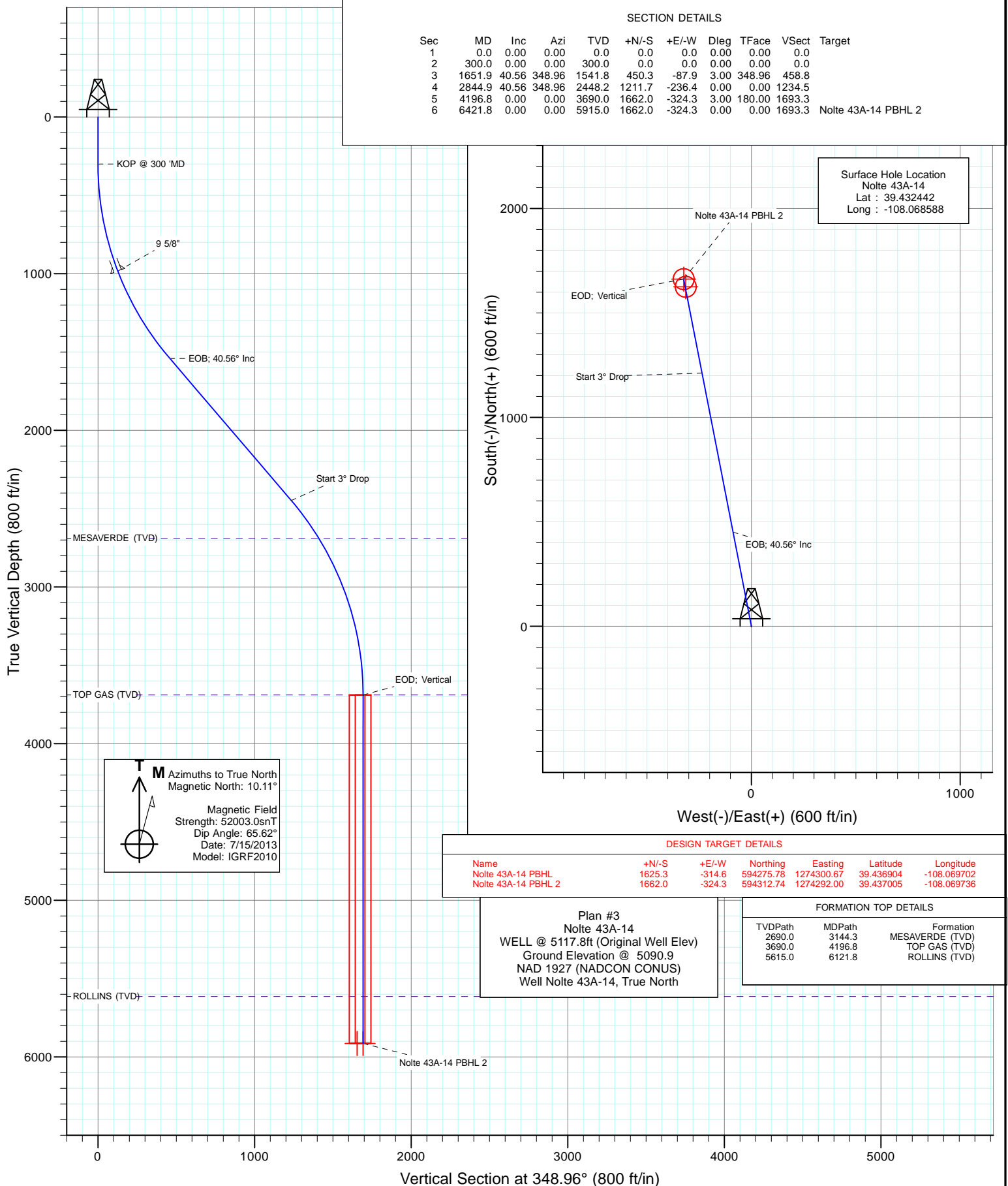




Project: Garfield County, CO
Site: S14-T7S-R96W
Well: Nolte 43A-14
Wellbore: DD
Design: Plan #3



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 43A-14
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	North Reference:	True
Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Project	Garfield County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado Central 502		

Site		S14-T7S-R96W			
Site Position:		Northing:	592,603.28 ft	Latitude:	39.432320
From:	Lat/Long	Easting:	1,274,372.48 ft	Longitude:	-108.069280
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.62 °

Well	Nolte 43A-14					
Well Position	+N/-S	0.0 ft	Northing:	592,642.23 ft	Latitude:	39.432442
	+E/-W	0.0 ft	Easting:	1,274,569.16 ft	Longitude:	-108.068588
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,090.9 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	7/15/2013	10.11	65.62	52,003

Design	Plan #3				
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	348.96	

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,651.9	40.56	348.96	1,541.8	450.3	-87.9	3.00	3.00	0.00	348.96	
2,844.9	40.56	348.96	2,448.2	1,211.7	-236.4	0.00	0.00	0.00	0.00	
4,196.8	0.00	0.00	3,690.0	1,662.0	-324.3	3.00	-3.00	0.00	180.00	
6,421.8	0.00	0.00	5,915.0	1,662.0	-324.3	0.00	0.00	0.00	0.00	Nolte 43A-14 PBHL 2

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 43A-14
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	North Reference:	True
Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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	KOP @ 300 'MD
400.0	3.00	348.96	400.0	2.6	-0.5	2.6	3.00	3.00	
500.0	6.00	348.96	499.6	10.3	-2.0	10.5	3.00	3.00	
600.0	9.00	348.96	598.8	23.1	-4.5	23.5	3.00	3.00	
700.0	12.00	348.96	697.1	41.0	-8.0	41.7	3.00	3.00	
800.0	15.00	348.96	794.3	63.9	-12.5	65.1	3.00	3.00	
900.0	18.00	348.96	890.2	91.7	-17.9	93.5	3.00	3.00	
1,000.0	21.00	348.96	984.4	124.5	-24.3	126.9	3.00	3.00	9 5/8"
1,100.0	24.00	348.96	1,076.8	162.1	-31.6	165.1	3.00	3.00	
1,200.0	27.00	348.96	1,167.1	204.3	-39.9	208.2	3.00	3.00	
1,300.0	30.00	348.96	1,254.9	251.1	-49.0	255.9	3.00	3.00	
1,400.0	33.00	348.96	1,340.2	302.4	-59.0	308.1	3.00	3.00	
1,500.0	36.00	348.96	1,422.6	358.0	-69.8	364.8	3.00	3.00	
1,600.0	39.00	348.96	1,501.9	417.7	-81.5	425.6	3.00	3.00	
1,651.9	40.56	348.96	1,541.8	450.3	-87.9	458.8	3.00	3.00	EOB; 40.56° Inc
1,700.0	40.56	348.96	1,578.3	481.0	-93.9	490.1	0.00	0.00	
1,800.0	40.56	348.96	1,654.3	544.8	-106.3	555.1	0.00	0.00	
1,900.0	40.56	348.96	1,730.3	608.7	-118.8	620.1	0.00	0.00	
2,000.0	40.56	348.96	1,806.3	672.5	-131.2	685.2	0.00	0.00	
2,100.0	40.56	348.96	1,882.2	736.3	-143.7	750.2	0.00	0.00	
2,200.0	40.56	348.96	1,958.2	800.1	-156.1	815.2	0.00	0.00	
2,300.0	40.56	348.96	2,034.2	863.9	-168.6	880.2	0.00	0.00	
2,400.0	40.56	348.96	2,110.2	927.7	-181.0	945.2	0.00	0.00	
2,500.0	40.56	348.96	2,186.2	991.6	-193.5	1,010.3	0.00	0.00	
2,600.0	40.56	348.96	2,262.1	1,055.4	-205.9	1,075.3	0.00	0.00	
2,700.0	40.56	348.96	2,338.1	1,119.2	-218.4	1,140.3	0.00	0.00	
2,800.0	40.56	348.96	2,414.1	1,183.0	-230.8	1,205.3	0.00	0.00	
2,844.9	40.56	348.96	2,448.2	1,211.7	-236.4	1,234.5	0.00	0.00	Start 3° Drop
2,900.0	38.90	348.96	2,490.6	1,246.2	-243.2	1,269.7	3.00	-3.00	
3,000.0	35.90	348.96	2,570.0	1,305.8	-254.8	1,330.5	3.00	-3.00	
3,100.0	32.90	348.96	2,652.5	1,361.3	-265.6	1,387.0	3.00	-3.00	
3,144.3	31.57	348.96	2,690.0	1,384.5	-270.1	1,410.6	3.00	-3.00	MESAVERDE (TVD)
3,200.0	29.90	348.96	2,737.8	1,412.4	-275.6	1,439.1	3.00	-3.00	
3,300.0	26.90	348.96	2,825.8	1,459.1	-284.7	1,486.6	3.00	-3.00	
3,400.0	23.90	348.96	2,916.1	1,501.2	-292.9	1,529.5	3.00	-3.00	
3,500.0	20.90	348.96	3,008.5	1,538.6	-300.2	1,567.6	3.00	-3.00	
3,600.0	17.90	348.96	3,102.9	1,571.2	-306.6	1,600.9	3.00	-3.00	
3,700.0	14.90	348.96	3,198.8	1,598.9	-312.0	1,629.1	3.00	-3.00	
3,800.0	11.90	348.96	3,296.0	1,621.7	-316.4	1,652.3	3.00	-3.00	
3,900.0	8.90	348.96	3,394.4	1,639.4	-319.9	1,670.3	3.00	-3.00	
4,000.0	5.90	348.96	3,493.5	1,652.1	-322.3	1,683.2	3.00	-3.00	
4,100.0	2.90	348.96	3,593.2	1,659.6	-323.8	1,690.9	3.00	-3.00	
4,196.8	0.00	0.00	3,690.0	1,662.0	-324.3	1,693.3	3.00	-3.00	EOD; Vertical - TOP GAS (TVD)
4,200.0	0.00	0.00	3,693.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,300.0	0.00	0.00	3,793.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,400.0	0.00	0.00	3,893.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,500.0	0.00	0.00	3,993.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,600.0	0.00	0.00	4,093.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,700.0	0.00	0.00	4,193.2	1,662.0	-324.3	1,693.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 43A-14
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	North Reference:	True
Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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
4,800.0	0.00	0.00	4,293.2	1,662.0	-324.3	1,693.3	0.00	0.00	
4,900.0	0.00	0.00	4,393.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,000.0	0.00	0.00	4,493.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,100.0	0.00	0.00	4,593.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,200.0	0.00	0.00	4,693.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,300.0	0.00	0.00	4,793.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,400.0	0.00	0.00	4,893.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,500.0	0.00	0.00	4,993.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,600.0	0.00	0.00	5,093.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,700.0	0.00	0.00	5,193.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,800.0	0.00	0.00	5,293.2	1,662.0	-324.3	1,693.3	0.00	0.00	
5,900.0	0.00	0.00	5,393.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,000.0	0.00	0.00	5,493.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,100.0	0.00	0.00	5,593.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,121.8	0.00	0.00	5,615.0	1,662.0	-324.3	1,693.3	0.00	0.00	ROLLINS (TVD)
6,200.0	0.00	0.00	5,693.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,300.0	0.00	0.00	5,793.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,400.0	0.00	0.00	5,893.2	1,662.0	-324.3	1,693.3	0.00	0.00	
6,421.8	0.00	0.00	5,915.0	1,662.0	-324.3	1,693.3	0.00	0.00	PBHL @ 6,421' MD

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Nolte 43A-14 PBHL 2 - plan hits target center - Circle (radius 50.0)	0.00	0.00	5,915.0	1,662.0	-324.3	594,312.74	1,274,292.00	39.437005	-108.069736
Nolte 43A-14 PBHL - plan misses target center by 38.0ft at 6421.8ft MD (5915.0 TVD, 1662.0 N, -324.3 E) - Circle (radius 50.0)	0.00	0.00	5,915.0	1,625.3	-314.6	594,275.78	1,274,300.67	39.436904	-108.069702

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,000.0	984.4	9 5/8"	9.625	12.250

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,144.3	2,690.0	MESAVERDE (TVD)		0.00	
4,196.8	3,690.0	TOP GAS (TVD)		0.00	
6,121.8	5,615.0	ROLLINS (TVD)		0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 43A-14
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	North Reference:	True
Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300 'MD
1,651.9	1,541.8	450.3	-87.9	EOB; 40.56° Inc
2,844.9	2,448.2	1,211.7	-236.4	Start 3° Drop
4,196.8	3,690.0	1,662.0	-324.3	EOD; Vertical
6,421.8	5,915.0	1,662.0	-324.3	PBHL @ 6,421' MD

