



Ursa Operating Company, LLC

Rockies Region

Monument Ridge B

Monument Ridge B 33D-08-07-95

Wellbore #1

Design: Production

End of Well Report

22 February, 2016



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well Monument Ridge B 33D-08-07-95
Project:	Rockies Region	TVD Reference:	Monument Ridge B 33D-08-07-95 @ 5718.8usft (PLAN
Site:	Monument Ridge B	MD Reference:	Monument Ridge B 33D-08-07-95 @ 5718.8usft (PLAN
Well:	Monument Ridge B 33D-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	Latitude:		39° 26' 40.501 N
From:	Lat/Long	Easting:		2,287,433.43	usft	Longitude:		108° 1' 24.665 W
Position Uncertainty:	0.0	Slot Radius:		13-3/16	"	Grid Convergence:		-1.59

Well		Monument Ridge B 33D-08-07-95, SHL: 39.447599541 -108.012356011				
Well Position	+N-S	0.0 usft	Northing:	1,597,727.25 usft	Latitude:	39° 26' 51.358 N
	+E-W	0.0 usft	Easting:	2,290,614.84 usft	Longitude:	108° 0' 44.482 W
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	282.71

Survey Program		Date	2/22/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
118.0	7,405.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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Design:	Production	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	
118.0	1.05	307.27	118.0	1.0	0.7	-0.9	0.89	0.89	0.00	
148.0	1.41	305.51	148.0	1.6	1.0	-1.4	1.21	1.20	-5.87	
179.0	1.45	313.38	179.0	2.3	1.5	-2.0	0.65	0.13	25.39	
208.0	1.19	315.58	208.0	2.8	2.0	-2.5	0.91	-0.90	7.59	
238.0	0.79	337.68	238.0	3.2	2.4	-2.7	1.82	-1.33	73.67	
269.0	0.62	349.99	269.0	3.4	2.8	-2.9	0.73	-0.55	39.71	
300.0	0.62	349.99	300.0	3.5	3.1	-2.9	0.00	0.00	0.00	
330.0	0.22	334.03	330.0	3.6	3.3	-3.0	1.38	-1.33	-53.20	
361.0	0.26	158.56	361.0	3.6	3.3	-3.0	1.55	0.13	-566.03	
392.0	0.59	167.71	392.0	3.5	3.1	-2.9	1.08	1.06	29.52	
422.0	0.53	173.63	422.0	3.4	2.8	-2.9	0.28	-0.20	19.73	
452.0	0.57	167.97	452.0	3.3	2.5	-2.8	0.22	0.13	-18.87	
483.0	0.57	173.46	483.0	3.2	2.2	-2.8	0.18	0.00	17.71	
514.0	0.57	165.59	514.0	3.1	1.9	-2.7	0.25	0.00	-25.39	
544.0	0.70	172.97	544.0	2.9	1.6	-2.7	0.51	0.43	24.60	
575.0	0.62	207.96	574.9	2.9	1.2	-2.7	1.30	-0.26	112.87	
605.0	0.92	247.46	604.9	3.2	1.0	-3.0	1.97	1.00	131.67	
636.0	1.54	266.71	635.9	3.8	0.9	-3.7	2.38	2.00	62.10	
666.0	2.07	276.69	665.9	4.7	0.9	-4.6	2.05	1.77	33.27	
697.0	2.81	280.55	696.9	6.0	1.1	-5.9	2.44	2.39	12.45	
728.0	3.51	281.86	727.8	7.7	1.5	-7.6	2.27	2.26	4.23	
758.0	4.48	282.22	757.8	9.8	1.9	-9.6	3.23	3.23	1.20	
788.0	5.54	282.40	787.7	12.4	2.5	-12.2	3.53	3.53	0.60	
819.0	6.70	282.42	818.5	15.7	3.2	-15.4	3.74	3.74	0.06	
849.0	7.83	284.31	848.2	19.5	4.0	-19.1	3.85	3.77	6.30	
892.0	9.36	283.81	890.8	25.9	5.6	-25.3	3.56	3.56	-1.16	

