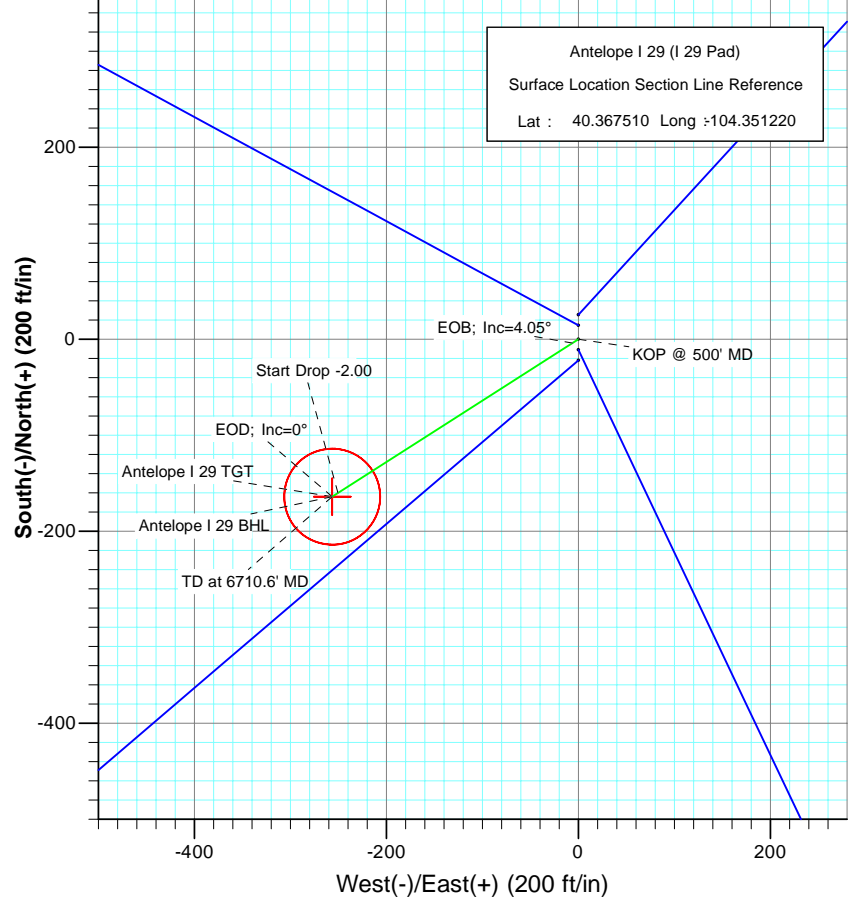


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	702.5	4.05	237.40	702.3	-3.9	-6.0	2.00	237.40	7.2	
4	4808.1	4.05	237.40	4797.7	-160.1	-250.3	0.00	0.00	297.1	
5	5010.6	0.00	0.00	5000.0	-163.9	-256.4	2.00	180.00	304.3	Antelope I 29 TGT
6	6710.6	0.00	0.00	6700.0	-163.9	-256.4	0.00	0.00	304.3	Antelope I 29 BHL



FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
5800.0	5810.6	Target #1
6201.0	6211.6	Niobrara



Azimuths to True North
Magnetic North: 8.68°

Magnetic Field
Strength: 53192.8nT
Dip Angle: 67.10°
Date: 2/24/2011
Model: IGRF2010

Plan #1
Antelope I 29 (I 29 Pad)

KBE @ 4601.0ft (Well Elevation)
North American Datum 1983
Well Antelope I 29 (I 29 Pad), True North

Target	Azimuth	Origin	Type	N/S	E/W	From
Antelope I 29 BHL	237.40	Slot		0.0	0.0	TVD
Antelope I 29 TGT	237.40	Slot		0.0	0.0	TVD
Antelope I 29 BHL	6700.0	Slot		0.0	0.0	TVD

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Antelope I 29 TGT	5000.0	-163.9	-256.4	40.367060	-104.352140
Antelope I 29 BHL	6700.0	-163.9	-256.4	40.367060	-104.352140

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Project:	Weld County	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site:	Antelope I 29 Pad	North Reference:	True
Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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 I 29 Pad			
Site Position:		Northing:	1,378,800.60 ft	Latitude:	40.367510
From:	Lat/Long	Easting:	3,320,098.15 ft	Longitude:	-104.351220
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.74 °

Well	Antelope I 29 (I 29 Pad)					
Well Position	+N/-S	0.0 ft	Northing:	1,378,800.60 ft	Latitude:	40.367510
	+E/-W	0.0 ft	Easting:	3,320,098.15 ft	Longitude:	-104.351220
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,591.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/24/2011	8.68	67.10	53,193

