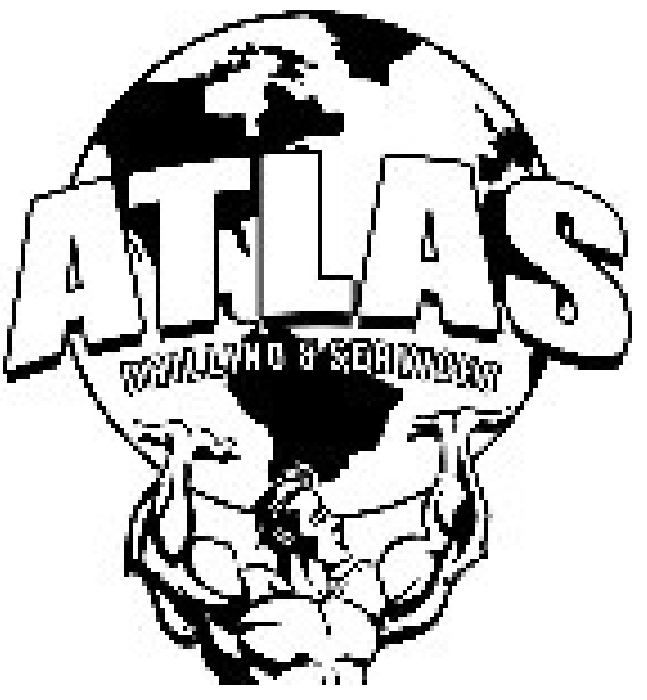




HighPoint Resources
Project: Weld County, CO (NAD83)
Site: Sec 05-T01N-R64W Grinde Pad
Well: Grinde 01-64-05-3340B
Wellbore: Wellbore #1
Wellbore #1 (Grinde 01-64-05-3340B/We
