

Captiva Energy Partners

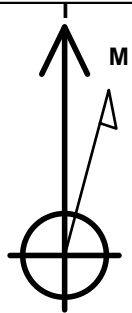
Well Name: **Stillroven Farm 6**

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	1338121.53	134292.57	40.260542	-105.018806	
Original Well Elev WELL @ 5098.0ft (Original Well Elev)						

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
SHL 640'FNL, 310'FEL	1.0	0.0	0.0	40.260542	105.018806
BHL 1125'FNL, 460'FWL	0.0	-564.7	-4502.1	40.258991	105.034937
LP 1125'FNL, 513'FEL	0.0	-487.6	-204.0	40.259204	105.019537



Azimuths to True North
Magnetic North: 8.19°

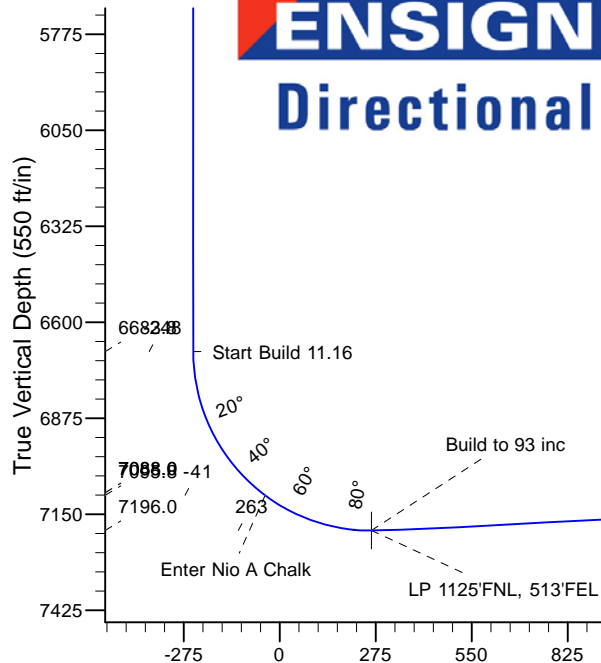
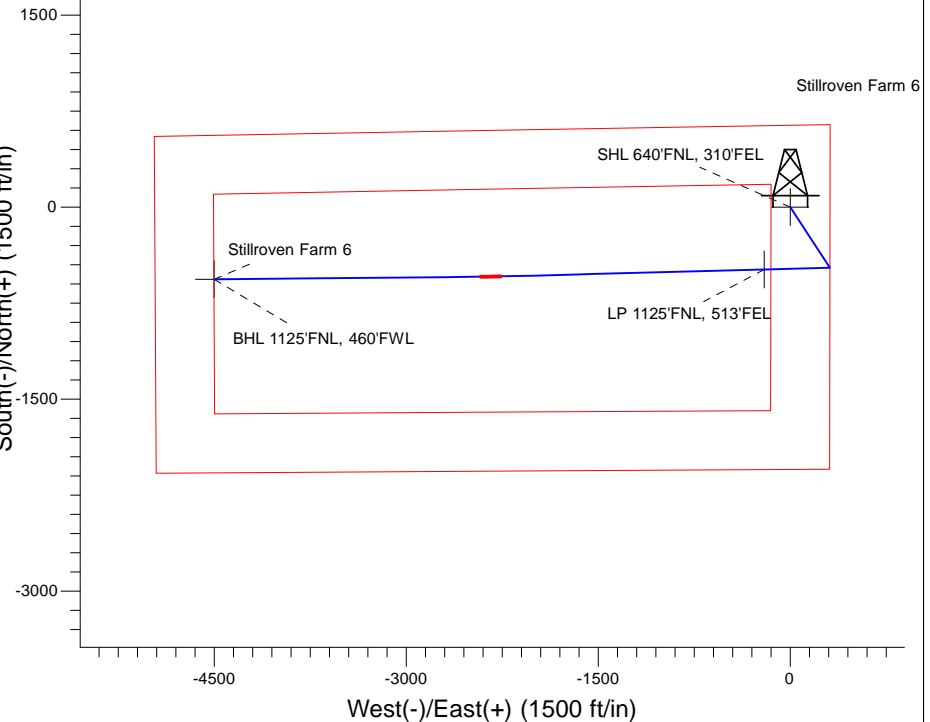
Magnetic Field
Strength: 52405.2nT
Dip Angle: 66.69°
Date: 5/23/2017
Model: IGRF2010

Stillroven Farm Pad Sec.5-T3N-R68W
Stillroven Farm 6
Plan #2 (6-5-17)
13:24, June 05 2017

ANNOTATIONS

TVD	MD	Annotation
1400.0	1400.0	Start Build 1.50
6683.8	6725.0	Start Build 11.16
7095.8	7203.2	Enter Nio A Chalk
7196.0	7532.1	Build to 93 inc
7088.0	9749.5	Start 2084.3 hold at 9749.5 MD
7088.0	11833.8	TD at 11833.8

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



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
	21400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	
	31981.1	8.72	146.90	1978.9	-37.0	24.1	1.50	146.90	-19.3	
	45205.3	8.72	146.90	5165.9	-446.3	290.9	0.00	0.00	-233.1	
	55641.2	0.00	0.00	5600.0	-474.0	309.0	2.00	180.00	-247.6	
	66725.0	0.00	0.00	6683.8	-474.0	309.0	0.00	0.00	-247.6	
	77531.1	90.00	268.48	7196.0	-487.5	-203.0	11.16	268.48	262.1	
	87532.1	90.00	268.48	7196.0	-487.6	-204.0	0.00	0.00	263.1	LP 1125'FNL, 513'FEL
	97682.1	93.00	268.48	7192.1	-491.5	-353.9	2.00	-0.08	412.3	
	109591.7	93.00	268.48	7092.1	-542.1	-2260.3	0.00	0.00	2310.2	
	119749.5	90.00	269.46	7088.0	-545.0	-2417.9	2.00	161.92	2467.0	
	121833.8	90.00	269.46	7088.0	-564.7	-4502.1	0.00	0.00	4537.4	BHL 1125'FNL, 460'FWL

Vertical Section at 262.85° (550 ft/in)



Directional

Captiva Energy Partners

SEC.5-T3N-R68W

Stillroven Farm Pad Sec.5-T3N-R68W

Stillroven Farm 6

Wellbore #1

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

Standard Planning Report

05 June, 2017



Directional

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

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

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

Well	Stillroven Farm 6			
Well Position	+N/-S	-75.0 ft	Northing:	1,338,121.55 usft
	+E/-W	-0.3 ft	Easting:	3,134,292.57 usft
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft
			Ground Level:	5,075.0 ft

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

Design	Plan #2 (6-5-17)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	262.85

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,981.1	8.72	146.90	1,978.9	-37.0	24.1	1.50	1.50	0.00	146.90	
5,205.3	8.72	146.90	5,165.9	-446.3	290.9	0.00	0.00	0.00	0.00	
5,641.2	0.00	0.00	5,600.0	-474.0	309.0	2.00	-2.00	0.00	180.00	
6,725.0	0.00	0.00	6,683.8	-474.0	309.0	0.00	0.00	0.00	0.00	
7,531.1	90.00	268.48	7,196.0	-487.5	-203.0	11.16	11.16	0.00	268.48	
7,532.1	90.00	268.48	7,196.0	-487.6	-204.0	0.00	0.00	0.00	0.00	LP 1125'FNL, 513'FEI
7,682.1	93.00	268.48	7,192.1	-491.5	-353.9	2.00	2.00	0.00	-0.08	
9,591.7	93.00	268.48	7,092.1	-542.1	-2,260.3	0.00	0.00	0.00	0.00	
9,749.5	90.00	269.46	7,088.0	-545.0	-2,417.9	2.00	-1.90	0.62	161.92	
11,833.8	90.00	269.46	7,088.0	-564.7	-4,502.1	0.00	0.00	0.00	0.00	BHL 1125'FNL, 460'F

Database:	US_EDM	Local Co-ordinate Reference:	Well Stillroven Farm 6
Company:	Captiva Energy Partners	TVD Reference:	WELL @ 5098.0ft (Original Well Elev)
Project:	SEC.5-T3N-R68W	MD Reference:	WELL @ 5098.0ft (Original Well Elev)
Site:	Stillroven Farm Pad Sec.5-T3N-R68W	North Reference:	True
Well:	Stillroven Farm 6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
SHL 640'FNL, 310'FEL									
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
Start Build 1.50									
1,500.0	1.50	146.90	1,500.0	-1.1	0.7	-0.6	1.50	1.50	0.00
1,600.0	3.00	146.90	1,599.9	-4.4	2.9	-2.3	1.50	1.50	0.00
1,700.0	4.50	146.90	1,699.7	-9.9	6.4	-5.2	1.50	1.50	0.00
1,800.0	6.00	146.90	1,799.3	-17.5	11.4	-9.2	1.50	1.50	0.00
1,900.0	7.50	146.90	1,898.6	-27.4	17.8	-14.3	1.50	1.50	0.00
1,981.1	8.72	146.90	1,978.9	-37.0	24.1	-19.3	1.50	1.50	0.00
2,000.0	8.72	146.90	1,997.5	-39.4	25.7	-20.6	0.00	0.00	0.00
2,100.0	8.72	146.90	2,096.4	-52.1	33.9	-27.2	0.00	0.00	0.00
2,200.0	8.72	146.90	2,195.2	-64.7	42.2	-33.8	0.00	0.00	0.00
2,300.0	8.72	146.90	2,294.1	-77.4	50.5	-40.5	0.00	0.00	0.00
2,400.0	8.72	146.90	2,392.9	-90.1	58.8	-47.1	0.00	0.00	0.00
2,500.0	8.72	146.90	2,491.8	-102.8	67.0	-53.7	0.00	0.00	0.00
2,600.0	8.72	146.90	2,590.6	-115.5	75.3	-60.4	0.00	0.00	0.00
2,700.0	8.72	146.90	2,689.5	-128.2	83.6	-67.0	0.00	0.00	0.00
2,800.0	8.72	146.90	2,788.3	-140.9	91.9	-73.6	0.00	0.00	0.00
2,900.0	8.72	146.90	2,887.1	-153.6	100.1	-80.2	0.00	0.00	0.00
3,000.0	8.72	146.90	2,986.0	-166.3	108.4	-86.9	0.00	0.00	0.00
3,100.0	8.72	146.90	3,084.8	-179.0	116.7	-93.5	0.00	0.00	0.00
3,200.0	8.72	146.90	3,183.7	-191.7	125.0	-100.1	0.00	0.00	0.00
3,300.0	8.72	146.90	3,282.5	-204.4	133.2	-106.8	0.00	0.00	0.00
3,400.0	8.72	146.90	3,381.4	-217.1	141.5	-113.4	0.00	0.00	0.00
3,500.0	8.72	146.90	3,480.2	-229.8	149.8	-120.0	0.00	0.00	0.00
3,600.0	8.72	146.90	3,579.1	-242.5	158.1	-126.7	0.00	0.00	0.00
3,700.0	8.72	146.90	3,677.9	-255.2	166.3	-133.3	0.00	0.00	0.00
3,800.0	8.72	146.90	3,776.8	-267.9	174.6	-139.9	0.00	0.00	0.00
3,900.0	8.72	146.90	3,875.6	-280.6	182.9	-146.6	0.00	0.00	0.00
4,000.0	8.72	146.90	3,974.4	-293.3	191.2	-153.2	0.00	0.00	0.00
4,100.0	8.72	146.90	4,073.3	-306.0	199.5	-159.8	0.00	0.00	0.00
4,200.0	8.72	146.90	4,172.1	-318.7	207.7	-166.5	0.00	0.00	0.00
4,300.0	8.72	146.90	4,271.0	-331.3	216.0	-173.1	0.00	0.00	0.00
4,400.0	8.72	146.90	4,369.8	-344.0	224.3	-179.7	0.00	0.00	0.00
4,500.0	8.72	146.90	4,468.7	-356.7	232.6	-186.4	0.00	0.00	0.00
4,600.0	8.72	146.90	4,567.5	-369.4	240.8	-193.0	0.00	0.00	0.00
4,700.0	8.72	146.90	4,666.4	-382.1	249.1	-199.6	0.00	0.00	0.00
4,800.0	8.72	146.90	4,765.2	-394.8	257.4	-206.3	0.00	0.00	0.00
4,900.0	8.72	146.90	4,864.0	-407.5	265.7	-212.9	0.00	0.00	0.00

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Project:	SEC.5-T3N-R68W	MD Reference:	WELL @ 5098.0ft (Original Well Elev)
Site:	Stillroven Farm Pad Sec.5-T3N-R68W	North Reference:	True
Well:	Stillroven Farm 6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	8.72	146.90	4,962.9	-420.2	273.9	-219.5	0.00	0.00	0.00
5,100.0	8.72	146.90	5,061.7	-432.9	282.2	-226.1	0.00	0.00	0.00
5,200.0	8.72	146.90	5,160.6	-445.6	290.5	-232.8	0.00	0.00	0.00
5,205.3	8.72	146.90	5,165.9	-446.3	290.9	-233.1	0.00	0.00	0.00
5,300.0	6.82	146.90	5,259.6	-457.0	297.9	-238.7	2.00	-2.00	0.00
5,400.0	4.82	146.90	5,359.1	-465.5	303.5	-243.2	2.00	-2.00	0.00
5,500.0	2.82	146.90	5,458.9	-471.1	307.1	-246.1	2.00	-2.00	0.00
5,600.0	0.82	146.90	5,558.8	-473.8	308.8	-247.5	2.00	-2.00	0.00
5,641.2	0.00	0.00	5,600.0	-474.0	309.0	-247.6	2.00	-2.00	0.00
5,700.0	0.00	0.00	5,658.8	-474.0	309.0	-247.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,758.8	-474.0	309.0	-247.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,858.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,958.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,058.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,158.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,258.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,358.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,458.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,558.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,658.8	-474.0	309.0	-247.6	0.00	0.00	0.00
6,725.0	0.00	0.00	6,683.8	-474.0	309.0	-247.6	0.00	0.00	0.00
Start Build 11.16									
6,800.0	8.38	268.48	6,758.6	-474.1	303.5	-242.2	11.17	11.17	0.00
6,900.0	19.54	268.48	6,855.5	-474.8	279.5	-218.2	11.16	11.16	0.00
7,000.0	30.71	268.48	6,945.9	-475.9	237.1	-176.0	11.16	11.16	0.00
7,100.0	41.87	268.48	7,026.3	-477.5	178.0	-117.2	11.16	11.16	0.00
7,200.0	53.04	268.48	7,093.9	-479.4	104.5	-44.0	11.16	11.16	0.00
7,203.2	53.39	268.48	7,095.8	-479.5	101.9	-41.5	11.16	11.16	0.00
Enter Nio A Chalk									
7,300.0	64.20	268.48	7,145.8	-481.7	19.3	40.8	11.16	11.16	0.00
7,400.0	75.37	268.48	7,180.4	-484.1	-74.4	134.1	11.16	11.16	0.00
7,500.0	86.53	268.48	7,196.1	-486.8	-173.0	232.2	11.16	11.16	0.00
7,531.1	90.00	268.48	7,196.0	-487.5	-203.0	262.1	11.16	11.16	0.00
7,532.1	90.00	268.48	7,196.0	-487.6	-204.0	263.1	0.00	0.00	0.00
Build to 93 inc - LP 1125'FNL, 513'FEL									
7,600.0	91.36	268.48	7,195.2	-489.4	-271.9	330.7	2.00	2.00	0.00
7,682.1	93.00	268.48	7,192.1	-491.5	-353.9	412.3	2.00	2.00	0.00
7,700.0	93.00	268.48	7,191.1	-492.0	-371.8	430.1	0.00	0.00	0.00
7,800.0	93.00	268.48	7,185.9	-494.7	-471.6	529.5	0.00	0.00	0.00
7,900.0	93.00	268.48	7,180.7	-497.3	-571.4	628.9	0.00	0.00	0.00
8,000.0	93.00	268.48	7,175.4	-500.0	-671.3	728.3	0.00	0.00	0.00
8,100.0	93.00	268.48	7,170.2	-502.6	-771.1	827.6	0.00	0.00	0.00
8,200.0	93.00	268.48	7,165.0	-505.3	-870.9	927.0	0.00	0.00	0.00
8,300.0	93.00	268.48	7,159.7	-507.9	-970.7	1,026.4	0.00	0.00	0.00
8,400.0	93.00	268.48	7,154.5	-510.6	-1,070.6	1,125.8	0.00	0.00	0.00
8,500.0	93.00	268.48	7,149.3	-513.2	-1,170.4	1,225.2	0.00	0.00	0.00
8,600.0	93.00	268.48	7,144.0	-515.9	-1,270.2	1,324.5	0.00	0.00	0.00
8,700.0	93.00	268.48	7,138.8	-518.5	-1,370.0	1,423.9	0.00	0.00	0.00
8,800.0	93.00	268.48	7,133.6	-521.2	-1,469.9	1,523.3	0.00	0.00	0.00
8,900.0	93.00	268.48	7,128.3	-523.8	-1,569.7	1,622.7	0.00	0.00	0.00
9,000.0	93.00	268.48	7,123.1	-526.5	-1,669.5	1,722.1	0.00	0.00	0.00
9,100.0	93.00	268.48	7,117.9	-529.1	-1,769.4	1,821.4	0.00	0.00	0.00
9,200.0	93.00	268.48	7,112.6	-531.8	-1,869.2	1,920.8	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Stillroven Farm 6
Company:	Captiva Energy Partners	TVD Reference:	WELL @ 5098.0ft (Original Well Elev)
Project:	SEC.5-T3N-R68W	MD Reference:	WELL @ 5098.0ft (Original Well Elev)
Site:	Stillroven Farm Pad Sec.5-T3N-R68W	North Reference:	True
Well:	Stillroven Farm 6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
9,300.0	93.00	268.48	7,107.4	-534.4	-1,969.0	2,020.2	0.00	0.00	0.00	
9,400.0	93.00	268.48	7,102.2	-537.1	-2,068.8	2,119.6	0.00	0.00	0.00	
9,500.0	93.00	268.48	7,096.9	-539.7	-2,168.7	2,219.0	0.00	0.00	0.00	
9,591.7	93.00	268.48	7,092.1	-542.1	-2,260.3	2,310.2	0.00	0.00	0.00	
9,600.0	92.84	268.53	7,091.7	-542.3	-2,268.5	2,318.4	2.00	-1.90	0.62	
9,700.0	90.94	269.15	7,088.4	-544.4	-2,368.4	2,417.8	2.00	-1.90	0.62	
9,749.5	90.00	269.46	7,088.0	-545.0	-2,417.9	2,466.9	2.00	-1.90	0.62	
Start 2084.3 hold at 9749.5 MD										
9,800.0	90.00	269.46	7,088.0	-545.4	-2,468.4	2,517.1	0.00	0.00	0.00	
9,900.0	90.00	269.46	7,088.0	-546.4	-2,568.4	2,616.4	0.00	0.00	0.00	
10,000.0	90.00	269.46	7,088.0	-547.3	-2,668.4	2,715.8	0.00	0.00	0.00	
10,100.0	90.00	269.46	7,088.0	-548.3	-2,768.4	2,815.1	0.00	0.00	0.00	
10,200.0	90.00	269.46	7,088.0	-549.2	-2,868.4	2,914.4	0.00	0.00	0.00	
10,300.0	90.00	269.46	7,088.0	-550.2	-2,968.4	3,013.8	0.00	0.00	0.00	
10,400.0	90.00	269.46	7,088.0	-551.1	-3,068.4	3,113.1	0.00	0.00	0.00	
10,500.0	90.00	269.46	7,088.0	-552.1	-3,168.4	3,212.5	0.00	0.00	0.00	
10,600.0	90.00	269.46	7,088.0	-553.0	-3,268.4	3,311.8	0.00	0.00	0.00	
10,700.0	90.00	269.46	7,088.0	-553.9	-3,368.4	3,411.1	0.00	0.00	0.00	
10,800.0	90.00	269.46	7,088.0	-554.9	-3,468.4	3,510.5	0.00	0.00	0.00	
10,900.0	90.00	269.46	7,088.0	-555.8	-3,568.4	3,609.8	0.00	0.00	0.00	
11,000.0	90.00	269.46	7,088.0	-556.8	-3,668.4	3,709.1	0.00	0.00	0.00	
11,100.0	90.00	269.46	7,088.0	-557.7	-3,768.4	3,808.5	0.00	0.00	0.00	
11,200.0	90.00	269.46	7,088.0	-558.7	-3,868.3	3,907.8	0.00	0.00	0.00	
11,300.0	90.00	269.46	7,088.0	-559.6	-3,968.3	4,007.1	0.00	0.00	0.00	
11,400.0	90.00	269.46	7,088.0	-560.6	-4,068.3	4,106.5	0.00	0.00	0.00	
11,500.0	90.00	269.46	7,088.0	-561.5	-4,168.3	4,205.8	0.00	0.00	0.00	
11,600.0	90.00	269.46	7,088.0	-562.4	-4,268.3	4,305.1	0.00	0.00	0.00	
11,700.0	90.00	269.46	7,088.0	-563.4	-4,368.3	4,404.5	0.00	0.00	0.00	
11,800.0	90.00	269.46	7,088.0	-564.3	-4,468.3	4,503.8	0.00	0.00	0.00	
11,833.8	90.00	269.46	7,088.0	-564.7	-4,502.1	4,537.4	0.00	0.00	0.00	
TD at 11833.8 - BHL 1125'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		
- hit/miss target										
- Shape										
SHL 640'FNL, 310'FEL	0.00	0.00	1.0	0.0	0.0	1,338,121.55	3,134,292.57	40.260543 -105.018806		
- plan hits target center										
- Point										
BHL 1125'FNL, 460'FWL	0.00	0.00	7,088.0	-564.7	-4,502.1	1,337,532.50	3,129,793.78	40.258991 -105.034937		
- plan hits target center										
- Point										
LP 1125'FNL, 513'FEL	0.00	0.00	7,196.0	-487.6	-204.0	1,337,632.89	3,134,091.22	40.259204 -105.019537		
- plan hits target center										
- Point										

