.28	281.88	659.4	71.3	17.6	-69.1	3.81	3.73	-2.80	
696.0	17.27	283.73	688.1	80.0	19.6	-77.5	3.75	3.30	6.17	
726.0	18.24	286.54	716.7	89.1	22.0	-86.4	4.31	3.23	9.37	
756.0	19.16	281.88	745.1	98.7	24.3	-95.7	5.85	3.07	-15.53	
786.0	20.21	283.07	773.4	108.8	26.5	-105.6	3.75	3.50	3.97	
816.0	21.23	286.98	801.4	119.4	29.3	-115.8	5.73	3.40	13.03	
846.0	22.10	283.16	829.3	130.5	32.1	-126.5	5.52	2.90	-12.73	

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
876.0	23.03	282.98	857.0	142.0	34.7	-137.7	3.11	3.10	-0.60	
906.0	23.99	285.75	884.5	154.0	37.7	-149.3	4.88	3.20	9.23	
936.0	25.05	285.62	911.8	166.4	41.1	-161.3	3.54	3.53	-0.43	
966.0	25.71	282.94	938.9	179.3	44.2	-173.7	4.42	2.20	-8.93	
996.0	26.76	283.82	965.8	192.5	47.3	-186.6	3.73	3.50	2.93	
1,026.0	27.86	285.62	992.5	206.3	50.8	-199.9	4.58	3.67	6.00	
1,056.0	29.00	285.53	1,018.9	220.6	54.6	-213.7	3.80	3.80	-0.30	
1,086.0	30.19	283.64	1,045.0	235.4	58.4	-228.0	5.04	3.97	-6.30	
1,116.0	31.29	284.56	1,070.8	250.7	62.1	-242.9	3.99	3.67	3.07	
1,146.0	32.04	283.95	1,096.3	266.4	66.0	-258.2	2.72	2.50	-2.03	
1,176.0	33.00	284.47	1,121.6	282.6	69.9	-273.8	3.33	3.20	1.73	
1,206.0	33.27	283.77	1,146.7	299.0	73.9	-289.7	1.56	0.90	-2.33	
1,236.0	33.40	282.98	1,171.8	315.5	77.8	-305.7	1.51	0.43	-2.63	
1,266.0	33.57	281.93	1,196.8	332.0	81.3	-321.9	2.01	0.57	-3.50	
1,296.0	34.02	281.26	1,221.7	348.7	84.7	-338.3	1.95	1.50	-2.23	
1,326.0	34.19	281.40	1,246.6	365.5	88.0	-354.8	0.62	0.57	0.47	
1,356.0	34.98	281.40	1,271.3	382.5	91.3	-371.4	2.63	2.63	0.00	
1,386.0	35.24	282.41	1,295.8	399.8	94.9	-388.3	2.12	0.87	3.37	
1,416.0	34.85	281.93	1,320.4	417.0	98.5	-405.2	1.59	-1.30	-1.60	
1,446.0	35.04	282.73	1,345.0	434.2	102.2	-422.0	1.65	0.63	2.67	
1,476.0	34.85	282.63	1,369.5	451.3	106.0	-438.7	0.66	-0.63	-0.33	
1,506.0	34.89	282.45	1,394.2	468.5	109.7	-455.5	0.37	0.13	-0.60	
1,536.0	35.11	283.16	1,418.7	485.7	113.5	-472.2	1.54	0.73	2.37	
1,566.0	35.42	283.07	1,443.2	503.0	117.4	-489.1	1.05	1.03	-0.30	
1,596.0	35.20	283.29	1,467.7	520.3	121.4	-506.0	0.85	-0.73	0.73	
1,626.0	35.33	283.64	1,492.2	537.7	125.4	-522.8	0.80	0.43	1.17	
1,656.0	35.31	283.27	1,516.7	555.0	129.5	-539.7	0.72	-0.07	-1.23	