Cade 23

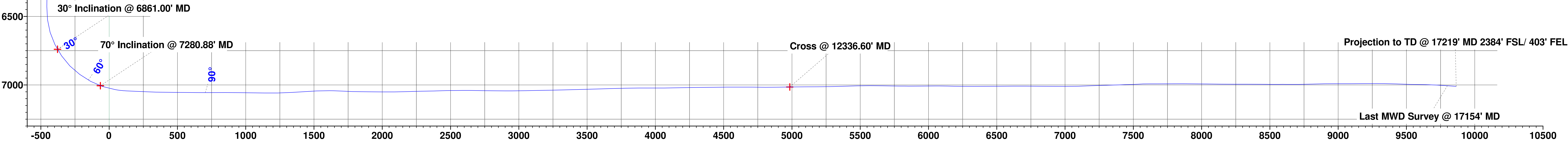
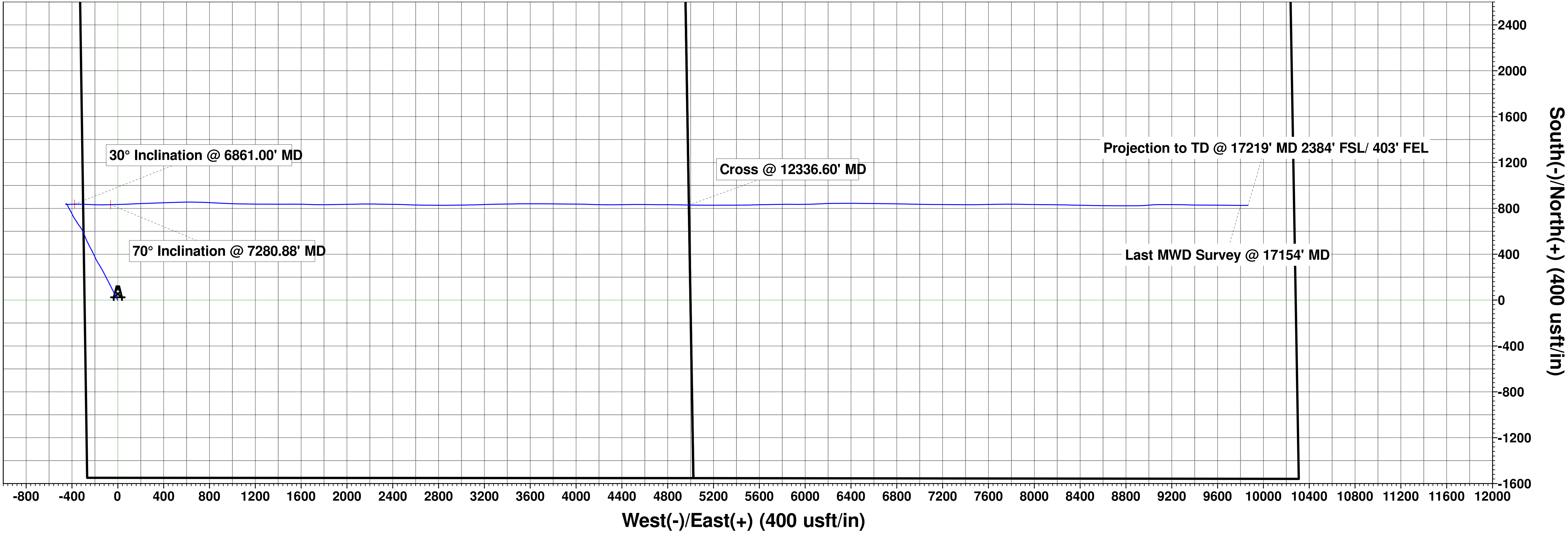
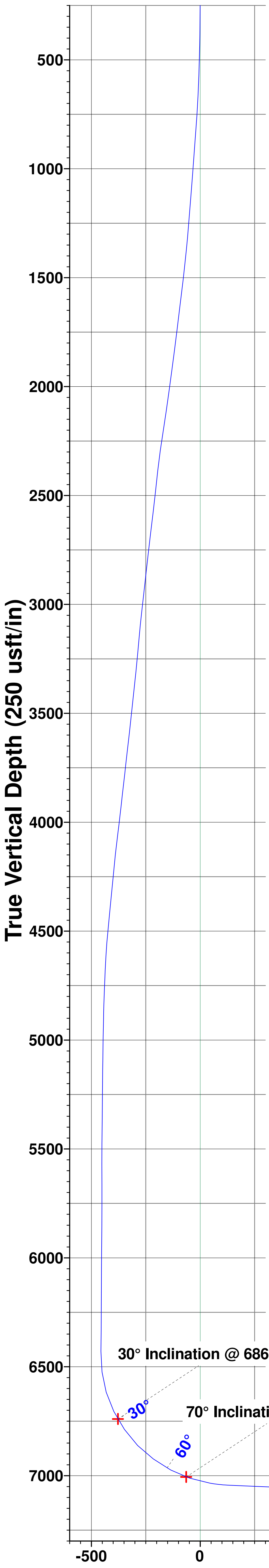
Ground Elevation:: 5030.00
RKB Elevation: KB @ 5046.50usft (Cade 23)
Rig Name: Cade 23

