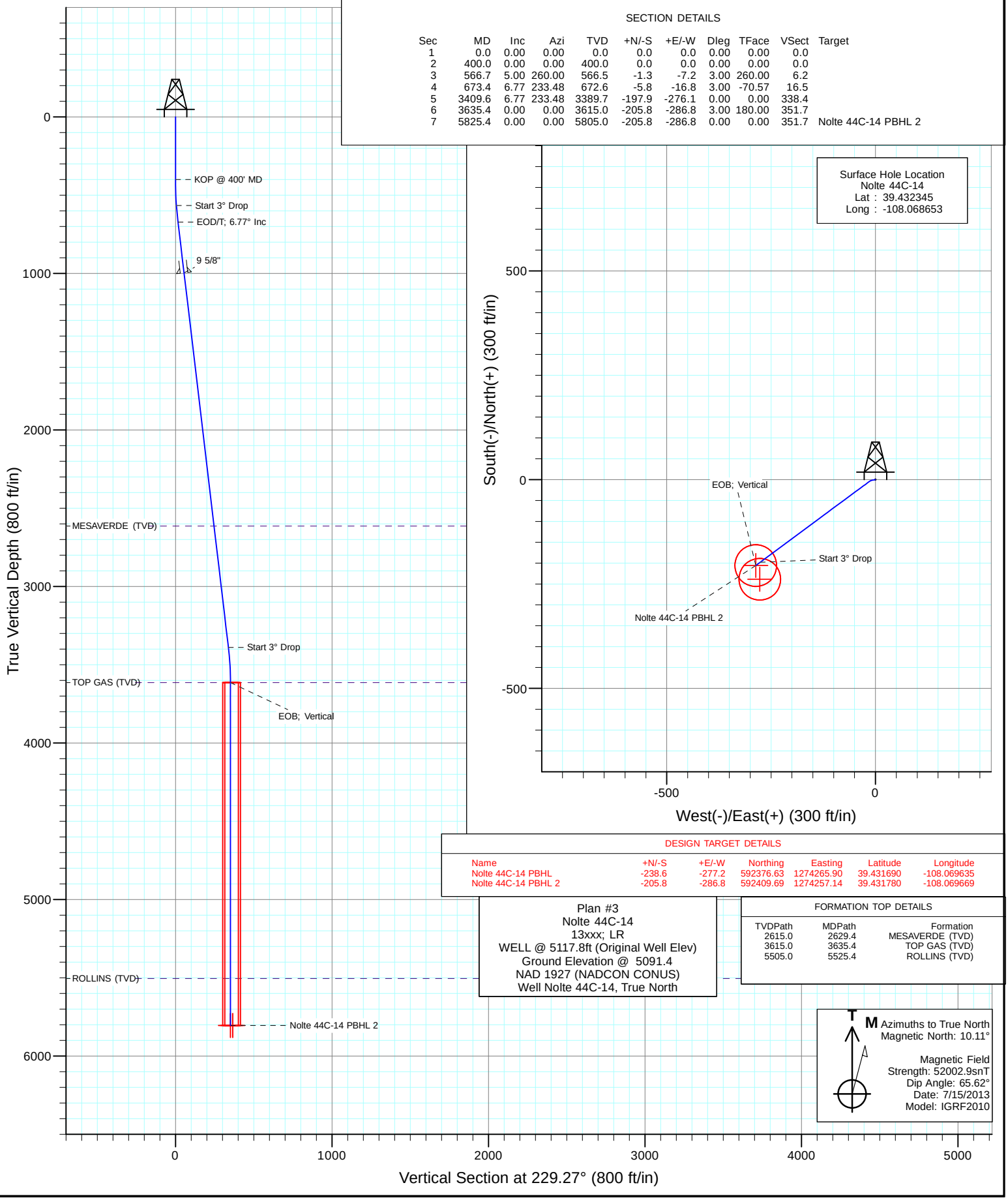
Project: Garfield County, CO
Site: S14-T7S-R96W
Well: Nolte 44C-14
Wellbore: DD
Design: Plan #3

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	566.7	5.00	260.00	566.5	-1.3	-7.2	3.00	260.00	6.2	
4	673.4	6.77	233.48	672.6	-5.8	-16.8	3.00	-70.57	16.5	
5	3409.6	6.77	233.48	3389.7	-197.9	-276.1	0.00	0.00	338.4	
6	3635.4	0.00	0.00	3615.0	-205.8	-286.8	3.00	180.00	351.7	
7	5825.4	0.00	0.00	5805.0	-205.8	-286.8	0.00	0.00	351.7	Nolte 44C-14 PBHL 2



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Nolte 44C-14 PBHL	-238.6	-277.2	592376.63	1274265.90	39.431690	-108.069635
Nolte 44C-14 PBHL 2	-205.8	-286.8	592409.69	1274257.14	39.431780	-108.069669

Plan #3
Nolte 44C-14
13xxx; LR
WELL @ 5117.8ft (Original Well Elev)
Ground Elevation @ 5091.4
NAD 1927 (NADCON CONUS)
Well Nolte 44C-14, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2615.0	2629.4	MESAVERDE (TVD)
3615.0	3635.4	TOP GAS (TVD)
5505.0	5525.4	ROLLINS (TVD)

T M Azimuths to True North
Magnetic North: 10.11°

Magnetic Field
Strength: 52002.9snT
Dip Angle: 65.62°
Date: 7/15/2013
Model: IGRF2010

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	**North Reference:**	True
Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

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

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

Well	Nolte 44C-14					
Well Position	**+N/-S**	0.0 ft	**Northing:**	592,607.31 ft	**Latitude:**	39.432345
	+E/-W	0.0 ft	**Easting:**	1,274,549.69 ft	**Longitude:**	-108.068653
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,091.4 ft

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

Design	Plan #3				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.0	0.0	0.0	229.27	

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
566.7	5.00	260.00	566.5	-1.3	-7.2	3.00	3.00	0.00	260.00	
673.4	6.77	233.48	672.6	-5.8	-16.8	3.00	1.66	-24.85	-70.57	
3,409.6	6.77	233.48	3,389.7	-197.9	-276.1	0.00	0.00	0.00	0.00	
3,635.4	0.00	0.00	3,615.0	-205.8	-286.8	3.00	-3.00	0.00	180.00	
5,825.4	0.00	0.00	5,805.0	-205.8	-286.8	0.00	0.00	0.00	0.00	Nolte 44C-14 PBHL 2

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	**North Reference:**	True
Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400' MD
500.0	3.00	260.00	500.0	-0.5	-2.6	2.2	3.00	3.00	
566.7	5.00	260.00	566.5	-1.3	-7.2	6.2	3.00	3.00	Start 3° Drop
600.0	5.42	249.96	599.7	-2.1	-10.1	9.0	3.00	1.25	
673.4	6.77	233.48	672.6	-5.8	-16.8	16.5	3.00	1.85	EOD/T; 6.77° Inc
700.0	6.77	233.48	699.1	-7.7	-19.3	19.7	0.00	0.00	
800.0	6.77	233.48	798.4	-14.7	-28.8	31.4	0.00	0.00	
900.0	6.77	233.48	897.7	-21.7	-38.3	43.2	0.00	0.00	
1,000.0	6.77	233.48	997.0	-28.7	-47.8	54.9	0.00	0.00	9 5/8"
1,100.0	6.77	233.48	1,096.3	-35.8	-57.2	66.7	0.00	0.00	
1,200.0	6.77	233.48	1,195.6	-42.8	-66.7	78.5	0.00	0.00	
1,300.0	6.77	233.48	1,294.9	-49.8	-76.2	90.2	0.00	0.00	
1,400.0	6.77	233.48	1,394.2	-56.8	-85.7	102.0	0.00	0.00	
1,500.0	6.77	233.48	1,493.5	-63.8	-95.1	113.8	0.00	0.00	
1,600.0	6.77	233.48	1,592.8	-70.9	-104.6	125.5	0.00	0.00	
1,700.0	6.77	233.48	1,692.1	-77.9	-114.1	137.3	0.00	0.00	
1,800.0	6.77	233.48	1,791.4	-84.9	-123.6	149.0	0.00	0.00	
1,900.0	6.77	233.48	1,890.7	-91.9	-133.1	160.8	0.00	0.00	
2,000.0	6.77	233.48	1,990.0	-98.9	-142.5	172.6	0.00	0.00	
2,100.0	6.77	233.48	2,089.3	-106.0	-152.0	184.3	0.00	0.00	
2,200.0	6.77	233.48	2,188.6	-113.0	-161.5	196.1	0.00	0.00	
2,300.0	6.77	233.48	2,287.9	-120.0	-171.0	207.9	0.00	0.00	
2,400.0	6.77	233.48	2,387.2	-127.0	-180.4	219.6	0.00	0.00	
2,500.0	6.77	233.48	2,486.5	-134.0	-189.9	231.4	0.00	0.00	
2,600.0	6.77	233.48	2,585.8	-141.1	-199.4	243.1	0.00	0.00	
2,629.4	6.77	233.48	2,615.0	-143.1	-202.2	246.6	0.00	0.00	MESAVERDE (TVD)
2,700.0	6.77	233.48	2,685.1	-148.1	-208.9	254.9	0.00	0.00	
2,800.0	6.77	233.48	2,784.4	-155.1	-218.4	266.7	0.00	0.00	
2,900.0	6.77	233.48	2,883.7	-162.1	-227.8	278.4	0.00	0.00	
3,000.0	6.77	233.48	2,983.0	-169.1	-237.3	290.2	0.00	0.00	
3,100.0	6.77	233.48	3,082.3	-176.1	-246.8	302.0	0.00	0.00	
3,200.0	6.77	233.48	3,181.6	-183.2	-256.3	313.7	0.00	0.00	
3,300.0	6.77	233.48	3,280.9	-190.2	-265.7	325.5	0.00	0.00	
3,409.6	6.77	233.48	3,389.7	-197.9	-276.1	338.4	0.00	0.00	Start 3° Drop
3,500.0	4.06	233.48	3,479.7	-203.0	-283.0	346.9	3.00	-3.00	
3,600.0	1.06	233.48	3,579.6	-205.6	-286.6	351.3	3.00	-3.00	
3,635.4	0.00	0.00	3,615.0	-205.8	-286.8	351.7	3.00	-3.00	EOB; Vertical - TOP GAS (TVD)
3,700.0	0.00	0.00	3,679.6	-205.8	-286.8	351.7	0.00	0.00	
3,800.0	0.00	0.00	3,779.6	-205.8	-286.8	351.7	0.00	0.00	
3,900.0	0.00	0.00	3,879.6	-205.8	-286.8	351.7	0.00	0.00	
4,000.0	0.00	0.00	3,979.6	-205.8	-286.8	351.7	0.00	0.00	
4,100.0	0.00	0.00	4,079.6	-205.8	-286.8	351.7	0.00	0.00	
4,200.0	0.00	0.00	4,179.6	-205.8	-286.8	351.7	0.00	0.00	
4,300.0	0.00	0.00	4,279.6	-205.8	-286.8	351.7	0.00	0.00	
4,400.0	0.00	0.00	4,379.6	-205.8	-286.8	351.7	0.00	0.00	
4,500.0	0.00	0.00	4,479.6	-205.8	-286.8	351.7	0.00	0.00	
4,600.0	0.00	0.00	4,579.6	-205.8	-286.8	351.7	0.00	0.00	
4,700.0	0.00	0.00	4,679.6	-205.8	-286.8	351.7	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	**North Reference:**	True
Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	0.00	0.00	4,779.6	-205.8	-286.8	351.7	0.00	0.00	
4,900.0	0.00	0.00	4,879.6	-205.8	-286.8	351.7	0.00	0.00	
5,000.0	0.00	0.00	4,979.6	-205.8	-286.8	351.7	0.00	0.00	
5,100.0	0.00	0.00	5,079.6	-205.8	-286.8	351.7	0.00	0.00	
5,200.0	0.00	0.00	5,179.6	-205.8	-286.8	351.7	0.00	0.00	
5,300.0	0.00	0.00	5,279.6	-205.8	-286.8	351.7	0.00	0.00	
5,400.0	0.00	0.00	5,379.6	-205.8	-286.8	351.7	0.00	0.00	
5,500.0	0.00	0.00	5,479.6	-205.8	-286.8	351.7	0.00	0.00	
5,525.4	0.00	0.00	5,505.0	-205.8	-286.8	351.7	0.00	0.00	ROLLINS (TVD)
5,600.0	0.00	0.00	5,579.6	-205.8	-286.8	351.7	0.00	0.00	
5,700.0	0.00	0.00	5,679.6	-205.8	-286.8	351.7	0.00	0.00	
5,800.0	0.00	0.00	5,779.6	-205.8	-286.8	351.7	0.00	0.00	
5,825.4	0.00	0.00	5,805.0	-205.8	-286.8	351.7	0.00	0.00	PBHL @ 5825' MD

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Nolte 44C-14 PBHL 2	0.00	0.00	5,805.0	-205.8	-286.8	592,409.69	1,274,257.14	39.431780	-108.069669
- plan hits target center									
- Circle (radius 50.0)									
Nolte 44C-14 PBHL	0.00	0.00	5,805.0	-238.6	-277.2	592,376.63	1,274,265.90	39.431690	-108.069635
- plan misses target center by 34.2ft at 5825.4ft MD (5805.0 TVD, -205.8 N, -286.8 E)									
- Circle (radius 50.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,000.0	997.0	9 5/8"	9.625	12.250

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,629.4	2,615.0	MESAVERDE (TVD)			
3,635.4	3,615.0	TOP GAS (TVD)			
5,525.4	5,505.0	ROLLINS (TVD)			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Project:	Garfield County, CO	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site:	S14-T7S-R96W	**North Reference:**	True
Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
400.0	400.0	0.0	0.0	KOP @ 400' MD
566.7	566.5	-1.3	-7.2	Start 3° Drop
673.4	672.6	-5.8	-16.8	EOD/T; 6.77° Inc
3,409.6	3,389.7	-197.9	-276.1	Start 3° Drop
3,635.4	3,615.0	-205.8	-286.8	EOB; Vertical
5,825.4	5,805.0	-205.8	-286.8	PBHL @ 5825' MD

Caerus Oil & Gas (NAD 27)

Garfield County, CO
S14-T7S-R96W
Nolte 44C-14
DD
Plan #3

Anticollision Report

09 September, 2013

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Reference Plan #3

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

Survey Tool Program **Date** 8/29/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	5,825.3	Plan #3 (DD)	MWD	Geolink MWD

