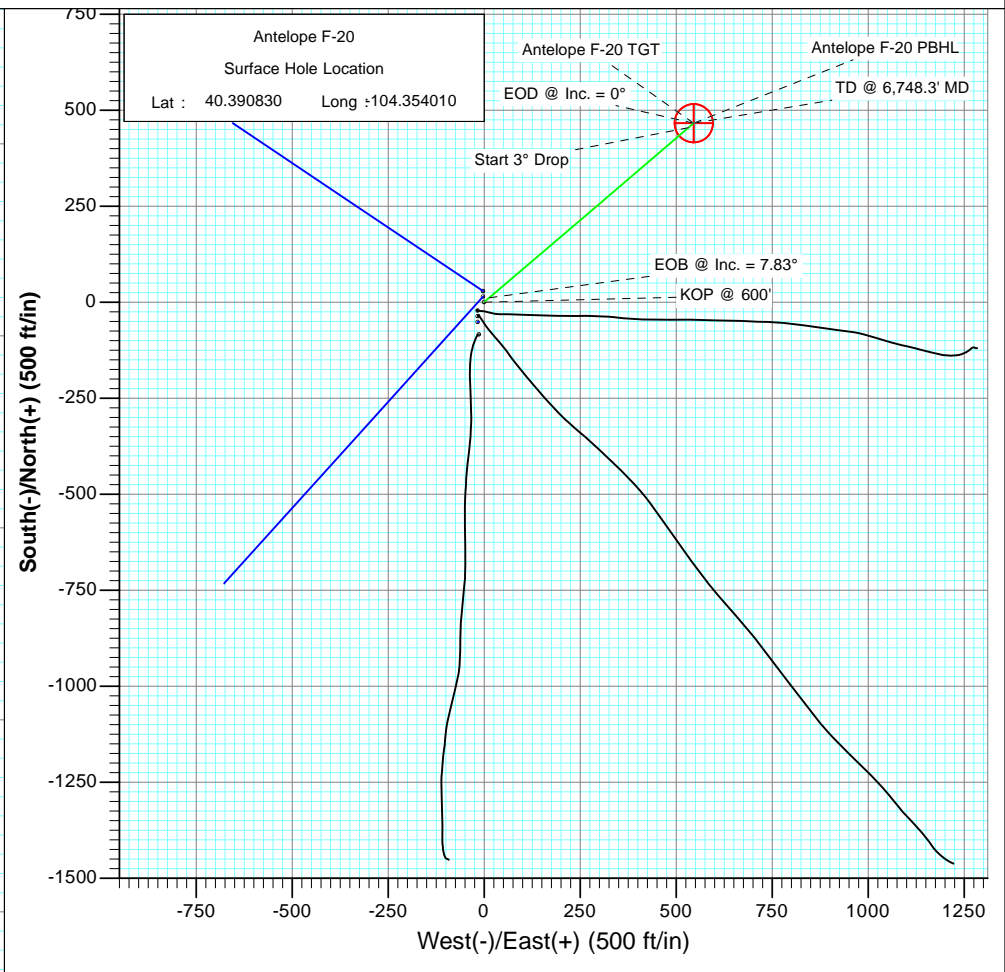
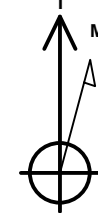


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	861.1	7.83	49.50	860.3	11.6	13.6	3.00	49.50	17.8	
4	5867.2	7.83	49.50	5819.7	454.7	532.4	0.00	0.00	700.2	
5	6128.3	0.00	0.00	6080.0	466.3	545.9	3.00	180.00	718.0	Antelope F-20 TGT
6	6748.3	0.00	0.00	6700.0	466.3	545.9	0.00	0.00	718.0	Antelope F-20 PBHL



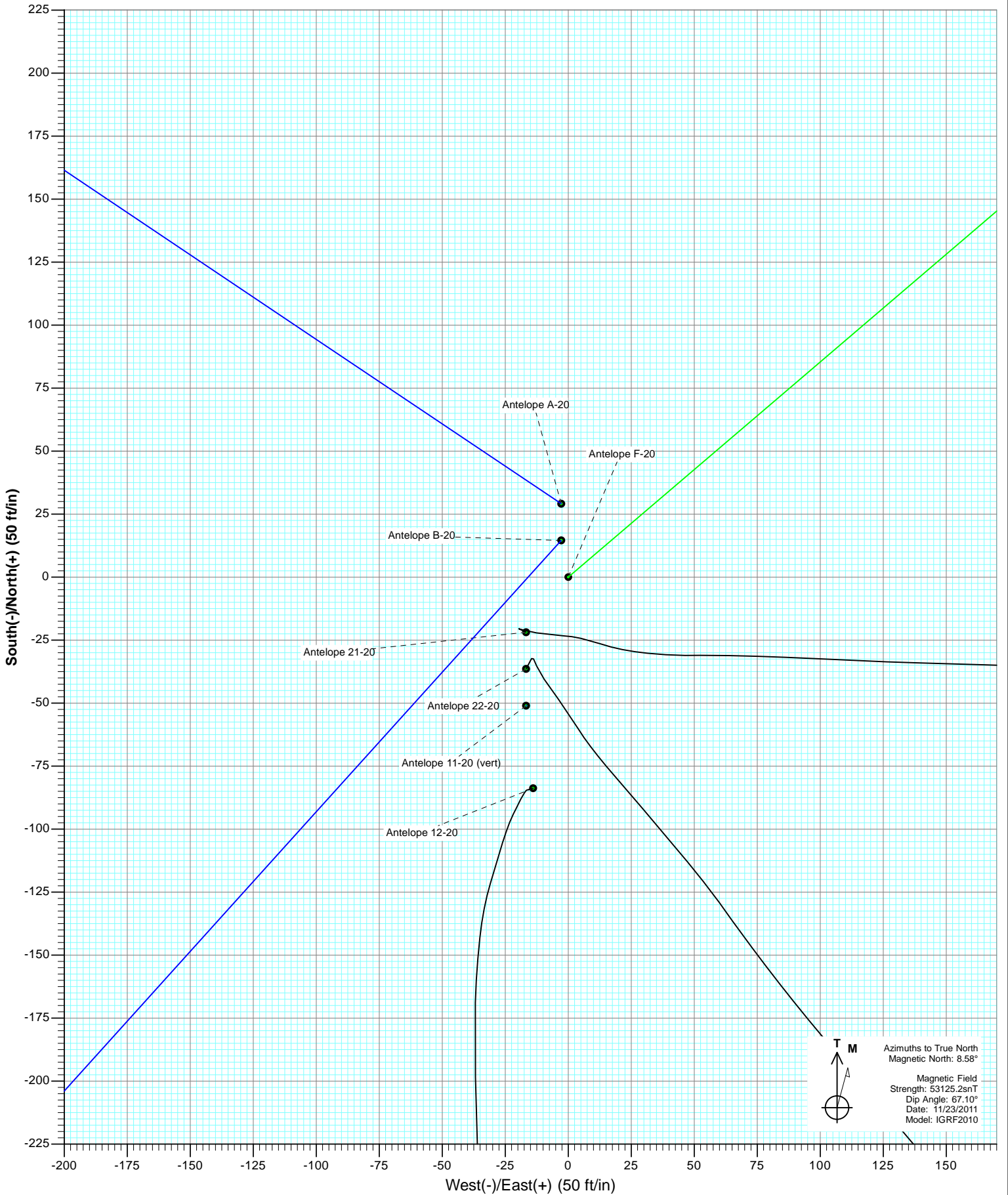
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3405.0	3429.8	Parkman
4095.0	4126.3	Sussex
6280.0	6328.3	Niobrara
6516.0	6564.3	Ft. Hayes
6540.0	6588.3	Codell
6548.0	6596.3	Carlike
6590.0	6638.3	Greenhorn

