

# Captiva Energy Partners

Well Name: **Stillroven Farm 5**

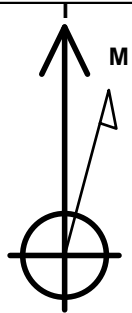
Surface Location: Stillroven Farm Pad Sec.5-T3N-R68W  
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone  
Ground Elevation: 5075.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1338136.53	134292.60	40.260584	-105.018806	

Original Well Elev WELL @ 5098.0ft (Original Well Elev)

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SHL 625'FNL, 310'FEL	1.0	0.0	0.0	40.260584	105.018806
BHL 1035'FNL, 460'FWL	208.0	-489.7	-4502.7	40.259238	105.034939
LP 1035'FNL, 512'FEL	7308.0	-412.6	-203.0	40.259451	105.019533



Azimuths to True North  
Magnetic North: 8.19°

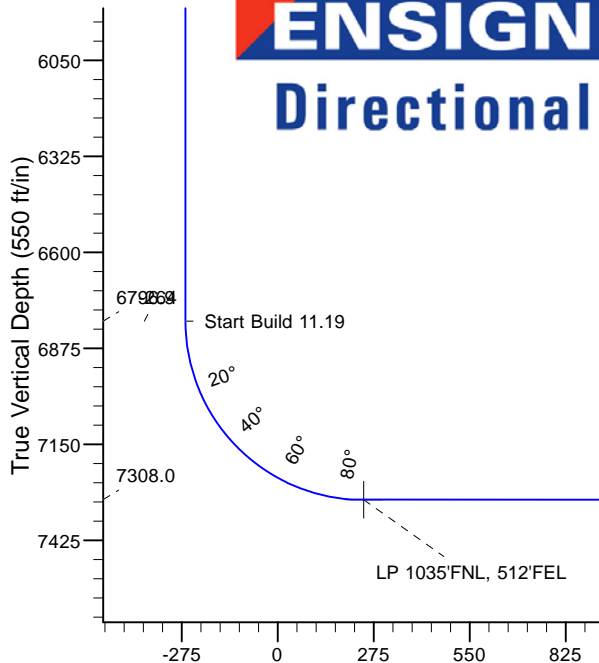
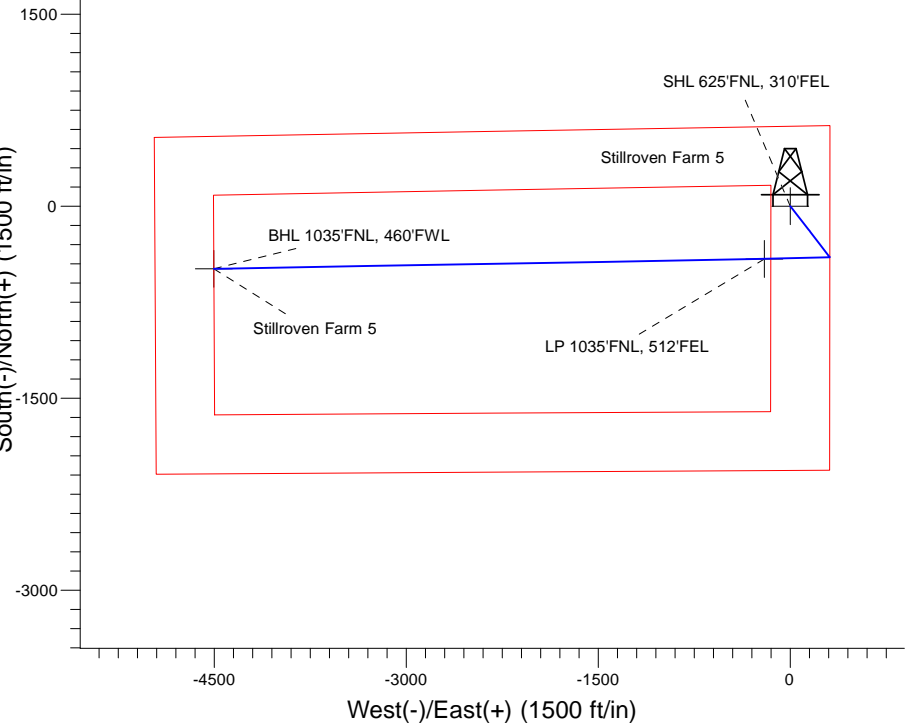
Magnetic Field  
Strength: 52405.2nT  
Dip Angle: 66.69°  
Date: 5/23/2017  
Model: IGRF2010

Stillroven Farm Pad Sec.5-T3N-R68W  
Stillroven Farm 5  
Plan #2 (6-5-17)  
13:16, June 05 2017

## ANNOTATIONS

TVD	MD	Annotation
1600.0	1600.0	Start Build 1.50
6796.8	6829.3	Start Build 11.19
7308.0	11935.2	TD at 11935.2

South(-)/North(+) (1500 ft/in)



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
3	32110.6	7.66	142.24	2109.1	-26.9	20.9	1.50	142.24	-17.8	
4	45449.5	7.66	142.24	5418.2	-378.8	293.3	0.00	0.00	-250.7	
5	55832.4	0.00	0.00	5800.0	-399.0	309.0	2.00	180.00	-264.1	
6	66829.3	0.00	0.00	6796.8	-399.0	309.0	0.00	0.00	-264.1	
7	77633.8	90.00	268.48	7308.0	-412.5	-202.0	11.19	268.48	245.4	
8	87634.8	90.00	268.48	7308.0	-412.6	-203.0	0.00	0.00	246.4	LP 1035'FNL, 512'FEL
9	97684.0	90.00	268.98	7308.0	-413.7	-252.2	1.00	90.00	295.5	
10	11935.2	90.00	268.98	7308.0	-489.7	-4502.7	0.00	0.00	4529.3	BHL 1035'FNL, 460'FWL

Vertical Section at 263.79° (550 ft/in)



# Directional

## **Captiva Energy Partners**

**SEC.5-T3N-R68W**

**Stillroven Farm Pad Sec.5-T3N-R68W**

**Stillroven Farm 5**

**Wellbore #1**

**Plan: Plan #2 (6-5-17)**

## **Standard Planning Report**

**05 June, 2017**



# Directional

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Company:</b>	Captiva Energy Partners	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Project:</b>	SEC.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (6-5-17)		

<b>Project</b>	SEC.5-T3N-R68W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	Stillroven Farm Pad Sec.5-T3N-R68W			
<b>Site Position:</b>		<b>Northing:</b>	1,338,196.56 usft	<b>Latitude:</b> 40.260749
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,134,292.41 usft	<b>Longitude:</b> -105.018805
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.31 °

<b>Well</b>	Stillroven Farm 5			
<b>Well Position</b>	<b>+N/-S</b>	-60.0 ft	<b>Northing:</b>	1,338,136.55 usft
	<b>+E/-W</b>	-0.1 ft	<b>Easting:</b>	3,134,292.60 usft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	0.0 ft
			<b>Ground Level:</b>	5,075.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	5/23/2017	8.19	66.69	52,405

<b>Design</b>	Plan #2 (6-5-17)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	263.79

<b>Plan Sections</b>										
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	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,110.6	7.66	142.24	2,109.1	-26.9	20.9	1.50	1.50	0.00	142.24	
5,449.5	7.66	142.24	5,418.2	-378.8	293.3	0.00	0.00	0.00	0.00	
5,832.4	0.00	0.00	5,800.0	-399.0	309.0	2.00	-2.00	0.00	180.00	
6,829.3	0.00	0.00	6,796.8	-399.0	309.0	0.00	0.00	0.00	0.00	
7,633.8	90.00	268.48	7,308.0	-412.5	-202.0	11.19	11.19	0.00	268.48	
7,634.8	90.00	268.48	7,308.0	-412.6	-203.0	0.00	0.00	0.00	0.00	LP 1035'FNL, 512'FEI
7,684.0	90.00	268.98	7,308.0	-413.7	-252.2	1.00	0.00	1.00	90.00	
11,935.2	90.00	268.98	7,308.0	-489.7	-4,502.7	0.00	0.00	0.00	0.00	BHL 1035'FNL, 460'F'

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Company:</b>	Captiva Energy Partners	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Project:</b>	SEC.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (6-5-17)		

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
<b>SHL 625'FNL, 310'FEL</b>									
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	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Start Build 1.50</b>									
1,700.0	1.50	142.24	1,700.0	-1.0	0.8	-0.7	1.50	1.50	0.00
1,800.0	3.00	142.24	1,799.9	-4.1	3.2	-2.7	1.50	1.50	0.00
1,900.0	4.50	142.24	1,899.7	-9.3	7.2	-6.2	1.50	1.50	0.00
2,000.0	6.00	142.24	1,999.3	-16.5	12.8	-10.9	1.50	1.50	0.00
2,100.0	7.50	142.24	2,098.6	-25.8	20.0	-17.1	1.50	1.50	0.00
2,110.6	7.66	142.24	2,109.1	-26.9	20.9	-17.8	1.50	1.50	0.00
2,200.0	7.66	142.24	2,197.7	-36.4	28.2	-24.1	0.00	0.00	0.00
2,300.0	7.66	142.24	2,296.8	-46.9	36.3	-31.0	0.00	0.00	0.00
2,400.0	7.66	142.24	2,395.9	-57.4	44.5	-38.0	0.00	0.00	0.00
2,500.0	7.66	142.24	2,495.0	-68.0	52.6	-45.0	0.00	0.00	0.00
2,600.0	7.66	142.24	2,594.1	-78.5	60.8	-52.0	0.00	0.00	0.00
2,700.0	7.66	142.24	2,693.2	-89.1	69.0	-58.9	0.00	0.00	0.00
2,800.0	7.66	142.24	2,792.3	-99.6	77.1	-65.9	0.00	0.00	0.00
2,900.0	7.66	142.24	2,891.4	-110.1	85.3	-72.9	0.00	0.00	0.00
3,000.0	7.66	142.24	2,990.5	-120.7	93.4	-79.9	0.00	0.00	0.00
3,100.0	7.66	142.24	3,089.7	-131.2	101.6	-86.8	0.00	0.00	0.00
3,200.0	7.66	142.24	3,188.8	-141.7	109.8	-93.8	0.00	0.00	0.00
3,300.0	7.66	142.24	3,287.9	-152.3	117.9	-100.8	0.00	0.00	0.00
3,400.0	7.66	142.24	3,387.0	-162.8	126.1	-107.8	0.00	0.00	0.00
3,500.0	7.66	142.24	3,486.1	-173.4	134.3	-114.7	0.00	0.00	0.00
3,600.0	7.66	142.24	3,585.2	-183.9	142.4	-121.7	0.00	0.00	0.00
3,700.0	7.66	142.24	3,684.3	-194.4	150.6	-128.7	0.00	0.00	0.00
3,800.0	7.66	142.24	3,783.4	-205.0	158.7	-135.6	0.00	0.00	0.00
3,900.0	7.66	142.24	3,882.5	-215.5	166.9	-142.6	0.00	0.00	0.00
4,000.0	7.66	142.24	3,981.6	-226.0	175.1	-149.6	0.00	0.00	0.00
4,100.0	7.66	142.24	4,080.7	-236.6	183.2	-156.6	0.00	0.00	0.00
4,200.0	7.66	142.24	4,179.8	-247.1	191.4	-163.5	0.00	0.00	0.00
4,300.0	7.66	142.24	4,278.9	-257.7	199.5	-170.5	0.00	0.00	0.00
4,400.0	7.66	142.24	4,378.1	-268.2	207.7	-177.5	0.00	0.00	0.00
4,500.0	7.66	142.24	4,477.2	-278.7	215.9	-184.5	0.00	0.00	0.00
4,600.0	7.66	142.24	4,576.3	-289.3	224.0	-191.4	0.00	0.00	0.00
4,700.0	7.66	142.24	4,675.4	-299.8	232.2	-198.4	0.00	0.00	0.00
4,800.0	7.66	142.24	4,774.5	-310.3	240.3	-205.4	0.00	0.00	0.00
4,900.0	7.66	142.24	4,873.6	-320.9	248.5	-212.4	0.00	0.00	0.00

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Company:</b>	Captiva Energy Partners	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Project:</b>	SEC.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (6-5-17)		

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)
5,000.0	7.66	142.24	4,972.7	-331.4	256.7	-219.3	0.00	0.00	0.00
5,100.0	7.66	142.24	5,071.8	-342.0	264.8	-226.3	0.00	0.00	0.00
5,200.0	7.66	142.24	5,170.9	-352.5	273.0	-233.3	0.00	0.00	0.00
5,300.0	7.66	142.24	5,270.0	-363.0	281.2	-240.3	0.00	0.00	0.00
5,400.0	7.66	142.24	5,369.1	-373.6	289.3	-247.2	0.00	0.00	0.00
5,449.5	7.66	142.24	5,418.2	-378.8	293.3	-250.7	0.00	0.00	0.00
5,500.0	6.65	142.24	5,468.3	-383.8	297.2	-254.0	2.00	-2.00	0.00
5,600.0	4.65	142.24	5,567.8	-391.5	303.2	-259.1	2.00	-2.00	0.00
5,700.0	2.65	142.24	5,667.6	-396.6	307.1	-262.4	2.00	-2.00	0.00
5,800.0	0.65	142.24	5,767.6	-398.9	308.9	-264.0	2.00	-2.00	0.00
5,832.4	0.00	0.00	5,800.0	-399.0	309.0	-264.1	2.00	-2.00	0.00
5,900.0	0.00	0.00	5,867.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,967.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,100.0	0.00	0.00	6,067.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,167.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,267.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,367.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,467.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,567.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,667.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,767.6	-399.0	309.0	-264.1	0.00	0.00	0.00
6,829.3	0.00	0.00	6,796.9	-399.0	309.0	-264.1	0.00	0.00	0.00
Start Build 11.19									
6,900.0	7.91	268.48	6,867.3	-399.1	304.1	-259.2	11.19	11.19	0.00
7,000.0	19.10	268.48	6,964.4	-399.7	280.8	-236.0	11.19	11.19	0.00
7,100.0	30.29	268.48	7,055.1	-400.9	239.1	-194.4	11.19	11.19	0.00
7,200.0	41.47	268.48	7,136.0	-402.4	180.6	-136.1	11.19	11.19	0.00
7,300.0	52.66	268.48	7,204.0	-404.3	107.6	-63.2	11.19	11.19	0.00
7,400.0	63.85	268.48	7,256.6	-406.6	22.7	21.4	11.19	11.19	0.00
7,500.0	75.03	268.48	7,291.6	-409.1	-70.8	114.6	11.19	11.19	0.00
7,600.0	86.22	268.48	7,307.9	-411.7	-169.2	212.8	11.19	11.19	0.00
7,633.8	90.00	268.48	7,308.0	-412.5	-202.0	245.4	11.19	11.19	0.00
7,634.8	90.00	268.48	7,308.0	-412.6	-203.0	246.4	0.00	0.00	0.00
LP 1035'FNL, 512'FEL									
7,684.0	90.00	268.98	7,308.0	-413.7	-252.2	295.5	1.00	0.00	1.00
7,700.0	90.00	268.98	7,308.0	-413.9	-268.2	311.4	0.00	0.00	0.00
7,800.0	90.00	268.98	7,308.0	-415.7	-368.2	411.0	0.00	0.00	0.00
7,900.0	90.00	268.98	7,308.0	-417.5	-468.2	510.5	0.00	0.00	0.00
8,000.0	90.00	268.98	7,308.0	-419.3	-568.1	610.1	0.00	0.00	0.00
8,100.0	90.00	268.98	7,308.0	-421.1	-668.1	709.7	0.00	0.00	0.00
8,200.0	90.00	268.98	7,308.0	-422.9	-768.1	809.3	0.00	0.00	0.00
8,300.0	90.00	268.98	7,308.0	-424.7	-868.1	908.9	0.00	0.00	0.00
8,400.0	90.00	268.98	7,308.0	-426.5	-968.1	1,008.5	0.00	0.00	0.00
8,500.0	90.00	268.98	7,308.0	-428.2	-1,068.1	1,108.1	0.00	0.00	0.00
8,600.0	90.00	268.98	7,308.0	-430.0	-1,168.0	1,207.7	0.00	0.00	0.00
8,700.0	90.00	268.98	7,308.0	-431.8	-1,268.0	1,307.3	0.00	0.00	0.00
8,800.0	90.00	268.98	7,308.0	-433.6	-1,368.0	1,406.9	0.00	0.00	0.00
8,900.0	90.00	268.98	7,308.0	-435.4	-1,468.0	1,506.5	0.00	0.00	0.00
9,000.0	90.00	268.98	7,308.0	-437.2	-1,568.0	1,606.1	0.00	0.00	0.00
9,100.0	90.00	268.98	7,308.0	-439.0	-1,668.0	1,705.6	0.00	0.00	0.00
9,200.0	90.00	268.98	7,308.0	-440.8	-1,767.9	1,805.2	0.00	0.00	0.00
9,300.0	90.00	268.98	7,308.0	-442.6	-1,867.9	1,904.8	0.00	0.00	0.00
9,400.0	90.00	268.98	7,308.0	-444.3	-1,967.9	2,004.4	0.00	0.00	0.00
9,500.0	90.00	268.98	7,308.0	-446.1	-2,067.9	2,104.0	0.00	0.00	0.00

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Company:</b>	Captiva Energy Partners	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Project:</b>	SEC.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (6-5-17)		