Summary

Site Name Offset Well - Wellbore - Design	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	300.0	300.0	12.8	11.9	13.424	CC, ES
Nolte 11A-24 - DD - Plan #3	400.0	399.5	14.5	13.2	11.081	SF
Nolte 11B-24 - DD - Plan #3	200.0	200.0	10.0	9.4	16.531	CC, ES
Nolte 11B-24 - DD - Plan #3	300.0	299.4	12.4	11.5	12.935	SF
Nolte 11C-24 - DD - Plan #3	244.2	234.5	12.8	12.0	16.854	CC, ES
Nolte 11C-24 - DD - Plan #3	400.0	389.1	17.9	16.5	13.565	SF
Nolte 13A-13 - DD - Plan #3	200.0	200.0	56.0	55.4	92.520	CC, ES
Nolte 13A-13 - DD - Plan #3	500.0	489.0	80.3	78.7	49.120	SF
Nolte 13B-13 - DD - Plan #3	233.3	233.3	48.0	47.3	66.524	CC, ES
Nolte 13B-13 - DD - Plan #3	500.0	492.4	65.4	63.7	39.822	SF
Nolte 13C-13 - DD - Plan #3	200.0	199.8	56.9	56.3	94.115	CC, ES
Nolte 13C-13 - DD - Plan #3	500.0	488.6	81.4	79.8	49.808	SF
Nolte 13D-13 - DD - Plan #3	300.0	300.0	49.0	48.1	51.404	CC, ES
Nolte 13D-13 - DD - Plan #3	500.0	494.3	60.9	59.2	36.994	SF
Nolte 14A-13 - DD - Plan #3	400.0	400.0	41.2	39.9	31.640	CC, ES
Nolte 14A-13 - DD - Plan #3	500.0	497.9	45.5	43.9	27.608	SF
Nolte 14B-13 - DD - Plan #3	400.0	400.0	33.5	32.2	25.724	CC, ES
Nolte 14B-13 - DD - Plan #3	600.0	598.8	42.9	40.9	21.480	SF
Nolte 14C-13 - DD - Plan #3	400.0	400.0	26.4	25.1	20.235	CC, ES
Nolte 14C-13 - DD - Plan #3	500.0	500.0	28.6	27.0	17.342	SF
Nolte 14D-13 - DD - Plan #3	400.0	400.0	18.9	17.6	14.482	CC, ES
Nolte 14D-13 - DD - Plan #3	500.0	499.3	22.7	21.1	13.743	SF
Nolte 43A-14 - DD - Plan #3	300.0	300.0	40.0	39.0	41.901	CC, ES
Nolte 43A-14 - DD - Plan #3	500.0	496.0	49.8	48.1	29.969	SF
Nolte 43B-14 - DD - Plan #3	333.7	333.7	32.0	30.9	29.841	CC, ES
Nolte 43B-14 - DD - Plan #3	500.0	497.8	38.0	36.4	22.943	SF
Nolte 43C-14 - DD - Plan #3	400.0	400.0	24.0	22.7	18.412	CC, ES
Nolte 43C-14 - DD - Plan #3	500.0	499.0	27.3	25.7	16.509	SF
Nolte 44A-14 - DD - Plan #3	400.0	400.0	16.0	14.7	12.274	CC, ES
Nolte 44A-14 - DD - Plan #3	500.0	499.8	17.9	16.3	10.828	SF
Nolte 44B-14 - DD - Plan #3	400.0	400.0	8.0	6.7	6.135	CC, ES
Nolte 44B-14 - DD - Plan #3	500.0	500.0	9.8	8.2	5.934	SF
Nolte SWD 1-14 - DD - Plan #3	535.1	535.0	6.2	4.4	3.486	CC, ES, SF

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11A-24 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	78.93	2.5	12.6	12.8				
100.0	100.0	100.0	100.0	0.1	0.1	78.93	2.5	12.6	12.8	12.6	0.26	50.027	
200.0	200.0	200.0	200.0	0.3	0.3	78.93	2.5	12.6	12.8	12.2	0.61	21.167	
300.0	300.0	300.0	300.0	0.5	0.5	78.93	2.5	12.6	12.8	11.9	0.95	13.424	CC, ES
400.0	400.0	399.5	399.5	0.7	0.7	87.32	0.7	14.5	14.5	13.2	1.31	11.081	SF
500.0	500.0	498.3	497.9	0.8	0.9	-159.46	-4.6	20.0	23.1	21.4	1.66	13.892	
600.0	599.7	595.2	594.0	1.0	1.1	-143.51	-13.2	29.1	41.1	39.1	2.02	20.302	
700.0	699.1	690.2	687.5	1.3	1.5	-126.50	-24.9	41.4	64.2	61.7	2.43	26.436	
800.0	798.4	783.1	777.9	1.5	1.9	-125.96	-39.3	56.7	91.3	88.4	2.85	31.972	
900.0	897.7	873.5	864.9	1.7	2.3	-124.71	-56.3	74.6	122.5	119.2	3.30	37.163	
1,000.0	997.0	961.2	948.0	2.0	2.8	-123.30	-75.5	94.8	157.8	154.1	3.75	42.124	
1,100.0	1,096.3	1,045.8	1,027.0	2.3	3.4	-121.93	-96.4	117.0	197.0	192.8	4.20	46.936	
1,200.0	1,195.6	1,127.4	1,101.7	2.5	4.0	-120.67	-118.9	140.7	240.0	235.3	4.65	51.650	
1,300.0	1,294.9	1,200.0	1,167.1	2.8	4.6	-119.61	-140.7	163.7	286.6	281.5	5.07	56.483	
1,400.0	1,394.2	1,280.6	1,238.1	3.0	5.3	-118.51	-166.9	191.4	336.5	331.0	5.53	60.826	
1,500.0	1,493.5	1,352.2	1,299.8	3.3	6.1	-117.61	-191.9	217.7	389.6	383.7	5.97	65.298	
1,600.0	1,592.8	1,421.7	1,358.3	3.6	6.8	-116.79	-217.6	244.9	445.7	439.4	6.39	69.751	
1,700.0	1,692.1	1,503.4	1,426.5	3.8	7.6	-115.97	-248.6	277.6	503.1	496.3	6.84	73.512	
1,800.0	1,791.4	1,585.1	1,494.6	4.1	8.4	-115.32	-279.6	310.3	560.6	553.3	7.30	76.813	
1,900.0	1,890.7	1,666.8	1,562.8	4.4	9.3	-114.79	-310.6	343.1	618.1	610.3	7.75	79.740	
2,000.0	1,990.0	1,748.5	1,630.9	4.6	10.1	-114.35	-341.5	375.8	675.6	667.4	8.20	82.353	
2,100.0	2,089.3	1,830.2	1,699.1	4.9	11.0	-113.98	-372.5	408.5	733.1	724.5	8.66	84.698	
2,200.0	2,188.6	1,911.9	1,767.3	5.2	11.8	-113.67	-403.5	441.2	790.7	781.6	9.11	86.813	
2,300.0	2,287.9	1,993.6	1,835.4	5.5	12.7	-113.39	-434.5	473.9	848.2	838.7	9.56	88.730	
2,400.0	2,387.2	2,075.3	1,903.6	5.7	13.5	-113.16	-465.5	506.6	905.8	895.8	10.01	90.473	
2,500.0	2,486.5	2,157.0	1,971.7	6.0	14.4	-112.95	-496.5	539.3	963.4	952.9	10.46	92.068	
2,600.0	2,585.8	2,238.7	2,039.9	6.3	15.2	-112.76	-527.4	572.0	1,021.0	1,010.1	10.92	93.533	
2,700.0	2,685.1	2,320.5	2,108.1	6.5	16.1	-112.59	-558.4	604.8	1,078.6	1,067.2	11.37	94.882	
2,800.0	2,784.4	2,402.2	2,176.2	6.8	17.0	-112.44	-589.4	637.5	1,136.2	1,124.4	11.82	96.129	
2,900.0	2,883.7	2,483.9	2,244.4	7.1	17.8	-112.31	-620.4	670.2	1,193.8	1,181.5	12.27	97.283	
3,000.0	2,983.0	2,565.6	2,312.5	7.3	18.7	-112.18	-651.4	702.9	1,251.4	1,238.7	12.72	98.356	
3,100.0	3,082.3	2,647.3	2,380.7	7.6	19.5	-112.07	-682.4	735.6	1,309.0	1,295.9	13.18	99.356	