Northing	Easting	Latitude	Longitude
1272404.33	3256542.76	40.077500	-104.583220

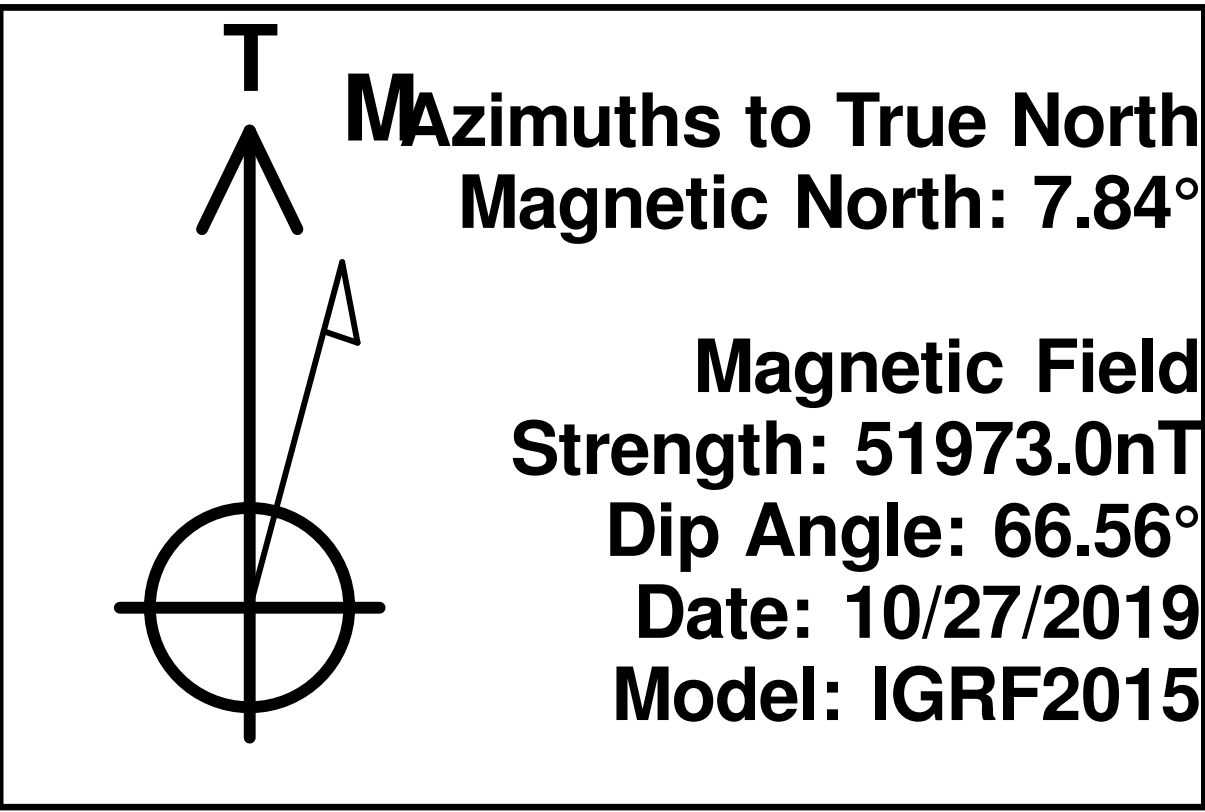


ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
6861.00	29.99	89.35	6739.97	836.47	-377.31	-378.04	1050.35	30° Inclination @ 6861.00' MD
7280.88	70.00	88.36	7005.85	832.51	-63.66	-64.39	1363.38	70° Inclination @ 7280.88' MD
12336.60	90.88	90.78	7015.17	828.99	4985.00	4984.27	6412.91	Cross @ 12336.60' MD
17154.00	86.01	90.17	7005.98	825.88	9800.59	9799.87	11229.39	Last MWD Survey @ 17154' MD
17219.00	86.01	90.17	7010.50	825.68	9865.43	9864.71	11294.23	Projection to TD @ 17219' MD 2384' FSL/ 403' FEL



Vertical Section at 90.05° (250 usft/in)



HighPoint Resources

Weld County, CO (NAD83)

Sec 05-T01N-R64W Grinde Pad

Grinde 01-64-05-3340B

Wellbore #1

Design: Wellbore #1

Standard Survey Report

08 January, 2020

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Project	Weld County, CO (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 05-T01N-R64W Grinde Pad			
Site Position:		Northing:	1,276,126.40 usft	Latitude:	40.087728
From:	Lat/Long	Easting:	3,256,159.56 usft	Longitude:	-104.584452
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.59 °

Well	Grinde 01-64-05-3340B					
Well Position	+N/-S	0.00 usft	Northing:	1,272,404.33 usft	Latitude:	40.077500
	+E/-W	0.00 usft	Easting:	3,256,542.77 usft	Longitude:	-104.583220
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,030.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/27/2019	7.84	66.56	51,972.96284311

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	90.05	

Survey Program	Date	1/8/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
202.00	17,219.00	Atlas MWD Surveys (Wellbore #1)	MWD	MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.00	0.18	220.68	202.00	-0.24	-0.21	-0.21	0.09	0.09	0.00
First MWD Survey @ 202.00' MD									
294.00	0.35	215.98	294.00	-0.58	-0.47	-0.47	0.19	0.18	-5.11
386.00	1.32	311.10	385.99	-0.11	-1.43	-1.43	1.52	1.05	103.39
478.00	2.96	333.56	477.92	2.72	-3.29	-3.29	1.97	1.78	24.41
570.00	5.26	335.80	569.68	8.69	-6.07	-6.08	2.51	2.50	2.43
662.00	6.13	335.43	661.23	17.00	-9.84	-9.86	0.95	0.95	-0.40
753.00	8.04	333.38	751.53	27.11	-14.72	-14.74	2.12	2.10	-2.25
845.00	9.61	331.89	842.44	39.64	-21.22	-21.25	1.72	1.71	-1.62
937.00	9.67	334.72	933.14	53.40	-28.14	-28.18	0.52	0.07	3.08

