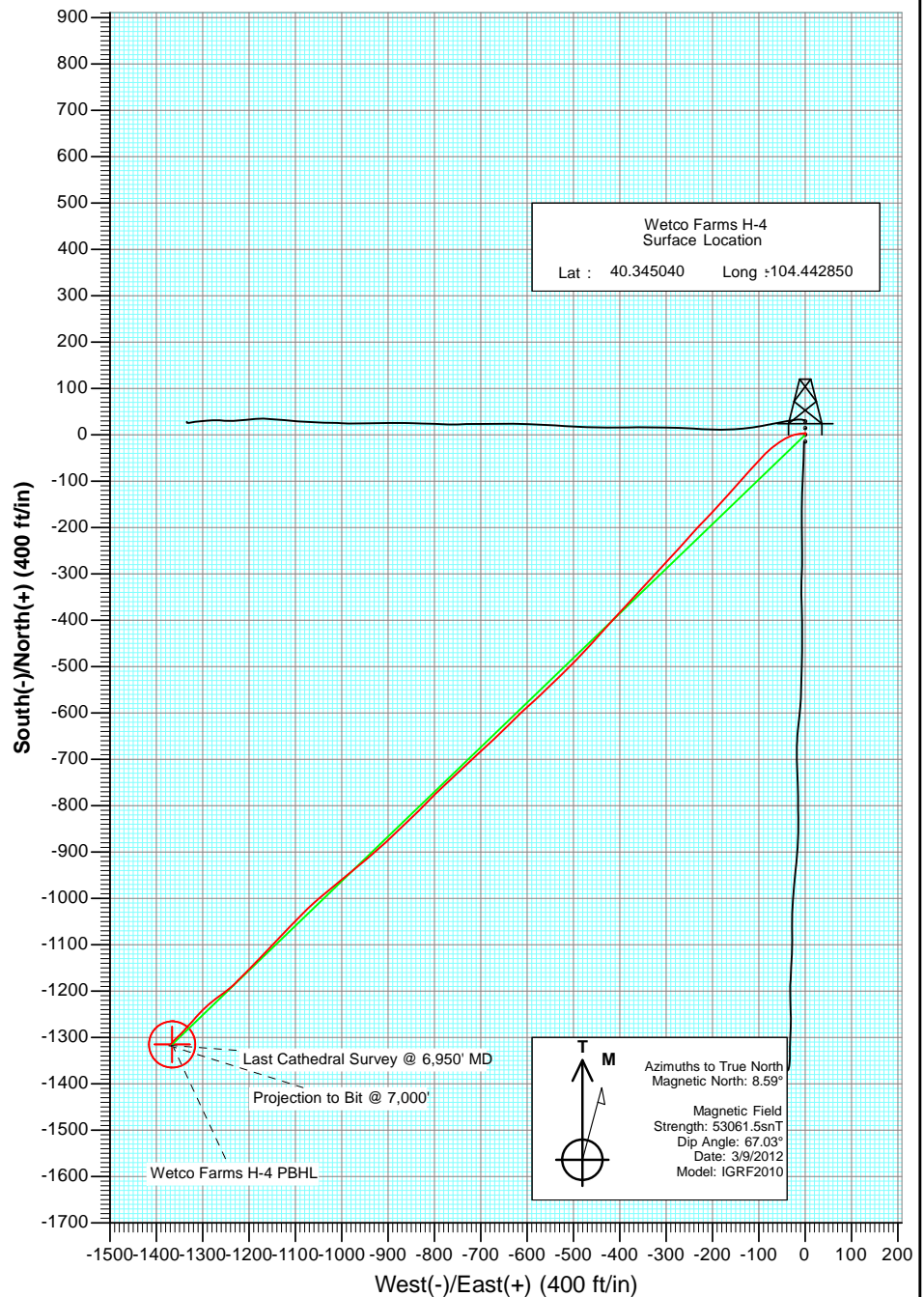
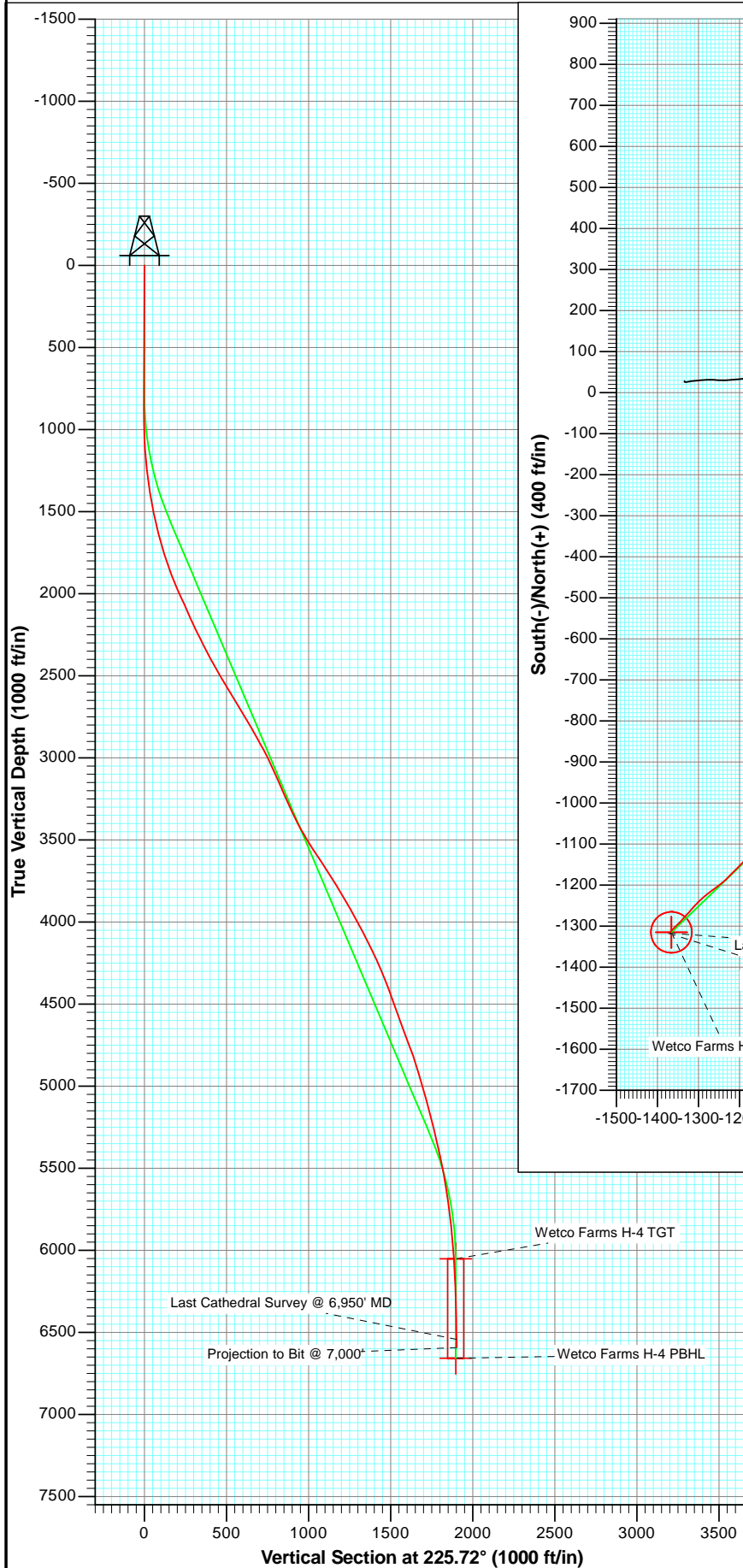