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S14-T7S-R96W

Nolte 43A-14

DD

Plan #3

Anticollision Report

09 September, 2013

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference	Plan #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,356.1ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	8/29/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	6,421.8	Plan #3 (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						
S14-T7S-R96W						
Nolte 11A-24 - DD - Plan #3	300.0	300.0	33.5	32.6	35.163	CC, ES
Nolte 11A-24 - DD - Plan #3	400.0	398.8	37.5	36.2	28.773	SF
Nolte 11B-24 - DD - Plan #3	200.0	200.0	41.2	40.6	68.202	CC, ES
Nolte 11B-24 - DD - Plan #3	400.0	396.4	50.7	49.4	38.405	SF
Nolte 11C-24 - DD - Plan #3	244.3	234.6	49.0	48.3	64.553	CC, ES
Nolte 11C-24 - DD - Plan #3	500.0	483.7	69.7	68.1	41.894	SF
Nolte 13A-13 - DD - Plan #3	200.0	200.0	16.0	15.4	26.482	CC, ES
Nolte 13A-13 - DD - Plan #3	400.0	397.8	24.4	23.1	18.752	SF
Nolte 13B-13 - DD - Plan #3	233.4	233.4	8.0	7.3	11.105	CC, ES
Nolte 13B-13 - DD - Plan #3	300.0	299.8	8.6	7.7	9.074	SF
Nolte 13C-13 - DD - Plan #3	200.0	199.8	18.9	18.3	31.276	CC, ES
Nolte 13C-13 - DD - Plan #3	400.0	397.3	28.0	26.7	21.470	SF
Nolte 13D-13 - DD - Plan #3	300.0	300.0	12.8	11.9	13.447	CC, ES
Nolte 13D-13 - DD - Plan #3	400.0	399.3	15.3	14.0	11.712	SF
Nolte 14A-13 - DD - Plan #3	300.0	300.0	10.0	9.0	10.499	CC, ES
Nolte 14A-13 - DD - Plan #3	400.0	400.0	11.8	10.5	9.060	SF
Nolte 14B-13 - DD - Plan #3	300.0	300.0	12.8	11.8	13.433	CC, ES
Nolte 14B-13 - DD - Plan #3	400.0	400.0	15.4	14.1	11.809	SF
Nolte 14C-13 - DD - Plan #3	300.0	300.0	18.3	17.4	19.247	CC, ES
Nolte 14C-13 - DD - Plan #3	400.0	400.0	20.9	19.6	16.101	SF
Nolte 14D-13 - DD - Plan #3	300.0	300.0	26.0	25.0	27.268	CC, ES
Nolte 14D-13 - DD - Plan #3	400.0	400.0	28.5	27.2	21.910	SF
Nolte 43B-14 - DD - Plan #3	300.0	300.0	8.0	7.0	8.385	CC, ES
Nolte 43B-14 - DD - Plan #3	1,400.0	1,410.6	35.9	29.0	5.168	SF
Nolte 43C-14 - DD - Plan #3	300.0	300.0	16.0	15.0	16.758	CC, ES
Nolte 43C-14 - DD - Plan #3	1,100.0	1,108.1	61.1	56.2	12.589	SF
Nolte 44A-14 - DD - Plan #3	300.0	300.0	24.0	23.0	25.140	CC, ES
Nolte 44A-14 - DD - Plan #3	500.0	500.0	32.5	30.9	19.611	SF
Nolte 44B-14 - DD - Plan #3	300.0	300.0	32.0	31.0	33.525	CC, ES
Nolte 44B-14 - DD - Plan #3	500.0	499.6	40.7	39.0	24.533	SF
Nolte 44C-14 - DD - Plan #3	300.0	300.0	40.0	39.0	41.901	CC, ES
Nolte 44C-14 - DD - Plan #3	500.0	498.3	49.9	48.3	30.020	SF
Nolte SWD 1-14 - DD - Plan #3	300.0	300.0	48.0	47.0	50.271	CC, ES
Nolte SWD 1-14 - DD - Plan #3	600.0	598.8	68.0	65.9	33.672	SF

