

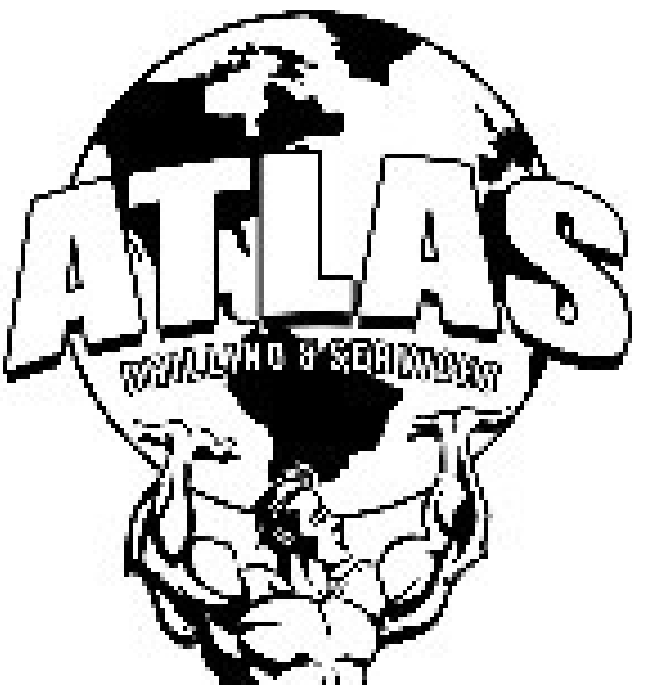


HighPoint Resources
Project: Weld County, CO (NAD83)
Site: Sec 05-T01N-R64W Grinde Pad
Well: Grinde 1-64-05-4956C
Wellbore: Wellbore #1