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,029.00	9.45	333.67	1,023.86	67.15	-34.79	-34.84	0.31	-0.24	-1.14
1,121.00	10.15	332.11	1,114.52	81.09	-41.93	-42.00	0.81	0.76	-1.70
1,189.00	9.68	332.36	1,181.50	91.45	-47.38	-47.46	0.69	-0.69	0.37
1,299.00	10.63	334.60	1,289.78	108.81	-56.02	-56.12	0.94	0.86	2.04
1,391.00	12.61	332.16	1,379.89	125.35	-64.35	-64.46	2.22	2.15	-2.65
1,483.00	12.98	332.73	1,469.60	143.42	-73.78	-73.90	0.42	0.40	0.62
1,575.00	14.59	331.99	1,558.95	162.83	-83.96	-84.10	1.76	1.75	-0.80
1,670.00	15.31	333.78	1,650.73	184.65	-95.12	-95.28	0.90	0.76	1.88
1,766.00	15.30	333.26	1,743.33	207.33	-106.41	-106.60	0.14	-0.01	-0.54
1,862.00	15.62	332.34	1,835.86	230.09	-118.11	-118.31	0.42	0.33	-0.96
1,957.00	15.47	331.39	1,927.38	252.54	-130.12	-130.34	0.31	-0.16	-1.00
2,053.00	15.74	330.11	2,019.84	275.07	-142.74	-142.98	0.46	0.28	-1.33
2,148.00	15.75	328.91	2,111.28	297.28	-155.82	-156.08	0.34	0.01	-1.26
2,243.00	15.93	326.90	2,202.67	319.24	-169.59	-169.87	0.61	0.19	-2.12
2,338.00	15.96	330.25	2,294.02	341.51	-183.19	-183.49	0.97	0.03	3.53
2,434.00	15.39	337.44	2,386.46	364.73	-194.63	-194.95	2.11	-0.59	7.49
2,530.00	15.01	334.95	2,479.10	387.76	-204.78	-205.12	0.79	-0.40	-2.59
2,625.00	14.58	333.73	2,570.95	409.62	-215.28	-215.64	0.56	-0.45	-1.28
2,721.00	14.20	331.56	2,663.94	430.81	-226.24	-226.62	0.69	-0.40	-2.26
2,816.00	13.51	332.49	2,756.17	450.90	-236.91	-237.31	0.76	-0.73	0.98
2,911.00	13.37	330.28	2,848.57	470.28	-247.49	-247.90	0.56	-0.15	-2.33
3,007.00	14.31	335.37	2,941.79	490.71	-257.93	-258.36	1.60	0.98	5.30
3,103.00	13.71	332.42	3,034.93	511.58	-268.15	-268.59	0.97	-0.63	-3.07
3,199.00	15.00	338.93	3,127.94	533.26	-277.88	-278.35	2.15	1.34	6.78
3,294.00	15.08	340.31	3,219.69	556.36	-286.46	-286.95	0.39	0.08	1.45
3,388.00	14.39	336.61	3,310.60	578.60	-295.22	-295.73	1.24	-0.73	-3.94
3,484.00	13.05	333.54	3,403.86	599.25	-304.79	-305.31	1.59	-1.40	-3.20
3,580.00	12.12	329.28	3,497.55	617.62	-314.76	-315.30	1.37	-0.97	-4.44
3,675.00	11.43	326.08	3,590.55	634.00	-325.11	-325.67	1.00	-0.73	-3.37
3,770.00	10.05	320.33	3,683.89	648.20	-335.66	-336.22	1.84	-1.45	-6.05
3,866.00	11.19	325.44	3,778.24	662.32	-346.29	-346.87	1.54	1.19	5.32
3,961.00	12.62	330.05	3,871.20	678.90	-356.70	-357.29	1.81	1.51	4.85
4,056.00	11.37	325.28	3,964.13	695.59	-367.22	-367.82	1.68	-1.32	-5.02
4,152.00	13.11	325.95	4,057.94	712.39	-378.70	-379.32	1.82	1.81	0.70
4,246.00	13.13	333.30	4,149.49	730.76	-389.47	-390.11	1.77	0.02	7.82
4,342.00	12.61	334.92	4,243.08	749.99	-398.81	-399.46	0.66	-0.54	1.69
4,437.00	11.74	331.72	4,335.95	767.90	-407.79	-408.46	1.16	-0.92	-3.37
4,533.00	10.90	329.49	4,430.08	784.32	-417.02	-417.71	0.99	-0.88	-2.32
4,628.00	10.49	330.87	4,523.43	799.61	-425.79	-426.49	0.51	-0.43	1.45
4,723.00	7.94	336.94	4,617.20	813.21	-432.57	-433.28	2.87	-2.68	6.39
4,819.00	5.38	330.12	4,712.54	823.21	-437.41	-438.13	2.79	-2.67	-7.10
4,914.00	3.98	331.11	4,807.22	829.96	-441.22	-441.95	1.48	-1.47	1.04
5,009.00	1.89	327.55	4,902.09	834.17	-443.66	-444.39	2.21	-2.20	-3.75