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)	
9,600.0	90.00	268.98	7,308.0	-447.9	-2,167.9	2,203.6	0.00	0.00	0.00	
9,700.0	90.00	268.98	7,308.0	-449.7	-2,267.9	2,303.2	0.00	0.00	0.00	
9,800.0	90.00	268.98	7,308.0	-451.5	-2,367.8	2,402.8	0.00	0.00	0.00	
9,900.0	90.00	268.98	7,308.0	-453.3	-2,467.8	2,502.4	0.00	0.00	0.00	
10,000.0	90.00	268.98	7,308.0	-455.1	-2,567.8	2,602.0	0.00	0.00	0.00	
10,100.0	90.00	268.98	7,308.0	-456.9	-2,667.8	2,701.6	0.00	0.00	0.00	
10,200.0	90.00	268.98	7,308.0	-458.6	-2,767.8	2,801.1	0.00	0.00	0.00	
10,300.0	90.00	268.98	7,308.0	-460.4	-2,867.8	2,900.7	0.00	0.00	0.00	
10,400.0	90.00	268.98	7,308.0	-462.2	-2,967.8	3,000.3	0.00	0.00	0.00	
10,500.0	90.00	268.98	7,308.0	-464.0	-3,067.7	3,099.9	0.00	0.00	0.00	
10,600.0	90.00	268.98	7,308.0	-465.8	-3,167.7	3,199.5	0.00	0.00	0.00	
10,700.0	90.00	268.98	7,308.0	-467.6	-3,267.7	3,299.1	0.00	0.00	0.00	
10,800.0	90.00	268.98	7,308.0	-469.4	-3,367.7	3,398.7	0.00	0.00	0.00	
10,900.0	90.00	268.98	7,308.0	-471.2	-3,467.7	3,498.3	0.00	0.00	0.00	
11,000.0	90.00	268.98	7,308.0	-473.0	-3,567.7	3,597.9	0.00	0.00	0.00	
11,100.0	90.00	268.98	7,308.0	-474.7	-3,667.6	3,697.5	0.00	0.00	0.00	
11,200.0	90.00	268.98	7,308.0	-476.5	-3,767.6	3,797.1	0.00	0.00	0.00	
11,300.0	90.00	268.98	7,308.0	-478.3	-3,867.6	3,896.7	0.00	0.00	0.00	
11,400.0	90.00	268.98	7,308.0	-480.1	-3,967.6	3,996.2	0.00	0.00	0.00	
11,500.0	90.00	268.98	7,308.0	-481.9	-4,067.6	4,095.8	0.00	0.00	0.00	
11,600.0	90.00	268.98	7,308.0	-483.7	-4,167.6	4,195.4	0.00	0.00	0.00	
11,700.0	90.00	268.98	7,308.0	-485.5	-4,267.5	4,295.0	0.00	0.00	0.00	
11,800.0	90.00	268.98	7,308.0	-487.3	-4,367.5	4,394.6	0.00	0.00	0.00	
11,900.0	90.00	268.98	7,308.0	-489.0	-4,467.5	4,494.2	0.00	0.00	0.00	
11,935.2	90.00	268.98	7,308.0	-489.7	-4,502.7	4,529.3	0.00	0.00	0.00	
TD at 11935.2 - BHL 1035'FNL, 460'FWL										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 625'FNL, 310'FEL - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	1,338,136.56	3,134,292.60	40.260584	-105.018806
BHL 1035'FNL, 460'FWL - plan hits target center - Point	0.00	0.00	7,308.0	-489.7	-4,502.7	1,337,622.47	3,129,792.78	40.259238	-105.034939
LP 1035'FNL, 512'FEL - plan hits target center - Point	0.00	0.00	7,308.0	-412.6	-203.0	1,337,722.91	3,134,091.85	40.259451	-105.019533

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,600.0	1,600.0	0.0	0.0	Start Build 1.50	
6,829.3	6,796.8	-26.9	20.9	Start Build 11.19	
11,935.2	7,308.0	-378.8	293.3	TD at 11935.2	



# Directional

## **Captiva Energy Partners**

**SEC.5-T3N-R68W**

**Stillroven Farm Pad Sec.5-T3N-R68W**

**Stillroven Farm 5**

**Wellbore #1**

**Plan #2 (6-5-17)**

## **Anticollision Report**

**05 June, 2017**



# Directional

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2 (6-5-17)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 500.0 ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b> 6/5/2017			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	11,935.2	Plan #2 (6-5-17) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
Stillroven Farm Pad Sec.5-T3N-R68W						
Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	999.0	60.0	55.7	14.056	CC, ES
Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)	1,300.0	1,295.2	68.5	62.9	12.240	SF
Stillroven Farm 10 - Wellbore #1 - Plan #2 (6-5-17)	600.0	600.0	74.9	72.4	30.295	CC, ES
Stillroven Farm 10 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	991.2	94.9	90.7	22.868	SF
Stillroven Farm 11 - Wellbore #1 - Plan #2 (6-5-17)	400.0	400.0	89.9	88.4	57.163	CC, ES
Stillroven Farm 11 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	982.0	134.9	130.6	32.024	SF
Stillroven Farm 12 - Wellbore #1 - Plan #2 (6-5-17)	200.0	200.0	105.0	104.3	155.694	CC, ES
Stillroven Farm 12 - Wellbore #1 - Plan #2 (6-5-17)	1,100.0	1,061.6	205.7	200.8	41.484	SF
Stillroven Farm 2 - Wellbore #1 - Plan #2 (6-5-17)	1,200.0	1,199.0	45.1	39.9	8.720	CC, ES
Stillroven Farm 2 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,397.5	48.2	42.2	7.972	SF
Stillroven Farm 3 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,399.0	30.0	24.0	4.948	CC, ES
Stillroven Farm 3 - Wellbore #1 - Plan #2 (6-5-17)	1,600.0	1,598.2	32.3	25.4	4.653	SF
Stillroven Farm 4 - Wellbore #1 - Plan #2 (6-5-17)	1,600.0	1,599.0	15.0	8.1	2.156	CC, ES
Stillroven Farm 4 - Wellbore #1 - Plan #2 (6-5-17)	11,935.2	11,854.0	382.7	123.9	1.479	Level 3, SF
Stillroven Farm 6 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,400.0	15.0	8.9	2.473	CC, ES
Stillroven Farm 6 - Wellbore #1 - Plan #2 (6-5-17)	11,935.2	11,831.5	237.6	117.8	1.984	SF
Stillroven Farm 7 - Wellbore #1 - Plan #2 (6-5-17)	1,200.0	1,200.0	29.9	24.7	5.785	CC, ES
Stillroven Farm 7 - Wellbore #1 - Plan #2 (6-5-17)	11,935.2	12,092.6	246.4	30.5	1.142	Level 2, SF
Stillroven Farm 8 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	1,000.0	45.1	40.8	10.551	CC, ES
Stillroven Farm 8 - Wellbore #1 - Plan #2 (6-5-17)	11,935.2	11,904.2	382.9	123.9	1.478	Level 3, SF
Stillroven Farm 9 - Wellbore #1 - Plan #2(6-5-17)	800.0	800.0	59.9	56.5	17.763	CC, ES
Stillroven Farm 9 - Wellbore #1 - Plan #2(6-5-17)	1,100.0	1,095.0	71.1	66.5	15.439	SF

<b>Offset Design</b>	Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)											<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b>	0-MWD											<b>Offset Well Error:</b>	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	0.13	60.0	0.1	60.0				
100.0	100.0	99.0	99.0	0.1	0.1	0.13	60.0	0.1	60.0	59.8	0.22	268.269	
200.0	200.0	199.0	199.0	0.3	0.3	0.13	60.0	0.1	60.0	59.3	0.67	89.274	
300.0	300.0	299.0	299.0	0.6	0.6	0.13	60.0	0.1	60.0	58.9	1.12	53.493	
400.0	400.0	399.0	399.0	0.8	0.8	0.13	60.0	0.1	60.0	58.4	1.57	38.187	
500.0	500.0	499.0	499.0	1.0	1.0	0.13	60.0	0.1	60.0	58.0	2.02	29.692	

