

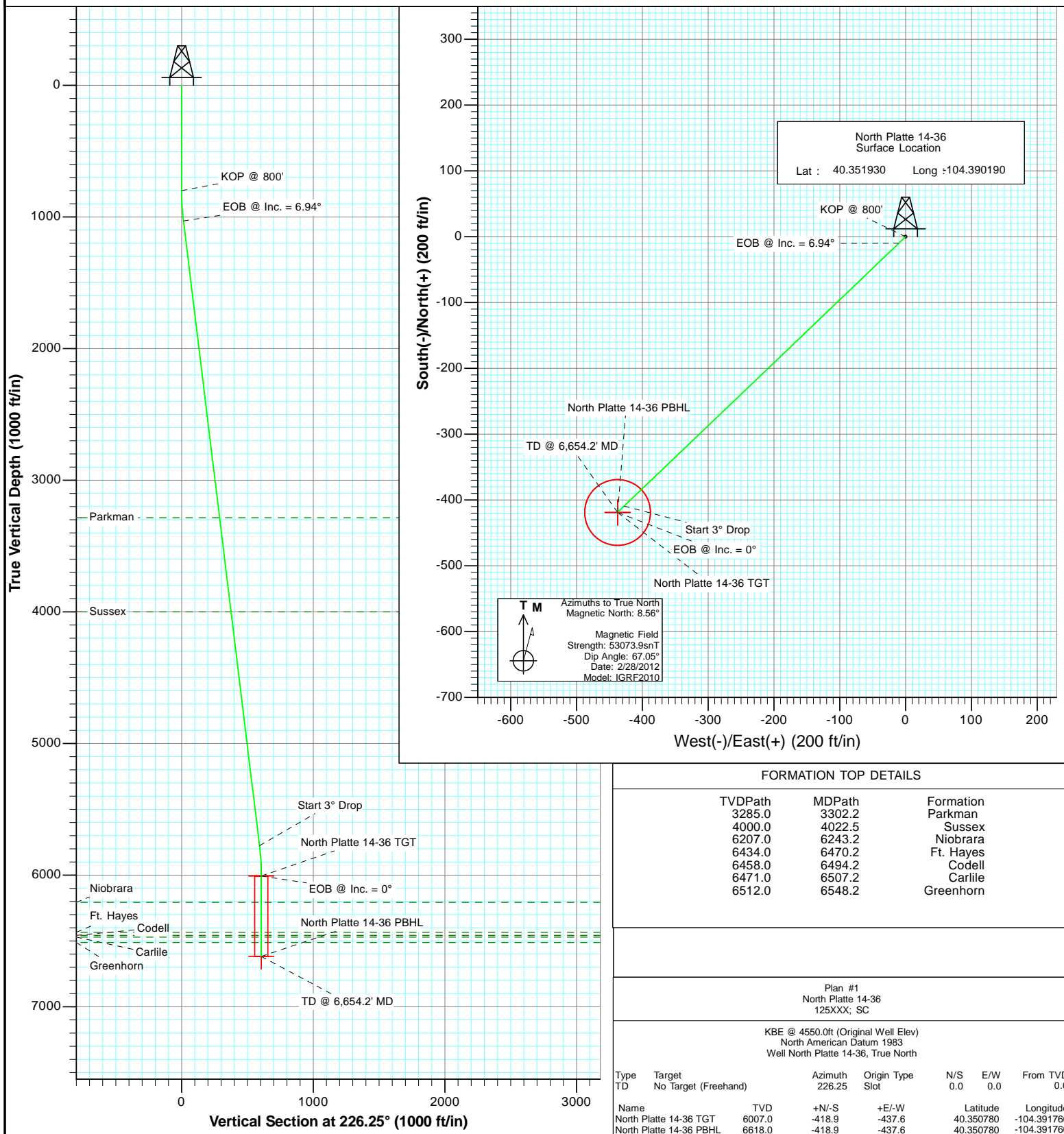


Project: Weld County
Site: North Platte 14-36 Pad
Well: North Platte 14-36
Wellbore: OH
Plan: Plan #1