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

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,400.0	1,400.0	0.0	0.0	Start Build 1.50
6,725.0	6,683.8	-474.0	309.0	Start Build 11.16
7,203.2	7,095.8	-479.5	101.9	Enter Nio A Chalk
7,532.1	7,196.0	-487.6	-204.0	Build to 93 inc
9,749.5	7,088.0	-491.2	-341.5	Start 2084.3 hold at 9749.5 MD
11,833.8	7,088.0	-491.5	-353.9	TD at 11833.8



Directional

Captiva Energy Partners

SEC.5-T3N-R68W

Stillroven Farm Pad Sec.5-T3N-R68W

Stillroven Farm 6

Wellbore #1

Plan #2 (6-5-17)

Anticollision Report

05 June, 2017



Directional

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

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

Survey Tool Program	Date 6/5/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,833.8	Plan #2 (6-5-17) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Stillroven Farm Pad Sec.5-T3N-R68W						
Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	999.0	75.0	70.7	17.572	CC, ES
Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)	1,300.0	1,294.4	83.4	77.8	14.905	SF
Stillroven Farm 10 - Wellbore #1 - Plan #2 (6-5-17)	600.0	600.0	59.9	57.4	24.225	CC, ES
Stillroven Farm 10 - Wellbore #1 - Plan #2 (6-5-17)	900.0	894.9	71.2	67.4	19.146	SF
Stillroven Farm 11 - Wellbore #1 - Plan #2 (6-5-17)	400.0	400.0	74.9	73.4	47.626	CC, ES
Stillroven Farm 11 - Wellbore #1 - Plan #2 (6-5-17)	3,700.0	3,640.7	490.8	472.7	27.122	SF
Stillroven Farm 12 - Wellbore #1 - Plan #2 (6-5-17)	200.0	200.0	90.0	89.3	133.441	CC, ES
Stillroven Farm 12 - Wellbore #1 - Plan #2 (6-5-17)	2,800.0	2,726.1	489.9	476.7	37.110	SF
Stillroven Farm 2 - Wellbore #1 - Plan #2 (6-5-17)	1,200.0	1,199.0	60.1	54.9	11.624	CC, ES
Stillroven Farm 2 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,397.0	63.2	57.1	10.446	SF
Stillroven Farm 3 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,399.0	45.0	39.0	7.422	CC, ES
Stillroven Farm 3 - Wellbore #1 - Plan #2 (6-5-17)	1,500.0	1,498.5	46.6	40.1	7.191	SF
Stillroven Farm 4 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,399.0	30.0	24.0	4.949	CC, ES
Stillroven Farm 4 - Wellbore #1 - Plan #2 (6-5-17)	11,833.8	11,854.0	491.7	241.4	1.964	SF
Stillroven Farm 5 - Wellbore #1 - Plan #2 (6-5-17)	1,400.0	1,400.0	15.0	8.9	2.473	CC, ES
Stillroven Farm 5 - Wellbore #1 - Plan #2 (6-5-17)	11,833.8	11,935.2	237.7	118.0	1.985	SF
Stillroven Farm 7 - Wellbore #1 - Plan #2 (6-5-17)	1,200.0	1,200.0	14.9	9.7	2.882	CC, ES
Stillroven Farm 7 - Wellbore #1 - Plan #2 (6-5-17)	1,300.0	1,299.6	16.1	10.5	2.872	SF
Stillroven Farm 8 - Wellbore #1 - Plan #2 (6-5-17)	1,000.0	1,000.0	30.1	25.8	7.038	CC, ES
Stillroven Farm 8 - Wellbore #1 - Plan #2 (6-5-17)	11,833.8	11,904.5	325.2	92.4	1.397	Level 3, SF
Stillroven Farm 9 - Wellbore #1 - Plan #2(6-5-17)	800.0	800.0	44.9	41.5	13.312	CC, ES
Stillroven Farm 9 - Wellbore #1 - Plan #2(6-5-17)	1,000.0	997.6	49.9	45.7	11.894	SF

Offset Design												
Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 1 - Wellbore #1 - Plan #2 (6-5-17)												
Survey Program: 0-MWD												
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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	0.19	75.0	0.3	75.0			
100.0	100.0	99.0	99.0	0.1	0.1	0.19	75.0	0.3	75.0	74.8	0.22	335.364
200.0	200.0	199.0	199.0	0.3	0.3	0.19	75.0	0.3	75.0	74.3	0.67	111.602
300.0	300.0	299.0	299.0	0.6	0.6	0.19	75.0	0.3	75.0	73.9	1.12	66.872
400.0	400.0	399.0	399.0	0.8	0.8	0.19	75.0	0.3	75.0	73.4	1.57	47.738
500.0	500.0	499.0	499.0	1.0	1.0	0.19	75.0	0.3	75.0	73.0	2.02	37.118

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
600.0	600.0	599.0	599.0	1.2	1.2	0.19	75.0	0.3	75.0	72.5	2.47	30.363		
700.0	700.0	699.0	699.0	1.5	1.5	0.19	75.0	0.3	75.0	72.1	2.92	25.688		
800.0	800.0	799.0	799.0	1.7	1.7	0.19	75.0	0.3	75.0	71.6	3.37	22.261		
900.0	900.0	899.0	899.0	1.9	1.9	0.19	75.0	0.3	75.0	71.2	3.82	19.640		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.19	75.0	0.3	75.0	70.7	4.27	17.572 CC, ES		
1,100.0	1,100.0	1,097.7	1,097.6	2.4	2.4	0.87	75.9	1.2	75.9	71.2	4.71	16.108		
1,200.0	1,200.0	1,196.2	1,196.1	2.6	2.6	2.85	78.5	3.9	78.6	73.5	5.15	15.260		
1,300.0	1,300.0	1,294.4	1,294.1	2.8	2.8	5.84	82.8	8.5	83.4	77.8	5.59	14.905 SF		
1,400.0	1,400.0	1,392.3	1,391.6	3.0	3.0	9.48	88.9	14.8	90.4	84.4	6.04	14.971		
1,500.0	1,500.0	1,489.6	1,488.2	3.2	3.3	-133.94	96.6	23.0	100.8	94.3	6.48	15.559		
1,600.0	1,599.9	1,587.4	1,585.1	3.4	3.5	-131.45	105.8	32.7	115.0	108.1	6.89	16.694		
1,700.0	1,699.7	1,686.0	1,682.8	3.6	3.8	-130.24	115.3	42.7	131.3	124.0	7.31	17.964		
1,800.0	1,799.3	1,784.4	1,780.2	3.8	4.1	-130.03	124.8	52.7	149.3	141.6	7.74	19.287		
1,900.0	1,898.6	1,882.4	1,877.3	4.0	4.4	-130.49	134.3	62.6	168.9	160.8	8.19	20.640		
1,981.1	1,978.9	1,961.6	1,955.7	4.2	4.6	-131.19	141.9	70.6	186.1	177.6	8.56	21.754		
2,000.0	1,997.5	1,980.0	1,973.9	4.3	4.7	-131.43	143.7	72.5	190.3	181.6	8.65	22.007		
2,100.0	2,096.4	2,077.5	2,070.5	4.5	5.0	-132.51	153.1	82.4	212.2	203.1	9.13	23.245		
2,200.0	2,195.2	2,175.0	2,167.0	4.8	5.3	-133.39	162.5	92.3	234.3	224.6	9.63	24.334		
2,300.0	2,294.1	2,272.5	2,263.5	5.1	5.6	-134.13	171.9	102.2	256.3	246.2	10.13	25.297		
2,400.0	2,392.9	2,370.0	2,360.0	5.4	5.9	-134.74	181.3	112.1	278.4	267.8	10.65	26.152		
2,500.0	2,491.8	2,467.5	2,456.6	5.7	6.2	-135.27	190.7	122.0	300.5	289.4	11.17	26.913		
2,600.0	2,590.6	2,565.0	2,553.1	6.0	6.5	-135.72	200.1	131.8	322.7	311.0	11.69	27.594		
2,700.0	2,689.5	2,662.5	2,649.6	6.3	6.8	-136.11	209.5	141.7	344.8	332.6	12.23	28.207		
2,800.0	2,788.3	2,760.0	2,746.2	6.6	7.1	-136.46	218.9	151.6	367.0	354.3	12.76	28.759		
2,900.0	2,887.1	2,857.4	2,842.7	7.0	7.5	-136.77	228.3	161.5	389.2	375.9	13.30	29.259		
3,000.0	2,986.0	2,954.9	2,939.2	7.3	7.8	-137.04	237.7	171.4	411.4	397.6	13.85	29.714		
3,100.0	3,084.8	3,052.4	3,035.7	7.6	8.1	-137.29	247.1	181.3	433.6	419.2	14.39	30.128		
3,200.0	3,183.7	3,149.9	3,132.3	8.0	8.4	-137.51	256.5	191.2	455.8	440.9	14.94	30.507		
3,300.0	3,282.5	3,247.4	3,228.8	8.3	8.8	-137.71	265.8	201.1	478.0	462.5	15.49	30.855		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-179.89	-59.9	-0.1	59.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.89	-59.9	-0.1	59.9	59.7	0.22	266.480		
200.0	200.0	200.0	200.0	0.3	0.3	-179.89	-59.9	-0.1	59.9	59.2	0.67	88.827		
300.0	300.0	300.0	300.0	0.6	0.6	-179.89	-59.9	-0.1	59.9	58.8	1.12	53.296		
400.0	400.0	400.0	400.0	0.8	0.8	-179.89	-59.9	-0.1	59.9	58.3	1.57	38.069		
500.0	500.0	500.0	500.0	1.0	1.0	-179.89	-59.9	-0.1	59.9	57.9	2.02	29.609		
600.0	600.0	600.0	600.0	1.2	1.2	-179.89	-59.9	-0.1	59.9	57.4	2.47	24.225 CC, ES		
700.0	700.0	698.5	698.5	1.5	1.4	179.80	-61.1	0.2	61.1	58.3	2.89	21.141		
800.0	800.0	796.8	796.8	1.7	1.6	178.96	-64.8	1.2	64.9	61.6	3.30	19.678		
900.0	900.0	894.9	894.6	1.9	1.8	177.75	-70.9	2.8	71.2	67.4	3.72	19.146 SF		
1,000.0	1,000.0	992.6	991.9	2.1	2.0	176.38	-79.4	5.0	80.0	75.8	4.15	19.269		
1,100.0	1,100.0	1,089.8	1,088.5	2.4	2.3	175.00	-90.2	7.9	91.3	86.7	4.60	19.862		
1,200.0	1,200.0	1,186.4	1,184.1	2.6	2.5	173.74	-103.3	11.3	105.2	100.1	5.06	20.793		
1,300.0	1,300.0	1,282.2	1,278.6	2.8	2.8	172.61	-118.6	15.4	121.5	116.0	5.53	21.965		
1,400.0	1,400.0	1,377.2	1,371.8	3.0	3.2	171.65	-136.1	20.0	140.4	134.4	6.02	23.307		
1,500.0	1,500.0	1,471.4	1,463.9	3.2	3.5	23.99	-155.6	25.1	160.5	154.2	6.32	25.390		
1,600.0	1,599.9	1,567.0	1,556.8	3.4	3.9	23.63	-177.4	30.9	180.5	173.8	6.73	26.806		
1,700.0	1,699.7	1,665.4	1,652.3	3.6	4.4	23.63	-200.2	36.9	198.5	191.4	7.16	27.742		
1,800.0	1,799.3	1,764.1	1,748.1	3.8	4.9	23.91	-223.2	42.9	214.2	206.6	7.59	28.207		
1,900.0	1,898.6	1,863.2	1,844.3	4.0	5.3	24.42	-246.2	49.0	227.5	219.5	8.05	28.282		
1,981.1	1,978.9	1,943.8	1,922.5	4.2	5.7	24.99	-264.8	53.9	236.6	228.2	8.42	28.097		
2,000.0	1,997.5	1,962.5	1,940.7	4.3	5.8	25.15	-269.2	55.1	238.6	230.1	8.51	28.024		
2,100.0	2,096.4	2,062.0	2,037.2	4.5	6.3	25.96	-292.3	61.2	248.9	239.9	9.00	27.645		
2,200.0	2,195.2	2,161.4	2,133.7	4.8	6.8	26.71	-315.3	67.2	259.2	249.7	9.50	27.276		
2,300.0	2,294.1	2,260.8	2,230.3	5.1	7.3	27.39	-338.4	73.3	269.6	259.6	10.02	26.920		
2,400.0	2,392.9	2,360.2	2,326.8	5.4	7.8	28.03	-361.5	79.4	280.1	269.5	10.54	26.578		
2,500.0	2,491.8	2,459.6	2,423.3	5.7	8.3	28.62	-384.6	85.5	290.5	279.4	11.07	26.250		
2,600.0	2,590.6	2,559.0	2,519.8	6.0	8.8	29.17	-407.6	91.6	301.0	289.4	11.61	25.937		
2,700.0	2,689.5	2,658.4	2,616.3	6.3	9.3	29.68	-430.7	97.7	311.5	299.4	12.15	25.639		
2,800.0	2,788.3	2,757.8	2,712.8	6.6	9.8	30.16	-453.8	103.7	322.0	309.3	12.70	25.354		
2,900.0	2,887.1	2,857.2	2,809.3	7.0	10.3	30.61	-476.8	109.8	332.6	319.3	13.26	25.084		
3,000.0	2,986.0	2,956.6	2,905.8	7.3	10.8	31.03	-499.9	115.9	343.2	329.4	13.82	24.827		
3,100.0	3,084.8	3,056.0	3,002.3	7.6	11.3	31.42	-523.0	122.0	353.8	339.4	14.39	24.583		
3,200.0	3,183.7	3,155.4	3,098.8	8.0	11.8	31.79	-546.0	128.1	364.4	349.4	14.96	24.350		
3,300.0	3,282.5	3,254.9	3,195.3	8.3	12.3	32.15	-569.1	134.2	375.0	359.5	15.54	24.130		
3,400.0	3,381.4	3,354.3	3,291.8	8.7	12.8	32.48	-592.2	140.2	385.6	369.5	16.12	23.920		
3,500.0	3,480.2	3,453.7	3,388.3	9.0	13.3	32.79	-615.2	146.3	396.3	379.6	16.71	23.720		
3,600.0	3,579.1	3,553.1	3,484.8	9.4	13.8	33.09	-638.3	152.4	406.9	389.6	17.29	23.530		
3,700.0	3,677.9	3,652.5	3,581.3	9.7	14.3	33.37	-661.4	158.5	417.6	399.7	17.89	23.349		
3,800.0	3,776.8	3,751.9	3,677.8	10.1	14.8	33.64	-684.5	164.6	428.3	409.8	18.48	23.177		
3,900.0	3,875.6	3,851.3	3,774.3	10.4	15.3	33.90	-707.5	170.7	439.0	419.9	19.08	23.012		
4,000.0	3,974.4	3,950.7	3,870.8	10.8	15.8	34.14	-730.6	176.7	449.7	430.0	19.67	22.855		
4,100.0	4,073.3	4,050.1	3,967.3	11.1	16.3	34.37	-753.7	182.8	460.4	440.1	20.28	22.706		
4,200.0	4,172.1	4,149.5	4,063.8	11.5	16.8	34.59	-776.7	188.9	471.1	450.2	20.88	22.562		
4,300.0	4,271.0	4,248.9	4,160.3	11.9	17.4	34.80	-799.8	195.0	481.8	460.3	21.48	22.426		
4,400.0	4,369.8	4,348.4	4,256.8	12.2	17.9	35.01	-822.9	201.1	492.5	470.4	22.09	22.295		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-179.91	-74.9	-0.1	74.9					
100.0	100.0	100.0	100.0	0.1	0.1	-179.91	-74.9	-0.1	74.9	74.7	0.22	333.383		
200.0	200.0	200.0	200.0	0.3	0.3	-179.91	-74.9	-0.1	74.9	74.3	0.67	111.128		
300.0	300.0	300.0	300.0	0.6	0.6	-179.91	-74.9	-0.1	74.9	73.8	1.12	66.677		
400.0	400.0	400.0	400.0	0.8	0.8	-179.91	-74.9	-0.1	74.9	73.4	1.57	47.626 CC, ES		
500.0	500.0	498.1	498.1	1.0	1.0	179.86	-76.2	0.2	76.2	74.2	1.99	38.218		
600.0	600.0	596.1	596.0	1.2	1.2	179.23	-79.8	1.1	79.9	77.5	2.40	33.244		
700.0	700.0	693.8	693.5	1.5	1.4	178.29	-85.9	2.6	86.2	83.4	2.83	30.438		
800.0	800.0	791.1	790.5	1.7	1.6	177.19	-94.4	4.6	95.0	91.7	3.27	29.002		
900.0	900.0	888.0	886.7	1.9	1.9	176.05	-105.2	7.3	106.3	102.5	3.73	28.473		
1,000.0	1,000.0	984.2	981.9	2.1	2.1	174.95	-118.3	10.4	120.1	115.9	4.20	28.557		
1,100.0	1,100.0	1,079.6	1,076.1	2.4	2.5	173.94	-133.5	14.2	136.4	131.7	4.69	29.066		
1,200.0	1,200.0	1,174.3	1,169.0	2.6	2.8	173.05	-150.9	18.4	155.2	150.0	5.19	29.869		
1,300.0	1,300.0	1,267.9	1,260.5	2.8	3.2	172.27	-170.3	23.1	176.4	170.7	5.71	30.878		
1,400.0	1,400.0	1,361.5	1,351.4	3.0	3.6	171.59	-191.8	28.4	199.9	193.7	6.25	32.012		
1,500.0	1,500.0	1,458.8	1,445.8	3.2	4.1	24.11	-214.9	34.0	223.1	216.7	6.42	34.764		
1,600.0	1,599.9	1,556.6	1,540.6	3.4	4.6	23.88	-238.1	39.6	243.9	237.0	6.84	35.642		
1,700.0	1,699.7	1,654.9	1,635.9	3.6	5.0	23.92	-261.4	45.3	262.4	255.1	7.28	36.024		
1,800.0	1,799.3	1,753.6	1,731.6	3.8	5.5	24.18	-284.8	51.0	278.5	270.8	7.74	36.002		
1,900.0	1,898.6	1,852.6	1,827.6	4.0	6.0	24.62	-308.2	56.7	292.3	284.1	8.20	35.643		
1,981.1	1,978.9	1,933.1	1,905.7	4.2	6.4	25.11	-327.3	61.4	301.7	293.1	8.59	35.141		
2,000.0	1,997.5	1,951.8	1,923.9	4.3	6.5	25.25	-331.7	62.5	303.8	295.1	8.68	35.000		
2,100.0	2,096.4	2,051.2	2,020.2	4.5	7.0	25.96	-355.3	68.2	314.5	305.4	9.18	34.276		
2,200.0	2,195.2	2,150.5	2,116.6	4.8	7.5	26.63	-378.8	73.9	325.3	315.7	9.68	33.595		
2,300.0	2,294.1	2,249.9	2,212.9	5.1	8.0	27.25	-402.4	79.7	336.2	326.0	10.20	32.955		
2,400.0	2,392.9	2,349.2	2,309.3	5.4	8.6	27.83	-425.9	85.4	347.1	336.3	10.73	32.355		
2,500.0	2,491.8	2,448.6	2,405.6	5.7	9.1	28.37	-449.5	91.2	358.0	346.7	11.26	31.791		
2,600.0	2,590.6	2,547.9	2,502.0	6.0	9.6	28.89	-473.0	96.9	368.9	357.1	11.80	31.261		
2,700.0	2,689.5	2,647.3	2,598.3	6.3	10.1	29.37	-496.6	102.6	379.9	367.6	12.35	30.763		
2,800.0	2,788.3	2,746.6	2,694.7	6.6	10.6	29.83	-520.1	108.4	390.9	378.0	12.90	30.295		
2,900.0	2,887.1	2,845.9	2,791.0	7.0	11.1	30.26	-543.7	114.1	402.0	388.5	13.46	29.855		
3,000.0	2,986.0	2,945.3	2,887.3	7.3	11.6	30.67	-567.2	119.8	413.0	399.0	14.03	29.441		
3,100.0	3,084.8	3,044.6	2,983.7	7.6	12.1	31.05	-590.7	125.6	424.1	409.5	14.60	29.051		
3,200.0	3,183.7	3,144.0	3,080.0	8.0	12.7	31.42	-614.3	131.3	435.2	420.0	15.17	28.682		
3,300.0	3,282.5	3,243.3	3,176.4	8.3	13.2	31.77	-637.8	137.1	446.3	430.5	15.75	28.335		
3,400.0	3,381.4	3,342.7	3,272.7	8.7	13.7	32.10	-661.4	142.8	457.4	441.1	16.33	28.006		
3,500.0	3,480.2	3,442.0	3,369.1	9.0	14.2	32.42	-684.9	148.5	468.5	451.6	16.92	27.695		
3,600.0	3,579.1	3,541.4	3,465.4	9.4	14.7	32.72	-708.5	154.3	479.7	462.2	17.51	27.401		
3,700.0	3,677.9	3,640.7	3,561.8	9.7	15.2	33.01	-732.0	160.0	490.8	472.7	18.10	27.122 SF		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-179.93	-90.0	-0.1	90.0					
100.0	100.0	100.0	100.0	0.1	0.1	-179.93	-90.0	-0.1	90.0	89.8	0.22	400.322		
200.0	200.0	200.0	200.0	0.3	0.3	-179.93	-90.0	-0.1	90.0	89.3	0.67	133.441	CC, ES	
300.0	300.0	297.7	297.7	0.6	0.5	179.90	-91.2	0.2	91.2	90.1	1.10	83.210		
400.0	400.0	395.3	395.2	0.8	0.7	179.43	-94.9	0.9	95.0	93.5	1.52	62.491		
500.0	500.0	492.7	492.4	1.0	1.0	178.72	-100.9	2.3	101.2	99.3	1.96	51.607		
600.0	600.0	589.6	589.0	1.2	1.2	177.86	-109.4	4.1	110.0	107.6	2.42	45.478		
700.0	700.0	686.1	684.8	1.5	1.5	176.95	-120.2	6.4	121.3	118.4	2.89	41.962		
800.0	800.0	782.0	779.7	1.7	1.8	176.04	-133.2	9.2	135.1	131.7	3.38	40.006		
900.0	900.0	877.1	873.5	1.9	2.1	175.18	-148.5	12.5	151.3	147.5	3.88	39.040		
1,000.0	1,000.0	971.3	966.1	2.1	2.5	174.40	-165.8	16.3	170.1	165.7	4.39	38.728		
1,100.0	1,100.0	1,064.7	1,057.3	2.4	2.9	173.70	-185.2	20.5	191.2	186.3	4.92	38.863		
1,200.0	1,200.0	1,157.0	1,147.0	2.6	3.3	173.08	-206.5	25.1	214.7	209.2	5.46	39.309		
1,300.0	1,300.0	1,249.5	1,236.3	2.8	3.8	172.54	-230.0	30.1	240.5	234.5	6.02	39.940		
1,400.0	1,400.0	1,345.9	1,329.3	3.0	4.3	172.07	-255.0	35.5	267.0	260.4	6.60	40.458		
1,500.0	1,500.0	1,442.6	1,422.5	3.2	4.8	24.73	-280.1	40.9	292.3	285.8	6.57	44.500		
1,600.0	1,599.9	1,539.9	1,516.3	3.4	5.3	24.55	-305.3	46.4	315.4	308.4	7.01	44.973		
1,700.0	1,699.7	1,637.7	1,610.7	3.6	5.9	24.59	-330.7	51.9	336.1	328.6	7.47	45.002		
1,800.0	1,799.3	1,736.0	1,705.4	3.8	6.4	24.80	-356.2	57.4	354.5	346.5	7.94	44.666		
1,900.0	1,898.6	1,834.7	1,800.5	4.0	7.0	25.17	-381.9	62.9	370.5	362.1	8.42	44.030		
1,981.1	1,978.9	1,914.9	1,877.9	4.2	7.4	25.57	-402.7	67.4	381.9	373.1	8.81	43.326		
2,000.0	1,997.5	1,933.6	1,895.9	4.3	7.5	25.69	-407.5	68.5	384.3	375.4	8.91	43.141		
2,100.0	2,096.4	2,032.7	1,991.4	4.5	8.0	26.30	-433.3	74.0	397.4	388.0	9.42	42.202		
2,200.0	2,195.2	2,131.7	2,086.9	4.8	8.6	26.88	-459.0	79.6	410.5	400.6	9.93	41.323		
2,300.0	2,294.1	2,230.8	2,182.4	5.1	9.1	27.41	-484.7	85.1	423.7	413.2	10.46	40.500		
2,400.0	2,392.9	2,329.8	2,277.9	5.4	9.7	27.92	-510.4	90.7	436.9	425.9	11.00	39.730		
2,500.0	2,491.8	2,428.9	2,373.4	5.7	10.2	28.39	-536.1	96.2	450.1	438.6	11.54	39.010		
2,600.0	2,590.6	2,528.0	2,468.9	6.0	10.8	28.84	-561.8	101.8	463.4	451.3	12.09	38.335		
2,700.0	2,689.5	2,627.0	2,564.4	6.3	11.3	29.26	-587.5	107.4	476.6	464.0	12.64	37.703		
2,800.0	2,788.3	2,726.1	2,659.9	6.6	11.9	29.66	-613.2	112.9	489.9	476.7	13.20	37.110	SF	