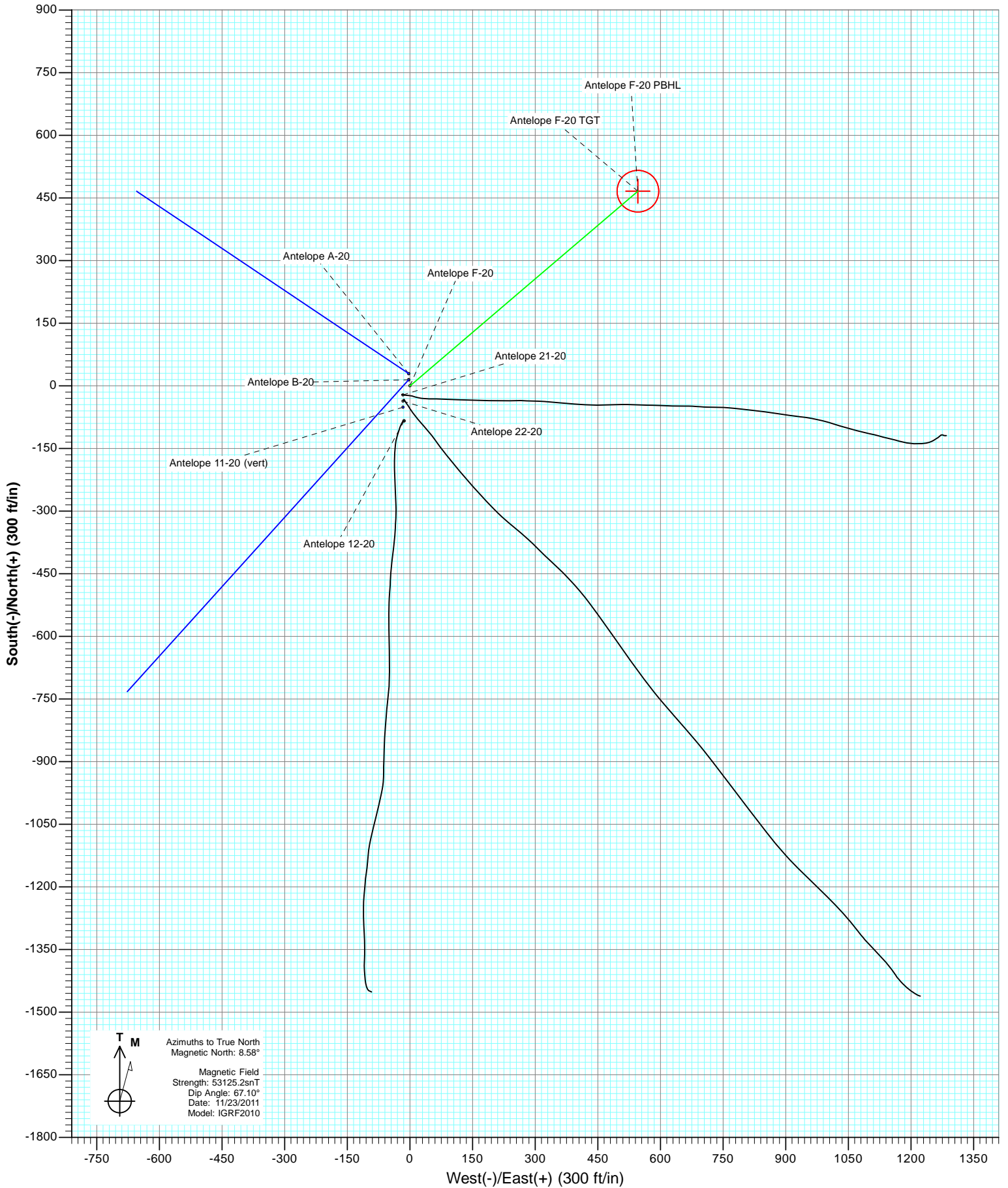


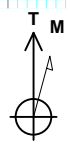
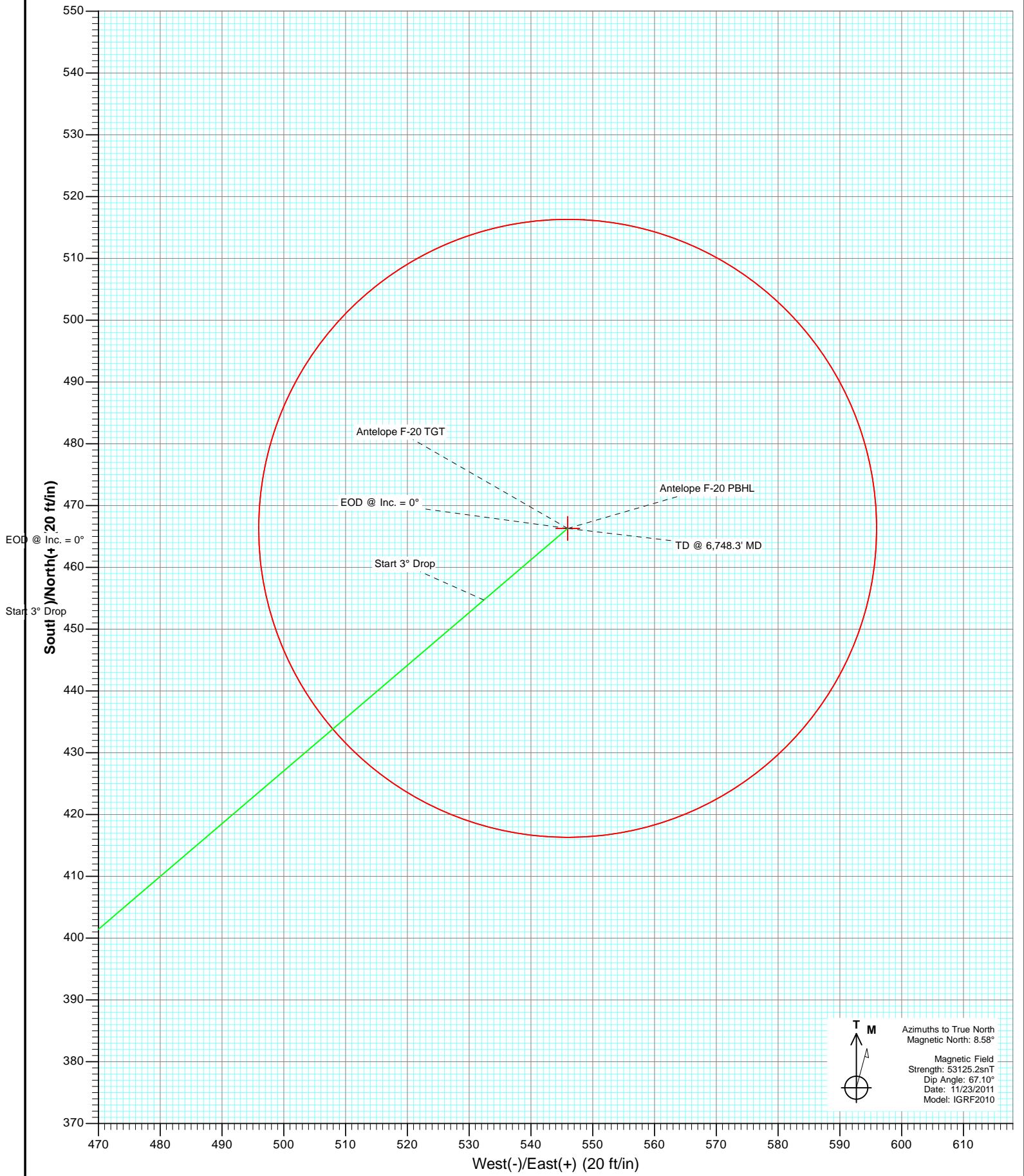
Azimuths to True North
 Magnetic North: 8.58°

Magnetic Field
 Strength: 53125.2nT
 Dip Angle: 67.10°
 Date: 11/23/2011
 Model: IGRF2010

Plan #1 Antelope F-20 125XXX; SC							
KBE @ 4665.0ft (Original Well Elev) North American Datum 1983 Well Antelope F-20, True North							
Type	Target	Azimuth	Origin	Type	N/S	E/W	From TVD
TD	No Target (Freehand)	49.50	Slot		0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude		
Antelope F-20 TGT	6080.0	466.3	545.9	40.392110	-104.352050		
Antelope F-20 PBHL	6700.0	466.3	545.9	40.392110	-104.352050		







Azimuths to True North
Magnetic North: 8.58°
Magnetic Field
Strength: 53125.2snT
Dip Angle: 67.10°
Date: 11/23/2011
Model: IGRF2010

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Antelope F-20
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site:	Antelope 11-20 Pad	North Reference:	True
Well:	Antelope F-20	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	Antelope 11-20 Pad				
Site Position:		Northing:	1,387,248.61 ft	Latitude:	40.390730
From:	Lat/Long	Easting:	3,319,197.55 ft	Longitude:	-104.354060
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.74 °

Well	Antelope F-20					
Well Position	+N/-S	0.0 ft	Northing:	1,387,285.20 ft	Latitude:	40.390830
	+E/-W	0.0 ft	Easting:	3,319,211.01 ft	Longitude:	-104.354010
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,655.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	11/23/2011	8.58	67.10	53,125

