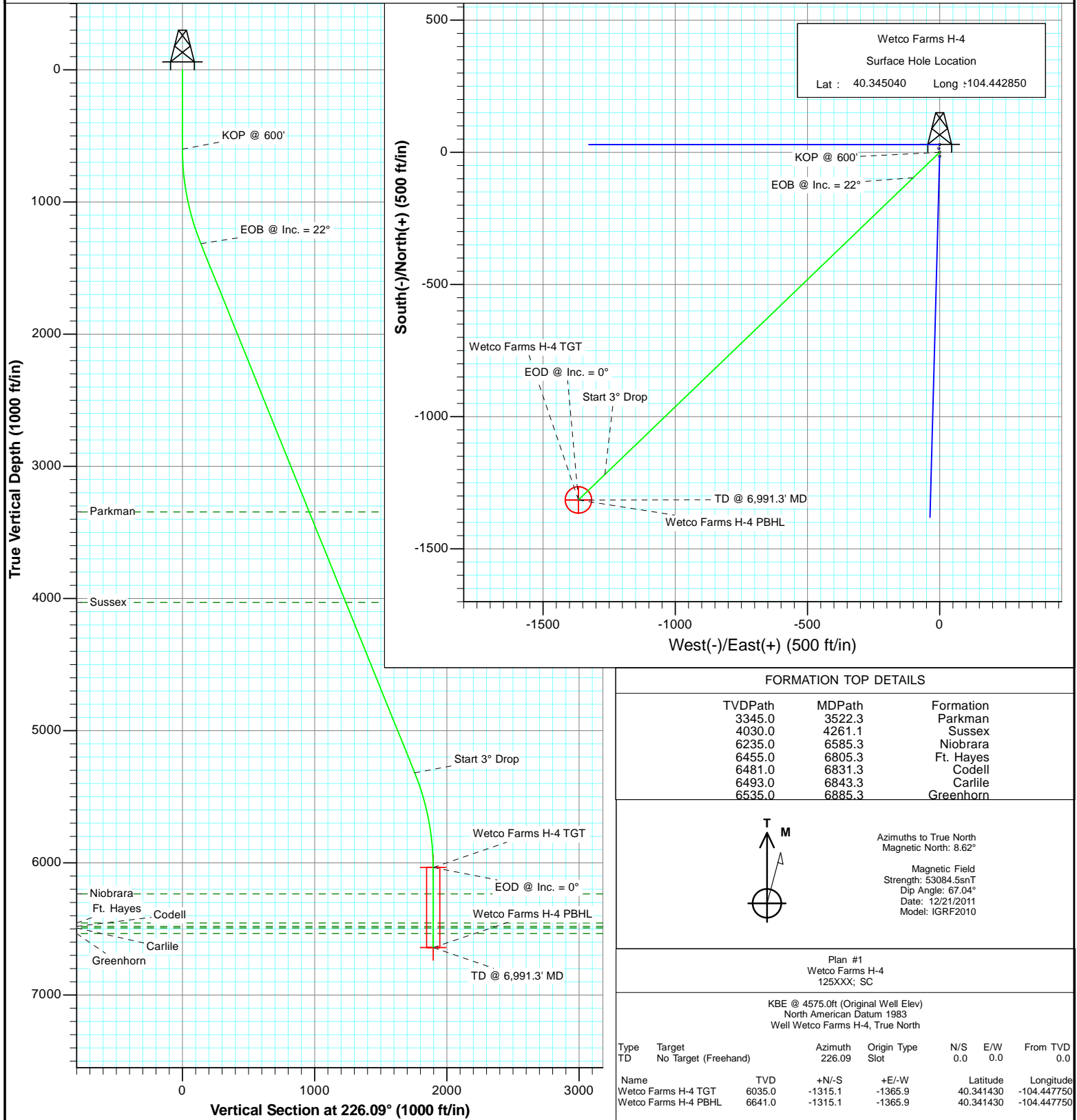
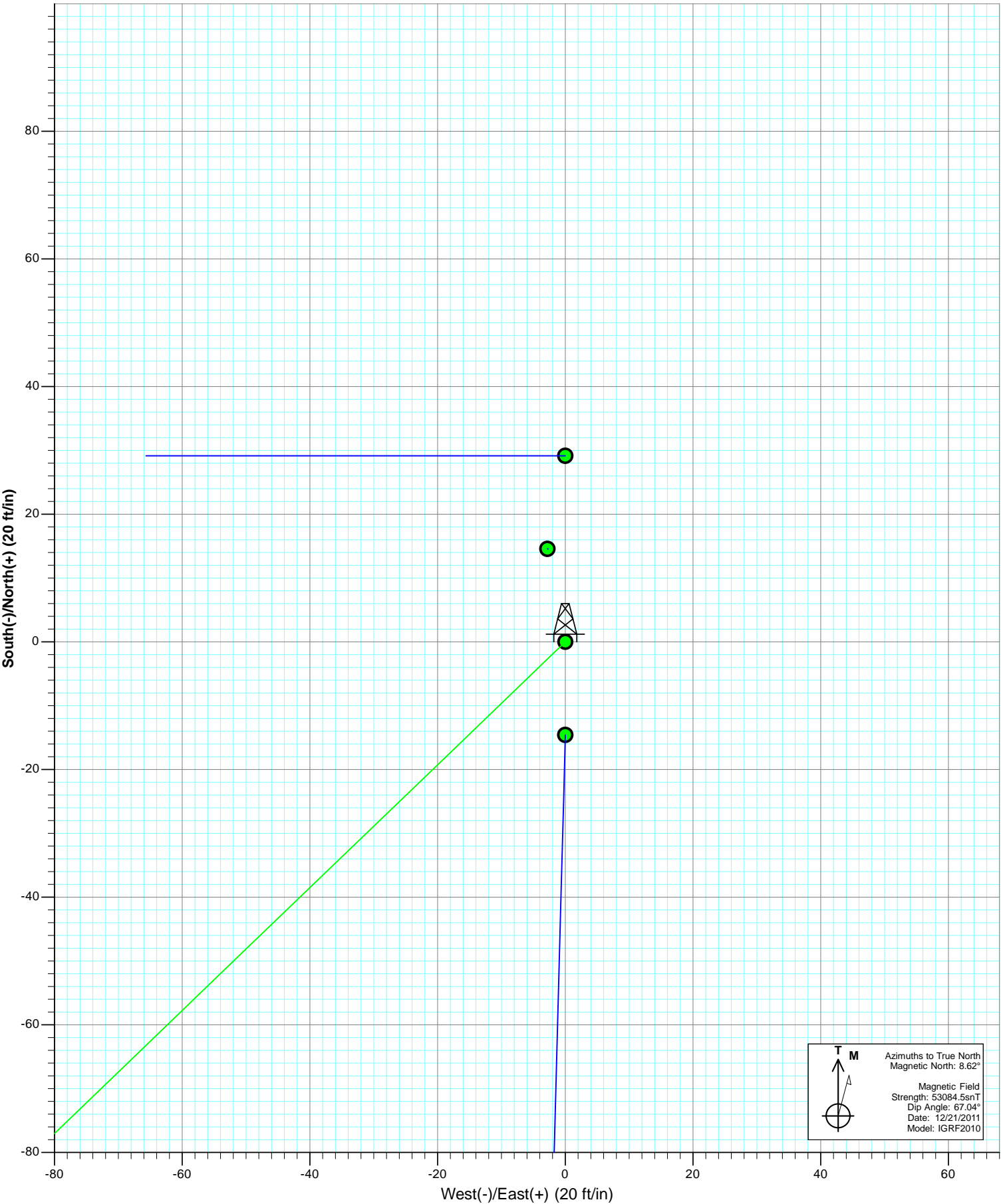
