



Ursa Operating Company, LLC

Rockies Region

Monument Ridge B

Monument Ridge B 33B-08-07-95

Wellbore #1

Design: Production

End of Well Report

28 December, 2015



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well Monument Ridge B 33B-08-07-95
Project:	Rockies Region	TVD Reference:	Monument Ridge B 33B-08-07-95 @ 5718.8usft (PLAN
Site:	Monument Ridge B	MD Reference:	Monument Ridge B 33B-08-07-95 @ 5718.8usft (PLAN
Well:	Monument Ridge B 33B-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 33B-08-07-95, SHL: 39.447764192 -108.012356025				
Well Position	+N-S	0.0 usft	Northing:	1,597,787.20 usft	Latitude:	39° 26' 51.951 N
	+E-W	0.0 usft	Easting:	2,290,616.50 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)
	IGRF2010	11/17/2015	9.78	65.57	51,778

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	298.92

Survey Program		Date	12/28/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
116.0	7,505.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
116.0	0.83	253.89	116.0	0.6	-0.2	-0.8	0.72	0.72	0.00	
146.0	1.14	256.31	146.0	1.0	-0.4	-1.3	1.04	1.03	8.07	
177.0	1.32	255.30	177.0	1.5	-0.5	-2.0	0.58	0.58	-3.26	
208.0	1.67	249.72	208.0	2.0	-0.8	-2.7	1.22	1.13	-18.00	
238.0	1.80	248.40	238.0	2.6	-1.1	-3.6	0.45	0.43	-4.40	
269.0	1.89	264.53	268.9	3.3	-1.3	-4.5	1.69	0.29	52.03	
299.0	1.80	276.04	298.9	4.2	-1.3	-5.5	1.27	-0.30	38.37	
330.0	1.89	286.72	329.9	5.1	-1.1	-6.5	1.14	0.29	34.45	
360.0	2.33	290.77	359.9	6.2	-0.8	-7.5	1.55	1.47	13.50	
391.0	2.90	294.55	390.9	7.6	-0.2	-8.8	1.92	1.84	12.19	
421.0	3.89	301.39	420.8	9.4	0.6	-10.4	3.56	3.30	22.80	
452.0	5.01	301.97	451.7	11.8	1.9	-12.4	3.62	3.61	1.87	
483.0	6.20	303.42	482.6	14.8	3.5	-15.0	3.87	3.84	4.68	
513.0	7.29	303.51	512.4	18.3	5.5	-17.9	3.63	3.63	0.30	
544.0	8.70	304.65	543.1	22.6	7.9	-21.5	4.58	4.55	3.68	
575.0	10.02	304.17	573.6	27.6	10.7	-25.6	4.27	4.26	-1.55	
605.0	11.07	304.30	603.1	33.1	13.8	-30.2	3.50	3.50	0.43	
636.0	12.30	303.77	633.5	39.3	17.3	-35.4	3.98	3.97	-1.71	
666.0	13.32	303.07	662.7	46.0	21.0	-40.9	3.44	3.40	-2.33	
696.0	14.33	302.19	691.9	53.1	24.9	-47.0	3.44	3.37	-2.93	
726.0	15.29	301.19	720.9	60.8	28.9	-53.5	3.31	3.20	-3.33	
757.0	16.22	301.18	750.7	69.2	33.3	-60.7	3.00	3.00	-0.03	
800.0	17.40	299.07	791.9	81.6	39.5	-71.4	3.09	2.74	-4.91	
843.0	18.85	298.50	832.7	95.0	45.9	-83.2	3.40	3.37	-1.33	
885.0	19.91	299.34	872.4	108.9	52.7	-95.4	2.61	2.52	2.00	
928.0	21.09	298.37	912.6	124.0	59.9	-108.6	2.86	2.74	-2.26	

