



Survey Certification

7327 West Barton Road
Casper, WY 82604
(307)-472-6621 Fax (307) 472-5439

Operator	HighPoint Resources
Well Name & No.	Anschutz Equus Farms Fed 5-61-34-5649B
API #	05-123-48183
County & State	Weld County, CO
SDI Job #	OP.017558
Rig	Cade 24
Survey Date	4-Apr-2019

I, Seth M. Burstad, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 959.5 feet to a measured depth of 15911 feet is true and correct as determined from all available records.

Seth M. Burstad

Signature

10-Apr-2019

Date

Seth M. Burstad

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



Project: Weld County, CO NAD 83
Site: Anschutz Equus Farms Fed 5-61-34 NESE Pad
Well: Anschutz Equus Farms Fed 5-61-34-5649B
Wellbore: OH
Design: OH



WELL DETAILS: Anschutz Equus Farms Fed 5-61-34-5649B

GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)	4479.60
Latitude	Longitude
40° 21' 17.030 N	104° 11' 11.400 W

Northing 1374780.07 Easting 3366054.25

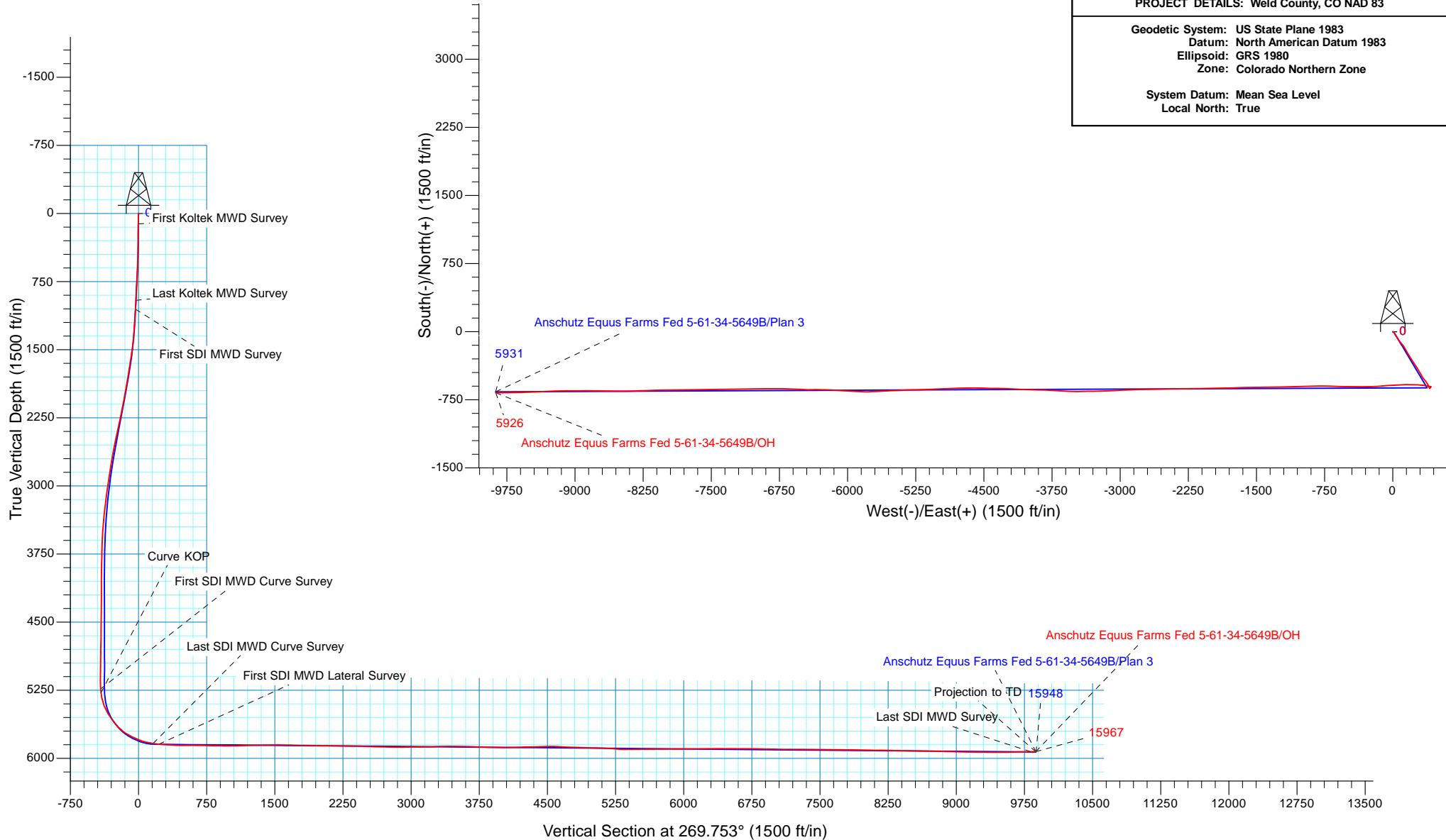
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
115.50	115.50	0.92	118.080	-0.44	0.82	-0.82	0.93	First Koltek MWD Survey
957.68	959.50	4.79	147.440	-34.05	28.05	-27.90	45.24	Last Koltek MWD Survey
1054.84	1057.00	4.77	146.040	-40.85	32.50	-32.33	53.37	First SDI MWD Survey
5237.48	5340.00	3.02	284.120	-604.18	419.24	-416.63	779.00	First SDI MWD Curve Survey
5282.29	5385.00	7.31	277.087	-603.54	415.25	-412.64	784.92	Curve KOP
5837.09	6245.00	80.50	265.250	-599.93	-159.14	161.73	1359.59	Last SDI MWD Curve Survey
5844.69	6309.00	85.86	267.100	-604.16	-222.52	225.12	1423.12	First SDI MWD Lateral Survey
5927.41	15911.00	91.17	270.050	-671.07	-9817.20	9820.00	11022.28	Last SDI MWD Survey
5926.27	15967.00	91.17	270.050	-671.02	-9873.19	9875.99	11078.27	Projection to TD