**Design: Wellbore #1 (Grinde 1-64-05-4956C/Wellbore #1)
Cade 23**

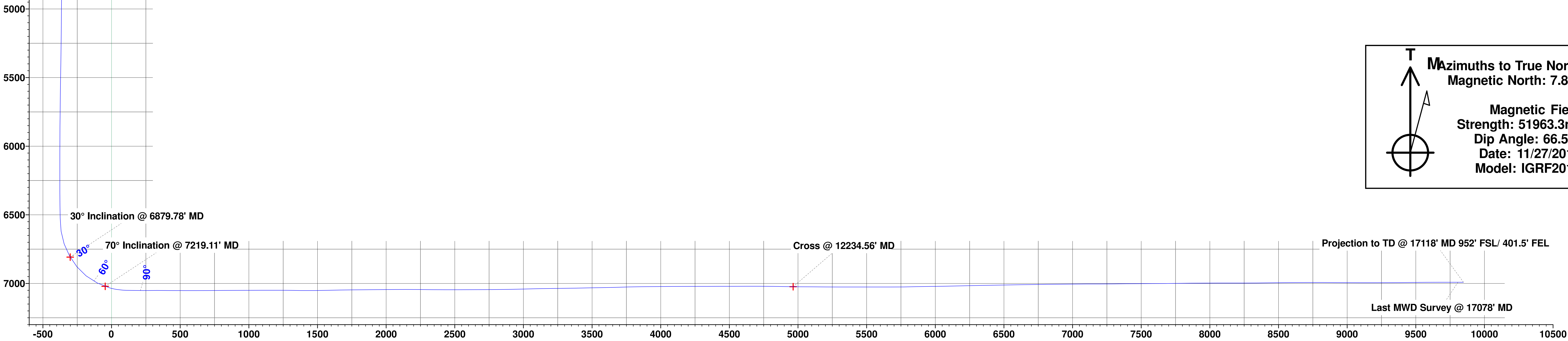
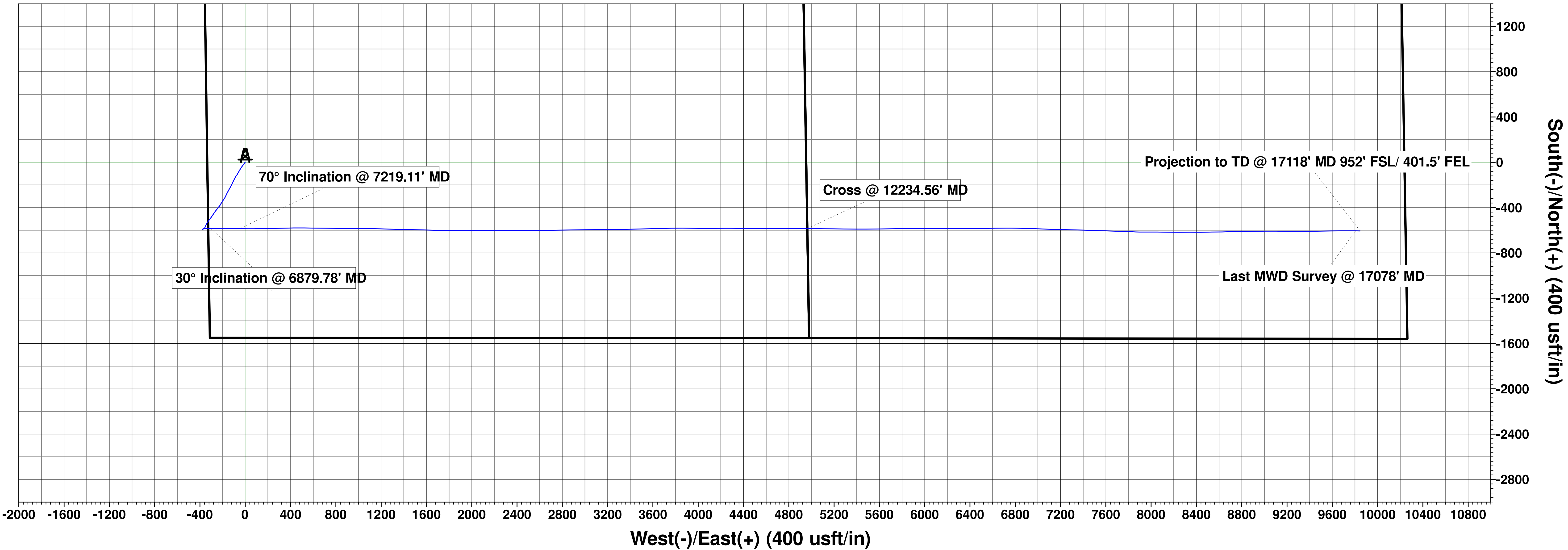
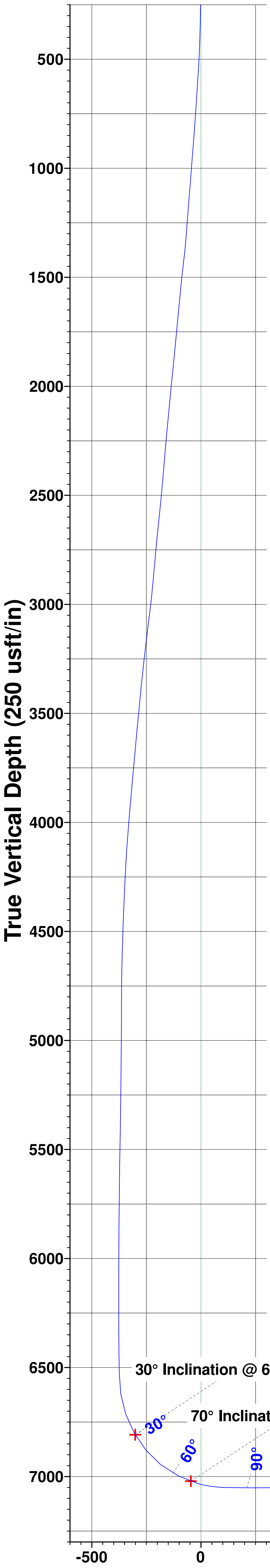
Ground Elevation:: 5030.00
RKB Elevation: KB @ 5046.50usft (Cade 23)
Rig Name: Cade 23