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.13	60.1	0.1	60.1					
100.0	100.0	99.0	99.0	0.1	0.1	0.13	60.1	0.1	60.1	59.8	0.22	268.576		
200.0	200.0	199.0	199.0	0.3	0.3	0.13	60.1	0.1	60.1	59.4	0.67	89.376		
300.0	300.0	299.0	299.0	0.6	0.6	0.13	60.1	0.1	60.1	58.9	1.12	53.554		
400.0	400.0	399.0	399.0	0.8	0.8	0.13	60.1	0.1	60.1	58.5	1.57	38.231		
500.0	500.0	499.0	499.0	1.0	1.0	0.13	60.1	0.1	60.1	58.0	2.02	29.726		
600.0	600.0	599.0	599.0	1.2	1.2	0.13	60.1	0.1	60.1	57.6	2.47	24.316		
700.0	700.0	699.0	699.0	1.5	1.5	0.13	60.1	0.1	60.1	57.1	2.92	20.572		
800.0	800.0	799.0	799.0	1.7	1.7	0.13	60.1	0.1	60.1	56.7	3.37	17.828		
900.0	900.0	899.0	899.0	1.9	1.9	0.13	60.1	0.1	60.1	56.2	3.82	15.729		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.13	60.1	0.1	60.1	55.8	4.27	14.072		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	0.13	60.1	0.1	60.1	55.3	4.72	12.732		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.13	60.1	0.1	60.1	54.9	5.17	11.624 CC, ES		
1,300.0	1,300.0	1,298.1	1,298.1	2.8	2.8	1.10	60.8	1.2	60.8	55.2	5.61	10.841		
1,400.0	1,400.0	1,397.0	1,396.9	3.0	3.0	3.89	63.0	4.3	63.2	57.1	6.05	10.446 SF		
1,500.0	1,500.0	1,495.7	1,495.4	3.2	3.2	-139.48	66.7	9.5	68.4	62.0	6.47	10.583		
1,600.0	1,599.9	1,593.9	1,593.2	3.4	3.5	-136.42	71.8	16.7	77.6	70.8	6.87	11.305		
1,700.0	1,699.7	1,692.1	1,690.8	3.6	3.7	-134.15	78.3	25.8	90.6	83.3	7.28	12.434		
1,800.0	1,799.3	1,790.9	1,788.9	3.8	3.9	-133.26	85.0	35.3	105.7	98.0	7.71	13.708		
1,900.0	1,898.6	1,889.5	1,886.8	4.0	4.2	-133.45	91.7	44.7	122.6	114.4	8.15	15.045		
1,981.1	1,978.9	1,969.2	1,965.9	4.2	4.4	-134.11	97.1	52.4	137.6	129.1	8.51	16.163		
2,000.0	1,997.5	1,987.7	1,984.3	4.3	4.5	-134.33	98.4	54.2	141.2	132.6	8.60	16.421		
2,100.0	2,096.4	2,085.8	2,081.7	4.5	4.7	-135.36	105.1	63.6	160.5	151.4	9.07	17.687		
2,200.0	2,195.2	2,183.9	2,179.1	4.8	5.0	-136.16	111.8	73.0	179.8	170.3	9.56	18.808		
2,300.0	2,294.1	2,282.0	2,276.5	5.1	5.3	-136.81	118.5	82.4	199.2	189.1	10.06	19.804		
2,400.0	2,392.9	2,380.1	2,373.9	5.4	5.6	-137.34	125.2	91.9	218.6	208.0	10.56	20.691		
2,500.0	2,491.8	2,478.2	2,471.3	5.7	5.8	-137.79	131.8	101.3	238.0	226.9	11.07	21.486		
2,600.0	2,590.6	2,576.2	2,568.8	6.0	6.1	-138.17	138.5	110.7	257.4	245.8	11.59	22.199		
2,700.0	2,689.5	2,674.3	2,666.2	6.3	6.4	-138.49	145.2	120.1	276.8	264.6	12.12	22.842		
2,800.0	2,788.3	2,772.4	2,763.6	6.6	6.7	-138.78	151.9	129.5	296.2	283.5	12.64	23.424		
2,900.0	2,887.1	2,870.5	2,861.0	7.0	7.0	-139.02	158.6	139.0	315.6	302.4	13.18	23.952		
3,000.0	2,986.0	2,968.6	2,958.4	7.3	7.3	-139.24	165.3	148.4	335.0	321.3	13.71	24.434		
3,100.0	3,084.8	3,066.7	3,055.8	7.6	7.6	-139.44	172.0	157.8	354.5	340.2	14.25	24.874		
3,200.0	3,183.7	3,164.8	3,153.2	8.0	7.9	-139.61	178.6	167.2	373.9	359.1	14.79	25.277		
3,300.0	3,282.5	3,262.8	3,250.6	8.3	8.2	-139.77	185.3	176.6	393.4	378.0	15.34	25.648		
3,400.0	3,381.4	3,360.9	3,348.0	8.7	8.5	-139.92	192.0	186.1	412.8	396.9	15.88	25.990		
3,500.0	3,480.2	3,459.0	3,445.4	9.0	8.8	-140.05	198.7	195.5	432.2	415.8	16.43	26.306		
3,600.0	3,579.1	3,557.1	3,542.8	9.4	9.1	-140.16	205.4	204.9	451.7	434.7	16.98	26.600		
3,700.0	3,677.9	3,655.2	3,640.2	9.7	9.4	-140.27	212.1	214.3	471.1	453.6	17.53	26.872		
3,800.0	3,776.8	3,753.3	3,737.6	10.1	9.7	-140.37	218.8	223.8	490.6	472.5	18.09	27.125		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.07	45.0	0.1	45.0					
100.0	100.0	99.0	99.0	0.1	0.1	0.07	45.0	0.1	45.0	44.8	0.22	201.319		
200.0	200.0	199.0	199.0	0.3	0.3	0.07	45.0	0.1	45.0	44.4	0.67	66.995		
300.0	300.0	299.0	299.0	0.6	0.6	0.07	45.0	0.1	45.0	43.9	1.12	40.143		
400.0	400.0	399.0	399.0	0.8	0.8	0.07	45.0	0.1	45.0	43.5	1.57	28.657		
500.0	500.0	499.0	499.0	1.0	1.0	0.07	45.0	0.1	45.0	43.0	2.02	22.282		
600.0	600.0	599.0	599.0	1.2	1.2	0.07	45.0	0.1	45.0	42.6	2.47	18.227		
700.0	700.0	699.0	699.0	1.5	1.5	0.07	45.0	0.1	45.0	42.1	2.92	15.421		
800.0	800.0	799.0	799.0	1.7	1.7	0.07	45.0	0.1	45.0	41.7	3.37	13.363		
900.0	900.0	899.0	899.0	1.9	1.9	0.07	45.0	0.1	45.0	41.2	3.82	11.790		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.07	45.0	0.1	45.0	40.8	4.27	10.548		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	0.07	45.0	0.1	45.0	40.3	4.72	9.543		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.07	45.0	0.1	45.0	39.9	5.17	8.713		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	0.07	45.0	0.1	45.0	39.4	5.62	8.016		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	0.07	45.0	0.1	45.0	39.0	6.07	7.422 CC, ES		
1,500.0	1,500.0	1,498.5	1,498.5	3.2	3.2	-146.24	45.5	1.2	46.6	40.1	6.48	7.191 SF		
1,600.0	1,599.9	1,597.9	1,597.8	3.4	3.5	-144.65	46.9	4.8	51.4	44.5	6.87	7.481		
1,700.0	1,699.7	1,697.0	1,696.7	3.6	3.7	-142.54	49.3	10.8	59.4	52.1	7.27	8.175		
1,800.0	1,799.3	1,795.5	1,794.8	3.8	3.9	-140.38	52.7	19.0	70.7	63.0	7.68	9.208		
1,900.0	1,898.6	1,893.7	1,892.3	4.0	4.1	-138.44	56.9	29.5	85.3	77.2	8.11	10.515		
1,981.1	1,978.9	1,973.6	1,971.6	4.2	4.3	-137.68	60.6	38.7	98.9	90.4	8.47	11.669		
2,000.0	1,997.5	1,992.2	1,990.1	4.3	4.4	-137.63	61.5	40.8	102.2	93.6	8.56	11.937		
2,100.0	2,096.4	2,090.7	2,087.8	4.5	4.6	-137.44	66.0	52.1	119.7	110.7	9.03	13.250		
2,200.0	2,195.2	2,189.1	2,185.5	4.8	4.9	-137.29	70.6	63.4	137.2	127.7	9.52	14.409		
2,300.0	2,294.1	2,287.6	2,283.2	5.1	5.2	-137.18	75.1	74.7	154.8	144.7	10.03	15.436		
2,400.0	2,392.9	2,386.0	2,380.9	5.4	5.4	-137.09	79.7	85.9	172.3	161.8	10.54	16.348		
2,500.0	2,491.8	2,484.5	2,478.6	5.7	5.7	-137.02	84.2	97.2	189.8	178.8	11.06	17.160		
2,600.0	2,590.6	2,582.9	2,576.3	6.0	6.0	-136.96	88.8	108.5	207.4	195.8	11.59	17.887		
2,700.0	2,689.5	2,681.4	2,674.0	6.3	6.3	-136.90	93.3	119.8	224.9	212.8	12.13	18.539		
2,800.0	2,788.3	2,779.8	2,771.7	6.6	6.6	-136.86	97.8	131.1	242.5	229.8	12.68	19.127		
2,900.0	2,887.1	2,878.3	2,869.4	7.0	6.9	-136.82	102.4	142.3	260.0	246.8	13.23	19.658		
3,000.0	2,986.0	2,976.7	2,967.1	7.3	7.2	-136.79	106.9	153.6	277.5	263.8	13.78	20.140		
3,100.0	3,084.8	3,075.2	3,064.8	7.6	7.5	-136.76	111.5	164.9	295.1	280.7	14.34	20.579		
3,200.0	3,183.7	3,173.6	3,162.5	8.0	7.8	-136.73	116.0	176.2	312.6	297.7	14.90	20.979		
3,300.0	3,282.5	3,272.1	3,260.1	8.3	8.1	-136.71	120.6	187.4	330.2	314.7	15.47	21.346		
3,400.0	3,381.4	3,370.5	3,357.8	8.7	8.4	-136.69	125.1	198.7	347.7	331.7	16.04	21.683		
3,500.0	3,480.2	3,469.0	3,455.5	9.0	8.7	-136.67	129.7	210.0	365.2	348.6	16.61	21.993		
3,600.0	3,579.1	3,567.4	3,553.2	9.4	9.0	-136.65	134.2	221.3	382.8	365.6	17.18	22.280		
3,700.0	3,677.9	3,665.9	3,650.9	9.7	9.3	-136.64	138.8	232.5	400.3	382.6	17.76	22.545		
3,800.0	3,776.8	3,764.3	3,748.6	10.1	9.6	-136.62	143.3	243.8	417.9	399.5	18.33	22.791		
3,900.0	3,875.6	3,862.8	3,846.3	10.4	9.9	-136.61	147.9	255.1	435.4	416.5	18.91	23.020		
4,000.0	3,974.4	3,961.2	3,944.0	10.8	10.2	-136.60	152.4	266.4	452.9	433.4	19.49	23.234		
4,100.0	4,073.3	4,059.7	4,041.7	11.1	10.5	-136.59	157.0	277.7	470.5	450.4	20.08	23.433		
4,200.0	4,172.1	4,158.1	4,139.4	11.5	10.8	-136.58	161.5	288.9	488.0	467.3	20.66	23.620		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	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	134.243		
200.0	200.0	199.0	199.0	0.3	0.3	0.11	30.0	0.1	30.0	29.4	0.67	44.673		
300.0	300.0	299.0	299.0	0.6	0.6	0.11	30.0	0.1	30.0	28.9	1.12	26.768		
400.0	400.0	399.0	399.0	0.8	0.8	0.11	30.0	0.1	30.0	28.5	1.57	19.109		
500.0	500.0	499.0	499.0	1.0	1.0	0.11	30.0	0.1	30.0	28.0	2.02	14.858		
600.0	600.0	599.0	599.0	1.2	1.2	0.11	30.0	0.1	30.0	27.6	2.47	12.154		
700.0	700.0	699.0	699.0	1.5	1.5	0.11	30.0	0.1	30.0	27.1	2.92	10.283		
800.0	800.0	799.0	799.0	1.7	1.7	0.11	30.0	0.1	30.0	26.7	3.37	8.911		
900.0	900.0	899.0	899.0	1.9	1.9	0.11	30.0	0.1	30.0	26.2	3.82	7.862		
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	7.034		
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	6.364		
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	5.810		
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	5.345		
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	4.949 CC, ES		
1,500.0	1,500.0	1,499.0	1,499.0	3.2	3.3	-148.10	30.0	0.1	31.1	24.6	6.49	4.796		
1,600.0	1,599.9	1,598.9	1,598.9	3.4	3.5	-151.52	30.0	0.1	34.5	27.6	6.89	5.011		
1,700.0	1,699.7	1,698.7	1,698.7	3.6	3.7	-155.91	30.0	0.1	40.4	33.1	7.29	5.539		
1,800.0	1,799.3	1,798.3	1,798.3	3.8	3.9	-160.25	30.0	0.1	48.9	41.2	7.70	6.353		
1,900.0	1,898.6	1,898.2	1,898.2	4.0	4.1	-162.90	29.9	1.3	59.6	51.5	8.08	7.371		
1,981.1	1,978.9	1,979.2	1,979.2	4.2	4.3	-163.40	29.5	4.2	69.4	61.0	8.39	8.270		
2,000.0	1,997.5	1,998.1	1,998.0	4.3	4.3	-163.37	29.4	5.2	71.8	63.3	8.47	8.477		
2,100.0	2,096.4	2,098.2	2,097.9	4.5	4.5	-162.25	28.6	11.6	83.8	74.9	8.88	9.434		
2,200.0	2,195.2	2,198.3	2,197.6	4.8	4.8	-159.93	27.6	20.7	94.9	85.5	9.31	10.185		
2,300.0	2,294.1	2,297.8	2,296.5	5.1	5.0	-157.18	26.3	31.4	105.5	95.7	9.77	10.802		
2,400.0	2,392.9	2,397.1	2,395.2	5.4	5.2	-154.92	25.0	42.2	116.4	106.1	10.24	11.363		
2,500.0	2,491.8	2,496.5	2,494.0	5.7	5.5	-153.05	23.7	53.0	127.3	116.6	10.73	11.872		
2,600.0	2,590.6	2,595.8	2,592.7	6.0	5.7	-151.47	22.4	63.8	138.4	127.2	11.23	12.334		
2,700.0	2,689.5	2,695.1	2,691.4	6.3	6.0	-150.13	21.1	74.6	149.6	137.9	11.74	12.751		
2,800.0	2,788.3	2,794.4	2,790.1	6.6	6.2	-148.97	19.8	85.4	160.9	148.6	12.26	13.129		
2,900.0	2,887.1	2,893.7	2,888.8	7.0	6.5	-147.97	18.5	96.2	172.2	159.4	12.78	13.471		
3,000.0	2,986.0	2,993.0	2,987.5	7.3	6.7	-147.09	17.3	107.0	183.6	170.3	13.32	13.782		
3,100.0	3,084.8	3,092.4	3,086.3	7.6	7.0	-146.31	16.0	117.9	195.0	181.1	13.86	14.064		
3,200.0	3,183.7	3,191.7	3,185.0	8.0	7.3	-145.62	14.7	128.7	206.4	192.0	14.41	14.321		
3,300.0	3,282.5	3,291.0	3,283.7	8.3	7.5	-145.00	13.4	139.5	217.9	202.9	14.97	14.556		
3,400.0	3,381.4	3,390.3	3,382.4	8.7	7.8	-144.45	12.1	150.3	229.4	213.8	15.53	14.772		
3,500.0	3,480.2	3,489.6	3,481.1	9.0	8.1	-143.94	10.8	161.1	240.9	224.8	16.09	14.969		
3,600.0	3,579.1	3,588.9	3,579.8	9.4	8.4	-143.49	9.5	171.9	252.4	235.7	16.66	15.150		
3,700.0	3,677.9	3,688.2	3,678.6	9.7	8.7	-143.07	8.2	182.7	263.9	246.7	17.23	15.318		
3,800.0	3,776.8	3,787.6	3,777.3	10.1	8.9	-142.69	6.9	193.5	275.5	257.7	17.80	15.472		
3,900.0	3,875.6	3,886.9	3,876.0	10.4	9.2	-142.33	5.6	204.3	287.0	268.6	18.38	15.615		
4,000.0	3,974.4	3,986.2	3,974.7	10.8	9.5	-142.01	4.4	215.1	298.6	279.6	18.96	15.748		
4,100.0	4,073.3	4,085.5	4,073.4	11.1	9.8	-141.71	3.1	225.9	310.2	290.6	19.54	15.871		
4,200.0	4,172.1	4,184.8	4,172.1	11.5	10.1	-141.43	1.8	236.7	321.7	301.6	20.13	15.986		
4,300.0	4,271.0	4,284.1	4,270.9	11.9	10.4	-141.17	0.5	247.5	333.3	312.6	20.71	16.094		
4,400.0	4,369.8	4,383.5	4,369.6	12.2	10.7	-140.93	-0.8	258.3	344.9	323.6	21.30	16.194		
4,500.0	4,468.7	4,482.8	4,468.3	12.6	10.9	-140.70	-2.1	269.1	356.5	334.6	21.89	16.288		
4,600.0	4,567.5	4,582.1	4,567.0	12.9	11.2	-140.49	-3.4	279.9	368.1	345.7	22.48	16.376		
4,700.0	4,666.4	4,681.4	4,665.7	13.3	11.5	-140.29	-4.7	290.7	379.7	356.7	23.07	16.459		
4,800.0	4,765.2	4,780.6	4,764.5	13.7	11.8	-140.26	-5.8	300.4	391.4	367.7	23.62	16.566		
4,900.0	4,864.0	4,879.7	4,863.4	14.0	12.0	-140.72	-6.6	306.8	403.0	378.9	24.10	16.724		
5,000.0	4,962.9	4,978.5	4,962.1	14.4	12.2	-141.62	-6.9	309.8	414.8	390.3	24.52	16.919		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,061.7	5,077.2	5,060.7	14.7	12.3	-142.84	-7.0	310.1	426.8	401.9	24.91	17.138		
5,205.3	5,165.9	5,181.3	5,164.9	15.1	12.5	-144.09	-7.0	310.1	439.7	414.4	25.32	17.364		
5,300.0	5,259.6	5,275.1	5,258.6	15.4	12.7	-145.16	-7.0	310.1	450.2	424.5	25.71	17.507		
5,400.0	5,359.1	5,374.5	5,358.1	15.6	12.9	-145.98	-7.0	310.1	458.6	432.5	26.09	17.575		
5,500.0	5,458.9	5,474.3	5,457.9	15.8	13.1	-146.50	-7.0	310.1	464.1	437.7	26.46	17.542		
5,600.0	5,558.8	5,574.3	5,557.8	16.0	13.3	-146.75	-7.0	310.1	466.8	440.0	26.81	17.413		
5,641.2	5,600.0	5,615.4	5,599.0	16.1	13.4	0.13	-7.0	310.1	467.0	439.9	27.15	17.205		
5,700.0	5,658.8	5,674.3	5,657.8	16.2	13.5	0.13	-7.0	310.1	467.0	439.7	27.36	17.067		
5,800.0	5,758.8	5,774.3	5,757.8	16.3	13.7	0.13	-7.0	310.1	467.0	439.3	27.73	16.842		
5,900.0	5,858.8	5,874.3	5,857.8	16.5	13.9	0.13	-7.0	310.1	467.0	438.9	28.10	16.622		
6,000.0	5,958.8	5,974.3	5,957.8	16.6	14.1	0.13	-7.0	310.1	467.0	438.6	28.47	16.406		
6,100.0	6,058.8	6,074.3	6,057.8	16.8	14.3	0.13	-7.0	310.1	467.0	438.2	28.84	16.195		
6,200.0	6,158.8	6,174.3	6,157.8	16.9	14.5	0.13	-7.0	310.1	467.0	437.8	29.21	15.988		
6,300.0	6,258.8	6,274.3	6,257.8	17.1	14.7	0.13	-7.0	310.1	467.0	437.4	29.59	15.785		
6,400.0	6,358.8	6,374.3	6,357.8	17.2	14.9	0.13	-7.0	310.1	467.0	437.1	29.96	15.586		
6,500.0	6,458.8	6,474.3	6,457.8	17.4	15.1	0.13	-7.0	310.1	467.0	436.7	30.34	15.391		
6,600.0	6,558.8	6,574.3	6,557.8	17.5	15.3	0.13	-7.0	310.1	467.0	436.3	30.72	15.201		
6,700.0	6,658.8	6,674.3	6,657.8	17.7	15.5	0.13	-7.0	310.1	467.0	435.9	31.11	15.014		
6,725.0	6,683.8	6,699.2	6,682.8	17.7	15.5	0.13	-7.0	310.1	467.0	435.8	31.20	14.968		
6,750.0	6,708.8	6,724.2	6,707.8	17.8	15.6	91.72	-7.0	310.1	467.0	435.9	31.17	14.985		
6,800.0	6,758.6	6,775.1	6,758.7	17.8	15.7	92.19	-7.0	309.1	467.2	435.8	31.35	14.904		
6,850.0	6,807.6	6,827.0	6,810.2	17.9	15.7	92.70	-7.2	303.3	467.4	435.9	31.48	14.848		
