



NPR 15B-11 596
 Plan #1 (11-30-17)
 11:21, December 18 2017



Azimuths to True North
 Magnetic North: 9.63°
 Magnetic Field
 Strength: 51521.1nT
 Dip Angle: 65.85°
 Date: 12/18/2017
 Model: HDGM

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
SHL 2061'FNL, 182'FEL, SEC.15	1.0	0.0	0.0	39.616700	-108.146092	Point
BHL 653'FSL, 1321'FWL, SEC.11	9429.0	2711.9	1492.7	39.624145	-108.140793	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	1363.8	34.92	30.95	1293.1	294.8	176.8	3.00	30.95	343.5	
4	5813.5	34.92	30.95	4941.9	2479.2	1486.4	0.00	0.00	2888.6	
5	6977.4	0.00	0.00	6035.0	2774.0	1663.2	3.00	180.00	3232.2	
6	7298.5	3.21	250.00	6356.0	2770.9	1654.7	1.00	250.00	3225.4	
7	10376.4	3.21	250.00	9429.0	2711.9	1492.7	0.00	0.00	3095.6	BHL 653'FSL, 1321'FWL, SEC.11



Caerus Oil and Gas LLC

SEC.15-T5S-R96W

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

NPR 15B-11 596

Wellbore #1

Plan: Plan #1 (11-30-17)

Standard Planning Report

18 December, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-30-17)		

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:	14,399,246.79 usft	Latitude:	39.616700
From:	Lat/Long	Easting:	2,444,190.74 usft	Longitude:	-108.146093
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	1.82

Well	NPR 15B-11 596					
Well Position	+N/-S	0.0 ft	Northing:	14,399,246.79 usft	Latitude:	39.616700
	+E/-W	0.0 ft	Easting:	2,444,190.74 usft	Longitude:	-108.146093
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	6,429.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	12/18/2017	9.63	65.85	51,521

Design	Plan #1 (11-30-17)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	28.83

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	
1,363.8	34.92	30.95	1,293.1	294.8	176.8	3.00	3.00	0.00	30.95	
5,813.5	34.92	30.95	4,941.9	2,479.2	1,486.4	0.00	0.00	0.00	0.00	
6,977.4	0.00	0.00	6,035.0	2,774.0	1,663.2	3.00	-3.00	0.00	180.00	
7,298.5	3.21	250.00	6,356.0	2,770.9	1,654.7	1.00	1.00	-34.25	250.00	
10,376.4	3.21	250.00	9,429.0	2,711.9	1,492.7	0.00	0.00	0.00	0.00	BHL 653'FSL, 1321'F

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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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-30-17)		

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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 2061'FNL, 182'FEL, SEC.15									
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	30.95	300.0	2.2	1.3	2.6	3.00	3.00	0.00
400.0	6.00	30.95	399.6	9.0	5.4	10.5	3.00	3.00	0.00
500.0	9.00	30.95	498.8	20.2	12.1	23.5	3.00	3.00	0.00
600.0	12.00	30.95	597.1	35.8	21.5	41.7	3.00	3.00	0.00
700.0	15.00	30.95	694.3	55.8	33.5	65.0	3.00	3.00	0.00
800.0	18.00	30.95	790.2	80.2	48.1	93.4	3.00	3.00	0.00
900.0	21.00	30.95	884.4	108.8	65.2	126.8	3.00	3.00	0.00
1,000.0	24.00	30.95	976.8	141.6	84.9	165.0	3.00	3.00	0.00
1,100.0	27.00	30.95	1,067.1	178.5	107.0	208.0	3.00	3.00	0.00
1,113.4	27.40	30.95	1,079.0	183.8	110.2	214.2	3.00	3.00	0.00
WASATCH.NPC									
1,200.0	30.00	30.95	1,154.9	219.5	131.6	255.7	3.00	3.00	0.00
1,300.0	33.00	30.95	1,240.2	264.3	158.4	307.9	3.00	3.00	0.00
1,363.8	34.92	30.95	1,293.1	294.8	176.8	343.5	3.00	3.00	0.00
1,400.0	34.92	30.95	1,322.8	312.6	187.4	364.2	0.00	0.00	0.00
1,500.0	34.92	30.95	1,404.8	361.7	216.9	421.4	0.00	0.00	0.00
1,600.0	34.92	30.95	1,486.8	410.8	246.3	478.6	0.00	0.00	0.00
1,700.0	34.92	30.95	1,568.8	459.9	275.7	535.8	0.00	0.00	0.00
1,800.0	34.92	30.95	1,650.8	508.9	305.1	593.0	0.00	0.00	0.00
1,900.0	34.92	30.95	1,732.8	558.0	334.6	650.2	0.00	0.00	0.00
2,000.0	34.92	30.95	1,814.8	607.1	364.0	707.4	0.00	0.00	0.00
2,100.0	34.92	30.95	1,896.8	656.2	393.4	764.6	0.00	0.00	0.00
2,200.0	34.92	30.95	1,978.8	705.3	422.9	821.8	0.00	0.00	0.00
2,300.0	34.92	30.95	2,060.8	754.4	452.3	879.0	0.00	0.00	0.00
2,400.0	34.92	30.95	2,142.8	803.5	481.7	936.2	0.00	0.00	0.00
2,500.0	34.92	30.95	2,224.8	852.6	511.2	993.4	0.00	0.00	0.00
2,600.0	34.92	30.95	2,306.8	901.7	540.6	1,050.6	0.00	0.00	0.00
2,700.0	34.92	30.95	2,388.8	950.8	570.0	1,107.8	0.00	0.00	0.00
2,800.0	34.92	30.95	2,470.8	999.8	599.5	1,165.0	0.00	0.00	0.00
2,835.6	34.92	30.95	2,500.0	1,017.3	610.0	1,185.4	0.00	0.00	0.00
9 5/8"									
2,900.0	34.92	30.95	2,552.8	1,048.9	628.9	1,222.2	0.00	0.00	0.00
3,000.0	34.92	30.95	2,634.8	1,098.0	658.3	1,279.4	0.00	0.00	0.00
3,100.0	34.92	30.95	2,716.8	1,147.1	687.8	1,336.6	0.00	0.00	0.00
3,200.0	34.92	30.95	2,798.8	1,196.2	717.2	1,393.8	0.00	0.00	0.00
3,300.0	34.92	30.95	2,880.8	1,245.3	746.6	1,451.0	0.00	0.00	0.00
3,400.0	34.92	30.95	2,962.8	1,294.4	776.1	1,508.2	0.00	0.00	0.00
3,500.0	34.92	30.95	3,044.8	1,343.5	805.5	1,565.4	0.00	0.00	0.00
3,600.0	34.92	30.95	3,126.8	1,392.6	834.9	1,622.6	0.00	0.00	0.00
3,700.0	34.92	30.95	3,208.8	1,441.6	864.4	1,679.8	0.00	0.00	0.00
3,800.0	34.92	30.95	3,290.8	1,490.7	893.8	1,737.0	0.00	0.00	0.00
3,900.0	34.92	30.95	3,372.8	1,539.8	923.2	1,794.2	0.00	0.00	0.00
4,000.0	34.92	30.95	3,454.8	1,588.9	952.7	1,851.4	0.00	0.00	0.00
4,029.5	34.92	30.95	3,479.0	1,603.4	961.4	1,868.3	0.00	0.00	0.00
WASATCH_G.NPC									
4,100.0	34.92	30.95	3,536.8	1,638.0	982.1	1,908.6	0.00	0.00	0.00
4,200.0	34.92	30.95	3,618.8	1,687.1	1,011.5	1,965.8	0.00	0.00	0.00
4,300.0	34.92	30.95	3,700.8	1,736.2	1,041.0	2,023.0	0.00	0.00	0.00
4,400.0	34.92	30.95	3,782.8	1,785.3	1,070.4	2,080.1	0.00	0.00	0.00

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Well:	NPR 15B-11 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-30-17)		

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)
4,500.0	34.92	30.95	3,864.8	1,834.4	1,099.8	2,137.3	0.00	0.00	0.00
4,503.9	34.92	30.95	3,868.0	1,836.3	1,101.0	2,139.6	0.00	0.00	0.00
FORT_UNION.NPC									
4,600.0	34.92	30.95	3,946.8	1,883.4	1,129.3	2,194.5	0.00	0.00	0.00
4,700.0	34.92	30.95	4,028.8	1,932.5	1,158.7	2,251.7	0.00	0.00	0.00
4,800.0	34.92	30.95	4,110.8	1,981.6	1,188.1	2,308.9	0.00	0.00	0.00
4,900.0	34.92	30.95	4,192.8	2,030.7	1,217.6	2,366.1	0.00	0.00	0.00
5,000.0	34.92	30.95	4,274.8	2,079.8	1,247.0	2,423.3	0.00	0.00	0.00
5,100.0	34.92	30.95	4,356.8	2,128.9	1,276.4	2,480.5	0.00	0.00	0.00
5,200.0	34.92	30.95	4,438.8	2,178.0	1,305.8	2,537.7	0.00	0.00	0.00
5,300.0	34.92	30.95	4,520.8	2,227.1	1,335.3	2,594.9	0.00	0.00	0.00
5,400.0	34.92	30.95	4,602.8	2,276.2	1,364.7	2,652.1	0.00	0.00	0.00
5,500.0	34.92	30.95	4,684.8	2,325.3	1,394.1	2,709.3	0.00	0.00	0.00
5,600.0	34.92	30.95	4,766.8	2,374.3	1,423.6	2,766.5	0.00	0.00	0.00
5,700.0	34.92	30.95	4,848.8	2,423.4	1,453.0	2,823.7	0.00	0.00	0.00
5,800.0	34.92	30.95	4,930.8	2,472.5	1,482.4	2,880.9	0.00	0.00	0.00
5,813.5	34.92	30.95	4,941.9	2,479.2	1,486.4	2,888.6	0.00	0.00	0.00
5,900.0	32.32	30.95	5,013.9	2,520.2	1,511.0	2,936.5	3.00	-3.00	0.00
6,000.0	29.32	30.95	5,099.7	2,564.2	1,537.4	2,987.7	3.00	-3.00	0.00
6,100.0	26.32	30.95	5,188.2	2,604.2	1,561.4	3,034.3	3.00	-3.00	0.00
6,200.0	23.32	30.95	5,278.9	2,640.2	1,583.0	3,076.3	3.00	-3.00	0.00
6,300.0	20.32	30.95	5,371.7	2,672.1	1,602.1	3,113.4	3.00	-3.00	0.00
6,400.0	17.32	30.95	5,466.4	2,699.7	1,618.7	3,145.6	3.00	-3.00	0.00
6,500.0	14.32	30.95	5,562.6	2,723.1	1,632.7	3,172.9	3.00	-3.00	0.00
6,600.0	11.32	30.95	5,660.1	2,742.1	1,644.1	3,195.1	3.00	-3.00	0.00
6,700.0	8.32	30.95	5,758.6	2,756.8	1,652.9	3,212.1	3.00	-3.00	0.00
6,794.1	5.50	30.95	5,852.0	2,766.5	1,658.7	3,223.4	3.00	-3.00	0.00
OHIO_CREEK.MBL									
6,800.0	5.32	30.95	5,857.9	2,766.9	1,659.0	3,224.0	3.00	-3.00	0.00
6,900.0	2.32	30.95	5,957.7	2,772.7	1,662.4	3,230.6	3.00	-3.00	0.00
6,977.4	0.00	0.00	6,035.0	2,774.0	1,663.2	3,232.2	3.00	-3.00	0.00
7,000.0	0.23	250.00	6,057.6	2,774.0	1,663.2	3,232.2	1.00	1.00	0.00
7,027.4	0.50	250.00	6,085.0	2,773.9	1,663.0	3,232.0	1.00	1.00	0.00
WILLIAMS_FORK.MBL									
7,077.4	1.00	250.00	6,135.0	2,773.7	1,662.4	3,231.5	1.00	1.00	0.00
TOP_GAS.MBL									
7,100.0	1.23	250.00	6,157.6	2,773.6	1,662.0	3,231.2	1.00	1.00	0.00
7,200.0	2.23	250.00	6,257.6	2,772.5	1,659.1	3,228.9	1.00	1.00	0.00
7,298.5	3.21	250.00	6,356.0	2,770.9	1,654.7	3,225.4	1.00	1.00	0.00
7,300.0	3.21	250.00	6,357.5	2,770.9	1,654.7	3,225.4	0.00	0.00	0.00
7,400.0	3.21	250.00	6,457.3	2,769.0	1,649.4	3,221.1	0.00	0.00	0.00
7,500.0	3.21	250.00	6,557.2	2,767.1	1,644.1	3,216.9	0.00	0.00	0.00
7,600.0	3.21	250.00	6,657.0	2,765.1	1,638.9	3,212.7	0.00	0.00	0.00
7,700.0	3.21	250.00	6,756.8	2,763.2	1,633.6	3,208.5	0.00	0.00	0.00
7,800.0	3.21	250.00	6,856.7	2,761.3	1,628.3	3,204.3	0.00	0.00	0.00
7,900.0	3.21	250.00	6,956.5	2,759.4	1,623.1	3,200.0	0.00	0.00	0.00
8,000.0	3.21	250.00	7,056.4	2,757.5	1,617.8	3,195.8	0.00	0.00	0.00
8,100.0	3.21	250.00	7,156.2	2,755.6	1,612.5	3,191.6	0.00	0.00	0.00
8,200.0	3.21	250.00	7,256.1	2,753.6	1,607.3	3,187.4	0.00	0.00	0.00
8,300.0	3.21	250.00	7,355.9	2,751.7	1,602.0	3,183.2	0.00	0.00	0.00
8,400.0	3.21	250.00	7,455.7	2,749.8	1,596.8	3,179.0	0.00	0.00	0.00
8,500.0	3.21	250.00	7,555.6	2,747.9	1,591.5	3,174.7	0.00	0.00	0.00
8,600.0	3.21	250.00	7,655.4	2,746.0	1,586.2	3,170.5	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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-30-17)		

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)	
8,700.0	3.21	250.00	7,755.3	2,744.1	1,581.0	3,166.3	0.00	0.00	0.00	
8,800.0	3.21	250.00	7,855.1	2,742.1	1,575.7	3,162.1	0.00	0.00	0.00	
8,900.0	3.21	250.00	7,955.0	2,740.2	1,570.4	3,157.9	0.00	0.00	0.00	
9,000.0	3.21	250.00	8,054.8	2,738.3	1,565.2	3,153.7	0.00	0.00	0.00	
9,100.0	3.21	250.00	8,154.6	2,736.4	1,559.9	3,149.4	0.00	0.00	0.00	
9,200.0	3.21	250.00	8,254.5	2,734.5	1,554.6	3,145.2	0.00	0.00	0.00	
9,300.0	3.21	250.00	8,354.3	2,732.6	1,549.4	3,141.0	0.00	0.00	0.00	
9,400.0	3.21	250.00	8,454.2	2,730.6	1,544.1	3,136.8	0.00	0.00	0.00	
9,500.0	3.21	250.00	8,554.0	2,728.7	1,538.8	3,132.6	0.00	0.00	0.00	
9,579.1	3.21	250.00	8,633.0	2,727.2	1,534.7	3,129.2	0.00	0.00	0.00	
CAMEO.MBL										
9,600.0	3.21	250.00	8,653.9	2,726.8	1,533.6	3,128.3	0.00	0.00	0.00	
9,700.0	3.21	250.00	8,753.7	2,724.9	1,528.3	3,124.1	0.00	0.00	0.00	
9,800.0	3.21	250.00	8,853.5	2,723.0	1,523.0	3,119.9	0.00	0.00	0.00	
9,900.0	3.21	250.00	8,953.4	2,721.1	1,517.8	3,115.7	0.00	0.00	0.00	
10,000.0	3.21	250.00	9,053.2	2,719.1	1,512.5	3,111.5	0.00	0.00	0.00	
10,100.0	3.21	250.00	9,153.1	2,717.2	1,507.3	3,107.3	0.00	0.00	0.00	
10,200.0	3.21	250.00	9,252.9	2,715.3	1,502.0	3,103.0	0.00	0.00	0.00	
10,200.1	3.21	250.00	9,253.0	2,715.3	1,502.0	3,103.0	0.00	0.00	0.00	
ROLLINS.MBL										
10,300.0	3.21	250.00	9,352.8	2,713.4	1,496.7	3,098.8	0.00	0.00	0.00	
10,376.4	3.21	250.00	9,429.0	2,711.9	1,492.7	3,095.6	0.00	0.00	0.00	
TD.MBL - BHL 653'FSL, 1321'FWL, SEC.11										

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 2061'FNL, 182'FEL	0.00	0.00	1.0	0.0	0.0	14,399,246.79	2,444,190.74	39.616700	-108.146093	
- plan hits target center										
- Point										
BHL 653'FSL, 1321'FWL	0.00	0.00	9,429.0	2,711.9	1,492.7	14,402,005.72	2,445,597.00	39.624145	-108.140794	
- plan hits target center										
- Ellipse (radii L200.0 W100.0 on 250.00 azi)										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,835.6	2,500.0	9 5/8"	9-5/8	12-1/4	

Database:	US_EDM	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-30-17)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,113.4	1,079.0	WASATCH.NPC		0.00		
4,029.5	3,479.0	WASATCH_G.NPC		0.00		
4,503.9	3,868.0	FORT_UNION.NPC		0.00		
6,794.1	5,852.0	OHIO_CREEK.MBL		0.00		
7,027.4	6,085.0	WILLIAMS_FORK.MBL		0.00		
7,077.4	6,135.0	TOP_GAS.MBL		0.00		
9,579.1	8,633.0	CAMEO.MBL		0.00		
10,200.1	9,253.0	ROLLINS.MBL		0.00		
10,376.4	9,429.0	TD.MBL		0.00		



Caerus Oil and Gas LLC

SEC.15-T5S-R96W

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

NPR 15B-11 596

Wellbore #1

Plan #1 (11-30-17)

Anticollision Report

18 December, 2017

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (11-30-17)		
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	12/6/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	10,376.4	Plan #1 (11-30-17) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
NPR H15 596 North Pad Sec.15-T5S-R96W						
NPR 12B-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	286.1	285.5	424.356	CC, ES
NPR 12B-14 596 - Wellbore #1 - Plan #1 (12-01-17)	2,400.0	2,329.3	781.7	755.9	30.295	SF
NPR 12C-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	293.6	293.0	435.485	CC, ES
NPR 12C-14 596 - Wellbore #1 - Plan #1 (12-01-17)	2,100.0	2,020.0	765.3	744.5	36.853	SF
NPR 12D-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	301.1	300.5	446.597	CC, ES
NPR 12D-14 596 - Wellbore #1 - Plan #1 (12-01-17)	2,000.0	1,896.5	799.7	781.3	43.440	SF
NPR 13B-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	308.6	308.0	457.726	CC, ES
NPR 13B-14 596 - Wellbore #1 - Plan #1 (12-01-17)	1,700.0	1,543.2	776.1	762.4	56.536	SF
NPR 13C-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	323.6	323.0	479.968	CC, ES
NPR 13C-14 596 - Wellbore #1 - Plan #1 (12-01-17)	1,600.0	1,443.3	770.2	759.4	71.300	SF
NPR 13D-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	316.1	315.5	468.839	CC, ES
NPR 13D-14 596 - Wellbore #1 - Plan #1 (12-01-17)	1,500.0	1,302.5	767.4	755.9	66.991	SF
NPR 14A-14 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	331.1	330.5	491.097	CC, ES
NPR 14A-14 596 - Wellbore #1 - Plan #1 (12-01-17)	1,400.0	1,185.0	762.2	752.3	76.718	SF
NPR 22C-15 596 - Wellbore #1 - Plan #1 (12-01-17)	483.0	513.0	284.2	282.0	128.439	CC
NPR 22C-15 596 - Wellbore #1 - Plan #1 (12-01-17)	500.0	531.2	284.3	281.9	122.260	ES
NPR 22C-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	1,091.6	404.8	397.7	57.113	SF
NPR 22D-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	293.8	293.1	435.734	CC, ES
NPR 22D-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	1,078.5	434.8	428.2	65.024	SF
NPR 23A-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	301.3	300.6	446.841	CC, ES
NPR 23A-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	1,062.1	459.8	453.4	72.089	SF
NPR 23B-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	308.8	308.1	457.964	CC, ES
NPR 23B-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	1,033.9	501.9	495.1	74.317	SF
NPR 23C-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	316.3	315.6	469.087	CC, ES
NPR 23C-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	1,004.6	522.4	516.0	80.718	SF
NPR 23D-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	323.8	323.1	480.210	CC, ES
NPR 23D-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,200.0	1,066.8	593.3	586.4	86.587	SF
NPR 24A-15 596 - Wellbore #1 - Plan #1 (12-01-17)	200.0	200.0	331.3	330.6	491.318	CC, ES
NPR 24A-15 596 - Wellbore #1 - Plan #1 (12-01-17)	1,100.0	958.6	594.1	587.7	92.933	SF