PROJECT DETAILS: Weld County, CO NAD 83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level
Local North: True





HighPoint Resources

Weld County, CO NAD 83

Anschutz Equus Farms Fed 5-61-34 NESE Pad

Anschutz Equus Farms Fed 5-61-34-5649B

OH

Design: OH

Standard Survey Report

10 April, 2019



Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Project	Weld County, CO NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Anschutz Equus Farms Fed 5-61-34 NESE Pad, Site Center : Anschutz Equus Farms 5-61-34-2532BS				
Site Position:		Northing:	1,374,782.51 usft	Latitude:	40° 21' 17.060 N
From:	Lat/Long	Easting:	3,366,009.33 usft	Longitude:	104° 11' 11.980 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.85 °

Well	Anschutz Equus Farms Fed 5-61-34-5649B, 1686' FSL 270' FEL Sec 34 T5N R61W					
Well Position	+N/-S	0.00 ft	Northing:	1,374,780.07 usft	Latitude:	40° 21' 17.030 N
	+E/-W	0.00 ft	Easting:	3,366,054.24 usft	Longitude:	104° 11' 11.400 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,479.60 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	2/13/2019	8.12	66.95	52,203

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	269.753	

Survey Program	Date	4/10/2019			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
115.50	959.50	Survey #1 - Surface (OH)	OWSG MWD	OWSG MWD - Standard	
1,057.00	6,245.00	Survey #2 - Intermediate (OH)	OWSG MWD	OWSG MWD - Standard	
6,309.00	15,967.00	Survey #3 - Lateral (OH)	OWSG MWD	OWSG MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.50	0.92	118.080	115.50	-0.44	0.82	-0.82	0.80	0.80	0.00
First Koltek MWD Survey									
207.50	0.75	123.530	207.49	-1.12	1.97	-1.97	0.20	-0.18	5.92
299.50	0.66	98.130	299.48	-1.52	3.00	-2.99	0.35	-0.10	-27.61
390.50	0.48	122.120	390.47	-1.80	3.84	-3.83	0.32	-0.20	26.36
485.50	1.41	111.580	485.46	-2.44	5.26	-5.25	0.99	0.98	-11.09
580.50	3.47	134.600	580.37	-4.89	8.40	-8.38	2.36	2.17	24.23
675.50	4.70	140.410	675.13	-9.91	12.93	-12.88	1.36	1.29	6.12

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
770.50	5.93	146.210	769.72	-16.99	18.14	-18.06	1.41	1.29	6.11
865.50	6.64	152.350	864.15	-25.93	23.41	-23.30	1.03	0.75	6.46
959.50	4.79	147.440	957.68	-34.05	28.05	-27.90	2.03	-1.97	-5.22
Last Koltek MWD Survey									
1,057.00	4.77	146.040	1,054.84	-40.85	32.50	-32.33	0.12	-0.02	-1.44
First SDI MWD Survey									
1,147.00	7.10	149.360	1,144.35	-48.74	37.43	-37.22	2.62	2.59	3.69
1,239.00	8.77	152.450	1,235.47	-59.85	43.57	-43.31	1.87	1.82	3.36
