

Synergy Resources

Well Name: SRC Union 11HZN

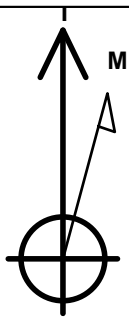
Surface Location: SRC Union Pad Sec.5-T2N-R68W
North American Datum 1983, US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4963.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1305176.79	3129907.75	40.170171	-105.035136	
RKB - 13' WELL @ 4976.0ft (RKB - 13')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINES BHL 460'FEL	-1.0	-949.3	4502.7	Polygon
HARDLINES SHL 460'FWL	-1.0	-949.4	91.5	Polygon
BHL 650'FNL, 460'FEL	7000.0	1058.0	4520.5	Point
Landing Pt. 628'FNL & 510'FWL	7000.0	1049.9	159.9	Point
T1 - SRC Union 11HZN	7000.0	1049.9	309.9	Point



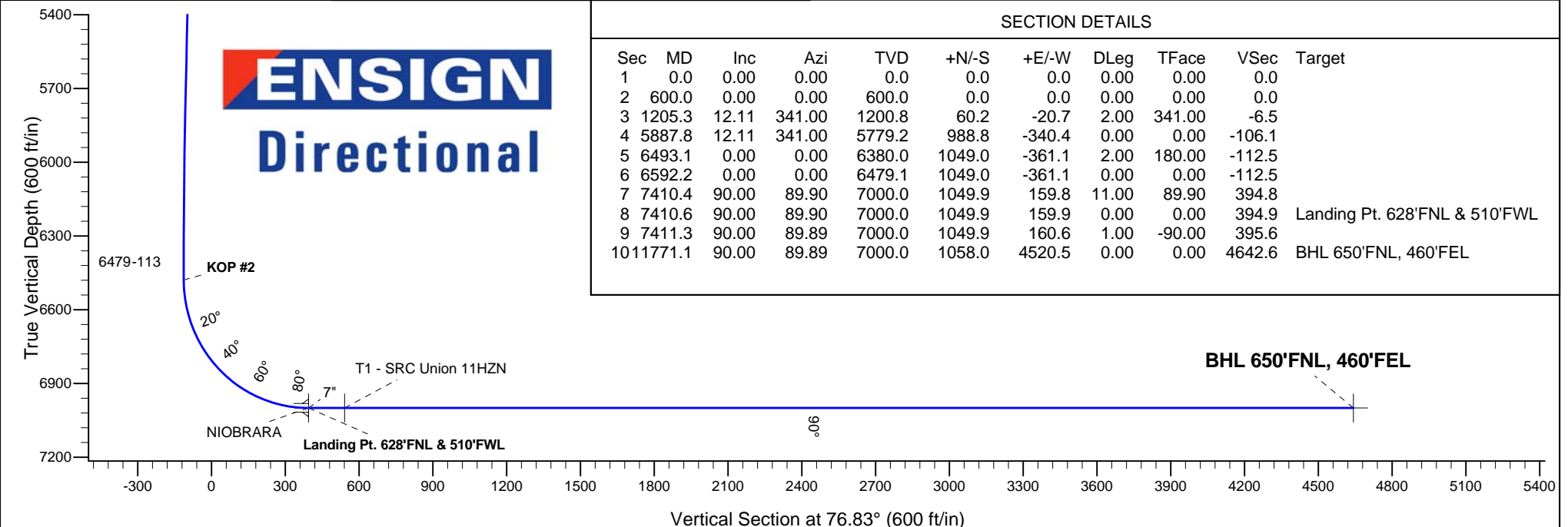
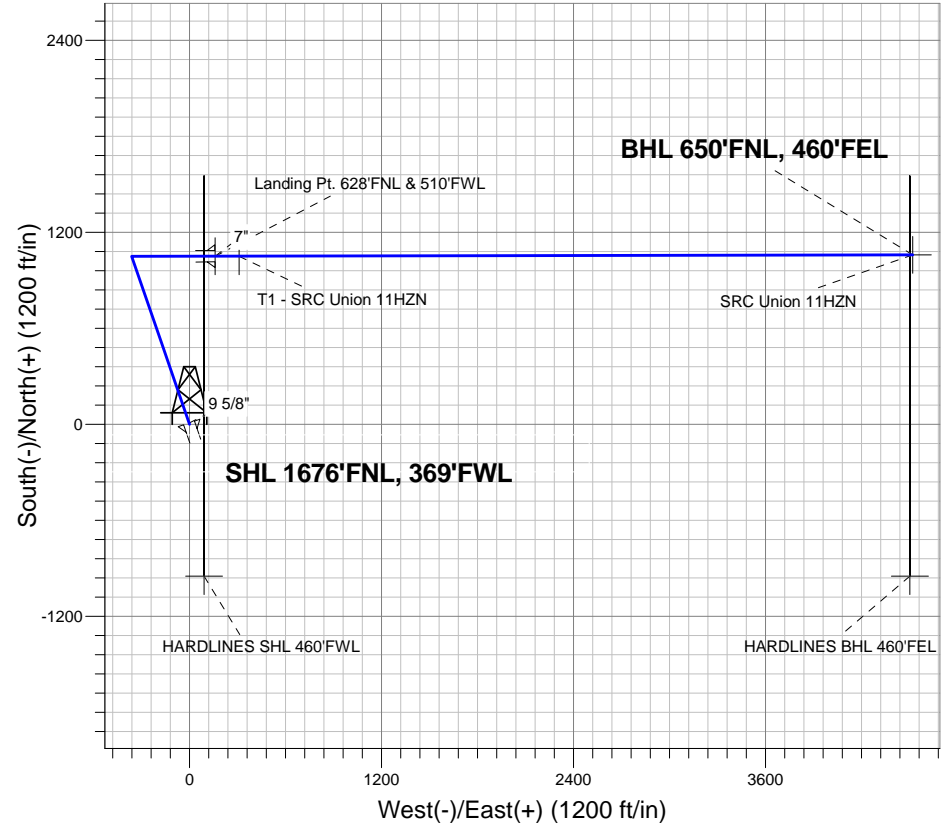
Azimuths to True North
Magnetic North: 8.74°