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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		
600.0	600.0	599.0	599.0	1.2	1.2	0.13	60.0	0.1	60.0	57.5	2.47	24.288		
700.0	700.0	699.0	699.0	1.5	1.5	0.13	60.0	0.1	60.0	57.1	2.92	20.549		
800.0	800.0	799.0	799.0	1.7	1.7	0.13	60.0	0.1	60.0	56.6	3.37	17.807		
900.0	900.0	899.0	899.0	1.9	1.9	0.13	60.0	0.1	60.0	56.2	3.82	15.711		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.13	60.0	0.1	60.0	55.7	4.27	14.056 CC, ES		
1,100.0	1,100.0	1,097.9	1,097.9	2.4	2.4	0.99	60.9	1.0	60.9	56.2	4.71	12.921		
1,200.0	1,200.0	1,196.7	1,196.6	2.6	2.6	3.43	63.5	3.8	63.6	58.5	5.15	12.351		
1,300.0	1,300.0	1,295.2	1,294.9	2.8	2.8	7.06	67.9	8.4	68.5	62.9	5.60	12.240 SF		
1,400.0	1,400.0	1,393.3	1,392.6	3.0	3.0	11.32	73.9	14.8	75.7	69.6	6.04	12.530		
1,500.0	1,500.0	1,490.9	1,489.6	3.3	3.3	15.71	81.7	23.0	85.4	78.9	6.48	13.170		
1,600.0	1,600.0	1,589.1	1,586.8	3.5	3.5	19.79	91.0	32.7	97.5	90.5	6.93	14.059		
1,700.0	1,700.0	1,688.1	1,684.8	3.7	3.8	-119.61	100.5	42.8	110.8	103.4	7.39	14.993		
1,800.0	1,799.9	1,786.9	1,782.7	3.9	4.1	-118.39	110.1	52.8	125.5	117.7	7.80	16.092		
1,900.0	1,899.7	1,885.6	1,880.4	4.0	4.4	-118.31	119.6	62.8	141.5	133.3	8.22	17.210		
2,000.0	1,999.3	1,984.1	1,977.9	4.2	4.7	-119.04	129.1	72.8	158.8	150.1	8.66	18.337		
2,100.0	2,098.6	2,082.3	2,075.1	4.5	5.0	-120.30	138.5	82.8	177.4	168.2	9.11	19.469		
2,110.6	2,109.1	2,092.7	2,085.5	4.5	5.0	-120.46	139.5	83.8	179.4	170.3	9.16	19.590		
2,200.0	2,197.7	2,180.2	2,172.1	4.7	5.3	-121.90	148.0	92.7	196.8	187.3	9.58	20.540		
2,300.0	2,296.8	2,278.2	2,269.1	4.9	5.6	-123.23	157.4	102.6	216.5	206.4	10.07	21.495		
2,400.0	2,395.9	2,376.1	2,366.1	5.2	5.9	-124.34	166.9	112.6	236.2	225.6	10.57	22.349		
2,500.0	2,495.0	2,474.1	2,463.1	5.5	6.2	-125.28	176.3	122.5	255.9	244.9	11.07	23.116		
2,600.0	2,594.1	2,572.0	2,560.0	5.7	6.5	-126.08	185.7	132.4	275.8	264.2	11.58	23.806		
2,700.0	2,693.2	2,669.9	2,657.0	6.0	6.9	-126.78	195.2	142.4	295.7	283.6	12.10	24.429		
2,800.0	2,792.3	2,767.9	2,754.0	6.3	7.2	-127.39	204.6	152.3	315.6	302.9	12.63	24.993		
2,900.0	2,891.4	2,865.8	2,851.0	6.6	7.5	-127.92	214.1	162.2	335.5	322.4	13.16	25.505		
3,000.0	2,990.5	2,963.8	2,948.0	6.9	7.8	-128.40	223.5	172.2	355.5	341.8	13.69	25.972		
3,100.0	3,089.7	3,061.7	3,045.0	7.2	8.1	-128.83	232.9	182.1	375.5	361.3	14.22	26.399		
3,200.0	3,188.8	3,159.7	3,141.9	7.5	8.5	-129.21	242.4	192.1	395.5	380.7	14.76	26.790		
3,300.0	3,287.9	3,257.6	3,238.9	7.8	8.8	-129.55	251.8	202.0	415.5	400.2	15.31	27.150		
3,400.0	3,387.0	3,355.6	3,335.9	8.1	9.1	-129.87	261.3	211.9	435.6	419.7	15.85	27.482		
3,500.0	3,486.1	3,453.5	3,432.9	8.4	9.4	-130.15	270.7	221.9	455.6	439.2	16.40	27.788		
3,600.0	3,585.2	3,551.4	3,529.9	8.8	9.8	-130.42	280.2	231.8	475.7	458.7	16.95	28.072		
3,700.0	3,684.3	3,649.4	3,626.8	9.1	10.1	-130.66	289.6	241.7	495.8	478.3	17.50	28.336		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.83	-74.9	-0.2	74.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.83	-74.9	-0.2	74.9	74.7	0.22	333.240		
200.0	200.0	200.0	200.0	0.3	0.3	-179.83	-74.9	-0.2	74.9	74.2	0.67	111.080		
300.0	300.0	300.0	300.0	0.6	0.6	-179.83	-74.9	-0.2	74.9	73.8	1.12	66.648		
400.0	400.0	400.0	400.0	0.8	0.8	-179.83	-74.9	-0.2	74.9	73.3	1.57	47.606		
500.0	500.0	500.0	500.0	1.0	1.0	-179.83	-74.9	-0.2	74.9	72.9	2.02	37.027		
600.0	600.0	600.0	600.0	1.2	1.2	-179.83	-74.9	-0.2	74.9	72.4	2.47	30.295 CC, ES		
700.0	700.0	698.1	698.1	1.5	1.4	179.93	-76.1	0.1	76.1	73.3	2.89	26.335		
800.0	800.0	796.1	796.0	1.7	1.6	179.24	-79.8	1.1	79.9	76.6	3.30	24.234		
900.0	900.0	893.8	893.6	1.9	1.8	178.23	-85.8	2.7	86.1	82.4	3.71	23.181		
1,000.0	1,000.0	991.2	990.5	2.1	2.0	177.04	-94.3	4.9	94.9	90.7	4.15	22.868 SF		
1,100.0	1,100.0	1,088.0	1,086.7	2.4	2.3	175.80	-105.0	7.7	106.1	101.5	4.60	23.085		
1,200.0	1,200.0	1,184.2	1,182.0	2.6	2.5	174.60	-118.0	11.1	119.9	114.8	5.06	23.685		
1,300.0	1,300.0	1,279.7	1,276.1	2.8	2.8	173.51	-133.2	15.2	136.2	130.6	5.54	24.561		
1,400.0	1,400.0	1,374.3	1,369.0	3.0	3.2	172.54	-150.5	19.7	154.9	148.9	6.04	25.633		
1,500.0	1,500.0	1,468.0	1,460.6	3.3	3.5	171.69	-169.9	24.8	176.1	169.6	6.56	26.843		
1,600.0	1,600.0	1,562.4	1,552.3	3.5	3.9	170.95	-191.4	30.5	199.6	192.5	7.10	28.109		
1,700.0	1,700.0	1,659.8	1,646.8	3.7	4.4	28.09	-214.0	36.4	222.3	215.1	7.24	30.719		
1,800.0	1,799.9	1,757.7	1,741.9	3.9	4.8	27.87	-236.7	42.4	242.9	235.2	7.66	31.710		
1,900.0	1,899.7	1,856.0	1,837.3	4.0	5.3	27.95	-259.5	48.4	261.1	253.0	8.09	32.268		
2,000.0	1,999.3	1,954.7	1,933.1	4.2	5.8	28.28	-282.4	54.5	277.1	268.6	8.54	32.458		
2,100.0	2,098.6	2,053.7	2,029.2	4.5	6.2	28.82	-305.4	60.5	290.8	281.8	9.00	32.333		
2,110.6	2,109.1	2,064.2	2,039.4	4.5	6.3	28.89	-307.8	61.2	292.2	283.1	9.04	32.303		
2,200.0	2,197.7	2,152.8	2,125.5	4.7	6.7	29.55	-328.4	66.6	303.3	293.8	9.47	32.013		
2,300.0	2,296.8	2,252.0	2,221.7	4.9	7.2	30.22	-351.4	72.7	315.7	305.7	9.96	31.691		
2,400.0	2,395.9	2,351.1	2,318.0	5.2	7.7	30.85	-374.4	78.8	328.2	317.7	10.46	31.375		
2,500.0	2,495.0	2,450.3	2,414.2	5.5	8.2	31.43	-397.4	84.8	340.7	329.7	10.97	31.066		
2,600.0	2,594.1	2,549.4	2,510.5	5.7	8.7	31.97	-420.4	90.9	353.3	341.8	11.48	30.767		
2,700.0	2,693.2	2,648.6	2,606.7	6.0	9.2	32.47	-443.4	97.0	365.8	353.8	12.00	30.477		
2,800.0	2,792.3	2,747.8	2,703.0	6.3	9.7	32.94	-466.4	103.0	378.4	365.9	12.53	30.198		
2,900.0	2,891.4	2,846.9	2,799.3	6.6	10.2	33.38	-489.4	109.1	391.1	378.0	13.07	29.930		
3,000.0	2,990.5	2,946.1	2,895.5	6.9	10.7	33.79	-512.5	115.2	403.7	390.1	13.61	29.672		
3,100.0	3,089.7	3,045.2	2,991.8	7.2	11.2	34.18	-535.5	121.2	416.4	402.2	14.15	29.425		
3,200.0	3,188.8	3,144.4	3,088.0	7.5	11.7	34.54	-558.5	127.3	429.1	414.4	14.70	29.189		
3,300.0	3,287.9	3,243.5	3,184.3	7.8	12.2	34.88	-581.5	133.4	441.8	426.5	15.25	28.962		
3,400.0	3,387.0	3,342.7	3,280.6	8.1	12.7	35.20	-604.5	139.4	454.5	438.7	15.81	28.745		
3,500.0	3,486.1	3,441.8	3,376.8	8.4	13.2	35.51	-627.5	145.5	467.2	450.9	16.37	28.538		
3,600.0	3,585.2	3,541.0	3,473.1	8.8	13.7	35.80	-650.5	151.6	480.0	463.1	16.94	28.339		
3,700.0	3,684.3	3,640.2	3,569.3	9.1	14.2	36.07	-673.5	157.6	492.7	475.2	17.50	28.149		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.86	-89.9	-0.2	89.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.86	-89.9	-0.2	89.9	89.7	0.22	400.143		
200.0	200.0	200.0	200.0	0.3	0.3	-179.86	-89.9	-0.2	89.9	89.3	0.67	133.381		
300.0	300.0	300.0	300.0	0.6	0.6	-179.86	-89.9	-0.2	89.9	88.8	1.12	80.029		
400.0	400.0	400.0	400.0	0.8	0.8	-179.86	-89.9	-0.2	89.9	88.4	1.57	57.163 CC, ES		
500.0	500.0	497.7	497.7	1.0	1.0	179.95	-91.2	0.1	91.2	89.2	1.99	45.762		
600.0	600.0	595.4	595.3	1.2	1.2	179.42	-94.8	1.0	94.9	92.5	2.40	39.503		
700.0	700.0	692.7	692.4	1.5	1.4	178.62	-100.8	2.4	101.1	98.3	2.83	35.744		
800.0	800.0	789.7	789.0	1.7	1.6	177.65	-109.2	4.5	109.9	106.6	3.27	33.568		
900.0	900.0	886.2	884.9	1.9	1.9	176.62	-120.0	7.1	121.1	117.4	3.73	32.439		
1,000.0	1,000.0	982.0	979.8	2.1	2.1	175.59	-132.9	10.3	134.9	130.6	4.21	32.024 SF		
1,100.0	1,100.0	1,077.2	1,073.6	2.4	2.4	174.62	-148.1	14.0	151.1	146.4	4.71	32.104		
1,200.0	1,200.0	1,171.5	1,166.2	2.6	2.8	173.73	-165.4	18.2	169.8	164.5	5.22	32.532		
1,300.0	1,300.0	1,264.8	1,257.4	2.8	3.2	172.94	-184.6	22.9	190.9	185.1	5.75	33.207		
1,400.0	1,400.0	1,358.0	1,348.0	3.0	3.6	172.24	-206.0	28.1	214.3	208.0	6.30	34.044		
1,500.0	1,500.0	1,455.0	1,442.0	3.3	4.1	171.64	-229.0	33.7	238.6	231.7	6.87	34.752		
1,600.0	1,600.0	1,551.9	1,536.1	3.5	4.5	171.14	-252.0	39.3	262.9	255.5	7.44	35.333		
1,700.0	1,700.0	1,649.2	1,630.4	3.7	5.0	28.45	-275.0	44.9	286.1	278.8	7.36	38.899		
1,800.0	1,799.9	1,747.0	1,725.2	3.9	5.5	28.29	-298.2	50.5	307.1	299.3	7.79	39.413		
1,900.0	1,899.7	1,845.2	1,820.5	4.0	6.0	28.38	-321.5	56.2	325.8	317.5	8.24	39.544		
2,000.0	1,999.3	1,943.8	1,916.1	4.2	6.5	28.66	-344.9	61.9	342.2	333.5	8.70	39.354		
2,100.0	2,098.6	2,042.7	2,012.0	4.5	7.0	29.14	-368.3	67.6	356.4	347.2	9.17	38.888		
2,110.6	2,109.1	2,053.3	2,022.3	4.5	7.0	29.20	-370.8	68.2	357.8	348.6	9.22	38.824		
2,200.0	2,197.7	2,141.8	2,108.1	4.7	7.5	29.78	-391.8	73.3	369.3	359.6	9.65	38.267		
2,300.0	2,296.8	2,240.9	2,204.2	4.9	8.0	30.40	-415.3	79.0	382.2	372.1	10.15	37.671		
2,400.0	2,395.9	2,340.0	2,300.3	5.2	8.5	30.97	-438.7	84.8	395.2	384.5	10.65	37.105		
2,500.0	2,495.0	2,439.1	2,396.4	5.5	9.0	31.50	-462.2	90.5	408.2	397.0	11.16	36.567		
2,600.0	2,594.1	2,538.1	2,492.5	5.7	9.5	32.01	-485.7	96.2	421.2	409.5	11.68	36.056		
2,700.0	2,693.2	2,637.2	2,588.6	6.0	10.0	32.48	-509.2	101.9	434.2	422.0	12.21	35.572		
2,800.0	2,792.3	2,736.3	2,684.7	6.3	10.5	32.92	-532.7	107.7	447.3	434.6	12.74	35.114		
2,900.0	2,891.4	2,835.4	2,780.8	6.6	11.1	33.34	-556.2	113.4	460.4	447.1	13.28	34.679		
3,000.0	2,990.5	2,934.5	2,876.9	6.9	11.6	33.74	-579.6	119.1	473.5	459.7	13.82	34.267		
3,100.0	3,089.7	3,033.6	2,972.9	7.2	12.1	34.12	-603.1	124.8	486.7	472.3	14.37	33.877		
3,200.0	3,188.8	3,132.6	3,069.0	7.5	12.6	34.47	-626.6	130.5	499.9	484.9	14.92	33.506		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.88	-105.0	-0.2	105.0					
100.0	100.0	100.0	100.0	0.1	0.1	-179.88	-105.0	-0.2	105.0	104.8	0.22	467.082		
200.0	200.0	200.0	200.0	0.3	0.3	-179.88	-105.0	-0.2	105.0	104.3	0.67	155.694	CC, ES	
300.0	300.0	297.4	297.4	0.6	0.5	179.98	-106.2	0.0	106.2	105.1	1.10	96.968		
400.0	400.0	394.6	394.5	0.8	0.7	179.57	-109.8	0.8	110.0	108.4	1.52	72.432		
500.0	500.0	491.6	491.3	1.0	1.0	178.95	-115.9	2.1	116.2	114.2	1.96	59.288		
600.0	600.0	588.2	587.5	1.2	1.2	178.18	-124.2	3.9	124.9	122.5	2.42	51.656		
700.0	700.0	684.3	683.0	1.5	1.5	177.35	-135.0	6.3	136.2	133.3	2.89	47.059		
800.0	800.0	779.8	777.6	1.7	1.8	176.50	-147.9	9.0	149.9	146.5	3.38	44.280		
900.0	900.0	874.6	871.1	1.9	2.1	175.68	-163.1	12.3	166.1	162.2	3.89	42.658		
1,000.0	1,000.0	968.5	963.4	2.1	2.5	174.91	-180.3	16.0	184.7	180.3	4.42	41.807		
1,100.0	1,100.0	1,061.6	1,054.3	2.4	2.9	174.22	-199.6	20.2	205.7	200.8	4.96	41.484	SF	
1,200.0	1,200.0	1,153.5	1,143.7	2.6	3.3	173.60	-220.7	24.8	229.1	223.6	5.52	41.533		
1,300.0	1,300.0	1,245.6	1,232.6	2.8	3.8	173.04	-243.9	29.8	254.8	248.7	6.09	41.823		
1,400.0	1,400.0	1,342.0	1,325.5	3.0	4.3	172.54	-269.0	35.2	281.3	274.6	6.69	42.027		
1,500.0	1,500.0	1,438.4	1,418.5	3.3	4.8	172.14	-294.0	40.6	307.8	300.5	7.30	42.183		
1,600.0	1,600.0	1,534.8	1,511.4	3.5	5.3	171.79	-319.0	46.0	334.3	326.4	7.90	42.301		
1,700.0	1,700.0	1,631.5	1,604.7	3.7	5.8	29.17	-344.1	51.4	359.7	352.1	7.53	47.760		
1,800.0	1,799.9	1,728.8	1,698.4	3.9	6.4	29.03	-369.4	56.9	382.9	374.9	7.98	47.968		
1,900.0	1,899.7	1,826.6	1,792.7	4.0	6.9	29.09	-394.8	62.4	403.8	395.4	8.44	47.827		
2,000.0	1,999.3	1,924.8	1,887.4	4.2	7.5	29.32	-420.2	67.9	422.5	413.6	8.92	47.394		
2,100.0	2,098.6	2,023.3	1,982.4	4.5	8.0	29.70	-445.8	73.4	439.0	429.6	9.40	46.711		
2,110.6	2,109.1	2,033.8	1,992.5	4.5	8.1	29.75	-448.6	74.0	440.7	431.2	9.45	46.626		
2,200.0	2,197.7	2,122.0	2,077.6	4.7	8.5	30.27	-471.5	78.9	454.2	444.3	9.89	45.906		
2,300.0	2,296.8	2,220.8	2,172.8	4.9	9.1	30.80	-497.1	84.5	469.4	459.0	10.40	45.140		
2,400.0	2,395.9	2,319.5	2,268.0	5.2	9.6	31.31	-522.7	90.0	484.7	473.8	10.91	44.415		
2,500.0	2,495.0	2,418.3	2,363.2	5.5	10.2	31.78	-548.4	95.5	500.0	488.6	11.43	43.730		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	0.04	45.1	0.0	45.1					
100.0	100.0	99.0	99.0	0.1	0.1	0.04	45.1	0.0	45.1	44.8	0.22	201.482		
200.0	200.0	199.0	199.0	0.3	0.3	0.04	45.1	0.0	45.1	44.4	0.67	67.049		
300.0	300.0	299.0	299.0	0.6	0.6	0.04	45.1	0.0	45.1	43.9	1.12	40.176		
400.0	400.0	399.0	399.0	0.8	0.8	0.04	45.1	0.0	45.1	43.5	1.57	28.680		
500.0	500.0	499.0	499.0	1.0	1.0	0.04	45.1	0.0	45.1	43.0	2.02	22.300		
600.0	600.0	599.0	599.0	1.2	1.2	0.04	45.1	0.0	45.1	42.6	2.47	18.242		
700.0	700.0	699.0	699.0	1.5	1.5	0.04	45.1	0.0	45.1	42.1	2.92	15.433		
800.0	800.0	799.0	799.0	1.7	1.7	0.04	45.1	0.0	45.1	41.7	3.37	13.374		
900.0	900.0	899.0	899.0	1.9	1.9	0.04	45.1	0.0	45.1	41.2	3.82	11.800		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.04	45.1	0.0	45.1	40.8	4.27	10.557		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	0.04	45.1	0.0	45.1	40.3	4.72	9.551		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.04	45.1	0.0	45.1	39.9	5.17	8.720 CC, ES		
1,300.0	1,300.0	1,298.3	1,298.3	2.8	2.8	1.33	45.8	1.1	45.8	40.2	5.61	8.166		
1,400.0	1,400.0	1,397.5	1,397.4	3.0	3.0	4.99	48.0	4.2	48.2	42.2	6.05	7.972 SF		
1,500.0	1,500.0	1,496.4	1,496.1	3.3	3.2	10.30	51.7	9.4	52.6	46.2	6.49	8.111		
1,600.0	1,600.0	1,594.9	1,594.2	3.5	3.5	16.33	56.9	16.7	59.4	52.5	6.93	8.577		
1,700.0	1,700.0	1,693.5	1,692.2	3.7	3.7	-120.89	63.3	25.8	69.4	62.0	7.37	9.418		
1,800.0	1,799.9	1,792.7	1,790.7	3.9	4.0	-118.55	70.1	35.3	81.3	73.5	7.78	10.456		
1,900.0	1,899.7	1,891.9	1,889.1	4.0	4.2	-118.17	76.9	44.9	94.5	86.3	8.19	11.535		
2,000.0	1,999.3	1,990.8	1,987.4	4.2	4.5	-119.06	83.6	54.4	109.0	100.4	8.63	12.635		
2,100.0	2,098.6	2,089.5	2,085.4	4.5	4.7	-120.72	90.3	63.8	124.8	115.7	9.07	13.755		
2,110.6	2,109.1	2,099.9	2,095.8	4.5	4.8	-120.93	91.1	64.8	126.5	117.4	9.12	13.875		
2,200.0	2,197.7	2,187.9	2,183.2	4.7	5.0	-122.70	97.1	73.3	141.5	132.0	9.54	14.834		
2,300.0	2,296.8	2,286.4	2,281.0	4.9	5.3	-124.28	103.8	82.7	158.4	148.3	10.02	15.807		
2,400.0	2,395.9	2,384.9	2,378.8	5.2	5.6	-125.56	110.5	92.2	175.3	164.8	10.51	16.684		
2,500.0	2,495.0	2,483.4	2,476.6	5.5	5.9	-126.61	117.2	101.7	192.3	181.3	11.01	17.475		
2,600.0	2,594.1	2,581.9	2,574.4	5.7	6.2	-127.49	123.9	111.1	209.4	197.9	11.51	18.192		
2,700.0	2,693.2	2,680.4	2,672.1	6.0	6.4	-128.23	130.6	120.6	226.5	214.5	12.02	18.841		
2,800.0	2,792.3	2,778.8	2,769.9	6.3	6.7	-128.88	137.3	130.0	243.7	231.2	12.54	19.432		
2,900.0	2,891.4	2,877.3	2,867.7	6.6	7.0	-129.43	144.0	139.5	260.9	247.8	13.06	19.971		
3,000.0	2,990.5	2,975.8	2,965.5	6.9	7.3	-129.92	150.8	149.0	278.1	264.5	13.59	20.464		
3,100.0	3,089.7	3,074.3	3,063.3	7.2	7.6	-130.35	157.5	158.4	295.3	281.2	14.12	20.916		
3,200.0	3,188.8	3,172.8	3,161.1	7.5	7.9	-130.74	164.2	167.9	312.5	297.9	14.65	21.332		
3,300.0	3,287.9	3,271.3	3,258.9	7.8	8.2	-131.08	170.9	177.3	329.8	314.6	15.19	21.715		
3,400.0	3,387.0	3,369.7	3,356.7	8.1	8.5	-131.39	177.6	186.8	347.0	331.3	15.72	22.070		
3,500.0	3,486.1	3,468.2	3,454.5	8.4	8.8	-131.67	184.3	196.3	364.3	348.0	16.26	22.398		
3,600.0	3,585.2	3,566.7	3,552.3	8.8	9.1	-131.93	191.0	205.7	381.6	364.8	16.81	22.703		
3,700.0	3,684.3	3,665.2	3,650.1	9.1	9.4	-132.16	197.8	215.2	398.9	381.5	17.35	22.986		
3,800.0	3,783.4	3,763.7	3,747.9	9.4	9.7	-132.37	204.5	224.6	416.1	398.2	17.90	23.251		
3,900.0	3,882.5	3,862.2	3,845.7	9.7	10.0	-132.57	211.2	234.1	433.4	415.0	18.45	23.498		
4,000.0	3,981.6	3,960.6	3,943.5	10.0	10.3	-132.75	217.9	243.6	450.7	431.7	18.99	23.729		
4,100.0	4,080.7	4,059.1	4,041.3	10.4	10.6	-132.92	224.6	253.0	468.0	448.5	19.54	23.946		
4,200.0	4,179.8	4,157.6	4,139.1	10.7	10.9	-133.08	231.3	262.5	485.3	465.2	20.10	24.150		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-0.11	30.0	-0.1	30.0					
100.0	100.0	99.0	99.0	0.1	0.1	-0.11	30.0	-0.1	30.0	29.8	0.22	134.225		
200.0	200.0	199.0	199.0	0.3	0.3	-0.11	30.0	-0.1	30.0	29.3	0.67	44.667		
300.0	300.0	299.0	299.0	0.6	0.6	-0.11	30.0	-0.1	30.0	28.9	1.12	26.765		
400.0	400.0	399.0	399.0	0.8	0.8	-0.11	30.0	-0.1	30.0	28.4	1.57	19.107		
500.0	500.0	499.0	499.0	1.0	1.0	-0.11	30.0	-0.1	30.0	28.0	2.02	14.856		
600.0	600.0	599.0	599.0	1.2	1.2	-0.11	30.0	-0.1	30.0	27.5	2.47	12.152		
700.0	700.0	699.0	699.0	1.5	1.5	-0.11	30.0	-0.1	30.0	27.1	2.92	10.281		
800.0	800.0	799.0	799.0	1.7	1.7	-0.11	30.0	-0.1	30.0	26.6	3.37	8.910		
900.0	900.0	899.0	899.0	1.9	1.9	-0.11	30.0	-0.1	30.0	26.2	3.82	7.861		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	-0.11	30.0	-0.1	30.0	25.8	4.27	7.033		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	-0.11	30.0	-0.1	30.0	25.3	4.72	6.363		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	-0.11	30.0	-0.1	30.0	24.9	5.17	5.809		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-0.11	30.0	-0.1	30.0	24.4	5.62	5.344		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	-0.11	30.0	-0.1	30.0	24.0	6.07	4.948 CC, ES		
1,500.0	1,500.0	1,498.7	1,498.7	3.3	3.2	2.12	30.5	1.1	30.5	24.0	6.51	4.690		
1,600.0	1,600.0	1,598.2	1,598.2	3.5	3.5	8.40	31.9	4.7	32.3	25.4	6.94	4.653 SF		
1,700.0	1,700.0	1,697.5	1,697.2	3.7	3.7	-126.57	34.4	10.7	36.8	29.4	7.36	4.999		
1,800.0	1,799.9	1,796.5	1,795.8	3.9	3.9	-121.34	37.7	19.0	44.8	37.1	7.76	5.780		
1,900.0	1,899.7	1,895.1	1,893.7	4.0	4.1	-118.23	42.0	29.6	56.2	48.0	8.17	6.876		
2,000.0	1,999.3	1,994.2	1,992.1	4.2	4.4	-117.60	46.6	41.0	69.4	60.8	8.60	8.067		
2,100.0	2,098.6	2,093.2	2,090.3	4.5	4.6	-118.70	51.1	52.3	83.8	74.7	9.05	9.262		
2,110.6	2,109.1	2,103.7	2,100.7	4.5	4.7	-118.89	51.6	53.5	85.4	76.3	9.09	9.390		
2,200.0	2,197.7	2,192.0	2,188.3	4.7	4.9	-120.40	55.7	63.6	99.0	89.5	9.51	10.406		
2,300.0	2,296.8	2,290.8	2,286.3	4.9	5.2	-121.66	60.3	74.9	114.3	104.3	10.00	11.432		
2,400.0	2,395.9	2,389.6	2,384.4	5.2	5.5	-122.63	64.8	86.2	129.6	119.1	10.49	12.352		
2,500.0	2,495.0	2,488.3	2,482.4	5.5	5.7	-123.39	69.4	97.6	145.0	134.0	11.00	13.180		
2,600.0	2,594.1	2,587.1	2,580.5	5.7	6.0	-124.00	73.9	108.9	160.4	148.8	11.52	13.925		
2,700.0	2,693.2	2,685.9	2,678.5	6.0	6.3	-124.51	78.5	120.2	175.7	163.7	12.04	14.598		
2,800.0	2,792.3	2,784.7	2,776.6	6.3	6.6	-124.94	83.1	131.5	191.2	178.6	12.57	15.207		
2,900.0	2,891.4	2,883.5	2,874.6	6.6	6.9	-125.30	87.6	142.8	206.6	193.5	13.11	15.761		
3,000.0	2,990.5	2,982.3	2,972.6	6.9	7.2	-125.61	92.2	154.1	222.0	208.3	13.65	16.265		
3,100.0	3,089.7	3,081.1	3,070.7	7.2	7.5	-125.88	96.8	165.5	237.4	223.2	14.19	16.725		
3,200.0	3,188.8	3,179.9	3,168.7	7.5	7.8	-126.12	101.3	176.8	252.8	238.1	14.75	17.147		
3,300.0	3,287.9	3,278.7	3,266.8	7.8	8.1	-126.33	105.9	188.1	268.3	253.0	15.30	17.535		
3,400.0	3,387.0	3,377.5	3,364.8	8.1	8.4	-126.52	110.4	199.4	283.7	267.9	15.86	17.892		
3,500.0	3,486.1	3,476.3	3,462.8	8.4	8.7	-126.69	115.0	210.7	299.2	282.7	16.42	18.221		
3,600.0	3,585.2	3,575.1	3,560.9	8.8	9.0	-126.84	119.6	222.0	314.6	297.6	16.98	18.526		
3,700.0	3,684.3	3,673.9	3,658.9	9.1	9.3	-126.98	124.1	233.4	330.1	312.5	17.55	18.809		
3,800.0	3,783.4	3,772.7	3,757.0	9.4	9.6	-127.10	128.7	244.7	345.5	327.4	18.12	19.072		
3,900.0	3,882.5	3,871.5	3,855.0	9.7	9.9	-127.22	133.3	256.0	360.9	342.3	18.69	19.317		
4,000.0	3,981.6	3,970.3	3,953.0	10.0	10.2	-127.32	137.8	267.3	376.4	357.1	19.26	19.546		
4,100.0	4,080.7	4,069.1	4,051.1	10.4	10.5	-127.42	142.4	278.6	391.8	372.0	19.83	19.760		
4,200.0	4,179.8	4,168.2	4,149.4	10.7	10.8	-127.51	147.0	290.0	407.3	386.9	20.40	19.961		
4,300.0	4,278.9	4,276.3	4,257.0	11.0	11.1	-127.84	151.2	300.4	421.6	400.7	20.93	20.143		
4,400.0	4,378.1	4,384.9	4,365.3	11.3	11.3	-128.59	153.8	307.0	433.7	412.3	21.42	20.244		
4,500.0	4,477.2	4,493.6	4,473.9	11.7	11.5	-129.74	155.0	309.8	443.8	421.9	21.89	20.271		
4,600.0	4,576.3	4,594.9	4,575.3	12.0	11.7	-131.04	155.0	309.9	452.5	430.2	22.34	20.255		
4,700.0	4,675.4	4,694.0	4,674.4	12.3	11.8	-132.29	155.0	309.9	461.4	438.6	22.80	20.236		
4,800.0	4,774.5	4,793.1	4,773.5	12.7	12.0	-133.48	155.0	309.9	470.5	447.3	23.26	20.229		
4,900.0	4,873.6	4,892.3	4,872.6	13.0	12.2	-134.63	155.0	309.9	479.9	456.1	23.72	20.234		
5,000.0	4,972.7	4,991.4	4,971.7	13.3	12.4	-135.74	155.0	309.9	489.4	465.2	24.17	20.248		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>												<b>Offset Site Error:</b>	0.0 ft
Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 3 - Wellbore #1 - Plan #2 (6-5-17)												<b>Offset Well Error:</b>	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	
5,100.0	5,071.8	5,090.5	5,070.8	13.7	12.6	-136.80	155.0	309.9	499.0	474.4	24.62	20.271	