Northing	Easting	Latitude	Longitude
1272404.79	3256587.54	40.077500	-104.583060

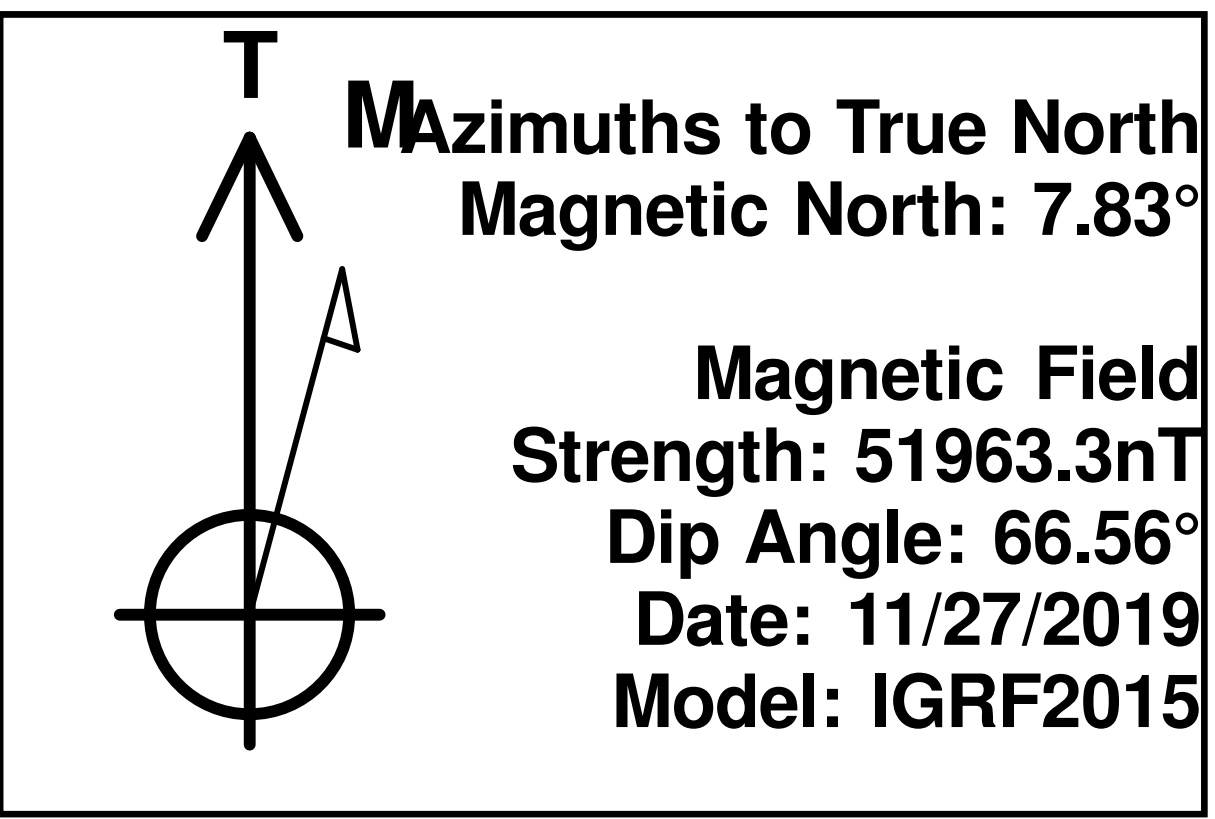


ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
153.00	0.68	231.51	153.00	-0.57	-0.71	-0.71	0.91	First MWD Survey @ 153.00' MD
6879.78	29.99	91.48	6808.22	-586.55	-301.77	-301.15	791.92	30° Inclination @ 6879.78' MD
7219.11	70.00	90.95	7021.23	-585.04	-47.03	-46.42	1046.68	70° Inclination @ 7219.11' MD
12234.56	89.22	91.01	7023.92	-584.65	4964.00	4964.61	6057.67	Cross @ 12234.56' MD
17078.00	90.12	90.26	6991.37	-605.95	9806.38	9807.00	10900.83	Last MWD Survey @ 17078' MD
17118.00	90.12	90.23	6991.29	-606.12	9846.37	9847.00	10940.83	Projection to TD @ 17118' MD 952' FSL/ 401.5' FEL



Vertical Section at 90.06° (250 usft/in)



HighPoint Resources

Weld County, CO (NAD83)

Sec 05-T01N-R64W Grinde Pad

Grinde 1-64-05-4956C

Wellbore #1

Design: Wellbore #1

Standard Survey Report

14 January, 2020

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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 1-64-05-4956C					
Well Position	+N/-S	0.00 usft	Northing:	1,272,404.79 usft	Latitude:	40.077500
	+E/-W	0.00 usft	Easting:	3,256,587.54 usft	Longitude:	-104.583060
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	11/27/2019	7.83	66.56	51,963.31869695

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	90.06	

Survey Program	Date	1/14/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
153.00	17,118.00	Atlas MWD Surveys (Wellbore #1)			

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	
153.00	0.68	231.51	153.00	-0.57	-0.71	-0.71	0.44	0.44	0.00	
First MWD Survey @ 153.00' MD										
245.00	1.07	226.61	244.99	-1.49	-1.76	-1.76	0.43	0.42	-5.33	
337.00	1.96	217.90	336.95	-3.33	-3.35	-3.35	1.00	0.97	-9.47	
428.00	4.00	212.35	427.82	-7.24	-6.01	-6.00	2.26	2.24	-6.10	
520.00	4.72	221.68	519.56	-12.77	-10.24	-10.23	1.10	0.78	10.14	
612.00	6.17	215.85	611.14	-19.61	-15.65	-15.63	1.68	1.58	-6.34	
704.00	6.46	215.73	702.58	-27.82	-21.57	-21.54	0.32	0.32	-0.13	
796.00	6.86	216.49	793.96	-36.44	-27.86	-27.82	0.45	0.43	0.83	
888.00	8.15	214.05	885.17	-46.26	-34.78	-34.73	1.44	1.40	-2.65	