6,900.0	6,855.5	6,879.2	6,861.3	17.9	15.8	93.18	-7.4	292.2	467.6	436.0	31.56	14.815		
6,950.0	6,901.7	6,932.0	6,911.3	17.9	15.8	93.64	-7.9	275.9	467.8	436.2	31.60	14.801		
7,000.0	6,945.9	6,985.1	6,959.9	17.9	15.8	94.06	-8.4	254.3	468.0	436.4	31.63	14.798		
7,050.0	6,987.5	7,038.6	7,006.3	17.9	15.9	94.45	-9.2	227.7	468.3	436.6	31.65	14.795		
7,100.0	7,026.3	7,092.5	7,049.9	17.8	15.9	94.79	-10.0	196.2	468.5	436.8	31.70	14.779		
7,150.0	7,061.9	7,146.7	7,090.3	17.8	16.0	95.09	-10.9	160.1	468.7	436.9	31.81	14.733		
7,200.0	7,093.9	7,201.1	7,126.8	17.8	16.1	95.34	-12.0	119.7	468.9	436.9	32.03	14.640		
7,250.0	7,121.9	7,255.8	7,158.9	17.7	16.3	95.54	-13.2	75.5	469.0	436.6	32.39	14.481		
7,300.0	7,145.8	7,310.7	7,186.3	17.7	16.6	95.69	-14.4	28.0	469.2	436.2	32.93	14.247		
7,350.0	7,165.4	7,365.7	7,208.5	17.7	17.0	95.77	-15.8	-22.3	469.2	435.6	33.67	13.936		
7,400.0	7,180.4	7,420.8	7,225.3	17.6	17.5	95.80	-17.1	-74.7	469.3	434.6	34.62	13.554		
7,450.0	7,190.6	7,475.8	7,236.3	17.7	18.1	95.78	-18.6	-128.6	469.2	433.5	35.78	13.115		
7,500.0	7,196.1	7,531.8	7,241.0	18.4	18.8	95.61	-20.0	-184.3	469.1	432.0	37.14	12.632		
7,514.8	7,196.7	7,548.2	7,241.0	18.6	19.0	95.54	-20.5	-200.7	469.1	431.5	37.57	12.486		
7,531.1	7,196.0	7,563.1	7,241.0	18.9	19.2	95.63	-20.8	-214.5	469.1	431.1	38.00	12.344		
7,532.1	7,196.0	7,564.0	7,241.0	18.9	19.2	95.63	-20.8	-215.5	469.1	431.1	38.03	12.335		
7,600.0	7,195.2	7,628.8	7,241.0	20.0	20.3	95.71	-22.1	-280.3	469.7	429.6	40.09	11.715		
7,682.1	7,192.1	7,710.8	7,241.0	21.4	21.7	96.06	-23.6	-362.3	470.7	427.8	42.90	10.972		
7,700.0	7,191.1	7,728.7	7,241.0	21.8	22.0	96.17	-23.9	-380.1	470.9	427.4	43.56	10.812		
7,800.0	7,185.9	7,828.6	7,241.0	23.7	24.0	96.79	-25.7	-480.0	472.4	425.0	47.39	9.968		
7,900.0	7,180.7	7,928.4	7,241.0	25.8	26.1	97.40	-27.5	-579.8	473.9	422.4	51.52	9.198		
8,000.0	7,175.4	8,028.3	7,241.0	28.1	28.3	98.01	-29.3	-679.7	475.4	419.6	55.88	8.509		
8,100.0	7,170.2	8,128.1	7,241.0	30.4	30.6	98.62	-31.1	-779.5	477.1	416.7	60.40	7.898		
8,200.0	7,165.0	8,228.0	7,241.0	32.8	33.0	99.22	-32.9	-879.4	478.7	413.7	65.05	7.359		
8,300.0	7,159.7	8,327.9	7,241.0	35.2	35.5	99.82	-34.6	-979.2	480.4	410.6	69.80	6.883		
8,400.0	7,154.5	8,427.7	7,241.0	37.7	38.0	100.42	-36.4	-1,079.0	482.2	407.6	74.62	6.462		
8,500.0	7,149.3	8,527.6	7,241.0	40.3	40.5	101.01	-38.2	-1,178.9	484.0	404.5	79.50	6.089		
8,600.0	7,144.0	8,627.4	7,241.0	42.9	43.1	101.59	-40.0	-1,278.7	485.9	401.5	84.41	5.757		
8,700.0	7,138.8	8,727.3	7,241.0	45.4	45.7	102.17	-41.8	-1,378.6	487.8	398.5	89.34	5.460		
8,800.0	7,133.6	8,827.2	7,241.0	48.1	48.3	102.75	-43.6	-1,478.4	489.8	395.5	94.29	5.195		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,900.0	7,128.3	8,927.0	7,241.0	50.7	50.9	103.32	-45.4	-1,578.3	491.8	392.6	99.25	4.956		
9,000.0	7,123.1	9,026.9	7,241.0	53.4	53.6	103.89	-47.1	-1,678.1	493.9	389.7	104.21	4.740		
9,100.0	7,117.9	9,126.7	7,241.0	56.0	56.3	104.45	-48.9	-1,778.0	496.0	386.9	109.17	4.544		
9,200.0	7,112.6	9,226.6	7,241.0	58.7	58.9	105.01	-50.7	-1,877.8	498.2	384.1	114.11	4.366		
10,800.0	7,088.0	10,825.9	7,241.0	102.5	102.8	107.94	-79.3	-3,476.9	499.9	303.8	196.09	2.550		
10,900.0	7,088.0	10,925.9	7,241.0	105.3	105.5	107.97	-81.1	-3,576.9	499.1	297.8	201.35	2.479		
11,000.0	7,088.0	11,025.9	7,241.0	108.0	108.3	108.00	-82.9	-3,676.8	498.3	291.7	206.61	2.412		
11,100.0	7,088.0	11,125.9	7,241.0	110.8	111.1	108.03	-84.7	-3,776.8	497.5	285.7	211.86	2.348		
11,200.0	7,088.0	11,225.9	7,241.0	113.6	113.9	108.06	-86.5	-3,876.8	496.7	279.6	217.12	2.288		
11,300.0	7,088.0	11,325.9	7,241.0	116.3	116.6	108.09	-88.3	-3,976.8	495.9	273.5	222.38	2.230		
11,400.0	7,088.0	11,425.9	7,241.0	119.1	119.4	108.12	-90.1	-4,076.8	495.1	267.5	227.64	2.175		
11,500.0	7,088.0	11,525.9	7,241.0	121.9	122.2	108.15	-91.9	-4,176.7	494.3	261.4	232.90	2.122		
11,600.0	7,088.0	11,625.9	7,241.0	124.7	125.0	108.18	-93.6	-4,276.7	493.5	255.4	238.17	2.072		
11,700.0	7,088.0	11,725.9	7,241.0	127.5	127.8	108.21	-95.4	-4,376.7	492.7	249.3	243.43	2.024		
11,800.0	7,088.0	11,825.9	7,241.0	130.2	130.5	108.24	-97.2	-4,476.7	491.9	243.2	248.69	1.978		
11,832.0	7,088.0	11,854.0	7,241.0	131.1	131.3	108.25	-97.7	-4,504.8	491.7	241.4	250.27	1.965		
11,833.8	7,088.0	11,854.0	7,241.0	131.2	131.3	108.25	-97.7	-4,504.8	491.7	241.4	250.32	1.964 SF		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.43	15.0	0.1	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	0.43	15.0	0.1	15.0	14.8	0.22	66.761		
200.0	200.0	200.0	200.0	0.3	0.3	0.43	15.0	0.1	15.0	14.3	0.67	22.254		
300.0	300.0	300.0	300.0	0.6	0.6	0.43	15.0	0.1	15.0	13.9	1.12	13.352		
400.0	400.0	400.0	400.0	0.8	0.8	0.43	15.0	0.1	15.0	13.4	1.57	9.537		
500.0	500.0	500.0	500.0	1.0	1.0	0.43	15.0	0.1	15.0	13.0	2.02	7.418		
600.0	600.0	600.0	600.0	1.2	1.2	0.43	15.0	0.1	15.0	12.5	2.47	6.069		
700.0	700.0	700.0	700.0	1.5	1.5	0.43	15.0	0.1	15.0	12.1	2.92	5.135		
800.0	800.0	800.0	800.0	1.7	1.7	0.43	15.0	0.1	15.0	11.6	3.37	4.451		
900.0	900.0	900.0	900.0	1.9	1.9	0.43	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	0.43	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	0.43	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	0.43	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	0.43	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	0.43	15.0	0.1	15.0	8.9	6.07	2.473 CC, ES		
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.3	-149.04	15.0	0.1	16.1	9.6	6.49	2.482		
1,600.0	1,599.9	1,599.9	1,599.9	3.4	3.5	-154.93	15.0	0.1	19.6	12.7	6.89	2.842		
1,700.0	1,699.7	1,700.3	1,700.3	3.6	3.7	-159.91	14.0	0.9	24.5	17.2	7.27	3.366		
1,800.0	1,799.3	1,800.8	1,800.7	3.8	3.9	-162.81	10.8	3.3	29.5	21.9	7.63	3.872		
1,900.0	1,898.6	1,901.5	1,901.1	4.0	4.1	-164.51	5.6	7.4	34.7	26.7	7.99	4.343		
1,981.1	1,978.9	1,983.2	1,982.5	4.2	4.2	-165.33	-0.2	11.9	38.9	30.6	8.29	4.696		
2,000.0	1,997.5	2,002.2	2,001.5	4.3	4.3	-165.45	-1.7	13.1	39.9	31.5	8.36	4.768		
2,100.0	2,096.4	2,103.2	2,101.8	4.5	4.5	-165.35	-11.2	20.4	43.4	34.6	8.77	4.950		
2,200.0	2,195.2	2,203.3	2,200.9	4.8	4.7	-164.64	-21.7	28.5	45.5	36.3	9.19	4.955		
2,300.0	2,294.1	2,303.3	2,300.0	5.1	4.9	-163.99	-32.2	36.7	47.6	38.0	9.62	4.953		
2,400.0	2,392.9	2,403.2	2,399.1	5.4	5.2	-163.39	-42.8	44.9	49.7	39.7	10.05	4.948		
2,500.0	2,491.8	2,503.2	2,498.2	5.7	5.5	-162.84	-53.3	53.0	51.9	41.4	10.50	4.939		
2,600.0	2,590.6	2,603.2	2,597.3	6.0	5.7	-162.33	-63.8	61.2	54.0	43.0	10.96	4.927		
2,700.0	2,689.5	2,703.2	2,696.4	6.3	6.0	-161.87	-74.4	69.3	56.1	44.7	11.42	4.914		
2,800.0	2,788.3	2,803.1	2,795.4	6.6	6.3	-161.43	-84.9	77.5	58.3	46.4	11.89	4.900		
2,900.0	2,887.1	2,903.1	2,894.5	7.0	6.6	-161.03	-95.5	85.7	60.4	48.0	12.37	4.884		
3,000.0	2,986.0	3,003.1	2,993.6	7.3	6.9	-160.66	-106.0	93.8	62.5	49.7	12.85	4.867		
3,100.0	3,084.8	3,103.1	3,092.7	7.6	7.2	-160.31	-116.5	102.0	64.7	51.3	13.33	4.851		
3,200.0	3,183.7	3,203.0	3,191.8	8.0	7.5	-159.98	-127.1	110.1	66.8	53.0	13.82	4.834		
3,300.0	3,282.5	3,303.0	3,290.9	8.3	7.8	-159.67	-137.6	118.3	69.0	54.6	14.32	4.816		
3,400.0	3,381.4	3,403.0	3,389.9	8.7	8.1	-159.38	-148.1	126.4	71.1	56.3	14.82	4.799		
3,500.0	3,480.2	3,503.0	3,489.0	9.0	8.4	-159.11	-158.7	134.6	73.3	57.9	15.32	4.782		
3,600.0	3,579.1	3,602.9	3,588.1	9.4	8.8	-158.85	-169.2	142.8	75.4	59.6	15.82	4.766		
3,700.0	3,677.9	3,702.9	3,687.2	9.7	9.1	-158.61	-179.7	150.9	77.6	61.2	16.33	4.749		
3,800.0	3,776.8	3,802.9	3,786.3	10.1	9.4	-158.38	-190.3	159.1	79.7	62.9	16.84	4.733		
3,900.0	3,875.6	3,902.9	3,885.4	10.4	9.7	-158.17	-200.8	167.2	81.9	64.5	17.36	4.717		
4,000.0	3,974.4	4,002.9	3,984.5	10.8	10.0	-157.96	-211.3	175.4	84.0	66.2	17.87	4.701		
4,100.0	4,073.3	4,102.8	4,083.5	11.1	10.4	-157.76	-221.9	183.6	86.2	67.8	18.39	4.686		
4,200.0	4,172.1	4,202.8	4,182.6	11.5	10.7	-157.58	-232.4	191.7	88.3	69.4	18.91	4.671		
4,300.0	4,271.0	4,302.8	4,281.7	11.9	11.0	-157.40	-242.9	199.9	90.5	71.1	19.43	4.657		
4,400.0	4,369.8	4,402.8	4,380.8	12.2	11.4	-157.23	-253.5	208.0	92.7	72.7	19.96	4.643		
4,500.0	4,468.7	4,502.7	4,479.9	12.6	11.7	-157.07	-264.0	216.2	94.8	74.3	20.48	4.629		
4,600.0	4,567.5	4,602.7	4,579.0	12.9	12.0	-156.92	-274.6	224.4	97.0	76.0	21.01	4.616		
4,700.0	4,666.4	4,702.7	4,678.0	13.3	12.3	-156.77	-285.1	232.5	99.1	77.6	21.54	4.603		
4,800.0	4,765.2	4,802.7	4,777.1	13.7	12.7	-156.63	-295.6	240.7	101.3	79.2	22.07	4.591		
4,900.0	4,864.0	4,902.6	4,876.2	14.0	13.0	-156.49	-306.2	248.8	103.5	80.9	22.60	4.579		
5,000.0	4,962.9	5,002.6	4,975.3	14.4	13.3	-156.36	-316.7	257.0	105.6	82.5	23.13	4.567		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,061.7	5,102.6	5,074.4	14.7	13.7	-156.24	-327.2	265.2	107.8	84.1	23.66	4.555		
5,205.3	5,165.9	5,207.9	5,178.7	15.1	14.0	-156.11	-338.3	273.7	110.1	85.8	24.22	4.544		
5,300.0	5,259.6	5,302.6	5,272.6	15.4	14.3	-155.68	-348.3	281.5	110.7	85.9	24.76	4.470		
5,400.0	5,359.1	5,402.5	5,371.6	15.6	14.7	-154.45	-358.8	289.6	108.3	82.9	25.35	4.271		
5,500.0	5,458.9	5,500.0	5,468.3	15.8	15.0	-152.45	-368.8	297.3	103.2	77.2	25.98	3.974		
5,600.0	5,558.8	5,597.6	5,565.5	16.0	15.2	-150.23	-376.4	303.2	97.7	71.2	26.56	3.680		
5,641.2	5,600.0	5,637.6	5,605.3	16.1	15.3	-2.37	-378.8	305.1	95.5	66.0	29.46	3.241		
5,700.0	5,658.8	5,694.8	5,662.4	16.2	15.4	-1.18	-381.4	307.1	92.7	63.2	29.54	3.138		
5,800.0	5,758.8	5,792.3	5,759.8	16.3	15.6	-0.04	-383.8	308.9	90.2	60.5	29.75	3.033		
5,856.6	5,815.5	5,847.9	5,815.5	16.4	15.7	0.07	-384.0	309.1	90.0	60.1	29.92	3.008		
5,900.0	5,858.8	5,891.3	5,858.8	16.5	15.7	0.07	-384.0	309.1	90.0	59.9	30.07	2.994		
6,000.0	5,958.8	5,991.3	5,958.8	16.6	15.9	0.07	-384.0	309.1	90.0	59.6	30.39	2.962		
6,100.0	6,058.8	6,091.3	6,058.8	16.8	16.0	0.07	-384.0	309.1	90.0	59.3	30.72	2.930		
6,200.0	6,158.8	6,191.3	6,158.8	16.9	16.2	0.07	-384.0	309.1	90.0	59.0	31.05	2.899		
6,300.0	6,258.8	6,291.3	6,258.8	17.1	16.4	0.07	-384.0	309.1	90.0	58.6	31.38	2.868		
6,400.0	6,358.8	6,391.3	6,358.8	17.2	16.5	0.07	-384.0	309.1	90.0	58.3	31.71	2.838		
6,500.0	6,458.8	6,491.3	6,458.8	17.4	16.7	0.07	-384.0	309.1	90.0	58.0	32.05	2.808		
6,600.0	6,558.8	6,591.3	6,558.8	17.5	16.9	0.07	-384.0	309.1	90.0	57.6	32.39	2.778		
6,700.0	6,658.8	6,691.3	6,658.8	17.7	17.0	0.07	-384.0	309.1	90.0	57.3	32.74	2.749		
6,725.0	6,683.8	6,716.3	6,683.8	17.7	17.1	0.07	-384.0	309.1	90.0	57.2	32.82	2.742		
6,750.0	6,708.8	6,741.3	6,708.8	17.8	17.1	91.97	-384.0	309.1	90.0	58.9	31.14	2.891		
6,800.0	6,758.6	6,791.0	6,758.6	17.8	17.2	95.01	-384.0	309.1	90.3	58.7	31.61	2.857		
6,850.0	6,807.6	6,840.4	6,808.0	17.9	17.3	100.76	-384.0	309.0	91.7	59.4	32.30	2.838		
6,900.0	6,855.5	6,891.5	6,858.9	17.9	17.3	107.17	-384.1	305.3	94.4	61.5	32.87	2.871		
6,950.0	6,901.7	6,943.8	6,910.4	17.9	17.4	113.09	-384.3	296.4	98.2	65.1	33.10	2.965		
7,000.0	6,945.9	6,997.4	6,961.9	17.9	17.4	118.42	-384.7	281.8	102.8	69.9	32.95	3.121		
7,050.0	6,987.5	7,052.2	7,012.8	17.9	17.4	123.11	-385.3	261.4	108.1	75.7	32.40	3.335		
7,100.0	7,026.3	7,108.4	7,062.3	17.8	17.4	127.17	-386.0	235.0	113.6	82.1	31.51	3.606		
7,150.0	7,061.9	7,165.9	7,109.7	17.8	17.4	130.61	-386.8	202.5	119.3	88.9	30.37	3.926		
7,200.0	7,093.9	7,224.7	7,154.1	17.8	17.4	133.49	-387.8	164.0	124.7	95.6	29.09	4.287		
7,250.0	7,121.9	7,284.7	7,194.6	17.7	17.3	135.86	-389.0	119.7	129.8	102.0	27.78	4.672		
7,300.0	7,145.8	7,345.9	7,230.2	17.7	17.3	137.75	-390.3	70.0	134.3	107.7	26.59	5.050		
7,350.0	7,165.4	7,408.1	7,260.1	17.7	17.3	139.21	-391.8	15.5	138.0	112.4	25.67	5.377		
7,400.0	7,180.4	7,471.0	7,283.4	17.6	17.3	140.26	-393.3	-42.9	140.9	115.7	25.16	5.600		
7,450.0	7,190.6	7,534.6	7,299.4	17.7	17.7	140.93	-394.9	-104.3	142.8	117.6	25.18	5.671		
7,500.0	7,196.1	7,598.5	7,307.8	18.4	18.5	141.22	-396.6	-167.6	143.6	117.8	25.80	5.568		
7,531.1	7,196.0	7,637.3	7,308.0	18.9	19.0	141.23	-397.6	-205.3	143.7	117.2	26.48	5.425		
7,532.1	7,196.0	7,638.2	7,308.0	18.9	19.0	141.23	-397.6	-206.3	143.7	117.2	26.50	5.421		
7,600.0	7,195.2	7,705.4	7,308.0	20.0	20.1	141.29	-399.0	-273.5	144.5	116.6	27.95	5.171		
7,682.1	7,192.1	7,787.4	7,308.0	21.4	21.5	141.80	-400.5	-355.5	147.4	117.7	29.72	4.961		
7,700.0	7,191.1	7,805.3	7,308.0	21.8	21.8	141.98	-400.8	-373.4	148.3	118.2	30.07	4.931		
7,800.0	7,185.9	7,905.2	7,308.0	23.7	23.8	142.93	-402.6	-473.2	152.9	120.8	32.13	4.759		
7,900.0	7,180.7	8,005.1	7,308.0	25.8	25.9	143.83	-404.4	-573.1	157.6	123.3	34.32	4.594		
8,000.0	7,175.4	8,104.9	7,308.0	28.1	28.1	144.67	-406.2	-672.9	162.4	125.8	36.57	4.440		
8,100.0	7,170.2	8,204.8	7,308.0	30.4	30.5	145.47	-408.0	-772.8	167.2	128.3	38.87	4.301		
8,200.0	7,165.0	8,304.6	7,308.0	32.8	32.9	146.22	-409.7	-872.6	172.0	130.8	41.19	4.175		
8,300.0	7,159.7	8,404.5	7,308.0	35.2	35.3	146.93	-411.5	-972.5	176.8	133.3	43.52	4.063		
8,400.0	7,154.5	8,504.4	7,308.0	37.7	37.8	147.60	-413.3	-1,072.3	181.7	135.9	45.85	3.964		
8,500.0	7,149.3	8,604.2	7,308.0	40.3	40.3	148.24	-415.1	-1,172.1	186.6	138.5	48.16	3.875		
8,600.0	7,144.0	8,704.1	7,308.0	42.9	42.9	148.84	-416.9	-1,272.0	191.5	141.1	50.46	3.796		
8,700.0	7,138.8	8,803.9	7,308.0	45.4	45.5	149.41	-418.7	-1,371.8	196.5	143.7	52.73	3.726		
8,800.0	7,133.6	8,903.8	7,308.0	48.1	48.1	149.96	-420.5	-1,471.7	201.4	146.4	54.99	3.663		