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11A-24 - DD - Plan #3													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	-169.86	-33.0	-5.9	33.5					
100.0	100.0	100.0	100.0	0.1	0.1	-169.86	-33.0	-5.9	33.5	33.3	0.26	131.360		
200.0	200.0	200.0	200.0	0.3	0.3	-169.86	-33.0	-5.9	33.5	32.9	0.60	55.476		
300.0	300.0	300.0	300.0	0.5	0.5	-169.86	-33.0	-5.9	33.5	32.6	0.95	35.163 CC, ES		
400.0	400.0	398.8	398.8	0.7	0.7	-163.48	-34.8	-4.0	37.5	36.2	1.30	28.773 SF		
500.0	499.6	496.2	495.8	0.9	0.9	-172.75	-39.9	1.4	50.4	48.8	1.66	30.392		
600.0	598.8	590.7	589.6	1.1	1.1	179.42	-48.2	10.1	73.3	71.3	2.01	36.413		
700.0	697.1	681.3	678.8	1.5	1.4	174.20	-59.1	21.6	105.9	103.6	2.36	44.835		
800.0	794.3	767.0	762.3	1.9	1.8	170.83	-72.1	35.3	147.6	144.9	2.71	54.490		
900.0	890.2	846.9	839.5	2.4	2.2	168.54	-86.5	50.6	197.5	194.5	3.05	64.736		
1,000.0	984.4	920.6	909.8	3.0	2.6	166.86	-101.7	66.7	255.0	251.6	3.39	75.209		
1,100.0	1,076.8	987.9	973.1	3.7	3.0	165.49	-117.3	83.1	319.3	315.5	3.73	85.578		
1,200.0	1,167.1	1,048.6	1,029.6	4.5	3.4	164.28	-132.6	99.3	389.6	385.5	4.08	95.537		
1,300.0	1,254.9	1,100.0	1,076.8	5.4	3.8	163.11	-146.5	114.0	465.2	460.8	4.42	105.172		
1,400.0	1,340.2	1,150.6	1,122.7	6.3	4.2	161.86	-161.1	129.4	545.5	540.7	4.81	113.410		
1,500.0	1,422.6	1,200.0	1,167.1	7.4	4.6	160.50	-176.1	145.2	630.0	624.7	5.24	120.267		
1,600.0	1,501.9	1,228.4	1,192.2	8.5	4.9	158.80	-185.1	154.7	717.7	712.0	5.72	125.461		
1,700.0	1,578.3	1,259.3	1,219.5	9.6	5.2	157.97	-195.2	165.4	808.3	802.0	6.24	129.537		
1,800.0	1,654.3	1,300.0	1,254.9	10.7	5.5	158.36	-209.0	179.9	899.8	893.1	6.70	134.206		
1,900.0	1,730.3	1,300.0	1,254.9	11.9	5.5	158.36	-209.0	179.9	991.8	984.6	7.15	138.661		
2,000.0	1,806.3	1,340.4	1,289.7	13.0	5.9	158.63	-223.1	194.8	1,084.1	1,076.4	7.63	142.151		
2,100.0	1,882.2	1,364.4	1,310.1	14.2	6.2	158.74	-231.7	203.9	1,176.9	1,168.9	8.09	145.469		
2,200.0	1,958.2	1,400.0	1,340.2	15.3	6.5	158.87	-244.9	217.8	1,270.3	1,261.8	8.57	148.269		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11B-24 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		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	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-166.53	-40.1	-9.6	41.2					
100.0	100.0	100.0	100.0	0.1	0.1	-166.53	-40.1	-9.6	41.2	41.0	0.26	161.432		
200.0	200.0	200.0	200.0	0.3	0.3	-166.53	-40.1	-9.6	41.2	40.6	0.60	68.202 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	-169.24	-42.1	-8.0	42.8	41.9	0.96	44.735		
400.0	400.0	396.4	396.1	0.7	0.7	-165.79	-47.9	-3.2	50.7	49.4	1.32	38.405 SF		
500.0	499.6	492.1	490.9	0.9	1.0	-174.32	-57.4	4.5	68.5	66.8	1.68	40.705		
600.0	598.8	584.2	581.6	1.1	1.3	179.34	-69.9	14.7	96.5	94.5	2.03	47.503		
700.0	697.1	671.7	666.9	1.5	1.7	175.19	-85.0	27.0	134.2	131.8	2.37	56.679		
800.0	794.3	753.7	746.0	1.9	2.1	172.45	-101.9	40.7	180.7	178.0	2.69	67.142		
900.0	890.2	829.6	818.2	2.4	2.5	170.56	-119.8	55.3	235.2	232.2	3.00	78.324		
1,000.0	984.4	900.0	884.4	3.0	3.0	169.12	-138.4	70.5	296.9	293.6	3.30	89.842		
1,100.0	1,076.8	961.8	941.7	3.7	3.4	167.95	-156.3	85.1	365.0	361.4	3.60	101.384		
1,200.0	1,167.1	1,017.9	993.1	4.5	3.8	166.88	-173.8	99.3	438.9	435.0	3.89	112.778		
1,300.0	1,254.9	1,067.5	1,038.0	5.4	4.3	165.82	-190.2	112.7	517.7	513.5	4.19	123.589		
1,400.0	1,340.2	1,100.0	1,067.1	6.3	4.5	164.65	-201.5	121.9	601.0	596.5	4.48	134.032		
1,500.0	1,422.6	1,148.3	1,109.8	7.4	5.0	163.34	-218.9	136.0	687.8	682.9	4.86	141.564		
1,600.0	1,501.9	1,180.1	1,137.6	8.5	5.2	161.72	-230.8	145.8	777.8	772.5	5.29	147.078		
1,700.0	1,578.3	1,200.0	1,154.9	9.6	5.4	160.79	-238.5	152.0	870.3	864.5	5.75	151.308		
1,800.0	1,654.3	1,231.9	1,182.4	10.7	5.7	161.16	-251.0	162.2	963.4	957.3	6.15	156.546		
1,900.0	1,730.3	1,255.3	1,202.4	11.9	6.0	161.38	-260.4	169.9	1,057.0	1,050.5	6.56	161.226		
2,000.0	1,806.3	1,277.3	1,221.0	13.0	6.2	161.55	-269.5	177.2	1,151.0	1,144.1	6.96	165.432		
2,100.0	1,882.2	1,300.0	1,240.2	14.2	6.4	161.70	-279.0	185.0	1,245.4	1,238.1	7.36	169.221		
2,200.0	1,958.2	1,300.0	1,240.2	15.3	6.4	161.70	-279.0	185.0	1,340.3	1,332.5	7.76	172.813		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11C-24 - DD - Plan #3													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	-164.25	-47.2	-13.3	50.0					
100.0	100.0	90.3	90.3	0.1	0.1	-164.25	-47.2	-13.3	49.0	48.8	0.26	189.663		
200.0	200.0	190.3	190.3	0.3	0.3	-164.25	-47.2	-13.3	49.0	48.4	0.60	81.064		
244.3	244.3	234.6	234.6	0.4	0.4	-164.25	-47.2	-13.3	49.0	48.3	0.76	64.553 CC, ES		
300.0	300.0	289.6	289.6	0.5	0.5	-164.61	-47.5	-13.1	49.3	48.3	0.95	51.726		
400.0	400.0	387.5	387.4	0.7	0.7	-158.30	-51.3	-10.6	54.9	53.6	1.31	42.013		
500.0	499.6	483.7	483.1	0.9	0.9	-165.96	-59.0	-5.4	69.7	68.1	1.66	41.894 SF		
600.0	598.8	576.6	575.0	1.1	1.2	-172.80	-70.3	2.2	94.7	92.7	2.01	47.027		
700.0	697.1	665.2	661.9	1.5	1.5	-177.72	-84.5	11.7	129.6	127.2	2.35	55.229		
800.0	794.3	748.4	742.8	1.9	1.9	178.91	-100.9	22.6	173.6	171.0	2.66	65.260		
900.0	890.2	825.7	817.0	2.4	2.3	176.57	-118.8	34.6	226.0	223.1	2.96	76.441		
1,000.0	984.4	900.0	887.5	3.0	2.7	174.80	-138.2	47.6	286.0	282.8	3.24	88.203		
1,100.0	1,076.8	960.6	944.3	3.7	3.1	173.54	-155.8	59.3	352.7	349.2	3.51	100.622		
1,200.0	1,167.1	1,017.9	997.4	4.5	3.5	172.44	-173.8	71.4	425.3	421.6	3.76	113.190		
1,300.0	1,254.9	1,068.7	1,043.9	5.4	3.9	171.44	-190.8	82.8	503.2	499.2	4.00	125.687		
1,400.0	1,340.2	1,113.1	1,084.0	6.3	4.2	170.45	-206.6	93.3	585.6	581.4	4.25	137.886		
1,500.0	1,422.6	1,151.4	1,118.3	7.4	4.6	169.40	-220.7	102.8	671.9	667.4	4.50	149.183		
1,600.0	1,501.9	1,184.0	1,147.2	8.5	4.8	168.19	-233.3	111.1	761.5	756.8	4.79	158.961		
1,700.0	1,578.3	1,200.0	1,161.3	9.6	5.0	167.47	-239.6	115.3	853.8	848.7	5.11	167.209		
1,800.0	1,654.3	1,237.1	1,193.7	10.7	5.3	167.55	-254.5	125.4	946.6	941.1	5.45	173.713		
1,900.0	1,730.3	1,261.0	1,214.4	11.9	5.5	167.59	-264.5	132.0	1,039.9	1,034.1	5.78	179.999		
2,000.0	1,806.3	1,300.0	1,247.9	13.0	5.9	167.60	-281.1	143.1	1,133.9	1,127.7	6.13	185.082		
2,100.0	1,882.2	1,300.0	1,247.9	14.2	5.9	167.60	-281.1	143.1	1,227.8	1,221.4	6.43	191.050		
2,200.0	1,958.2	1,324.5	1,268.7	15.3	6.2	167.60	-291.9	150.3	1,322.3	1,315.5	6.76	195.520		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13A-13 - DD - Plan #3													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	27.55	14.2	7.4	16.0					
100.0	100.0	100.0	100.0	0.1	0.1	27.55	14.2	7.4	16.0	15.7	0.26	62.707		
200.0	200.0	200.0	200.0	0.3	0.3	27.55	14.2	7.4	16.0	15.4	0.60	26.482 CC, ES		
300.0	300.0	299.1	299.0	0.5	0.5	28.11	16.4	8.7	18.6	17.6	0.95	19.530		
400.0	400.0	397.8	397.4	0.7	0.7	43.98	22.9	12.8	24.4	23.1	1.30	18.752 SF		
500.0	499.6	496.0	494.8	0.9	1.0	52.88	33.7	19.4	32.1	30.4	1.68	19.117		
600.0	598.8	593.4	590.6	1.1	1.3	62.13	48.6	28.6	42.5	40.4	2.14	19.832		
700.0	697.1	689.9	684.6	1.5	1.8	70.05	67.4	40.1	56.3	53.6	2.77	20.371		
800.0	794.3	785.4	776.2	1.9	2.3	76.29	90.0	54.0	73.7	70.1	3.57	20.659		
900.0	890.2	879.6	865.3	2.4	2.8	81.02	116.1	70.1	94.6	90.1	4.54	20.816		
1,000.0	984.4	972.5	951.6	3.0	3.5	84.58	145.4	88.1	119.0	113.3	5.68	20.935		
1,100.0	1,076.8	1,063.9	1,034.7	3.7	4.2	87.23	177.8	108.0	146.7	139.7	6.97	21.053		
1,200.0	1,167.1	1,153.8	1,114.6	4.5	5.0	89.19	212.9	129.6	177.6	169.2	8.38	21.182		
1,300.0	1,254.9	1,242.1	1,191.2	5.4	5.8	90.63	250.4	152.7	211.5	201.6	9.92	21.323		
1,400.0	1,340.2	1,328.8	1,264.2	6.3	6.7	91.66	290.1	177.1	248.4	236.8	11.57	21.472		
1,500.0	1,422.6	1,413.8	1,333.7	7.4	7.6	92.35	331.8	202.8	287.9	274.6	13.31	21.626		
1,600.0	1,501.9	1,500.0	1,401.9	8.5	8.6	92.84	376.7	230.4	330.1	314.9	15.18	21.742		
1,700.0	1,578.3	1,578.9	1,462.2	9.6	9.6	93.61	420.1	257.1	374.6	357.5	17.10	21.910		
1,800.0	1,654.3	1,660.7	1,522.5	10.7	10.6	94.52	467.2	286.1	421.2	402.1	19.09	22.066		
1,900.0	1,730.3	1,748.8	1,586.5	11.9	11.7	95.15	518.7	317.8	468.3	447.2	21.14	22.158		
2,000.0	1,806.3	1,836.9	1,650.4	13.0	12.8	95.66	570.3	349.5	515.5	492.3	23.19	22.232		
2,100.0	1,882.2	1,924.9	1,714.4	14.2	13.9	96.09	621.8	381.2	562.8	537.5	25.24	22.293		
2,200.0	1,958.2	2,013.0	1,778.4	15.3	15.1	96.45	673.4	412.9	610.0	582.7	27.30	22.345		
2,300.0	2,034.2	2,101.1	1,842.4	16.5	16.2	96.76	724.9	444.6	657.3	627.9	29.36	22.388		
2,400.0	2,110.2	2,189.1	1,906.4	17.6	17.3	97.03	776.4	476.3	704.6	673.2	31.42	22.426		
2,500.0	2,186.2	2,277.2	1,970.4	18.8	18.5	97.26	828.0	508.0	751.9	718.4	33.48	22.458		
2,600.0	2,262.1	2,365.3	2,034.4	19.9	19.6	97.47	879.5	539.7	799.2	763.6	35.54	22.487		
2,700.0	2,338.1	2,453.4	2,098.4	21.1	20.7	97.66	931.0	571.4	846.5	808.9	37.60	22.512		
2,800.0	2,414.1	2,541.4	2,162.4	22.3	21.8	97.82	982.6	603.1	893.8	854.2	39.66	22.534		
2,900.0	2,490.6	2,629.6	2,226.4	23.4	23.0	98.79	1,034.2	634.8	941.0	899.2	41.83	22.498		
3,000.0	2,570.0	2,718.0	2,290.7	24.4	24.1	100.13	1,085.9	666.6	987.6	943.6	43.99	22.451		
3,100.0	2,652.5	2,806.5	2,355.0	25.4	25.2	101.12	1,137.7	698.5	1,033.4	987.4	46.06	22.434		
3,200.0	2,737.8	2,902.0	2,424.6	26.3	26.5	101.77	1,193.5	732.8	1,078.4	1,030.3	48.11	22.413		
3,300.0	2,825.8	3,021.5	2,515.1	27.1	27.9	102.10	1,259.8	773.6	1,120.8	1,070.6	50.22	22.320		
3,400.0	2,916.1	3,145.7	2,614.2	27.8	29.2	102.38	1,323.6	812.8	1,159.9	1,107.7	52.19	22.226		
3,500.0	3,008.5	3,274.7	2,722.1	28.5	30.4	102.59	1,383.8	849.9	1,195.3	1,141.3	54.01	22.133		
3,600.0	3,102.9	3,408.3	2,838.6	29.0	31.6	102.75	1,439.6	884.2	1,226.8	1,171.2	55.64	22.047		
3,700.0	3,198.8	3,546.4	2,963.4	29.5	32.6	102.86	1,489.7	915.0	1,254.1	1,197.1	57.07	21.975		
3,800.0	3,296.0	3,688.6	3,096.1	29.9	33.5	102.93	1,533.2	941.8	1,277.0	1,218.7	58.29	21.910		
3,900.0	3,394.4	3,834.3	3,235.6	30.2	34.2	102.95	1,568.9	963.7	1,295.3	1,236.0	59.25	21.862		
4,000.0	3,493.5	3,982.9	3,380.7	30.4	34.7	102.95	1,595.8	980.3	1,308.7	1,248.8	59.96	21.827		
4,100.0	3,593.2	4,133.6	3,530.0	30.5	35.0	102.90	1,613.3	991.1	1,317.2	1,256.8	60.39	21.810		
4,200.0	3,693.2	4,285.7	3,681.8	30.6	35.1	91.79	1,620.7	995.6	1,320.6	1,260.0	60.56	21.804		
4,300.0	3,793.2	4,397.1	3,793.2	30.6	35.2	91.78	1,621.0	995.8	1,320.7	1,260.0	60.66	21.773		
4,400.0	3,893.2	4,497.1	3,893.2	30.7	35.2	91.78	1,621.0	995.8	1,320.7	1,259.9	60.74	21.742		
4,500.0	3,993.2	4,597.1	3,993.2	30.7	35.3	91.78	1,621.0	995.8	1,320.7	1,259.8	60.83	21.710		
4,600.0	4,093.2	4,697.1	4,093.2	30.8	35.3	91.78	1,621.0	995.8	1,320.7	1,259.7	60.92	21.677		
4,700.0	4,193.2	4,797.1	4,193.2	30.8	35.3	91.78	1,621.0	995.8	1,320.7	1,259.7	61.02	21.644		
4,800.0	4,293.2	4,897.1	4,293.2	30.9	35.4	91.78	1,621.0	995.8	1,320.7	1,259.6	61.11	21.610		
4,900.0	4,393.2	4,997.1	4,393.2	30.9	35.4	91.78	1,621.0	995.8	1,320.7	1,259.5	61.21	21.576		
5,000.0	4,493.2	5,097.1	4,493.2	31.0	35.5	91.78	1,621.0	995.8	1,320.7	1,259.4	61.31	21.541		
5,100.0	4,593.2	5,197.1	4,593.2	31.0	35.5	91.78	1,621.0	995.8	1,320.7	1,259.3	61.41	21.506		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13A-13 - DD - Plan #3													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		
