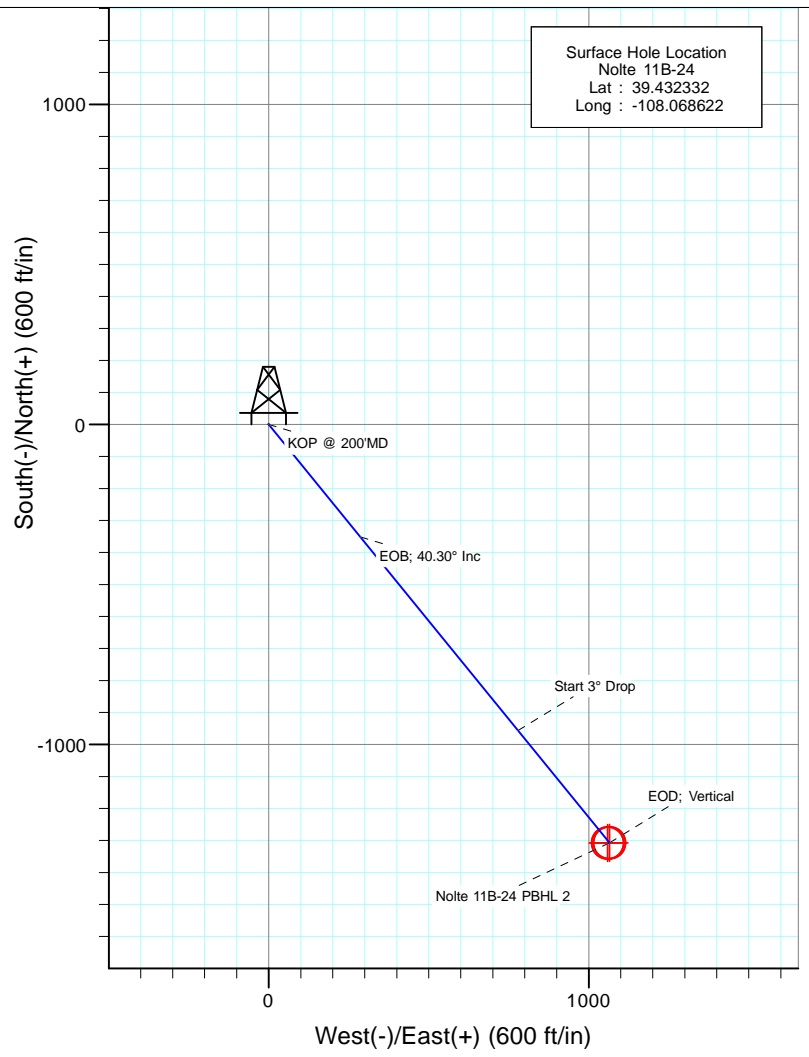


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1543.2	40.30	140.84	1435.2	-351.4	286.2	3.00	140.84	453.2	
4	2749.0	40.30	140.84	2354.8	-956.0	778.7	0.00	0.00	1233.0	
5	4092.2	0.00	0.00	3590.0	-1307.4	1064.9	3.00	180.00	1686.2	
6	6292.2	0.00	0.00	5790.0	-1307.4	1064.9	0.00	0.00	1686.2	Nolte 11B-24 PBHL 2



Surface Hole Location
 Nolte 11B-24
 Lat : 39.432332
 Long : -108.068622

M Azimuths to True North
 Magnetic North: 10.11°
 Magnetic Field
 Strength: 52002.9snT
 Dip Angle: 65.62°
 Date: 7/15/2013
 Model: IGRF2010

DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Nolte 11B-24 PBHL	-1307.8	1059.0	591265.24	1275579.98	39.428741	-108.064873
Nolte 11B-24 PBHL 2	-1307.4	1064.9	591265.47	1275585.89	39.428743	-108.064852

Plan #3
 Nolte 11B-24
 WELL @ 5117.8ft (Original Well Elev)
 Ground Elevation @ 5091.0
 NAD 1927 (NADCON CONUS)
 Well Nolte 11B-24, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2590.0	3039.7	MESAVERDE (TVD)
3590.0	4092.2	TOP GAS (TVD)
5490.0	5992.2	ROLLINS (TVD)

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well Nolte 11B-24
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 11B-24	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 11B-24						
Well Position	+N/-S	0.0 ft	Northing:	592,602.43 ft	Latitude:	39.432332
	+E/-W	0.0 ft	Easting:	1,274,558.42 ft	Longitude:	-108.068622
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,091.0 ft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	7/15/2013	(°)	(°)	(nT)
			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	141.00	

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,543.2	40.30	140.84	1,435.2	-351.4	286.2	3.00	3.00	0.00	140.84	
2,749.0	40.30	140.84	2,354.8	-956.0	778.7	0.00	0.00	0.00	0.00	
4,092.2	0.00	0.00	3,590.0	-1,307.4	1,064.9	3.00	-3.00	0.00	180.00	
6,292.2	0.00	0.00	5,790.0	-1,307.4	1,064.9	0.00	0.00	0.00	0.00	Nolte 11B-24 PBHL 2

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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	KOP @ 200'MD
300.0	3.00	140.84	300.0	-2.0	1.7	2.6	3.00	3.00	
400.0	6.00	140.84	399.6	-8.1	6.6	10.5	3.00	3.00	
500.0	9.00	140.84	498.8	-18.2	14.8	23.5	3.00	3.00	
600.0	12.00	140.84	597.1	-32.4	26.4	41.7	3.00	3.00	
700.0	15.00	140.84	694.3	-50.5	41.1	65.1	3.00	3.00	
800.0	18.00	140.84	790.2	-72.5	59.0	93.5	3.00	3.00	
900.0	21.00	140.84	884.4	-98.4	80.1	126.9	3.00	3.00	
1,000.0	24.00	140.84	976.8	-128.0	104.3	165.1	3.00	3.00	9 5/8"
1,100.0	27.00	140.84	1,067.1	-161.4	131.5	208.2	3.00	3.00	
1,200.0	30.00	140.84	1,154.9	-198.4	161.6	255.9	3.00	3.00	
1,300.0	33.00	140.84	1,240.2	-238.9	194.6	308.1	3.00	3.00	
1,400.0	36.00	140.84	1,322.6	-282.8	230.3	364.7	3.00	3.00	
1,500.0	39.00	140.84	1,401.9	-330.0	268.8	425.6	3.00	3.00	
1,543.2	40.30	140.84	1,435.2	-351.4	286.2	453.2	3.00	3.00	EOB; 40.30° Inc
1,600.0	40.30	140.84	1,478.5	-379.9	309.4	489.9	0.00	0.00	
1,700.0	40.30	140.84	1,554.8	-430.0	350.2	554.6	0.00	0.00	
1,800.0	40.30	140.84	1,631.0	-480.2	391.1	619.3	0.00	0.00	
1,900.0	40.30	140.84	1,707.3	-530.3	431.9	683.9	0.00	0.00	
2,000.0	40.30	140.84	1,783.6	-580.4	472.8	748.6	0.00	0.00	
2,100.0	40.30	140.84	1,859.9	-630.6	513.6	813.3	0.00	0.00	
2,200.0	40.30	140.84	1,936.1	-680.7	554.5	878.0	0.00	0.00	
2,300.0	40.30	140.84	2,012.4	-730.9	595.3	942.6	0.00	0.00	
2,400.0	40.30	140.84	2,088.7	-781.0	636.1	1,007.3	0.00	0.00	
2,500.0	40.30	140.84	2,164.9	-831.2	677.0	1,072.0	0.00	0.00	
2,600.0	40.30	140.84	2,241.2	-881.3	717.8	1,136.6	0.00	0.00	
2,700.0	40.30	140.84	2,317.5	-931.5	758.7	1,201.3	0.00	0.00	
2,749.0	40.30	140.84	2,354.9	-956.0	778.7	1,233.0	0.00	0.00	Start 3° Drop
2,800.0	38.76	140.84	2,394.2	-981.2	799.2	1,265.5	3.00	-3.00	
2,900.0	35.76	140.84	2,473.8	-1,028.1	837.4	1,326.0	3.00	-3.00	
3,000.0	32.76	140.84	2,556.4	-1,071.8	873.0	1,382.3	3.00	-3.00	
3,039.7	31.57	140.84	2,590.0	-1,088.2	886.3	1,403.4	3.00	-3.00	MESAVERDE (TVD)
3,100.0	29.76	140.84	2,641.9	-1,112.0	905.7	1,434.2	3.00	-3.00	
3,200.0	26.76	140.84	2,729.9	-1,148.7	935.6	1,481.5	3.00	-3.00	
3,300.0	23.76	140.84	2,820.4	-1,181.8	962.6	1,524.2	3.00	-3.00	
3,400.0	20.76	140.84	2,912.9	-1,211.2	986.5	1,562.1	3.00	-3.00	
3,500.0	17.76	140.84	3,007.3	-1,236.8	1,007.3	1,595.1	3.00	-3.00	
3,600.0	14.76	140.84	3,103.3	-1,258.5	1,025.0	1,623.1	3.00	-3.00	
3,700.0	11.76	140.84	3,200.6	-1,276.3	1,039.5	1,646.0	3.00	-3.00	
3,800.0	8.76	140.84	3,299.0	-1,290.1	1,050.8	1,663.9	3.00	-3.00	
3,900.0	5.76	140.84	3,398.2	-1,299.9	1,058.8	1,676.5	3.00	-3.00	
4,000.0	2.76	140.84	3,497.9	-1,305.7	1,063.5	1,683.9	3.00	-3.00	
4,092.2	0.00	0.00	3,590.0	-1,307.4	1,064.9	1,686.2	3.00	-3.00	EOB; Vertical - TOP GAS (TVD)
4,100.0	0.00	0.00	3,597.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,200.0	0.00	0.00	3,697.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,300.0	0.00	0.00	3,797.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,400.0	0.00	0.00	3,897.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,500.0	0.00	0.00	3,997.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,600.0	0.00	0.00	4,097.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,700.0	0.00	0.00	4,197.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well Nolte 11B-24
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 11B-24	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	4,297.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
4,900.0	0.00	0.00	4,397.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,000.0	0.00	0.00	4,497.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,100.0	0.00	0.00	4,597.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,200.0	0.00	0.00	4,697.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,300.0	0.00	0.00	4,797.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,400.0	0.00	0.00	4,897.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,500.0	0.00	0.00	4,997.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,600.0	0.00	0.00	5,097.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,700.0	0.00	0.00	5,197.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,800.0	0.00	0.00	5,297.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,900.0	0.00	0.00	5,397.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
5,992.2	0.00	0.00	5,490.0	-1,307.4	1,064.9	1,686.2	0.00	0.00	ROLLINS (TVD)
6,000.0	0.00	0.00	5,497.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
6,100.0	0.00	0.00	5,597.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
6,200.0	0.00	0.00	5,697.8	-1,307.4	1,064.9	1,686.2	0.00	0.00	
6,292.2	0.00	0.00	5,790.0	-1,307.4	1,064.9	1,686.2	0.00	0.00	PBHL @ 6,292' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Nolte 11B-24 PBHL 2 - plan hits target center - Circle (radius 50.0)	0.00	0.00	5,790.0	-1,307.4	1,064.9	591,265.47	1,275,585.89	39.428743	-108.064852
Nolte 11B-24 PBHL - plan misses target center by 5.9ft at 6292.2ft MD (5790.0 TVD, -1307.4 N, 1064.9 E) - Circle (radius 50.0)	0.00	0.00	5,790.0	-1,307.8	1,059.0	591,265.24	1,275,579.98	39.428741	-108.064873

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.0	976.8	9 5/8"	9.625	12.250	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,039.7	2,590.0	MESAVERDE (TVD)		0.00	
4,092.2	3,590.0	TOP GAS (TVD)		0.00	
5,992.2	5,490.0	ROLLINS (TVD)		0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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)	
200.0	200.0	0.0	0.0	KOP @ 200'MD
1,543.2	1,435.2	-351.4	286.2	EOB; 40.30° Inc
2,749.0	2,354.9	-956.0	778.7	Start 3° Drop
4,092.2	3,590.0	-1,307.4	1,064.9	EOD; Vertical
6,292.2	5,790.0	-1,307.4	1,064.9	PBHL @ 6,292' MD