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

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

Offset Design		Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 5 - 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)		
8,900.0	7,128.3	9,003.7	7,308.0	50.7	50.8	150.48	-422.2	-1,571.5	206.4	149.2	57.23	3.607	
9,000.0	7,123.1	9,103.5	7,308.0	53.4	53.4	150.97	-424.0	-1,671.4	211.4	151.9	59.44	3.556	
9,100.0	7,117.9	9,203.4	7,308.0	56.0	56.1	151.45	-425.8	-1,771.2	216.4	154.8	61.63	3.511	
9,200.0	7,112.6	9,303.2	7,308.0	58.7	58.8	151.90	-427.6	-1,871.0	221.4	157.6	63.80	3.470	
9,300.0	7,107.4	9,403.1	7,308.0	61.4	61.5	152.33	-429.4	-1,970.9	226.4	160.5	65.95	3.433	
9,400.0	7,102.2	9,503.0	7,308.0	64.1	64.2	152.74	-431.2	-2,070.7	231.5	163.4	68.08	3.400	
9,500.0	7,096.9	9,602.8	7,308.0	66.8	66.9	153.13	-433.0	-2,170.6	236.5	166.3	70.19	3.370	
9,591.7	7,092.1	9,694.4	7,308.0	69.3	69.4	153.48	-434.6	-2,262.2	241.2	169.1	72.10	3.345	
9,600.0	7,091.7	9,702.7	7,308.0	69.5	69.6	153.51	-434.7	-2,270.4	241.6	169.3	72.26	3.344	
9,700.0	7,088.4	9,802.6	7,308.0	72.2	72.3	153.84	-436.5	-2,370.3	244.6	170.5	74.17	3.298	
9,749.5	7,088.0	9,852.1	7,308.0	73.6	73.7	153.95	-437.4	-2,419.9	244.9	169.7	75.18	3.257	
9,800.0	7,088.0	9,902.6	7,308.0	75.0	75.0	154.03	-438.3	-2,470.3	244.7	168.3	76.38	3.204	
9,900.0	7,088.0	10,002.6	7,308.0	77.7	77.8	154.21	-440.1	-2,570.3	244.3	165.6	78.75	3.103	
10,000.0	7,088.0	10,102.6	7,308.0	80.4	80.5	154.39	-441.9	-2,670.3	244.0	162.9	81.09	3.009	
10,100.0	7,088.0	10,202.6	7,308.0	83.2	83.3	154.57	-443.7	-2,770.3	243.6	160.2	83.41	2.921	
10,200.0	7,088.0	10,302.6	7,308.0	85.9	86.0	154.75	-445.5	-2,870.2	243.2	157.5	85.71	2.838	
10,300.0	7,088.0	10,402.6	7,308.0	88.7	88.8	154.93	-447.3	-2,970.2	242.9	154.9	87.98	2.761	
10,400.0	7,088.0	10,502.6	7,308.0	91.4	91.5	155.11	-449.1	-3,070.2	242.5	152.3	90.23	2.688	
10,500.0	7,088.0	10,602.6	7,308.0	94.2	94.3	155.29	-450.8	-3,170.2	242.2	149.7	92.46	2.619	
10,600.0	7,088.0	10,702.6	7,308.0	97.0	97.0	155.47	-452.6	-3,270.2	241.8	147.2	94.66	2.555	
10,700.0	7,088.0	10,802.6	7,308.0	99.7	99.8	155.65	-454.4	-3,370.2	241.5	144.6	96.84	2.494	
10,800.0	7,088.0	10,902.6	7,308.0	102.5	102.6	155.84	-456.2	-3,470.1	241.1	142.1	98.99	2.436	
10,900.0	7,088.0	11,002.6	7,308.0	105.3	105.3	156.02	-458.0	-3,570.1	240.8	139.7	101.12	2.381	
11,000.0	7,088.0	11,102.6	7,308.0	108.0	108.1	156.20	-459.8	-3,670.1	240.4	137.2	103.22	2.329	
11,100.0	7,088.0	11,202.6	7,308.0	110.8	110.9	156.39	-461.6	-3,770.1	240.1	134.8	105.30	2.280	
11,200.0	7,088.0	11,302.6	7,308.0	113.6	113.7	156.57	-463.4	-3,870.1	239.8	132.4	107.35	2.234	
11,300.0	7,088.0	11,402.6	7,308.0	116.3	116.4	156.76	-465.1	-3,970.0	239.4	130.1	109.37	2.189	
11,400.0	7,088.0	11,502.5	7,308.0	119.1	119.2	156.94	-466.9	-4,070.0	239.1	127.7	111.37	2.147	
11,500.0	7,088.0	11,602.5	7,308.0	121.9	122.0	157.13	-468.7	-4,170.0	238.8	125.4	113.34	2.107	
11,600.0	7,088.0	11,702.5	7,308.0	124.7	124.8	157.32	-470.5	-4,270.0	238.4	123.2	115.29	2.068	
11,700.0	7,088.0	11,802.5	7,308.0	127.5	127.5	157.51	-472.3	-4,370.0	238.1	120.9	117.21	2.032	
11,800.0	7,088.0	11,902.5	7,308.0	130.2	130.3	157.69	-474.1	-4,469.9	237.8	118.7	119.10	1.997	
11,831.0	7,088.0	11,933.5	7,308.0	131.1	131.2	157.75	-474.6	-4,500.9	237.7	118.0	119.69	1.986	
11,833.8	7,088.0	11,935.2	7,308.0	131.2	131.2	157.75	-474.7	-4,502.6	237.7	118.0	119.73	1.985 SF	