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,105.00	1.63	323.85	4,998.05	836.61	-445.31	-446.04	0.30	-0.27	-3.85
5,201.00	1.75	323.95	5,094.01	838.90	-446.98	-447.71	0.13	0.13	0.10
5,296.00	0.34	286.00	5,188.99	840.15	-448.11	-448.84	1.58	-1.48	-39.95
5,391.00	0.77	221.42	5,283.98	839.74	-448.80	-449.53	0.73	0.45	-67.98
5,485.00	0.98	236.05	5,377.97	838.82	-449.88	-450.62	0.32	0.22	15.56
5,581.00	0.87	320.03	5,473.96	838.92	-451.03	-451.76	1.29	-0.11	87.48
5,677.00	0.30	124.31	5,569.96	839.34	-451.29	-452.03	1.21	-0.59	171.13
5,772.00	0.35	154.59	5,664.96	838.94	-450.96	-451.70	0.19	0.05	31.87
5,867.00	0.35	210.93	5,759.96	838.43	-450.99	-451.72	0.35	0.00	59.31
5,963.00	0.35	255.86	5,855.96	838.10	-451.42	-452.15	0.28	0.00	46.80
6,059.00	1.06	204.66	5,951.95	837.22	-452.08	-452.81	0.92	0.74	-53.33
6,154.00	0.95	219.47	6,046.94	835.82	-452.94	-453.67	0.30	-0.12	15.59
6,250.00	0.63	338.48	6,142.93	835.69	-453.64	-454.37	1.43	-0.33	123.97
6,346.00	0.23	335.35	6,238.93	836.36	-453.92	-454.65	0.42	-0.42	-3.26
6,440.00	0.46	265.44	6,332.93	836.50	-454.37	-455.10	0.47	0.24	-74.37
6,536.00	1.00	255.47	6,428.92	836.26	-455.57	-456.30	0.58	0.56	-10.39
6,631.00	7.15	95.88	6,523.70	835.45	-450.48	-451.21	8.52	6.47	-167.99
6,726.00	16.18	88.93	6,616.64	835.09	-431.33	-432.05	9.60	9.51	-7.32
6,821.00	27.05	88.10	6,704.83	836.05	-396.40	-397.13	11.45	11.44	-0.87
6,861.00	29.99	89.35	6,739.97	836.47	-377.31	-378.04	7.51	7.36	3.12
30° Inclination @ 6861.00' MD									
6,917.00	34.13	90.76	6,787.42	836.42	-347.59	-348.32	7.51	7.39	2.52
7,013.00	44.38	91.41	6,861.66	835.23	-286.93	-287.66	10.69	10.68	0.68
7,108.00	54.39	93.13	6,923.43	832.30	-214.98	-215.70	10.63	10.54	1.81
7,203.00	61.45	89.04	6,973.87	830.89	-134.57	-135.30	8.28	7.43	-4.31
7,280.88	70.00	88.36	7,005.85	832.51	-63.66	-64.39	11.01	10.98	-0.87
70° Inclination @ 7280.88' MD									
7,298.00	71.88	88.22	7,011.44	833.00	-47.49	-48.22	11.01	10.98	-0.81
7,394.00	80.33	88.84	7,034.48	835.37	45.59	44.86	8.82	8.80	0.65
7,475.00	87.06	86.84	7,043.37	838.42	125.99	125.26	8.66	8.31	-2.47
7,569.00	87.88	87.76	7,047.52	842.84	219.79	219.06	1.31	0.87	0.98
7,630.00	87.04	87.89	7,050.22	845.15	280.69	279.95	1.39	-1.38	0.21
7,725.00	89.46	88.23	7,053.12	848.37	375.58	374.84	2.57	2.55	0.36
7,821.00	88.97	88.38	7,054.44	851.21	471.53	470.79	0.53	-0.51	0.16
7,916.00	89.76	88.69	7,055.49	853.63	566.49	565.75	0.89	0.83	0.33
8,012.00	89.60	90.07	7,056.03	854.67	662.48	661.74	1.45	-0.17	1.44
8,107.00	90.50	93.06	7,055.94	852.08	757.43	756.69	3.29	0.95	3.15
8,202.00	89.78	92.78	7,055.71	847.24	852.31	851.57	0.81	-0.76	-0.29
8,298.00	89.17	92.66	7,056.59	842.68	948.20	947.46	0.65	-0.64	-0.13
8,394.00	89.43	91.08	7,057.76	839.55	1,044.14	1,043.40	1.67	0.27	-1.65
8,490.00	88.88	90.75	7,059.18	838.02	1,140.11	1,139.38	0.67	-0.57	-0.34
8,585.00	91.57	90.39	7,058.81	837.07	1,235.10	1,234.37	2.86	2.83	-0.38
8,680.00	93.00	90.27	7,055.02	836.53	1,330.02	1,329.29	1.51	1.51	-0.13
8,774.00	93.44	89.98	7,049.74	836.32	1,423.87	1,423.14	0.56	0.47	-0.31