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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 South Pad Sec.15-T5S-R96W						
NPR 11A-14 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	22.5	21.8	33.387	CC, ES
NPR 11A-14 596 - Wellbore #1 - Plan #1 (11-30-17)	6,977.4	6,679.0	794.7	684.4	7.209	SF
NPR 11B-14 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	30.0	29.3	44.417	CC, ES
NPR 11B-14 596 - Wellbore #1 - Plan #1 (11-30-17)	1,300.0	1,301.4	95.6	83.3	7.807	SF
NPR 11C-14 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	37.5	36.9	55.678	CC, ES
NPR 11C-14 596 - Wellbore #1 - Plan #1 (11-30-17)	1,300.0	1,307.2	139.9	129.3	13.228	SF
NPR 11D-14 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	45.0	44.3	66.724	CC, ES
NPR 11D-14 596 - Wellbore #1 - Plan #1 (11-30-17)	1,300.0	1,309.1	187.1	177.6	19.822	SF
NPR 12A-14 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	52.5	51.8	77.820	CC, ES
NPR 12A-14 596 - Wellbore #1 - Plan #1 (11-30-17)	3,000.0	2,918.7	773.8	743.2	25.272	SF
NPR 15C-11 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	7.5	6.8	11.129	CC, ES
NPR 15C-11 596 - Wellbore #1 - Plan #1 (11-30-17)	6,977.4	6,871.8	262.8	144.2	2.216	SF
NPR 15D-11 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	15.0	14.4	22.291	CC, ES
NPR 15D-11 596 - Wellbore #1 - Plan #1 (11-30-17)	6,977.4	6,773.4	525.8	411.4	4.595	SF
NPR 21A-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	18.1	17.4	26.811	CC, ES
NPR 21A-15 596 - Wellbore #1 - Plan #1 (11-30-17)	400.0	399.6	28.1	26.4	16.331	SF
NPR 21B-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	24.6	24.0	36.520	CC, ES
NPR 21B-15 596 - Wellbore #1 - Plan #1 (11-30-17)	400.0	399.6	34.1	32.4	19.911	SF
NPR 21C-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	31.6	31.0	46.903	CC, ES
NPR 21C-15 596 - Wellbore #1 - Plan #1 (11-30-17)	500.0	500.6	52.0	49.8	22.731	SF
NPR 21D-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	38.8	38.2	57.613	CC, ES
NPR 21D-15 596 - Wellbore #1 - Plan #1 (11-30-17)	500.0	499.4	59.5	57.3	26.433	SF
NPR 22A-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	46.1	45.4	68.308	CC, ES
NPR 22A-15 596 - Wellbore #1 - Plan #1 (11-30-17)	500.0	498.6	65.6	63.4	29.330	SF
NPR 22B-15 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	53.4	52.8	79.249	CC, ES
NPR 22B-15 596 - Wellbore #1 - Plan #1 (11-30-17)	600.0	596.7	88.7	85.9	31.673	SF
NPR 25C-10 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	10.0	9.3	14.818	CC, ES
NPR 25C-10 596 - Wellbore #1 - Plan #1 (11-30-17)	300.0	300.0	11.8	10.7	10.216	SF
NPR 25D-10 596 - Wellbore #1 - Plan #1 (11-30-17)	200.0	200.0	12.5	11.8	18.537	CC, ES
NPR 25D-10 596 - Wellbore #1 - Plan #1 (11-30-17)	400.0	400.3	21.5	19.8	12.500	SF

Offset Design NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 12B-14 596 - Wellbore #1 - Plan #1 (12-01-17)													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 +N/-S (ft)	Wellbore Centre +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	156.61	-262.6	113.6	286.1						
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-262.6	113.6	286.1	285.9	0.22	1,273.068			
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-262.6	113.6	286.1	285.5	0.67	424.356	CC, ES		
300.0	300.0	301.9	301.9	0.6	0.6	125.53	-261.2	115.9	287.3	286.2	1.14	251.119			
400.0	399.6	403.7	403.3	0.8	0.8	125.13	-257.1	122.9	290.9	289.2	1.66	175.559			
500.0	498.8	505.3	504.0	1.1	1.1	124.49	-250.2	134.5	296.9	294.6	2.25	132.132			
600.0	597.1	606.6	603.5	1.4	1.5	123.63	-240.6	150.7	305.2	302.3	2.95	103.457			
700.0	694.3	707.5	701.5	1.9	1.9	122.58	-228.4	171.2	316.0	312.2	3.79	83.268			
800.0	790.2	807.8	797.6	2.4	2.5	121.38	-213.7	196.1	329.1	324.3	4.80	68.601			
900.0	884.4	906.9	891.3	3.0	3.1	120.29	-197.2	223.8	344.8	338.8	5.95	57.937			
1,000.0	976.8	1,005.2	984.2	3.7	3.7	119.88	-180.8	251.5	363.0	355.8	7.19	50.466			
1,100.0	1,067.1	1,102.9	1,076.4	4.5	4.4	120.07	-164.5	279.0	383.8	375.3	8.50	45.138			
1,200.0	1,154.9	1,199.7	1,167.9	5.4	5.0	120.77	-148.3	306.3	407.4	397.5	9.87	41.286			
1,300.0	1,240.2	1,295.3	1,258.2	6.4	5.6	121.83	-132.3	333.3	433.8	422.5	11.26	38.507			

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 12B-14 596 - Wellbore #1 - Plan #1 (12-01-17)													Offset Site Error:	0.0 ft
Survey Design		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 +N/-S	Wellbore Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
1,363.8	1,293.1	1,355.6	1,315.2	7.1	6.0	122.65	-122.2	350.3	452.3	440.1	12.17	37.167		
1,400.0	1,322.8	1,389.5	1,347.3	7.5	6.2	123.41	-116.5	359.8	463.1	450.5	12.68	36.535		
1,500.0	1,404.8	1,483.5	1,436.1	8.5	6.9	125.34	-100.8	386.3	493.6	479.5	14.07	35.088		
1,600.0	1,486.8	1,577.5	1,524.9	9.6	7.5	127.05	-85.1	412.8	524.5	509.1	15.43	33.981		
1,700.0	1,568.8	1,671.5	1,613.6	10.8	8.1	128.57	-69.4	439.3	555.8	539.0	16.78	33.118		
1,800.0	1,650.8	1,765.4	1,702.4	11.9	8.8	129.93	-53.7	465.8	587.4	569.3	18.11	32.434		
1,900.0	1,732.8	1,859.4	1,791.2	13.0	9.4	131.16	-38.0	492.3	619.3	599.9	19.42	31.885		
2,000.0	1,814.8	1,953.4	1,880.0	14.1	10.0	132.26	-22.3	518.8	651.4	630.7	20.72	31.437		
2,100.0	1,896.8	2,047.4	1,968.8	15.2	10.7	133.26	-6.6	545.3	683.7	661.7	22.01	31.070		
2,200.0	1,978.8	2,141.3	2,057.6	16.3	11.3	134.18	9.2	571.7	716.2	693.0	23.28	30.765		
2,300.0	2,060.8	2,235.3	2,146.4	17.4	11.9	135.01	24.9	598.2	748.9	724.3	24.55	30.510		
2,400.0	2,142.8	2,329.3	2,235.1	18.5	12.6	135.78	40.6	624.7	781.7	755.9	25.80	30.295 SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design		NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 12C-14 596 - Wellbore #1 - Plan #1 (12-01-17)											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	156.61	-269.5	116.6	293.6						
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-269.5	116.6	293.6	293.4	0.22	1,306.455			
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-269.5	116.6	293.6	293.0	0.67	435.485	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	126.04	-269.5	116.6	295.2	294.0	1.14	257.984			
400.0	399.6	399.9	399.9	0.8	0.8	126.64	-268.5	119.0	299.8	298.2	1.64	183.252			
500.0	498.8	499.9	499.5	1.1	1.0	126.95	-265.4	126.2	307.5	305.4	2.17	141.607			
600.0	597.1	599.7	598.5	1.4	1.3	126.98	-260.3	138.2	318.3	315.5	2.79	114.073			
700.0	694.3	699.3	696.4	1.9	1.6	126.73	-253.2	154.8	332.0	328.5	3.52	94.281			
800.0	790.2	798.4	792.7	2.4	2.1	126.25	-244.1	176.0	348.7	344.3	4.39	79.423			
900.0	884.4	896.9	887.3	3.0	2.6	125.55	-233.2	201.7	368.2	362.8	5.42	67.999			
1,000.0	976.8	994.4	979.9	3.7	3.1	125.00	-221.3	229.6	390.7	384.1	6.56	59.527			
1,100.0	1,067.1	1,091.0	1,071.7	4.5	3.7	124.97	-209.4	257.3	416.1	408.3	7.79	53.418			
1,200.0	1,154.9	1,186.6	1,162.4	5.4	4.3	125.35	-197.7	284.8	444.5	435.4	9.07	49.013			
1,300.0	1,240.2	1,280.7	1,251.9	6.4	4.9	126.04	-186.2	311.8	476.0	465.6	10.39	45.801			
1,363.8	1,293.1	1,340.1	1,308.3	7.1	5.3	126.60	-178.9	328.8	497.8	486.6	11.25	44.253			
1,400.0	1,322.8	1,373.5	1,340.0	7.5	5.5	127.25	-174.9	338.4	510.6	498.8	11.73	43.520			
1,500.0	1,404.8	1,465.8	1,427.8	8.5	6.1	128.88	-163.5	364.9	546.2	533.1	13.06	41.827			
1,600.0	1,486.8	1,558.2	1,515.5	9.6	6.7	130.31	-152.2	391.4	582.1	567.7	14.37	40.508			
1,700.0	1,568.8	1,650.6	1,603.3	10.8	7.3	131.58	-140.9	417.9	618.3	602.7	15.67	39.459			
1,800.0	1,650.8	1,742.9	1,691.0	11.9	7.9	132.72	-129.6	444.4	654.8	637.8	16.96	38.612			
1,900.0	1,732.8	1,835.3	1,778.8	13.0	8.4	133.73	-118.3	470.9	691.5	673.2	18.24	37.917			
2,000.0	1,814.8	1,927.6	1,866.5	14.1	9.0	134.64	-107.0	497.4	728.3	708.8	19.51	37.339			
2,100.0	1,896.8	2,020.0	1,954.3	15.2	9.6	135.47	-95.7	523.9	765.3	744.5	20.77	36.853	SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 12D-14 596 - Wellbore #1 - Plan #1 (12-01-17)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	156.61	-276.4	119.5	301.1				
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-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	156.61	-276.4	119.5	301.1	300.5	0.67	446.597	CC, ES
300.0	300.0	300.0	300.0	0.6	0.6	126.03	-276.4	119.5	302.7	301.5	1.14	264.534	
400.0	399.6	399.6	399.6	0.8	0.8	127.10	-276.4	119.5	307.4	305.7	1.64	187.183	
500.0	498.8	497.2	497.1	1.1	1.0	128.31	-275.8	121.9	315.7	313.5	2.16	145.938	
600.0	597.1	594.7	594.4	1.4	1.2	129.18	-273.9	129.1	327.9	325.2	2.73	119.900	
700.0	694.3	692.1	690.9	1.9	1.5	129.72	-270.8	141.1	343.9	340.5	3.39	101.517	
800.0	790.2	789.0	786.3	2.4	1.8	129.93	-266.5	157.7	363.6	359.4	4.14	87.725	
900.0	884.4	885.3	880.1	3.0	2.2	129.84	-261.0	178.9	386.8	381.8	5.03	76.965	
1,000.0	976.8	980.7	971.8	3.7	2.6	129.48	-254.3	204.3	413.6	407.6	6.04	68.456	
1,100.0	1,067.1	1,076.0	1,062.7	4.5	3.2	129.19	-247.1	232.2	443.7	436.5	7.18	61.801	
1,200.0	1,154.9	1,170.1	1,152.3	5.4	3.7	129.26	-239.9	259.6	476.9	468.5	8.38	56.904	
1,300.0	1,240.2	1,262.6	1,240.5	6.4	4.3	129.60	-232.9	286.7	513.4	503.8	9.62	53.349	
1,363.8	1,293.1	1,320.8	1,296.0	7.1	4.6	129.92	-228.5	303.7	538.5	528.1	10.44	51.571	
1,400.0	1,322.8	1,353.5	1,327.2	7.5	4.8	130.46	-226.0	313.2	553.1	542.2	10.90	50.743	
1,500.0	1,404.8	1,444.0	1,413.5	8.5	5.4	131.83	-219.1	339.7	593.7	581.5	12.16	48.811	
1,600.0	1,486.8	1,534.5	1,499.8	9.6	5.9	133.03	-212.2	366.1	634.6	621.1	13.42	47.276	
1,700.0	1,568.8	1,625.0	1,586.0	10.8	6.5	134.09	-205.3	392.5	675.6	660.9	14.68	46.033	
1,800.0	1,650.8	1,715.5	1,672.3	11.9	7.1	135.03	-198.5	419.0	716.8	700.9	15.93	45.012	
1,900.0	1,732.8	1,806.0	1,758.6	13.0	7.6	135.86	-191.6	445.4	758.2	741.0	17.17	44.160	
2,000.0	1,814.8	1,896.5	1,844.9	14.1	8.2	136.61	-184.7	471.9	799.7	781.3	18.41	43.440	SF