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-0.21	15.0	-0.1	15.1	15.1	0.00	N/A		
100.0	100.0	99.0	99.0	0.1	0.1	-0.21	15.0	-0.1	15.0	14.8	0.22	67.150		
200.0	200.0	199.0	199.0	0.3	0.3	-0.21	15.0	-0.1	15.0	14.3	0.67	22.346		
300.0	300.0	299.0	299.0	0.6	0.6	-0.21	15.0	-0.1	15.0	13.9	1.12	13.390		
400.0	400.0	399.0	399.0	0.8	0.8	-0.21	15.0	-0.1	15.0	13.4	1.57	9.559		
500.0	500.0	499.0	499.0	1.0	1.0	-0.21	15.0	-0.1	15.0	13.0	2.02	7.432		
600.0	600.0	599.0	599.0	1.2	1.2	-0.21	15.0	-0.1	15.0	12.5	2.47	6.080		
700.0	700.0	699.0	699.0	1.5	1.5	-0.21	15.0	-0.1	15.0	12.1	2.92	5.144		
800.0	800.0	799.0	799.0	1.7	1.7	-0.21	15.0	-0.1	15.0	11.6	3.37	4.457		
900.0	900.0	899.0	899.0	1.9	1.9	-0.21	15.0	-0.1	15.0	11.2	3.82	3.933		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	-0.21	15.0	-0.1	15.0	10.7	4.27	3.518		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	-0.21	15.0	-0.1	15.0	10.3	4.72	3.183		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	-0.21	15.0	-0.1	15.0	9.9	5.17	2.906		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-0.21	15.0	-0.1	15.0	9.4	5.62	2.674		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	-0.21	15.0	-0.1	15.0	9.0	6.07	2.476		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	-0.21	15.0	-0.1	15.0	8.5	6.52	2.305		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	-0.21	15.0	-0.1	15.0	8.1	6.97	2.156 CC, ES		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	-145.29	15.0	-0.1	16.1	8.7	7.39	2.176		
1,800.0	1,799.9	1,798.9	1,798.9	3.9	3.9	-151.87	15.0	-0.1	19.4	11.6	7.79	2.495		
1,900.0	1,899.7	1,898.9	1,898.9	4.0	4.1	-156.12	14.9	1.2	24.9	16.7	8.17	3.047		
2,000.0	1,999.3	1,999.0	1,998.9	4.2	4.3	-156.19	14.4	5.1	31.9	23.4	8.55	3.732		
2,100.0	2,098.6	2,098.9	2,098.6	4.5	4.5	-154.23	13.6	11.6	40.4	31.4	8.94	4.518		
2,110.6	2,109.1	2,109.5	2,109.2	4.5	4.6	-153.96	13.5	12.4	41.4	32.4	8.98	4.608		
2,200.0	2,197.7	2,198.8	2,198.1	4.7	4.8	-150.92	12.6	20.6	49.5	40.2	9.36	5.291		
2,300.0	2,296.8	2,298.4	2,297.1	4.9	5.0	-146.96	11.3	31.4	58.4	48.6	9.81	5.955		
2,400.0	2,395.9	2,397.9	2,396.0	5.2	5.2	-144.01	10.0	42.2	67.5	57.2	10.27	6.568		
2,500.0	2,495.0	2,497.5	2,495.0	5.5	5.5	-141.76	8.7	53.0	76.7	65.9	10.75	7.131		
2,600.0	2,594.1	2,597.0	2,593.9	5.7	5.7	-140.00	7.4	63.9	86.0	74.7	11.24	7.646		
2,700.0	2,693.2	2,696.6	2,692.8	6.0	6.0	-138.58	6.1	74.7	95.3	83.6	11.75	8.115		
2,800.0	2,792.3	2,796.1	2,791.8	6.3	6.2	-137.42	4.8	85.5	104.7	92.5	12.26	8.542		
2,900.0	2,891.4	2,895.6	2,890.7	6.6	6.5	-136.45	3.5	96.3	114.2	101.4	12.78	8.932		
3,000.0	2,990.5	2,995.2	2,989.6	6.9	6.7	-135.62	2.2	107.2	123.6	110.3	13.31	9.287		
3,100.0	3,089.7	3,094.7	3,088.6	7.2	7.0	-134.92	0.9	118.0	133.1	119.3	13.85	9.613		
3,200.0	3,188.8	3,194.2	3,187.5	7.5	7.3	-134.30	-0.4	128.8	142.7	128.3	14.39	9.911		
3,300.0	3,287.9	3,293.8	3,286.5	7.8	7.6	-133.77	-1.7	139.6	152.2	137.2	14.94	10.184		
3,400.0	3,387.0	3,393.3	3,385.4	8.1	7.8	-133.30	-2.9	150.5	161.7	146.2	15.50	10.436		
3,500.0	3,486.1	3,492.8	3,484.3	8.4	8.1	-132.88	-4.2	161.3	171.3	155.2	16.05	10.668		
3,600.0	3,585.2	3,592.4	3,583.3	8.8	8.4	-132.50	-5.5	172.1	180.8	164.2	16.62	10.882		
3,700.0	3,684.3	3,691.9	3,682.2	9.1	8.7	-132.16	-6.8	183.0	190.4	173.2	17.18	11.080		
3,800.0	3,783.4	3,791.4	3,781.1	9.4	9.0	-131.86	-8.1	193.8	200.0	182.2	17.75	11.264		
3,900.0	3,882.5	3,891.0	3,880.1	9.7	9.2	-131.58	-9.4	204.6	209.5	191.2	18.32	11.436		
4,000.0	3,981.6	3,990.5	3,979.0	10.0	9.5	-131.33	-10.7	215.4	219.1	200.2	18.90	11.595		
4,100.0	4,080.7	4,090.1	4,078.0	10.4	9.8	-131.10	-12.0	226.3	228.7	209.2	19.47	11.744		
4,200.0	4,179.8	4,189.6	4,176.9	10.7	10.1	-130.88	-13.3	237.1	238.3	218.2	20.05	11.883		
4,300.0	4,278.9	4,289.1	4,275.8	11.0	10.4	-130.68	-14.6	247.9	247.9	227.2	20.63	12.013		
4,400.0	4,378.1	4,388.7	4,374.8	11.3	10.7	-130.50	-15.9	258.7	257.4	236.2	21.22	12.135		
4,500.0	4,477.2	4,488.2	4,473.7	11.7	11.0	-130.33	-17.2	269.6	267.0	245.2	21.80	12.250		
4,600.0	4,576.3	4,587.7	4,572.6	12.0	11.3	-130.18	-18.5	280.4	276.6	254.3	22.39	12.358		
4,700.0	4,675.4	4,687.3	4,671.6	12.3	11.5	-130.03	-19.7	291.2	286.2	263.3	22.97	12.460		
4,800.0	4,774.5	4,787.6	4,771.4	12.7	11.8	-130.14	-20.9	300.9	295.7	272.2	23.52	12.574		
4,900.0	4,873.6	4,887.9	4,871.6	13.0	12.0	-130.90	-21.6	307.1	304.9	280.9	23.99	12.712		
5,000.0	4,972.7	4,988.0	4,971.5	13.3	12.2	-132.24	-22.0	309.8	314.0	289.6	24.41	12.866		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	5,071.8	5,087.2	5,070.8	13.7	12.4	-133.96	-22.0	309.9	323.1	298.4	24.79	13.033		
5,200.0	5,170.9	5,186.3	5,169.9	14.0	12.6	-135.61	-22.0	309.9	332.6	307.4	25.19	13.202		
5,300.0	5,270.0	5,285.4	5,269.0	14.3	12.7	-137.16	-22.0	309.9	342.3	316.7	25.59	13.377		
5,400.0	5,369.1	5,384.5	5,368.1	14.7	12.9	-138.63	-22.0	309.9	352.2	326.2	25.98	13.555		
5,449.5	5,418.2	5,433.6	5,417.2	14.8	13.0	-139.33	-22.0	309.9	357.2	331.0	26.18	13.645		
5,500.0	5,468.3	5,483.7	5,467.3	15.0	13.1	-140.04	-22.0	309.9	362.0	335.6	26.38	13.721		
5,600.0	5,567.8	5,583.2	5,566.8	15.2	13.3	-141.11	-22.0	309.9	369.6	342.9	26.76	13.812		
5,700.0	5,667.6	5,683.0	5,666.6	15.4	13.5	-141.78	-22.0	309.9	374.6	347.5	27.13	13.809		
5,800.0	5,767.6	5,783.0	5,766.6	15.6	13.7	-142.08	-22.0	309.9	376.9	349.4	27.48	13.712		
5,832.4	5,800.0	5,815.4	5,799.0	15.6	13.8	0.14	-22.0	309.9	377.0	349.9	27.10	13.911		
5,900.0	5,867.6	5,883.0	5,866.6	15.7	13.9	0.14	-22.0	309.9	377.0	349.7	27.36	13.778		
6,000.0	5,967.6	5,983.0	5,966.6	15.9	14.1	0.14	-22.0	309.9	377.0	349.3	27.74	13.590		
6,100.0	6,067.6	6,083.0	6,066.6	16.1	14.3	0.14	-22.0	309.9	377.0	348.9	28.12	13.406		
6,200.0	6,167.6	6,183.0	6,166.6	16.2	14.5	0.14	-22.0	309.9	377.0	348.5	28.51	13.226		
6,300.0	6,267.6	6,283.0	6,266.6	16.4	14.7	0.14	-22.0	309.9	377.0	348.1	28.89	13.050		
6,400.0	6,367.6	6,383.0	6,366.6	16.5	14.9	0.14	-22.0	309.9	377.0	347.7	29.28	12.878		
6,500.0	6,467.6	6,483.0	6,466.6	16.7	15.1	0.14	-22.0	309.9	377.0	347.4	29.66	12.710		
6,600.0	6,567.6	6,583.0	6,566.6	16.9	15.3	0.14	-22.0	309.9	377.0	347.0	30.05	12.545		
6,700.0	6,667.6	6,683.0	6,666.6	17.0	15.5	0.14	-22.0	309.9	377.0	346.6	30.44	12.384		
6,800.0	6,767.6	6,783.7	6,767.3	17.2	15.7	-0.10	-22.0	308.4	377.0	346.1	30.84	12.224		
6,829.3	6,796.8	6,813.3	6,796.7	17.3	15.7	-0.58	-22.1	305.2	376.9	345.9	30.97	12.171		
6,850.0	6,817.5	6,834.0	6,817.1	17.3	15.8	90.52	-22.2	302.0	376.9	345.5	31.40	12.004		
6,874.9	6,842.4	6,858.8	6,841.4	17.3	15.8	90.01	-22.3	297.0	376.9	345.4	31.43	11.992		
6,900.0	6,867.3	6,883.6	6,865.4	17.4	15.8	89.50	-22.5	291.0	376.9	345.4	31.45	11.984		
6,950.0	6,916.4	6,932.5	6,911.9	17.4	15.8	88.50	-22.9	275.6	377.0	345.5	31.46	11.982		
7,000.0	6,964.4	6,980.8	6,956.1	17.4	15.8	87.52	-23.4	256.1	377.2	345.8	31.45	11.994		
7,050.0	7,010.8	7,026.6	6,997.8	17.4	15.9	86.58	-24.0	232.9	377.5	346.1	31.43	12.012		
7,100.0	7,055.1	7,075.9	7,036.8	17.4	15.9	85.68	-24.7	206.3	378.0	346.5	31.42	12.031		
7,150.0	7,097.0	7,122.7	7,072.9	17.4	15.9	84.82	-25.5	176.4	378.4	347.0	31.43	12.041		
7,200.0	7,136.0	7,169.1	7,105.8	17.4	16.0	84.02	-26.4	143.8	379.0	347.5	31.50	12.032		
7,250.0	7,171.8	7,215.1	7,135.4	17.4	16.1	83.28	-27.3	108.6	379.5	347.9	31.64	11.995		
7,300.0	7,204.0	7,260.7	7,161.6	17.3	16.3	82.60	-28.3	71.3	380.1	348.2	31.89	11.919		
7,350.0	7,232.4	7,306.0	7,184.2	17.3	16.5	82.00	-29.3	32.0	380.6	348.3	32.26	11.797		
7,400.0	7,256.6	7,350.0	7,202.7	17.3	16.8	81.48	-30.4	-7.8	381.1	348.4	32.78	11.628		
7,450.0	7,276.4	7,396.0	7,218.4	17.3	17.2	81.01	-31.5	-51.0	381.6	348.1	33.47	11.399		
7,500.0	7,291.6	7,440.6	7,229.9	17.4	17.7	80.64	-32.7	-94.1	382.0	347.7	34.33	11.127		
7,550.0	7,302.2	7,485.1	7,237.6	17.8	18.2	80.35	-33.8	-137.9	382.3	347.0	35.35	10.816		
7,600.0	7,307.9	7,528.4	7,240.9	18.5	18.7	80.07	-34.9	-181.0	382.6	346.2	36.48	10.489		
7,633.8	7,308.0	7,559.9	7,241.0	19.0	19.2	80.07	-35.7	-211.5	382.6	345.3	37.37	10.240		
7,634.8	7,308.0	7,560.9	7,241.0	19.0	19.2	80.07	-35.8	-212.5	382.6	345.2	37.39	10.233		
7,684.0	7,308.0	7,607.4	7,241.0	19.7	19.9	80.07	-36.8	-259.0	382.7	343.9	38.82	9.859		
7,700.0	7,308.0	7,623.4	7,241.0	20.0	20.2	80.07	-37.0	-274.9	382.7	343.4	39.33	9.729		
7,800.0	7,308.0	7,723.4	7,241.0	21.7	21.9	80.07	-38.8	-374.9	382.7	339.9	42.76	8.951		
7,900.0	7,308.0	7,823.4	7,241.0	23.7	23.9	80.07	-40.6	-474.9	382.7	336.1	46.58	8.216		
8,000.0	7,308.0	7,923.4	7,241.0	25.8	26.0	80.07	-42.4	-574.9	382.7	332.0	50.72	7.546		
8,100.0	7,308.0	8,023.4	7,241.0	28.0	28.2	80.07	-44.2	-674.9	382.7	327.6	55.10	6.945		
8,200.0	7,308.0	8,123.4	7,241.0	30.3	30.5	80.07	-46.0	-774.8	382.7	323.0	59.68	6.413		
8,300.0	7,308.0	8,223.4	7,241.0	32.7	32.9	80.07	-47.8	-874.8	382.7	318.3	64.40	5.942		
8,400.0	7,308.0	8,323.4	7,241.0	35.2	35.3	80.07	-49.6	-974.8	382.7	313.4	69.25	5.526		
8,500.0	7,308.0	8,423.4	7,241.0	37.7	37.9	80.07	-51.4	-1,074.8	382.7	308.5	74.19	5.158		
8,600.0	7,308.0	8,523.4	7,241.0	40.2	40.4	80.07	-53.1	-1,174.8	382.7	303.5	79.21	4.831		
8,700.0	7,308.0	8,623.4	7,241.0	42.8	43.0	80.07	-54.9	-1,274.8	382.7	298.4	84.29	4.540		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
8,800.0	7,308.0	8,723.4	7,241.0	45.4	45.6	80.07	-56.7	-1,374.8	382.7	293.3	89.43	4.279		
8,900.0	7,308.0	8,823.4	7,241.0	48.0	48.2	80.07	-58.5	-1,474.7	382.7	288.1	94.61	4.045		
9,000.0	7,308.0	8,923.4	7,241.0	50.7	50.8	80.07	-60.3	-1,574.7	382.7	282.9	99.83	3.833		
9,100.0	7,308.0	9,023.4	7,241.0	53.3	53.5	80.07	-62.1	-1,674.7	382.7	277.6	105.08	3.642		
9,200.0	7,308.0	9,123.4	7,241.0	56.0	56.2	80.07	-63.9	-1,774.7	382.7	272.3	110.36	3.468		
9,300.0	7,308.0	9,223.4	7,241.0	58.7	58.9	80.07	-65.7	-1,874.7	382.7	267.0	115.66	3.309		
9,400.0	7,308.0	9,323.4	7,241.0	61.4	61.6	80.07	-67.5	-1,974.7	382.7	261.7	120.99	3.163		
9,500.0	7,308.0	9,423.4	7,241.0	64.1	64.3	80.07	-69.2	-2,074.6	382.7	256.4	126.33	3.029		
9,600.0	7,308.0	9,523.4	7,241.0	66.8	67.0	80.07	-71.0	-2,174.6	382.7	251.0	131.69	2.906		
9,700.0	7,308.0	9,623.4	7,241.0	69.5	69.7	80.07	-72.8	-2,274.6	382.7	245.6	137.06	2.792		
9,800.0	7,308.0	9,723.4	7,241.0	72.2	72.4	80.07	-74.6	-2,374.6	382.7	240.2	142.44	2.687		
9,900.0	7,308.0	9,823.4	7,241.0	75.0	75.2	80.07	-76.4	-2,474.6	382.7	234.8	147.83	2.589		
10,000.0	7,308.0	9,923.4	7,241.0	77.7	77.9	80.07	-78.2	-2,574.6	382.7	229.4	153.24	2.497		
10,100.0	7,308.0	10,023.4	7,241.0	80.4	80.6	80.07	-80.0	-2,674.5	382.7	224.0	158.65	2.412		
10,200.0	7,308.0	10,123.4	7,241.0	83.2	83.4	80.07	-81.8	-2,774.5	382.7	218.6	164.07	2.332		
10,300.0	7,308.0	10,223.4	7,241.0	85.9	86.1	80.07	-83.6	-2,874.5	382.7	213.2	169.50	2.258		
10,400.0	7,308.0	10,323.4	7,241.0	88.7	88.9	80.07	-85.3	-2,974.5	382.7	207.7	174.93	2.188		
10,500.0	7,308.0	10,423.4	7,241.0	91.5	91.7	80.07	-87.1	-3,074.5	382.7	202.3	180.37	2.122		
10,600.0	7,308.0	10,523.4	7,241.0	94.2	94.4	80.07	-88.9	-3,174.5	382.7	196.8	185.82	2.059		
10,700.0	7,308.0	10,623.4	7,241.0	97.0	97.2	80.07	-90.7	-3,274.4	382.7	191.4	191.27	2.001		
10,800.0	7,308.0	10,723.4	7,241.0	99.7	99.9	80.07	-92.5	-3,374.4	382.7	185.9	196.73	1.945		
10,900.0	7,308.0	10,823.4	7,241.0	102.5	102.7	80.07	-94.3	-3,474.4	382.7	180.5	202.19	1.893		
11,000.0	7,308.0	10,923.4	7,241.0	105.3	105.5	80.07	-96.1	-3,574.4	382.7	175.0	207.65	1.843		
11,100.0	7,308.0	11,023.4	7,241.0	108.0	108.2	80.07	-97.9	-3,674.4	382.7	169.5	213.12	1.796		
11,200.0	7,308.0	11,123.4	7,241.0	110.8	111.0	80.07	-99.7	-3,774.4	382.7	164.1	218.59	1.751		
11,300.0	7,308.0	11,223.4	7,241.0	113.6	113.8	80.07	-101.4	-3,874.4	382.7	158.6	224.06	1.708		
11,400.0	7,308.0	11,323.4	7,241.0	116.4	116.6	80.07	-103.2	-3,974.3	382.7	153.1	229.54	1.667		