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	237.40	

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
702.5	4.05	237.40	702.3	-3.9	-6.0	2.00	2.00	0.00	237.40	
4,808.1	4.05	237.40	4,797.7	-160.1	-250.3	0.00	0.00	0.00	0.00	
5,010.6	0.00	0.00	5,000.0	-163.9	-256.4	2.00	-2.00	0.00	180.00	Antelope I 29 TGT
6,710.6	0.00	0.00	6,700.0	-163.9	-256.4	0.00	0.00	0.00	0.00	Antelope I 29 BHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Project:	Weld County	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site:	Antelope I 29 Pad	North Reference:	True
Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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	KOP @ 500' MD
600.0	2.00	237.40	600.0	-0.9	-1.5	1.7	2.00	2.00	
700.0	4.00	237.40	699.8	-3.8	-5.9	7.0	2.00	2.00	
702.5	4.05	237.40	702.3	-3.9	-6.0	7.2	2.00	2.00	EOB; Inc=4.05°
800.0	4.05	237.40	799.6	-7.6	-11.8	14.0	0.00	0.00	
900.0	4.05	237.40	899.3	-11.4	-17.8	21.1	0.00	0.00	
1,000.0	4.05	237.40	999.1	-15.2	-23.7	28.2	0.00	0.00	
1,100.0	4.05	237.40	1,098.8	-19.0	-29.7	35.2	0.00	0.00	
1,200.0	4.05	237.40	1,198.6	-22.8	-35.6	42.3	0.00	0.00	
1,300.0	4.05	237.40	1,298.3	-26.6	-41.6	49.4	0.00	0.00	
1,400.0	4.05	237.40	1,398.1	-30.4	-47.5	56.4	0.00	0.00	
1,500.0	4.05	237.40	1,497.8	-34.2	-53.5	63.5	0.00	0.00	
1,600.0	4.05	237.40	1,597.6	-38.0	-59.4	70.5	0.00	0.00	
1,700.0	4.05	237.40	1,697.3	-41.8	-65.4	77.6	0.00	0.00	
1,800.0	4.05	237.40	1,797.1	-45.6	-71.3	84.7	0.00	0.00	
1,900.0	4.05	237.40	1,896.8	-49.4	-77.3	91.7	0.00	0.00	
2,000.0	4.05	237.40	1,996.6	-53.2	-83.2	98.8	0.00	0.00	
2,100.0	4.05	237.40	2,096.3	-57.0	-89.2	105.9	0.00	0.00	
2,200.0	4.05	237.40	2,196.1	-60.8	-95.1	112.9	0.00	0.00	
2,300.0	4.05	237.40	2,295.8	-64.6	-101.1	120.0	0.00	0.00	
2,400.0	4.05	237.40	2,395.6	-68.4	-107.0	127.0	0.00	0.00	
2,500.0	4.05	237.40	2,495.3	-72.2	-113.0	134.1	0.00	0.00	
2,600.0	4.05	237.40	2,595.1	-76.1	-118.9	141.2	0.00	0.00	
2,700.0	4.05	237.40	2,694.8	-79.9	-124.9	148.2	0.00	0.00	
2,800.0	4.05	237.40	2,794.6	-83.7	-130.8	155.3	0.00	0.00	
2,900.0	4.05	237.40	2,894.3	-87.5	-136.8	162.4	0.00	0.00	
3,000.0	4.05	237.40	2,994.1	-91.3	-142.7	169.4	0.00	0.00	
3,100.0	4.05	237.40	3,093.8	-95.1	-148.7	176.5	0.00	0.00	
3,200.0	4.05	237.40	3,193.6	-98.9	-154.6	183.6	0.00	0.00	
3,300.0	4.05	237.40	3,293.3	-102.7	-160.6	190.6	0.00	0.00	
3,400.0	4.05	237.40	3,393.1	-106.5	-166.5	197.7	0.00	0.00	
3,500.0	4.05	237.40	3,492.8	-110.3	-172.5	204.7	0.00	0.00	
3,600.0	4.05	237.40	3,592.6	-114.1	-178.4	211.8	0.00	0.00	
3,700.0	4.05	237.40	3,692.3	-117.9	-184.4	218.9	0.00	0.00	
3,800.0	4.05	237.40	3,792.1	-121.7	-190.3	225.9	0.00	0.00	
3,900.0	4.05	237.40	3,891.8	-125.5	-196.3	233.0	0.00	0.00	
4,000.0	4.05	237.40	3,991.6	-129.3	-202.2	240.1	0.00	0.00	
4,100.0	4.05	237.40	4,091.3	-133.1	-208.2	247.1	0.00	0.00	
4,200.0	4.05	237.40	4,191.1	-136.9	-214.1	254.2	0.00	0.00	
4,300.0	4.05	237.40	4,290.8	-140.7	-220.1	261.2	0.00	0.00	
4,400.0	4.05	237.40	4,390.6	-144.5	-226.0	268.3	0.00	0.00	
4,500.0	4.05	237.40	4,490.3	-148.4	-232.0	275.4	0.00	0.00	
4,600.0	4.05	237.40	4,590.1	-152.2	-237.9	282.4	0.00	0.00	
4,700.0	4.05	237.40	4,689.8	-156.0	-243.9	289.5	0.00	0.00	
4,800.0	4.05	237.40	4,789.6	-159.8	-249.8	296.6	0.00	0.00	
4,808.1	4.05	237.40	4,797.7	-160.1	-250.3	297.1	0.00	0.00	Start Drop -2.00
4,900.0	2.21	237.40	4,889.4	-162.8	-254.6	302.2	2.00	-2.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Project:	Weld County	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site:	Antelope I 29 Pad	North Reference:	True
Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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
5,000.0	0.21	237.40	4,989.4	-163.9	-256.3	304.3	2.00	-2.00	
5,010.6	0.00	0.00	5,000.0	-163.9	-256.4	304.3	2.00	-2.00	EOD; Inc=0° - Antelope I 29 TGT
5,100.0	0.00	0.00	5,089.4	-163.9	-256.4	304.3	0.00	0.00	
5,200.0	0.00	0.00	5,189.4	-163.9	-256.4	304.3	0.00	0.00	
5,300.0	0.00	0.00	5,289.4	-163.9	-256.4	304.3	0.00	0.00	
5,400.0	0.00	0.00	5,389.4	-163.9	-256.4	304.3	0.00	0.00	
5,500.0	0.00	0.00	5,489.4	-163.9	-256.4	304.3	0.00	0.00	
5,600.0	0.00	0.00	5,589.4	-163.9	-256.4	304.3	0.00	0.00	
5,700.0	0.00	0.00	5,689.4	-163.9	-256.4	304.3	0.00	0.00	
5,800.0	0.00	0.00	5,789.4	-163.9	-256.4	304.3	0.00	0.00	
5,810.6	0.00	0.00	5,800.0	-163.9	-256.4	304.3	0.00	0.00	Target #1
5,900.0	0.00	0.00	5,889.4	-163.9	-256.4	304.3	0.00	0.00	
6,000.0	0.00	0.00	5,989.4	-163.9	-256.4	304.3	0.00	0.00	
6,100.0	0.00	0.00	6,089.4	-163.9	-256.4	304.3	0.00	0.00	
6,200.0	0.00	0.00	6,189.4	-163.9	-256.4	304.3	0.00	0.00	
6,211.6	0.00	0.00	6,201.0	-163.9	-256.4	304.3	0.00	0.00	Niobrara
6,300.0	0.00	0.00	6,289.4	-163.9	-256.4	304.3	0.00	0.00	
6,400.0	0.00	0.00	6,389.4	-163.9	-256.4	304.3	0.00	0.00	
6,500.0	0.00	0.00	6,489.4	-163.9	-256.4	304.3	0.00	0.00	
6,600.0	0.00	0.00	6,589.4	-163.9	-256.4	304.3	0.00	0.00	
6,700.0	0.00	0.00	6,689.4	-163.9	-256.4	304.3	0.00	0.00	
6,710.6	0.00	0.00	6,700.0	-163.9	-256.4	304.3	0.00	0.00	TD at 6710.6' MD - Antelope I 29 BHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Antelope I 29 BHL	0.00	0.00	6,700.0	-163.9	-256.4	1,378,633.36	3,319,843.94	40.367060	-104.352140
- plan hits target center									
- Circle (radius 50.0)									
Antelope I 29 TGT	0.00	0.00	5,000.0	-163.9	-256.4	1,378,633.36	3,319,843.94	40.367060	-104.352140
- plan hits target center									
- Point									