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 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11B-24 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	117.57	-4.6	8.9	10.0				
100.0	100.0	100.0	100.0	0.1	0.1	117.57	-4.6	8.9	10.0	9.7	0.26	39.055	
200.0	200.0	200.0	200.0	0.3	0.3	117.57	-4.6	8.9	10.0	9.4	0.61	16.531	CC, ES
300.0	300.0	299.4	299.4	0.5	0.5	122.29	-6.6	10.5	12.4	11.5	0.96	12.935	SF
400.0	400.0	398.3	398.0	0.7	0.7	129.37	-12.6	15.4	20.0	18.6	1.35	14.746	
500.0	500.0	495.9	494.7	0.8	1.0	-129.36	-22.4	23.3	34.3	32.7	1.65	20.766	
600.0	599.7	591.2	588.5	1.0	1.3	-121.69	-35.6	34.1	56.6	54.5	2.02	28.002	
700.0	699.1	684.4	679.2	1.3	1.7	-108.18	-52.0	47.5	82.6	80.1	2.43	33.953	
800.0	798.4	775.3	766.7	1.5	2.2	-109.86	-71.3	63.2	112.6	109.7	2.87	39.244	
900.0	897.7	863.6	850.3	1.7	2.7	-110.26	-93.1	80.9	146.8	143.5	3.32	44.270	
1,000.0	997.0	949.0	929.9	2.0	3.3	-110.07	-117.1	100.4	185.1	181.3	3.77	49.111	
1,100.0	1,096.3	1,031.3	1,005.3	2.3	4.0	-109.63	-142.7	121.3	227.1	222.9	4.22	53.827	
1,200.0	1,195.6	1,110.3	1,076.3	2.5	4.6	-109.08	-169.7	143.3	272.9	268.2	4.67	58.460	
1,300.0	1,294.9	1,186.1	1,142.9	2.8	5.3	-108.50	-197.7	166.1	322.0	316.9	5.11	62.988	
1,400.0	1,394.2	1,258.6	1,205.2	3.0	6.0	-107.93	-226.4	189.5	374.3	368.8	5.55	67.436	
1,500.0	1,493.5	1,327.8	1,263.4	3.3	6.7	-107.39	-255.4	213.1	429.7	423.7	5.98	71.851	
1,600.0	1,592.8	1,400.0	1,322.6	3.6	7.5	-106.83	-287.4	239.2	488.0	481.6	6.42	76.056	
1,700.0	1,692.1	1,456.6	1,367.9	3.8	8.2	-106.40	-313.7	260.6	548.8	542.0	6.82	80.491	
1,800.0	1,791.4	1,516.3	1,414.5	4.1	8.9	-105.96	-342.6	284.2	612.1	604.9	7.22	84.759	
1,900.0	1,890.7	1,583.3	1,465.8	4.4	9.7	-105.49	-376.1	311.5	677.4	669.8	7.64	88.644	
2,000.0	1,990.0	1,658.7	1,523.3	4.6	10.6	-105.05	-413.9	342.2	743.0	734.9	8.08	91.936	
2,100.0	2,089.3	1,734.1	1,580.8	4.9	11.5	-104.68	-451.7	373.0	808.6	800.1	8.52	94.903	
2,200.0	2,188.6	1,809.5	1,638.3	5.2	12.4	-104.37	-489.5	403.8	874.2	865.2	8.96	97.585	
2,300.0	2,287.9	1,884.9	1,695.8	5.5	13.4	-104.09	-527.3	434.6	939.8	930.4	9.40	100.014	
2,400.0	2,387.2	1,960.3	1,753.3	5.7	14.3	-103.86	-565.2	465.4	1,005.4	995.6	9.84	102.229	
2,500.0	2,486.5	2,035.7	1,810.8	6.0	15.2	-103.65	-603.0	496.2	1,071.1	1,060.8	10.27	104.258	
2,600.0	2,585.8	2,111.1	1,868.3	6.3	16.1	-103.47	-640.8	527.0	1,136.7	1,126.0	10.71	106.124	
2,700.0	2,685.1	2,186.4	1,925.8	6.5	17.0	-103.31	-678.6	557.8	1,202.4	1,191.2	11.15	107.843	
2,800.0	2,784.4	2,261.8	1,983.3	6.8	18.0	-103.16	-716.4	588.6	1,268.0	1,256.5	11.59	109.432	
2,900.0	2,883.7	2,337.2	2,040.8	7.1	18.9	-103.03	-754.2	619.4	1,333.7	1,321.7	12.03	110.907	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 11C-24 - DD - Plan #3 — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	156.19	-11.7	5.2	16.1				
100.0	100.0	90.3	90.3	0.1	0.1	156.19	-11.7	5.2	12.8	12.5	0.26	49.386	
200.0	200.0	190.3	190.3	0.3	0.3	156.19	-11.7	5.2	12.8	12.2	0.61	21.147	
244.2	244.2	234.5	234.5	0.4	0.4	156.19	-11.7	5.2	12.8	12.0	0.76	16.854	CC, ES
300.0	300.0	290.0	290.0	0.5	0.5	155.87	-12.1	5.4	13.2	12.3	0.95	13.851	
400.0	400.0	389.1	389.0	0.7	0.7	153.37	-15.9	8.0	17.9	16.5	1.32	13.565	SF
500.0	500.0	487.3	486.7	0.8	0.9	-113.76	-24.0	13.4	28.6	27.0	1.65	17.321	
600.0	599.7	583.6	581.9	1.0	1.2	-111.86	-35.9	21.3	46.8	44.8	2.02	23.224	
700.0	699.1	678.2	674.6	1.3	1.5	-101.33	-51.4	31.7	68.8	66.4	2.42	28.403	
800.0	798.4	770.8	764.3	1.5	2.0	-104.38	-70.4	44.4	95.1	92.3	2.86	33.273	
900.0	897.7	861.0	850.6	1.7	2.5	-105.40	-92.3	59.0	125.9	122.5	3.31	38.028	
1,000.0	997.0	948.5	933.0	2.0	3.0	-105.48	-116.7	75.4	160.8	157.0	3.77	42.662	
1,100.0	1,096.3	1,033.1	1,011.4	2.3	3.6	-105.13	-143.3	93.2	199.6	195.4	4.23	47.207	
1,200.0	1,195.6	1,114.6	1,085.4	2.5	4.2	-104.60	-171.7	112.1	242.2	237.6	4.69	51.693	
1,300.0	1,294.9	1,193.0	1,155.1	2.8	4.9	-103.99	-201.3	132.0	288.4	283.3	5.14	56.117	
1,400.0	1,394.2	1,268.0	1,220.5	3.0	5.6	-103.38	-232.0	152.4	338.0	332.4	5.59	60.463	
1,500.0	1,493.5	1,339.8	1,281.6	3.3	6.3	-102.78	-263.2	173.4	390.8	384.8	6.03	64.789	
1,600.0	1,592.8	1,400.0	1,331.8	3.6	6.9	-102.28	-290.9	191.9	446.7	440.2	6.44	69.343	
1,700.0	1,692.1	1,473.6	1,391.6	3.8	7.8	-101.68	-326.5	215.7	505.1	498.2	6.89	73.323	
1,800.0	1,791.4	1,535.8	1,440.8	4.1	8.5	-101.20	-358.1	236.8	566.3	559.0	7.31	77.515	
1,900.0	1,890.7	1,600.0	1,490.4	4.4	9.2	-100.71	-392.1	259.5	629.9	622.2	7.72	81.560	
2,000.0	1,990.0	1,651.1	1,528.8	4.6	9.9	-100.33	-420.1	278.3	695.8	687.7	8.11	85.752	
2,100.0	2,089.3	1,700.0	1,564.7	4.9	10.5	-99.99	-447.7	296.7	763.7	755.2	8.49	89.929	
2,200.0	2,188.6	1,755.2	1,604.2	5.2	11.3	-99.60	-479.8	318.2	833.6	824.7	8.89	93.767	
2,300.0	2,287.9	1,800.0	1,635.4	5.5	11.9	-99.31	-506.5	336.0	905.3	896.1	9.26	97.790	
2,400.0	2,387.2	1,849.2	1,668.8	5.7	12.6	-98.99	-536.5	356.1	978.7	969.1	9.64	101.534	
2,500.0	2,486.5	1,900.0	1,702.3	6.0	13.3	-98.67	-568.3	377.3	1,053.7	1,043.6	10.02	105.175	
2,600.0	2,585.8	1,934.0	1,724.1	6.3	13.8	-98.46	-589.9	391.8	1,130.0	1,119.6	10.36	109.043	
2,700.0	2,685.1	1,973.3	1,748.8	6.5	14.4	-98.23	-615.4	408.8	1,207.7	1,197.0	10.72	112.697	
2,800.0	2,784.4	2,000.0	1,765.2	6.8	14.8	-98.07	-632.9	420.5	1,286.7	1,275.6	11.04	116.544	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13A-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance 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	100.0	100.0	0.1	0.1	27.53	49.6	25.9	56.0	55.7	0.26	218.664	
200.0	200.0	200.0	200.0	0.3	0.3	27.53	49.6	25.9	56.0	55.4	0.61	92.520	CC, ES
300.0	300.0	297.1	297.0	0.5	0.5	27.70	51.7	27.2	58.5	57.6	0.96	61.128	
400.0	400.0	393.7	393.3	0.7	0.7	28.13	58.0	31.0	66.1	64.8	1.34	49.204	
500.0	500.0	489.0	487.8	0.8	1.0	129.75	68.2	37.3	80.3	78.7	1.64	49.120	SF
600.0	599.7	581.7	579.2	1.0	1.3	142.86	82.0	45.8	103.0	101.0	1.98	52.029	
700.0	699.1	671.0	666.3	1.3	1.7	161.16	98.9	56.2	134.6	132.3	2.31	58.240	
800.0	798.4	757.0	749.1	1.5	2.1	161.85	118.3	68.1	171.8	169.2	2.64	64.984	
900.0	897.7	839.7	827.9	1.7	2.6	162.20	140.1	81.5	213.1	210.1	2.97	71.723	
1,000.0	997.0	919.3	902.4	2.0	3.1	162.37	163.6	96.0	258.1	254.8	3.29	78.434	
1,100.0	1,096.3	1,000.0	976.8	2.3	3.7	162.43	190.3	112.4	306.8	303.2	3.61	84.921	
1,200.0	1,195.6	1,068.2	1,038.6	2.5	4.2	162.42	214.8	127.5	358.8	354.9	3.92	91.610	
1,300.0	1,294.9	1,137.6	1,100.4	2.8	4.8	162.39	241.8	144.1	413.9	409.7	4.22	98.081	
1,400.0	1,394.2	1,200.0	1,154.9	3.0	5.4	162.33	267.6	159.9	472.0	467.5	4.51	104.661	
1,500.0	1,493.5	1,266.7	1,212.1	3.3	6.0	162.25	296.8	177.9	532.8	528.0	4.81	110.764	
1,600.0	1,592.8	1,326.5	1,262.3	3.6	6.7	162.18	324.5	195.0	596.0	590.9	5.10	116.963	
1,700.0	1,692.1	1,383.3	1,309.1	3.8	7.3	162.10	352.0	211.9	661.7	656.3	5.38	123.065	
1,800.0	1,791.4	1,437.3	1,352.5	4.1	7.9	162.03	379.2	228.6	729.4	723.8	5.65	129.040	
1,900.0	1,890.7	1,500.0	1,401.9	4.4	8.6	161.93	412.2	248.9	799.3	793.3	5.94	134.542	
2,000.0	1,990.0	1,537.1	1,430.5	4.6	9.0	161.88	432.3	261.3	870.8	864.6	6.19	140.694	
2,100.0	2,089.3	1,583.3	1,465.5	4.9	9.6	161.81	458.0	277.1	944.1	937.6	6.45	146.367	
2,200.0	2,188.6	1,627.1	1,497.9	5.2	10.2	161.75	483.0	292.5	1,019.0	1,012.3	6.71	151.931	
2,300.0	2,287.9	1,681.4	1,537.5	5.5	10.8	161.67	514.7	312.0	1,095.1	1,088.1	6.98	156.888	
2,400.0	2,387.2	1,746.0	1,584.4	5.7	11.7	161.58	552.6	335.2	1,171.4	1,164.1	7.27	161.119	
2,500.0	2,486.5	1,810.6	1,631.4	6.0	12.5	161.51	590.4	358.5	1,247.7	1,240.1	7.56	165.063	
2,600.0	2,585.8	1,875.3	1,678.4	6.3	13.3	161.45	628.2	381.8	1,324.0	1,316.2	7.85	168.703	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13B-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance 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	0.26	187.549	
200.0	200.0	200.0	200.0	0.3	0.3	27.52	42.6	22.2	48.0	47.4	0.60	79.324	
233.3	233.3	233.3	233.3	0.4	0.4	27.52	42.6	22.2	48.0	47.3	0.72	66.524	CC, ES
300.0	300.0	298.8	298.8	0.5	0.5	27.65	43.0	22.6	48.6	47.7	0.95	51.043	
400.0	400.0	396.1	396.0	0.7	0.7	28.59	47.0	25.6	53.6	52.3	1.31	40.802	
500.0	500.0	492.4	491.7	0.8	0.9	131.45	54.7	31.6	65.4	63.7	1.64	39.822	SF
600.0	599.7	586.3	584.6	1.0	1.2	145.91	65.9	40.3	85.9	83.9	1.99	43.242	
700.0	699.1	677.0	673.4	1.3	1.5	164.83	80.1	51.3	115.6	113.2	2.32	49.878	
800.0	798.4	764.4	758.2	1.5	1.9	165.81	97.0	64.4	150.9	148.2	2.65	57.008	
900.0	897.7	848.8	839.0	1.7	2.4	166.36	116.1	79.2	190.4	187.4	2.97	64.101	
1,000.0	997.0	929.8	915.6	2.0	2.9	166.67	137.2	95.5	233.8	230.6	3.29	71.142	
1,100.0	1,096.3	1,007.6	987.8	2.3	3.4	166.84	159.7	113.0	281.0	277.4	3.60	78.127	
1,200.0	1,195.6	1,081.9	1,055.8	2.5	4.0	166.93	183.5	131.4	331.6	327.7	3.90	84.977	
1,300.0	1,294.9	1,152.9	1,119.6	2.8	4.6	166.97	208.1	150.5	385.5	381.3	4.20	91.731	
1,400.0	1,394.2	1,220.5	1,179.2	3.0	5.2	166.98	233.3	170.0	442.4	437.9	4.49	98.427	
1,500.0	1,493.5	1,284.8	1,234.9	3.3	5.8	166.97	258.8	189.8	502.1	497.3	4.78	105.011	
1,600.0	1,592.8	1,346.0	1,286.8	3.6	6.4	166.95	284.4	209.6	564.4	559.3	5.06	111.463	
1,700.0	1,692.1	1,400.0	1,331.8	3.8	7.0	166.92	308.0	228.0	629.1	623.8	5.33	118.023	
1,800.0	1,791.4	1,466.7	1,386.1	4.1	7.7	166.88	338.7	251.7	696.1	690.4	5.62	123.875	
1,900.0	1,890.7	1,529.7	1,436.7	4.4	8.4	166.84	368.2	274.7	764.3	758.4	5.90	129.491	
2,000.0	1,990.0	1,602.8	1,495.4	4.6	9.2	166.80	402.6	301.3	832.5	826.3	6.20	134.307	
2,100.0	2,089.3	1,675.8	1,554.2	4.9	10.0	166.77	436.9	327.9	900.8	894.3	6.50	138.654	
2,200.0	2,188.6	1,748.9	1,612.9	5.2	10.8	166.74	471.3	354.5	969.1	962.3	6.79	142.637	
2,300.0	2,287.9	1,822.0	1,671.6	5.5	11.6	166.72	505.7	381.2	1,037.3	1,030.2	7.09	146.299	
2,400.0	2,387.2	1,895.0	1,730.4	5.7	12.4	166.69	540.0	407.8	1,105.6	1,098.2	7.39	149.671	
2,500.0	2,486.5	1,968.1	1,789.1	6.0	13.2	166.68	574.4	434.4	1,173.9	1,166.2	7.68	152.773	
2,600.0	2,585.8	2,041.2	1,847.8	6.3	14.0	166.66	608.7	461.1	1,242.2	1,234.2	7.98	155.655	
2,700.0	2,685.1	2,114.2	1,906.6	6.5	14.9	166.64	643.1	487.7	1,310.4	1,302.1	8.28	158.337	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13C-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	37.66	45.0	34.7	56.9				
100.0	100.0	99.8	99.8	0.1	0.1	37.66	45.0	34.7	56.9	56.6	0.26	222.790	
200.0	200.0	199.8	199.8	0.3	0.3	37.66	45.0	34.7	56.9	56.3	0.60	94.115	CC, ES
300.0	300.0	296.9	296.8	0.5	0.5	38.00	46.7	36.5	59.4	58.4	0.96	62.073	
400.0	400.0	393.4	393.1	0.7	0.7	38.88	51.8	41.8	66.9	65.6	1.34	49.808	
500.0	500.0	488.6	487.5	0.8	1.0	140.84	60.1	50.4	81.4	79.8	1.63	49.808	SF
600.0	599.7	581.2	578.6	1.0	1.3	153.95	71.3	62.0	105.0	103.0	1.97	53.227	
700.0	699.1	670.2	665.4	1.3	1.7	172.09	85.0	76.2	137.2	134.9	2.29	59.792	
800.0	798.4	755.8	748.0	1.5	2.1	172.62	100.8	92.5	174.9	172.2	2.62	66.822	
900.0	897.7	838.3	826.4	1.7	2.6	172.96	118.4	110.8	216.5	213.6	2.93	73.865	
1,000.0	997.0	917.4	900.6	2.0	3.1	173.17	137.5	130.6	262.0	258.8	3.24	80.899	
1,100.0	1,096.3	1,000.0	976.8	2.3	3.7	173.31	159.7	153.6	311.2	307.7	3.55	87.639	
1,200.0	1,195.6	1,065.6	1,036.2	2.5	4.3	173.39	178.9	173.5	363.5	359.7	3.84	94.736	
1,300.0	1,294.9	1,134.6	1,097.7	2.8	4.8	173.45	200.7	196.0	419.1	414.9	4.12	101.595	
1,400.0	1,394.2	1,212.4	1,166.1	3.0	5.5	173.49	226.5	222.7	476.7	472.3	4.43	107.679	
1,500.0	1,493.5	1,294.0	1,237.8	3.3	6.2	173.53	253.6	250.8	534.5	529.8	4.74	112.878	
1,600.0	1,592.8	1,375.7	1,309.5	3.6	7.0	173.56	280.7	278.9	592.3	587.2	5.04	117.432	
1,700.0	1,692.1	1,457.3	1,381.2	3.8	7.7	173.59	307.7	307.0	650.0	644.7	5.35	121.476	
1,800.0	1,791.4	1,538.9	1,452.9	4.1	8.4	173.61	334.8	335.1	707.8	702.1	5.66	125.089	
1,900.0	1,890.7	1,620.5	1,524.6	4.4	9.1	173.62	361.9	363.1	765.6	759.6	5.97	128.334	
2,000.0	1,990.0	1,702.2	1,596.3	4.6	9.9	173.64	389.0	391.2	823.3	817.0	6.27	131.265	
2,100.0	2,089.3	1,783.8	1,668.0	4.9	10.6	173.65	416.1	419.3	881.1	874.5	6.58	133.917	
2,200.0	2,188.6	1,865.4	1,739.7	5.2	11.3	173.66	443.2	447.4	938.8	932.0	6.89	136.336	
2,300.0	2,287.9	1,947.1	1,811.4	5.5	12.1	173.67	470.3	475.5	996.6	989.4	7.19	138.552	
2,400.0	2,387.2	2,028.7	1,883.1	5.7	12.8	173.68	497.4	503.5	1,054.4	1,046.9	7.50	140.590	
2,500.0	2,486.5	2,110.3	1,954.8	6.0	13.5	173.69	524.5	531.6	1,112.1	1,104.3	7.81	142.469	
2,600.0	2,585.8	2,192.0	2,026.5	6.3	14.3	173.70	551.6	559.7	1,169.9	1,161.8	8.11	144.206	
2,700.0	2,685.1	2,273.6	2,098.2	6.5	15.0	173.70	578.7	587.8	1,227.7	1,219.2	8.42	145.816	
2,800.0	2,784.4	2,355.2	2,169.9	6.8	15.7	173.71	605.8	615.9	1,285.4	1,276.7	8.73	147.315	
2,900.0	2,883.7	2,436.8	2,241.6	7.1	16.5	173.71	632.9	643.9	1,343.2	1,334.2	9.03	148.713	