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 13B-14 596 - Wellbore #1 - Plan #1 (12-01-17)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	156.61	-283.3	122.5	308.6				
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-283.3	122.5	308.6	308.4	0.22	1,373.179	
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-283.3	122.5	308.6	308.0	0.67	457.726 CC, ES	
300.0	300.0	300.0	300.0	0.6	0.6	126.02	-283.3	122.5	310.2	309.0	1.14	271.095	
400.0	399.6	399.6	399.6	0.8	0.8	127.06	-283.3	122.5	314.9	313.2	1.64	191.762	
500.0	498.8	498.8	498.8	1.1	1.0	128.71	-283.3	122.5	322.9	320.7	2.17	148.575	
600.0	597.1	590.7	590.6	1.4	1.2	130.34	-283.5	124.7	335.6	332.9	2.73	123.103	
700.0	694.3	682.0	681.7	1.9	1.4	131.63	-284.2	131.1	354.0	350.6	3.33	106.205	
800.0	790.2	772.3	771.4	2.4	1.6	132.57	-285.3	141.8	377.7	373.7	4.01	94.229	
900.0	884.4	861.4	859.3	3.0	1.9	133.14	-286.8	156.4	406.7	402.0	4.77	85.353	
1,000.0	976.8	948.9	944.8	3.7	2.2	133.38	-288.7	174.8	440.7	435.1	5.61	78.526	
1,100.0	1,067.1	1,034.6	1,027.6	4.5	2.6	133.31	-290.9	196.5	479.5	473.0	6.56	73.122	
1,200.0	1,154.9	1,118.1	1,107.3	5.4	3.0	132.97	-293.5	221.1	522.9	515.3	7.60	68.771	
1,300.0	1,240.2	1,201.5	1,185.9	6.4	3.5	132.44	-296.4	249.0	570.5	561.7	8.76	65.096	
1,363.8	1,293.1	1,256.4	1,237.4	7.1	3.9	132.16	-298.3	267.9	602.7	593.1	9.55	63.104	
1,400.0	1,322.8	1,287.2	1,266.4	7.5	4.1	132.49	-299.4	278.4	621.3	611.3	9.99	62.201	
1,500.0	1,404.8	1,372.6	1,346.5	8.5	4.7	133.31	-302.4	307.7	672.8	661.6	11.22	59.968	
1,600.0	1,486.8	1,457.9	1,426.6	9.6	5.3	134.01	-305.5	337.0	724.5	712.0	12.47	58.103	
1,700.0	1,568.8	1,543.2	1,506.7	10.8	5.9	134.63	-308.5	366.2	776.1	762.4	13.73	56.536 SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 13C-14 596 - Wellbore #1 - Plan #1 (12-01-17)													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	156.61	-297.1	128.5	323.6					
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-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	156.61	-297.1	128.5	323.6	323.0	0.67	479.968 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	126.00	-297.1	128.5	325.2	324.0	1.14	284.207		
400.0	399.6	399.6	399.6	0.8	0.8	126.99	-297.1	128.5	329.9	328.2	1.64	200.913		
500.0	498.8	487.6	487.6	1.1	1.0	128.09	-297.9	130.3	339.5	337.4	2.14	158.500		
600.0	597.1	574.6	574.4	1.4	1.2	129.08	-300.5	135.7	355.9	353.2	2.70	131.957		
700.0	694.3	660.1	659.3	1.9	1.4	129.89	-304.7	144.4	378.8	375.5	3.32	114.146		
800.0	790.2	749.6	747.8	2.4	1.6	130.64	-310.5	156.7	407.7	403.7	4.01	101.697		
900.0	884.4	843.2	840.2	3.0	1.9	131.65	-316.9	170.0	440.6	435.8	4.76	92.503		
1,000.0	976.8	935.0	930.8	3.7	2.2	132.81	-323.1	183.1	477.2	471.6	5.56	85.800		
1,100.0	1,067.1	1,024.7	1,019.5	4.5	2.5	134.01	-329.2	195.8	517.6	511.2	6.40	80.834		
1,200.0	1,154.9	1,112.2	1,105.9	5.4	2.9	135.19	-335.1	208.2	562.0	554.7	7.28	77.197		
1,300.0	1,240.2	1,197.2	1,189.8	6.4	3.2	136.30	-340.9	220.3	610.4	602.2	8.18	74.574		
1,363.8	1,293.1	1,250.0	1,242.0	7.1	3.3	136.95	-344.4	227.8	643.4	634.6	8.77	73.325		
1,400.0	1,322.8	1,279.6	1,271.2	7.5	3.5	137.75	-346.4	232.0	662.6	653.5	9.09	72.879		
1,500.0	1,404.8	1,361.4	1,352.0	8.5	3.8	139.74	-352.0	243.6	716.1	706.2	9.96	71.927		
1,600.0	1,486.8	1,443.3	1,432.8	9.6	4.1	141.46	-357.5	255.2	770.2	759.4	10.80	71.300 SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 13D-14 596 - Wellbore #1 - Plan #1 (12-01-17)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	156.61	-290.2	125.5	316.1				
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-290.2	125.5	316.1	315.9	0.22	1,406.516	
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-290.2	125.5	316.1	315.5	0.67	468.839 CC, ES	
300.0	300.0	293.8	293.7	0.6	0.5	125.59	-290.2	127.8	318.6	317.5	1.13	283.200	
400.0	399.6	383.8	383.6	0.8	0.8	125.39	-290.5	134.2	326.4	324.8	1.62	201.980	
500.0	498.8	470.4	469.6	1.1	1.0	125.24	-292.7	143.9	340.8	338.6	2.16	157.812	
600.0	597.1	555.5	553.5	1.4	1.3	125.15	-296.9	156.6	361.7	358.9	2.77	130.471	
700.0	694.3	638.4	634.8	1.9	1.6	125.07	-302.8	172.0	389.1	385.6	3.46	112.443	
800.0	790.2	718.8	712.8	2.4	2.0	124.95	-310.4	189.8	422.6	418.4	4.22	100.067	
900.0	884.4	796.4	787.3	3.0	2.4	124.75	-319.3	209.7	462.1	457.0	5.07	91.184	
1,000.0	976.8	885.8	872.6	3.7	2.9	124.79	-330.4	234.0	505.9	499.9	6.02	84.050	
1,100.0	1,067.1	973.3	956.1	4.5	3.4	125.02	-341.4	257.7	552.5	545.5	7.02	78.743	
1,200.0	1,154.9	1,058.7	1,037.6	5.4	4.0	125.35	-352.0	280.9	602.2	594.1	8.07	74.641	
1,300.0	1,240.2	1,141.8	1,116.9	6.4	4.5	125.71	-362.4	303.5	654.9	645.8	9.17	71.389	
1,363.8	1,293.1	1,193.5	1,166.2	7.1	4.8	125.93	-368.9	317.5	690.2	680.3	9.90	69.747	
1,400.0	1,322.8	1,222.4	1,193.9	7.5	5.0	126.62	-372.5	325.4	710.6	700.3	10.31	68.910	
1,500.0	1,404.8	1,302.5	1,270.3	8.5	5.5	128.37	-382.5	347.2	767.4	755.9	11.45	66.991 SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 14A-14 596 - Wellbore #1 - Plan #1 (12-01-17)													
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
0.0	0.0	0.0	0.0	0.0	0.0	156.61	-303.9	131.5	331.1				
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-303.9	131.5	331.1	330.9	0.22	1,473.290	
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-303.9	131.5	331.1	330.5	0.67	491.097 CC, ES	
300.0	300.0	287.3	287.3	0.6	0.5	125.71	-305.0	133.1	334.6	333.5	1.11	301.419	
400.0	399.6	374.0	373.7	0.8	0.7	125.83	-308.2	138.1	344.8	343.2	1.60	215.987	
500.0	498.8	459.5	458.7	1.1	0.9	125.99	-313.5	146.3	361.8	359.7	2.14	169.336	
600.0	597.1	543.1	541.3	1.4	1.2	126.16	-320.6	157.3	385.4	382.7	2.73	141.177	
700.0	694.3	624.5	621.0	1.9	1.5	126.27	-329.4	171.0	415.5	412.1	3.39	122.605	
800.0	790.2	700.0	694.3	2.4	1.9	126.24	-339.2	186.2	451.8	447.7	4.10	110.058	
900.0	884.4	778.8	769.9	3.0	2.3	126.17	-351.1	204.6	494.0	489.0	4.92	100.393	
1,000.0	976.8	858.8	846.0	3.7	2.8	126.05	-364.6	225.6	541.4	535.6	5.82	93.074	
1,100.0	1,067.1	944.0	926.8	4.5	3.4	126.13	-379.2	248.3	592.2	585.4	6.77	87.487	
1,200.0	1,154.9	1,026.9	1,005.4	5.4	3.9	126.28	-393.4	270.3	645.9	638.1	7.77	83.101	
1,300.0	1,240.2	1,107.2	1,081.6	6.4	4.4	126.43	-407.1	291.7	702.6	693.8	8.83	79.537	
1,363.8	1,293.1	1,157.1	1,128.9	7.1	4.7	126.50	-415.7	304.9	740.4	730.9	9.54	77.612	
1,400.0	1,322.8	1,185.0	1,155.4	7.5	4.9	127.17	-420.5	312.4	762.2	752.3	9.94	76.718 SF	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 22C-15 596 - Wellbore #1 - Plan #1 (12-01-17)													Offset Site Error:	0.0 ft
Survey Program: 0-MWDD													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	158.61	-266.6	104.4	286.3					
100.0	100.0	100.0	100.0	0.1	0.1	158.61	-266.6	104.4	286.3	286.1	0.22	1,273.837		
200.0	200.0	200.0	200.0	0.3	0.3	158.61	-266.6	104.4	286.3	285.6	0.67	424.612		
300.0	300.0	312.0	311.9	0.6	0.6	128.60	-265.2	101.4	285.8	284.7	1.17	244.729		
400.0	399.6	422.7	422.2	0.8	0.9	131.35	-261.1	92.6	284.7	283.0	1.71	166.829		
483.0	482.0	513.0	511.6	1.0	1.1	134.94	-255.8	81.2	284.2	282.0	2.21	128.439 CC		
500.0	498.8	531.2	529.6	1.1	1.2	135.81	-254.5	78.4	284.3	281.9	2.33	122.260 ES		
600.0	597.1	636.5	632.7	1.4	1.6	141.70	-245.7	59.4	286.2	283.2	3.04	94.095		
700.0	694.3	737.5	730.5	1.9	2.1	148.60	-234.9	36.3	293.0	289.1	3.86	75.982		
800.0	790.2	831.2	820.0	2.4	2.6	155.64	-223.3	11.2	307.1	302.4	4.71	65.148		
900.0	884.4	920.1	904.7	3.0	3.2	162.04	-212.0	-13.1	330.8	325.3	5.55	59.561		
1,000.0	976.8	1,006.9	987.5	3.7	3.7	167.73	-201.0	-36.8	363.7	357.4	6.35	57.288		
1,100.0	1,067.1	1,091.6	1,068.3	4.5	4.2	172.63	-190.2	-59.9	404.8	397.7	7.09	57.113 SF		
1,200.0	1,154.9	1,173.9	1,146.8	5.4	4.7	176.78	-179.8	-82.4	453.0	445.2	7.79	58.185		
1,300.0	1,240.2	1,253.6	1,222.7	6.4	5.2	-179.72	-169.7	-104.1	507.5	499.1	8.44	60.124		
1,363.8	1,293.1	1,303.0	1,269.8	7.1	5.5	-177.77	-163.4	-117.6	545.2	536.3	8.85	61.631		
1,400.0	1,322.8	1,330.6	1,296.2	7.5	5.7	-176.80	-159.9	-125.2	567.2	558.1	9.11	62.258		
1,500.0	1,404.8	1,407.0	1,369.0	8.5	6.2	-174.44	-150.2	-146.0	628.5	618.6	9.86	63.710		
1,600.0	1,486.8	1,483.4	1,441.9	9.6	6.7	-172.47	-140.5	-166.9	690.4	679.7	10.65	64.797		
1,700.0	1,568.8	1,559.7	1,514.7	10.8	7.1	-170.82	-130.8	-187.7	752.7	741.3	11.47	65.601		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 22D-15 596 - Wellbore #1 - Plan #1 (12-01-17)													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(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	158.56	-273.5	107.4	293.8						
100.0	100.0	100.0	100.0	0.1	0.1	158.56	-273.5	107.4	293.8	293.6	0.22	1,307.203			
200.0	200.0	200.0	200.0	0.3	0.3	158.56	-273.5	107.4	293.8	293.1	0.67	435.734	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	127.98	-273.5	107.4	295.4	294.3	1.15	257.756			
400.0	399.6	409.6	409.6	0.8	0.8	129.68	-272.6	104.4	298.6	297.0	1.66	180.083			
500.0	498.8	517.6	517.1	1.1	1.1	133.07	-270.1	95.5	302.5	300.3	2.22	136.494			
600.0	597.1	622.6	621.1	1.4	1.4	137.85	-266.0	81.3	308.6	305.7	2.86	108.028			
700.0	694.3	723.7	720.3	1.9	1.7	143.61	-260.6	62.4	318.8	315.2	3.58	89.011			
800.0	790.2	820.1	813.7	2.4	2.2	149.88	-254.1	39.7	335.2	330.8	4.37	76.717			
900.0	884.4	909.7	899.6	3.0	2.6	155.98	-247.0	15.2	359.6	354.5	5.18	69.452			
1,000.0	976.8	995.3	981.5	3.7	3.1	161.39	-240.2	-8.6	393.1	387.1	5.96	65.982			
1,100.0	1,067.1	1,078.5	1,061.1	4.5	3.6	166.11	-233.5	-31.7	434.8	428.2	6.69	65.024	SF		
1,200.0	1,154.9	1,159.0	1,138.2	5.4	4.1	170.17	-227.1	-54.1	483.9	476.6	7.36	65.791			
1,300.0	1,240.2	1,236.7	1,212.6	6.4	4.6	173.62	-220.9	-75.7	539.4	531.4	7.99	67.498			
1,363.8	1,293.1	1,284.8	1,258.6	7.1	4.8	175.55	-217.1	-89.1	577.9	569.5	8.37	69.039			
1,400.0	1,322.8	1,311.6	1,284.3	7.5	5.0	176.62	-214.9	-96.6	600.3	591.7	8.60	69.786			
1,500.0	1,404.8	1,385.8	1,355.3	8.5	5.4	179.22	-209.0	-117.2	663.1	653.8	9.27	71.570			
1,600.0	1,486.8	1,460.0	1,426.4	9.6	5.9	-178.59	-203.1	-137.8	726.6	716.7	9.96	72.991			
1,700.0	1,568.8	1,534.3	1,497.4	10.8	6.3	-176.73	-197.1	-158.5	790.7	780.1	10.67	74.098			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	158.52	-280.4	110.4	301.3					
100.0	100.0	100.0	100.0	0.1	0.1	158.52	-280.4	110.4	301.3	301.1	0.22	1,340.524		
200.0	200.0	200.0	200.0	0.3	0.3	158.52	-280.4	110.4	301.3	300.6	0.67	446.841	CC, ES	
300.0	300.0	300.0	300.0	0.6	0.6	127.92	-280.4	110.4	302.9	301.8	1.15	264.302		
400.0	399.6	399.6	399.6	0.8	0.8	128.96	-280.4	110.4	307.8	306.1	1.65	186.938		
500.0	498.8	505.9	505.8	1.1	1.0	131.24	-280.0	107.4	315.1	312.9	2.18	144.354		
600.0	597.1	609.8	609.3	1.4	1.3	134.93	-279.1	98.9	324.5	321.8	2.77	117.360		
700.0	694.3	710.1	708.7	1.9	1.5	139.64	-277.6	85.4	337.8	334.4	3.42	98.810		
800.0	790.2	805.8	802.7	2.4	1.9	144.93	-275.7	67.7	356.6	352.5	4.13	86.307		
900.0	884.4	896.1	890.6	3.0	2.2	150.34	-273.4	46.7	382.7	377.8	4.88	78.346		
1,000.0	976.8	980.8	972.0	3.7	2.7	155.52	-270.9	23.4	417.1	411.4	5.64	73.890		
1,100.0	1,067.1	1,062.1	1,049.9	4.5	3.1	160.13	-268.3	0.3	459.8	453.4	6.38	72.089	SF	
1,200.0	1,154.9	1,140.7	1,125.1	5.4	3.5	164.11	-265.9	-22.0	509.9	502.9	7.06	72.272		
1,300.0	1,240.2	1,216.1	1,197.4	6.4	4.0	167.51	-263.5	-43.4	566.7	559.0	7.69	73.740		
1,363.8	1,293.1	1,262.6	1,242.0	7.1	4.2	169.41	-262.1	-56.7	606.1	598.0	8.06	75.157		
1,400.0	1,322.8	1,288.5	1,266.8	7.5	4.4	170.56	-261.3	-64.0	629.0	620.8	8.28	75.970		
1,500.0	1,404.8	1,360.3	1,335.6	8.5	4.8	173.38	-259.1	-84.4	693.5	684.6	8.88	78.067		
1,600.0	1,486.8	1,432.0	1,404.3	9.6	5.2	175.77	-256.8	-104.8	758.8	749.3	9.50	79.886		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 23B-15 596 - Wellbore #1 - Plan #1 (12-01-17)													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	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	158.47	-287.3	113.3	308.8						
100.0	100.0	100.0	100.0	0.1	0.1	158.47	-287.3	113.3	308.8	308.6	0.22	1,373.892			
200.0	200.0	200.0	200.0	0.3	0.3	158.47	-287.3	113.3	308.8	308.1	0.67	457.964	CC, ES		
300.0	300.0	304.9	304.9	0.6	0.6	128.41	-287.4	110.5	309.6	308.5	1.15	269.943			
400.0	399.6	408.4	408.0	0.8	0.8	131.00	-288.0	102.0	312.4	310.8	1.67	187.142			
500.0	498.8	509.2	507.8	1.1	1.1	135.01	-288.9	88.4	318.5	316.2	2.28	139.774			
600.0	597.1	606.0	602.9	1.4	1.5	140.02	-290.1	70.5	329.7	326.7	2.98	110.538			
700.0	694.3	697.8	692.2	1.9	1.9	145.53	-291.6	49.0	347.8	344.0	3.76	92.486			
800.0	790.2	785.5	776.6	2.4	2.4	151.03	-293.2	25.3	374.3	369.7	4.57	81.880			
900.0	884.4	870.9	858.8	3.0	2.8	156.00	-294.8	2.0	409.3	403.9	5.35	76.462			
1,000.0	976.8	953.8	938.5	3.7	3.3	160.35	-296.3	-20.6	452.1	446.0	6.08	74.338			
1,100.0	1,067.1	1,033.9	1,015.5	4.5	3.7	164.08	-297.8	-42.5	501.9	495.1	6.75	74.317	SF		
1,200.0	1,154.9	1,111.0	1,089.7	5.4	4.2	167.26	-299.2	-63.5	557.9	550.6	7.37	75.653			
1,300.0	1,240.2	1,184.8	1,160.7	6.4	4.6	169.95	-300.5	-83.7	619.6	611.7	7.95	77.946			
1,363.8	1,293.1	1,230.2	1,204.4	7.1	4.9	171.46	-301.4	-96.0	661.6	653.4	8.29	79.802			
1,400.0	1,322.8	1,255.5	1,228.7	7.5	5.0	172.39	-301.8	-102.9	686.1	677.6	8.49	80.783			
1,500.0	1,404.8	1,325.4	1,296.0	8.5	5.4	174.66	-303.1	-122.0	754.1	745.0	9.06	83.259			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
NPR H15 596 North Pad Sec.15-T5S-R96W - NPR 23C-15 596 - Wellbore #1 - Plan #1 (12-01-17)													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	158.42	-294.1	116.3	316.3						
100.0	100.0	100.0	100.0	0.1	0.1	158.42	-294.1	116.3	316.3	316.1	0.22	1,407.261			
200.0	200.0	200.0	200.0	0.3	0.3	158.42	-294.1	116.3	316.3	315.6	0.67	469.087	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	127.81	-294.1	116.3	317.9	316.8	1.15	277.414			
400.0	399.6	401.2	401.2	0.8	0.8	129.29	-294.8	113.7	322.5	320.9	1.64	197.020			
500.0	498.8	500.4	500.0	1.1	1.0	132.20	-296.8	106.2	330.6	328.4	2.17	152.094			
600.0	597.1	596.2	595.0	1.4	1.3	136.16	-299.9	94.1	343.4	340.6	2.79	122.980			
700.0	694.3	687.5	684.8	1.9	1.6	140.72	-303.9	78.4	362.6	359.1	3.49	103.915			
800.0	790.2	773.4	768.5	2.4	1.9	145.43	-308.7	59.8	389.6	385.4	4.24	91.936			
900.0	884.4	853.2	845.5	3.0	2.3	149.93	-314.0	39.3	425.4	420.3	5.00	85.009			
1,000.0	976.8	928.5	917.2	3.7	2.8	154.11	-319.7	17.2	470.0	464.3	5.75	81.791			
1,100.0	1,067.1	1,004.6	989.5	4.5	3.2	158.00	-325.6	-5.9	522.4	516.0	6.47	80.718	SF		
1,200.0	1,154.9	1,077.4	1,058.6	5.4	3.7	161.28	-331.3	-28.0	581.4	574.3	7.14	81.399			
1,300.0	1,240.2	1,146.7	1,124.4	6.4	4.1	164.05	-336.7	-49.0	646.2	638.5	7.76	83.280			
1,363.8	1,293.1	1,189.0	1,164.6	7.1	4.4	165.58	-340.0	-61.9	690.3	682.2	8.13	84.872			
1,400.0	1,322.8	1,212.5	1,187.0	7.5	4.6	166.63	-341.9	-69.0	715.9	707.6	8.33	85.932			
1,500.0	1,404.8	1,277.6	1,248.8	8.5	5.0	169.24	-347.0	-88.8	787.3	778.5	8.88	88.705			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	158.38	-301.0	119.3	323.8					
100.0	100.0	100.0	100.0	0.1	0.1	158.38	-301.0	119.3	323.8	323.6	0.22	1,440.630		
200.0	200.0	200.0	200.0	0.3	0.3	158.38	-301.0	119.3	323.8	323.1	0.67	480.210	CC, ES	
300.0	300.0	300.0	300.0	0.6	0.6	127.76	-301.0	119.3	325.4	324.3	1.15	283.971		
400.0	399.6	399.6	399.6	0.8	0.8	128.72	-301.0	119.3	330.3	328.6	1.65	200.657		
500.0	498.8	494.9	494.9	1.1	1.0	130.55	-302.3	117.3	339.2	337.0	2.16	157.184		
600.0	597.1	587.4	587.1	1.4	1.2	133.41	-305.8	111.5	353.4	350.7	2.72	130.026		
700.0	694.3	675.9	675.0	1.9	1.4	136.91	-311.4	102.3	374.1	370.8	3.34	111.870		
800.0	790.2	759.6	757.4	2.4	1.7	140.64	-318.6	90.5	402.4	398.4	4.02	99.972		
900.0	884.4	837.5	833.7	3.0	1.9	144.27	-327.1	76.7	438.9	434.2	4.73	92.751		
1,000.0	976.8	914.1	908.0	3.7	2.3	147.81	-336.7	60.9	483.9	478.4	5.46	88.641		
1,100.0	1,067.1	992.1	983.6	4.5	2.6	151.10	-346.8	44.5	535.6	529.4	6.17	86.831		
1,200.0	1,154.9	1,066.8	1,056.0	5.4	3.0	153.88	-356.4	28.8	593.3	586.4	6.85	86.587	SF	
1,300.0	1,240.2	1,138.0	1,124.9	6.4	3.4	156.18	-365.6	13.8	656.4	648.9	7.51	87.416		
1,363.8	1,293.1	1,181.5	1,167.1	7.1	3.6	157.44	-371.2	4.6	699.4	691.5	7.92	88.329		
1,400.0	1,322.8	1,205.7	1,190.6	7.5	3.7	158.46	-374.3	-0.5	724.3	716.2	8.12	89.239		
1,500.0	1,404.8	1,272.6	1,255.4	8.5	4.0	161.01	-382.9	-14.6	793.9	785.3	8.65	91.754		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	158.34	-307.9	122.3	331.3						
100.0	100.0	100.0	100.0	0.1	0.1	158.34	-307.9	122.3	331.3	331.1	0.22	1,473.954	CC, ES		
200.0	200.0	200.0	200.0	0.3	0.3	158.34	-307.9	122.3	331.3	330.6	0.67	491.318			
300.0	300.0	294.4	294.3	0.6	0.5	128.05	-309.4	120.5	333.7	332.6	1.12	297.714			
400.0	399.6	387.3	387.0	0.8	0.7	129.92	-313.9	115.3	341.3	339.7	1.62	210.701			
500.0	498.8	477.5	476.6	1.1	1.0	132.73	-321.1	107.1	354.9	352.7	2.19	162.017			
600.0	597.1	563.9	561.7	1.4	1.3	136.11	-330.5	96.2	375.5	372.7	2.83	132.513			
700.0	694.3	645.4	641.4	1.9	1.6	139.66	-341.8	83.2	404.2	400.6	3.53	114.564			
800.0	790.2	721.4	714.9	2.4	2.0	143.08	-354.2	68.8	441.3	437.1	4.25	103.834			
900.0	884.4	803.6	794.1	3.0	2.4	146.68	-368.7	52.1	486.2	481.2	4.99	97.435			
1,000.0	976.8	882.8	870.3	3.7	2.9	149.76	-382.7	35.9	537.3	531.6	5.70	94.189			
1,100.0	1,067.1	958.6	943.4	4.5	3.3	152.37	-396.1	20.5	594.1	587.7	6.39	92.933	SF		
1,200.0	1,154.9	1,031.0	1,013.1	5.4	3.7	154.54	-408.9	5.7	656.3	649.3	7.06	92.977			
1,300.0	1,240.2	1,099.8	1,079.3	6.4	4.1	156.31	-421.0	-8.3	723.4	715.7	7.71	93.809			
1,363.8	1,293.1	1,141.6	1,119.6	7.1	4.3	157.25	-428.4	-16.8	768.6	760.4	8.12	94.595			
1,400.0	1,322.8	1,164.9	1,142.0	7.5	4.4	158.15	-432.5	-21.5	794.7	786.4	8.32	95.491			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.78	-20.7	8.9	22.5					
100.0	100.0	100.0	100.0	0.1	0.1	156.78	-20.7	8.9	22.5	22.3	0.22	100.161		
200.0	200.0	200.0	200.0	0.3	0.3	156.78	-20.7	8.9	22.5	21.8	0.67	33.387 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	130.84	-20.7	8.9	24.1	23.0	1.15	21.008		
400.0	399.6	399.6	399.6	0.8	0.8	142.18	-20.7	8.9	29.9	28.2	1.68	17.794		
500.0	498.8	498.8	498.8	1.1	1.0	153.27	-20.7	8.9	41.0	38.7	2.25	18.241		
600.0	597.1	599.7	599.6	1.4	1.2	160.19	-18.7	10.5	55.6	52.8	2.81	19.820		
700.0	694.3	701.5	701.1	1.9	1.5	163.57	-12.5	15.6	70.9	67.6	3.35	21.140		
800.0	790.2	804.1	802.8	2.4	1.7	165.21	-2.0	24.2	86.5	82.6	3.92	22.073		
900.0	884.4	907.6	904.5	3.0	2.1	165.87	12.8	36.4	102.2	97.7	4.51	22.667		
1,000.0	976.8	1,011.9	1,005.8	3.7	2.5	165.93	32.0	52.2	118.0	112.9	5.14	22.958		
1,100.0	1,067.1	1,117.0	1,106.4	4.5	3.0	165.61	55.6	71.7	133.8	128.0	5.82	22.977		
1,200.0	1,154.9	1,223.1	1,205.9	5.4	3.6	165.00	83.8	94.8	149.5	143.0	6.57	22.748		
1,300.0	1,240.2	1,329.9	1,304.0	6.4	4.4	164.19	116.4	121.6	165.2	157.8	7.42	22.274		
1,363.8	1,293.1	1,398.6	1,365.8	7.1	4.9	163.58	139.6	140.7	175.2	167.2	7.98	21.945		
1,400.0	1,322.8	1,437.6	1,400.4	7.5	5.2	163.23	153.5	152.2	180.5	172.1	8.34	21.652		
1,500.0	1,404.8	1,541.9	1,491.3	8.5	6.2	161.97	193.0	184.7	192.2	182.8	9.40	20.446		
1,600.0	1,486.8	1,641.2	1,577.4	9.6	7.1	160.81	231.2	216.1	203.4	192.8	10.54	19.302		
1,700.0	1,568.8	1,740.5	1,663.5	10.8	8.0	159.76	269.4	247.5	214.6	202.8	11.73	18.298		
1,800.0	1,650.8	1,839.8	1,749.6	11.9	9.0	158.83	307.6	278.9	225.8	212.9	12.96	17.420		
1,900.0	1,732.8	1,939.1	1,835.8	13.0	10.0	157.98	345.8	310.3	237.2	222.9	14.24	16.654		
2,000.0	1,814.8	2,038.4	1,921.9	14.1	10.9	157.20	384.0	341.8	248.5	233.0	15.55	15.983		
2,100.0	1,896.8	2,137.7	2,008.0	15.2	11.9	156.50	422.2	373.2	259.9	243.0	16.88	15.394		
2,200.0	1,978.8	2,237.0	2,094.1	16.3	12.9	155.85	460.3	404.6	271.4	253.1	18.24	14.875		
2,300.0	2,060.8	2,336.3	2,180.2	17.4	13.8	155.26	498.5	436.0	282.8	263.2	19.62	14.415		
2,400.0	2,142.8	2,435.6	2,266.3	18.5	14.8	154.71	536.7	467.4	294.3	273.3	21.02	14.005		
2,500.0	2,224.8	2,534.9	2,352.4	19.7	15.8	154.21	574.9	498.8	305.9	283.4	22.42	13.639		
2,600.0	2,306.8	2,634.2	2,438.5	20.8	16.8	153.74	613.1	530.2	317.4	293.6	23.85	13.310		
2,700.0	2,388.8	2,733.5	2,524.7	21.9	17.7	153.30	651.3	561.6	329.0	303.7	25.28	13.014		
2,800.0	2,470.8	2,832.8	2,610.8	23.0	18.7	152.90	689.5	593.1	340.6	313.8	26.72	12.745		
2,900.0	2,552.8	2,932.1	2,696.9	24.1	19.7	152.52	727.6	624.5	352.2	324.0	28.17	12.500		
3,000.0	2,634.8	3,031.4	2,783.0	25.2	20.7	152.16	765.8	655.9	363.8	334.1	29.63	12.277		
3,100.0	2,716.8	3,130.7	2,869.1	26.4	21.7	151.83	804.0	687.3	375.4	344.3	31.10	12.072		
3,200.0	2,798.8	3,230.0	2,955.2	27.5	22.6	151.52	842.2	718.7	387.0	354.5	32.57	11.884		
3,300.0	2,880.8	3,329.3	3,041.3	28.6	23.6	151.22	880.4	750.1	398.7	364.6	34.04	11.711		
3,400.0	2,962.8	3,428.6	3,127.4	29.7	24.6	150.94	918.6	781.5	410.3	374.8	35.53	11.550		
3,500.0	3,044.8	3,527.9	3,213.6	30.8	25.6	150.68	956.8	812.9	422.0	385.0	37.01	11.402		
3,600.0	3,126.8	3,627.2	3,299.7	32.0	26.6	150.43	994.9	844.4	433.7	395.2	38.50	11.264		
3,700.0	3,208.8	3,726.5	3,385.8	33.1	27.6	150.20	1,033.1	875.8	445.4	405.4	40.00	11.135		
3,800.0	3,290.8	3,825.8	3,471.9	34.2	28.5	149.97	1,071.3	907.2	457.1	415.6	41.49	11.015		
3,900.0	3,372.8	3,925.1	3,558.0	35.3	29.5	149.76	1,109.5	938.6	468.7	425.8	42.99	10.903		
4,000.0	3,454.8	4,024.4	3,644.1	36.4	30.5	149.56	1,147.7	970.0	480.5	436.0	44.50	10.797		
4,100.0	3,536.8	4,123.7	3,730.2	37.6	31.5	149.36	1,185.9	1,001.4	492.2	446.2	46.00	10.698		
4,200.0	3,618.8	4,223.0	3,816.3	38.7	32.5	149.18	1,224.1	1,032.8	503.9	456.4	47.51	10.605		
4,300.0	3,700.8	4,322.3	3,902.5	39.8	33.5	149.01	1,262.2	1,064.2	515.6	466.6	49.02	10.518		
4,400.0	3,782.8	4,421.6	3,988.6	40.9	34.4	148.84	1,300.4	1,095.7	527.3	476.8	50.53	10.435		
4,500.0	3,864.8	4,520.9	4,074.7	42.0	35.4	148.68	1,338.6	1,127.1	539.0	487.0	52.05	10.357		
4,600.0	3,946.8	4,620.2	4,160.8	43.2	36.4	148.52	1,376.8	1,158.5	550.8	497.2	53.56	10.282		
4,700.0	4,028.8	4,719.5	4,246.9	44.3	37.4	148.38	1,415.0	1,189.9	562.5	507.4	55.08	10.212		
4,800.0	4,110.8	4,818.8	4,333.0	45.4	38.4	148.24	1,453.2	1,221.3	574.2	517.6	56.60	10.145		
4,900.0	4,192.8	4,918.1	4,419.1	46.5	39.4	148.10	1,491.4	1,252.7	586.0	527.9	58.12	10.082		
5,000.0	4,274.8	5,017.4	4,505.2	47.7	40.4	147.97	1,529.5	1,284.1	597.7	538.1	59.64	10.022		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	4,356.8	5,116.7	4,591.4	48.8	41.3	147.85	1,567.7	1,315.5	609.5	548.3	61.17	9.964		
5,200.0	4,438.8	5,216.0	4,677.5	49.9	42.3	147.73	1,605.9	1,347.0	621.2	558.5	62.69	9.909		
5,300.0	4,520.8	5,315.3	4,763.6	51.0	43.3	147.61	1,644.1	1,378.4	633.0	568.8	64.22	9.857		
5,400.0	4,602.8	5,414.6	4,849.7	52.1	44.3	147.50	1,682.3	1,409.8	644.7	579.0	65.74	9.807		
5,500.0	4,684.8	5,513.9	4,935.8	53.3	45.3	147.39	1,720.5	1,441.2	656.5	589.2	67.27	9.759		
5,600.0	4,766.8	5,613.2	5,021.9	54.4	46.3	147.29	1,758.7	1,472.6	668.3	599.5	68.80	9.713		
5,700.0	4,848.8	5,700.0	5,097.3	55.5	47.1	147.21	1,792.0	1,500.0	680.2	610.0	70.21	9.689		
5,800.0	4,930.8	5,782.6	5,170.2	56.6	47.7	147.27	1,821.9	1,524.6	694.6	623.3	71.31	9.741		
5,813.5	4,941.9	5,800.0	5,185.8	56.8	47.8	147.31	1,827.8	1,529.5	696.8	625.4	71.46	9.751		
5,900.0	5,013.9	5,859.6	5,239.7	57.6	48.2	147.66	1,847.5	1,545.7	710.4	638.3	72.13	9.850		
6,000.0	5,099.7	5,936.3	5,310.1	58.4	48.7	148.03	1,870.9	1,564.9	725.0	652.2	72.77	9.962		
6,100.0	5,188.2	6,012.8	5,381.6	59.1	49.2	148.36	1,892.0	1,582.3	738.2	664.9	73.33	10.068		
6,200.0	5,278.9	6,100.0	5,464.2	59.8	49.6	148.67	1,913.4	1,599.9	750.2	676.4	73.80	10.166		
6,300.0	5,371.7	6,165.2	5,526.8	60.3	49.9	148.90	1,927.5	1,611.5	760.6	686.5	74.10	10.265		
6,400.0	5,466.4	6,241.1	5,600.5	60.9	50.2	149.12	1,941.8	1,623.2	769.7	695.4	74.32	10.357		
6,500.0	5,562.6	6,317.0	5,674.7	61.3	50.5	149.30	1,953.8	1,633.1	777.4	703.0	74.43	10.446		
6,600.0	5,660.1	6,400.0	5,756.6	61.7	50.7	149.45	1,964.3	1,641.8	783.8	709.4	74.43	10.530		
6,700.0	5,758.6	6,468.3	5,824.4	61.9	50.9	149.56	1,970.9	1,647.2	788.6	714.3	74.29	10.615		
6,800.0	5,857.9	6,543.9	5,899.7	62.2	51.0	149.64	1,976.0	1,651.4	792.1	718.0	74.06	10.695		
6,900.0	5,957.7	6,619.4	5,975.1	62.3	51.1	149.69	1,978.8	1,653.7	794.1	720.4	73.73	10.771		
6,977.4	6,035.0	6,679.0	6,034.7	62.3	51.1	-179.35	1,979.4	1,654.2	794.7	684.4	110.23	7.209 SF		
7,000.0	6,057.6	6,700.0	6,055.7	62.4	51.1	-69.35	1,979.4	1,654.1	794.7	721.3	73.41	10.826		
7,100.0	6,157.6	6,796.0	6,151.6	62.4	51.2	-69.34	1,978.9	1,652.9	794.7	721.3	73.43	10.823		
7,200.0	6,257.6	6,891.3	6,246.9	62.4	51.2	-69.34	1,978.0	1,650.3	794.7	721.3	73.42	10.824		
7,298.5	6,356.0	6,985.2	6,340.8	62.4	51.2	-69.35	1,976.5	1,646.2	794.6	721.3	73.38	10.828		
7,300.0	6,357.5	6,986.6	6,342.2	62.4	51.2	-69.35	1,976.5	1,646.1	794.6	721.3	73.38	10.828		
7,328.2	6,385.6	7,014.4	6,369.9	62.4	51.2	-69.35	1,975.9	1,644.7	794.6	721.2	73.39	10.828		
7,400.0	6,457.3	7,086.2	6,441.6	62.4	51.2	-69.35	1,974.5	1,640.9	794.6	721.3	73.39	10.828		
7,500.0	6,557.2	7,186.2	6,541.4	62.4	51.2	-69.35	1,972.6	1,635.6	794.6	721.3	73.39	10.828		
7,600.0	6,657.0	7,286.2	6,641.3	62.4	51.2	-69.35	1,970.7	1,630.3	794.6	721.2	73.39	10.827		
7,700.0	6,756.8	7,386.2	6,741.1	62.3	51.2	-69.35	1,968.8	1,625.1	794.6	721.2	73.40	10.826		
7,800.0	6,856.7	7,486.2	6,841.0	62.3	51.2	-69.35	1,966.9	1,619.8	794.6	721.2	73.42	10.824		
7,900.0	6,956.5	7,586.2	6,940.8	62.3	51.1	-69.35	1,964.9	1,614.5	794.6	721.2	73.43	10.821		
8,000.0	7,056.4	7,686.2	7,040.6	62.3	51.1	-69.35	1,963.0	1,609.2	794.7	721.2	73.45	10.819		
8,100.0	7,156.2	7,786.2	7,140.5	62.3	51.1	-69.35	1,961.1	1,604.0	794.7	721.2	73.47	10.815		
8,200.0	7,256.1	7,886.2	7,240.3	62.3	51.1	-69.35	1,959.2	1,598.7	794.7	721.2	73.50	10.812		
8,300.0	7,355.9	7,986.2	7,340.2	62.3	51.1	-69.35	1,957.3	1,593.4	794.7	721.1	73.53	10.807		
8,400.0	7,455.7	8,086.2	7,440.0	62.3	51.1	-69.35	1,955.4	1,588.2	794.7	721.1	73.56	10.803		
8,500.0	7,555.6	8,186.2	7,539.9	62.3	51.2	-69.35	1,953.4	1,582.9	794.7	721.1	73.60	10.797		
8,600.0	7,655.4	8,286.2	7,639.7	62.3	51.2	-69.35	1,951.5	1,577.6	794.7	721.0	73.64	10.792		
8,700.0	7,755.3	8,386.2	7,739.5	62.3	51.2	-69.35	1,949.6	1,572.3	794.7	721.0	73.68	10.785		
8,800.0	7,855.1	8,486.2	7,839.4	62.3	51.2	-69.35	1,947.7	1,567.1	794.7	720.9	73.73	10.779		
8,900.0	7,955.0	8,586.2	7,939.2	62.3	51.2	-69.34	1,945.8	1,561.8	794.7	720.9	73.77	10.772		
9,000.0	8,054.8	8,686.2	8,039.1	62.3	51.2	-69.34	1,943.8	1,556.5	794.7	720.8	73.83	10.764		
9,100.0	8,154.6	8,786.2	8,138.9	62.3	51.2	-69.34	1,941.9	1,551.3	794.7	720.8	73.88	10.756		
9,200.0	8,254.5	8,886.2	8,238.8	62.3	51.2	-69.34	1,940.0	1,546.0	794.7	720.7	73.94	10.747		
9,300.0	8,354.3	8,986.2	8,338.6	62.3	51.2	-69.34	1,938.1	1,540.7	794.7	720.7	74.00	10.738		
9,400.0	8,454.2	9,086.2	8,438.4	62.3	51.2	-69.34	1,936.2	1,535.4	794.7	720.6	74.07	10.729		
9,500.0	8,554.0	9,186.2	8,538.3	62.3	51.3	-69.34	1,934.2	1,530.2	794.7	720.6	74.14	10.719		
9,600.0	8,653.9	9,286.2	8,638.1	62.3	51.3	-69.34	1,932.3	1,524.9	794.7	720.5	74.21	10.709		
9,700.0	8,753.7	9,386.2	8,738.0	62.3	51.3	-69.34	1,930.4	1,519.6	794.7	720.4	74.28	10.698		
9,800.0	8,853.5	9,486.2	8,837.8	62.3	51.3	-69.34	1,928.5	1,514.3	794.7	720.3	74.36	10.687		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	
9,900.0	8,953.4	9,586.2	8,937.7	62.3	51.3	-69.34	1,926.6	1,509.1	794.7	720.3	74.44	10.675	
10,000.0	9,053.2	9,686.2	9,037.5	62.3	51.3	-69.34	1,924.6	1,503.8	794.7	720.2	74.53	10.663	
10,100.0	9,153.1	9,786.2	9,137.3	62.4	51.4	-69.34	1,922.7	1,498.5	794.7	720.1	74.62	10.651	
10,200.0	9,252.9	9,886.2	9,237.2	62.4	51.4	-69.34	1,920.8	1,493.3	794.7	720.0	74.71	10.638	
10,300.0	9,352.8	9,986.2	9,337.0	62.4	51.4	-69.34	1,918.9	1,488.0	794.7	719.9	74.80	10.624	
10,344.0	9,396.6	10,030.2	9,380.9	62.4	51.4	-69.34	1,918.0	1,485.7	794.7	719.9	74.84	10.619	
10,376.4	9,429.0	10,059.3	9,410.0	62.4	51.4	-69.34	1,917.5	1,484.1	794.7	719.8	74.87	10.614	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.67	-27.5	11.9	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	156.67	-27.5	11.9	30.0	29.7	0.22	133.250		
200.0	200.0	200.0	200.0	0.3	0.3	156.67	-27.5	11.9	30.0	29.3	0.67	44.417 CC, ES		
300.0	300.0	300.6	300.6	0.6	0.6	125.16	-25.6	13.7	30.4	29.3	1.14	26.659		
400.0	399.6	401.2	400.8	0.8	0.8	123.56	-19.8	19.1	31.9	30.3	1.64	19.400		
500.0	498.8	501.8	500.5	1.1	1.1	121.20	-10.2	28.2	34.4	32.2	2.22	15.515		
600.0	597.1	602.3	599.3	1.4	1.5	118.43	3.2	40.8	38.0	35.1	2.91	13.070		
700.0	694.3	702.7	696.9	1.9	1.9	115.55	20.3	57.0	42.7	38.9	3.75	11.383		
800.0	790.2	803.0	793.0	2.4	2.4	112.78	41.2	76.7	48.4	43.7	4.77	10.160		
900.0	884.4	903.2	887.4	3.0	3.0	110.25	65.6	99.7	55.4	49.4	5.98	9.255		
1,000.0	976.8	1,003.3	979.8	3.7	3.8	108.01	93.6	126.1	63.4	56.0	7.39	8.575		
1,100.0	1,067.1	1,103.0	1,070.0	4.5	4.6	106.43	124.6	155.4	72.5	63.5	8.98	8.074		
1,200.0	1,154.9	1,202.4	1,159.5	5.4	5.4	108.03	156.1	185.1	83.1	72.4	10.63	7.818		
1,300.0	1,240.2	1,301.4	1,248.6	6.4	6.3	112.12	187.4	214.6	95.6	83.3	12.24	7.807 SF		
1,363.8	1,293.1	1,364.2	1,305.2	7.1	6.8	115.48	207.3	233.4	105.0	91.7	13.22	7.940		
1,400.0	1,322.8	1,399.7	1,337.1	7.5	7.1	117.54	218.5	244.0	110.7	97.0	13.75	8.055		
1,500.0	1,404.8	1,497.9	1,425.5	8.5	7.9	122.24	249.6	273.3	127.2	112.1	15.15	8.399		
1,600.0	1,486.8	1,596.0	1,513.8	9.6	8.8	125.85	280.6	302.6	144.4	127.9	16.50	8.751		
1,700.0	1,568.8	1,694.2	1,602.2	10.8	9.6	128.69	311.7	331.9	162.0	144.1	17.82	9.089		
1,800.0	1,650.8	1,792.4	1,690.6	11.9	10.5	130.97	342.8	361.2	179.9	160.7	19.12	9.405		
1,900.0	1,732.8	1,890.5	1,779.0	13.0	11.3	132.84	373.8	390.6	198.0	177.6	20.42	9.697		
2,000.0	1,814.8	1,988.7	1,867.3	14.1	12.2	134.40	404.9	419.9	216.3	194.6	21.71	9.964		
2,100.0	1,896.8	2,086.8	1,955.7	15.2	13.0	135.71	436.0	449.2	234.7	211.7	22.99	10.209		
2,200.0	1,978.8	2,185.0	2,044.1	16.3	13.9	136.83	467.0	478.5	253.2	229.0	24.27	10.432		
2,300.0	2,060.8	2,283.1	2,132.5	17.4	14.7	137.80	498.1	507.8	271.8	246.3	25.56	10.637		
2,400.0	2,142.8	2,381.3	2,220.8	18.5	15.6	138.65	529.2	537.1	290.5	263.7	26.84	10.825		
2,500.0	2,224.8	2,479.4	2,309.2	19.7	16.5	139.39	560.3	566.5	309.3	281.1	28.12	10.997		
2,600.0	2,306.8	2,577.6	2,397.6	20.8	17.3	140.05	591.3	595.8	328.0	298.6	29.40	11.156		
2,700.0	2,388.8	2,675.8	2,486.0	21.9	18.2	140.63	622.4	625.1	346.8	316.1	30.69	11.302		
2,800.0	2,470.8	2,773.9	2,574.3	23.0	19.0	141.16	653.5	654.4	365.7	333.7	31.97	11.438		
2,900.0	2,552.8	2,872.1	2,662.7	24.1	19.9	141.63	684.5	683.7	384.6	351.3	33.26	11.563		
3,000.0	2,634.8	2,970.2	2,751.1	25.2	20.7	142.06	715.6	713.0	403.4	368.9	34.54	11.680		
3,100.0	2,716.8	3,068.4	2,839.5	26.4	21.6	142.45	746.7	742.4	422.4	386.5	35.83	11.789		
3,200.0	2,798.8	3,166.5	2,927.8	27.5	22.4	142.81	777.7	771.7	441.3	404.2	37.11	11.890		
3,300.0	2,880.8	3,264.7	3,016.2	28.6	23.3	143.14	808.8	801.0	460.2	421.8	38.40	11.985		