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Well:	Monument Ridge B 33B-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)	
971.0	22.50	299.56	952.6	140.0	67.7	-122.5	3.44	3.28	2.77	
1,013.0	23.60	299.03	991.2	156.4	75.7	-136.9	2.67	2.62	-1.26	
1,056.0	25.08	299.64	1,030.4	174.1	84.4	-152.3	3.49	3.44	1.42	
1,099.0	26.41	298.90	1,069.1	192.8	93.5	-168.6	3.18	3.09	-1.72	
1,141.0	27.89	299.06	1,106.5	212.0	102.8	-185.4	3.53	3.52	0.38	
1,184.0	28.96	298.15	1,144.3	232.4	112.6	-203.3	2.68	2.49	-2.12	
1,227.0	29.49	297.45	1,181.8	253.4	122.4	-221.9	1.47	1.23	-1.63	
1,269.0	30.32	297.58	1,218.2	274.4	132.1	-240.5	1.98	1.98	0.31	
1,312.0	31.20	296.96	1,255.2	296.3	142.1	-260.0	2.18	2.05	-1.44	
1,355.0	31.90	298.15	1,291.8	318.8	152.6	-280.0	2.18	1.63	2.77	
1,398.0	31.95	299.69	1,328.3	341.6	163.6	-299.9	1.90	0.12	3.58	
1,440.0	32.13	299.55	1,363.9	363.9	174.6	-319.3	0.46	0.43	-0.33	
1,483.0	32.08	298.76	1,400.4	386.7	185.7	-339.2	0.98	-0.12	-1.84	
1,526.0	31.77	298.98	1,436.8	409.4	196.7	-359.1	0.77	-0.72	0.51	
1,568.0	31.25	300.39	1,472.7	431.4	207.5	-378.2	2.15	-1.24	3.36	
1,611.0	31.19	299.53	1,509.4	453.7	218.7	-397.5	1.05	-0.14	-2.00	
1,654.0	31.29	299.47	1,546.2	476.0	229.7	-416.9	0.24	0.23	-0.14	
1,697.0	32.02	299.80	1,582.8	498.5	240.8	-436.5	1.74	1.70	0.77	
1,739.0	32.41	299.94	1,618.3	520.9	252.0	-455.9	0.95	0.93	0.33	
1,782.0	32.65	299.29	1,654.6	544.1	263.4	-476.0	0.99	0.56	-1.51	
1,819.0	32.78	298.68	1,685.7	564.0	273.1	-493.5	0.96	0.35	-1.65	
1,891.0	31.86	298.24	1,746.6	602.5	291.4	-527.4	1.32	-1.28	-0.61	
1,977.0	30.41	296.74	1,820.2	647.0	312.0	-566.8	1.91	-1.69	-1.74	
2,062.0	29.62	299.47	1,893.8	689.5	332.0	-604.3	1.86	-0.93	3.21	
2,147.0	30.72	298.24	1,967.3	732.2	352.6	-641.7	1.48	1.29	-1.45	
2,232.0	29.97	298.28	2,040.6	775.1	372.9	-679.6	0.88	-0.88	0.05	
2,318.0	31.55	298.32	2,114.5	819.1	393.8	-718.3	1.84	1.84	0.05	

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2,403.0	31.07	298.01	2,187.1	863.3	414.6	-757.2	0.60	-0.56	-0.36	
2,488.0	29.75	297.89	2,260.4	906.3	434.8	-795.2	1.55	-1.55	-0.14	
2,574.0	30.59	298.70	2,334.8	949.5	455.3	-833.3	1.09	0.98	0.94	
2,659.0	29.00	297.53	2,408.6	991.8	475.2	-870.5	1.99	-1.87	-1.38	
2,744.0	29.36	299.47	2,482.8	1,033.2	495.0	-906.9	1.19	0.42	2.28	
2,830.0	29.75	301.40	2,557.6	1,075.6	516.5	-943.5	1.20	0.45	2.24	
2,915.0	30.67	302.37	2,631.0	1,118.3	539.0	-979.8	1.23	1.08	1.14	
3,001.0	31.84	303.12	2,704.6	1,162.8	563.2	-1,017.3	1.43	1.36	0.87	
3,086.0	30.94	302.54	2,777.1	1,207.0	587.2	-1,054.5	1.12	-1.06	-0.68	
3,171.0	30.67	301.58	2,850.1	1,250.5	610.3	-1,091.4	0.66	-0.32	-1.13	
3,257.0	31.95	301.18	2,923.6	1,295.1	633.6	-1,129.6	1.51	1.49	-0.47	
3,342.0	31.16	301.80	2,996.0	1,339.5	656.8	-1,167.5	1.00	-0.93	0.73	
3,428.0	30.45	301.49	3,069.9	1,383.5	679.9	-1,205.0	0.85	-0.83	-0.36	
3,513.0	30.33	299.65	3,143.2	1,426.5	701.8	-1,242.0	1.10	-0.14	-2.16	
3,598.0	30.98	299.38	3,216.3	1,469.9	723.1	-1,279.7	0.78	0.76	-0.32	
3,684.0	30.89	298.05	3,290.1	1,514.1	744.4	-1,318.5	0.80	-0.10	-1.55	
3,769.0	31.33	298.54	3,362.9	1,558.0	765.2	-1,357.2	0.60	0.52	0.58	
3,854.0	31.99	297.89	3,435.2	1,602.6	786.3	-1,396.5	0.87	0.78	-0.76	
3,940.0	30.89	299.73	3,508.6	1,647.4	807.9	-1,435.8	1.70	-1.28	2.14	
4,025.0	31.07	298.63	3,581.5	1,691.2	829.2	-1,474.0	0.70	0.21	-1.29	
4,111.0	30.10	297.45	3,655.5	1,734.9	849.8	-1,512.6	1.33	-1.13	-1.37	
4,196.0	28.17	296.79	3,729.8	1,776.3	868.7	-1,549.5	2.30	-2.27	-0.78	
4,282.0	26.55	298.40	3,806.1	1,815.8	886.9	-1,584.5	2.07	-1.88	1.87	
4,367.0	25.84	301.23	3,882.4	1,853.3	905.6	-1,617.0	1.69	-0.84	3.33	
4,452.0	24.70	301.84	3,959.3	1,889.6	924.6	-1,648.0	1.38	-1.34	0.72	
4,538.0	23.55	300.74	4,037.8	1,924.7	942.8	-1,678.0	1.44	-1.34	-1.28	
4,623.0	22.54	301.45	4,116.0	1,957.9	960.0	-1,706.5	1.23	-1.19	0.84	

