



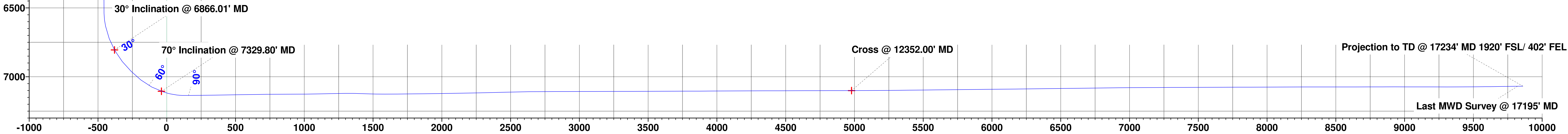
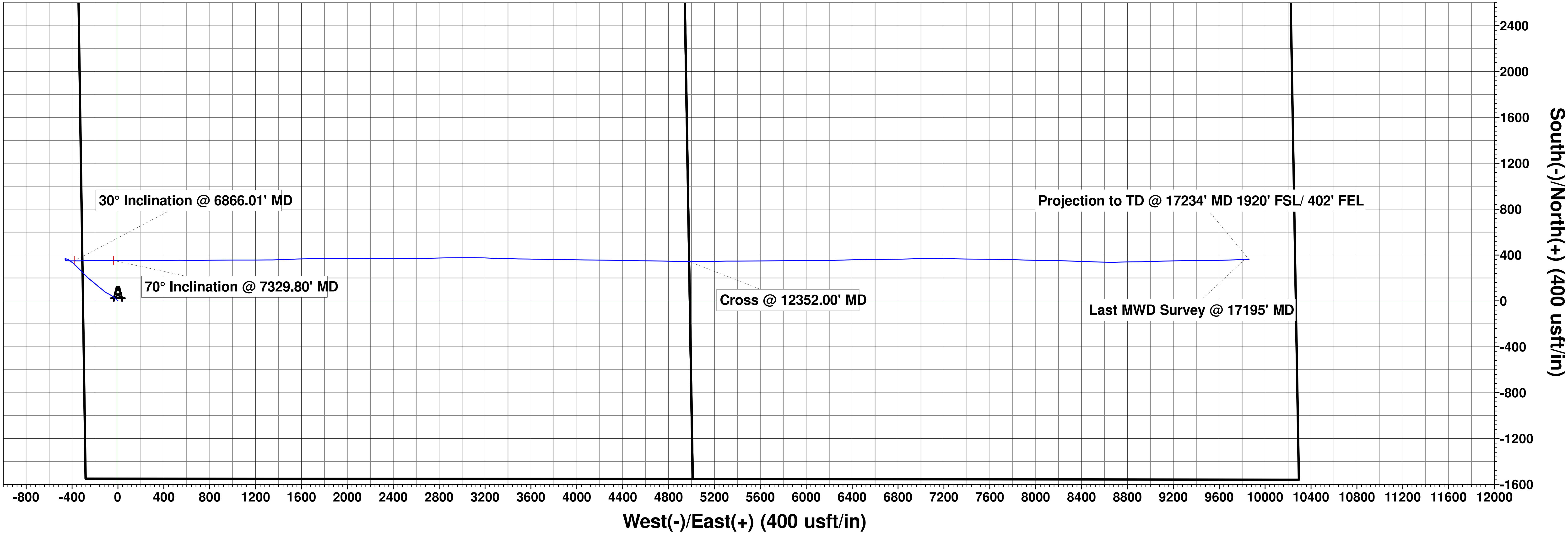
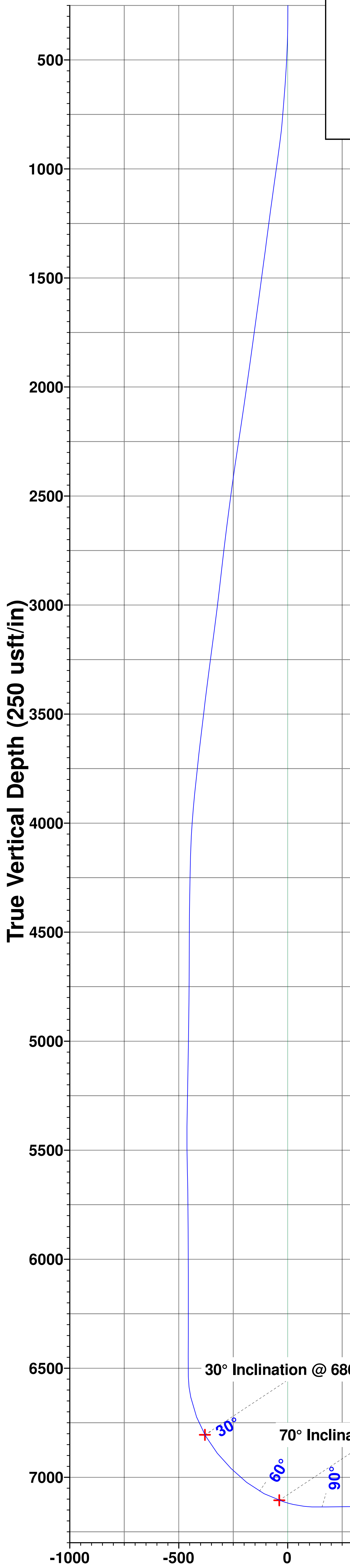
HighPoint Resources
Project: Weld County, CO (NAD83)
Site: Sec 05-T01N-R64W Grinde Pad
Well: Grinde 01-64-05-4841C
Wellbore: Wellbore #1
Wellbore #1 (Grinde 01-64-05-4841C/We
Cade 23