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,810.6	5,800.0	Target #1		0.00	
6,211.6	6,201.0	Niobrara		0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Project:	Weld County	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site:	Antelope I 29 Pad	North Reference:	True
Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500' MD
702.5	702.3	-3.9	-6.0	EOB; Inc=4.05°
4,808.1	4,797.7	-160.1	-250.3	Start Drop -2.00
5,010.6	5,000.0	-163.9	-256.4	EOD; Inc=0°
6,710.6	6,700.0	-163.9	-256.4	TD at 6710.6' MD

Bonanza Creek Energy Operating Company, LLC

Weld County

Antelope I 29 Pad

Antelope I 29 (I 29 Pad)

DD

Plan #1

Anticollision Report

24 February, 2011

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	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 871.1ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	2/24/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	6,710.6	Plan #1 (DD)	MWD	Geolink MWD	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Antelope I 29 Pad						
Antelope 13-29 (I 29 Pad) - DD - Plan #1	0.0	0.0	14.6			
Antelope 13-29 (I 29 Pad) - DD - Plan #1	500.0	500.0	14.6	14.6	10,000.000	CC, ES
Antelope 14-29 (I 29 Pad) - DD - Plan #1	0.0	0.0	21.9			
Antelope 14-29 (I 29 Pad) - DD - Plan #1	500.0	500.0	21.9	21.9	10,000.000	CC, ES
Antelope 23-29 (I 29 Pad) - DD - Plan #1	0.0	0.0	25.5			
Antelope 23-29 (I 29 Pad) - DD - Plan #1	500.0	500.0	25.5	25.5	10,000.000	CC, ES
Antelope 24-29 (I 29 Pad) - DD - Plan #1	0.0	0.0	10.9			
Antelope 24-29 (I 29 Pad) - DD - Plan #1	500.0	500.0	10.9	10.9	10,000.000	CC, ES