5,200.0	4,693.2	5,297.1	4,693.2	31.1	35.6	91.78	1,621.0	995.8	1,320.7	1,259.2	61.51	21.470		
5,300.0	4,793.2	5,397.1	4,793.2	31.1	35.6	91.78	1,621.0	995.8	1,320.7	1,259.1	61.62	21.434		
5,400.0	4,893.2	5,497.1	4,893.2	31.2	35.7	91.78	1,621.0	995.8	1,320.7	1,259.0	61.72	21.397		
5,500.0	4,993.2	5,597.1	4,993.2	31.2	35.7	91.78	1,621.0	995.8	1,320.7	1,258.8	61.83	21.360		
5,600.0	5,093.2	5,697.1	5,093.2	31.3	35.8	91.78	1,621.0	995.8	1,320.7	1,258.7	61.94	21.322		
5,700.0	5,193.2	5,797.1	5,193.2	31.3	35.8	91.78	1,621.0	995.8	1,320.7	1,258.6	62.05	21.283		
5,800.0	5,293.2	5,897.1	5,293.2	31.4	35.9	91.78	1,621.0	995.8	1,320.7	1,258.5	62.17	21.245		
5,900.0	5,393.2	5,997.1	5,393.2	31.4	35.9	91.78	1,621.0	995.8	1,320.7	1,258.4	62.28	21.205		
6,000.0	5,493.2	6,097.1	5,493.2	31.5	36.0	91.78	1,621.0	995.8	1,320.7	1,258.3	62.40	21.166		
6,100.0	5,593.2	6,197.1	5,593.2	31.5	36.0	91.78	1,621.0	995.8	1,320.7	1,258.2	62.52	21.126		
6,200.0	5,693.2	6,297.1	5,693.2	31.6	36.1	91.78	1,621.0	995.8	1,320.7	1,258.0	62.64	21.085		
6,300.0	5,793.2	6,397.1	5,793.2	31.7	36.1	91.78	1,621.0	995.8	1,320.7	1,257.9	62.76	21.044		
6,400.0	5,893.2	6,497.1	5,893.2	31.7	36.2	91.78	1,621.0	995.8	1,320.7	1,257.8	62.88	21.003		
6,421.8	5,915.0	6,518.9	5,915.0	31.7	36.2	91.78	1,621.0	995.8	1,320.7	1,257.8	62.91	20.994		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13B-13 - DD - Plan #3													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	27.54	7.1	3.7	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	27.54	7.1	3.7	8.0	7.7	0.26	31.383		
200.0	200.0	200.0	200.0	0.3	0.3	27.54	7.1	3.7	8.0	7.4	0.60	13.248		
233.4	233.4	233.4	233.4	0.4	0.4	27.54	7.1	3.7	8.0	7.3	0.72	11.105 CC, ES		
300.0	300.0	299.8	299.8	0.5	0.5	28.30	7.6	4.1	8.6	7.7	0.95	9.074 SF		
400.0	400.0	399.2	399.0	0.7	0.7	51.29	11.7	7.3	12.0	10.7	1.30	9.217		
500.0	499.6	498.1	497.4	0.9	0.9	68.94	19.8	13.6	18.4	16.7	1.70	10.837		
600.0	598.8	596.3	594.4	1.1	1.2	82.03	31.8	22.9	29.1	26.9	2.20	13.203		
700.0	697.1	693.6	689.6	1.5	1.6	90.16	47.6	35.1	44.3	41.4	2.86	15.499		
800.0	794.3	789.6	782.5	1.9	2.1	95.16	66.9	50.1	63.7	60.1	3.66	17.417		
900.0	890.2	884.3	872.7	2.4	2.6	98.31	89.6	67.6	87.3	82.7	4.61	18.941		
1,000.0	984.4	977.4	959.9	3.0	3.2	100.33	115.3	87.5	114.9	109.2	5.70	20.145		
1,100.0	1,076.8	1,068.8	1,043.9	3.7	3.9	101.63	143.7	109.6	146.2	139.2	6.92	21.111		
1,200.0	1,167.1	1,158.3	1,124.4	4.5	4.6	102.42	174.6	133.6	181.0	172.8	8.27	21.903		
1,300.0	1,254.9	1,245.9	1,201.4	5.4	5.4	102.84	207.7	159.2	219.3	209.6	9.72	22.567		
1,400.0	1,340.2	1,331.5	1,274.6	6.3	6.2	102.97	242.7	186.4	260.9	249.6	11.27	23.139		
1,500.0	1,422.6	1,415.1	1,344.2	7.4	7.1	102.88	279.4	214.8	305.5	292.6	12.92	23.647		
1,600.0	1,501.9	1,499.0	1,412.0	8.5	8.0	102.68	318.4	245.0	352.9	338.3	14.66	24.074		
1,700.0	1,578.3	1,585.7	1,481.7	9.6	9.0	103.55	359.1	276.6	401.8	385.3	16.50	24.350		
1,800.0	1,654.3	1,672.2	1,551.3	10.7	10.0	104.99	399.8	308.1	451.0	432.6	18.38	24.544		
1,900.0	1,730.3	1,758.7	1,620.8	11.9	10.9	106.15	440.5	339.7	500.4	480.2	20.25	24.716		
2,000.0	1,806.3	1,845.3	1,690.4	13.0	11.9	107.10	481.2	371.2	550.0	527.8	22.12	24.867		
2,100.0	1,882.2	1,931.8	1,759.9	14.2	12.8	107.89	521.8	402.7	599.6	575.6	23.98	25.001		
2,200.0	1,958.2	2,018.4	1,829.5	15.3	13.8	108.57	562.5	434.3	649.3	623.4	25.85	25.120		
2,300.0	2,034.2	2,104.9	1,899.1	16.5	14.8	109.15	603.2	465.8	699.1	671.3	27.71	25.226		
2,400.0	2,110.2	2,191.4	1,968.6	17.6	15.7	109.65	643.9	497.4	748.9	719.3	29.57	25.322		
2,500.0	2,186.2	2,278.0	2,038.2	18.8	16.7	110.09	684.6	528.9	798.7	767.3	31.44	25.408		
2,600.0	2,262.1	2,364.5	2,107.7	19.9	17.6	110.48	725.3	560.4	848.6	815.3	33.30	25.485		
2,700.0	2,338.1	2,451.0	2,177.3	21.1	18.6	110.82	765.9	592.0	898.5	863.3	35.16	25.556		
2,800.0	2,414.1	2,537.6	2,246.9	22.3	19.6	111.13	806.6	623.5	948.4	911.4	37.02	25.620		
2,900.0	2,490.6	2,624.3	2,316.6	23.4	20.5	112.24	847.4	655.1	998.1	959.2	38.93	25.642		
3,000.0	2,570.0	2,711.9	2,387.0	24.4	21.5	113.69	888.6	687.1	1,046.3	1,005.4	40.83	25.628		
3,100.0	2,652.5	2,800.4	2,458.1	25.4	22.5	114.77	930.2	719.3	1,092.6	1,049.9	42.69	25.595		
3,200.0	2,737.8	2,889.4	2,529.6	26.3	23.5	115.54	972.0	751.7	1,137.0	1,092.5	44.51	25.545		
3,300.0	2,825.8	2,988.6	2,609.8	27.1	24.6	115.96	1,018.3	787.6	1,179.3	1,132.9	46.36	25.438		
3,400.0	2,916.1	3,103.0	2,705.4	27.8	25.7	116.19	1,067.8	826.0	1,218.3	1,170.1	48.19	25.280		
3,500.0	3,008.5	3,221.4	2,808.2	28.5	26.7	116.38	1,114.3	862.0	1,253.4	1,203.5	49.87	25.135		
3,600.0	3,102.9	3,343.7	2,918.0	29.0	27.7	116.52	1,157.0	895.1	1,284.4	1,233.1	51.38	25.001		
3,700.0	3,198.8	3,469.8	3,034.4	29.5	28.5	116.63	1,195.0	924.6	1,311.2	1,258.5	52.70	24.880		
3,800.0	3,296.0	3,599.1	3,156.9	29.9	29.2	116.70	1,227.6	949.9	1,333.5	1,279.6	53.82	24.775		
3,900.0	3,394.4	3,731.3	3,284.8	30.2	29.8	116.74	1,254.1	970.4	1,351.0	1,296.3	54.70	24.697		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13C-13 - DD - Plan #3													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	59.56	9.6	16.3	18.9					
100.0	100.0	99.8	99.8	0.1	0.1	59.56	9.6	16.3	18.9	18.6	0.25	74.177		
200.0	200.0	199.8	199.8	0.3	0.3	59.56	9.6	16.3	18.9	18.3	0.60	31.276 CC, ES		
300.0	300.0	298.8	298.7	0.5	0.5	57.96	11.3	18.1	21.4	20.4	0.95	22.467		
400.0	400.0	397.3	396.9	0.7	0.7	70.51	16.6	23.6	28.0	26.7	1.31	21.470 SF		
500.0	499.6	495.1	493.9	0.9	1.0	76.72	25.4	32.6	38.2	36.5	1.70	22.403		
600.0	598.8	591.8	589.1	1.1	1.3	83.38	37.4	45.1	52.5	50.3	2.20	23.848		
700.0	697.1	687.2	681.9	1.5	1.7	88.94	52.5	60.7	71.3	68.4	2.83	25.170		
800.0	794.3	780.9	771.9	1.9	2.2	93.15	70.4	79.3	94.7	91.1	3.61	26.221		
900.0	890.2	872.7	858.8	2.4	2.8	96.23	91.0	100.6	122.6	118.0	4.53	27.051		
1,000.0	984.4	962.3	942.3	3.0	3.4	98.43	113.8	124.3	154.8	149.2	5.58	27.732		
1,100.0	1,076.8	1,049.8	1,022.0	3.7	4.1	99.96	138.7	150.1	191.2	184.4	6.75	28.318		
1,200.0	1,167.1	1,134.8	1,097.9	4.5	4.8	100.97	165.3	177.6	231.5	223.5	8.02	28.876		
1,300.0	1,254.9	1,223.1	1,175.5	5.4	5.6	101.95	194.5	207.9	274.8	265.4	9.40	29.227		
1,400.0	1,340.2	1,311.5	1,253.2	6.3	6.4	103.24	223.9	238.4	319.6	308.7	10.87	29.388		
1,500.0	1,422.6	1,398.6	1,329.7	7.4	7.2	104.64	252.8	268.3	366.1	353.7	12.41	29.503		
1,600.0	1,501.9	1,484.1	1,404.8	8.5	7.9	106.05	281.2	297.7	414.6	400.6	13.99	29.640		
1,700.0	1,578.3	1,568.0	1,478.5	9.6	8.7	108.17	309.1	326.6	465.1	449.5	15.61	29.802		
1,800.0	1,654.3	1,651.7	1,551.9	10.7	9.4	110.66	336.8	355.4	516.6	499.4	17.23	29.974		
1,900.0	1,730.3	1,735.3	1,625.4	11.9	10.2	112.72	364.6	384.1	568.7	549.9	18.84	30.191		
2,000.0	1,806.3	1,818.9	1,698.8	13.0	10.9	114.44	392.3	412.9	621.3	600.9	20.42	30.428		
2,100.0	1,882.2	1,902.6	1,772.3	14.2	11.7	115.90	420.1	441.7	674.3	652.3	21.99	30.668		
2,200.0	1,958.2	1,986.2	1,845.8	15.3	12.4	117.15	447.9	470.5	727.5	704.0	23.54	30.905		
2,300.0	2,034.2	2,069.8	1,919.2	16.5	13.2	118.24	475.6	499.2	780.9	755.9	25.08	31.134		
2,400.0	2,110.2	2,153.5	1,992.7	17.6	13.9	119.19	503.4	528.0	834.6	808.0	26.62	31.353		
2,500.0	2,186.2	2,237.1	2,066.1	18.8	14.7	120.02	531.2	556.8	888.3	860.2	28.15	31.560		
2,600.0	2,262.1	2,320.7	2,139.6	19.9	15.4	120.76	558.9	585.5	942.2	912.6	29.67	31.756		
2,700.0	2,338.1	2,404.4	2,213.1	21.1	16.2	121.43	586.7	614.3	996.2	965.0	31.19	31.940		
2,800.0	2,414.1	2,488.0	2,286.5	22.3	16.9	122.02	614.5	643.1	1,050.3	1,017.6	32.71	32.114		
2,900.0	2,490.6	2,571.9	2,360.2	23.4	17.7	123.40	642.3	671.9	1,104.1	1,069.9	34.23	32.257		
3,000.0	2,570.0	2,657.5	2,435.4	24.4	18.4	125.12	670.7	701.4	1,155.7	1,120.0	35.74	32.339		
3,100.0	2,652.5	2,744.6	2,511.9	25.4	19.2	126.45	699.7	731.3	1,204.7	1,167.5	37.24	32.351		
3,200.0	2,737.8	2,833.1	2,589.7	26.3	20.0	127.46	729.0	761.8	1,251.0	1,212.3	38.74	32.297		
3,300.0	2,825.8	2,922.7	2,668.4	27.1	20.8	128.17	758.8	792.6	1,294.5	1,254.3	40.22	32.185		
3,400.0	2,916.1	3,013.2	2,747.8	27.8	21.6	128.62	788.8	823.7	1,335.2	1,293.5	41.69	32.026		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13D-13 - DD - Plan #3														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
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	78.89	2.5	12.6	12.8						
100.0	100.0	100.0	100.0	0.1	0.1	78.89	2.5	12.6	12.8	12.6	0.25	50.336			
200.0	200.0	200.0	200.0	0.3	0.3	78.89	2.5	12.6	12.8	12.2	0.60	21.224			
300.0	300.0	300.0	300.0	0.5	0.5	78.89	2.5	12.6	12.8	11.9	0.95	13.447 CC, ES			
400.0	400.0	399.3	399.2	0.7	0.7	96.09	3.8	14.7	15.3	14.0	1.31	11.712 SF			
500.0	499.6	498.1	497.7	0.9	0.9	106.16	8.0	21.2	23.4	21.7	1.70	13.753			
600.0	598.8	595.8	594.7	1.1	1.1	112.83	14.7	31.9	37.6	35.4	2.18	17.253			
700.0	697.1	692.1	689.4	1.5	1.5	116.44	23.9	46.5	57.6	54.8	2.75	20.909			
800.0	794.3	786.5	781.3	1.9	1.9	118.32	35.4	64.6	83.2	79.8	3.44	24.159			
900.0	890.2	878.7	869.9	2.4	2.3	119.24	49.0	86.1	114.2	110.0	4.25	26.870			
1,000.0	984.4	968.2	954.7	3.0	2.9	119.59	64.4	110.3	150.4	145.2	5.17	29.092			
1,100.0	1,076.8	1,054.9	1,035.4	3.7	3.5	119.57	81.3	137.0	191.5	185.3	6.19	30.922			
1,200.0	1,167.1	1,139.3	1,112.5	4.5	4.1	119.28	99.5	165.9	237.2	229.9	7.30	32.511			
1,300.0	1,254.9	1,226.3	1,191.5	5.4	4.8	119.32	119.1	196.7	286.1	277.6	8.49	33.716			
1,400.0	1,340.2	1,311.6	1,268.9	6.3	5.5	119.71	138.3	227.0	337.4	327.7	9.72	34.723			
1,500.0	1,422.6	1,395.1	1,344.6	7.4	6.1	120.24	157.0	256.7	391.2	380.3	10.98	35.630			
1,600.0	1,501.9	1,476.3	1,418.4	8.5	6.7	120.79	175.3	285.5	447.7	435.5	12.27	36.493			
1,700.0	1,578.3	1,555.5	1,490.3	9.6	7.4	122.15	193.1	313.6	506.7	493.1	13.57	37.336			
1,800.0	1,654.3	1,634.4	1,561.8	10.7	8.0	124.07	210.8	341.6	566.4	551.5	14.87	38.077			
1,900.0	1,730.3	1,713.3	1,633.4	11.9	8.6	125.64	228.6	369.6	626.4	610.2	16.17	38.750			
2,000.0	1,806.3	1,792.1	1,705.0	13.0	9.2	126.94	246.3	397.6	686.7	669.3	17.45	39.358			
2,100.0	1,882.2	1,871.0	1,776.5	14.2	9.9	128.03	264.0	425.6	747.2	728.5	18.72	39.909			
2,200.0	1,958.2	1,949.9	1,848.1	15.3	10.5	128.96	281.7	453.6	807.8	787.8	19.99	40.407			
2,300.0	2,034.2	2,028.7	1,919.7	16.5	11.1	129.76	299.5	481.6	868.6	847.3	21.26	40.860			
2,400.0	2,110.2	2,107.6	1,991.2	17.6	11.7	130.46	317.2	509.6	929.4	906.9	22.52	41.273			
2,500.0	2,186.2	2,186.5	2,062.8	18.8	12.4	131.08	334.9	537.6	990.4	966.6	23.78	41.649			
2,600.0	2,262.1	2,265.3	2,134.4	19.9	13.0	131.62	352.7	565.6	1,051.4	1,026.3	25.04	41.994			
2,700.0	2,338.1	2,344.2	2,205.9	21.1	13.6	132.10	370.4	593.6	1,112.4	1,086.1	26.29	42.311			
2,800.0	2,414.1	2,423.1	2,277.5	22.3	14.2	132.54	388.1	621.6	1,173.5	1,146.0	27.55	42.603			
2,900.0	2,490.6	2,502.3	2,349.4	23.4	14.9	133.81	405.9	649.7	1,234.2	1,205.4	28.78	42.886			
3,000.0	2,570.0	2,583.7	2,423.2	24.4	15.5	135.47	424.2	678.6	1,292.3	1,262.3	30.00	43.081			
3,100.0	2,652.5	2,667.2	2,499.0	25.4	16.2	136.78	443.0	708.3	1,347.3	1,316.1	31.23	43.140			