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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)
980.00	8.01	212.58	976.26	-57.06	-41.88	-41.82	0.27	-0.15	-1.60
1,072.00	8.62	210.88	1,067.29	-68.38	-48.87	-48.80	0.71	0.66	-1.85
1,164.00	9.52	209.85	1,158.14	-80.90	-56.20	-56.11	0.99	0.98	-1.12
1,187.00	8.75	210.11	1,180.85	-84.06	-58.02	-57.94	3.35	-3.35	1.13
1,288.00	9.16	208.38	1,280.62	-97.78	-65.70	-65.60	0.49	0.41	-1.71
1,345.00	9.60	210.18	1,336.86	-105.88	-70.25	-70.13	0.93	0.77	3.16
1,436.00	11.88	216.48	1,426.26	-119.97	-79.63	-79.50	2.81	2.51	6.92
1,529.00	11.95	206.73	1,517.26	-136.27	-89.65	-89.51	2.16	0.08	-10.48
1,624.00	12.10	206.90	1,610.18	-153.93	-98.58	-98.42	0.16	0.16	0.18
1,720.00	12.22	206.42	1,704.03	-172.01	-107.65	-107.47	0.16	0.13	-0.50
1,815.00	12.57	205.36	1,796.81	-190.35	-116.56	-116.36	0.44	0.37	-1.12
1,911.00	12.19	207.40	1,890.58	-208.79	-125.69	-125.48	0.60	-0.40	2.13
2,007.00	11.28	210.19	1,984.57	-225.90	-135.08	-134.84	1.12	-0.95	2.91
2,102.00	11.01	209.32	2,077.78	-241.84	-144.19	-143.94	0.33	-0.28	-0.92
2,196.00	11.32	207.69	2,170.00	-257.84	-152.88	-152.61	0.47	0.33	-1.73
2,292.00	11.25	206.43	2,264.15	-274.57	-161.42	-161.14	0.27	-0.07	-1.31
2,387.00	11.03	204.87	2,357.36	-291.11	-169.37	-169.07	0.39	-0.23	-1.64
2,483.00	10.59	207.27	2,451.65	-307.28	-177.27	-176.95	0.66	-0.46	2.50
2,578.00	10.57	214.24	2,545.04	-322.25	-186.18	-185.84	1.35	-0.02	7.34
2,674.00	10.42	213.90	2,639.44	-336.73	-195.97	-195.62	0.17	-0.16	-0.35
2,769.00	9.92	212.43	2,732.94	-350.77	-205.15	-204.79	0.59	-0.53	-1.55
2,865.00	9.64	211.25	2,827.55	-364.62	-213.76	-213.38	0.36	-0.29	-1.23
2,960.00	9.83	212.08	2,921.18	-378.29	-222.19	-221.79	0.25	0.20	0.87
3,056.00	11.22	219.13	3,015.57	-392.48	-232.44	-232.03	1.97	1.45	7.34
3,152.00	11.13	218.49	3,109.75	-406.98	-244.10	-243.67	0.16	-0.09	-0.67
3,247.00	10.73	217.72	3,203.02	-421.15	-255.22	-254.78	0.45	-0.42	-0.81
3,342.00	10.30	216.59	3,296.43	-434.97	-265.69	-265.23	0.50	-0.45	-1.19
3,438.00	10.02	213.98	3,390.92	-448.78	-275.47	-275.00	0.56	-0.29	-2.72
3,533.00	9.70	214.94	3,484.52	-462.20	-284.68	-284.19	0.38	-0.34	1.01
3,628.00	9.31	213.92	3,578.22	-475.13	-293.55	-293.05	0.45	-0.41	-1.07
3,723.00	8.82	215.27	3,672.03	-487.46	-302.04	-301.53	0.56	-0.52	1.42
3,819.00	8.70	217.19	3,766.91	-499.25	-310.68	-310.16	0.33	-0.13	2.00
3,914.00	8.38	217.48	3,860.86	-510.47	-319.24	-318.70	0.34	-0.34	0.31
4,010.00	8.24	213.83	3,955.85	-521.73	-327.32	-326.78	0.57	-0.15	-3.80
4,105.00	8.25	215.55	4,049.87	-532.93	-335.08	-334.52	0.26	0.01	1.81
4,200.00	7.63	207.36	4,143.96	-544.08	-341.94	-341.37	1.36	-0.65	-8.62
4,295.00	7.35	204.25	4,238.15	-555.22	-347.33	-346.75	0.52	-0.29	-3.27
4,391.00	5.63	203.80	4,333.53	-565.13	-351.75	-351.16	1.79	-1.79	-0.47
4,486.00	5.48	205.17	4,428.08	-573.50	-355.56	-354.96	0.21	-0.16	1.44
4,582.00	4.11	203.70	4,523.75	-580.80	-358.90	-358.29	1.43	-1.43	-1.53
4,676.00	2.35	226.23	4,617.60	-585.22	-361.64	-361.03	2.27	-1.87	23.97
4,772.00	1.12	225.76	4,713.55	-587.23	-363.74	-363.12	1.28	-1.28	-0.49
4,867.00	0.34	331.24	4,808.54	-587.63	-364.54	-363.92	1.32	-0.82	111.03