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 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 13D-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	39.30	37.9	31.0	49.0				
100.0	100.0	100.0	100.0	0.1	0.1	39.30	37.9	31.0	49.0	48.8	0.26	191.957	
200.0	200.0	200.0	200.0	0.3	0.3	39.30	37.9	31.0	49.0	48.4	0.60	81.092	
300.0	300.0	300.0	300.0	0.5	0.5	39.30	37.9	31.0	49.0	48.1	0.95	51.404	CC, ES
400.0	400.0	397.5	397.5	0.7	0.7	40.17	39.3	33.1	51.4	50.1	1.30	39.440	
500.0	500.0	494.3	494.0	0.8	0.9	143.65	43.2	39.4	60.9	59.2	1.65	36.994	SF
600.0	599.7	588.9	587.8	1.0	1.1	158.72	49.6	49.5	79.7	77.7	1.99	40.122	
700.0	699.1	680.4	677.9	1.3	1.4	177.80	58.1	62.9	107.5	105.1	2.31	46.441	
800.0	798.4	769.0	764.3	1.5	1.8	178.91	68.6	79.4	140.8	138.1	2.64	53.310	
900.0	897.7	854.5	846.7	1.7	2.2	179.70	80.7	98.6	178.3	175.4	2.96	60.239	
1,000.0	997.0	936.8	925.1	2.0	2.7	-179.71	94.2	119.9	220.0	216.7	3.27	67.191	
1,100.0	1,096.3	1,015.9	999.2	2.3	3.2	-179.27	108.9	143.1	265.4	261.9	3.58	74.145	
1,200.0	1,195.6	1,091.6	1,069.1	2.5	3.8	-178.92	124.4	167.7	314.5	310.6	3.88	81.048	
1,300.0	1,294.9	1,170.7	1,141.1	2.8	4.4	-178.62	142.1	195.5	366.4	362.2	4.19	87.554	
1,400.0	1,394.2	1,255.9	1,218.3	3.0	5.0	-178.37	161.2	225.7	418.8	414.3	4.50	93.068	
1,500.0	1,493.5	1,341.0	1,295.6	3.3	5.7	-178.18	180.3	256.0	471.2	466.4	4.81	97.884	
1,600.0	1,592.8	1,426.2	1,372.9	3.6	6.4	-178.03	199.5	286.2	523.6	518.5	5.13	102.115	
1,700.0	1,692.1	1,511.4	1,450.2	3.8	7.0	-177.90	218.6	316.4	576.0	570.6	5.44	105.862	
1,800.0	1,791.4	1,596.5	1,527.5	4.1	7.7	-177.80	237.8	346.7	628.4	622.6	5.75	109.200	
1,900.0	1,890.7	1,681.7	1,604.8	4.4	8.4	-177.71	256.9	376.9	680.8	674.7	6.07	112.189	
2,000.0	1,990.0	1,766.9	1,682.1	4.6	9.0	-177.63	276.1	407.1	733.2	726.8	6.38	114.889	
2,100.0	2,089.3	1,852.1	1,759.3	4.9	9.7	-177.57	295.2	437.4	785.6	778.9	6.70	117.339	
2,200.0	2,188.6	1,937.2	1,836.6	5.2	10.4	-177.51	314.4	467.6	838.0	831.0	7.01	119.572	
2,300.0	2,287.9	2,022.4	1,913.9	5.5	11.1	-177.46	333.5	497.8	890.4	883.1	7.32	121.616	
2,400.0	2,387.2	2,107.6	1,991.2	5.7	11.7	-177.42	352.6	528.1	942.8	935.2	7.63	123.493	
2,500.0	2,486.5	2,192.7	2,068.5	6.0	12.4	-177.37	371.8	558.3	995.2	987.3	7.95	125.222	
2,600.0	2,585.8	2,277.9	2,145.8	6.3	13.1	-177.34	390.9	588.5	1,047.6	1,039.3	8.26	126.820	
2,700.0	2,685.1	2,363.1	2,223.0	6.5	13.8	-177.31	410.1	618.8	1,100.0	1,091.4	8.57	128.302	
2,800.0	2,784.4	2,448.2	2,300.3	6.8	14.4	-177.28	429.2	649.0	1,152.4	1,143.5	8.89	129.681	
2,900.0	2,883.7	2,533.4	2,377.6	7.1	15.1	-177.25	448.4	679.2	1,204.8	1,195.6	9.20	130.967	
3,000.0	2,983.0	2,618.6	2,454.9	7.3	15.8	-177.22	467.5	709.5	1,257.2	1,247.7	9.51	132.169	
3,100.0	3,082.3	2,703.7	2,532.2	7.6	16.5	-177.20	486.7	739.7	1,309.6	1,299.8	9.83	133.294	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14A-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	41.56	30.8	27.3	41.2				
100.0	100.0	100.0	100.0	0.1	0.1	41.56	30.8	27.3	41.2	41.0	0.26	161.411	
200.0	200.0	200.0	200.0	0.3	0.3	41.56	30.8	27.3	41.2	40.6	0.60	68.188	
300.0	300.0	300.0	300.0	0.5	0.5	41.56	30.8	27.3	41.2	40.3	0.95	43.224	
400.0	400.0	400.0	400.0	0.7	0.7	41.56	30.8	27.3	41.2	39.9	1.30	31.640	CC, ES
500.0	500.0	497.9	497.9	0.8	0.8	145.15	31.6	29.7	45.5	43.9	1.65	27.608	SF
600.0	599.7	594.3	594.0	1.0	1.0	162.45	33.7	36.8	59.2	57.2	2.00	29.676	
700.0	699.1	688.3	687.2	1.3	1.3	-177.05	37.2	48.1	81.9	79.5	2.33	35.116	
800.0	798.4	779.8	777.3	1.5	1.6	-174.87	41.8	63.3	110.1	107.5	2.67	41.270	
900.0	897.7	868.5	863.8	1.7	1.9	-173.18	47.6	82.0	142.9	139.9	3.00	47.581	
1,000.0	997.0	954.2	946.5	2.0	2.3	-171.85	54.2	103.7	179.9	176.6	3.33	53.977	
1,100.0	1,096.3	1,036.8	1,025.1	2.3	2.8	-170.79	61.6	127.9	221.0	217.3	3.66	60.409	
1,200.0	1,195.6	1,116.1	1,099.5	2.5	3.3	-169.92	69.7	154.2	265.9	261.9	3.98	66.864	
1,300.0	1,294.9	1,197.8	1,174.9	2.8	3.9	-169.18	78.8	184.0	314.0	309.7	4.30	73.039	
1,400.0	1,394.2	1,285.1	1,255.5	3.0	4.5	-168.57	88.6	216.2	362.7	358.1	4.63	78.291	
1,500.0	1,493.5	1,372.4	1,336.0	3.3	5.1	-168.11	98.5	248.5	411.4	406.4	4.97	82.853	
1,600.0	1,592.8	1,459.7	1,416.5	3.6	5.8	-167.74	108.4	280.7	460.1	454.8	5.30	86.848	
1,700.0	1,692.1	1,547.0	1,497.0	3.8	6.4	-167.45	118.2	313.0	508.8	503.2	5.63	90.376	
1,800.0	1,791.4	1,634.3	1,577.6	4.1	7.0	-167.21	128.1	345.2	557.5	551.6	5.96	93.513	
1,900.0	1,890.7	1,721.6	1,658.1	4.4	7.7	-167.00	138.0	377.5	606.3	600.0	6.29	96.321	
2,000.0	1,990.0	1,808.9	1,738.6	4.6	8.3	-166.83	147.9	409.7	655.0	648.4	6.63	98.849	
2,100.0	2,089.3	1,896.2	1,819.1	4.9	8.9	-166.68	157.7	441.9	703.8	696.8	6.96	101.135	
2,200.0	2,188.6	1,983.5	1,899.7	5.2	9.6	-166.55	167.6	474.2	752.5	745.2	7.29	103.213	
2,300.0	2,287.9	2,070.8	1,980.2	5.5	10.2	-166.43	177.5	506.4	801.3	793.6	7.62	105.111	
2,400.0	2,387.2	2,158.1	2,060.7	5.7	10.9	-166.33	187.3	538.7	850.0	842.1	7.96	106.851	
2,500.0	2,486.5	2,245.4	2,141.2	6.0	11.5	-166.24	197.2	570.9	898.8	890.5	8.29	108.452	
2,600.0	2,585.8	2,332.7	2,221.8	6.3	12.1	-166.16	207.1	603.2	947.5	938.9	8.62	109.931	
2,700.0	2,685.1	2,420.0	2,302.3	6.5	12.8	-166.09	216.9	635.4	996.3	987.3	8.95	111.300	
2,800.0	2,784.4	2,507.3	2,382.8	6.8	13.4	-166.02	226.8	667.7	1,045.0	1,035.8	9.28	112.572	
2,900.0	2,883.7	2,594.6	2,463.3	7.1	14.1	-165.96	236.7	699.9	1,093.8	1,084.2	9.62	113.755	
3,000.0	2,983.0	2,681.9	2,543.9	7.3	14.7	-165.90	246.5	732.1	1,142.6	1,132.6	9.95	114.860	
3,100.0	3,082.3	2,769.2	2,624.4	7.6	15.3	-165.85	256.4	764.4	1,191.3	1,181.1	10.28	115.893	
3,200.0	3,181.6	2,856.5	2,704.9	7.9	16.0	-165.81	266.3	796.6	1,240.1	1,229.5	10.61	116.862	
3,300.0	3,280.9	2,943.8	2,785.4	8.1	16.6	-165.76	276.1	828.9	1,288.9	1,277.9	10.94	117.773	
3,400.0	3,380.2	3,031.1	2,866.0	8.4	17.3	-165.72	286.0	861.1	1,337.6	1,326.3	11.28	118.630	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14B-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	44.87	23.7	23.6	33.5				
100.0	100.0	100.0	100.0	0.1	0.1	44.87	23.7	23.6	33.5	33.3	0.26	131.157	
200.0	200.0	200.0	200.0	0.3	0.3	44.87	23.7	23.6	33.5	32.9	0.60	55.429	
300.0	300.0	300.0	300.0	0.5	0.5	44.87	23.7	23.6	33.5	32.6	0.95	35.140	
400.0	400.0	400.0	400.0	0.7	0.7	44.87	23.7	23.6	33.5	32.2	1.30	25.724	CC, ES
500.0	500.0	500.0	500.0	0.8	0.8	147.25	23.7	23.6	35.7	34.0	1.65	21.598	
600.0	599.7	598.8	598.8	1.0	1.0	163.02	23.7	24.3	42.9	40.9	2.00	21.480	SF
700.0	699.1	695.5	695.4	1.3	1.2	-176.29	23.7	29.2	57.9	55.5	2.34	24.743	
800.0	798.4	790.5	789.9	1.5	1.4	-172.82	23.5	38.8	78.1	75.4	2.69	29.072	
900.0	897.7	883.4	881.8	1.7	1.6	-169.53	23.3	52.7	102.7	99.7	3.04	33.804	
1,000.0	997.0	973.9	970.5	2.0	1.9	-166.69	23.0	70.5	131.8	128.4	3.40	38.799	
1,100.0	1,096.3	1,061.7	1,055.6	2.3	2.3	-164.30	22.6	91.8	165.1	161.4	3.76	43.962	
1,200.0	1,195.6	1,146.6	1,136.9	2.5	2.7	-162.32	22.2	116.0	202.6	198.5	4.12	49.231	
1,300.0	1,294.9	1,228.3	1,214.1	2.8	3.2	-160.66	21.8	142.8	244.1	239.7	4.47	54.563	
1,400.0	1,394.2	1,306.7	1,287.1	3.0	3.8	-159.28	21.3	171.6	289.4	284.6	4.83	59.932	
1,500.0	1,493.5	1,389.4	1,362.9	3.3	4.3	-158.04	20.7	204.5	337.6	332.4	5.19	65.029	
1,600.0	1,592.8	1,476.6	1,442.8	3.6	5.0	-157.04	20.2	239.5	386.2	380.7	5.56	69.423	
1,700.0	1,692.1	1,563.8	1,522.7	3.8	5.6	-156.26	19.6	274.4	434.9	429.0	5.93	73.289	
1,800.0	1,791.4	1,651.0	1,602.6	4.1	6.3	-155.64	19.0	309.4	483.7	477.3	6.30	76.715	
1,900.0	1,890.7	1,738.2	1,682.5	4.4	6.9	-155.13	18.4	344.4	532.4	525.7	6.67	79.771	
2,000.0	1,990.0	1,825.5	1,762.4	4.6	7.6	-154.70	17.8	379.4	581.2	574.2	7.04	82.514	
2,100.0	2,089.3	1,912.7	1,842.3	4.9	8.3	-154.35	17.3	414.3	630.0	622.6	7.41	84.989	
2,200.0	2,188.6	1,999.9	1,922.2	5.2	8.9	-154.04	16.7	449.3	678.9	671.1	7.78	87.233	
2,300.0	2,287.9	2,087.1	2,002.0	5.5	9.6	-153.77	16.1	484.3	727.7	719.6	8.15	89.278	
2,400.0	2,387.2	2,174.3	2,081.9	5.7	10.3	-153.54	15.5	519.3	776.6	768.1	8.52	91.148	
2,500.0	2,486.5	2,261.5	2,161.8	6.0	10.9	-153.34	14.9	554.2	825.4	816.6	8.89	92.864	
2,600.0	2,585.8	2,348.7	2,241.7	6.3	11.6	-153.16	14.4	589.2	874.3	865.1	9.26	94.446	
2,700.0	2,685.1	2,435.9	2,321.6	6.5	12.3	-152.99	13.8	624.2	923.2	913.6	9.63	95.908	
2,800.0	2,784.4	2,523.2	2,401.5	6.8	12.9	-152.85	13.2	659.1	972.1	962.1	9.99	97.264	
2,900.0	2,883.7	2,610.4	2,481.4	7.1	13.6	-152.71	12.6	694.1	1,021.0	1,010.6	10.36	98.523	
3,000.0	2,983.0	2,697.6	2,561.3	7.3	14.3	-152.59	12.0	729.1	1,069.9	1,059.1	10.73	99.698	
3,100.0	3,082.3	2,784.8	2,641.2	7.6	14.9	-152.48	11.5	764.1	1,118.8	1,107.7	11.10	100.794	
3,200.0	3,181.6	2,872.0	2,721.1	7.9	15.6	-152.38	10.9	799.0	1,167.7	1,156.2	11.47	101.822	
3,300.0	3,280.9	2,959.2	2,800.9	8.1	16.3	-152.29	10.3	834.0	1,216.6	1,204.7	11.84	102.785	
3,400.0	3,380.2	3,046.4	2,880.8	8.4	17.0	-152.21	9.7	869.0	1,265.5	1,253.3	12.20	103.691	
3,500.0	3,479.7	3,309.8	3,128.5	8.6	18.5	-152.55	8.2	958.1	1,307.0	1,294.0	12.99	100.583	
3,600.0	3,579.6	3,613.7	3,426.1	8.8	19.6	-152.69	7.2	1,017.5	1,330.2	1,316.5	13.76	96.665	
3,700.0	3,679.6	3,867.7	3,679.6	8.9	19.8	80.82	7.0	1,030.7	1,334.6	1,320.3	14.34	93.075	
3,800.0	3,779.6	3,967.7	3,779.6	9.0	19.9	80.82	7.0	1,030.7	1,334.6	1,319.9	14.66	91.044	
3,900.0	3,879.6	4,067.7	3,879.6	9.2	20.0	80.82	7.0	1,030.7	1,334.6	1,319.6	14.98	89.091	
4,000.0	3,979.6	4,167.7	3,979.6	9.3	20.0	80.82	7.0	1,030.7	1,334.6	1,319.3	15.30	87.214	
4,100.0	4,079.6	4,267.7	4,079.6	9.4	20.1	80.82	7.0	1,030.7	1,334.6	1,319.0	15.63	85.407	
4,200.0	4,179.6	4,367.7	4,179.6	9.6	20.2	80.82	7.0	1,030.7	1,334.6	1,318.7	15.95	83.669	
4,300.0	4,279.6	4,467.7	4,279.6	9.7	20.2	80.82	7.0	1,030.7	1,334.6	1,318.3	16.28	81.994	
4,400.0	4,379.6	4,567.7	4,379.6	9.8	20.3	80.82	7.0	1,030.7	1,334.6	1,318.0	16.60	80.381	
4,500.0	4,479.6	4,667.7	4,479.6	10.0	20.4	80.82	7.0	1,030.7	1,334.6	1,317.7	16.93	78.826	
4,600.0	4,579.6	4,767.7	4,579.6	10.1	20.4	80.82	7.0	1,030.7	1,334.6	1,317.3	17.26	77.326	
4,700.0	4,679.6	4,867.7	4,679.6	10.2	20.5	80.82	7.0	1,030.7	1,334.6	1,317.0	17.59	75.879	
4,800.0	4,779.6	4,967.7	4,779.6	10.4	20.6	80.82	7.0	1,030.7	1,334.6	1,316.7	17.92	74.482	
4,900.0	4,879.6	5,067.7	4,879.6	10.5	20.6	80.82	7.0	1,030.7	1,334.6	1,316.4	18.25	73.132	
5,000.0	4,979.6	5,167.7	4,979.6	10.7	20.7	80.82	7.0	1,030.7	1,334.6	1,316.0	18.58	71.828	
5,100.0	5,079.6	5,267.7	5,079.6	10.8	20.8	80.82	7.0	1,030.7	1,334.6	1,315.7	18.91	70.567	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14B-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,179.6	5,367.7	5,179.6	10.9	20.9	80.82	7.0	1,030.7	1,334.6	1,315.4	19.25	69.348	
5,300.0	5,279.6	5,467.7	5,279.6	11.1	21.0	80.82	7.0	1,030.7	1,334.6	1,315.0	19.58	68.168	
5,400.0	5,379.6	5,567.7	5,379.6	11.2	21.0	80.82	7.0	1,030.7	1,334.6	1,314.7	19.91	67.025	
5,500.0	5,479.6	5,667.7	5,479.6	11.4	21.1	80.82	7.0	1,030.7	1,334.6	1,314.4	20.25	65.919	
5,600.0	5,579.6	5,767.7	5,579.6	11.5	21.2	80.82	7.0	1,030.7	1,334.6	1,314.0	20.58	64.847	
5,700.0	5,679.6	5,867.7	5,679.6	11.7	21.3	80.82	7.0	1,030.7	1,334.6	1,313.7	20.92	63.808	
5,800.0	5,779.6	5,967.7	5,779.6	11.8	21.4	80.82	7.0	1,030.7	1,334.6	1,313.4	21.25	62.800	
5,825.7	5,805.3	5,993.4	5,805.3	11.9	21.4	80.82	7.0	1,030.7	1,334.6	1,313.3	21.34	62.546	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14C-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	49.34	17.2	20.0	26.4				
