



NPR 24A-15 596
 Plan #3 (10-05-18)
 9:33, October 05 2018



Azimuths to True North
 Magnetic North: 9.55°
 Magnetic Field
 Strength: 51430.9snT
 Dip Angle: 65.82°
 Date: 10/3/2018
 Model: HDGM

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
SHL 2369'FNL, 62'FEL, SEC.15	1.0	0.0	0.0	39.615855	-108.145658	Point
BHL 1940'FSL, 1545'FEL, SEC.15	9069.0	-967.7	-1481.5	39.613198	-108.150917	Ellipse (Radii: L200.0 W100.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	763.0	16.89	235.36	754.9	-46.8	-67.8	3.00	235.36	82.4	
4	5681.4	16.89	235.36	5461.1	-859.0	-1243.5	0.00	0.00	1510.8	
5	6244.4	0.00	0.00	6016.0	-905.8	-1311.3	3.00	180.00	1593.2	
6	6605.2	3.61	250.00	6376.6	-909.7	-1322.0	1.00	250.00	1604.3	
7	9303.0	3.61	250.00	9069.0	-967.7	-1481.5	0.00	0.00	1769.6	BHL 1940'FSL, 1545'FEL, SEC.15



Caerus Oil and Gas LLC

SEC.15-T5S-R96W

NPR H15 596 South Pad Sec.15-T5S-R96W

NPR 24A-15 596

NPR 24A-15 596 Wellbore #1

Plan: Plan #3 (10-05-18)

Standard Planning Report

05 October, 2018

Database:	US_EDM	Local Co-ordinate Reference:	Well NPR 24A-15 596
Company:	Caerus Oil and Gas LLC	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Project:	SEC.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	North Reference:	True
Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	NPR 24A-15 596 Wellbore #1		
Design:	Plan #3 (10-05-18)		

Project	SEC.15-T5S-R96W, Garfield County, CO		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		Using Well Reference Point
Map Zone:	Zone 12N (114 W to 108 W)		Using geodetic scale factor

Site	NPR H15 596 South Pad Sec.15-T5S-R96W			
Site Position:		Northing:	14,398,987.82 usft	Latitude: 39.615979
From:	Lat/Long	Easting:	2,444,312.67 usft	Longitude: -108.145689
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence: 1.82 °

Well	NPR 24A-15 596					
Well Position	+N/-S	-45.3 ft	Northing:	14,398,942.83 usft	Latitude:	39.615855
	+E/-W	8.7 ft	Easting:	2,444,322.78 usft	Longitude:	-108.145659
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	6,429.0 ft

Wellbore	NPR 24A-15 596 Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/3/2018	9.55	65.82	51,431

Design	Plan #3 (10-05-18)			
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	236.85

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
763.0	16.89	235.36	754.9	-46.8	-67.8	3.00	3.00	0.00	235.36	
5,681.4	16.89	235.36	5,461.1	-859.0	-1,243.5	0.00	0.00	0.00	0.00	
6,244.4	0.00	0.00	6,016.0	-905.8	-1,311.3	3.00	-3.00	0.00	180.00	
6,605.2	3.61	250.00	6,376.6	-909.7	-1,322.0	1.00	1.00	-30.48	250.00	
9,303.0	3.61	250.00	9,069.0	-967.7	-1,481.5	0.00	0.00	0.00	0.00	BHL 1940'FSL, 1545'I

Database:	US_EDM	Local Co-ordinate Reference:	Well NPR 24A-15 596
Company:	Caerus Oil and Gas LLC	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Project:	SEC.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	North Reference:	True
Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	NPR 24A-15 596 Wellbore #1		
Design:	Plan #3 (10-05-18)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	235.36	300.0	-1.5	-2.2	2.6	3.00	3.00	0.00
400.0	6.00	235.36	399.6	-5.9	-8.6	10.5	3.00	3.00	0.00
500.0	9.00	235.36	498.8	-13.4	-19.3	23.5	3.00	3.00	0.00
600.0	12.00	235.36	597.1	-23.7	-34.3	41.7	3.00	3.00	0.00
700.0	15.00	235.36	694.3	-37.0	-53.5	65.1	3.00	3.00	0.00
763.0	16.89	235.36	754.9	-46.8	-67.8	82.4	3.00	3.00	0.00
800.0	16.89	235.36	790.3	-52.9	-76.6	93.1	0.00	0.00	0.00
900.0	16.89	235.36	886.0	-69.4	-100.5	122.1	0.00	0.00	0.00
1,000.0	16.89	235.36	981.7	-86.0	-124.4	151.2	0.00	0.00	0.00
1,100.0	16.89	235.36	1,077.3	-102.5	-148.3	180.2	0.00	0.00	0.00
1,200.0	16.89	235.36	1,173.0	-119.0	-172.2	209.3	0.00	0.00	0.00
1,300.0	16.89	235.36	1,268.7	-135.5	-196.2	238.3	0.00	0.00	0.00
1,400.0	16.89	235.36	1,364.4	-152.0	-220.1	267.4	0.00	0.00	0.00
1,500.0	16.89	235.36	1,460.1	-168.5	-244.0	296.4	0.00	0.00	0.00
1,600.0	16.89	235.36	1,555.8	-185.0	-267.9	325.5	0.00	0.00	0.00
1,646.2	16.89	235.36	1,600.0	-192.7	-278.9	338.9	0.00	0.00	0.00
WASATCH.NPC									
1,700.0	16.89	235.36	1,651.5	-201.5	-291.8	354.5	0.00	0.00	0.00
1,800.0	16.89	235.36	1,747.1	-218.1	-315.7	383.5	0.00	0.00	0.00
1,900.0	16.89	235.36	1,842.8	-234.6	-339.6	412.6	0.00	0.00	0.00
2,000.0	16.89	235.36	1,938.5	-251.1	-363.5	441.6	0.00	0.00	0.00
2,100.0	16.89	235.36	2,034.2	-267.6	-387.4	470.7	0.00	0.00	0.00
2,200.0	16.89	235.36	2,129.9	-284.1	-411.3	499.7	0.00	0.00	0.00
2,300.0	16.89	235.36	2,225.6	-300.6	-435.2	528.8	0.00	0.00	0.00
2,400.0	16.89	235.36	2,321.3	-317.1	-459.1	557.8	0.00	0.00	0.00
2,500.0	16.89	235.36	2,417.0	-333.6	-483.0	586.8	0.00	0.00	0.00
2,600.0	16.89	235.36	2,512.6	-350.2	-506.9	615.9	0.00	0.00	0.00
2,700.0	16.89	235.36	2,608.3	-366.7	-530.8	644.9	0.00	0.00	0.00
2,800.0	16.89	235.36	2,704.0	-383.2	-554.7	674.0	0.00	0.00	0.00
2,900.0	16.89	235.36	2,799.7	-399.7	-578.6	703.0	0.00	0.00	0.00
3,000.0	16.89	235.36	2,895.4	-416.2	-602.5	732.1	0.00	0.00	0.00
3,100.0	16.89	235.36	2,991.1	-432.7	-626.4	761.1	0.00	0.00	0.00
3,200.0	16.89	235.36	3,086.8	-449.2	-650.3	790.2	0.00	0.00	0.00
3,300.0	16.89	235.36	3,182.4	-465.7	-674.2	819.2	0.00	0.00	0.00
3,400.0	16.89	235.36	3,278.1	-482.3	-698.2	848.2	0.00	0.00	0.00
3,442.7	16.89	235.36	3,319.0	-489.3	-708.4	860.6	0.00	0.00	0.00
WASATCH_G.NPC									
3,500.0	16.89	235.36	3,373.8	-498.8	-722.1	877.3	0.00	0.00	0.00
3,600.0	16.89	235.36	3,469.5	-515.3	-746.0	906.3	0.00	0.00	0.00
3,700.0	16.89	235.36	3,565.2	-531.8	-769.9	935.4	0.00	0.00	0.00
3,800.0	16.89	235.36	3,660.9	-548.3	-793.8	964.4	0.00	0.00	0.00
3,808.5	16.89	235.36	3,669.0	-549.7	-795.8	966.9	0.00	0.00	0.00
FORT_UNION.NPC									
3,900.0	16.89	235.36	3,756.6	-564.8	-817.7	993.5	0.00	0.00	0.00
4,000.0	16.89	235.36	3,852.3	-581.3	-841.6	1,022.5	0.00	0.00	0.00
4,100.0	16.89	235.36	3,947.9	-597.8	-865.5	1,051.5	0.00	0.00	0.00
4,200.0	16.89	235.36	4,043.6	-614.4	-889.4	1,080.6	0.00	0.00	0.00
4,300.0	16.89	235.36	4,139.3	-630.9	-913.3	1,109.6	0.00	0.00	0.00
4,400.0	16.89	235.36	4,235.0	-647.4	-937.2	1,138.7	0.00	0.00	0.00
4,500.0	16.89	235.36	4,330.7	-663.9	-961.1	1,167.7	0.00	0.00	0.00

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Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	NPR 24A-15 596 Wellbore #1		
Design:	Plan #3 (10-05-18)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	16.89	235.36	4,426.4	-680.4	-985.0	1,196.8	0.00	0.00	0.00
4,700.0	16.89	235.36	4,522.1	-696.9	-1,008.9	1,225.8	0.00	0.00	0.00
4,800.0	16.89	235.36	4,617.7	-713.4	-1,032.8	1,254.9	0.00	0.00	0.00
4,900.0	16.89	235.36	4,713.4	-729.9	-1,056.7	1,283.9	0.00	0.00	0.00
5,000.0	16.89	235.36	4,809.1	-746.5	-1,080.6	1,312.9	0.00	0.00	0.00
5,100.0	16.89	235.36	4,904.8	-763.0	-1,104.5	1,342.0	0.00	0.00	0.00
5,200.0	16.89	235.36	5,000.5	-779.5	-1,128.4	1,371.0	0.00	0.00	0.00
5,300.0	16.89	235.36	5,096.2	-796.0	-1,152.3	1,400.1	0.00	0.00	0.00
5,400.0	16.89	235.36	5,191.9	-812.5	-1,176.2	1,429.1	0.00	0.00	0.00
5,500.0	16.89	235.36	5,287.5	-829.0	-1,200.2	1,458.2	0.00	0.00	0.00
5,600.0	16.89	235.36	5,383.2	-845.5	-1,224.1	1,487.2	0.00	0.00	0.00
5,681.4	16.89	235.36	5,461.1	-859.0	-1,243.5	1,510.8	0.00	0.00	0.00
5,700.0	16.33	235.36	5,478.9	-862.0	-1,247.9	1,516.2	3.00	-3.00	0.00
5,800.0	13.33	235.36	5,575.6	-876.5	-1,269.0	1,541.7	3.00	-3.00	0.00
5,888.3	10.68	235.36	5,662.0	-887.0	-1,284.1	1,560.1	3.00	-3.00	0.00
OHIO_CREEK.MBL									
5,900.0	10.33	235.36	5,673.5	-888.2	-1,285.8	1,562.2	3.00	-3.00	0.00
6,000.0	7.33	235.36	5,772.3	-896.9	-1,298.5	1,577.6	3.00	-3.00	0.00
6,100.0	4.33	235.36	5,871.7	-902.7	-1,306.8	1,587.7	3.00	-3.00	0.00
6,111.3	3.99	235.36	5,883.0	-903.2	-1,307.5	1,588.6	3.00	-3.00	0.00
WILLIAMS_FORK.MBL									
6,161.4	2.49	235.36	5,933.0	-904.8	-1,309.8	1,591.4	3.00	-3.00	0.00
TOP_GAS.MBL									
6,200.0	1.33	235.36	5,971.6	-905.5	-1,310.9	1,592.7	3.00	-3.00	0.00
6,244.4	0.00	0.00	6,016.0	-905.8	-1,311.3	1,593.2	3.00	-3.00	0.00
6,300.0	0.56	250.00	6,071.6	-905.9	-1,311.6	1,593.5	1.00	1.00	0.00
6,400.0	1.56	250.00	6,171.6	-906.5	-1,313.3	1,595.3	1.00	1.00	0.00
6,500.0	2.56	250.00	6,271.5	-907.7	-1,316.7	1,598.7	1.00	1.00	0.00
6,600.0	3.56	250.00	6,371.4	-909.6	-1,321.7	1,603.9	1.00	1.00	0.00
6,605.2	3.61	250.00	6,376.6	-909.7	-1,322.0	1,604.3	1.00	1.00	0.00
6,700.0	3.61	250.00	6,471.2	-911.7	-1,327.6	1,610.1	0.00	0.00	0.00
6,800.0	3.61	250.00	6,571.0	-913.9	-1,333.5	1,616.2	0.00	0.00	0.00
6,900.0	3.61	250.00	6,670.8	-916.0	-1,339.4	1,622.3	0.00	0.00	0.00
7,000.0	3.61	250.00	6,770.6	-918.2	-1,345.3	1,628.5	0.00	0.00	0.00
7,100.0	3.61	250.00	6,870.4	-920.3	-1,351.2	1,634.6	0.00	0.00	0.00
7,200.0	3.61	250.00	6,970.2	-922.5	-1,357.2	1,640.7	0.00	0.00	0.00
7,300.0	3.61	250.00	7,070.0	-924.6	-1,363.1	1,646.8	0.00	0.00	0.00
7,400.0	3.61	250.00	7,169.8	-926.8	-1,369.0	1,653.0	0.00	0.00	0.00
7,500.0	3.61	250.00	7,269.6	-928.9	-1,374.9	1,659.1	0.00	0.00	0.00
7,600.0	3.61	250.00	7,369.4	-931.1	-1,380.8	1,665.2	0.00	0.00	0.00
7,700.0	3.61	250.00	7,469.2	-933.2	-1,386.7	1,671.4	0.00	0.00	0.00
7,800.0	3.61	250.00	7,569.0	-935.4	-1,392.6	1,677.5	0.00	0.00	0.00
7,900.0	3.61	250.00	7,668.8	-937.5	-1,398.6	1,683.6	0.00	0.00	0.00
8,000.0	3.61	250.00	7,768.6	-939.7	-1,404.5	1,689.7	0.00	0.00	0.00
8,100.0	3.61	250.00	7,868.4	-941.9	-1,410.4	1,695.9	0.00	0.00	0.00
8,200.0	3.61	250.00	7,968.2	-944.0	-1,416.3	1,702.0	0.00	0.00	0.00
8,300.0	3.61	250.00	8,068.0	-946.2	-1,422.2	1,708.1	0.00	0.00	0.00
8,400.0	3.61	250.00	8,167.8	-948.3	-1,428.1	1,714.3	0.00	0.00	0.00
8,500.0	3.61	250.00	8,267.6	-950.5	-1,434.0	1,720.4	0.00	0.00	0.00
8,600.0	3.61	250.00	8,367.4	-952.6	-1,440.0	1,726.5	0.00	0.00	0.00
8,651.7	3.61	250.00	8,419.0	-953.7	-1,443.0	1,729.7	0.00	0.00	0.00
CAMEO.MBL									
8,700.0	3.61	250.00	8,467.2	-954.8	-1,445.9	1,732.6	0.00	0.00	0.00
8,800.0	3.61	250.00	8,567.0	-956.9	-1,451.8	1,738.8	0.00	0.00	0.00

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Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	North Reference:	True
Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	NPR 24A-15 596 Wellbore #1		
Design:	Plan #3 (10-05-18)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.0	3.61	250.00	8,666.8	-959.1	-1,457.7	1,744.9	0.00	0.00	0.00
9,000.0	3.61	250.00	8,766.6	-961.2	-1,463.6	1,751.0	0.00	0.00	0.00
9,100.0	3.61	250.00	8,866.4	-963.4	-1,469.5	1,757.2	0.00	0.00	0.00
9,152.7	3.61	250.00	8,919.0	-964.5	-1,472.6	1,760.4	0.00	0.00	0.00
ROLLINS.MBL									
9,200.0	3.61	250.00	8,966.2	-965.5	-1,475.4	1,763.3	0.00	0.00	0.00
9,300.0	3.61	250.00	9,066.0	-967.7	-1,481.4	1,769.4	0.00	0.00	0.00
9,303.0	3.61	250.00	9,069.0	-967.7	-1,481.5	1,769.6	0.00	0.00	0.00
TD.MBL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL 2369'FNL, 62'FEL, - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	14,398,942.83	2,444,322.78	39.615855	-108.145659
BHL 1940'FSL, 1545'FEI - plan hits target center - Ellipse (radii L200.0 W100.0 on 250.00 azi)	0.00	0.00	9,069.0	-967.7	-1,481.5	14,397,928.15	2,442,872.26	39.613198	-108.150917

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,646.2	1,600.0	WASATCH.NPC		0.00		
3,442.7	3,319.0	WASATCH_G.NPC		0.00		
3,808.5	3,669.0	FORT_UNION.NPC		0.00		
5,888.3	5,662.0	OHIO_CREEK.MBL		0.00		
6,111.3	5,883.0	WILLIAMS_FORK.MBL		0.00		
6,161.4	5,933.0	TOP_GAS.MBL		0.00		
8,651.7	8,419.0	CAMEO.MBL		0.00		
9,152.7	8,919.0	ROLLINS.MBL		0.00		
9,303.0	9,069.0	TD.MBL		0.00		



Caerus Oil and Gas LLC

SEC.15-T5S-R96W

NPR H15 596 South Pad Sec.15-T5S-R96W

NPR 24A-15 596

NPR 24A-15 596 Wellbore #1

Plan #3 (10-05-18)

Anticollision Report

05 October, 2018

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Reference	Plan #3 (10-05-18)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 800.0 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	10/5/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	9,302.9	Plan #3 (10-05-18) (NPR 24A-15 596 Well	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells Sec.14-T5S-R96W						
N. Parachute WF05D M14 596 (Exist) - Wellbore #1 - We						Out of range
N. Parachute WF09D M14 596 (Exist - TA) - Wellbore #1						Out of range
N. Parachute WF10D M14 596 (Exist - IJ) - Wellbore #1	7,984.7	8,112.5	370.4	305.5	5.704	CC
N. Parachute WF10D M14 596 (Exist - IJ) - Wellbore #1	8,000.0	8,127.5	370.4	305.4	5.699	ES
N. Parachute WF10D M14 596 (Exist - IJ) - Wellbore #1	8,300.0	8,421.0	373.3	307.2	5.649	SF
N. Parachute WF12D M14 596 (Exist) - Wellbore #1 - We						Out of range
Existing Wells Sec.15-T5S-R96W						
N. Parachute WF02B A15 596 (P&A) - Wellbore #1 - We						Out of range
N. Parachute WF03D A15 596 (P&A) - Wellbore #1 - We						Out of range
N. Parachute WF14D A15 596 (Exist) - Wellbore #1 - We						Out of range
NPR H15 596 North Pad Sec.15-T5S-R96W						
NPR 11A-14 596 - NPR 11A-14 596 Wellbore #1 - Plan #	200.0	200.0	308.8	308.1	457.944	CC, ES
NPR 11A-14 596 - NPR 11A-14 596 Wellbore #1 - Plan #	1,200.0	1,052.6	496.9	490.3	75.146	SF
NPR 11B-14 596 - NPR 11B-14 596 Wellbore #1 - Plan #	200.0	200.0	301.4	300.7	446.922	CC, ES
NPR 11B-14 596 - NPR 11B-14 596 Wellbore #1 - Plan #	1,100.0	920.5	527.3	521.1	84.362	SF
NPR 11C-14 596 - NPR 11C-14 596 Wellbore #1 - Plan #	200.0	200.0	293.8	293.1	435.669	CC, ES
NPR 11C-14 596 - NPR 11C-14 596 Wellbore #1 - Plan #	1,100.0	950.8	486.2	480.1	79.074	SF
NPR 11D-14 596 - NPR 11D-14 596 Wellbore #1 - Plan #	200.0	200.0	286.3	285.7	424.628	CC, ES
NPR 11D-14 596 - NPR 11D-14 596 Wellbore #1 - Plan #	1,100.0	978.9	449.2	443.2	74.174	SF
NPR 12A-14 596 - NPR 12A-14 596 Wellbore #1 - Plan #	200.0	200.0	278.8	278.2	413.536	CC, ES
NPR 12A-14 596 - NPR 12A-14 596 Wellbore #1 - Plan #	1,100.0	1,000.0	416.8	410.8	69.863	SF
NPR 15B-11 596 - NPR 15B-11 596 Wellbore #1 - Plan #	200.0	200.0	331.3	330.6	491.318	CC, ES
NPR 15B-11 596 - NPR 15B-11 596 Wellbore #1 - Plan #	1,200.0	963.9	615.0	608.1	90.002	SF
NPR 15C-11 596 - NPR 15C-11 596 Wellbore #1 - Plan #	200.0	200.0	323.8	323.1	480.195	CC, ES
NPR 15C-11 596 - NPR 15C-11 596 Wellbore #1 - Plan #	1,200.0	1,000.0	572.1	565.3	84.774	SF
NPR 15D-11 596 - NPR 15D-11 596 Wellbore #1 - Plan #	200.0	200.0	316.3	315.6	469.037	CC, ES
NPR 15D-11 596 - NPR 15D-11 596 Wellbore #1 - Plan #	1,200.0	1,025.2	532.6	525.9	79.860	SF
NPR 21A-15 596 - NPR 21A-15 596 Wellbore #1 - Plan #	200.0	200.0	316.1	315.5	468.839	CC, ES
NPR 21A-15 596 - NPR 21A-15 596 Wellbore #1 - Plan #	1,700.0	1,392.1	777.8	766.9	71.464	SF
NPR 21B-15 596 - NPR 21B-15 596 Wellbore #1 - Plan #	200.0	200.0	308.7	308.0	457.743	CC, ES
NPR 21B-15 596 - NPR 21B-15 596 Wellbore #1 - Plan #	1,800.0	1,525.7	774.1	762.3	65.962	SF
NPR 21C-15 596 - NPR 21C-15 596 Wellbore #1 - Plan #	200.0	200.0	301.1	300.5	446.597	CC, ES
NPR 21C-15 596 - NPR 21C-15 596 Wellbore #1 - Plan #	1,800.0	1,566.6	790.9	778.3	62.939	SF
NPR 21D-15 596 - NPR 21D-15 596 Wellbore #1 - Plan #	200.0	200.0	293.6	292.9	435.435	CC, ES
NPR 21D-15 596 - NPR 21D-15 596 Wellbore #1 - Plan #	1,900.0	1,701.9	765.2	751.8	56.789	SF