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1,686.0	35.55	283.60	1,541.1	572.4	133.5	-556.6	1.02	0.80	1.10	
1,716.0	35.73	284.12	1,565.5	589.9	137.7	-573.6	1.17	0.60	1.73	
1,746.0	36.17	282.58	1,589.8	607.5	141.8	-590.7	3.35	1.47	-5.13	
1,776.0	36.52	282.85	1,614.0	625.3	145.7	-608.1	1.28	1.17	0.90	
1,806.0	36.56	283.42	1,638.1	643.1	149.7	-625.5	1.14	0.13	1.90	
1,836.0	36.83	283.55	1,662.1	661.1	153.9	-642.9	0.94	0.90	0.43	
1,932.0	36.78	284.03	1,739.0	718.6	167.6	-698.7	0.30	-0.05	0.50	
2,018.0	35.82	282.72	1,808.3	769.5	179.4	-748.3	1.43	-1.12	-1.52	
2,103.0	35.55	285.09	1,877.3	819.1	191.3	-796.4	1.66	-0.32	2.79	
2,188.0	34.23	284.12	1,947.1	867.7	203.6	-843.4	1.68	-1.55	-1.14	
2,274.0	33.88	283.24	2,018.3	915.8	215.0	-890.2	0.70	-0.41	-1.02	
2,359.0	34.58	284.65	2,088.6	963.6	226.5	-936.6	1.24	0.82	1.66	
2,445.0	35.86	284.83	2,158.8	1,013.2	239.1	-984.6	1.49	1.49	0.21	
2,530.0	35.11	283.86	2,228.1	1,062.6	251.4	-1,032.4	1.10	-0.88	-1.14	
2,615.0	36.25	284.25	2,297.1	1,112.1	263.4	-1,080.5	1.37	1.34	0.46	
2,701.0	35.73	283.55	2,366.7	1,162.7	275.5	-1,129.5	0.77	-0.60	-0.81	
2,786.0	35.11	283.46	2,435.9	1,211.9	287.0	-1,177.4	0.73	-0.73	-0.11	
2,872.0	34.76	282.72	2,506.5	1,261.2	298.2	-1,225.4	0.64	-0.41	-0.86	
2,957.0	36.34	284.34	2,575.6	1,310.6	309.8	-1,273.5	2.16	1.86	1.91	
3,043.0	35.99	284.47	2,645.0	1,361.3	322.4	-1,322.6	0.42	-0.41	0.15	
3,128.0	35.64	284.21	2,714.0	1,411.1	334.7	-1,370.8	0.45	-0.41	-0.31	
3,213.0	35.16	282.72	2,783.3	1,460.3	346.2	-1,418.7	1.16	-0.56	-1.75	
3,299.0	34.96	282.18	2,853.6	1,509.7	356.8	-1,466.9	0.43	-0.23	-0.63	
3,384.0	36.04	283.51	2,922.8	1,559.0	367.8	-1,515.0	1.56	1.27	1.56	
3,470.0	35.29	283.77	2,992.7	1,609.2	379.6	-1,563.8	0.89	-0.87	0.30	
3,555.0	36.34	283.73	3,061.6	1,658.9	391.5	-1,612.1	1.24	1.24	-0.05	
3,641.0	35.07	283.16	3,131.5	1,709.1	403.1	-1,660.9	1.53	-1.48	-0.66	