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Well:	Monument Ridge B 33D-08-07-95	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Production	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)	
935.0	10.72	282.27	933.1	33.4	7.3	-32.6	3.22	3.16	-3.58	
977.0	12.30	281.74	974.3	41.8	9.0	-40.8	3.77	3.76	-1.26	
1,020.0	14.02	279.81	1,016.1	51.6	10.9	-50.4	4.13	4.00	-4.49	
1,063.0	15.78	280.16	1,057.7	62.6	12.8	-61.3	4.10	4.09	0.81	
1,105.0	17.38	281.82	1,097.9	74.6	15.1	-73.1	3.97	3.81	3.95	
1,148.0	18.72	282.62	1,138.8	87.9	17.9	-86.1	3.17	3.12	1.86	
1,191.0	20.46	283.79	1,179.3	102.4	21.2	-100.1	4.15	4.05	2.72	
1,233.0	22.19	283.59	1,218.4	117.6	24.8	-115.0	4.12	4.12	-0.48	
1,276.0	23.99	284.02	1,258.0	134.5	28.8	-131.4	4.20	4.19	1.00	
1,319.0	25.22	285.17	1,297.1	152.4	33.3	-148.7	3.07	2.86	2.67	
1,362.0	25.60	283.51	1,335.9	170.8	37.9	-166.6	1.88	0.88	-3.86	
1,404.0	25.71	283.37	1,373.8	189.0	42.1	-184.2	0.30	0.26	-0.33	
1,447.0	26.02	282.00	1,412.5	207.8	46.3	-202.5	1.57	0.72	-3.19	
1,490.0	26.94	281.65	1,451.0	226.9	50.2	-221.3	2.17	2.14	-0.81	
1,532.0	26.98	281.26	1,488.4	246.0	54.0	-240.0	0.43	0.10	-0.93	
1,575.0	27.77	280.73	1,526.6	265.7	57.7	-259.4	1.92	1.84	-1.23	
1,618.0	28.87	281.52	1,564.4	286.1	61.7	-279.4	2.70	2.56	1.84	
1,660.0	29.18	280.82	1,601.2	306.5	65.6	-299.4	1.09	0.74	-1.67	
1,703.0	29.44	280.38	1,638.7	327.5	69.5	-320.1	0.79	0.60	-1.02	
1,744.0	29.84	279.76	1,674.3	347.8	73.0	-340.0	1.23	0.98	-1.51	
1,849.0	29.79	279.67	1,765.4	399.9	81.8	-391.5	0.06	-0.05	-0.09	
1,934.0	28.96	281.56	1,839.5	441.6	89.5	-432.5	1.46	-0.98	2.22	
2,018.0	28.76	282.32	1,913.0	482.1	97.9	-472.1	0.50	-0.24	0.90	
2,105.0	30.94	285.08	1,988.5	525.4	108.2	-514.2	2.96	2.51	3.17	
2,190.0	32.31	284.49	2,060.9	569.9	119.6	-557.3	1.65	1.61	-0.69	
2,276.0	33.61	285.64	2,133.0	616.7	131.7	-602.5	1.68	1.51	1.34	
2,361.0	33.09	284.51	2,204.0	663.4	143.9	-647.6	0.95	-0.61	-1.33	

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Survey										
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2,446.0	33.00	284.46	2,275.3	709.7	155.5	-692.5	0.11	-0.11	-0.06	
2,532.0	32.43	283.37	2,347.6	756.2	166.7	-737.6	0.95	-0.66	-1.27	
2,617.0	31.96	283.21	2,419.6	801.5	177.1	-781.7	0.56	-0.55	-0.19	
2,703.0	30.98	282.88	2,492.9	846.3	187.2	-825.4	1.16	-1.14	-0.38	
2,788.0	31.64	284.68	2,565.5	890.5	197.7	-868.3	1.35	0.78	2.12	
2,874.0	31.33	284.42	2,638.9	935.4	209.0	-911.8	0.39	-0.36	-0.30	
2,959.0	31.07	284.29	2,711.6	979.4	219.9	-954.4	0.32	-0.31	-0.15	
3,045.0	30.41	283.85	2,785.5	1,023.4	230.6	-997.1	0.81	-0.77	-0.51	
3,130.0	30.59	283.37	2,858.7	1,066.5	240.8	-1,039.0	0.36	0.21	-0.56	
3,215.0	29.97	282.31	2,932.2	1,109.4	250.3	-1,080.8	0.96	-0.73	-1.25	
3,301.0	29.40	282.14	3,006.9	1,151.9	259.3	-1,122.4	0.67	-0.66	-0.20	
3,386.0	29.00	281.34	3,081.1	1,193.4	267.8	-1,163.0	0.66	-0.47	-0.94	
3,472.0	29.05	283.32	3,156.3	1,235.1	276.7	-1,203.7	1.12	0.06	2.30	
3,557.0	28.69	283.14	3,230.7	1,276.2	286.1	-1,243.7	0.44	-0.42	-0.21	
3,643.0	27.99	282.62	3,306.4	1,317.0	295.2	-1,283.5	0.86	-0.81	-0.60	
3,728.0	28.67	283.12	3,381.2	1,357.3	304.1	-1,322.8	0.85	0.80	0.59	
3,813.0	29.05	283.59	3,455.7	1,398.3	313.6	-1,362.7	0.52	0.45	0.55	
3,899.0	28.17	282.71	3,531.2	1,439.5	323.0	-1,402.8	1.13	-1.02	-1.02	
3,984.0	27.86	283.10	3,606.2	1,479.4	331.9	-1,441.7	0.42	-0.36	0.46	
4,070.0	26.94	284.02	3,682.5	1,519.0	341.2	-1,480.2	1.18	-1.07	1.07	
4,155.0	25.22	282.31	3,758.9	1,556.4	349.7	-1,516.6	2.21	-2.02	-2.01	
4,241.0	24.65	283.01	3,836.9	1,592.6	357.7	-1,552.0	0.75	-0.66	0.81	
4,326.0	25.09	284.73	3,914.0	1,628.4	366.2	-1,586.7	1.00	0.52	2.02	
4,411.0	24.43	284.55	3,991.2	1,664.0	375.2	-1,621.1	0.78	-0.78	-0.21	
4,497.0	22.10	283.01	4,070.2	1,697.9	383.3	-1,654.1	2.80	-2.71	-1.79	
4,582.0	19.42	283.63	4,149.7	1,728.0	390.3	-1,683.4	3.16	-3.15	0.73	
4,667.0	17.01	284.07	4,230.4	1,754.6	396.6	-1,709.2	2.84	-2.84	0.52	