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-179.89	-14.9	0.0	14.9	14.9	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-179.89	-14.9	0.0	14.9	14.7	0.22	66.291		
200.0	200.0	200.0	200.0	0.3	0.3	-179.89	-14.9	0.0	14.9	14.2	0.67	22.097		
300.0	300.0	300.0	300.0	0.6	0.6	-179.89	-14.9	0.0	14.9	13.8	1.12	13.258		
400.0	400.0	400.0	400.0	0.8	0.8	-179.89	-14.9	0.0	14.9	13.3	1.57	9.470		
500.0	500.0	500.0	500.0	1.0	1.0	-179.89	-14.9	0.0	14.9	12.9	2.02	7.366		
600.0	600.0	600.0	600.0	1.2	1.2	-179.89	-14.9	0.0	14.9	12.4	2.47	6.026		
700.0	700.0	700.0	700.0	1.5	1.5	-179.89	-14.9	0.0	14.9	12.0	2.92	5.099		
800.0	800.0	800.0	800.0	1.7	1.7	-179.89	-14.9	0.0	14.9	11.5	3.37	4.419		
900.0	900.0	900.0	900.0	1.9	1.9	-179.89	-14.9	0.0	14.9	11.1	3.82	3.899		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-179.89	-14.9	0.0	14.9	10.6	4.27	3.489		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-179.89	-14.9	0.0	14.9	10.2	4.72	3.157		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-179.89	-14.9	0.0	14.9	9.7	5.17	2.882 CC, ES		
1,300.0	1,300.0	1,299.6	1,299.6	2.8	2.8	177.89	-16.0	0.6	16.1	10.5	5.59	2.872 SF		
1,400.0	1,400.0	1,399.1	1,399.0	3.0	3.0	172.84	-19.5	2.4	19.6	13.6	5.99	3.276		
1,500.0	1,500.0	1,498.5	1,498.2	3.2	3.1	21.75	-25.1	5.5	24.6	18.2	6.38	3.857		
1,600.0	1,599.9	1,597.6	1,596.9	3.4	3.3	19.37	-33.1	9.8	29.7	22.9	6.74	4.403		
1,700.0	1,699.7	1,696.7	1,695.3	3.6	3.6	18.03	-43.3	15.3	34.8	27.7	7.11	4.897		
1,800.0	1,799.3	1,795.6	1,793.2	3.8	3.8	17.33	-55.6	22.1	40.0	32.5	7.50	5.340		
1,900.0	1,898.6	1,895.4	1,891.8	4.0	4.1	17.36	-69.4	29.5	44.2	36.3	7.89	5.600		
1,981.1	1,978.9	1,976.5	1,971.9	4.2	4.3	18.10	-80.7	35.6	45.7	37.5	8.22	5.564		
2,000.0	1,997.5	1,995.4	1,990.5	4.3	4.4	18.35	-83.3	37.0	45.9	37.6	8.30	5.530		
2,100.0	2,096.4	2,095.4	2,089.3	4.5	4.7	19.62	-97.1	44.5	46.8	38.1	8.74	5.357		
2,200.0	2,195.2	2,195.4	2,188.0	4.8	5.0	20.85	-110.9	52.0	47.7	38.6	9.19	5.196		
2,300.0	2,294.1	2,295.4	2,286.8	5.1	5.3	22.02	-124.7	59.5	48.7	39.1	9.65	5.045		
2,400.0	2,392.9	2,395.4	2,385.5	5.4	5.6	23.15	-138.6	67.0	49.7	39.6	10.13	4.904		
2,500.0	2,491.8	2,495.4	2,484.3	5.7	6.0	24.24	-152.4	74.5	50.7	40.1	10.62	4.772		
2,600.0	2,590.6	2,595.4	2,583.0	6.0	6.3	25.29	-166.2	82.0	51.7	40.6	11.12	4.649		
2,700.0	2,689.5	2,695.4	2,681.8	6.3	6.6	26.29	-180.0	89.5	52.7	41.1	11.63	4.534		
2,800.0	2,788.3	2,795.4	2,780.5	6.6	7.0	27.25	-193.9	97.0	53.8	41.6	12.15	4.426		
2,900.0	2,887.1	2,895.3	2,879.2	7.0	7.3	28.18	-207.7	104.5	54.8	42.1	12.68	4.324		
3,000.0	2,986.0	2,995.3	2,978.0	7.3	7.7	29.07	-221.5	112.0	55.9	42.7	13.22	4.229		
3,100.0	3,084.8	3,095.3	3,076.7	7.6	8.0	29.93	-235.3	119.5	57.0	43.2	13.77	4.140		
3,200.0	3,183.7	3,195.3	3,175.5	8.0	8.4	30.76	-249.2	127.0	58.1	43.8	14.32	4.056		
3,300.0	3,282.5	3,295.3	3,274.2	8.3	8.8	31.56	-263.0	134.5	59.2	44.3	14.88	3.977		
3,400.0	3,381.4	3,395.3	3,373.0	8.7	9.1	32.32	-276.8	142.0	60.3	44.9	15.45	3.903		
3,500.0	3,480.2	3,495.3	3,471.7	9.0	9.5	33.06	-290.7	149.5	61.5	45.4	16.03	3.833		
3,600.0	3,579.1	3,595.3	3,570.5	9.4	9.9	33.77	-304.5	157.0	62.6	46.0	16.62	3.767		
3,700.0	3,677.9	3,695.3	3,669.2	9.7	10.2	34.46	-318.3	164.4	63.8	46.5	17.21	3.705		
3,800.0	3,776.8	3,795.3	3,768.0	10.1	10.6	35.12	-332.1	171.9	64.9	47.1	17.80	3.646		
3,900.0	3,875.6	3,895.2	3,866.7	10.4	11.0	35.76	-346.0	179.4	66.1	47.7	18.41	3.590		
4,000.0	3,974.4	3,995.2	3,965.5	10.8	11.3	36.37	-359.8	186.9	67.3	48.2	19.01	3.537		
4,100.0	4,073.3	4,095.2	4,064.2	11.1	11.7	36.97	-373.6	194.4	68.4	48.8	19.63	3.487		
4,200.0	4,172.1	4,195.2	4,162.9	11.5	12.1	37.54	-387.4	201.9	69.6	49.4	20.24	3.440		
4,300.0	4,271.0	4,295.2	4,261.7	11.9	12.4	38.09	-401.3	209.4	70.8	50.0	20.86	3.395		
4,400.0	4,369.8	4,395.2	4,360.4	12.2	12.8	38.63	-415.1	216.9	72.0	50.5	21.49	3.352		
4,500.0	4,468.7	4,495.2	4,459.2	12.6	13.2	39.15	-428.9	224.4	73.2	51.1	22.12	3.311		
4,600.0	4,567.5	4,595.2	4,557.9	12.9	13.5	39.65	-442.7	231.9	74.5	51.7	22.75	3.273		
4,700.0	4,666.4	4,695.2	4,656.7	13.3	13.9	40.14	-456.6	239.4	75.7	52.3	23.39	3.236		
4,800.0	4,765.2	4,795.2	4,755.4	13.7	14.3	40.61	-470.4	246.9	76.9	52.9	24.03	3.201		
4,900.0	4,864.0	4,895.2	4,854.2	14.0	14.7	41.06	-484.2	254.4	78.1	53.5	24.67	3.167		
5,000.0	4,962.9	4,995.1	4,952.9	14.4	15.0	41.50	-498.0	261.9	79.4	54.1	25.32	3.135		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,061.7	5,095.1	5,051.7	14.7	15.4	41.93	-511.9	269.4	80.6	54.7	25.97	3.105		
5,205.3	5,165.9	5,200.5	5,155.7	15.1	15.8	42.37	-526.4	277.3	81.9	55.3	26.65	3.074		
5,300.0	5,259.6	5,295.1	5,249.1	15.4	16.2	42.06	-539.5	284.4	84.3	57.1	27.15	3.104		
5,400.0	5,359.1	5,394.9	5,347.7	15.6	16.5	40.33	-553.3	291.8	89.3	61.9	27.42	3.257		
5,500.0	5,458.9	5,497.3	5,449.1	15.8	16.8	38.02	-565.9	298.7	95.7	68.2	27.52	3.479		
5,600.0	5,558.8	5,600.1	5,551.3	16.0	17.0	35.90	-575.4	303.8	102.0	74.5	27.59	3.699		
5,641.2	5,600.0	5,642.4	5,593.5	16.1	17.1	-178.04	-578.3	305.4	104.6	73.7	30.94	3.381		
5,700.0	5,658.8	5,703.1	5,654.1	16.2	17.2	-179.04	-581.6	307.2	107.8	76.5	31.27	3.445		
5,800.0	5,758.8	5,806.5	5,757.4	16.3	17.4	-179.91	-584.6	308.8	110.6	78.9	31.70	3.490		
5,900.0	5,858.8	5,907.9	5,858.8	16.5	17.6	-179.99	-584.9	309.0	110.9	78.9	32.02	3.463		
6,000.0	5,958.8	6,007.9	5,958.8	16.6	17.7	-179.99	-584.9	309.0	110.9	78.6	32.32	3.431		
6,100.0	6,058.8	6,107.9	6,058.8	16.8	17.8	-179.99	-584.9	309.0	110.9	78.3	32.62	3.400		
6,200.0	6,158.8	6,207.9	6,158.8	16.9	18.0	-179.99	-584.9	309.0	110.9	78.0	32.93	3.368		
6,300.0	6,258.8	6,307.9	6,258.8	17.1	18.1	-179.99	-584.9	309.0	110.9	77.7	33.24	3.337		
6,400.0	6,358.8	6,407.9	6,358.8	17.2	18.3	-179.99	-584.9	309.0	110.9	77.4	33.55	3.306		
6,500.0	6,458.8	6,507.9	6,458.8	17.4	18.4	-179.99	-584.9	309.0	110.9	77.0	33.86	3.275		
6,600.0	6,558.8	6,607.9	6,558.8	17.5	18.5	-179.99	-584.9	309.0	110.9	76.7	34.18	3.244		
6,700.0	6,658.8	6,707.9	6,658.8	17.7	18.7	-179.99	-584.9	309.0	110.9	76.4	34.50	3.214		
6,725.0	6,683.8	6,732.9	6,683.8	17.7	18.7	-179.99	-584.9	309.0	110.9	76.3	34.58	3.207		
6,750.0	6,708.8	6,757.9	6,708.8	17.8	18.8	-88.79	-584.9	309.0	110.9	79.6	31.29	3.544		
6,780.1	6,738.8	6,787.9	6,738.8	17.8	18.8	-90.00	-584.9	309.0	110.9	79.6	31.24	3.548		
6,800.0	6,758.6	6,807.7	6,758.6	17.8	18.8	-91.28	-584.9	309.0	110.9	79.7	31.16	3.559		
6,850.0	6,807.6	6,856.7	6,807.6	17.9	18.9	-96.09	-584.9	309.0	111.5	80.8	30.76	3.626		
6,900.0	6,855.5	6,904.6	6,855.5	17.9	19.0	-102.74	-584.9	309.0	114.0	83.8	30.17	3.778		
6,950.0	6,901.7	6,950.8	6,901.7	17.9	19.1	-110.42	-584.9	309.0	119.9	90.4	29.48	4.066		
7,000.0	6,945.9	6,995.6	6,945.5	17.9	19.1	-118.27	-584.9	309.0	130.6	101.9	28.66	4.556		
7,050.0	6,987.5	7,047.1	6,997.9	17.9	19.2	-126.31	-585.0	305.9	145.4	117.8	27.57	5.273		
7,100.0	7,026.3	7,102.0	7,052.0	17.8	19.2	-133.05	-585.2	297.0	162.5	136.3	26.25	6.193		
7,150.0	7,061.9	7,160.9	7,108.6	17.8	19.3	-138.64	-585.6	281.0	181.0	156.3	24.66	7.339		
7,200.0	7,093.9	7,224.4	7,167.3	17.8	19.3	-143.26	-586.2	256.6	199.8	177.0	22.83	8.752		
7,250.0	7,121.9	7,293.4	7,226.9	17.7	19.3	-147.07	-587.1	222.1	218.3	197.5	20.83	10.477		
7,300.0	7,145.8	7,368.4	7,285.9	17.7	19.2	-150.18	-588.2	175.8	235.6	216.8	18.77	12.548		
7,350.0	7,165.4	7,450.0	7,341.6	17.7	19.2	-152.67	-589.7	116.4	250.9	234.1	16.80	14.935		
7,400.0	7,180.4	7,538.1	7,390.3	17.6	19.1	-154.56	-591.5	43.1	263.5	248.3	15.16	17.377		
7,450.0	7,190.6	7,632.1	7,427.6	17.7	19.1	-155.88	-593.6	-42.9	272.6	258.5	14.16	19.251		
7,500.0	7,196.1	7,730.2	7,449.0	18.4	19.1	-156.60	-596.0	-138.6	277.7	263.6	14.07	19.733		
7,531.1	7,196.0	7,531.1	7,451.9	18.9	19.0	-156.74	-597.4	-195.0	278.6	265.8	12.72	21.892		
7,532.1	7,196.0	7,794.1	7,452.0	18.9	19.6	-156.75	-597.5	-201.3	278.6	264.1	14.57	19.124		
7,534.5	7,196.0	7,796.6	7,452.0	18.9	19.6	-156.75	-597.6	-203.8	278.6	264.0	14.61	19.075		
7,600.0	7,195.2	7,862.8	7,452.0	20.0	20.6	-156.89	-598.9	-269.9	279.2	263.6	15.59	17.908		
7,682.1	7,192.1	7,944.8	7,452.0	21.4	22.0	-157.25	-600.4	-351.9	281.8	264.9	16.86	16.719		
7,700.0	7,191.1	7,962.7	7,452.0	21.8	22.3	-157.36	-600.7	-369.8	282.6	265.5	17.12	16.505		
7,800.0	7,185.9	8,062.6	7,452.0	23.7	24.2	-157.92	-602.5	-469.7	287.1	268.4	18.69	15.359		
7,900.0	7,180.7	8,162.4	7,452.0	25.8	26.3	-158.46	-604.3	-569.5	291.7	271.3	20.37	14.321		
8,000.0	7,175.4	8,262.3	7,452.0	28.1	28.5	-158.99	-606.1	-669.4	296.2	274.1	22.10	13.406		
8,100.0	7,170.2	8,362.1	7,452.0	30.4	30.8	-159.50	-607.8	-769.2	300.8	277.0	23.86	12.608		
8,200.0	7,165.0	8,462.0	7,452.0	32.8	33.2	-159.99	-609.6	-869.0	305.4	279.8	25.63	11.916		
8,300.0	7,159.7	8,561.9	7,452.0	35.2	35.6	-160.48	-611.4	-968.9	310.1	282.7	27.40	11.315		
8,400.0	7,154.5	8,661.7	7,452.0	37.7	38.1	-160.94	-613.2	-1,068.7	314.7	285.5	29.17	10.791		
8,500.0	7,149.3	8,761.6	7,452.0	40.3	40.6	-161.39	-615.0	-1,168.6	319.4	288.5	30.91	10.332		
8,600.0	7,144.0	8,861.4	7,452.0	42.9	43.1	-161.83	-616.8	-1,268.4	324.1	291.4	32.64	9.930		
8,700.0	7,138.8	8,961.3	7,452.0	45.4	45.7	-162.26	-618.6	-1,368.3	328.8	294.5	34.34	9.574		