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

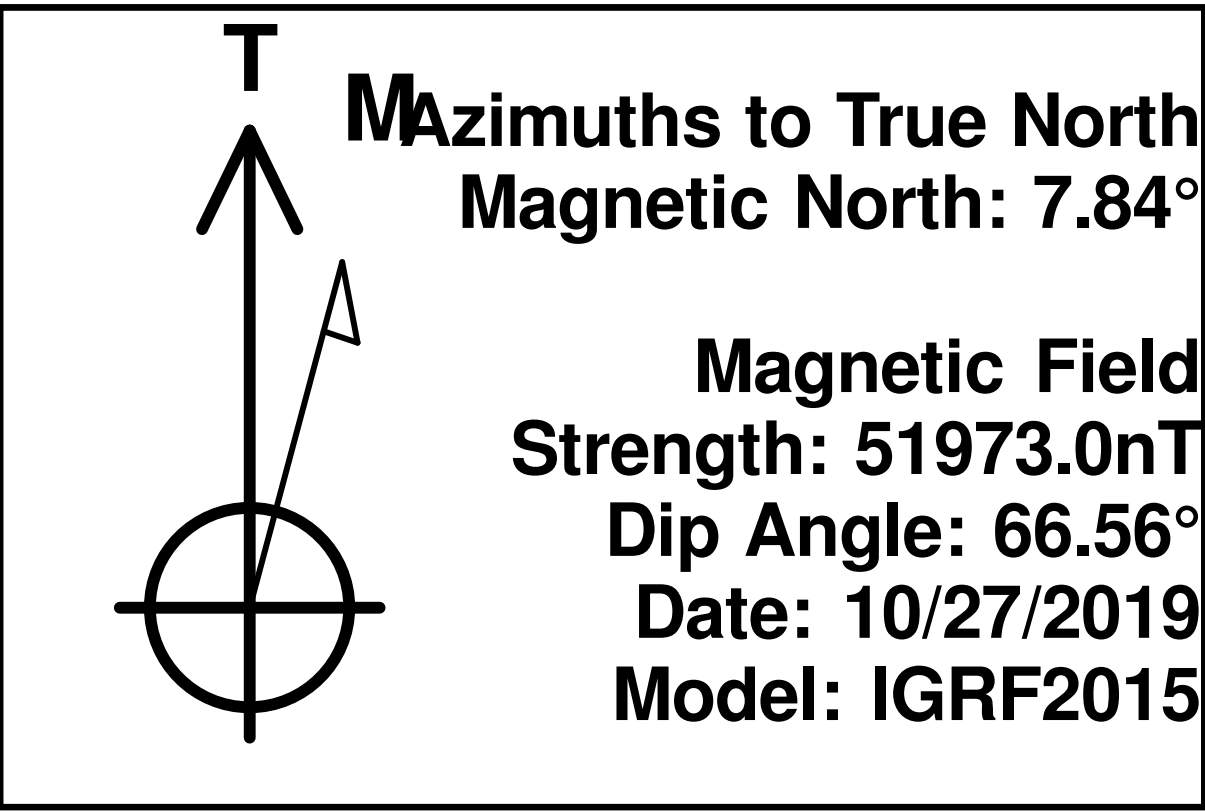


Northing	Easting	Latitude	Longitude
1272404.47	3256556.76	40.077500	-104.583170

ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
152.00	0.25	68.10	152.00	0.12	0.31	0.31	0.33	First MWD Survey @ 152' MD
6866.01	30.00	90.56	6805.41	349.61	-379.54	-379.85	693.96	30° Inclination @ 6866.01' MD
7329.80	70.00	89.85	7105.69	352.43	-38.05	-38.35	1035.49	70° Inclination @ 7329.80' MD
12352.00	90.10	90.84	7100.78	343.95	4979.50	4979.19	6053.21	Cross @ 12352.00' MD
17195.00	90.85	88.69	7069.29	360.83	9821.40	9821.08	10896.05	Last MWD Survey @ 17195' MD
17234.00	90.85	88.69	7068.72	361.72	9860.38	9860.06	10935.04	Projection to TD @ 17234' MD 1920' FSL/ 402' FE



Vertical Section at 90.05° (250 usft/in)



HighPoint Resources

Weld County, CO (NAD83)

Sec 05-T01N-R64W Grinde Pad

Grinde 01-64-05-4841C

Wellbore #1

Design: Wellbore #1

Standard Survey Report

08 January, 2020