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4,753.0	15.03	284.46	4,313.0	1,778.3	402.5	-1,732.2	2.31	-2.30	0.45	
4,838.0	12.79	285.74	4,395.5	1,798.7	407.8	-1,751.9	2.66	-2.64	1.51	
4,923.0	10.15	284.07	4,478.8	1,815.6	412.1	-1,768.3	3.13	-3.11	-1.96	
5,009.0	8.26	282.49	4,563.7	1,829.4	415.3	-1,781.7	2.22	-2.20	-1.84	
5,094.0	6.02	288.20	4,648.1	1,839.9	418.0	-1,791.8	2.76	-2.64	6.72	
5,179.0	4.09	282.27	4,732.7	1,847.4	420.1	-1,799.0	2.35	-2.27	-6.98	
5,265.0	2.02	274.66	4,818.6	1,852.0	420.8	-1,803.6	2.45	-2.41	-8.85	
5,350.0	1.85	281.30	4,903.6	1,854.8	421.2	-1,806.4	0.33	-0.20	7.81	
5,435.0	1.85	279.50	4,988.5	1,857.5	421.7	-1,809.1	0.07	0.00	-2.12	
5,521.0	1.76	276.29	5,074.5	1,860.2	422.1	-1,811.8	0.16	-0.10	-3.73	
5,606.0	1.45	278.80	5,159.4	1,862.6	422.4	-1,814.1	0.37	-0.36	2.95	
5,691.0	1.19	279.10	5,244.4	1,864.6	422.7	-1,816.1	0.31	-0.31	0.35	
5,776.0	1.14	273.35	5,329.4	1,866.3	422.9	-1,817.8	0.15	-0.06	-6.76	
5,861.0	1.27	265.17	5,414.4	1,868.0	422.9	-1,819.6	0.25	0.15	-9.62	
5,946.0	1.41	270.97	5,499.4	1,869.9	422.8	-1,821.6	0.23	0.16	6.82	
6,031.0	1.32	266.89	5,584.3	1,871.9	422.8	-1,823.6	0.16	-0.11	-4.80	
6,116.0	1.35	268.93	5,669.3	1,873.8	422.7	-1,825.6	0.07	0.04	2.40	
6,201.0	1.45	267.02	5,754.3	1,875.8	422.6	-1,827.6	0.13	0.12	-2.25	
6,287.0	1.78	271.86	5,840.2	1,878.2	422.6	-1,830.0	0.41	0.38	5.63	
6,372.0	1.45	264.25	5,925.2	1,880.5	422.6	-1,832.4	0.46	-0.39	-8.95	
6,457.0	0.48	85.79	6,010.2	1,881.2	422.5	-1,833.2	2.27	-1.14	-209.95	
6,542.0	0.36	124.08	6,095.2	1,880.6	422.4	-1,832.6	0.35	-0.14	45.05	
6,627.0	0.36	141.00	6,180.2	1,880.1	422.0	-1,832.2	0.12	0.00	19.91	
6,712.0	0.26	163.35	6,265.2	1,879.8	421.6	-1,832.0	0.18	-0.12	26.29	
6,797.0	0.79	172.50	6,350.2	1,879.5	420.8	-1,831.8	0.63	0.62	10.76	
6,882.0	1.01	168.10	6,435.2	1,879.0	419.5	-1,831.6	0.27	0.26	-5.18	
6,967.0	1.23	184.09	6,520.2	1,878.6	417.9	-1,831.5	0.45	0.26	18.81	