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	49.50

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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
861.1	7.83	49.50	860.3	11.6	13.6	3.00	3.00	0.00	49.50	
5,867.2	7.83	49.50	5,819.7	454.7	532.4	0.00	0.00	0.00	0.00	
6,128.3	0.00	0.00	6,080.0	466.3	545.9	3.00	-3.00	0.00	180.00	Antelope F-20 TGT
6,748.3	0.00	0.00	6,700.0	466.3	545.9	0.00	0.00	0.00	0.00	Antelope F-20 PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Antelope F-20
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site:	Antelope 11-20 Pad	North Reference:	True
Well:	Antelope F-20	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	KOP @ 600'
700.0	3.00	49.50	700.0	1.7	2.0	2.6	3.00	3.00	
800.0	6.00	49.50	799.6	6.8	8.0	10.5	3.00	3.00	
861.1	7.83	49.50	860.3	11.6	13.6	17.8	3.00	3.00	EOB @ Inc. = 7.83°
900.0	7.83	49.50	898.8	15.0	17.6	23.1	0.00	0.00	
1,000.0	7.83	49.50	997.9	23.9	27.9	36.8	0.00	0.00	
1,100.0	7.83	49.50	1,097.0	32.7	38.3	50.4	0.00	0.00	
1,200.0	7.83	49.50	1,196.0	41.6	48.7	64.0	0.00	0.00	
1,300.0	7.83	49.50	1,295.1	50.4	59.0	77.6	0.00	0.00	
1,400.0	7.83	49.50	1,394.2	59.3	69.4	91.3	0.00	0.00	
1,500.0	7.83	49.50	1,493.2	68.1	79.8	104.9	0.00	0.00	
1,600.0	7.83	49.50	1,592.3	77.0	90.1	118.5	0.00	0.00	
1,700.0	7.83	49.50	1,691.4	85.8	100.5	132.2	0.00	0.00	
1,800.0	7.83	49.50	1,790.4	94.7	110.9	145.8	0.00	0.00	
1,900.0	7.83	49.50	1,889.5	103.5	121.2	159.4	0.00	0.00	
2,000.0	7.83	49.50	1,988.6	112.4	131.6	173.1	0.00	0.00	
2,100.0	7.83	49.50	2,087.6	121.2	142.0	186.7	0.00	0.00	
2,200.0	7.83	49.50	2,186.7	130.1	152.3	200.3	0.00	0.00	
2,300.0	7.83	49.50	2,285.8	139.0	162.7	213.9	0.00	0.00	
2,400.0	7.83	49.50	2,384.8	147.8	173.0	227.6	0.00	0.00	
2,500.0	7.83	49.50	2,483.9	156.7	183.4	241.2	0.00	0.00	
2,600.0	7.83	49.50	2,583.0	165.5	193.8	254.8	0.00	0.00	
2,700.0	7.83	49.50	2,682.0	174.4	204.1	268.5	0.00	0.00	
2,800.0	7.83	49.50	2,781.1	183.2	214.5	282.1	0.00	0.00	
2,900.0	7.83	49.50	2,880.2	192.1	224.9	295.7	0.00	0.00	
3,000.0	7.83	49.50	2,979.2	200.9	235.2	309.4	0.00	0.00	
3,100.0	7.83	49.50	3,078.3	209.8	245.6	323.0	0.00	0.00	
3,200.0	7.83	49.50	3,177.4	218.6	256.0	336.6	0.00	0.00	
3,300.0	7.83	49.50	3,276.4	227.5	266.3	350.2	0.00	0.00	
3,400.0	7.83	49.50	3,375.5	236.3	276.7	363.9	0.00	0.00	
3,429.8	7.83	49.50	3,405.0	239.0	279.8	367.9	0.00	0.00	Parkman
3,500.0	7.83	49.50	3,474.6	245.2	287.0	377.5	0.00	0.00	
3,600.0	7.83	49.50	3,573.6	254.0	297.4	391.1	0.00	0.00	
3,700.0	7.83	49.50	3,672.7	262.9	307.8	404.8	0.00	0.00	
3,800.0	7.83	49.50	3,771.8	271.7	318.1	418.4	0.00	0.00	
3,900.0	7.83	49.50	3,870.8	280.6	328.5	432.0	0.00	0.00	
4,000.0	7.83	49.50	3,969.9	289.4	338.9	445.7	0.00	0.00	
4,100.0	7.83	49.50	4,069.0	298.3	349.2	459.3	0.00	0.00	
4,126.3	7.83	49.50	4,095.0	300.6	352.0	462.9	0.00	0.00	Sussex
4,200.0	7.83	49.50	4,168.0	307.2	359.6	472.9	0.00	0.00	
4,300.0	7.83	49.50	4,267.1	316.0	370.0	486.6	0.00	0.00	
4,400.0	7.83	49.50	4,366.2	324.9	380.3	500.2	0.00	0.00	
4,500.0	7.83	49.50	4,465.2	333.7	390.7	513.8	0.00	0.00	
4,600.0	7.83	49.50	4,564.3	342.6	401.1	527.4	0.00	0.00	
4,700.0	7.83	49.50	4,663.4	351.4	411.4	541.1	0.00	0.00	
4,800.0	7.83	49.50	4,762.4	360.3	421.8	554.7	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Antelope F-20
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site:	Antelope 11-20 Pad	North Reference:	True
Well:	Antelope F-20	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	7.83	49.50	4,861.5	369.1	432.1	568.3	0.00	0.00	
5,000.0	7.83	49.50	4,960.6	378.0	442.5	582.0	0.00	0.00	
5,100.0	7.83	49.50	5,059.6	386.8	452.9	595.6	0.00	0.00	
5,200.0	7.83	49.50	5,158.7	395.7	463.2	609.2	0.00	0.00	
5,300.0	7.83	49.50	5,257.8	404.5	473.6	622.9	0.00	0.00	
5,400.0	7.83	49.50	5,356.8	413.4	484.0	636.5	0.00	0.00	
5,500.0	7.83	49.50	5,455.9	422.2	494.3	650.1	0.00	0.00	
5,600.0	7.83	49.50	5,555.0	431.1	504.7	663.7	0.00	0.00	
5,700.0	7.83	49.50	5,654.0	439.9	515.1	677.4	0.00	0.00	
5,800.0	7.83	49.50	5,753.1	448.8	525.4	691.0	0.00	0.00	
5,867.2	7.83	49.50	5,819.7	454.7	532.4	700.2	0.00	0.00	Start 3° Drop
5,900.0	6.85	49.50	5,852.2	457.5	535.6	704.4	3.00	-3.00	
6,000.0	3.85	49.50	5,951.8	463.5	542.7	713.7	3.00	-3.00	
6,100.0	0.85	49.50	6,051.7	466.2	545.8	717.8	3.00	-3.00	
6,128.3	0.00	0.00	6,080.0	466.3	545.9	718.0	3.00	-3.00	EOD @ Inc. = 0°
6,200.0	0.00	0.00	6,151.7	466.3	545.9	718.0	0.00	0.00	
6,300.0	0.00	0.00	6,251.7	466.3	545.9	718.0	0.00	0.00	
6,328.3	0.00	0.00	6,280.0	466.3	545.9	718.0	0.00	0.00	Niobrara
6,400.0	0.00	0.00	6,351.7	466.3	545.9	718.0	0.00	0.00	
6,500.0	0.00	0.00	6,451.7	466.3	545.9	718.0	0.00	0.00	
6,564.3	0.00	0.00	6,516.0	466.3	545.9	718.0	0.00	0.00	Ft. Hayes
6,588.3	0.00	0.00	6,540.0	466.3	545.9	718.0	0.00	0.00	Codell
6,596.3	0.00	0.00	6,548.0	466.3	545.9	718.0	0.00	0.00	Carlile
6,600.0	0.00	0.00	6,551.7	466.3	545.9	718.0	0.00	0.00	
6,638.3	0.00	0.00	6,590.0	466.3	545.9	718.0	0.00	0.00	Greenhorn
6,700.0	0.00	0.00	6,651.7	466.3	545.9	718.0	0.00	0.00	
6,748.3	0.00	0.00	6,700.0	466.3	545.9	718.0	0.00	0.00	TD @ 6,748.3' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Antelope F-20 PBHL - hit/miss target - Shape	0.00	0.00	6,700.0	466.3	545.9	1,387,758.54	3,319,750.88	40.392110	-104.352050
Antelope F-20 TGT - plan hits target center - Point	0.00	0.00	6,080.0	466.3	545.9	1,387,758.54	3,319,750.88	40.392110	-104.352050

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Antelope F-20
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Project:	Weld County	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site:	Antelope 11-20 Pad	North Reference:	True
Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,429.8	3,405.0	Parkman				
4,126.3	4,095.0	Sussex				
6,328.3	6,280.0	Niobrara				
6,564.3	6,516.0	Ft. Hayes				
6,588.3	6,540.0	Codell				
6,596.3	6,548.0	Carlile				
6,638.3	6,590.0	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'	
861.1	860.3	11.6	13.6	EOB @ Inc. = 7.83°	
5,867.2	5,819.7	454.7	532.4	Start 3° Drop	
6,128.3	6,080.0	466.3	545.9	EOD @ Inc. = 0°	
6,748.3	6,700.0	466.3	545.9	TD @ 6,748.3' MD	