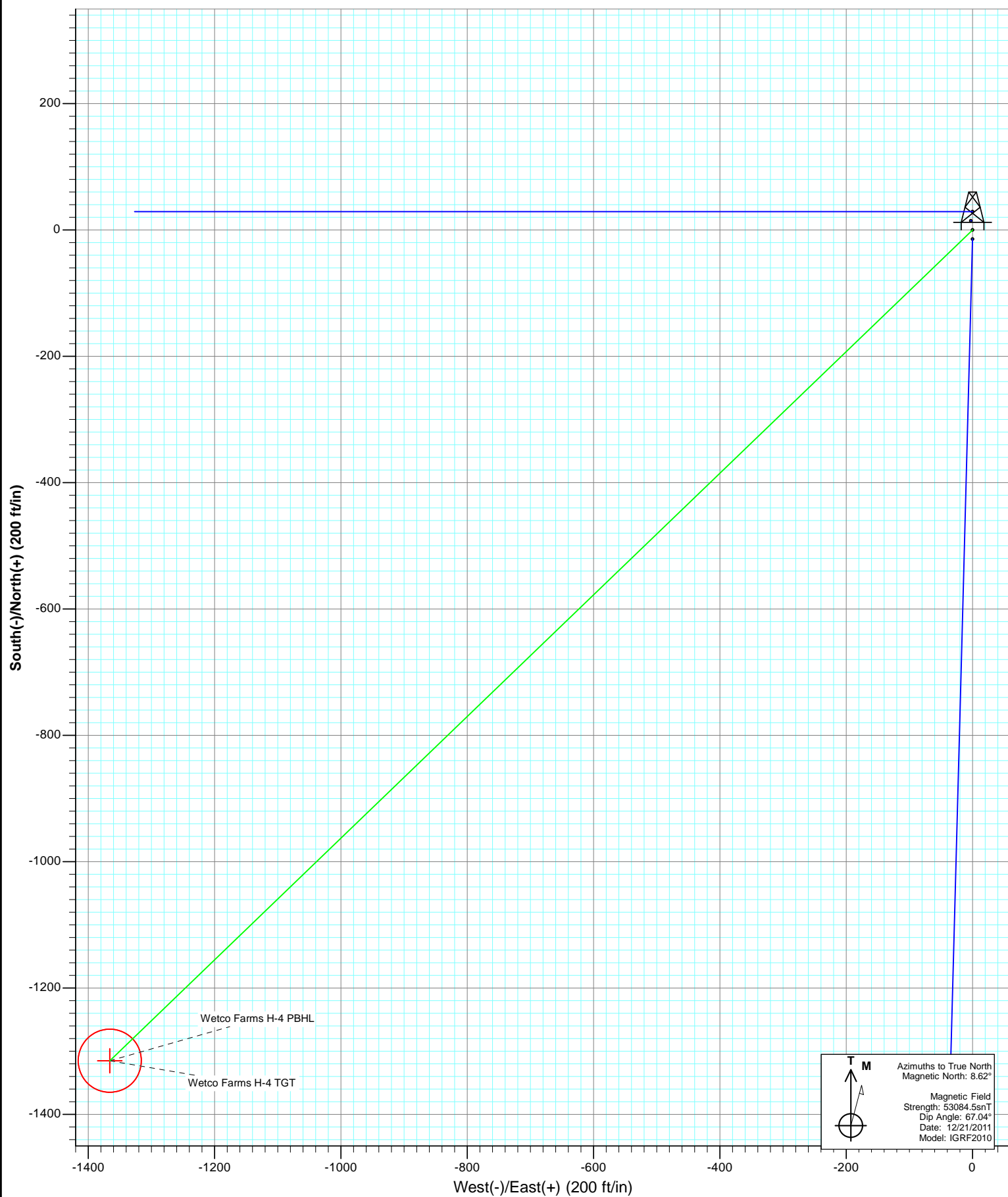