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NPR H15 596 North Pad Sec.15-T5S-R96W						
NPR 22A-15 596 - NPR 22A-15 596 Wellbore #1 - Plan #	200.0	200.0	286.2	285.5	424.422	CC, ES
NPR 22A-15 596 - NPR 22A-15 596 Wellbore #1 - Plan #	2,100.0	1,925.9	765.5	749.0	46.607	SF
NPR 22B-10 596 - NPR 22B-10 596 Wellbore #1 - Plan #	200.0	200.0	278.3	277.6	412.681	CC, ES
NPR 22B-10 596 - NPR 22B-10 596 Wellbore #1 - Plan #	1,400.0	1,231.5	516.0	507.8	62.317	SF
NPR 25C-10 596 - NPR 25C-10 596 Wellbore #1 - Plan #	200.0	200.0	331.2	330.5	491.146	CC, ES
NPR 25C-10 596 - NPR 25C-10 596 Wellbore #1 - Plan #	1,500.0	1,145.1	779.7	770.5	85.409	SF
NPR 25D-10 596 - NPR 25D-10 596 Wellbore #1 - Plan #	200.0	200.0	323.6	323.0	479.968	CC, ES
NPR 25D-10 596 - NPR 25D-10 596 Wellbore #1 - Plan #	1,600.0	1,260.7	776.9	766.8	77.320	SF
NPR H15 596 South Pad Sec.15-T5S-R96W						
NPR 12B-14 596 - NPR 12B-14 596 Wellbore #1 - Plan #	200.0	200.0	46.1	45.4	68.369	CC, ES
NPR 12B-14 596 - NPR 12B-14 596 Wellbore #1 - Plan #	500.0	490.5	76.5	74.2	33.573	SF
NPR 12C-14 596 - NPR 12C-14 596 Wellbore #1 - Plan #	200.0	200.0	38.8	38.1	57.559	CC, ES
NPR 12C-14 596 - NPR 12C-14 596 Wellbore #1 - Plan #	500.0	494.7	60.3	58.1	27.220	SF
NPR 12D-14 596 - NPR 12D-14 596 Wellbore #1 - Plan #	200.0	200.0	31.6	31.0	46.903	CC, ES
NPR 12D-14 596 - NPR 12D-14 596 Wellbore #1 - Plan #	500.0	497.3	49.3	47.1	22.533	SF
NPR 13B-14 596 - NPR 13B-14 596 Wellbore #1 - Plan #	200.0	200.0	24.6	24.0	36.519	CC, ES
NPR 13B-14 596 - NPR 13B-14 596 Wellbore #1 - Plan #	400.0	399.6	31.8	30.2	19.379	SF
NPR 13C-14 596 - NPR 13C-14 596 Wellbore #1 - Plan #	200.0	200.0	18.1	17.4	26.834	CC, ES
NPR 13C-14 596 - NPR 13C-14 596 Wellbore #1 - Plan #	400.0	399.6	26.5	24.9	15.938	SF
NPR 13D-14 596 - NPR 13D-14 596 Wellbore #1 - Plan #	200.0	200.0	12.5	11.8	18.564	CC, ES
NPR 13D-14 596 - NPR 13D-14 596 Wellbore #1 - Plan #	300.0	299.4	16.5	15.3	14.208	SF
NPR 14A-14 596 - NPR 14A-14 596 Wellbore #1 - Plan #	200.0	200.0	10.0	9.3	14.839	CC, ES
NPR 14A-14 596 - NPR 14A-14 596 Wellbore #1 - Plan #	300.0	299.5	14.1	12.9	12.217	SF
NPR 22C-15 596 - NPR 22C-15 596 Wellbore #1 - NPR	100.0	100.0	45.0	44.8	200.193	CC
NPR 22C-15 596 - NPR 22C-15 596 Wellbore #1 - NPR	200.0	199.7	45.3	44.6	70.054	ES
NPR 22C-15 596 - NPR 22C-15 596 Wellbore #1 - NPR	500.0	489.8	71.3	69.1	32.997	SF
NPR 22D-15 596 - NRP 22D-15 596 Wellbore #1 - NRP	100.0	100.0	37.5	37.3	166.811	CC, ES
NPR 22D-15 596 - NRP 22D-15 596 Wellbore #1 - NRP	1,000.0	980.5	155.1	148.6	23.911	SF
NPR 23A-15 596 - NPR 23A-15 596 Wellbore #1 - NPR 2	100.0	100.0	30.0	29.8	133.478	CC, ES
NPR 23A-15 596 - NPR 23A-15 596 Wellbore #1 - NPR 2	2,300.0	2,246.9	402.8	380.9	18.402	SF
NPR 23B-15 596 - NPR 23B-15 596 Wellbore #1 - NPR 2	100.0	100.0	22.5	22.3	100.096	CC, ES
NPR 23B-15 596 - NPR 23B-15 596 Wellbore #1 - NPR 2	5,600.0	5,629.1	793.9	733.8	13.207	SF
NPR 23C-15 596 - NPR 23C-15 596 Wellbore #1 - NPR	106.3	106.3	15.0	14.8	60.974	CC
NPR 23C-15 596 - NPR 23C-15 596 Wellbore #1 - NPR	200.0	200.0	15.1	14.5	23.422	ES
NPR 23C-15 596 - NPR 23C-15 596 Wellbore #1 - NPR	700.0	700.0	27.8	24.3	7.910	SF
NPR 23C-15 596 - NPR 23C-15 596 Wellbore #1 - Plan #	200.0	200.0	15.0	14.3	22.241	CC, ES
NPR 23C-15 596 - NPR 23C-15 596 Wellbore #1 - Plan #	700.0	701.7	34.7	31.4	10.294	SF
NPR 23D-15 596 - NPR 23D-15 596 Wellbore #1 - Plan #	200.0	200.0	7.5	6.8	11.112	CC, ES
NPR 23D-15 596 - NPR 23D-15 596 Wellbore #1 - Plan #	6,244.4	6,178.7	333.7	272.1	5.421	SF

Offset Design Existing Wells Sec.14-T5S-R96W - N. Parachute WF10D M14 596 (Exist - IJ) - Wellbore #1 - Wellbore												Offset Site Error:	0.0 ft
Survey Program: 145-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,100.0	3,947.9	4,229.1	3,790.8	22.6	35.0	-36.37	-1,338.9	-1,135.0	788.7	738.4	50.24	15.696	
4,200.0	4,043.6	4,314.2	3,867.6	23.2	35.8	-34.63	-1,328.3	-1,170.2	767.9	716.9	51.06	15.039	
4,300.0	4,139.3	4,401.5	3,947.4	23.8	36.5	-32.97	-1,319.3	-1,204.3	749.1	697.3	51.82	14.457	
4,400.0	4,235.0	4,503.4	4,041.7	24.4	37.2	-31.16	-1,310.4	-1,241.9	731.6	679.0	52.55	13.920	
4,500.0	4,330.7	4,624.8	4,154.4	25.0	38.1	-28.93	-1,297.2	-1,285.0	712.2	659.0	53.24	13.377	

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

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.14-T5S-R96W - N. Parachute WF10D M14 596 (Exist - IJ) - Wellbore #1 - Wellbore													Offset Site Error:	0.0 ft
Survey Program: 145-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,600.0	4,426.4	4,725.6	4,248.2	25.6	38.9	-26.96	-1,284.1	-1,319.6	691.2	637.5	53.79	12.852		
4,700.0	4,522.1	4,821.1	4,337.3	26.3	39.5	-25.06	-1,271.9	-1,351.6	670.7	616.5	54.25	12.365		
4,800.0	4,617.7	4,917.5	4,427.6	26.9	40.2	-23.11	-1,259.9	-1,383.0	650.9	596.3	54.64	11.914		
4,900.0	4,713.4	5,016.1	4,520.4	27.5	40.9	-21.08	-1,247.9	-1,414.4	631.6	576.6	54.95	11.495		
5,000.0	4,809.1	5,111.0	4,609.7	28.1	41.5	-19.01	-1,236.2	-1,444.4	612.9	557.7	55.18	11.107		
5,100.0	4,904.8	5,210.5	4,703.8	28.7	42.1	-16.87	-1,224.8	-1,474.4	594.7	539.4	55.35	10.746		
5,200.0	5,000.5	5,311.4	4,800.3	29.3	42.7	-14.87	-1,214.6	-1,502.2	576.6	521.2	55.47	10.395		
5,300.0	5,096.2	5,413.3	4,898.6	30.0	43.2	-13.06	-1,205.9	-1,527.5	558.5	502.9	55.59	10.047		
5,400.0	5,191.9	5,522.7	5,005.3	30.6	43.7	-11.47	-1,198.3	-1,550.0	539.1	483.4	55.72	9.675		
5,500.0	5,287.5	5,637.3	5,118.5	31.2	44.0	-10.36	-1,192.7	-1,567.4	517.6	461.7	55.93	9.254		
5,600.0	5,383.2	5,746.3	5,227.0	31.8	44.3	-9.91	-1,189.0	-1,577.0	492.7	436.4	56.29	8.754		
5,681.4	5,461.1	5,825.8	5,306.3	32.3	44.4	-9.88	-1,187.5	-1,581.6	471.7	415.0	56.64	8.328		
5,700.0	5,478.9	5,843.7	5,324.2	32.4	44.4	-9.86	-1,187.3	-1,582.6	466.9	410.1	56.80	8.221		
5,800.0	5,575.6	5,943.7	5,424.1	32.8	44.5	-9.87	-1,186.8	-1,586.9	444.4	386.8	57.55	7.721		
5,900.0	5,673.5	6,048.0	5,528.4	33.1	44.6	-9.94	-1,186.3	-1,589.9	425.8	367.7	58.16	7.322		
6,000.0	5,772.3	6,149.0	5,629.4	33.4	44.7	-9.99	-1,185.5	-1,591.6	411.4	352.8	58.58	7.023		
6,100.0	5,871.7	6,248.4	5,728.7	33.6	44.8	-9.95	-1,184.7	-1,593.1	401.8	343.0	58.79	6.834		
6,200.0	5,971.6	6,345.6	5,825.9	33.7	44.9	-9.82	-1,184.1	-1,594.8	397.8	339.0	58.80	6.765		
6,219.6	5,991.2	6,364.8	5,845.1	33.7	44.9	-9.79	-1,184.1	-1,595.2	397.7	338.9	58.78	6.765		
6,244.4	6,016.0	6,389.2	5,869.5	33.8	44.9	-134.38	-1,184.0	-1,595.6	397.9	330.0	67.89	5.861		
6,300.0	6,071.6	6,443.7	5,924.0	33.8	45.0	-24.28	-1,184.0	-1,596.8	398.5	339.6	58.89	6.766		
6,400.0	6,171.6	6,541.9	6,022.2	33.9	45.1	-24.18	-1,184.3	-1,599.1	398.7	339.5	59.19	6.735		
6,500.0	6,271.5	6,640.1	6,120.4	34.1	45.2	-24.19	-1,184.9	-1,601.7	397.7	338.2	59.54	6.680		
6,605.2	6,376.6	6,743.5	6,223.6	34.3	45.2	-24.32	-1,185.8	-1,604.8	395.5	335.5	59.95	6.597		
6,700.0	6,471.2	6,836.5	6,316.6	34.5	45.3	-24.48	-1,187.0	-1,607.9	393.1	332.8	60.29	6.521		
6,800.0	6,571.0	6,935.7	6,415.7	34.7	45.4	-24.66	-1,188.5	-1,611.4	391.0	330.4	60.65	6.446		
6,900.0	6,670.8	7,035.9	6,515.8	34.9	45.5	-24.82	-1,190.0	-1,615.0	388.9	327.9	61.02	6.373		
7,000.0	6,770.6	7,136.1	6,615.9	35.1	45.7	-24.97	-1,191.4	-1,618.7	386.7	325.4	61.39	6.300		
7,100.0	6,870.4	7,236.2	6,716.1	35.3	45.8	-25.11	-1,192.6	-1,622.4	384.5	322.8	61.75	6.228		
7,200.0	6,970.2	7,336.4	6,816.2	35.5	45.9	-25.23	-1,193.8	-1,626.2	382.3	320.2	62.10	6.156		
7,300.0	7,070.0	7,436.6	6,916.3	35.7	46.0	-25.34	-1,194.8	-1,630.0	380.0	317.5	62.45	6.084		
7,400.0	7,169.8	7,536.1	7,015.7	35.9	46.1	-25.43	-1,195.7	-1,633.8	377.6	314.8	62.80	6.014		
7,500.0	7,269.6	7,634.8	7,114.3	36.1	46.2	-25.53	-1,196.8	-1,637.8	375.6	312.4	63.15	5.948		
7,600.0	7,369.4	7,733.6	7,213.0	36.3	46.3	-25.65	-1,198.3	-1,641.9	373.9	310.3	63.51	5.887		
7,700.0	7,469.2	7,832.4	7,311.7	36.5	46.4	-25.77	-1,200.0	-1,646.2	372.4	308.6	63.87	5.831		
7,800.0	7,569.0	7,931.2	7,410.4	36.7	46.6	-25.91	-1,201.9	-1,650.6	371.4	307.1	64.24	5.781		
7,900.0	7,668.8	8,029.6	7,508.7	36.9	46.7	-26.05	-1,204.2	-1,655.3	370.6	306.0	64.62	5.735		
7,984.7	7,753.3	8,112.5	7,591.4	37.1	46.8	-26.16	-1,206.3	-1,659.5	370.4	305.5	64.94	5.704 CC		
8,000.0	7,768.6	8,127.5	7,606.4	37.1	46.8	-26.18	-1,206.7	-1,660.4	370.4	305.4	65.00	5.699 ES		
8,100.0	7,868.4	8,225.3	7,704.0	37.3	47.0	-26.28	-1,209.5	-1,665.9	370.8	305.4	65.37	5.672		
8,200.0	7,968.2	8,323.2	7,801.6	37.5	47.1	-26.35	-1,212.6	-1,672.0	371.8	306.0	65.73	5.656		
8,300.0	8,068.0	8,421.0	7,899.2	37.7	47.3	-26.40	-1,216.1	-1,678.6	373.3	307.2	66.08	5.649 SF		
8,400.0	8,167.8	8,518.9	7,996.7	38.0	47.4	-26.43	-1,219.8	-1,685.7	375.4	309.0	66.43	5.651		
8,500.0	8,267.6	8,616.7	8,094.1	38.2	47.6	-26.43	-1,223.8	-1,693.2	378.1	311.3	66.76	5.663		
8,600.0	8,367.4	8,715.7	8,192.7	38.4	47.7	-26.42	-1,228.1	-1,701.3	381.2	314.1	67.10	5.681		
8,700.0	8,467.2	8,814.9	8,291.5	38.6	47.9	-26.41	-1,232.5	-1,709.4	384.5	317.0	67.44	5.701		
8,800.0	8,567.0	8,914.1	8,390.3	38.8	48.1	-26.40	-1,237.1	-1,717.7	388.0	320.2	67.79	5.724		
8,900.0	8,666.8	9,013.3	8,489.0	39.0	48.3	-26.39	-1,241.9	-1,726.1	391.6	323.5	68.13	5.748		
9,000.0	8,766.6	9,112.5	8,587.7	39.2	48.4	-26.39	-1,246.8	-1,734.7	395.5	327.0	68.48	5.776		
9,100.0	8,866.4	9,211.7	8,686.4	39.4	48.6	-26.39	-1,251.8	-1,743.3	399.6	330.7	68.83	5.805		
9,200.0	8,966.2	9,310.9	8,785.0	39.7	48.8	-26.39	-1,257.0	-1,752.0	403.8	334.6	69.18	5.837		
9,303.0	9,069.0	9,375.0	8,848.8	39.9	48.9	-26.39	-1,260.4	-1,757.8	410.1	340.6	69.49	5.902		