Bonanza Creek Energy Operating Company, LLC

**Weld County
Antelope 11-20 Pad
Antelope F-20
OH
Plan #1**

Anticollision Report

28 November, 2011

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
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	11/28/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	6,748.3	Plan #1 (OH)	MWD	Geolink MWD

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
Antelope 11-20 Pad						
Antelope 11-20 (vert) - V - Plan #3	0.0	0.0	53.8			
Antelope 11-20 (vert) - V - Plan #3	600.0	597.0	53.7	53.7	10,000.000	CC, ES
Antelope 12-20 - DD - DD	0.0	0.0	85.0			
Antelope 12-20 - DD - DD	100.0	95.9	85.0	85.0	10,000.000	CC, ES
Antelope 21-20 - DD - DD	0.0	0.0	27.8			
Antelope 21-20 - DD - DD	100.0	96.0	27.5	27.5	10,000.000	CC, ES
Antelope 22-20 - DD - DD	0.0	0.0	40.3			
Antelope 22-20 - DD - DD	588.7	584.8	35.0	35.0	10,000.000	CC, ES
Antelope A-20 - OH - Plan #1	0.0	0.0	29.7			
Antelope A-20 - OH - Plan #1	638.8	633.4	29.2	29.2	10,000.000	CC, ES
Antelope B-20 - OH - Plan #1	0.0	0.0	17.9			
Antelope B-20 - OH - Plan #1	729.7	719.7	12.4	12.4	10,000.000	CC, ES

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope 11-20 (vert) - V - Plan #3													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-161.86	-51.0	-16.7	53.8					
100.0	100.0	97.0	97.0	0.2	0.2	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A		
200.0	200.0	197.0	197.0	0.3	0.3	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A		
300.0	300.0	297.0	297.0	0.5	0.5	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A		
400.0	400.0	397.0	397.0	0.7	0.7	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A		
500.0	500.0	497.0	497.0	0.9	0.8	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A		
600.0	600.0	597.0	597.0	1.0	1.0	-161.86	-51.0	-16.7	53.7	53.7	0.00	N/A CC, ES		
700.0	700.0	697.0	697.0	1.2	1.2	150.01	-51.0	-16.7	55.9	55.9	0.00	N/A		
800.0	799.6	796.6	796.6	1.4	1.4	153.49	-51.0	-16.7	62.8	62.8	0.00	N/A		
900.0	898.8	895.8	895.8	1.6	1.5	157.76	-51.0	-16.7	74.4	74.4	0.00	N/A		
1,000.0	997.9	994.9	994.9	1.9	1.7	161.15	-51.0	-16.7	87.2	87.2	0.00	N/A		
1,100.0	1,097.0	1,094.0	1,094.0	2.1	1.9	163.67	-51.0	-16.7	100.2	100.2	0.00	N/A		
1,200.0	1,196.0	1,193.0	1,193.0	2.4	2.1	165.61	-51.0	-16.7	113.3	113.3	0.00	N/A		
1,300.0	1,295.1	1,292.1	1,292.1	2.7	2.2	167.14	-51.0	-16.7	126.6	126.6	0.00	N/A		
1,400.0	1,394.2	1,391.2	1,391.2	3.0	2.4	168.38	-51.0	-16.7	139.9	139.9	0.00	N/A		
1,500.0	1,493.2	1,490.2	1,490.2	3.2	2.6	169.41	-51.0	-16.7	153.3	153.3	0.00	N/A		
1,600.0	1,592.3	1,589.3	1,589.3	3.5	2.8	170.27	-51.0	-16.7	166.7	166.7	0.00	N/A		
1,700.0	1,691.4	1,688.4	1,688.4	3.8	2.9	171.00	-51.0	-16.7	180.2	180.2	0.00	N/A		
1,800.0	1,790.4	1,787.4	1,787.4	4.1	3.1	171.63	-51.0	-16.7	193.7	193.7	0.00	N/A		
1,900.0	1,889.5	1,886.5	1,886.5	4.4	3.3	172.18	-51.0	-16.7	207.1	207.1	0.00	N/A		
2,000.0	1,988.6	1,985.6	1,985.6	4.7	3.4	172.66	-51.0	-16.7	220.7	220.7	0.00	N/A		
2,100.0	2,087.6	2,084.6	2,084.6	5.0	3.6	173.09	-51.0	-16.7	234.2	234.2	0.00	N/A		
2,200.0	2,186.7	2,183.7	2,183.7	5.3	3.8	173.47	-51.0	-16.7	247.7	247.7	0.00	N/A		