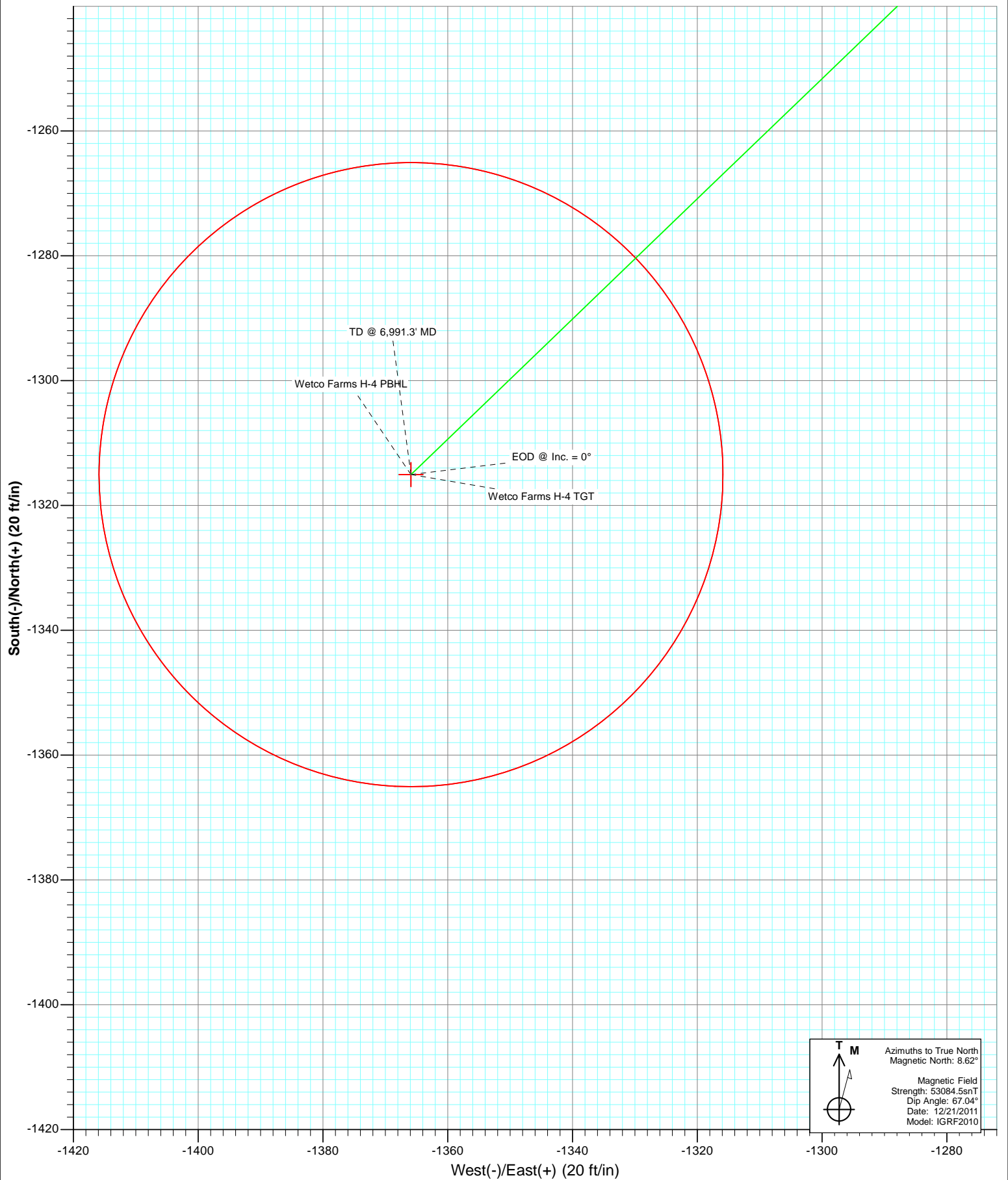
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1333.4	22.00	226.09	1315.5	-96.5	-100.2	3.00	226.09	139.1	
4	5651.9	22.00	226.09	5319.5	-1218.6	-1265.7	0.00	0.00	1757.0	
5	6385.3	0.00	0.00	6035.0	-1315.1	-1365.9	3.00	180.00	1896.0	Wetco Farms H-4 TGT
6	6991.3	0.00	0.00	6641.0	-1315.1	-1365.9	0.00	0.00	1896.0	Wetco Farms H-4 PBHL









# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>TVD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms L-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<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:	4,565.0 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	12/21/2011	8.62	67.04	53,085

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	226.09

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,333.4	22.00	226.09	1,315.5	-96.5	-100.2	3.00	3.00	0.00	226.09	
5,651.9	22.00	226.09	5,319.5	-1,218.6	-1,265.7	0.00	0.00	0.00	0.00	
6,385.3	0.00	0.00	6,035.0	-1,315.1	-1,365.9	3.00	-3.00	0.00	180.00	Wetco Farms H-4 TG
6,991.3	0.00	0.00	6,641.0	-1,315.1	-1,365.9	0.00	0.00	0.00	0.00	Wetco Farms H-4 PBI

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>TVD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms L-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600'
700.0	3.00	226.09	700.0	-1.8	-1.9	2.6	3.00	3.00	
800.0	6.00	226.09	799.6	-7.3	-7.5	10.5	3.00	3.00	
900.0	9.00	226.09	898.8	-16.3	-16.9	23.5	3.00	3.00	
1,000.0	12.00	226.09	997.1	-28.9	-30.1	41.7	3.00	3.00	
1,100.0	15.00	226.09	1,094.3	-45.1	-46.9	65.1	3.00	3.00	
1,200.0	18.00	226.09	1,190.2	-64.8	-67.3	93.5	3.00	3.00	
1,300.0	21.00	226.09	1,284.4	-88.0	-91.4	126.9	3.00	3.00	
1,333.4	22.00	226.09	1,315.5	-96.5	-100.2	139.1	3.00	3.00	EOB @ Inc. = 22°
1,400.0	22.00	226.09	1,377.3	-113.8	-118.2	164.0	0.00	0.00	
1,500.0	22.00	226.09	1,470.0	-139.8	-145.2	201.5	0.00	0.00	
1,600.0	22.00	226.09	1,562.7	-165.7	-172.2	239.0	0.00	0.00	
1,700.0	22.00	226.09	1,655.4	-191.7	-199.1	276.4	0.00	0.00	
1,800.0	22.00	226.09	1,748.1	-217.7	-226.1	313.9	0.00	0.00	
1,900.0	22.00	226.09	1,840.8	-243.7	-253.1	351.4	0.00	0.00	
2,000.0	22.00	226.09	1,933.6	-269.7	-280.1	388.8	0.00	0.00	
2,100.0	22.00	226.09	2,026.3	-295.7	-307.1	426.3	0.00	0.00	
2,200.0	22.00	226.09	2,119.0	-321.6	-334.1	463.8	0.00	0.00	
2,300.0	22.00	226.09	2,211.7	-347.6	-361.1	501.2	0.00	0.00	
2,400.0	22.00	226.09	2,304.4	-373.6	-388.1	538.7	0.00	0.00	
2,500.0	22.00	226.09	2,397.1	-399.6	-415.0	576.1	0.00	0.00	
2,600.0	22.00	226.09	2,489.9	-425.6	-442.0	613.6	0.00	0.00	
2,700.0	22.00	226.09	2,582.6	-451.6	-469.0	651.1	0.00	0.00	
2,800.0	22.00	226.09	2,675.3	-477.6	-496.0	688.5	0.00	0.00	
2,900.0	22.00	226.09	2,768.0	-503.5	-523.0	726.0	0.00	0.00	
3,000.0	22.00	226.09	2,860.7	-529.5	-550.0	763.5	0.00	0.00	
3,100.0	22.00	226.09	2,953.4	-555.5	-577.0	800.9	0.00	0.00	
3,200.0	22.00	226.09	3,046.2	-581.5	-604.0	838.4	0.00	0.00	
3,300.0	22.00	226.09	3,138.9	-607.5	-630.9	875.9	0.00	0.00	
3,400.0	22.00	226.09	3,231.6	-633.5	-657.9	913.3	0.00	0.00	
3,500.0	22.00	226.09	3,324.3	-659.4	-684.9	950.8	0.00	0.00	
3,522.3	22.00	226.09	3,345.0	-665.2	-690.9	959.1	0.00	0.00	Parkman
3,600.0	22.00	226.09	3,417.0	-685.4	-711.9	988.2	0.00	0.00	
3,700.0	22.00	226.09	3,509.8	-711.4	-738.9	1,025.7	0.00	0.00	
3,800.0	22.00	226.09	3,602.5	-737.4	-765.9	1,063.2	0.00	0.00	
3,900.0	22.00	226.09	3,695.2	-763.4	-792.9	1,100.6	0.00	0.00	
4,000.0	22.00	226.09	3,787.9	-789.4	-819.9	1,138.1	0.00	0.00	
4,100.0	22.00	226.09	3,880.6	-815.3	-846.9	1,175.6	0.00	0.00	
4,200.0	22.00	226.09	3,973.3	-841.3	-873.8	1,213.0	0.00	0.00	
4,261.1	22.00	226.09	4,030.0	-857.2	-890.3	1,235.9	0.00	0.00	Sussex
4,300.0	22.00	226.09	4,066.1	-867.3	-900.8	1,250.5	0.00	0.00	
4,400.0	22.00	226.09	4,158.8	-893.3	-927.8	1,288.0	0.00	0.00	
4,500.0	22.00	226.09	4,251.5	-919.3	-954.8	1,325.4	0.00	0.00	
4,600.0	22.00	226.09	4,344.2	-945.3	-981.8	1,362.9	0.00	0.00	
4,700.0	22.00	226.09	4,436.9	-971.2	-1,008.8	1,400.3	0.00	0.00	
4,800.0	22.00	226.09	4,529.6	-997.2	-1,035.8	1,437.8	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>TVD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms L-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	22.00	226.09	4,622.4	-1,023.2	-1,062.8	1,475.3	0.00	0.00	
5,000.0	22.00	226.09	4,715.1	-1,049.2	-1,089.7	1,512.7	0.00	0.00	
5,100.0	22.00	226.09	4,807.8	-1,075.2	-1,116.7	1,550.2	0.00	0.00	
5,200.0	22.00	226.09	4,900.5	-1,101.2	-1,143.7	1,587.7	0.00	0.00	
5,300.0	22.00	226.09	4,993.2	-1,127.1	-1,170.7	1,625.1	0.00	0.00	
5,400.0	22.00	226.09	5,085.9	-1,153.1	-1,197.7	1,662.6	0.00	0.00	
5,500.0	22.00	226.09	5,178.7	-1,179.1	-1,224.7	1,700.1	0.00	0.00	
5,600.0	22.00	226.09	5,271.4	-1,205.1	-1,251.7	1,737.5	0.00	0.00	
5,651.9	22.00	226.09	5,319.5	-1,218.6	-1,265.7	1,757.0	0.00	0.00	Start 3° Drop
5,700.0	20.56	226.09	5,364.3	-1,230.7	-1,278.3	1,774.4	3.00	-3.00	
5,800.0	17.56	226.09	5,458.8	-1,253.3	-1,301.8	1,807.1	3.00	-3.00	
5,900.0	14.56	226.09	5,554.9	-1,272.5	-1,321.7	1,834.7	3.00	-3.00	
6,000.0	11.56	226.09	5,652.3	-1,288.2	-1,338.0	1,857.3	3.00	-3.00	
6,100.0	8.56	226.09	5,750.8	-1,300.3	-1,350.6	1,874.8	3.00	-3.00	
6,200.0	5.56	226.09	5,850.0	-1,308.8	-1,359.4	1,887.1	3.00	-3.00	
6,300.0	2.56	226.09	5,949.7	-1,313.7	-1,364.5	1,894.1	3.00	-3.00	
6,385.3	0.00	0.00	6,035.0	-1,315.1	-1,365.9	1,896.0	3.00	-3.00	EOD @ Inc. = 0°
6,400.0	0.00	0.00	6,049.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,500.0	0.00	0.00	6,149.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,585.3	0.00	0.00	6,235.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	Niobrara
6,600.0	0.00	0.00	6,249.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,700.0	0.00	0.00	6,349.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,800.0	0.00	0.00	6,449.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,805.3	0.00	0.00	6,455.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	Ft. Hayes
6,831.3	0.00	0.00	6,481.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	Codell
6,843.3	0.00	0.00	6,493.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	Carlile
6,885.3	0.00	0.00	6,535.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	Greenhorn
6,900.0	0.00	0.00	6,549.7	-1,315.1	-1,365.9	1,896.0	0.00	0.00	
6,991.3	0.00	0.00	6,641.0	-1,315.1	-1,365.9	1,896.0	0.00	0.00	TD @ 6,991.3' MD