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

Company:	Captiva Energy Partners	Local Co-ordinate Reference:	Well Stillroven Farm 6
Project:	SEC.5-T3N-R68W	TVD Reference:	WELL @ 5098.0ft (Original Well Elev)
Reference Site:	Stillroven Farm Pad Sec.5-T3N-R68W	MD Reference:	WELL @ 5098.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Stillroven Farm 6	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #2 (6-5-17)	Offset TVD Reference:	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 +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
8,800.0	7,133.6	9,061.2	7,452.0	48.1	48.3	-162.68	-620.4	-1,468.1	333.5	297.5	36.02	9.258		
8,900.0	7,128.3	9,161.0	7,452.0	50.7	50.9	-163.08	-622.1	-1,567.9	338.3	300.6	37.68	8.977		
9,000.0	7,123.1	9,260.9	7,452.0	53.4	53.6	-163.47	-623.9	-1,667.8	343.0	303.7	39.32	8.725		
9,100.0	7,117.9	9,360.7	7,452.0	56.0	56.2	-163.85	-625.7	-1,767.6	347.8	306.9	40.93	8.498		
9,200.0	7,112.6	9,460.6	7,452.0	58.7	58.9	-164.22	-627.5	-1,867.5	352.6	310.1	42.52	8.294		
9,300.0	7,107.4	9,560.4	7,452.0	61.4	61.6	-164.59	-629.3	-1,967.3	357.4	313.3	44.08	8.108		
9,400.0	7,102.2	9,660.3	7,452.0	64.1	64.3	-164.94	-631.1	-2,067.2	362.3	316.6	45.63	7.939		
9,500.0	7,096.9	9,760.2	7,452.0	66.8	67.0	-165.28	-632.9	-2,167.0	367.1	319.9	47.15	7.785		
9,591.7	7,092.1	9,851.8	7,452.0	69.3	69.5	-165.59	-634.5	-2,258.6	371.5	323.0	48.53	7.655		
9,600.0	7,091.7	9,860.0	7,452.0	69.5	69.7	-165.61	-634.6	-2,266.8	371.9	323.3	48.66	7.643		
9,700.0	7,088.4	9,960.0	7,452.0	72.2	72.4	-165.79	-636.4	-2,366.8	375.1	324.6	50.49	7.428		
9,749.5	7,088.0	10,009.5	7,452.0	73.6	73.8	-165.76	-637.3	-2,416.3	375.5	324.0	51.58	7.280		
9,800.0	7,088.0	10,060.0	7,452.0	75.0	75.1	-165.70	-638.2	-2,466.8	375.6	323.0	52.67	7.132		
9,900.0	7,088.0	10,160.0	7,452.0	77.7	77.9	-165.57	-640.0	-2,566.7	375.9	321.0	54.84	6.853		
10,000.0	7,088.0	10,260.0	7,452.0	80.4	80.6	-165.45	-641.8	-2,666.7	376.1	319.0	57.03	6.594		
10,100.0	7,088.0	10,360.0	7,452.0	83.2	83.3	-165.32	-643.6	-2,766.7	376.3	317.0	59.24	6.352		
10,200.0	7,088.0	10,459.9	7,452.0	85.9	86.1	-165.20	-645.4	-2,866.7	376.5	315.0	61.47	6.125		
10,300.0	7,088.0	10,559.9	7,452.0	88.7	88.8	-165.08	-647.2	-2,966.7	376.7	313.0	63.71	5.913		
10,400.0	7,088.0	10,659.9	7,452.0	91.4	91.6	-164.95	-649.0	-3,066.6	376.9	311.0	65.97	5.714		
10,500.0	7,088.0	10,759.9	7,452.0	94.2	94.3	-164.83	-650.7	-3,166.6	377.1	308.9	68.24	5.527		
10,600.0	7,088.0	10,859.9	7,452.0	97.0	97.1	-164.70	-652.5	-3,266.6	377.4	306.8	70.53	5.350		
10,700.0	7,088.0	10,959.9	7,452.0	99.7	99.9	-164.58	-654.3	-3,366.6	377.6	304.7	72.84	5.184		
10,800.0	7,088.0	11,059.9	7,452.0	102.5	102.6	-164.46	-656.1	-3,466.6	377.8	302.6	75.17	5.026		
10,900.0	7,088.0	11,159.9	7,452.0	105.3	105.4	-164.33	-657.9	-3,566.5	378.0	300.5	77.52	4.877		
11,000.0	7,088.0	11,259.9	7,452.0	108.0	108.1	-164.21	-659.7	-3,666.5	378.3	298.4	79.88	4.736		
11,100.0	7,088.0	11,359.9	7,452.0	110.8	110.9	-164.09	-661.5	-3,766.5	378.5	296.2	82.26	4.602		
11,200.0	7,088.0	11,459.9	7,452.0	113.6	113.7	-163.96	-663.3	-3,866.5	378.7	294.1	84.65	4.474		
11,300.0	7,088.0	11,559.9	7,452.0	116.3	116.5	-163.84	-665.1	-3,966.5	379.0	291.9	87.06	4.353		
11,400.0	7,088.0	11,659.9	7,452.0	119.1	119.2	-163.72	-666.9	-4,066.4	379.2	289.7	89.49	4.237		
11,500.0	7,088.0	11,759.9	7,452.0	121.9	122.0	-163.60	-668.6	-4,166.4	379.4	287.5	91.94	4.127		
11,600.0	7,088.0	11,859.9	7,452.0	124.7	124.8	-163.47	-670.4	-4,266.4	379.7	285.3	94.40	4.022		
11,700.0	7,088.0	11,959.9	7,452.0	127.5	127.6	-163.35	-672.2	-4,366.4	379.9	283.0	96.88	3.921		
11,800.0	7,088.0	12,059.9	7,452.0	130.2	130.3	-163.23	-674.0	-4,466.4	380.2	280.8	99.38	3.825		
11,833.8	7,088.0	12,093.7	7,452.0	131.2	131.3	-163.19	-674.6	-4,500.1	380.3	280.0	100.23	3.794		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-30.1	0.0	30.1					
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-30.1	0.0	30.1	29.8	0.22	133.717		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-30.1	0.0	30.1	29.4	0.67	44.572		
300.0	300.0	300.0	300.0	0.6	0.6	-180.00	-30.1	0.0	30.1	28.9	1.12	26.743		
400.0	400.0	400.0	400.0	0.8	0.8	-180.00	-30.1	0.0	30.1	28.5	1.57	19.102		
500.0	500.0	500.0	500.0	1.0	1.0	-180.00	-30.1	0.0	30.1	28.0	2.02	14.857		
600.0	600.0	600.0	600.0	1.2	1.2	-180.00	-30.1	0.0	30.1	27.6	2.47	12.156		
700.0	700.0	700.0	700.0	1.5	1.5	-180.00	-30.1	0.0	30.1	27.1	2.92	10.286		
800.0	800.0	800.0	800.0	1.7	1.7	-180.00	-30.1	0.0	30.1	26.7	3.37	8.914		
900.0	900.0	900.0	900.0	1.9	1.9	-180.00	-30.1	0.0	30.1	26.2	3.82	7.866		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-180.00	-30.1	0.0	30.1	25.8	4.27	7.038 CC, ES		
1,100.0	1,100.0	1,099.3	1,099.2	2.4	2.3	179.08	-31.2	0.5	31.3	26.6	4.69	6.662		
1,200.0	1,200.0	1,198.4	1,198.3	2.6	2.5	176.70	-34.8	2.0	34.9	29.8	5.09	6.851		
1,300.0	1,300.0	1,297.2	1,296.9	2.8	2.7	173.69	-40.7	4.5	41.1	35.6	5.51	7.458		
1,400.0	1,400.0	1,395.7	1,395.0	3.0	2.9	170.74	-48.9	8.0	49.8	43.9	5.93	8.401		
1,500.0	1,500.0	1,493.8	1,492.4	3.2	3.1	21.70	-59.4	12.4	60.0	53.6	6.32	9.493		
1,600.0	1,599.9	1,591.6	1,589.3	3.4	3.4	20.53	-72.2	17.8	70.2	63.5	6.69	10.493		
1,700.0	1,699.7	1,689.2	1,685.4	3.6	3.6	19.98	-87.2	24.1	80.6	73.5	7.08	11.380		
1,800.0	1,799.3	1,788.1	1,782.6	3.8	4.0	19.89	-104.1	31.3	90.4	82.9	7.48	12.079		
1,900.0	1,898.6	1,887.8	1,880.6	4.0	4.3	20.33	-121.3	38.6	97.8	89.9	7.89	12.393		
1,981.1	1,978.9	1,968.8	1,960.1	4.2	4.6	21.03	-135.2	44.5	102.1	93.8	8.24	12.395		
2,000.0	1,997.5	1,987.6	1,978.7	4.3	4.6	21.23	-138.5	45.8	102.9	94.6	8.32	12.365		
2,100.0	2,096.4	2,087.5	2,076.8	4.5	5.0	22.24	-155.7	53.1	107.2	98.4	8.78	12.210		
2,200.0	2,195.2	2,187.4	2,174.9	4.8	5.4	23.17	-172.9	60.4	111.5	102.3	9.25	12.059		
2,300.0	2,294.1	2,287.3	2,273.1	5.1	5.8	24.03	-190.1	67.6	115.9	106.1	9.73	11.911		
2,400.0	2,392.9	2,387.2	2,371.2	5.4	6.1	24.83	-207.3	74.9	120.2	110.0	10.22	11.767		
2,500.0	2,491.8	2,487.1	2,469.3	5.7	6.5	25.57	-224.5	82.2	124.6	113.9	10.72	11.627		
2,600.0	2,590.6	2,587.0	2,567.4	6.0	6.9	26.26	-241.7	89.5	129.1	117.8	11.23	11.493		
2,700.0	2,689.5	2,686.9	2,665.6	6.3	7.3	26.91	-258.9	96.7	133.5	121.7	11.75	11.364		
2,800.0	2,788.3	2,786.8	2,763.7	6.6	7.7	27.51	-276.1	104.0	137.9	125.7	12.27	11.240		
2,900.0	2,887.1	2,886.7	2,861.8	7.0	8.1	28.08	-293.3	111.3	142.4	129.6	12.80	11.122		
3,000.0	2,986.0	2,986.6	2,960.0	7.3	8.5	28.61	-310.5	118.6	146.9	133.5	13.34	11.008		
3,100.0	3,084.8	3,086.4	3,058.1	7.6	9.0	29.11	-327.7	125.8	151.4	137.5	13.89	10.900		
3,200.0	3,183.7	3,186.3	3,156.2	8.0	9.4	29.58	-344.9	133.1	155.9	141.4	14.44	10.797		
3,300.0	3,282.5	3,286.2	3,254.3	8.3	9.8	30.02	-362.1	140.4	160.4	145.4	14.99	10.698		
3,400.0	3,381.4	3,386.1	3,352.5	8.7	10.2	30.44	-379.3	147.6	164.9	149.4	15.55	10.604		
3,500.0	3,480.2	3,486.0	3,450.6	9.0	10.6	30.84	-396.5	154.9	169.4	153.3	16.11	10.514		
3,600.0	3,579.1	3,585.9	3,548.7	9.4	11.0	31.22	-413.7	162.2	174.0	157.3	16.68	10.428		
3,700.0	3,677.9	3,685.8	3,646.9	9.7	11.4	31.58	-430.9	169.5	178.5	161.3	17.25	10.346		
3,800.0	3,776.8	3,785.7	3,745.0	10.1	11.9	31.92	-448.1	176.7	183.1	165.2	17.83	10.268		
3,900.0	3,875.6	3,885.6	3,843.1	10.4	12.3	32.24	-465.3	184.0	187.6	169.2	18.41	10.193		
4,000.0	3,974.4	3,985.5	3,941.2	10.8	12.7	32.55	-482.6	191.3	192.2	173.2	18.99	10.122		
4,100.0	4,073.3	4,085.4	4,039.4	11.1	13.1	32.84	-499.8	198.5	196.7	177.2	19.57	10.054		
4,200.0	4,172.1	4,185.2	4,137.5	11.5	13.5	33.12	-517.0	205.8	201.3	181.2	20.16	9.988		
4,300.0	4,271.0	4,285.1	4,235.6	11.9	13.9	33.39	-534.2	213.1	205.9	185.1	20.74	9.926		
4,400.0	4,369.8	4,385.0	4,333.8	12.2	14.4	33.65	-551.4	220.4	210.5	189.1	21.33	9.866		
4,500.0	4,468.7	4,484.9	4,431.9	12.6	14.8	33.90	-568.6	227.6	215.1	193.1	21.93	9.808		
4,600.0	4,567.5	4,584.8	4,530.0	12.9	15.2	34.13	-585.8	234.9	219.6	197.1	22.52	9.753		
4,700.0	4,666.4	4,684.7	4,628.2	13.3	15.6	34.36	-603.0	242.2	224.2	201.1	23.12	9.700		
4,800.0	4,765.2	4,784.6	4,726.3	13.7	16.0	34.57	-620.2	249.5	228.8	205.1	23.71	9.650		
4,900.0	4,864.0	4,884.5	4,824.4	14.0	16.5	34.78	-637.4	256.7	233.4	209.1	24.31	9.601		
5,000.0	4,962.9	4,984.4	4,922.5	14.4	16.9	34.98	-654.6	264.0	238.0	213.1	24.91	9.554		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,061.7	5,084.3	5,020.7	14.7	17.3	35.17	-671.8	271.3	242.6	217.1	25.52	9.509		
5,205.3	5,165.9	5,189.5	5,124.0	15.1	17.8	35.37	-689.9	278.9	247.5	221.3	26.15	9.463		
5,300.0	5,259.6	5,284.0	5,216.9	15.4	18.2	35.40	-706.2	285.8	253.1	226.5	26.67	9.491		
5,400.0	5,359.1	5,388.2	5,319.3	15.6	18.6	35.05	-723.6	293.2	261.4	234.3	27.10	9.646		
5,500.0	5,458.9	5,497.0	5,426.9	15.8	18.9	34.57	-738.6	299.5	269.5	242.1	27.43	9.824		
5,600.0	5,558.8	5,606.2	5,535.4	16.0	19.1	34.02	-749.8	304.2	277.1	249.4	27.70	10.001		
5,641.2	5,600.0	5,651.2	5,580.3	16.1	19.2	-179.33	-753.3	305.7	280.0	246.7	33.26	8.419		
5,700.0	5,658.8	5,715.8	5,644.7	16.2	19.3	-179.67	-757.2	307.4	283.5	250.0	33.52	8.460		
5,800.0	5,758.8	5,825.8	5,754.7	16.3	19.5	-179.97	-760.7	308.9	286.8	252.9	33.88	8.464		
5,900.0	5,858.8	5,930.0	5,858.8	16.5	19.6	180.00	-761.1	309.0	287.1	252.9	34.18	8.399		
6,000.0	5,958.8	6,030.0	5,958.8	16.6	19.7	180.00	-761.1	309.0	287.1	252.6	34.46	8.330		
6,100.0	6,058.8	6,130.0	6,058.8	16.8	19.9	180.00	-761.1	309.0	287.1	252.3	34.74	8.262		
6,200.0	6,158.8	6,230.0	6,158.8	16.9	20.0	180.00	-761.1	309.0	287.1	252.0	35.03	8.195		
6,300.0	6,258.8	6,330.0	6,258.8	17.1	20.1	180.00	-761.1	309.0	287.1	251.7	35.32	8.127		
6,400.0	6,358.8	6,430.0	6,358.8	17.2	20.2	180.00	-761.1	309.0	287.1	251.4	35.61	8.060		
6,500.0	6,458.8	6,530.0	6,458.8	17.4	20.4	180.00	-761.1	309.0	287.1	251.1	35.91	7.994		
6,600.0	6,558.8	6,630.0	6,558.8	17.5	20.5	180.00	-761.1	309.0	287.1	250.8	36.21	7.927		
6,700.0	6,658.8	6,730.0	6,658.8	17.7	20.6	180.00	-761.1	309.0	287.1	250.5	36.51	7.862		
6,725.0	6,683.8	6,755.0	6,683.8	17.7	20.7	180.00	-761.1	309.0	287.1	250.5	36.59	7.845		
6,750.0	6,708.8	6,780.0	6,708.8	17.8	20.7	-88.61	-761.1	309.0	287.0	255.4	31.62	9.079		
6,800.0	6,758.6	6,829.6	6,758.4	17.8	20.8	-89.44	-761.1	308.3	287.0	255.3	31.65	9.066		
6,830.1	6,788.2	6,859.5	6,788.2	17.8	20.8	-90.00	-761.1	305.9	287.0	255.3	31.64	9.069		
6,850.0	6,807.6	6,879.3	6,807.9	17.9	20.8	-90.37	-761.2	303.3	287.0	255.3	31.63	9.072		
6,900.0	6,855.5	6,929.5	6,857.1	17.9	20.8	-91.30	-761.5	293.4	287.0	255.5	31.57	9.091		
6,950.0	6,901.7	6,980.2	6,905.5	17.9	20.9	-92.22	-761.9	278.5	287.2	255.7	31.49	9.119		
7,000.0	6,945.9	7,031.3	6,952.6	17.9	20.9	-93.11	-762.4	258.8	287.4	256.0	31.40	9.151		
7,050.0	6,987.5	7,082.9	6,998.0	17.9	20.8	-93.96	-763.0	234.1	287.6	256.3	31.33	9.180		
7,100.0	7,026.3	7,135.0	7,040.9	17.8	20.8	-94.78	-763.8	204.7	288.0	256.7	31.31	9.198		
7,150.0	7,061.9	7,187.6	7,081.0	17.8	20.8	-95.54	-764.7	170.8	288.3	257.0	31.35	9.196		
7,200.0	7,093.9	7,240.5	7,117.7	17.8	20.8	-96.25	-765.7	132.7	288.7	257.2	31.50	9.163		
7,250.0	7,121.9	7,293.9	7,150.4	17.7	20.7	-96.88	-766.8	90.6	289.0	257.2	31.79	9.092		
7,300.0	7,145.8	7,347.6	7,178.7	17.7	20.7	-97.45	-768.0	45.0	289.4	257.1	32.25	8.974		
7,350.0	7,165.4	7,401.7	7,202.3	17.7	20.7	-97.93	-769.3	-3.7	289.7	256.8	32.90	8.806		
7,400.0	7,180.4	7,456.0	7,220.6	17.6	20.7	-98.32	-770.7	-54.8	290.0	256.2	33.76	8.591		
7,450.0	7,190.6	7,510.5	7,233.4	17.7	20.7	-98.62	-772.1	-107.7	290.2	255.4	34.81	8.337		
7,500.0	7,196.1	7,566.1	7,240.3	18.4	20.7	-98.77	-773.5	-162.9	290.3	254.3	36.07	8.048		
7,505.7	7,196.4	7,572.4	7,240.6	18.5	20.7	-98.77	-773.7	-169.1	290.3	254.1	36.23	8.013		
7,531.1	7,196.0	7,599.2	7,241.1	18.9	20.8	-98.92	-774.4	-195.9	290.5	253.6	36.90	7.872		
7,532.1	7,196.0	7,600.3	7,241.0	18.9	20.8	-98.92	-774.4	-197.0	290.5	253.5	36.93	7.866		
7,540.7	7,196.0	7,609.4	7,241.0	19.0	20.9	-98.92	-774.6	-205.0	290.4	253.3	37.19	7.811		
7,600.0	7,195.2	7,668.7	7,241.0	20.0	21.3	-99.07	-776.2	-264.4	290.6	251.6	38.96	7.459		
7,682.1	7,192.1	7,750.9	7,241.0	21.4	22.3	-99.67	-778.3	-346.5	291.0	249.4	41.61	6.995		
7,700.0	7,191.1	7,768.8	7,241.0	21.8	22.6	-99.85	-778.8	-364.4	291.2	249.0	42.21	6.898		
7,800.0	7,185.9	7,868.8	7,241.0	23.7	24.4	-100.86	-781.4	-464.3	292.0	246.2	45.82	6.373		
7,900.0	7,180.7	7,968.7	7,241.0	25.8	26.5	-101.87	-783.9	-564.3	292.9	243.2	49.71	5.893		
8,000.0	7,175.4	8,068.7	7,241.0	28.1	28.6	-102.88	-786.4	-664.2	293.9	240.1	53.80	5.462		
8,100.0	7,170.2	8,168.7	7,241.0	30.4	30.9	-103.88	-788.8	-764.2	294.9	236.8	58.05	5.080		
8,200.0	7,165.0	8,268.7	7,241.0	32.8	33.3	-104.88	-791.2	-864.1	295.9	233.6	62.39	4.744		
8,300.0	7,159.7	8,368.6	7,241.0	35.2	35.7	-105.87	-793.6	-964.0	297.1	230.3	66.80	4.447		
8,400.0	7,154.5	8,468.6	7,241.0	37.7	38.2	-106.85	-795.9	-1,064.0	298.2	227.0	71.24	4.186		
8,500.0	7,149.3	8,568.6	7,241.0	40.3	40.7	-107.83	-798.2	-1,163.9	299.4	223.7	75.70	3.955		
8,600.0	7,144.0	8,668.6	7,241.0	42.9	43.2	-108.80	-800.4	-1,263.9	300.7	220.5	80.15	3.751		