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4,709.0	19.64	297.27	4,196.2	1,988.8	975.2	-1,733.4	3.80	-3.37	-4.86
4,794.0	17.14	297.01	4,276.9	2,015.6	987.5	-1,757.3	2.94	-2.94	-0.31
4,879.0	14.06	297.93	4,358.7	2,038.5	998.0	-1,777.5	3.64	-3.62	1.08
4,965.0	11.07	297.93	4,442.7	2,057.2	1,006.8	-1,794.1	3.48	-3.48	0.00
5,050.0	8.36	299.52	4,526.4	2,071.5	1,013.6	-1,806.7	3.20	-3.19	1.87
5,136.0	5.63	307.25	4,611.8	2,082.0	1,019.3	-1,815.5	3.35	-3.17	8.99
5,221.0	2.77	303.73	4,696.5	2,088.1	1,022.9	-1,820.5	3.38	-3.36	-4.14
5,307.0	2.07	296.96	4,782.5	2,091.8	1,024.8	-1,823.6	0.88	-0.81	-7.87
5,392.0	2.02	291.29	4,867.4	2,094.8	1,026.0	-1,826.4	0.25	-0.06	-6.67
5,477.0	1.76	287.95	4,952.4	2,097.6	1,027.0	-1,829.0	0.33	-0.31	-3.93
5,563.0	1.58	279.69	5,038.3	2,100.0	1,027.6	-1,831.4	0.35	-0.21	-9.60
5,648.0	1.54	272.35	5,123.3	2,102.1	1,027.8	-1,833.7	0.24	-0.05	-8.64
5,734.0	1.67	269.32	5,209.3	2,104.2	1,027.8	-1,836.1	0.18	0.15	-3.52
5,819.0	1.79	266.80	5,294.2	2,106.4	1,027.8	-1,838.7	0.17	0.14	-2.96
5,904.0	0.57	169.30	5,379.2	2,107.3	1,027.3	-1,839.9	2.29	-1.44	-114.71
5,990.0	0.83	111.47	5,465.2	2,106.4	1,026.6	-1,839.3	0.83	0.30	-67.24
6,075.0	0.48	111.16	5,550.2	2,105.4	1,026.3	-1,838.4	0.41	-0.41	-0.36
6,161.0	0.48	114.55	5,636.2	2,104.7	1,026.0	-1,837.7	0.03	0.00	3.94
6,246.0	0.67	110.15	5,721.2	2,103.9	1,025.7	-1,836.9	0.23	0.22	-5.18
6,331.0	0.44	117.09	5,806.2	2,103.0	1,025.3	-1,836.2	0.28	-0.27	8.16
6,417.0	0.31	205.12	5,892.2	2,102.7	1,025.0	-1,836.0	0.62	-0.15	102.36
6,502.0	0.31	231.66	5,977.2	2,102.8	1,024.6	-1,836.3	0.17	0.00	31.22
6,588.0	0.44	247.22	6,063.2	2,103.1	1,024.4	-1,836.7	0.19	0.15	18.09
6,673.0	0.22	211.84	6,148.2	2,103.3	1,024.1	-1,837.1	0.34	-0.26	-41.62
6,759.0	0.53	209.07	6,234.2	2,103.3	1,023.6	-1,837.4	0.36	0.36	-3.22
6,844.0	0.92	229.37	6,319.2	2,103.5	1,022.8	-1,838.1	0.54	0.46	23.88
6,929.0	1.10	238.47	6,404.2	2,104.2	1,022.0	-1,839.3	0.28	0.21	10.71