Magnetic Field
Strength: 52789.3nT
Dip Angle: 66.76°
Date: 4/8/2013
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
600.0	600.0	KOP #1
6479.1	6592.2	KOP #2

SRC Union Pad Sec.5-T2N-R68W
SRC Union 11HZN
Plan #2 (4-08-13)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1205.3	12.11	341.00	1200.8	60.2	-20.7	2.00	341.00	-6.5	
4	5887.8	12.11	341.00	5779.2	988.8	-340.4	0.00	0.00	-106.1	
5	6493.1	0.00	0.00	6380.0	1049.0	-361.1	2.00	180.00	-112.5	
6	6592.2	0.00	0.00	6479.1	1049.0	-361.1	0.00	0.00	-112.5	
7	7410.4	90.00	89.90	7000.0	1049.9	159.8	11.00	89.90	394.8	
8	7410.6	90.00	89.90	7000.0	1049.9	159.9	0.00	0.00	394.9	Landing Pt. 628'FNL & 510'FWL
9	7411.3	90.00	89.89	7000.0	1049.9	160.6	1.00	-90.00	395.6	
10	11771.1	90.00	89.89	7000.0	1058.0	4520.5	0.00	0.00	4642.6	BHL 650'FNL, 460'FEL



Directional

Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union 11HZN

Wellbore #1

Plan: Plan #2 (4-08-13)

Standard Planning Report

08 April, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 11HZN
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Project	SEC.5-T2N-R68W, Weld County, CO		
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						SRC Union Pad Sec.5-T2N-R68W											
Site Position:						Northing:			1,305,169.78 ft			Latitude:			40.170152		
From:			Lat/Long			Easting:			3,129,889.07 ft			Longitude:			-105.035203		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.30 °		

Well	SRC Union 11HZN					
Well Position	+N-S	6.9 ft	Northing:	1,305,176.79 ft	Latitude:	40.170171
	+E-W	18.7 ft	Easting:	3,129,907.75 ft	Longitude:	-105.035136
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,963.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/8/2013	8.74	66.76	52,789

Design	Plan #2 (4-08-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	76.83

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,205.3	12.11	341.00	1,200.8	60.2	-20.7	2.00	2.00	0.00	341.00	
5,887.8	12.11	341.00	5,779.2	988.8	-340.4	0.00	0.00	0.00	0.00	
6,493.1	0.00	0.00	6,380.0	1,049.0	-361.1	2.00	-2.00	0.00	180.00	
6,592.2	0.00	0.00	6,479.1	1,049.0	-361.1	0.00	0.00	0.00	0.00	
7,410.4	90.00	89.90	7,000.0	1,049.9	159.8	11.00	11.00	0.00	89.90	
7,410.6	90.00	89.90	7,000.0	1,049.9	159.9	0.00	0.00	0.00	0.00	Landing Pt. 628'FN
7,411.3	90.00	89.89	7,000.0	1,049.9	160.6	1.00	0.00	-1.00	-90.00	
11,771.1	90.00	89.89	7,000.0	1,058.0	4,520.5	0.00	0.00	0.00	0.00	BHL 650'FNL, 460'f

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Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
HARDLINES BHL 460'FEL - HARDLINES SHL 460'FWL									
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
KOP #1									
640.0	0.80	341.00	640.0	0.3	-0.1	0.0	2.00	2.00	0.00
680.0	1.60	341.00	680.0	1.1	-0.4	-0.1	2.00	2.00	0.00
720.0	2.40	341.00	720.0	2.4	-0.8	-0.3	2.00	2.00	0.00
760.0	3.20	341.00	759.9	4.2	-1.5	-0.5	2.00	2.00	0.00
800.0	4.00	341.00	799.8	6.6	-2.3	-0.7	2.00	2.00	0.00
9 5/8"									
840.0	4.80	341.00	839.7	9.5	-3.3	-1.0	2.00	2.00	0.00
880.0	5.60	341.00	879.6	12.9	-4.5	-1.4	2.00	2.00	0.00
920.0	6.40	341.00	919.3	16.9	-5.8	-1.8	2.00	2.00	0.00
960.0	7.20	341.00	959.1	21.4	-7.4	-2.3	2.00	2.00	0.00
1,000.0	8.00	341.00	998.7	26.4	-9.1	-2.8	2.00	2.00	0.00
1,040.0	8.80	341.00	1,038.3	31.9	-11.0	-3.4	2.00	2.00	0.00
1,080.0	9.60	341.00	1,077.8	37.9	-13.1	-4.1	2.00	2.00	0.00
1,120.0	10.40	341.00	1,117.1	44.5	-15.3	-4.8	2.00	2.00	0.00
1,160.0	11.20	341.00	1,156.4	51.6	-17.8	-5.5	2.00	2.00	0.00
1,200.0	12.00	341.00	1,195.6	59.2	-20.4	-6.4	2.00	2.00	0.00
1,205.3	12.11	341.00	1,200.8	60.2	-20.7	-6.5	2.00	2.00	0.00
1,240.0	12.11	341.00	1,234.7	67.1	-23.1	-7.2	0.00	0.00	0.00
1,280.0	12.11	341.00	1,273.8	75.1	-25.8	-8.1	0.00	0.00	0.00
1,320.0	12.11	341.00	1,313.0	83.0	-28.6	-8.9	0.00	0.00	0.00
1,360.0	12.11	341.00	1,352.1	90.9	-31.3	-9.8	0.00	0.00	0.00
1,400.0	12.11	341.00	1,391.2	98.8	-34.0	-10.6	0.00	0.00	0.00
1,440.0	12.11	341.00	1,430.3	106.8	-36.8	-11.5	0.00	0.00	0.00
1,480.0	12.11	341.00	1,469.4	114.7	-39.5	-12.3	0.00	0.00	0.00
1,520.0	12.11	341.00	1,508.5	122.6	-42.2	-13.2	0.00	0.00	0.00
1,560.0	12.11	341.00	1,547.6	130.6	-44.9	-14.0	0.00	0.00	0.00
1,600.0	12.11	341.00	1,586.7	138.5	-47.7	-14.9	0.00	0.00	0.00
1,640.0	12.11	341.00	1,625.8	146.4	-50.4	-15.7	0.00	0.00	0.00
1,680.0	12.11	341.00	1,665.0	154.4	-53.1	-16.6	0.00	0.00	0.00
1,720.0	12.11	341.00	1,704.1	162.3	-55.9	-17.4	0.00	0.00	0.00
1,760.0	12.11	341.00	1,743.2	170.2	-58.6	-18.3	0.00	0.00	0.00
1,800.0	12.11	341.00	1,782.3	178.2	-61.3	-19.1	0.00	0.00	0.00
1,840.0	12.11	341.00	1,821.4	186.1	-64.1	-20.0	0.00	0.00	0.00
1,880.0	12.11	341.00	1,860.5	194.0	-66.8	-20.8	0.00	0.00	0.00
1,920.0	12.11	341.00	1,899.6	202.0	-69.5	-21.7	0.00	0.00	0.00

