



Ursa Operating Company, LLC

Rockies Region

Monument Ridge B

Monument Ridge B 24A-08-07-95

Wellbore #1

Design: Production

End of Well Report

10 February, 2016



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well Monument Ridge B 24A-08-07-95
Project:	Rockies Region	TVD Reference:	Monument Ridge B 24A-08-07-95 @ 5718.8usft (PLAN
Site:	Monument Ridge B	MD Reference:	Monument Ridge B 24A-08-07-95 @ 5718.8usft (PLAN
Well:	Monument Ridge B 24A-08-07-95	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Production	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 B		
Site Position:		Northing:	1,596,716.56 usft
From:	Lat/Long	Easting:	2,287,433.43 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 26' 40.501 N
		Longitude:	108° 1' 24.665 W
		Grid Convergence:	-1.59 °

Well	Monument Ridge B 24A-08-07-95, SHL: 39.447544657 -108.012356006		
Well Position	+N/-S	0.0 usft	Northing: 1,597,707.26 usft
	+E/-W	0.0 usft	Easting: 2,290,614.29 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	5,718.8 usft
		Ground Level:	5,701.8 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/6/2016	9.85	65.57	51,664

Design	Production			
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	274.28

Survey Program	Date	2/10/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
119.0	7,990.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

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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	
119.0	0.63	340.49	119.0	0.3	0.6	-0.2	0.53	0.53	0.00	
149.0	0.55	352.16	149.0	0.4	0.9	-0.3	0.48	-0.27	38.90	
180.0	0.44	355.57	180.0	0.4	1.2	-0.3	0.37	-0.35	11.00	
209.0	0.37	341.37	209.0	0.5	1.4	-0.4	0.42	-0.24	-48.97	
239.0	0.66	317.60	239.0	0.6	1.6	-0.5	1.18	0.97	-79.23	
270.0	1.49	296.29	270.0	1.1	1.9	-1.0	2.93	2.68	-68.74	
301.0	2.17	293.35	301.0	2.1	2.3	-1.9	2.21	2.19	-9.48	
331.0	2.68	294.84	330.9	3.3	2.8	-3.0	1.71	1.70	4.97	
362.0	3.12	289.25	361.9	4.7	3.4	-4.5	1.69	1.42	-18.03	
393.0	3.25	275.15	392.9	6.4	3.8	-6.2	2.55	0.42	-45.48	
423.0	3.96	268.16	422.8	8.3	3.8	-8.1	2.78	2.37	-23.30	
453.0	4.88	269.08	452.7	10.6	3.8	-10.4	3.08	3.07	3.07	
484.0	5.91	266.73	483.6	13.5	3.7	-13.3	3.40	3.32	-7.58	
515.0	6.71	266.32	514.4	16.9	3.5	-16.7	2.58	2.58	-1.32	
545.0	7.95	265.26	544.1	20.7	3.2	-20.5	4.16	4.13	-3.53	
576.0	9.14	265.83	574.8	25.2	2.8	-25.1	3.85	3.84	1.84	
606.0	10.38	267.95	604.4	30.3	2.5	-30.2	4.30	4.13	7.07	
637.0	11.43	268.73	634.8	36.1	2.4	-36.0	3.42	3.39	2.52	
668.0	12.74	270.67	665.1	42.6	2.3	-42.5	4.42	4.23	6.26	
698.0	13.84	272.03	694.3	49.5	2.5	-49.4	3.81	3.67	4.53	
729.0	15.05	273.95	724.3	57.2	2.9	-57.1	4.20	3.90	6.19	
759.0	16.26	275.32	753.2	65.3	3.6	-65.2	4.22	4.03	4.57	
789.0	17.45	274.62	781.9	74.0	4.3	-73.9	4.02	3.97	-2.33	
820.0	18.57	273.95	811.4	83.6	5.0	-83.4	3.67	3.61	-2.16	
850.0	19.73	274.23	839.7	93.4	5.7	-93.2	3.88	3.87	0.93	
893.0	21.31	275.06	880.0	108.5	7.0	-108.3	3.74	3.67	1.93	