3,400.0	2,962.8	3,362.9	3,104.6	29.7	24.1	143.44	839.9	830.3	479.2	439.5	39.69	12.074		
3,500.0	3,044.8	3,461.0	3,193.0	30.8	25.0	143.72	870.9	859.6	498.2	457.2	40.98	12.157		
3,600.0	3,126.8	3,559.2	3,281.3	32.0	25.9	143.98	902.0	888.9	517.1	474.9	42.27	12.236		
3,700.0	3,208.8	3,657.3	3,369.7	33.1	26.7	144.22	933.1	918.3	536.1	492.6	43.55	12.310		
3,800.0	3,290.8	3,755.5	3,458.1	34.2	27.6	144.45	964.1	947.6	555.1	510.3	44.84	12.379		
3,900.0	3,372.8	3,853.6	3,546.4	35.3	28.4	144.66	995.2	976.9	574.1	528.0	46.13	12.445		
4,000.0	3,454.8	3,951.8	3,634.8	36.4	29.3	144.85	1,026.3	1,006.2	593.2	545.7	47.42	12.508		
4,100.0	3,536.8	4,049.9	3,723.2	37.6	30.1	145.04	1,057.4	1,035.5	612.2	563.5	48.71	12.567		
4,200.0	3,618.8	4,148.1	3,811.6	38.7	31.0	145.21	1,088.4	1,064.8	631.2	581.2	50.01	12.623		
4,300.0	3,700.8	4,246.3	3,899.9	39.8	31.9	145.37	1,119.5	1,094.1	650.2	598.9	51.30	12.676		
4,400.0	3,782.8	4,344.4	3,988.3	40.9	32.7	145.53	1,150.6	1,123.5	669.3	616.7	52.59	12.727		
4,500.0	3,864.8	4,442.6	4,076.7	42.0	33.6	145.67	1,181.6	1,152.8	688.3	634.4	53.88	12.775		
4,600.0	3,946.8	4,540.7	4,165.1	43.2	34.4	145.81	1,212.7	1,182.1	707.4	652.2	55.17	12.821		
4,700.0	4,028.8	4,638.9	4,253.4	44.3	35.3	145.94	1,243.8	1,211.4	726.4	669.9	56.46	12.865		
4,800.0	4,110.8	4,737.0	4,341.8	45.4	36.1	146.06	1,274.8	1,240.7	745.5	687.7	57.76	12.907		
4,900.0	4,192.8	4,835.2	4,430.2	46.5	37.0	146.18	1,305.9	1,270.0	764.5	705.5	59.05	12.947		
5,000.0	4,274.8	4,933.3	4,518.6	47.7	37.8	146.29	1,337.0	1,299.4	783.6	723.2	60.34	12.986		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.61	-34.5	14.9	37.5					
100.0	100.0	100.0	100.0	0.1	0.1	156.61	-34.5	14.9	37.5	37.3	0.22	167.034		
200.0	200.0	200.0	200.0	0.3	0.3	156.61	-34.5	14.9	37.5	36.9	0.67	55.678 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	128.74	-34.5	14.9	39.1	38.0	1.15	34.116		
400.0	399.6	400.7	400.7	0.8	0.8	133.57	-32.7	16.9	43.2	41.6	1.65	26.140		
500.0	498.8	501.7	501.3	1.1	1.0	136.32	-27.3	22.8	48.7	46.6	2.20	22.198		
600.0	597.1	602.8	601.6	1.4	1.3	137.39	-18.4	32.7	55.5	52.7	2.80	19.832		
700.0	694.3	704.1	701.1	1.9	1.6	137.24	-5.9	46.5	63.4	59.9	3.49	18.171		
800.0	790.2	805.5	799.7	2.4	2.1	136.26	10.1	64.3	72.5	68.2	4.30	16.847		
900.0	884.4	907.0	896.8	3.0	2.6	134.75	29.7	85.9	82.7	77.4	5.27	15.703		
1,000.0	976.8	1,008.5	992.4	3.7	3.2	132.94	52.7	111.3	94.1	87.7	6.41	14.683		
1,100.0	1,067.1	1,110.0	1,086.0	4.5	4.0	130.97	79.0	140.4	106.7	98.9	7.74	13.782		
1,200.0	1,154.9	1,208.9	1,176.1	5.4	4.7	130.13	106.3	170.6	121.6	112.4	9.16	13.268		
1,300.0	1,240.2	1,307.2	1,265.7	6.4	5.5	130.99	133.3	200.6	139.9	129.3	10.57	13.228 SF		
1,363.8	1,293.1	1,369.5	1,322.5	7.1	6.0	132.11	150.5	219.6	153.4	141.9	11.44	13.402		
1,400.0	1,322.8	1,404.6	1,354.5	7.5	6.3	132.98	160.2	230.3	161.5	149.5	11.92	13.542		
1,500.0	1,404.8	1,501.9	1,443.2	8.5	7.1	134.98	187.0	259.9	184.0	170.7	13.24	13.894		
1,600.0	1,486.8	1,599.1	1,531.8	9.6	7.9	136.54	213.8	289.6	206.7	192.1	14.56	14.197		
1,700.0	1,568.8	1,696.4	1,620.5	10.8	8.7	137.79	240.6	319.2	229.5	213.6	15.87	14.459		
1,800.0	1,650.8	1,793.6	1,709.2	11.9	9.5	138.82	267.4	348.9	252.3	235.2	17.18	14.687		
1,900.0	1,732.8	1,890.9	1,797.8	13.0	10.3	139.67	294.2	378.6	275.3	256.8	18.49	14.886		
2,000.0	1,814.8	1,988.2	1,886.5	14.1	11.1	140.40	321.0	408.2	298.3	278.5	19.80	15.060		
2,100.0	1,896.8	2,085.4	1,975.2	15.2	11.9	141.02	347.8	437.9	321.3	300.2	21.12	15.215		
2,200.0	1,978.8	2,182.7	2,063.8	16.3	12.7	141.55	374.6	467.5	344.4	321.9	22.43	15.353		
2,300.0	2,060.8	2,279.9	2,152.5	17.4	13.5	142.02	401.4	497.2	367.5	343.7	23.74	15.476		
2,400.0	2,142.8	2,377.2	2,241.1	18.5	14.3	142.44	428.2	526.8	390.6	365.5	25.06	15.586		
2,500.0	2,224.8	2,474.4	2,329.8	19.7	15.1	142.81	455.0	556.5	413.7	387.3	26.37	15.686		
2,600.0	2,306.8	2,571.7	2,418.5	20.8	15.9	143.14	481.8	586.1	436.8	409.1	27.69	15.777		
2,700.0	2,388.8	2,669.0	2,507.1	21.9	16.7	143.43	508.6	615.8	460.0	431.0	29.00	15.860		
2,800.0	2,470.8	2,766.2	2,595.8	23.0	17.5	143.70	535.4	645.5	483.2	452.8	30.32	15.935		
2,900.0	2,552.8	2,863.5	2,684.5	24.1	18.3	143.94	562.2	675.1	506.3	474.7	31.64	16.005		
3,000.0	2,634.8	2,960.7	2,773.1	25.2	19.1	144.16	589.0	704.8	529.5	496.6	32.95	16.069		
3,100.0	2,716.8	3,058.0	2,861.8	26.4	19.9	144.37	615.8	734.4	552.7	518.4	34.27	16.128		
3,200.0	2,798.8	3,155.2	2,950.4	27.5	20.7	144.55	642.6	764.1	575.9	540.3	35.59	16.183		
3,300.0	2,880.8	3,252.5	3,039.1	28.6	21.5	144.73	669.4	793.7	599.1	562.2	36.90	16.234		
3,400.0	2,962.8	3,349.7	3,127.8	29.7	22.3	144.89	696.2	823.4	622.3	584.1	38.22	16.281		
3,500.0	3,044.8	3,447.0	3,216.4	30.8	23.1	145.04	723.0	853.0	645.5	606.0	39.54	16.325		
3,600.0	3,126.8	3,544.3	3,305.1	32.0	24.0	145.17	749.8	882.7	668.7	627.9	40.86	16.366		
3,700.0	3,208.8	3,641.5	3,393.8	33.1	24.8	145.30	776.6	912.4	691.9	649.8	42.18	16.405		
3,800.0	3,290.8	3,738.8	3,482.4	34.2	25.6	145.42	803.4	942.0	715.2	671.7	43.50	16.442		
3,900.0	3,372.8	3,836.0	3,571.1	35.3	26.4	145.53	830.2	971.7	738.4	693.6	44.81	16.476		
4,000.0	3,454.8	3,933.3	3,659.7	36.4	27.2	145.64	857.0	1,001.3	761.6	715.5	46.13	16.508		
4,100.0	3,536.8	4,030.5	3,748.4	37.6	28.0	145.74	883.8	1,031.0	784.8	737.4	47.45	16.539		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.65	-41.3	17.8	45.0					
100.0	100.0	100.0	100.0	0.1	0.1	156.65	-41.3	17.8	45.0	44.8	0.22	200.172		
200.0	200.0	200.0	200.0	0.3	0.3	156.65	-41.3	17.8	45.0	44.3	0.67	66.724 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	128.28	-41.3	17.8	46.6	45.4	1.15	40.620		
400.0	399.6	399.6	399.6	0.8	0.8	134.99	-41.3	17.8	51.8	50.1	1.66	31.181		
500.0	498.8	500.4	500.3	1.1	1.0	141.38	-39.7	19.9	60.4	58.2	2.21	27.375		
600.0	597.1	601.5	601.2	1.4	1.2	144.91	-34.9	26.3	71.0	68.3	2.78	25.592		
700.0	694.3	703.0	701.8	1.9	1.5	146.41	-26.9	37.1	83.2	79.8	3.39	24.531		
800.0	790.2	804.9	801.8	2.4	1.9	146.55	-15.7	52.1	96.7	92.6	4.08	23.698		
900.0	884.4	906.9	901.0	3.0	2.3	145.81	-1.3	71.4	111.5	106.6	4.87	22.873		
1,000.0	976.8	1,009.2	998.9	3.7	2.8	144.49	16.4	95.0	127.6	121.8	5.81	21.978		
1,100.0	1,067.1	1,111.6	1,095.2	4.5	3.4	142.81	37.1	122.8	145.0	138.1	6.90	21.018		
1,200.0	1,154.9	1,211.7	1,187.8	5.4	4.1	141.15	60.1	153.5	164.2	156.1	8.15	20.142		
1,300.0	1,240.2	1,309.1	1,277.5	6.4	4.8	140.58	82.7	183.7	187.1	177.6	9.44	19.822 SF		
1,363.8	1,293.1	1,370.7	1,334.2	7.1	5.3	140.69	97.0	202.9	203.7	193.5	10.26	19.859		
1,400.0	1,322.8	1,405.4	1,366.3	7.5	5.6	141.01	105.1	213.7	213.6	202.9	10.72	19.936		
1,500.0	1,404.8	1,501.6	1,454.8	8.5	6.3	141.77	127.4	243.6	241.0	229.0	11.99	20.099		
1,600.0	1,486.8	1,597.7	1,543.4	9.6	7.0	142.38	149.8	273.6	268.4	255.2	13.28	20.215		
1,700.0	1,568.8	1,693.8	1,632.0	10.8	7.8	142.87	172.1	303.5	295.9	281.3	14.57	20.301		
1,800.0	1,650.8	1,790.0	1,720.6	11.9	8.5	143.28	194.5	333.4	323.3	307.5	15.88	20.366		
1,900.0	1,732.8	1,886.1	1,809.2	13.0	9.3	143.62	216.9	363.3	350.8	333.6	17.18	20.416		
2,000.0	1,814.8	1,982.2	1,897.8	14.1	10.0	143.92	239.2	393.2	378.3	359.8	18.49	20.455		
2,100.0	1,896.8	2,078.4	1,986.4	15.2	10.8	144.17	261.6	423.1	405.8	386.0	19.81	20.486		
2,200.0	1,978.8	2,174.5	2,074.9	16.3	11.5	144.39	283.9	453.0	433.3	412.2	21.12	20.511		
2,300.0	2,060.8	2,270.6	2,163.5	17.4	12.3	144.59	306.3	482.9	460.8	438.3	22.44	20.531		
2,400.0	2,142.8	2,366.8	2,252.1	18.5	13.0	144.76	328.6	512.8	488.3	464.5	23.76	20.548		
2,500.0	2,224.8	2,462.9	2,340.7	19.7	13.8	144.92	351.0	542.7	515.8	490.7	25.09	20.562		
2,600.0	2,306.8	2,559.0	2,429.3	20.8	14.5	145.06	373.3	572.7	543.3	516.9	26.41	20.573		
2,700.0	2,388.8	2,655.2	2,517.9	21.9	15.3	145.18	395.7	602.6	570.8	543.1	27.73	20.583		
2,800.0	2,470.8	2,751.3	2,606.4	23.0	16.1	145.30	418.0	632.5	598.3	569.3	29.06	20.591		
2,900.0	2,552.8	2,847.4	2,695.0	24.1	16.8	145.40	440.4	662.4	625.9	595.5	30.38	20.598		
3,000.0	2,634.8	2,943.6	2,783.6	25.2	17.6	145.50	462.7	692.3	653.4	621.7	31.71	20.604		
3,100.0	2,716.8	3,039.7	2,872.2	26.4	18.3	145.59	485.1	722.2	680.9	647.9	33.04	20.610		
3,200.0	2,798.8	3,135.8	2,960.8	27.5	19.1	145.67	507.4	752.1	708.4	674.1	34.37	20.614		
3,300.0	2,880.8	3,232.0	3,049.4	28.6	19.9	145.74	529.8	782.0	735.9	700.3	35.69	20.618		
3,400.0	2,962.8	3,328.1	3,138.0	29.7	20.6	145.81	552.1	811.9	763.5	726.5	37.02	20.621		
3,500.0	3,044.8	3,424.2	3,226.5	30.8	21.4	145.88	574.5	841.8	791.0	752.6	38.35	20.624		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.69	-48.2	20.8	52.5					
100.0	100.0	100.0	100.0	0.1	0.1	156.69	-48.2	20.8	52.5	52.2	0.22	233.460		
200.0	200.0	200.0	200.0	0.3	0.3	156.69	-48.2	20.8	52.5	51.8	0.67	77.820 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	127.96	-48.2	20.8	54.0	52.9	1.15	47.155		
400.0	399.6	399.6	399.6	0.8	0.8	133.84	-48.2	20.8	59.2	57.5	1.66	35.695		
500.0	498.8	498.8	498.8	1.1	1.0	141.48	-48.2	20.8	68.9	66.7	2.21	31.122		
600.0	597.1	599.2	599.2	1.4	1.2	147.59	-46.9	23.0	82.7	79.9	2.78	29.702		
700.0	694.3	700.3	699.9	1.9	1.5	150.76	-42.9	29.8	98.9	95.5	3.36	29.406		
800.0	790.2	801.8	800.5	2.4	1.7	151.98	-36.1	41.2	116.9	112.9	3.98	29.359		
900.0	884.4	903.7	900.7	3.0	2.0	151.96	-26.6	57.4	136.6	131.9	4.67	29.239		
1,000.0	976.8	1,005.8	999.9	3.7	2.5	151.12	-14.3	78.1	157.8	152.3	5.46	28.899		
1,100.0	1,067.1	1,108.1	1,097.9	4.5	3.0	149.76	0.6	103.4	180.6	174.2	6.38	28.298		
1,200.0	1,154.9	1,210.6	1,194.3	5.4	3.6	148.08	18.3	133.3	205.0	197.5	7.46	27.488		
1,300.0	1,240.2	1,307.3	1,284.3	6.4	4.2	146.70	36.4	163.9	232.1	223.5	8.64	26.865		
1,363.8	1,293.1	1,368.1	1,340.8	7.1	4.6	146.23	47.8	183.2	251.7	242.3	9.41	26.754		
1,400.0	1,322.8	1,402.4	1,372.6	7.5	4.9	146.25	54.2	194.1	263.2	253.4	9.85	26.733		
1,500.0	1,404.8	1,497.2	1,460.7	8.5	5.6	146.29	72.0	224.2	295.1	284.0	11.07	26.659		
1,600.0	1,486.8	1,591.9	1,548.8	9.6	6.2	146.32	89.8	254.2	327.0	314.7	12.32	26.548		
1,700.0	1,568.8	1,686.7	1,636.9	10.8	6.9	146.34	107.5	284.3	358.9	345.4	13.58	26.423		
1,800.0	1,650.8	1,781.5	1,725.0	11.9	7.6	146.36	125.3	314.4	390.9	376.0	14.86	26.296		
1,900.0	1,732.8	1,876.2	1,813.1	13.0	8.3	146.38	143.1	344.5	422.8	406.6	16.15	26.174		
2,000.0	1,814.8	1,971.0	1,901.2	14.1	9.0	146.39	160.8	374.5	454.7	437.2	17.45	26.058		
2,100.0	1,896.8	2,065.8	1,989.3	15.2	9.7	146.41	178.6	404.6	486.6	467.9	18.75	25.950		
2,200.0	1,978.8	2,160.5	2,077.4	16.3	10.4	146.42	196.4	434.7	518.5	498.5	20.06	25.850		
2,300.0	2,060.8	2,255.3	2,165.5	17.4	11.2	146.43	214.2	464.7	550.4	529.1	21.37	25.757		
2,400.0	2,142.8	2,350.1	2,253.6	18.5	11.9	146.44	231.9	494.8	582.4	559.7	22.69	25.671		
2,500.0	2,224.8	2,444.9	2,341.7	19.7	12.6	146.45	249.7	524.9	614.3	590.3	24.00	25.591		
2,600.0	2,306.8	2,539.6	2,429.8	20.8	13.3	146.45	267.5	554.9	646.2	620.9	25.32	25.518		
2,700.0	2,388.8	2,634.4	2,517.9	21.9	14.0	146.46	285.2	585.0	678.1	651.5	26.65	25.449		
2,800.0	2,470.8	2,729.2	2,606.0	23.0	14.7	146.47	303.0	615.1	710.0	682.0	27.97	25.386		
2,900.0	2,552.8	2,823.9	2,694.1	24.1	15.4	146.47	320.8	645.2	741.9	712.6	29.29	25.327		
3,000.0	2,634.8	2,918.7	2,782.2	25.2	16.1	146.48	338.5	675.2	773.8	743.2	30.62	25.272 SF		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.55	-6.9	3.0	7.5	7.5	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	156.55	-6.9	3.0	7.5	7.3	0.22	33.387		
200.0	200.0	200.0	200.0	0.3	0.3	156.55	-6.9	3.0	7.5	6.8	0.67	11.129 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	138.83	-6.9	3.0	9.3	8.1	1.16	8.015		
400.0	399.6	400.3	400.3	0.8	0.8	153.01	-4.7	4.4	13.7	12.0	1.69	8.098		
500.0	498.8	500.9	500.6	1.1	1.0	159.38	1.9	8.8	18.6	16.4	2.24	8.317		
600.0	597.1	601.8	600.6	1.4	1.3	162.51	13.0	16.1	23.7	20.9	2.80	8.467		
700.0	694.3	703.0	700.0	1.9	1.6	164.08	28.5	26.3	28.8	25.4	3.38	8.532		
800.0	790.2	804.5	798.6	2.4	2.1	164.78	48.4	39.4	34.0	30.0	3.99	8.518		
900.0	884.4	906.2	896.1	3.0	2.6	164.95	72.8	55.5	39.1	34.4	4.63	8.434		
1,000.0	976.8	1,008.2	992.1	3.7	3.2	164.76	101.5	74.4	44.2	38.8	5.33	8.286		
1,100.0	1,067.1	1,110.5	1,086.3	4.5	3.9	164.34	134.6	96.2	49.2	43.1	6.09	8.082		
1,200.0	1,154.9	1,213.0	1,178.6	5.4	4.7	163.74	171.9	120.7	54.2	47.3	6.91	7.842		
1,300.0	1,240.2	1,315.7	1,268.5	6.4	5.7	163.00	213.4	148.1	59.1	51.3	7.82	7.556		
1,363.8	1,293.1	1,381.5	1,324.6	7.1	6.3	162.47	242.1	167.0	62.2	53.8	8.46	7.359		
1,400.0	1,322.8	1,418.5	1,355.6	7.5	6.7	162.09	258.9	178.0	63.7	54.8	8.84	7.203		
1,500.0	1,404.8	1,518.4	1,439.2	8.5	7.7	160.96	304.7	208.2	67.1	57.2	9.95	6.743		
1,600.0	1,486.8	1,618.3	1,522.7	9.6	8.8	159.94	350.5	238.4	70.6	59.5	11.13	6.343		
1,700.0	1,568.8	1,718.3	1,606.2	10.8	9.8	159.02	396.3	268.5	74.1	61.8	12.36	5.996		
1,800.0	1,650.8	1,818.2	1,689.8	11.9	10.9	158.18	442.1	298.7	77.6	64.0	13.63	5.696		
1,900.0	1,732.8	1,918.1	1,773.3	13.0	12.0	157.41	487.9	328.9	81.2	66.3	14.94	5.436		
2,000.0	1,814.8	2,018.1	1,856.8	14.1	13.0	156.71	533.7	359.0	84.7	68.5	16.27	5.209		
2,100.0	1,896.8	2,118.0	1,940.4	15.2	14.1	156.06	579.5	389.2	88.3	70.7	17.63	5.010		
2,200.0	1,978.8	2,217.9	2,023.9	16.3	15.2	155.47	625.3	419.4	91.9	72.9	19.01	4.834		
2,300.0	2,060.8	2,317.8	2,107.4	17.4	16.2	154.92	671.1	449.6	95.5	75.1	20.41	4.679		
2,400.0	2,142.8	2,417.8	2,191.0	18.5	17.3	154.41	716.9	479.7	99.1	77.3	21.82	4.540		
2,500.0	2,224.8	2,517.7	2,274.5	19.7	18.4	153.93	762.7	509.9	102.7	79.4	23.25	4.416		
2,600.0	2,306.8	2,617.6	2,358.0	20.8	19.5	153.49	808.6	540.1	106.3	81.6	24.69	4.304		
2,700.0	2,388.8	2,717.6	2,441.6	21.9	20.5	153.07	854.4	570.2	109.9	83.8	26.14	4.204		
2,800.0	2,470.8	2,817.5	2,525.1	23.0	21.6	152.69	900.2	600.4	113.5	85.9	27.61	4.112		
2,900.0	2,552.8	2,917.4	2,608.6	24.1	22.7	152.32	946.0	630.6	117.1	88.1	29.08	4.029		
3,000.0	2,634.8	3,017.4	2,692.2	25.2	23.8	151.98	991.8	660.7	120.8	90.2	30.55	3.953		
3,100.0	2,716.8	3,117.3	2,775.7	26.4	24.9	151.66	1,037.6	690.9	124.4	92.4	32.04	3.883		
3,200.0	2,798.8	3,217.2	2,859.2	27.5	25.9	151.36	1,083.4	721.1	128.0	94.5	33.53	3.819		
3,300.0	2,880.8	3,317.2	2,942.8	28.6	27.0	151.07	1,129.2	751.3	131.7	96.7	35.03	3.759		
3,400.0	2,962.8	3,417.1	3,026.3	29.7	28.1	150.80	1,175.0	781.4	135.3	98.8	36.53	3.705		
3,500.0	3,044.8	3,517.0	3,109.8	30.8	29.2	150.54	1,220.8	811.6	139.0	100.9	38.04	3.654		
3,600.0	3,126.8	3,617.0	3,193.4	32.0	30.2	150.30	1,266.6	841.8	142.6	103.1	39.55	3.606		
3,700.0	3,208.8	3,716.9	3,276.9	33.1	31.3	150.07	1,312.4	871.9	146.3	105.2	41.07	3.562		
3,800.0	3,290.8	3,816.8	3,360.4	34.2	32.4	149.85	1,358.2	902.1	149.9	107.3	42.59	3.521		
3,900.0	3,372.8	3,916.8	3,444.0	35.3	33.5	149.64	1,404.0	932.3	153.6	109.5	44.11	3.482		
4,000.0	3,454.8	4,016.7	3,527.5	36.4	34.6	149.44	1,449.8	962.4	157.2	111.6	45.63	3.446		
4,100.0	3,536.8	4,116.6	3,611.0	37.6	35.6	149.25	1,495.6	992.6	160.9	113.7	47.16	3.412		
4,200.0	3,618.8	4,216.5	3,694.6	38.7	36.7	149.06	1,541.5	1,022.8	164.6	115.9	48.69	3.380		
4,300.0	3,700.8	4,316.5	3,778.1	39.8	37.8	148.89	1,587.3	1,053.0	168.2	118.0	50.23	3.349		
4,400.0	3,782.8	4,416.4	3,861.6	40.9	38.9	148.72	1,633.1	1,083.1	171.9	120.1	51.76	3.321		
4,500.0	3,864.8	4,516.3	3,945.2	42.0	40.0	148.56	1,678.9	1,113.3	175.6	122.3	53.30	3.294		
4,600.0	3,946.8	4,616.3	4,028.7	43.2	41.0	148.41	1,724.7	1,143.5	179.2	124.4	54.84	3.268		
4,700.0	4,028.8	4,716.2	4,112.2	44.3	42.1	148.26	1,770.5	1,173.6	182.9	126.5	56.38	3.244		
4,800.0	4,110.8	4,816.1	4,195.8	45.4	43.2	148.12	1,816.3	1,203.8	186.6	128.6	57.93	3.221		
4,900.0	4,192.8	4,916.1	4,279.3	46.5	44.3	147.98	1,862.1	1,234.0	190.2	130.8	59.47	3.199		
5,000.0	4,274.8	5,016.0	4,362.8	47.7	45.4	147.85	1,907.9	1,264.1	193.9	132.9	61.02	3.178		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	4,356.8	5,115.9	4,446.4	48.8	46.4	147.73	1,953.7	1,294.3	197.6	135.0	62.57	3.158		
5,200.0	4,438.8	5,215.9	4,529.9	49.9	47.5	147.61	1,999.5	1,324.5	201.3	137.1	64.12	3.139		
5,300.0	4,520.8	5,315.8	4,613.5	51.0	48.6	147.49	2,045.3	1,354.6	204.9	139.3	65.67	3.121		
5,400.0	4,602.8	5,415.7	4,697.0	52.1	49.7	147.38	2,091.1	1,384.8	208.6	141.4	67.22	3.103		
5,500.0	4,684.8	5,515.7	4,780.5	53.3	50.7	147.27	2,136.9	1,415.0	212.3	143.5	68.77	3.087		
5,600.0	4,766.8	5,615.6	4,864.1	54.4	51.8	147.16	2,182.7	1,445.2	216.0	145.6	70.33	3.071		
5,700.0	4,848.8	5,715.5	4,947.6	55.5	52.9	147.06	2,228.5	1,475.3	219.6	147.8	71.88	3.056		
5,800.0	4,930.8	5,810.7	5,027.5	56.6	53.9	147.06	2,271.7	1,503.8	223.9	150.7	73.25	3.057		
5,813.5	4,941.9	5,823.0	5,038.0	56.8	54.0	147.10	2,277.1	1,507.3	224.7	151.3	73.37	3.063		
5,900.0	5,013.9	5,900.0	5,104.5	57.6	54.6	147.46	2,309.5	1,528.7	230.0	156.0	74.02	3.108		
6,000.0	5,099.7	5,992.3	5,186.2	58.4	55.2	147.84	2,345.4	1,552.3	235.7	161.1	74.62	3.158		
6,100.0	5,188.2	6,082.8	5,268.2	59.1	55.8	148.16	2,377.4	1,573.3	240.8	165.7	75.11	3.206		
6,200.0	5,278.9	6,173.2	5,351.8	59.8	56.4	148.44	2,406.0	1,592.2	245.5	170.0	75.50	3.251		
6,300.0	5,371.7	6,263.4	5,436.8	60.3	56.8	148.68	2,431.2	1,608.8	249.6	173.8	75.78	3.293		
6,400.0	5,466.4	6,353.4	5,522.9	60.9	57.3	148.89	2,453.0	1,623.2	253.1	177.2	75.95	3.333		
6,500.0	5,562.6	6,443.4	5,610.1	61.3	57.6	149.06	2,471.4	1,635.3	256.2	180.2	75.99	3.371		
6,600.0	5,660.1	6,533.2	5,698.1	61.7	57.9	149.19	2,486.3	1,645.1	258.6	182.7	75.93	3.406		
6,700.0	5,758.6	6,623.0	5,786.9	61.9	58.1	149.30	2,497.8	1,652.7	260.5	184.8	75.74	3.440		
6,800.0	5,857.9	6,712.7	5,876.0	62.2	58.3	149.37	2,505.7	1,657.9	261.9	186.4	75.45	3.471		
6,900.0	5,957.7	6,800.0	5,963.2	62.3	58.4	149.41	2,510.1	1,660.8	262.6	187.6	75.05	3.500		
6,977.4	6,035.0	6,871.8	6,035.0	62.3	58.5	-179.63	2,511.2	1,661.5	262.8	188.2	74.63	3.521		
7,000.0	6,057.6	6,894.1	6,057.3	62.4	58.5	-69.62	2,511.2	1,661.4	262.8	188.2	74.67	3.520		
7,100.0	6,157.6	6,992.5	6,155.7	62.4	58.5	-69.62	2,510.7	1,660.3	262.8	188.1	74.68	3.519		
7,200.0	6,257.6	7,090.9	6,254.1	62.4	58.6	-69.63	2,509.7	1,657.5	262.8	188.1	74.67	3.520		
7,298.5	6,356.0	7,187.9	6,351.0	62.4	58.5	-69.64	2,508.2	1,653.2	262.8	188.2	74.63	3.521		
7,300.0	6,357.5	7,189.4	6,352.4	62.4	58.5	-69.64	2,508.2	1,653.2	262.8	188.2	74.63	3.521		
7,348.3	6,405.7	7,237.6	6,400.5	62.4	58.5	-69.64	2,507.2	1,650.6	262.8	188.2	74.63	3.521		
7,400.0	6,457.3	7,289.3	6,452.2	62.4	58.5	-69.64	2,506.2	1,647.9	262.8	188.2	74.63	3.521		
7,500.0	6,557.2	7,389.3	6,552.0	62.4	58.5	-69.64	2,504.3	1,642.7	262.8	188.2	74.63	3.521		
7,600.0	6,657.0	7,489.3	6,651.9	62.4	58.5	-69.65	2,502.4	1,637.4	262.8	188.1	74.63	3.521		
7,700.0	6,756.8	7,589.3	6,751.7	62.3	58.5	-69.65	2,500.5	1,632.1	262.8	188.1	74.64	3.520		
7,800.0	6,856.7	7,689.3	6,851.6	62.3	58.5	-69.65	2,498.6	1,626.9	262.8	188.1	74.65	3.520		
7,900.0	6,956.5	7,789.3	6,951.4	62.3	58.5	-69.65	2,496.7	1,621.6	262.8	188.1	74.67	3.519		
8,000.0	7,056.4	7,889.3	7,051.3	62.3	58.5	-69.65	2,494.8	1,616.4	262.8	188.1	74.69	3.518		
8,100.0	7,156.2	7,989.3	7,151.1	62.3	58.5	-69.65	2,492.8	1,611.1	262.8	188.1	74.71	3.517		
8,200.0	7,256.1	8,089.3	7,250.9	62.3	58.5	-69.65	2,490.9	1,605.8	262.8	188.0	74.73	3.516		
8,300.0	7,355.9	8,189.3	7,350.8	62.3	58.5	-69.66	2,489.0	1,600.6	262.8	188.0	74.76	3.515		
8,400.0	7,455.7	8,289.3	7,450.6	62.3	58.5	-69.66	2,487.1	1,595.3	262.8	188.0	74.79	3.513		
8,500.0	7,555.6	8,389.3	7,550.5	62.3	58.5	-69.66	2,485.2	1,590.1	262.8	187.9	74.82	3.512		
8,600.0	7,655.4	8,489.3	7,650.3	62.3	58.5	-69.66	2,483.3	1,584.8	262.8	187.9	74.86	3.510		
8,700.0	7,755.3	8,589.3	7,750.2	62.3	58.5	-69.66	2,481.4	1,579.6	262.7	187.8	74.90	3.508		
8,800.0	7,855.1	8,689.3	7,850.0	62.3	58.5	-69.66	2,479.5	1,574.3	262.7	187.8	74.95	3.506		
8,900.0	7,955.0	8,789.3	7,949.8	62.3	58.5	-69.66	2,477.5	1,569.0	262.7	187.8	74.99	3.504		
9,000.0	8,054.8	8,889.3	8,049.7	62.3	58.5	-69.67	2,475.6	1,563.8	262.7	187.7	75.04	3.501		
9,100.0	8,154.6	8,989.3	8,149.5	62.3	58.5	-69.67	2,473.7	1,558.5	262.7	187.6	75.10	3.499		
9,200.0	8,254.5	9,089.3	8,249.4	62.3	58.5	-69.67	2,471.8	1,553.3	262.7	187.6	75.15	3.496		
9,300.0	8,354.3	9,189.3	8,349.2	62.3	58.5	-69.67	2,469.9	1,548.0	262.7	187.5	75.21	3.493		
9,400.0	8,454.2	9,289.3	8,449.1	62.3	58.5	-69.67	2,468.0	1,542.7	262.7	187.5	75.27	3.490		
9,500.0	8,554.0	9,389.3	8,548.9	62.3	58.5	-69.67	2,466.1	1,537.5	262.7	187.4	75.34	3.487		
9,600.0	8,653.9	9,489.3	8,648.7	62.3	58.5	-69.67	2,464.1	1,532.2	262.7	187.3	75.41	3.484		
9,700.0	8,753.7	9,589.3	8,748.6	62.3	58.5	-69.68	2,462.2	1,527.0	262.7	187.2	75.48	3.481		
9,800.0	8,853.5	9,689.3	8,848.4	62.3	58.5	-69.68	2,460.3	1,521.7	262.7	187.2	75.56	3.477		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	
9,900.0	8,953.4	9,789.3	8,948.3	62.3	58.5	-69.68	2,458.4	1,516.5	262.7	187.1	75.64	3.473	
10,000.0	9,053.2	9,889.3	9,048.1	62.3	58.6	-69.68	2,456.5	1,511.2	262.7	187.0	75.72	3.470	
10,100.0	9,153.1	9,989.3	9,148.0	62.4	58.6	-69.68	2,454.6	1,505.9	262.7	186.9	75.80	3.466	
10,200.0	9,252.9	10,089.3	9,247.8	62.4	58.6	-69.68	2,452.7	1,500.7	262.7	186.8	75.89	3.462	
10,300.0	9,352.8	10,189.3	9,347.7	62.4	58.6	-69.68	2,450.8	1,495.4	262.7	186.7	75.98	3.457	
10,356.0	9,408.6	10,245.3	9,403.5	62.4	58.6	-69.68	2,449.7	1,492.5	262.7	186.7	76.03	3.455	
10,376.4	9,429.0	10,264.8	9,423.0	62.4	58.6	-69.68	2,449.3	1,491.5	262.7	186.6	76.05	3.454	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	156.70	-13.8	5.9	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	156.70	-13.8	5.9	15.0	14.8	0.22	66.873		
200.0	200.0	200.0	200.0	0.3	0.3	156.70	-13.8	5.9	15.0	14.4	0.67	22.291 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	133.03	-13.8	5.9	16.7	15.5	1.15	14.502		
400.0	399.6	399.6	399.6	0.8	0.8	147.49	-13.8	5.9	22.8	21.1	1.69	13.479		
500.0	498.8	500.3	500.3	1.1	1.0	157.17	-11.7	7.5	32.2	30.0	2.24	14.349		
600.0	597.1	601.5	601.2	1.4	1.3	161.74	-5.2	12.2	42.3	39.5	2.79	15.128		
700.0	694.3	703.3	702.1	1.9	1.5	164.01	5.6	20.1	52.5	49.2	3.36	15.656		
800.0	790.2	805.7	802.6	2.4	1.9	165.08	20.8	31.3	62.9	59.0	3.94	15.963		
900.0	884.4	908.6	902.6	3.0	2.3	165.43	40.5	45.7	73.3	68.7	4.56	16.076		
1,000.0	976.8	1,012.1	1,001.6	3.7	2.8	165.34	64.7	63.3	83.7	78.4	5.22	16.019		
1,100.0	1,067.1	1,116.1	1,099.4	4.5	3.4	164.94	93.3	84.3	94.0	88.0	5.94	15.810		
1,200.0	1,154.9	1,220.7	1,195.6	5.4	4.1	164.32	126.3	108.4	104.2	97.5	6.75	15.448		
1,300.0	1,240.2	1,325.8	1,289.9	6.4	5.0	163.53	163.8	135.8	114.4	106.8	7.60	15.041		
1,363.8	1,293.1	1,393.1	1,349.0	7.1	5.6	162.96	190.0	155.0	120.8	112.6	8.22	14.703		
1,400.0	1,322.8	1,431.4	1,382.0	7.5	5.9	162.60	205.6	166.4	124.1	115.5	8.59	14.448		
1,500.0	1,404.8	1,532.5	1,468.2	8.5	6.9	161.39	248.3	197.6	131.3	121.6	9.68	13.560		
1,600.0	1,486.8	1,632.2	1,553.1	9.6	7.9	160.30	290.5	228.5	138.5	127.6	10.84	12.769		
1,700.0	1,568.8	1,731.9	1,638.0	10.8	8.9	159.31	332.7	259.3	145.7	133.6	12.06	12.081		
1,800.0	1,650.8	1,831.6	1,722.9	11.9	9.9	158.42	374.9	290.2	152.9	139.6	13.32	11.483		
1,900.0	1,732.8	1,931.3	1,807.8	13.0	11.0	157.61	417.1	321.1	160.2	145.6	14.61	10.963		
2,000.0	1,814.8	2,031.1	1,892.7	14.1	12.0	156.86	459.3	351.9	167.5	151.6	15.94	10.509		
2,100.0	1,896.8	2,130.8	1,977.6	15.2	13.0	156.19	501.5	382.8	174.8	157.5	17.29	10.111		
2,200.0	1,978.8	2,230.5	2,062.5	16.3	14.0	155.56	543.7	413.7	182.2	163.5	18.67	9.760		
2,300.0	2,060.8	2,330.2	2,147.4	17.4	15.1	154.98	585.9	444.5	189.6	169.5	20.06	9.450		
2,400.0	2,142.8	2,429.9	2,232.3	18.5	16.1	154.45	628.1	475.4	197.0	175.5	21.47	9.173		
2,500.0	2,224.8	2,529.6	2,317.2	19.7	17.1	153.96	670.4	506.2	204.4	181.5	22.90	8.926		
2,600.0	2,306.8	2,629.3	2,402.1	20.8	18.1	153.50	712.6	537.1	211.8	187.5	24.33	8.704		
2,700.0	2,388.8	2,729.0	2,487.0	21.9	19.2	153.07	754.8	568.0	219.2	193.4	25.78	8.503		
2,800.0	2,470.8	2,828.7	2,571.9	23.0	20.2	152.67	797.0	598.8	226.7	199.4	27.24	8.321		
2,900.0	2,552.8	2,928.4	2,656.8	24.1	21.2	152.30	839.2	629.7	234.1	205.4	28.71	8.156		
3,000.0	2,634.8	3,028.2	2,741.7	25.2	22.3	151.94	881.4	660.6	241.6	211.4	30.18	8.005		
3,100.0	2,716.8	3,127.9	2,826.6	26.4	23.3	151.61	923.6	691.4	249.1	217.4	31.66	7.866		
3,200.0	2,798.8	3,227.6	2,911.5	27.5	24.3	151.30	965.8	722.3	256.5	223.4	33.15	7.739		
3,300.0	2,880.8	3,327.3	2,996.4	28.6	25.4	151.01	1,008.0	753.2	264.0	229.4	34.64	7.621		
3,400.0	2,962.8	3,427.0	3,081.3	29.7	26.4	150.73	1,050.2	784.0	271.5	235.4	36.14	7.513		
3,500.0	3,044.8	3,526.7	3,166.2	30.8	27.4	150.47	1,092.4	814.9	279.0	241.4	37.65	7.412		
3,600.0	3,126.8	3,626.4	3,251.1	32.0	28.5	150.22	1,134.6	845.7	286.5	247.4	39.15	7.318		
3,700.0	3,208.8	3,726.1	3,336.0	33.1	29.5	149.98	1,176.8	876.6	294.0	253.4	40.67	7.231		
3,800.0	3,290.8	3,825.8	3,420.9	34.2	30.5	149.76	1,219.0	907.5	301.6	259.4	42.18	7.149		
3,900.0	3,372.8	3,925.6	3,505.8	35.3	31.6	149.55	1,261.2	938.3	309.1	265.4	43.70	7.073		
4,000.0	3,454.8	4,025.3	3,590.7	36.4	32.6	149.34	1,303.4	969.2	316.6	271.4	45.22	7.001		
4,100.0	3,536.8	4,125.0	3,675.6	37.6	33.6	149.15	1,345.6	1,000.1	324.1	277.4	46.74	6.934		
4,200.0	3,618.8	4,224.7	3,760.5	38.7	34.7	148.96	1,387.9	1,030.9	331.7	283.4	48.27	6.871		
4,300.0	3,700.8	4,324.4	3,845.4	39.8	35.7	148.79	1,430.1	1,061.8	339.2	289.4	49.80	6.811		
4,400.0	3,782.8	4,424.1	3,930.3	40.9	36.7	148.62	1,472.3	1,092.7	346.7	295.4	51.33	6.755		
4,500.0	3,864.8	4,523.8	4,015.2	42.0	37.8	148.46	1,514.5	1,123.5	354.3	301.4	52.86	6.702		
4,600.0	3,946.8	4,623.5	4,100.1	43.2	38.8	148.30	1,556.7	1,154.4	361.8	307.4	54.40	6.651		
4,700.0	4,028.8	4,723.2	4,185.0	44.3	39.8	148.15	1,598.9	1,185.2	369.4	313.4	55.94	6.603		
4,800.0	4,110.8	4,822.9	4,269.9	45.4	40.9	148.01	1,641.1	1,216.1	376.9	319.4	57.47	6.558		
4,900.0	4,192.8	4,922.7	4,354.8	46.5	41.9	147.87	1,683.3	1,247.0	384.5	325.5	59.01	6.515		
5,000.0	4,274.8	5,022.4	4,439.7	47.7	42.9	147.74	1,725.5	1,277.8	392.0	331.5	60.56	6.474		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	4,356.8	5,122.1	4,524.6	48.8	44.0	147.61	1,767.7	1,308.7	399.6	337.5	62.10	6.435		
5,200.0	4,438.8	5,221.8	4,609.5	49.9	45.0	147.49	1,809.9	1,339.6	407.1	343.5	63.64	6.397		
5,300.0	4,520.8	5,321.5	4,694.4	51.0	46.1	147.37	1,852.1	1,370.4	414.7	349.5	65.19	6.361		
5,400.0	4,602.8	5,421.2	4,779.3	52.1	47.1	147.26	1,894.3	1,401.3	422.3	355.5	66.73	6.327		
5,500.0	4,684.8	5,520.9	4,864.2	53.3	48.1	147.15	1,936.5	1,432.2	429.8	361.5	68.28	6.295		
5,600.0	4,766.8	5,620.6	4,949.1	54.4	49.2	147.04	1,978.7	1,463.0	437.4	367.5	69.83	6.263		
5,700.0	4,848.8	5,716.2	5,030.5	55.5	50.2	146.94	2,019.2	1,492.6	445.0	373.6	71.35	6.237		
5,800.0	4,930.8	5,800.0	5,102.8	56.6	50.9	147.00	2,053.4	1,517.6	454.4	381.9	72.54	6.264		
5,813.5	4,941.9	5,814.9	5,115.8	56.8	51.0	147.04	2,059.2	1,521.8	455.9	383.3	72.67	6.274		
5,900.0	5,013.9	5,886.9	5,179.6	57.6	51.5	147.40	2,086.1	1,541.5	465.7	392.3	73.34	6.350		
6,000.0	5,099.7	5,970.0	5,254.8	58.4	52.1	147.77	2,114.7	1,562.5	476.1	402.1	73.96	6.437		
6,100.0	5,188.2	6,052.8	5,331.1	59.1	52.6	148.10	2,140.6	1,581.4	485.5	411.1	74.48	6.519		
6,200.0	5,278.9	6,135.4	5,408.6	59.8	53.0	148.38	2,163.7	1,598.3	494.0	419.1	74.89	6.597		
6,300.0	5,371.7	6,217.8	5,487.1	60.3	53.5	148.63	2,184.1	1,613.2	501.5	426.3	75.20	6.670		
6,400.0	5,466.4	6,300.0	5,566.3	60.9	53.8	148.84	2,201.6	1,626.0	508.1	432.7	75.39	6.739		
6,500.0	5,562.6	6,382.2	5,646.4	61.3	54.1	149.01	2,216.4	1,636.8	513.6	438.1	75.46	6.806		
6,600.0	5,660.1	6,464.2	5,727.0	61.7	54.4	149.15	2,228.4	1,645.6	518.1	442.7	75.42	6.869		
6,700.0	5,758.6	6,546.1	5,808.1	61.9	54.6	149.26	2,237.5	1,652.3	521.6	446.3	75.27	6.930		
6,800.0	5,857.9	6,627.9	5,889.6	62.2	54.7	149.34	2,243.9	1,656.9	524.0	449.0	75.01	6.987		
6,900.0	5,957.7	6,709.7	5,971.2	62.3	54.8	149.38	2,247.4	1,659.5	525.5	450.8	74.64	7.040		
6,977.4	6,035.0	6,773.4	6,034.9	62.3	54.9	-179.66	2,248.2	1,660.0	525.8	411.4	114.44	4.595 SF		
7,000.0	6,057.6	6,795.3	6,056.8	62.4	54.9	-69.65	2,248.1	1,660.0	525.8	451.6	74.30	7.078		
7,100.0	6,157.6	6,892.2	6,153.7	62.4	54.9	-69.65	2,247.7	1,658.8	525.9	451.5	74.31	7.076		
7,200.0	6,257.6	6,989.1	6,250.6	62.4	54.9	-69.66	2,246.7	1,656.1	525.8	451.5	74.30	7.077		
7,298.5	6,356.0	7,084.6	6,346.0	62.4	54.9	-69.67	2,245.2	1,652.0	525.8	451.5	74.27	7.080		
7,300.0	6,357.5	7,086.0	6,347.4	62.4	54.9	-69.67	2,245.2	1,651.9	525.8	451.5	74.27	7.080		
7,337.5	6,394.9	7,123.3	6,384.6	62.4	54.9	-69.67	2,244.5	1,649.9	525.8	451.5	74.27	7.080		
7,400.0	6,457.3	7,185.8	6,447.1	62.4	54.9	-69.67	2,243.3	1,646.6	525.8	451.5	74.26	7.080		
7,500.0	6,557.2	7,285.8	6,546.9	62.4	54.9	-69.67	2,241.4	1,641.4	525.8	451.5	74.27	7.080		
7,600.0	6,657.0	7,385.8	6,646.8	62.4	54.9	-69.67	2,239.5	1,636.1	525.8	451.5	74.27	7.079		
7,700.0	6,756.8	7,485.8	6,746.6	62.3	54.9	-69.67	2,237.5	1,630.8	525.8	451.5	74.28	7.079		
7,800.0	6,856.7	7,585.8	6,846.5	62.3	54.9	-69.67	2,235.6	1,625.6	525.8	451.5	74.29	7.078		
7,900.0	6,956.5	7,685.8	6,946.3	62.3	54.9	-69.67	2,233.7	1,620.3	525.8	451.5	74.30	7.076		
8,000.0	7,056.4	7,785.8	7,046.1	62.3	54.9	-69.67	2,231.8	1,615.1	525.8	451.5	74.32	7.074		
8,100.0	7,156.2	7,885.8	7,146.0	62.3	54.9	-69.67	2,229.9	1,609.8	525.8	451.4	74.34	7.072		
8,200.0	7,256.1	7,985.8	7,245.8	62.3	54.9	-69.67	2,228.0	1,604.5	525.8	451.4	74.37	7.070		
8,300.0	7,355.9	8,085.8	7,345.7	62.3	54.9	-69.67	2,226.0	1,599.3	525.8	451.4	74.40	7.067		
8,400.0	7,455.7	8,185.8	7,445.5	62.3	54.9	-69.67	2,224.1	1,594.0	525.8	451.4	74.43	7.065		
8,500.0	7,555.6	8,285.8	7,545.4	62.3	54.9	-69.67	2,222.2	1,588.7	525.8	451.3	74.46	7.061		
8,600.0	7,655.4	8,385.8	7,645.2	62.3	54.9	-69.67	2,220.3	1,583.5	525.8	451.3	74.50	7.058		
8,700.0	7,755.3	8,485.8	7,745.0	62.3	54.9	-69.67	2,218.4	1,578.2	525.8	451.2	74.54	7.054		
8,800.0	7,855.1	8,585.8	7,844.9	62.3	54.9	-69.67	2,216.5	1,573.0	525.8	451.2	74.58	7.050		
8,900.0	7,955.0	8,685.8	7,944.7	62.3	54.9	-69.67	2,214.6	1,567.7	525.8	451.2	74.63	7.045		
9,000.0	8,054.8	8,785.8	8,044.6	62.3	54.9	-69.67	2,212.6	1,562.4	525.8	451.1	74.68	7.040		
9,100.0	8,154.6	8,885.8	8,144.4	62.3	54.9	-69.67	2,210.7	1,557.2	525.8	451.0	74.73	7.035		
9,200.0	8,254.5	8,985.8	8,244.3	62.3	54.9	-69.67	2,208.8	1,551.9	525.8	451.0	74.79	7.030		
9,300.0	8,354.3	9,085.8	8,344.1	62.3	54.9	-69.67	2,206.9	1,546.6	525.8	450.9	74.85	7.024		
9,400.0	8,454.2	9,185.8	8,443.9	62.3	54.9	-69.67	2,205.0	1,541.4	525.8	450.9	74.91	7.019		
9,500.0	8,554.0	9,285.8	8,543.8	62.3	54.9	-69.67	2,203.1	1,536.1	525.8	450.8	74.98	7.012		
9,600.0	8,653.9	9,385.8	8,643.6	62.3	54.9	-69.67	2,201.1	1,530.9	525.8	450.7	75.05	7.006		
9,700.0	8,753.7	9,485.8	8,743.5	62.3	54.9	-69.67	2,199.2	1,525.6	525.8	450.7	75.12	6.999		
9,800.0	8,853.5	9,585.8	8,843.3	62.3	55.0	-69.67	2,197.3	1,520.3	525.8	450.6	75.20	6.992		

