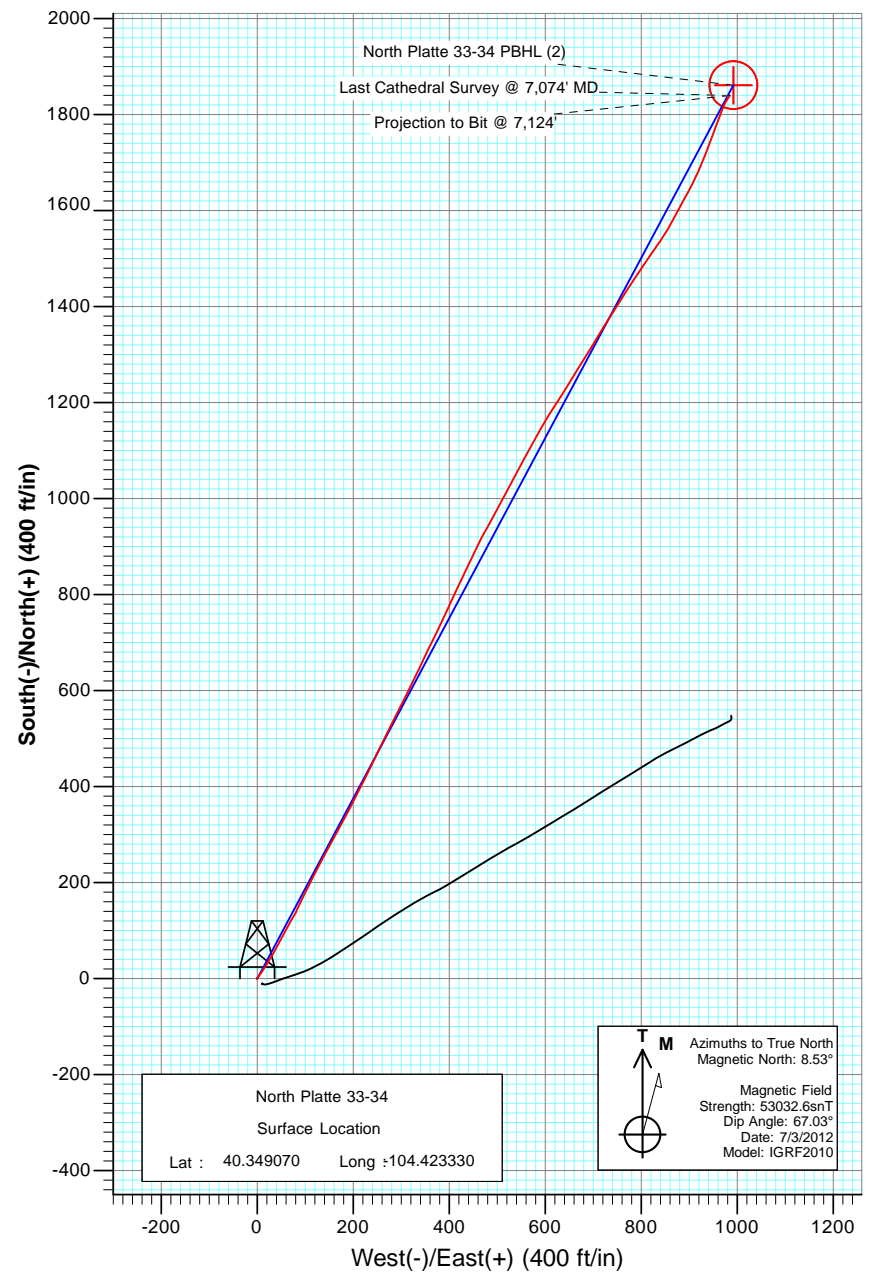