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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 01-64-05-4841C					
Well Position	+N/-S	0.00 usft	Northing:	1,272,404.47 usft	Latitude:	40.077500
	+E/-W	0.00 usft	Easting:	3,256,556.76 usft	Longitude:	-104.583170
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	51,972.96802085

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	
152.00	17,234.00	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
152.00	0.25	68.10	152.00	0.12	0.31	0.31	0.16	0.16	0.00
First MWD Survey @ 152' MD									
244.00	0.37	107.63	244.00	0.11	0.78	0.78	0.26	0.13	42.97
336.00	0.91	314.86	336.00	0.53	0.54	0.54	1.36	0.59	-166.05
427.00	2.51	310.55	426.95	2.34	-1.48	-1.49	1.76	1.76	-4.74
519.00	4.32	311.94	518.78	5.97	-5.59	-5.60	1.97	1.97	1.51
611.00	5.88	313.87	610.42	11.55	-11.57	-11.58	1.71	1.70	2.10
703.00	6.01	312.95	701.92	18.09	-18.49	-18.51	0.18	0.14	-1.00
795.00	7.05	312.18	793.32	25.17	-26.20	-26.22	1.13	1.13	-0.84
887.00	9.34	305.82	884.38	33.33	-36.44	-36.47	2.67	2.49	-6.91