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

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-21.54	287.2	-113.4	308.8					
100.0	100.0	100.0	100.0	0.1	0.1	-21.54	287.2	-113.4	308.8	308.6	0.22	1,373.833		
200.0	200.0	200.0	200.0	0.3	0.3	-21.54	287.2	-113.4	308.8	308.1	0.67	457.944	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	103.54	287.2	-113.4	309.4	308.3	1.11	278.481		
400.0	399.6	399.6	399.6	0.8	0.8	104.89	287.2	-113.4	311.3	309.8	1.57	198.361		
500.0	498.8	498.8	498.8	1.1	1.0	107.06	287.2	-113.4	315.0	312.9	2.09	150.942		
600.0	597.1	588.2	588.2	1.4	1.2	109.94	288.8	-112.1	322.2	319.5	2.66	121.281		
700.0	694.3	674.4	674.1	1.9	1.4	113.64	293.4	-108.3	335.5	332.2	3.31	101.407		
763.0	754.9	726.5	726.0	2.2	1.5	116.18	297.6	-104.9	347.6	343.8	3.76	92.473		
800.0	790.3	756.4	755.6	2.4	1.6	117.91	300.5	-102.5	356.1	352.0	4.02	88.600		
900.0	886.0	835.1	833.4	3.0	1.8	122.34	309.9	-94.8	383.0	378.3	4.71	81.325		
1,000.0	981.7	910.7	907.6	3.6	2.1	126.39	321.2	-85.4	415.7	410.3	5.37	77.379		
1,100.0	1,077.3	983.2	978.1	4.2	2.4	130.02	334.2	-74.8	453.8	447.8	6.01	75.551		
1,200.0	1,173.0	1,052.6	1,044.9	4.8	2.7	133.22	348.5	-63.0	496.9	490.3	6.61	75.146	SF	
1,300.0	1,268.7	1,118.8	1,108.0	5.4	3.0	136.01	364.0	-50.3	544.6	537.4	7.19	75.763		
1,400.0	1,364.4	1,182.0	1,167.6	6.0	3.4	138.44	380.3	-36.9	596.3	588.6	7.74	77.037		
1,500.0	1,460.1	1,242.2	1,223.7	6.6	3.7	140.55	397.2	-22.9	651.8	643.5	8.27	78.768		
1,600.0	1,555.8	1,300.0	1,276.8	7.2	4.1	142.40	414.7	-8.5	710.5	701.7	8.79	80.858		
1,700.0	1,651.5	1,354.2	1,326.0	7.8	4.5	143.98	432.3	5.9	772.2	762.9	9.29	83.154		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-21.49	280.4	-110.4	301.4					
100.0	100.0	100.0	100.0	0.1	0.1	-21.49	280.4	-110.4	301.4	301.1	0.22	1,340.767		
200.0	200.0	200.0	200.0	0.3	0.3	-21.49	280.4	-110.4	301.4	300.7	0.67	446.922 CC, ES		
300.0	300.0	293.5	293.4	0.5	0.6	103.94	282.1	-108.8	303.0	301.9	1.10	276.063		
400.0	399.6	385.6	385.3	0.8	0.8	106.20	287.0	-104.2	308.4	306.9	1.56	197.504		
500.0	498.8	474.9	474.0	1.1	1.0	109.63	294.8	-96.9	318.7	316.6	2.11	150.889		
600.0	597.1	560.5	558.3	1.4	1.3	113.75	305.1	-87.1	335.3	332.5	2.76	121.611		
700.0	694.3	641.2	637.3	1.9	1.6	118.08	317.3	-75.6	359.5	356.0	3.48	103.281		
763.0	754.9	689.2	683.9	2.2	1.8	120.72	325.7	-67.6	379.3	375.3	3.96	95.679		
800.0	790.3	716.5	710.3	2.4	2.0	122.53	330.9	-62.8	392.3	388.1	4.24	92.587		
900.0	886.0	787.9	778.7	3.0	2.3	127.01	345.7	-48.8	431.9	426.9	4.95	87.286		
1,000.0	981.7	855.9	843.1	3.6	2.7	130.90	361.5	-33.9	477.1	471.5	5.62	84.866		
1,100.0	1,077.3	920.5	903.5	4.2	3.2	134.26	378.1	-18.2	527.3	521.1	6.25	84.362 SF		
1,200.0	1,173.0	981.8	960.1	4.8	3.6	137.14	395.2	-2.1	581.9	575.1	6.85	85.003		
1,300.0	1,268.7	1,040.0	1,013.2	5.4	4.1	139.62	412.6	14.3	640.3	632.9	7.41	86.409		
1,400.0	1,364.4	1,100.0	1,067.1	6.0	4.6	141.92	431.8	32.5	702.1	694.2	7.96	88.249		
1,500.0	1,460.1	1,159.0	1,119.4	6.6	5.1	143.95	451.6	51.1	766.6	758.1	8.50	90.229		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation		Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)		(ft)		
0.0	0.0	0.0	0.0	0.0	0.0	-21.44	273.4	-107.4	293.8					
100.0	100.0	100.0	100.0	0.1	0.1	-21.44	273.4	-107.4	293.8	293.5	0.22	1,307.006		
200.0	200.0	200.0	200.0	0.3	0.3	-21.44	273.4	-107.4	293.8	293.1	0.67	435.669	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	103.68	273.4	-107.4	294.4	293.3	1.11	264.951		
400.0	399.6	393.9	393.9	0.8	0.8	105.39	275.0	-105.7	297.3	295.7	1.56	190.906		
500.0	498.8	485.8	485.5	1.1	1.0	108.53	279.5	-100.7	304.2	302.2	2.08	146.517		
600.0	597.1	574.2	573.3	1.4	1.2	112.67	286.6	-92.8	316.7	314.0	2.69	117.787		
700.0	694.3	658.1	656.0	1.9	1.5	117.29	295.9	-82.5	336.3	332.9	3.39	99.185		
763.0	754.9	708.3	705.2	2.2	1.7	120.21	302.6	-75.1	353.0	349.1	3.87	91.331		
800.0	790.3	736.9	733.1	2.4	1.8	122.16	306.8	-70.5	364.3	360.2	4.14	88.013		
900.0	886.0	811.7	805.6	3.0	2.1	127.02	319.1	-56.8	399.2	394.4	4.84	82.396		
1,000.0	981.7	882.9	873.9	3.6	2.5	131.30	332.6	-41.9	440.0	434.5	5.52	79.775		
1,100.0	1,077.3	950.8	938.3	4.2	2.9	135.02	347.1	-25.9	486.2	480.1	6.15	79.074	SF	
1,200.0	1,173.0	1,015.3	998.7	4.8	3.3	138.22	362.2	-9.2	537.2	530.4	6.74	79.697		
1,300.0	1,268.7	1,076.5	1,055.3	5.4	3.7	140.98	377.8	8.1	592.3	585.0	7.30	81.092		
1,400.0	1,364.4	1,142.7	1,115.8	6.0	4.2	143.66	395.9	28.1	650.9	643.0	7.84	83.029		
1,500.0	1,460.1	1,218.1	1,184.5	6.6	4.8	146.30	416.7	51.1	711.0	702.6	8.38	84.868		
1,600.0	1,555.8	1,293.5	1,253.2	7.2	5.4	148.56	437.5	74.1	772.0	763.1	8.88	86.979		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-21.39	266.6	-104.4	286.3					
100.0	100.0	100.0	100.0	0.1	0.1	-21.39	266.6	-104.4	286.3	286.1	0.22	1,273.883		
200.0	200.0	200.0	200.0	0.3	0.3	-21.39	266.6	-104.4	286.3	285.7	0.67	424.628	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	103.73	266.6	-104.4	286.9	285.8	1.11	258.245		
400.0	399.6	399.6	399.6	0.8	0.8	105.18	266.6	-104.4	288.9	287.3	1.57	184.029		
500.0	498.8	493.8	493.8	1.1	1.0	107.80	268.0	-102.6	293.4	291.4	2.08	141.378		
600.0	597.1	585.1	584.8	1.4	1.2	111.72	272.0	-97.3	302.6	299.9	2.66	113.683		
700.0	694.3	672.2	671.3	1.9	1.4	116.44	278.2	-88.9	318.0	314.7	3.34	95.303		
763.0	754.9	724.6	723.0	2.2	1.6	119.56	283.1	-82.4	331.7	327.9	3.80	87.272		
800.0	790.3	754.4	752.4	2.4	1.7	121.60	286.2	-78.2	341.3	337.2	4.07	83.900		
900.0	886.0	832.8	829.1	3.0	2.0	126.79	295.8	-65.3	371.3	366.6	4.77	77.907		
1,000.0	981.7	907.6	901.6	3.6	2.3	131.45	306.7	-50.7	407.5	402.1	5.43	75.083		
1,100.0	1,077.3	978.9	970.0	4.2	2.6	135.54	318.7	-34.7	449.2	443.2	6.06	74.174	SF	
1,200.0	1,173.0	1,046.7	1,034.4	4.8	3.0	139.11	331.5	-17.6	496.1	489.4	6.65	74.597		
1,300.0	1,268.7	1,111.2	1,094.9	5.4	3.4	142.19	345.0	0.4	547.4	540.2	7.21	75.974		
1,400.0	1,364.4	1,175.4	1,154.3	6.0	3.8	144.98	359.5	19.9	602.8	595.1	7.75	77.815		
1,500.0	1,460.1	1,252.3	1,225.2	6.6	4.4	147.89	377.4	43.8	660.3	652.1	8.26	79.899		
1,600.0	1,555.8	1,329.2	1,296.0	7.2	5.0	150.38	395.3	67.7	718.9	710.2	8.77	81.974		
1,700.0	1,651.5	1,406.1	1,366.9	7.8	5.6	152.52	413.2	91.7	778.4	769.1	9.25	84.168		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 12A-14 596 - NPR 12A-14 596 Wellbore #1 - Plan #													Offset Site Error:	0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-21.35	259.7	-101.5	278.8					
100.0	100.0	100.0	100.0	0.1	0.1	-21.35	259.7	-101.5	278.8	278.6	0.22	1,240.609	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-21.35	259.7	-101.5	278.8	278.2	0.67	413.536		
300.0	300.0	300.0	300.0	0.5	0.6	103.79	259.7	-101.5	279.5	278.3	1.11	251.510		
400.0	399.6	399.6	399.6	0.8	0.8	105.28	259.7	-101.5	281.4	279.9	1.57	179.259		
500.0	498.8	498.8	498.8	1.1	1.0	107.68	259.7	-101.5	285.2	283.1	2.09	136.599		
600.0	597.1	592.8	592.8	1.4	1.2	111.13	260.9	-99.6	292.0	289.3	2.66	109.626		
700.0	694.3	683.2	682.9	1.9	1.4	115.69	264.2	-93.9	304.1	300.8	3.32	91.686		
763.0	754.9	737.8	737.2	2.2	1.6	118.88	267.2	-88.8	315.3	311.5	3.77	83.651		
800.0	790.3	769.0	768.1	2.4	1.6	120.97	269.3	-85.2	323.1	319.1	4.03	80.265		
900.0	886.0	851.0	849.0	3.0	1.9	126.37	276.1	-73.8	348.5	343.8	4.71	73.991		
1,000.0	981.7	929.5	925.9	3.6	2.1	131.34	284.2	-60.1	379.8	374.4	5.36	70.826		
1,100.0	1,077.3	1,000.0	994.3	4.2	2.4	135.54	292.8	-45.5	416.8	410.8	5.97	69.863	SF	
1,200.0	1,173.0	1,076.0	1,067.3	4.8	2.8	139.74	303.6	-27.3	459.1	452.5	6.57	69.919		
1,300.0	1,268.7	1,144.1	1,131.9	5.4	3.2	143.18	314.4	-8.9	506.2	499.1	7.12	71.065		
1,400.0	1,364.4	1,208.8	1,192.6	6.0	3.6	146.18	325.9	10.4	557.7	550.0	7.65	72.897		
1,500.0	1,460.1	1,284.0	1,262.6	6.6	4.1	149.30	339.9	34.3	612.3	604.2	8.17	74.937		
1,600.0	1,555.8	1,362.3	1,335.3	7.2	4.6	152.06	354.6	59.1	668.4	659.7	8.67	77.093		
1,700.0	1,651.5	1,440.6	1,408.1	7.8	5.1	154.44	369.3	83.9	725.4	716.3	9.15	79.252		
1,800.0	1,747.1	1,518.8	1,480.9	8.5	5.7	156.49	384.0	108.8	783.3	773.6	9.62	81.382		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-21.66	307.9	-122.3	331.3					
100.0	100.0	100.0	100.0	0.1	0.1	-21.66	307.9	-122.3	331.3	331.1	0.22	1,473.954		
200.0	200.0	200.0	200.0	0.3	0.3	-21.66	307.9	-122.3	331.3	330.6	0.67	491.318 CC, ES		
300.0	300.0	290.3	290.2	0.5	0.5	103.60	309.7	-121.2	333.3	332.3	1.09	305.100		
400.0	399.6	379.3	379.0	0.8	0.8	105.40	315.1	-117.9	339.8	338.2	1.55	219.120		
500.0	498.8	465.8	465.0	1.1	1.0	108.10	323.7	-112.8	351.4	349.4	2.09	168.385		
600.0	597.1	548.9	547.0	1.4	1.3	111.37	335.2	-105.9	369.4	366.7	2.71	136.304		
700.0	694.3	627.7	624.1	1.9	1.6	114.83	348.8	-97.7	394.6	391.2	3.41	115.648		
763.0	754.9	674.7	669.9	2.2	1.8	116.95	358.3	-92.1	414.6	410.7	3.89	106.616		
800.0	790.3	700.0	694.3	2.4	1.9	118.40	363.7	-88.8	427.7	423.6	4.15	103.015		
900.0	886.0	771.8	763.3	3.0	2.2	122.32	380.8	-78.6	467.1	462.3	4.88	95.810		
1,000.0	981.7	838.9	827.1	3.6	2.6	125.68	398.7	-67.8	511.9	506.3	5.56	92.059		
1,100.0	1,077.3	900.0	884.4	4.2	3.0	128.47	416.7	-57.0	561.3	555.1	6.20	90.514		
1,200.0	1,173.0	963.9	943.7	4.8	3.5	131.12	437.2	-44.8	615.0	608.1	6.83	90.002 SF		
1,300.0	1,268.7	1,021.9	996.8	5.4	3.9	133.30	457.3	-32.7	672.3	664.9	7.43	90.534		
1,400.0	1,364.4	1,077.1	1,046.6	6.0	4.3	135.18	477.6	-20.5	733.0	725.0	8.00	91.631		
1,500.0	1,460.1	1,129.6	1,093.3	6.6	4.8	136.81	498.1	-8.2	796.6	788.0	8.56	93.097		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-21.62	301.0	-119.3	323.8					
100.0	100.0	100.0	100.0	0.1	0.1	-21.62	301.0	-119.3	323.8	323.6	0.22	1,440.584		
200.0	200.0	200.0	200.0	0.3	0.3	-21.62	301.0	-119.3	323.8	323.1	0.67	480.195 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	103.45	301.0	-119.3	324.4	323.3	1.11	291.994		
400.0	399.6	390.3	390.3	0.8	0.8	104.86	302.8	-118.1	327.7	326.2	1.55	211.253		
500.0	498.8	478.8	478.5	1.1	1.0	107.38	308.0	-114.7	335.8	333.8	2.06	162.647		
600.0	597.1	564.1	563.3	1.4	1.2	110.68	316.3	-109.3	349.8	347.1	2.66	131.277		
700.0	694.3	645.5	643.6	1.9	1.4	114.36	327.0	-102.1	370.7	367.4	3.35	110.706		
763.0	754.9	700.0	697.1	2.2	1.6	117.02	335.9	-96.3	388.1	384.3	3.83	101.293		
800.0	790.3	722.1	718.7	2.4	1.7	118.31	339.8	-93.7	399.6	395.5	4.09	97.800		
900.0	886.0	800.0	794.3	3.0	2.0	122.66	355.4	-83.5	434.9	430.1	4.81	90.497		
1,000.0	981.7	865.2	857.0	3.6	2.4	126.02	370.3	-73.6	475.8	470.3	5.48	86.859		
1,100.0	1,077.3	932.0	920.5	4.2	2.7	129.17	387.5	-62.3	521.7	515.5	6.13	85.164		
1,200.0	1,173.0	1,000.0	984.4	4.8	3.1	132.09	407.0	-49.5	572.1	565.3	6.75	84.774 SF		
1,300.0	1,268.7	1,056.4	1,036.8	5.4	3.5	134.28	424.5	-38.0	626.4	619.1	7.33	85.422		
1,400.0	1,364.4	1,114.2	1,089.8	6.0	4.0	136.33	443.8	-25.3	684.4	676.5	7.90	86.653		
1,500.0	1,460.1	1,169.2	1,139.5	6.6	4.4	138.11	463.4	-12.4	745.5	737.0	8.45	88.270		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 15D-11 596 - NPR 15D-11 596 Wellbore #1 - Plan #													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses		Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)		(ft)		
0.0	0.0	0.0	0.0	0.0	0.0	-21.58	294.1	-116.3	316.3					
100.0	100.0	100.0	100.0	0.1	0.1	-21.58	294.1	-116.3	316.3	316.0	0.22	1,407.110		
200.0	200.0	200.0	200.0	0.3	0.3	-21.58	294.1	-116.3	316.3	315.6	0.67	469.037 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	103.50	294.1	-116.3	316.9	315.8	1.11	285.217		
400.0	399.6	399.6	399.6	0.8	0.8	104.81	294.1	-116.3	318.8	317.2	1.57	203.132		
500.0	498.8	489.7	489.7	1.1	1.0	106.99	295.8	-115.1	323.8	321.7	2.07	156.506		
600.0	597.1	577.2	576.9	1.4	1.2	110.16	300.7	-111.5	334.1	331.5	2.65	126.084		
700.0	694.3	661.0	660.2	1.9	1.4	113.92	308.5	-105.8	351.1	347.7	3.32	105.853		
763.0	754.9	711.5	710.1	2.2	1.5	116.40	314.6	-101.4	365.7	361.9	3.77	96.893		
800.0	790.3	740.4	738.6	2.4	1.6	118.10	318.5	-98.5	375.7	371.6	4.04	92.980		
900.0	886.0	816.3	813.0	3.0	1.9	122.40	330.6	-89.6	406.8	402.0	4.74	85.804		
1,000.0	981.7	889.1	883.8	3.6	2.2	126.25	344.4	-79.6	443.6	438.2	5.41	81.944		
1,100.0	1,077.3	958.7	950.8	4.2	2.5	129.65	359.6	-68.4	485.7	479.6	6.06	80.175		
1,200.0	1,173.0	1,025.2	1,014.1	4.8	2.9	132.62	376.0	-56.5	532.6	525.9	6.67	79.860 SF		
1,300.0	1,268.7	1,088.7	1,073.9	5.4	3.2	135.20	393.3	-43.8	583.7	576.5	7.25	80.494		
1,400.0	1,364.4	1,149.2	1,130.1	6.0	3.6	137.43	411.2	-30.7	638.7	630.9	7.81	81.735		
1,500.0	1,460.1	1,200.0	1,176.8	6.6	4.0	139.15	427.4	-18.9	697.1	688.8	8.34	83.572		
1,600.0	1,555.8	1,261.5	1,232.6	7.2	4.5	141.04	448.3	-3.6	758.6	749.7	8.87	85.504		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.40	290.1	-125.6	316.1					
100.0	100.0	100.0	100.0	0.1	0.1	-23.40	290.1	-125.6	316.1	315.9	0.22	1,406.517		
200.0	200.0	200.0	200.0	0.3	0.3	-23.40	290.1	-125.6	316.1	315.5	0.67	468.839	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	101.68	290.1	-125.6	316.7	315.5	1.11	285.238		
400.0	399.6	399.6	399.6	0.8	0.8	103.01	290.1	-125.6	318.3	316.8	1.57	203.112		
500.0	498.8	484.6	484.5	1.1	1.0	104.74	291.8	-126.4	323.7	321.7	2.06	157.388		
600.0	597.1	568.2	568.0	1.4	1.2	106.84	296.8	-128.8	335.4	332.8	2.63	127.419		
700.0	694.3	650.0	649.3	1.9	1.4	109.11	304.8	-132.8	353.7	350.4	3.29	107.388		
763.0	754.9	700.0	698.8	2.2	1.5	110.52	311.2	-135.9	368.8	365.0	3.75	98.352		
800.0	790.3	729.5	727.9	2.4	1.6	111.61	315.6	-138.0	378.8	374.8	4.02	94.170		
900.0	886.0	800.0	797.1	3.0	1.8	113.93	327.6	-143.9	409.2	404.5	4.73	86.428		
1,000.0	981.7	883.5	878.4	3.6	2.2	116.21	344.8	-152.3	443.9	438.4	5.49	80.900		
1,100.0	1,077.3	957.9	950.0	4.2	2.5	117.83	362.8	-161.2	482.5	476.3	6.22	77.546		
1,200.0	1,173.0	1,030.3	1,018.9	4.8	2.9	119.08	382.7	-170.9	524.8	517.8	6.96	75.371		
1,300.0	1,268.7	1,100.0	1,084.4	5.4	3.3	120.01	404.1	-181.4	570.3	562.6	7.71	74.002		
1,400.0	1,364.4	1,168.7	1,148.1	6.0	3.8	120.70	427.2	-192.7	618.9	610.4	8.47	73.081		
1,500.0	1,460.1	1,234.5	1,208.2	6.6	4.3	121.17	451.3	-204.5	670.2	661.0	9.24	72.569		
1,600.0	1,555.8	1,308.0	1,274.4	7.2	4.9	121.55	480.0	-218.6	723.8	713.8	10.05	72.039		
1,700.0	1,651.5	1,392.1	1,349.9	7.8	5.6	121.90	513.2	-234.8	777.8	766.9	10.88	71.464	SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	283.3	-122.6	308.7					
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	283.3	-122.6	308.7	308.4	0.22	1,373.229		
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	283.3	-122.6	308.7	308.0	0.67	457.743 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	101.70	283.3	-122.6	309.2	308.1	1.11	278.496		
400.0	399.6	399.6	399.6	0.8	0.8	103.06	283.3	-122.6	310.9	309.3	1.57	198.335		
500.0	498.8	498.8	498.8	1.1	1.0	105.27	283.3	-122.6	314.1	312.0	2.08	150.739		
600.0	597.1	583.4	583.4	1.4	1.2	107.67	284.9	-123.4	321.5	318.8	2.65	121.515		
700.0	694.3	666.5	666.3	1.9	1.4	110.25	289.6	-126.1	335.7	332.4	3.30	101.804		
763.0	754.9	717.9	717.4	2.2	1.5	111.89	294.1	-128.6	348.3	344.6	3.75	92.844		
800.0	790.3	747.7	747.0	2.4	1.6	113.04	297.3	-130.4	356.9	352.9	4.02	88.798		
900.0	886.0	827.6	826.0	3.0	1.8	115.76	307.7	-136.3	383.6	378.8	4.74	80.903		
1,000.0	981.7	900.0	897.1	3.6	2.0	117.78	319.7	-143.0	414.8	409.3	5.45	76.165		
1,100.0	1,077.3	983.1	978.0	4.2	2.4	119.63	336.3	-152.4	449.9	443.7	6.19	72.731		
1,200.0	1,173.0	1,058.4	1,050.4	4.8	2.7	120.89	353.9	-162.3	488.6	481.7	6.92	70.627		
1,300.0	1,268.7	1,131.7	1,120.2	5.4	3.1	121.80	373.5	-173.3	530.7	523.0	7.66	69.265		
1,400.0	1,364.4	1,200.0	1,184.4	6.0	3.5	122.41	393.8	-184.8	575.8	567.4	8.41	68.497		
1,500.0	1,460.1	1,272.1	1,251.2	6.6	4.0	122.82	417.5	-198.0	623.8	614.6	9.19	67.864		
1,600.0	1,555.8	1,352.7	1,325.1	7.2	4.6	123.11	445.7	-213.9	673.8	663.8	10.02	67.246		
1,700.0	1,651.5	1,439.2	1,404.2	7.8	5.2	123.37	476.1	-231.0	723.9	713.0	10.87	66.575		
1,800.0	1,747.1	1,525.7	1,483.3	8.5	5.9	123.60	506.5	-248.1	774.1	762.3	11.74	65.962 SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	276.4	-119.5	301.1					
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	276.4	-119.5	301.1	300.9	0.22	1,339.792		
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	276.4	-119.5	301.1	300.5	0.67	446.597 CC, ES		
300.0	300.0	296.0	296.0	0.5	0.5	101.40	276.4	-121.1	302.3	301.2	1.09	276.780		
400.0	399.6	387.6	387.5	0.8	0.8	101.86	276.7	-125.6	306.2	304.6	1.53	199.568		
500.0	498.8	473.0	472.6	1.1	1.0	102.80	280.0	-131.6	315.2	313.1	2.05	154.043		
600.0	597.1	557.1	556.1	1.4	1.2	104.20	286.5	-139.1	330.0	327.4	2.65	124.690		
700.0	694.3	639.1	637.0	1.9	1.5	105.85	296.1	-147.9	350.9	347.6	3.33	105.284		
763.0	754.9	689.5	686.5	2.2	1.6	106.95	303.6	-154.0	367.3	363.5	3.81	96.389		
800.0	790.3	718.7	715.0	2.4	1.7	107.86	308.4	-157.8	378.0	373.9	4.10	92.217		
900.0	886.0	800.0	794.0	3.0	2.1	110.13	324.1	-169.4	409.9	405.0	4.89	83.776		
1,000.0	981.7	871.9	863.1	3.6	2.5	111.79	340.4	-180.8	446.1	440.4	5.68	78.575		
1,100.0	1,077.3	945.5	933.0	4.2	2.9	113.17	359.6	-193.6	486.2	479.7	6.48	75.018		
1,200.0	1,173.0	1,029.1	1,011.6	4.8	3.4	114.43	383.5	-209.2	529.1	521.8	7.32	72.268		
1,300.0	1,268.7	1,118.7	1,095.7	5.4	4.0	115.58	409.3	-225.8	572.4	564.2	8.17	70.093		
1,400.0	1,364.4	1,208.3	1,179.9	6.0	4.6	116.57	435.1	-242.5	615.9	606.8	9.03	68.191		
1,500.0	1,460.1	1,297.9	1,264.0	6.6	5.2	117.43	460.9	-259.2	659.5	649.6	9.90	66.593		
1,600.0	1,555.8	1,387.4	1,348.1	7.2	5.8	118.19	486.8	-275.9	703.2	692.4	10.78	65.205		
1,700.0	1,651.5	1,477.0	1,432.3	7.8	6.4	118.85	512.6	-292.6	747.0	735.3	11.67	63.998		
1,800.0	1,747.1	1,566.6	1,516.4	8.5	7.0	119.45	538.4	-309.3	790.9	778.3	12.57	62.939 SF		