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3,726.0	35.60	283.33	3,200.8	1,758.3	414.4	-1,708.7	0.63	0.62	0.20	
3,811.0	35.68	282.80	3,269.9	1,807.8	425.6	-1,757.0	0.38	0.09	-0.62	
3,897.0	37.05	282.94	3,339.1	1,858.8	436.9	-1,806.7	1.60	1.59	0.16	
3,982.0	37.09	283.73	3,407.0	1,910.0	448.8	-1,856.6	0.56	0.05	0.93	
4,068.0	35.90	282.54	3,476.1	1,961.2	460.4	-1,906.4	1.61	-1.38	-1.38	
4,153.0	34.10	281.40	3,545.7	2,009.9	470.5	-1,954.0	2.25	-2.12	-1.34	
4,238.0	32.87	281.22	3,616.6	2,056.8	479.7	-2,000.0	1.45	-1.45	-0.21	
4,324.0	31.68	282.63	3,689.3	2,102.7	489.2	-2,045.0	1.64	-1.38	1.64	
4,409.0	30.50	284.52	3,762.1	2,146.5	499.5	-2,087.6	1.80	-1.39	2.22	
4,495.0	28.87	283.95	3,836.8	2,189.1	510.0	-2,128.9	1.92	-1.90	-0.66	
4,580.0	27.03	282.98	3,911.9	2,229.0	519.2	-2,167.6	2.23	-2.16	-1.14	
4,665.0	25.75	282.23	3,988.1	2,266.7	527.5	-2,204.5	1.56	-1.51	-0.88	
4,751.0	24.04	281.40	4,066.1	2,302.9	534.9	-2,239.9	2.03	-1.99	-0.97	
4,836.0	20.92	282.45	4,144.6	2,335.4	541.6	-2,271.7	3.70	-3.67	1.24	
4,921.0	19.20	283.86	4,224.4	2,364.6	548.2	-2,300.1	2.10	-2.02	1.66	
5,007.0	18.37	283.68	4,305.9	2,392.3	554.8	-2,327.0	0.97	-0.97	-0.21	
5,092.0	17.80	282.41	4,386.7	2,418.6	560.8	-2,352.7	0.82	-0.67	-1.49	
5,177.0	15.56	286.50	4,468.1	2,443.0	566.8	-2,376.4	2.97	-2.64	4.81	
5,263.0	11.34	286.72	4,551.7	2,463.0	572.5	-2,395.5	4.91	-4.91	0.26	
5,348.0	8.09	283.02	4,635.5	2,477.3	576.3	-2,409.4	3.89	-3.82	-4.35	
5,434.0	5.05	294.58	4,720.9	2,487.1	579.2	-2,418.7	3.84	-3.53	13.44	
5,519.0	4.75	289.75	4,805.6	2,494.3	582.0	-2,425.4	0.60	-0.35	-5.68	
5,605.0	4.53	281.35	4,891.3	2,501.2	583.8	-2,432.1	0.83	-0.26	-9.77	
5,690.0	4.57	269.44	4,976.0	2,507.8	584.5	-2,438.8	1.11	0.05	-14.01	
5,776.0	3.10	271.93	5,061.8	2,513.4	584.5	-2,444.5	1.72	-1.71	2.90	
5,861.0	3.08	276.52	5,146.7	2,517.9	584.8	-2,449.1	0.29	-0.02	5.40	
5,947.0	2.06	293.53	5,232.6	2,521.8	585.7	-2,452.8	1.47	-1.19	19.78	