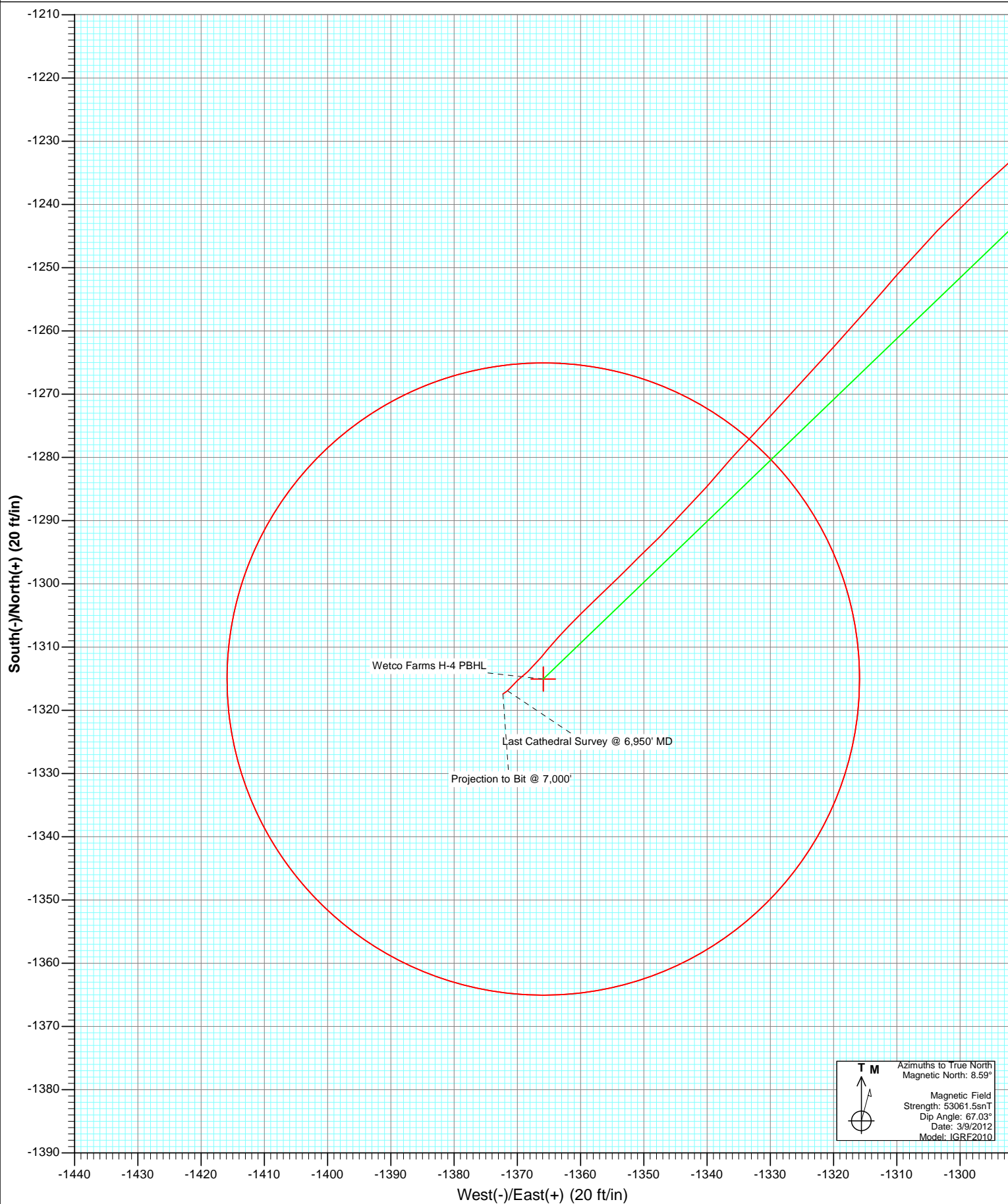
Project: Weld County  
 Site: Wetco Farms L-4 Pad  
 Well: Wetco Farms H-4  
 Wellbore: OH  
 Plan: AB FINAL