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Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
936.0	22.55	274.67	919.9	124.5	8.3	-124.3	2.90	2.88	-0.91	
978.0	24.08	275.19	958.5	141.2	9.8	-140.8	3.68	3.64	1.24	
1,021.0	25.97	275.46	997.4	159.3	11.5	-158.9	4.40	4.40	0.63	
1,064.0	27.64	275.32	1,035.8	178.7	13.3	-178.2	3.89	3.88	-0.33	
1,107.0	29.18	275.63	1,073.6	199.2	15.2	-198.6	3.60	3.58	0.72	
1,149.0	30.50	273.87	1,110.1	220.1	16.9	-219.4	3.77	3.14	-4.19	
1,192.0	32.08	273.61	1,146.8	242.4	18.4	-241.7	3.69	3.67	-0.60	
1,234.0	33.13	273.92	1,182.2	265.0	19.9	-264.3	2.53	2.50	0.74	
1,277.0	34.37	275.15	1,217.9	288.9	21.8	-288.1	3.29	2.88	2.86	
1,320.0	35.29	276.60	1,253.2	313.5	24.3	-312.5	2.88	2.14	3.37	
1,362.0	36.30	275.50	1,287.3	338.0	26.9	-337.0	2.85	2.40	-2.62	
1,405.0	37.31	275.19	1,321.7	363.8	29.3	-362.6	2.39	2.35	-0.72	
1,448.0	38.01	274.18	1,355.8	390.1	31.4	-388.8	2.17	1.63	-2.35	
1,490.0	37.40	272.51	1,389.0	415.7	32.9	-414.4	2.83	-1.45	-3.98	
1,533.0	37.27	271.76	1,423.2	441.8	33.9	-440.5	1.10	-0.30	-1.74	
1,576.0	38.14	271.85	1,457.2	468.1	34.7	-466.8	2.03	2.02	0.21	
1,618.0	38.45	272.07	1,490.2	494.1	35.6	-492.8	0.81	0.74	0.52	
1,661.0	39.51	272.91	1,523.6	521.1	36.8	-519.8	2.75	2.47	1.95	
1,704.0	39.73	273.21	1,556.7	548.5	38.3	-547.2	0.68	0.51	0.70	
1,747.0	40.52	272.69	1,589.6	576.2	39.7	-574.9	2.00	1.84	-1.21	
1,789.0	40.78	271.94	1,621.5	603.6	40.8	-602.2	1.32	0.62	-1.79	
1,832.0	40.25	272.95	1,654.2	631.5	42.0	-630.1	1.96	-1.23	2.35	
1,865.0	40.25	273.21	1,679.3	652.8	43.1	-651.4	0.51	0.00	0.79	
1,960.0	40.31	272.01	1,751.8	714.2	45.9	-712.8	0.82	0.06	-1.26	
2,045.0	39.99	272.38	1,816.8	769.0	48.0	-767.5	0.47	-0.38	0.44	
2,131.0	39.99	272.95	1,882.7	824.2	50.6	-822.7	0.43	0.00	0.66	
2,216.0	40.78	274.23	1,947.4	879.3	54.0	-877.7	1.35	0.93	1.51	