Offset Design		NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 21D-15 596 - NPR 21D-15 596 Wellbore #1 - Plan #											Offset Site Error:		0.0 ft		
Survey Program:		0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	269.5	-116.6	293.6								
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	269.5	-116.6	293.6	293.4	0.22	1,306.306					
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	269.5	-116.6	293.6	292.9	0.67	435.435	CC, ES				
300.0	300.0	300.0	300.0	0.5	0.6	101.73	269.5	-116.6	294.1	293.0	1.11	264.945					
400.0	399.6	396.0	396.0	0.8	0.8	102.80	269.5	-118.2	296.4	294.9	1.55	191.348					
500.0	498.8	487.6	487.5	1.1	1.0	104.09	269.8	-122.7	301.6	299.6	2.05	147.313					
600.0	597.1	572.9	572.5	1.4	1.2	105.69	272.9	-128.9	312.3	309.7	2.63	118.656					
700.0	694.3	656.6	655.5	1.9	1.4	107.56	279.1	-136.9	329.2	325.9	3.31	99.370					
763.0	754.9	708.3	706.6	2.2	1.6	108.78	284.6	-142.7	343.2	339.4	3.79	90.642					
800.0	790.3	738.2	736.1	2.4	1.7	109.73	288.3	-146.4	352.4	348.4	4.07	86.557					
900.0	886.0	818.3	814.5	3.0	2.0	111.94	300.1	-157.4	380.7	375.8	4.85	78.526					
1,000.0	981.7	900.0	893.8	3.6	2.3	113.73	315.2	-170.2	413.2	407.5	5.64	73.199					
1,100.0	1,077.3	973.3	964.1	4.2	2.7	114.99	331.1	-183.2	449.5	443.1	6.44	69.820					
1,200.0	1,173.0	1,060.9	1,047.5	4.8	3.1	116.16	352.3	-199.8	488.5	481.2	7.29	67.045					
1,300.0	1,268.7	1,152.5	1,134.6	5.4	3.7	117.20	374.5	-217.2	527.7	519.6	8.14	64.841					
1,400.0	1,364.4	1,244.0	1,221.7	6.0	4.2	118.10	396.7	-234.7	567.1	558.1	9.01	62.975					
1,500.0	1,460.1	1,335.6	1,308.9	6.6	4.8	118.88	418.9	-252.1	606.6	596.7	9.89	61.348					
1,600.0	1,555.8	1,427.2	1,396.0	7.2	5.3	119.57	441.1	-269.5	646.2	635.4	10.77	59.969					
1,700.0	1,651.5	1,518.8	1,483.1	7.8	5.9	120.18	463.2	-286.9	685.8	674.1	11.67	58.767					
1,800.0	1,747.1	1,610.4	1,570.2	8.5	6.5	120.72	485.4	-304.4	725.5	712.9	12.57	57.716					
1,900.0	1,842.8	1,701.9	1,657.4	9.1	7.0	121.20	507.6	-321.8	765.2	751.8	13.47	56.789	SF				

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 22A-15 596 - NPR 22A-15 596 Wellbore #1 - Plan #												Offset Site Error:	0.0 ft
Survey Program:		0-MWVD										Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	262.7	-113.6	286.2				
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	262.7	-113.6	286.2		0.22	1,273.267	
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	262.7	-113.6	286.2	285.5	0.67	424.422	CC, ES
300.0	300.0	300.0	300.0	0.5	0.6	101.74	262.7	-113.6	286.7	285.6	1.11	258.255	
400.0	399.6	399.6	399.6	0.8	0.8	103.21	262.7	-113.6	288.4	286.8	1.57	183.989	
500.0	498.8	495.6	495.6	1.1	1.0	105.21	262.7	-115.2	292.2	290.2	2.07	141.410	
600.0	597.1	587.7	587.5	1.4	1.2	107.30	262.9	-119.8	299.3	296.6	2.64	113.510	
700.0	694.3	674.1	673.6	1.9	1.4	109.39	265.4	-127.0	311.9	308.6	3.30	94.438	
763.0	754.9	727.9	727.0	2.2	1.5	110.70	268.3	-132.9	322.9	319.2	3.77	85.596	
800.0	790.3	759.3	758.1	2.4	1.6	111.62	270.4	-136.9	330.5	326.4	4.06	81.470	
900.0	886.0	843.7	841.2	3.0	1.9	113.65	277.9	-149.5	353.6	348.8	4.84	73.093	
1,000.0	981.7	927.1	922.7	3.6	2.2	115.08	287.7	-164.5	380.4	374.8	5.65	67.385	
1,100.0	1,077.3	1,009.4	1,002.1	4.2	2.6	115.97	299.8	-181.9	410.6	404.1	6.48	63.322	
1,200.0	1,173.0	1,090.1	1,079.2	4.8	3.0	116.43	313.9	-201.4	443.8	436.5	7.36	60.290	
1,300.0	1,268.7	1,178.8	1,163.0	5.4	3.5	116.61	331.3	-224.8	479.4	471.1	8.31	57.686	
1,400.0	1,364.4	1,272.2	1,251.1	6.0	4.1	116.77	349.7	-249.6	515.2	505.9	9.29	55.467	
1,500.0	1,460.1	1,365.6	1,339.2	6.6	4.7	116.90	368.1	-274.4	550.9	540.6	10.29	53.566	
1,600.0	1,555.8	1,459.0	1,427.4	7.2	5.3	117.01	386.6	-299.2	586.7	575.4	11.29	51.967	
1,700.0	1,651.5	1,552.4	1,515.5	7.8	6.0	117.12	405.0	-324.0	622.4	610.1	12.30	50.584	
1,800.0	1,747.1	1,645.8	1,603.6	8.5	6.6	117.21	423.4	-348.8	658.2	644.9	13.33	49.386	
1,900.0	1,842.8	1,739.1	1,691.7	9.1	7.2	117.29	441.9	-373.6	694.0	679.6	14.36	48.340	
2,000.0	1,938.5	1,832.5	1,779.8	9.7	7.8	117.37	460.3	-398.5	729.7	714.3	15.39	47.421	
2,100.0	2,034.2	1,925.9	1,868.0	10.3	8.5	117.43	478.7	-423.3	765.5	749.0	16.42	46.607	SF