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S14-T7S-R96W

Nolte 11B-24

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 11B-24
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 11B-24	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	6,292.2	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
S14-T7S-R96W						
Nolte 11A-24 - DD - Plan #3	200.0	200.0	8.0	7.4	13.234	CC, ES
Nolte 11A-24 - DD - Plan #3	1,500.0	1,515.5	88.7	77.2	7.748	SF
Nolte 11C-24 - DD - Plan #3	311.5	301.7	7.4	6.4	7.374	CC, ES
Nolte 11C-24 - DD - Plan #3	2,000.0	2,000.7	78.1	48.7	2.655	SF
Nolte 13A-13 - DD - Plan #3	200.0	200.0	56.9	56.3	94.105	CC, ES
Nolte 13A-13 - DD - Plan #3	500.0	487.1	92.7	91.0	53.206	SF
Nolte 13B-13 - DD - Plan #3	200.0	200.0	49.0	48.4	81.135	CC, ES
Nolte 13B-13 - DD - Plan #3	500.0	491.0	78.3	76.5	44.955	SF
Nolte 13C-13 - DD - Plan #3	200.0	199.8	56.0	55.4	92.765	CC, ES
Nolte 13C-13 - DD - Plan #3	500.0	488.0	87.9	86.1	49.314	SF
Nolte 13D-13 - DD - Plan #3	200.0	200.0	48.0	47.4	79.489	CC, ES
Nolte 13D-13 - DD - Plan #3	500.0	494.1	68.1	66.3	38.531	SF
Nolte 14A-13 - DD - Plan #3	200.0	200.0	40.0	39.4	66.239	CC, ES
Nolte 14A-13 - DD - Plan #3	500.0	497.7	54.8	53.0	31.559	SF
Nolte 14B-13 - DD - Plan #3	200.0	200.0	32.0	31.4	52.981	CC, ES
Nolte 14B-13 - DD - Plan #3	500.0	498.8	46.6	44.9	27.202	SF
Nolte 14C-13 - DD - Plan #3	200.0	200.0	24.5	23.9	40.535	CC, ES
Nolte 14C-13 - DD - Plan #3	400.0	399.6	30.3	28.9	22.737	SF
Nolte 14D-13 - DD - Plan #3	200.0	200.0	16.0	15.4	26.490	CC, ES
Nolte 14D-13 - DD - Plan #3	6,292.2	6,057.2	660.3	618.1	15.647	SF
Nolte 43A-14 - DD - Plan #3	200.0	200.0	41.2	40.6	68.202	CC, ES
Nolte 43A-14 - DD - Plan #3	400.0	397.2	50.8	49.4	38.401	SF
Nolte 43B-14 - DD - Plan #3	200.0	200.0	33.5	32.9	55.456	CC, ES
Nolte 43B-14 - DD - Plan #3	400.0	398.6	41.7	40.4	31.626	SF
Nolte 43C-14 - DD - Plan #3	200.0	200.0	26.0	25.4	43.007	CC, ES
Nolte 43C-14 - DD - Plan #3	400.0	399.6	34.3	33.0	26.075	SF
Nolte 44A-14 - DD - Plan #3	200.0	200.0	18.9	18.3	31.204	CC, ES
Nolte 44A-14 - DD - Plan #3	400.0	399.6	28.1	26.8	21.500	SF
Nolte 44B-14 - DD - Plan #3	200.0	200.0	12.8	12.2	21.174	CC, ES
Nolte 44B-14 - DD - Plan #3	300.0	300.0	15.4	14.4	16.096	SF
Nolte 44C-14 - DD - Plan #3	200.0	200.0	10.0	9.4	16.531	CC, ES
Nolte 44C-14 - DD - Plan #3	300.0	300.0	12.5	11.5	13.048	SF
Nolte SWD 1-14 - DD - Plan #3	200.0	200.0	12.8	12.2	21.154	CC, ES
Nolte SWD 1-14 - DD - Plan #3	300.0	300.0	14.2	13.3	14.827	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 11B-24
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 11B-24	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													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	27.56	7.1	3.7	8.0						
100.0	100.0	100.0	100.0	0.1	0.1	27.56	7.1	3.7	8.0	7.7	0.26	31.326			
200.0	200.0	200.0	200.0	0.3	0.3	27.56	7.1	3.7	8.0	7.4	0.60	13.234	CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-128.15	7.1	3.7	9.3	8.4	0.96	9.753			
400.0	399.6	400.2	400.2	0.7	0.7	-145.09	5.3	5.6	13.4	12.1	1.32	10.169			
500.0	498.8	500.7	500.3	1.0	0.9	-151.86	-0.2	11.4	18.5	16.8	1.70	10.862			
600.0	597.1	601.5	600.2	1.4	1.1	-154.22	-9.2	20.9	24.0	21.8	2.11	11.344			
700.0	694.3	702.5	699.5	1.8	1.5	-154.49	-22.0	34.4	29.7	27.2	2.58	11.540			
800.0	790.2	803.8	798.0	2.3	1.9	-153.66	-38.3	51.7	35.8	32.7	3.13	11.445			
900.0	884.4	905.3	895.2	3.0	2.5	-152.22	-58.3	72.8	42.1	38.3	3.80	11.094			
1,000.0	976.8	1,007.0	991.0	3.7	3.1	-150.43	-81.9	97.6	48.7	44.1	4.62	10.553			
1,100.0	1,067.1	1,109.0	1,085.0	4.5	3.9	-148.43	-109.0	126.2	55.7	50.0	5.62	9.904			
1,200.0	1,154.9	1,211.2	1,177.0	5.4	4.7	-146.32	-139.6	158.5	62.9	56.1	6.82	9.219			
1,300.0	1,240.2	1,313.5	1,266.6	6.4	5.7	-144.17	-173.5	194.4	70.5	62.3	8.25	8.551			
1,400.0	1,322.6	1,416.1	1,353.6	7.5	6.7	-142.01	-210.9	233.8	78.5	68.6	9.89	7.936			
1,500.0	1,401.9	1,515.5	1,436.6	8.7	7.7	-141.16	-248.6	273.6	88.7	77.2	11.44	7.748	SF		
1,600.0	1,478.5	1,614.6	1,519.2	9.9	8.7	-142.10	-286.1	313.3	102.3	89.6	12.71	8.046			
1,700.0	1,554.8	1,713.6	1,601.8	11.1	9.8	-143.04	-323.7	352.9	116.3	102.4	13.95	8.339			
1,800.0	1,631.0	1,812.6	1,684.4	12.3	10.8	-143.79	-361.2	392.6	130.4	115.2	15.19	8.583			
1,900.0	1,707.3	1,911.6	1,767.0	13.5	11.8	-144.38	-398.7	432.2	144.5	128.0	16.43	8.790			
2,000.0	1,783.6	2,010.6	1,849.6	14.8	12.9	-144.88	-436.3	471.8	158.5	140.9	17.68	8.967			
2,100.0	1,859.9	2,109.6	1,932.1	16.0	13.9	-145.29	-473.8	511.5	172.6	153.7	18.93	9.121			
2,200.0	1,936.1	2,208.6	2,014.7	17.2	14.9	-145.64	-511.4	551.1	186.7	166.6	20.18	9.255			
2,300.0	2,012.4	2,307.6	2,097.3	18.4	16.0	-145.94	-548.9	590.7	200.9	179.4	21.43	9.373			
2,400.0	2,088.7	2,406.6	2,179.9	19.7	17.0	-146.20	-586.4	630.4	215.0	192.3	22.68	9.478			
2,500.0	2,164.9	2,505.5	2,262.5	20.9	18.0	-146.43	-624.0	670.0	229.1	205.2	23.94	9.571			
2,600.0	2,241.2	2,604.5	2,345.1	22.1	19.1	-146.63	-661.5	709.6	243.2	218.0	25.19	9.655			
2,700.0	2,317.5	2,703.5	2,427.6	23.4	20.1	-146.81	-699.1	749.3	257.3	230.9	26.45	9.731			
2,800.0	2,394.2	2,802.6	2,510.3	24.6	21.2	-147.00	-736.6	788.9	270.9	243.2	27.72	9.774			
2,900.0	2,473.8	2,900.0	2,591.7	25.7	22.2	-146.78	-773.4	827.7	280.9	251.7	29.20	9.619			
3,000.0	2,556.4	2,987.6	2,666.7	26.7	23.0	-146.51	-804.5	860.5	289.5	258.9	30.56	9.473			
3,100.0	2,641.9	3,076.8	2,745.1	27.6	23.7	-146.26	-833.7	891.4	297.2	265.4	31.82	9.341			
3,200.0	2,729.9	3,165.8	2,825.3	28.4	24.4	-146.03	-860.3	919.5	304.3	271.3	32.98	9.226			
3,300.0	2,820.4	3,254.8	2,907.2	29.2	25.0	-145.82	-884.8	944.8	310.5	276.4	34.03	9.124			
3,400.0	2,912.9	3,343.7	2,990.4	29.8	25.6	-145.63	-905.6	967.3	315.9	280.9	34.97	9.033			
3,500.0	3,007.3	3,432.5	3,075.0	30.4	26.0	-145.45	-924.2	987.0	320.5	284.7	35.80	8.951			
3,600.0	3,103.3	3,521.2	3,160.7	30.9	26.4	-145.28	-940.1	1,003.7	324.2	287.7	36.52	8.877			
3,700.0	3,200.6	3,609.9	3,247.3	31.2	26.7	-145.12	-953.2	1,017.6	327.1	290.0	37.14	8.809			
3,800.0	3,299.0	3,700.0	3,336.1	31.5	27.0	-144.96	-963.7	1,028.7	329.2	291.6	37.65	8.745			
3,900.0	3,398.2	3,787.3	3,422.7	31.7	27.2	-144.82	-971.1	1,036.5	330.4	292.4	38.03	8.688			
4,000.0	3,497.9	3,876.0	3,511.1	31.8	27.3	-144.68	-975.8	1,041.5	330.8	292.5	38.32	8.633			
4,100.0	3,597.8	3,964.7	3,599.8	31.9	27.3	-3.71	-977.7	1,043.5	330.3	291.8	38.51	8.577			
4,140.2	3,638.1	4,003.0	3,638.1	31.9	27.3	-3.70	-977.8	1,043.5	330.3	291.7	38.57	8.563			
4,200.0	3,697.8	4,062.8	3,697.8	31.9	27.4	-3.70	-977.8	1,043.5	330.3	291.6	38.65	8.546			
4,300.0	3,797.8	4,162.8	3,797.8	32.0	27.4	-3.70	-977.8	1,043.5	330.3	291.5	38.78	8.517			
4,400.0	3,897.8	4,262.8	3,897.8	32.0	27.5	-3.70	-977.8	1,043.5	330.3	291.4	38.91	8.488			
4,500.0	3,997.8	4,362.8	3,997.8	32.0	27.5	-3.70	-977.8	1,043.5	330.3	291.2	39.05	8.459			
4,600.0	4,097.8	4,462.8	4,097.8	32.1	27.6	-3.70	-977.8	1,043.5	330.3	291.1	39.18	8.429			
4,700.0	4,197.8	4,562.8	4,197.8	32.1	27.6	-3.70	-977.8	1,043.5	330.3	291.0	39.33	8.398			
4,800.0	4,297.8	4,662.8	4,297.8	32.2	27.7	-3.70	-977.8	1,043.5	330.3	290.8	39.47	8.368			
4,900.0	4,397.8	4,762.8	4,397.8	32.2	27.7	-3.70	-977.8	1,043.5	330.3	290.7	39.62	8.337			