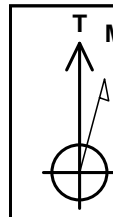
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6,032.0	1.07	351.15	5,317.6	2,523.6	587.1	-2,454.3	2.05	-1.16	67.79	
6,118.0	1.19	324.86	5,403.6	2,524.5	588.6	-2,455.0	0.61	0.14	-30.57	
6,203.0	1.27	289.65	5,488.6	2,526.1	589.7	-2,456.4	0.88	0.09	-41.42	
6,288.0	1.05	14.34	5,573.6	2,527.1	590.8	-2,457.0	1.85	-0.26	99.64	
6,374.0	0.83	24.19	5,659.6	2,526.9	592.1	-2,456.6	0.32	-0.26	11.45	
6,459.0	0.48	275.69	5,744.5	2,527.2	592.7	-2,456.7	1.27	-0.41	-127.65	
6,545.0	0.97	288.34	5,830.5	2,528.3	592.9	-2,457.8	0.60	0.57	14.71	
6,630.0	2.02	258.92	5,915.5	2,530.3	592.9	-2,459.9	1.49	1.24	-34.61	
6,715.0	1.76	258.41	6,000.5	2,532.9	592.3	-2,462.7	0.31	-0.31	-0.60	
6,801.0	0.83	250.15	6,086.4	2,534.6	591.9	-2,464.5	1.10	-1.08	-9.60	