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7,014.0	0.92	238.12	6,489.1	2,104.9	1,021.2	-1,840.6	0.21	-0.21	-0.41
7,100.0	0.79	246.16	6,575.1	2,105.6	1,020.6	-1,841.7	0.21	-0.15	9.35
7,185.0	1.05	265.50	6,660.1	2,106.6	1,020.3	-1,843.0	0.47	0.31	22.75
7,270.0	1.19	279.87	6,745.1	2,108.1	1,020.4	-1,844.7	0.37	0.16	16.91
7,356.0	0.48	285.23	6,831.1	2,109.3	1,020.6	-1,845.9	0.83	-0.83	6.23
7,450.0	0.62	270.07	6,925.1	2,110.1	1,020.7	-1,846.8	0.21	0.15	-16.13
Projection to Bit									
7,505.0	0.62	270.07	6,980.1	2,110.6	1,020.7	-1,847.4	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,450.0	6,925.1	1,020.7	-1,846.8	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____

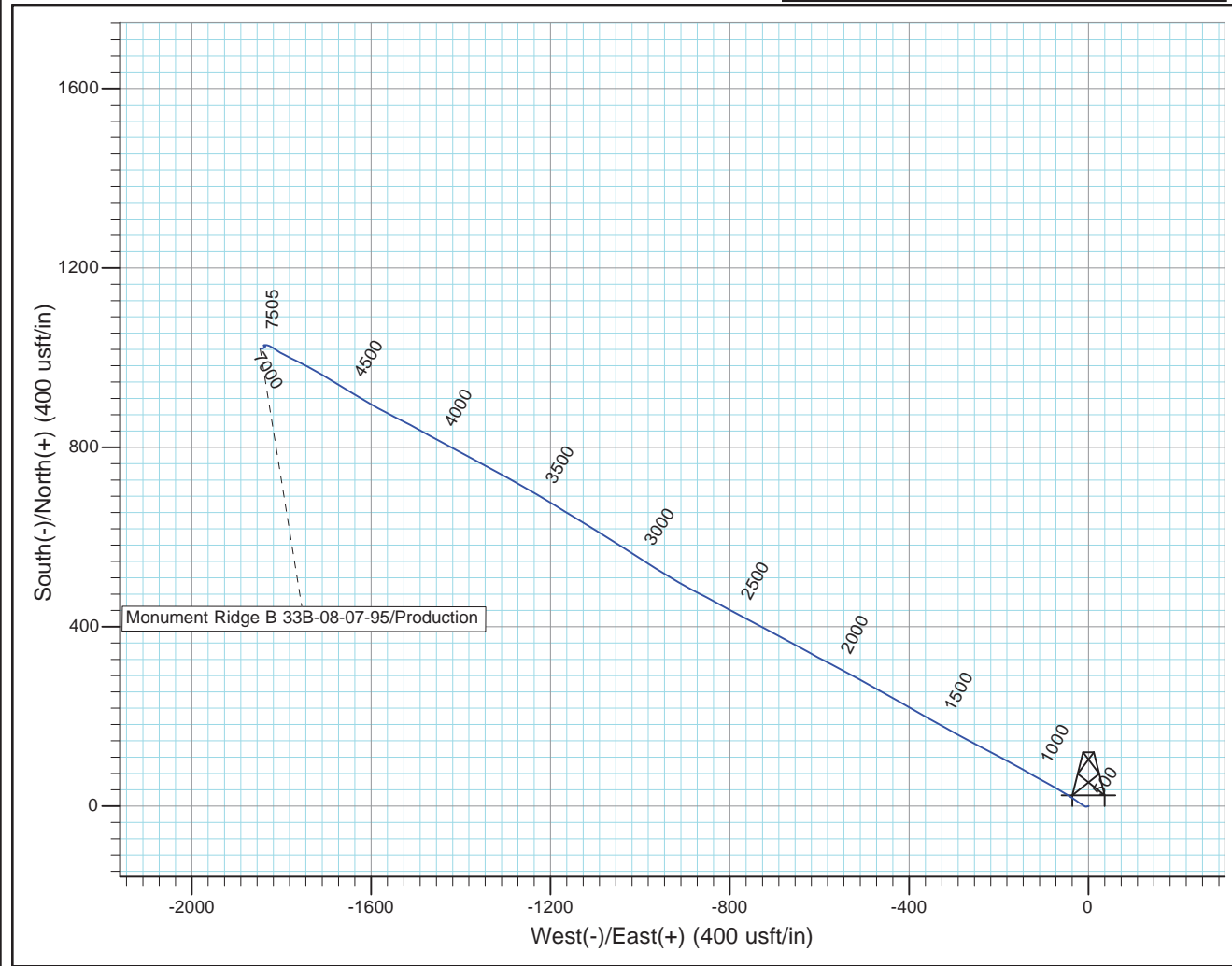
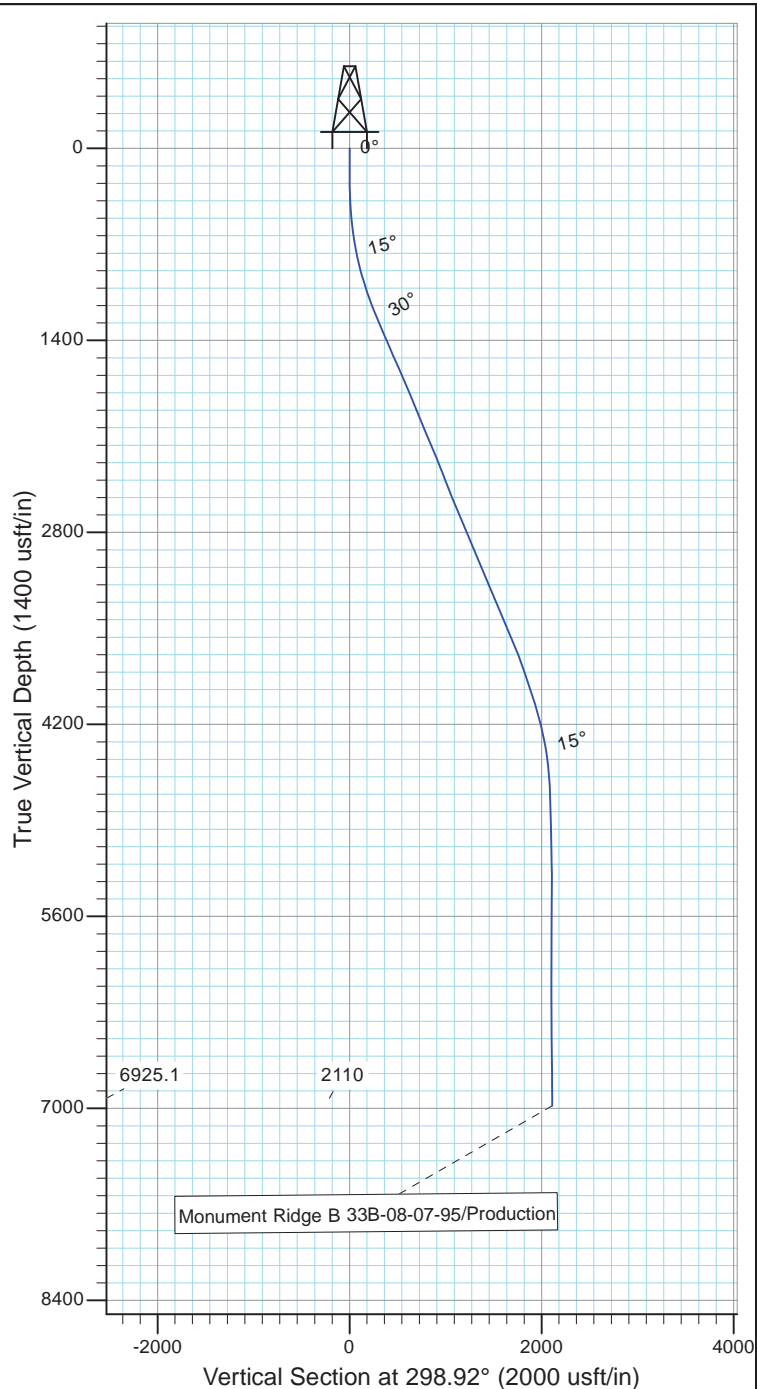


Project: Rockies Region
Site: Monument Ridge B
Well: Monument Ridge B 33B-08-07-95
Wellbore: Wellbore #1
Design: Production



Azimuths to True North
Magnetic North: 9.78°

Magnetic Field
Strength: 51777.9snT
Dip Angle: 65.57°
Date: 11/17/2015
Model: IGRF2010



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

Created By: Matthew Linton

Date: 9:53, December 28 20

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