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14A-13 - DD - Plan #3													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			
0.0	0.0	0.0	0.0	0.0	0.0	117.53	-4.6	8.9	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	117.53	-4.6	8.9	10.0	9.7	0.25	39.300		
200.0	200.0	200.0	200.0	0.3	0.3	117.53	-4.6	8.9	10.0	9.4	0.60	16.571		
300.0	300.0	300.0	300.0	0.5	0.5	117.53	-4.6	8.9	10.0	9.0	0.95	10.499 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	138.50	-4.6	8.9	11.8	10.5	1.30	9.060 SF		
500.0	499.6	499.2	499.2	0.9	0.8	147.49	-3.9	11.3	19.4	17.8	1.66	11.691		
600.0	598.8	597.6	597.2	1.1	1.0	147.39	-1.6	18.6	33.9	31.8	2.06	16.473		
700.0	697.1	694.3	693.1	1.5	1.3	145.30	2.0	30.5	54.9	52.4	2.52	21.807		
800.0	794.3	788.8	786.1	1.9	1.6	143.16	6.9	46.6	82.4	79.4	3.07	26.886		
900.0	890.2	880.4	875.4	2.4	2.0	141.27	13.0	66.4	116.3	112.6	3.71	31.347		
1,000.0	984.4	968.9	960.5	3.0	2.4	139.61	20.0	89.3	156.2	151.7	4.45	35.122		
1,100.0	1,076.8	1,053.6	1,040.9	3.7	2.9	138.08	27.8	114.8	201.9	196.6	5.27	38.284		
1,200.0	1,167.1	1,134.5	1,116.5	4.5	3.4	136.63	36.2	142.3	253.0	246.8	6.17	41.006		
1,300.0	1,254.9	1,215.8	1,191.6	5.4	4.0	135.36	45.4	172.2	308.7	301.5	7.14	43.245		
1,400.0	1,340.2	1,296.6	1,266.1	6.3	4.6	134.58	54.5	202.0	367.5	359.4	8.14	45.144		
1,500.0	1,422.6	1,374.8	1,338.3	7.4	5.1	134.05	63.3	230.9	429.4	420.2	9.17	46.834		
1,600.0	1,501.9	1,450.5	1,408.0	8.5	5.7	133.64	71.9	258.8	494.2	484.0	10.22	48.374		
1,700.0	1,578.3	1,523.5	1,475.4	9.6	6.2	134.15	80.1	285.8	561.7	550.4	11.27	49.848		
1,800.0	1,654.3	1,596.2	1,542.5	10.7	6.7	135.42	88.4	312.7	629.6	617.3	12.31	51.136		
1,900.0	1,730.3	1,668.9	1,609.5	11.9	7.3	136.45	96.6	339.5	697.7	684.4	13.36	52.240		
2,000.0	1,806.3	1,741.6	1,676.6	13.0	7.8	137.30	104.8	366.4	766.0	751.6	14.40	53.196		
2,100.0	1,882.2	1,814.3	1,743.6	14.2	8.3	138.01	113.0	393.2	834.2	818.8	15.44	54.032		
2,200.0	1,958.2	1,887.0	1,810.7	15.3	8.9	138.61	121.2	420.1	902.6	886.1	16.48	54.768		
2,300.0	2,034.2	1,959.7	1,877.7	16.5	9.4	139.13	129.4	446.9	971.0	953.5	17.52	55.421		
2,400.0	2,110.2	2,032.4	1,944.8	17.6	9.9	139.58	137.7	473.8	1,039.4	1,020.8	18.56	56.004		
2,500.0	2,186.2	2,105.1	2,011.9	18.8	10.5	139.97	145.9	500.6	1,107.9	1,088.3	19.60	56.528		
2,600.0	2,262.1	2,177.8	2,078.9	19.9	11.0	140.32	154.1	527.5	1,176.3	1,155.7	20.64	57.001		
2,700.0	2,338.1	2,250.5	2,146.0	21.1	11.5	140.63	162.3	554.3	1,244.8	1,223.2	21.68	57.430		
2,800.0	2,414.1	2,323.2	2,213.0	22.3	12.1	140.91	170.5	581.2	1,313.4	1,290.6	22.71	57.821		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14B-13 - DD - Plan #3													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	156.18	-11.7	5.2	12.8					
100.0	100.0	100.0	100.0	0.1	0.1	156.18	-11.7	5.2	12.8	12.5	0.25	50.259		
200.0	200.0	200.0	200.0	0.3	0.3	156.18	-11.7	5.2	12.8	12.2	0.60	21.200		
300.0	300.0	300.0	300.0	0.5	0.5	156.18	-11.7	5.2	12.8	11.8	0.95	13.433 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	169.37	-11.7	5.2	15.4	14.1	1.30	11.809 SF		
500.0	499.6	499.6	499.6	0.9	0.8	172.93	-11.7	5.2	23.1	21.5	1.65	14.045		
600.0	598.8	598.5	598.5	1.1	1.0	174.50	-11.7	5.8	36.3	34.3	1.99	18.269		
700.0	697.1	695.7	695.6	1.5	1.2	171.27	-11.8	10.7	56.0	53.7	2.33	24.002		
800.0	794.3	790.6	790.0	1.9	1.4	167.07	-12.0	20.3	82.7	80.0	2.71	30.491		
900.0	890.2	882.4	880.7	2.4	1.6	163.31	-12.2	34.0	116.6	113.4	3.15	37.041		
1,000.0	984.4	970.4	967.0	3.0	1.9	160.16	-12.5	51.2	157.4	153.7	3.65	43.168		
1,100.0	1,076.8	1,054.1	1,048.2	3.7	2.3	157.52	-12.8	71.3	204.9	200.7	4.21	48.649		
1,200.0	1,167.1	1,132.9	1,123.9	4.5	2.7	155.24	-13.2	93.4	258.7	253.9	4.84	53.444		
1,300.0	1,254.9	1,206.8	1,193.9	5.4	3.1	153.19	-13.6	117.0	318.3	312.8	5.53	57.605		
1,400.0	1,340.2	1,275.5	1,258.1	6.3	3.5	151.25	-14.0	141.3	383.3	377.1	6.28	61.066		
1,500.0	1,422.6	1,339.0	1,316.7	7.4	4.0	149.35	-14.4	165.8	453.2	446.1	7.07	64.081		
1,600.0	1,501.9	1,406.6	1,378.6	8.5	4.5	147.54	-14.8	192.9	526.9	518.9	7.95	66.317		
1,700.0	1,578.3	1,471.2	1,437.9	9.6	4.9	146.84	-15.3	218.8	603.2	594.4	8.81	68.451		
1,800.0	1,654.3	1,535.4	1,496.6	10.7	5.4	147.11	-15.7	244.6	679.8	670.2	9.66	70.382		
1,900.0	1,730.3	1,599.6	1,555.4	11.9	5.9	147.32	-16.1	270.3	756.5	746.0	10.51	71.965		
2,000.0	1,806.3	1,663.7	1,614.2	13.0	6.4	147.50	-16.5	296.0	833.2	821.8	11.37	73.276		
2,100.0	1,882.2	1,727.9	1,673.0	14.2	6.9	147.64	-17.0	321.8	909.8	897.6	12.23	74.383		
2,200.0	1,958.2	1,792.1	1,731.8	15.3	7.3	147.77	-17.4	347.5	986.5	973.4	13.10	75.328		
2,300.0	2,034.2	1,856.3	1,790.6	16.5	7.8	147.87	-17.8	373.3	1,063.2	1,049.2	13.96	76.141		
2,400.0	2,110.2	1,920.5	1,849.4	17.6	8.3	147.96	-18.2	399.0	1,139.9	1,125.0	14.83	76.850		
2,500.0	2,186.2	1,984.6	1,908.2	18.8	8.8	148.04	-18.7	424.7	1,216.6	1,200.9	15.70	77.472		
2,600.0	2,262.1	2,048.8	1,967.0	19.9	9.3	148.12	-19.1	450.5	1,293.2	1,276.7	16.58	78.022		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14C-13 - DD - Plan #3													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	175.23	-18.3	1.5	18.3					
100.0	100.0	100.0	100.0	0.1	0.1	175.23	-18.3	1.5	18.3	18.1	0.25	71.976		
200.0	200.0	200.0	200.0	0.3	0.3	175.23	-18.3	1.5	18.3	17.7	0.60	30.373		
300.0	300.0	300.0	300.0	0.5	0.5	175.23	-18.3	1.5	18.3	17.4	0.95	19.247 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	-174.50	-18.3	1.5	20.9	19.6	1.30	16.101 SF		
500.0	499.6	499.6	499.6	0.9	0.8	-175.98	-18.3	1.5	28.8	27.1	1.65	17.479		
600.0	598.8	597.7	597.7	1.1	1.0	179.79	-19.1	3.9	43.0	41.0	1.99	21.656		
700.0	697.1	693.5	693.2	1.5	1.2	174.10	-21.5	10.8	65.3	63.0	2.33	27.977		
800.0	794.3	786.1	785.0	1.9	1.4	169.43	-25.3	21.7	95.9	93.2	2.71	35.447		
900.0	890.2	874.5	872.1	2.4	1.7	165.90	-30.2	36.1	134.6	131.5	3.11	43.303		
1,000.0	984.4	958.1	953.7	3.0	2.0	163.20	-36.1	53.2	181.0	177.4	3.55	51.047		
1,100.0	1,076.8	1,036.3	1,029.2	3.7	2.4	161.03	-42.7	72.2	234.4	230.4	4.01	58.406		
1,200.0	1,167.1	1,108.7	1,098.4	4.5	2.8	159.17	-49.7	92.4	294.5	290.0	4.51	65.245		
1,300.0	1,254.9	1,175.2	1,161.3	5.4	3.2	157.49	-56.8	113.2	360.4	355.4	5.05	71.323		
1,400.0	1,340.2	1,235.8	1,217.8	6.3	3.6	155.86	-64.0	133.9	431.8	426.1	5.63	76.691		
1,500.0	1,422.6	1,290.5	1,268.2	7.4	4.0	154.19	-70.9	154.0	507.9	501.6	6.25	81.296		
1,600.0	1,501.9	1,339.6	1,312.8	8.5	4.3	152.40	-77.5	173.2	588.2	581.2	6.92	84.964		
1,700.0	1,578.3	1,395.0	1,362.9	9.6	4.8	151.58	-85.2	195.5	671.4	663.7	7.63	87.938		
1,800.0	1,654.3	1,449.9	1,412.6	10.7	5.2	151.83	-92.8	217.5	754.9	746.6	8.31	90.802		
1,900.0	1,730.3	1,504.8	1,462.3	11.9	5.6	152.03	-100.5	239.6	838.5	829.5	9.00	93.207		
2,000.0	1,806.3	1,559.6	1,512.0	13.0	6.0	152.20	-108.1	261.7	922.1	912.4	9.68	95.219		
2,100.0	1,882.2	1,614.5	1,561.6	14.2	6.5	152.34	-115.7	283.7	1,005.7	995.3	10.37	96.946		
2,200.0	1,958.2	1,669.4	1,611.3	15.3	6.9	152.46	-123.3	305.8	1,089.2	1,078.2	11.07	98.429		
2,300.0	2,034.2	1,724.3	1,661.0	16.5	7.4	152.56	-130.9	327.9	1,172.8	1,161.1	11.76	99.722		
2,400.0	2,110.2	1,779.2	1,710.7	17.6	7.8	152.64	-138.6	350.0	1,256.4	1,244.0	12.46	100.855		
2,500.0	2,186.2	1,834.1	1,760.3	18.8	8.2	152.72	-146.2	372.0	1,340.0	1,326.8	13.16	101.856		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14D-13 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-175.14	-25.9	-2.2	26.0					
100.0	100.0	100.0	100.0	0.1	0.1	-175.14	-25.9	-2.2	26.0	25.7	0.26	101.918		
200.0	200.0	200.0	200.0	0.3	0.3	-175.14	-25.9	-2.2	26.0	25.4	0.60	43.025		
300.0	300.0	300.0	300.0	0.5	0.5	-175.14	-25.9	-2.2	26.0	25.0	0.95	27.268 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	-165.52	-25.9	-2.2	28.5	27.2	1.30	21.910 SF		
500.0	499.6	498.5	498.5	0.9	0.8	-171.84	-27.3	-0.1	37.6	36.0	1.65	22.827		
600.0	598.8	595.2	594.8	1.1	1.0	179.95	-31.3	6.2	55.6	53.6	2.00	27.836		
700.0	697.1	688.6	687.5	1.5	1.3	173.77	-37.7	16.1	82.9	80.5	2.35	35.232		
800.0	794.3	777.8	775.3	1.9	1.6	169.60	-46.2	29.0	119.1	116.4	2.72	43.842		
900.0	890.2	861.9	857.4	2.4	1.9	166.73	-56.1	44.4	163.8	160.7	3.09	52.933		
1,000.0	984.4	940.4	933.2	3.0	2.3	164.62	-67.2	61.5	216.2	212.7	3.48	62.080		
1,100.0	1,076.8	1,012.7	1,002.2	3.7	2.7	162.94	-78.9	79.5	275.7	271.8	3.88	71.030		
1,200.0	1,167.1	1,078.7	1,064.5	4.5	3.1	161.49	-90.8	97.9	341.5	337.2	4.30	79.450		
1,300.0	1,254.9	1,138.4	1,120.2	5.4	3.5	160.12	-102.6	116.1	413.0	408.3	4.73	87.223		
1,400.0	1,340.2	1,200.0	1,176.8	6.3	3.9	158.72	-115.8	136.3	489.6	484.4	5.21	93.905		
1,500.0	1,422.6	1,239.2	1,212.4	7.4	4.2	157.22	-124.6	150.0	570.5	564.8	5.70	100.022		
1,600.0	1,501.9	1,280.7	1,249.8	8.5	4.6	155.51	-134.5	165.1	655.2	649.0	6.27	104.438		
1,700.0	1,578.3	1,317.0	1,282.2	9.6	4.9	154.65	-143.4	179.0	743.0	736.2	6.86	108.236		
1,800.0	1,654.3	1,354.0	1,314.9	10.7	5.2	154.91	-152.9	193.6	831.9	824.4	7.41	112.199		
1,900.0	1,730.3	1,399.6	1,355.0	11.9	5.6	155.16	-164.6	211.6	920.9	912.9	7.98	115.446		
2,000.0	1,806.3	1,445.1	1,395.1	13.0	6.0	155.37	-176.4	229.7	1,009.9	1,001.4	8.54	118.207		
2,100.0	1,882.2	1,490.6	1,435.1	14.2	6.4	155.54	-188.1	247.8	1,098.9	1,089.8	9.11	120.628		