1,329.00	9.06	152.280	1,324.38	-72.20	50.04	-49.73	0.32	0.32	-0.19
1,420.00	10.70	144.960	1,414.03	-85.47	58.23	-57.86	2.27	1.80	-8.04
1,510.00	11.75	139.050	1,502.31	-99.23	69.03	-68.60	1.73	1.17	-6.57
1,601.00	13.15	139.200	1,591.17	-114.06	81.87	-81.37	1.54	1.54	0.16
1,692.00	14.84	140.680	1,679.46	-130.92	96.02	-95.45	1.90	1.86	1.63
1,782.00	16.09	142.900	1,766.20	-149.78	110.84	-110.20	1.54	1.39	2.47
1,873.00	17.98	149.130	1,853.21	-171.90	125.66	-124.92	2.88	2.08	6.85
1,964.00	20.47	151.280	1,939.13	-197.91	140.51	-139.66	2.84	2.74	2.36
2,055.00	19.21	150.790	2,024.73	-224.93	155.47	-154.49	1.40	-1.38	-0.54
2,146.00	21.16	148.340	2,110.14	-251.98	171.39	-170.31	2.34	2.14	-2.69
2,237.00	20.31	147.990	2,195.24	-279.36	188.39	-187.18	0.94	-0.93	-0.38
2,328.00	21.74	147.090	2,280.18	-306.90	205.92	-204.59	1.61	1.57	-0.99
2,422.00	21.31	144.650	2,367.63	-335.45	225.26	-223.81	1.06	-0.46	-2.60
2,516.00	21.47	146.790	2,455.16	-363.77	244.56	-242.99	0.85	0.17	2.28
2,610.00	21.19	146.330	2,542.72	-392.30	263.40	-261.71	0.35	-0.30	-0.49
2,704.00	20.28	152.360	2,630.64	-420.88	280.38	-278.56	2.47	-0.97	6.41
2,799.00	18.58	150.890	2,720.23	-448.69	295.38	-293.45	1.86	-1.79	-1.55
2,893.00	16.91	147.380	2,809.75	-473.29	310.04	-308.00	2.11	-1.78	-3.73
2,987.00	15.24	147.670	2,900.07	-495.24	324.02	-321.88	1.78	-1.78	0.31
3,081.00	13.43	144.410	2,991.14	-514.56	336.98	-334.76	2.11	-1.93	-3.47
3,176.00	13.39	138.370	3,083.56	-531.76	350.71	-348.41	1.47	-0.04	-6.36
3,270.00	12.94	145.580	3,175.09	-548.57	363.89	-361.52	1.81	-0.48	7.67
3,363.00	12.05	146.130	3,265.89	-565.22	375.18	-372.74	0.97	-0.96	0.59
3,458.00	10.67	152.390	3,359.03	-581.25	384.79	-382.28	1.95	-1.45	6.59
3,552.00	9.50	156.210	3,451.58	-596.06	391.95	-389.38	1.43	-1.24	4.06
3,646.00	7.27	158.670	3,544.57	-608.70	397.24	-394.61	2.40	-2.37	2.62
3,739.00	4.73	149.590	3,637.05	-617.49	401.32	-398.66	2.91	-2.73	-9.76
3,833.00	2.58	138.370	3,730.86	-622.42	404.69	-402.01	2.40	-2.29	-11.94
3,928.00	1.43	40.860	3,825.82	-623.12	406.89	-404.20	3.27	-1.21	-102.64
4,021.00	1.59	29.570	3,918.79	-621.12	408.28	-405.60	0.36	0.17	-12.14
4,115.00	2.16	18.100	4,012.74	-618.30	409.48	-406.81	0.72	0.61	-12.20
4,209.00	0.86	0.750	4,106.70	-615.91	410.04	-407.38	1.45	-1.38	-18.46
4,303.00	1.31	354.610	4,200.68	-614.14	409.95	-407.29	0.49	0.48	-6.53
4,397.00	1.83	22.310	4,294.65	-611.68	410.42	-407.77	0.96	0.55	29.47
4,491.00	1.02	76.190	4,388.62	-610.09	411.80	-409.16	1.57	-0.86	57.32
4,586.00	0.61	93.890	4,483.61	-609.92	413.12	-410.49	0.50	-0.43	18.63