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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)
978.00	9.36	302.88	974.17	41.67	-48.64	-48.68	0.53	0.02	-3.23
1,071.00	9.44	301.86	1,065.92	49.80	-61.47	-61.51	0.20	0.09	-1.10
1,163.00	8.73	298.42	1,156.77	57.10	-74.02	-74.07	0.97	-0.77	-3.74
1,187.00	8.58	298.52	1,180.50	58.83	-77.19	-77.24	0.63	-0.63	0.42
1,346.00	8.20	295.63	1,337.80	69.39	-97.84	-97.90	0.36	-0.24	-1.82
1,438.00	9.81	306.74	1,428.67	76.92	-110.04	-110.10	2.57	1.75	12.08
1,530.00	9.46	309.94	1,519.37	86.46	-122.11	-122.19	0.70	-0.38	3.48
1,625.00	10.04	309.92	1,613.00	96.79	-134.45	-134.53	0.61	0.61	-0.02
1,721.00	9.98	307.73	1,707.53	107.25	-147.45	-147.54	0.40	-0.06	-2.28
1,817.00	9.85	307.04	1,802.10	117.29	-160.58	-160.68	0.18	-0.14	-0.72
1,912.00	10.20	311.27	1,895.65	127.73	-173.39	-173.50	0.86	0.37	4.45
2,008.00	10.71	311.49	1,990.06	139.25	-186.46	-186.58	0.53	0.53	0.23
2,103.00	10.90	310.69	2,083.37	150.95	-199.88	-200.01	0.25	0.20	-0.84
2,198.00	11.01	309.29	2,176.64	162.55	-213.71	-213.86	0.30	0.12	-1.47
2,293.00	10.84	308.02	2,269.92	173.80	-227.77	-227.92	0.31	-0.18	-1.34
2,389.00	10.63	307.40	2,364.24	184.74	-241.92	-242.08	0.25	-0.22	-0.65
2,484.00	10.69	312.59	2,457.60	196.02	-255.37	-255.54	1.01	0.06	5.46
2,580.00	10.36	315.21	2,551.99	208.17	-268.00	-268.18	0.61	-0.34	2.73
2,675.00	9.94	314.96	2,645.50	220.03	-279.82	-280.01	0.44	-0.44	-0.26
2,771.00	9.75	315.18	2,740.09	231.65	-291.42	-291.62	0.20	-0.20	0.23
2,866.00	9.38	316.14	2,833.77	242.94	-302.45	-302.66	0.42	-0.39	1.01
2,962.00	9.24	315.07	2,928.50	254.03	-313.31	-313.54	0.23	-0.15	-1.11
3,057.00	9.89	315.21	3,022.18	265.22	-324.45	-324.68	0.68	0.68	0.15
3,153.00	10.74	314.62	3,116.63	277.36	-336.62	-336.87	0.89	0.89	-0.61
3,249.00	10.47	314.63	3,210.99	289.77	-349.20	-349.45	0.28	-0.28	0.01
3,343.00	10.30	315.91	3,303.45	301.81	-361.12	-361.39	0.30	-0.18	1.36
3,439.00	10.01	314.97	3,397.94	313.87	-373.00	-373.27	0.35	-0.30	-0.98
3,534.00	8.98	309.73	3,491.64	324.44	-384.54	-384.82	1.41	-1.08	-5.52
3,629.00	8.43	307.11	3,585.55	333.38	-395.80	-396.09	0.71	-0.58	-2.76
3,725.00	8.01	306.20	3,680.56	341.58	-406.81	-407.10	0.46	-0.44	-0.95
3,821.00	7.42	306.40	3,775.69	349.21	-417.19	-417.50	0.62	-0.61	0.21
3,915.00	7.20	306.63	3,868.93	356.32	-426.81	-427.12	0.24	-0.23	0.24
4,011.00	5.18	300.36	3,964.37	362.10	-435.37	-435.69	2.22	-2.10	-6.53
4,106.00	3.36	283.79	4,059.10	364.94	-441.78	-442.10	2.30	-1.92	-17.44
4,201.00	1.35	270.27	4,154.02	365.60	-445.60	-445.92	2.18	-2.12	-14.23
4,297.00	1.00	275.86	4,250.00	365.69	-447.57	-447.89	0.38	-0.36	5.82
4,392.00	1.35	280.89	4,344.98	365.99	-449.49	-449.81	0.38	0.37	5.29
4,487.00	0.23	297.34	4,439.97	366.29	-450.76	-451.08	1.19	-1.18	17.32
4,583.00	0.11	344.00	4,535.97	366.47	-450.96	-451.27	0.18	-0.13	48.60
4,678.00	0.37	281.82	4,630.97	366.62	-451.28	-451.60	0.35	0.27	-65.45
4,773.00	0.41	274.61	4,725.96	366.71	-451.92	-452.24	0.07	0.04	-7.59
4,869.00	0.58	288.06	4,821.96	366.89	-452.72	-453.04	0.21	0.18	14.01
4,964.00	0.67	280.34	4,916.95	367.13	-453.73	-454.05	0.13	0.09	-8.13