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Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,960.0	12.11	341.00	1,938.7	209.9	-72.3	-22.5	0.00	0.00	0.00
2,000.0	12.11	341.00	1,977.8	217.8	-75.0	-23.4	0.00	0.00	0.00
2,040.0	12.11	341.00	2,016.9	225.8	-77.7	-24.2	0.00	0.00	0.00
2,080.0	12.11	341.00	2,056.1	233.7	-80.4	-25.1	0.00	0.00	0.00
2,120.0	12.11	341.00	2,095.2	241.6	-83.2	-25.9	0.00	0.00	0.00
2,160.0	12.11	341.00	2,134.3	249.6	-85.9	-26.8	0.00	0.00	0.00
2,200.0	12.11	341.00	2,173.4	257.5	-88.6	-27.6	0.00	0.00	0.00
2,240.0	12.11	341.00	2,212.5	265.4	-91.4	-28.5	0.00	0.00	0.00
2,280.0	12.11	341.00	2,251.6	273.3	-94.1	-29.3	0.00	0.00	0.00
2,320.0	12.11	341.00	2,290.7	281.3	-96.8	-30.2	0.00	0.00	0.00
2,360.0	12.11	341.00	2,329.8	289.2	-99.6	-31.0	0.00	0.00	0.00
2,400.0	12.11	341.00	2,368.9	297.1	-102.3	-31.9	0.00	0.00	0.00
2,440.0	12.11	341.00	2,408.0	305.1	-105.0	-32.7	0.00	0.00	0.00
2,480.0	12.11	341.00	2,447.2	313.0	-107.7	-33.6	0.00	0.00	0.00
2,520.0	12.11	341.00	2,486.3	320.9	-110.5	-34.4	0.00	0.00	0.00
2,560.0	12.11	341.00	2,525.4	328.9	-113.2	-35.3	0.00	0.00	0.00
2,600.0	12.11	341.00	2,564.5	336.8	-115.9	-36.1	0.00	0.00	0.00
2,640.0	12.11	341.00	2,603.6	344.7	-118.7	-37.0	0.00	0.00	0.00
2,680.0	12.11	341.00	2,642.7	352.7	-121.4	-37.8	0.00	0.00	0.00
2,720.0	12.11	341.00	2,681.8	360.6	-124.1	-38.7	0.00	0.00	0.00
2,760.0	12.11	341.00	2,720.9	368.5	-126.9	-39.5	0.00	0.00	0.00
2,800.0	12.11	341.00	2,760.0	376.5	-129.6	-40.4	0.00	0.00	0.00
2,840.0	12.11	341.00	2,799.2	384.4	-132.3	-41.2	0.00	0.00	0.00
2,880.0	12.11	341.00	2,838.3	392.3	-135.1	-42.1	0.00	0.00	0.00
2,920.0	12.11	341.00	2,877.4	400.3	-137.8	-42.9	0.00	0.00	0.00
2,960.0	12.11	341.00	2,916.5	408.2	-140.5	-43.8	0.00	0.00	0.00
3,000.0	12.11	341.00	2,955.6	416.1	-143.2	-44.6	0.00	0.00	0.00
3,040.0	12.11	341.00	2,994.7	424.1	-146.0	-45.5	0.00	0.00	0.00
3,080.0	12.11	341.00	3,033.8	432.0	-148.7	-46.3	0.00	0.00	0.00
3,120.0	12.11	341.00	3,072.9	439.9	-151.4	-47.2	0.00	0.00	0.00
3,160.0	12.11	341.00	3,112.0	447.8	-154.2	-48.1	0.00	0.00	0.00
3,200.0	12.11	341.00	3,151.1	455.8	-156.9	-48.9	0.00	0.00	0.00
3,240.0	12.11	341.00	3,190.3	463.7	-159.6	-49.8	0.00	0.00	0.00
3,280.0	12.11	341.00	3,229.4	471.6	-162.4	-50.6	0.00	0.00	0.00
3,320.0	12.11	341.00	3,268.5	479.6	-165.1	-51.5	0.00	0.00	0.00
3,360.0	12.11	341.00	3,307.6	487.5	-167.8	-52.3	0.00	0.00	0.00
3,400.0	12.11	341.00	3,346.7	495.4	-170.5	-53.2	0.00	0.00	0.00
3,440.0	12.11	341.00	3,385.8	503.4	-173.3	-54.0	0.00	0.00	0.00
3,480.0	12.11	341.00	3,424.9	511.3	-176.0	-54.9	0.00	0.00	0.00
3,520.0	12.11	341.00	3,464.0	519.2	-178.7	-55.7	0.00	0.00	0.00
3,560.0	12.11	341.00	3,503.1	527.2	-181.5	-56.6	0.00	0.00	0.00
3,600.0	12.11	341.00	3,542.3	535.1	-184.2	-57.4	0.00	0.00	0.00
3,640.0	12.11	341.00	3,581.4	543.0	-186.9	-58.3	0.00	0.00	0.00
3,680.0	12.11	341.00	3,620.5	551.0	-189.7	-59.1	0.00	0.00	0.00
3,720.0	12.11	341.00	3,659.6	558.9	-192.4	-60.0	0.00	0.00	0.00
3,760.0	12.11	341.00	3,698.7	566.8	-195.1	-60.8	0.00	0.00	0.00
3,800.0	12.11	341.00	3,737.8	574.8	-197.8	-61.7	0.00	0.00	0.00
3,840.0	12.11	341.00	3,776.9	582.7	-200.6	-62.5	0.00	0.00	0.00
3,880.0	12.11	341.00	3,816.0	590.6	-203.3	-63.4	0.00	0.00	0.00
3,920.0	12.11	341.00	3,855.1	598.6	-206.0	-64.2	0.00	0.00	0.00
3,960.0	12.11	341.00	3,894.2	606.5	-208.8	-65.1	0.00	0.00	0.00
4,000.0	12.11	341.00	3,933.4	614.4	-211.5	-65.9	0.00	0.00	0.00
4,040.0	12.11	341.00	3,972.5	622.3	-214.2	-66.8	0.00	0.00	0.00
4,080.0	12.11	341.00	4,011.6	630.3	-217.0	-67.6	0.00	0.00	0.00