11,500.0	7,308.0	11,423.4	7,241.0	119.1	119.3	80.07	-105.0	-4,074.3	382.7	147.6	235.01	1.628		
11,600.0	7,308.0	11,523.4	7,241.0	121.9	122.1	80.07	-106.8	-4,174.3	382.7	142.2	240.50	1.591		
11,700.0	7,308.0	11,623.4	7,241.0	124.7	124.9	80.07	-108.6	-4,274.3	382.7	136.7	245.98	1.556		
11,800.0	7,308.0	11,723.4	7,241.0	127.5	127.7	80.07	-110.4	-4,374.3	382.7	131.2	251.46	1.522		
11,900.0	7,308.0	11,823.4	7,241.0	130.2	130.5	80.07	-112.2	-4,474.3	382.7	125.7	256.95	1.489 Level 3		
11,926.8	7,308.0	11,850.1	7,241.0	131.0	131.2	80.07	-112.7	-4,501.0	382.7	124.2	258.42	1.481 Level 3		
11,935.2	7,308.0	11,854.0	7,241.0	131.2	131.3	80.07	-112.7	-4,504.9	382.7	123.9	258.76	1.479 Level 3, SF		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.57	-15.0	-0.1	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-179.57	-15.0	-0.1	15.0	14.8	0.22	66.761		
200.0	200.0	200.0	200.0	0.3	0.3	-179.57	-15.0	-0.1	15.0	14.3	0.67	22.254		
300.0	300.0	300.0	300.0	0.6	0.6	-179.57	-15.0	-0.1	15.0	13.9	1.12	13.352		
400.0	400.0	400.0	400.0	0.8	0.8	-179.57	-15.0	-0.1	15.0	13.4	1.57	9.537		
500.0	500.0	500.0	500.0	1.0	1.0	-179.57	-15.0	-0.1	15.0	13.0	2.02	7.418		
600.0	600.0	600.0	600.0	1.2	1.2	-179.57	-15.0	-0.1	15.0	12.5	2.47	6.069		
700.0	700.0	700.0	700.0	1.5	1.5	-179.57	-15.0	-0.1	15.0	12.1	2.92	5.135		
800.0	800.0	800.0	800.0	1.7	1.7	-179.57	-15.0	-0.1	15.0	11.6	3.37	4.451		
900.0	900.0	900.0	900.0	1.9	1.9	-179.57	-15.0	-0.1	15.0	11.2	3.82	3.927		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-179.57	-15.0	-0.1	15.0	10.7	4.27	3.514		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-179.57	-15.0	-0.1	15.0	10.3	4.72	3.179		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-179.57	-15.0	-0.1	15.0	9.8	5.17	2.903		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-179.57	-15.0	-0.1	15.0	9.4	5.62	2.670		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-179.57	-15.0	-0.1	15.0	8.9	6.07	2.473 CC, ES		
1,500.0	1,500.0	1,499.7	1,499.6	3.3	3.2	177.87	-16.1	0.6	16.1	9.6	6.49	2.482		
1,600.0	1,600.0	1,599.2	1,599.1	3.5	3.4	171.99	-19.4	2.7	19.6	12.7	6.89	2.838		
1,700.0	1,700.0	1,698.5	1,698.2	3.7	3.6	24.78	-24.8	6.3	24.4	17.1	7.28	3.357		
1,800.0	1,799.9	1,797.7	1,797.0	3.9	3.8	21.87	-32.3	11.2	29.4	21.8	7.64	3.856		
1,900.0	1,899.7	1,896.8	1,895.4	4.0	4.0	20.15	-42.0	17.5	34.6	26.6	8.01	4.317		
2,000.0	1,999.3	1,995.9	1,993.4	4.2	4.2	19.18	-53.8	25.2	39.7	31.3	8.39	4.737		
2,100.0	2,098.6	2,095.8	2,092.2	4.5	4.5	19.23	-66.5	33.5	43.3	34.6	8.77	4.938		
2,110.6	2,109.1	2,106.4	2,102.7	4.5	4.5	19.30	-67.9	34.4	43.6	34.7	8.82	4.942		
2,200.0	2,197.7	2,195.8	2,191.0	4.7	4.8	19.94	-79.2	41.7	45.4	36.3	9.19	4.945		
2,300.0	2,296.8	2,295.7	2,289.9	4.9	5.1	20.60	-91.9	50.0	47.6	37.9	9.62	4.944		
2,400.0	2,395.9	2,395.7	2,388.7	5.2	5.4	21.20	-104.6	58.3	49.7	39.6	10.06	4.939		
2,500.0	2,495.0	2,495.7	2,487.5	5.5	5.7	21.75	-117.3	66.6	51.8	41.3	10.50	4.931		
2,600.0	2,594.1	2,595.7	2,586.3	5.7	6.0	22.26	-130.0	74.8	53.9	43.0	10.96	4.920		
2,700.0	2,693.2	2,695.6	2,685.1	6.0	6.3	22.72	-142.7	83.1	56.0	44.6	11.42	4.907		
2,800.0	2,792.3	2,795.6	2,784.0	6.3	6.6	23.16	-155.4	91.4	58.2	46.3	11.89	4.893		
2,900.0	2,891.4	2,895.6	2,882.8	6.6	7.0	23.56	-168.1	99.7	60.3	47.9	12.37	4.877		
3,000.0	2,990.5	2,995.6	2,981.6	6.9	7.3	23.94	-180.8	107.9	62.5	49.6	12.85	4.861		
3,100.0	3,089.7	3,095.5	3,080.4	7.2	7.6	24.29	-193.4	116.2	64.6	51.3	13.33	4.845		
3,200.0	3,188.8	3,195.5	3,179.3	7.5	8.0	24.62	-206.1	124.5	66.7	52.9	13.82	4.828		
3,300.0	3,287.9	3,295.5	3,278.1	7.8	8.3	24.93	-218.8	132.8	68.9	54.6	14.32	4.811		
3,400.0	3,387.0	3,395.5	3,376.9	8.1	8.7	25.22	-231.5	141.0	71.0	56.2	14.82	4.794		
3,500.0	3,486.1	3,495.5	3,475.7	8.4	9.0	25.49	-244.2	149.3	73.2	57.9	15.32	4.777		
3,600.0	3,585.2	3,595.4	3,574.5	8.8	9.4	25.74	-256.9	157.6	75.3	59.5	15.82	4.761		
3,700.0	3,684.3	3,695.4	3,673.4	9.1	9.7	25.99	-269.6	165.9	77.5	61.1	16.33	4.744		
3,800.0	3,783.4	3,795.4	3,772.2	9.4	10.1	26.22	-282.3	174.1	79.6	62.8	16.84	4.728		
3,900.0	3,882.5	3,895.4	3,871.0	9.7	10.4	26.43	-295.0	182.4	81.8	64.4	17.35	4.713		
4,000.0	3,981.6	3,995.3	3,969.8	10.0	10.8	26.64	-307.7	190.7	83.9	66.1	17.87	4.697		
4,100.0	4,080.7	4,095.3	4,068.7	10.4	11.1	26.84	-320.4	199.0	86.1	67.7	18.39	4.682		
4,200.0	4,179.8	4,195.3	4,167.5	10.7	11.5	27.02	-333.1	207.2	88.3	69.3	18.91	4.668		
4,300.0	4,278.9	4,295.3	4,266.3	11.0	11.8	27.20	-345.8	215.5	90.4	71.0	19.43	4.653		
4,400.0	4,378.1	4,395.2	4,365.1	11.3	12.2	27.37	-358.4	223.8	92.6	72.6	19.95	4.639		
4,500.0	4,477.2	4,495.2	4,463.9	11.7	12.6	27.53	-371.1	232.0	94.7	74.3	20.48	4.626		
4,600.0	4,576.3	4,595.2	4,562.8	12.0	12.9	27.68	-383.8	240.3	96.9	75.9	21.01	4.613		
4,700.0	4,675.4	4,695.2	4,661.6	12.3	13.3	27.83	-396.5	248.6	99.1	77.5	21.53	4.600		
4,800.0	4,774.5	4,795.1	4,760.4	12.7	13.6	27.97	-409.2	256.9	101.2	79.2	22.06	4.588		
4,900.0	4,873.6	4,895.1	4,859.2	13.0	14.0	28.11	-421.9	265.1	103.4	80.8	22.59	4.576		
5,000.0	4,972.7	4,995.1	4,958.0	13.3	14.4	28.24	-434.6	273.4	105.5	82.4	23.13	4.564		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	5,071.8	5,095.1	5,056.9	13.7	14.7	28.36	-447.3	281.7	107.7	84.0	23.66	4.552		
5,200.0	5,170.9	5,195.0	5,155.7	14.0	15.1	28.48	-460.0	290.0	109.9	85.7	24.19	4.541		
5,300.0	5,270.0	5,298.3	5,258.0	14.3	15.4	28.92	-471.8	297.7	110.7	86.0	24.74	4.474		
5,400.0	5,369.1	5,401.9	5,361.0	14.7	15.6	30.17	-480.6	303.4	108.3	83.0	25.34	4.273		
5,449.5	5,418.2	5,453.0	5,411.9	14.8	15.7	31.14	-483.8	305.5	105.9	80.3	25.67	4.126		
5,500.0	5,468.3	5,505.1	5,464.0	15.0	15.8	32.25	-486.3	307.1	103.1	77.1	26.01	3.964		
5,600.0	5,567.8	5,608.0	5,566.8	15.2	16.0	34.55	-488.8	308.8	97.5	70.8	26.65	3.657		
5,700.0	5,667.6	5,708.8	5,667.6	15.4	16.2	36.69	-489.0	308.9	92.4	65.2	27.24	3.393		
5,800.0	5,767.6	5,808.7	5,767.6	15.6	16.3	37.76	-489.0	308.9	90.2	62.5	27.68	3.257		
5,832.4	5,800.0	5,841.2	5,800.0	15.6	16.4	-179.93	-489.0	308.9	90.0	60.1	29.87	3.013		
5,900.0	5,867.6	5,908.7	5,867.6	15.7	16.5	-179.93	-489.0	308.9	90.0	59.9	30.09	2.991		
6,000.0	5,967.6	6,008.7	5,967.6	15.9	16.6	-179.93	-489.0	308.9	90.0	59.6	30.42	2.959		
6,100.0	6,067.6	6,108.7	6,067.6	16.1	16.8	-179.93	-489.0	308.9	90.0	59.3	30.74	2.927		
6,200.0	6,167.6	6,208.7	6,167.6	16.2	16.9	-179.93	-489.0	308.9	90.0	58.9	31.07	2.896		
6,300.0	6,267.6	6,308.7	6,267.6	16.4	17.1	-179.93	-489.0	308.9	90.0	58.6	31.41	2.866		
6,400.0	6,367.6	6,408.7	6,367.6	16.5	17.2	-179.93	-489.0	308.9	90.0	58.3	31.74	2.835		
6,500.0	6,467.6	6,508.7	6,467.6	16.7	17.4	-179.93	-489.0	308.9	90.0	57.9	32.08	2.805		
6,600.0	6,567.6	6,608.7	6,567.6	16.9	17.5	-179.93	-489.0	308.9	90.0	57.6	32.42	2.776		
6,700.0	6,667.6	6,708.7	6,667.6	17.0	17.7	-179.93	-489.0	308.9	90.0	57.2	32.77	2.747		
6,731.2	6,698.7	6,739.9	6,698.7	17.1	17.8	-179.93	-489.0	308.9	90.0	57.1	32.87	2.738		
6,800.0	6,767.6	6,807.9	6,766.5	17.2	17.8	-176.87	-489.1	304.1	90.3	57.5	32.82	2.751		
6,829.3	6,796.8	6,836.2	6,794.4	17.3	17.9	-173.90	-489.3	299.4	90.8	58.2	32.63	2.783		
6,850.0	6,817.5	6,856.0	6,813.8	17.3	17.9	-79.93	-489.4	295.1	91.4	59.2	32.27	2.834		
6,900.0	6,867.3	6,903.1	6,859.0	17.4	17.9	-74.23	-489.7	282.0	93.6	60.7	32.89	2.846		
6,950.0	6,916.4	6,950.0	6,902.6	17.4	17.9	-68.86	-490.2	264.8	96.6	63.3	33.33	2.900		
7,000.0	6,964.4	6,994.9	6,942.6	17.4	17.9	-64.11	-490.7	244.6	100.3	66.8	33.48	2.996		
7,050.0	7,010.8	7,039.7	6,980.7	17.4	17.9	-59.81	-491.3	220.8	104.5	71.1	33.35	3.133		
7,100.0	7,055.1	7,084.0	7,015.9	17.4	17.9	-56.02	-492.0	194.2	108.9	76.0	32.92	3.310		
7,150.0	7,097.0	7,127.6	7,048.3	17.4	17.8	-52.72	-492.8	164.9	113.6	81.3	32.22	3.525		
7,200.0	7,136.0	7,170.8	7,077.7	17.4	17.8	-49.87	-493.7	133.3	118.2	86.9	31.30	3.775		
7,250.0	7,171.8	7,213.5	7,104.0	17.4	17.8	-47.43	-494.5	99.7	122.6	92.4	30.22	4.058		
7,300.0	7,204.0	7,255.8	7,127.1	17.3	17.8	-45.36	-495.5	64.3	126.9	97.8	29.07	4.364		
7,350.0	7,232.4	7,297.8	7,147.0	17.3	17.7	-43.62	-496.5	27.4	130.8	102.8	27.93	4.681		
7,400.0	7,256.6	7,339.4	7,163.6	17.3	17.7	-42.19	-497.5	-10.8	134.2	107.3	26.91	4.989		
7,450.0	7,276.4	7,380.9	7,176.9	17.3	17.7	-41.03	-498.5	-50.0	137.3	111.2	26.10	5.258		
7,500.0	7,291.6	7,422.1	7,186.9	17.4	17.6	-40.12	-499.6	-90.0	139.7	114.1	25.62	5.455		
7,550.0	7,302.2	7,463.1	7,193.5	17.8	17.8	-39.44	-500.6	-130.4	141.7	116.1	25.54	5.547		
7,600.0	7,307.9	7,504.0	7,196.8	18.5	18.4	-38.99	-501.7	-171.2	143.0	117.1	25.91	5.521		
7,625.2	7,308.9	7,525.0	7,197.2	18.8	18.7	-38.84	-502.3	-192.2	143.5	117.2	26.27	5.461		
7,633.8	7,308.0	7,525.0	7,197.2	19.0	18.7	-39.07	-502.3	-192.2	142.9	116.5	26.47	5.400		
7,634.8	7,308.0	7,525.0	7,197.2	19.0	18.7	-39.07	-502.3	-192.2	143.0	116.5	26.48	5.400		
7,684.0	7,308.0	7,581.5	7,194.9	19.7	19.6	-38.50	-503.6	-247.7	144.6	117.3	27.31	5.293		
7,700.0	7,308.0	7,597.6	7,194.5	20.0	19.9	-38.40	-503.9	-263.7	144.9	117.3	27.61	5.247		
7,800.0	7,308.0	7,697.6	7,192.0	21.7	21.6	-37.79	-505.6	-363.6	146.9	117.2	29.64	4.955		
7,900.0	7,308.0	7,797.5	7,189.4	23.7	23.6	-37.20	-507.4	-463.6	148.9	117.0	31.86	4.672		
8,000.0	7,308.0	7,897.5	7,186.9	25.8	25.7	-36.62	-509.2	-563.5	150.9	116.7	34.22	4.409		
8,100.0	7,308.0	7,997.5	7,184.4	28.0	27.9	-36.06	-511.0	-663.4	152.9	116.2	36.68	4.169		
8,200.0	7,308.0	8,097.4	7,181.9	30.3	30.3	-35.52	-512.8	-763.3	154.9	115.7	39.19	3.954		
8,300.0	7,308.0	8,197.4	7,179.4	32.7	32.7	-34.98	-514.6	-863.3	157.0	115.3	41.73	3.762		
8,400.0	7,308.0	8,297.4	7,176.9	35.2	35.1	-34.46	-516.4	-963.2	159.0	114.8	44.30	3.591		
8,500.0	7,308.0	8,397.3	7,174.4	37.7	37.6	-33.96	-518.2	-1,063.1	161.1	114.3	46.86	3.438		
8,600.0	7,308.0	8,497.3	7,171.9	40.2	40.1	-33.47	-519.9	-1,163.0	163.2	113.8	49.42	3.303		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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		
8,700.0	7,308.0	8,597.3	7,169.4	42.8	42.7	-32.99	-521.7	-1,262.9	165.3	113.4	51.96	3.181		
8,800.0	7,308.0	8,697.2	7,166.9	45.4	45.3	-32.52	-523.5	-1,362.9	167.4	112.9	54.48	3.073		
8,900.0	7,308.0	8,797.2	7,164.3	48.0	47.9	-32.06	-525.3	-1,462.8	169.5	112.6	56.98	2.975		
9,000.0	7,308.0	8,897.2	7,161.8	50.7	50.6	-31.62	-527.1	-1,562.7	171.7	112.2	59.46	2.887		
9,100.0	7,308.0	8,997.2	7,159.3	53.3	53.2	-31.18	-528.9	-1,662.6	173.8	111.9	61.90	2.808		
9,200.0	7,308.0	9,097.1	7,156.8	56.0	55.9	-30.76	-530.7	-1,762.5	176.0	111.7	64.32	2.736		
9,300.0	7,308.0	9,197.1	7,154.3	58.7	58.6	-30.35	-532.5	-1,862.5	178.1	111.4	66.70	2.671		
9,400.0	7,308.0	9,297.1	7,151.8	61.4	61.3	-29.94	-534.2	-1,962.4	180.3	111.3	69.05	2.611		
9,500.0	7,308.0	9,397.0	7,149.3	64.1	64.0	-29.55	-536.0	-2,062.3	182.5	111.1	71.37	2.557		
9,600.0	7,308.0	9,497.0	7,146.8	66.8	66.7	-29.17	-537.8	-2,162.2	184.7	111.0	73.67	2.507		
9,700.0	7,308.0	9,597.0	7,144.3	69.5	69.4	-28.79	-539.6	-2,262.1	186.9	110.9	75.93	2.461		
9,800.0	7,308.0	9,696.9	7,141.8	72.2	72.1	-28.43	-541.4	-2,362.1	189.1	110.9	78.16	2.419		
9,900.0	7,308.0	9,796.9	7,139.2	75.0	74.9	-28.07	-543.2	-2,462.0	191.3	110.9	80.35	2.381		
10,000.0	7,308.0	9,896.9	7,136.7	77.7	77.6	-27.72	-545.0	-2,561.9	193.5	111.0	82.53	2.345		
10,100.0	7,308.0	9,996.8	7,134.2	80.4	80.3	-27.38	-546.7	-2,661.8	195.7	111.1	84.67	2.312		
10,200.0	7,308.0	10,096.8	7,131.7	83.2	83.1	-27.04	-548.5	-2,761.8	198.0	111.2	86.78	2.281		
10,300.0	7,308.0	10,196.8	7,129.2	85.9	85.8	-26.72	-550.3	-2,861.7	200.2	111.3	88.87	2.253		
10,400.0	7,308.0	10,296.7	7,126.7	88.7	88.6	-26.40	-552.1	-2,961.6	202.5	111.5	90.93	2.227		
10,500.0	7,308.0	10,396.7	7,124.2	91.5	91.3	-26.08	-553.9	-3,061.5	204.7	111.7	92.96	2.202		