OH Wetco Farms H-4 125215/150155; SC					
kbe @ 4592.0ft North American Datum 1983 Well Wetco Farms H-4, True North					
Type	Target	Azimuth	Origin Type	N/S	E/W
User	No Target (Freehand)	225.72	Slot	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Wetco Farms H-4 TGT	6052.0	-1315.0	-1365.9	40.341430	-104.447750
Wetco Farms H-4 PBHL	6658.0	-1315.0	-1365.9	40.341430	-104.447750



Project: Weld County  
Site: Wetco Farms L-4 Pad  
Well: Wetco Farms H-4  
Wellbore: OH  
Plan: AB FINAL



# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	kbe @ 4592.0ft
<b>Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	kbe @ 4592.0ft
<b>Well:</b>	Wetco Farms H-4	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<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		Wetco Farms L-4 Pad			
Site Position:		Northing:	1,370,312.33 ft	Latitude:	40.345080
From:	Lat/Long	Easting:	3,294,651.41 ft	Longitude:	-104.442900
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.68 °

Well	Wetco Farms H-4					
Well Position	+N/-S	0.0 ft	Northing:	1,370,297.91 ft	Latitude:	40.345040
	+E/-W	0.0 ft	Easting:	3,294,665.52 ft	Longitude:	-104.442850
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,566.0 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/9/2012	8.59	67.03	53,062