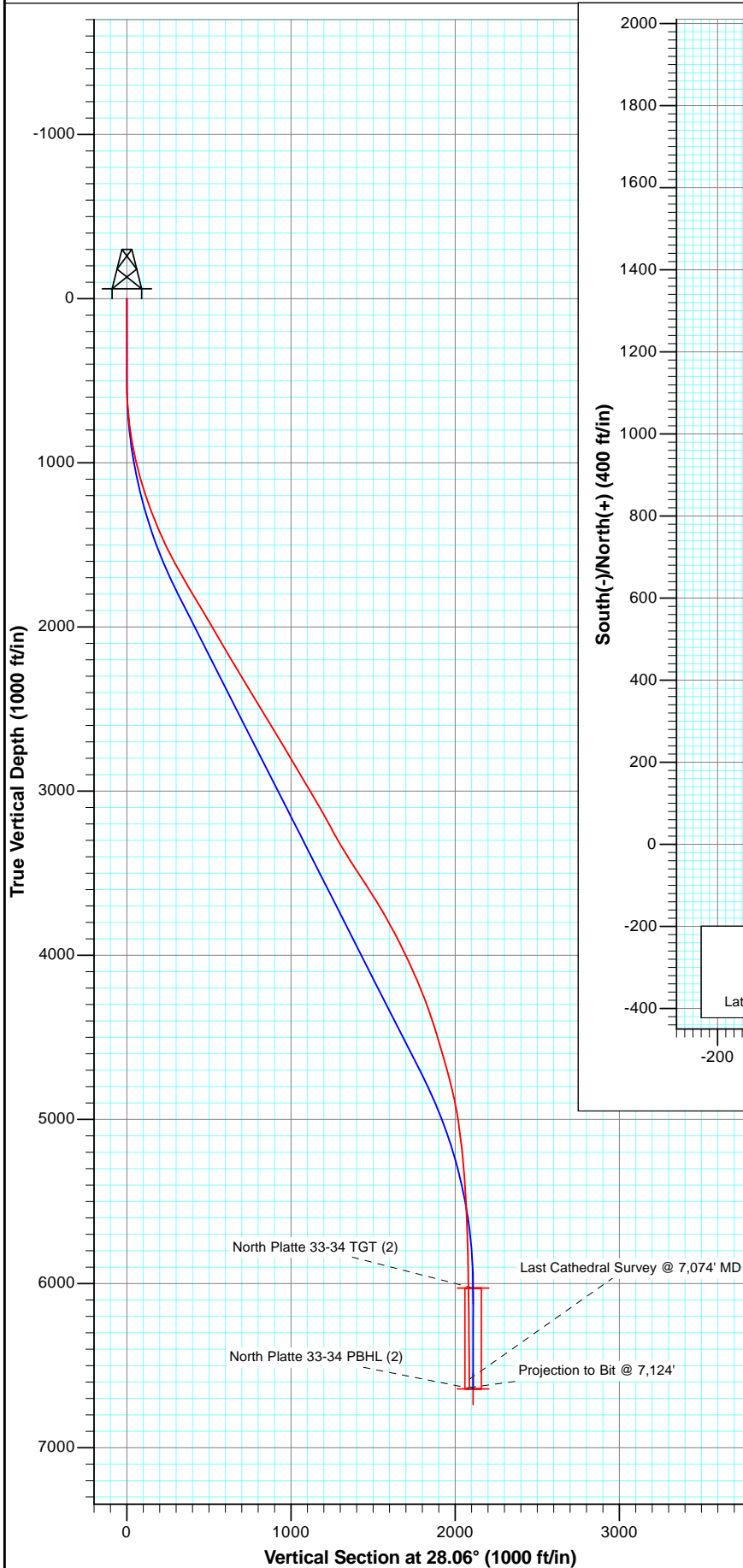