10,600.0	7,308.0	10,496.7	7,121.7	94.2	94.1	-25.78	-555.7	-3,161.4	207.0	112.0	94.97	2.179		
10,700.0	7,308.0	10,596.6	7,119.2	97.0	96.9	-25.48	-557.5	-3,261.4	209.2	112.3	96.96	2.158		
10,800.0	7,308.0	10,696.6	7,116.7	99.7	99.6	-25.19	-559.3	-3,361.3	211.5	112.6	98.92	2.138		
10,900.0	7,308.0	10,796.6	7,114.1	102.5	102.4	-24.90	-561.0	-3,461.2	213.8	112.9	100.86	2.119		
11,000.0	7,308.0	10,896.6	7,111.6	105.3	105.1	-24.62	-562.8	-3,561.1	216.1	113.3	102.78	2.102		
11,100.0	7,308.0	10,996.5	7,109.1	108.0	107.9	-24.34	-564.6	-3,661.0	218.3	113.7	104.67	2.086		
11,200.0	7,308.0	11,096.5	7,106.6	110.8	110.7	-24.08	-566.4	-3,761.0	220.6	114.1	106.55	2.071		
11,300.0	7,308.0	11,196.5	7,104.1	113.6	113.5	-23.81	-568.2	-3,860.9	222.9	114.5	108.40	2.056		
11,400.0	7,308.0	11,296.4	7,101.6	116.4	116.2	-23.55	-570.0	-3,960.8	225.2	115.0	110.24	2.043		
11,500.0	7,308.0	11,396.4	7,099.1	119.1	119.0	-23.30	-571.8	-4,060.7	227.5	115.5	112.06	2.030		
11,600.0	7,308.0	11,496.4	7,096.6	121.9	121.8	-23.05	-573.5	-4,160.6	229.8	116.0	113.86	2.019		
11,700.0	7,308.0	11,596.3	7,094.1	124.7	124.5	-22.81	-575.3	-4,260.6	232.1	116.5	115.64	2.007		
11,800.0	7,308.0	11,696.3	7,091.6	127.5	127.3	-22.57	-577.1	-4,360.5	234.5	117.1	117.40	1.997		
11,900.0	7,308.0	11,796.3	7,089.1	130.2	130.1	-22.34	-578.9	-4,460.4	236.8	117.6	119.15	1.987		
11,935.2	7,308.0	11,831.5	7,088.2	131.2	131.1	-22.26	-579.5	-4,495.6	237.6	117.8	119.77	1.984 SF		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.73	-29.9	-0.1	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.73	-29.9	-0.1	29.9	29.7	0.22	133.052		
200.0	200.0	200.0	200.0	0.3	0.3	-179.73	-29.9	-0.1	29.9	29.2	0.67	44.351		
300.0	300.0	300.0	300.0	0.6	0.6	-179.73	-29.9	-0.1	29.9	28.8	1.12	26.610		
400.0	400.0	400.0	400.0	0.8	0.8	-179.73	-29.9	-0.1	29.9	28.3	1.57	19.007		
500.0	500.0	500.0	500.0	1.0	1.0	-179.73	-29.9	-0.1	29.9	27.9	2.02	14.784		
600.0	600.0	600.0	600.0	1.2	1.2	-179.73	-29.9	-0.1	29.9	27.4	2.47	12.096		
700.0	700.0	700.0	700.0	1.5	1.5	-179.73	-29.9	-0.1	29.9	27.0	2.92	10.235		
800.0	800.0	800.0	800.0	1.7	1.7	-179.73	-29.9	-0.1	29.9	26.5	3.37	8.870		
900.0	900.0	900.0	900.0	1.9	1.9	-179.73	-29.9	-0.1	29.9	26.1	3.82	7.827		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-179.73	-29.9	-0.1	29.9	25.6	4.27	7.003		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-179.73	-29.9	-0.1	29.9	25.2	4.72	6.336		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-179.73	-29.9	-0.1	29.9	24.7	5.17	5.785 CC, ES		
1,300.0	1,300.0	1,299.3	1,299.3	2.8	2.8	179.12	-31.0	0.5	31.1	25.5	5.59	5.554		
1,400.0	1,400.0	1,398.5	1,398.4	3.0	3.0	176.15	-34.4	2.3	34.6	28.6	5.99	5.766		
1,500.0	1,500.0	1,497.4	1,497.1	3.3	3.1	172.36	-40.1	5.4	40.5	34.1	6.40	6.331		
1,600.0	1,600.0	1,595.8	1,595.1	3.5	3.3	168.64	-47.9	9.6	49.1	42.3	6.83	7.196		
1,700.0	1,700.0	1,694.0	1,692.6	3.7	3.6	23.62	-57.9	15.1	59.1	51.9	7.21	8.202		
1,800.0	1,799.9	1,791.8	1,789.5	3.9	3.8	21.98	-70.1	21.7	69.3	61.7	7.58	9.140		
1,900.0	1,899.7	1,891.2	1,887.6	4.0	4.1	21.19	-83.9	29.1	78.6	70.7	7.97	9.869		
2,000.0	1,999.3	1,990.9	1,986.1	4.2	4.4	21.19	-97.6	36.6	85.5	77.2	8.36	10.231		
2,100.0	2,098.6	2,090.8	2,084.8	4.5	4.7	21.80	-111.5	44.1	90.0	81.2	8.76	10.271		
2,110.6	2,109.1	2,101.5	2,095.3	4.5	4.7	21.89	-112.9	44.9	90.3	81.5	8.81	10.258		
2,200.0	2,197.7	2,190.8	2,183.5	4.7	5.0	22.73	-125.3	51.6	93.0	83.8	9.19	10.120		
2,300.0	2,296.8	2,290.7	2,282.2	4.9	5.3	23.62	-139.1	59.1	96.1	86.4	9.64	9.970		
2,400.0	2,395.9	2,390.7	2,380.9	5.2	5.6	24.45	-152.9	66.5	99.1	89.1	10.09	9.826		
2,500.0	2,495.0	2,490.6	2,479.6	5.5	5.9	25.23	-166.7	74.0	102.2	91.7	10.55	9.688		
2,600.0	2,594.1	2,590.6	2,578.3	5.7	6.3	25.97	-180.6	81.5	105.3	94.3	11.02	9.555		
2,700.0	2,693.2	2,690.5	2,677.0	6.0	6.6	26.66	-194.4	89.0	108.4	96.9	11.50	9.428		
2,800.0	2,792.3	2,790.4	2,775.7	6.3	7.0	27.31	-208.2	96.5	111.6	99.6	11.99	9.306		
2,900.0	2,891.4	2,890.4	2,874.4	6.6	7.3	27.93	-222.0	104.0	114.7	102.2	12.48	9.190		
3,000.0	2,990.5	2,990.3	2,973.1	6.9	7.7	28.52	-235.8	111.5	117.9	104.9	12.98	9.079		
3,100.0	3,089.7	3,090.3	3,071.7	7.2	8.0	29.07	-249.7	119.0	121.0	107.6	13.49	8.974		
3,200.0	3,188.8	3,190.2	3,170.4	7.5	8.4	29.60	-263.5	126.5	124.2	110.2	14.00	8.873		
3,300.0	3,287.9	3,290.2	3,269.1	7.8	8.7	30.10	-277.3	134.0	127.4	112.9	14.52	8.777		
3,400.0	3,387.0	3,390.1	3,367.8	8.1	9.1	30.57	-291.1	141.5	130.6	115.6	15.04	8.685		
3,500.0	3,486.1	3,490.0	3,466.5	8.4	9.5	31.02	-304.9	149.0	133.8	118.3	15.57	8.598		
3,600.0	3,585.2	3,590.0	3,565.2	8.8	9.8	31.46	-318.8	156.4	137.0	120.9	16.10	8.515		
3,700.0	3,684.3	3,689.9	3,663.9	9.1	10.2	31.87	-332.6	163.9	140.3	123.6	16.63	8.435		
3,800.0	3,783.4	3,789.9	3,762.6	9.4	10.6	32.26	-346.4	171.4	143.5	126.3	17.17	8.359		
3,900.0	3,882.5	3,889.8	3,861.3	9.7	10.9	32.64	-360.2	178.9	146.7	129.0	17.71	8.286		
4,000.0	3,981.6	3,989.8	3,960.0	10.0	11.3	33.00	-374.0	186.4	150.0	131.7	18.25	8.217		
4,100.0	4,080.7	4,089.7	4,058.7	10.4	11.7	33.34	-387.8	193.9	153.2	134.4	18.80	8.151		
4,200.0	4,179.8	4,189.6	4,157.4	10.7	12.0	33.67	-401.7	201.4	156.5	137.1	19.35	8.087		
4,300.0	4,278.9	4,289.6	4,256.1	11.0	12.4	33.99	-415.5	208.9	159.7	139.8	19.90	8.026		
4,400.0	4,378.1	4,389.5	4,354.8	11.3	12.8	34.29	-429.3	216.4	163.0	142.5	20.46	7.968		
4,500.0	4,477.2	4,489.5	4,453.5	11.7	13.2	34.58	-443.1	223.9	166.3	145.3	21.01	7.912		
4,600.0	4,576.3	4,589.4	4,552.2	12.0	13.5	34.86	-456.9	231.4	169.5	148.0	21.57	7.859		
4,700.0	4,675.4	4,689.4	4,650.9	12.3	13.9	35.13	-470.8	238.9	172.8	150.7	22.14	7.807		
4,800.0	4,774.5	4,789.3	4,749.6	12.7	14.3	35.39	-484.6	246.3	176.1	153.4	22.70	7.758		
4,900.0	4,873.6	4,889.2	4,848.3	13.0	14.6	35.64	-498.4	253.8	179.4	156.1	23.26	7.711		
5,000.0	4,972.7	4,989.2	4,947.0	13.3	15.0	35.89	-512.2	261.3	182.7	158.8	23.83	7.665		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	5,071.8	5,089.1	5,045.7	13.7	15.4	36.12	-526.0	268.8	186.0	161.6	24.40	7.621		
5,200.0	5,170.9	5,189.1	5,144.4	14.0	15.8	36.34	-539.9	276.3	189.2	164.3	24.97	7.579		
5,300.0	5,270.0	5,289.0	5,243.1	14.3	16.1	36.56	-553.7	283.8	192.5	167.0	25.54	7.538		
5,400.0	5,369.1	5,389.0	5,341.8	14.7	16.5	36.77	-567.5	291.3	195.8	169.7	26.11	7.499		
5,449.5	5,418.2	5,441.1	5,393.4	14.8	16.7	36.92	-574.4	295.0	197.2	170.8	26.39	7.472		
5,500.0	5,468.3	5,494.9	5,446.7	15.0	16.8	37.14	-580.7	298.4	198.1	171.4	26.66	7.430		
5,600.0	5,567.8	5,601.4	5,552.6	15.2	17.0	37.48	-590.5	303.8	199.5	172.4	27.13	7.353		
5,700.0	5,667.6	5,708.0	5,658.9	15.4	17.3	37.69	-596.8	307.2	200.5	172.9	27.54	7.278		
5,800.0	5,767.6	5,814.5	5,765.4	15.6	17.4	37.79	-599.7	308.8	200.9	173.0	27.89	7.203		
5,832.4	5,800.0	5,849.1	5,800.0	15.6	17.5	-179.96	-599.9	308.9	200.9	169.8	31.06	6.469		
5,900.0	5,867.6	5,916.7	5,867.6	15.7	17.6	-179.96	-599.9	308.9	200.9	169.6	31.28	6.423		
6,000.0	5,967.6	6,016.7	5,967.6	15.9	17.7	-179.96	-599.9	308.9	200.9	169.3	31.59	6.361		
6,100.0	6,067.6	6,116.7	6,067.6	16.1	17.8	-179.96	-599.9	308.9	200.9	169.0	31.90	6.298		
6,200.0	6,167.6	6,216.7	6,167.6	16.2	18.0	-179.96	-599.9	308.9	200.9	168.7	32.21	6.237		
6,300.0	6,267.6	6,316.7	6,267.6	16.4	18.1	-179.96	-599.9	308.9	200.9	168.4	32.53	6.176		
6,400.0	6,367.6	6,416.7	6,367.6	16.5	18.3	-179.96	-599.9	308.9	200.9	168.1	32.85	6.115		
6,500.0	6,467.6	6,516.7	6,467.6	16.7	18.4	-179.96	-599.9	308.9	200.9	167.7	33.18	6.056		
6,600.0	6,567.6	6,616.7	6,567.6	16.9	18.6	-179.96	-599.9	308.9	200.9	167.4	33.50	5.996		
6,700.0	6,667.6	6,716.7	6,667.6	17.0	18.7	-179.96	-599.9	308.9	200.9	167.1	33.83	5.938		
6,800.0	6,767.6	6,816.7	6,767.6	17.2	18.9	-179.96	-599.9	308.9	200.9	166.7	34.17	5.880		
6,829.3	6,796.8	6,845.9	6,796.8	17.3	18.9	-179.96	-599.9	308.9	200.9	166.6	34.27	5.863		
6,850.0	6,817.5	6,866.7	6,817.5	17.3	18.9	-88.56	-599.9	308.9	200.9	169.2	31.65	6.348		
6,900.0	6,867.3	6,916.4	6,867.3	17.4	19.0	-89.84	-599.9	308.9	200.8	169.2	31.67	6.341		
6,904.1	6,871.4	6,920.5	6,871.4	17.4	19.0	-90.00	-599.9	308.9	200.8	169.2	31.66	6.342		
6,950.0	6,916.4	6,965.5	6,916.4	17.4	19.1	-92.41	-599.9	308.9	201.0	169.5	31.53	6.375		
7,000.0	6,964.4	7,014.6	6,965.4	17.4	19.2	-96.06	-599.9	308.3	202.1	170.8	31.26	6.464		
7,050.0	7,010.8	7,065.5	7,016.1	17.4	19.2	-99.86	-600.0	303.4	204.1	173.1	30.94	6.596		
7,100.0	7,055.1	7,118.0	7,067.6	17.4	19.2	-103.54	-600.3	293.2	207.0	176.4	30.59	6.768		
7,150.0	7,097.0	7,172.2	7,119.3	17.4	19.3	-107.07	-600.7	277.1	210.7	180.5	30.18	6.982		
7,200.0	7,136.0	7,228.2	7,170.7	17.4	19.3	-110.38	-601.2	254.8	215.0	185.3	29.72	7.235		
7,250.0	7,171.8	7,286.1	7,220.9	17.4	19.3	-113.43	-602.0	226.0	219.8	190.6	29.22	7.523		
7,300.0	7,204.0	7,346.0	7,269.0	17.3	19.2	-116.21	-602.8	190.5	224.7	196.0	28.69	7.834		
7,350.0	7,232.4	7,407.7	7,314.0	17.3	19.2	-118.67	-603.9	148.2	229.6	201.4	28.19	8.145		
7,400.0	7,256.6	7,471.4	7,354.6	17.3	19.2	-120.79	-605.1	99.3	234.3	206.5	27.81	8.425		
7,450.0	7,276.4	7,536.9	7,389.7	17.3	19.1	-122.55	-606.5	44.1	238.4	210.8	27.61	8.636		
7,500.0	7,291.6	7,603.8	7,418.1	17.4	19.1	-123.95	-608.0	-16.5	241.9	214.2	27.68	8.737		
7,550.0	7,302.2	7,672.1	7,438.6	17.8	19.0	-124.95	-609.6	-81.5	244.4	216.3	28.13	8.689		
7,600.0	7,307.9	7,741.2	7,450.3	18.5	19.1	-125.57	-611.3	-149.6	246.0	217.0	28.94	8.500		
7,633.8	7,308.0	7,791.7	7,452.0	19.0	19.5	-125.76	-612.5	-200.0	246.4	216.7	29.75	8.283		
7,634.8	7,308.0	7,793.1	7,452.0	19.0	19.5	-125.76	-612.5	-201.4	246.4	216.7	29.78	8.275		
7,654.6	7,308.0	7,811.1	7,452.0	19.3	19.8	-125.76	-612.9	-218.4	246.4	216.2	30.24	8.148		
7,684.0	7,308.0	7,841.4	7,452.0	19.7	20.2	-125.77	-613.5	-248.7	246.4	215.4	30.98	7.952		
7,700.0	7,308.0	7,857.4	7,452.0	20.0	20.5	-125.77	-613.8	-264.6	246.4	215.0	31.41	7.845		
7,800.0	7,308.0	7,957.4	7,452.0	21.7	22.2	-125.77	-615.6	-364.6	246.4	212.1	34.28	7.188		
7,900.0	7,308.0	8,057.4	7,452.0	23.7	24.1	-125.77	-617.4	-464.6	246.4	208.9	37.49	6.572		
8,000.0	7,308.0	8,157.4	7,452.0	25.8	26.2	-125.77	-619.2	-564.6	246.4	205.4	40.97	6.013		
8,100.0	7,308.0	8,257.4	7,452.0	28.0	28.4	-125.77	-621.0	-664.5	246.4	201.7	44.67	5.516		
8,200.0	7,308.0	8,357.4	7,452.0	30.3	30.7	-125.77	-622.8	-764.5	246.4	197.9	48.53	5.077		
8,300.0	7,308.0	8,457.4	7,452.0	32.7	33.0	-125.77	-624.6	-864.5	246.4	193.9	52.51	4.692		
8,400.0	7,308.0	8,557.4	7,452.0	35.2	35.5	-125.77	-626.3	-964.5	246.4	189.8	56.59	4.353		
8,500.0	7,308.0	8,657.4	7,452.0	37.7	38.0	-125.76	-628.1	-1,064.5	246.4	185.6	60.76	4.055		
8,600.0	7,308.0	8,757.4	7,452.0	40.2	40.5	-125.76	-629.9	-1,164.5	246.4	181.4	64.99	3.791		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 7 - Wellbore #1 - Plan #2 (6-5-17)										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)			
8,700.0	7,308.0	8,857.4	7,452.0	42.8	43.0	-125.76	-631.7	-1,264.4	246.4	177.1	69.27	3.557		
8,800.0	7,308.0	8,957.4	7,452.0	45.4	45.6	-125.76	-633.5	-1,364.4	246.4	172.8	73.59	3.348		
8,900.0	7,308.0	9,057.4	7,452.0	48.0	48.2	-125.76	-635.3	-1,464.4	246.4	168.4	77.95	3.161		
9,000.0	7,308.0	9,157.4	7,452.0	50.7	50.8	-125.76	-637.1	-1,564.4	246.4	164.0	82.34	2.992		
9,100.0	7,308.0	9,257.4	7,452.0	53.3	53.5	-125.76	-638.9	-1,664.4	246.4	159.6	86.76	2.840		
9,200.0	7,308.0	9,357.4	7,452.0	56.0	56.1	-125.76	-640.7	-1,764.4	246.4	155.2	91.19	2.702		
9,300.0	7,308.0	9,457.4	7,452.0	58.7	58.8	-125.76	-642.4	-1,864.4	246.4	150.7	95.65	2.576		
9,400.0	7,308.0	9,557.4	7,452.0	61.4	61.5	-125.76	-644.2	-1,964.3	246.4	146.3	100.12	2.461		
9,500.0	7,308.0	9,657.4	7,452.0	64.1	64.2	-125.76	-646.0	-2,064.3	246.4	141.8	104.61	2.355		
9,600.0	7,308.0	9,757.4	7,452.0	66.8	66.9	-125.76	-647.8	-2,164.3	246.4	137.3	109.11	2.258		