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.36	255.5	-110.4	278.3					
100.0	100.0	100.0	100.0	0.1	0.1	-23.36	255.5	-110.4	278.3	278.0	0.22	1,238.043		
200.0	200.0	200.0	200.0	0.3	0.3	-23.36	255.5	-110.4	278.3	277.6	0.67	412.681	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	101.78	255.5	-110.4	278.8	277.7	1.11	251.121		
400.0	399.6	399.6	399.6	0.8	0.8	103.30	255.5	-110.4	280.5	278.9	1.57	178.934		
500.0	498.8	498.8	498.8	1.1	1.0	105.75	255.5	-110.4	283.8	281.7	2.08	136.157		
600.0	597.1	594.5	594.5	1.4	1.2	108.62	255.5	-111.9	289.8	287.1	2.66	109.102		
700.0	694.3	685.6	685.4	1.9	1.4	111.45	255.8	-116.2	299.5	296.2	3.30	90.788		
763.0	754.9	738.2	737.9	2.2	1.5	113.21	257.4	-119.4	309.1	305.3	3.75	82.436		
800.0	790.3	768.7	768.4	2.4	1.6	114.41	259.0	-121.4	315.9	311.9	4.01	78.710		
900.0	886.0	850.4	849.6	3.0	1.8	117.36	265.6	-127.3	338.1	333.4	4.73	71.453		
1,000.0	981.7	930.5	928.8	3.6	2.0	119.84	275.4	-134.0	365.3	359.9	5.44	67.096		
1,100.0	1,077.3	1,008.9	1,005.8	4.2	2.3	121.87	288.0	-141.2	397.1	390.9	6.15	64.547		
1,200.0	1,173.0	1,085.3	1,080.2	4.8	2.6	123.47	303.3	-149.0	433.0	426.2	6.86	63.137		
1,300.0	1,268.7	1,159.5	1,151.9	5.4	2.9	124.72	320.9	-157.2	472.8	465.2	7.57	62.472		
1,400.0	1,364.4	1,231.5	1,220.6	6.0	3.2	125.67	340.6	-165.8	516.0	507.8	8.28	62.317	SF	
1,500.0	1,460.1	1,300.0	1,285.2	6.6	3.6	126.37	361.6	-174.5	562.6	553.6	9.00	62.542		
1,600.0	1,555.8	1,368.4	1,348.8	7.2	4.0	126.89	384.9	-183.7	612.1	602.4	9.73	62.941		
1,700.0	1,651.5	1,433.1	1,408.2	7.8	4.5	127.24	408.9	-193.0	664.5	654.1	10.45	63.584		
1,800.0	1,747.1	1,500.0	1,468.6	8.5	5.0	127.48	435.8	-202.9	719.6	708.4	11.21	64.211		
1,900.0	1,842.8	1,555.3	1,517.8	9.1	5.4	127.60	459.6	-211.6	777.1	765.2	11.93	65.119		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 25C-10 596 - NPR 25C-10 596 Wellbore #1 - Plan #													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Offset Wellbore Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	304.0	-131.5	331.2					
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	304.0	-131.5	331.2	331.0	0.22	1,473.439		
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	304.0	-131.5	331.2	330.5	0.67	491.146 CC, ES		
300.0	300.0	285.2	285.2	0.5	0.5	101.59	305.8	-132.0	333.9	332.8	1.08	308.103		
400.0	399.6	369.7	369.4	0.8	0.7	102.56	311.2	-133.5	342.2	340.7	1.53	223.299		
500.0	498.8	452.6	451.9	1.1	1.0	104.03	320.0	-135.9	356.3	354.3	2.05	173.933		
600.0	597.1	533.4	531.7	1.4	1.2	105.81	331.9	-139.2	376.5	373.9	2.64	142.753		
700.0	694.3	611.4	608.2	1.9	1.5	107.69	346.5	-143.3	403.1	399.8	3.31	121.966		
763.0	754.9	658.9	654.5	2.2	1.7	108.86	356.8	-146.1	423.3	419.5	3.77	112.328		
800.0	790.3	686.2	681.0	2.4	1.8	109.87	363.3	-147.9	436.2	432.2	4.04	107.964		
900.0	886.0	758.6	750.7	3.0	2.2	112.32	382.1	-153.2	474.3	469.6	4.78	99.277		
1,000.0	981.7	828.9	817.6	3.6	2.6	114.36	402.8	-158.9	516.7	511.2	5.51	93.776		
1,100.0	1,077.3	900.0	884.4	4.2	3.0	116.12	426.2	-165.4	563.0	556.8	6.25	90.141		
1,200.0	1,173.0	962.5	942.4	4.8	3.5	117.42	448.7	-171.7	612.7	605.8	6.96	87.999		
1,300.0	1,268.7	1,025.7	1,000.2	5.4	3.9	118.54	473.3	-178.5	665.6	657.9	7.68	86.626		
1,400.0	1,364.4	1,086.6	1,055.1	6.0	4.4	119.44	498.7	-185.6	721.3	712.9	8.40	85.833		
1,500.0	1,460.1	1,145.1	1,107.0	6.6	4.9	120.17	524.7	-192.8	779.7	770.5	9.13	85.409 SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 25D-10 596 - NPR 25D-10 596 Wellbore #1 - Plan #													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation		Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)		(ft)		
0.0	0.0	0.0	0.0	0.0	0.0	-23.39	297.1	-128.5	323.6					
100.0	100.0	100.0	100.0	0.1	0.1	-23.39	297.1	-128.5	323.6	323.4	0.22	1,439.903		
200.0	200.0	200.0	200.0	0.3	0.3	-23.39	297.1	-128.5	323.6	323.0	0.67	479.968	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	101.69	297.1	-128.5	324.2	323.1	1.11	291.997		
400.0	399.6	385.1	385.0	0.8	0.8	102.71	298.8	-129.2	328.1	326.5	1.54	212.998		
500.0	498.8	469.2	468.9	1.1	1.0	104.23	303.9	-131.4	337.8	335.8	2.04	165.206		
600.0	597.1	551.6	550.9	1.4	1.2	106.08	312.3	-135.0	353.8	351.1	2.63	134.513		
700.0	694.3	631.9	630.2	1.9	1.4	108.07	323.5	-139.8	376.1	372.9	3.30	114.134		
763.0	754.9	681.0	678.5	2.2	1.6	109.31	331.9	-143.4	393.6	389.9	3.76	104.784		
800.0	790.3	709.4	706.3	2.4	1.7	110.32	337.2	-145.7	405.0	401.0	4.03	100.519		
900.0	886.0	785.0	779.8	3.0	2.0	112.72	353.3	-152.6	439.0	434.2	4.77	92.033		
1,000.0	981.7	858.7	850.8	3.6	2.3	114.68	371.6	-160.5	477.3	471.8	5.51	86.583		
1,100.0	1,077.3	930.3	919.0	4.2	2.7	116.25	391.8	-169.1	519.4	513.2	6.25	83.045		
1,200.0	1,173.0	1,000.0	984.4	4.8	3.2	117.49	413.6	-178.5	565.0	558.0	7.00	80.739		
1,300.0	1,268.7	1,067.1	1,046.7	5.4	3.6	118.45	436.7	-188.4	613.8	606.1	7.75	79.217		
1,400.0	1,364.4	1,132.1	1,106.1	6.0	4.1	119.19	461.0	-198.9	665.6	657.1	8.50	78.295		
1,500.0	1,460.1	1,200.0	1,167.1	6.6	4.7	119.78	488.3	-210.6	720.0	710.7	9.28	77.618		
1,600.0	1,555.8	1,260.7	1,220.7	7.2	5.2	120.17	514.3	-221.8	776.9	766.8	10.05	77.320	SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-10.85	45.3	-8.7	46.1					
100.0	100.0	100.0	100.0	0.1	0.1	-10.85	45.3	-8.7	46.1	45.9	0.22	205.107		
200.0	200.0	200.0	200.0	0.3	0.3	-10.85	45.3	-8.7	46.1	45.4	0.67	68.369 CC, ES		
300.0	300.0	298.9	298.9	0.5	0.6	119.41	46.6	-6.5	48.3	47.2	1.12	43.093		
400.0	399.6	396.3	395.9	0.8	0.8	132.86	50.4	0.0	57.1	55.5	1.65	34.572		
500.0	498.8	490.5	489.4	1.1	1.1	146.68	56.5	10.3	76.5	74.2	2.28	33.573 SF		
600.0	597.1	580.4	577.9	1.4	1.4	156.69	64.5	23.8	107.4	104.5	2.91	36.886		
700.0	694.3	664.9	660.3	1.9	1.7	163.13	74.0	39.7	148.9	145.4	3.52	42.325		
763.0	754.9	715.0	708.8	2.2	2.0	165.91	80.5	50.7	179.9	176.0	3.88	46.316		
800.0	790.3	743.4	736.1	2.4	2.1	167.36	84.5	57.4	199.4	195.4	4.05	49.277		
900.0	886.0	817.4	806.7	3.0	2.5	170.27	95.8	76.4	254.7	250.2	4.49	56.774		
1,000.0	981.7	895.7	880.7	3.6	3.0	172.41	108.8	98.4	312.7	307.8	4.93	63.475		
1,100.0	1,077.3	976.6	957.2	4.2	3.5	173.95	122.3	121.2	371.0	365.6	5.35	69.288		
1,200.0	1,173.0	1,057.5	1,033.6	4.8	4.1	175.07	135.8	144.0	429.4	423.6	5.79	74.184		
1,300.0	1,268.7	1,138.4	1,110.0	5.4	4.6	175.93	149.4	166.8	487.9	481.7	6.25	78.035		
1,400.0	1,364.4	1,219.3	1,186.5	6.0	5.1	176.60	162.9	189.6	546.5	539.8	6.70	81.505		
1,500.0	1,460.1	1,300.2	1,262.9	6.6	5.7	177.14	176.4	212.4	605.1	597.9	7.17	84.390		
1,600.0	1,555.8	1,381.1	1,339.3	7.2	6.2	177.59	190.0	235.2	663.7	656.1	7.64	86.827		
1,700.0	1,651.5	1,462.0	1,415.8	7.8	6.7	177.96	203.5	258.0	722.4	714.3	8.12	88.933		
1,800.0	1,747.1	1,542.9	1,492.2	8.5	7.3	178.28	217.0	280.8	781.1	772.5	8.61	90.762		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-8.43	38.4	-5.7	38.8					
100.0	100.0	100.0	100.0	0.1	0.1	-8.43	38.4	-5.7	38.8	38.6	0.22	172.678		
200.0	200.0	200.0	200.0	0.3	0.3	-8.43	38.4	-5.7	38.8	38.1	0.67	57.559 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	119.53	38.4	-5.7	40.0	38.9	1.12	35.673		
400.0	399.6	398.5	398.5	0.8	0.8	130.97	39.4	-3.4	45.7	44.0	1.62	28.208		
500.0	498.8	494.7	494.4	1.1	1.0	146.20	42.3	3.4	60.3	58.1	2.21	27.220 SF		
600.0	597.1	587.2	586.1	1.4	1.3	158.11	46.9	14.1	86.3	83.5	2.84	30.369		
700.0	694.3	674.8	672.4	1.9	1.5	165.77	52.8	28.0	123.3	119.8	3.45	35.727		
763.0	754.9	727.0	723.5	2.2	1.7	169.03	57.1	38.0	151.6	147.8	3.82	39.695		
800.0	790.3	756.7	752.4	2.4	1.9	170.64	59.7	44.3	169.6	165.6	3.98	42.605		
900.0	886.0	834.4	827.4	3.0	2.2	173.86	67.5	62.6	220.9	216.5	4.42	50.030		
1,000.0	981.7	908.5	898.2	3.6	2.6	176.06	76.1	82.7	275.9	271.1	4.85	56.849		
1,100.0	1,077.3	990.5	976.2	4.2	3.1	177.80	86.2	106.2	332.6	327.3	5.31	62.653		
1,200.0	1,173.0	1,072.5	1,054.1	4.8	3.6	179.03	96.2	129.8	389.4	383.7	5.76	67.661		
1,300.0	1,268.7	1,154.6	1,132.0	5.4	4.1	179.95	106.2	153.3	446.4	440.2	6.21	71.928		
1,400.0	1,364.4	1,236.6	1,210.0	6.0	4.6	-179.33	116.3	176.8	503.4	496.7	6.69	75.290		
1,500.0	1,460.1	1,318.6	1,287.9	6.6	5.1	-178.76	126.3	200.4	560.4	553.2	7.16	78.312		
1,600.0	1,555.8	1,400.7	1,365.9	7.2	5.7	-178.30	136.4	223.9	617.4	609.8	7.64	80.856		
1,700.0	1,651.5	1,482.7	1,443.8	7.8	6.2	-177.91	146.4	247.4	674.5	666.4	8.12	83.025		
1,800.0	1,747.1	1,564.7	1,521.7	8.5	6.7	-177.59	156.5	271.0	731.6	723.0	8.62	84.908		
1,900.0	1,842.8	1,646.7	1,599.7	9.1	7.2	-177.31	166.5	294.5	788.7	779.6	9.11	86.554		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-4.96	31.5	-2.7	31.6					
100.0	100.0	100.0	100.0	0.1	0.1	-4.96	31.5	-2.7	31.6	31.4	0.22	140.708		
200.0	200.0	200.0	200.0	0.3	0.3	-4.96	31.5	-2.7	31.6	31.0	0.67	46.903 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	123.59	31.5	-2.7	33.0	31.9	1.13	29.307		
400.0	399.6	399.6	399.6	0.8	0.8	133.39	31.5	-2.7	37.9	36.3	1.63	23.323		
500.0	498.8	497.3	497.2	1.1	1.0	146.84	32.1	-0.3	49.3	47.1	2.19	22.533 SF		
600.0	597.1	591.9	591.6	1.4	1.2	159.27	33.9	6.6	70.9	68.1	2.79	25.399		
700.0	694.3	682.3	681.3	1.9	1.5	167.73	36.8	17.4	103.2	99.8	3.39	30.436		
763.0	754.9	736.6	734.9	2.2	1.6	171.40	39.0	25.9	128.6	124.8	3.76	34.207		
800.0	790.3	767.6	765.3	2.4	1.7	173.17	40.4	31.4	144.9	141.0	3.92	36.969		
900.0	886.0	848.8	844.7	3.0	2.0	176.75	44.7	48.1	191.9	187.5	4.36	44.000		
1,000.0	981.7	926.3	919.6	3.6	2.4	179.23	49.7	67.0	242.7	237.8	4.81	50.428		
1,100.0	1,077.3	1,002.2	992.2	4.2	2.8	-178.89	55.2	88.3	296.8	291.5	5.29	56.117		
1,200.0	1,173.0	1,085.1	1,071.4	4.8	3.2	-177.39	61.5	112.6	352.2	346.4	5.75	61.274		
1,300.0	1,268.7	1,168.1	1,150.5	5.4	3.7	-176.29	67.8	136.8	407.6	401.4	6.22	65.572		
1,400.0	1,364.4	1,251.1	1,229.6	6.0	4.2	-175.45	74.1	161.0	463.2	456.5	6.70	69.171		
1,500.0	1,460.1	1,334.1	1,308.7	6.6	4.7	-174.79	80.4	185.3	518.8	511.6	7.20	72.093		
1,600.0	1,555.8	1,417.1	1,387.8	7.2	5.2	-174.26	86.7	209.5	574.4	566.7	7.69	74.669		
1,700.0	1,651.5	1,500.1	1,466.9	7.8	5.7	-173.83	93.1	233.8	630.1	621.9	8.20	76.864		
1,800.0	1,747.1	1,583.0	1,546.0	8.5	6.2	-173.46	99.4	258.0	685.8	677.1	8.71	78.745		
1,900.0	1,842.8	1,666.0	1,625.1	9.1	6.7	-173.15	105.7	282.3	741.5	732.3	9.22	80.386		
2,000.0	1,938.5	1,749.0	1,704.3	9.7	7.3	-172.88	112.0	306.5	797.2	787.5	9.74	81.825		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	0.59	24.6	0.3	24.6					
100.0	100.0	100.0	100.0	0.1	0.1	0.59	24.6	0.3	24.6	24.4	0.22	109.558		
200.0	200.0	200.0	200.0	0.3	0.3	0.59	24.6	0.3	24.6	24.0	0.67	36.519 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	129.86	24.6	0.3	26.2	25.1	1.13	23.160		
400.0	399.6	399.6	399.6	0.8	0.8	140.65	24.6	0.3	31.8	30.2	1.64	19.379 SF		
500.0	498.8	498.8	498.8	1.1	1.0	151.63	24.6	0.3	42.7	40.5	2.20	19.418		
600.0	597.1	595.6	595.5	1.4	1.2	161.74	24.3	2.6	60.6	57.9	2.77	21.916		
700.0	694.3	689.2	688.8	1.9	1.4	170.39	23.4	9.5	87.5	84.2	3.34	26.236		
763.0	754.9	745.9	745.3	2.2	1.6	174.58	22.6	15.9	109.2	105.5	3.70	29.538		
800.0	790.3	778.5	777.5	2.4	1.6	176.68	22.1	20.4	123.3	119.4	3.86	31.963		
900.0	886.0	864.5	862.2	3.0	1.9	-178.83	20.3	34.6	164.0	159.7	4.31	38.045		
1,000.0	981.7	947.1	943.0	3.6	2.2	-175.45	18.1	51.9	208.4	203.6	4.79	43.486		
1,100.0	1,077.3	1,029.0	1,022.3	4.2	2.6	-172.72	15.5	72.3	256.2	250.9	5.30	48.331		
1,200.0	1,173.0	1,115.7	1,106.1	4.8	3.0	-170.60	12.7	94.7	305.1	299.3	5.84	52.266		
1,300.0	1,268.7	1,202.5	1,189.8	5.4	3.4	-169.06	9.8	117.1	354.2	347.9	6.38	55.532		
1,400.0	1,364.4	1,289.3	1,273.6	6.0	3.8	-167.90	7.0	139.5	403.5	396.6	6.93	58.190		
1,500.0	1,460.1	1,376.0	1,357.3	6.6	4.3	-166.99	4.1	161.9	452.9	445.4	7.51	60.342		
1,600.0	1,555.8	1,462.8	1,441.1	7.2	4.7	-166.26	1.3	184.4	502.4	494.3	8.08	62.180		
1,700.0	1,651.5	1,549.5	1,524.9	7.8	5.2	-165.65	-1.6	206.8	551.9	543.2	8.66	63.721		
1,800.0	1,747.1	1,636.3	1,608.6	8.5	5.7	-165.15	-4.4	229.2	601.4	592.2	9.25	65.029		
1,900.0	1,842.8	1,723.0	1,692.4	9.1	6.1	-164.72	-7.2	251.6	651.0	641.2	9.84	66.155		
2,000.0	1,938.5	1,809.8	1,776.1	9.7	6.6	-164.36	-10.1	274.0	700.6	690.2	10.44	67.128		
2,100.0	2,034.2	1,896.5	1,859.9	10.3	7.1	-164.04	-12.9	296.4	750.2	739.2	11.04	67.977		
2,200.0	2,129.9	1,983.3	1,943.6	10.9	7.6	-163.76	-15.8	318.8	799.9	788.2	11.64	68.724		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	10.13	17.8	3.2	18.1	18.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	10.13	17.8	3.2	18.1	17.9	0.22	80.503		
200.0	200.0	200.0	200.0	0.3	0.3	10.13	17.8	3.2	18.1	17.4	0.67	26.834 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	140.06	17.8	3.2	20.0	18.9	1.14	17.528		
400.0	399.6	399.6	399.6	0.8	0.8	150.90	17.8	3.2	26.5	24.9	1.66	15.938 SF		
500.0	498.8	498.1	498.0	1.1	1.0	163.76	17.0	5.6	39.3	37.1	2.22	17.730		
600.0	597.1	594.1	593.8	1.4	1.2	175.14	14.7	12.5	60.7	57.9	2.79	21.789		
700.0	694.3	686.6	685.5	1.9	1.4	-177.11	11.0	23.5	91.2	87.9	3.37	27.084		
763.0	754.9	742.7	740.8	2.2	1.6	-173.64	8.1	32.3	115.0	111.3	3.75	30.700		
800.0	790.3	774.8	772.4	2.4	1.7	-172.00	6.2	38.0	130.2	126.3	3.92	33.223		
900.0	886.0	859.5	855.1	3.0	2.1	-168.41	0.4	55.4	173.6	169.2	4.42	39.255		
1,000.0	981.7	943.2	935.9	3.6	2.4	-165.55	-6.4	75.8	220.3	215.3	4.98	44.232		
1,100.0	1,077.3	1,030.7	1,020.3	4.2	2.9	-163.44	-13.8	98.0	268.0	262.4	5.55	48.274		
1,200.0	1,173.0	1,118.2	1,104.6	4.8	3.3	-161.97	-21.2	120.2	315.9	309.7	6.14	51.417		
1,300.0	1,268.7	1,205.8	1,189.0	5.4	3.8	-160.88	-28.6	142.4	363.9	357.1	6.75	53.890		
1,400.0	1,364.4	1,293.3	1,273.3	6.0	4.3	-160.05	-36.0	164.6	412.0	404.6	7.38	55.837		
1,500.0	1,460.1	1,380.8	1,357.6	6.6	4.8	-159.39	-43.4	186.8	460.1	452.1	8.01	57.433		
1,600.0	1,555.8	1,468.4	1,442.0	7.2	5.3	-158.86	-50.8	209.1	508.3	499.7	8.65	58.751		
1,700.0	1,651.5	1,555.9	1,526.3	7.8	5.7	-158.41	-58.2	231.3	556.6	547.3	9.30	59.849		
1,800.0	1,747.1	1,643.4	1,610.7	8.5	6.2	-158.04	-65.7	253.5	604.8	594.8	9.95	60.776		
1,900.0	1,842.8	1,731.0	1,695.0	9.1	6.7	-157.73	-73.1	275.7	653.1	642.4	10.61	61.568		
2,000.0	1,938.5	1,818.5	1,779.4	9.7	7.2	-157.45	-80.5	297.9	701.3	690.1	11.27	62.250		
2,100.0	2,034.2	1,906.0	1,863.7	10.3	7.7	-157.21	-87.9	320.1	749.6	737.7	11.93	62.843		
2,200.0	2,129.9	1,993.6	1,948.0	10.9	8.2	-157.00	-95.3	342.3	797.9	785.3	12.59	63.362		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	29.53	10.9	6.2	12.5	12.5	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	29.53	10.9	6.2	12.5	12.3	0.22	55.691		
200.0	200.0	200.0	200.0	0.3	0.3	29.53	10.9	6.2	12.5	11.8	0.67	18.564 CC, ES		
300.0	300.0	299.4	299.4	0.5	0.6	165.99	10.9	8.8	16.5	15.3	1.16	14.208 SF		
400.0	399.6	397.8	397.5	0.8	0.8	-178.56	10.3	16.2	29.8	28.1	1.73	17.216		
500.0	498.8	494.0	492.9	1.1	1.0	-168.80	7.4	27.8	51.8	49.5	2.30	22.538		
600.0	597.1	587.0	584.6	1.4	1.4	-163.04	2.2	42.8	82.4	79.5	2.89	28.455		
700.0	694.3	675.9	671.3	1.9	1.7	-159.36	-5.0	60.8	120.9	117.4	3.52	34.386		
763.0	754.9	729.6	723.2	2.2	2.0	-157.63	-10.3	73.2	149.1	145.2	3.92	38.002		
800.0	790.3	760.2	752.7	2.4	2.2	-156.94	-13.7	80.9	166.7	162.5	4.13	40.393		
900.0	886.0	841.1	829.8	3.0	2.6	-155.15	-23.8	103.1	216.1	211.4	4.72	45.818		
1,000.0	981.7	926.7	910.8	3.6	3.2	-153.62	-35.5	128.2	267.2	261.8	5.34	49.986		
1,100.0	1,077.3	1,012.5	992.1	4.2	3.8	-152.58	-47.2	153.3	318.3	312.3	5.99	53.111		
1,200.0	1,173.0	1,098.4	1,073.3	4.8	4.3	-151.82	-58.9	178.4	369.5	362.8	6.67	55.426		
1,300.0	1,268.7	1,184.2	1,154.5	5.4	4.9	-151.25	-70.6	203.5	420.7	413.3	7.36	57.165		
1,400.0	1,364.4	1,270.0	1,235.7	6.0	5.5	-150.80	-82.3	228.6	471.9	463.9	8.05	58.599		
1,500.0	1,460.1	1,355.8	1,317.0	6.6	6.1	-150.44	-94.1	253.7	523.2	514.4	8.76	59.718		
1,600.0	1,555.8	1,441.6	1,398.2	7.2	6.7	-150.15	-105.8	278.8	574.5	565.0	9.48	60.627		
1,700.0	1,651.5	1,527.5	1,479.4	7.8	7.2	-149.90	-117.5	304.0	625.8	615.6	10.20	61.376		
1,800.0	1,747.1	1,613.3	1,560.6	8.5	7.8	-149.69	-129.2	329.1	677.0	666.1	10.92	62.003		