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,680.00	0.52	113.430	4,577.61	-610.13	414.01	-411.38	0.22	-0.10	20.79
4,774.00	0.68	73.850	4,671.60	-610.14	414.94	-412.31	0.46	0.17	-42.11
4,868.00	1.07	87.700	4,765.59	-609.95	416.35	-413.72	0.47	0.41	14.73
4,962.00	0.93	74.180	4,859.58	-609.71	417.96	-415.33	0.29	-0.15	-14.38
5,056.00	1.26	31.270	4,953.56	-608.62	419.23	-416.61	0.91	0.35	-45.65
5,150.00	1.10	26.930	5,047.54	-606.93	420.18	-417.56	0.19	-0.17	-4.62
5,245.00	1.03	39.090	5,142.53	-605.45	421.13	-418.52	0.25	-0.07	12.80
5,340.00	3.02	284.120	5,237.48	-604.18	419.24	-416.63	3.77	2.09	-121.02
First SDI MWD Curve Survey									
5,385.00	7.31	277.087	5,282.29	-603.54	415.25	-412.64	9.62	9.53	-15.63
Curve KOP									
5,435.00	12.11	275.130	5,331.56	-602.67	406.86	-404.26	9.62	9.60	-3.91
5,529.00	21.82	282.630	5,421.37	-597.96	379.93	-377.35	10.57	10.33	7.98
5,623.00	31.36	278.080	5,505.34	-590.68	338.57	-336.02	10.37	10.15	-4.84
5,717.00	36.39	275.180	5,583.37	-584.73	286.54	-284.02	5.62	5.35	-3.09
5,812.00	43.04	269.780	5,656.42	-582.30	225.97	-223.46	7.88	7.00	-5.68
5,905.00	56.23	269.340	5,716.52	-582.87	155.27	-152.76	14.19	14.18	-0.47
5,999.00	63.49	267.250	5,763.69	-585.34	74.08	-71.55	7.96	7.72	-2.22
6,093.00	70.08	266.920	5,800.73	-589.74	-12.15	14.69	7.02	7.01	-0.35
6,187.00	78.22	265.810	5,826.38	-595.49	-102.32	104.88	8.73	8.66	-1.18
6,245.00	80.50	265.250	5,837.09	-599.93	-159.14	161.73	4.04	3.93	-0.97
Last SDI MWD Curve Survey									
6,309.00	85.86	267.100	5,844.69	-604.16	-222.52	225.12	8.85	8.38	2.89
First SDI MWD Lateral Survey									
6,402.00	86.54	271.010	5,850.85	-605.69	-315.29	317.89	4.26	0.73	4.20
6,496.00	87.55	269.790	5,855.70	-605.03	-409.16	411.76	1.68	1.07	-1.30
6,589.00	90.50	270.580	5,857.28	-604.73	-502.13	504.73	3.28	3.17	0.85
6,683.00	90.07	271.650	5,856.81	-602.91	-596.11	598.70	1.23	-0.46	1.14
6,777.00	88.12	272.100	5,858.30	-599.83	-690.04	692.62	2.13	-2.07	0.48
6,870.00	88.59	270.540	5,860.97	-597.69	-782.98	785.55	1.75	0.51	-1.68
6,964.00	89.70	268.320	5,862.37	-598.62	-876.96	879.53	2.64	1.18	-2.36
7,016.00	88.76	268.350	5,863.07	-600.13	-928.93	931.51	1.81	-1.81	0.06
7,058.00	88.89	268.520	5,863.93	-601.28	-970.90	973.49	0.51	0.31	0.40
7,093.00	90.87	268.470	5,864.00	-602.20	-1,005.89	1,008.48	5.66	5.66	-0.14
7,151.00	91.51	268.760	5,862.80	-603.60	-1,063.86	1,066.45	1.21	1.10	0.50
7,245.00	91.81	268.280	5,860.08	-606.03	-1,157.79	1,160.39	0.60	0.32	-0.51
7,338.00	91.61	268.720	5,857.30	-608.46	-1,250.72	1,253.33	0.52	-0.22	0.47
7,431.00	91.27	269.000	5,854.96	-610.31	-1,343.67	1,346.29	0.47	-0.37	0.30
7,526.00	91.34	269.660	5,852.80	-611.42	-1,438.64	1,441.26	0.70	0.07	0.69
7,619.00	89.33	268.720	5,852.26	-612.74	-1,531.62	1,534.25	2.39	-2.16	-1.01
7,713.00	88.29	268.880	5,854.21	-614.71	-1,625.58	1,628.21	1.12	-1.11	0.17
7,806.00	89.50	268.540	5,856.00	-616.80	-1,718.53	1,721.18	1.35	1.30	-0.37
7,901.00	88.89	268.250	5,857.34	-619.46	-1,813.49	1,816.14	0.71	-0.64	-0.31
7,995.00	89.29	268.710	5,858.83	-621.95	-1,907.44	1,910.10	0.65	0.43	0.49