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
Wetco Farms H-4 PBHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	6,641.0	-1,315.1	-1,365.9	1,368,966.67	3,293,315.42	40.341430	-104.447750
Wetco Farms H-4 TGT - plan hits target center - Point	0.00	0.00	6,035.0	-1,315.1	-1,365.9	1,368,966.67	3,293,315.42	40.341430	-104.447750

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms H-4
<b>Company:</b>	Bonanza Creek Energy Operating Company, LLC	<b>TVD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms L-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,522.3	3,345.0	Parkman				
4,261.1	4,030.0	Sussex				
6,585.3	6,235.0	Niobrara				
6,805.3	6,455.0	Ft. Hayes				
6,831.3	6,481.0	Codell				
6,843.3	6,493.0	Carlile				
6,885.3	6,535.0	Greenhorn				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
600.0	600.0	0.0	0.0	KOP @ 600'
1,333.4	1,315.5	-96.5	-100.2	EOB @ Inc. = 22°
5,651.9	5,319.5	-1,218.6	-1,265.7	Start 3° Drop
6,385.3	6,035.0	-1,315.1	-1,365.9	EOD @ Inc. = 0°
6,991.3	6,641.0	-1,315.1	-1,365.9	TD @ 6,991.3' MD



# **Bonanza Creek Energy Operating Company, LLC**

**Weld County**

**Wetco Farms L-4 Pad**

**Wetco Farms H-4**

**OH**

**Plan #1**

## **Anticollision Report**

**21 December, 2011**

# Cathedral Energy Services

## Anticollision 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 @ 4575.0ft (Original Well Elev)
<b>Reference Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference	Plan #1		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	12/21/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	6,991.3	Plan #1 (OH)	MWD	Geolink MWD	