Cathedral Energy Services

Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Antelope I 29 Pad - Antelope 13-29 (I 29 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
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	0.00	14.6	0.0	14.6					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	14.6	0.0	14.6	14.6	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.6	0.0	14.6	14.6	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	14.6	0.0	14.6	14.6	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	14.6	0.0	14.6	14.6	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	0.00	14.6	0.0	14.6	14.6	0.00	N/A CC, ES		
600.0	600.0	599.7	599.7	1.0	1.0	122.36	15.4	-1.5	16.3	16.3	0.00	N/A		
700.0	699.8	699.3	699.1	1.2	1.2	121.86	17.9	-6.1	21.6	21.6	0.00	N/A		
800.0	799.6	798.5	797.9	1.4	1.4	118.80	22.0	-13.7	29.6	29.6	0.00	N/A		
900.0	899.3	897.2	896.0	1.6	1.7	112.93	27.7	-24.2	39.7	39.7	0.00	N/A		
1,000.0	999.1	995.3	992.8	1.8	1.9	106.68	34.9	-37.5	52.3	52.3	0.00	N/A		
1,100.0	1,098.8	1,092.4	1,088.2	2.0	2.3	101.00	43.7	-53.6	67.9	67.9	0.00	N/A		
1,200.0	1,198.6	1,188.9	1,182.3	2.2	2.6	96.18	53.8	-72.4	86.5	86.5	0.00	N/A		
1,300.0	1,298.3	1,286.8	1,277.6	2.4	3.0	92.75	64.6	-92.2	106.3	106.3	0.00	N/A		
1,400.0	1,398.1	1,384.6	1,372.8	2.6	3.4	90.40	75.3	-111.9	126.3	126.3	0.00	N/A		
1,500.0	1,497.8	1,482.5	1,468.0	2.9	3.8	88.70	86.0	-131.7	146.5	146.5	0.00	N/A		
1,600.0	1,597.6	1,580.4	1,563.3	3.1	4.3	87.40	96.8	-151.5	166.8	166.8	0.00	N/A		
1,700.0	1,697.3	1,678.2	1,658.5	3.3	4.7	86.39	107.5	-171.3	187.1	187.1	0.00	N/A		
1,800.0	1,797.1	1,776.1	1,753.7	3.5	5.1	85.58	118.2	-191.1	207.5	207.5	0.00	N/A		
1,900.0	1,896.8	1,874.0	1,849.0	3.7	5.5	84.91	129.0	-210.9	227.9	227.9	0.00	N/A		
2,000.0	1,996.6	1,971.8	1,944.2	3.9	5.9	84.35	139.7	-230.7	248.4	248.4	0.00	N/A		
2,100.0	2,096.3	2,069.7	2,039.5	4.1	6.4	83.88	150.4	-250.4	268.8	268.8	0.00	N/A		
2,200.0	2,196.1	2,167.5	2,134.7	4.3	6.8	83.47	161.1	-270.2	289.3	289.3	0.00	N/A		
2,300.0	2,295.8	2,265.4	2,229.9	4.5	7.2	83.12	171.9	-290.0	309.8	309.8	0.00	N/A		
2,400.0	2,395.6	2,363.3	2,325.2	4.8	7.7	82.81	182.6	-309.8	330.3	330.3	0.00	N/A		
2,500.0	2,495.3	2,461.1	2,420.4	5.0	8.1	82.54	193.3	-329.6	350.8	350.8	0.00	N/A		
2,600.0	2,595.1	2,559.0	2,515.7	5.2	8.5	82.29	204.1	-349.4	371.3	371.3	0.00	N/A		
2,700.0	2,694.8	2,656.8	2,610.9	5.4	8.9	82.08	214.8	-369.2	391.9	391.9	0.00	N/A		
2,800.0	2,794.6	2,754.7	2,706.1	5.6	9.4	81.88	225.5	-388.9	412.4	412.4	0.00	N/A		
2,900.0	2,894.3	2,852.6	2,801.4	5.8	9.8	81.70	236.3	-408.7	432.9	432.9	0.00	N/A		
3,000.0	2,994.1	2,950.4	2,896.6	6.0	10.2	81.54	247.0	-428.5	453.4	453.4	0.00	N/A		
3,100.0	3,093.8	3,048.3	2,991.8	6.2	10.7	81.40	257.7	-448.3	474.0	474.0	0.00	N/A		
3,200.0	3,193.6	3,146.2	3,087.1	6.5	11.1	81.26	268.5	-468.1	494.5	494.5	0.00	N/A		
3,300.0	3,293.3	3,244.0	3,182.3	6.7	11.5	81.14	279.2	-487.9	515.1	515.1	0.00	N/A		
3,400.0	3,393.1	3,341.9	3,277.6	6.9	12.0	81.02	289.9	-507.7	535.6	535.6	0.00	N/A		
3,500.0	3,492.8	3,439.7	3,372.8	7.1	12.4	80.92	300.7	-527.4	556.1	556.1	0.00	N/A		
3,600.0	3,592.6	3,537.6	3,468.0	7.3	12.8	80.82	311.4	-547.2	576.7	576.7	0.00	N/A		
3,700.0	3,692.3	3,635.5	3,563.3	7.5	13.3	80.73	322.1	-567.0	597.2	597.2	0.00	N/A		
3,800.0	3,792.1	3,733.3	3,658.5	7.7	13.7	80.64	332.9	-586.8	617.8	617.8	0.00	N/A		
3,900.0	3,891.8	3,831.2	3,753.7	7.9	14.1	80.56	343.6	-606.6	638.3	638.3	0.00	N/A		
4,000.0	3,991.6	3,929.0	3,849.0	8.2	14.6	80.48	354.3	-626.4	658.9	658.9	0.00	N/A		
4,100.0	4,091.3	4,026.9	3,944.2	8.4	15.0	80.41	365.1	-646.2	679.5	679.5	0.00	N/A		
4,200.0	4,191.1	4,124.8	4,039.5	8.6	15.4	80.35	375.8	-665.9	700.0	700.0	0.00	N/A		
4,300.0	4,290.8	4,222.6	4,134.7	8.8	15.9	80.28	386.5	-685.7	720.6	720.6	0.00	N/A		
4,400.0	4,390.6	4,320.5	4,229.9	9.0	16.3	80.23	397.3	-705.5	741.1	741.1	0.00	N/A		
4,500.0	4,490.3	4,418.4	4,325.2	9.2	16.7	80.17	408.0	-725.3	761.7	761.7	0.00	N/A		
4,600.0	4,590.1	4,516.2	4,420.4	9.4	17.2	80.12	418.7	-745.1	782.2	782.2	0.00	N/A		
4,700.0	4,689.8	4,614.1	4,515.6	9.7	17.6	80.07	429.5	-764.9	802.8	802.8	0.00	N/A		
4,800.0	4,789.6	4,711.9	4,610.9	9.9	18.0	80.02	440.2	-784.7	823.4	823.4	0.00	N/A		
4,900.0	4,889.4	4,809.7	4,706.0	10.1	18.5	80.26	450.9	-804.4	844.2	844.2	0.00	N/A		