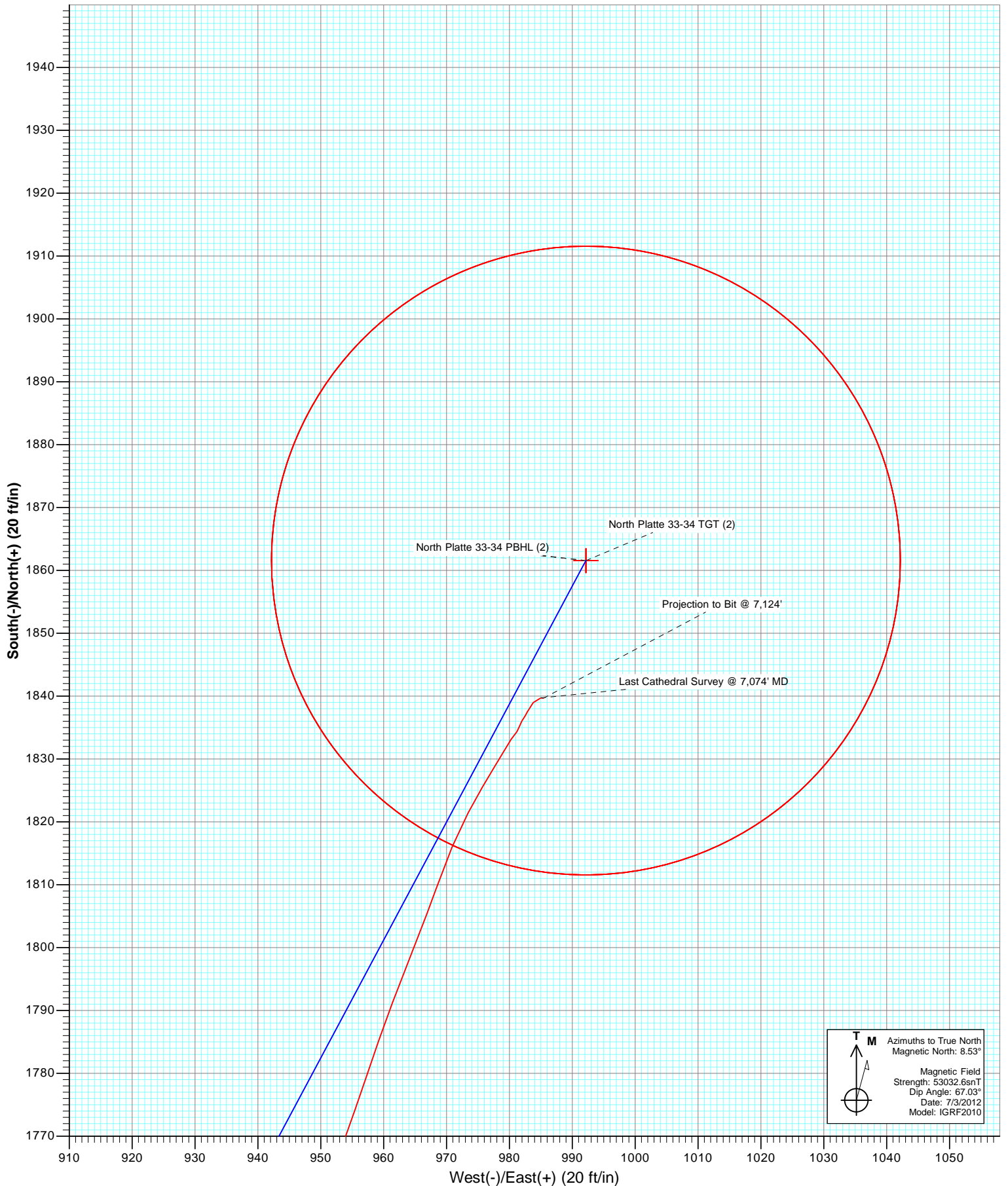
Project: Weld County  
Site: North Platte 24-34 Pad (was N-34)  
Well: North Platte 33-34  
Wellbore: DD  
Plan: FINAL