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	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1031.4	6.94	226.25	1030.8	-9.7	-10.1	3.00	226.25	14.0	
4	5811.8	6.94	226.25	5776.2	-409.2	-427.5	0.00	0.00	591.8	
5	6043.2	0.00	0.00	6007.0	-418.9	-437.6	3.00	180.00	605.8	North Platte 14-36 TGT
6	6654.2	0.00	0.00	6618.0	-418.9	-437.6	0.00	0.00	605.8	North Platte 14-36 PBHL



FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
3285.0	3302.2	Parkman
4000.0	4022.5	Sussex
6207.0	6243.2	Niobrara
6434.0	6470.2	Ft. Hayes
6458.0	6494.2	Codell
6471.0	6507.2	Carlile
6512.0	6548.2	Greenhorn

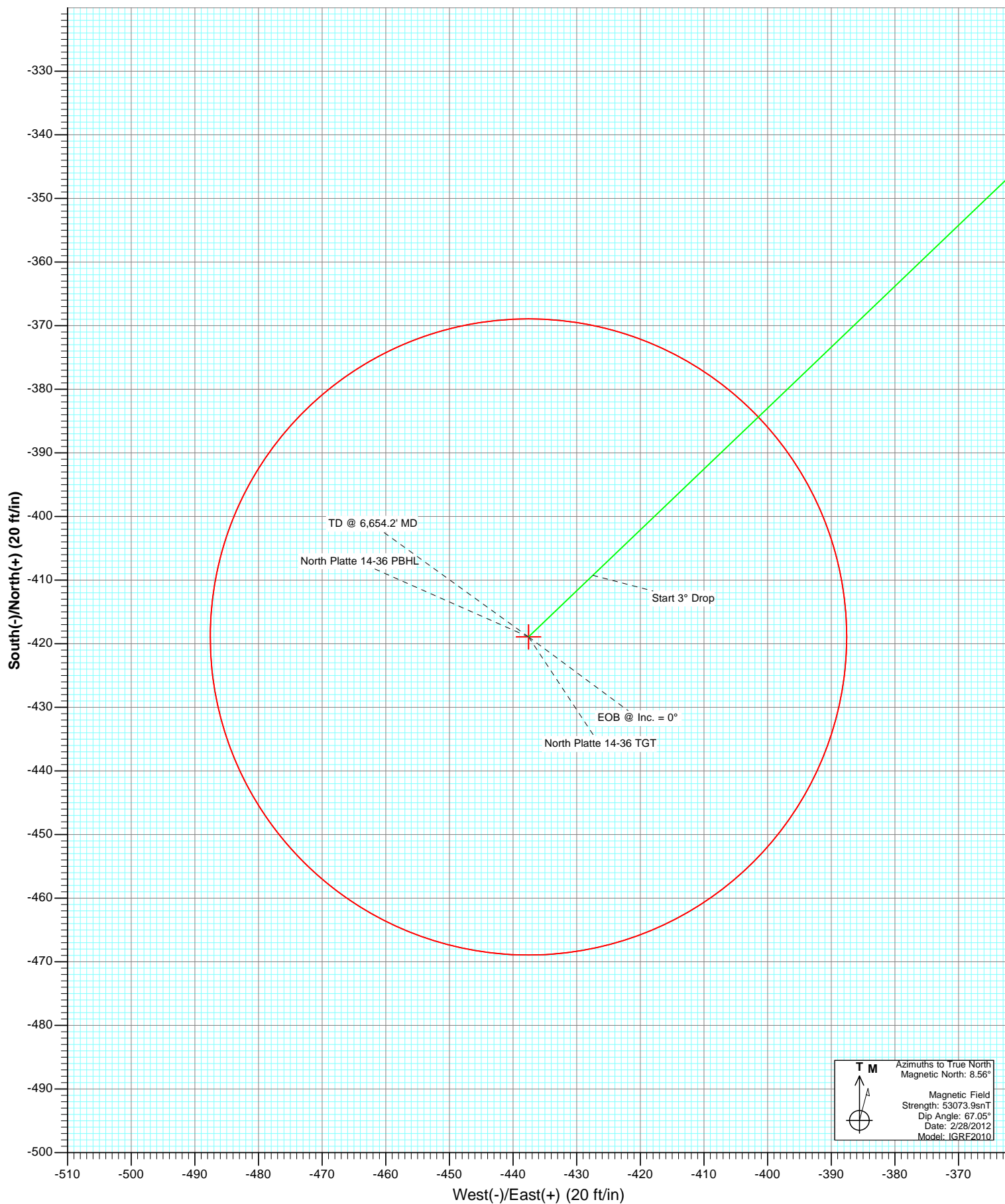
Plan #1
North Platte 14-36
125XXX; SC

KBE @ 4550.0ft (Original Well Elev)
North American Datum 1983
Well North Platte 14-36, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	226.25	Slot	0.0	0.0	0.0
Name		TVD			Latitude	Longitude
North Platte 14-36 TGT		6007.0	+N/-S		40.350780	-104.391760
North Platte 14-36 PBHL		6618.0	+E/-W		40.350780	-104.391760



Project: Weld County
Site: North Platte 14-36 Pad
Well: North Platte 14-36
Wellbore: OH
Plan: Plan #1



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well North Platte 14-36
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4550.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4550.0ft (Original Well Elev)
Site:	North Platte 14-36 Pad	North Reference:	True
Well:	North Platte 14-36	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site		North Platte 14-36 Pad			
Site Position:		Northing:	1,372,987.05 ft	Latitude:	40.351930
From:	Lat/Long	Easting:	3,309,311.29 ft	Longitude:	-104.390190
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.72 °

Well	North Platte 14-36					
Well Position	+N/-S	0.0 ft	Northing:	1,372,987.05 ft	Latitude:	40.351930
	+E/-W	0.0 ft	Easting:	3,309,311.29 ft	Longitude:	-104.390190
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,540.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/28/2012	8.56	67.05	53,074

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	226.25

Plan Sections										
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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,031.4	6.94	226.25	1,030.8	-9.7	-10.1	3.00	3.00	0.00	226.25	
5,811.8	6.94	226.25	5,776.2	-409.2	-427.5	0.00	0.00	0.00	0.00	
6,043.2	0.00	0.00	6,007.0	-418.9	-437.6	3.00	-3.00	0.00	180.00	North Platte 14-36 TC
6,654.2	0.00	0.00	6,618.0	-418.9	-437.6	0.00	0.00	0.00	0.00	North Platte 14-36 PE