5,000.0	4,989.4	4,907.2	4,801.0	10.2	18.9	80.32	461.6	-824.2	865.6	865.6	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 I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Antelope I 29 Pad - Antelope 14-29 (I 29 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-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	180.00	-21.9	0.0	21.9					
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-21.9	0.0	21.9	21.9	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-21.9	0.0	21.9	21.9	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-21.9	0.0	21.9	21.9	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	180.00	-21.9	0.0	21.9	21.9	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	180.00	-21.9	0.0	21.9	21.9	0.00	N/A CC, ES		
600.0	600.0	599.5	599.5	1.0	1.0	-57.79	-23.0	-1.3	22.0	22.0	0.00	N/A		
700.0	699.8	699.0	698.9	1.2	1.2	-58.89	-26.3	-5.3	22.6	22.6	0.00	N/A		
800.0	799.6	798.5	797.9	1.4	1.4	-57.26	-31.9	-11.8	24.4	24.4	0.00	N/A		
900.0	899.3	897.7	896.4	1.6	1.7	-50.75	-39.8	-21.0	28.7	28.7	0.00	N/A		
1,000.0	999.1	996.5	994.0	1.8	1.9	-42.61	-49.7	-32.6	36.0	36.0	0.00	N/A		
1,100.0	1,098.8	1,094.5	1,090.3	2.0	2.3	-35.27	-61.8	-46.8	46.9	46.9	0.00	N/A		
1,200.0	1,198.6	1,191.7	1,185.0	2.2	2.7	-29.53	-75.8	-63.2	61.3	61.3	0.00	N/A		
1,300.0	1,298.3	1,287.7	1,277.8	2.4	3.1	-25.26	-91.7	-81.9	79.3	79.3	0.00	N/A		
1,400.0	1,398.1	1,384.6	1,370.9	2.6	3.6	-22.17	-109.3	-102.5	99.9	99.9	0.00	N/A		
1,500.0	1,497.8	1,482.3	1,464.6	2.9	4.0	-20.11	-127.1	-123.4	120.9	120.9	0.00	N/A		
1,600.0	1,597.6	1,580.0	1,558.4	3.1	4.5	-18.66	-144.9	-144.2	142.0	142.0	0.00	N/A		
1,700.0	1,697.3	1,677.7	1,652.1	3.3	5.0	-17.58	-162.8	-165.1	163.2	163.2	0.00	N/A		
1,800.0	1,797.1	1,775.4	1,745.9	3.5	5.5	-16.75	-180.6	-186.0	184.4	184.4	0.00	N/A		
1,900.0	1,896.8	1,873.1	1,839.7	3.7	6.0	-16.09	-198.4	-206.9	205.6	205.6	0.00	N/A		
2,000.0	1,996.6	1,970.8	1,933.4	3.9	6.5	-15.56	-216.2	-227.8	226.8	226.8	0.00	N/A		
2,100.0	2,096.3	2,068.5	2,027.2	4.1	7.0	-15.11	-234.0	-248.7	248.1	248.1	0.00	N/A		
2,200.0	2,196.1	2,166.2	2,120.9	4.3	7.5	-14.74	-251.9	-269.5	269.4	269.4	0.00	N/A		
2,300.0	2,295.8	2,263.9	2,214.7	4.5	8.1	-14.42	-269.7	-290.4	290.7	290.7	0.00	N/A		
2,400.0	2,395.6	2,361.6	2,308.5	4.8	8.6	-14.15	-287.5	-311.3	311.9	311.9	0.00	N/A		
2,500.0	2,495.3	2,459.3	2,402.2	5.0	9.1	-13.91	-305.3	-332.2	333.2	333.2	0.00	N/A		
2,600.0	2,595.1	2,557.0	2,496.0	5.2	9.6	-13.70	-323.1	-353.1	354.5	354.5	0.00	N/A		
2,700.0	2,694.8	2,654.7	2,589.7	5.4	10.1	-13.51	-341.0	-374.0	375.8	375.8	0.00	N/A		
2,800.0	2,794.6	2,752.4	2,683.5	5.6	10.6	-13.34	-358.8	-394.9	397.2	397.2	0.00	N/A		
2,900.0	2,894.3	2,850.1	2,777.3	5.8	11.1	-13.19	-376.6	-415.7	418.5	418.5	0.00	N/A		
3,000.0	2,994.1	2,947.8	2,871.0	6.0	11.7	-13.06	-394.4	-436.6	439.8	439.8	0.00	N/A		
3,100.0	3,093.8	3,045.5	2,964.8	6.2	12.2	-12.93	-412.2	-457.5	461.1	461.1	0.00	N/A		
3,200.0	3,193.6	3,143.2	3,058.5	6.5	12.7	-12.82	-430.1	-478.4	482.4	482.4	0.00	N/A		
3,300.0	3,293.3	3,240.9	3,152.3	6.7	13.2	-12.72	-447.9	-499.3	503.7	503.7	0.00	N/A		
3,400.0	3,393.1	3,338.5	3,246.1	6.9	13.7	-12.62	-465.7	-520.2	525.1	525.1	0.00	N/A		
3,500.0	3,492.8	3,436.2	3,339.8	7.1	14.2	-12.54	-483.5	-541.0	546.4	546.4	0.00	N/A		
3,600.0	3,592.6	3,533.9	3,433.6	7.3	14.7	-12.46	-501.3	-561.9	567.7	567.7	0.00	N/A		
3,700.0	3,692.3	3,631.6	3,527.3	7.5	15.3	-12.38	-519.2	-582.8	589.0	589.0	0.00	N/A		
3,800.0	3,792.1	3,729.3	3,621.1	7.7	15.8	-12.31	-537.0	-603.7	610.4	610.4	0.00	N/A		
3,900.0	3,891.8	3,827.0	3,714.9	7.9	16.3	-12.25	-554.8	-624.6	631.7	631.7	0.00	N/A		
4,000.0	3,991.6	3,924.7	3,808.6	8.2	16.8	-12.19	-572.6	-645.5	653.0	653.0	0.00	N/A		
4,100.0	4,091.3	4,022.4	3,902.4	8.4	17.3	-12.13	-590.4	-666.3	674.3	674.3	0.00	N/A		
4,200.0	4,191.1	4,120.1	3,996.1	8.6	17.8	-12.08	-608.3	-687.2	695.7	695.7	0.00	N/A		
4,300.0	4,290.8	4,217.8	4,089.9	8.8	18.4	-12.03	-626.1	-708.1	717.0	717.0	0.00	N/A		
4,400.0	4,390.6	4,315.5	4,183.7	9.0	18.9	-11.98	-643.9	-729.0	738.3	738.3	0.00	N/A		
4,500.0	4,490.3	4,413.2	4,277.4	9.2	19.4	-11.94	-661.7	-749.9	759.7	759.7	0.00	N/A		
4,600.0	4,590.1	4,510.9	4,371.2	9.4	19.9	-11.89	-679.5	-770.8	781.0	781.0	0.00	N/A		
4,700.0	4,689.8	4,608.6	4,464.9	9.7	20.4	-11.85	-697.4	-791.7	802.3	802.3	0.00	N/A		
4,800.0	4,789.6	4,706.3	4,558.7	9.9	21.0	-11.82	-715.2	-812.5	823.7	823.7	0.00	N/A		