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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)	
5,060.00	0.98	273.00	5,012.94	367.28	-455.10	-455.42	0.34	0.32	-7.65	
5,156.00	0.97	272.34	5,108.93	367.35	-456.73	-457.05	0.02	-0.01	-0.69	
5,251.00	1.25	287.17	5,203.91	367.69	-458.52	-458.85	0.42	0.29	15.61	
5,346.00	0.99	240.16	5,298.90	367.59	-460.23	-460.55	0.97	-0.27	-49.48	
5,440.00	1.36	240.39	5,392.88	366.64	-461.90	-462.22	0.39	0.39	0.24	
5,536.00	1.36	139.58	5,488.86	365.21	-462.15	-462.47	2.18	0.00	-105.01	
5,632.00	1.83	119.51	5,584.82	363.58	-460.08	-460.40	0.75	0.49	-20.91	
5,726.00	1.48	154.81	5,678.79	361.74	-458.26	-458.57	1.12	-0.37	37.55	
5,822.00	1.29	159.49	5,774.76	359.61	-457.35	-457.66	0.23	-0.20	4.88	
5,918.00	1.21	162.52	5,870.74	357.63	-456.67	-456.98	0.11	-0.08	3.16	
6,013.00	0.98	166.54	5,965.72	355.89	-456.18	-456.49	0.26	-0.24	4.23	
6,109.00	0.67	167.78	6,061.71	354.54	-455.87	-456.18	0.32	-0.32	1.29	
6,204.00	0.45	175.18	6,156.70	353.62	-455.72	-456.03	0.24	-0.23	7.79	
6,300.00	0.39	197.01	6,252.70	352.94	-455.78	-456.09	0.18	-0.06	22.74	
6,395.00	0.24	179.52	6,347.70	352.43	-455.88	-456.18	0.19	-0.16	-18.41	
6,491.00	0.38	193.26	6,443.70	351.92	-455.95	-456.25	0.16	0.15	14.31	
6,586.00	0.76	118.51	6,538.69	351.31	-455.47	-455.77	0.79	0.40	-78.68	
6,634.00	6.86	98.84	6,586.57	350.72	-452.35	-452.66	12.81	12.71	-40.98	
6,681.00	12.91	90.68	6,632.85	350.22	-444.32	-444.62	13.18	12.87	-17.36	
6,776.00	19.93	90.49	6,723.92	349.96	-417.48	-417.79	7.39	7.39	-0.20	
6,866.01	30.00	90.56	6,805.41	349.61	-379.54	-379.85	11.19	11.19	0.07	
30° Inclination @ 6866.01' MD										
6,872.00	30.67	90.56	6,810.58	349.58	-376.52	-376.82	11.19	11.19	0.05	
6,968.00	37.91	88.80	6,889.85	349.96	-322.48	-322.78	7.61	7.54	-1.83	
7,063.00	45.98	87.70	6,960.45	351.94	-259.06	-259.37	8.53	8.49	-1.16	
7,158.00	51.09	90.27	7,023.34	353.14	-187.92	-188.23	5.75	5.38	2.71	
7,253.00	62.88	90.47	7,075.01	352.62	-108.40	-108.71	12.41	12.41	0.21	
7,329.80	70.00	89.85	7,105.69	352.43	-38.05	-38.35	9.30	9.27	-0.80	
70° Inclination @ 7329.80' MD										
7,349.00	71.78	89.71	7,111.97	352.50	-19.91	-20.21	9.30	9.27	-0.75	
7,444.00	82.91	89.65	7,132.75	353.01	72.64	72.33	11.72	11.72	-0.06	
7,490.00	89.04	91.48	7,135.98	352.56	118.50	118.19	13.90	13.33	3.98	
7,548.00	90.45	90.08	7,136.24	351.77	176.49	176.18	3.43	2.43	-2.41	
7,622.00	90.83	89.16	7,135.41	352.26	250.48	250.18	1.35	0.51	-1.24	
7,717.00	90.92	89.43	7,133.96	353.43	345.47	345.16	0.30	0.09	0.28	
7,813.00	91.25	89.65	7,132.14	354.20	441.44	441.14	0.41	0.34	0.23	
7,908.00	90.62	90.01	7,130.59	354.48	536.43	536.12	0.76	-0.66	0.38	
8,004.00	90.97	90.26	7,129.26	354.25	632.42	632.11	0.45	0.36	0.26	
8,099.00	90.67	89.76	7,127.90	354.24	727.41	727.10	0.61	-0.32	-0.53	
8,194.00	90.15	89.00	7,127.22	355.27	822.40	822.09	0.97	-0.55	-0.80	