100.0	100.0	100.0	100.0	0.1	0.1	49.34	17.2	20.0	26.4	26.1	0.26	103.115	
200.0	200.0	200.0	200.0	0.3	0.3	49.34	17.2	20.0	26.4	25.8	0.60	43.595	
300.0	300.0	300.0	300.0	0.5	0.5	49.34	17.2	20.0	26.4	25.4	0.95	27.641	
400.0	400.0	400.0	400.0	0.7	0.7	49.34	17.2	20.0	26.4	25.1	1.30	20.235	CC, ES
500.0	500.0	500.0	500.0	0.8	0.8	151.98	17.2	20.0	28.6	27.0	1.65	17.342	SF
600.0	599.7	598.4	598.4	1.0	1.0	170.42	16.4	22.4	37.3	35.3	2.00	18.685	
700.0	699.1	695.4	695.0	1.3	1.2	-167.18	13.9	29.4	53.5	51.1	2.35	22.785	
800.0	798.4	790.6	789.5	1.5	1.4	-162.63	10.0	40.9	74.4	71.7	2.72	27.413	
900.0	897.7	883.8	881.2	1.7	1.7	-158.50	4.6	56.3	99.6	96.5	3.10	32.131	
1,000.0	997.0	974.5	969.6	2.0	2.1	-154.97	-2.0	75.4	129.0	125.5	3.50	36.902	
1,100.0	1,096.3	1,062.5	1,054.4	2.3	2.5	-152.03	-9.7	97.7	162.6	158.7	3.90	41.704	
1,200.0	1,195.6	1,147.5	1,135.2	2.5	3.0	-149.58	-18.3	122.8	200.4	196.1	4.31	46.524	
1,300.0	1,294.9	1,229.5	1,211.8	2.8	3.5	-147.54	-27.7	150.1	242.0	237.3	4.71	51.353	
1,400.0	1,394.2	1,308.1	1,284.2	3.0	4.1	-145.83	-37.8	179.2	287.4	282.3	5.11	56.198	
1,500.0	1,493.5	1,390.8	1,359.1	3.3	4.7	-144.29	-49.2	212.2	335.8	330.2	5.53	60.763	
1,600.0	1,592.8	1,477.8	1,437.9	3.6	5.4	-143.05	-61.3	247.2	384.6	378.6	5.95	64.672	
1,700.0	1,692.1	1,564.8	1,516.7	3.8	6.1	-142.10	-73.3	282.2	433.4	427.1	6.36	68.101	
1,800.0	1,791.4	1,651.9	1,595.4	4.1	6.8	-141.33	-85.4	317.2	482.4	475.6	6.78	71.128	
1,900.0	1,890.7	1,738.9	1,674.2	4.4	7.5	-140.71	-97.5	352.2	531.4	524.2	7.20	73.820	
2,000.0	1,990.0	1,825.9	1,752.9	4.6	8.2	-140.19	-109.6	387.2	580.5	572.9	7.62	76.228	
2,100.0	2,089.3	1,913.0	1,831.7	4.9	8.9	-139.75	-121.7	422.2	629.6	621.5	8.03	78.394	
2,200.0	2,188.6	2,000.0	1,910.5	5.2	9.6	-139.37	-133.7	457.2	678.7	670.2	8.45	80.352	
2,300.0	2,287.9	2,087.0	1,989.2	5.5	10.3	-139.05	-145.8	492.2	727.8	718.9	8.86	82.130	
2,400.0	2,387.2	2,174.0	2,068.0	5.7	11.0	-138.76	-157.9	527.2	776.9	767.7	9.28	83.752	
2,500.0	2,486.5	2,261.1	2,146.7	6.0	11.7	-138.51	-170.0	562.2	826.1	816.4	9.69	85.238	
2,600.0	2,585.8	2,348.1	2,225.5	6.3	12.4	-138.29	-182.1	597.2	875.3	865.2	10.11	86.604	
2,700.0	2,685.1	2,435.1	2,304.3	6.5	13.1	-138.09	-194.2	632.2	924.4	913.9	10.52	87.865	
2,800.0	2,784.4	2,522.2	2,383.0	6.8	13.8	-137.92	-206.2	667.2	973.6	962.7	10.94	89.031	
2,900.0	2,883.7	2,609.2	2,461.8	7.1	14.5	-137.75	-218.3	702.2	1,022.8	1,011.5	11.35	90.113	
3,000.0	2,983.0	2,696.2	2,540.6	7.3	15.2	-137.61	-230.4	737.2	1,072.0	1,060.3	11.76	91.120	
3,100.0	3,082.3	2,783.3	2,619.3	7.6	16.0	-137.47	-242.5	772.2	1,121.2	1,109.0	12.18	92.059	
3,200.0	3,181.6	2,870.3	2,698.1	7.9	16.7	-137.35	-254.6	807.2	1,170.4	1,157.8	12.59	92.936	
3,300.0	3,280.9	2,957.3	2,776.8	8.1	17.4	-137.24	-266.6	842.2	1,219.6	1,206.6	13.01	93.759	
3,400.0	3,380.2	3,110.9	2,917.0	8.4	18.5	-137.09	-287.1	901.6	1,267.9	1,254.3	13.56	93.506	
3,500.0	3,479.7	3,380.2	3,172.8	8.6	20.0	-137.71	-314.3	980.4	1,304.9	1,290.4	14.45	90.291	
3,600.0	3,579.6	3,676.9	3,465.1	8.8	20.8	-137.98	-330.4	1,026.9	1,324.3	1,309.1	15.21	87.053	
3,700.0	3,679.6	3,891.6	3,679.6	8.9	21.0	95.49	-332.9	1,034.0	1,327.0	1,311.3	15.69	84.585	
3,800.0	3,779.6	3,991.6	3,779.6	9.0	21.1	95.49	-332.9	1,034.0	1,327.0	1,311.0	15.98	83.029	
3,900.0	3,879.6	4,091.6	3,879.6	9.2	21.1	95.49	-332.9	1,034.0	1,327.0	1,310.7	16.28	81.519	
4,000.0	3,979.6	4,191.6	3,979.6	9.3	21.2	95.49	-332.9	1,034.0	1,327.0	1,310.4	16.58	80.052	
4,100.0	4,079.6	4,291.6	4,079.6	9.4	21.2	95.49	-332.9	1,034.0	1,327.0	1,310.1	16.88	78.629	
4,200.0	4,179.6	4,391.6	4,179.6	9.6	21.3	95.49	-332.9	1,034.0	1,327.0	1,309.8	17.18	77.246	
4,300.0	4,279.6	4,491.6	4,279.6	9.7	21.4	95.49	-332.9	1,034.0	1,327.0	1,309.5	17.48	75.904	
4,400.0	4,379.6	4,591.6	4,379.6	9.8	21.4	95.49	-332.9	1,034.0	1,327.0	1,309.2	17.79	74.601	
4,500.0	4,479.6	4,691.6	4,479.6	10.0	21.5	95.49	-332.9	1,034.0	1,327.0	1,308.9	18.09	73.336	
4,600.0	4,579.6	4,791.6	4,579.6	10.1	21.6	95.49	-332.9	1,034.0	1,327.0	1,308.6	18.40	72.106	
4,700.0	4,679.6	4,891.6	4,679.6	10.2	21.6	95.49	-332.9	1,034.0	1,327.0	1,308.3	18.71	70.912	
4,800.0	4,779.6	4,991.6	4,779.6	10.4	21.7	95.49	-332.9	1,034.0	1,327.0	1,307.9	19.02	69.752	
4,900.0	4,879.6	5,091.6	4,879.6	10.5	21.8	95.49	-332.9	1,034.0	1,327.0	1,307.6	19.34	68.625	
5,000.0	4,979.6	5,191.6	4,979.6	10.7	21.8	95.49	-332.9	1,034.0	1,327.0	1,307.3	19.65	67.529	
5,100.0	5,079.6	5,291.6	5,079.6	10.8	21.9	95.49	-332.9	1,034.0	1,327.0	1,307.0	19.97	66.464	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14C-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,179.6	5,391.6	5,179.6	10.9	22.0	95.49	-332.9	1,034.0	1,327.0	1,306.7	20.28	65.428	
5,300.0	5,279.6	5,491.6	5,279.6	11.1	22.1	95.49	-332.9	1,034.0	1,327.0	1,306.4	20.60	64.420	
5,400.0	5,379.6	5,591.6	5,379.6	11.2	22.1	95.49	-332.9	1,034.0	1,327.0	1,306.1	20.92	63.441	
5,500.0	5,479.6	5,691.6	5,479.6	11.4	22.2	95.49	-332.9	1,034.0	1,327.0	1,305.7	21.24	62.487	
5,600.0	5,579.6	5,791.6	5,579.6	11.5	22.3	95.49	-332.9	1,034.0	1,327.0	1,305.4	21.56	61.560	
5,700.0	5,679.6	5,891.6	5,679.6	11.7	22.4	95.49	-332.9	1,034.0	1,327.0	1,305.1	21.88	60.657	
5,800.0	5,779.6	5,991.6	5,779.6	11.8	22.4	95.49	-332.9	1,034.0	1,327.0	1,304.8	22.20	59.777	
5,825.7	5,805.3	6,017.3	5,805.3	11.9	22.5	95.49	-332.9	1,034.0	1,327.0	1,304.7	22.28	59.555	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 14D-13 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	59.56	9.6	16.3	18.9				
100.0	100.0	100.0	100.0	0.1	0.1	59.56	9.6	16.3	18.9	18.6	0.26	73.759	
200.0	200.0	200.0	200.0	0.3	0.3	59.56	9.6	16.3	18.9	18.3	0.60	31.196	
300.0	300.0	300.0	300.0	0.5	0.5	59.56	9.6	16.3	18.9	17.9	0.95	19.782	
400.0	400.0	400.0	400.0	0.7	0.7	59.56	9.6	16.3	18.9	17.6	1.30	14.482	CC, ES
500.0	500.0	499.3	499.3	0.8	0.8	167.68	8.2	18.4	22.7	21.1	1.65	13.743	SF
600.0	599.7	597.3	597.0	1.0	1.0	-169.71	4.0	24.8	35.5	33.5	2.01	17.684	
700.0	699.1	693.5	692.4	1.3	1.3	-148.10	-2.7	35.2	55.1	52.7	2.38	23.115	
800.0	798.4	787.9	785.2	1.5	1.6	-144.76	-11.8	49.2	79.1	76.4	2.79	28.401	
900.0	897.7	879.9	874.9	1.7	2.0	-141.62	-23.1	66.6	107.3	104.1	3.21	33.458	
1,000.0	997.0	969.4	961.0	2.0	2.4	-138.88	-36.3	86.9	139.6	136.0	3.64	38.362	
1,100.0	1,096.3	1,056.0	1,043.1	2.3	2.9	-136.54	-51.1	109.8	176.0	171.9	4.08	43.167	
1,200.0	1,195.6	1,139.5	1,121.1	2.5	3.5	-134.55	-67.4	134.9	216.3	211.8	4.51	47.907	
1,300.0	1,294.9	1,219.8	1,194.9	2.8	4.1	-132.85	-84.7	161.6	260.3	255.4	4.95	52.603	
1,400.0	1,394.2	1,300.0	1,267.1	3.0	4.7	-131.34	-103.7	190.9	308.0	302.6	5.39	57.177	
1,500.0	1,493.5	1,375.5	1,333.8	3.3	5.4	-130.09	-123.0	220.5	358.7	352.9	5.81	61.718	
1,600.0	1,592.8	1,461.0	1,409.1	3.6	6.1	-128.97	-145.0	254.5	410.2	403.9	6.26	65.511	
1,700.0	1,692.1	1,546.5	1,484.4	3.8	6.9	-128.10	-167.0	288.5	461.7	455.0	6.71	68.832	
1,800.0	1,791.4	1,632.0	1,559.7	4.1	7.6	-127.41	-189.1	322.5	513.3	506.2	7.15	71.754	
1,900.0	1,890.7	1,717.5	1,635.0	4.4	8.4	-126.84	-211.1	356.4	565.0	557.4	7.60	74.345	
2,000.0	1,990.0	1,803.0	1,710.3	4.6	9.2	-126.37	-233.1	390.4	616.6	608.6	8.04	76.656	
2,100.0	2,089.3	1,888.5	1,785.6	4.9	9.9	-125.97	-255.2	424.4	668.4	659.9	8.49	78.727	
2,200.0	2,188.6	1,974.0	1,860.9	5.2	10.7	-125.62	-277.2	458.3	720.1	711.2	8.93	80.595	
2,300.0	2,287.9	2,059.5	1,936.2	5.5	11.5	-125.33	-299.3	492.3	771.8	762.5	9.38	82.291	
2,400.0	2,387.2	2,145.0	2,011.5	5.7	12.2	-125.07	-321.3	526.3	823.6	813.8	9.82	83.835	
2,500.0	2,486.5	2,230.5	2,086.8	6.0	13.0	-124.84	-343.3	560.3	875.4	865.1	10.27	85.248	
2,600.0	2,585.8	2,316.0	2,162.1	6.3	13.8	-124.63	-365.4	594.2	927.2	916.5	10.71	86.544	
2,700.0	2,685.1	2,401.5	2,237.5	6.5	14.6	-124.45	-387.4	628.2	979.0	967.8	11.16	87.739	
2,800.0	2,784.4	2,487.0	2,312.8	6.8	15.3	-124.29	-409.5	662.2	1,030.8	1,019.2	11.60	88.842	
2,900.0	2,883.7	2,572.5	2,388.1	7.1	16.1	-124.14	-431.5	696.1	1,082.6	1,070.5	12.05	89.865	
3,000.0	2,983.0	2,658.0	2,463.4	7.3	16.9	-124.01	-453.5	730.1	1,134.4	1,121.9	12.49	90.815	
3,100.0	3,082.3	2,743.6	2,538.7	7.6	17.6	-123.88	-475.6	764.1	1,186.2	1,173.2	12.94	91.701	
3,200.0	3,181.6	2,829.1	2,614.0	7.9	18.4	-123.77	-497.6	798.1	1,238.0	1,224.6	13.38	92.529	
3,300.0	3,280.9	2,914.6	2,689.3	8.1	19.2	-123.67	-519.6	832.0	1,289.8	1,276.0	13.82	93.303	
3,400.0	3,380.2	3,106.4	2,861.1	8.4	20.7	-123.54	-566.0	903.4	1,339.7	1,325.2	14.50	92.364	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43A-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	27.52	35.5	18.5	40.0				
100.0	100.0	100.0	100.0	0.1	0.1	27.52	35.5	18.5	40.0	39.7	0.26	156.152	
200.0	200.0	200.0	200.0	0.3	0.3	27.52	35.5	18.5	40.0	39.4	0.61	66.073	
300.0	300.0	300.0	300.0	0.5	0.5	27.52	35.5	18.5	40.0	39.0	0.95	41.901	CC, ES
400.0	400.0	398.3	398.3	0.7	0.7	25.37	37.9	18.0	42.0	40.7	1.30	32.245	
500.0	500.0	496.0	495.7	0.8	0.9	122.42	45.3	16.5	49.8	48.1	1.66	29.969	SF
600.0	599.7	592.5	591.4	1.0	1.1	131.59	57.4	14.2	64.7	62.7	2.05	31.651	
700.0	699.1	686.5	683.9	1.3	1.4	146.11	73.7	11.0	88.2	85.7	2.44	36.120	
800.0	798.4	777.9	772.9	1.5	1.8	143.73	93.8	7.1	117.1	114.3	2.85	41.038	
900.0	897.7	866.6	858.3	1.7	2.3	141.52	117.3	2.5	150.2	146.9	3.27	45.875	
1,000.0	997.0	952.4	939.8	2.0	2.8	139.56	143.8	-2.7	187.2	183.6	3.70	50.671	
1,100.0	1,096.3	1,035.2	1,017.2	2.3	3.3	137.86	172.6	-8.3	228.2	224.1	4.12	55.445	
1,200.0	1,195.6	1,114.8	1,090.3	2.5	3.9	136.38	203.5	-14.3	272.9	268.4	4.53	60.208	
1,300.0	1,294.9	1,191.0	1,159.1	2.8	4.5	135.10	235.8	-20.6	321.1	316.1	4.94	64.940	
1,400.0	1,394.2	1,264.0	1,223.6	3.0	5.1	133.99	269.2	-27.1	372.6	367.2	5.35	69.626	
1,500.0	1,493.5	1,333.6	1,283.9	3.3	5.7	133.02	303.4	-33.8	427.2	421.5	5.75	74.299	
1,600.0	1,592.8	1,400.0	1,340.2	3.6	6.3	132.16	337.9	-40.5	484.7	478.6	6.14	78.957	
1,700.0	1,692.1	1,463.2	1,392.6	3.8	7.0	131.41	372.5	-47.3	545.0	538.4	6.52	83.527	
1,800.0	1,791.4	1,523.4	1,441.4	4.1	7.6	130.75	407.0	-54.0	607.7	600.8	6.90	88.076	
1,900.0	1,890.7	1,580.5	1,486.7	4.4	8.2	130.16	441.2	-60.7	672.8	665.5	7.27	92.568	
2,000.0	1,990.0	1,634.8	1,528.7	4.6	8.9	129.63	474.9	-67.3	740.1	732.5	7.63	97.019	
2,100.0	2,089.3	1,700.5	1,578.7	4.9	9.6	129.04	516.8	-75.4	808.9	800.9	8.01	100.964	
2,200.0	2,188.6	1,772.7	1,633.5	5.2	10.4	128.49	562.9	-84.4	877.9	869.5	8.41	104.399	
2,300.0	2,287.9	1,844.8	1,688.4	5.5	11.3	128.03	608.9	-93.4	947.0	938.2	8.81	107.543	
2,400.0	2,387.2	1,917.0	1,743.2	5.7	12.1	127.62	654.9	-102.4	1,016.0	1,006.8	9.20	110.432	
2,500.0	2,486.5	1,989.1	1,798.0	6.0	12.9	127.26	701.0	-111.4	1,085.1	1,075.5	9.59	113.092	
2,600.0	2,585.8	2,061.2	1,852.8	6.3	13.7	126.95	747.0	-120.4	1,154.2	1,144.2	9.99	115.549	
2,700.0	2,685.1	2,133.4	1,907.6	6.5	14.6	126.68	793.1	-129.3	1,223.3	1,212.9	10.38	117.828	
2,800.0	2,784.4	2,205.5	1,962.4	6.8	15.4	126.43	839.1	-138.3	1,292.5	1,281.7	10.78	119.947	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43B-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	27.51	28.4	14.8	32.0				
100.0	100.0	100.0	100.0	0.1	0.1	27.51	28.4	14.8	32.0	31.7	0.26	124.868	
200.0	200.0	200.0	200.0	0.3	0.3	27.51	28.4	14.8	32.0	31.4	0.61	52.850	
300.0	300.0	300.0	300.0	0.5	0.5	27.51	28.4	14.8	32.0	31.0	0.95	33.518	
333.7	333.7	333.7	333.7	0.5	0.5	27.51	28.4	14.8	32.0	30.9	1.07	29.841	CC, ES