4,900.0	4,889.4	4,803.7	4,652.2	10.1	21.5	-11.85	-732.9	-833.4	846.4	846.4	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 I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Antelope I 29 Pad - Antelope 23-29 (I 29 Pad) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
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	0.00	25.5	0.0	25.5					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	25.5	0.0	25.5	25.5	0.00	N/A		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	25.5	0.0	25.5	25.5	0.00	N/A		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	25.5	0.0	25.5	25.5	0.00	N/A		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	25.5	0.0	25.5	25.5	0.00	N/A		
500.0	500.0	500.0	500.0	0.9	0.9	0.00	25.5	0.0	25.5	25.5	0.00	N/A CC, ES		
600.0	600.0	599.2	599.2	1.0	1.0	127.96	26.8	1.2	27.8	27.8	0.00	N/A		
700.0	699.8	697.8	697.6	1.2	1.2	139.38	30.5	4.6	35.9	35.9	0.00	N/A		
800.0	799.6	795.2	794.7	1.4	1.4	148.85	36.7	10.3	49.7	49.7	0.00	N/A		
900.0	899.3	891.7	890.4	1.6	1.6	154.67	45.2	18.1	67.5	67.5	0.00	N/A		
1,000.0	999.1	989.6	987.5	1.8	1.9	158.22	54.8	26.9	87.2	87.2	0.00	N/A		
1,100.0	1,098.8	1,087.5	1,084.6	2.0	2.1	160.46	64.5	35.8	107.0	107.0	0.00	N/A		
1,200.0	1,198.6	1,185.5	1,181.6	2.2	2.4	162.00	74.2	44.6	127.0	127.0	0.00	N/A		
1,300.0	1,298.3	1,283.4	1,278.7	2.4	2.7	163.12	83.8	53.5	147.0	147.0	0.00	N/A		
1,400.0	1,398.1	1,381.4	1,375.8	2.6	3.0	163.97	93.5	62.3	167.0	167.0	0.00	N/A		
1,500.0	1,497.8	1,479.3	1,472.8	2.9	3.2	164.64	103.1	71.1	187.1	187.1	0.00	N/A		
1,600.0	1,597.6	1,577.3	1,569.9	3.1	3.5	165.18	112.8	80.0	207.2	207.2	0.00	N/A		
1,700.0	1,697.3	1,675.2	1,666.9	3.3	3.8	165.63	122.4	88.8	227.3	227.3	0.00	N/A		
1,800.0	1,797.1	1,773.1	1,764.0	3.5	4.1	166.00	132.1	97.7	247.5	247.5	0.00	N/A		
1,900.0	1,896.8	1,871.1	1,861.1	3.7	4.3	166.32	141.7	106.5	267.6	267.6	0.00	N/A		
2,000.0	1,996.6	1,969.0	1,958.1	3.9	4.6	166.59	151.4	115.4	287.7	287.7	0.00	N/A		
2,100.0	2,096.3	2,067.0	2,055.2	4.1	4.9	166.82	161.0	124.2	307.9	307.9	0.00	N/A		
2,200.0	2,196.1	2,164.9	2,152.3	4.3	5.2	167.03	170.7	133.1	328.0	328.0	0.00	N/A		
2,300.0	2,295.8	2,262.9	2,249.3	4.5	5.5	167.21	180.3	141.9	348.2	348.2	0.00	N/A		
2,400.0	2,395.6	2,360.8	2,346.4	4.8	5.7	167.38	190.0	150.8	368.4	368.4	0.00	N/A		
2,500.0	2,495.3	2,458.7	2,443.4	5.0	6.0	167.52	199.7	159.6	388.5	388.5	0.00	N/A		
2,600.0	2,595.1	2,556.7	2,540.5	5.2	6.3	167.66	209.3	168.5	408.7	408.7	0.00	N/A		
2,700.0	2,694.8	2,654.6	2,637.6	5.4	6.6	167.78	219.0	177.3	428.8	428.8	0.00	N/A		
2,800.0	2,794.6	2,752.6	2,734.6	5.6	6.9	167.88	228.6	186.2	449.0	449.0	0.00	N/A		
2,900.0	2,894.3	2,850.5	2,831.7	5.8	7.2	167.98	238.3	195.0	469.2	469.2	0.00	N/A		
3,000.0	2,994.1	2,948.4	2,928.8	6.0	7.4	168.08	247.9	203.9	489.4	489.4	0.00	N/A		
3,100.0	3,093.8	3,046.4	3,025.8	6.2	7.7	168.16	257.6	212.7	509.5	509.5	0.00	N/A		
3,200.0	3,193.6	3,144.3	3,122.9	6.5	8.0	168.24	267.2	221.6	529.7	529.7	0.00	N/A		
3,300.0	3,293.3	3,242.3	3,219.9	6.7	8.3	168.31	276.9	230.4	549.9	549.9	0.00	N/A		
3,400.0	3,393.1	3,340.2	3,317.0	6.9	8.6	168.38	286.5	239.3	570.0	570.0	0.00	N/A		
3,500.0	3,492.8	3,438.2	3,414.1	7.1	8.9	168.44	296.2	248.1	590.2	590.2	0.00	N/A		
3,600.0	3,592.6	3,536.1	3,511.1	7.3	9.2	168.50	305.8	257.0	610.4	610.4	0.00	N/A		
3,700.0	3,692.3	3,634.0	3,608.2	7.5	9.4	168.55	315.5	265.8	630.6	630.6	0.00	N/A		
3,800.0	3,792.1	3,732.0	3,705.3	7.7	9.7	168.60	325.2	274.7	650.7	650.7	0.00	N/A		
3,900.0	3,891.8	3,829.9	3,802.3	7.9	10.0	168.65	334.8	283.5	670.9	670.9	0.00	N/A		
4,000.0	3,991.6	3,927.9	3,899.4	8.2	10.3	168.69	344.5	292.4	691.1	691.1	0.00	N/A		
4,100.0	4,091.3	4,025.8	3,996.4	8.4	10.6	168.74	354.1	301.2	711.3	711.3	0.00	N/A		
4,200.0	4,191.1	4,123.7	4,093.5	8.6	10.9	168.78	363.8	310.1	731.4	731.4	0.00	N/A		
4,300.0	4,290.8	4,221.7	4,190.6	8.8	11.1	168.82	373.4	318.9	751.6	751.6	0.00	N/A		
4,400.0	4,390.6	4,319.6	4,287.6	9.0	11.4	168.85	383.1	327.8	771.8	771.8	0.00	N/A		
4,500.0	4,490.3	4,417.6	4,384.7	9.2	11.7	168.89	392.7	336.6	792.0	792.0	0.00	N/A		
4,600.0	4,590.1	4,515.5	4,481.8	9.4	12.0	168.92	402.4	345.5	812.2	812.2	0.00	N/A		
4,700.0	4,689.8	4,613.5	4,578.8	9.7	12.3	168.95	412.0	354.3	832.3	832.3	0.00	N/A		