1,900.0	1,842.8	1,699.1	1,641.8	9.1	8.4	-149.51	-140.9	354.2	728.3	716.7	11.65	62.532		
2,000.0	1,938.5	1,784.9	1,723.1	9.7	9.0	-149.35	-152.6	379.3	779.6	767.3	12.38	62.984		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	66.62	4.0	9.2	10.0	10.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	66.62	4.0	9.2	10.0	9.8	0.22	44.517		
200.0	200.0	200.0	200.0	0.3	0.3	66.62	4.0	9.2	10.0	9.3	0.67	14.839 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-161.84	2.5	11.3	14.1	12.9	1.15	12.217 SF		
400.0	399.6	398.0	397.6	0.8	0.8	-154.03	-1.8	17.7	26.7	25.0	1.69	15.812		
500.0	498.8	494.3	493.1	1.1	1.0	-150.11	-8.7	27.9	47.8	45.5	2.27	21.082		
600.0	597.1	587.5	584.8	1.4	1.4	-148.06	-18.0	41.6	77.1	74.2	2.89	26.677		
700.0	694.3	676.8	671.8	1.9	1.8	-146.75	-29.3	58.2	114.2	110.6	3.56	32.099		
763.0	754.9	730.8	724.0	2.2	2.1	-146.10	-37.2	69.8	141.3	137.3	4.00	35.335		
800.0	790.3	761.7	753.6	2.4	2.2	-145.99	-42.1	77.0	158.3	154.1	4.23	37.390		
900.0	886.0	844.0	831.8	3.0	2.7	-145.33	-56.4	98.1	206.3	201.4	4.91	42.033		
1,000.0	981.7	931.0	914.1	3.6	3.3	-144.67	-72.4	121.6	255.5	249.9	5.61	45.573		
1,100.0	1,077.3	1,018.0	996.4	4.2	3.9	-144.22	-88.3	145.1	304.7	298.4	6.32	48.182		
1,200.0	1,173.0	1,105.1	1,078.7	4.8	4.5	-143.89	-104.2	168.5	353.9	346.8	7.07	50.066		
1,300.0	1,268.7	1,192.1	1,161.0	5.4	5.0	-143.65	-120.2	192.0	403.1	395.3	7.82	51.521		
1,400.0	1,364.4	1,279.2	1,243.3	6.0	5.6	-143.46	-136.1	215.5	452.3	443.7	8.59	52.670		
1,500.0	1,460.1	1,366.2	1,325.6	6.6	6.2	-143.30	-152.0	238.9	501.5	492.2	9.36	53.580		
1,600.0	1,555.8	1,453.3	1,407.9	7.2	6.8	-143.18	-168.0	262.4	550.8	540.6	10.14	54.318		
1,700.0	1,651.5	1,540.3	1,490.2	7.8	7.4	-143.07	-183.9	285.9	600.0	589.1	10.92	54.927		
1,800.0	1,747.1	1,627.3	1,572.4	8.5	8.0	-142.98	-199.9	309.3	649.2	637.5	11.71	55.437		
1,900.0	1,842.8	1,714.4	1,654.7	9.1	8.6	-142.90	-215.8	332.8	698.4	685.9	12.50	55.868		
2,000.0	1,938.5	1,801.4	1,737.0	9.7	9.2	-142.84	-231.7	356.3	747.7	734.4	13.30	56.237		
2,100.0	2,034.2	1,888.5	1,819.3	10.3	9.8	-142.78	-247.7	379.7	796.9	782.8	14.09	56.555		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	
NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 22C-15 596 - NPR 22C-15 596 Wellbore #1 - NPR													0.0 ft	
Survey Program: 120-MWD													Offset Well Error:	
Reference		Offset		Semi Major Axis		Highside Toolface (')	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-23.38	41.3	-17.9	45.0					
100.0	100.0	100.0	100.0	0.1	0.1	-23.38	41.3	-17.9	45.0	44.8	0.22	200.193 CC		
200.0	200.0	199.7	199.7	0.3	0.3	-23.72	41.4	-18.2	45.3	44.6	0.65	70.054 ES		
300.0	300.0	298.5	298.5	0.5	0.5	102.23	42.5	-20.2	47.6	46.5	1.08	44.005		
400.0	399.6	395.0	394.7	0.8	0.8	105.68	46.5	-26.0	55.5	53.9	1.57	35.400		
500.0	498.8	489.8	488.4	1.1	1.1	108.53	54.9	-37.2	71.3	69.1	2.16	32.997 SF		
600.0	597.1	582.7	579.0	1.4	1.4	109.70	66.9	-54.1	94.5	91.6	2.85	33.084		
700.0	694.3	675.8	668.5	1.9	1.9	110.43	81.3	-75.4	123.0	119.4	3.66	33.569		
763.0	754.9	732.4	722.3	2.2	2.3	110.89	91.0	-89.9	143.4	139.1	4.24	33.843		
800.0	790.3	765.2	753.2	2.4	2.5	111.34	97.1	-99.0	156.2	151.6	4.58	34.126		
900.0	886.0	859.2	841.4	3.0	3.1	111.96	114.7	-126.2	191.2	185.7	5.56	34.384		
1,000.0	981.7	961.2	937.5	3.6	3.7	112.34	131.8	-155.7	224.4	217.9	6.56	34.209		
1,100.0	1,077.3	1,055.8	1,027.1	4.2	4.3	112.66	146.0	-182.7	255.8	248.3	7.54	33.928		
1,200.0	1,173.0	1,144.0	1,109.8	4.8	4.9	112.63	161.3	-209.3	289.7	281.1	8.56	33.842		
1,300.0	1,268.7	1,215.9	1,176.0	5.4	5.4	112.37	176.6	-232.5	327.6	318.1	9.54	34.335		
1,400.0	1,364.4	1,298.6	1,251.2	6.0	6.1	111.98	197.0	-260.4	369.1	358.5	10.60	34.833		
1,500.0	1,460.1	1,384.0	1,328.1	6.6	6.9	111.51	219.1	-290.2	412.1	400.4	11.68	35.279		
1,600.0	1,555.8	1,471.9	1,406.7	7.2	7.7	110.98	242.5	-321.9	455.9	443.2	12.79	35.645		
1,700.0	1,651.5	1,568.8	1,493.0	7.8	8.6	110.33	267.6	-358.0	499.6	485.6	13.96	35.797		
1,800.0	1,747.1	1,680.2	1,592.9	8.5	9.6	109.59	293.2	-400.1	540.7	525.5	15.20	35.581		
1,900.0	1,842.8	1,773.7	1,677.3	9.1	10.4	108.97	312.1	-435.8	579.2	562.9	16.35	35.421		
2,000.0	1,938.5	1,853.3	1,748.7	9.7	11.1	108.47	329.0	-466.7	619.0	601.6	17.43	35.506		
2,100.0	2,034.2	1,925.6	1,813.3	10.3	11.7	108.16	346.2	-494.2	661.0	642.5	18.47	35.797		
2,200.0	2,129.9	1,994.0	1,873.9	10.9	12.4	107.98	364.9	-519.7	706.0	686.6	19.46	36.278		
2,300.0	2,225.6	2,066.4	1,937.5	11.5	13.1	107.81	386.5	-546.9	753.4	732.9	20.49	36.770		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 120-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.37	34.4	-14.9	37.5					
100.0	100.0	100.0	100.0	0.1	0.1	-23.37	34.4	-14.9	37.5	37.3	0.22	166.811	CC, ES	
200.0	200.0	199.0	199.0	0.3	0.3	-24.02	35.2	-15.7	38.6	37.9	0.65	59.389		
300.0	300.0	298.1	298.0	0.5	0.5	100.63	37.6	-19.4	42.8	41.7	1.09	39.172		
400.0	399.6	396.9	396.4	0.8	0.8	101.90	40.1	-27.5	49.9	48.3	1.57	31.783		
500.0	498.8	495.9	494.3	1.1	1.1	101.91	41.6	-41.5	59.5	57.3	2.15	27.658		
600.0	597.1	592.8	589.4	1.4	1.5	102.16	43.5	-60.1	72.4	69.5	2.86	25.307		
700.0	694.3	688.4	682.6	1.9	1.9	104.01	47.9	-81.4	90.1	86.4	3.70	24.321		
763.0	754.9	749.0	741.3	2.2	2.2	106.02	51.7	-95.5	103.2	98.9	4.29	24.062		
800.0	790.3	784.8	776.1	2.4	2.3	107.51	54.2	-103.9	111.4	106.8	4.64	24.022		
900.0	886.0	883.1	871.5	3.0	2.8	110.71	60.6	-126.5	133.4	127.8	5.57	23.961		
1,000.0	981.7	980.5	966.2	3.6	3.2	113.19	66.5	-148.4	155.1	148.6	6.49	23.911	SF	
1,100.0	1,077.3	1,074.0	1,057.0	4.2	3.6	114.96	73.2	-169.6	178.1	170.7	7.43	23.961		
1,200.0	1,173.0	1,163.9	1,143.6	4.8	4.1	115.75	82.2	-192.0	204.3	195.9	8.42	24.275		
1,300.0	1,268.7	1,255.0	1,230.6	5.4	4.7	115.90	93.4	-216.8	233.0	223.5	9.45	24.665		
1,400.0	1,364.4	1,343.3	1,314.2	6.0	5.2	115.81	106.4	-241.8	264.1	253.6	10.48	25.203		
1,500.0	1,460.1	1,434.1	1,399.8	6.6	5.8	115.65	121.4	-268.1	297.1	285.6	11.54	25.755		
1,600.0	1,555.8	1,532.7	1,492.4	7.2	6.5	115.25	137.7	-298.1	330.2	317.6	12.64	26.121		
1,700.0	1,651.5	1,644.0	1,597.1	7.8	7.2	114.63	152.2	-332.9	360.3	346.5	13.81	26.086		
1,800.0	1,747.1	1,753.7	1,700.8	8.5	7.9	114.09	162.1	-367.0	386.4	371.5	14.97	25.811		
1,900.0	1,842.8	1,862.6	1,804.4	9.1	8.5	113.64	168.6	-400.3	409.5	393.3	16.14	25.367		
2,000.0	1,938.5	1,957.5	1,894.5	9.7	9.1	113.20	172.5	-429.6	430.9	413.7	17.27	24.957		
2,100.0	2,034.2	2,041.0	1,973.1	10.3	9.7	112.64	177.5	-457.2	454.6	436.3	18.36	24.763		
2,200.0	2,129.9	2,124.6	2,051.5	10.9	10.3	112.10	185.2	-485.6	481.6	462.1	19.46	24.744		
2,300.0	2,225.6	2,213.4	2,134.4	11.5	10.9	111.64	195.0	-515.4	510.3	489.7	20.59	24.784		
2,400.0	2,321.3	2,301.0	2,216.1	12.1	11.5	111.21	205.8	-545.3	540.3	518.6	21.71	24.882		
2,500.0	2,417.0	2,389.4	2,298.1	12.7	12.2	110.78	217.9	-576.0	571.8	549.0	22.84	25.034		
2,600.0	2,512.6	2,482.9	2,385.1	13.4	12.9	110.46	231.4	-607.7	603.9	579.9	23.99	25.176		
2,700.0	2,608.3	2,606.1	2,500.3	14.0	13.7	110.17	247.0	-648.2	634.1	608.8	25.27	25.096		
2,800.0	2,704.0	2,717.4	2,605.2	14.6	14.5	109.92	257.1	-684.2	660.7	634.2	26.48	24.950		
2,900.0	2,799.7	2,823.7	2,705.8	15.2	15.1	109.75	265.1	-717.7	685.7	658.0	27.66	24.793		
3,000.0	2,895.4	2,930.7	2,807.6	15.8	15.8	109.72	272.0	-749.6	709.2	680.4	28.82	24.611		
3,100.0	2,991.1	3,031.8	2,904.4	16.4	16.4	109.79	277.8	-778.5	731.7	701.8	29.94	24.441		
3,200.0	3,086.8	3,127.9	2,995.8	17.0	16.9	109.72	282.7	-807.6	754.2	723.1	31.06	24.280		
3,300.0	3,182.4	3,229.8	3,092.6	17.7	17.6	109.60	287.9	-838.9	776.6	744.4	32.22	24.103		
3,400.0	3,278.1	3,331.4	3,189.6	18.3	18.2	109.59	292.6	-868.7	798.3	765.0	33.36	23.934		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 120-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.40	27.5	-11.9	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-23.40	27.5	-11.9	30.0	29.8	0.22	133.478 CC, ES		
200.0	200.0	199.7	199.7	0.3	0.3	-24.02	27.8	-12.4	30.4	29.8	0.65	46.962		
300.0	300.0	299.2	299.2	0.5	0.5	102.72	28.9	-14.3	32.7	31.7	1.08	30.230		
400.0	399.6	398.9	398.8	0.8	0.8	109.14	30.1	-18.4	37.3	35.8	1.55	24.085		
500.0	498.8	498.1	497.6	1.1	1.0	114.28	30.6	-27.0	44.7	42.5	2.10	21.249		
600.0	597.1	596.2	594.6	1.4	1.3	116.41	32.0	-41.4	56.2	53.4	2.77	20.304		
700.0	694.3	694.3	690.6	1.9	1.7	116.84	34.2	-61.4	71.7	68.1	3.57	20.065		
763.0	754.9	755.7	750.3	2.2	2.0	117.17	35.9	-75.9	83.2	79.1	4.15	20.065		
800.0	790.3	792.4	785.7	2.4	2.1	117.51	37.0	-85.0	90.4	85.9	4.50	20.105		
900.0	886.0	892.2	882.2	3.0	2.6	117.76	38.6	-110.5	108.5	103.1	5.46	19.873		
1,000.0	981.7	990.7	977.4	3.6	3.1	117.77	39.3	-136.0	125.8	119.4	6.45	19.509		
1,100.0	1,077.3	1,087.8	1,070.7	4.2	3.6	117.08	40.4	-162.9	143.8	136.3	7.50	19.159		
1,200.0	1,173.0	1,184.7	1,163.2	4.8	4.2	115.85	42.2	-191.6	162.7	154.0	8.63	18.854		
1,300.0	1,268.7	1,279.3	1,253.0	5.4	4.8	114.41	44.7	-221.2	182.6	172.9	9.78	18.675		
1,400.0	1,364.4	1,371.7	1,340.1	6.0	5.4	112.85	49.4	-251.8	205.4	194.4	10.95	18.760		
1,500.0	1,460.1	1,467.0	1,429.4	6.6	6.1	111.33	55.6	-284.6	229.9	217.7	12.14	18.934		
1,600.0	1,555.8	1,568.7	1,524.7	7.2	6.8	109.95	61.7	-319.6	254.0	240.6	13.35	19.025		
1,700.0	1,651.5	1,675.5	1,625.2	7.8	7.4	108.83	64.9	-355.5	275.2	260.6	14.57	18.882		
1,800.0	1,747.1	1,776.5	1,720.3	8.5	8.1	107.79	65.2	-389.4	293.9	278.1	15.80	18.609		
1,900.0	1,842.8	1,870.8	1,809.2	9.1	8.7	106.97	65.9	-421.0	313.1	296.1	16.97	18.446		
2,000.0	1,938.5	1,963.2	1,896.2	9.7	9.4	106.35	68.1	-451.8	333.8	315.7	18.14	18.407		
2,100.0	2,034.2	2,056.8	1,983.8	10.3	10.0	105.54	71.2	-484.8	356.1	336.7	19.35	18.406		
2,200.0	2,129.9	2,151.9	2,072.2	10.9	10.8	104.59	74.6	-519.8	379.1	358.5	20.60	18.404		
2,300.0	2,225.6	2,246.9	2,159.6	11.5	11.5	103.42	77.6	-556.8	402.8	380.9	21.89	18.402 SF		
2,400.0	2,321.3	2,342.0	2,246.0	12.1	12.4	102.03	80.3	-596.2	427.1	403.9	23.20	18.414		
2,500.0	2,417.0	2,441.3	2,336.1	12.7	13.2	100.62	82.6	-638.1	451.5	426.9	24.52	18.413		
2,600.0	2,512.6	2,542.9	2,428.3	13.4	14.1	99.32	84.1	-680.7	475.3	449.5	25.83	18.404		
2,700.0	2,608.3	2,638.7	2,515.6	14.0	14.8	98.29	85.0	-720.0	498.4	471.4	27.05	18.425		
2,800.0	2,704.0	2,732.2	2,601.4	14.6	15.5	97.59	87.8	-757.1	522.8	494.5	28.24	18.512		
2,900.0	2,799.7	2,835.9	2,697.2	15.2	16.3	97.07	91.1	-796.7	546.7	517.2	29.47	18.550		
3,000.0	2,895.4	2,930.6	2,785.3	15.8	17.0	96.78	93.9	-831.3	569.8	539.1	30.64	18.598		
3,100.0	2,991.1	3,022.9	2,871.7	16.4	17.6	96.75	98.7	-863.5	594.0	562.3	31.78	18.693		
3,200.0	3,086.8	3,125.4	2,967.9	17.0	18.3	96.82	104.5	-898.3	618.3	585.3	32.97	18.753		
3,300.0	3,182.4	3,231.2	3,067.7	17.7	19.0	96.95	109.5	-933.2	641.2	607.0	34.17	18.762		
3,400.0	3,278.1	3,334.7	3,165.7	18.3	19.6	97.12	113.5	-966.3	663.0	627.6	35.37	18.745		
3,500.0	3,373.8	3,426.4	3,252.7	18.9	20.2	97.30	117.3	-995.1	684.7	648.2	36.49	18.764		
3,600.0	3,469.5	3,521.8	3,343.5	19.5	20.8	97.65	122.8	-1,023.7	707.2	669.6	37.61	18.803		
3,700.0	3,565.2	3,623.8	3,440.9	20.1	21.4	98.10	128.9	-1,053.1	729.5	690.7	38.75	18.825		
3,800.0	3,660.9	3,726.5	3,539.6	20.7	21.9	98.62	134.9	-1,081.3	751.1	711.3	39.88	18.834		
3,900.0	3,756.6	3,831.4	3,640.6	21.3	22.5	99.21	140.8	-1,108.7	772.0	731.0	41.01	18.824		
4,000.0	3,852.3	3,938.4	3,744.0	22.0	23.0	99.82	145.9	-1,135.7	791.9	749.8	42.14	18.790		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 120-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.38	20.7	-8.9	22.5					
100.0	100.0	100.0	100.0	0.1	0.1	-23.38	20.7	-8.9	22.5	22.3	0.22	100.096 CC, ES		
200.0	200.0	199.5	199.5	0.3	0.3	-26.50	20.9	-10.4	23.3	22.7	0.65	35.710		
300.0	300.0	298.7	298.5	0.5	0.5	92.98	21.7	-16.4	27.2	26.1	1.09	24.964		
400.0	399.6	398.1	397.3	0.8	0.8	91.29	22.3	-26.9	33.7	32.1	1.59	21.258		
500.0	498.8	497.5	495.6	1.1	1.1	90.77	21.1	-41.9	41.3	39.2	2.18	18.962		
600.0	597.1	596.5	592.8	1.4	1.5	91.98	18.8	-60.4	50.0	47.1	2.91	17.187		
700.0	694.3	695.0	689.0	1.9	2.0	95.41	16.4	-81.5	60.5	56.7	3.79	15.943		
763.0	754.9	756.8	749.0	2.2	2.3	98.38	15.2	-95.9	68.3	63.9	4.42	15.456		
800.0	790.3	793.5	784.6	2.4	2.4	100.20	14.5	-104.8	73.3	68.5	4.81	15.255		
900.0	886.0	893.4	881.5	3.0	2.9	103.69	11.8	-129.3	86.3	80.5	5.84	14.788		
1,000.0	981.7	993.0	978.1	3.6	3.4	106.46	8.2	-153.0	98.5	91.6	6.85	14.385		
1,100.0	1,077.3	1,091.0	1,073.0	4.2	3.9	108.23	4.9	-177.1	111.2	103.4	7.89	14.101		
1,200.0	1,173.0	1,188.1	1,166.4	4.8	4.4	108.47	2.3	-203.7	125.5	116.5	9.00	13.940		
1,300.0	1,268.7	1,283.8	1,257.6	5.4	5.0	107.62	0.8	-232.6	141.5	131.3	10.16	13.924		
1,400.0	1,364.4	1,379.9	1,348.5	6.0	5.6	106.32	0.9	-263.8	159.8	148.5	11.36	14.069		
1,500.0	1,460.1	1,478.6	1,441.4	6.6	6.3	104.73	0.8	-297.4	178.5	165.9	12.61	14.164		
1,600.0	1,555.8	1,579.3	1,535.8	7.2	7.0	103.16	-0.2	-332.1	196.7	182.8	13.84	14.206		
1,700.0	1,651.5	1,681.8	1,632.3	7.8	7.6	101.97	-2.8	-366.5	213.2	198.2	15.05	14.165		
1,800.0	1,747.1	1,787.0	1,731.8	8.5	8.3	101.02	-7.6	-400.7	227.5	211.3	16.27	13.988		
1,900.0	1,842.8	1,886.2	1,825.5	9.1	8.9	100.17	-13.8	-432.3	240.1	222.6	17.48	13.736		
2,000.0	1,938.5	1,982.8	1,915.9	9.7	9.6	98.82	-20.3	-465.7	253.4	234.7	18.74	13.522		
2,100.0	2,034.2	2,074.9	2,001.2	10.3	10.3	97.16	-26.0	-500.2	268.6	248.6	20.00	13.430		
2,200.0	2,129.9	2,164.5	2,083.2	10.9	11.1	95.41	-30.0	-535.9	286.8	265.5	21.24	13.500		
2,300.0	2,225.6	2,254.7	2,165.0	11.5	11.8	93.65	-32.4	-573.8	308.0	285.5	22.49	13.693		
2,400.0	2,321.3	2,339.9	2,241.5	12.1	12.6	92.05	-33.0	-611.4	332.1	308.4	23.70	14.016		
2,500.0	2,417.0	2,436.6	2,327.9	12.7	13.5	90.46	-32.1	-654.9	358.3	333.4	24.93	14.374		
2,600.0	2,512.6	2,535.7	2,416.7	13.4	14.3	89.16	-31.1	-698.8	384.4	358.3	26.15	14.699		
2,700.0	2,608.3	2,635.3	2,506.6	14.0	15.1	88.12	-30.8	-741.8	409.5	382.1	27.38	14.959		
2,800.0	2,704.0	2,733.6	2,595.2	14.6	16.0	87.20	-30.6	-784.2	434.6	406.0	28.60	15.194		
2,900.0	2,799.7	2,834.8	2,686.8	15.2	16.9	86.38	-31.0	-827.3	458.8	429.0	29.83	15.382		
3,000.0	2,895.4	2,934.7	2,777.6	15.8	17.7	85.74	-31.7	-868.9	482.4	451.4	31.03	15.547		
3,100.0	2,991.1	3,036.1	2,870.3	16.4	18.5	85.25	-32.3	-910.2	505.4	473.1	32.24	15.673		
3,200.0	3,086.8	3,139.4	2,964.8	17.0	19.3	84.78	-33.9	-951.7	527.4	493.9	33.48	15.754		
3,300.0	3,182.4	3,241.6	3,058.7	17.7	20.1	84.37	-36.3	-992.1	548.4	513.7	34.70	15.806		
3,400.0	3,278.1	3,344.3	3,153.4	18.3	20.9	84.07	-38.8	-1,031.6	568.7	532.8	35.92	15.833		
3,500.0	3,373.8	3,450.3	3,251.9	18.9	21.7	83.91	-41.4	-1,070.8	587.9	550.7	37.16	15.821		
3,600.0	3,469.5	3,556.3	3,350.8	19.5	22.4	83.83	-44.8	-1,108.6	605.7	567.3	38.40	15.774		
3,700.0	3,565.2	3,661.5	3,449.3	20.1	23.2	83.77	-48.9	-1,145.4	622.6	582.9	39.64	15.706		
3,800.0	3,660.9	3,768.5	3,550.1	20.7	23.9	83.82	-53.5	-1,181.0	638.0	597.1	40.89	15.603		
3,900.0	3,756.6	3,871.4	3,647.5	21.3	24.6	83.95	-57.9	-1,214.0	652.6	610.5	42.11	15.498		
4,000.0	3,852.3	3,980.2	3,750.9	22.0	25.2	84.21	-62.5	-1,247.3	666.4	623.0	43.37	15.366		
4,100.0	3,947.9	4,096.4	3,862.3	22.6	25.9	84.61	-68.3	-1,280.2	678.0	633.4	44.66	15.180		
4,200.0	4,043.6	4,206.0	3,968.2	23.2	26.4	85.21	-73.8	-1,307.6	687.6	641.7	45.92	14.975		
4,300.0	4,139.3	4,313.9	4,073.2	23.8	26.9	86.01	-78.8	-1,331.6	695.8	648.7	47.15	14.757		
4,400.0	4,235.0	4,407.4	4,164.8	24.4	27.3	86.87	-81.8	-1,350.6	704.1	655.8	48.29	14.579		
4,500.0	4,330.7	4,498.7	4,254.6	25.0	27.7	87.95	-82.1	-1,367.2	713.6	664.1	49.42	14.440		
4,600.0	4,426.4	4,598.7	4,353.1	25.6	28.0	89.22	-81.3	-1,384.3	723.7	673.1	50.57	14.310		
4,700.0	4,522.1	4,704.9	4,457.7	26.3	28.4	90.53	-80.8	-1,402.2	733.8	682.0	51.74	14.183		
4,800.0	4,617.7	4,823.0	4,574.7	26.9	28.7	92.14	-81.1	-1,418.6	741.9	689.0	52.93	14.017		
4,900.0	4,713.4	4,930.2	4,681.1	27.5	29.0	93.68	-82.5	-1,431.1	748.6	694.6	54.03	13.854		
5,000.0	4,809.1	5,038.1	4,788.4	28.1	29.3	95.26	-84.5	-1,442.5	754.7	699.6	55.10	13.697		