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7,052.0	1.05	161.42	6,605.2	1,878.0	416.2	-1,831.3	0.57	-0.21	-26.67
7,137.0	1.05	102.62	6,690.1	1,876.8	415.3	-1,830.3	1.21	0.00	-69.18
7,222.0	0.70	136.85	6,775.1	1,875.6	414.8	-1,829.2	0.72	-0.41	40.27
7,307.0	0.75	194.60	6,860.1	1,875.2	413.9	-1,829.0	0.83	0.06	67.94
7,350.0	0.80	199.40	6,903.1	1,875.3	413.3	-1,829.2	0.19	0.12	11.16
Projection to Bit									
7,405.0	0.80	199.40	6,958.1	1,875.4	412.6	-1,829.4	0.00	0.00	0.00

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,350.0	6,903.1	413.3	-1,829.2	Projection to Bit	

Checked By: _____ Approved By: _____ Date: _____

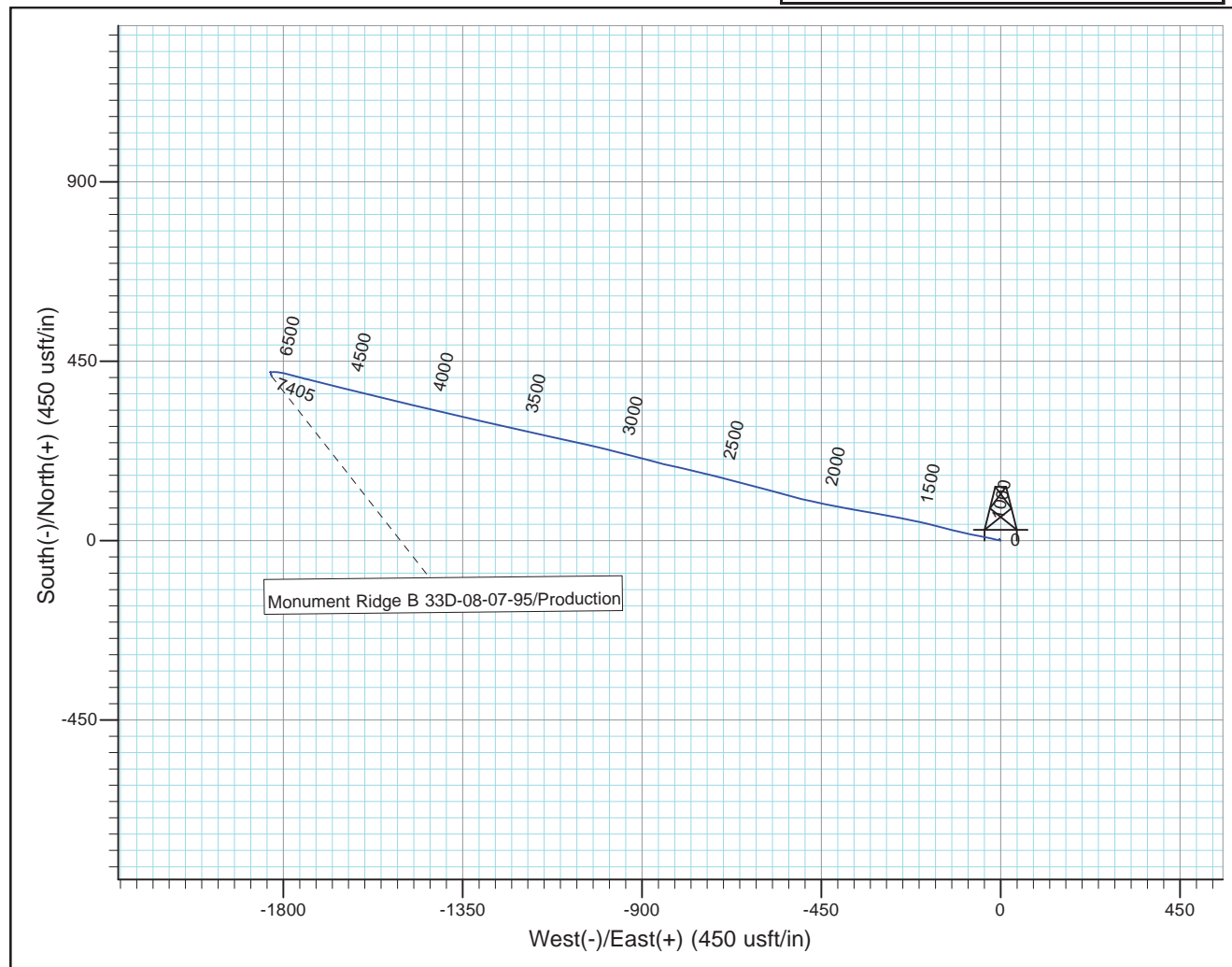
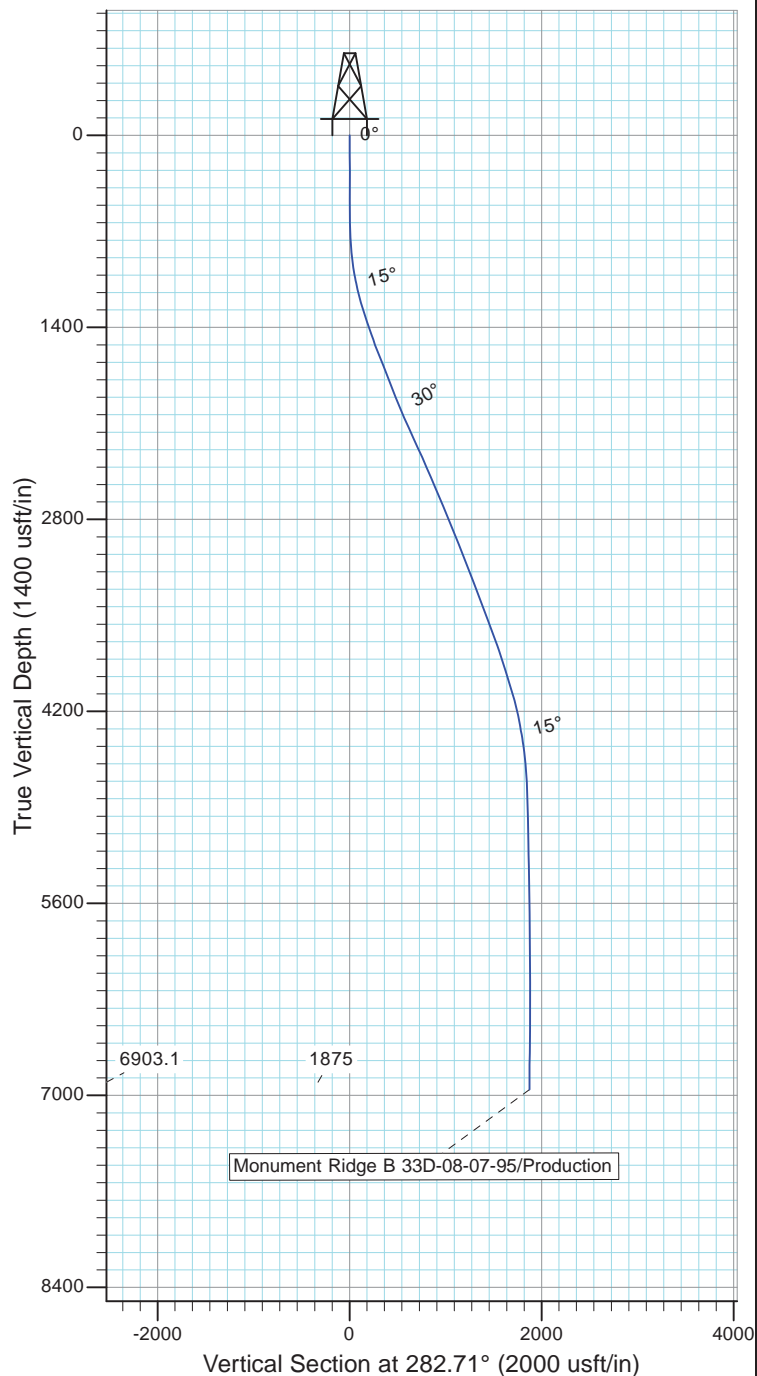


Project: Rockies Region
 Site: Monument Ridge B
 Well: Monument Ridge B 33D-08-07-95
 Wellbore: Wellbore #1
 Design: Production



Azimuths to True North
 Magnetic North: 9.85°

Magnetic Field
 Strength: 51663.6snT
 Dip Angle: 65.57°
 Date: 1/6/2016
 Model: IGRF2015



Design: Production (Monument Ridge B 33D-08-07-95/Wellbore #1)

Created By: *Matthew Linton*

Date: 11:28, February 22 20

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