4,800.0	4,789.6	4,711.4	4,675.9	9.9	12.6	168.98	421.7	363.2	852.5	852.5	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 I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Antelope I 29 Pad - Antelope 24-29 (I 29 Pad) - DD - 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	180.00	-10.9	0.0	10.9						
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-10.9	0.0	10.9	10.9	0.00	N/A			
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-10.9	0.0	10.9	10.9	0.00	N/A			
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-10.9	0.0	10.9	10.9	0.00	N/A			
400.0	400.0	400.0	400.0	0.7	0.7	180.00	-10.9	0.0	10.9	10.9	0.00	N/A			
500.0	500.0	500.0	500.0	0.9	0.9	180.00	-10.9	0.0	10.9	10.9	0.00	N/A CC, ES			
600.0	600.0	599.6	599.6	1.0	1.0	-68.19	-12.5	0.7	11.8	11.8	0.00	N/A			
700.0	699.8	698.9	698.7	1.2	1.2	-90.50	-17.2	3.0	16.1	16.1	0.00	N/A			
800.0	799.6	797.7	797.1	1.4	1.4	-103.77	-24.9	6.6	25.4	25.4	0.00	N/A			
900.0	899.3	895.8	894.5	1.6	1.7	-107.44	-35.6	11.7	38.5	38.5	0.00	N/A			
1,000.0	999.1	993.1	990.6	1.8	1.9	-107.66	-49.2	18.1	54.6	54.6	0.00	N/A			
1,100.0	1,098.8	1,089.4	1,085.3	2.0	2.2	-106.67	-65.5	25.9	73.7	73.7	0.00	N/A			
1,200.0	1,198.6	1,187.3	1,181.1	2.2	2.6	-105.72	-83.4	34.3	94.2	94.2	0.00	N/A			
1,300.0	1,298.3	1,285.1	1,277.0	2.4	2.9	-105.11	-101.3	42.8	114.7	114.7	0.00	N/A			
1,400.0	1,398.1	1,383.0	1,372.8	2.6	3.3	-104.69	-119.1	51.3	135.2	135.2	0.00	N/A			
1,500.0	1,497.8	1,480.9	1,468.7	2.9	3.7	-104.38	-137.0	59.7	155.7	155.7	0.00	N/A			
1,600.0	1,597.6	1,578.8	1,564.5	3.1	4.0	-104.14	-154.9	68.2	176.2	176.2	0.00	N/A			
1,700.0	1,697.3	1,676.6	1,660.4	3.3	4.4	-103.95	-172.8	76.7	196.7	196.7	0.00	N/A			
1,800.0	1,797.1	1,774.5	1,756.2	3.5	4.8	-103.79	-190.6	85.2	217.2	217.2	0.00	N/A			
1,900.0	1,896.8	1,872.4	1,852.1	3.7	5.2	-103.66	-208.5	93.6	237.8	237.8	0.00	N/A			
2,000.0	1,996.6	1,970.2	1,947.9	3.9	5.5	-103.56	-226.4	102.1	258.3	258.3	0.00	N/A			
2,100.0	2,096.3	2,068.1	2,043.8	4.1	5.9	-103.46	-244.3	110.6	278.8	278.8	0.00	N/A			
2,200.0	2,196.1	2,166.0	2,139.6	4.3	6.3	-103.39	-262.1	119.0	299.3	299.3	0.00	N/A			
2,300.0	2,295.8	2,263.9	2,235.5	4.5	6.7	-103.32	-280.0	127.5	319.8	319.8	0.00	N/A			
2,400.0	2,395.6	2,361.7	2,331.3	4.8	7.1	-103.26	-297.9	136.0	340.3	340.3	0.00	N/A			
2,500.0	2,495.3	2,459.6	2,427.2	5.0	7.4	-103.20	-315.8	144.4	360.9	360.9	0.00	N/A			
2,600.0	2,595.1	2,557.5	2,523.0	5.2	7.8	-103.15	-333.6	152.9	381.4	381.4	0.00	N/A			
2,700.0	2,694.8	2,655.4	2,618.9	5.4	8.2	-103.11	-351.5	161.4	401.9	401.9	0.00	N/A			
2,800.0	2,794.6	2,753.2	2,714.7	5.6	8.6	-103.07	-369.4	169.9	422.4	422.4	0.00	N/A			
2,900.0	2,894.3	2,851.1	2,810.6	5.8	9.0	-103.04	-387.3	178.3	442.9	442.9	0.00	N/A			
3,000.0	2,994.1	2,949.0	2,906.4	6.0	9.3	-103.01	-405.1	186.8	463.4	463.4	0.00	N/A			
3,100.0	3,093.8	3,046.8	3,002.3	6.2	9.7	-102.98	-423.0	195.3	484.0	484.0	0.00	N/A			
3,200.0	3,193.6	3,144.7	3,098.2	6.5	10.1	-102.95	-440.9	203.7	504.5	504.5	0.00	N/A			
3,300.0	3,293.3	3,242.6	3,194.0	6.7	10.5	-102.92	-458.8	212.2	525.0	525.0	0.00	N/A			
3,400.0	3,393.1	3,340.5	3,289.9	6.9	10.9	-102.90	-476.6	220.7	545.5	545.5	0.00	N/A			
3,500.0	3,492.8	3,438.3	3,385.7	7.1	11.3	-102.88	-494.5	229.1	566.0	566.0	0.00	N/A			
3,600.0	3,592.6	3,536.2	3,481.6	7.3	11.6	-102.86	-512.4	237.6	586.6	586.6	0.00	N/A			
3,700.0	3,692.3	3,634.1	3,577.4	7.5	12.0	-102.84	-530.3	246.1	607.1	607.1	0.00	N/A			
3,800.0	3,792.1	3,731.9	3,673.3	7.7	12.4	-102.82	-548.1	254.5	627.6	627.6	0.00	N/A			
3,900.0	3,891.8	3,829.8	3,769.1	7.9	12.8	-102.81	-566.0	263.0	648.1	648.1	0.00	N/A			
4,000.0	3,991.6	3,927.7	3,865.0	8.2	13.2	-102.79	-583.9	271.5	668.6	668.6	0.00	N/A			
4,100.0	4,091.3	4,025.6	3,960.8	8.4	13.6	-102.78	-601.8	280.0	689.2	689.2	0.00	N/A			
4,200.0	4,191.1	4,123.4	4,056.7	8.6	14.0	-102.76	-619.6	288.4	709.7	709.7	0.00	N/A			
4,300.0	4,290.8	4,221.3	4,152.5	8.8	14.3	-102.75	-637.5	296.9	730.2	730.2	0.00	N/A			
4,400.0	4,390.6	4,319.2	4,248.4	9.0	14.7	-102.74	-655.4	305.4	750.7	750.7	0.00	N/A			
4,500.0	4,490.3	4,417.0	4,344.2	9.2	15.1	-102.73	-673.2	313.8	771.2	771.2	0.00	N/A			
4,600.0	4,590.1	4,514.9	4,440.1	9.4	15.5	-102.72	-691.1	322.3	791.8	791.8	0.00	N/A			
4,700.0	4,689.8	4,612.8	4,535.9	9.7	15.9	-102.71	-709.0	330.8	812.3	812.3	0.00	N/A			
4,800.0	4,789.6	4,710.7	4,631.8	9.9	16.3	-102.70	-726.9	339.2	832.8	832.8	0.00	N/A			
4,900.0	4,889.4	4,808.6	4,727.7	10.1	16.7	-102.69	-744.8	347.7	853.0	853.0	0.00	N/A			