400.0	400.0	399.4	399.4	0.7	0.7	26.77	29.0	14.6	32.5	31.2	1.30	24.938	
500.0	500.0	497.8	497.6	0.8	0.8	124.83	33.9	13.5	38.0	36.4	1.66	22.943	SF
600.0	599.7	595.2	594.5	1.0	1.1	134.45	43.7	11.2	50.7	48.6	2.04	24.899	
700.0	699.1	690.5	688.7	1.3	1.3	148.36	57.8	7.9	71.7	69.3	2.43	29.521	
800.0	798.4	783.4	779.7	1.5	1.7	145.23	76.0	3.6	98.1	95.3	2.84	34.529	
900.0	897.7	873.8	867.3	1.7	2.1	142.41	97.9	-1.5	128.7	125.5	3.27	39.411	
1,000.0	997.0	961.5	951.1	2.0	2.6	139.96	122.9	-7.4	163.5	159.8	3.70	44.222	
1,100.0	1,096.3	1,046.1	1,030.8	2.3	3.1	137.87	150.5	-13.9	202.2	198.0	4.13	48.995	
1,200.0	1,195.6	1,127.7	1,106.4	2.5	3.6	136.09	180.4	-20.9	244.7	240.1	4.55	53.744	
1,300.0	1,294.9	1,200.0	1,172.2	2.8	4.2	134.67	209.5	-27.7	290.9	286.0	4.96	58.677	
1,400.0	1,394.2	1,280.9	1,244.5	3.0	4.8	133.25	244.9	-36.0	340.5	335.1	5.39	63.155	
1,500.0	1,493.5	1,352.5	1,307.1	3.3	5.5	132.12	278.7	-43.9	393.3	387.5	5.80	67.804	
1,600.0	1,592.8	1,423.2	1,367.6	3.6	6.1	131.10	314.3	-52.3	449.2	443.0	6.20	72.393	
1,700.0	1,692.1	1,505.1	1,437.3	3.8	6.9	130.13	356.3	-62.1	506.1	499.5	6.63	76.304	
1,800.0	1,791.4	1,587.1	1,506.9	4.1	7.6	129.35	398.3	-72.0	563.1	556.1	7.06	79.765	
1,900.0	1,890.7	1,669.0	1,576.5	4.4	8.4	128.71	440.4	-81.8	620.2	612.7	7.49	82.850	
2,000.0	1,990.0	1,750.9	1,646.1	4.6	9.1	128.18	482.4	-91.7	677.3	669.4	7.91	85.616	
2,100.0	2,089.3	1,832.9	1,715.8	4.9	9.9	127.73	524.5	-101.6	734.5	726.2	8.34	88.110	
2,200.0	2,188.6	1,914.8	1,785.4	5.2	10.7	127.35	566.5	-111.4	791.7	782.9	8.76	90.370	
2,300.0	2,287.9	1,996.7	1,855.0	5.5	11.4	127.02	608.5	-121.3	848.9	839.7	9.18	92.427	
2,400.0	2,387.2	2,078.6	1,924.6	5.7	12.2	126.73	650.6	-131.1	906.1	896.5	9.61	94.305	
2,500.0	2,486.5	2,160.6	1,994.3	6.0	13.0	126.47	692.6	-141.0	963.3	953.3	10.03	96.028	
2,600.0	2,585.8	2,242.5	2,063.9	6.3	13.7	126.25	734.7	-150.9	1,020.6	1,010.1	10.46	97.615	
2,700.0	2,685.1	2,324.4	2,133.5	6.5	14.5	126.04	776.7	-160.7	1,077.9	1,067.0	10.88	99.080	
2,800.0	2,784.4	2,406.4	2,203.1	6.8	15.3	125.86	818.8	-170.6	1,135.1	1,123.8	11.30	100.438	
2,900.0	2,883.7	2,488.3	2,272.8	7.1	16.0	125.70	860.8	-180.4	1,192.4	1,180.7	11.72	101.699	
3,000.0	2,983.0	2,570.2	2,342.4	7.3	16.8	125.55	902.8	-190.3	1,249.7	1,237.5	12.15	102.874	
3,100.0	3,082.3	2,652.1	2,412.0	7.6	17.6	125.41	944.9	-200.2	1,307.0	1,294.4	12.57	103.970	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43C-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	27.55	21.3	11.1	24.0				
100.0	100.0	100.0	100.0	0.1	0.1	27.55	21.3	11.1	24.0	23.7	0.26	93.636	
200.0	200.0	200.0	200.0	0.3	0.3	27.55	21.3	11.1	24.0	23.4	0.61	39.645	
300.0	300.0	300.0	300.0	0.5	0.5	27.55	21.3	11.1	24.0	23.0	0.95	25.146	
400.0	400.0	400.0	400.0	0.7	0.7	27.55	21.3	11.1	24.0	22.7	1.30	18.412	CC, ES
500.0	500.0	499.0	499.0	0.8	0.8	127.80	23.7	10.2	27.3	25.7	1.66	16.509	SF
600.0	599.7	597.4	597.1	1.0	1.0	137.90	30.9	7.6	37.4	35.4	2.03	18.430	
700.0	699.1	694.1	692.9	1.3	1.3	150.28	42.5	3.3	55.4	53.0	2.43	22.834	
800.0	798.4	788.7	786.1	1.5	1.6	145.59	58.3	-2.4	78.6	75.7	2.85	27.577	
900.0	897.7	881.2	876.1	1.7	2.0	141.51	77.9	-9.6	105.9	102.6	3.29	32.182	
1,000.0	997.0	971.1	962.6	2.0	2.4	138.09	100.9	-18.0	137.4	133.6	3.74	36.724	
1,100.0	1,096.3	1,060.0	1,047.0	2.3	2.9	135.22	127.2	-27.6	172.8	168.6	4.19	41.246	
1,200.0	1,195.6	1,152.8	1,134.8	2.5	3.4	133.07	155.6	-38.0	209.4	204.8	4.65	45.064	
1,300.0	1,294.9	1,245.6	1,222.5	2.8	3.9	131.56	184.0	-48.3	246.3	241.2	5.11	48.235	
1,400.0	1,394.2	1,338.4	1,310.3	3.0	4.5	130.45	212.4	-58.7	283.2	277.7	5.56	50.903	
1,500.0	1,493.5	1,431.2	1,398.0	3.3	5.0	129.59	240.8	-69.1	320.3	314.2	6.02	53.173	
1,600.0	1,592.8	1,524.0	1,485.7	3.6	5.6	128.91	269.1	-79.4	357.3	350.9	6.48	55.127	
1,700.0	1,692.1	1,616.8	1,573.5	3.8	6.1	128.35	297.5	-89.8	394.5	387.5	6.94	56.824	
1,800.0	1,791.4	1,709.6	1,661.2	4.1	6.6	127.89	325.9	-100.2	431.6	424.2	7.40	58.313	
1,900.0	1,890.7	1,802.4	1,748.9	4.4	7.2	127.51	354.3	-110.5	468.7	460.9	7.86	59.628	
2,000.0	1,990.0	1,895.2	1,836.7	4.6	7.7	127.18	382.7	-120.9	505.9	497.6	8.32	60.798	
2,100.0	2,089.3	1,988.0	1,924.4	4.9	8.3	126.90	411.1	-131.3	543.1	534.3	8.78	61.846	
2,200.0	2,188.6	2,080.8	2,012.2	5.2	8.8	126.65	439.5	-141.7	580.3	571.1	9.24	62.789	
2,300.0	2,287.9	2,173.6	2,099.9	5.5	9.4	126.43	467.9	-152.0	617.5	607.8	9.70	63.642	
2,400.0	2,387.2	2,266.4	2,187.6	5.7	9.9	126.24	496.3	-162.4	654.7	644.5	10.16	64.419	
2,500.0	2,486.5	2,359.2	2,275.4	6.0	10.5	126.07	524.7	-172.8	691.9	681.3	10.62	65.127	
2,600.0	2,585.8	2,452.0	2,363.1	6.3	11.1	125.91	553.1	-183.1	729.1	718.1	11.09	65.777	
2,700.0	2,685.1	2,544.8	2,450.8	6.5	11.6	125.77	581.5	-193.5	766.4	754.8	11.55	66.374	
2,800.0	2,784.4	2,637.6	2,538.6	6.8	12.2	125.64	609.8	-203.9	803.6	791.6	12.01	66.926	
2,900.0	2,883.7	2,730.4	2,626.3	7.1	12.7	125.53	638.2	-214.2	840.8	828.4	12.47	67.437	
3,000.0	2,983.0	2,823.2	2,714.1	7.3	13.3	125.42	666.6	-224.6	878.1	865.1	12.93	67.911	
3,100.0	3,082.3	2,916.0	2,801.8	7.6	13.8	125.33	695.0	-235.0	915.3	901.9	13.39	68.352	
3,200.0	3,181.6	3,008.8	2,889.5	7.9	14.4	125.24	723.4	-245.4	952.5	938.7	13.85	68.764	
3,300.0	3,280.9	3,101.6	2,977.3	8.1	14.9	125.15	751.8	-255.7	989.8	975.5	14.31	69.149	
3,400.0	3,380.2	3,234.6	3,103.6	8.4	15.7	125.08	791.0	-270.1	1,026.2	1,011.4	14.86	69.055	
3,500.0	3,479.7	3,432.0	3,295.3	8.6	16.5	125.70	834.8	-286.1	1,054.0	1,038.4	15.59	67.589	
3,600.0	3,579.6	3,639.7	3,501.0	8.8	17.0	125.98	860.6	-295.5	1,069.1	1,052.9	16.17	66.104	
3,700.0	3,679.6	3,818.4	3,679.6	8.9	17.1	-0.57	866.0	-297.5	1,071.9	1,055.3	16.57	64.702	
3,800.0	3,779.6	3,918.4	3,779.6	9.0	17.2	-0.57	866.0	-297.5	1,071.9	1,055.1	16.84	63.642	
3,900.0	3,879.6	4,018.4	3,879.6	9.2	17.3	-0.57	866.0	-297.5	1,071.9	1,054.8	17.12	62.606	
4,000.0	3,979.6	4,118.4	3,979.6	9.3	17.3	-0.57	866.0	-297.5	1,071.9	1,054.5	17.40	61.595	
4,100.0	4,079.6	4,218.4	4,079.6	9.4	17.4	-0.57	866.0	-297.5	1,071.9	1,054.2	17.69	60.607	
4,200.0	4,179.6	4,318.4	4,179.6	9.6	17.5	-0.57	866.0	-297.5	1,071.9	1,053.9	17.97	59.643	
4,300.0	4,279.6	4,418.4	4,279.6	9.7	17.5	-0.57	866.0	-297.5	1,071.9	1,053.6	18.26	58.702	
4,400.0	4,379.6	4,518.4	4,379.6	9.8	17.6	-0.57	866.0	-297.5	1,071.9	1,053.3	18.55	57.784	
4,500.0	4,479.6	4,618.4	4,479.6	10.0	17.7	-0.57	866.0	-297.5	1,071.9	1,053.1	18.84	56.888	
4,600.0	4,579.6	4,718.4	4,579.6	10.1	17.8	-0.57	866.0	-297.5	1,071.9	1,052.8	19.14	56.014	
4,700.0	4,679.6	4,818.4	4,679.6	10.2	17.9	-0.57	866.0	-297.5	1,071.9	1,052.5	19.43	55.161	
4,800.0	4,779.6	4,918.4	4,779.6	10.4	17.9	-0.57	866.0	-297.5	1,071.9	1,052.2	19.73	54.329	
4,900.0	4,879.6	5,018.4	4,879.6	10.5	18.0	-0.57	866.0	-297.5	1,071.9	1,051.9	20.03	53.517	
5,000.0	4,979.6	5,118.4	4,979.6	10.7	18.1	-0.57	866.0	-297.5	1,071.9	1,051.6	20.33	52.725	
5,100.0	5,079.6	5,218.4	5,079.6	10.8	18.2	-0.57	866.0	-297.5	1,071.9	1,051.3	20.63	51.953	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 43C-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,179.6	5,318.4	5,179.6	10.9	18.3	-0.57	866.0	-297.5	1,071.9	1,051.0	20.94	51.199	
5,300.0	5,279.6	5,418.4	5,279.6	11.1	18.4	-0.57	866.0	-297.5	1,071.9	1,050.7	21.24	50.463	
5,400.0	5,379.6	5,518.4	5,379.6	11.2	18.5	-0.57	866.0	-297.5	1,071.9	1,050.3	21.55	49.745	
5,500.0	5,479.6	5,618.4	5,479.6	11.4	18.6	-0.57	866.0	-297.5	1,071.9	1,050.0	21.86	49.044	
5,600.0	5,579.6	5,718.4	5,579.6	11.5	18.7	-0.57	866.0	-297.5	1,071.9	1,049.7	22.16	48.361	
5,700.0	5,679.6	5,818.4	5,679.6	11.7	18.7	-0.57	866.0	-297.5	1,071.9	1,049.4	22.47	47.693	
5,800.0	5,779.6	5,918.4	5,779.6	11.8	18.8	-0.57	866.0	-297.5	1,071.9	1,049.1	22.79	47.041	
5,825.7	5,805.3	5,944.1	5,805.3	11.9	18.9	-0.57	866.0	-297.5	1,071.9	1,049.0	22.87	46.876	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44A-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	27.55	14.2	7.4	16.0				
100.0	100.0	100.0	100.0	0.1	0.1	27.55	14.2	7.4	16.0	15.7	0.26	62.374	
200.0	200.0	200.0	200.0	0.3	0.3	27.55	14.2	7.4	16.0	15.4	0.61	26.422	
300.0	300.0	300.0	300.0	0.5	0.5	27.55	14.2	7.4	16.0	15.0	0.95	16.761	
400.0	400.0	400.0	400.0	0.7	0.7	27.55	14.2	7.4	16.0	14.7	1.30	12.274	CC, ES
500.0	500.0	499.8	499.8	0.8	0.8	132.98	14.6	7.2	17.9	16.3	1.65	10.828	SF
600.0	599.7	599.2	599.2	1.0	1.0	148.28	17.6	5.5	25.1	23.0	2.01	12.441	
700.0	699.1	697.9	697.6	1.3	1.2	160.83	23.5	2.1	37.9	35.5	2.38	15.899	
800.0	798.4	795.8	794.9	1.5	1.4	155.10	32.4	-2.8	53.9	51.1	2.79	19.328	
900.0	897.7	892.7	890.9	1.7	1.7	149.82	43.9	-9.3	72.1	68.9	3.22	22.410	
1,000.0	997.0	988.5	985.4	2.0	2.0	145.14	58.2	-17.3	92.8	89.2	3.67	25.300	
1,100.0	1,096.3	1,083.1	1,077.9	2.3	2.3	141.06	74.9	-26.7	116.3	112.1	4.14	28.090	
1,200.0	1,195.6	1,176.1	1,168.4	2.5	2.7	137.51	94.0	-37.4	142.5	137.9	4.62	30.840	
1,300.0	1,294.9	1,267.6	1,256.5	2.8	3.1	134.45	115.2	-49.4	171.5	166.4	5.11	33.582	
1,400.0	1,394.2	1,357.2	1,342.1	3.0	3.6	131.79	138.4	-62.4	203.4	197.8	5.60	36.339	
1,500.0	1,493.5	1,448.5	1,428.5	3.3	4.1	129.45	163.9	-76.8	237.6	231.5	6.09	39.035	
1,600.0	1,592.8	1,541.9	1,517.0	3.6	4.7	127.63	190.3	-91.6	272.3	265.7	6.58	41.395	
1,700.0	1,692.1	1,635.4	1,605.4	3.8	5.2	126.21	216.8	-106.4	307.2	300.1	7.07	43.468	
1,800.0	1,791.4	1,728.9	1,693.8	4.1	5.7	125.09	243.2	-121.3	342.3	334.7	7.56	45.300	
1,900.0	1,890.7	1,822.3	1,782.2	4.4	6.3	124.17	269.6	-136.1	377.4	369.4	8.04	46.927	
2,000.0	1,990.0	1,915.8	1,870.6	4.6	6.8	123.41	296.0	-150.9	412.6	404.1	8.53	48.382	
2,100.0	2,089.3	2,009.3	1,959.1	4.9	7.4	122.76	322.4	-165.8	447.9	438.9	9.01	49.688	
2,200.0	2,188.6	2,102.7	2,047.5	5.2	7.9	122.22	348.8	-180.6	483.2	473.7	9.50	50.868	
2,300.0	2,287.9	2,196.2	2,135.9	5.5	8.5	121.74	375.2	-195.4	518.5	508.6	9.98	51.937	
2,400.0	2,387.2	2,289.7	2,224.3	5.7	9.0	121.33	401.6	-210.3	553.9	543.4	10.47	52.911	
2,500.0	2,486.5	2,393.1	2,322.4	6.0	9.6	120.95	430.4	-226.5	588.9	578.0	10.97	53.662	
2,600.0	2,585.8	2,510.4	2,434.7	6.3	10.2	120.74	459.7	-242.9	621.0	609.5	11.50	53.985	
2,700.0	2,685.1	2,630.5	2,551.1	6.5	10.7	120.73	485.6	-257.5	649.5	637.4	12.03	53.986	
2,800.0	2,784.4	2,753.2	2,671.2	6.8	11.2	120.91	507.6	-269.8	674.2	661.7	12.56	53.695	
2,900.0	2,883.7	2,878.1	2,794.3	7.1	11.6	121.27	525.3	-279.8	695.2	682.1	13.08	53.150	
3,000.0	2,983.0	3,004.7	2,920.0	7.3	11.9	121.80	538.5	-287.2	712.2	698.6	13.60	52.386	
3,100.0	3,082.3	3,132.5	3,047.5	7.6	12.1	122.49	546.9	-292.0	725.3	711.2	14.10	51.446	
3,200.0	3,181.6	3,261.2	3,176.1	7.9	12.2	123.36	550.4	-293.9	734.5	720.0	14.59	50.342	
3,300.0	3,280.9	3,366.0	3,280.9	8.1	12.3	124.16	550.5	-294.0	741.2	726.2	15.03	49.301	
3,400.0	3,380.2	3,465.3	3,380.2	8.4	12.4	124.90	550.5	-294.0	747.9	732.5	15.46	48.369	
3,500.0	3,479.7	3,564.8	3,479.7	8.6	12.5	125.62	550.5	-294.0	753.5	737.6	15.88	47.438	
3,600.0	3,579.6	3,664.7	3,579.6	8.8	12.6	125.96	550.5	-294.0	756.1	739.9	16.22	46.627	
3,700.0	3,679.6	3,764.7	3,679.6	8.9	12.6	-0.54	550.5	-294.0	756.3	739.8	16.50	45.852	
3,800.0	3,779.6	3,864.7	3,779.6	9.0	12.7	-0.54	550.5	-294.0	756.3	739.6	16.77	45.100	
3,900.0	3,879.6	3,964.7	3,879.6	9.2	12.8	-0.54	550.5	-294.0	756.3	739.3	17.05	44.365	
4,000.0	3,979.6	4,064.7	3,979.6	9.3	12.9	-0.54	550.5	-294.0	756.3	739.0	17.33	43.647	