6,886.0	1.01	259.34	6,171.4	2,535.8	591.5	-2,465.8	0.27	0.21	10.81	
6,929.0	0.97	261.97	6,214.4	2,536.5	591.4	-2,466.6	0.14	-0.09	6.12	
6,986.0	0.97	261.97	6,271.4	2,537.4	591.3	-2,467.5	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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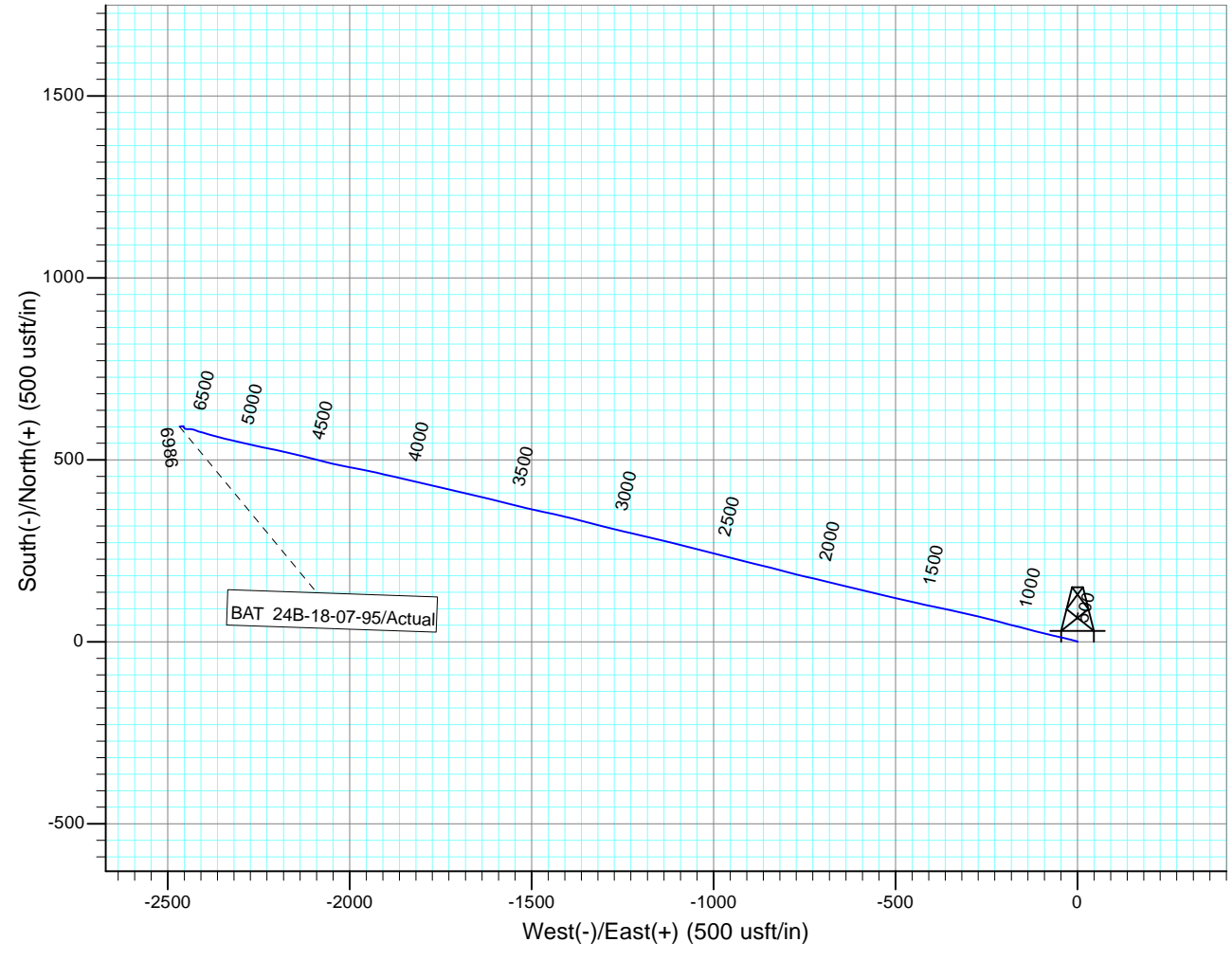
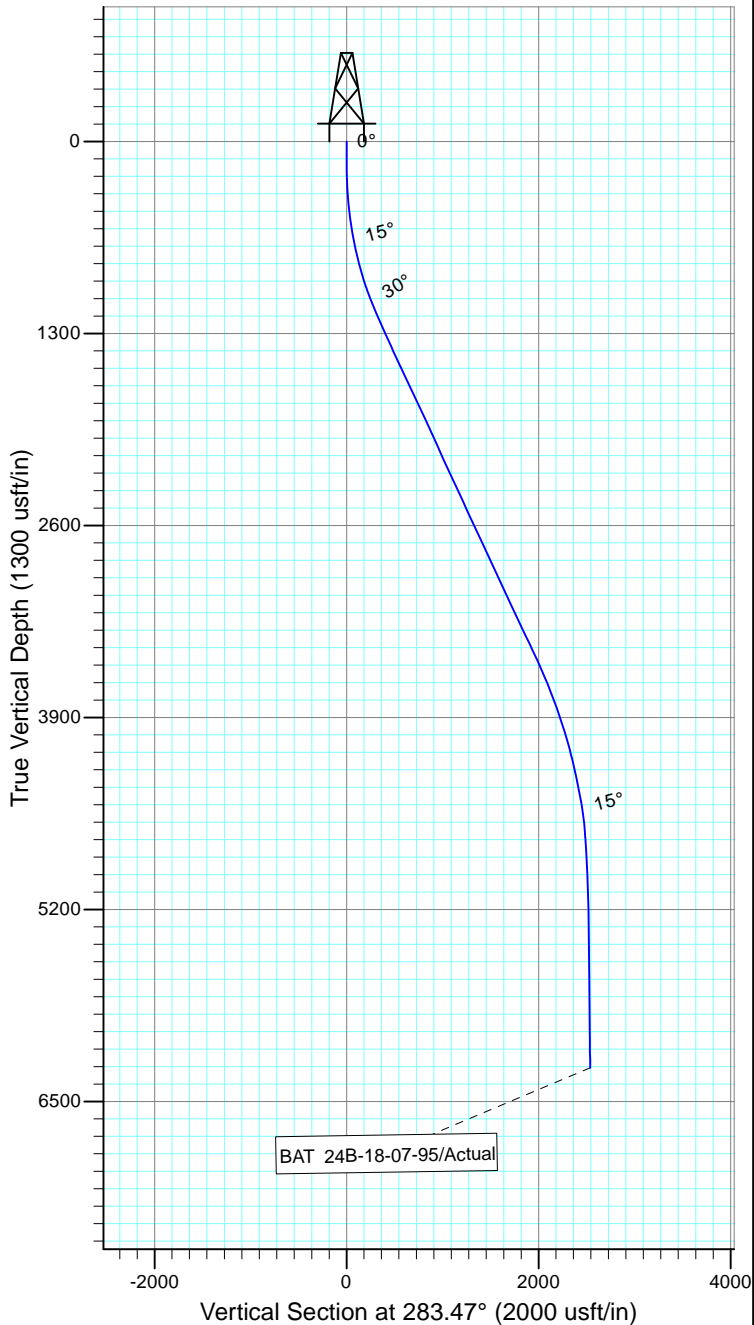


Project: Rockies Region
 Site: Monument Ridge
 Well: BAT 24B-18-07-95
 Wellbore: Wellbore #1
 Design: Actual



Azimuths to True North
 Magnetic North: 9.86°

Magnetic Field
 Strength: 51825.6snT
 Dip Angle: 65.57°
 Date: 4/23/2015
 Model: IGRF2010



Design: Actual (BAT 24B-18-07-95/Wellbore #1)

Created By: *Matthew Linton*

Date: 11:34, June 18 2015

THIS SURVEY IS CORRECT TO THE BEST OF
 MY KNOWLEDGE AND IS SUPPORTED
 BY ACTUAL FIELD DATA