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Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,120.0	12.11	341.00	4,050.7	638.2	-219.7	-68.5	0.00	0.00	0.00
4,150.0	12.11	341.00	4,080.0	644.2	-221.7	-69.1	0.00	0.00	0.00
SUSSEX									
4,160.0	12.11	341.00	4,089.8	646.1	-222.4	-69.3	0.00	0.00	0.00
4,200.0	12.11	341.00	4,128.9	654.1	-225.2	-70.2	0.00	0.00	0.00
4,240.0	12.11	341.00	4,168.0	662.0	-227.9	-71.0	0.00	0.00	0.00
4,280.0	12.11	341.00	4,207.1	669.9	-230.6	-71.9	0.00	0.00	0.00
4,320.0	12.11	341.00	4,246.2	677.9	-233.3	-72.7	0.00	0.00	0.00
4,360.0	12.11	341.00	4,285.4	685.8	-236.1	-73.6	0.00	0.00	0.00
4,400.0	12.11	341.00	4,324.5	693.7	-238.8	-74.4	0.00	0.00	0.00
4,440.0	12.11	341.00	4,363.6	701.7	-241.5	-75.3	0.00	0.00	0.00
4,480.0	12.11	341.00	4,402.7	709.6	-244.3	-76.1	0.00	0.00	0.00
4,520.0	12.11	341.00	4,441.8	717.5	-247.0	-77.0	0.00	0.00	0.00
4,560.0	12.11	341.00	4,480.9	725.5	-249.7	-77.8	0.00	0.00	0.00
4,579.5	12.11	341.00	4,500.0	729.3	-251.1	-78.3	0.00	0.00	0.00
SHANNON									
4,600.0	12.11	341.00	4,520.0	733.4	-252.5	-78.7	0.00	0.00	0.00
4,640.0	12.11	341.00	4,559.1	741.3	-255.2	-79.5	0.00	0.00	0.00
4,680.0	12.11	341.00	4,598.2	749.3	-257.9	-80.4	0.00	0.00	0.00
4,720.0	12.11	341.00	4,637.3	757.2	-260.6	-81.2	0.00	0.00	0.00
4,760.0	12.11	341.00	4,676.5	765.1	-263.4	-82.1	0.00	0.00	0.00
4,800.0	12.11	341.00	4,715.6	773.1	-266.1	-82.9	0.00	0.00	0.00
4,840.0	12.11	341.00	4,754.7	781.0	-268.8	-83.8	0.00	0.00	0.00
4,880.0	12.11	341.00	4,793.8	788.9	-271.6	-84.6	0.00	0.00	0.00
4,920.0	12.11	341.00	4,832.9	796.8	-274.3	-85.5	0.00	0.00	0.00
4,960.0	12.11	341.00	4,872.0	804.8	-277.0	-86.3	0.00	0.00	0.00
5,000.0	12.11	341.00	4,911.1	812.7	-279.8	-87.2	0.00	0.00	0.00
5,040.0	12.11	341.00	4,950.2	820.6	-282.5	-88.0	0.00	0.00	0.00
5,080.0	12.11	341.00	4,989.3	828.6	-285.2	-88.9	0.00	0.00	0.00
5,120.0	12.11	341.00	5,028.5	836.5	-288.0	-89.8	0.00	0.00	0.00
5,160.0	12.11	341.00	5,067.6	844.4	-290.7	-90.6	0.00	0.00	0.00
5,200.0	12.11	341.00	5,106.7	852.4	-293.4	-91.5	0.00	0.00	0.00
5,240.0	12.11	341.00	5,145.8	860.3	-296.1	-92.3	0.00	0.00	0.00
5,280.0	12.11	341.00	5,184.9	868.2	-298.9	-93.2	0.00	0.00	0.00
5,320.0	12.11	341.00	5,224.0	876.2	-301.6	-94.0	0.00	0.00	0.00
5,360.0	12.11	341.00	5,263.1	884.1	-304.3	-94.9	0.00	0.00	0.00
5,400.0	12.11	341.00	5,302.2	892.0	-307.1	-95.7	0.00	0.00	0.00
5,440.0	12.11	341.00	5,341.3	900.0	-309.8	-96.6	0.00	0.00	0.00
5,480.0	12.11	341.00	5,380.4	907.9	-312.5	-97.4	0.00	0.00	0.00
5,520.0	12.11	341.00	5,419.6	915.8	-315.3	-98.3	0.00	0.00	0.00
5,560.0	12.11	341.00	5,458.7	923.8	-318.0	-99.1	0.00	0.00	0.00
5,600.0	12.11	341.00	5,497.8	931.7	-320.7	-100.0	0.00	0.00	0.00
5,640.0	12.11	341.00	5,536.9	939.6	-323.4	-100.8	0.00	0.00	0.00
5,680.0	12.11	341.00	5,576.0	947.6	-326.2	-101.7	0.00	0.00	0.00
5,720.0	12.11	341.00	5,615.1	955.5	-328.9	-102.5	0.00	0.00	0.00
5,760.0	12.11	341.00	5,654.2	963.4	-331.6	-103.4	0.00	0.00	0.00
5,800.0	12.11	341.00	5,693.3	971.3	-334.4	-104.2	0.00	0.00	0.00
5,840.0	12.11	341.00	5,732.4	979.3	-337.1	-105.1	0.00	0.00	0.00
5,880.0	12.11	341.00	5,771.6	987.2	-339.8	-105.9	0.00	0.00	0.00
5,887.8	12.11	341.00	5,779.2	988.8	-340.4	-106.1	0.00	0.00	0.00
5,920.0	11.46	341.00	5,810.7	995.0	-342.5	-106.8	2.00	-2.00	0.00
5,960.0	10.66	341.00	5,850.0	1,002.2	-345.0	-107.5	2.00	-2.00	0.00
6,000.0	9.86	341.00	5,889.3	1,009.0	-347.3	-108.3	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 11HZN