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 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 15D-11 596 - Wellbore #1 - Plan #1 (11-30-17)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
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	
9,900.0	8,953.4	9,685.8	8,943.2	62.3	55.0	-69.67	2,195.4	1,515.1	525.8	450.5	75.28	6.985	
10,000.0	9,053.2	9,785.8	9,043.0	62.3	55.0	-69.67	2,193.5	1,509.8	525.8	450.4	75.36	6.977	
10,100.0	9,153.1	9,885.8	9,142.8	62.4	55.0	-69.67	2,191.6	1,504.5	525.8	450.3	75.44	6.969	
10,200.0	9,252.9	9,985.8	9,242.7	62.4	55.0	-69.67	2,189.7	1,499.3	525.8	450.2	75.53	6.961	
10,300.0	9,352.8	10,085.8	9,342.5	62.4	55.1	-69.67	2,187.7	1,494.0	525.8	450.1	75.62	6.952	
10,355.5	9,408.2	10,141.3	9,397.9	62.4	55.1	-69.67	2,186.7	1,491.1	525.8	450.1	75.68	6.948	
10,376.4	9,429.0	10,160.4	9,417.0	62.4	55.1	-69.67	2,186.3	1,490.1	525.8	450.1	75.69	6.946	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	-169.49	-17.8	-3.3	18.1	18.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-169.49	-17.8	-3.3	18.1	17.9	0.22	80.434		
200.0	200.0	200.0	200.0	0.3	0.3	-169.49	-17.8	-3.3	18.1	17.4	0.67	26.811 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	162.09	-17.8	-3.3	20.6	19.4	1.18	17.466		
400.0	399.6	399.6	399.6	0.8	0.8	166.96	-17.8	-3.3	28.1	26.4	1.72	16.331 SF		
500.0	498.8	500.1	500.1	1.1	1.0	173.94	-15.4	-4.5	39.3	37.0	2.27	17.294		
600.0	597.1	600.3	599.9	1.4	1.3	-177.28	-8.4	-7.9	53.1	50.3	2.82	18.839		
700.0	694.3	699.7	698.5	1.9	1.5	-168.86	3.3	-13.6	70.7	67.3	3.40	20.803		
800.0	790.2	798.1	795.3	2.4	1.8	-161.57	19.4	-21.5	92.5	88.5	4.05	22.872		
900.0	884.4	895.2	889.7	3.0	2.2	-155.50	39.6	-31.4	119.0	114.2	4.81	24.745		
1,000.0	976.8	990.6	981.2	3.7	2.7	-150.48	63.6	-43.1	150.0	144.3	5.71	26.279		
1,100.0	1,067.1	1,084.0	1,069.5	4.5	3.2	-146.29	91.1	-56.6	185.6	178.8	6.76	27.468		
1,200.0	1,154.9	1,175.4	1,154.3	5.4	3.8	-142.71	121.7	-71.6	225.5	217.5	7.95	28.372		
1,300.0	1,240.2	1,264.5	1,235.2	6.4	4.5	-139.60	154.9	-87.9	269.5	260.3	9.26	29.094		
1,363.8	1,293.1	1,320.5	1,285.6	7.1	5.0	-137.93	177.1	-98.7	299.7	289.6	10.16	29.494		
1,400.0	1,322.8	1,352.1	1,314.0	7.5	5.2	-137.54	189.5	-104.8	317.2	306.5	10.68	29.702		
1,500.0	1,404.8	1,439.4	1,392.4	8.5	6.0	-136.65	224.0	-121.7	365.7	353.6	12.12	30.163		
1,600.0	1,486.8	1,526.8	1,470.9	9.6	6.7	-135.96	258.4	-138.6	414.2	400.6	13.60	30.466		
1,700.0	1,568.8	1,614.1	1,549.4	10.8	7.4	-135.42	292.9	-155.4	462.8	447.7	15.09	30.673		
1,800.0	1,650.8	1,701.5	1,627.9	11.9	8.2	-134.99	327.3	-172.3	511.4	494.8	16.59	30.818		
1,900.0	1,732.8	1,788.8	1,706.3	13.0	9.0	-134.62	361.8	-189.2	560.0	541.9	18.11	30.921		
2,000.0	1,814.8	1,876.2	1,784.8	14.1	9.7	-134.32	396.2	-206.1	608.6	589.0	19.63	30.997		
2,100.0	1,896.8	1,963.5	1,863.3	15.2	10.5	-134.06	430.7	-222.9	657.2	636.0	21.16	31.053		
2,200.0	1,978.8	2,050.9	1,941.7	16.3	11.2	-133.84	465.1	-239.8	705.9	683.2	22.70	31.096		
2,300.0	2,060.8	2,138.2	2,020.2	17.4	12.0	-133.64	499.6	-256.7	754.5	730.3	24.24	31.128		