8,290.00	90.12	89.86	7,127.00	356.22	918.40	918.08	0.90	-0.03	0.90	
8,386.00	90.65	89.21	7,126.35	357.00	1,014.39	1,014.08	0.87	0.55	-0.68	
8,482.00	91.16	90.73	7,124.83	357.05	1,110.37	1,110.06	1.67	0.53	1.58	
8,577.00	91.23	89.36	7,122.85	356.98	1,205.35	1,205.04	1.44	0.07	-1.44	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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)	
8,672.00	90.82	90.22	7,121.15	357.32	1,300.33	1,300.02	1.00	-0.43	0.91	
8,766.00	87.96	87.92	7,122.15	358.85	1,394.30	1,393.99	3.90	-3.04	-2.45	
8,861.00	88.12	87.18	7,125.40	362.91	1,489.16	1,488.84	0.80	0.17	-0.78	
8,957.00	90.38	89.02	7,126.66	366.09	1,585.09	1,584.77	3.04	2.35	1.92	
9,052.00	90.52	89.56	7,125.91	367.27	1,680.08	1,679.75	0.59	0.15	0.57	
9,147.00	90.66	89.85	7,124.94	367.76	1,775.07	1,774.75	0.34	0.15	0.31	
9,242.00	90.59	89.98	7,123.90	367.90	1,870.06	1,869.74	0.16	-0.07	0.14	
9,338.00	90.82	90.09	7,122.72	367.84	1,966.06	1,965.73	0.27	0.24	0.11	
9,433.00	91.05	89.27	7,121.17	368.37	2,061.04	2,060.72	0.90	0.24	-0.86	
9,529.00	91.02	90.00	7,119.43	368.98	2,157.02	2,156.70	0.76	-0.03	0.76	
9,624.00	90.86	89.85	7,117.88	369.10	2,252.01	2,251.69	0.23	-0.17	-0.16	
9,718.00	91.78	89.33	7,115.71	369.78	2,345.98	2,345.66	1.12	0.98	-0.55	
9,813.00	91.48	89.60	7,113.01	370.66	2,440.94	2,440.61	0.42	-0.32	0.28	
9,908.00	91.22	89.54	7,110.77	371.38	2,535.91	2,535.58	0.28	-0.27	-0.06	
10,004.00	90.69	89.64	7,109.17	372.06	2,631.89	2,631.57	0.56	-0.55	0.10	
10,099.00	90.32	89.17	7,108.33	373.05	2,726.88	2,726.56	0.63	-0.39	-0.49	
10,195.00	90.21	88.98	7,107.89	374.60	2,822.87	2,822.54	0.23	-0.11	-0.20	
10,290.00	90.08	89.27	7,107.65	376.05	2,917.86	2,917.53	0.33	-0.14	0.31	
10,385.00	90.18	89.62	7,107.43	376.97	3,012.85	3,012.52	0.38	0.11	0.37	
10,481.00	90.24	90.63	7,107.08	376.76	3,108.85	3,108.52	1.05	0.06	1.05	
10,577.00	90.10	91.79	7,106.80	374.73	3,204.83	3,204.50	1.22	-0.15	1.21	
10,673.00	90.04	92.04	7,106.68	371.53	3,300.78	3,300.45	0.27	-0.06	0.26	
10,769.00	90.18	91.89	7,106.49	368.23	3,396.72	3,396.40	0.21	0.15	-0.16	
10,864.00	90.38	90.33	7,106.03	366.39	3,491.70	3,491.38	1.66	0.21	-1.64	
10,959.00	90.18	90.98	7,105.57	365.31	3,586.69	3,586.37	0.72	-0.21	0.68	
11,055.00	90.12	91.33	7,105.31	363.37	3,682.67	3,682.35	0.37	-0.06	0.36	
11,151.00	90.29	90.78	7,104.97	361.61	3,778.65	3,778.33	0.60	0.18	-0.57	
11,246.00	90.24	90.88	7,104.53	360.23	3,873.64	3,873.32	0.12	-0.05	0.11	
11,342.00	90.32	90.52	7,104.06	359.06	3,969.63	3,969.32	0.38	0.08	-0.38	
11,438.00	90.18	91.06	7,103.64	357.73	4,065.62	4,065.31	0.58	-0.15	0.56	
11,533.00	90.36	90.36	7,103.20	356.56	4,160.61	4,160.30	0.76	0.19	-0.74	
11,628.00	90.31	90.88	7,102.64	355.53	4,255.60	4,255.29	0.55	-0.05	0.55	
11,723.00	90.19	90.48	7,102.23	354.40	4,350.60	4,350.29	0.44	-0.13	-0.42	
11,819.00	90.01	91.65	7,102.06	352.62	4,446.58	4,446.27	1.23	-0.19	1.22	
11,915.00	90.33	91.04	7,101.77	350.36	4,542.55	4,542.24	0.72	0.33	-0.64	