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,089.00	88.79	269.360	5,860.40	-623.54	-2,001.41	2,004.08	0.87	-0.53	0.69
8,183.00	89.50	269.260	5,861.81	-624.67	-2,095.40	2,098.07	0.76	0.76	-0.11
8,276.00	89.60	269.370	5,862.54	-625.78	-2,188.39	2,191.06	0.16	0.11	0.12
8,370.00	89.09	269.020	5,863.61	-627.10	-2,282.37	2,285.05	0.66	-0.54	-0.37
8,464.00	88.59	268.900	5,865.52	-628.81	-2,376.34	2,379.02	0.55	-0.53	-0.13
8,558.00	87.82	268.510	5,868.46	-630.93	-2,470.26	2,472.96	0.92	-0.82	-0.41
8,652.00	88.19	269.360	5,871.73	-632.67	-2,564.19	2,566.89	0.99	0.39	0.90
8,747.00	89.26	269.990	5,873.85	-633.21	-2,659.16	2,661.87	1.31	1.13	0.66
8,840.00	87.72	267.930	5,876.30	-634.90	-2,752.11	2,754.82	2.76	-1.66	-2.22
8,935.00	89.66	267.990	5,878.47	-638.28	-2,847.02	2,849.74	2.04	2.04	0.06
9,029.00	91.48	268.290	5,877.53	-641.33	-2,940.96	2,943.70	1.96	1.94	0.32
9,123.00	90.03	266.400	5,876.29	-645.69	-3,034.84	3,037.60	2.53	-1.54	-2.01
9,217.00	90.47	268.040	5,875.88	-650.24	-3,128.73	3,131.50	1.81	0.47	1.74
9,311.00	91.85	268.040	5,873.98	-653.46	-3,222.65	3,225.44	1.47	1.47	0.00
9,405.00	91.85	270.260	5,870.95	-654.85	-3,316.59	3,319.38	2.36	0.00	2.36
9,499.00	90.54	267.420	5,868.99	-656.76	-3,410.54	3,413.34	3.33	-1.39	-3.02
9,592.00	90.94	270.480	5,867.78	-658.46	-3,503.50	3,506.31	3.32	0.43	3.29
9,686.00	87.65	273.520	5,868.94	-655.18	-3,597.41	3,600.20	4.76	-3.50	3.23
9,780.00	86.62	273.780	5,873.64	-649.20	-3,691.10	3,693.87	1.13	-1.10	0.28
9,873.00	88.16	272.450	5,877.87	-644.16	-3,783.87	3,786.61	2.19	1.66	-1.43
9,965.00	90.50	271.920	5,878.95	-640.65	-3,875.79	3,878.51	2.61	2.54	-0.58
10,058.00	89.33	270.320	5,879.09	-638.83	-3,968.76	3,971.48	2.13	-1.26	-1.72
10,151.00	90.87	272.810	5,878.93	-636.29	-4,061.72	4,064.42	3.15	1.66	2.68
10,244.00	90.20	273.460	5,878.06	-631.21	-4,154.57	4,157.26	1.00	-0.72	0.70
10,337.00	92.35	272.490	5,875.99	-626.38	-4,247.42	4,250.08	2.54	2.31	-1.04
10,431.00	90.64	270.470	5,873.54	-623.95	-4,341.35	4,344.00	2.81	-1.82	-2.15
10,484.00	90.74	270.270	5,872.90	-623.61	-4,394.34	4,396.99	0.42	0.19	-0.38
10,525.00	92.45	271.880	5,871.76	-622.84	-4,435.32	4,437.96	5.73	4.17	3.93
10,619.00	89.76	270.690	5,869.94	-620.74	-4,529.26	4,531.90	3.13	-2.86	-1.27
10,710.00	88.59	269.690	5,871.25	-620.43	-4,620.25	4,622.88	1.69	-1.29	-1.10
10,801.00	86.64	269.390	5,875.04	-621.16	-4,711.17	4,713.80	2.17	-2.14	-0.33
10,892.00	87.68	268.700	5,879.55	-622.68	-4,802.04	4,804.68	1.37	1.14	-0.76
10,982.00	87.61	268.900	5,883.25	-624.56	-4,891.94	4,894.59	0.24	-0.08	0.22
11,073.00	89.50	265.950	5,885.54	-628.65	-4,982.81	4,985.47	3.85	2.08	-3.24
11,165.00	88.86	266.610	5,886.86	-634.62	-5,074.60	5,077.29	1.00	-0.70	0.72
11,255.00	87.05	268.590	5,890.07	-638.39	-5,164.46	5,167.16	2.98	-2.01	2.20
11,346.00	85.01	269.070	5,896.37	-640.24	-5,255.22	5,257.93	2.30	-2.24	0.53
11,403.00	86.04	270.450	5,900.82	-640.48	-5,312.04	5,314.75	3.02	1.81	2.42
11,436.00	87.99	267.520	5,902.54	-641.06	-5,344.99	5,347.70	10.65	5.91	-8.88
11,528.00	91.14	266.870	5,903.24	-645.56	-5,436.86	5,439.59	3.50	3.42	-0.71
11,618.00	90.77	268.140	5,901.74	-649.48	-5,526.76	5,529.51	1.47	-0.41	1.41
11,709.00	90.94	266.500	5,900.38	-653.73	-5,617.65	5,620.41	1.81	0.19	-1.80
11,800.00	90.94	267.560	5,898.88	-658.45	-5,708.51	5,711.30	1.16	0.00	1.16