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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)
4,963.00	0.58	337.78	4,904.54	-586.93	-364.86	-364.24	0.26	0.25	6.81
5,059.00	0.91	323.43	5,000.53	-585.87	-365.50	-364.88	0.39	0.34	-14.95
5,154.00	0.78	341.64	5,095.52	-584.65	-366.15	-365.54	0.31	-0.14	19.17
5,249.00	1.05	226.75	5,190.52	-584.64	-366.99	-366.37	1.63	0.28	-120.94
5,344.00	1.22	225.51	5,285.50	-585.94	-368.34	-367.73	0.18	0.18	-1.31
5,439.00	1.22	229.41	5,380.48	-587.31	-369.83	-369.22	0.09	0.00	4.11
5,534.00	1.27	227.25	5,475.45	-588.68	-371.37	-370.76	0.07	0.05	-2.27
5,630.00	1.13	238.77	5,571.43	-589.89	-372.96	-372.34	0.29	-0.15	12.00
5,725.00	0.89	232.63	5,666.42	-590.83	-374.35	-373.73	0.28	-0.25	-6.46
5,821.00	0.82	216.51	5,762.41	-591.83	-375.35	-374.73	0.26	-0.07	-16.79
5,916.00	0.48	262.10	5,857.40	-592.43	-376.15	-375.53	0.62	-0.36	47.99
6,012.00	0.31	223.41	5,953.40	-592.68	-376.73	-376.11	0.32	-0.18	-40.30
6,107.00	0.27	353.13	6,048.40	-592.64	-376.93	-376.31	0.55	-0.04	136.55
6,202.00	0.22	341.73	6,143.40	-592.25	-377.01	-376.39	0.07	-0.05	-12.00
6,298.00	0.49	323.52	6,239.40	-591.74	-377.32	-376.70	0.30	0.28	-18.97
6,393.00	0.50	34.09	6,334.39	-591.07	-377.33	-376.71	0.60	0.01	74.28
6,489.00	1.19	61.79	6,430.38	-590.25	-376.21	-375.59	0.82	0.72	28.85
6,584.00	0.95	38.00	6,525.37	-589.17	-374.86	-374.24	0.53	-0.25	-25.04
6,679.00	7.68	82.65	6,620.05	-587.73	-368.07	-367.45	7.41	7.08	47.00
6,774.00	19.50	87.55	6,712.23	-586.24	-345.85	-345.24	12.49	12.44	5.16
6,870.00	28.90	92.09	6,799.70	-586.40	-306.57	-305.96	9.97	9.79	4.73
6,879.78	29.99	91.48	6,808.22	-586.55	-301.77	-301.15	11.57	11.16	-6.25
30° Inclination @ 6879.78' MD									
6,966.00	39.70	87.42	6,878.91	-585.86	-252.59	-251.98	11.57	11.26	-4.71
7,060.00	51.28	90.84	6,944.70	-585.04	-185.69	-185.08	12.59	12.32	3.64
7,156.00	63.51	89.16	6,996.33	-584.96	-104.98	-104.37	12.82	12.74	-1.75
7,219.11	70.00	90.95	7,021.23	-585.04	-47.03	-46.42	10.60	10.28	2.84
70° Inclination @ 7219.11' MD									
7,251.00	73.28	91.80	7,031.28	-585.77	-16.78	-16.16	10.60	10.30	2.66
7,347.00	85.86	89.31	7,048.62	-586.64	77.44	78.05	13.35	13.10	-2.59
7,376.00	88.28	89.24	7,050.11	-586.28	106.39	107.01	8.35	8.34	-0.24
7,427.00	89.17	89.00	7,051.24	-585.49	157.38	157.99	1.81	1.75	-0.47
7,507.00	90.45	88.55	7,051.51	-583.78	237.35	237.97	1.70	1.60	-0.56
7,601.00	89.89	88.90	7,051.23	-581.69	331.33	331.94	0.70	-0.60	0.37
7,697.00	89.66	89.08	7,051.60	-580.00	427.31	427.92	0.30	-0.24	0.19
7,792.00	89.84	90.69	7,052.02	-579.81	522.31	522.92	1.71	0.19	1.69
7,888.00	89.99	90.27	7,052.16	-580.61	618.31	618.91	0.46	0.16	-0.44
7,983.00	90.61	90.84	7,051.66	-581.53	713.30	713.91	0.89	0.65	0.60
8,079.00	90.20	90.41	7,050.99	-582.58	809.29	809.90	0.62	-0.43	-0.45
8,174.00	90.12	90.23	7,050.72	-583.11	904.29	904.90	0.21	-0.08	-0.19
8,270.00	90.63	90.73	7,050.09	-583.91	1,000.28	1,000.89	0.74	0.53	0.52
8,366.00	89.51	91.05	7,049.97	-585.41	1,096.27	1,096.88	1.21	-1.17	0.33
8,461.00	90.72	91.82	7,049.78	-587.78	1,191.24	1,191.85	1.51	1.27	0.81
8,556.00	88.89	91.08	7,050.11	-590.19	1,286.20	1,286.82	2.08	-1.93	-0.78