4,100.0	4,079.6	4,164.7	4,079.6	9.4	13.0	-0.54	550.5	-294.0	756.3	738.7	17.61	42.946	
4,200.0	4,179.6	4,264.7	4,179.6	9.6	13.1	-0.54	550.5	-294.0	756.3	738.4	17.90	42.261	
4,300.0	4,279.6	4,364.7	4,279.6	9.7	13.2	-0.54	550.5	-294.0	756.3	738.1	18.18	41.593	
4,400.0	4,379.6	4,464.7	4,379.6	9.8	13.3	-0.54	550.5	-294.0	756.3	737.9	18.47	40.941	
4,500.0	4,479.6	4,564.7	4,479.6	10.0	13.4	-0.54	550.5	-294.0	756.3	737.6	18.77	40.305	
4,600.0	4,579.6	4,664.7	4,579.6	10.1	13.5	-0.54	550.5	-294.0	756.3	737.3	19.06	39.684	
4,700.0	4,679.6	4,764.7	4,679.6	10.2	13.6	-0.54	550.5	-294.0	756.3	737.0	19.35	39.079	
4,800.0	4,779.6	4,864.7	4,779.6	10.4	13.7	-0.54	550.5	-294.0	756.3	736.7	19.65	38.488	
4,900.0	4,879.6	4,964.7	4,879.6	10.5	13.8	-0.54	550.5	-294.0	756.3	736.4	19.95	37.911	
5,000.0	4,979.6	5,064.7	4,979.6	10.7	14.0	-0.54	550.5	-294.0	756.3	736.1	20.25	37.349	
5,100.0	5,079.6	5,164.7	5,079.6	10.8	14.1	-0.54	550.5	-294.0	756.3	735.8	20.55	36.800	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44A-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,179.6	5,264.7	5,179.6	10.9	14.2	-0.54	550.5	-294.0	756.3	735.5	20.86	36.265	
5,300.0	5,279.6	5,364.7	5,279.6	11.1	14.3	-0.54	550.5	-294.0	756.3	735.2	21.16	35.742	
5,400.0	5,379.6	5,464.7	5,379.6	11.2	14.4	-0.54	550.5	-294.0	756.3	734.9	21.47	35.232	
5,500.0	5,479.6	5,564.7	5,479.6	11.4	14.5	-0.54	550.5	-294.0	756.3	734.6	21.77	34.735	
5,600.0	5,579.6	5,664.7	5,579.6	11.5	14.6	-0.54	550.5	-294.0	756.3	734.2	22.08	34.249	
5,700.0	5,679.6	5,764.7	5,679.6	11.7	14.8	-0.54	550.5	-294.0	756.3	733.9	22.39	33.775	
5,800.0	5,779.6	5,864.7	5,779.6	11.8	14.9	-0.54	550.5	-294.0	756.3	733.6	22.70	33.313	
5,825.7	5,805.3	5,890.4	5,805.3	11.9	14.9	-0.54	550.5	-294.0	756.3	733.5	22.78	33.196	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44B-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
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	31.162	
200.0	200.0	200.0	200.0	0.3	0.3	27.56	7.1	3.7	8.0	7.4	0.61	13.205	
300.0	300.0	300.0	300.0	0.5	0.5	27.56	7.1	3.7	8.0	7.0	0.95	8.377	
400.0	400.0	400.0	400.0	0.7	0.7	27.56	7.1	3.7	8.0	6.7	1.30	6.135	CC, ES
500.0	500.0	500.0	500.0	0.8	0.8	139.72	7.1	3.7	9.8	8.2	1.65	5.934	SF
600.0	599.7	599.9	599.9	1.0	1.0	157.74	8.4	1.4	15.5	13.5	2.01	7.730	
700.0	699.1	699.7	699.3	1.3	1.2	161.42	12.3	-5.4	24.3	21.9	2.40	10.156	
800.0	798.4	798.9	797.8	1.5	1.4	148.89	17.9	-15.2	35.3	32.5	2.83	12.458	
900.0	897.7	898.1	896.4	1.7	1.7	142.29	23.6	-25.2	47.2	43.9	3.29	14.347	
1,000.0	997.0	997.2	994.9	2.0	1.9	138.36	29.3	-35.2	59.4	55.6	3.75	15.841	
1,100.0	1,096.3	1,096.4	1,093.4	2.3	2.2	135.79	35.0	-45.2	71.8	67.6	4.22	17.027	
1,200.0	1,195.6	1,195.6	1,191.9	2.5	2.4	133.97	40.7	-55.2	84.3	79.6	4.69	17.983	
1,300.0	1,294.9	1,294.8	1,290.4	2.8	2.7	132.63	46.4	-65.2	96.9	91.7	5.16	18.766	
1,400.0	1,394.2	1,394.0	1,388.9	3.0	2.9	131.59	52.0	-75.2	109.5	103.9	5.64	19.418	
1,500.0	1,493.5	1,493.2	1,487.5	3.3	3.2	130.77	57.7	-85.2	122.1	116.0	6.12	19.967	
1,600.0	1,592.8	1,592.3	1,586.0	3.6	3.4	130.10	63.4	-95.1	134.8	128.2	6.60	20.436	
1,700.0	1,692.1	1,691.5	1,684.5	3.8	3.7	129.55	69.1	-105.1	147.5	140.4	7.08	20.840	
1,800.0	1,791.4	1,790.7	1,783.0	4.1	4.0	129.08	74.8	-115.1	160.2	152.6	7.56	21.192	
1,900.0	1,890.7	1,889.9	1,881.5	4.4	4.2	128.69	80.5	-125.1	172.8	164.8	8.04	21.502	
2,000.0	1,990.0	1,989.1	1,980.0	4.6	4.5	128.34	86.2	-135.1	185.6	177.0	8.52	21.775	
2,100.0	2,089.3	2,088.3	2,078.6	4.9	4.7	128.05	91.9	-145.1	198.3	189.3	9.00	22.019	
2,200.0	2,188.6	2,187.4	2,177.1	5.2	5.0	127.78	97.6	-155.1	211.0	201.5	9.49	22.238	
2,300.0	2,287.9	2,286.6	2,275.6	5.5	5.3	127.55	103.3	-165.1	223.7	213.7	9.97	22.435	
2,400.0	2,387.2	2,385.8	2,374.1	5.7	5.5	127.34	109.0	-175.0	236.4	226.0	10.45	22.613	
2,500.0	2,486.5	2,485.0	2,472.6	6.0	5.8	127.16	114.7	-185.0	249.1	238.2	10.94	22.776	
2,600.0	2,585.8	2,584.2	2,571.1	6.3	6.1	126.99	120.4	-195.0	261.9	250.4	11.42	22.924	
2,700.0	2,685.1	2,683.4	2,669.6	6.5	6.3	126.83	126.1	-205.0	274.6	262.7	11.91	23.060	
2,800.0	2,784.4	2,782.6	2,768.2	6.8	6.6	126.70	131.7	-215.0	287.3	274.9	12.39	23.186	
2,900.0	2,883.7	2,881.7	2,866.7	7.1	6.9	126.57	137.4	-225.0	300.0	287.2	12.88	23.302	
3,000.0	2,983.0	2,980.9	2,965.2	7.3	7.1	126.45	143.1	-235.0	312.8	299.4	13.36	23.409	
3,100.0	3,082.3	3,080.1	3,063.7	7.6	7.4	126.34	148.8	-245.0	325.5	311.7	13.85	23.508	
3,200.0	3,181.6	3,179.3	3,162.2	7.9	7.7	126.24	154.5	-254.9	338.2	323.9	14.33	23.601	
3,300.0	3,280.9	3,278.5	3,260.7	8.1	7.9	126.15	160.2	-264.9	351.0	336.2	14.82	23.688	
3,400.0	3,380.2	3,377.7	3,359.3	8.4	8.2	126.06	165.9	-274.9	363.7	348.4	15.30	23.769	
3,500.0	3,479.7	3,482.9	3,463.9	8.6	8.4	126.06	171.5	-284.7	374.8	359.0	15.76	23.784	
3,600.0	3,579.6	3,593.8	3,574.6	8.8	8.6	125.99	174.5	-290.0	380.2	364.1	16.10	23.614	
3,700.0	3,679.6	3,698.8	3,679.6	8.9	8.7	-0.56	174.8	-290.6	380.7	364.3	16.38	23.240	
3,800.0	3,779.6	3,798.8	3,779.6	9.0	8.9	-0.56	174.8	-290.6	380.7	364.0	16.65	22.857	
3,900.0	3,879.6	3,898.8	3,879.6	9.2	9.0	-0.56	174.8	-290.6	380.7	363.7	16.93	22.482	
4,000.0	3,979.6	3,998.8	3,979.6	9.3	9.1	-0.56	174.8	-290.6	380.7	363.5	17.21	22.117	
4,100.0	4,079.6	4,098.8	4,079.6	9.4	9.3	-0.56	174.8	-290.6	380.7	363.2	17.49	21.759	
4,200.0	4,179.6	4,198.8	4,179.6	9.6	9.4	-0.56	174.8	-290.6	380.7	362.9	17.78	21.411	
4,300.0	4,279.6	4,298.8	4,279.6	9.7	9.5	-0.56	174.8	-290.6	380.7	362.6	18.07	21.071	
4,400.0	4,379.6	4,398.8	4,379.6	9.8	9.7	-0.56	174.8	-290.6	380.7	362.3	18.36	20.739	
4,500.0	4,479.6	4,498.8	4,479.6	10.0	9.8	-0.56	174.8	-290.6	380.7	362.0	18.65	20.415	
4,600.0	4,579.6	4,598.8	4,579.6	10.1	10.0	-0.56	174.8	-290.6	380.7	361.7	18.94	20.099	
4,700.0	4,679.6	4,698.8	4,679.6	10.2	10.1	-0.56	174.8	-290.6	380.7	361.4	19.24	19.790	
4,800.0	4,779.6	4,798.8	4,779.6	10.4	10.2	-0.56	174.8	-290.6	380.7	361.1	19.53	19.489	
4,900.0	4,879.6	4,898.8	4,879.6	10.5	10.4	-0.56	174.8	-290.6	380.7	360.8	19.83	19.196	
5,000.0	4,979.6	4,998.8	4,979.6	10.7	10.5	-0.56	174.8	-290.6	380.7	360.5	20.13	18.910	
5,100.0	5,079.6	5,098.8	5,079.6	10.8	10.7	-0.56	174.8	-290.6	380.7	360.2	20.43	18.630	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte 44B-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,179.6	5,198.8	5,179.6	10.9	10.8	-0.56	174.8	-290.6	380.7	359.9	20.74	18.358	
5,300.0	5,279.6	5,298.8	5,279.6	11.1	11.0	-0.56	174.8	-290.6	380.7	359.6	21.04	18.092	
5,400.0	5,379.6	5,398.8	5,379.6	11.2	11.1	-0.56	174.8	-290.6	380.7	359.3	21.35	17.833	
5,500.0	5,479.6	5,498.8	5,479.6	11.4	11.3	-0.56	174.8	-290.6	380.7	359.0	21.65	17.580	
5,600.0	5,579.6	5,598.8	5,579.6	11.5	11.4	-0.56	174.8	-290.6	380.7	358.7	21.96	17.333	
5,700.0	5,679.6	5,698.8	5,679.6	11.7	11.6	-0.56	174.8	-290.6	380.7	358.4	22.27	17.092	
5,800.0	5,779.6	5,798.8	5,779.6	11.8	11.7	-0.56	174.8	-290.6	380.7	358.1	22.58	16.856	
5,825.7	5,805.3	5,824.5	5,805.3	11.9	11.7	-0.56	174.8	-290.6	380.7	358.0	22.66	16.797	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte SWD 1-14 - DD - Plan #3 — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-152.43	-7.1	-3.7	8.0				
100.0	100.0	100.0	100.0	0.1	0.1	-152.43	-7.1	-3.7	8.0	7.7	0.26	31.102	
200.0	200.0	200.0	200.0	0.3	0.3	-152.43	-7.1	-3.7	8.0	7.4	0.61	13.190	
300.0	300.0	300.0	300.0	0.5	0.5	-152.43	-7.1	-3.7	8.0	7.0	0.96	8.370	
400.0	400.0	400.0	400.0	0.7	0.7	-152.43	-7.1	-3.7	8.0	6.7	1.30	6.130	
500.0	500.0	500.0	500.0	0.8	0.8	-70.42	-7.1	-3.7	6.7	5.1	1.66	4.058	
535.1	535.0	535.0	535.0	0.9	0.9	-83.50	-7.1	-3.7	6.2	4.4	1.79	3.486	CC, ES, SF
600.0	599.7	599.7	599.7	1.0	1.0	-121.51	-7.1	-3.7	8.1	6.1	2.02	4.020	
700.0	699.1	699.1	699.1	1.3	1.2	-145.48	-7.1	-3.7	15.6	13.3	2.36	6.636	
800.0	798.4	798.4	798.4	1.5	1.3	-160.23	-7.1	-3.7	26.2	23.5	2.70	9.730	
900.0	897.7	897.7	897.7	1.7	1.5	-166.33	-7.1	-3.7	37.5	34.5	3.04	12.349	
1,000.0	997.0	997.0	997.0	2.0	1.7	-169.58	-7.1	-3.7	49.1	45.7	3.39	14.494	
1,100.0	1,096.3	1,096.3	1,096.3	2.3	1.9	-171.60	-7.1	-3.7	60.7	57.0	3.73	16.265	
1,200.0	1,195.6	1,195.6	1,195.6	2.5	2.0	-172.96	-7.1	-3.7	72.4	68.3	4.08	17.746	
1,300.0	1,294.9	1,294.9	1,294.9	2.8	2.2	-173.94	-7.1	-3.7	84.1	79.7	4.43	19.002	
1,400.0	1,394.2	1,394.2	1,394.2	3.0	2.4	-174.69	-7.1	-3.7	95.9	91.1	4.78	20.078	
1,500.0	1,493.5	1,493.5	1,493.5	3.3	2.6	-175.27	-7.1	-3.7	107.6	102.5	5.12	21.010	
1,600.0	1,592.8	1,592.8	1,592.8	3.6	2.7	-175.74	-7.1	-3.7	119.4	113.9	5.47	21.826	
1,700.0	1,692.1	1,692.1	1,692.1	3.8	2.9	-176.12	-7.1	-3.7	131.1	125.3	5.82	22.546	
1,800.0	1,791.4	1,791.4	1,791.4	4.1	3.1	-176.44	-7.1	-3.7	142.9	136.8	6.16	23.185	
1,900.0	1,890.7	1,890.7	1,890.7	4.4	3.3	-176.71	-7.1	-3.7	154.7	148.2	6.51	23.756	
2,000.0	1,990.0	1,990.0	1,990.0	4.6	3.4	-176.94	-7.1	-3.7	166.5	159.6	6.86	24.270	
2,100.0	2,089.3	2,089.3	2,089.3	4.9	3.6	-177.15	-7.1	-3.7	178.2	171.0	7.21	24.735	
2,200.0	2,188.6	2,188.6	2,188.6	5.2	3.8	-177.32	-7.1	-3.7	190.0	182.5	7.55	25.157	
2,300.0	2,287.9	2,287.9	2,287.9	5.5	3.9	-177.48	-7.1	-3.7	201.8	193.9	7.90	25.542	
2,400.0	2,387.2	2,387.2	2,387.2	5.7	4.1	-177.62	-7.1	-3.7	213.6	205.3	8.25	25.895	
2,500.0	2,486.5	2,486.5	2,486.5	6.0	4.3	-177.74	-7.1	-3.7	225.4	216.8	8.60	26.220	
2,600.0	2,585.8	2,585.8	2,585.8	6.3	4.5	-177.85	-7.1	-3.7	237.2	228.2	8.94	26.519	
2,700.0	2,685.1	2,685.1	2,685.1	6.5	4.6	-177.96	-7.1	-3.7	248.9	239.7	9.29	26.797	
2,800.0	2,784.4	2,784.4	2,784.4	6.8	4.8	-178.05	-7.1	-3.7	260.7	251.1	9.64	27.054	
2,900.0	2,883.7	2,883.7	2,883.7	7.1	5.0	-178.13	-7.1	-3.7	272.5	262.5	9.98	27.293	
3,000.0	2,983.0	2,983.0	2,983.0	7.3	5.2	-178.21	-7.1	-3.7	284.3	274.0	10.33	27.517	
3,100.0	3,082.3	3,082.3	3,082.3	7.6	5.3	-178.28	-7.1	-3.7	296.1	285.4	10.68	27.726	
3,200.0	3,181.6	3,181.6	3,181.6	7.9	5.5	-178.35	-7.1	-3.7	307.9	296.9	11.03	27.921	
3,300.0	3,280.9	3,280.9	3,280.9	8.1	5.7	-178.41	-7.1	-3.7	319.7	308.3	11.37	28.105	
3,400.0	3,380.2	3,380.2	3,380.2	8.4	5.9	-178.47	-7.1	-3.7	331.5	319.7	11.72	28.278	
3,500.0	3,479.7	3,479.7	3,479.7	8.6	6.0	-178.52	-7.1	-3.7	341.1	329.0	12.09	28.225	
3,600.0	3,579.6	3,579.6	3,579.6	8.8	6.2	-178.54	-7.1	-3.7	345.6	333.2	12.43	27.798	
3,700.0	3,679.6	3,679.6	3,679.6	8.9	6.4	54.94	-7.1	-3.7	345.9	333.1	12.78	27.077	
3,800.0	3,779.6	3,779.6	3,779.6	9.0	6.6	54.94	-7.1	-3.7	345.9	332.8	13.12	26.356	
3,900.0	3,879.6	3,879.6	3,879.6	9.2	6.7	54.94	-7.1	-3.7	345.9	332.4	13.47	25.673	
4,000.0	3,979.6	3,979.6	3,979.6	9.3	6.9	54.94	-7.1	-3.7	345.9	332.1	13.82	25.024	
4,100.0	4,079.6	4,079.6	4,079.6	9.4	7.1	54.94	-7.1	-3.7	345.9	331.7	14.17	24.407	
4,200.0	4,179.6	4,179.6	4,179.6	9.6	7.2	54.94	-7.1	-3.7	345.9	331.4	14.52	23.820	
4,300.0	4,279.6	4,279.6	4,279.6	9.7	7.4	54.94	-7.1	-3.7	345.9	331.1	14.87	23.261	
4,400.0	4,379.6	4,379.6	4,379.6	9.8	7.6	54.94	-7.1	-3.7	345.9	330.7	15.22	22.727	
4,500.0	4,479.6	4,479.6	4,479.6	10.0	7.8	54.94	-7.1	-3.7	345.9	330.4	15.57	22.217	
4,600.0	4,579.6	4,579.6	4,579.6	10.1	7.9	54.94	-7.1	-3.7	345.9	330.0	15.92	21.730	
4,700.0	4,679.6	4,679.6	4,679.6	10.2	8.1	54.94	-7.1	-3.7	345.9	329.7	16.27	21.263	
4,800.0	4,779.6	4,779.6	4,779.6	10.4	8.3	54.94	-7.1	-3.7	345.9	329.3	16.62	20.816	
4,900.0	4,879.6	4,879.6	4,879.6	10.5	8.5	54.94	-7.1	-3.7	345.9	329.0	16.97	20.388	
5,000.0	4,979.6	4,979.6	4,979.6	10.7	8.6	54.94	-7.1	-3.7	345.9	328.6	17.32	19.976	