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,891.00	89.23	269.230	5,898.75	-661.00	-5,799.47	5,802.27	2.63	-1.88	1.84
11,981.00	90.84	272.640	5,898.69	-659.53	-5,889.44	5,892.23	4.19	1.79	3.79
12,072.00	92.18	275.980	5,896.30	-652.69	-5,980.14	5,982.90	3.95	1.47	3.67
12,163.00	90.57	272.770	5,894.11	-645.76	-6,070.83	6,073.56	3.95	-1.77	-3.53
12,253.00	90.30	273.280	5,893.43	-641.01	-6,160.70	6,163.41	0.64	-0.30	0.57
12,344.00	89.50	270.030	5,893.59	-638.38	-6,251.65	6,254.35	3.68	-0.88	-3.57
12,434.00	88.96	269.620	5,894.80	-638.65	-6,341.64	6,344.34	0.75	-0.60	-0.46
12,526.00	89.90	271.730	5,895.71	-637.57	-6,433.63	6,436.32	2.51	1.02	2.29
12,617.00	90.27	272.350	5,895.58	-634.33	-6,524.57	6,527.24	0.79	0.41	0.68
12,708.00	90.64	273.050	5,894.85	-630.04	-6,615.46	6,618.12	0.87	0.41	0.77
12,799.00	89.87	270.310	5,894.45	-627.38	-6,706.41	6,709.06	3.13	-0.85	-3.01
12,889.00	88.46	269.370	5,895.76	-627.63	-6,796.40	6,799.04	1.88	-1.57	-1.04
12,983.00	88.69	269.600	5,898.10	-628.47	-6,890.37	6,893.01	0.35	0.24	0.24
13,077.00	88.99	269.460	5,900.00	-629.24	-6,984.35	6,986.99	0.35	0.32	-0.15
13,171.00	89.20	269.270	5,901.49	-630.29	-7,078.33	7,080.98	0.30	0.22	-0.20
13,265.00	89.93	270.300	5,902.20	-630.64	-7,172.32	7,174.98	1.34	0.78	1.10
13,359.00	90.37	268.860	5,901.95	-631.33	-7,266.32	7,268.97	1.60	0.47	-1.53
13,453.00	89.10	268.880	5,902.39	-633.18	-7,360.30	7,362.96	1.35	-1.35	0.02
13,547.00	90.10	268.890	5,903.05	-635.01	-7,454.28	7,456.94	1.06	1.06	0.01
13,641.00	89.06	269.560	5,903.73	-636.28	-7,548.26	7,550.93	1.32	-1.11	0.71
13,735.00	90.10	268.610	5,904.42	-637.78	-7,642.25	7,644.92	1.50	1.11	-1.01
13,829.00	88.66	269.760	5,905.44	-639.12	-7,736.23	7,738.91	1.96	-1.53	1.22
13,922.00	88.93	268.610	5,907.40	-640.44	-7,829.19	7,831.88	1.27	0.29	-1.24
14,015.00	90.23	270.110	5,908.08	-641.48	-7,922.18	7,924.87	2.13	1.40	1.61
14,108.00	88.42	269.240	5,909.17	-642.01	-8,015.17	8,017.86	2.16	-1.95	-0.94
14,201.00	89.26	268.410	5,911.06	-643.92	-8,108.13	8,110.83	1.27	0.90	-0.89
14,294.00	89.16	267.840	5,912.34	-646.96	-8,201.07	8,203.78	0.62	-0.11	-0.61
14,387.00	88.63	268.270	5,914.13	-650.11	-8,294.00	8,296.72	0.73	-0.57	0.46
14,480.00	88.83	267.540	5,916.19	-653.51	-8,386.91	8,389.65	0.81	0.22	-0.78
14,572.00	89.46	271.110	5,917.57	-654.60	-8,478.88	8,481.62	3.94	0.68	3.88
14,665.00	90.20	270.290	5,917.84	-653.46	-8,571.87	8,574.61	1.19	0.80	-0.88
14,757.00	87.65	271.190	5,919.57	-652.27	-8,663.84	8,666.57	2.94	-2.77	0.98
14,850.00	87.59	270.540	5,923.43	-650.87	-8,756.75	8,759.47	0.70	-0.06	-0.70
14,943.00	89.43	269.500	5,925.85	-650.84	-8,849.71	8,852.43	2.27	1.98	-1.12
15,035.00	89.30	270.340	5,926.87	-650.97	-8,941.70	8,944.43	0.92	-0.14	0.91
15,129.00	88.66	270.570	5,928.54	-650.22	-9,035.69	9,038.41	0.72	-0.68	0.24
15,221.00	89.29	268.910	5,930.19	-650.64	-9,127.67	9,130.39	1.93	0.68	-1.80
15,314.00	89.50	268.520	5,931.17	-652.72	-9,220.64	9,223.37	0.48	0.23	-0.42
15,407.00	88.83	267.220	5,932.52	-656.18	-9,313.56	9,316.30	1.57	-0.72	-1.40
15,500.00	90.20	267.480	5,933.31	-660.48	-9,406.46	9,409.22	1.50	1.47	0.28
15,592.00	90.20	267.130	5,932.99	-664.80	-9,498.35	9,501.13	0.38	0.00	-0.38
15,685.00	90.90	268.330	5,932.10	-668.49	-9,591.27	9,594.07	1.49	0.75	1.29
15,779.00	91.11	269.230	5,930.45	-670.49	-9,685.24	9,688.04	0.98	0.22	0.96