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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)
8,585.00	88.72	92.05	7,050.71	-590.98	1,315.18	1,315.80	3.40	-0.59	3.34
8,651.00	89.45	91.12	7,051.77	-592.81	1,381.15	1,381.77	1.79	1.11	-1.41
8,746.00	90.62	91.24	7,051.71	-594.76	1,476.13	1,476.75	1.24	1.23	0.13
8,841.00	91.39	91.43	7,050.04	-596.97	1,571.09	1,571.71	0.83	0.81	0.20
8,936.00	91.09	92.10	7,047.99	-599.90	1,666.02	1,666.65	0.77	-0.32	0.71
9,031.00	90.44	90.26	7,046.72	-601.86	1,760.99	1,761.61	2.05	-0.68	-1.94
9,126.00	90.45	91.12	7,045.98	-603.00	1,855.97	1,856.61	0.91	0.01	0.91
9,221.00	90.61	89.87	7,045.10	-603.82	1,950.97	1,951.60	1.33	0.17	-1.32
9,317.00	90.45	89.15	7,044.21	-603.00	2,046.96	2,047.59	0.77	-0.17	-0.75
9,412.00	89.97	90.23	7,043.86	-602.49	2,141.95	2,142.58	1.24	-0.51	1.14
9,508.00	89.40	90.12	7,044.39	-602.78	2,237.95	2,238.58	0.60	-0.59	-0.11
9,603.00	89.30	89.68	7,045.47	-602.61	2,332.94	2,333.57	0.47	-0.11	-0.46
9,699.00	89.94	90.16	7,046.11	-602.48	2,428.94	2,429.57	0.83	0.67	0.50
9,794.00	90.19	89.43	7,046.00	-602.14	2,523.94	2,524.57	0.81	0.26	-0.77
9,890.00	90.32	89.36	7,045.57	-601.13	2,619.93	2,620.56	0.15	0.14	-0.07
9,985.00	90.27	89.13	7,045.08	-599.87	2,714.92	2,715.55	0.25	-0.05	-0.24
10,081.00	90.79	89.11	7,044.19	-598.40	2,810.91	2,811.53	0.54	0.54	-0.02
10,176.00	90.81	89.21	7,042.87	-597.01	2,905.89	2,906.51	0.11	0.02	0.11
10,271.00	91.48	89.24	7,040.97	-595.72	3,000.86	3,001.48	0.71	0.71	0.03
10,367.00	91.41	89.21	7,038.55	-594.42	3,096.82	3,097.44	0.08	-0.07	-0.03
10,463.00	90.60	90.03	7,036.86	-593.79	3,192.80	3,193.42	1.20	-0.84	0.85
10,559.00	90.98	88.85	7,035.54	-592.85	3,288.79	3,289.41	1.29	0.40	-1.23
10,654.00	90.75	88.85	7,034.11	-590.94	3,383.76	3,384.37	0.24	-0.24	0.00
10,750.00	91.19	88.83	7,032.48	-589.00	3,479.72	3,480.34	0.46	0.46	-0.02
10,845.00	91.18	88.70	7,030.52	-586.95	3,574.68	3,575.29	0.14	-0.01	-0.14
10,941.00	91.49	88.03	7,028.28	-584.21	3,670.62	3,671.23	0.77	0.32	-0.70
11,036.00	91.59	88.89	7,025.73	-581.66	3,765.55	3,766.15	0.91	0.11	0.91
11,132.00	90.55	90.37	7,023.93	-581.04	3,861.52	3,862.13	1.88	-1.08	1.54
11,228.00	90.37	91.10	7,023.16	-582.27	3,957.51	3,958.12	0.78	-0.19	0.76
11,323.00	90.58	89.68	7,022.38	-582.92	4,052.50	4,053.11	1.51	0.22	-1.49
11,419.00	90.33	89.71	7,021.61	-582.41	4,148.50	4,149.11	0.26	-0.26	0.03
11,514.00	90.05	89.96	7,021.30	-582.14	4,243.50	4,244.11	0.40	-0.29	0.26
11,609.00	89.98	91.19	7,021.27	-583.09	4,338.49	4,339.10	1.30	-0.07	1.29
11,705.00	90.05	90.06	7,021.25	-584.14	4,434.48	4,435.09	1.18	0.07	-1.18
11,801.00	90.16	90.00	7,021.07	-584.19	4,530.48	4,531.09	0.13	0.11	-0.06
11,896.00	90.29	89.39	7,020.70	-583.68	4,625.48	4,626.09	0.66	0.14	-0.64
11,991.00	89.83	89.87	7,020.60	-583.07	4,720.48	4,721.09	0.70	-0.48	0.51
12,087.00	89.19	90.09	7,021.42	-583.03	4,816.47	4,817.08	0.70	-0.67	0.23
12,181.00	88.86	90.83	7,023.02	-583.79	4,910.46	4,911.07	0.86	-0.35	0.79
12,234.56	89.22	91.01	7,023.92	-584.65	4,964.00	4,964.61	0.76	0.68	0.34
Cross @ 12234.56' MD									
12,277.00	89.51	91.16	7,024.39	-585.46	5,006.43	5,007.04	0.76	0.68	0.34
12,373.00	89.92	90.22	7,024.86	-586.61	5,102.42	5,103.03	1.07	0.43	-0.98