2,200.0	1,958.2	1,536.1	1,475.2	15.3	6.8	155.69	-199.8	265.9	1,188.0	1,178.3	9.68	122.727		
2,300.0	2,034.2	1,581.6	1,515.3	16.5	7.2	155.82	-211.6	284.0	1,277.0	1,266.7	10.25	124.584		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43B-14 - DD - Plan #3													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	-152.43	-7.1	-3.7	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	-152.43	-7.1	-3.7	8.0	7.7	0.26	31.312		
200.0	200.0	200.0	200.0	0.3	0.3	-152.43	-7.1	-3.7	8.0	7.4	0.60	13.228		
300.0	300.0	300.0	300.0	0.5	0.5	-152.43	-7.1	-3.7	8.0	7.0	0.95	8.385 CC, ES		
400.0	400.0	400.2	400.2	0.7	0.7	-148.58	-6.4	-3.9	9.6	8.3	1.30	7.377		
500.0	499.6	500.6	500.5	0.9	0.8	-154.25	-1.3	-5.1	12.0	10.3	1.66	7.225		
600.0	598.8	601.2	600.5	1.1	1.1	-157.25	9.0	-7.5	14.5	12.5	2.03	7.151		
700.0	697.1	701.9	700.0	1.5	1.4	-158.71	24.4	-11.1	17.1	14.7	2.42	7.075		
800.0	794.3	802.8	798.6	1.9	1.8	-159.20	44.9	-15.9	19.7	16.9	2.83	6.964		
900.0	890.2	903.8	896.1	2.4	2.2	-159.07	70.5	-21.9	22.4	19.1	3.29	6.798		
1,000.0	984.4	1,004.9	992.2	3.0	2.8	-158.50	101.2	-29.1	25.0	21.2	3.81	6.570		
1,100.0	1,076.8	1,106.2	1,086.6	3.7	3.5	-157.63	136.8	-37.4	27.7	23.3	4.42	6.280		
1,200.0	1,167.1	1,207.5	1,179.0	4.5	4.2	-156.54	177.2	-46.9	30.4	25.3	5.13	5.938		
1,300.0	1,254.9	1,309.0	1,269.2	5.4	5.1	-155.28	222.4	-57.5	33.2	27.2	5.96	5.560		
1,400.0	1,340.2	1,410.6	1,356.9	6.3	6.0	-153.90	272.3	-69.2	35.9	29.0	6.95	5.168 SF		
1,500.0	1,422.6	1,510.4	1,441.8	7.4	6.9	-154.25	323.6	-81.2	41.0	33.3	7.77	5.284		
1,600.0	1,501.9	1,609.9	1,526.3	8.5	7.8	-156.99	374.6	-93.2	50.9	42.8	8.14	6.256		
1,700.0	1,578.3	1,708.8	1,610.4	9.6	8.7	-160.32	425.4	-105.1	65.2	56.9	8.27	7.882		
1,800.0	1,654.3	1,807.6	1,694.3	10.7	9.7	-162.65	476.1	-117.0	80.3	71.8	8.50	9.444		
1,900.0	1,730.3	1,906.4	1,778.3	11.9	10.6	-164.24	526.8	-128.9	95.5	86.7	8.81	10.838		
2,000.0	1,806.3	2,005.3	1,862.3	13.0	11.5	-165.39	577.5	-140.8	110.7	101.5	9.16	12.083		
2,100.0	1,882.2	2,104.1	1,946.3	14.2	12.4	-166.27	628.2	-152.7	126.0	116.4	9.54	13.200		
2,200.0	1,958.2	2,202.9	2,030.2	15.3	13.4	-166.95	678.9	-164.6	141.3	131.3	9.94	14.206		
2,300.0	2,034.2	2,301.7	2,114.2	16.5	14.3	-167.50	729.6	-176.5	156.6	146.2	10.36	15.117		
2,400.0	2,110.2	2,400.5	2,198.2	17.6	15.2	-167.96	780.3	-188.3	171.9	161.1	10.78	15.944		
2,500.0	2,186.2	2,499.3	2,282.1	18.8	16.1	-168.34	831.0	-200.2	187.2	176.0	11.21	16.699		
2,600.0	2,262.1	2,598.1	2,366.1	19.9	17.1	-168.66	881.7	-212.1	202.5	190.9	11.65	17.391		
2,700.0	2,338.1	2,696.9	2,450.1	21.1	18.0	-168.94	932.4	-224.0	217.9	205.8	12.09	18.027		
2,800.0	2,414.1	2,795.8	2,534.1	22.3	18.9	-169.18	983.1	-235.9	233.2	220.7	12.53	18.614		
2,900.0	2,490.6	2,894.7	2,618.1	23.4	19.9	-169.40	1,033.9	-247.8	247.8	234.8	13.01	19.042		
3,000.0	2,570.0	2,990.2	2,699.4	24.4	20.8	-169.43	1,082.7	-259.3	258.0	244.5	13.58	19.004		
3,100.0	2,652.5	3,078.0	2,775.8	25.4	21.5	-169.43	1,124.9	-269.1	266.7	252.6	14.11	18.903		
3,200.0	2,737.8	3,165.6	2,853.8	26.3	22.2	-169.43	1,163.5	-278.2	274.7	260.1	14.60	18.810		
3,300.0	2,825.8	3,252.9	2,933.4	27.1	22.8	-169.43	1,198.5	-286.4	282.0	266.9	15.06	18.725		
3,400.0	2,916.1	3,339.9	3,014.3	27.8	23.3	-169.43	1,229.8	-293.8	288.6	273.1	15.48	18.646		
3,500.0	3,008.5	3,426.8	3,096.4	28.5	23.8	-169.44	1,257.5	-300.3	294.5	278.6	15.86	18.571		
3,600.0	3,102.9	3,513.5	3,179.5	29.0	24.2	-169.45	1,281.5	-305.9	299.7	283.5	16.20	18.500		
3,700.0	3,198.8	3,600.0	3,263.4	29.5	24.6	-169.46	1,301.7	-310.6	304.2	287.7	16.51	18.430		
3,800.0	3,296.0	3,686.5	3,348.2	29.9	24.9	-169.47	1,318.2	-314.5	308.0	291.2	16.77	18.363		
3,900.0	3,394.4	3,772.8	3,433.5	30.2	25.1	-169.49	1,330.9	-317.5	311.0	294.0	17.00	18.296		
4,000.0	3,493.5	3,859.0	3,519.3	30.4	25.2	-169.50	1,339.9	-319.6	313.3	296.1	17.19	18.227		
4,100.0	3,593.2	3,945.2	3,605.3	30.5	25.3	-169.52	1,345.0	-320.8	314.8	297.5	17.34	18.155		
4,200.0	3,693.2	4,033.1	3,693.2	30.6	25.4	179.43	1,346.5	-321.1	315.6	298.1	17.47	18.065		
4,300.0	3,793.2	4,133.1	3,793.2	30.6	25.4	179.43	1,346.5	-321.1	315.6	297.8	17.75	17.774		
4,400.0	3,893.2	4,233.1	3,893.2	30.7	25.5	179.43	1,346.5	-321.1	315.6	297.5	18.04	17.489		
4,500.0	3,993.2	4,333.1	3,993.2	30.7	25.5	179.43	1,346.5	-321.1	315.6	297.2	18.33	17.212		
4,600.0	4,093.2	4,433.1	4,093.2	30.8	25.6	179.43	1,346.5	-321.1	315.6	296.9	18.63	16.942		
4,700.0	4,193.2	4,533.1	4,193.2	30.8	25.6	179.43	1,346.5	-321.1	315.6	296.6	18.92	16.678		
4,800.0	4,293.2	4,633.1	4,293.2	30.9	25.7	179.43	1,346.5	-321.1	315.6	296.3	19.22	16.421		
4,900.0	4,393.2	4,733.1	4,393.2	30.9	25.7	179.43	1,346.5	-321.1	315.6	296.0	19.52	16.170		
5,000.0	4,493.2	4,833.1	4,493.2	31.0	25.8	179.43	1,346.5	-321.1	315.6	295.7	19.82	15.925		
5,100.0	4,593.2	4,933.1	4,593.2	31.0	25.9	179.43	1,346.5	-321.1	315.6	295.4	20.12	15.686		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43B-14 - DD - Plan #3													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		
5,200.0	4,693.2	5,033.1	4,693.2	31.1	25.9	179.43	1,346.5	-321.1	315.6	295.1	20.42	15.454		
5,300.0	4,793.2	5,133.1	4,793.2	31.1	26.0	179.43	1,346.5	-321.1	315.6	294.8	20.72	15.227		
5,400.0	4,893.2	5,233.1	4,893.2	31.2	26.0	179.43	1,346.5	-321.1	315.6	294.5	21.03	15.005		
5,500.0	4,993.2	5,333.1	4,993.2	31.2	26.1	179.43	1,346.5	-321.1	315.6	294.2	21.34	14.789		
5,600.0	5,093.2	5,433.1	5,093.2	31.3	26.2	179.43	1,346.5	-321.1	315.6	293.9	21.65	14.579		
5,700.0	5,193.2	5,533.1	5,193.2	31.3	26.2	179.43	1,346.5	-321.1	315.6	293.6	21.96	14.373		
5,800.0	5,293.2	5,633.1	5,293.2	31.4	26.3	179.43	1,346.5	-321.1	315.6	293.3	22.27	14.172		
5,900.0	5,393.2	5,733.1	5,393.2	31.4	26.4	179.43	1,346.5	-321.1	315.6	293.0	22.58	13.977		
6,000.0	5,493.2	5,833.1	5,493.2	31.5	26.4	179.43	1,346.5	-321.1	315.6	292.7	22.89	13.785		
6,100.0	5,593.2	5,933.1	5,593.2	31.5	26.5	179.43	1,346.5	-321.1	315.6	292.4	23.20	13.599		
6,200.0	5,693.2	6,033.1	5,693.2	31.6	26.6	179.43	1,346.5	-321.1	315.6	292.0	23.52	13.417		
6,300.0	5,793.2	6,133.1	5,793.2	31.7	26.6	179.43	1,346.5	-321.1	315.6	291.7	23.84	13.239		
6,365.6	5,858.8	6,198.7	5,858.8	31.7	26.7	179.43	1,346.5	-321.1	315.6	291.5	24.04	13.125		
6,400.0	5,893.2	6,229.9	5,890.0	31.7	26.7	179.43	1,346.5	-321.1	315.6	291.4	24.15	13.069		
6,421.8	5,915.0	6,229.9	5,890.0	31.7	26.7	179.43	1,346.5	-321.1	316.5	292.4	24.18	13.090		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43C-14 - DD - Plan #3													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	-152.53	-14.2	-7.4	16.0					
100.0	100.0	100.0	100.0	0.1	0.1	-152.53	-14.2	-7.4	16.0	15.7	0.26	62.551		
200.0	200.0	200.0	200.0	0.3	0.3	-152.53	-14.2	-7.4	16.0	15.4	0.60	26.434		
300.0	300.0	300.0	300.0	0.5	0.5	-152.53	-14.2	-7.4	16.0	15.0	0.95	16.758 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	-146.62	-14.2	-7.4	18.1	16.8	1.30	13.884		
500.0	499.6	500.7	500.6	0.9	0.8	-152.99	-11.7	-8.3	22.9	21.2	1.66	13.768		
600.0	598.8	601.6	601.2	1.1	1.0	-155.58	-4.2	-11.0	28.1	26.1	2.03	13.858		
700.0	697.1	702.8	701.6	1.5	1.3	-156.03	8.3	-15.6	33.8	31.4	2.43	13.897		
800.0	794.3	804.3	801.3	1.9	1.6	-155.24	25.9	-22.0	39.8	36.9	2.89	13.772		
900.0	890.2	906.0	900.1	2.4	2.1	-153.69	48.4	-30.2	46.1	42.7	3.44	13.427		
1,000.0	984.4	1,007.9	997.7	3.0	2.6	-151.69	75.9	-40.3	52.8	48.7	4.11	12.868		
1,100.0	1,076.8	1,108.1	1,092.5	3.7	3.2	-150.31	106.4	-51.4	61.1	56.2	4.85	12.589 SF		
1,200.0	1,167.1	1,207.3	1,186.2	4.5	3.7	-151.18	136.8	-62.5	73.8	68.2	5.52	13.359		
1,300.0	1,254.9	1,305.7	1,279.3	5.4	4.3	-153.25	166.9	-73.5	91.1	85.0	6.08	14.972		
1,400.0	1,340.2	1,403.1	1,371.4	6.3	4.8	-155.68	196.7	-84.4	113.1	106.6	6.55	17.280		
1,500.0	1,422.6	1,499.2	1,462.3	7.4	5.4	-158.03	226.1	-95.1	140.0	133.1	6.94	20.180		
1,600.0	1,501.9	1,593.8	1,551.7	8.5	6.0	-160.12	255.0	-105.7	171.9	164.6	7.29	23.591		
1,700.0	1,578.3	1,686.8	1,639.6	9.6	6.5	-162.03	283.5	-116.1	208.0	200.4	7.61	27.346		
1,800.0	1,654.3	1,779.6	1,727.3	10.7	7.1	-163.56	311.9	-126.5	245.0	237.0	7.96	30.768		
1,900.0	1,730.3	1,872.3	1,815.0	11.9	7.6	-164.69	340.2	-136.8	282.1	273.7	8.34	33.809		
2,000.0	1,806.3	1,965.1	1,902.7	13.0	8.2	-165.56	368.6	-147.2	319.2	310.5	8.74	36.526		
2,100.0	1,882.2	2,057.8	1,990.4	14.2	8.7	-166.25	397.0	-157.6	356.4	347.2	9.15	38.966		
2,200.0	1,958.2	2,150.6	2,078.1	15.3	9.3	-166.81	425.4	-167.9	393.6	384.1	9.56	41.167		
2,300.0	2,034.2	2,243.3	2,165.8	16.5	9.8	-167.27	453.8	-178.3	430.9	420.9	9.98	43.163		
2,400.0	2,110.2	2,336.1	2,253.5	17.6	10.4	-167.66	482.1	-188.7	468.2	457.7	10.41	44.981		
2,500.0	2,186.2	2,428.8	2,341.2	18.8	10.9	-167.99	510.5	-199.0	505.4	494.6	10.84	46.643		
2,600.0	2,262.1	2,521.6	2,428.9	19.9	11.5	-168.28	538.9	-209.4	542.8	531.5	11.27	48.168		
2,700.0	2,338.1	2,614.3	2,516.5	21.1	12.0	-168.53	567.3	-219.7	580.1	568.4	11.70	49.573		
2,800.0	2,414.1	2,707.1	2,604.2	22.3	12.6	-168.74	595.6	-230.1	617.4	605.3	12.14	50.871		
2,900.0	2,490.6	2,800.1	2,692.2	23.4	13.1	-169.05	624.1	-240.5	654.0	641.4	12.60	51.925		
3,000.0	2,570.0	2,894.7	2,781.7	24.4	13.7	-169.32	653.1	-251.1	686.3	673.2	13.09	52.411		