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
Wetco Farms L-4 Pad						
Wetco Farms G-4 - OH - Plan #2	0.0	0.0	29.1			
Wetco Farms G-4 - OH - Plan #2	600.0	600.0	29.1	29.1	10,000.000	CC, ES
Wetco Farms L-4 (vert) - VH - Plan #1	0.0	0.0	14.8			
Wetco Farms L-4 (vert) - VH - Plan #1	600.0	600.0	14.8	14.8	10,000.000	CC, ES
Wetco Farms M-4 - OH - Plan #1	0.0	0.0	14.6			
Wetco Farms M-4 - OH - Plan #1	600.0	600.0	14.6	14.6	10,000.000	CC, ES

# Cathedral Energy Services

## Anticollision 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 @ 4575.0ft (Original Well Elev)
<b>Reference Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Wetco Farms L-4 Pad - Wetco Farms G-4 - OH - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	29.1	0.0	29.1					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	29.1	0.0	29.1	29.1	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	29.1	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	29.1	0.0	29.1	29.1	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	29.1	0.0	29.1	29.1	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	0.00	29.1	0.0	29.1	29.1	0.00	N/A		
600.0	600.0	600.0	600.0	1.0	1.0	0.00	29.1	0.0	29.1	29.1	0.00	N/A CC, ES		
700.0	700.0	700.0	699.9	1.2	1.2	132.52	29.1	-2.6	31.0	31.0	0.00	N/A		
800.0	799.6	799.7	799.3	1.4	1.4	129.18	29.1	-10.4	36.5	36.5	0.00	N/A		
900.0	898.8	899.0	897.8	1.6	1.6	125.38	29.1	-23.4	45.9	45.9	0.00	N/A		
1,000.0	997.1	997.6	994.7	2.0	2.0	122.05	29.1	-41.2	59.2	59.2	0.00	N/A		
1,100.0	1,094.3	1,095.3	1,089.8	2.3	2.3	119.39	29.1	-63.9	76.3	76.3	0.00	N/A		
1,200.0	1,190.2	1,193.2	1,184.3	2.8	2.8	118.55	29.1	-89.3	96.7	96.7	0.00	N/A		
1,300.0	1,284.4	1,290.4	1,278.2	3.4	3.2	120.00	29.1	-114.6	119.6	119.6	0.00	N/A		
1,400.0	1,377.3	1,387.0	1,371.5	4.1	3.6	122.59	29.1	-139.7	144.7	144.7	0.00	N/A		
1,500.0	1,470.0	1,483.6	1,464.7	4.7	4.1	124.65	29.1	-164.8	170.1	170.1	0.00	N/A		
1,600.0	1,562.7	1,580.1	1,557.9	5.4	4.6	126.18	29.1	-189.9	195.8	195.8	0.00	N/A		
1,700.0	1,655.4	1,676.7	1,651.1	6.0	5.0	127.35	29.2	-215.0	221.5	221.5	0.00	N/A		
1,800.0	1,748.1	1,773.2	1,744.4	6.7	5.5	128.28	29.2	-240.1	247.3	247.3	0.00	N/A		
1,900.0	1,840.8	1,869.7	1,837.6	7.4	6.0	129.04	29.2	-265.2	273.1	273.1	0.00	N/A		
2,000.0	1,933.6	1,966.3	1,930.8	8.1	6.4	129.66	29.2	-290.3	299.0	299.0	0.00	N/A		
2,100.0	2,026.3	2,062.8	2,024.0	8.8	6.9	130.18	29.2	-315.4	324.9	324.9	0.00	N/A		
2,200.0	2,119.0	2,159.4	2,117.3	9.5	7.4	130.63	29.2	-340.5	350.9	350.9	0.00	N/A		
2,300.0	2,211.7	2,255.9	2,210.5	10.2	7.9	131.01	29.2	-365.6	376.8	376.8	0.00	N/A		
2,400.0	2,304.4	2,352.5	2,303.7	10.8	8.3	131.35	29.2	-390.7	402.8	402.8	0.00	N/A		
2,500.0	2,397.1	2,449.0	2,396.9	11.5	8.8	131.65	29.2	-415.8	428.8	428.8	0.00	N/A		
2,600.0	2,489.9	2,545.6	2,490.2	12.2	9.3	131.91	29.2	-440.9	454.7	454.7	0.00	N/A		
2,700.0	2,582.6	2,642.1	2,583.4	12.9	9.8	132.14	29.2	-466.0	480.7	480.7	0.00	N/A		