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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)
12,469.00	89.38	90.64	7,025.45	-587.33	5,198.42	5,199.03	0.71	-0.56	0.44
12,564.00	89.95	90.74	7,026.01	-588.48	5,293.41	5,294.02	0.61	0.60	0.11
12,660.00	89.93	90.53	7,026.11	-589.54	5,389.40	5,390.02	0.22	-0.02	-0.22
12,755.00	90.16	89.55	7,026.03	-589.61	5,484.40	5,485.02	1.06	0.24	-1.03
12,851.00	89.65	89.27	7,026.19	-588.62	5,580.40	5,581.01	0.61	-0.53	-0.29
12,946.00	90.31	89.30	7,026.22	-587.43	5,675.39	5,676.00	0.70	0.69	0.03
13,041.00	90.85	89.41	7,025.26	-586.36	5,770.38	5,770.99	0.58	0.57	0.12
13,136.00	91.10	89.06	7,023.65	-585.09	5,865.35	5,865.96	0.45	0.26	-0.37
13,232.00	90.88	90.33	7,021.99	-584.58	5,961.34	5,961.95	1.34	-0.23	1.32
13,328.00	91.15	90.43	7,020.29	-585.22	6,057.32	6,057.93	0.30	0.28	0.10
13,422.00	91.12	90.27	7,018.42	-585.79	6,151.30	6,151.91	0.17	-0.03	-0.17
13,517.00	91.31	88.81	7,016.41	-585.03	6,246.27	6,246.88	1.55	0.20	-1.54
13,613.00	90.99	90.27	7,014.48	-584.26	6,342.25	6,342.86	1.56	-0.33	1.52
13,708.00	91.23	89.62	7,012.64	-584.17	6,437.23	6,437.84	0.73	0.25	-0.68
13,803.00	90.89	89.33	7,010.89	-583.30	6,532.21	6,532.82	0.47	-0.36	-0.31
13,897.00	90.99	89.05	7,009.34	-581.97	6,626.19	6,626.79	0.32	0.11	-0.30
13,992.00	90.90	89.84	7,007.78	-581.05	6,721.17	6,721.77	0.84	-0.09	0.83
14,088.00	90.65	91.12	7,006.48	-581.86	6,817.15	6,817.76	1.36	-0.26	1.33
14,182.00	90.67	91.53	7,005.40	-584.03	6,911.12	6,911.73	0.44	0.02	0.44
14,278.00	90.37	92.46	7,004.52	-587.37	7,007.06	7,007.67	1.02	-0.31	0.97
14,374.00	90.26	91.79	7,004.00	-590.93	7,102.99	7,103.61	0.71	-0.11	-0.70
14,469.00	89.74	91.57	7,004.00	-593.72	7,197.95	7,198.57	0.59	-0.55	-0.23
14,565.00	91.01	91.38	7,003.37	-596.19	7,293.91	7,294.53	1.34	1.32	-0.20
14,660.00	90.35	91.09	7,002.24	-598.23	7,388.88	7,389.51	0.76	-0.69	-0.31
14,754.00	90.39	92.71	7,001.63	-601.35	7,482.83	7,483.45	1.72	0.04	1.72
14,850.00	90.18	91.41	7,001.16	-604.80	7,578.76	7,579.39	1.37	-0.22	-1.35
14,946.00	90.80	91.51	7,000.33	-607.25	7,674.73	7,675.36	0.65	0.65	0.10
15,040.00	90.77	92.58	6,999.05	-610.60	7,768.66	7,769.29	1.14	-0.03	1.14
15,136.00	90.23	91.97	6,998.21	-614.41	7,864.58	7,865.22	0.85	-0.56	-0.64
15,231.00	90.44	89.62	6,997.65	-615.73	7,959.56	7,960.20	2.48	0.22	-2.47
15,327.00	90.02	90.56	6,997.27	-615.88	8,055.56	8,056.20	1.07	-0.44	0.98
15,423.00	90.05	90.95	6,997.21	-617.15	8,151.55	8,152.19	0.41	0.03	0.41
15,518.00	90.14	89.13	6,997.05	-617.21	8,246.54	8,247.19	1.92	0.09	-1.92
15,613.00	90.42	90.85	6,996.59	-617.20	8,341.54	8,342.18	1.83	0.29	1.81
15,709.00	90.95	89.17	6,995.44	-617.21	8,437.53	8,438.17	1.83	0.55	-1.75
15,805.00	90.39	89.36	6,994.32	-615.98	8,533.51	8,534.15	0.62	-0.58	0.20
15,899.00	90.50	88.88	6,993.59	-614.54	8,627.50	8,628.14	0.52	0.12	-0.51
15,995.00	89.98	88.33	6,993.19	-612.20	8,723.47	8,724.11	0.79	-0.54	-0.57
16,089.00	90.05	89.17	6,993.16	-610.15	8,817.45	8,818.08	0.90	0.07	0.89
16,185.00	89.22	89.26	6,993.77	-608.83	8,913.44	8,914.07	0.87	-0.86	0.09
16,280.00	89.95	89.26	6,994.46	-607.61	9,008.42	9,009.06	0.77	0.77	0.00
16,376.00	89.95	91.03	6,994.54	-607.85	9,104.42	9,105.05	1.84	0.00	1.84
16,470.00	89.98	90.07	6,994.60	-608.75	9,198.41	9,199.05	1.02	0.03	-1.02