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	225.72

<b>Survey Program</b>	<b>Date</b>	3/23/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
872.0	7,000.0	Survey #1 (OH)	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	
872.0	0.50	16.70	872.0	3.6	1.1	-3.3	0.06	0.06	
966.0	1.50	251.50	966.0	3.6	0.0	-2.6	1.95	1.06	
1,060.0	3.40	267.30	1,059.9	3.1	-3.9	0.6	2.13	2.02	
1,155.0	5.50	265.40	1,154.6	2.6	-11.3	6.2	2.22	2.21	
1,249.0	7.40	255.40	1,248.0	0.7	-21.6	15.0	2.34	2.02	
1,343.0	9.30	246.20	1,341.0	-3.9	-34.4	27.3	2.46	2.02	
1,437.0	10.50	239.00	1,433.6	-11.3	-48.7	42.8	1.83	1.28	
1,533.0	11.70	232.50	1,527.8	-21.8	-63.9	61.0	1.80	1.25	
1,627.0	14.20	228.20	1,619.4	-35.2	-80.1	82.0	2.85	2.66	
1,722.0	15.80	221.60	1,711.2	-52.7	-97.4	106.5	2.46	1.68	
1,816.0	18.50	222.10	1,801.0	-73.3	-115.9	134.1	2.88	2.87	
1,910.0	21.40	222.60	1,889.3	-97.0	-137.5	166.2	3.09	3.09	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	kbe @ 4592.0ft
<b>Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	kbe @ 4592.0ft
<b>Well:</b>	Wetco Farms H-4	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<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
2,004.0	24.20	221.20	1,976.0	-124.1	-161.8	202.5	3.03	2.98	
2,099.0	24.00	222.00	2,062.7	-153.2	-187.5	241.2	0.40	-0.21	
2,195.0	24.70	224.80	2,150.2	-181.9	-214.7	280.7	1.41	0.73	
2,289.0	25.70	221.20	2,235.2	-211.2	-242.0	320.7	1.95	1.06	
2,384.0	27.10	222.40	2,320.3	-242.7	-270.2	362.8	1.58	1.47	
2,479.0	28.70	222.60	2,404.3	-275.4	-300.2	407.2	1.69	1.68	
2,573.0	29.70	223.70	2,486.3	-308.9	-331.6	453.0	1.21	1.06	
2,670.0	31.00	222.50	2,570.0	-344.7	-365.0	502.0	1.48	1.34	
2,764.0	31.50	222.20	2,650.4	-380.7	-397.9	550.7	0.56	0.53	
2,858.0	31.70	221.80	2,730.5	-417.3	-430.8	599.8	0.31	0.21	
2,952.0	29.20	223.00	2,811.5	-452.5	-462.9	647.4	2.74	-2.66	
3,046.0	29.60	223.70	2,893.4	-486.0	-494.6	693.5	0.56	0.43	
3,141.0	27.60	226.10	2,976.8	-518.3	-526.7	738.9	2.43	-2.11	
3,236.0	24.30	225.70	3,062.2	-547.2	-556.6	780.5	3.48	-3.47	
3,330.0	23.90	228.10	3,148.0	-573.4	-584.6	818.9	1.13	-0.43	
3,424.0	23.70	226.40	3,234.0	-599.2	-612.4	856.8	0.76	-0.21	
3,519.0	24.40	225.80	3,320.8	-626.0	-640.3	895.5	0.78	0.74	
3,615.0	27.90	226.30	3,406.9	-655.4	-670.8	937.8	3.65	3.65	
3,709.0	31.00	227.30	3,488.8	-687.0	-704.5	984.0	3.34	3.30	
3,803.0	33.20	227.20	3,568.4	-720.9	-741.2	1,033.9	2.34	2.34	
3,898.0	33.50	226.30	3,647.8	-756.7	-779.2	1,086.1	0.61	0.32	
3,993.0	31.90	224.10	3,727.7	-792.8	-815.6	1,137.4	2.10	-1.68	
4,087.0	30.80	226.60	3,808.0	-827.2	-850.4	1,186.3	1.81	-1.17	
4,181.0	30.80	226.60	3,888.7	-860.3	-885.4	1,234.5	0.00	0.00	
4,275.0	29.10	227.70	3,970.2	-892.2	-919.8	1,281.4	1.90	-1.81	
4,369.0	27.00	230.40	4,053.1	-921.2	-953.1	1,325.5	2.61	-2.23	
4,464.0	27.20	230.60	4,137.7	-948.7	-986.5	1,368.6	0.23	0.21	
4,559.0	24.70	231.20	4,223.1	-974.9	-1,018.8	1,410.0	2.65	-2.63	