3,100.0	2,652.5	2,990.9	2,872.6	25.4	14.3	-169.47	682.5	-261.8	713.6	700.0	13.62	52.400		
3,200.0	2,737.8	3,088.4	2,964.7	26.3	14.8	-169.51	712.3	-272.7	736.0	721.8	14.17	51.952		
3,300.0	2,825.8	3,178.2	3,049.7	27.1	15.4	-169.48	739.7	-282.7	753.5	738.8	14.70	51.243		
3,400.0	2,916.1	3,250.0	3,118.3	27.8	15.7	-169.46	759.6	-290.0	768.6	753.5	15.15	50.731		
3,500.0	3,008.5	3,321.6	3,187.4	28.5	16.1	-169.45	777.2	-296.4	782.2	766.6	15.56	50.274		
3,600.0	3,102.9	3,400.0	3,263.9	29.0	16.4	-169.44	793.5	-302.4	794.2	778.3	15.94	49.820		
3,700.0	3,198.8	3,464.3	3,327.1	29.5	16.6	-169.44	804.7	-306.5	804.5	788.3	16.24	49.526		
3,800.0	3,296.0	3,535.5	3,397.4	29.9	16.8	-169.45	814.8	-310.2	813.2	796.7	16.52	49.218		
3,900.0	3,394.4	3,600.0	3,461.5	30.2	16.9	-169.47	821.8	-312.7	820.4	803.6	16.75	48.978		
4,000.0	3,493.5	3,677.6	3,538.8	30.4	17.0	-169.49	827.5	-314.8	825.8	808.9	16.95	48.710		
4,100.0	3,593.2	3,748.5	3,609.7	30.5	17.1	-169.51	830.2	-315.8	829.6	812.5	17.11	48.501		
4,200.0	3,693.2	3,832.0	3,693.2	30.6	17.1	179.42	830.6	-315.9	831.5	814.2	17.25	48.212		
4,300.0	3,793.2	3,932.0	3,793.2	30.6	17.2	179.42	830.6	-315.9	831.5	813.9	17.53	47.434		
4,400.0	3,893.2	4,032.0	3,893.2	30.7	17.3	179.42	830.6	-315.9	831.5	813.7	17.81	46.674		
4,500.0	3,993.2	4,132.0	3,993.2	30.7	17.3	179.42	830.6	-315.9	831.5	813.4	18.10	45.933		
4,600.0	4,093.2	4,232.0	4,093.2	30.8	17.4	179.42	830.6	-315.9	831.5	813.1	18.39	45.210		
4,700.0	4,193.2	4,332.0	4,193.2	30.8	17.5	179.42	830.6	-315.9	831.5	812.8	18.68	44.504		
4,800.0	4,293.2	4,432.0	4,293.2	30.9	17.6	179.42	830.6	-315.9	831.5	812.5	18.98	43.815		
4,900.0	4,393.2	4,532.0	4,393.2	30.9	17.6	179.42	830.6	-315.9	831.5	812.2	19.27	43.144		
5,000.0	4,493.2	4,632.0	4,493.2	31.0	17.7	179.42	830.6	-315.9	831.5	811.9	19.57	42.488		
5,100.0	4,593.2	4,732.0	4,593.2	31.0	17.8	179.42	830.6	-315.9	831.5	811.6	19.87	41.849		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43C-14 - DD - Plan #3													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		
5,200.0	4,693.2	4,832.0	4,693.2	31.1	17.9	179.42	830.6	-315.9	831.5	811.3	20.17	41.225		
5,300.0	4,793.2	4,932.0	4,793.2	31.1	18.0	179.42	830.6	-315.9	831.5	811.0	20.47	40.617		
5,400.0	4,893.2	5,032.0	4,893.2	31.2	18.0	179.42	830.6	-315.9	831.5	810.7	20.77	40.024		
5,500.0	4,993.2	5,132.0	4,993.2	31.2	18.1	179.42	830.6	-315.9	831.5	810.4	21.08	39.445		
5,600.0	5,093.2	5,232.0	5,093.2	31.3	18.2	179.42	830.6	-315.9	831.5	810.1	21.39	38.880		
5,700.0	5,193.2	5,332.0	5,193.2	31.3	18.3	179.42	830.6	-315.9	831.5	809.8	21.69	38.328		
5,800.0	5,293.2	5,432.0	5,293.2	31.4	18.4	179.42	830.6	-315.9	831.5	809.5	22.00	37.790		
5,900.0	5,393.2	5,532.0	5,393.2	31.4	18.5	179.42	830.6	-315.9	831.5	809.2	22.31	37.265		
6,000.0	5,493.2	5,632.0	5,493.2	31.5	18.6	179.42	830.6	-315.9	831.5	808.9	22.62	36.753		
6,100.0	5,593.2	5,732.0	5,593.2	31.5	18.7	179.42	830.6	-315.9	831.5	808.5	22.94	36.252		
6,200.0	5,693.2	5,832.0	5,693.2	31.6	18.8	179.42	830.6	-315.9	831.5	808.2	23.25	35.764		
6,300.0	5,793.2	5,932.0	5,793.2	31.7	18.9	179.42	830.6	-315.9	831.5	807.9	23.56	35.287		
6,341.3	5,834.5	5,973.3	5,834.5	31.7	18.9	179.42	830.6	-315.9	831.5	807.8	23.69	35.093		
6,400.0	5,893.2	5,988.8	5,850.0	31.7	18.9	179.42	830.6	-315.9	832.6	808.8	23.81	34.967		
6,421.8	5,915.0	5,988.8	5,850.0	31.7	18.9	179.42	830.6	-315.9	834.0	810.2	23.85	34.975		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44A-14 - DD - Plan #3													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	-152.50	-21.3	-11.1	24.0					
100.0	100.0	100.0	100.0	0.1	0.1	-152.50	-21.3	-11.1	24.0	23.7	0.26	93.776		
200.0	200.0	200.0	200.0	0.3	0.3	-152.50	-21.3	-11.1	24.0	23.4	0.60	39.650		
300.0	300.0	300.0	300.0	0.5	0.5	-152.50	-21.3	-11.1	24.0	23.0	0.95	25.140	CC, ES	
400.0	400.0	400.0	400.0	0.7	0.7	-145.01	-21.3	-11.1	26.1	24.8	1.30	19.995		
500.0	499.6	500.0	500.0	0.9	0.8	-152.27	-20.9	-11.3	32.5	30.9	1.66	19.611	SF	
600.0	598.8	600.5	600.4	1.1	1.0	-157.10	-17.8	-13.0	41.8	39.8	2.02	20.736		
700.0	697.1	701.1	700.8	1.5	1.2	-159.70	-11.7	-16.5	53.4	51.1	2.38	22.419		
800.0	794.3	801.8	800.9	1.9	1.4	-160.96	-2.5	-21.6	67.3	64.5	2.77	24.302		
900.0	890.2	902.6	900.7	2.4	1.7	-161.42	9.8	-28.6	83.3	80.1	3.18	26.186		
1,000.0	984.4	1,003.6	1,000.1	3.0	2.0	-161.43	25.2	-37.2	101.4	97.7	3.63	27.941		
1,100.0	1,076.8	1,104.7	1,099.0	3.7	2.4	-161.17	43.7	-47.6	121.5	117.4	4.12	29.487		
1,200.0	1,167.1	1,206.0	1,197.2	4.5	2.8	-160.76	65.2	-59.6	143.7	139.1	4.67	30.779		
1,300.0	1,254.9	1,307.4	1,294.6	5.4	3.3	-160.26	89.7	-73.5	168.0	162.7	5.28	31.807		
1,400.0	1,340.2	1,408.3	1,390.5	6.3	3.9	-159.70	117.1	-88.8	194.3	188.3	5.96	32.619		
1,500.0	1,422.6	1,503.6	1,480.7	7.4	4.4	-159.46	144.1	-104.0	224.3	217.7	6.62	33.869		
1,600.0	1,501.9	1,597.4	1,569.5	8.5	5.0	-159.57	170.6	-118.9	258.9	251.7	7.26	35.654		
1,700.0	1,578.3	1,689.6	1,656.6	9.6	5.5	-160.05	196.6	-133.5	297.7	289.8	7.88	37.779		
1,800.0	1,654.3	1,781.4	1,743.6	10.7	6.0	-160.64	222.6	-148.1	337.0	328.5	8.50	39.642		
1,900.0	1,730.3	1,873.3	1,830.5	11.9	6.6	-161.10	248.5	-162.7	376.4	367.3	9.13	41.240		
2,000.0	1,806.3	1,965.2	1,917.4	13.0	7.1	-161.48	274.5	-177.3	415.8	406.0	9.75	42.625		
2,100.0	1,882.2	2,057.1	2,004.3	14.2	7.6	-161.79	300.4	-191.8	455.2	444.8	10.38	43.837		
2,200.0	1,958.2	2,149.0	2,091.2	15.3	8.2	-162.05	326.4	-206.4	494.6	483.6	11.01	44.905		
2,300.0	2,034.2	2,240.9	2,178.2	16.5	8.7	-162.27	352.3	-221.0	534.0	522.4	11.65	45.854		
2,400.0	2,110.2	2,332.7	2,265.1	17.6	9.3	-162.46	378.3	-235.6	573.5	561.2	12.28	46.702		
2,500.0	2,186.2	2,411.7	2,340.1	18.8	9.7	-162.66	399.9	-247.7	613.8	601.0	12.85	47.776		
2,600.0	2,262.1	2,488.1	2,413.2	19.9	10.1	-162.94	419.0	-258.5	656.2	642.8	13.35	49.140		
2,700.0	2,338.1	2,562.7	2,485.3	21.1	10.4	-163.28	436.0	-268.0	700.6	686.8	13.80	50.750		
2,800.0	2,414.1	2,635.6	2,556.1	22.3	10.8	-163.67	451.1	-276.5	746.9	732.7	14.21	52.570		
2,900.0	2,490.6	2,700.0	2,619.0	23.4	11.0	-164.28	463.1	-283.3	794.6	780.0	14.55	54.605		
3,000.0	2,570.0	2,778.6	2,696.1	24.4	11.3	-165.08	476.1	-290.5	840.0	825.2	14.85	56.558		
3,100.0	2,652.5	2,850.3	2,766.9	25.4	11.5	-165.75	486.3	-296.3	883.0	867.8	15.14	58.324		
3,200.0	2,737.8	2,922.2	2,838.1	26.3	11.7	-166.34	495.0	-301.2	923.2	907.8	15.41	59.922		
3,300.0	2,825.8	3,000.0	2,915.4	27.1	11.9	-166.89	502.7	-305.5	960.9	945.2	15.66	61.375		
3,400.0	2,916.1	3,066.6	2,981.7	27.8	12.0	-167.35	507.8	-308.3	995.7	979.9	15.87	62.734		
3,500.0	3,008.5	3,139.0	3,054.0	28.5	12.1	-167.79	511.8	-310.6	1,027.9	1,011.8	16.07	63.980		
3,600.0	3,102.9	3,211.5	3,126.5	29.0	12.2	-168.19	514.2	-312.0	1,057.3	1,041.1	16.23	65.131		
3,700.0	3,198.8	3,285.1	3,200.0	29.5	12.2	-168.56	515.0	-312.4	1,083.9	1,067.5	16.37	66.205		
3,800.0	3,296.0	3,381.1	3,296.0	29.9	12.3	-168.93	515.0	-312.4	1,106.7	1,090.2	16.51	67.027		
3,900.0	3,394.4	3,479.5	3,394.4	30.2	12.4	-169.21	515.0	-312.4	1,124.4	1,107.8	16.66	67.479		
4,000.0	3,493.5	3,578.6	3,493.5	30.4	12.5	-169.40	515.0	-312.4	1,137.1	1,120.3	16.82	67.583		
4,100.0	3,593.2	3,678.3	3,593.2	30.5	12.6	-169.52	515.0	-312.4	1,144.6	1,127.6	16.99	67.362		
4,200.0	3,693.2	3,778.3	3,693.2	30.6	12.7	179.41	515.0	-312.4	1,147.0	1,129.9	17.17	66.820		
4,300.0	3,793.2	3,878.3	3,793.2	30.6	12.7	179.41	515.0	-312.4	1,147.0	1,129.6	17.45	65.739		
4,400.0	3,893.2	3,978.3	3,893.2	30.7	12.8	179.41	515.0	-312.4	1,147.0	1,129.3	17.73	64.683		
4,500.0	3,993.2	4,078.3	3,993.2	30.7	12.9	179.41	515.0	-312.4	1,147.0	1,129.0	18.02	63.653		
4,600.0	4,093.2	4,178.3	4,093.2	30.8	13.0	179.41	515.0	-312.4	1,147.0	1,128.7	18.31	62.648		
4,700.0	4,193.2	4,278.3	4,193.2	30.8	13.1	179.41	515.0	-312.4	1,147.0	1,128.4	18.60	61.668		
4,800.0	4,293.2	4,378.3	4,293.2	30.9	13.2	179.41	515.0	-312.4	1,147.0	1,128.1	18.89	60.711		
4,900.0	4,393.2	4,478.3	4,393.2	30.9	13.3	179.41	515.0	-312.4	1,147.0	1,127.9	19.19	59.778		
5,000.0	4,493.2	4,578.3	4,493.2	31.0	13.4	179.41	515.0	-312.4	1,147.0	1,127.6	19.49	58.867		
5,100.0	4,593.2	4,678.3	4,593.2	31.0	13.5	179.41	515.0	-312.4	1,147.0	1,127.3	19.78	57.979		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44A-14 - DD - Plan #3													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		
5,200.0	4,693.2	4,778.3	4,693.2	31.1	13.6	179.41	515.0	-312.4	1,147.0	1,127.0	20.08	57.112		
5,300.0	4,793.2	4,878.3	4,793.2	31.1	13.7	179.41	515.0	-312.4	1,147.0	1,126.7	20.39	56.267		
5,400.0	4,893.2	4,978.3	4,893.2	31.2	13.9	179.41	515.0	-312.4	1,147.0	1,126.4	20.69	55.443		
5,500.0	4,993.2	5,078.3	4,993.2	31.2	14.0	179.41	515.0	-312.4	1,147.0	1,126.0	20.99	54.638		
5,600.0	5,093.2	5,178.3	5,093.2	31.3	14.1	179.41	515.0	-312.4	1,147.0	1,125.7	21.30	53.853		
5,700.0	5,193.2	5,278.3	5,193.2	31.3	14.2	179.41	515.0	-312.4	1,147.0	1,125.4	21.61	53.087		
5,800.0	5,293.2	5,378.3	5,293.2	31.4	14.3	179.41	515.0	-312.4	1,147.0	1,125.1	21.92	52.340		
5,900.0	5,393.2	5,478.3	5,393.2	31.4	14.4	179.41	515.0	-312.4	1,147.0	1,124.8	22.23	51.610		
6,000.0	5,493.2	5,578.3	5,493.2	31.5	14.5	179.41	515.0	-312.4	1,147.0	1,124.5	22.54	50.898		