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 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T7S-R96W - Nolte SWD 1-14 - DD - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,079.6	5,079.6	5,079.6	10.8	8.8	54.94	-7.1	-3.7	345.9	328.3	17.67	19.581	
5,200.0	5,179.6	5,179.6	5,179.6	10.9	9.0	54.94	-7.1	-3.7	345.9	327.9	18.02	19.202	
5,300.0	5,279.6	5,279.6	5,279.6	11.1	9.2	54.94	-7.1	-3.7	345.9	327.6	18.36	18.837	
5,400.0	5,379.6	5,379.6	5,379.6	11.2	9.3	54.94	-7.1	-3.7	345.9	327.2	18.71	18.485	
5,500.0	5,479.6	5,479.6	5,479.6	11.4	9.5	54.94	-7.1	-3.7	345.9	326.9	19.06	18.147	
5,600.0	5,579.6	5,579.6	5,579.6	11.5	9.7	54.94	-7.1	-3.7	345.9	326.5	19.41	17.820	
5,700.0	5,679.6	5,679.6	5,679.6	11.7	9.9	54.94	-7.1	-3.7	345.9	326.2	19.76	17.505	
5,800.0	5,779.6	5,779.6	5,779.6	11.8	10.0	54.94	-7.1	-3.7	345.9	325.8	20.11	17.201	
5,825.7	5,805.3	5,805.3	5,805.3	11.9	10.1	54.94	-7.1	-3.7	345.9	325.7	20.20	17.125	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well Nolte 44C-14
Project:	Garfield County, CO	**TVD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Reference Site:	S14-T7S-R96W	**MD Reference:**	WELL @ 5117.8ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Nolte 44C-14	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

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

Coordinates are relative to: Nolte 44C-14
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.62°