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,869.00	93.22	89.25	7,044.22	836.96	1,518.71	1,517.98	0.80	-0.23	-0.77
8,965.00	89.13	91.85	7,042.25	836.04	1,614.65	1,613.92	5.05	-4.26	2.71
9,060.00	87.12	92.04	7,045.36	832.81	1,709.54	1,708.82	2.13	-2.12	0.20
9,107.00	87.72	90.42	7,047.48	831.81	1,756.48	1,755.76	3.67	1.28	-3.45
9,155.00	89.04	89.42	7,048.83	831.87	1,804.46	1,803.74	3.45	2.75	-2.08
9,250.00	89.35	88.51	7,050.17	833.59	1,899.44	1,898.71	1.01	0.33	-0.96
9,346.00	89.80	89.18	7,050.88	835.53	1,995.41	1,994.68	0.84	0.47	0.70
9,441.00	90.11	88.81	7,050.95	837.19	2,090.40	2,089.67	0.51	0.33	-0.39
9,537.00	92.21	90.25	7,049.01	837.98	2,186.37	2,185.64	2.65	2.19	1.50
9,584.00	92.16	89.90	7,047.22	837.92	2,233.33	2,232.60	0.75	-0.11	-0.74
9,632.00	90.94	91.98	7,045.92	837.13	2,281.31	2,280.57	5.02	-2.54	4.33
9,728.00	90.88	90.13	7,044.40	835.36	2,377.27	2,376.54	1.93	-0.06	-1.93
9,823.00	92.33	91.78	7,041.73	833.78	2,472.22	2,471.49	2.31	1.53	1.74
9,870.00	89.93	91.79	7,040.81	832.32	2,519.18	2,518.45	5.11	-5.11	0.02
9,918.00	90.79	93.12	7,040.51	830.26	2,567.13	2,566.41	3.30	1.79	2.77
10,014.00	88.93	90.01	7,040.74	827.64	2,663.08	2,662.36	3.77	-1.94	-3.24
10,110.00	89.05	90.43	7,042.43	827.27	2,759.07	2,758.34	0.45	0.13	0.44
10,205.00	90.16	89.88	7,043.09	827.01	2,854.06	2,853.34	1.30	1.17	-0.58
10,254.00	89.34	89.61	7,043.30	827.23	2,903.06	2,902.34	1.76	-1.67	-0.55
10,300.00	89.70	89.35	7,043.69	827.65	2,949.06	2,948.33	0.97	0.78	-0.57
10,395.00	91.74	88.57	7,042.49	829.37	3,044.03	3,043.30	2.30	2.15	-0.82
10,491.00	90.94	88.78	7,040.25	831.59	3,139.98	3,139.25	0.86	-0.83	0.22
10,587.00	91.25	87.80	7,038.41	834.46	3,235.91	3,235.18	1.07	0.32	-1.02
10,679.00	91.37	89.61	7,036.31	836.54	3,327.86	3,327.13	1.97	0.13	1.97
10,771.00	91.30	88.63	7,034.17	837.95	3,419.83	3,419.09	1.07	-0.08	-1.07
10,862.00	91.87	89.24	7,031.65	839.64	3,510.77	3,510.04	0.92	0.63	0.67
10,955.00	91.65	90.07	7,028.79	840.20	3,603.73	3,602.99	0.92	-0.24	0.89
11,047.00	91.81	89.75	7,026.02	840.34	3,695.69	3,694.95	0.39	0.17	-0.35
11,138.00	90.59	91.26	7,024.11	839.54	3,786.66	3,785.92	2.13	-1.34	1.66
11,230.00	90.86	91.03	7,022.95	837.70	3,878.63	3,877.90	0.39	0.29	-0.25
11,322.00	89.20	89.31	7,022.90	837.43	3,970.63	3,969.89	2.60	-1.80	-1.87
11,414.00	91.06	91.97	7,022.69	836.40	4,062.61	4,061.88	3.53	2.02	2.89
11,506.00	91.01	91.54	7,021.03	833.59	4,154.55	4,153.82	0.47	-0.05	-0.47
11,598.00	91.02	90.94	7,019.40	831.59	4,246.51	4,245.78	0.65	0.01	-0.65
11,690.00	90.62	89.43	7,018.08	831.30	4,338.50	4,337.77	1.70	-0.43	-1.64
11,782.00	90.69	89.10	7,017.03	832.48	4,430.49	4,429.76	0.37	0.08	-0.36
11,874.00	90.40	89.47	7,016.15	833.63	4,522.47	4,521.74	0.51	-0.32	0.40
11,966.00	90.02	90.84	7,015.82	833.38	4,614.47	4,613.74	1.55	-0.41	1.49
12,062.00	89.65	90.91	7,016.09	831.91	4,710.46	4,709.73	0.39	-0.39	0.07
12,158.00	89.16	89.41	7,017.09	831.64	4,806.45	4,805.72	1.64	-0.51	-1.56
12,253.00	91.27	91.65	7,016.73	830.76	4,901.43	4,900.71	3.24	2.22	2.36
12,336.60	90.88	90.78	7,015.17	828.99	4,985.00	4,984.27	1.14	-0.47	-1.04
Cross @ 12336.60' MD									