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2,302.0	41.75	275.10	2,012.1	936.0	58.7	-934.2	1.31	1.13	1.01	
2,387.0	41.84	275.76	2,075.4	992.6	64.0	-990.6	0.53	0.11	0.78	
2,472.0	41.75	275.24	2,138.8	1,049.3	69.5	-1,047.0	0.42	-0.11	-0.61	
2,558.0	41.26	276.47	2,203.2	1,106.2	75.3	-1,103.7	1.11	-0.57	1.43	
2,643.0	41.44	275.89	2,267.0	1,162.4	81.3	-1,159.5	0.50	0.21	-0.68	
2,729.0	40.43	276.03	2,332.0	1,218.7	87.2	-1,215.6	1.18	-1.17	0.16	
2,814.0	38.50	275.02	2,397.6	1,272.7	92.4	-1,269.3	2.39	-2.27	-1.19	
2,900.0	38.80	274.93	2,464.8	1,326.4	97.0	-1,322.9	0.35	0.35	-0.10	
2,985.0	39.64	274.88	2,530.6	1,380.2	101.6	-1,376.4	0.99	0.99	-0.06	
3,071.0	40.17	273.26	2,596.6	1,435.3	105.5	-1,431.4	1.36	0.62	-1.88	
3,156.0	40.52	273.30	2,661.4	1,490.3	108.7	-1,486.4	0.41	0.41	0.05	
3,241.0	40.78	273.96	2,725.9	1,545.7	112.2	-1,541.6	0.59	0.31	0.78	
3,326.0	40.61	273.83	2,790.3	1,601.1	116.0	-1,596.9	0.22	-0.20	-0.15	
3,412.0	40.83	274.71	2,855.5	1,657.2	120.1	-1,652.9	0.71	0.26	1.02	
3,497.0	40.65	274.84	2,919.9	1,712.7	124.8	-1,708.2	0.23	-0.21	0.15	
3,583.0	40.74	274.18	2,985.1	1,768.8	129.2	-1,764.1	0.51	0.10	-0.77	
3,668.0	40.03	274.80	3,049.9	1,823.8	133.5	-1,819.0	0.96	-0.84	0.73	
3,753.0	40.08	275.37	3,114.9	1,878.5	138.3	-1,873.4	0.44	0.06	0.67	
3,839.0	40.08	273.87	3,180.7	1,933.9	142.8	-1,928.6	1.12	0.00	-1.74	
3,924.0	40.34	273.70	3,245.6	1,988.8	146.4	-1,983.4	0.33	0.31	-0.20	
4,009.0	40.21	274.80	3,310.5	2,043.7	150.5	-2,038.2	0.85	-0.15	1.29	
4,095.0	39.16	274.75	3,376.7	2,098.6	155.0	-2,092.9	1.22	-1.22	-0.06	
4,180.0	39.42	274.44	3,442.5	2,152.5	159.4	-2,146.6	0.38	0.31	-0.36	
4,265.0	39.71	273.32	3,508.0	2,206.6	163.0	-2,200.6	0.91	0.34	-1.32	
4,351.0	39.77	273.74	3,574.1	2,261.6	166.4	-2,255.4	0.32	0.07	0.49	
4,436.0	38.89	273.39	3,639.9	2,315.4	169.8	-2,309.2	1.07	-1.04	-0.41	
4,522.0	38.50	274.84	3,707.0	2,369.2	173.6	-2,362.8	1.15	-0.45	1.69	