DD						
North Platte 33-34						
125436/178355; SC						
KBE @ 4539.0ft (Original Well Elev)						
North American Datum 1983						
Well North Platte 33-34, True North						
Type	Target	Target	Azimuth	Origin	Type	N/S
Target	North Platte 33-34 PBHL (2)		28.06	Slot		0.0
Name	TVD		+N/-S	+E/-W	Latitude	Longitude
North Platte 33-34 TGT (2)	6027.0		1861.6	992.2	40.354180	-104.419770
North Platte 33-34 PBHL (2)	6641.0		1861.6	992.2	40.354180	-104.419770



Project: Weld County  
Site: North Platte 24-34 Pad (was N-34)  
Well: North Platte 33-34  
Wellbore: DD  
Plan: FINAL



**T M**  
Azimuths to True North  
Magnetic North: 8.53°

Magnetic Field  
Strength: 53032.6snT  
Dip Angle: 67.03°  
Date: 7/3/2012  
Model: IGRF2010

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well North Platte 33-34
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Site:</b>	North Platte 24-34 Pad (was N-34)	<b>MD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Well:</b>	North Platte 33-34	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

<b>Project</b>	Weld County		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		North Platte 24-34 Pad (was N-34)			
Site Position:		Northing:	1,371,838.51 ft	Latitude:	40.349090
From:	Lat/Long	Easting:	3,300,077.01 ft	Longitude:	-104.423370
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.70 °

Well	North Platte 33-34					
Well Position	+N/-S	0.0 ft	Northing:	1,371,831.36 ft	Latitude:	40.349070
	+E/-W	0.0 ft	Easting:	3,300,088.25 ft	Longitude:	-104.423330
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,529.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	7/3/2012	8.53	67.03	53,033

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	28.06	

<b>Survey Program</b>	<b>Date</b>	8/2/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
525.0	7,124.0	Survey #1 (DD)	MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
525.0	0.30	18.30	525.0	1.3	0.4	1.4	0.06	0.06		
619.0	2.70	40.50	619.0	3.2	1.9	3.8	2.58	2.55		
713.0	5.50	33.10	712.7	8.7	5.8	10.4	3.03	2.98		
807.0	8.00	34.60	806.1	17.8	12.0	21.4	2.67	2.66		
902.0	10.80	33.00	899.8	30.7	20.6	36.8	2.96	2.95		
996.0	13.40	30.40	991.7	47.5	30.9	56.5	2.83	2.77		
1,090.0	15.10	26.50	1,082.8	67.9	41.9	79.6	2.08	1.81		
1,185.0	18.10	29.90	1,173.8	91.8	54.8	106.7	3.32	3.16		
1,278.0	19.90	29.30	1,261.7	118.1	69.7	137.0	1.95	1.94		
1,372.0	21.80	25.60	1,349.6	147.8	85.1	170.4	2.46	2.02		
1,465.0	23.80	25.90	1,435.3	180.2	100.8	206.5	2.15	2.15		
1,560.0	26.10	26.90	1,521.4	216.1	118.6	246.5	2.46	2.42		