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,040.0	9.06	341.00	5,928.8	1,015.2	-349.5	-108.9	2.00	-2.00	0.00
6,080.0	8.26	341.00	5,968.3	1,020.9	-351.4	-109.5	2.00	-2.00	0.00
6,120.0	7.46	341.00	6,007.9	1,026.1	-353.2	-110.1	2.00	-2.00	0.00
6,160.0	6.66	341.00	6,047.6	1,030.7	-354.8	-110.6	2.00	-2.00	0.00
6,200.0	5.86	341.00	6,087.4	1,034.8	-356.2	-111.0	2.00	-2.00	0.00
6,240.0	5.06	341.00	6,127.2	1,038.4	-357.5	-111.4	2.00	-2.00	0.00
6,280.0	4.26	341.00	6,167.1	1,041.5	-358.5	-111.7	2.00	-2.00	0.00
6,320.0	3.46	341.00	6,207.0	1,044.1	-359.4	-112.0	2.00	-2.00	0.00
6,360.0	2.66	341.00	6,246.9	1,046.1	-360.1	-112.2	2.00	-2.00	0.00
6,400.0	1.86	341.00	6,286.9	1,047.6	-360.6	-112.4	2.00	-2.00	0.00
6,440.0	1.06	341.00	6,326.9	1,048.5	-360.9	-112.5	2.00	-2.00	0.00
6,480.0	0.26	341.00	6,366.9	1,049.0	-361.1	-112.5	2.00	-2.00	0.00
6,493.1	0.00	0.00	6,380.0	1,049.0	-361.1	-112.5	2.00	-2.00	0.00
6,520.0	0.00	0.00	6,406.9	1,049.0	-361.1	-112.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,446.9	1,049.0	-361.1	-112.5	0.00	0.00	0.00
6,592.2	0.00	0.00	6,479.1	1,049.0	-361.1	-112.5	0.00	0.00	0.00
KOP #2									
6,600.0	0.85	89.90	6,486.9	1,049.0	-361.0	-112.5	10.94	10.94	0.00
6,640.0	5.25	89.90	6,526.8	1,049.0	-358.9	-110.4	11.00	11.00	0.00
6,680.0	9.65	89.90	6,566.5	1,049.0	-353.7	-105.4	11.00	11.00	0.00
6,720.0	14.05	89.90	6,605.6	1,049.0	-345.5	-97.4	11.00	11.00	0.00
6,760.0	18.45	89.90	6,644.0	1,049.0	-334.3	-86.5	11.00	11.00	0.00
6,800.0	22.85	89.90	6,681.4	1,049.1	-320.2	-72.7	11.00	11.00	0.00
6,840.0	27.25	89.90	6,717.6	1,049.1	-303.3	-56.2	11.00	11.00	0.00
6,880.0	31.65	89.90	6,752.5	1,049.1	-283.6	-37.1	11.00	11.00	0.00
6,920.0	36.05	89.90	6,785.7	1,049.2	-261.3	-15.4	11.00	11.00	0.00
6,960.0	40.45	89.90	6,817.1	1,049.2	-236.6	8.7	11.00	11.00	0.00
7,000.0	44.85	89.90	6,846.5	1,049.3	-209.5	35.1	11.00	11.00	0.00
7,040.0	49.25	89.90	6,873.7	1,049.3	-180.2	63.7	11.00	11.00	0.00
7,080.0	53.65	89.90	6,898.7	1,049.4	-148.9	94.1	11.00	11.00	0.00
7,120.0	58.05	89.90	6,921.1	1,049.4	-115.8	126.4	11.00	11.00	0.00
7,160.0	62.45	89.90	6,941.0	1,049.5	-81.1	160.2	11.00	11.00	0.00
7,200.0	66.85	89.90	6,958.1	1,049.5	-45.0	195.4	11.00	11.00	0.00
7,240.0	71.25	89.90	6,972.4	1,049.6	-7.6	231.8	11.00	11.00	0.00
7,280.0	75.65	89.90	6,983.8	1,049.7	30.7	269.1	11.00	11.00	0.00
7,320.0	80.05	89.90	6,992.2	1,049.7	69.8	307.2	11.00	11.00	0.00
7,360.0	84.45	89.90	6,997.6	1,049.8	109.4	345.8	11.00	11.00	0.00
7,400.0	88.85	89.90	6,999.9	1,049.9	149.3	384.7	11.00	11.00	0.00
7,410.4	90.00	89.90	7,000.0	1,049.9	159.7	394.8	11.00	11.00	0.00
NIOBRARA - 7"									
7,410.6	90.00	89.90	7,000.0	1,049.9	159.9	394.9	1.86	1.86	0.00
Landing Pt. 628'FNL & 510'FWL									
7,411.3	90.00	89.89	7,000.0	1,049.9	160.6	395.6	1.00	0.00	-1.00
7,440.0	90.00	89.89	7,000.0	1,050.0	189.3	423.6	0.00	0.00	0.00
7,480.0	90.00	89.89	7,000.0	1,050.0	229.3	462.6	0.00	0.00	0.00
7,520.0	90.00	89.89	7,000.0	1,050.1	269.3	501.6	0.00	0.00	0.00
7,560.0	90.00	89.89	7,000.0	1,050.2	309.3	540.5	0.00	0.00	0.00
7,560.6	90.00	89.89	7,000.0	1,050.2	309.9	541.1	0.00	0.00	0.00
T1 - SRC Union 11HZN									
7,600.0	90.00	89.89	7,000.0	1,050.3	349.3	579.5	0.00	0.00	0.00
7,640.0	90.00	89.89	7,000.0	1,050.3	389.3	618.5	0.00	0.00	0.00
7,680.0	90.00	89.89	7,000.0	1,050.4	429.3	657.4	0.00	0.00	0.00
7,720.0	90.00	89.89	7,000.0	1,050.5	469.3	696.4	0.00	0.00	0.00
7,760.0	90.00	89.89	7,000.0	1,050.5	509.3	735.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 11HZN