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,349.00	90.82	90.65	7,014.98	828.84	4,997.40	4,996.67	1.14	-0.47	-1.04	
12,444.00	90.16	90.38	7,014.17	827.98	5,092.39	5,091.67	0.75	-0.69	-0.28	
12,540.00	90.55	90.08	7,013.58	827.60	5,188.39	5,187.66	0.51	0.41	-0.31	
12,635.00	91.13	89.40	7,012.18	828.03	5,283.37	5,282.65	0.94	0.61	-0.72	
12,731.00	91.53	90.28	7,009.95	828.30	5,379.35	5,378.62	1.01	0.42	0.92	
12,827.00	92.09	89.37	7,006.92	828.59	5,475.30	5,474.57	1.11	0.58	-0.95	
12,922.00	89.56	88.10	7,005.55	830.69	5,570.25	5,569.53	2.98	-2.66	-1.34	
13,017.00	89.28	89.44	7,006.52	832.73	5,665.23	5,664.50	1.44	-0.29	1.41	
13,112.00	88.93	88.52	7,008.00	834.42	5,760.20	5,759.47	1.04	-0.37	-0.97	
13,208.00	90.15	90.17	7,008.77	835.52	5,856.18	5,855.45	2.14	1.27	1.72	
13,304.00	90.25	90.24	7,008.44	835.17	5,952.18	5,951.45	0.13	0.10	0.07	
13,400.00	90.30	88.48	7,007.98	836.24	6,048.17	6,047.44	1.83	0.05	-1.83	
13,495.00	88.83	86.75	7,008.70	840.20	6,143.08	6,142.34	2.39	-1.55	-1.82	
13,542.00	89.06	87.55	7,009.56	842.53	6,190.01	6,189.28	1.77	0.49	1.70	
13,590.00	89.53	90.18	7,010.15	843.48	6,238.00	6,237.26	5.57	0.98	5.48	
13,685.00	90.00	89.21	7,010.54	843.99	6,332.99	6,332.25	1.13	0.49	-1.02	
13,780.00	90.41	91.06	7,010.20	843.77	6,427.99	6,427.25	1.99	0.43	1.95	
13,876.00	90.14	89.93	7,009.74	842.94	6,523.98	6,523.24	1.21	-0.28	-1.18	
13,972.00	90.60	90.78	7,009.12	842.34	6,619.98	6,619.24	1.01	0.48	0.89	
14,067.00	89.69	90.94	7,008.88	840.92	6,714.96	6,714.23	0.97	-0.96	0.17	
14,163.00	89.28	90.83	7,009.74	839.43	6,810.95	6,810.21	0.44	-0.43	-0.11	
14,258.00	90.15	91.56	7,010.22	837.45	6,905.93	6,905.19	1.20	0.92	0.77	
14,354.00	89.30	90.75	7,010.68	835.52	7,001.90	7,001.17	1.22	-0.89	-0.84	
14,449.00	92.06	90.81	7,009.55	834.22	7,096.88	7,096.15	2.91	2.91	0.06	
14,544.00	92.01	90.08	7,006.18	833.49	7,191.81	7,191.08	0.77	-0.05	-0.77	
14,639.00	91.85	90.75	7,002.98	832.80	7,286.76	7,286.03	0.72	-0.17	0.71	
14,735.00	91.66	90.31	7,000.04	831.91	7,382.71	7,381.98	0.50	-0.20	-0.46	
14,831.00	92.12	89.23	6,996.87	832.30	7,478.65	7,477.92	1.22	0.48	-1.13	
14,878.00	92.42	88.96	6,995.01	833.04	7,525.61	7,524.88	0.86	0.64	-0.57	
14,925.00	92.58	88.98	6,992.96	833.88	7,572.56	7,571.83	0.34	0.34	0.04	
14,973.00	89.60	89.51	6,992.05	834.51	7,620.54	7,619.81	6.31	-6.21	1.10	
15,020.00	89.95	88.80	6,992.23	835.21	7,667.53	7,666.80	1.68	0.74	-1.51	
15,116.00	90.34	89.25	6,991.99	836.84	7,763.52	7,762.79	0.62	0.41	0.47	
15,211.00	90.17	91.82	6,991.56	835.95	7,858.51	7,857.77	2.71	-0.18	2.71	
15,306.00	89.19	91.00	6,992.10	833.62	7,953.47	7,952.74	1.35	-1.03	-0.86	
15,400.00	89.41	90.23	6,993.24	832.61	8,047.46	8,046.73	0.85	0.23	-0.82	
15,495.00	89.12	90.39	6,994.46	832.09	8,142.45	8,141.72	0.35	-0.31	0.17	
15,591.00	90.48	91.46	6,994.80	830.54	8,238.44	8,237.71	1.80	1.42	1.11	
15,685.00	89.60	90.66	6,994.73	828.80	8,332.42	8,331.69	1.27	-0.94	-0.85	
15,781.00	89.89	91.66	6,995.16	826.86	8,428.40	8,427.67	1.08	0.30	1.04	
15,877.00	89.39	90.89	6,995.76	824.73	8,524.37	8,523.65	0.96	-0.52	-0.80	
15,924.00	90.63	90.57	6,995.75	824.13	8,571.36	8,570.64	2.72	2.64	-0.68	