Cathedral Energy Services

Planning Report

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Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4550.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4550.0ft (Original Well Elev)
Site:	North Platte 14-36 Pad	North Reference:	True
Well:	North Platte 14-36	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	KOP @ 800'
900.0	3.00	226.25	900.0	-1.8	-1.9	2.6	3.00	3.00	
1,000.0	6.00	226.25	999.6	-7.2	-7.6	10.5	3.00	3.00	
1,031.4	6.94	226.25	1,030.8	-9.7	-10.1	14.0	3.00	3.00	EOB @ Inc. = 6.94°
1,100.0	6.94	226.25	1,098.9	-15.4	-16.1	22.3	0.00	0.00	
1,200.0	6.94	226.25	1,198.2	-23.8	-24.8	34.4	0.00	0.00	
1,300.0	6.94	226.25	1,297.5	-32.1	-33.6	46.5	0.00	0.00	
1,400.0	6.94	226.25	1,396.7	-40.5	-42.3	58.6	0.00	0.00	
1,500.0	6.94	226.25	1,496.0	-48.9	-51.0	70.6	0.00	0.00	
1,600.0	6.94	226.25	1,595.3	-57.2	-59.8	82.7	0.00	0.00	
1,700.0	6.94	226.25	1,694.5	-65.6	-68.5	94.8	0.00	0.00	
1,800.0	6.94	226.25	1,793.8	-73.9	-77.2	106.9	0.00	0.00	
1,900.0	6.94	226.25	1,893.1	-82.3	-85.9	119.0	0.00	0.00	
2,000.0	6.94	226.25	1,992.3	-90.6	-94.7	131.1	0.00	0.00	
2,100.0	6.94	226.25	2,091.6	-99.0	-103.4	143.2	0.00	0.00	
2,200.0	6.94	226.25	2,190.9	-107.4	-112.1	155.2	0.00	0.00	
2,300.0	6.94	226.25	2,290.1	-115.7	-120.9	167.3	0.00	0.00	
2,400.0	6.94	226.25	2,389.4	-124.1	-129.6	179.4	0.00	0.00	
2,500.0	6.94	226.25	2,488.7	-132.4	-138.3	191.5	0.00	0.00	
2,600.0	6.94	226.25	2,587.9	-140.8	-147.1	203.6	0.00	0.00	
2,700.0	6.94	226.25	2,687.2	-149.2	-155.8	215.7	0.00	0.00	
2,800.0	6.94	226.25	2,786.5	-157.5	-164.5	227.8	0.00	0.00	
2,900.0	6.94	226.25	2,885.7	-165.9	-173.3	239.9	0.00	0.00	
3,000.0	6.94	226.25	2,985.0	-174.2	-182.0	251.9	0.00	0.00	
3,100.0	6.94	226.25	3,084.3	-182.6	-190.7	264.0	0.00	0.00	
3,200.0	6.94	226.25	3,183.5	-190.9	-199.4	276.1	0.00	0.00	
3,300.0	6.94	226.25	3,282.8	-199.3	-208.2	288.2	0.00	0.00	
3,302.2	6.94	226.25	3,285.0	-199.5	-208.4	288.5	0.00	0.00	Parkman
3,400.0	6.94	226.25	3,382.1	-207.7	-216.9	300.3	0.00	0.00	
3,500.0	6.94	226.25	3,481.3	-216.0	-225.6	312.4	0.00	0.00	
3,600.0	6.94	226.25	3,580.6	-224.4	-234.4	324.5	0.00	0.00	
3,700.0	6.94	226.25	3,679.9	-232.7	-243.1	336.5	0.00	0.00	
3,800.0	6.94	226.25	3,779.1	-241.1	-251.8	348.6	0.00	0.00	
3,900.0	6.94	226.25	3,878.4	-249.5	-260.6	360.7	0.00	0.00	
4,000.0	6.94	226.25	3,977.7	-257.8	-269.3	372.8	0.00	0.00	
4,022.5	6.94	226.25	4,000.0	-259.7	-271.3	375.5	0.00	0.00	Sussex
4,100.0	6.94	226.25	4,076.9	-266.2	-278.0	384.9	0.00	0.00	
4,200.0	6.94	226.25	4,176.2	-274.5	-286.7	397.0	0.00	0.00	
4,300.0	6.94	226.25	4,275.5	-282.9	-295.5	409.1	0.00	0.00	
4,400.0	6.94	226.25	4,374.7	-291.2	-304.2	421.2	0.00	0.00	
4,500.0	6.94	226.25	4,474.0	-299.6	-312.9	433.2	0.00	0.00	
4,600.0	6.94	226.25	4,573.3	-308.0	-321.7	445.3	0.00	0.00	
4,700.0	6.94	226.25	4,672.5	-316.3	-330.4	457.4	0.00	0.00	
4,800.0	6.94	226.25	4,771.8	-324.7	-339.1	469.5	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well North Platte 14-36