12,010.00	89.95	90.30	7,101.54	349.25	4,637.54	4,637.24	0.88	-0.40	-0.78	
12,106.00	90.25	90.88	7,101.37	348.26	4,733.54	4,733.23	0.68	0.31	0.60	
12,201.00	90.14	91.45	7,101.05	346.33	4,828.52	4,828.21	0.61	-0.12	0.60	
12,295.00	90.08	90.59	7,100.87	344.66	4,922.50	4,922.20	0.92	-0.06	-0.91	
12,352.00	90.10	90.84	7,100.78	343.95	4,979.50	4,979.19	0.44	0.04	0.44	
Cross @ 12352.00' MD										
12,391.00	90.12	91.01	7,100.70	343.32	5,018.49	5,018.19	0.44	0.04	0.44	
12,487.00	90.42	89.13	7,100.25	343.20	5,114.49	5,114.18	1.98	0.31	-1.96	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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)	
12,583.00	90.28	88.39	7,099.66	345.28	5,210.46	5,210.16	0.78	-0.15	-0.77	
12,678.00	90.66	89.22	7,098.88	347.26	5,305.44	5,305.13	0.96	0.40	0.87	
12,774.00	90.59	89.97	7,097.84	347.94	5,401.43	5,401.12	0.78	-0.07	0.78	
12,869.00	90.63	89.64	7,096.83	348.26	5,496.42	5,496.12	0.35	0.04	-0.35	
12,965.00	90.69	89.67	7,095.72	348.84	5,592.41	5,592.11	0.07	0.06	0.03	
13,060.00	90.58	89.59	7,094.67	349.45	5,687.41	5,687.10	0.14	-0.12	-0.08	
13,155.00	90.63	89.52	7,093.66	350.19	5,782.40	5,782.09	0.09	0.05	-0.07	
13,250.00	90.69	89.47	7,092.57	351.03	5,877.39	5,877.08	0.08	0.06	-0.05	
13,346.00	90.47	89.05	7,091.60	352.27	5,973.37	5,973.06	0.49	-0.23	-0.44	
13,442.00	90.55	89.27	7,090.74	353.67	6,069.36	6,069.05	0.24	0.08	0.23	
13,536.00	90.79	90.71	7,089.64	353.69	6,163.35	6,163.04	1.55	0.26	1.53	
13,631.00	90.79	88.03	7,088.33	354.74	6,258.33	6,258.02	2.82	0.00	-2.82	
13,727.00	90.75	88.46	7,087.04	357.68	6,354.27	6,353.96	0.45	-0.04	0.45	
13,822.00	90.59	89.00	7,085.93	359.78	6,449.24	6,448.93	0.59	-0.17	0.57	
13,917.00	90.61	89.12	7,084.94	361.34	6,544.23	6,543.91	0.13	0.02	0.13	
14,011.00	90.68	89.76	7,083.88	362.26	6,638.21	6,637.90	0.68	0.07	0.68	
14,106.00	90.61	88.82	7,082.81	363.43	6,733.20	6,732.88	0.99	-0.07	-0.99	
14,202.00	90.76	89.24	7,081.66	365.06	6,829.18	6,828.86	0.46	0.16	0.44	
14,296.00	90.80	89.05	7,080.38	366.46	6,923.16	6,922.84	0.21	0.04	-0.20	
14,392.00	90.29	88.20	7,079.47	368.77	7,019.13	7,018.80	1.03	-0.53	-0.89	
14,488.00	90.30	90.61	7,078.98	369.76	7,115.11	7,114.79	2.51	0.01	2.51	
14,583.00	90.38	90.67	7,078.41	368.70	7,210.11	7,209.78	0.11	0.08	0.06	
14,679.00	90.16	91.13	7,077.96	367.19	7,306.09	7,305.77	0.53	-0.23	0.48	
14,774.00	90.28	90.46	7,077.59	365.88	7,401.08	7,400.76	0.72	0.13	-0.71	
14,868.00	90.23	90.87	7,077.18	364.78	7,495.07	7,494.75	0.44	-0.05	0.44	
14,964.00	90.22	90.95	7,076.80	363.26	7,591.06	7,590.74	0.08	-0.01	0.08	
15,060.00	90.31	90.49	7,076.36	362.05	7,687.05	7,686.73	0.49	0.09	-0.48	
15,154.00	90.12	91.59	7,076.00	360.35	7,781.04	7,780.72	1.19	-0.20	1.17	
15,250.00	90.08	91.77	7,075.83	357.53	7,876.99	7,876.68	0.19	-0.04	0.19	
15,346.00	90.17	91.55	7,075.63	354.75	7,972.95	7,972.64	0.25	0.09	-0.23	