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well North Platte 33-34
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Site:</b>	North Platte 24-34 Pad (was N-34)	<b>MD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Well:</b>	North Platte 33-34	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,655.0	28.20	28.00	1,606.0	254.6	138.6	289.9	2.27	2.21	
1,749.0	29.90	29.00	1,688.1	294.7	160.4	335.5	1.88	1.81	
1,843.0	30.90	28.40	1,769.2	336.4	183.2	383.1	1.11	1.06	
1,938.0	30.20	26.70	1,851.0	379.2	205.6	431.3	1.17	-0.74	
2,030.0	31.30	26.60	1,930.1	421.3	226.7	478.4	1.20	1.20	
2,123.0	29.70	25.60	2,010.2	463.6	247.4	525.5	1.80	-1.72	
2,218.0	30.40	25.80	2,092.5	506.5	268.1	573.1	0.74	0.74	
2,311.0	30.60	28.00	2,172.6	548.6	289.4	620.2	1.22	0.22	
2,405.0	31.60	25.70	2,253.1	591.9	311.3	668.8	1.65	1.06	
2,499.0	30.30	25.00	2,333.7	635.6	332.0	717.1	1.44	-1.38	
2,593.0	31.70	26.70	2,414.3	679.2	353.2	765.4	1.76	1.49	
2,687.0	31.50	25.50	2,494.3	723.4	374.8	814.7	0.70	-0.21	
2,781.0	31.10	25.10	2,574.6	767.5	395.7	863.4	0.48	-0.43	
2,874.0	30.50	25.00	2,654.5	810.7	415.9	911.0	0.65	-0.65	
2,968.0	31.50	25.70	2,735.1	854.4	436.6	959.4	1.13	1.06	
3,060.0	30.50	25.50	2,814.0	897.2	457.1	1,006.7	1.09	-1.09	
3,153.0	30.60	28.60	2,894.1	939.2	478.6	1,053.9	1.70	0.11	
3,246.0	30.40	29.10	2,974.2	980.6	501.3	1,101.1	0.35	-0.22	
3,339.0	31.20	28.10	3,054.1	1,022.4	524.1	1,148.8	1.02	0.86	
3,434.0	28.50	28.00	3,136.5	1,064.1	546.4	1,196.0	2.84	-2.84	
3,528.0	28.70	28.40	3,219.0	1,103.8	567.6	1,241.0	0.29	0.21	
3,621.0	29.30	29.50	3,300.3	1,143.2	589.4	1,286.1	0.86	0.65	
3,716.0	32.50	32.80	3,381.8	1,184.9	614.7	1,334.8	3.81	3.37	
3,810.0	33.10	32.00	3,460.9	1,227.9	642.0	1,385.6	0.79	0.64	
3,905.0	33.20	31.60	3,540.4	1,272.1	669.4	1,437.4	0.25	0.11	
3,999.0	32.30	31.70	3,619.5	1,315.4	696.1	1,488.2	0.96	-0.96	
4,093.0	30.90	31.60	3,699.5	1,357.3	721.9	1,537.3	1.49	-1.49	
4,187.0	29.80	32.30	3,780.6	1,397.6	747.0	1,584.7	1.23	-1.17	
4,282.0	27.90	33.10	3,863.8	1,436.2	771.8	1,630.4	2.04	-2.00	
4,376.0	26.30	33.80	3,947.5	1,471.9	795.4	1,673.0	1.74	-1.70	
4,470.0	25.20	34.40	4,032.2	1,505.7	818.3	1,713.6	1.20	-1.17	
4,564.0	24.00	34.50	4,117.6	1,538.0	840.4	1,752.5	1.28	-1.28	
4,659.0	22.70	29.00	4,204.9	1,569.9	860.2	1,790.1	2.67	-1.37	
4,753.0	19.90	28.30	4,292.4	1,599.9	876.6	1,824.2	2.99	-2.98	
4,848.0	18.50	28.00	4,382.2	1,627.4	891.4	1,855.4	1.48	-1.47	
4,942.0	16.90	29.00	4,471.7	1,652.6	905.0	1,884.0	1.73	-1.70	
5,036.0	16.70	23.30	4,561.7	1,676.9	917.0	1,911.1	1.76	-0.21	
5,130.0	16.20	22.10	4,651.8	1,701.5	927.2	1,937.6	0.64	-0.53	
5,224.0	14.90	21.60	4,742.4	1,724.9	936.6	1,962.7	1.39	-1.38	
5,318.0	13.10	21.20	4,833.6	1,746.0	944.9	1,985.3	1.92	-1.91	
5,413.0	10.70	20.40	4,926.6	1,764.3	951.9	2,004.7	2.53	-2.53	
5,506.0	8.50	18.30	5,018.3	1,778.9	957.1	2,020.0	2.39	-2.37	
5,601.0	7.20	20.80	5,112.4	1,791.2	961.4	2,032.9	1.41	-1.37	
5,694.0	5.90	21.50	5,204.8	1,801.1	965.2	2,043.4	1.40	-1.40	
5,788.0	4.80	19.90	5,298.3	1,809.3	968.3	2,052.1	1.18	-1.17	
5,882.0	4.00	22.20	5,392.1	1,816.0	970.9	2,059.2	0.87	-0.85	
5,977.0	3.20	28.80	5,486.9	1,821.4	973.4	2,065.2	0.95	-0.84	
6,071.0	2.50	28.90	5,580.8	1,825.5	975.7	2,069.9	0.74	-0.74	
6,165.0	2.00	33.10	5,674.7	1,828.7	977.6	2,073.5	0.56	-0.53	
6,260.0	1.60	29.10	5,769.6	1,831.2	979.1	2,076.5	0.44	-0.42	
6,354.0	1.10	33.50	5,863.6	1,833.1	980.2	2,078.7	0.54	-0.53	
6,449.0	0.80	42.20	5,958.6	1,834.4	981.2	2,080.3	0.35	-0.32	
6,542.0	0.50	1.00	6,051.6	1,835.2	981.6	2,081.3	0.58	-0.32	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well North Platte 33-34
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Site:</b>	North Platte 24-34 Pad (was N-34)	<b>MD Reference:</b>	KBE @ 4539.0ft (Original Well Elev)
<b>Well:</b>	North Platte 33-34	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
6,637.0	0.60	40.30	6,146.6	1,836.0	982.0	2,082.1	0.40	0.11	
6,731.0	0.80	26.20	6,240.6	1,837.0	982.6	2,083.3	0.28	0.21	
6,775.0	0.70	30.10	6,284.6	1,837.5	982.8	2,083.8	0.26	-0.23	
6,920.0	0.70	34.90	6,429.6	1,839.0	983.8	2,085.6	0.04	0.00	
7,074.0	0.50	94.30	6,583.6	1,839.7	985.0	2,086.8	0.40	-0.13	Last Cathedral Survey @ 7,074' MD Projection to Bit @ 7,124'
7,124.0	0.50	94.30	6,633.6	1,839.7	985.4	2,087.0	0.00	0.00	