Survey Report

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Grinde 1-64-05-4956C
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 1-64-05-4956C	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)	
16,566.00	90.28	90.38	6,994.38	-609.13	9,294.41	9,295.05	0.45	0.31	0.32	
16,661.00	90.39	89.21	6,993.83	-608.79	9,389.41	9,390.04	1.24	0.12	-1.23	
16,757.00	90.92	89.08	6,992.73	-607.36	9,485.39	9,486.02	0.57	0.55	-0.14	
16,853.00	90.35	89.55	6,991.67	-606.21	9,581.38	9,582.01	0.77	-0.59	0.49	
16,948.00	90.05	89.79	6,991.34	-605.66	9,676.38	9,677.01	0.40	-0.32	0.25	
17,043.00	89.90	90.34	6,991.38	-605.77	9,771.38	9,772.00	0.60	-0.16	0.58	
17,078.00	90.12	90.26	6,991.37	-605.95	9,806.38	9,807.00	0.67	0.63	-0.23	
Last MWD Survey @ 17078' MD										
17,118.00	90.12	90.23	6,991.29	-606.12	9,846.37	9,847.00	0.07	0.00	-0.08	
Projection to TD @ 17118' MD 952' FSL/ 401.5' 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 @ 6879.7 - actual wellpath misses target center by 0.01usft at 6879.78usft MD (6808.22 TVD, -586.55 N, -301.77 E) - Point	0.00	0.00	6,808.22	-586.55	-301.77	1,271,815.15	3,256,291.85	40.075890	-104.584139	
70° Inclination @ 7219.1 - actual wellpath misses target center by 0.02usft at 7219.11usft MD (7021.23 TVD, -585.04 N, -47.03 E) - Point	0.00	0.00	7,021.23	-585.02	-47.03	1,271,819.31	3,256,546.56	40.075894	-104.583228	
Cross @ 12234.56' MD - actual wellpath hits target center - Point	0.00	0.00	7,023.92	-584.65	4,964.00	1,271,871.50	3,261,557.32	40.075894	-104.565322	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
153.00	153.00	-0.57	-0.71	First MWD Survey @ 153.00' MD	
6,879.78	6,808.22	-586.55	-301.77	30° Inclination @ 6879.78' MD	
7,219.11	7,021.23	-585.04	-47.03	70° Inclination @ 7219.11' MD	
12,234.56	7,023.92	-584.65	4,964.00	Cross @ 12234.56' MD	
17,078.00	6,991.37	-605.95	9,806.38	Last MWD Survey @ 17078' MD	
17,118.00	6,991.29	-606.12	9,846.37	Projection to TD @ 17118' MD 952' FSL/ 401.5' FEL	

Checked By: _____ Approved By: _____ Date: _____