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,800.0	90.00	89.89	7,000.0	1,050.6	549.3	774.3	0.00	0.00	0.00
7,840.0	90.00	89.89	7,000.0	1,050.7	589.3	813.3	0.00	0.00	0.00
7,880.0	90.00	89.89	7,000.0	1,050.8	629.3	852.2	0.00	0.00	0.00
7,920.0	90.00	89.89	7,000.0	1,050.8	669.3	891.2	0.00	0.00	0.00
7,960.0	90.00	89.89	7,000.0	1,050.9	709.3	930.2	0.00	0.00	0.00
8,000.0	90.00	89.89	7,000.0	1,051.0	749.3	969.1	0.00	0.00	0.00
8,040.0	90.00	89.89	7,000.0	1,051.1	789.3	1,008.1	0.00	0.00	0.00
8,080.0	90.00	89.89	7,000.0	1,051.1	829.3	1,047.1	0.00	0.00	0.00
8,120.0	90.00	89.89	7,000.0	1,051.2	869.3	1,086.0	0.00	0.00	0.00
8,160.0	90.00	89.89	7,000.0	1,051.3	909.3	1,125.0	0.00	0.00	0.00
8,200.0	90.00	89.89	7,000.0	1,051.4	949.3	1,164.0	0.00	0.00	0.00
8,240.0	90.00	89.89	7,000.0	1,051.4	989.3	1,202.9	0.00	0.00	0.00
8,280.0	90.00	89.89	7,000.0	1,051.5	1,029.3	1,241.9	0.00	0.00	0.00
8,320.0	90.00	89.89	7,000.0	1,051.6	1,069.3	1,280.8	0.00	0.00	0.00
8,360.0	90.00	89.89	7,000.0	1,051.7	1,109.3	1,319.8	0.00	0.00	0.00
8,400.0	90.00	89.89	7,000.0	1,051.7	1,149.3	1,358.8	0.00	0.00	0.00
8,440.0	90.00	89.89	7,000.0	1,051.8	1,189.3	1,397.7	0.00	0.00	0.00
8,480.0	90.00	89.89	7,000.0	1,051.9	1,229.3	1,436.7	0.00	0.00	0.00
8,520.0	90.00	89.89	7,000.0	1,052.0	1,269.3	1,475.7	0.00	0.00	0.00
8,560.0	90.00	89.89	7,000.0	1,052.0	1,309.3	1,514.6	0.00	0.00	0.00
8,600.0	90.00	89.89	7,000.0	1,052.1	1,349.3	1,553.6	0.00	0.00	0.00
8,640.0	90.00	89.89	7,000.0	1,052.2	1,389.3	1,592.6	0.00	0.00	0.00
8,680.0	90.00	89.89	7,000.0	1,052.3	1,429.3	1,631.5	0.00	0.00	0.00
8,720.0	90.00	89.89	7,000.0	1,052.3	1,469.3	1,670.5	0.00	0.00	0.00
8,760.0	90.00	89.89	7,000.0	1,052.4	1,509.3	1,709.5	0.00	0.00	0.00
8,800.0	90.00	89.89	7,000.0	1,052.5	1,549.3	1,748.4	0.00	0.00	0.00
8,840.0	90.00	89.89	7,000.0	1,052.5	1,589.3	1,787.4	0.00	0.00	0.00
8,880.0	90.00	89.89	7,000.0	1,052.6	1,629.3	1,826.3	0.00	0.00	0.00
8,920.0	90.00	89.89	7,000.0	1,052.7	1,669.3	1,865.3	0.00	0.00	0.00
8,960.0	90.00	89.89	7,000.0	1,052.8	1,709.3	1,904.3	0.00	0.00	0.00
9,000.0	90.00	89.89	7,000.0	1,052.8	1,749.3	1,943.2	0.00	0.00	0.00
9,040.0	90.00	89.89	7,000.0	1,052.9	1,789.3	1,982.2	0.00	0.00	0.00
9,080.0	90.00	89.89	7,000.0	1,053.0	1,829.3	2,021.2	0.00	0.00	0.00
9,120.0	90.00	89.89	7,000.0	1,053.1	1,869.3	2,060.1	0.00	0.00	0.00
9,160.0	90.00	89.89	7,000.0	1,053.1	1,909.3	2,099.1	0.00	0.00	0.00
9,200.0	90.00	89.89	7,000.0	1,053.2	1,949.3	2,138.1	0.00	0.00	0.00
9,240.0	90.00	89.89	7,000.0	1,053.3	1,989.3	2,177.0	0.00	0.00	0.00
9,280.0	90.00	89.89	7,000.0	1,053.4	2,029.3	2,216.0	0.00	0.00	0.00
9,320.0	90.00	89.89	7,000.0	1,053.4	2,069.3	2,255.0	0.00	0.00	0.00
9,360.0	90.00	89.89	7,000.0	1,053.5	2,109.3	2,293.9	0.00	0.00	0.00
9,400.0	90.00	89.89	7,000.0	1,053.6	2,149.3	2,332.9	0.00	0.00	0.00
9,440.0	90.00	89.89	7,000.0	1,053.7	2,189.3	2,371.8	0.00	0.00	0.00
9,480.0	90.00	89.89	7,000.0	1,053.7	2,229.3	2,410.8	0.00	0.00	0.00
9,520.0	90.00	89.89	7,000.0	1,053.8	2,269.3	2,449.8	0.00	0.00	0.00
9,560.0	90.00	89.89	7,000.0	1,053.9	2,309.3	2,488.7	0.00	0.00	0.00
9,600.0	90.00	89.89	7,000.0	1,054.0	2,349.3	2,527.7	0.00	0.00	0.00
9,640.0	90.00	89.89	7,000.0	1,054.0	2,389.3	2,566.7	0.00	0.00	0.00
9,680.0	90.00	89.89	7,000.0	1,054.1	2,429.3	2,605.6	0.00	0.00	0.00
9,720.0	90.00	89.89	7,000.0	1,054.2	2,469.3	2,644.6	0.00	0.00	0.00
9,760.0	90.00	89.89	7,000.0	1,054.3	2,509.3	2,683.6	0.00	0.00	0.00
9,800.0	90.00	89.89	7,000.0	1,054.3	2,549.3	2,722.5	0.00	0.00	0.00
9,840.0	90.00	89.89	7,000.0	1,054.4	2,589.3	2,761.5	0.00	0.00	0.00