9,700.0	7,308.0	9,857.4	7,452.0	69.5	69.6	-125.76	-649.6	-2,264.3	246.4	132.8	113.62	2.168		
9,800.0	7,308.0	9,957.4	7,452.0	72.2	72.3	-125.76	-651.4	-2,364.3	246.4	128.2	118.14	2.086		
9,900.0	7,308.0	10,057.4	7,452.0	75.0	75.1	-125.76	-653.2	-2,464.3	246.4	123.7	122.67	2.009		
10,000.0	7,308.0	10,157.4	7,452.0	77.7	77.8	-125.76	-655.0	-2,564.2	246.4	119.2	127.21	1.937		
10,100.0	7,308.0	10,257.4	7,452.0	80.4	80.5	-125.76	-656.8	-2,664.2	246.4	114.6	131.76	1.870		
10,200.0	7,308.0	10,357.4	7,452.0	83.2	83.3	-125.76	-658.5	-2,764.2	246.4	110.1	136.31	1.808		
10,300.0	7,308.0	10,457.4	7,452.0	85.9	86.0	-125.76	-660.3	-2,864.2	246.4	105.5	140.86	1.749		
10,400.0	7,308.0	10,557.4	7,452.0	88.7	88.8	-125.76	-662.1	-2,964.2	246.4	101.0	145.42	1.694		
10,500.0	7,308.0	10,657.4	7,452.0	91.5	91.5	-125.76	-663.9	-3,064.2	246.4	96.4	149.99	1.643		
10,600.0	7,308.0	10,757.4	7,452.0	94.2	94.3	-125.76	-665.7	-3,164.1	246.4	91.8	154.56	1.594		
10,700.0	7,308.0	10,857.4	7,452.0	97.0	97.0	-125.76	-667.5	-3,264.1	246.4	87.3	159.14	1.548		
10,800.0	7,308.0	10,957.4	7,452.0	99.7	99.8	-125.76	-669.3	-3,364.1	246.4	82.7	163.71	1.505		
10,900.0	7,308.0	11,057.4	7,452.0	102.5	102.5	-125.76	-671.1	-3,464.1	246.4	78.1	168.30	1.464 Level 3		
11,000.0	7,308.0	11,157.4	7,452.0	105.3	105.3	-125.76	-672.9	-3,564.1	246.4	73.5	172.88	1.425 Level 3		
11,100.0	7,308.0	11,257.4	7,452.0	108.0	108.1	-125.76	-674.7	-3,664.1	246.4	68.9	177.47	1.388 Level 3		
11,200.0	7,308.0	11,357.4	7,452.0	110.8	110.8	-125.76	-676.4	-3,764.0	246.4	64.3	182.06	1.353 Level 3		
11,300.0	7,308.0	11,457.4	7,452.0	113.6	113.6	-125.76	-678.2	-3,864.0	246.4	59.8	186.65	1.320 Level 3		
11,400.0	7,308.0	11,557.4	7,452.0	116.4	116.4	-125.76	-680.0	-3,964.0	246.4	55.2	191.24	1.288 Level 3		
11,500.0	7,308.0	11,657.4	7,452.0	119.1	119.2	-125.76	-681.8	-4,064.0	246.4	50.6	195.84	1.258 Level 3		
11,600.0	7,308.0	11,757.4	7,452.0	121.9	121.9	-125.76	-683.6	-4,164.0	246.4	46.0	200.44	1.229 Level 2		
11,700.0	7,308.0	11,857.4	7,452.0	124.7	124.7	-125.76	-685.4	-4,264.0	246.4	41.4	205.04	1.202 Level 2		
11,800.0	7,308.0	11,957.4	7,452.0	127.5	127.5	-125.76	-687.2	-4,364.0	246.4	36.8	209.64	1.175 Level 2		
11,900.0	7,308.0	12,057.4	7,452.0	130.2	130.3	-125.76	-689.0	-4,463.9	246.4	32.2	214.24	1.150 Level 2		
11,935.2	7,308.0	12,092.6	7,452.0	131.2	131.2	-125.76	-689.6	-4,499.2	246.4	30.5	215.86	1.142 Level 2, SF		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.86	-45.1	-0.1	45.1					
100.0	100.0	100.0	100.0	0.1	0.1	-179.86	-45.1	-0.1	45.1	44.8	0.22	200.477		
200.0	200.0	200.0	200.0	0.3	0.3	-179.86	-45.1	-0.1	45.1	44.4	0.67	66.826		
300.0	300.0	300.0	300.0	0.6	0.6	-179.86	-45.1	-0.1	45.1	43.9	1.12	40.095		
400.0	400.0	400.0	400.0	0.8	0.8	-179.86	-45.1	-0.1	45.1	43.5	1.57	28.640		
500.0	500.0	500.0	500.0	1.0	1.0	-179.86	-45.1	-0.1	45.1	43.0	2.02	22.275		
600.0	600.0	600.0	600.0	1.2	1.2	-179.86	-45.1	-0.1	45.1	42.6	2.47	18.225		
700.0	700.0	700.0	700.0	1.5	1.5	-179.86	-45.1	-0.1	45.1	42.1	2.92	15.421		
800.0	800.0	800.0	800.0	1.7	1.7	-179.86	-45.1	-0.1	45.1	41.7	3.37	13.365		
900.0	900.0	900.0	900.0	1.9	1.9	-179.86	-45.1	-0.1	45.1	41.2	3.82	11.793		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-179.86	-45.1	-0.1	45.1	40.8	4.27	10.551	CC, ES	
1,100.0	1,100.0	1,098.9	1,098.9	2.4	2.3	179.52	-46.2	0.4	46.3	41.6	4.69	9.861		
1,200.0	1,200.0	1,197.7	1,197.6	2.6	2.5	177.84	-49.8	1.9	49.9	44.8	5.09	9.792		
1,300.0	1,300.0	1,296.2	1,295.9	2.8	2.7	175.52	-55.6	4.4	56.0	50.4	5.50	10.166		
1,400.0	1,400.0	1,394.3	1,393.6	3.0	2.9	173.02	-63.8	7.8	64.6	58.7	5.93	10.895		
1,500.0	1,500.0	1,491.9	1,490.5	3.3	3.1	170.66	-74.2	12.2	75.8	69.4	6.36	11.906		
1,600.0	1,600.0	1,588.8	1,586.5	3.5	3.4	168.58	-86.8	17.5	89.6	82.7	6.82	13.139		
1,700.0	1,700.0	1,685.3	1,681.6	3.7	3.6	24.78	-101.5	23.8	104.7	97.5	7.17	14.596		
1,800.0	1,799.9	1,783.2	1,777.9	3.9	3.9	23.95	-118.3	30.8	119.5	111.9	7.56	15.798		
1,900.0	1,899.7	1,882.4	1,875.3	4.0	4.3	23.73	-135.4	38.1	132.0	124.1	7.96	16.583		
2,000.0	1,999.3	1,981.9	1,973.0	4.2	4.6	23.97	-152.5	45.3	142.2	133.8	8.37	16.990		
2,100.0	2,098.6	2,081.6	2,070.9	4.5	5.0	24.61	-169.7	52.6	150.0	141.2	8.79	17.062		
2,110.6	2,109.1	2,092.2	2,081.4	4.5	5.0	24.69	-171.5	53.3	150.7	141.9	8.84	17.053		
2,200.0	2,197.7	2,181.3	2,169.0	4.7	5.4	25.46	-186.8	59.8	156.4	147.2	9.24	16.931		
2,300.0	2,296.8	2,281.1	2,267.0	4.9	5.7	26.25	-204.0	67.1	162.9	153.2	9.70	16.792		
2,400.0	2,395.9	2,380.9	2,365.0	5.2	6.1	26.98	-221.2	74.3	169.3	159.1	10.17	16.653		
2,500.0	2,495.0	2,480.7	2,463.0	5.5	6.5	27.66	-238.4	81.6	175.8	165.1	10.65	16.514		
2,600.0	2,594.1	2,580.4	2,561.0	5.7	6.9	28.29	-255.6	88.9	182.3	171.2	11.13	16.376		
2,700.0	2,693.2	2,680.2	2,659.0	6.0	7.3	28.88	-272.8	96.1	188.8	177.2	11.63	16.241		
2,800.0	2,792.3	2,780.0	2,757.0	6.3	7.7	29.42	-289.9	103.4	195.4	183.2	12.13	16.110		
2,900.0	2,891.4	2,879.7	2,855.0	6.6	8.1	29.94	-307.1	110.7	201.9	189.3	12.64	15.982		
3,000.0	2,990.5	2,979.5	2,953.0	6.9	8.5	30.42	-324.3	117.9	208.5	195.4	13.15	15.857		
3,100.0	3,089.7	3,079.3	3,051.0	7.2	8.9	30.87	-341.5	125.2	215.1	201.4	13.67	15.737		
3,200.0	3,188.8	3,179.0	3,149.0	7.5	9.3	31.29	-358.7	132.5	221.7	207.5	14.19	15.621		
3,300.0	3,287.9	3,278.8	3,247.1	7.8	9.7	31.69	-375.9	139.7	228.3	213.6	14.72	15.510		
3,400.0	3,387.0	3,378.6	3,345.1	8.1	10.2	32.06	-393.0	147.0	234.9	219.7	15.25	15.402		
3,500.0	3,486.1	3,478.3	3,443.1	8.4	10.6	32.42	-410.2	154.2	241.6	225.8	15.79	15.298		
3,600.0	3,585.2	3,578.1	3,541.1	8.8	11.0	32.76	-427.4	161.5	248.2	231.9	16.33	15.199		
3,700.0	3,684.3	3,677.9	3,639.1	9.1	11.4	33.08	-444.6	168.8	254.9	238.0	16.87	15.103		
3,800.0	3,783.4	3,777.7	3,737.1	9.4	11.8	33.38	-461.8	176.0	261.5	244.1	17.42	15.011		
3,900.0	3,882.5	3,877.4	3,835.1	9.7	12.2	33.67	-478.9	183.3	268.2	250.2	17.97	14.923		
4,000.0	3,981.6	3,977.2	3,933.1	10.0	12.7	33.94	-496.1	190.6	274.8	256.3	18.52	14.838		
4,100.0	4,080.7	4,077.0	4,031.1	10.4	13.1	34.20	-513.3	197.8	281.5	262.4	19.08	14.757		
4,200.0	4,179.8	4,176.7	4,129.1	10.7	13.5	34.45	-530.5	205.1	288.2	268.6	19.63	14.678		
4,300.0	4,278.9	4,276.5	4,227.1	11.0	13.9	34.69	-547.7	212.4	294.9	274.7	20.19	14.603		
4,400.0	4,378.1	4,376.3	4,325.2	11.3	14.3	34.92	-564.9	219.6	301.6	280.8	20.76	14.530		
4,500.0	4,477.2	4,476.0	4,423.2	11.7	14.7	35.13	-582.0	226.9	308.3	287.0	21.32	14.460		
4,600.0	4,576.3	4,575.8	4,521.2	12.0	15.2	35.34	-599.2	234.1	315.0	293.1	21.88	14.393		
4,700.0	4,675.4	4,675.6	4,619.2	12.3	15.6	35.54	-616.4	241.4	321.7	299.2	22.45	14.329		
4,800.0	4,774.5	4,775.3	4,717.2	12.7	16.0	35.73	-633.6	248.7	328.4	305.4	23.02	14.266		
4,900.0	4,873.6	4,875.1	4,815.2	13.0	16.4	35.91	-650.8	255.9	335.1	311.5	23.59	14.206		
5,000.0	4,972.7	4,974.9	4,913.2	13.3	16.9	36.09	-668.0	263.2	341.8	317.7	24.16	14.149		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	5,071.8	5,074.6	5,011.2	13.7	17.3	36.26	-685.1	270.5	348.5	323.8	24.73	14.093		
5,200.0	5,170.9	5,174.4	5,109.2	14.0	17.7	36.42	-702.3	277.7	355.3	330.0	25.30	14.039		
5,300.0	5,270.0	5,274.2	5,207.2	14.3	18.1	36.58	-719.5	285.0	362.0	336.1	25.88	13.987		
5,400.0	5,369.1	5,379.6	5,310.9	14.7	18.5	36.76	-737.3	292.5	368.4	341.9	26.46	13.921		
5,449.5	5,418.2	5,435.7	5,366.2	14.8	18.7	36.93	-745.6	296.0	370.5	343.8	26.75	13.850		
5,500.0	5,468.3	5,493.1	5,423.0	15.0	18.9	37.14	-753.1	299.2	372.1	345.1	27.03	13.768		
5,600.0	5,567.8	5,606.7	5,535.9	15.2	19.1	37.47	-764.8	304.1	374.6	347.1	27.50	13.623		
5,700.0	5,667.6	5,720.4	5,649.4	15.4	19.3	37.67	-772.4	307.3	376.3	348.4	27.91	13.483		
5,800.0	5,767.6	5,834.2	5,763.1	15.6	19.5	37.77	-775.8	308.8	377.0	348.8	28.25	13.345		
5,832.4	5,800.0	5,871.1	5,800.0	15.6	19.6	-179.98	-776.1	308.9	377.1	343.8	33.23	11.346		
5,900.0	5,867.6	5,938.7	5,867.6	15.7	19.6	-179.98	-776.1	308.9	377.1	343.6	33.44	11.277		
6,000.0	5,967.6	6,038.7	5,967.6	15.9	19.8	-179.98	-776.1	308.9	377.1	343.3	33.72	11.180		
6,100.0	6,067.6	6,138.7	6,067.6	16.1	19.9	-179.98	-776.1	308.9	377.1	343.0	34.02	11.084		
6,200.0	6,167.6	6,238.7	6,167.6	16.2	20.0	-179.98	-776.1	308.9	377.1	342.7	34.31	10.988		
6,300.0	6,267.6	6,338.7	6,267.6	16.4	20.1	-179.98	-776.1	308.9	377.1	342.4	34.61	10.893		
6,400.0	6,367.6	6,438.7	6,367.6	16.5	20.3	-179.98	-776.1	308.9	377.1	342.1	34.92	10.799		
6,500.0	6,467.6	6,538.7	6,467.6	16.7	20.4	-179.98	-776.1	308.9	377.1	341.8	35.22	10.705		
6,600.0	6,567.6	6,638.7	6,567.6	16.9	20.5	-179.98	-776.1	308.9	377.1	341.5	35.53	10.612		
6,700.0	6,667.6	6,738.7	6,667.6	17.0	20.6	-179.98	-776.1	308.9	377.1	341.2	35.84	10.520		
6,749.6	6,717.2	6,788.3	6,717.2	17.1	20.7	-179.98	-776.1	308.9	377.1	341.1	36.00	10.474		
6,800.0	6,767.6	6,837.9	6,766.8	17.2	20.8	-179.80	-776.1	307.7	377.1	341.0	36.14	10.435		
6,829.3	6,796.8	6,866.4	6,795.1	17.3	20.8	-179.39	-776.2	305.0	377.2	341.0	36.18	10.425		
6,850.0	6,817.5	6,886.3	6,814.8	17.3	20.8	-87.48	-776.2	302.1	377.3	345.3	32.03	11.778		
6,900.0	6,867.3	6,934.1	6,861.5	17.4	20.8	-86.57	-776.5	292.1	377.6	345.4	32.25	11.710		
6,950.0	6,916.4	6,981.4	6,906.7	17.4	20.9	-85.70	-776.9	278.0	378.0	345.6	32.41	11.664		
7,000.0	6,964.4	7,028.2	6,949.8	17.4	20.9	-84.86	-777.4	260.0	378.5	345.9	32.52	11.639		
7,050.0	7,010.8	7,074.6	6,990.8	17.4	20.8	-84.07	-777.9	238.3	379.0	346.4	32.58	11.632		
7,100.0	7,055.1	7,120.6	7,029.3	17.4	20.8	-83.34	-778.6	213.2	379.5	346.9	32.61	11.636		
7,150.0	7,097.0	7,166.2	7,065.2	17.4	20.8	-82.66	-779.3	185.0	380.1	347.4	32.64	11.645		
7,200.0	7,136.0	7,211.6	7,098.1	17.4	20.8	-82.05	-780.2	153.9	380.6	347.9	32.68	11.647		
7,250.0	7,171.8	7,256.6	7,128.0	17.4	20.8	-81.51	-781.0	120.2	381.1	348.4	32.76	11.633		
7,300.0	7,204.0	7,300.0	7,153.9	17.3	20.7	-81.05	-782.0	85.4	381.6	348.7	32.92	11.591		
7,350.0	7,232.4	7,346.0	7,178.0	17.3	20.7	-80.64	-783.0	46.2	382.0	348.8	33.21	11.502		
7,400.0	7,256.6	7,390.5	7,197.8	17.3	20.7	-80.32	-784.1	6.5	382.4	348.7	33.65	11.364		
7,450.0	7,276.4	7,434.8	7,214.1	17.3	20.7	-80.09	-785.1	-34.7	382.6	348.4	34.25	11.171		
7,500.0	7,291.6	7,479.0	7,226.7	17.4	20.7	-79.93	-786.3	-77.1	382.8	347.8	35.04	10.925		
7,550.0	7,302.2	7,523.2	7,235.6	17.8	20.7	-79.85	-787.4	-120.3	382.9	346.9	36.02	10.631		
7,600.0	7,307.9	7,566.2	7,240.3	18.5	20.7	-79.82	-788.5	-163.1	382.9	345.8	37.15	10.307		
7,633.6	7,309.0	7,595.9	7,241.1	18.9	20.8	-79.78	-789.3	-192.7	383.0	345.0	38.01	10.076		
7,633.8	7,308.0	7,595.2	7,241.1	19.0	20.8	-79.93	-789.3	-192.0	382.8	344.8	38.01	10.072		
7,634.8	7,308.0	7,596.1	7,241.1	19.0	20.8	-79.93	-789.3	-192.9	382.8	344.8	38.03	10.065		
7,684.0	7,308.0	7,646.6	7,241.0	19.7	21.1	-79.93	-790.6	-242.3	383.0	343.5	39.50	9.697		
7,700.0	7,308.0	7,662.6	7,241.0	20.0	21.2	-79.93	-791.0	-258.3	383.1	343.2	39.99	9.581		
7,800.0	7,308.0	7,762.7	7,241.0	21.7	22.5	-79.95	-793.7	-358.4	383.9	340.6	43.36	8.855		
7,900.0	7,308.0	7,862.8	7,241.0	23.7	24.3	-79.97	-796.2	-458.5	384.7	337.6	47.14	8.160		
8,000.0	7,308.0	7,963.0	7,241.0	25.8	26.3	-79.99	-798.7	-558.6	385.4	334.2	51.24	7.521		
8,100.0	7,308.0	8,063.1	7,241.0	28.0	28.5	-80.01	-801.2	-658.8	386.1	330.5	55.59	6.945		
8,200.0	7,308.0	8,163.3	7,241.0	30.3	30.8	-80.02	-803.7	-758.9	386.7	326.6	60.14	6.431		
8,300.0	7,308.0	8,263.4	7,241.0	32.7	33.1	-80.04	-806.1	-859.0	387.4	322.5	64.84	5.974		
8,400.0	7,308.0	8,363.6	7,241.0	35.2	35.6	-80.05	-808.4	-959.1	387.9	318.3	69.66	5.569		
8,500.0	7,308.0	8,463.7	7,241.0	37.7	38.0	-80.07	-810.8	-1,059.2	388.4	313.9	74.58	5.208		
8,600.0	7,308.0	8,563.9	7,241.0	40.2	40.6	-80.08	-813.1	-1,159.4	388.9	309.4	79.58	4.887		