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4,607.0	38.36	273.61	3,773.6	2,422.0	177.5	-2,415.5	0.91	-0.16	-1.45	
4,693.0	37.75	276.51	3,841.3	2,475.0	182.2	-2,468.3	2.20	-0.71	3.37	
4,778.0	39.29	275.85	3,907.8	2,527.9	187.9	-2,520.9	1.88	1.81	-0.78	
4,863.0	40.30	274.53	3,973.1	2,582.3	192.8	-2,575.1	1.55	1.19	-1.55	
4,949.0	39.38	275.24	4,039.1	2,637.4	197.5	-2,630.0	1.19	-1.07	0.83	
5,034.0	36.91	274.23	4,106.0	2,689.9	201.8	-2,682.3	3.00	-2.91	-1.19	
5,119.0	34.72	273.30	4,174.9	2,739.6	205.1	-2,732.0	2.65	-2.58	-1.09	
5,205.0	32.17	272.20	4,246.7	2,787.0	207.4	-2,779.3	3.05	-2.97	-1.28	
5,290.0	28.78	270.23	4,319.9	2,830.1	208.3	-2,822.4	4.16	-3.99	-2.32	
5,376.0	28.83	269.82	4,395.3	2,871.4	208.3	-2,863.8	0.24	0.06	-0.48	
5,461.0	28.03	273.02	4,470.0	2,911.8	209.3	-2,904.3	2.02	-0.94	3.76	
5,547.0	27.29	276.03	4,546.2	2,951.7	212.5	-2,944.1	1.84	-0.86	3.50	
5,632.0	25.63	275.22	4,622.3	2,989.6	216.2	-2,981.7	2.00	-1.95	-0.95	
5,718.0	23.51	277.17	4,700.5	3,025.3	220.0	-3,017.3	2.64	-2.47	2.27	
5,803.0	20.13	277.52	4,779.4	3,056.8	224.1	-3,048.6	3.98	-3.98	0.41	
5,889.0	16.13	280.11	4,861.1	3,083.5	228.1	-3,075.1	4.74	-4.65	3.01	
5,974.0	14.02	279.67	4,943.2	3,105.5	231.9	-3,096.8	2.49	-2.48	-0.52	
6,059.0	11.47	281.43	5,026.1	3,124.1	235.3	-3,115.3	3.03	-3.00	2.07	
6,144.0	8.35	283.81	5,109.8	3,138.6	238.4	-3,129.6	3.70	-3.67	2.80	
6,230.0	5.14	283.98	5,195.2	3,148.6	240.9	-3,139.4	3.73	-3.73	0.20	
6,315.0	1.58	281.61	5,280.0	3,153.5	242.0	-3,144.2	4.19	-4.19	-2.79	
6,401.0	1.23	283.37	5,366.0	3,155.6	242.5	-3,146.3	0.41	-0.41	2.05	
6,486.0	1.36	284.60	5,451.0	3,157.5	242.9	-3,148.1	0.16	0.15	1.45	
6,572.0	1.36	286.84	5,537.0	3,159.5	243.5	-3,150.1	0.06	0.00	2.60	
6,657.0	1.12	268.15	5,621.9	3,161.3	243.8	-3,151.9	0.55	-0.28	-21.99	
6,742.0	0.97	268.47	5,706.9	3,162.8	243.7	-3,153.4	0.18	-0.18	0.38	
6,828.0	0.79	211.43	5,792.9	3,163.8	243.2	-3,154.5	0.99	-0.21	-66.33	