Company:	HighPoint Resources	Local Co-ordinate Reference:	Well Anschutz Equus Farms Fed 5-61-34-5649B
Project:	Weld County, CO NAD 83	TVD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Site:	Anschutz Equus Farms Fed 5-61-34 NESE Pad	MD Reference:	GL 4479.6' & KB 16.5' @ 4496.10ft (Cade 24)
Well:	Anschutz Equus Farms Fed 5-61-34-5649B	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Casper District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,873.00	91.51	270.030	5,928.30	-671.09	-9,779.21	9,782.01	0.95	0.43	0.85
15,911.00	91.17	270.050	5,927.41	-671.07	-9,817.20	9,820.00	0.90	-0.89	0.05
Last SDI MWD Survey									
15,967.00	91.17	270.050	5,926.27	-671.02	-9,873.19	9,875.99	0.00	0.00	0.00
Projection to TD									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
115.50	115.50	-0.44	0.82	First Koltek MWD Survey
959.50	957.68	-34.05	28.05	Last Koltek MWD Survey
1,057.00	1,054.84	-40.85	32.50	First SDI MWD Survey
5,340.00	5,237.48	-604.18	419.24	First SDI MWD Curve Survey
5,385.00	5,282.29	-603.54	415.25	Curve KOP
6,245.00	5,837.09	-599.93	-159.14	Last SDI MWD Curve Survey
6,309.00	5,844.69	-604.16	-222.52	First SDI MWD Lateral Survey
15,911.00	5,927.41	-671.07	-9,817.20	Last SDI MWD Survey
15,967.00	5,926.27	-671.02	-9,873.19	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------