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 11B-24
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 11B-24	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		
5,000.0	4,497.8	4,862.8	4,497.8	32.3	27.8	-3.70	-977.8	1,043.5	330.3	290.5	39.77	8.306		
5,100.0	4,597.8	4,962.8	4,597.8	32.3	27.8	-3.70	-977.8	1,043.5	330.3	290.4	39.92	8.274		
5,200.0	4,697.8	5,062.8	4,697.8	32.4	27.9	-3.70	-977.8	1,043.5	330.3	290.2	40.07	8.242		
5,300.0	4,797.8	5,162.8	4,797.8	32.4	27.9	-3.70	-977.8	1,043.5	330.3	290.1	40.23	8.210		
5,400.0	4,897.8	5,262.8	4,897.8	32.5	28.0	-3.70	-977.8	1,043.5	330.3	289.9	40.39	8.178		
5,500.0	4,997.8	5,362.8	4,997.8	32.5	28.0	-3.70	-977.8	1,043.5	330.3	289.7	40.55	8.145		
5,600.0	5,097.8	5,462.8	5,097.8	32.6	28.1	-3.70	-977.8	1,043.5	330.3	289.6	40.71	8.113		
5,700.0	5,197.8	5,562.8	5,197.8	32.6	28.2	-3.70	-977.8	1,043.5	330.3	289.4	40.88	8.080		
5,800.0	5,297.8	5,662.8	5,297.8	32.7	28.2	-3.70	-977.8	1,043.5	330.3	289.2	41.05	8.047		
5,900.0	5,397.8	5,762.8	5,397.8	32.7	28.3	-3.70	-977.8	1,043.5	330.3	289.1	41.22	8.013		
6,000.0	5,497.8	5,862.8	5,497.8	32.8	28.3	-3.70	-977.8	1,043.5	330.3	288.9	41.39	7.980		
6,100.0	5,597.8	5,962.8	5,597.8	32.8	28.4	-3.70	-977.8	1,043.5	330.3	288.7	41.56	7.946		
6,200.0	5,697.8	6,062.8	5,697.8	32.9	28.5	-3.70	-977.8	1,043.5	330.3	288.5	41.74	7.913		
6,292.2	5,790.0	6,154.9	5,790.0	32.9	28.5	-3.70	-977.8	1,043.5	330.3	288.4	41.91	7.881		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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	-152.41	-7.1	-3.7	12.6					
100.0	100.0	90.3	90.3	0.1	0.1	-152.41	-7.1	-3.7	8.0	7.7	0.26	30.903		
200.0	200.0	190.3	190.3	0.3	0.3	-152.41	-7.1	-3.7	8.0	7.4	0.60	13.213		
300.0	300.0	290.2	290.2	0.5	0.5	82.60	-7.4	-3.5	7.4	6.5	0.96	7.733		
311.5	311.4	301.7	301.7	0.5	0.5	85.38	-7.7	-3.3	7.4	6.4	1.01	7.374	CC, ES	
400.0	399.6	390.2	390.0	0.7	0.7	105.63	-11.4	-0.8	8.1	6.8	1.37	5.931		
500.0	498.8	490.3	489.6	1.0	0.9	121.44	-19.6	4.7	10.3	8.4	1.84	5.591		
600.0	597.1	590.5	588.7	1.4	1.2	129.95	-32.3	13.1	13.3	10.9	2.36	5.627		
700.0	694.3	690.9	687.0	1.8	1.6	134.05	-49.2	24.5	16.9	13.9	2.97	5.671		
800.0	790.2	791.5	784.3	2.3	2.1	135.71	-70.5	38.7	20.8	17.1	3.69	5.628		
900.0	884.4	892.2	880.2	3.0	2.6	136.01	-96.0	55.8	25.1	20.5	4.56	5.497		
1,000.0	976.8	993.0	974.4	3.7	3.3	135.51	-125.7	75.6	29.7	24.1	5.59	5.302		
1,100.0	1,067.1	1,094.0	1,066.8	4.5	4.1	134.54	-159.6	98.3	34.5	27.7	6.81	5.074		
1,200.0	1,154.9	1,195.1	1,157.0	5.4	4.9	133.30	-197.5	123.7	39.7	31.5	8.22	4.835		
1,300.0	1,240.2	1,296.3	1,244.8	6.4	5.9	131.89	-239.4	151.7	45.2	35.4	9.83	4.602		
1,400.0	1,322.6	1,397.7	1,329.8	7.5	6.9	130.41	-285.2	182.3	51.0	39.4	11.64	4.382		
1,500.0	1,401.9	1,499.1	1,412.0	8.7	8.0	128.89	-334.7	215.4	57.1	43.5	13.67	4.181		
1,600.0	1,478.5	1,600.7	1,490.9	9.9	9.2	126.83	-387.9	250.9	63.0	47.1	15.96	3.949		
1,700.0	1,554.8	1,702.2	1,566.3	11.1	10.5	121.55	-444.4	288.7	66.7	47.7	19.00	3.508		
1,800.0	1,631.0	1,803.1	1,637.5	12.3	11.9	112.81	-503.7	328.4	68.9	46.2	22.72	3.033		
1,900.0	1,707.3	1,902.7	1,704.1	13.5	13.3	100.80	-565.4	369.6	71.8	45.3	26.54	2.705		
2,000.0	1,783.6	2,000.7	1,765.6	14.8	14.8	86.62	-628.7	412.0	78.1	48.7	29.40	2.655	SF	
2,100.0	1,859.9	2,096.6	1,822.0	16.0	16.3	72.38	-693.1	455.0	90.2	59.7	30.46	2.960		
2,200.0	1,936.1	2,189.8	1,873.1	17.2	17.8	60.03	-758.0	498.4	109.3	79.4	29.93	3.653		
2,300.0	2,012.4	2,281.2	1,919.4	18.4	19.4	50.21	-823.4	542.2	135.3	106.7	28.59	4.733		
2,400.0	2,088.7	2,380.5	1,970.2	19.7	21.0	43.11	-894.4	589.6	163.9	136.5	27.35	5.992		
2,500.0	2,164.9	2,484.2	2,027.7	20.9	22.6	38.94	-966.1	637.5	189.8	162.9	26.93	7.046		
2,600.0	2,241.2	2,590.8	2,091.7	22.1	24.2	36.60	-1,037.0	685.0	211.8	184.6	27.22	7.782		
2,700.0	2,317.5	2,699.9	2,161.9	23.4	25.7	35.49	-1,106.3	731.3	229.4	201.3	28.08	8.167		
2,800.0	2,394.2	2,810.7	2,238.0	24.6	27.2	35.32	-1,173.2	776.1	242.6	213.2	29.44	8.241		
2,900.0	2,473.8	2,922.4	2,319.4	25.7	28.6	35.36	-1,236.9	818.6	254.7	223.9	30.81	8.267		
3,000.0	2,556.4	3,034.9	2,405.7	26.7	29.9	35.40	-1,296.8	858.7	266.0	233.9	32.07	8.293		
3,100.0	2,641.9	3,148.1	2,496.7	27.6	31.1	35.44	-1,352.8	896.2	276.5	243.2	33.23	8.319		
3,200.0	2,729.9	3,262.1	2,592.1	28.4	32.2	35.47	-1,404.6	930.8	286.2	251.9	34.29	8.345		
3,300.0	2,820.4	3,376.7	2,691.7	29.2	33.2	35.50	-1,451.7	962.3	295.0	259.7	35.24	8.370		
3,400.0	2,912.9	3,491.9	2,795.0	29.8	34.1	35.52	-1,494.0	990.6	302.9	266.8	36.08	8.394		
3,500.0	3,007.3	3,607.7	2,901.7	30.4	34.9	35.53	-1,531.3	1,015.5	309.8	273.0	36.80	8.418		
3,600.0	3,103.3	3,723.9	3,011.5	30.9	35.5	35.54	-1,563.2	1,036.8	315.8	278.4	37.41	8.440		
3,700.0	3,200.6	3,840.6	3,123.7	31.2	36.0	35.54	-1,589.6	1,054.5	320.8	282.8	37.91	8.461		
3,800.0	3,299.0	3,957.6	3,238.0	31.5	36.4	35.53	-1,610.2	1,068.3	324.7	286.4	38.29	8.479		
3,900.0	3,398.2	4,074.9	3,353.9	31.7	36.7	35.52	-1,625.1	1,078.2	327.6	289.1	38.57	8.495		
4,000.0	3,497.9	4,192.3	3,470.8	31.8	36.9	35.49	-1,634.0	1,084.2	329.5	290.8	38.74	8.506		
4,100.0	3,597.8	4,309.7	3,588.1	31.9	36.9	176.30	-1,637.0	1,086.2	330.3	291.5	38.80	8.512		
4,200.0	3,697.8	4,409.7	3,688.1	31.9	37.0	176.30	-1,637.0	1,086.2	330.3	291.3	38.93	8.483		
4,300.0	3,797.8	4,509.7	3,788.1	32.0	37.0	176.30	-1,637.0	1,086.2	330.3	291.2	39.07	8.454		
4,400.0	3,897.8	4,609.7	3,888.1	32.0	37.1	176.30	-1,637.0	1,086.2	330.3	291.1	39.21	8.424		
4,500.0	3,997.8	4,709.7	3,988.1	32.0	37.1	176.30	-1,637.0	1,086.2	330.3	290.9	39.35	8.394		
4,600.0	4,097.8	4,809.7	4,088.1	32.1	37.1	176.30	-1,637.0	1,086.2	330.3	290.8	39.49	8.364		
4,700.0	4,197.8	4,909.7	4,188.1	32.1	37.2	176.30	-1,637.0	1,086.2	330.3	290.6	39.64	8.333		
4,800.0	4,297.8	5,009.7	4,288.1	32.2	37.2	176.30	-1,637.0	1,086.2	330.3	290.5	39.78	8.302		
4,900.0	4,397.8	5,109.7	4,388.1	32.2	37.3	176.30	-1,637.0	1,086.2	330.3	290.3	39.94	8.270		
5,000.0	4,497.8	5,209.7	4,488.1	32.3	37.3	176.30	-1,637.0	1,086.2	330.3	290.2	40.09	8.239		

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 11B-24
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 11B-24	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						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		
5,100.0	4,597.8	5,309.7	4,588.1	32.3	37.3	176.30	-1,637.0	1,086.2	330.3	290.0	40.24	8.207		
5,200.0	4,697.8	5,409.7	4,688.1	32.4	37.4	176.30	-1,637.0	1,086.2	330.3	289.9	40.40	8.175		
5,300.0	4,797.8	5,509.7	4,788.1	32.4	37.4	176.30	-1,637.0	1,086.2	330.3	289.7	40.56	8.142		
5,400.0	4,897.8	5,609.7	4,888.1	32.5	37.5	176.30	-1,637.0	1,086.2	330.3	289.6	40.73	8.110		
5,500.0	4,997.8	5,709.7	4,988.1	32.5	37.5	176.30	-1,637.0	1,086.2	330.3	289.4	40.89	8.077		
5,600.0	5,097.8	5,809.7	5,088.1	32.6	37.6	176.30	-1,637.0	1,086.2	330.3	289.2	41.06	8.044		
5,700.0	5,197.8	5,909.7	5,188.1	32.6	37.6	176.30	-1,637.0	1,086.2	330.3	289.1	41.23	8.011		
5,800.0	5,297.8	6,009.7	5,288.1	32.7	37.7	176.30	-1,637.0	1,086.2	330.3	288.9	41.40	7.978		
5,900.0	5,397.8	6,109.7	5,388.1	32.7	37.7	176.30	-1,637.0	1,086.2	330.3	288.7	41.57	7.944		
6,000.0	5,497.8	6,209.7	5,488.1	32.8	37.8	176.30	-1,637.0	1,086.2	330.3	288.5	41.75	7.911		
6,100.0	5,597.8	6,309.7	5,588.1	32.8	37.8	176.30	-1,637.0	1,086.2	330.3	288.4	41.93	7.877		
6,200.0	5,697.8	6,341.5	5,620.0	32.9	37.8	176.30	-1,637.0	1,086.2	337.2	295.2	42.05	8.020		
6,292.2	5,790.0	6,341.5	5,620.0	32.9	37.8	176.30	-1,637.0	1,086.2	367.1	325.0	42.13	8.714		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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													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	17.40	54.3	17.0	56.9						
100.0	100.0	100.0	100.0	0.1	0.1	17.40	54.3	17.0	56.9	56.6	0.26	222.751			
200.0	200.0	200.0	200.0	0.3	0.3	17.40	54.3	17.0	56.9	56.3	0.60	94.105 CC, ES			
300.0	300.0	297.0	297.0	0.5	0.5	-124.77	56.4	18.3	60.8	59.8	0.95	63.698			
400.0	399.6	393.0	392.7	0.7	0.7	-127.86	62.6	22.1	72.7	71.4	1.33	54.698			
500.0	498.8	487.1	486.0	1.0	1.0	-131.13	72.6	28.3	92.7	91.0	1.74	53.206 SF			
600.0	597.1	578.2	575.8	1.4	1.3	-133.72	86.1	36.6	120.8	118.6	2.20	54.778			
700.0	694.3	665.8	661.2	1.8	1.6	-135.49	102.4	46.6	156.5	153.8	2.72	57.543			
800.0	790.2	749.1	741.6	2.3	2.1	-136.56	121.1	58.1	199.5	196.3	3.29	60.663			
900.0	884.4	827.7	816.5	3.0	2.5	-137.07	141.4	70.6	249.3	245.4	3.91	63.767			
1,000.0	976.8	900.0	884.4	3.7	3.0	-137.12	162.3	83.5	305.4	300.8	4.58	66.746			
1,100.0	1,067.1	969.7	949.1	4.5	3.5	-136.85	184.6	97.2	367.2	361.9	5.30	69.220			
1,200.0	1,154.9	1,032.8	1,006.7	5.4	4.0	-136.22	206.5	110.6	434.2	428.1	6.08	71.426			
1,300.0	1,240.2	1,090.6	1,058.7	6.4	4.4	-135.26	228.0	123.8	505.9	499.0	6.91	73.225			
1,400.0	1,322.6	1,143.2	1,105.3	7.5	4.9	-133.96	248.7	136.6	581.8	574.0	7.81	74.477			
1,500.0	1,401.9	1,200.0	1,154.9	8.7	5.4	-132.54	272.2	151.1	661.5	652.7	8.80	75.125			
1,600.0	1,478.5	1,233.9	1,184.1	9.9	5.7	-132.10	286.9	160.1	744.0	734.2	9.78	76.062			
1,700.0	1,554.8	1,274.8	1,218.9	11.1	6.1	-133.02	305.1	171.3	827.8	817.1	10.72	77.252			
1,800.0	1,631.0	1,313.8	1,251.8	12.3	6.5	-133.71	323.2	182.4	912.5	900.9	11.65	78.316			
1,900.0	1,707.3	1,351.1	1,282.7	13.5	6.9	-134.23	340.9	193.3	998.1	985.5	12.59	79.257			
2,000.0	1,783.6	1,400.0	1,322.6	14.8	7.4	-134.75	365.0	208.1	1,084.6	1,071.0	13.56	79.985			
2,100.0	1,859.9	1,420.8	1,339.4	16.0	7.7	-134.92	375.5	214.6	1,171.5	1,157.0	14.48	80.898			
2,200.0	1,936.1	1,453.4	1,365.3	17.2	8.0	-135.14	392.2	224.9	1,259.2	1,243.8	15.43	81.604			
2,300.0	2,012.4	1,500.0	1,401.9	18.4	8.6	-135.36	416.8	240.0	1,347.6	1,331.2	16.42	82.070			

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 11B-24
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 11B-24	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													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	15.75	47.2	13.3	49.0						
100.0	100.0	100.0	100.0	0.1	0.1	15.75	47.2	13.3	49.0	48.8	0.26	192.127			
200.0	200.0	200.0	200.0	0.3	0.3	15.75	47.2	13.3	49.0	48.4	0.60	81.135 CC, ES			
300.0	300.0	298.8	298.8	0.5	0.5	-127.14	47.7	13.7	51.2	50.2	0.96	53.483			
400.0	399.6	395.7	395.6	0.7	0.7	-130.77	51.6	16.7	60.7	59.3	1.33	45.639			
500.0	498.8	491.0	490.4	1.0	0.9	-134.06	59.2	22.6	78.3	76.5	1.74	44.955 SF			
600.0	597.1	583.9	582.2	1.4	1.2	-136.33	70.2	31.1	103.7	101.5	2.20	47.068			
700.0	694.3	673.7	670.2	1.8	1.5	-137.66	84.2	42.0	136.8	134.0	2.73	50.148			
800.0	790.2	759.5	753.5	2.3	1.9	-138.30	100.6	54.7	177.0	173.6	3.31	53.403			
900.0	884.4	841.1	831.7	3.0	2.3	-138.45	118.9	68.9	223.8	219.9	3.96	56.518			
1,000.0	976.8	918.0	904.5	3.7	2.8	-138.23	138.6	84.1	277.0	272.3	4.66	59.382			
1,100.0	1,067.1	989.9	971.6	4.5	3.3	-137.71	159.1	100.0	335.9	330.4	5.42	61.911			
1,200.0	1,154.9	1,056.8	1,033.0	5.4	3.8	-136.93	179.9	116.2	400.0	393.8	6.25	64.051			
1,300.0	1,240.2	1,118.6	1,089.0	6.4	4.3	-135.89	200.6	132.3	469.0	461.8	7.12	65.883			
1,400.0	1,322.6	1,175.4	1,139.6	7.5	4.8	-134.57	220.9	148.0	542.2	534.2	8.06	67.295			
1,500.0	1,401.9	1,227.2	1,185.1	8.7	5.2	-132.95	240.5	163.1	619.4	610.3	9.07	68.271			
1,600.0	1,478.5	1,274.6	1,226.1	9.9	5.7	-132.70	259.2	177.7	699.6	689.5	10.09	69.328			
1,700.0	1,554.8	1,319.8	1,264.7	11.1	6.1	-133.44	277.8	192.1	781.1	770.1	11.08	70.480			
1,800.0	1,631.0	1,363.0	1,301.1	12.3	6.6	-133.95	296.3	206.5	863.6	851.6	12.08	71.474			
1,900.0	1,707.3	1,400.0	1,331.8	13.5	7.0	-134.27	312.7	219.1	947.0	934.0	13.07	72.455			
2,000.0	1,783.6	1,444.2	1,367.9	14.8	7.4	-134.54	332.8	234.7	1,031.2	1,017.1	14.10	73.162			
2,100.0	1,859.9	1,488.4	1,403.5	16.0	7.9	-134.71	353.5	250.7	1,116.1	1,101.0	15.13	73.779			
2,200.0	1,936.1	1,541.0	1,445.8	17.2	8.5	-134.87	378.2	269.9	1,201.1	1,184.9	16.19	74.170			
2,300.0	2,012.4	1,593.6	1,488.1	18.4	9.1	-135.02	402.9	289.1	1,286.2	1,268.9	17.26	74.507			