15,972.00	88.84	90.74	6,995.98	823.58	8,619.36	8,618.64	3.75	-3.73	0.35	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,068.00	91.14	89.94	6,995.99	823.01	8,715.35	8,714.63	2.54	2.40	-0.83	
16,163.00	91.24	90.54	6,994.02	822.61	8,810.33	8,809.61	0.64	0.11	0.63	
16,258.00	91.86	88.75	6,991.45	823.20	8,905.29	8,904.56	1.99	0.65	-1.88	
16,343.00	89.01	85.60	6,990.80	827.39	8,990.16	8,989.44	5.00	-3.35	-3.71	
16,353.00	89.05	85.05	6,990.97	828.20	9,000.13	8,999.40	5.51	0.40	-5.50	
16,401.00	90.62	86.68	6,991.11	831.66	9,048.00	9,047.27	4.71	3.27	3.40	
16,449.00	90.12	90.11	6,990.80	833.01	9,095.97	9,095.24	7.22	-1.04	7.15	
16,544.00	90.65	90.12	6,990.16	832.82	9,190.97	9,190.24	0.56	0.56	0.01	
16,639.00	89.88	91.27	6,989.72	831.66	9,285.96	9,285.23	1.46	-0.81	1.21	
16,735.00	88.26	91.29	6,991.28	829.52	9,381.92	9,381.19	1.69	-1.69	0.02	
16,782.00	88.25	90.36	6,992.71	828.84	9,428.89	9,428.16	1.98	-0.02	-1.98	
16,830.00	87.74	90.19	6,994.39	828.61	9,476.86	9,476.13	1.12	-1.06	-0.35	
16,926.00	89.37	90.57	6,996.81	827.98	9,572.83	9,572.10	1.74	1.70	0.40	
17,021.00	88.19	90.27	6,998.84	827.28	9,667.80	9,667.07	1.28	-1.24	-0.32	
17,117.00	86.26	90.97	7,003.48	826.24	9,763.68	9,762.95	2.14	-2.01	0.73	
17,154.00	86.01	90.17	7,005.98	825.88	9,800.59	9,799.87	2.26	-0.68	-2.16	
Last MWD Survey @ 17154' MD										
17,219.00	86.01	90.17	7,010.50	825.68	9,865.43	9,864.71	0.00	0.00	0.00	
Projection to TD @ 17219' MD 2384' FSL/ 403' FEL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
30° Inclination @ 6861.0	0.00	0.00	6,739.97	836.49	-377.30	1,273,236.88	3,256,156.84	40.079796	-104.584569	
- hit/miss target										
- Shape										
- actual wellpath misses target center by 0.02usft at 6861.00usft MD (6739.97 TVD, 836.47 N, -377.31 E)										
- Point										
70° Inclination @ 7280.8	0.00	0.00	7,005.85	832.51	-63.67	1,273,236.13	3,256,470.50	40.079785	-104.583448	
- hit/miss target										
- Shape										
- actual wellpath misses target center by 0.01usft at 7280.88usft MD (7005.85 TVD, 832.51 N, -63.67 E)										
- Point										
Cross @ 12336.60' MD	0.00	0.00	7,015.17	828.99	4,985.00	1,273,284.81	3,261,518.93	40.079774	-104.565406	
- hit/miss target										
- Shape										
- actual wellpath hits target center										
- Point										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
202.00	202.00	-0.24	-0.21	First MWD Survey @ 202.00' MD	
6,861.00	6,739.97	836.47	-377.31	30° Inclination @ 6861.00' MD	
7,280.88	7,005.85	832.51	-63.66	70° Inclination @ 7280.88' MD	
12,336.60	7,015.17	828.99	4,985.00	Cross @ 12336.60' MD	
17,154.00	7,005.98	825.88	9,800.59	Last MWD Survey @ 17154' MD	
17,219.00	7,010.50	825.68	9,865.43	Projection to TD @ 17219' MD 2384' FSL/ 403' FEL	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-3340B
Project:	Weld County, CO (NAD83)	TVD Reference:	KB @ 5046.50usft (Cade 23)
Site:	Sec 05-T01N-R64W Grinde Pad	MD Reference:	KB @ 5046.50usft (Cade 23)
Well:	Grinde 01-64-05-3340B	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Checked By: _____ Approved By: _____ Date: _____