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
North Platte 33-34 PBHL - actual wellpath misses target center by 24.1ft at 7124.0ft MD (6633.6 TVD, 1839.7 N, 985.4 E) - Circle (radius 50.0)	0.00	0.00	6,641.0	1,861.6	992.2	1,373,704.85	3,301,057.74	40.354180	-104.419770
North Platte 33-34 TGT - actual wellpath misses target center by 32.0ft at 6301.1ft MD (5810.7 TVD, 1832.1 N, 979.6 E) - Point	0.00	0.00	5,810.0	1,861.6	992.2	1,373,704.85	3,301,057.74	40.354180	-104.419770
North Platte 33-34 PBHL - actual wellpath misses target center by 22.9ft at 7100.5ft MD (6610.0 TVD, 1839.7 N, 985.2 E) - Circle (radius 50.0)	0.00	0.00	6,610.0	1,861.6	992.2	1,373,704.85	3,301,057.74	40.354180	-104.419770
North Platte 33-34 TGT - actual wellpath misses target center by 28.6ft at 6517.7ft MD (6027.3 TVD, 1835.0 N, 981.6 E) - Point	0.00	0.00	6,027.0	1,861.6	992.2	1,373,704.85	3,301,057.74	40.354180	-104.419770

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
7,074.0	6,583.6	1,839.7	985.0	Last Cathedral Survey @ 7,074' MD	
7,124.0	6,633.6	1,839.7	985.4	Projection to Bit @ 7,124'	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_