Offset Design													Offset Site Error:		0.0 ft
NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 21B-15 596 - Wellbore #1 - Plan #1 (11-30-17)													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	-179.34	-24.6	-0.3	24.6						
100.0	100.0	100.0	100.0	0.1	0.1	-179.34	-24.6	-0.3	24.6	24.4	0.22	109.560			
200.0	200.0	200.0	200.0	0.3	0.3	-179.34	-24.6	-0.3	24.6	24.0	0.67	36.520	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	152.49	-24.6	-0.3	26.9	25.7	1.17	23.008			
400.0	399.6	399.6	399.6	0.8	0.8	158.51	-24.6	-0.3	34.1	32.4	1.71	19.911	SF		
500.0	498.8	498.8	498.8	1.1	1.0	164.31	-24.6	-0.3	46.5	44.2	2.27	20.485			
600.0	597.1	599.2	599.1	1.4	1.2	170.49	-22.4	-1.5	62.6	59.8	2.82	22.188			
700.0	694.3	699.2	698.8	1.9	1.5	177.55	-15.6	-5.4	81.4	78.0	3.37	24.167			
800.0	790.2	798.4	797.2	2.4	1.7	-175.56	-4.4	-11.7	103.7	99.8	3.94	26.341			
900.0	884.4	896.4	893.5	3.0	2.0	-169.29	11.1	-20.4	130.2	125.6	4.57	28.505			
1,000.0	976.8	992.8	987.3	3.7	2.4	-163.76	30.5	-31.3	161.1	155.8	5.30	30.423			
1,100.0	1,067.1	1,087.3	1,078.1	4.5	2.8	-158.94	53.5	-44.2	196.6	190.4	6.15	31.956			
1,200.0	1,154.9	1,179.7	1,165.5	5.4	3.4	-154.73	79.7	-59.0	236.5	229.4	7.15	33.094			
1,300.0	1,240.2	1,269.8	1,249.1	6.4	4.0	-151.01	108.8	-75.3	280.9	272.6	8.28	33.911			
1,363.8	1,293.1	1,325.6	1,300.3	7.1	4.3	-148.91	128.3	-86.3	311.5	302.4	9.07	34.352			
1,400.0	1,322.8	1,356.9	1,328.9	7.5	4.6	-148.20	139.3	-92.5	329.3	319.8	9.52	34.596			
1,500.0	1,404.8	1,443.4	1,408.0	8.5	5.2	-146.57	169.7	-109.6	378.7	367.9	10.82	35.015			
1,600.0	1,486.8	1,529.8	1,487.1	9.6	5.9	-145.31	200.1	-126.7	428.4	416.2	12.14	35.284			
1,700.0	1,568.8	1,616.3	1,566.2	10.8	6.6	-144.32	230.5	-143.8	478.1	464.6	13.50	35.427			
1,800.0	1,650.8	1,702.8	1,645.4	11.9	7.2	-143.51	260.9	-160.9	528.0	513.1	14.87	35.503			
1,900.0	1,732.8	1,789.2	1,724.5	13.0	7.9	-142.84	291.3	-178.0	577.9	561.6	16.26	35.539			
2,000.0	1,814.8	1,875.7	1,803.6	14.1	8.6	-142.27	321.7	-195.1	627.9	610.2	17.66	35.551			
2,100.0	1,896.8	1,962.2	1,882.7	15.2	9.3	-141.79	352.1	-212.2	677.9	658.8	19.07	35.548			
2,200.0	1,978.8	2,048.6	1,961.8	16.3	10.0	-141.38	382.5	-229.3	727.9	707.4	20.48	35.536			
2,300.0	2,060.8	2,135.1	2,041.0	17.4	10.7	-141.02	412.9	-246.4	778.0	756.1	21.90	35.518			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design		NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 21C-15 596 - Wellbore #1 - Plan #1 (11-30-17)											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	175.04	-31.5	2.7	31.6						
100.0	100.0	100.0	100.0	0.1	0.1	175.04	-31.5	2.7	31.6	31.4	0.22	140.708			
200.0	200.0	200.0	200.0	0.3	0.3	175.04	-31.5	2.7	31.6	31.0	0.67	46.903	CC, ES		
300.0	300.0	300.0	299.9	0.6	0.6	149.63	-31.5	1.0	33.8	32.6	1.16	29.150			
400.0	399.6	400.1	400.0	0.8	0.8	162.35	-30.9	-4.1	41.0	39.3	1.71	23.998			
500.0	498.8	500.6	500.0	1.1	1.0	176.12	-26.1	-11.6	52.0	49.8	2.29	22.731	SF		
600.0	597.1	600.2	598.7	1.4	1.3	-171.68	-16.7	-21.3	67.7	64.8	2.89	23.470			
700.0	694.3	698.6	695.4	1.9	1.7	-161.89	-2.9	-32.9	88.6	85.1	3.53	25.095			
800.0	790.2	795.4	789.5	2.4	2.1	-154.30	15.2	-46.5	114.7	110.4	4.27	26.880			
900.0	884.4	890.5	880.8	3.0	2.6	-148.41	37.1	-61.7	145.8	140.7	5.12	28.459			
1,000.0	976.8	983.5	968.7	3.7	3.1	-143.74	62.5	-78.4	181.6	175.5	6.10	29.753			
1,100.0	1,067.1	1,074.8	1,054.4	4.5	3.7	-140.68	88.8	-95.4	221.8	214.6	7.18	30.905			
1,200.0	1,154.9	1,164.5	1,138.7	5.4	4.3	-138.98	114.6	-112.1	265.8	257.5	8.30	32.021			
1,300.0	1,240.2	1,252.5	1,221.4	6.4	4.9	-138.08	140.0	-128.5	313.3	303.8	9.45	33.158			
1,363.8	1,293.1	1,307.6	1,273.1	7.1	5.3	-137.76	155.8	-138.8	345.4	335.2	10.20	33.876			
1,400.0	1,322.8	1,338.6	1,302.2	7.5	5.5	-138.05	164.8	-144.6	364.0	353.4	10.63	34.246			
1,500.0	1,404.8	1,424.3	1,382.7	8.5	6.1	-138.70	189.5	-160.5	415.4	403.6	11.83	35.106			
1,600.0	1,486.8	1,510.0	1,463.2	9.6	6.6	-139.21	214.1	-176.5	466.9	453.8	13.05	35.775			
1,700.0	1,568.8	1,595.6	1,543.7	10.8	7.2	-139.62	238.8	-192.5	518.4	504.1	14.28	36.308			
1,800.0	1,650.8	1,681.3	1,624.1	11.9	7.8	-139.95	263.5	-208.4	569.9	554.3	15.51	36.739			
1,900.0	1,732.8	1,767.0	1,704.6	13.0	8.4	-140.23	288.2	-224.4	621.4	604.6	16.75	37.095			
2,000.0	1,814.8	1,852.7	1,785.1	14.1	9.0	-140.47	312.9	-240.4	672.9	654.9	17.99	37.393			
2,100.0	1,896.8	1,938.3	1,865.6	15.2	9.6	-140.67	337.6	-256.4	724.4	705.2	19.24	37.645			
2,200.0	1,978.8	2,024.0	1,946.0	16.3	10.2	-140.85	362.2	-272.3	775.9	755.4	20.49	37.862			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	171.58	-38.4	5.7	38.8					
100.0	100.0	100.0	100.0	0.1	0.1	171.58	-38.4	5.7	38.8	38.6	0.22	172.838		
200.0	200.0	200.0	200.0	0.3	0.3	171.58	-38.4	5.7	38.8	38.2	0.67	57.613 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	142.92	-38.4	5.7	40.9	39.7	1.16	35.225		
400.0	399.6	399.6	399.6	0.8	0.8	150.63	-38.4	4.0	47.4	45.7	1.69	28.111		
500.0	498.8	499.4	499.2	1.1	1.0	161.70	-37.9	-1.1	59.5	57.3	2.25	26.433 SF		
600.0	597.1	599.6	599.0	1.4	1.2	172.70	-33.4	-9.0	75.6	72.8	2.83	26.685		
700.0	694.3	698.7	697.2	1.9	1.5	-177.55	-24.4	-19.3	96.1	92.7	3.43	28.050		
800.0	790.2	796.5	793.2	2.4	1.9	-169.34	-11.3	-31.9	121.6	117.5	4.07	29.897		
900.0	884.4	892.4	886.4	3.0	2.3	-162.58	5.7	-46.7	152.2	147.4	4.79	31.758		
1,000.0	976.8	986.2	976.4	3.7	2.7	-157.00	26.3	-63.3	187.8	182.2	5.63	33.382		
1,100.0	1,067.1	1,076.9	1,062.7	4.5	3.2	-152.90	48.3	-80.6	228.5	221.9	6.55	34.867		
1,200.0	1,154.9	1,165.7	1,147.2	5.4	3.8	-150.28	69.8	-97.5	273.7	266.2	7.53	36.371		
1,300.0	1,240.2	1,252.6	1,229.9	6.4	4.3	-148.59	90.8	-114.0	323.1	314.6	8.54	37.842		
1,363.8	1,293.1	1,306.9	1,281.5	7.1	4.6	-147.83	104.0	-124.3	356.7	347.5	9.19	38.831		
1,400.0	1,322.8	1,337.4	1,310.5	7.5	4.8	-147.82	111.4	-130.1	376.1	366.6	9.56	39.339		
1,500.0	1,404.8	1,421.7	1,390.7	8.5	5.3	-147.80	131.8	-146.2	429.9	419.3	10.62	40.498		
1,600.0	1,486.8	1,506.0	1,470.9	9.6	5.8	-147.78	152.2	-162.2	483.7	472.0	11.69	41.377		
1,700.0	1,568.8	1,590.3	1,551.1	10.8	6.3	-147.77	172.7	-178.3	537.5	524.7	12.78	42.056		
1,800.0	1,650.8	1,674.6	1,631.3	11.9	6.9	-147.76	193.1	-194.3	591.3	577.4	13.88	42.593		
1,900.0	1,732.8	1,758.9	1,711.6	13.0	7.4	-147.75	213.5	-210.3	645.0	630.1	14.99	43.026		
2,000.0	1,814.8	1,843.2	1,791.8	14.1	7.9	-147.74	233.9	-226.4	698.8	682.7	16.11	43.380		
2,100.0	1,896.8	1,927.5	1,872.0	15.2	8.4	-147.73	254.4	-242.4	752.6	735.4	17.23	43.673		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	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	169.18	-45.2	8.6	46.1					
100.0	100.0	100.0	100.0	0.1	0.1	169.18	-45.2	8.6	46.1	45.8	0.22	204.924		
200.0	200.0	200.0	200.0	0.3	0.3	169.18	-45.2	8.6	46.1	45.4	0.67	68.308 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	140.27	-45.2	8.6	48.0	46.9	1.16	41.465		
400.0	399.6	399.6	399.6	0.8	0.8	145.46	-45.2	8.6	54.3	52.6	1.69	32.214		
500.0	498.8	498.6	498.6	1.1	1.0	153.25	-45.2	7.0	65.6	63.4	2.24	29.330 SF		
600.0	597.1	597.2	597.0	1.4	1.2	162.38	-44.8	1.8	83.0	80.2	2.81	29.559		
700.0	694.3	695.6	694.9	1.9	1.5	171.34	-41.5	-7.0	105.4	102.0	3.39	31.125		
800.0	790.2	791.9	790.2	2.4	1.7	179.32	-34.9	-19.2	133.3	129.3	3.98	33.532		
900.0	884.4	885.6	882.2	3.0	2.1	-173.91	-25.4	-34.4	167.2	162.6	4.60	36.308		
1,000.0	976.8	976.3	970.3	3.7	2.4	-168.26	-13.3	-52.3	207.0	201.7	5.30	39.090		
1,100.0	1,067.1	1,063.6	1,054.1	4.5	2.9	-163.52	1.1	-72.4	252.7	246.7	6.07	41.648		
1,200.0	1,154.9	1,147.7	1,133.7	5.4	3.3	-159.52	17.2	-94.3	303.9	297.0	6.92	43.933		
1,300.0	1,240.2	1,229.9	1,211.2	6.4	3.9	-156.51	33.4	-116.1	359.8	352.0	7.82	45.992		
1,363.8	1,293.1	1,281.0	1,259.4	7.1	4.2	-155.01	43.5	-129.7	397.8	389.3	8.42	47.242		
1,400.0	1,322.8	1,309.7	1,286.5	7.5	4.4	-154.61	49.2	-137.3	419.7	410.9	8.76	47.898		
1,500.0	1,404.8	1,388.9	1,361.3	8.5	4.9	-153.69	64.8	-158.3	480.4	470.7	9.74	49.345		
1,600.0	1,486.8	1,468.2	1,436.0	9.6	5.4	-152.97	80.5	-179.4	541.2	530.4	10.74	50.410		
1,700.0	1,568.8	1,547.4	1,510.8	10.8	5.9	-152.40	96.1	-200.4	602.0	590.2	11.76	51.192		
1,800.0	1,650.8	1,626.7	1,585.6	11.9	6.4	-151.93	111.8	-221.5	662.8	650.0	12.80	51.782		
1,900.0	1,732.8	1,705.9	1,660.4	13.0	7.0	-151.55	127.4	-242.6	723.7	709.9	13.86	52.234		
2,000.0	1,814.8	1,785.2	1,735.2	14.1	7.5	-151.22	143.1	-263.6	784.6	769.7	14.92	52.584		