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

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 120-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.0	4,904.8	5,146.8	4,896.7	28.7	29.5	96.99	-86.8	-1,451.2	759.9	703.8	56.12	13.542	
5,200.0	5,000.5	5,248.9	4,998.7	29.3	29.7	98.72	-89.2	-1,457.5	764.7	707.7	57.05	13.405	
5,300.0	5,096.2	5,341.9	5,091.5	30.0	29.8	100.37	-90.8	-1,461.9	770.1	712.2	57.90	13.302	
5,400.0	5,191.9	5,430.7	5,180.2	30.6	29.9	102.06	-91.0	-1,464.8	777.1	718.5	58.67	13.246	
5,500.0	5,287.5	5,529.9	5,279.4	31.2	30.1	103.92	-90.9	-1,467.9	785.2	725.8	59.41	13.217	
5,600.0	5,383.2	5,629.1	5,378.5	31.8	30.2	105.69	-91.2	-1,471.7	793.9	733.8	60.12	13.207 SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 120-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.35	13.8	-5.9	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-23.35	13.8	-5.9	15.0	14.8	0.22	66.714		
106.3	106.3	106.3	106.3	0.1	0.1	-23.35	13.8	-5.9	15.0	14.8	0.25	60.974 CC		
200.0	200.0	200.0	199.9	0.3	0.3	-26.94	13.5	-6.8	15.1	14.5	0.65	23.422 ES		
300.0	300.0	299.8	299.8	0.5	0.5	93.34	12.3	-10.5	16.1	15.1	1.07	15.034		
400.0	399.6	399.7	399.4	0.8	0.8	95.76	10.0	-17.3	18.1	16.6	1.55	11.741		
500.0	498.8	500.0	499.0	1.1	1.0	101.84	5.2	-27.1	20.1	18.0	2.12	9.505		
600.0	597.1	600.0	598.1	1.4	1.4	112.34	-1.3	-39.2	22.9	20.1	2.79	8.207		
700.0	694.3	700.0	696.8	1.9	1.7	125.90	-9.3	-53.0	27.8	24.3	3.51	7.910 SF		
763.0	754.9	762.9	758.7	2.2	2.0	134.24	-15.0	-62.5	32.5	28.6	3.94	8.246		
800.0	790.3	799.6	794.8	2.4	2.1	138.51	-18.4	-68.2	35.9	31.7	4.15	8.637		
900.0	886.0	898.5	892.2	3.0	2.4	147.06	-27.2	-83.2	46.1	41.4	4.66	9.886		
1,000.0	981.7	997.4	989.7	3.6	2.7	152.20	-35.0	-97.9	58.0	52.9	5.16	11.236		
1,100.0	1,077.3	1,097.3	1,087.9	4.2	3.1	153.89	-42.1	-114.7	69.9	64.2	5.76	12.151		
1,200.0	1,173.0	1,197.9	1,186.4	4.8	3.6	153.84	-49.5	-133.8	80.5	74.1	6.42	12.531		
1,300.0	1,268.7	1,298.6	1,284.6	5.4	4.0	153.54	-58.1	-154.0	89.6	82.5	7.13	12.571		
1,400.0	1,364.4	1,399.4	1,382.8	6.0	4.5	152.95	-67.3	-175.3	97.5	89.7	7.87	12.389		
1,500.0	1,460.1	1,500.3	1,480.7	6.6	5.0	152.43	-77.7	-197.2	104.2	95.6	8.63	12.073		
1,600.0	1,555.8	1,597.8	1,575.4	7.2	5.4	152.23	-87.7	-217.8	111.2	101.8	9.35	11.892		
1,700.0	1,651.5	1,695.0	1,670.5	7.8	5.8	152.67	-96.3	-236.2	120.5	110.6	9.99	12.072		
1,800.0	1,747.1	1,793.4	1,767.1	8.5	6.2	153.41	-104.1	-253.5	131.3	120.7	10.58	12.408		
1,900.0	1,842.8	1,893.7	1,865.6	9.1	6.6	154.14	-112.2	-270.9	142.2	131.0	11.19	12.708		
2,000.0	1,938.5	1,996.1	1,965.8	9.7	7.0	154.61	-121.4	-289.7	151.7	139.9	11.84	12.817		
2,100.0	2,034.2	2,099.4	2,066.4	10.3	7.5	154.76	-132.2	-310.5	159.0	146.5	12.54	12.682		
2,200.0	2,129.9	2,199.6	2,163.5	10.9	8.0	154.28	-142.9	-332.7	165.1	151.8	13.32	12.393		
2,300.0	2,225.6	2,299.4	2,259.7	11.5	8.5	152.81	-151.9	-357.4	171.2	157.0	14.28	11.989		
2,400.0	2,321.3	2,398.4	2,354.9	12.1	9.1	150.91	-160.2	-383.4	177.5	162.1	15.36	11.557		
2,500.0	2,417.0	2,496.3	2,449.2	12.7	9.6	149.10	-167.6	-408.9	184.7	168.2	16.45	11.228		
2,600.0	2,512.6	2,595.6	2,544.7	13.4	10.1	147.31	-174.4	-434.9	192.6	175.0	17.58	10.957		
2,700.0	2,608.3	2,698.1	2,643.6	14.0	10.6	146.08	-182.8	-460.5	200.0	181.3	18.64	10.728		
2,800.0	2,704.0	2,798.2	2,740.5	14.6	11.1	145.67	-192.8	-483.6	206.5	187.0	19.52	10.581		
2,900.0	2,799.7	2,897.6	2,836.9	15.2	11.5	145.43	-202.6	-505.8	213.4	193.0	20.36	10.479		
3,000.0	2,895.4	3,000.7	2,936.8	15.8	12.0	145.35	-214.0	-528.8	219.2	198.0	21.20	10.338		
3,100.0	2,991.1	3,100.4	3,033.2	16.4	12.5	145.28	-225.6	-551.1	224.3	202.3	22.03	10.185		
3,200.0	3,086.8	3,199.6	3,129.3	17.0	13.0	145.20	-236.9	-573.4	229.9	207.0	22.85	10.057		
3,300.0	3,182.4	3,299.4	3,225.8	17.7	13.5	145.11	-248.1	-595.7	235.4	211.7	23.69	9.938		
3,400.0	3,278.1	3,397.8	3,321.0	18.3	14.0	144.85	-258.7	-618.4	241.2	216.6	24.57	9.818		
3,500.0	3,373.8	3,499.8	3,419.7	18.9	14.5	144.61	-269.3	-641.7	247.4	222.0	25.46	9.719		
3,600.0	3,469.5	3,538.0	3,456.7	19.5	14.7	144.64	-274.0	-650.1	260.0	234.0	26.02	9.990		
3,700.0	3,565.2	3,538.0	3,456.7	20.1	14.7	144.64	-274.0	-650.1	304.3	277.8	26.45	11.503		
3,800.0	3,660.9	3,538.0	3,456.7	20.7	14.7	144.64	-274.0	-650.1	370.9	344.0	26.88	13.798		
3,900.0	3,756.6	3,538.0	3,456.7	21.3	14.7	144.64	-274.0	-650.1	450.1	422.8	27.31	16.480		
4,000.0	3,852.3	3,538.0	3,456.7	22.0	14.7	144.64	-274.0	-650.1	536.3	508.5	27.74	19.332		
4,100.0	3,947.9	3,538.0	3,456.7	22.6	14.7	144.64	-274.0	-650.1	626.6	598.4	28.17	22.243		
4,200.0	4,043.6	3,538.0	3,456.7	23.2	14.7	144.64	-274.0	-650.1	719.4	690.8	28.60	25.156		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.35	13.8	-5.9	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-23.35	13.8	-5.9	15.0	14.8	0.22	66.724		
200.0	200.0	200.0	200.0	0.3	0.3	-23.35	13.8	-5.9	15.0	14.3	0.67	22.241 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	110.65	13.8	-5.9	15.7	14.6	1.12	14.096		
400.0	399.6	400.1	400.1	0.8	0.8	125.48	12.7	-8.3	18.6	17.0	1.59	11.710		
500.0	498.8	500.5	500.1	1.1	1.0	134.36	9.3	-15.5	23.1	20.9	2.12	10.874		
600.0	597.1	601.2	599.9	1.4	1.3	138.95	3.7	-27.4	28.5	25.7	2.71	10.491		
700.0	694.3	701.7	698.8	1.9	1.6	141.23	-3.9	-43.9	34.7	31.4	3.37	10.294 SF		
763.0	754.9	764.4	760.3	2.2	1.9	143.75	-9.1	-54.8	40.3	36.5	3.81	10.566		
800.0	790.3	801.2	796.4	2.4	2.0	145.44	-12.1	-61.2	44.1	40.1	4.04	10.921		
900.0	886.0	900.6	894.0	3.0	2.4	148.80	-20.2	-78.6	54.5	49.9	4.65	11.729		
1,000.0	981.7	1,000.0	991.5	3.6	2.8	151.08	-28.3	-96.0	65.1	59.8	5.26	12.373		
1,100.0	1,077.3	1,099.4	1,089.1	4.2	3.2	152.73	-36.4	-113.4	75.7	69.8	5.87	12.889		
1,200.0	1,173.0	1,198.9	1,186.6	4.8	3.7	153.97	-44.5	-130.7	86.3	79.9	6.49	13.308		
1,300.0	1,268.7	1,298.3	1,284.2	5.4	4.1	154.93	-52.6	-148.1	97.0	89.9	7.11	13.654		
1,400.0	1,364.4	1,397.7	1,381.7	6.0	4.5	155.71	-60.7	-165.5	107.7	100.0	7.73	13.941		
1,500.0	1,460.1	1,497.1	1,479.3	6.6	4.9	156.34	-68.8	-182.8	118.5	110.1	8.35	14.184		
1,600.0	1,555.8	1,596.5	1,576.8	7.2	5.4	156.87	-77.0	-200.2	129.2	120.2	8.98	14.392		
1,700.0	1,651.5	1,695.9	1,674.4	7.8	5.8	157.32	-85.1	-217.6	140.0	130.4	9.61	14.570		
1,800.0	1,747.1	1,795.3	1,771.9	8.5	6.2	157.70	-93.2	-235.0	150.7	140.5	10.24	14.726		
1,900.0	1,842.8	1,894.8	1,869.5	9.1	6.7	158.03	-101.3	-252.3	161.5	150.6	10.87	14.863		
2,000.0	1,938.5	1,994.2	1,967.0	9.7	7.1	158.32	-109.4	-269.7	172.3	160.8	11.50	14.983		
2,100.0	2,034.2	2,093.6	2,064.6	10.3	7.5	158.58	-117.5	-287.1	183.0	170.9	12.13	15.090		
2,200.0	2,129.9	2,193.0	2,162.1	10.9	8.0	158.81	-125.6	-304.4	193.8	181.1	12.76	15.186		
2,300.0	2,225.6	2,292.4	2,259.7	11.5	8.4	159.01	-133.8	-321.8	204.6	191.2	13.40	15.273		
2,400.0	2,321.3	2,391.8	2,357.2	12.1	8.8	159.20	-141.9	-339.2	215.4	201.4	14.03	15.351		
2,500.0	2,417.0	2,491.2	2,454.7	12.7	9.3	159.36	-150.0	-356.6	226.2	211.5	14.67	15.422		
2,600.0	2,512.6	2,590.7	2,552.3	13.4	9.7	159.51	-158.1	-373.9	237.0	221.7	15.30	15.486		
2,700.0	2,608.3	2,690.1	2,649.8	14.0	10.1	159.65	-166.2	-391.3	247.7	231.8	15.94	15.546		
2,800.0	2,704.0	2,789.5	2,747.4	14.6	10.6	159.78	-174.3	-408.7	258.5	242.0	16.57	15.600		
2,900.0	2,799.7	2,888.9	2,844.9	15.2	11.0	159.89	-182.4	-426.1	269.3	252.1	17.21	15.650		
3,000.0	2,895.4	2,988.3	2,942.5	15.8	11.4	160.00	-190.5	-443.4	280.1	262.3	17.84	15.697		
3,100.0	2,991.1	3,087.7	3,040.0	16.4	11.9	160.10	-198.7	-460.8	290.9	272.4	18.48	15.740		
3,200.0	3,086.8	3,187.2	3,137.6	17.0	12.3	160.19	-206.8	-478.2	301.7	282.6	19.12	15.780		
3,300.0	3,182.4	3,286.6	3,235.1	17.7	12.7	160.28	-214.9	-495.5	312.5	292.7	19.76	15.817		
3,400.0	3,278.1	3,386.0	3,332.7	18.3	13.2	160.36	-223.0	-512.9	323.3	302.9	20.39	15.852		
3,500.0	3,373.8	3,485.4	3,430.2	18.9	13.6	160.43	-231.1	-530.3	334.1	313.0	21.03	15.884		
3,600.0	3,469.5	3,584.8	3,527.8	19.5	14.0	160.50	-239.2	-547.7	344.9	323.2	21.67	15.915		
3,700.0	3,565.2	3,684.2	3,625.3	20.1	14.5	160.57	-247.3	-565.0	355.7	333.4	22.31	15.944		
3,800.0	3,660.9	3,783.6	3,722.9	20.7	14.9	160.63	-255.4	-582.4	366.5	343.5	22.95	15.971		
3,900.0	3,756.6	3,883.1	3,820.4	21.3	15.3	160.69	-263.6	-599.8	377.3	353.7	23.58	15.997		
4,000.0	3,852.3	3,982.5	3,918.0	22.0	15.8	160.74	-271.7	-617.1	388.0	363.8	24.22	16.021		
4,100.0	3,947.9	4,081.9	4,015.5	22.6	16.2	160.80	-279.8	-634.5	398.8	374.0	24.86	16.044		
4,200.0	4,043.6	4,181.3	4,113.1	23.2	16.6	160.85	-287.9	-651.9	409.6	384.1	25.50	16.065		
4,300.0	4,139.3	4,280.7	4,210.6	23.8	17.1	160.89	-296.0	-669.3	420.4	394.3	26.14	16.086		
4,400.0	4,235.0	4,380.1	4,308.2	24.4	17.5	160.94	-304.1	-686.6	431.2	404.5	26.78	16.105		
4,500.0	4,330.7	4,479.5	4,405.7	25.0	17.9	160.98	-312.2	-704.0	442.0	414.6	27.42	16.124		
4,600.0	4,426.4	4,579.0	4,503.3	25.6	18.4	161.02	-320.4	-721.4	452.8	424.8	28.05	16.142		
4,700.0	4,522.1	4,678.4	4,600.8	26.3	18.8	161.06	-328.5	-738.7	463.6	434.9	28.69	16.158		
4,800.0	4,617.7	4,777.8	4,698.4	26.9	19.2	161.10	-336.6	-756.1	474.4	445.1	29.33	16.175		
4,900.0	4,713.4	4,877.2	4,795.9	27.5	19.7	161.13	-344.7	-773.5	485.2	455.3	29.97	16.190		
5,000.0	4,809.1	4,976.6	4,893.5	28.1	20.1	161.17	-352.8	-790.9	496.0	465.4	30.61	16.205		