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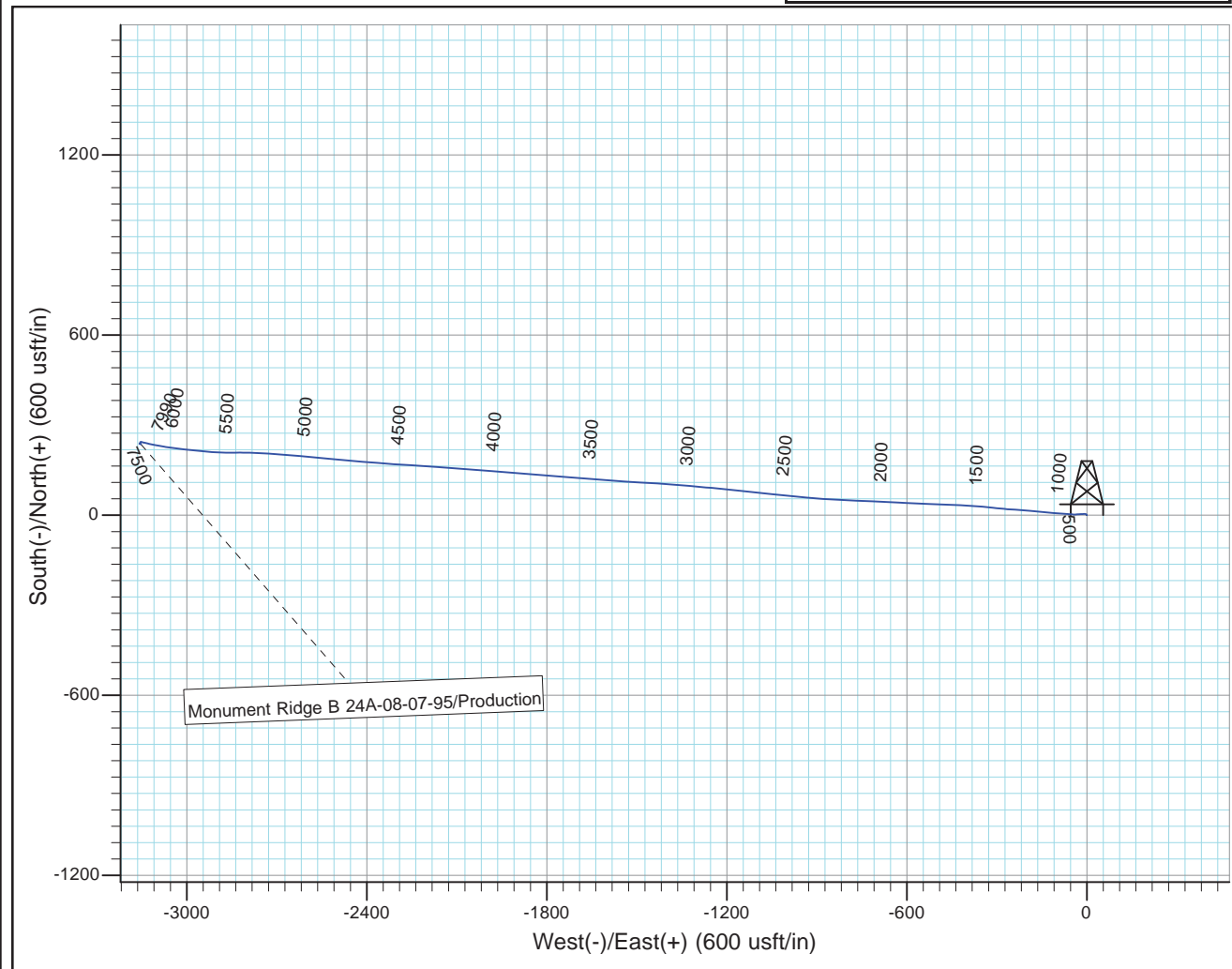
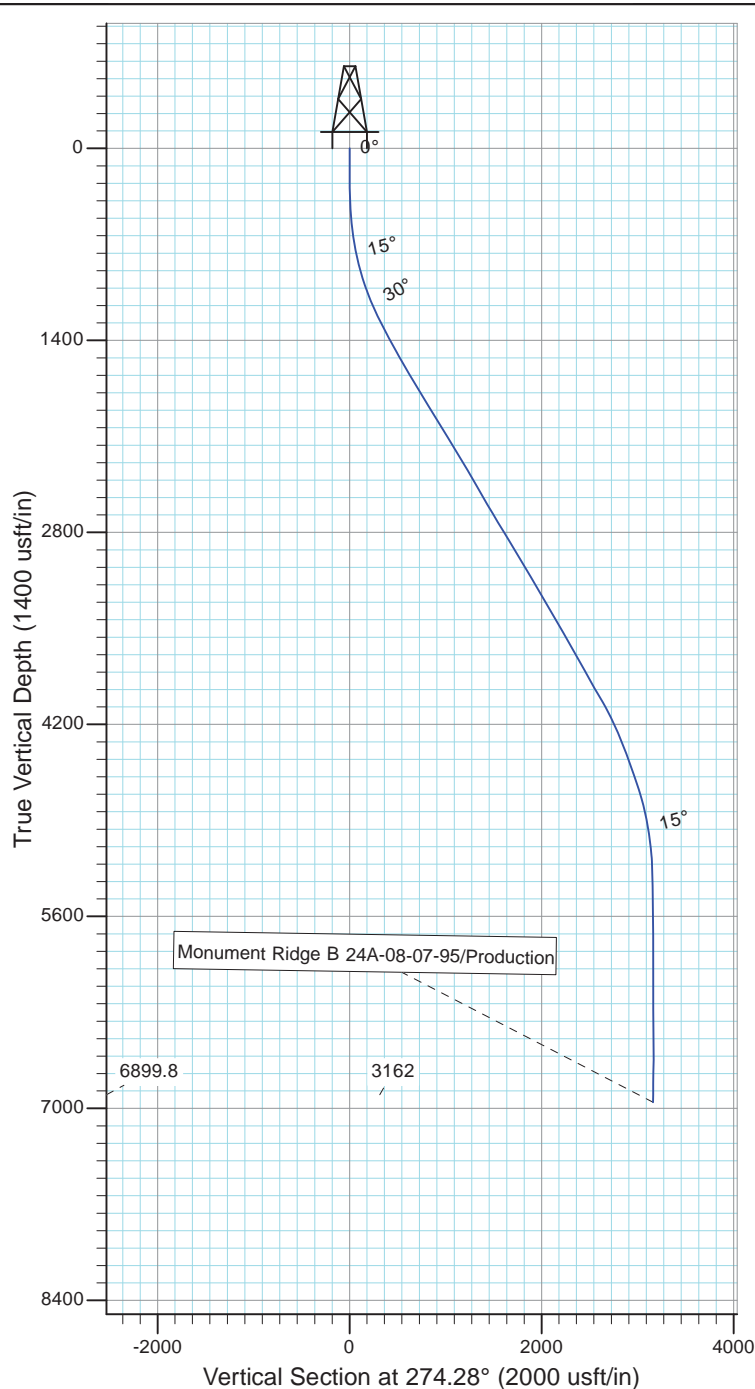
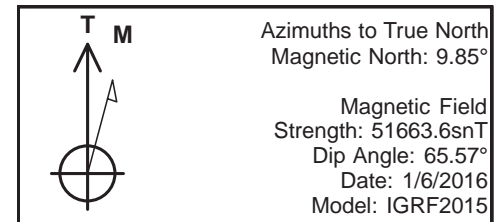
Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
6,913.0	0.70	199.12	5,877.9	3,164.2	242.2	-3,154.9	0.22	-0.11	-14.48
6,998.0	0.35	171.17	5,962.9	3,164.3	241.4	-3,155.1	0.50	-0.41	-32.88
7,084.0	0.22	127.01	6,048.9	3,164.1	241.1	-3,154.9	0.29	-0.15	-51.35
7,169.0	0.18	137.60	6,133.9	3,163.9	240.9	-3,154.7	0.06	-0.05	12.46
7,255.0	0.09	150.47	6,219.9	3,163.7	240.7	-3,154.6	0.11	-0.10	14.97
7,340.0	0.35	208.57	6,304.9	3,163.8	240.4	-3,154.7	0.37	0.31	68.35
7,425.0	0.79	234.10	6,389.9	3,164.4	239.9	-3,155.3	0.59	0.52	30.04
7,511.0	1.14	248.03	6,475.9	3,165.6	239.2	-3,156.5	0.49	0.41	16.20
7,596.0	1.23	218.46	6,560.9	3,166.8	238.2	-3,157.9	0.72	0.11	-34.79
7,681.0	1.10	81.96	6,645.9	3,166.6	237.6	-3,157.6	2.55	-0.15	-160.59
7,767.0	0.88	101.96	6,731.9	3,165.1	237.6	-3,156.2	0.47	-0.26	23.26
7,852.0	1.07	114.76	6,816.8	3,163.7	237.1	-3,154.8	0.34	0.22	15.06
7,935.0	0.97	112.77	6,899.8	3,162.3	236.5	-3,153.5	0.13	-0.12	-2.40
Projection to Bit									
7,990.0	0.97	112.77	6,954.8	3,161.4	236.1	-3,152.6	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,935.0	6,899.8	236.5	-3,153.5	Projection to Bit

Checked By: _____	Approved By: _____	Date: _____
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Project: Rockies Region
 Site: Monument Ridge B
 Well: Monument Ridge B 24A-08-07-95
 Wellbore: Wellbore #1
 Design: Production



Design: Production (Monument Ridge B 24A-08-07-95/Wellbore #1)

Created By: *Matthew Linton* Date: 9:39, February 10 2016

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