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design		NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 22B-15 596 - Wellbore #1 - Plan #1 (11-30-17)											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	167.45	-52.2	11.6	53.4						
100.0	100.0	100.0	100.0	0.1	0.1	167.45	-52.2	11.6	53.4	53.2	0.22	237.746			
200.0	200.0	200.0	200.0	0.3	0.3	167.45	-52.2	11.6	53.4	52.8	0.67	79.249	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	138.33	-52.2	11.6	55.4	54.2	1.16	47.865			
400.0	399.6	399.6	399.6	0.8	0.8	143.09	-52.2	11.6	61.5	59.8	1.68	36.565			
500.0	498.8	498.8	498.8	1.1	1.0	149.13	-52.2	11.6	72.3	70.1	2.24	32.346			
600.0	597.1	596.7	596.7	1.4	1.2	156.01	-52.2	10.0	88.7	85.9	2.80	31.673	SF		
700.0	694.3	693.8	693.6	1.9	1.4	163.31	-51.9	5.0	111.4	108.0	3.37	33.066			
800.0	790.2	790.1	789.5	2.4	1.7	170.46	-49.3	-3.9	139.5	135.6	3.94	35.442			
900.0	884.4	883.8	882.2	3.0	1.9	176.91	-44.3	-16.4	173.5	169.0	4.51	38.442			
1,000.0	976.8	974.1	970.8	3.7	2.2	-177.49	-37.0	-32.0	213.6	208.5	5.12	41.725			
1,100.0	1,067.1	1,060.6	1,054.9	4.5	2.6	-172.69	-27.9	-50.3	259.8	254.1	5.77	45.008			
1,200.0	1,154.9	1,143.0	1,134.1	5.4	3.0	-168.57	-17.3	-70.6	312.0	305.5	6.48	48.131			
1,300.0	1,240.2	1,222.8	1,209.9	6.4	3.4	-165.05	-5.5	-92.3	369.6	362.3	7.25	50.940			
1,363.8	1,293.1	1,272.6	1,257.2	7.1	3.7	-163.23	1.8	-105.9	408.7	401.0	7.77	52.615			
1,400.0	1,322.8	1,300.5	1,283.7	7.5	3.8	-162.57	6.0	-113.6	431.5	423.4	8.06	53.518			
1,500.0	1,404.8	1,377.6	1,357.0	8.5	4.3	-161.07	17.4	-134.7	494.4	485.5	8.90	55.524			
1,600.0	1,486.8	1,454.7	1,430.3	9.6	4.8	-159.90	28.8	-155.9	557.5	547.7	9.80	56.916			
1,700.0	1,568.8	1,531.8	1,503.5	10.8	5.2	-158.96	40.3	-177.1	620.7	610.0	10.70	58.031			
1,800.0	1,650.8	1,608.9	1,576.8	11.9	5.7	-158.20	51.7	-198.2	684.0	672.4	11.63	58.840			
1,900.0	1,732.8	1,686.0	1,650.1	13.0	6.2	-157.56	63.1	-219.4	747.4	734.8	12.57	59.450			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(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	-113.19	-3.9	-9.2	10.0	10.0	0.00	N/A			
100.0	100.0	100.0	100.0	0.1	0.1	-113.19	-3.9	-9.2	10.0	9.8	0.22	44.453			
200.0	200.0	200.0	200.0	0.3	0.3	-113.19	-3.9	-9.2	10.0	9.3	0.67	14.818	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	-138.94	-1.4	-9.9	11.8	10.7	1.16	10.216	SF		
400.0	399.6	399.8	399.4	0.8	0.8	-130.05	6.1	-12.0	17.6	15.9	1.67	10.567			
500.0	498.8	499.1	497.8	1.1	1.1	-123.66	18.6	-15.4	27.6	25.4	2.23	12.363			
600.0	597.1	597.6	594.7	1.4	1.4	-119.80	35.8	-20.2	41.8	38.9	2.90	14.387			
700.0	694.3	695.1	689.6	1.9	1.9	-117.39	57.6	-26.3	60.0	56.3	3.70	16.196			
800.0	790.2	791.5	782.1	2.4	2.3	-115.74	83.6	-33.5	82.1	77.4	4.64	17.675			
900.0	884.4	886.6	871.9	3.0	2.9	-114.50	113.7	-41.9	108.0	102.2	5.73	18.844			
1,000.0	976.8	980.1	958.6	3.7	3.6	-113.46	147.4	-51.3	137.5	130.6	6.96	19.763			
1,100.0	1,067.1	1,072.0	1,042.0	4.5	4.3	-112.53	184.6	-61.6	170.6	162.3	8.32	20.493			
1,200.0	1,154.9	1,162.2	1,122.0	5.4	5.1	-111.65	224.7	-72.7	207.0	197.2	9.82	21.087			
1,300.0	1,240.2	1,253.5	1,201.6	6.4	5.9	-111.13	267.8	-84.7	246.2	234.8	11.44	21.527			
1,363.8	1,293.1	1,311.7	1,252.3	7.1	6.5	-111.24	295.3	-92.4	272.2	259.7	12.51	21.763			
1,400.0	1,322.8	1,344.5	1,280.9	7.5	6.8	-111.80	310.8	-96.7	287.2	274.0	13.13	21.865			
1,500.0	1,404.8	1,435.3	1,360.0	8.5	7.6	-113.08	353.7	-108.6	328.6	313.8	14.87	22.103			
1,600.0	1,486.8	1,526.1	1,439.1	9.6	8.5	-114.07	396.7	-120.6	370.2	353.6	16.61	22.288			
1,700.0	1,568.8	1,616.9	1,518.2	10.8	9.4	-114.87	439.6	-132.5	411.8	393.5	18.36	22.436			
1,800.0	1,650.8	1,707.7	1,597.3	11.9	10.2	-115.52	482.5	-144.4	453.5	433.4	20.11	22.555			
1,900.0	1,732.8	1,798.4	1,676.4	13.0	11.1	-116.06	525.4	-156.3	495.2	473.4	21.86	22.655			
2,000.0	1,814.8	1,889.2	1,755.5	14.1	12.0	-116.51	568.3	-168.3	537.0	513.4	23.62	22.738			
2,100.0	1,896.8	1,980.0	1,834.6	15.2	12.8	-116.91	611.3	-180.2	578.8	553.4	25.37	22.809			
2,200.0	1,978.8	2,070.8	1,913.7	16.3	13.7	-117.24	654.2	-192.1	620.6	593.4	27.13	22.870			
2,300.0	2,060.8	2,161.6	1,992.9	17.4	14.6	-117.54	697.1	-204.1	662.4	633.5	28.90	22.923			
2,400.0	2,142.8	2,252.4	2,072.0	18.5	15.5	-117.80	740.0	-216.0	704.2	673.5	30.66	22.969			
2,500.0	2,224.8	2,343.2	2,151.1	19.7	16.3	-118.03	783.0	-227.9	746.0	713.6	32.42	23.011			
2,600.0	2,306.8	2,434.0	2,230.2	20.8	17.2	-118.24	825.9	-239.9	787.9	753.7	34.19	23.047			