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

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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		
8,700.0	7,308.0	8,664.0	7,241.0	42.8	43.1	-80.09	-815.3	-1,259.5	389.4	304.7	84.65	4.600		
8,800.0	7,308.0	8,764.2	7,241.0	45.4	45.7	-80.10	-817.5	-1,359.6	389.8	300.0	89.78	4.342		
8,900.0	7,308.0	8,864.3	7,241.0	48.0	48.3	-80.11	-819.7	-1,459.7	390.2	295.2	94.95	4.109		
9,000.0	7,308.0	8,964.5	7,241.0	50.7	50.9	-80.12	-821.8	-1,559.9	390.5	290.3	100.16	3.899		
9,100.0	7,308.0	9,064.6	7,241.0	53.3	53.6	-80.13	-823.9	-1,660.0	390.8	285.4	105.40	3.708		
9,200.0	7,308.0	9,164.8	7,241.0	56.0	56.2	-80.13	-825.9	-1,760.1	391.0	280.4	110.67	3.533		
9,300.0	7,308.0	9,265.0	7,241.0	58.7	58.9	-80.14	-828.0	-1,860.3	391.3	275.3	115.97	3.374		
9,400.0	7,308.0	9,365.1	7,241.0	61.4	61.6	-80.14	-829.9	-1,960.4	391.4	270.1	121.28	3.227		
9,500.0	7,308.0	9,465.3	7,241.0	64.1	64.3	-80.15	-831.9	-2,060.5	391.6	264.9	126.62	3.092		
9,600.0	7,308.0	9,565.4	7,241.0	66.8	67.0	-80.15	-833.7	-2,160.7	391.7	259.7	131.97	2.968		
9,700.0	7,308.0	9,665.6	7,241.0	69.5	69.7	-80.15	-835.6	-2,260.8	391.7	254.4	137.34	2.852		
9,800.0	7,308.0	9,765.7	7,241.0	72.2	72.4	-80.15	-837.4	-2,360.9	391.7	249.0	142.72	2.745		
9,900.0	7,308.0	9,865.9	7,241.0	75.0	75.2	-80.15	-839.2	-2,461.1	391.7	243.6	148.11	2.645		
10,000.0	7,308.0	9,966.0	7,241.0	77.7	77.9	-80.15	-840.9	-2,561.2	391.7	238.2	153.51	2.551		
10,100.0	7,308.0	10,066.2	7,241.0	80.4	80.6	-80.15	-842.6	-2,661.4	391.6	232.7	158.92	2.464		
10,200.0	7,308.0	10,166.3	7,241.0	83.2	83.4	-80.14	-844.3	-2,761.5	391.4	227.1	164.33	2.382		
10,300.0	7,308.0	10,266.5	7,241.0	85.9	86.1	-80.14	-845.9	-2,861.6	391.3	221.5	169.76	2.305		
10,400.0	7,308.0	10,366.6	7,241.0	88.7	88.9	-80.13	-847.4	-2,961.8	391.0	215.9	175.19	2.232		
10,500.0	7,308.0	10,466.8	7,241.0	91.5	91.6	-80.13	-849.0	-3,061.9	390.8	210.2	180.62	2.164		
10,600.0	7,308.0	10,566.9	7,241.0	94.2	94.4	-80.12	-850.5	-3,162.1	390.5	204.4	186.06	2.099		
10,700.0	7,308.0	10,667.1	7,241.0	97.0	97.1	-80.11	-851.9	-3,262.2	390.2	198.7	191.51	2.037		
10,800.0	7,308.0	10,767.2	7,241.0	99.7	99.9	-80.10	-853.3	-3,362.3	389.8	192.8	196.96	1.979		
10,900.0	7,308.0	10,867.4	7,241.0	102.5	102.7	-80.09	-854.7	-3,462.5	389.4	187.0	202.41	1.924		
11,000.0	7,308.0	10,967.5	7,241.0	105.3	105.4	-80.08	-856.0	-3,562.6	388.9	181.1	207.87	1.871		
11,100.0	7,308.0	11,067.7	7,241.0	108.0	108.2	-80.07	-857.3	-3,662.8	388.5	175.1	213.32	1.821		
11,200.0	7,308.0	11,167.8	7,241.0	110.8	111.0	-80.05	-858.6	-3,762.9	387.9	169.1	218.79	1.773		
11,300.0	7,308.0	11,268.0	7,241.0	113.6	113.7	-80.04	-859.8	-3,863.1	387.4	163.1	224.25	1.727		
11,400.0	7,308.0	11,368.1	7,241.0	116.4	116.5	-80.02	-861.0	-3,963.2	386.8	157.0	229.71	1.684		
11,500.0	7,308.0	11,468.3	7,241.0	119.1	119.3	-80.01	-862.1	-4,063.3	386.1	150.9	235.18	1.642		
11,600.0	7,308.0	11,568.4	7,241.0	121.9	122.1	-79.99	-863.2	-4,163.5	385.4	144.8	240.65	1.602		
11,700.0	7,308.0	11,668.6	7,241.0	124.7	124.9	-79.97	-864.3	-4,263.6	384.7	138.6	246.12	1.563		
11,800.0	7,308.0	11,768.7	7,241.0	127.5	127.6	-79.95	-865.3	-4,363.8	383.9	132.4	251.59	1.526		
11,900.0	7,308.0	11,868.9	7,241.0	130.2	130.4	-79.93	-866.3	-4,463.9	383.1	126.1	257.06	1.491 Level 3		
11,935.2	7,308.0	11,904.2	7,241.0	131.2	131.4	-79.92	-866.6	-4,499.2	382.9	123.9	258.99	1.478 Level 3, SF		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	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	-179.95	-59.9	-0.1	59.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.95	-59.9	-0.1	59.9	59.7	0.22	266.443		
200.0	200.0	200.0	200.0	0.3	0.3	-179.95	-59.9	-0.1	59.9	59.2	0.67	88.814		
300.0	300.0	300.0	300.0	0.6	0.6	-179.95	-59.9	-0.1	59.9	58.8	1.12	53.289		
400.0	400.0	400.0	400.0	0.8	0.8	-179.95	-59.9	-0.1	59.9	58.3	1.57	38.063		
500.0	500.0	500.0	500.0	1.0	1.0	-179.95	-59.9	-0.1	59.9	57.9	2.02	29.605		
600.0	600.0	600.0	600.0	1.2	1.2	-179.95	-59.9	-0.1	59.9	57.4	2.47	24.222		
700.0	700.0	700.0	700.0	1.5	1.5	-179.95	-59.9	-0.1	59.9	57.0	2.92	20.496		
800.0	800.0	800.0	800.0	1.7	1.7	-179.95	-59.9	-0.1	59.9	56.5	3.37	17.763 CC, ES		
900.0	900.0	898.5	898.5	1.9	1.9	179.73	-61.1	0.3	61.1	57.3	3.79	16.126		
1,000.0	1,000.0	996.9	996.8	2.1	2.1	178.83	-64.8	1.3	64.9	60.7	4.19	15.472		
1,100.0	1,100.0	1,095.0	1,094.7	2.4	2.2	177.55	-70.8	3.0	71.1	66.5	4.61	15.439 SF		
1,200.0	1,200.0	1,192.7	1,192.0	2.6	2.5	176.10	-79.3	5.4	79.9	74.9	5.03	15.874		
1,300.0	1,300.0	1,289.9	1,288.5	2.8	2.7	174.65	-90.1	8.4	91.2	85.7	5.47	16.664		
1,400.0	1,400.0	1,386.4	1,384.1	3.0	2.9	173.30	-103.1	12.1	105.1	99.1	5.93	17.719		
1,500.0	1,500.0	1,482.2	1,478.6	3.3	3.2	172.11	-118.4	16.4	121.4	115.0	6.40	18.969		
1,600.0	1,600.0	1,577.2	1,571.9	3.5	3.5	171.09	-135.7	21.3	140.3	133.4	6.89	20.360		
1,700.0	1,700.0	1,671.4	1,663.9	3.7	3.9	28.05	-155.2	26.7	160.4	153.2	7.17	22.362		
1,800.0	1,799.9	1,768.0	1,757.8	3.9	4.3	27.71	-176.9	32.8	180.2	172.7	7.58	23.784		
1,900.0	1,899.7	1,866.4	1,853.4	4.0	4.7	27.78	-199.1	39.1	198.0	190.0	7.99	24.763		
2,000.0	1,999.3	1,965.2	1,949.4	4.2	5.1	28.17	-221.5	45.4	213.4	205.0	8.43	25.330		
2,100.0	2,098.6	2,064.2	2,045.7	4.5	5.6	28.83	-243.9	51.7	226.6	217.7	8.87	25.550		
2,110.6	2,109.1	2,074.8	2,056.0	4.5	5.6	28.91	-246.3	52.4	227.9	219.0	8.92	25.554		
2,200.0	2,197.7	2,163.5	2,142.2	4.7	6.1	29.67	-266.4	58.0	238.5	229.1	9.34	25.541		
2,300.0	2,296.8	2,262.7	2,238.6	4.9	6.5	30.45	-288.8	64.3	250.4	240.6	9.82	25.504		
2,400.0	2,395.9	2,361.9	2,335.1	5.2	7.0	31.15	-311.3	70.7	262.3	252.0	10.31	25.448		
2,500.0	2,495.0	2,461.2	2,431.5	5.5	7.5	31.80	-333.7	77.0	274.3	263.5	10.81	25.378		
2,600.0	2,594.1	2,560.4	2,528.0	5.7	7.9	32.38	-356.2	83.3	286.3	275.0	11.32	25.297		
2,700.0	2,693.2	2,659.6	2,624.4	6.0	8.4	32.93	-378.6	89.6	298.4	286.5	11.84	25.209		
2,800.0	2,792.3	2,758.9	2,720.9	6.3	8.9	33.43	-401.1	95.9	310.4	298.1	12.36	25.116		
2,900.0	2,891.4	2,858.1	2,817.4	6.6	9.4	33.89	-423.6	102.2	322.5	309.6	12.89	25.019		
3,000.0	2,990.5	2,957.3	2,913.8	6.9	9.9	34.32	-446.0	108.6	334.6	321.2	13.43	24.920		
3,100.0	3,089.7	3,056.6	3,010.3	7.2	10.4	34.72	-468.5	114.9	346.7	332.8	13.97	24.821		
3,200.0	3,188.8	3,155.8	3,106.7	7.5	10.9	35.09	-490.9	121.2	358.9	344.4	14.52	24.721		
3,300.0	3,287.9	3,255.1	3,203.2	7.8	11.4	35.44	-513.4	127.5	371.0	356.0	15.07	24.623		
3,400.0	3,387.0	3,354.3	3,299.6	8.1	11.8	35.76	-535.8	133.8	383.2	367.6	15.62	24.526		
3,500.0	3,486.1	3,453.5	3,396.1	8.4	12.3	36.07	-558.3	140.1	395.4	379.2	16.18	24.430		
3,600.0	3,585.2	3,552.8	3,492.5	8.8	12.8	36.36	-580.8	146.5	407.6	390.8	16.75	24.337		
3,700.0	3,684.3	3,652.0	3,589.0	9.1	13.3	36.63	-603.2	152.8	419.8	402.4	17.31	24.245		
3,800.0	3,783.4	3,751.2	3,685.4	9.4	13.8	36.88	-625.7	159.1	432.0	414.1	17.88	24.156		
3,900.0	3,882.5	3,850.5	3,781.9	9.7	14.3	37.12	-648.1	165.4	444.2	425.7	18.45	24.070		
4,000.0	3,981.6	3,949.7	3,878.3	10.0	14.8	37.35	-670.6	171.7	456.4	437.4	19.03	23.985		
4,100.0	4,080.7	4,048.9	3,974.8	10.4	15.3	37.57	-693.0	178.0	468.6	449.0	19.60	23.904		
4,200.0	4,179.8	4,148.2	4,071.3	10.7	15.8	37.78	-715.5	184.4	480.8	460.7	20.18	23.825		
4,300.0	4,278.9	4,247.4	4,167.7	11.0	16.3	37.97	-738.0	190.7	493.1	472.3	20.76	23.748		

<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5098.0ft (Original Well Elev)

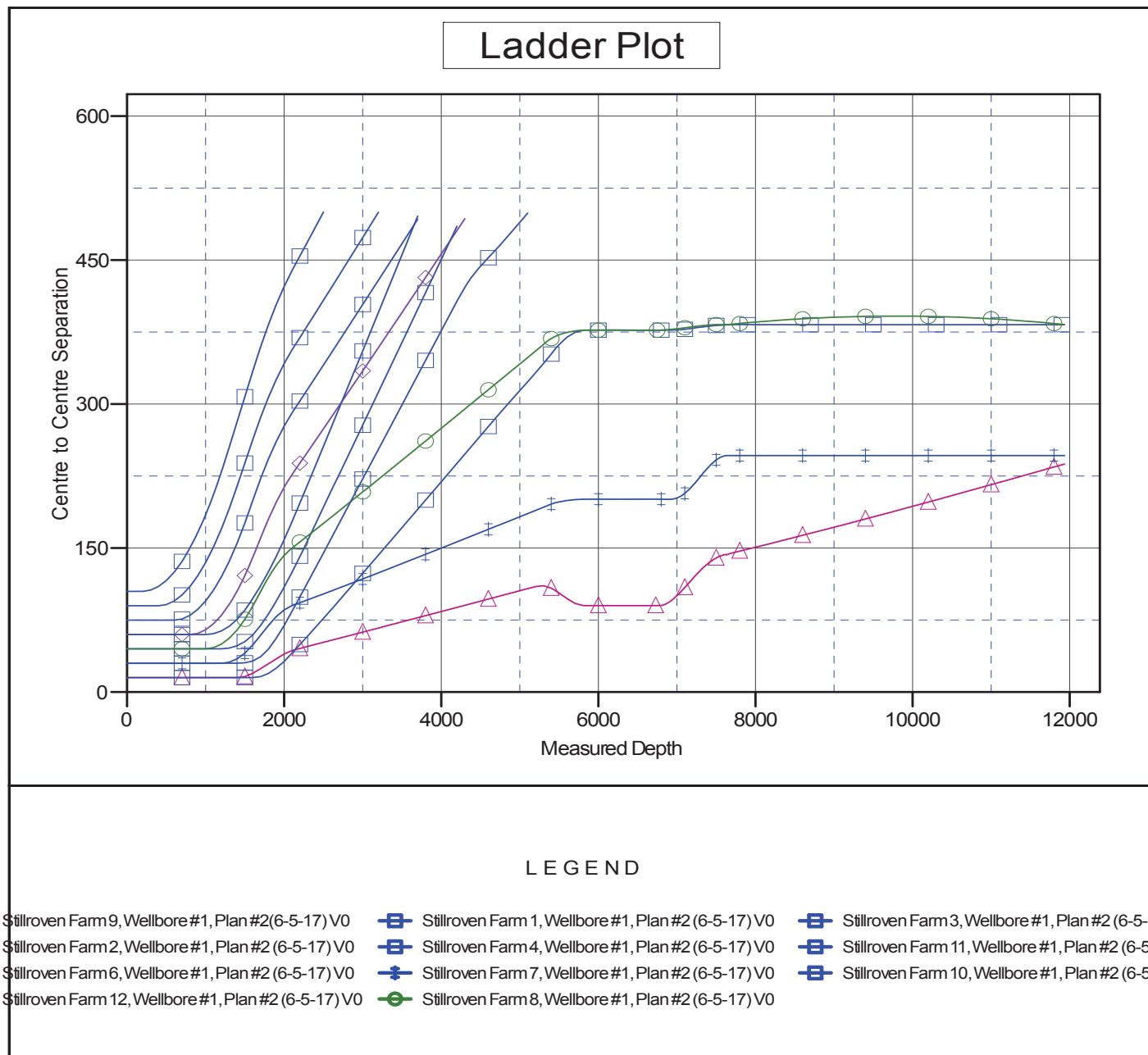
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Stillroven Farm 5

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°



<b>Company:</b>	Captiva Energy Partners	<b>Local Co-ordinate Reference:</b>	Well Stillroven Farm 5
<b>Project:</b>	SEC.5-T3N-R68W	<b>TVD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Reference Site:</b>	Stillroven Farm Pad Sec.5-T3N-R68W	<b>MD Reference:</b>	WELL @ 5098.0ft (Original Well Elev)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Stillroven Farm 5	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #2 (6-5-17)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5098.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Stillroven Farm 5

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