2,300.0	2,285.8	2,282.8	2,282.8	5.6	4.0	173.81	-51.0	-16.7	261.3	261.3	0.00	N/A		
2,400.0	2,384.8	2,381.8	2,381.8	5.8	4.1	174.11	-51.0	-16.7	274.8	274.8	0.00	N/A		
2,500.0	2,483.9	2,480.9	2,480.9	6.1	4.3	174.39	-51.0	-16.7	288.4	288.4	0.00	N/A		
2,600.0	2,583.0	2,580.0	2,580.0	6.4	4.5	174.64	-51.0	-16.7	302.0	302.0	0.00	N/A		
2,700.0	2,682.0	2,679.0	2,679.0	6.7	4.7	174.87	-51.0	-16.7	315.5	315.5	0.00	N/A		
2,800.0	2,781.1	2,778.1	2,778.1	7.0	4.8	175.09	-51.0	-16.7	329.1	329.1	0.00	N/A		
2,900.0	2,880.2	2,877.2	2,877.2	7.3	5.0	175.28	-51.0	-16.7	342.7	342.7	0.00	N/A		
3,000.0	2,979.2	2,976.2	2,976.2	7.6	5.2	175.46	-51.0	-16.7	356.3	356.3	0.00	N/A		
3,100.0	3,078.3	3,075.3	3,075.3	7.9	5.3	175.63	-51.0	-16.7	369.9	369.9	0.00	N/A		
3,200.0	3,177.4	3,174.4	3,174.4	8.2	5.5	175.78	-51.0	-16.7	383.5	383.5	0.00	N/A		
3,300.0	3,276.4	3,273.4	3,273.4	8.5	5.7	175.93	-51.0	-16.7	397.1	397.1	0.00	N/A		
3,400.0	3,375.5	3,372.5	3,372.5	8.8	5.9	176.06	-51.0	-16.7	410.7	410.7	0.00	N/A		
3,500.0	3,474.6	3,471.6	3,471.6	9.1	6.0	176.19	-51.0	-16.7	424.3	424.3	0.00	N/A		
3,600.0	3,573.6	3,570.6	3,570.6	9.4	6.2	176.31	-51.0	-16.7	437.9	437.9	0.00	N/A		
3,700.0	3,672.7	3,669.7	3,669.7	9.7	6.4	176.42	-51.0	-16.7	451.5	451.5	0.00	N/A		
3,800.0	3,771.8	3,768.8	3,768.8	10.0	6.6	176.53	-51.0	-16.7	465.1	465.1	0.00	N/A		
3,900.0	3,870.8	3,867.8	3,867.8	10.3	6.7	176.62	-51.0	-16.7	478.7	478.7	0.00	N/A		
4,000.0	3,969.9	3,966.9	3,966.9	10.6	6.9	176.72	-51.0	-16.7	492.3	492.3	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope 12-20 - DD - DD													Offset Well Error:	0.0 ft
Survey Program: 493-MWD														
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	-170.56	-83.8	-13.9	85.0					
100.0	100.0	95.9	95.9	0.2	0.2	-170.50	-83.8	-14.0	85.0	85.0	0.00	N/A	CC, ES	
200.0	200.0	195.8	195.8	0.3	0.3	-170.31	-83.9	-14.3	85.1	85.1	0.00	N/A		
300.0	300.0	295.8	295.8	0.5	0.5	-170.00	-84.0	-14.8	85.3	85.3	0.00	N/A		
400.0	400.0	395.7	395.7	0.7	0.7	-169.56	-84.2	-15.5	85.7	85.7	0.00	N/A		
500.0	500.0	495.5	495.5	0.9	0.9	-168.99	-84.5	-16.4	86.1	86.1	0.00	N/A		
600.0	600.0	590.8	590.8	1.0	1.0	-168.11	-87.3	-18.4	89.3	89.3	0.00	N/A		
700.0	700.0	685.6	685.2	1.2	1.2	144.29	-94.5	-22.0	99.8	99.8	0.00	N/A		
800.0	799.6	778.8	777.5	1.4	1.5	146.73	-105.9	-26.2	119.2	119.2	0.00	N/A		
900.0	898.8	869.0	866.3	1.6	1.8	149.03	-121.5	-30.9	147.7	147.7	0.00	N/A		
1,000.0	997.9	954.0	949.0	1.9	2.1	150.14	-140.8	-34.8	181.8	181.8	0.00	N/A		
1,100.0	1,097.0	1,041.4	1,033.1	2.1	2.5	150.00	-164.4	-36.7	219.2	219.2	0.00	N/A		
1,200.0	1,196.0	1,125.6	1,113.3	2.4	2.9	149.30	-190.0	-37.0	259.2	259.2	0.00	N/A		
1,300.0	1,295.1	1,215.7	1,198.3	2.7	3.4	148.35	-219.8	-36.2	301.2	301.2	0.00	N/A		
1,400.0	1,394.2	1,312.0	1,289.5	3.0	3.9	147.64	-250.7	-35.3	342.3	342.3	0.00	N/A		
1,500.0	1,493.2	1,407.6	1,380.5	3.2	4.4	147.08	-280.0	-33.9	382.1	382.1	0.00	N/A		
1,600.0	1,592.3	1,492.3	1,461.2	3.5	4.9	146.77	-305.9	-33.3	421.9	421.9	0.00	N/A		
1,700.0	1,691.4	1,585.4	1,549.5	3.8	5.4	146.75	-335.1	-34.9	463.2	463.2	0.00	N/A		