15,441.00	90.27	90.24	7,075.26	353.27	8,067.94	8,067.63	1.38	0.11	-1.38	
15,537.00	90.23	91.28	7,074.84	351.99	8,163.93	8,163.62	1.08	-0.04	1.08	
15,632.00	90.24	91.83	7,074.45	349.42	8,258.89	8,258.58	0.58	0.01	0.58	
15,727.00	89.90	92.13	7,074.34	346.13	8,353.83	8,353.53	0.48	-0.36	0.32	
15,823.00	89.98	91.86	7,074.44	342.79	8,449.78	8,449.47	0.29	0.08	-0.28	
15,919.00	89.99	91.72	7,074.46	339.79	8,545.73	8,545.43	0.15	0.01	-0.15	
16,013.00	90.14	90.55	7,074.36	337.93	8,639.71	8,639.41	1.25	0.16	-1.24	
16,109.00	90.23	88.59	7,074.05	338.65	8,735.70	8,735.40	2.04	0.09	-2.04	
16,203.00	90.05	89.21	7,073.82	340.46	8,829.68	8,829.38	0.69	-0.19	0.66	
16,299.00	90.08	89.07	7,073.71	341.90	8,925.67	8,925.37	0.15	0.03	-0.15	
16,394.00	89.83	87.87	7,073.78	344.43	9,020.64	9,020.33	1.29	-0.26	-1.26	
16,490.00	89.85	88.28	7,074.05	347.66	9,116.58	9,116.28	0.43	0.02	0.43	
16,584.00	90.01	89.17	7,074.16	349.75	9,210.56	9,210.25	0.96	0.17	0.95	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 01-64-05-4841C
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 01-64-05-4841C	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)	
16,680.00	89.85	89.24	7,074.28	351.08	9,306.55	9,306.24	0.18	-0.17	0.07	
16,775.00	90.21	88.80	7,074.23	352.71	9,401.53	9,401.22	0.60	0.38	-0.46	
16,871.00	90.65	89.75	7,073.51	353.92	9,497.52	9,497.21	1.09	0.46	0.99	
16,967.00	90.62	89.71	7,072.45	354.37	9,593.52	9,593.20	0.05	-0.03	-0.04	
16,999.00	90.80	88.25	7,072.05	354.94	9,625.51	9,625.19	4.60	0.56	-4.56	
17,062.00	90.87	87.79	7,071.13	357.12	9,688.46	9,688.15	0.74	0.11	-0.73	
17,157.00	90.72	88.76	7,069.81	359.98	9,783.41	9,783.09	1.03	-0.16	1.02	
17,195.00	90.85	88.69	7,069.29	360.83	9,821.40	9,821.08	0.39	0.34	-0.18	
Last MWD Survey @ 17195' MD										
17,234.00	90.85	88.69	7,068.72	361.72	9,860.38	9,860.06	0.00	0.00	0.00	
Projection to TD @ 17234' MD 1920' FSL/ 402' FEL										

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
30° Inclination @ 6866.C - actual wellpath hits target center - Point	0.00	0.00	6,805.41	349.61	-379.54	1,272,750.14	3,256,173.62	40.078460	-104.584527
Cross @ 12352.00' MD - actual wellpath hits target center - Point	0.00	0.00	7,100.78	343.95	4,979.50	1,272,799.89	3,261,532.44	40.078443	-104.565376
70° Inclination @ 7329.E - actual wellpath hits target center - Point	0.00	0.00	7,105.69	352.42	-38.05	1,272,756.48	3,256,515.07	40.078468	-104.583306

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
152.00	152.00	0.12	0.31	First MWD Survey @ 152' MD	
6,866.01	6,805.41	349.61	-379.54	30° Inclination @ 6866.01' MD	
7,329.80	7,105.69	352.43	-38.05	70° Inclination @ 7329.80' MD	
12,352.00	7,100.78	343.95	4,979.50	Cross @ 12352.00' MD	
17,195.00	7,069.29	360.83	9,821.40	Last MWD Survey @ 17195' MD	
17,234.00	7,068.72	361.72	9,860.38	Projection to TD @ 17234' MD 1920' FSL/ 402' FEL	

Checked By: _____ Approved By: _____ Date: _____