# Cathedral Energy Services

## Anticollision 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 @ 4575.0ft (Original Well Elev)
<b>Reference Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Wetco Farms L-4 Pad - Wetco Farms L-4 (vert) - VH - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-10.84	14.6	-2.8	14.8					
100.0	100.0	100.0	100.0	0.2	0.2	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A		
600.0	600.0	600.0	600.0	1.0	1.0	-10.84	14.6	-2.8	14.8	14.8	0.00	N/A CC, ES		
700.0	700.0	700.0	700.0	1.2	1.2	130.72	14.6	-2.8	16.4	16.4	0.00	N/A		
800.0	799.6	799.6	799.6	1.4	1.4	146.05	14.6	-2.8	22.3	22.3	0.00	N/A		
900.0	898.8	898.8	898.8	1.6	1.6	158.30	14.6	-2.8	34.0	34.0	0.00	N/A		
1,000.0	997.1	997.1	997.1	2.0	1.7	165.70	14.6	-2.8	51.4	51.4	0.00	N/A		
1,100.0	1,094.3	1,094.3	1,094.3	2.3	1.9	170.03	14.6	-2.8	74.2	74.2	0.00	N/A		
1,200.0	1,190.2	1,190.2	1,190.2	2.8	2.1	172.67	14.6	-2.8	102.3	102.3	0.00	N/A		
1,300.0	1,284.4	1,284.4	1,284.4	3.4	2.2	174.37	14.6	-2.8	135.5	135.5	0.00	N/A		
1,400.0	1,377.3	1,377.3	1,377.3	4.1	2.4	175.55	14.6	-2.8	172.6	172.6	0.00	N/A		
1,500.0	1,470.0	1,470.0	1,470.0	4.7	2.5	176.34	14.6	-2.8	210.0	210.0	0.00	N/A		
1,600.0	1,562.7	1,562.7	1,562.7	5.4	2.7	176.90	14.6	-2.8	247.4	247.4	0.00	N/A		
1,700.0	1,655.4	1,655.4	1,655.4	6.0	2.9	177.30	14.6	-2.8	284.8	284.8	0.00	N/A		
1,800.0	1,748.1	1,748.1	1,748.1	6.7	3.0	177.62	14.6	-2.8	322.2	322.2	0.00	N/A		
1,900.0	1,840.8	1,840.8	1,840.8	7.4	3.2	177.86	14.6	-2.8	359.7	359.7	0.00	N/A		
2,000.0	1,933.6	1,933.6	1,933.6	8.1	3.4	178.07	14.6	-2.8	397.1	397.1	0.00	N/A		
2,100.0	2,026.3	2,026.3	2,026.3	8.8	3.5	178.23	14.6	-2.8	434.6	434.6	0.00	N/A		
2,200.0	2,119.0	2,119.0	2,119.0	9.5	3.7	178.37	14.6	-2.8	472.0	472.0	0.00	N/A		

# Cathedral Energy Services

## Anticollision 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 @ 4575.0ft (Original Well Elev)
<b>Reference Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Wetco Farms L-4 Pad - Wetco Farms M-4 - OH - Plan #1										Offset Site Error:		0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-14.6	0.0	14.6					
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-14.6	0.0	14.6	14.6	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-14.6	0.0	14.6	14.6	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-14.6	0.0	14.6	14.6	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	180.00	-14.6	0.0	14.6	14.6	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	180.00	-14.6	0.0	14.6	14.6	0.00	N/A		
600.0	600.0	600.0	600.0	1.0	1.0	180.00	-14.6	0.0	14.6	14.6	0.00	N/A CC, ES		
700.0	700.0	699.2	699.2	1.2	1.2	-52.76	-17.1	-0.1	15.5	15.5	0.00	N/A		
800.0	799.6	798.2	797.8	1.4	1.4	-68.12	-24.8	-0.3	19.1	19.1	0.00	N/A		
900.0	898.8	896.7	895.5	1.6	1.6	-82.62	-37.6	-0.6	27.0	27.0	0.00	N/A		
1,000.0	997.1	994.6	991.8	2.0	1.9	-92.25	-55.2	-1.1	39.4	39.4	0.00	N/A		
1,100.0	1,094.3	1,091.5	1,086.1	2.3	2.3	-98.02	-77.4	-1.7	56.2	56.2	0.00	N/A		
1,200.0	1,190.2	1,188.9	1,180.0	2.8	2.7	-102.36	-103.3	-2.4	76.2	76.2	0.00	N/A		
1,300.0	1,284.4	1,286.1	1,273.6	3.4	3.2	-107.50	-129.4	-3.0	98.2	98.2	0.00	N/A		
1,400.0	1,377.3	1,382.6	1,366.6	4.1	3.6	-112.75	-155.2	-3.7	122.2	122.2	0.00	N/A		
1,500.0	1,470.0	1,479.1	1,459.5	4.7	4.0	-116.52	-181.1	-4.4	147.0	147.0	0.00	N/A		
1,600.0	1,562.7	1,575.5	1,552.5	5.4	4.5	-119.19	-206.9	-5.1	172.3	172.3	0.00	N/A		
1,700.0	1,655.4	1,672.0	1,645.4	6.0	5.0	-121.19	-232.7	-5.8	197.9	197.9	0.00	N/A		
1,800.0	1,748.1	1,768.5	1,738.4	6.7	5.4	-122.72	-258.6	-6.5	223.6	223.6	0.00	N/A		
1,900.0	1,840.8	1,865.0	1,831.3	7.4	5.9	-123.94	-284.4	-7.2	249.5	249.5	0.00	N/A		
2,000.0	1,933.6	1,961.5	1,924.3	8.1	6.4	-124.93	-310.2	-7.8	275.4	275.4	0.00	N/A		
2,100.0	2,026.3	2,057.9	2,017.2	8.8	6.8	-125.75	-336.1	-8.5	301.4	301.4	0.00	N/A		
2,200.0	2,119.0	2,154.4	2,110.2	9.5	7.3	-126.44	-361.9	-9.2	327.5	327.5	0.00	N/A		
2,300.0	2,211.7	2,250.9	2,203.2	10.2	7.8	-127.03	-387.7	-9.9	353.6	353.6	0.00	N/A		
2,400.0	2,304.4	2,347.4	2,296.1	10.8	8.3	-127.54	-413.6	-10.6	379.7	379.7	0.00	N/A		
2,500.0	2,397.1	2,443.8	2,389.1	11.5	8.7	-127.98	-439.4	-11.3	405.8	405.8	0.00	N/A		
2,600.0	2,489.9	2,540.3	2,482.0	12.2	9.2	-128.37	-465.2	-12.0	432.0	432.0	0.00	N/A		
2,700.0	2,582.6	2,636.8	2,575.0	12.9	9.7	-128.72	-491.1	-12.6	458.2	458.2	0.00	N/A		
2,800.0	2,675.3	2,733.3	2,667.9	13.6	10.2	-129.02	-516.9	-13.3	484.3	484.3	0.00	N/A		