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

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,700.0	7,138.8	8,768.5	7,241.0	45.4	45.8	-109.77	-802.6	-1,363.8	302.0	217.4	84.59	3.570		
8,800.0	7,133.6	8,868.5	7,241.0	48.1	48.4	-110.73	-804.8	-1,463.8	303.3	214.3	89.00	3.408		
8,900.0	7,128.3	8,968.5	7,241.0	50.7	51.0	-111.69	-806.9	-1,563.7	304.7	211.4	93.37	3.264		
9,000.0	7,123.1	9,068.5	7,241.0	53.4	53.7	-112.64	-809.0	-1,663.7	306.2	208.5	97.69	3.134		
9,100.0	7,117.9	9,168.4	7,241.0	56.0	56.3	-113.58	-811.0	-1,763.7	307.7	205.7	101.95	3.018		
9,200.0	7,112.6	9,268.4	7,241.0	58.7	59.0	-114.52	-813.0	-1,863.6	309.2	203.1	106.15	2.913		
9,300.0	7,107.4	9,368.4	7,241.0	61.4	61.7	-115.45	-815.0	-1,963.6	310.8	200.5	110.29	2.818		
9,400.0	7,102.2	9,468.3	7,241.0	64.1	64.4	-116.37	-816.9	-2,063.5	312.4	198.1	114.35	2.732		
9,500.0	7,096.9	9,568.3	7,241.0	66.8	67.1	-117.29	-818.8	-2,163.5	314.1	195.8	118.34	2.654		
9,591.7	7,092.1	9,660.0	7,241.0	69.3	69.6	-118.12	-820.5	-2,255.2	315.7	193.8	121.93	2.589		
9,600.0	7,091.7	9,668.3	7,241.0	69.5	69.8	-118.20	-820.6	-2,263.4	315.8	193.6	122.25	2.584		
9,700.0	7,088.4	9,768.3	7,241.0	72.2	72.5	-118.75	-822.4	-2,363.4	317.2	190.7	126.54	2.507		
9,749.5	7,088.0	9,817.9	7,241.0	73.6	73.8	-118.79	-823.3	-2,413.0	317.7	188.8	128.92	2.464		
9,800.0	7,088.0	9,868.4	7,241.0	75.0	75.2	-118.76	-824.2	-2,463.5	318.0	186.6	131.42	2.420		
9,900.0	7,088.0	9,968.5	7,241.0	77.7	78.0	-118.69	-825.9	-2,563.6	318.7	182.3	136.37	2.337		
10,000.0	7,088.0	10,068.7	7,241.0	80.4	80.7	-118.62	-827.6	-2,663.7	319.4	178.0	141.34	2.260		
10,100.0	7,088.0	10,168.8	7,241.0	83.2	83.4	-118.56	-829.3	-2,763.8	320.0	173.7	146.31	2.187		
10,200.0	7,088.0	10,268.9	7,241.0	85.9	86.2	-118.51	-830.9	-2,863.9	320.6	169.3	151.28	2.119		
10,300.0	7,088.0	10,369.0	7,241.0	88.7	88.9	-118.45	-832.5	-2,964.0	321.1	164.9	156.26	2.055		
10,400.0	7,088.0	10,469.1	7,241.0	91.4	91.7	-118.40	-834.0	-3,064.1	321.6	160.4	161.25	1.995		
10,500.0	7,088.0	10,569.2	7,241.0	94.2	94.4	-118.36	-835.5	-3,164.2	322.1	155.9	166.24	1.938		
10,600.0	7,088.0	10,669.3	7,241.0	97.0	97.2	-118.32	-836.9	-3,264.3	322.6	151.3	171.23	1.884		
10,700.0	7,088.0	10,769.4	7,241.0	99.7	100.0	-118.28	-838.4	-3,364.4	323.0	146.8	176.23	1.833		
10,800.0	7,088.0	10,869.5	7,241.0	102.5	102.7	-118.24	-839.7	-3,464.5	323.4	142.1	181.22	1.784		
10,900.0	7,088.0	10,969.6	7,241.0	105.3	105.5	-118.21	-841.1	-3,564.6	323.7	137.5	186.22	1.738		
11,000.0	7,088.0	11,069.8	7,241.0	108.0	108.3	-118.18	-842.4	-3,664.7	324.0	132.8	191.21	1.694		
11,100.0	7,088.0	11,169.9	7,241.0	110.8	111.0	-118.15	-843.6	-3,764.8	324.3	128.1	196.21	1.653		
11,200.0	7,088.0	11,270.0	7,241.0	113.6	113.8	-118.13	-844.8	-3,864.9	324.5	123.3	201.20	1.613		
11,300.0	7,088.0	11,370.1	7,241.0	116.3	116.6	-118.11	-846.0	-3,965.0	324.7	118.5	206.20	1.575		
11,400.0	7,088.0	11,470.2	7,241.0	119.1	119.3	-118.10	-847.1	-4,065.1	324.9	113.7	211.19	1.538		
11,500.0	7,088.0	11,570.3	7,241.0	121.9	122.1	-118.08	-848.2	-4,165.3	325.0	108.8	216.18	1.503		
11,600.0	7,088.0	11,670.4	7,241.0	124.7	124.9	-118.07	-849.3	-4,265.4	325.1	104.0	221.16	1.470 Level 3		
11,700.0	7,088.0	11,770.6	7,241.0	127.5	127.7	-118.07	-850.3	-4,365.5	325.2	99.0	226.14	1.438 Level 3		
11,800.0	7,088.0	11,870.7	7,241.0	130.2	130.5	-118.07	-851.3	-4,465.6	325.2	94.1	231.12	1.407 Level 3		
11,833.8	7,088.0	11,904.5	7,241.0	131.2	131.4	-118.07	-851.6	-4,499.4	325.2	92.4	232.80	1.397 Level 3, SF		

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	179.93	-44.9	0.1	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	179.93	-44.9	0.1	44.9	44.7	0.22	199.684		
200.0	200.0	200.0	200.0	0.3	0.3	179.93	-44.9	0.1	44.9	44.2	0.67	66.561		
300.0	300.0	300.0	300.0	0.6	0.6	179.93	-44.9	0.1	44.9	43.8	1.12	39.937		
400.0	400.0	400.0	400.0	0.8	0.8	179.93	-44.9	0.1	44.9	43.3	1.57	28.526		
500.0	500.0	500.0	500.0	1.0	1.0	179.93	-44.9	0.1	44.9	42.9	2.02	22.187		
600.0	600.0	600.0	600.0	1.2	1.2	179.93	-44.9	0.1	44.9	42.4	2.47	18.153		
700.0	700.0	700.0	700.0	1.5	1.5	179.93	-44.9	0.1	44.9	42.0	2.92	15.360		
800.0	800.0	800.0	800.0	1.7	1.7	179.93	-44.9	0.1	44.9	41.5	3.37	13.312 CC, ES		
900.0	900.0	898.9	898.8	1.9	1.9	179.50	-46.1	0.4	46.1	42.3	3.79	12.167		
1,000.0	1,000.0	997.6	997.5	2.1	2.1	178.34	-49.8	1.4	49.9	45.7	4.19	11.894 SF		
1,100.0	1,100.0	1,096.0	1,095.8	2.4	2.2	176.76	-55.9	3.2	56.2	51.6	4.61	12.190		
1,200.0	1,200.0	1,194.1	1,193.4	2.6	2.5	175.07	-64.4	5.6	65.0	60.0	5.03	12.914		
1,300.0	1,300.0	1,291.7	1,290.3	2.8	2.7	173.48	-75.3	8.6	76.4	70.9	5.47	13.961		
1,400.0	1,400.0	1,388.6	1,386.3	3.0	2.9	172.08	-88.4	12.3	90.4	84.4	5.92	15.250		
1,500.0	1,500.0	1,484.9	1,481.3	3.2	3.2	24.19	-103.8	16.6	105.6	99.3	6.29	16.789		
1,600.0	1,599.9	1,580.9	1,575.5	3.4	3.5	23.79	-121.5	21.6	121.1	114.4	6.68	18.112		
1,700.0	1,699.7	1,676.5	1,668.8	3.6	3.9	23.78	-141.3	27.2	136.6	129.5	7.09	19.268		
1,800.0	1,799.3	1,774.3	1,763.9	3.8	4.3	24.07	-163.3	33.4	151.6	144.1	7.51	20.189		
1,900.0	1,898.6	1,873.4	1,860.3	4.0	4.7	24.69	-185.7	39.7	164.4	156.4	7.94	20.701		
1,981.1	1,978.9	1,954.0	1,938.6	4.2	5.1	25.40	-204.0	44.8	173.0	164.7	8.31	20.831		
2,000.0	1,997.5	1,972.8	1,956.9	4.3	5.2	25.59	-208.2	46.0	174.9	166.5	8.40	20.829		
2,100.0	2,096.4	2,072.3	2,053.6	4.5	5.6	26.56	-230.7	52.3	184.7	175.8	8.88	20.805		
2,200.0	2,195.2	2,171.8	2,150.3	4.8	6.1	27.43	-253.2	58.7	194.5	185.1	9.37	20.758		
2,300.0	2,294.1	2,271.3	2,247.0	5.1	6.6	28.22	-275.8	65.0	204.3	194.5	9.87	20.695		
2,400.0	2,392.9	2,370.7	2,343.6	5.4	7.0	28.93	-298.3	71.3	214.2	203.9	10.39	20.620		
2,500.0	2,491.8	2,470.2	2,440.3	5.7	7.5	29.58	-320.8	77.7	224.2	213.3	10.92	20.536		
2,600.0	2,590.6	2,569.7	2,537.0	6.0	8.0	30.18	-343.3	84.0	234.1	222.7	11.45	20.446		
2,700.0	2,689.5	2,669.2	2,633.7	6.3	8.5	30.72	-365.8	90.3	244.1	232.1	11.99	20.353		
2,800.0	2,788.3	2,768.6	2,730.4	6.6	9.0	31.23	-388.3	96.7	254.1	241.6	12.54	20.257		
2,900.0	2,887.1	2,868.1	2,827.1	7.0	9.4	31.69	-410.8	103.0	264.1	251.0	13.10	20.161		
3,000.0	2,986.0	2,967.6	2,923.8	7.3	9.9	32.13	-433.3	109.3	274.2	260.5	13.66	20.065		
3,100.0	3,084.8	3,067.1	3,020.5	7.6	10.4	32.53	-455.8	115.6	284.2	270.0	14.23	19.970		
3,200.0	3,183.7	3,166.5	3,117.1	8.0	10.9	32.90	-478.4	122.0	294.3	279.5	14.81	19.877		
3,300.0	3,282.5	3,266.0	3,213.8	8.3	11.4	33.25	-500.9	128.3	304.4	289.0	15.38	19.786		
3,400.0	3,381.4	3,365.5	3,310.5	8.7	11.9	33.58	-523.4	134.6	314.4	298.5	15.96	19.697		
3,500.0	3,480.2	3,465.0	3,407.2	9.0	12.4	33.88	-545.9	141.0	324.5	308.0	16.55	19.610		
3,600.0	3,579.1	3,564.4	3,503.9	9.4	12.9	34.17	-568.4	147.3	334.6	317.5	17.14	19.526		
3,700.0	3,677.9	3,663.9	3,600.6	9.7	13.4	34.44	-590.9	153.6	344.8	327.0	17.73	19.445		
3,800.0	3,776.8	3,763.4	3,697.3	10.1	13.9	34.70	-613.4	160.0	354.9	336.5	18.32	19.366		
3,900.0	3,875.6	3,862.9	3,793.9	10.4	14.4	34.94	-635.9	166.3	365.0	346.1	18.92	19.290		
4,000.0	3,974.4	3,962.3	3,890.6	10.8	14.9	35.17	-658.4	172.6	375.1	355.6	19.52	19.216		
4,100.0	4,073.3	4,061.8	3,987.3	11.1	15.4	35.39	-680.9	179.0	385.3	365.1	20.12	19.145		
4,200.0	4,172.1	4,161.3	4,084.0	11.5	15.9	35.59	-703.5	185.3	395.4	374.7	20.73	19.077		
4,300.0	4,271.0	4,260.8	4,180.7	11.9	16.4	35.79	-726.0	191.6	405.6	384.2	21.33	19.010		
4,400.0	4,369.8	4,360.2	4,277.4	12.2	16.9	35.97	-748.5	198.0	415.7	393.8	21.94	18.947		
4,500.0	4,468.7	4,459.7	4,374.1	12.6	17.4	36.15	-771.0	204.3	425.9	403.3	22.55	18.885		
4,600.0	4,567.5	4,559.2	4,470.8	12.9	17.9	36.32	-793.5	210.6	436.0	412.9	23.16	18.825		
4,700.0	4,666.4	4,658.7	4,567.4	13.3	18.4	36.48	-816.0	217.0	446.2	422.4	23.77	18.768		
4,800.0	4,765.2	4,758.1	4,664.1	13.7	18.9	36.63	-838.5	223.3	456.3	432.0	24.39	18.713		
4,900.0	4,864.0	4,857.6	4,760.8	14.0	19.4	36.78	-861.0	229.6	466.5	441.5	25.00	18.659		
5,000.0	4,962.9	4,957.1	4,857.5	14.4	19.9	36.92	-883.5	236.0	476.7	451.1	25.62	18.607		

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

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

Offset Design												Offset Site Error:	0.0 ft
Stillroven Farm Pad Sec.5-T3N-R68W - Stillroven Farm 9 - Wellbore #1 - Plan #2(6-5-17)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.0	5,061.7	5,056.6	4,954.2	14.7	20.4	37.05	-906.1	242.3	486.9	460.6	26.24	18.558	
5,205.3	5,165.9	5,161.3	5,056.0	15.1	20.9	37.19	-929.8	249.0	497.6	470.7	26.89	18.507	

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

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

Offset Depths are relative to Offset Datum

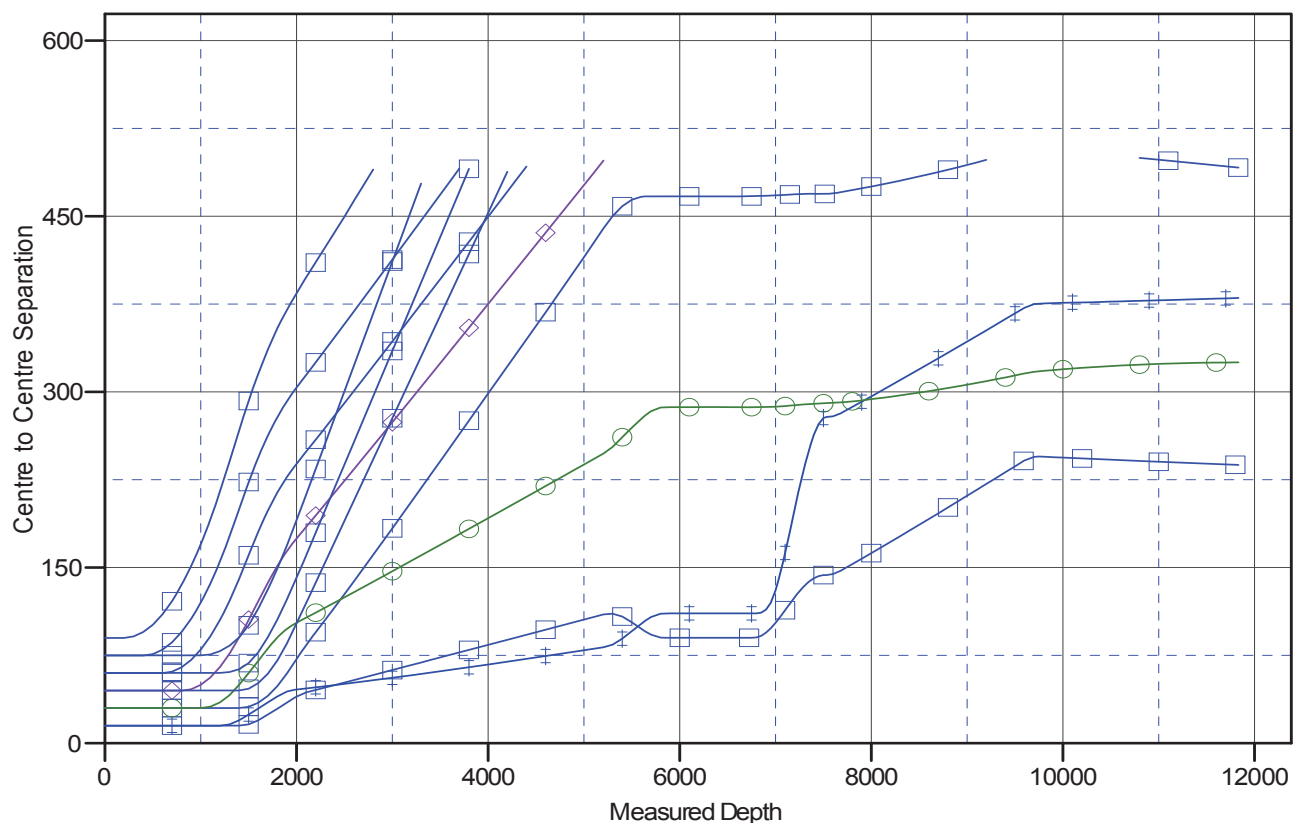
Central Meridian is -105.500000

Coordinates are relative to: Stillroven Farm 6

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

Stillroven Farm9, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm 1, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm3, Wellbore #1, Plan #2(6-5-17)
Stillroven Farm2, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm4, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm11, Wellbore #1, Plan #2(6-5-17)
Stillroven Farm5, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm7, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm10, Wellbore #1, Plan #2(6-5-17)
Stillroven Farm12, Wellbore #1, Plan #2(6-5-17) V0	Stillroven Farm8, Wellbore #1, Plan #2(6-5-17) V0	

Company:	Captiva Energy Partners	Local Co-ordinate Reference:	Well Stillroven Farm 6
Project:	SEC.5-T3N-R68W	TVD Reference:	WELL @ 5098.0ft (Original Well Elev)
Reference Site:	Stillroven Farm Pad Sec.5-T3N-R68W	MD Reference:	WELL @ 5098.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Stillroven Farm 6	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #2 (6-5-17)	Offset TVD Reference:	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 6
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.31°