9,880.0	90.00	89.89	7,000.0	1,054.5	2,629.3	2,800.5	0.00	0.00	0.00
9,920.0	90.00	89.89	7,000.0	1,054.5	2,669.3	2,839.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 11HZN
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,960.0	90.00	89.89	7,000.0	1,054.6	2,709.3	2,878.4	0.00	0.00	0.00
10,000.0	90.00	89.89	7,000.0	1,054.7	2,749.3	2,917.3	0.00	0.00	0.00
10,040.0	90.00	89.89	7,000.0	1,054.8	2,789.3	2,956.3	0.00	0.00	0.00
10,080.0	90.00	89.89	7,000.0	1,054.8	2,829.3	2,995.3	0.00	0.00	0.00
10,120.0	90.00	89.89	7,000.0	1,054.9	2,869.3	3,034.2	0.00	0.00	0.00
10,160.0	90.00	89.89	7,000.0	1,055.0	2,909.3	3,073.2	0.00	0.00	0.00
10,200.0	90.00	89.89	7,000.0	1,055.1	2,949.3	3,112.2	0.00	0.00	0.00
10,240.0	90.00	89.89	7,000.0	1,055.1	2,989.3	3,151.1	0.00	0.00	0.00
10,280.0	90.00	89.89	7,000.0	1,055.2	3,029.3	3,190.1	0.00	0.00	0.00
10,320.0	90.00	89.89	7,000.0	1,055.3	3,069.3	3,229.1	0.00	0.00	0.00
10,360.0	90.00	89.89	7,000.0	1,055.4	3,109.3	3,268.0	0.00	0.00	0.00
10,400.0	90.00	89.89	7,000.0	1,055.4	3,149.3	3,307.0	0.00	0.00	0.00
10,440.0	90.00	89.89	7,000.0	1,055.5	3,189.3	3,346.0	0.00	0.00	0.00
10,480.0	90.00	89.89	7,000.0	1,055.6	3,229.3	3,384.9	0.00	0.00	0.00
10,520.0	90.00	89.89	7,000.0	1,055.7	3,269.3	3,423.9	0.00	0.00	0.00
10,560.0	90.00	89.89	7,000.0	1,055.7	3,309.3	3,462.8	0.00	0.00	0.00
10,600.0	90.00	89.89	7,000.0	1,055.8	3,349.3	3,501.8	0.00	0.00	0.00
10,640.0	90.00	89.89	7,000.0	1,055.9	3,389.3	3,540.8	0.00	0.00	0.00
10,680.0	90.00	89.89	7,000.0	1,056.0	3,429.3	3,579.7	0.00	0.00	0.00
10,720.0	90.00	89.89	7,000.0	1,056.0	3,469.3	3,618.7	0.00	0.00	0.00
10,760.0	90.00	89.89	7,000.0	1,056.1	3,509.3	3,657.7	0.00	0.00	0.00
10,800.0	90.00	89.89	7,000.0	1,056.2	3,549.3	3,696.6	0.00	0.00	0.00
10,840.0	90.00	89.89	7,000.0	1,056.3	3,589.3	3,735.6	0.00	0.00	0.00
10,880.0	90.00	89.89	7,000.0	1,056.3	3,629.3	3,774.6	0.00	0.00	0.00
10,920.0	90.00	89.89	7,000.0	1,056.4	3,669.3	3,813.5	0.00	0.00	0.00
10,960.0	90.00	89.89	7,000.0	1,056.5	3,709.3	3,852.5	0.00	0.00	0.00
11,000.0	90.00	89.89	7,000.0	1,056.5	3,749.3	3,891.5	0.00	0.00	0.00
11,040.0	90.00	89.89	7,000.0	1,056.6	3,789.3	3,930.4	0.00	0.00	0.00
11,080.0	90.00	89.89	7,000.0	1,056.7	3,829.3	3,969.4	0.00	0.00	0.00
11,120.0	90.00	89.89	7,000.0	1,056.8	3,869.3	4,008.4	0.00	0.00	0.00
11,160.0	90.00	89.89	7,000.0	1,056.8	3,909.3	4,047.3	0.00	0.00	0.00
11,200.0	90.00	89.89	7,000.0	1,056.9	3,949.3	4,086.3	0.00	0.00	0.00
11,240.0	90.00	89.89	7,000.0	1,057.0	3,989.3	4,125.2	0.00	0.00	0.00
11,280.0	90.00	89.89	7,000.0	1,057.1	4,029.3	4,164.2	0.00	0.00	0.00
11,320.0	90.00	89.89	7,000.0	1,057.1	4,069.3	4,203.2	0.00	0.00	0.00
11,360.0	90.00	89.89	7,000.0	1,057.2	4,109.3	4,242.1	0.00	0.00	0.00
11,400.0	90.00	89.89	7,000.0	1,057.3	4,149.3	4,281.1	0.00	0.00	0.00
11,440.0	90.00	89.89	7,000.0	1,057.4	4,189.3	4,320.1	0.00	0.00	0.00
11,480.0	90.00	89.89	7,000.0	1,057.4	4,229.3	4,359.0	0.00	0.00	0.00
11,520.0	90.00	89.89	7,000.0	1,057.5	4,269.3	4,398.0	0.00	0.00	0.00
11,560.0	90.00	89.89	7,000.0	1,057.6	4,309.3	4,437.0	0.00	0.00	0.00
11,600.0	90.00	89.89	7,000.0	1,057.7	4,349.3	4,475.9	0.00	0.00	0.00
11,640.0	90.00	89.89	7,000.0	1,057.7	4,389.3	4,514.9	0.00	0.00	0.00
11,680.0	90.00	89.89	7,000.0	1,057.8	4,429.3	4,553.9	0.00	0.00	0.00
11,720.0	90.00	89.89	7,000.0	1,057.9	4,469.3	4,592.8	0.00	0.00	0.00
11,760.0	90.00	89.89	7,000.0	1,058.0	4,509.3	4,631.8	0.00	0.00	0.00
11,771.1	90.00	89.89	7,000.0	1,058.0	4,520.5	4,642.6	0.00	0.00	0.00
BHL 650°FNL, 460°FEL									