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope 21-20 - DD - DD													Offset Well Error:	0.0 ft
Survey Program: 530-MWD														
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
0.0	0.0	0.0	0.0	0.0	0.0	-142.60	-21.9	-16.7	27.8					
100.0	100.0	96.0	96.0	0.2	0.2	-142.38	-21.8	-16.8	27.5	27.5	0.00	N/A	CC, ES	
200.0	200.0	196.0	196.0	0.3	0.3	-141.70	-21.7	-17.1	27.6	27.6	0.00	N/A		
300.0	300.0	296.0	296.0	0.5	0.5	-140.56	-21.4	-17.6	27.7	27.7	0.00	N/A		
400.0	400.0	395.9	395.9	0.7	0.7	-138.97	-21.1	-18.3	27.9	27.9	0.00	N/A		
500.0	500.0	495.9	495.9	0.9	0.9	-136.96	-20.6	-19.3	28.2	28.2	0.00	N/A		
600.0	600.0	596.3	596.3	1.0	1.0	-136.86	-20.5	-19.2	28.1	28.1	0.00	N/A		
629.4	629.4	625.8	625.8	1.1	1.1	171.93	-20.8	-18.4	28.0	28.0	0.00	N/A		
700.0	700.0	697.0	696.8	1.2	1.2	165.30	-21.8	-14.4	28.7	28.7	0.00	N/A		
800.0	799.6	797.6	796.9	1.4	1.4	152.22	-23.1	-4.0	32.2	32.2	0.00	N/A		
900.0	898.8	895.7	893.8	1.6	1.7	139.30	-25.9	11.0	41.4	41.4	0.00	N/A		
1,000.0	997.9	995.9	991.9	1.9	2.0	127.26	-30.1	30.5	54.1	54.1	0.00	N/A		
1,100.0	1,097.0	1,095.5	1,088.4	2.1	2.4	115.05	-31.1	55.1	66.2	66.2	0.00	N/A		
1,200.0	1,196.0	1,191.1	1,180.0	2.4	2.9	104.33	-31.7	82.7	81.7	81.7	0.00	N/A		
1,300.0	1,295.1	1,289.1	1,273.4	2.7	3.4	96.49	-33.0	112.3	100.5	100.5	0.00	N/A		
1,400.0	1,394.2	1,386.6	1,366.4	3.0	3.9	91.24	-34.1	141.5	120.3	120.3	0.00	N/A		
1,500.0	1,493.2	1,485.6	1,461.0	3.2	4.4	87.48	-34.9	170.7	140.3	140.3	0.00	N/A		
1,600.0	1,592.3	1,583.3	1,554.5	3.5	4.9	84.74	-35.3	199.0	160.0	160.0	0.00	N/A		
1,700.0	1,691.4	1,678.5	1,645.1	3.8	5.5	82.29	-35.7	228.2	181.2	181.2	0.00	N/A		
1,800.0	1,790.4	1,778.4	1,740.3	4.1	6.0	80.12	-35.3	258.5	202.1	202.1	0.00	N/A		
1,900.0	1,889.5	1,873.4	1,830.8	4.4	6.6	78.72	-36.1	287.3	223.8	223.8	0.00	N/A		
2,000.0	1,988.6	1,971.6	1,924.6	4.7	7.1	77.65	-37.2	316.5	245.2	245.2	0.00	N/A		
2,100.0	2,087.6	2,064.6	2,013.0	5.0	7.7	76.87	-39.3	345.0	268.3	268.3	0.00	N/A		
2,200.0	2,186.7	2,166.7	2,110.4	5.3	8.2	76.27	-42.0	375.7	291.1	291.1	0.00	N/A		
2,300.0	2,285.8	2,267.0	2,206.6	5.6	8.8	75.90	-44.1	404.2	312.2	312.2	0.00	N/A		
2,400.0	2,384.8	2,361.9	2,297.3	5.8	9.3	75.46	-45.6	431.7	333.6	333.6	0.00	N/A		
2,500.0	2,483.9	2,460.4	2,391.0	6.1	9.9	74.67	-45.8	462.2	355.8	355.8	0.00	N/A		
2,600.0	2,583.0	2,558.2	2,484.2	6.4	10.5	73.89	-44.8	491.8	376.9	376.9	0.00	N/A		
2,700.0	2,682.0	2,648.3	2,569.7	6.7	11.0	73.23	-44.6	520.3	399.5	399.5	0.00	N/A		
2,800.0	2,781.1	2,745.3	2,661.5	7.0	11.6	72.70	-45.6	551.6	423.5	423.5	0.00	N/A		
2,900.0	2,880.2	2,839.4	2,750.8	7.3	12.2	72.25	-46.4	581.3	446.8	446.8	0.00	N/A		
3,000.0	2,979.2	2,933.6	2,839.6	7.6	12.8	71.76	-47.6	612.9	472.0	472.0	0.00	N/A		
3,100.0	3,078.3	3,047.3	2,947.4	7.9	13.4	71.33	-48.5	648.8	495.4	495.4	0.00	N/A		