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 11B-24
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 11B-24	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													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	27.53	49.6	25.9	56.0					
100.0	100.0	99.8	99.8	0.1	0.1	27.53	49.6	25.9	56.0	55.7	0.25	219.933		
200.0	200.0	199.8	199.8	0.3	0.3	27.53	49.6	25.9	56.0	55.4	0.60	92.765 CC, ES		
300.0	300.0	297.0	296.9	0.5	0.5	-114.72	51.4	27.6	59.4	58.5	0.96	62.200		
400.0	399.6	393.3	393.0	0.7	0.7	-118.05	56.4	32.9	70.0	68.7	1.34	52.189		
500.0	498.8	488.0	486.9	1.0	1.0	-121.69	64.7	41.5	87.9	86.1	1.78	49.314 SF		
600.0	597.1	580.3	577.8	1.4	1.3	-124.70	75.9	53.0	113.1	110.8	2.29	49.336		
700.0	694.3	669.7	665.0	1.8	1.7	-126.83	89.6	67.2	145.4	142.5	2.88	50.514		
800.0	790.2	755.5	747.7	2.3	2.1	-128.19	105.4	83.6	184.4	180.9	3.54	52.100		
900.0	884.4	837.4	825.6	3.0	2.6	-128.93	122.8	101.7	229.8	225.6	4.27	53.777		
1,000.0	976.8	914.9	898.3	3.7	3.1	-129.20	141.5	121.0	281.1	276.1	5.07	55.416		
1,100.0	1,067.1	988.0	965.8	4.5	3.6	-129.06	160.9	141.2	337.9	332.0	5.94	56.907		
1,200.0	1,154.9	1,056.4	1,028.0	5.4	4.2	-128.59	180.8	161.7	399.8	392.9	6.87	58.211		
1,300.0	1,240.2	1,120.2	1,085.0	6.4	4.7	-127.79	200.6	182.3	466.2	458.4	7.85	59.403		
1,400.0	1,322.6	1,184.7	1,141.8	7.5	5.3	-126.84	221.9	204.4	536.7	527.8	8.90	60.268		
1,500.0	1,401.9	1,252.0	1,200.9	8.7	5.9	-125.96	244.2	227.5	609.7	599.7	10.03	60.784		
1,600.0	1,478.5	1,316.6	1,257.7	9.9	6.4	-126.54	265.7	249.7	684.8	673.6	11.17	61.313		
1,700.0	1,554.8	1,381.0	1,314.2	11.1	7.0	-128.00	287.1	271.9	760.3	748.0	12.30	61.823		
1,800.0	1,631.0	1,445.4	1,370.8	12.3	7.6	-129.21	308.4	294.0	836.0	822.6	13.42	62.278		
1,900.0	1,707.3	1,509.8	1,427.4	13.5	8.2	-130.22	329.8	316.2	911.8	897.3	14.55	62.687		
2,000.0	1,783.6	1,574.2	1,483.9	14.8	8.7	-131.08	351.2	338.3	987.8	972.1	15.67	63.053		
2,100.0	1,859.9	1,638.6	1,540.5	16.0	9.3	-131.82	372.6	360.5	1,063.8	1,047.0	16.78	63.384		
2,200.0	1,936.1	1,703.0	1,597.0	17.2	9.9	-132.46	394.0	382.6	1,139.9	1,122.0	17.90	63.685		
2,300.0	2,012.4	1,767.4	1,653.6	18.4	10.5	-133.02	415.3	404.8	1,216.0	1,197.0	19.01	63.957		
2,400.0	2,088.7	1,831.8	1,710.1	19.7	11.0	-133.52	436.7	426.9	1,292.2	1,272.1	20.13	64.207		

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 11B-24
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 11B-24	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													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	27.52	42.6	22.2	48.0						
100.0	100.0	100.0	100.0	0.1	0.1	27.52	42.6	22.2	48.0	47.7	0.25	188.452			
200.0	200.0	200.0	200.0	0.3	0.3	27.52	42.6	22.2	48.0	47.4	0.60	79.489 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-116.09	42.6	22.2	49.1	48.1	0.96	51.152			
400.0	399.6	397.5	397.5	0.7	0.7	-121.73	43.9	24.3	55.0	53.6	1.34	41.038			
500.0	498.8	494.1	493.8	1.0	0.9	-126.64	47.8	30.5	68.1	66.3	1.77	38.531 SF			
600.0	597.1	589.3	588.2	1.4	1.1	-129.90	54.3	40.6	88.2	86.0	2.26	39.004			
700.0	694.3	682.3	679.7	1.8	1.4	-131.72	63.0	54.4	115.1	112.3	2.84	40.492			
800.0	790.2	772.6	767.8	2.3	1.8	-132.55	73.7	71.3	148.4	144.9	3.52	42.187			
900.0	884.4	859.8	851.9	3.0	2.2	-132.74	86.1	91.0	187.7	183.4	4.28	43.801			
1,000.0	976.8	943.6	931.5	3.7	2.7	-132.50	100.0	112.9	232.7	227.5	5.14	45.258			
1,100.0	1,067.1	1,023.6	1,006.4	4.5	3.3	-131.96	115.0	136.6	283.0	277.0	6.08	46.559			
1,200.0	1,154.9	1,100.0	1,076.8	5.4	3.8	-131.18	130.9	161.7	338.4	331.3	7.09	47.710			
1,300.0	1,240.2	1,176.8	1,146.6	6.4	4.4	-130.34	148.1	188.8	398.2	390.0	8.19	48.644			
1,400.0	1,322.6	1,254.4	1,217.0	7.5	5.0	-129.74	165.5	216.3	460.8	451.5	9.33	49.392			
1,500.0	1,401.9	1,329.4	1,285.1	8.7	5.6	-129.24	182.4	243.0	526.2	515.6	10.51	50.068			
1,600.0	1,478.5	1,402.1	1,351.1	9.9	6.2	-129.91	198.7	268.8	593.8	582.1	11.69	50.797			
1,700.0	1,554.8	1,474.6	1,416.8	11.1	6.7	-131.23	215.0	294.5	661.9	649.1	12.86	51.457			
1,800.0	1,631.0	1,547.0	1,482.5	12.3	7.3	-132.30	231.3	320.2	730.2	716.2	14.03	52.031			
1,900.0	1,707.3	1,619.5	1,548.3	13.5	7.9	-133.19	247.6	345.9	798.6	783.4	15.20	52.534			
2,000.0	1,783.6	1,691.9	1,614.0	14.8	8.4	-133.94	263.8	371.6	867.1	850.7	16.37	52.976			
2,100.0	1,859.9	1,764.3	1,679.7	16.0	9.0	-134.59	280.1	397.4	935.6	918.1	17.53	53.368			
2,200.0	1,936.1	1,836.8	1,745.5	17.2	9.6	-135.15	296.4	423.1	1,004.2	985.5	18.69	53.718			
2,300.0	2,012.4	1,909.2	1,811.2	18.4	10.2	-135.63	312.7	448.8	1,072.8	1,053.0	19.86	54.032			
2,400.0	2,088.7	1,981.6	1,876.9	19.7	10.7	-136.06	329.0	474.5	1,141.5	1,120.5	21.02	54.315			
2,500.0	2,164.9	2,054.1	1,942.7	20.9	11.3	-136.44	345.3	500.2	1,210.2	1,188.0	22.18	54.572			
2,600.0	2,241.2	2,126.5	2,008.4	22.1	11.9	-136.78	361.5	525.9	1,278.9	1,255.6	23.34	54.806			
2,700.0	2,317.5	2,199.0	2,074.1	23.4	12.5	-137.08	377.8	551.6	1,347.7	1,323.2	24.49	55.020			

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 11B-24
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 11B-24	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													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	27.51	35.5	18.5	40.0						
100.0	100.0	100.0	100.0	0.1	0.1	27.51	35.5	18.5	40.0	39.7	0.25	157.040			
200.0	200.0	200.0	200.0	0.3	0.3	27.51	35.5	18.5	40.0	39.4	0.60	66.239 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-116.65	35.5	18.5	41.1	40.1	0.96	42.831			
400.0	399.6	399.6	399.6	0.7	0.6	-125.46	35.5	18.5	45.2	43.8	1.34	33.776			
500.0	498.8	497.7	497.7	1.0	0.8	-134.05	36.2	20.9	54.8	53.0	1.74	31.559 SF			
600.0	597.1	595.1	594.8	1.4	1.0	-138.63	38.4	28.0	70.8	68.6	2.18	32.485			
700.0	694.3	691.5	690.4	1.8	1.3	-140.32	42.0	39.7	92.5	89.8	2.70	34.207			
800.0	790.2	786.3	783.7	2.3	1.6	-140.40	46.9	55.7	119.6	116.2	3.34	35.801			
900.0	884.4	879.2	874.2	3.0	2.0	-139.67	53.0	75.7	151.7	147.6	4.10	37.022			
1,000.0	976.8	969.8	961.4	3.7	2.4	-138.53	60.2	99.1	188.9	183.9	4.98	37.898			
1,100.0	1,067.1	1,057.8	1,044.9	4.5	2.9	-137.20	68.3	125.7	230.8	224.8	5.99	38.527			
1,200.0	1,154.9	1,143.1	1,124.5	5.4	3.5	-135.76	77.2	155.0	277.4	270.3	7.10	39.073			
1,300.0	1,240.2	1,228.7	1,203.5	6.4	4.1	-134.51	86.9	186.5	328.0	319.7	8.29	39.543			
1,400.0	1,322.6	1,313.0	1,281.2	7.5	4.7	-133.77	96.4	217.7	381.7	372.2	9.52	40.112			
1,500.0	1,401.9	1,395.0	1,356.9	8.7	5.3	-133.34	105.7	248.0	438.5	427.8	10.76	40.754			
1,600.0	1,478.5	1,475.0	1,430.7	9.9	5.9	-133.91	114.7	277.5	497.9	485.9	11.99	41.538			
1,700.0	1,554.8	1,554.8	1,504.2	11.1	6.4	-134.95	123.8	307.0	557.7	544.5	13.20	42.249			
1,800.0	1,631.0	1,634.5	1,577.8	12.3	7.0	-135.79	132.8	336.4	617.7	603.2	14.42	42.846			
1,900.0	1,707.3	1,714.3	1,651.4	13.5	7.6	-136.48	141.8	365.9	677.6	662.0	15.63	43.355			
2,000.0	1,783.6	1,794.1	1,725.0	14.8	8.2	-137.06	150.8	395.4	737.7	720.8	16.84	43.793			
2,100.0	1,859.9	1,873.8	1,798.5	16.0	8.8	-137.56	159.8	424.8	797.7	779.7	18.06	44.174			
2,200.0	1,936.1	1,953.6	1,872.1	17.2	9.4	-137.98	168.8	454.3	857.9	838.6	19.27	44.508			
2,300.0	2,012.4	2,033.4	1,945.7	18.4	9.9	-138.35	177.9	483.8	918.0	897.5	20.49	44.804			
2,400.0	2,088.7	2,113.2	2,019.3	19.7	10.5	-138.67	186.9	513.2	978.1	956.4	21.70	45.068			
2,500.0	2,164.9	2,192.9	2,092.9	20.9	11.1	-138.96	195.9	542.7	1,038.3	1,015.4	22.92	45.304			
2,600.0	2,241.2	2,272.7	2,166.4	22.1	11.7	-139.21	204.9	572.1	1,098.5	1,074.4	24.13	45.517			
2,700.0	2,317.5	2,352.5	2,240.0	23.4	12.3	-139.44	213.9	601.6	1,158.7	1,133.3	25.35	45.711			
2,800.0	2,394.2	2,432.6	2,313.9	24.6	12.9	-140.35	223.0	631.2	1,218.5	1,192.0	26.51	45.965			
2,900.0	2,473.8	2,514.8	2,389.7	25.7	13.5	-141.66	232.3	661.6	1,275.4	1,247.8	27.63	46.164			
3,000.0	2,556.4	2,599.2	2,467.6	26.7	14.1	-142.66	241.8	692.7	1,328.9	1,300.1	28.77	46.183			