4,652.0	22.50	229.70	4,308.3	-998.6	-1,047.5	1,447.1	2.45	-2.37	
4,747.0	21.60	225.00	4,396.4	-1,022.7	-1,073.7	1,482.7	2.08	-0.95	
4,842.0	19.80	225.20	4,485.2	-1,046.4	-1,097.5	1,516.3	1.90	-1.89	
4,936.0	18.50	223.70	4,574.0	-1,068.4	-1,119.1	1,547.1	1.48	-1.38	
5,029.0	20.30	223.30	4,661.8	-1,090.8	-1,140.3	1,578.0	1.94	1.94	
5,124.0	21.50	223.70	4,750.5	-1,115.4	-1,163.7	1,611.9	1.27	1.26	
5,217.0	18.50	224.10	4,837.9	-1,138.3	-1,185.7	1,643.7	3.23	-3.23	
5,311.0	16.50	225.20	4,927.5	-1,158.5	-1,205.6	1,671.9	2.16	-2.13	
5,407.0	16.00	224.40	5,019.7	-1,177.5	-1,224.5	1,698.8	0.57	-0.52	
5,501.0	14.80	229.60	5,110.3	-1,194.6	-1,242.7	1,723.7	1.95	-1.28	
5,596.0	14.20	235.10	5,202.3	-1,209.1	-1,261.5	1,747.3	1.58	-0.63	
5,690.0	14.30	231.00	5,293.4	-1,223.0	-1,280.0	1,770.2	1.08	0.11	
5,783.0	12.40	227.30	5,383.9	-1,237.0	-1,296.3	1,791.7	2.24	-2.04	
5,879.0	11.70	220.70	5,477.8	-1,251.4	-1,310.2	1,811.7	1.61	-0.73	
5,972.0	9.70	222.20	5,569.2	-1,264.3	-1,321.6	1,828.9	2.17	-2.15	
6,067.0	8.40	223.10	5,663.0	-1,275.3	-1,331.7	1,843.8	1.38	-1.37	
6,161.0	6.90	220.30	5,756.1	-1,284.6	-1,340.1	1,856.3	1.64	-1.60	
6,255.0	6.40	226.10	5,849.5	-1,292.6	-1,347.5	1,867.1	0.89	-0.53	
6,349.0	5.10	225.10	5,943.0	-1,299.2	-1,354.2	1,876.6	1.39	-1.38	
6,443.0	4.00	226.50	6,036.7	-1,304.4	-1,359.6	1,884.0	1.18	-1.17	
6,537.0	2.80	220.90	6,130.6	-1,308.4	-1,363.4	1,889.6	1.32	-1.28	
6,632.0	2.30	220.10	6,225.5	-1,311.6	-1,366.2	1,893.8	0.53	-0.53	
6,727.0	1.50	227.30	6,320.4	-1,313.9	-1,368.3	1,896.9	0.88	-0.84	
6,822.0	1.10	232.60	6,415.4	-1,315.3	-1,370.0	1,899.1	0.44	-0.42	
6,915.0	1.00	214.10	6,508.4	-1,316.5	-1,371.1	1,900.8	0.38	-0.11	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	kbe @ 4592.0ft
<b>Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	kbe @ 4592.0ft
<b>Well:</b>	Wetco Farms H-4	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<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
6,950.0	1.00	235.00	6,543.4	-1,316.9	-1,371.5	1,901.4	1.04	0.00	Last Cathedral Survey @ 6,950' MD
7,000.0	1.00	235.00	6,593.4	-1,317.4	-1,372.3	1,902.2	0.00	0.00	Projection to Bit @ 7,000'

### 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
Wetco Farms H-4 PBHL - actual wellpath misses target center by 65.0ft at 7000.0ft MD (6593.4 TVD, -1317.4 N, -1372.3 E) - Circle (radius 50.0)	0.00	0.00	6,658.0	-1,315.0	-1,365.9	1,368,966.67	3,293,315.42	40.341430	-104.447750
Wetco Farms H-4 TGT - actual wellpath misses target center by 11.4ft at 6458.9ft MD (6052.7 TVD, -1305.1 N, -1360.3 E) - Point	0.00	0.00	6,052.0	-1,315.0	-1,365.9	1,368,966.67	3,293,315.42	40.341430	-104.447750

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
6,950.0	6,543.4	-1,316.9	-1,371.5	Last Cathedral Survey @ 6,950' MD
7,000.0	6,593.4	-1,317.4	-1,372.3	Projection to Bit @ 7,000'

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