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

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	4,904.8	5,076.0	4,991.0	28.7	20.5	161.20	-360.9	-808.2	506.8	475.6	31.25	16.219		
5,200.0	5,000.5	5,175.4	5,088.6	29.3	21.0	161.23	-369.0	-825.6	517.6	485.7	31.89	16.232		
5,300.0	5,096.2	5,274.9	5,186.1	30.0	21.4	161.26	-377.1	-843.0	528.4	495.9	32.53	16.245		
5,400.0	5,191.9	5,374.3	5,283.7	30.6	21.9	161.29	-385.3	-860.3	539.2	506.1	33.17	16.258		
5,500.0	5,287.5	5,473.7	5,381.2	31.2	22.3	161.31	-393.4	-877.7	550.0	516.2	33.81	16.270		
5,600.0	5,383.2	5,573.1	5,478.8	31.8	22.7	161.34	-401.5	-895.1	560.8	526.4	34.45	16.281		
5,681.4	5,461.1	5,641.2	5,545.6	32.3	23.0	161.39	-406.8	-906.4	570.3	535.4	34.89	16.348		
5,700.0	5,478.9	5,655.8	5,560.0	32.4	23.0	161.43	-407.8	-908.6	572.7	537.7	34.98	16.373		
5,800.0	5,575.6	5,734.0	5,637.5	32.8	23.2	161.67	-412.4	-918.5	584.8	549.5	35.39	16.524		
5,900.0	5,673.5	5,812.1	5,715.2	33.1	23.4	161.91	-415.7	-925.5	595.6	560.0	35.69	16.691		
6,000.0	5,772.3	5,900.0	5,803.0	33.4	23.5	162.17	-417.8	-930.0	605.2	569.3	35.87	16.873		
6,100.0	5,871.7	5,969.4	5,872.3	33.6	23.6	162.39	-418.2	-930.9	613.2	577.3	35.92	17.073		
6,200.0	5,971.6	6,079.3	5,982.2	33.7	23.7	162.52	-418.6	-932.1	617.0	581.0	35.98	17.149		
6,244.4	6,016.0	6,128.1	6,031.0	33.8	23.8	37.84	-419.0	-933.2	616.5	559.1	57.46	10.730		
6,300.0	6,071.6	6,189.2	6,092.1	33.8	23.9	147.75	-419.8	-935.1	615.2	578.9	36.30	16.948		
6,400.0	6,171.6	6,299.1	6,201.9	33.9	24.1	147.60	-421.6	-940.2	612.6	575.8	36.83	16.634		
6,500.0	6,271.5	6,399.2	6,301.8	34.1	24.4	147.50	-423.6	-945.7	610.6	573.3	37.34	16.355		
6,581.3	6,352.7	6,480.5	6,382.9	34.2	24.5	147.47	-425.2	-950.2	610.2	572.4	37.74	16.167		
6,605.2	6,376.6	6,504.4	6,406.8	34.3	24.6	147.47	-425.7	-951.5	610.2	572.3	37.86	16.119		
6,700.0	6,471.2	6,599.2	6,501.4	34.5	24.8	147.49	-427.6	-956.8	610.5	572.3	38.25	15.963		
6,800.0	6,571.0	6,699.2	6,601.3	34.7	25.0	147.51	-429.6	-962.3	610.9	572.2	38.66	15.802		
6,900.0	6,670.8	6,799.2	6,701.1	34.9	25.3	147.53	-431.6	-967.8	611.2	572.2	39.07	15.644		
7,000.0	6,770.6	6,899.2	6,800.9	35.1	25.5	147.55	-433.7	-973.3	611.6	572.1	39.49	15.488		
7,100.0	6,870.4	6,999.2	6,900.7	35.3	25.7	147.58	-435.7	-978.9	612.0	572.0	39.90	15.335		
7,200.0	6,970.2	7,099.2	7,000.6	35.5	25.9	147.60	-437.7	-984.4	612.3	572.0	40.32	15.185		
7,300.0	7,070.0	7,199.2	7,100.4	35.7	26.2	147.62	-439.7	-989.9	612.7	571.9	40.74	15.038		
7,400.0	7,169.8	7,299.2	7,200.2	35.9	26.4	147.64	-441.7	-995.4	613.0	571.9	41.16	14.893		
7,500.0	7,269.6	7,399.2	7,300.0	36.1	26.6	147.66	-443.7	-1,000.9	613.4	571.8	41.58	14.751		
7,600.0	7,369.4	7,499.2	7,399.9	36.3	26.8	147.68	-445.7	-1,006.5	613.7	571.7	42.00	14.612		
7,700.0	7,469.2	7,599.2	7,499.7	36.5	27.1	147.70	-447.7	-1,012.0	614.1	571.6	42.42	14.475		
7,800.0	7,569.0	7,699.2	7,599.5	36.7	27.3	147.72	-449.7	-1,017.5	614.4	571.6	42.85	14.340		
7,900.0	7,668.8	7,799.2	7,699.3	36.9	27.5	147.74	-451.7	-1,023.0	614.8	571.5	43.27	14.208		
8,000.0	7,768.6	7,899.2	7,799.2	37.1	27.7	147.76	-453.8	-1,028.6	615.1	571.4	43.69	14.078		
8,100.0	7,868.4	7,999.2	7,899.0	37.3	28.0	147.78	-455.8	-1,034.1	615.5	571.4	44.12	13.950		
8,200.0	7,968.2	8,099.2	7,998.8	37.5	28.2	147.81	-457.8	-1,039.6	615.8	571.3	44.55	13.825		
8,300.0	8,068.0	8,199.2	8,098.7	37.7	28.4	147.83	-459.8	-1,045.1	616.2	571.2	44.97	13.701		
8,400.0	8,167.8	8,299.2	8,198.5	38.0	28.7	147.85	-461.8	-1,050.6	616.5	571.1	45.40	13.580		
8,500.0	8,267.6	8,399.2	8,298.3	38.2	28.9	147.87	-463.8	-1,056.2	616.9	571.1	45.83	13.461		
8,600.0	8,367.4	8,499.2	8,398.1	38.4	29.1	147.89	-465.8	-1,061.7	617.3	571.0	46.26	13.344		
8,700.0	8,467.2	8,599.2	8,498.0	38.6	29.4	147.91	-467.8	-1,067.2	617.6	570.9	46.69	13.229		
8,800.0	8,567.0	8,699.2	8,597.8	38.8	29.6	147.93	-469.8	-1,072.7	618.0	570.8	47.12	13.116		
8,900.0	8,666.8	8,799.2	8,697.6	39.0	29.8	147.95	-471.8	-1,078.3	618.3	570.8	47.55	13.004		
9,000.0	8,766.6	8,899.2	8,797.4	39.2	30.0	147.97	-473.8	-1,083.8	618.7	570.7	47.98	12.895		
9,100.0	8,866.4	8,999.2	8,897.3	39.4	30.3	147.99	-475.9	-1,089.3	619.0	570.6	48.41	12.787		
9,200.0	8,966.2	9,099.2	8,997.1	39.7	30.5	148.01	-477.9	-1,094.8	619.4	570.5	48.84	12.681		
9,303.0	9,069.0	9,202.1	9,099.9	39.9	30.8	148.03	-479.9	-1,100.5	619.7	570.5	49.29	12.574		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.25	6.9	-3.0	7.5	7.5	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-23.25	6.9	-3.0	7.5	7.3	0.22	33.337		
200.0	200.0	200.0	200.0	0.3	0.3	-23.25	6.9	-3.0	7.5	6.8	0.67	11.112 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	119.11	6.9	-3.0	8.4	7.3	1.12	7.496		
400.0	399.6	399.6	399.6	0.8	0.8	148.26	6.9	-3.0	14.0	12.4	1.66	8.451		
500.0	498.8	500.0	499.9	1.1	1.0	161.42	5.5	-5.2	23.6	21.4	2.19	10.773		
600.0	597.1	600.8	600.5	1.4	1.2	166.35	1.4	-12.0	33.8	31.1	2.71	12.479		
700.0	694.3	702.3	701.0	1.9	1.5	168.60	-5.6	-23.3	44.1	40.9	3.24	13.601		
763.0	754.9	766.5	764.3	2.2	1.7	169.36	-11.4	-32.9	50.6	47.0	3.59	14.079		
800.0	790.3	804.3	801.3	2.4	1.8	169.61	-15.4	-39.3	54.1	50.3	3.76	14.390		
900.0	886.0	906.2	900.4	3.0	2.2	169.40	-27.8	-59.7	60.1	55.8	4.25	14.148		
1,000.0	981.7	1,006.1	997.2	3.6	2.7	168.95	-40.7	-80.7	64.8	60.0	4.78	13.564		
1,100.0	1,077.3	1,106.0	1,094.0	4.2	3.2	168.56	-53.6	-101.8	69.6	64.2	5.33	13.039		
1,200.0	1,173.0	1,205.9	1,190.8	4.8	3.7	168.22	-66.4	-122.8	74.3	68.4	5.91	12.573		
1,300.0	1,268.7	1,305.8	1,287.6	5.4	4.2	167.92	-79.3	-143.9	79.0	72.5	6.49	12.170		
1,400.0	1,364.4	1,405.7	1,384.4	6.0	4.7	167.65	-92.2	-164.9	83.8	76.7	7.09	11.813		
1,500.0	1,460.1	1,505.6	1,481.1	6.6	5.2	167.41	-105.0	-186.0	88.5	80.8	7.70	11.499		
1,600.0	1,555.8	1,605.5	1,577.9	7.2	5.8	167.20	-117.9	-207.0	93.3	84.9	8.31	11.221		
1,700.0	1,651.5	1,705.3	1,674.7	7.8	6.3	167.01	-130.8	-228.1	98.0	89.1	8.93	10.976		
1,800.0	1,747.1	1,805.2	1,771.5	8.5	6.8	166.83	-143.7	-249.1	102.7	93.2	9.55	10.757		
1,900.0	1,842.8	1,905.1	1,868.3	9.1	7.3	166.67	-156.5	-270.2	107.5	97.3	10.18	10.561		
2,000.0	1,938.5	2,005.0	1,965.1	9.7	7.9	166.52	-169.4	-291.2	112.2	101.4	10.81	10.384		
2,100.0	2,034.2	2,104.9	2,061.9	10.3	8.4	166.39	-182.3	-312.3	117.0	105.5	11.44	10.225		
2,200.0	2,129.9	2,204.8	2,158.7	10.9	8.9	166.27	-195.2	-333.3	121.7	109.7	12.08	10.080		
2,300.0	2,225.6	2,304.7	2,255.5	11.5	9.4	166.15	-208.0	-354.4	126.5	113.8	12.71	9.948		
2,400.0	2,321.3	2,404.6	2,352.3	12.1	10.0	166.05	-220.9	-375.4	131.2	117.9	13.35	9.828		
2,500.0	2,417.0	2,504.4	2,449.1	12.7	10.5	165.95	-233.8	-396.5	136.0	122.0	13.99	9.717		
2,600.0	2,512.6	2,604.3	2,545.8	13.4	11.0	165.85	-246.7	-417.5	140.7	126.1	14.63	9.616		
2,700.0	2,608.3	2,704.2	2,642.6	14.0	11.6	165.77	-259.5	-438.6	145.5	130.2	15.28	9.522		
2,800.0	2,704.0	2,804.1	2,739.4	14.6	12.1	165.69	-272.4	-459.6	150.2	134.3	15.92	9.435		
2,900.0	2,799.7	2,904.0	2,836.2	15.2	12.6	165.61	-285.3	-480.7	155.0	138.4	16.57	9.354		
3,000.0	2,895.4	3,003.9	2,933.0	15.8	13.2	165.54	-298.2	-501.7	159.7	142.5	17.21	9.279		
3,100.0	2,991.1	3,103.8	3,029.8	16.4	13.7	165.47	-311.0	-522.8	164.5	146.6	17.86	9.209		
3,200.0	3,086.8	3,203.6	3,126.6	17.0	14.2	165.41	-323.9	-543.8	169.2	150.7	18.51	9.143		
3,300.0	3,182.4	3,303.5	3,223.4	17.7	14.7	165.35	-336.8	-564.9	174.0	154.8	19.16	9.082		
3,400.0	3,278.1	3,403.4	3,320.2	18.3	15.3	165.29	-349.7	-585.9	178.7	158.9	19.81	9.024		
3,500.0	3,373.8	3,503.3	3,417.0	18.9	15.8	165.24	-362.5	-607.0	183.5	163.0	20.46	8.970		
3,600.0	3,469.5	3,603.2	3,513.8	19.5	16.3	165.19	-375.4	-628.0	188.2	167.1	21.11	8.918		
3,700.0	3,565.2	3,703.1	3,610.5	20.1	16.9	165.14	-388.3	-649.1	193.0	171.2	21.76	8.870		
3,800.0	3,660.9	3,803.0	3,707.3	20.7	17.4	165.09	-401.2	-670.1	197.7	175.3	22.41	8.824		
3,900.0	3,756.6	3,902.9	3,804.1	21.3	17.9	165.05	-414.0	-691.2	202.5	179.4	23.06	8.781		
4,000.0	3,852.3	4,002.7	3,900.9	22.0	18.5	165.01	-426.9	-712.2	207.2	183.5	23.71	8.740		
4,100.0	3,947.9	4,102.6	3,997.7	22.6	19.0	164.97	-439.8	-733.3	212.0	187.6	24.36	8.701		
4,200.0	4,043.6	4,202.5	4,094.5	23.2	19.5	164.93	-452.7	-754.3	216.7	191.7	25.02	8.664		
4,300.0	4,139.3	4,302.4	4,191.3	23.8	20.1	164.89	-465.5	-775.4	221.5	195.8	25.67	8.629		
4,400.0	4,235.0	4,402.3	4,288.1	24.4	20.6	164.86	-478.4	-796.4	226.2	199.9	26.32	8.596		
4,500.0	4,330.7	4,502.2	4,384.9	25.0	21.1	164.82	-491.3	-817.5	231.0	204.0	26.97	8.564		
4,600.0	4,426.4	4,602.1	4,481.7	25.6	21.7	164.79	-504.2	-838.5	235.8	208.1	27.63	8.533		
4,700.0	4,522.1	4,701.9	4,578.5	26.3	22.2	164.76	-517.0	-859.6	240.5	212.2	28.28	8.504		
4,800.0	4,617.7	4,801.8	4,675.3	26.9	22.7	164.73	-529.9	-880.6	245.3	216.3	28.94	8.476		
4,900.0	4,713.4	4,901.7	4,772.0	27.5	23.3	164.70	-542.8	-901.7	250.0	220.4	29.59	8.449		
5,000.0	4,809.1	5,001.6	4,868.8	28.1	23.8	164.67	-555.6	-922.7	254.8	224.5	30.24	8.424		

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

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 24A-15 596
Project:	SEC.15-T5S-R96W	TVD Reference:	WELL @ 6453.0ft (Original Well Elev)
Reference Site:	NPR H15 596 South Pad Sec.15-T5S-R96W	MD Reference:	WELL @ 6453.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	NPR 24A-15 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	NPR 24A-15 596 Wellbore #1	Database:	US_EDM
Reference Design:	Plan #3 (10-05-18)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
5,100.0	4,904.8	5,101.5	4,965.6	28.7	24.3	164.65	-568.5	-943.8	259.5	228.6	30.90	8.399			
5,200.0	5,000.5	5,201.4	5,062.4	29.3	24.9	164.62	-581.4	-964.8	264.3	232.7	31.55	8.376			
5,300.0	5,096.2	5,301.3	5,159.2	30.0	25.4	164.60	-594.3	-985.9	269.0	236.8	32.21	8.353			
5,400.0	5,191.9	5,401.2	5,256.0	30.6	25.9	164.57	-607.1	-1,006.9	273.8	240.9	32.86	8.331			
5,500.0	5,287.5	5,501.0	5,352.8	31.2	26.5	164.55	-620.0	-1,028.0	278.5	245.0	33.52	8.310			
5,600.0	5,383.2	5,593.6	5,442.7	31.8	26.9	164.57	-631.6	-1,046.9	284.0	249.9	34.12	8.326			
5,681.4	5,461.1	5,664.5	5,512.1	32.3	27.1	164.76	-639.1	-1,059.2	291.4	256.9	34.50	8.448			
5,700.0	5,478.9	5,680.7	5,528.0	32.4	27.2	164.84	-640.6	-1,061.6	293.4	258.9	34.58	8.487			
5,800.0	5,575.6	5,767.3	5,613.5	32.8	27.4	165.23	-647.5	-1,073.0	303.8	268.9	34.91	8.703			
5,900.0	5,673.5	5,853.5	5,699.2	33.1	27.6	165.61	-652.4	-1,081.0	313.4	278.3	35.12	8.923			
6,000.0	5,772.3	5,939.4	5,785.0	33.4	27.7	165.96	-655.3	-1,085.7	322.2	287.0	35.21	9.151			
6,100.0	5,871.7	6,026.6	5,872.2	33.6	27.8	166.31	-656.1	-1,087.1	330.3	295.1	35.19	9.385			
6,200.0	5,971.6	6,131.9	5,977.4	33.7	28.0	166.46	-656.5	-1,088.1	334.1	299.0	35.17	9.500			
6,244.4	6,016.0	6,178.7	6,024.2	33.8	28.0	41.75	-656.9	-1,089.2	333.7	272.1	61.56	5.421 SF			
6,300.0	6,071.6	6,237.3	6,082.8	33.8	28.1	151.62	-657.6	-1,091.0	332.3	296.8	35.48	9.365			
6,400.0	6,171.6	6,342.6	6,188.0	33.9	28.3	151.38	-659.3	-1,095.7	329.8	293.7	36.05	9.148			
6,500.0	6,271.5	6,443.1	6,288.3	34.1	28.5	151.20	-661.3	-1,101.2	327.8	291.2	36.60	8.957			
6,579.2	6,350.6	6,522.3	6,367.4	34.2	28.7	151.15	-662.9	-1,105.5	327.3	290.3	37.01	8.845			
6,605.2	6,376.6	6,548.3	6,393.4	34.3	28.7	151.16	-663.4	-1,107.0	327.4	290.2	37.14	8.816			
6,700.0	6,471.2	6,643.1	6,488.0	34.5	28.9	151.19	-665.3	-1,112.2	327.8	290.2	37.52	8.736			
6,800.0	6,571.0	6,743.1	6,587.8	34.7	29.1	151.23	-667.3	-1,117.6	328.2	290.2	37.92	8.654			
6,900.0	6,670.8	6,843.1	6,687.6	34.9	29.4	151.27	-669.3	-1,123.1	328.6	290.2	38.32	8.574			
7,000.0	6,770.6	6,943.1	6,787.4	35.1	29.6	151.31	-671.3	-1,128.6	329.0	290.2	38.73	8.494			
7,100.0	6,870.4	7,043.1	6,887.3	35.3	29.8	151.35	-673.3	-1,134.1	329.4	290.2	39.13	8.417			
7,200.0	6,970.2	7,143.1	6,987.1	35.5	30.0	151.39	-675.3	-1,139.6	329.8	290.2	39.54	8.340			
7,300.0	7,070.0	7,243.1	7,086.9	35.7	30.2	151.42	-677.3	-1,145.1	330.1	290.2	39.95	8.265			
7,400.0	7,169.8	7,343.1	7,186.7	35.9	30.4	151.46	-679.3	-1,150.6	330.5	290.2	40.35	8.191			
7,500.0	7,269.6	7,443.1	7,286.6	36.1	30.6	151.50	-681.3	-1,156.1	330.9	290.2	40.76	8.119			
7,600.0	7,369.4	7,543.1	7,386.4	36.3	30.8	151.54	-683.3	-1,161.5	331.3	290.2	41.18	8.047			
7,700.0	7,469.2	7,643.1	7,486.2	36.5	31.0	151.57	-685.3	-1,167.0	331.7	290.2	41.59	7.977			
7,800.0	7,569.0	7,743.1	7,586.1	36.7	31.3	151.61	-687.3	-1,172.5	332.1	290.1	42.00	7.908			
7,900.0	7,668.8	7,843.1	7,685.9	36.9	31.5	151.65	-689.3	-1,178.0	332.5	290.1	42.41	7.840			
8,000.0	7,768.6	7,943.1	7,785.7	37.1	31.7	151.69	-691.2	-1,183.5	332.9	290.1	42.83	7.774			
8,100.0	7,868.4	8,043.1	7,885.5	37.3	31.9	151.72	-693.2	-1,189.0	333.3	290.1	43.24	7.708			
8,200.0	7,968.2	8,143.1	7,985.4	37.5	32.1	151.76	-695.2	-1,194.5	333.7	290.1	43.66	7.644			
8,300.0	8,068.0	8,243.1	8,085.2	37.7	32.3	151.80	-697.2	-1,199.9	334.1	290.1	44.08	7.581			
8,400.0	8,167.8	8,343.1	8,185.0	38.0	32.5	151.83	-699.2	-1,205.4	334.5	290.1	44.50	7.519			
8,500.0	8,267.6	8,443.1	8,284.9	38.2	32.8	151.87	-701.2	-1,210.9	335.0	290.0	44.92	7.457			
8,600.0	8,367.4	8,543.1	8,384.7	38.4	33.0	151.91	-703.2	-1,216.4	335.4	290.0	45.34	7.397			
8,700.0	8,467.2	8,643.1	8,484.5	38.6	33.2	151.95	-705.2	-1,221.9	335.8	290.0	45.76	7.338			
8,800.0	8,567.0	8,743.1	8,584.3	38.8	33.4	151.98	-707.2	-1,227.4	336.2	290.0	46.18	7.280			
8,900.0	8,666.8	8,843.1	8,684.2	39.0	33.6	152.02	-709.2	-1,232.9	336.6	290.0	46.60	7.222			
9,000.0	8,766.6	8,943.1	8,784.0	39.2	33.9	152.05	-711.2	-1,238.4	337.0	289.9	47.02	7.166			
9,100.0	8,866.4	9,043.1	8,883.8	39.4	34.1	152.09	-713.2	-1,243.8	337.4	289.9	47.44	7.111			
9,200.0	8,966.2	9,143.1	8,983.7	39.7	34.3	152.13	-715.2	-1,249.3	337.8	289.9	47.87	7.056			
9,303.0	9,069.0	9,246.0	9,086.5	39.9	34.5	152.16	-717.3	-1,255.0	338.2	289.9	48.30	7.001			

Reference Depths are relative to WELL @ 6453.0ft (Original Well Elev)	Coordinates are relative to: NPR 24A-15 596
Offset Depths are relative to Offset Datum	Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N
Central Meridian is -111.000000	Grid Convergence at Surface is: 1.82°



Reference Depths are relative to WELL @ 6453.0ft (Original Well Elev)	Coordinates are relative to: NPR 24A-15 596
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