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope 22-20 - DD - DD													Offset Well Error:	0.0 ft
Survey Program: 530-MWD														
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-155.36	-36.4	-16.7	40.3					
100.0	100.0	96.1	96.1	0.2	0.2	-155.37	-36.3	-16.6	39.9	39.9	0.00	N/A		
200.0	200.0	196.3	196.3	0.3	0.3	-155.40	-35.9	-16.4	39.4	39.4	0.00	N/A		
300.0	300.0	296.4	296.4	0.5	0.5	-155.46	-35.1	-16.0	38.6	38.6	0.00	N/A		
400.0	400.0	396.5	396.5	0.7	0.7	-155.55	-34.1	-15.5	37.5	37.5	0.00	N/A		
500.0	500.0	496.6	496.6	0.9	0.9	-155.68	-32.8	-14.8	36.0	36.0	0.00	N/A		
588.7	588.7	584.8	584.7	1.0	1.0	-156.18	-32.0	-14.1	35.0	35.0	0.00	N/A	CC, ES	
600.0	600.0	595.9	595.9	1.0	1.0	-156.37	-32.1	-14.0	35.0	35.0	0.00	N/A		
700.0	700.0	694.9	694.8	1.2	1.2	152.90	-34.4	-12.9	39.0	39.0	0.00	N/A		
800.0	799.6	793.7	793.5	1.4	1.4	151.85	-39.3	-10.3	49.7	49.7	0.00	N/A		
900.0	898.8	891.0	890.3	1.6	1.6	149.90	-47.1	-4.9	66.2	66.2	0.00	N/A		
1,000.0	997.9	986.1	984.4	1.9	1.8	146.80	-58.3	2.8	86.5	86.5	0.00	N/A		
1,100.0	1,097.0	1,082.1	1,078.6	2.1	2.1	142.80	-73.1	13.5	109.6	109.6	0.00	N/A		
1,200.0	1,196.0	1,174.9	1,168.8	2.4	2.5	138.35	-89.9	27.8	135.1	135.1	0.00	N/A		
1,300.0	1,295.1	1,264.8	1,255.0	2.7	2.9	134.30	-109.2	44.1	164.4	164.4	0.00	N/A		
1,400.0	1,394.2	1,350.3	1,335.9	3.0	3.4	130.98	-131.0	61.3	198.0	198.0	0.00	N/A		
1,500.0	1,493.2	1,436.5	1,416.3	3.2	3.9	128.24	-156.1	79.8	235.8	235.8	0.00	N/A		
1,600.0	1,592.3	1,521.4	1,494.1	3.5	4.5	125.54	-182.4	100.9	276.1	276.1	0.00	N/A		
1,700.0	1,691.4	1,610.2	1,574.5	3.8	5.2	122.98	-211.2	125.3	318.7	318.7	0.00	N/A		
1,800.0	1,790.4	1,702.7	1,658.7	4.1	5.8	121.02	-240.4	150.2	360.8	360.8	0.00	N/A		
1,900.0	1,889.5	1,794.0	1,741.4	4.4	6.5	119.21	-269.0	176.4	403.2	403.2	0.00	N/A		
2,000.0	1,988.6	1,888.9	1,827.6	4.7	7.2	117.70	-297.6	203.5	444.9	444.9	0.00	N/A		
2,100.0	2,087.6	1,987.3	1,916.8	5.0	8.0	116.04	-325.8	234.3	486.0	486.0	0.00	N/A		