CC - Min centre to center distance or covergent 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 11B-24
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 11B-24	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				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	27.50	28.4	14.8	32.0					
100.0	100.0	100.0	100.0	0.1	0.1	27.50	28.4	14.8	32.0	31.7	0.25	125.558		
200.0	200.0	200.0	200.0	0.3	0.3	27.50	28.4	14.8	32.0	31.4	0.60	52.981 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-117.47	28.4	14.8	33.1	32.2	0.96	34.515		
400.0	399.6	399.6	399.6	0.7	0.7	-128.07	28.4	14.8	37.4	36.1	1.33	28.015		
500.0	498.8	498.8	498.8	1.0	0.8	-140.58	28.4	14.8	46.6	44.9	1.71	27.202 SF		
600.0	597.1	597.4	597.4	1.4	1.0	-150.59	28.4	15.4	61.7	59.6	2.08	29.718		
700.0	694.3	696.1	696.0	1.8	1.2	-154.97	28.3	20.4	81.4	79.0	2.46	33.126		
800.0	790.2	794.7	794.1	2.3	1.4	-155.93	28.1	30.4	104.7	101.8	2.90	36.079		
900.0	884.4	892.9	891.1	3.0	1.7	-155.16	27.9	45.5	131.1	127.6	3.44	38.071		
1,000.0	976.8	990.5	986.6	3.7	2.0	-153.52	27.5	65.3	160.7	156.5	4.12	38.997		
1,100.0	1,067.1	1,087.1	1,080.0	4.5	2.4	-151.47	27.1	89.8	193.5	188.6	4.96	39.034		
1,200.0	1,154.9	1,182.5	1,171.0	5.4	2.9	-149.24	26.7	118.5	229.7	223.7	5.97	38.482		
1,300.0	1,240.2	1,276.6	1,259.2	6.4	3.6	-146.94	26.1	151.3	269.2	262.0	7.15	37.623		
1,400.0	1,322.6	1,368.4	1,343.7	7.5	4.2	-144.71	25.5	187.2	312.0	303.6	8.47	36.849		
1,500.0	1,401.9	1,456.8	1,424.7	8.7	4.8	-143.09	24.9	222.7	358.6	348.8	9.81	36.561		
1,600.0	1,478.5	1,543.6	1,504.2	9.9	5.5	-142.55	24.4	257.5	408.3	397.2	11.12	36.714		
1,700.0	1,554.8	1,630.2	1,583.5	11.1	6.1	-142.51	23.8	292.2	458.4	445.9	12.43	36.880		
1,800.0	1,631.0	1,716.8	1,662.8	12.3	6.8	-142.48	23.2	326.9	508.4	494.7	13.74	36.996		
1,900.0	1,707.3	1,803.3	1,742.1	13.5	7.4	-142.45	22.6	361.6	558.5	543.4	15.06	37.077		
2,000.0	1,783.6	1,889.9	1,821.4	14.8	8.1	-142.43	22.0	396.3	608.5	592.1	16.39	37.136		
2,100.0	1,859.9	1,976.5	1,900.7	16.0	8.7	-142.41	21.5	431.1	658.5	640.8	17.71	37.180		
2,200.0	1,936.1	2,063.1	1,980.0	17.2	9.4	-142.40	20.9	465.8	708.6	689.5	19.04	37.212		
2,300.0	2,012.4	2,149.7	2,059.4	18.4	10.1	-142.38	20.3	500.5	758.6	738.2	20.37	37.237		
2,400.0	2,088.7	2,236.2	2,138.7	19.7	10.7	-142.37	19.7	535.2	808.6	786.9	21.70	37.256		
2,500.0	2,164.9	2,322.8	2,218.0	20.9	11.4	-142.36	19.2	569.9	858.7	835.6	23.04	37.271		
2,600.0	2,241.2	2,409.4	2,297.3	22.1	12.1	-142.35	18.6	604.7	908.7	884.3	24.37	37.282		
2,700.0	2,317.5	2,496.0	2,376.6	23.4	12.7	-142.34	18.0	639.4	958.8	933.0	25.71	37.291		
2,800.0	2,394.2	2,582.8	2,456.2	24.6	13.4	-142.83	17.4	674.2	1,008.3	981.3	27.00	37.348		
2,900.0	2,473.8	2,671.4	2,537.3	25.7	14.1	-143.57	16.8	709.7	1,054.7	1,026.4	28.27	37.313		
3,000.0	2,556.4	2,761.6	2,619.9	26.7	14.8	-144.04	16.2	745.9	1,097.3	1,067.7	29.58	37.093		
3,100.0	2,641.9	2,853.3	2,703.9	27.6	15.5	-144.27	15.6	782.7	1,136.0	1,105.1	30.94	36.717		
3,200.0	2,729.9	2,946.2	2,789.1	28.4	16.2	-144.29	15.0	819.9	1,171.0	1,138.6	32.34	36.212		
3,300.0	2,820.4	3,040.1	2,875.0	29.2	16.9	-144.11	14.4	857.6	1,202.1	1,168.3	33.76	35.604		
3,400.0	2,912.9	3,129.5	2,957.6	29.8	17.5	-143.89	13.8	891.9	1,229.5	1,194.4	35.05	35.073		
3,500.0	3,007.3	3,220.0	3,042.6	30.4	18.1	-143.68	13.3	922.7	1,253.4	1,217.2	36.20	34.625		
3,600.0	3,103.3	3,311.9	3,130.5	30.9	18.6	-143.50	12.9	949.8	1,273.9	1,236.7	37.20	34.243		
3,700.0	3,200.6	3,405.2	3,220.9	31.2	19.0	-143.32	12.5	973.0	1,290.6	1,252.6	38.05	33.921		
3,800.0	3,299.0	3,500.0	3,313.7	31.5	19.3	-143.16	12.2	992.0	1,303.7	1,264.9	38.74	33.653		
3,900.0	3,398.2	3,595.1	3,407.7	31.7	19.5	-143.01	11.9	1,006.4	1,312.9	1,273.6	39.26	33.442		
4,000.0	3,497.9	3,691.1	3,503.2	31.8	19.7	-142.87	11.8	1,016.2	1,318.3	1,278.6	39.62	33.274		
4,100.0	3,597.8	3,787.6	3,599.6	31.9	19.8	-1.90	11.7	1,021.1	1,319.8	1,280.0	39.82	33.142		
4,169.3	3,667.1	3,855.2	3,667.1	31.9	19.8	-1.87	11.7	1,021.8	1,319.7	1,279.8	39.92	33.059		
4,200.0	3,697.8	3,885.9	3,697.8	31.9	19.9	-1.87	11.7	1,021.8	1,319.7	1,279.8	39.96	33.028		
4,300.0	3,797.8	3,985.9	3,797.8	32.0	19.9	-1.87	11.7	1,021.8	1,319.7	1,279.7	40.08	32.926		
4,400.0	3,897.8	4,085.9	3,897.8	32.0	20.0	-1.87	11.7	1,021.8	1,319.7	1,279.5	40.21	32.823		
4,500.0	3,997.8	4,185.9	3,997.8	32.0	20.0	-1.87	11.7	1,021.8	1,319.7	1,279.4	40.34	32.718		
4,600.0	4,097.8	4,285.9	4,097.8	32.1	20.1	-1.87	11.7	1,021.8	1,319.7	1,279.3	40.47	32.611		
4,700.0	4,197.8	4,385.9	4,197.8	32.1	20.2	-1.87	11.7	1,021.8	1,319.7	1,279.1	40.60	32.503		
4,800.0	4,297.8	4,485.9	4,297.8	32.2	20.2	-1.87	11.7	1,021.8	1,319.7	1,279.0	40.74	32.394		
4,900.0	4,397.8	4,585.9	4,397.8	32.2	20.3	-1.87	11.7	1,021.8	1,319.7	1,278.9	40.88	32.284		
5,000.0	4,497.8	4,685.9	4,497.8	32.3	20.4	-1.87	11.7	1,021.8	1,319.7	1,278.7	41.02	32.172		

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 11B-24
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 11B-24	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		
5,100.0	4,597.8	4,785.9	4,597.8	32.3	20.4	-1.87	11.7	1,021.8	1,319.7	1,278.6	41.17	32.060		
5,200.0	4,697.8	4,885.9	4,697.8	32.4	20.5	-1.87	11.7	1,021.8	1,319.7	1,278.4	41.31	31.946		
5,300.0	4,797.8	4,985.9	4,797.8	32.4	20.6	-1.87	11.7	1,021.8	1,319.7	1,278.3	41.46	31.831		
5,400.0	4,897.8	5,085.9	4,897.8	32.5	20.7	-1.87	11.7	1,021.8	1,319.7	1,278.1	41.61	31.715		
5,500.0	4,997.8	5,185.9	4,997.8	32.5	20.7	-1.87	11.7	1,021.8	1,319.7	1,278.0	41.77	31.598		
5,600.0	5,097.8	5,285.9	5,097.8	32.6	20.8	-1.87	11.7	1,021.8	1,319.7	1,277.8	41.92	31.480		
5,700.0	5,197.8	5,385.9	5,197.8	32.6	20.9	-1.87	11.7	1,021.8	1,319.7	1,277.7	42.08	31.362		
5,800.0	5,297.8	5,485.9	5,297.8	32.7	21.0	-1.87	11.7	1,021.8	1,319.7	1,277.5	42.24	31.242		
5,900.0	5,397.8	5,585.9	5,397.8	32.7	21.0	-1.87	11.7	1,021.8	1,319.7	1,277.3	42.41	31.122		
6,000.0	5,497.8	5,685.9	5,497.8	32.8	21.1	-1.87	11.7	1,021.8	1,319.7	1,277.2	42.57	31.001		
6,100.0	5,597.8	5,785.9	5,597.8	32.8	21.2	-1.87	11.7	1,021.8	1,319.7	1,277.0	42.74	30.880		
6,200.0	5,697.8	5,885.9	5,697.8	32.9	21.3	-1.87	11.7	1,021.8	1,319.7	1,276.8	42.91	30.758		
6,292.2	5,790.0	5,978.1	5,790.0	32.9	21.4	-1.87	11.7	1,021.8	1,319.7	1,276.7	43.07	30.645		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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	27.03	21.8	11.1	24.5					
100.0	100.0	100.0	100.0	0.1	0.1	27.03	21.8	11.1	24.5	24.2	0.25	96.024		
200.0	200.0	200.0	200.0	0.3	0.3	27.03	21.8	11.1	24.5	23.9	0.60	40.535 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-119.13	21.8	11.1	25.7	24.7	0.96	26.737		
400.0	399.6	399.6	399.6	0.7	0.7	-132.09	21.8	11.1	30.3	28.9	1.33	22.737 SF		
500.0	498.8	498.8	498.8	1.0	0.8	-145.82	21.8	11.1	40.2	38.5	1.70	23.683		
600.0	597.1	598.7	598.6	1.4	1.0	-154.00	21.0	13.5	54.9	52.8	2.06	26.613		
700.0	694.3	699.0	698.7	1.8	1.2	-156.81	18.4	20.9	71.9	69.5	2.46	29.259		
800.0	790.2	799.7	798.5	2.3	1.5	-157.00	14.2	33.3	90.7	87.8	2.92	31.093		
900.0	884.4	900.7	897.7	3.0	1.8	-155.86	8.1	50.7	111.3	107.8	3.48	31.941		
1,000.0	976.8	1,001.8	996.0	3.7	2.2	-154.01	0.4	73.1	133.6	129.4	4.19	31.849		
1,100.0	1,067.1	1,102.9	1,092.9	4.5	2.7	-151.81	-9.0	100.3	157.7	152.6	5.08	31.038		
1,200.0	1,154.9	1,203.9	1,188.1	5.4	3.3	-149.43	-20.0	132.4	183.7	177.6	6.17	29.794		
1,300.0	1,240.2	1,304.8	1,281.2	6.4	4.1	-146.98	-32.7	169.0	211.8	204.3	7.46	28.379		
1,400.0	1,322.6	1,401.6	1,369.0	7.5	4.8	-144.83	-46.1	207.7	242.3	233.4	8.87	27.322		
1,500.0	1,401.9	1,495.4	1,453.8	8.7	5.5	-143.58	-59.1	245.5	276.8	266.6	10.26	26.984		
1,600.0	1,478.5	1,588.0	1,537.6	9.9	6.3	-143.31	-71.9	282.7	314.7	303.1	11.60	27.122		
1,700.0	1,554.8	1,680.4	1,621.2	11.1	7.0	-143.40	-84.8	319.8	352.9	340.0	12.94	27.276		
1,800.0	1,631.0	1,772.8	1,704.9	12.3	7.8	-143.46	-97.6	357.0	391.1	376.8	14.28	27.391		
1,900.0	1,707.3	1,865.2	1,788.5	13.5	8.5	-143.52	-110.4	394.2	429.3	413.7	15.62	27.478		
2,000.0	1,783.6	1,957.6	1,872.1	14.8	9.2	-143.56	-123.2	431.3	467.5	450.6	16.97	27.546		
2,100.0	1,859.9	2,050.0	1,955.8	16.0	10.0	-143.60	-136.1	468.5	505.7	487.4	18.32	27.600		
2,200.0	1,936.1	2,142.5	2,039.4	17.2	10.7	-143.64	-148.9	505.7	544.0	524.3	19.68	27.644		
2,300.0	2,012.4	2,234.9	2,123.0	18.4	11.5	-143.67	-161.7	542.8	582.2	561.1	21.03	27.680		
2,400.0	2,088.7	2,327.3	2,206.7	19.7	12.2	-143.69	-174.6	580.0	620.4	598.0	22.39	27.710		
2,500.0	2,164.9	2,419.7	2,290.3	20.9	13.0	-143.72	-187.4	617.1	658.6	634.9	23.75	27.735		
2,600.0	2,241.2	2,512.1	2,373.9	22.1	13.7	-143.74	-200.2	654.3	696.8	671.7	25.10	27.756		
2,700.0	2,317.5	2,604.5	2,457.5	23.4	14.5	-143.75	-213.0	691.5	735.0	708.6	26.46	27.775		
2,800.0	2,394.2	2,697.1	2,541.4	24.6	15.2	-144.10	-225.9	728.7	772.7	744.9	27.78	27.813		
2,900.0	2,473.8	2,791.0	2,626.3	25.7	16.0	-144.52	-238.9	766.5	806.9	777.8	29.12	27.715		
3,000.0	2,556.4	2,886.2	2,712.4	26.7	16.8	-144.65	-252.1	804.7	837.2	806.6	30.53	27.421		
3,100.0	2,641.9	2,982.3	2,799.4	27.6	17.6	-144.52	-265.5	843.4	863.3	831.3	32.02	26.961		
3,200.0	2,729.9	3,067.5	2,877.0	28.4	18.2	-144.30	-277.0	876.9	886.0	852.6	33.38	26.541		
3,300.0	2,820.4	3,149.1	2,952.5	29.2	18.8	-144.14	-287.1	906.0	906.2	871.6	34.58	26.209		
3,400.0	2,912.9	3,231.2	3,029.8	29.8	19.3	-143.99	-296.1	932.1	924.1	888.5	35.65	25.922		
3,500.0	3,007.3	3,313.8	3,108.7	30.4	19.7	-143.85	-304.1	955.2	939.6	903.0	36.60	25.673		
3,600.0	3,103.3	3,400.0	3,192.0	30.9	20.1	-143.71	-311.2	975.9	952.7	915.2	37.44	25.446		
3,700.0	3,200.6	3,480.0	3,270.3	31.2	20.3	-143.60	-316.8	991.9	963.2	925.1	38.10	25.283		
3,800.0	3,299.0	3,563.6	3,352.7	31.5	20.6	-143.49	-321.4	1,005.3	971.3	932.6	38.65	25.132		
3,900.0	3,398.2	3,647.5	3,435.8	31.7	20.8	-143.38	-324.8	1,015.3	976.8	937.7	39.07	25.004		
4,000.0	3,497.9	3,731.5	3,519.6	31.8	20.9	-143.28	-327.1	1,021.9	979.7	940.3	39.36	24.894		
4,100.0	3,597.8	3,815.7	3,603.7	31.9	21.0	-2.34	-328.1	1,024.9	980.1	940.5	39.53	24.794		
4,153.0	3,650.9	3,862.9	3,650.9	31.9	21.0	-2.32	-328.2	1,025.2	980.0	940.4	39.60	24.748		
4,200.0	3,697.8	3,909.9	3,697.8	31.9	21.0	-2.32	-328.2	1,025.2	980.0	940.3	39.66	24.712		
4,300.0	3,797.8	4,009.9	3,797.8	32.0	21.1	-2.32	-328.2	1,025.2	980.0	940.2	39.78	24.634		
4,400.0	3,897.8	4,109.9	3,897.8	32.0	21.1	-2.32	-328.2	1,025.2	980.0	940.1	39.91	24.555		
4,500.0	3,997.8	4,209.9	3,997.8	32.0	21.2	-2.32	-328.2	1,025.2	980.0	939.9	40.04	24.475		
4,600.0	4,097.8	4,309.9	4,097.8	32.1	21.2	-2.32	-328.2	1,025.2	980.0	939.8	40.17	24.394		
4,700.0	4,197.8	4,409.9	4,197.8	32.1	21.3	-2.32	-328.2	1,025.2	980.0	939.7	40.31	24.312		
4,800.0	4,297.8	4,509.9	4,297.8	32.2	21.4	-2.32	-328.2	1,025.2	980.0	939.5	40.45	24.229		
4,900.0	4,397.8	4,609.9	4,397.8	32.2	21.4	-2.32	-328.2	1,025.2	980.0	939.4	40.59	24.145		
5,000.0	4,497.8	4,709.9	4,497.8	32.3	21.5	-2.32	-328.2	1,025.2	980.0	939.2	40.73	24.060		