6,100.0	5,593.2	5,678.3	5,593.2	31.5	14.7	179.41	515.0	-312.4	1,147.0	1,124.2	22.85	50.203		
6,200.0	5,693.2	5,778.3	5,693.2	31.6	14.8	179.41	515.0	-312.4	1,147.0	1,123.9	23.16	49.525		
6,300.0	5,793.2	5,878.3	5,793.2	31.7	14.9	179.41	515.0	-312.4	1,147.0	1,123.6	23.48	48.862		
6,328.8	5,822.0	5,907.1	5,822.0	31.7	14.9	179.41	515.0	-312.4	1,147.0	1,123.5	23.57	48.674		
6,400.0	5,893.2	5,925.1	5,840.0	31.7	14.9	179.41	515.0	-312.4	1,148.3	1,124.6	23.71	48.436		
6,421.8	5,915.0	5,925.1	5,840.0	31.7	14.9	179.41	515.0	-312.4	1,149.5	1,125.8	23.74	48.416		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44B-14 - DD - Plan #3													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	-152.49	-28.4	-14.8	32.0					
100.0	100.0	100.0	100.0	0.1	0.1	-152.49	-28.4	-14.8	32.0	31.7	0.26	125.005		
200.0	200.0	200.0	200.0	0.3	0.3	-152.49	-28.4	-14.8	32.0	31.4	0.60	52.871		
300.0	300.0	300.0	300.0	0.5	0.5	-152.49	-28.4	-14.8	32.0	31.0	0.95	33.525 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	-144.16	-28.4	-14.8	34.1	32.8	1.30	26.117		
500.0	499.6	499.6	499.6	0.9	0.8	-150.54	-28.4	-14.8	40.7	39.0	1.66	24.533 SF		
600.0	598.8	599.5	599.5	1.1	1.0	-154.72	-27.1	-17.0	51.7	49.7	2.02	25.587		
700.0	697.1	699.3	699.0	1.5	1.2	-154.78	-23.2	-23.8	66.1	63.7	2.42	27.326		
800.0	794.3	797.9	796.9	1.9	1.4	-153.84	-17.6	-33.6	84.2	81.4	2.86	29.417		
900.0	890.2	895.3	893.6	2.4	1.7	-154.29	-12.0	-43.4	106.9	103.6	3.32	32.163		
1,000.0	984.4	991.4	989.1	3.0	1.9	-155.40	-6.5	-53.1	134.2	130.4	3.79	35.431		
1,100.0	1,076.8	1,086.0	1,083.1	3.7	2.1	-156.73	-1.1	-62.6	166.2	161.9	4.25	39.130		
1,200.0	1,167.1	1,178.9	1,175.4	4.5	2.4	-158.05	4.2	-72.0	202.8	198.1	4.70	43.191		
1,300.0	1,254.9	1,269.8	1,265.6	5.4	2.6	-159.25	9.5	-81.1	244.0	238.9	5.13	47.557		
1,400.0	1,340.2	1,358.5	1,353.7	6.3	2.8	-160.32	14.5	-90.1	289.9	284.3	5.55	52.179		
1,500.0	1,422.6	1,444.6	1,439.2	7.4	3.1	-161.23	19.5	-98.7	340.1	334.2	5.97	57.009		
1,600.0	1,501.9	1,528.0	1,522.1	8.5	3.3	-161.98	24.3	-107.1	394.8	388.4	6.37	62.002		
1,700.0	1,578.3	1,608.8	1,602.3	9.6	3.5	-162.89	28.9	-115.3	453.3	446.5	6.77	66.990		
1,800.0	1,654.3	1,689.2	1,682.1	10.7	3.7	-163.89	33.5	-123.4	512.4	505.2	7.17	71.428		
1,900.0	1,730.3	1,769.5	1,762.0	11.9	3.9	-164.68	38.1	-131.5	571.5	564.0	7.58	75.386		
2,000.0	1,806.3	1,849.9	1,841.8	13.0	4.1	-165.32	42.8	-139.5	630.8	622.8	7.99	78.938		
2,100.0	1,882.2	1,930.3	1,921.7	14.2	4.3	-165.85	47.4	-147.6	690.1	681.7	8.40	82.141		
2,200.0	1,958.2	2,010.7	2,001.5	15.3	4.5	-166.30	52.0	-155.7	749.4	740.6	8.81	85.044		
2,300.0	2,034.2	2,091.1	2,081.3	16.5	4.8	-166.68	56.6	-163.8	808.7	799.5	9.22	87.687		
2,400.0	2,110.2	2,171.4	2,161.2	17.6	5.0	-167.01	61.2	-171.9	868.1	858.4	9.63	90.104		
2,500.0	2,186.2	2,251.8	2,241.0	18.8	5.2	-167.30	65.8	-180.0	927.5	917.4	10.05	92.323		
2,600.0	2,262.1	2,332.2	2,320.9	19.9	5.4	-167.55	70.4	-188.1	986.9	976.4	10.46	94.366		
2,700.0	2,338.1	2,412.6	2,400.7	21.1	5.6	-167.78	75.1	-196.2	1,046.3	1,035.4	10.87	96.253		
2,800.0	2,414.1	2,493.0	2,480.5	22.3	5.8	-167.98	79.7	-204.3	1,105.7	1,094.4	11.28	98.003		
2,900.0	2,490.6	2,573.8	2,560.8	23.4	6.0	-168.39	84.3	-212.4	1,164.5	1,152.7	11.71	99.446		
3,000.0	2,570.0	2,657.3	2,643.7	24.4	6.3	-168.88	89.1	-220.8	1,219.5	1,207.3	12.16	100.269		
3,100.0	2,652.5	2,743.5	2,729.4	25.4	6.5	-169.25	94.0	-229.5	1,270.1	1,257.5	12.63	100.568		
3,200.0	2,737.8	2,832.2	2,817.5	26.3	6.7	-169.53	99.1	-238.5	1,316.2	1,303.1	13.11	100.419		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44C-14 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-152.48	-35.5	-18.5	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	-152.48	-35.5	-18.5	40.0	39.7	0.26	156.152		
200.0	200.0	200.0	200.0	0.3	0.3	-152.48	-35.5	-18.5	40.0	39.4	0.61	66.073		
300.0	300.0	300.0	300.0	0.5	0.5	-152.48	-35.5	-18.5	40.0	39.0	0.95	41.901 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	-143.63	-35.5	-18.5	42.1	40.8	1.30	32.237		
500.0	499.6	498.3	498.3	0.9	0.8	-146.39	-35.9	-21.0	49.9	48.3	1.66	30.020 SF		
600.0	598.8	595.2	594.9	1.1	1.0	-147.00	-37.4	-28.1	65.0	63.0	2.05	31.767		
700.0	697.1	689.3	688.4	1.5	1.2	-148.74	-42.4	-36.8	88.6	86.2	2.44	36.281		
800.0	794.3	784.7	783.1	1.9	1.5	-150.99	-49.1	-45.8	118.3	115.5	2.85	41.446		
900.0	890.2	878.4	876.2	2.4	1.7	-153.05	-55.7	-54.7	152.6	149.3	3.27	46.611		
1,000.0	984.4	970.3	967.5	3.0	1.9	-154.86	-62.1	-63.4	191.4	187.7	3.69	51.814		
1,100.0	1,076.8	1,060.1	1,056.7	3.7	2.2	-156.38	-68.4	-71.9	234.8	230.7	4.11	57.076		
1,200.0	1,167.1	1,147.6	1,143.5	4.5	2.4	-157.66	-74.6	-80.2	282.8	278.2	4.53	62.402		
1,300.0	1,254.9	1,232.4	1,227.7	5.4	2.6	-158.71	-80.5	-88.3	335.1	330.1	4.94	67.783		
1,400.0	1,340.2	1,314.4	1,309.2	6.3	2.8	-159.55	-86.3	-96.0	391.7	386.3	5.35	73.197		
1,500.0	1,422.6	1,393.4	1,387.6	7.4	3.0	-160.22	-91.8	-103.5	452.4	446.7	5.76	78.608		
1,600.0	1,501.9	1,469.0	1,462.7	8.5	3.2	-160.72	-97.1	-110.7	517.2	511.0	6.16	83.966		
1,700.0	1,578.3	1,541.7	1,534.9	9.6	3.4	-161.49	-102.2	-117.6	585.4	578.8	6.56	89.190		
1,800.0	1,654.3	1,613.8	1,606.5	10.7	3.6	-162.51	-107.3	-124.4	654.1	647.2	6.97	93.898		
1,900.0	1,730.3	1,686.0	1,678.1	11.9	3.8	-163.33	-112.3	-131.2	723.0	715.6	7.37	98.129		
2,000.0	1,806.3	1,758.1	1,749.8	13.0	4.0	-164.01	-117.4	-138.1	791.9	784.2	7.77	101.951		
2,100.0	1,882.2	1,830.3	1,821.4	14.2	4.2	-164.58	-122.5	-144.9	860.9	852.8	8.17	105.420		
2,200.0	1,958.2	1,902.4	1,893.1	15.3	4.4	-165.07	-127.5	-151.8	930.0	921.4	8.56	108.583		
2,300.0	2,034.2	1,974.6	1,964.7	16.5	4.6	-165.49	-132.6	-158.6	999.0	990.0	8.96	111.477		
2,400.0	2,110.2	2,046.7	2,036.4	17.6	4.8	-165.85	-137.7	-165.4	1,068.1	1,058.7	9.36	114.136		
2,500.0	2,186.2	2,118.8	2,108.0	18.8	5.0	-166.17	-142.7	-172.3	1,137.2	1,127.4	9.75	116.586		
2,600.0	2,262.1	2,191.0	2,179.6	19.9	5.2	-166.46	-147.8	-179.1	1,206.3	1,196.2	10.15	118.852		
2,700.0	2,338.1	2,263.1	2,251.3	21.1	5.4	-166.71	-152.9	-185.9	1,275.4	1,264.9	10.54	120.953		
2,800.0	2,414.1	2,335.3	2,322.9	22.3	5.5	-166.94	-157.9	-192.8	1,344.6	1,333.6	10.94	122.907		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S14-T7S-R96W - Nolte SWD 1-14 - DD - Plan #3												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	-152.47	-42.5	-22.2	48.0				
100.0	100.0	100.0	100.0	0.1	0.1	-152.47	-42.5	-22.2	48.0	47.7	0.26	187.249	
200.0	200.0	200.0	200.0	0.3	0.3	-152.47	-42.5	-22.2	48.0	47.4	0.61	79.262	
300.0	300.0	300.0	300.0	0.5	0.5	-152.47	-42.5	-22.2	48.0	47.0	0.95	50.271	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-143.26	-42.5	-22.2	50.0	48.7	1.30	38.354	
500.0	499.6	499.6	499.6	0.9	0.8	-147.92	-42.5	-22.2	56.5	54.9	1.66	34.037	
600.0	598.8	598.8	598.8	1.1	1.0	-153.61	-42.5	-22.2	68.0	65.9	2.02	33.672	SF
700.0	697.1	697.1	697.1	1.5	1.2	-158.90	-42.5	-22.2	84.7	82.3	2.37	35.764	
800.0	794.3	794.3	794.3	1.9	1.3	-163.20	-42.5	-22.2	106.9	104.2	2.71	39.488	
900.0	890.2	890.2	890.2	2.4	1.5	-166.50	-42.5	-22.2	134.4	131.3	3.03	44.338	
1,000.0	984.4	984.4	984.4	3.0	1.7	-168.97	-42.5	-22.2	167.1	163.7	3.34	50.004	
1,100.0	1,076.8	1,076.8	1,076.8	3.7	1.8	-170.82	-42.5	-22.2	204.8	201.2	3.64	56.293	
1,200.0	1,167.1	1,167.1	1,167.1	4.5	2.0	-172.22	-42.5	-22.2	247.5	243.6	3.92	63.090	
1,300.0	1,254.9	1,254.9	1,254.9	5.4	2.1	-173.29	-42.5	-22.2	294.9	290.7	4.19	70.324	
1,400.0	1,340.2	1,340.2	1,340.2	6.3	2.3	-174.11	-42.5	-22.2	346.9	342.5	4.45	77.950	
1,500.0	1,422.6	1,422.6	1,422.6	7.4	2.4	-174.75	-42.5	-22.2	403.4	398.7	4.69	85.942	
1,600.0	1,501.9	1,501.9	1,501.9	8.5	2.6	-175.25	-42.5	-22.2	464.1	459.2	4.92	94.279	
1,700.0	1,578.3	1,578.3	1,578.3	9.6	2.7	-175.73	-42.5	-22.2	528.5	523.3	5.18	102.042	
1,800.0	1,654.3	1,654.3	1,654.3	10.7	2.8	-176.20	-42.5	-22.2	593.4	587.9	5.48	108.361	
1,900.0	1,730.3	1,730.3	1,730.3	11.9	3.0	-176.57	-42.5	-22.2	658.3	652.6	5.77	114.036	
2,000.0	1,806.3	1,806.3	1,806.3	13.0	3.1	-176.88	-42.5	-22.2	723.3	717.2	6.07	119.159	
2,100.0	1,882.2	1,882.2	1,882.2	14.2	3.2	-177.14	-42.5	-22.2	788.3	781.9	6.37	123.808	
2,200.0	1,958.2	1,958.2	1,958.2	15.3	3.4	-177.36	-42.5	-22.2	853.2	846.6	6.66	128.046	
2,300.0	2,034.2	2,034.2	2,034.2	16.5	3.5	-177.54	-42.5	-22.2	918.2	911.3	6.96	131.925	
2,400.0	2,110.2	2,110.2	2,110.2	17.6	3.6	-177.71	-42.5	-22.2	983.2	975.9	7.26	135.489	
2,500.0	2,186.2	2,186.2	2,186.2	18.8	3.8	-177.85	-42.5	-22.2	1,048.2	1,040.6	7.55	138.775	
2,600.0	2,262.1	2,262.1	2,262.1	19.9	3.9	-177.97	-42.5	-22.2	1,113.2	1,105.3	7.85	141.814	
2,700.0	2,338.1	2,338.1	2,338.1	21.1	4.0	-178.09	-42.5	-22.2	1,178.2	1,170.0	8.15	144.634	
2,800.0	2,414.1	2,414.1	2,414.1	22.3	4.2	-178.19	-42.5	-22.2	1,243.2	1,234.7	8.44	147.256	
2,900.0	2,490.6	2,490.6	2,490.6	23.4	4.3	-178.32	-42.5	-22.2	1,307.6	1,298.8	8.80	148.514	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 43A-14
Project:	Garfield County, CO	TVD Reference:	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 43A-14	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5117.8ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Nolte 43A-14
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.62°