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope A-20 - OH - Plan #1													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
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	-5.46	29.1	-2.8	29.7					
100.0	100.0	95.0	95.0	0.2	0.1	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
200.0	200.0	195.0	195.0	0.3	0.3	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
300.0	300.0	295.0	295.0	0.5	0.5	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
400.0	400.0	395.0	395.0	0.7	0.7	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
500.0	500.0	495.0	495.0	0.9	0.8	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
600.0	600.0	595.0	595.0	1.0	1.0	-5.46	29.1	-2.8	29.3	29.3	0.00	N/A		
638.8	638.8	633.4	633.4	1.1	1.1	-56.03	29.3	-3.0	29.2	29.2	0.00	N/A CC, ES		
700.0	700.0	693.9	693.9	1.2	1.2	-62.55	30.4	-4.7	29.5	29.5	0.00	N/A		
800.0	799.6	791.8	791.5	1.4	1.4	-83.04	34.5	-10.8	33.6	33.6	0.00	N/A		
900.0	898.8	887.9	886.8	1.6	1.6	-103.88	41.2	-20.8	47.0	47.0	0.00	N/A		
1,000.0	997.9	985.3	983.1	1.9	1.9	-115.52	49.3	-32.9	66.7	66.7	0.00	N/A		
1,100.0	1,097.0	1,082.7	1,079.4	2.1	2.1	-121.76	57.4	-45.0	87.8	87.8	0.00	N/A		
1,200.0	1,196.0	1,180.1	1,175.7	2.4	2.4	-125.56	65.6	-57.1	109.5	109.5	0.00	N/A		
1,300.0	1,295.1	1,277.5	1,272.0	2.7	2.7	-128.10	73.7	-69.2	131.5	131.5	0.00	N/A		
1,400.0	1,394.2	1,374.9	1,368.3	3.0	3.0	-129.91	81.8	-81.3	153.8	153.8	0.00	N/A		
1,500.0	1,493.2	1,472.3	1,464.6	3.2	3.3	-131.27	89.9	-93.4	176.1	176.1	0.00	N/A		
1,600.0	1,592.3	1,569.7	1,560.9	3.5	3.6	-132.31	98.0	-105.5	198.5	198.5	0.00	N/A		
1,700.0	1,691.4	1,667.1	1,657.2	3.8	3.9	-133.15	106.1	-117.6	220.9	220.9	0.00	N/A		
1,800.0	1,790.4	1,764.5	1,753.6	4.1	4.2	-133.83	114.3	-129.7	243.4	243.4	0.00	N/A		
1,900.0	1,889.5	1,861.9	1,849.9	4.4	4.5	-134.40	122.4	-141.8	265.9	265.9	0.00	N/A		
2,000.0	1,988.6	1,959.3	1,946.2	4.7	4.8	-134.88	130.5	-153.9	288.5	288.5	0.00	N/A		
2,100.0	2,087.6	2,056.7	2,042.5	5.0	5.1	-135.28	138.6	-166.0	311.0	311.0	0.00	N/A		
2,200.0	2,186.7	2,154.1	2,138.8	5.3	5.4	-135.64	146.7	-178.1	333.6	333.6	0.00	N/A		
2,300.0	2,285.8	2,251.5	2,235.1	5.6	5.7	-135.95	154.8	-190.2	356.1	356.1	0.00	N/A		
2,400.0	2,384.8	2,348.9	2,331.4	5.8	6.0	-136.22	162.9	-202.3	378.7	378.7	0.00	N/A		
2,500.0	2,483.9	2,446.3	2,427.7	6.1	6.3	-136.46	171.1	-214.4	401.3	401.3	0.00	N/A		
2,600.0	2,583.0	2,543.7	2,524.0	6.4	6.6	-136.68	179.2	-226.5	423.9	423.9	0.00	N/A		
2,700.0	2,682.0	2,641.1	2,620.3	6.7	6.9	-136.87	187.3	-238.6	446.5	446.5	0.00	N/A		
2,800.0	2,781.1	2,738.5	2,716.6	7.0	7.2	-137.04	195.4	-250.7	469.1	469.1	0.00	N/A		
2,900.0	2,880.2	2,835.9	2,812.9	7.3	7.5	-137.20	203.5	-262.8	491.7	491.7	0.00	N/A		

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design														Offset Site Error:	0.0 ft
Antelope 11-20 Pad - Antelope B-20 - OH - Plan #1														Offset Well Error:	0.0 ft
Survey Program: 0-MWD															
Reference		Offset		Semi Major Axis			Distance								
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	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-10.82	14.6	-2.8	17.9						
100.0	100.0	90.0	90.0	0.2	0.1	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
200.0	200.0	190.0	190.0	0.3	0.3	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
300.0	300.0	290.0	290.0	0.5	0.5	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
400.0	400.0	390.0	390.0	0.7	0.7	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
500.0	500.0	490.0	490.0	0.9	0.8	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
600.0	600.0	590.0	590.0	1.0	1.0	-10.82	14.6	-2.8	14.8	14.8	0.00	N/A			
700.0	700.0	690.2	690.2	1.2	1.2	-78.32	13.0	-4.2	12.9	12.9	0.00	N/A			
729.7	729.6	719.7	719.7	1.3	1.2	-93.57	11.8	-5.3	12.4	12.4	0.00	N/A CC, ES			
800.0	799.6	788.9	788.6	1.4	1.4	-136.19	7.7	-9.0	17.0	17.0	0.00	N/A			
900.0	898.8	884.6	883.5	1.6	1.6	-164.11	-1.1	-17.0	38.5	38.5	0.00	N/A			
1,000.0	997.9	977.6	975.2	1.9	1.9	-172.79	-13.0	-27.7	68.0	68.0	0.00	N/A			
1,100.0	1,097.0	1,072.2	1,068.0	2.1	2.2	-176.53	-26.6	-39.9	100.0	100.0	0.00	N/A			
1,200.0	1,196.0	1,166.8	1,160.8	2.4	2.5	-178.46	-40.1	-52.2	132.2	132.2	0.00	N/A			
1,300.0	1,295.1	1,261.4	1,253.6	2.7	2.8	-179.63	-53.7	-64.4	164.6	164.6	0.00	N/A			
1,400.0	1,394.2	1,356.0	1,346.4	3.0	3.1	179.58	-67.3	-76.7	196.9	196.9	0.00	N/A			
1,500.0	1,493.2	1,450.6	1,439.2	3.2	3.5	179.02	-80.8	-88.9	229.3	229.3	0.00	N/A			
1,600.0	1,592.3	1,545.2	1,532.0	3.5	3.8	178.59	-94.4	-101.1	261.7	261.7	0.00	N/A			
1,700.0	1,691.4	1,639.8	1,624.9	3.8	4.2	178.26	-107.9	-113.4	294.1	294.1	0.00	N/A			
1,800.0	1,790.4	1,734.4	1,717.7	4.1	4.5	178.00	-121.5	-125.6	326.5	326.5	0.00	N/A			
1,900.0	1,889.5	1,829.0	1,810.5	4.4	4.9	177.78	-135.0	-137.8	358.9	358.9	0.00	N/A			
2,000.0	1,988.6	1,923.5	1,903.3	4.7	5.2	177.60	-148.6	-150.1	391.3	391.3	0.00	N/A			
2,100.0	2,087.6	2,018.1	1,996.1	5.0	5.6	177.44	-162.2	-162.3	423.7	423.7	0.00	N/A			
2,200.0	2,186.7	2,112.7	2,088.9	5.3	5.9	177.31	-175.7	-174.6	456.1	456.1	0.00	N/A			
2,300.0	2,285.8	2,207.3	2,181.7	5.6	6.3	177.20	-189.3	-186.8	488.6	488.6	0.00	N/A			

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope F-20
Project:	Weld County	TVD Reference:	KBE @ 4665.0ft (Original Well Elev)
Reference Site:	Antelope 11-20 Pad	MD Reference:	KBE @ 4665.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-20	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KBE @ 4665.0ft (Original Well Elev) Coordinates are relative to: Antelope F-20
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.74 °