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 15B-11 596
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 15B-11 596	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-30-17)	Offset TVD Reference:	Offset Datum

Offset Design		NPR H15 596 South Pad Sec.15-T5S-R96W - NPR 25D-10 596 - Wellbore #1 - Plan #1 (11-30-17)											Offset Site Error:	0.0 ft	
Survey Program:		0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(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	-150.27	-10.9	-6.2	12.5	12.5	0.00	N/A			
100.0	100.0	100.0	100.0	0.1	0.1	-150.27	-10.9	-6.2	12.5	12.3	0.22	55.612			
200.0	200.0	200.0	200.0	0.3	0.3	-150.27	-10.9	-6.2	12.5	11.8	0.67	18.537	CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	178.99	-10.9	-6.2	15.1	13.9	1.18	12.792			
400.0	399.6	400.3	400.2	0.8	0.8	-175.00	-8.4	-7.2	21.5	19.8	1.72	12.500	SF		
500.0	498.8	500.3	499.9	1.1	1.0	-164.48	-1.2	-10.3	31.0	28.7	2.26	13.701			
600.0	597.1	599.7	598.4	1.4	1.3	-154.82	10.7	-15.5	44.7	41.8	2.84	15.707			
700.0	694.3	698.1	695.2	1.9	1.6	-147.30	27.1	-22.5	62.9	59.4	3.51	17.921			
800.0	790.2	795.3	789.7	2.4	2.0	-141.65	47.8	-31.4	85.8	81.5	4.30	19.951			
900.0	884.4	891.0	881.6	3.0	2.5	-137.34	72.5	-42.0	113.2	108.0	5.23	21.647			
1,000.0	976.8	984.9	970.3	3.7	3.1	-133.93	100.8	-54.1	145.1	138.7	6.30	23.009			
1,100.0	1,067.1	1,076.9	1,055.6	4.5	3.7	-131.14	132.4	-67.7	181.1	173.6	7.52	24.091			
1,200.0	1,154.9	1,166.8	1,137.3	5.4	4.4	-128.75	166.8	-82.5	221.1	212.3	8.86	24.960			
1,300.0	1,240.2	1,254.8	1,215.6	6.4	5.2	-126.65	203.9	-98.4	265.0	254.7	10.32	25.680			
1,363.8	1,293.1	1,311.4	1,265.4	7.1	5.7	-125.65	228.5	-108.9	294.6	283.3	11.30	26.072			
1,400.0	1,322.8	1,343.2	1,293.5	7.5	6.0	-125.67	242.3	-114.9	311.7	299.9	11.87	26.269			
1,500.0	1,404.8	1,431.3	1,371.1	8.5	6.8	-125.70	280.6	-131.3	359.1	345.6	13.45	26.704			
1,600.0	1,486.8	1,519.4	1,448.7	9.6	7.6	-125.72	318.8	-147.7	406.4	391.4	15.04	27.012			
1,700.0	1,568.8	1,607.5	1,526.3	10.8	8.4	-125.74	357.1	-164.2	453.7	437.1	16.66	27.238			
1,800.0	1,650.8	1,695.6	1,604.0	11.9	9.2	-125.75	395.4	-180.6	501.0	482.8	18.28	27.409			
1,900.0	1,732.8	1,783.7	1,681.6	13.0	10.0	-125.77	433.6	-197.0	548.4	528.5	19.91	27.541			
2,000.0	1,814.8	1,871.8	1,759.2	14.1	10.9	-125.78	471.9	-213.5	595.7	574.1	21.55	27.645			
2,100.0	1,896.8	1,959.9	1,836.8	15.2	11.7	-125.79	510.2	-229.9	643.0	619.8	23.19	27.729			
2,200.0	1,978.8	2,048.0	1,914.5	16.3	12.5	-125.79	548.4	-246.3	690.3	665.5	24.83	27.798			
2,300.0	2,060.8	2,136.1	1,992.1	17.4	13.3	-125.80	586.7	-262.8	737.7	711.2	26.48	27.855			
2,400.0	2,142.8	2,224.1	2,069.7	18.5	14.2	-125.81	625.0	-279.2	785.0	756.9	28.13	27.903			

Reference Depths are relative to WELL @ 6453.0ft (Original Well Elev)	Coordinates are relative to: NPR 15B-11 596
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 15B-11 596
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°