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

Cathedral Energy Services

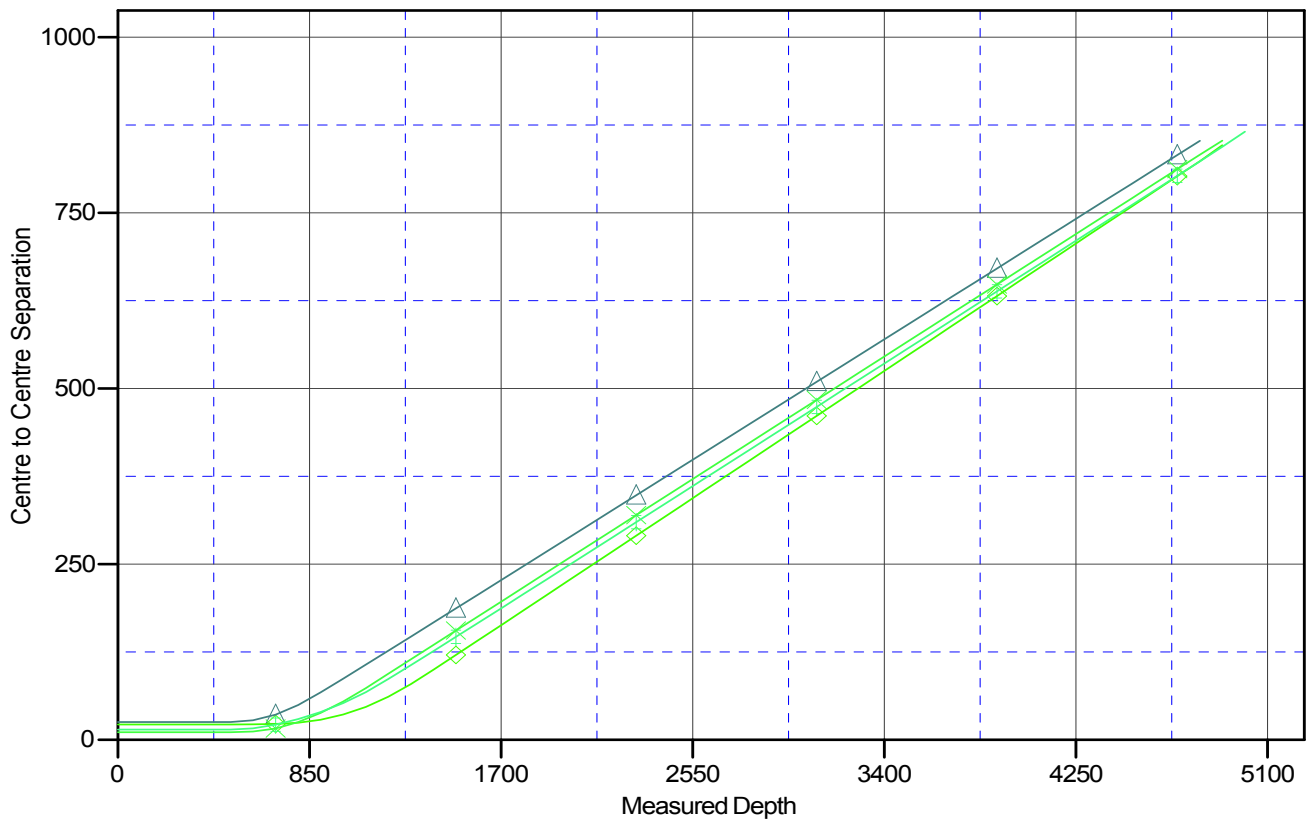
Anticollision Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Antelope I 29 (I 29 Pad)
Project:	Weld County	TVD Reference:	KBE @ 4601.0ft (Well Elevation)
Reference Site:	Antelope I 29 Pad	MD Reference:	KBE @ 4601.0ft (Well Elevation)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope I 29 (I 29 Pad)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KBE @ 4601.0ft (Well Elevation)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Antelope I 29 (I 29 Pad)
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.74°

Ladder Plot



LEGEND

- Antelope 14-29 (I 29 Pad), DD, Plan #1 V0
- Antelope 24-29 (I 29 Pad), DD, Plan #1 V0
- Antelope 23-29 (I 29 Pad), DD, Plan #1 V0
- Antelope 13-29 (I 29 Pad), DD, Plan #1 V0