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 11B-24
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 11B-24	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													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
S14-T7S-R96W - Nolte 14C-13 - DD - Plan #3															
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			
5,100.0	4,597.8	4,809.9	4,597.8	32.3	21.6	-2.32	-328.2	1,025.2	980.0	939.1	40.88	23.975			
5,200.0	4,697.8	4,909.9	4,697.8	32.4	21.6	-2.32	-328.2	1,025.2	980.0	938.9	41.02	23.888			
5,300.0	4,797.8	5,009.9	4,797.8	32.4	21.7	-2.32	-328.2	1,025.2	980.0	938.8	41.17	23.801			
5,400.0	4,897.8	5,109.9	4,897.8	32.5	21.8	-2.32	-328.2	1,025.2	980.0	938.6	41.33	23.713			
5,500.0	4,997.8	5,209.9	4,997.8	32.5	21.8	-2.32	-328.2	1,025.2	980.0	938.5	41.48	23.624			
5,600.0	5,097.8	5,309.9	5,097.8	32.6	21.9	-2.32	-328.2	1,025.2	980.0	938.3	41.64	23.534			
5,700.0	5,197.8	5,409.9	5,197.8	32.6	22.0	-2.32	-328.2	1,025.2	980.0	938.2	41.80	23.444			
5,800.0	5,297.8	5,509.9	5,297.8	32.7	22.1	-2.32	-328.2	1,025.2	980.0	938.0	41.96	23.354			
5,900.0	5,397.8	5,609.9	5,397.8	32.7	22.1	-2.32	-328.2	1,025.2	980.0	937.8	42.13	23.263			
6,000.0	5,497.8	5,709.9	5,497.8	32.8	22.2	-2.32	-328.2	1,025.2	980.0	937.7	42.29	23.171			
6,100.0	5,597.8	5,809.9	5,597.8	32.8	22.3	-2.32	-328.2	1,025.2	980.0	937.5	42.46	23.079			
6,200.0	5,697.8	5,909.9	5,697.8	32.9	22.4	-2.32	-328.2	1,025.2	980.0	937.3	42.63	22.986			
6,292.2	5,790.0	6,002.0	5,790.0	32.9	22.5	-2.32	-328.2	1,025.2	980.0	937.2	42.79	22.900			

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well Nolte 11B-24
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 11B-24	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				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	27.54	14.2	7.4	16.0					
100.0	100.0	100.0	100.0	0.1	0.1	27.54	14.2	7.4	16.0	15.8	0.26	62.727		
200.0	200.0	200.0	200.0	0.3	0.3	27.54	14.2	7.4	16.0	15.4	0.60	26.490 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-121.29	14.2	7.4	17.2	16.3	0.96	17.939		
400.0	399.6	399.6	399.6	0.7	0.7	-138.64	14.2	7.4	22.3	21.0	1.32	16.852		
500.0	498.8	499.9	499.9	1.0	0.8	-150.31	12.8	9.6	31.5	29.8	1.69	18.614		
600.0	597.1	600.7	600.3	1.4	1.0	-154.67	8.5	16.2	42.2	40.1	2.08	20.298		
700.0	694.3	701.9	700.6	1.8	1.3	-155.69	1.2	27.4	53.9	51.3	2.51	21.428		
800.0	790.2	803.5	800.5	2.3	1.6	-155.08	-8.9	43.0	66.3	63.3	3.03	21.901		
900.0	884.4	905.4	899.5	3.0	2.1	-153.59	-22.0	63.2	79.7	76.0	3.66	21.738		
1,000.0	976.8	1,007.7	997.5	3.7	2.6	-151.63	-38.0	87.8	93.8	89.4	4.46	21.056		
1,100.0	1,067.1	1,110.3	1,094.0	4.5	3.3	-149.41	-56.9	116.9	108.9	103.5	5.44	20.038		
1,200.0	1,154.9	1,213.1	1,188.7	5.4	4.0	-147.07	-78.6	150.4	125.0	118.4	6.63	18.864		
1,300.0	1,240.2	1,316.1	1,281.4	6.4	4.9	-144.69	-103.1	188.2	142.0	134.0	8.03	17.684		
1,400.0	1,322.6	1,415.5	1,369.0	7.5	5.7	-142.79	-128.6	227.6	161.0	151.5	9.53	16.892		
1,500.0	1,401.9	1,512.8	1,454.7	8.7	6.6	-142.15	-153.7	266.2	184.0	173.1	10.95	16.800		
1,600.0	1,478.5	1,609.2	1,539.6	9.9	7.4	-142.53	-178.6	304.5	210.4	198.2	12.27	17.152		
1,700.0	1,554.8	1,705.5	1,624.4	11.1	8.3	-143.06	-203.4	342.8	237.2	223.6	13.56	17.487		
1,800.0	1,631.0	1,801.8	1,709.3	12.3	9.2	-143.48	-228.2	381.1	264.0	249.1	14.86	17.760		
1,900.0	1,707.3	1,898.2	1,794.1	13.5	10.0	-143.83	-253.0	419.3	290.8	274.6	16.17	17.987		
2,000.0	1,783.6	1,994.5	1,879.0	14.8	10.9	-144.12	-277.9	457.6	317.6	300.1	17.47	18.178		
2,100.0	1,859.9	2,090.8	1,963.8	16.0	11.8	-144.36	-302.7	495.9	344.4	325.6	18.78	18.342		
2,200.0	1,936.1	2,187.2	2,048.6	17.2	12.6	-144.57	-327.5	534.2	371.2	351.2	20.09	18.483		
2,300.0	2,012.4	2,283.5	2,133.5	18.4	13.5	-144.75	-352.4	572.4	398.1	376.7	21.39	18.606		
2,400.0	2,088.7	2,379.8	2,218.3	19.7	14.4	-144.91	-377.2	610.7	424.9	402.2	22.70	18.715		
2,500.0	2,164.9	2,476.1	2,303.2	20.9	15.2	-145.05	-402.0	649.0	451.7	427.7	24.01	18.811		
2,600.0	2,241.2	2,572.5	2,388.0	22.1	16.1	-145.17	-426.8	687.2	478.6	453.2	25.33	18.897		
2,700.0	2,317.5	2,668.8	2,472.8	23.4	17.0	-145.28	-451.7	725.5	505.4	478.8	26.64	18.974		
2,800.0	2,394.2	2,765.3	2,557.8	24.6	17.8	-145.37	-476.5	763.8	531.7	503.8	27.92	19.042		
2,900.0	2,473.8	2,862.6	2,643.6	25.7	18.7	-145.44	-501.6	802.5	554.3	525.0	29.29	18.927		
3,000.0	2,556.4	2,959.1	2,728.5	26.7	19.6	-145.55	-526.5	840.8	572.7	542.0	30.78	18.608		
3,100.0	2,641.9	3,041.7	2,802.2	27.6	20.3	-145.34	-546.7	872.0	588.6	556.5	32.09	18.341		
3,200.0	2,729.9	3,124.3	2,877.5	28.4	20.9	-145.16	-565.2	900.5	602.9	569.7	33.29	18.110		
3,300.0	2,820.4	3,200.0	2,947.8	29.2	21.4	-145.02	-580.6	924.2	615.8	581.5	34.33	17.936		
3,400.0	2,912.9	3,289.6	3,032.3	29.8	21.9	-144.84	-596.8	949.2	627.0	591.7	35.35	17.736		
3,500.0	3,007.3	3,372.3	3,111.5	30.4	22.3	-144.70	-609.8	969.3	636.7	600.5	36.20	17.587		
3,600.0	3,103.3	3,455.1	3,191.6	30.9	22.6	-144.58	-621.0	986.5	644.7	607.8	36.93	17.456		
3,700.0	3,200.6	3,537.9	3,272.7	31.2	22.9	-144.46	-630.3	1,000.8	651.2	613.6	37.55	17.341		
3,800.0	3,299.0	3,620.8	3,354.4	31.5	23.2	-144.34	-637.6	1,012.1	656.0	617.9	38.05	17.238		
3,900.0	3,398.2	3,700.0	3,433.1	31.7	23.3	-144.24	-642.8	1,020.2	659.1	620.7	38.43	17.150		
4,000.0	3,497.9	3,786.7	3,519.5	31.8	23.4	-144.12	-646.5	1,025.9	660.6	621.9	38.71	17.066		
4,100.0	3,597.8	3,869.7	3,602.4	31.9	23.5	-3.18	-648.0	1,028.2	660.4	621.5	38.87	16.990		
4,145.8	3,643.6	3,910.8	3,643.6	31.9	23.5	-3.17	-648.1	1,028.3	660.3	621.4	38.93	16.962		
4,200.0	3,697.8	3,965.1	3,697.8	31.9	23.5	-3.17	-648.1	1,028.3	660.3	621.3	39.00	16.932		
4,300.0	3,797.8	4,065.1	3,797.8	32.0	23.6	-3.17	-648.1	1,028.3	660.3	621.2	39.12	16.877		
4,400.0	3,897.8	4,165.1	3,897.8	32.0	23.6	-3.17	-648.1	1,028.3	660.3	621.0	39.26	16.820		
4,500.0	3,997.8	4,265.1	3,997.8	32.0	23.7	-3.17	-648.1	1,028.3	660.3	620.9	39.39	16.763		
4,600.0	4,097.8	4,365.1	4,097.8	32.1	23.7	-3.17	-648.1	1,028.3	660.3	620.8	39.52	16.706		
4,700.0	4,197.8	4,465.1	4,197.8	32.1	23.8	-3.17	-648.1	1,028.3	660.3	620.6	39.66	16.647		
4,800.0	4,297.8	4,565.1	4,297.8	32.2	23.9	-3.17	-648.1	1,028.3	660.3	620.5	39.80	16.588		
4,900.0	4,397.8	4,665.1	4,397.8	32.2	23.9	-3.17	-648.1	1,028.3	660.3	620.3	39.95	16.529		
5,000.0	4,497.8	4,765.1	4,497.8	32.3	24.0	-3.17	-648.1	1,028.3	660.3	620.2	40.09	16.468		

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 11B-24
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 11B-24	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													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		
5,100.0	4,597.8	4,865.1	4,597.8	32.3	24.0	-3.17	-648.1	1,028.3	660.3	620.1	40.24	16.407			
5,200.0	4,697.8	4,965.1	4,697.8	32.4	24.1	-3.17	-648.1	1,028.3	660.3	619.9	40.39	16.346			
5,300.0	4,797.8	5,065.1	4,797.8	32.4	24.2	-3.17	-648.1	1,028.3	660.3	619.7	40.55	16.284			
5,400.0	4,897.8	5,165.1	4,897.8	32.5	24.2	-3.17	-648.1	1,028.3	660.3	619.6	40.70	16.222			
5,500.0	4,997.8	5,265.1	4,997.8	32.5	24.3	-3.17	-648.1	1,028.3	660.3	619.4	40.86	16.159			
5,600.0	5,097.8	5,365.1	5,097.8	32.6	24.4	-3.17	-648.1	1,028.3	660.3	619.3	41.02	16.095			
5,700.0	5,197.8	5,465.1	5,197.8	32.6	24.4	-3.17	-648.1	1,028.3	660.3	619.1	41.19	16.032			
5,800.0	5,297.8	5,565.1	5,297.8	32.7	24.5	-3.17	-648.1	1,028.3	660.3	618.9	41.35	15.967			
5,900.0	5,397.8	5,665.1	5,397.8	32.7	24.6	-3.17	-648.1	1,028.3	660.3	618.8	41.52	15.903			
6,000.0	5,497.8	5,765.1	5,497.8	32.8	24.6	-3.17	-648.1	1,028.3	660.3	618.6	41.69	15.838			
6,100.0	5,597.8	5,865.1	5,597.8	32.8	24.7	-3.17	-648.1	1,028.3	660.3	618.4	41.86	15.773			
6,200.0	5,697.8	5,965.1	5,697.8	32.9	24.8	-3.17	-648.1	1,028.3	660.3	618.3	42.04	15.707			
6,292.2	5,790.0	6,057.2	5,790.0	32.9	24.8	-3.17	-648.1	1,028.3	660.3	618.1	42.20	15.647 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 11B-24
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 11B-24	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													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	13.47	40.1	9.6	41.2						
100.0	100.0	100.0	100.0	0.1	0.1	13.47	40.1	9.6	41.2	41.0	0.26	161.432			
200.0	200.0	200.0	200.0	0.3	0.3	13.47	40.1	9.6	41.2	40.6	0.60	68.202 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-130.11	40.1	9.6	42.9	41.9	0.96	44.732			
400.0	399.6	397.2	397.1	0.7	0.7	-137.63	42.5	9.1	50.8	49.4	1.32	38.401 SF			
500.0	498.8	492.2	491.9	1.0	0.9	-145.98	49.6	7.8	68.5	66.8	1.69	40.640			
600.0	597.1	583.8	582.8	1.4	1.1	-152.06	60.8	5.6	96.5	94.4	2.04	47.254			
700.0	694.3	670.9	668.6	1.8	1.4	-155.88	75.3	2.7	134.0	131.6	2.39	56.072			
800.0	790.2	752.5	748.3	2.3	1.7	-158.16	92.5	-0.6	180.3	177.6	2.74	65.926			
900.0	884.4	828.1	821.4	3.0	2.1	-159.48	111.3	-4.3	234.6	231.5	3.08	76.159			
1,000.0	976.8	900.0	890.2	3.7	2.4	-160.23	131.8	-8.3	296.1	292.7	3.43	86.274			
1,100.0	1,067.1	959.9	946.8	4.5	2.8	-160.43	150.9	-12.0	364.1	360.3	3.79	96.082			
1,200.0	1,154.9	1,015.9	999.2	5.4	3.2	-160.34	170.2	-15.8	437.7	433.5	4.17	105.083			
1,300.0	1,240.2	1,065.4	1,045.1	6.4	3.5	-159.94	188.6	-19.4	516.4	511.8	4.57	112.915			
1,400.0	1,322.6	1,100.0	1,076.8	7.5	3.7	-159.04	202.1	-22.0	599.4	594.4	5.03	119.052			
1,500.0	1,401.9	1,146.0	1,118.6	8.7	4.1	-158.14	221.0	-25.7	686.0	680.4	5.57	123.110			
1,600.0	1,478.5	1,178.3	1,147.6	9.9	4.4	-157.98	234.8	-28.4	775.5	769.4	6.08	127.536			
1,700.0	1,554.8	1,200.0	1,167.1	11.1	4.5	-158.45	244.4	-30.3	866.0	859.5	6.52	132.862			
1,800.0	1,631.0	1,236.4	1,199.4	12.3	4.8	-159.10	260.9	-33.5	957.0	950.1	6.93	138.092			
1,900.0	1,707.3	1,262.9	1,222.7	13.5	5.1	-159.50	273.3	-35.9	1,048.6	1,041.3	7.36	142.563			
2,000.0	1,783.6	1,300.0	1,254.9	14.8	5.4	-159.95	291.2	-39.4	1,140.9	1,133.1	7.77	146.837			
2,100.0	1,859.9	1,300.0	1,254.9	16.0	5.4	-159.95	291.2	-39.4	1,233.5	1,225.3	8.22	150.080			
2,200.0	1,936.1	1,333.7	1,284.0	17.2	5.7	-160.29	308.0	-42.7	1,326.5	1,317.8	8.64	153.614			