# Cathedral Energy Services

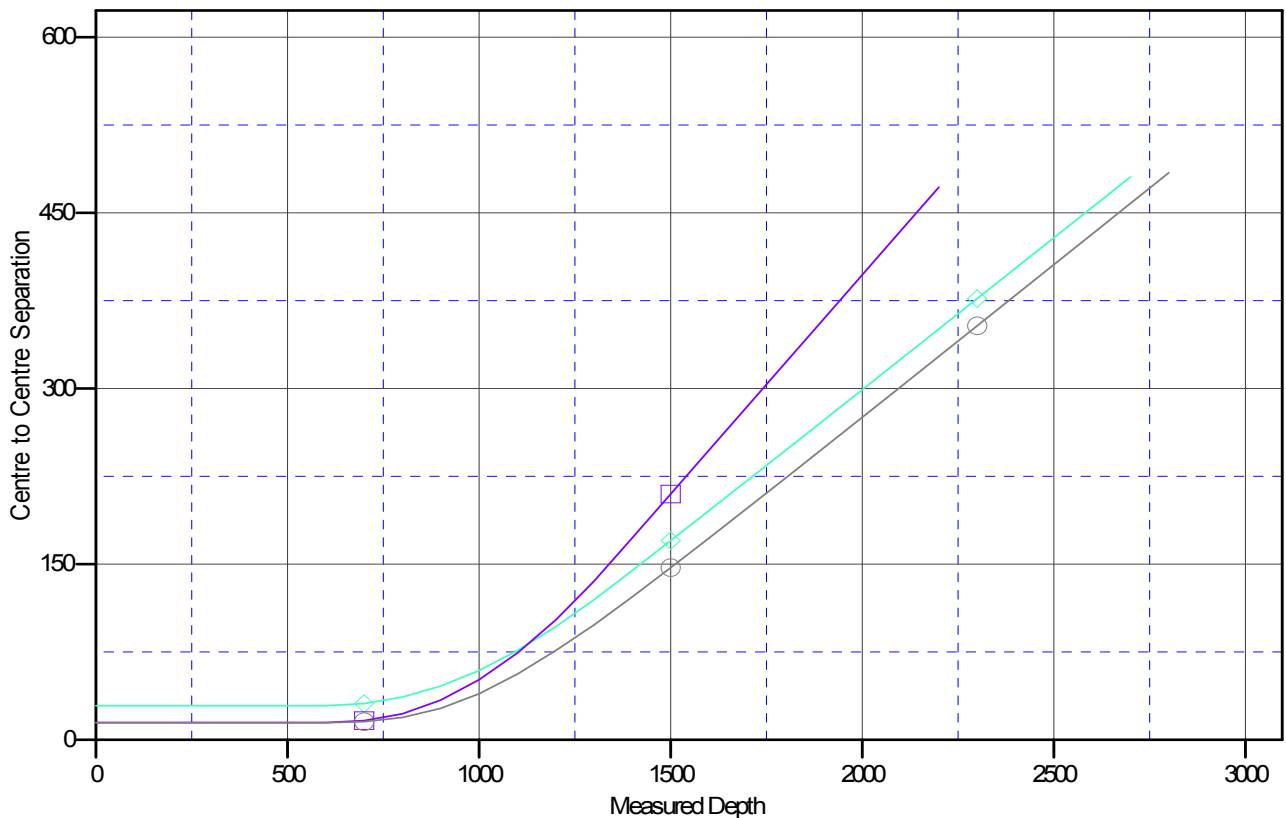
## Anticollision Report

<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 @ 4575.0ft (Original Well Elev)
<b>Reference Site:</b>	Wetco Farms L-4 Pad	<b>MD Reference:</b>	KBE @ 4575.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wetco Farms H-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KBE @ 4575.0ft (Original Well Elev)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Wetco Farms H-4  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.68°

### Ladder Plot



### LEGEND

◆ Wetco Farms G-4, OH, Plan #2 V0    
■ Wetco Farms L-4 (vert), VH, Plan #1 V0    
● Wetco Farms M-4, OH, Plan #1 V0