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4550.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4550.0ft (Original Well Elev)
Site:	North Platte 14-36 Pad	North Reference:	True
Well:	North Platte 14-36	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	6.94	226.25	4,871.1	-333.0	-347.9	481.6	0.00	0.00	
5,000.0	6.94	226.25	4,970.3	-341.4	-356.6	493.7	0.00	0.00	
5,100.0	6.94	226.25	5,069.6	-349.8	-365.3	505.8	0.00	0.00	
5,200.0	6.94	226.25	5,168.9	-358.1	-374.1	517.8	0.00	0.00	
5,300.0	6.94	226.25	5,268.1	-366.5	-382.8	529.9	0.00	0.00	
5,400.0	6.94	226.25	5,367.4	-374.8	-391.5	542.0	0.00	0.00	
5,500.0	6.94	226.25	5,466.7	-383.2	-400.2	554.1	0.00	0.00	
5,600.0	6.94	226.25	5,565.9	-391.5	-409.0	566.2	0.00	0.00	
5,700.0	6.94	226.25	5,665.2	-399.9	-417.7	578.3	0.00	0.00	
5,800.0	6.94	226.25	5,764.5	-408.3	-426.4	590.4	0.00	0.00	
5,811.8	6.94	226.25	5,776.2	-409.2	-427.5	591.8	0.00	0.00	Start 3° Drop
5,900.0	4.30	226.25	5,864.0	-415.2	-433.7	600.4	3.00	-3.00	
6,000.0	1.30	226.25	5,963.8	-418.6	-437.2	605.3	3.00	-3.00	
6,043.2	0.00	0.00	6,007.0	-418.9	-437.6	605.8	3.00	-3.00	EOB @ Inc. = 0°
6,100.0	0.00	0.00	6,063.8	-418.9	-437.6	605.8	0.00	0.00	
6,200.0	0.00	0.00	6,163.8	-418.9	-437.6	605.8	0.00	0.00	
6,243.2	0.00	0.00	6,207.0	-418.9	-437.6	605.8	0.00	0.00	Niobrara
6,300.0	0.00	0.00	6,263.8	-418.9	-437.6	605.8	0.00	0.00	
6,400.0	0.00	0.00	6,363.8	-418.9	-437.6	605.8	0.00	0.00	
6,470.2	0.00	0.00	6,434.0	-418.9	-437.6	605.8	0.00	0.00	Ft. Hayes
6,494.2	0.00	0.00	6,458.0	-418.9	-437.6	605.8	0.00	0.00	Codell
6,500.0	0.00	0.00	6,463.8	-418.9	-437.6	605.8	0.00	0.00	
6,507.2	0.00	0.00	6,471.0	-418.9	-437.6	605.8	0.00	0.00	Carlile
6,548.2	0.00	0.00	6,512.0	-418.9	-437.6	605.8	0.00	0.00	Greenhorn
6,600.0	0.00	0.00	6,563.8	-418.9	-437.6	605.8	0.00	0.00	
6,654.2	0.00	0.00	6,618.0	-418.9	-437.6	605.8	0.00	0.00	TD @ 6,654.2' 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									
North Platte 14-36 TGT - plan hits target center - Point	0.00	0.00	6,007.0	-418.9	-437.6	1,372,562.68	3,308,878.99	40.350780	-104.391760
North Platte 14-36 PBHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	6,618.0	-418.9	-437.6	1,372,562.68	3,308,878.99	40.350780	-104.391760

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well North Platte 14-36
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4550.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4550.0ft (Original Well Elev)
Site:	North Platte 14-36 Pad	North Reference:	True
Well:	North Platte 14-36	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,302.2	3,285.0	Parkman				
4,022.5	4,000.0	Sussex				
6,243.2	6,207.0	Niobrara				
6,470.2	6,434.0	Ft. Hayes				
6,494.2	6,458.0	Codell				
6,507.2	6,471.0	Carlile				
6,548.2	6,512.0	Greenhorn				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.0	800.0	0.0	0.0	KOP @ 800'	
1,031.4	1,030.8	-9.7	-10.1	EOB @ Inc. = 6.94°	
5,811.8	5,776.2	-409.2	-427.5	Start 3° Drop	
6,043.2	6,007.0	-418.9	-437.6	EOB @ Inc. = 0°	
6,654.2	6,618.0	-418.9	-437.6	TD @ 6,654.2' MD	