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 11B-24
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 11B-24	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													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 Tooface (")	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	10.14	33.0	5.9	33.5						
100.0	100.0	100.0	100.0	0.1	0.1	10.14	33.0	5.9	33.5	33.3	0.26	131.226			
200.0	200.0	200.0	200.0	0.3	0.3	10.14	33.0	5.9	33.5	32.9	0.60	55.456 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-133.88	33.0	5.9	35.3	34.3	0.96	36.847			
400.0	399.6	398.6	398.6	0.7	0.6	-141.75	33.6	5.8	41.7	40.4	1.32	31.626 SF			
500.0	498.8	494.6	494.4	1.0	0.8	-150.42	38.3	4.7	57.6	56.0	1.68	34.354			
600.0	597.1	587.3	586.7	1.4	1.0	-156.42	47.3	2.5	83.8	81.8	2.02	41.408			
700.0	694.3	675.7	674.2	1.8	1.3	-159.94	60.0	-0.4	119.7	117.3	2.36	50.661			
800.0	790.2	758.9	755.7	2.3	1.6	-161.92	75.4	-4.0	164.5	161.8	2.70	61.011			
900.0	884.4	836.0	830.8	3.0	1.9	-163.00	92.9	-8.1	217.3	214.3	3.02	71.851			
1,000.0	976.8	906.7	898.9	3.7	2.3	-163.53	111.4	-12.5	277.6	274.2	3.35	82.793			
1,100.0	1,067.1	970.8	959.9	4.5	2.6	-163.68	130.4	-16.9	344.4	340.7	3.68	93.472			
1,200.0	1,154.9	1,028.2	1,014.0	5.4	3.0	-163.55	149.0	-21.3	417.1	413.1	4.03	103.611			
1,300.0	1,240.2	1,079.0	1,061.5	6.4	3.3	-163.17	166.8	-25.5	495.0	490.6	4.39	112.837			
1,400.0	1,322.6	1,123.5	1,102.6	7.5	3.6	-162.54	183.4	-29.4	577.3	572.5	4.78	120.683			
1,500.0	1,401.9	1,162.0	1,137.7	8.7	3.9	-161.61	198.5	-32.9	663.5	658.2	5.24	126.580			
1,600.0	1,478.5	1,200.0	1,172.2	9.9	4.2	-161.52	214.1	-36.6	752.6	746.9	5.68	132.467			
1,700.0	1,554.8	1,226.2	1,195.8	11.1	4.4	-161.93	225.3	-39.2	842.6	836.5	6.07	138.724			
1,800.0	1,631.0	1,255.2	1,221.7	12.3	4.6	-162.31	238.0	-42.2	933.3	926.8	6.46	144.405			
1,900.0	1,707.3	1,282.5	1,245.9	13.5	4.8	-162.60	250.3	-45.0	1,024.5	1,017.7	6.85	149.523			
2,000.0	1,783.6	1,300.0	1,261.3	14.8	5.0	-162.77	258.3	-46.9	1,116.4	1,109.2	7.24	154.112			
2,100.0	1,859.9	1,332.4	1,289.6	16.0	5.3	-163.02	273.6	-50.5	1,208.7	1,201.1	7.63	158.351			
2,200.0	1,936.1	1,355.2	1,309.5	17.2	5.5	-163.17	284.7	-53.1	1,301.5	1,293.5	8.02	162.192			

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 11B-24
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 11B-24	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													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	4.92	25.9	2.2	26.0						
100.0	100.0	100.0	100.0	0.1	0.1	4.92	25.9	2.2	26.0	25.8	0.26	101.731			
200.0	200.0	200.0	200.0	0.3	0.3	4.92	25.9	2.2	26.0	25.4	0.60	43.007 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-139.61	25.9	2.2	27.9	27.0	0.96	29.204			
400.0	399.6	399.6	399.6	0.7	0.7	-148.02	25.9	2.2	34.3	33.0	1.32	26.075 SF			
500.0	498.8	496.4	496.3	1.0	0.8	-156.56	28.2	1.4	48.4	46.7	1.67	29.058			
600.0	597.1	590.2	589.8	1.4	1.0	-162.29	34.8	-1.0	72.9	70.9	2.00	36.400			
700.0	694.3	679.7	678.7	1.8	1.2	-165.46	45.1	-4.8	107.2	104.8	2.33	46.042			
800.0	790.2	764.1	761.9	2.3	1.5	-167.16	58.4	-9.6	150.5	147.8	2.64	56.959			
900.0	884.4	842.5	838.6	3.0	1.8	-168.05	73.8	-15.3	202.1	199.2	2.95	68.607			
1,000.0	976.8	914.4	908.2	3.7	2.1	-168.49	90.6	-21.4	261.3	258.1	3.24	80.656			
1,100.0	1,067.1	979.6	970.7	4.5	2.4	-168.63	107.9	-27.7	327.3	323.8	3.53	92.789			
1,200.0	1,154.9	1,038.9	1,027.0	5.4	2.8	-168.56	125.3	-34.1	399.3	395.5	3.81	104.769			
1,300.0	1,240.2	1,103.4	1,088.0	6.4	3.1	-168.45	145.1	-41.3	475.6	471.5	4.11	115.752			
1,400.0	1,322.6	1,163.9	1,145.2	7.5	3.5	-168.27	163.6	-48.1	555.2	550.8	4.41	125.799			
1,500.0	1,401.9	1,220.2	1,198.4	8.7	3.8	-167.98	180.8	-54.3	637.8	633.0	4.73	134.845			
1,600.0	1,478.5	1,272.8	1,248.2	9.9	4.1	-168.15	196.9	-60.2	722.7	717.7	5.05	143.061			
1,700.0	1,554.8	1,325.0	1,297.5	11.1	4.4	-168.64	212.9	-66.1	807.9	802.6	5.37	150.508			
1,800.0	1,631.0	1,377.2	1,346.9	12.3	4.7	-169.04	228.8	-71.9	893.2	887.5	5.68	157.137			
1,900.0	1,707.3	1,429.4	1,396.2	13.5	5.0	-169.37	244.8	-77.7	978.4	972.4	6.00	163.078			
2,000.0	1,783.6	1,481.6	1,445.6	14.8	5.3	-169.65	260.8	-83.6	1,063.7	1,057.4	6.32	168.434			
2,100.0	1,859.9	1,533.8	1,495.0	16.0	5.6	-169.88	276.8	-89.4	1,148.9	1,142.3	6.63	173.285			
2,200.0	1,936.1	1,586.0	1,544.3	17.2	5.9	-170.09	292.7	-95.2	1,234.2	1,227.2	6.95	177.704			
2,300.0	2,012.4	1,638.2	1,593.7	18.4	6.2	-170.26	308.7	-101.1	1,319.5	1,312.2	7.26	181.739			

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 11B-24
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 11B-24	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													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	-4.46	18.8	-1.5	18.9						
100.0	100.0	100.0	100.0	0.1	0.1	-4.46	18.8	-1.5	18.9	18.6	0.26	73.774			
200.0	200.0	200.0	200.0	0.3	0.3	-4.46	18.8	-1.5	18.9	18.3	0.60	31.204	CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-149.32	18.8	-1.5	21.1	20.1	0.96	22.060			
400.0	399.6	399.6	399.6	0.7	0.7	-157.42	18.8	-1.5	28.1	26.8	1.31	21.500	SF		
500.0	498.8	498.1	498.1	1.0	0.8	-164.44	19.2	-1.7	40.9	39.2	1.65	24.745			
600.0	597.1	594.0	594.0	1.4	1.0	-169.07	22.0	-3.2	62.0	60.0	1.99	31.201			
700.0	694.3	687.0	686.8	1.8	1.2	-171.71	27.4	-6.3	91.4	89.1	2.31	39.626			
800.0	790.2	776.3	775.6	2.3	1.4	-173.19	35.0	-10.6	128.9	126.3	2.62	49.269			
900.0	884.4	861.1	859.6	3.0	1.6	-174.04	44.5	-15.9	173.9	171.0	2.91	59.749			
1,000.0	976.8	940.8	938.4	3.7	1.8	-174.53	55.4	-22.0	226.0	222.8	3.19	70.857			
1,100.0	1,067.1	1,015.2	1,011.5	4.5	2.1	-174.81	67.3	-28.7	284.6	281.2	3.45	82.468			
1,200.0	1,154.9	1,083.8	1,078.7	5.4	2.3	-174.95	79.7	-35.7	349.4	345.7	3.70	94.454			
1,300.0	1,240.2	1,146.6	1,139.7	6.4	2.6	-174.98	92.3	-42.7	419.6	415.7	3.93	106.713			
1,400.0	1,322.6	1,200.0	1,191.5	7.5	2.8	-174.92	103.9	-49.3	494.9	490.8	4.15	119.336			
1,500.0	1,401.9	1,254.2	1,243.7	8.7	3.1	-174.81	116.6	-56.4	574.7	570.3	4.36	131.700			
1,600.0	1,478.5	1,300.0	1,287.6	9.9	3.3	-174.85	127.9	-62.8	657.9	653.3	4.60	142.990			
1,700.0	1,554.8	1,343.1	1,328.7	11.1	3.5	-175.00	139.2	-69.1	742.3	737.4	4.86	152.626			
1,800.0	1,631.0	1,384.3	1,367.8	12.3	3.8	-175.12	150.5	-75.4	827.4	822.3	5.12	161.562			
1,900.0	1,707.3	1,432.6	1,413.5	13.5	4.0	-175.22	164.1	-83.1	913.1	907.7	5.39	169.469			
2,000.0	1,783.6	1,484.1	1,462.3	14.8	4.3	-175.31	178.6	-91.3	998.8	993.1	5.66	176.560			
2,100.0	1,859.9	1,535.6	1,511.0	16.0	4.6	-175.39	193.2	-99.5	1,084.5	1,078.6	5.93	183.000			
2,200.0	1,936.1	1,587.1	1,559.7	17.2	4.9	-175.46	207.7	-107.6	1,170.2	1,164.0	6.19	188.903			
2,300.0	2,012.4	1,638.6	1,608.4	18.4	5.2	-175.51	222.3	-115.8	1,255.9	1,249.5	6.46	194.304			
2,400.0	2,088.7	1,690.1	1,657.2	19.7	5.5	-175.56	236.8	-124.0	1,341.7	1,334.9	6.73	199.296			

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

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Reference Site:	S14-T7S-R96W	MD Reference:	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 11B-24	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													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	-23.79	11.7	-5.2	12.8						
100.0	100.0	100.0	100.0	0.1	0.1	-23.79	11.7	-5.2	12.8	12.6	0.26	50.045			
200.0	200.0	200.0	200.0	0.3	0.3	-23.79	11.7	-5.2	12.8	12.2	0.61	21.174 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-167.20	11.7	-5.2	15.4	14.4	0.95	16.096 SF			
400.0	399.6	399.6	399.6	0.7	0.7	-171.49	11.7	-5.2	23.1	21.8	1.30	17.742			
500.0	498.8	498.8	498.8	1.0	0.8	-174.53	11.7	-5.2	36.0	34.4	1.64	21.943			
600.0	597.1	594.6	594.5	1.4	1.0	-177.32	12.9	-7.2	56.4	54.4	1.97	28.582			
700.0	694.3	686.7	686.4	1.8	1.2	-179.93	16.2	-13.1	86.3	84.0	2.29	37.628			
800.0	790.2	777.4	776.6	2.3	1.4	178.20	21.3	-21.9	124.6	122.0	2.61	47.823			
900.0	884.4	867.4	866.0	3.0	1.6	177.18	26.5	-31.0	168.1	165.2	2.91	57.719			
1,000.0	976.8	955.1	953.0	3.7	1.8	176.62	31.5	-39.8	216.3	213.1	3.21	67.401			
1,100.0	1,067.1	1,040.0	1,037.4	4.5	2.0	176.29	36.4	-48.4	269.0	265.5	3.49	76.987			
1,200.0	1,154.9	1,122.2	1,119.0	5.4	2.2	176.07	41.1	-56.7	326.0	322.2	3.77	86.560			
1,300.0	1,240.2	1,201.2	1,197.5	6.4	2.4	175.93	45.6	-64.6	387.2	383.2	4.03	96.176			
1,400.0	1,322.6	1,276.9	1,272.7	7.5	2.6	175.81	50.0	-72.2	452.5	448.3	4.27	105.865			
1,500.0	1,401.9	1,349.1	1,344.4	8.7	2.8	175.71	54.1	-79.5	521.7	517.2	4.51	115.649			
1,600.0	1,478.5	1,418.2	1,413.1	9.9	3.0	175.73	58.1	-86.5	594.0	589.2	4.78	124.223			
1,700.0	1,554.8	1,487.0	1,481.4	11.1	3.2	175.84	62.0	-93.4	666.6	661.5	5.08	131.126			
1,800.0	1,631.0	1,555.8	1,549.7	12.3	3.3	175.92	66.0	-100.3	739.1	733.8	5.38	137.267			
1,900.0	1,707.3	1,624.5	1,618.0	13.5	3.5	175.99	69.9	-107.3	811.7	806.1	5.69	142.770			
2,000.0	1,783.6	1,693.3	1,686.3	14.8	3.7	176.05	73.9	-114.2	884.3	878.4	5.99	147.729			
2,100.0	1,859.9	1,762.1	1,754.6	16.0	3.9	176.10	77.8	-121.1	957.0	950.7	6.29	152.220			
2,200.0	1,936.1	1,830.8	1,822.9	17.2	4.1	176.14	81.8	-128.0	1,029.6	1,023.0	6.59	156.308			
2,300.0	2,012.4	1,899.6	1,891.2	18.4	4.2	176.18	85.7	-134.9	1,102.2	1,095.3	6.89	160.046			
2,400.0	2,088.7	1,968.4	1,959.5	19.7	4.4	176.21	89.6	-141.9	1,174.8	1,167.6	7.19	163.476			
2,500.0	2,164.9	2,037.1	2,027.8	20.9	4.6	176.24	93.6	-148.8	1,247.4	1,239.9	7.49	166.635			
2,600.0	2,241.2	2,105.9	2,096.1	22.1	4.8	176.26	97.5	-155.7	1,320.0	1,312.2	7.78	169.554			

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

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Site Error:	0.0ft	North Reference:	True
Reference Well:	Nolte 11B-24	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													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	-62.43	4.6	-8.9	10.0						
100.0	100.0	100.0	100.0	0.1	0.1	-62.43	4.6	-8.9	10.0	9.7	0.26	39.055			
200.0	200.0	200.0	200.0	0.3	0.3	-62.43	4.6	-8.9	10.0	9.4	0.61	16.531 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	161.47	4.6	-8.9	12.5	11.5	0.95	13.048 SF			
400.0	399.6	399.6	399.6	0.7	0.7	168.57	4.6	-8.9	20.0	18.7	1.30	15.405			
500.0	498.8	497.7	497.6	1.0	0.8	169.57	4.2	-11.3	34.5	32.8	1.65	20.936			
600.0	597.1	594.5	594.2	1.4	1.0	166.83	2.7	-18.4	57.0	55.0	2.01	28.372			
700.0	694.3	692.0	691.2	1.8	1.2	163.46	-2.5	-27.4	83.7	81.3	2.42	34.651			
800.0	790.2	787.1	785.5	2.3	1.5	161.64	-9.2	-36.4	114.7	111.8	2.85	40.270			
900.0	884.4	880.5	878.3	3.0	1.7	161.10	-15.7	-45.3	150.3	147.0	3.29	45.696			
1,000.0	976.8	972.0	969.2	3.7	1.9	161.11	-22.1	-54.0	190.6	186.8	3.74	51.004			
1,100.0	1,067.1	1,061.4	1,058.0	4.5	2.2	161.37	-28.4	-62.4	235.3	231.1	4.18	56.251			
1,200.0	1,154.9	1,148.4	1,144.3	5.4	2.4	161.71	-34.5	-70.7	284.5	279.8	4.63	61.467			
1,300.0	1,240.2	1,232.8	1,228.1	6.4	2.6	162.05	-40.5	-78.7	337.9	332.9	5.07	66.657			
1,400.0	1,322.6	1,314.3	1,309.1	7.5	2.8	162.36	-46.2	-86.4	395.6	390.1	5.51	71.810			
1,500.0	1,401.9	1,392.8	1,387.0	8.7	3.0	162.60	-51.7	-93.8	457.4	451.4	5.95	76.894			
1,600.0	1,478.5	1,468.5	1,462.1	9.9	3.2	163.17	-57.0	-101.0	522.4	516.1	6.39	81.752			
1,700.0	1,554.8	1,543.8	1,537.0	11.1	3.4	163.90	-62.3	-108.2	587.9	581.1	6.84	85.978			
1,800.0	1,631.0	1,619.2	1,611.9	12.3	3.6	164.48	-67.6	-115.3	653.5	646.2	7.29	89.696			
1,900.0	1,707.3	1,694.6	1,686.7	13.5	3.8	164.95	-72.9	-122.5	719.0	711.3	7.73	92.990			
2,000.0	1,783.6	1,770.0	1,761.6	14.8	4.0	165.34	-78.2	-129.6	784.6	776.4	8.18	95.931			
2,100.0	1,859.9	1,845.4	1,836.5	16.0	4.2	165.68	-83.5	-136.7	850.2	841.6	8.63	98.571			
2,200.0	1,936.1	1,920.8	1,911.3	17.2	4.4	165.96	-88.7	-143.9	915.8	906.8	9.07	100.954			
2,300.0	2,012.4	1,996.2	1,986.2	18.4	4.6	166.21	-94.0	-151.0	981.5	971.9	9.52	103.117			
2,400.0	2,088.7	2,071.6	2,061.0	19.7	4.8	166.43	-99.3	-158.2	1,047.1	1,037.1	9.96	105.087			
2,500.0	2,164.9	2,146.9	2,135.9	20.9	5.0	166.62	-104.6	-165.3	1,112.7	1,102.3	10.41	106.891			
2,600.0	2,241.2	2,222.3	2,210.8	22.1	5.2	166.79	-109.9	-172.5	1,178.4	1,167.5	10.86	108.548			
2,700.0	2,317.5	2,297.7	2,285.6	23.4	5.4	166.94	-115.2	-179.6	1,244.1	1,232.7	11.30	110.075			
2,800.0	2,394.2	2,373.6	2,360.9	24.6	5.7	167.36	-120.5	-186.8	1,309.2	1,297.5	11.75	111.455			

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Offset Design													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	-101.05	-2.5	-12.6	12.8						
100.0	100.0	100.0	100.0	0.1	0.1	-101.05	-2.5	-12.6	12.8	12.6	0.26	49.956			
200.0	200.0	200.0	200.0	0.3	0.3	-101.05	-2.5	-12.6	12.8	12.2	0.61	21.154 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	127.41	-2.5	-12.6	14.2	13.3	0.96	14.827 SF			
400.0	399.6	399.6	399.6	0.7	0.7	145.45	-2.5	-12.6	20.0	18.7	1.32	15.161			
500.0	498.8	498.8	498.8	1.0	0.8	158.84	-2.5	-12.6	31.6	30.0	1.67	18.996			
600.0	597.1	597.1	597.1	1.4	1.0	166.41	-2.5	-12.6	49.1	47.1	2.00	24.541			
700.0	694.3	694.3	694.3	1.8	1.2	170.66	-2.5	-12.6	72.0	69.7	2.33	30.948			
800.0	790.2	790.2	790.2	2.3	1.3	173.19	-2.5	-12.6	100.1	97.5	2.64	37.870			
900.0	884.4	884.4	884.4	3.0	1.5	174.80	-2.5	-12.6	133.4	130.4	2.95	45.161			
1,000.0	976.8	976.8	976.8	3.7	1.7	175.87	-2.5	-12.6	171.5	168.3	3.25	52.758			
1,100.0	1,067.1	1,067.1	1,067.1	4.5	1.8	176.61	-2.5	-12.6	214.5	211.0	3.54	60.634			
1,200.0	1,154.9	1,154.9	1,154.9	5.4	2.0	177.15	-2.5	-12.6	262.2	258.3	3.81	68.781			
1,300.0	1,240.2	1,240.2	1,240.2	6.4	2.1	177.54	-2.5	-12.6	314.4	310.3	4.07	77.199			
1,400.0	1,322.6	1,322.6	1,322.6	7.5	2.3	177.84	-2.5	-12.6	371.0	366.6	4.32	85.896			
1,500.0	1,401.9	1,401.9	1,401.9	8.7	2.4	178.07	-2.5	-12.6	431.8	427.3	4.55	94.876			
1,600.0	1,478.5	1,478.5	1,478.5	9.9	2.5	178.29	-2.5	-12.6	496.1	491.3	4.82	102.950			
1,700.0	1,554.8	1,554.8	1,554.8	11.1	2.7	178.49	-2.5	-12.6	560.7	555.6	5.12	109.522			
1,800.0	1,631.0	1,631.0	1,631.0	12.3	2.8	178.64	-2.5	-12.6	625.4	620.0	5.42	115.377			
1,900.0	1,707.3	1,707.3	1,707.3	13.5	2.9	178.77	-2.5	-12.6	690.1	684.3	5.72	120.627			
2,000.0	1,783.6	1,783.6	1,783.6	14.8	3.1	178.88	-2.5	-12.6	754.7	748.7	6.02	125.362			
2,100.0	1,859.9	1,859.9	1,859.9	16.0	3.2	178.96	-2.5	-12.6	819.4	813.1	6.32	129.655			
2,200.0	1,936.1	1,936.1	1,936.1	17.2	3.3	179.04	-2.5	-12.6	884.1	877.4	6.62	133.566			
2,300.0	2,012.4	2,012.4	2,012.4	18.4	3.5	179.11	-2.5	-12.6	948.7	941.8	6.92	137.143			
2,400.0	2,088.7	2,088.7	2,088.7	19.7	3.6	179.16	-2.5	-12.6	1,013.4	1,006.2	7.22	140.429			
2,500.0	2,164.9	2,164.9	2,164.9	20.9	3.7	179.21	-2.5	-12.6	1,078.1	1,070.6	7.51	143.458			
2,600.0	2,241.2	2,241.2	2,241.2	22.1	3.9	179.26	-2.5	-12.6	1,142.7	1,134.9	7.81	146.259			
2,700.0	2,317.5	2,317.5	2,317.5	23.4	4.0	179.30	-2.5	-12.6	1,207.4	1,199.3	8.11	148.856			
2,800.0	2,394.2	2,394.2	2,394.2	24.6	4.1	179.35	-2.5	-12.6	1,271.6	1,263.1	8.47	150.154			
2,900.0	2,473.8	2,473.8	2,473.8	25.7	4.3	179.40	-2.5	-12.6	1,332.1	1,323.2	8.88	150.030			

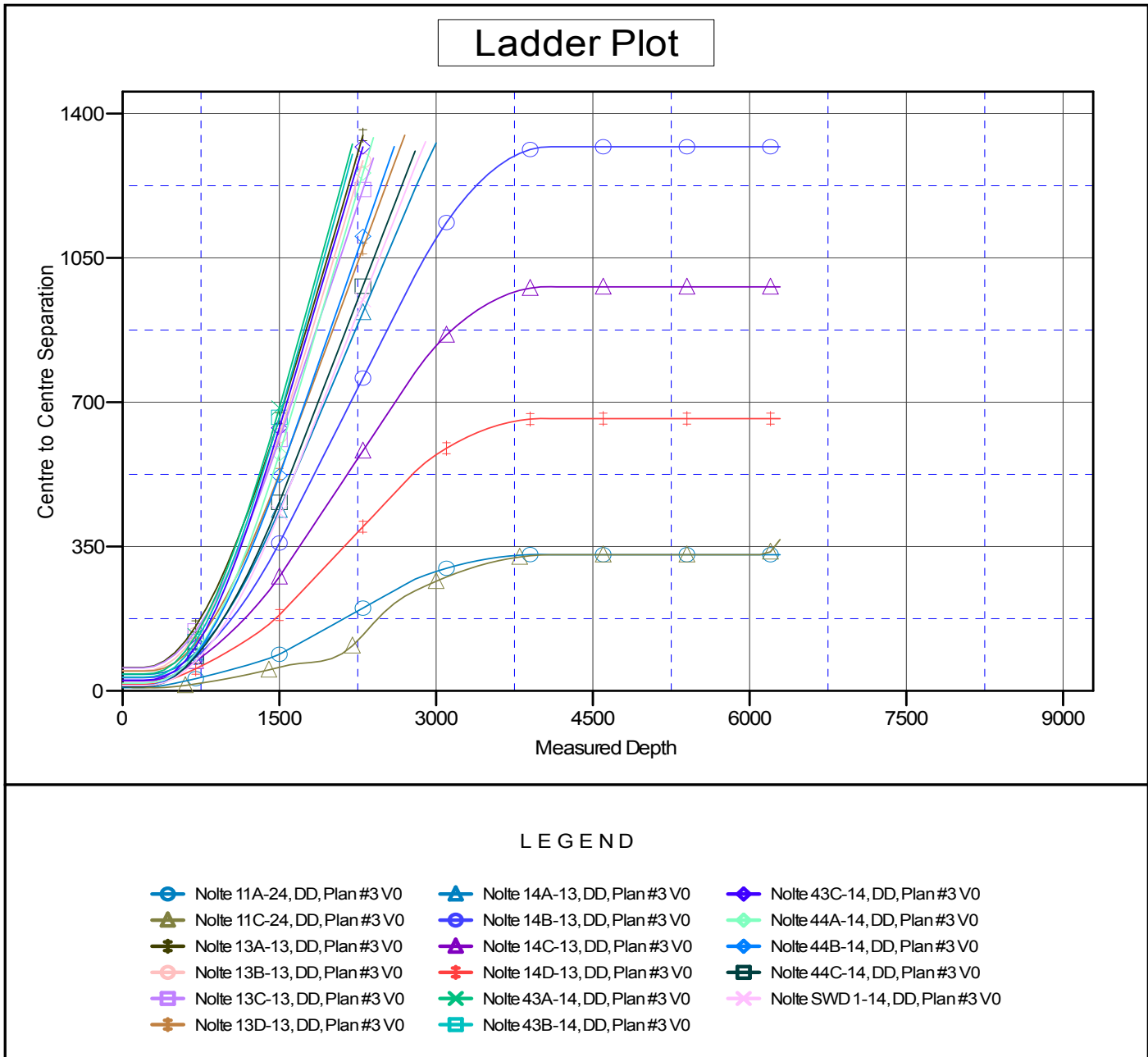
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Cathedral Energy Services

Anticollision Report

Company: Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference: Well Nolte 11B-24	
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 11B-24	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) Coordinates are relative to: Nolte 11B-24
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: -1.62°



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