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 11HZN
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-08-13)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")
7,410.4	7,000.0	7"		7	8-3/4
800.0	799.8	9 5/8"		9-5/8	12-1/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,150.0	4,080.0	SUSSEX		0.00	
4,579.5	4,500.0	SHANNON		0.00	
7,410.4	7,000.0	NIOBRARA		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
600.0	600.0	0.0	0.0	KOP #1
6,592.2	6,479.1	1,049.0	-361.1	KOP #2



Directional

Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union 11HZN

Wellbore #1

Plan #2 (4-08-13)

Anticollision Report

08 April, 2013

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	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		
100.0	100.0	101.0	101.0	0.1	0.1	68.60	14.6	37.2	39.9	39.7	0.23	175.857		
200.0	200.0	201.0	201.0	0.3	0.3	68.60	14.6	37.2	39.9	39.2	0.68	59.008		
300.0	300.0	301.0	301.0	0.6	0.6	68.60	14.6	37.2	39.9	38.8	1.13	35.452		
400.0	400.0	401.0	401.0	0.8	0.8	68.60	14.6	37.2	39.9	38.3	1.58	25.337		
500.0	500.0	501.0	501.0	1.0	1.0	68.60	14.6	37.2	39.9	37.9	2.03	19.713		
600.0	600.0	601.0	601.0	1.2	1.2	68.60	14.6	37.2	39.9	37.4	2.47	16.132		
698.0	698.0	699.0	699.0	1.5	1.5	90.00	14.6	37.2	39.9	37.0	2.91	13.688 CC		
700.0	700.0	701.0	701.0	1.5	1.5	90.10	14.6	37.2	39.9	37.0	2.92	13.646		
800.0	799.8	800.8	800.8	1.7	1.7	97.55	14.6	37.2	40.2	36.9	3.37	11.932 ES		
900.0	899.5	900.5	900.5	1.9	1.9	109.26	14.6	37.2	42.3	38.4	3.83	11.039		
1,000.0	998.7	999.5	999.5	2.2	2.1	121.49	15.8	37.7	47.9	43.7	4.29	11.165		
1,100.0	1,097.5	1,098.5	1,098.4	2.5	2.4	130.81	19.3	39.2	57.7	52.9	4.77	12.107		
1,200.0	1,195.6	1,197.4	1,197.1	2.8	2.6	137.11	25.2	41.8	70.9	65.6	5.25	13.505		
1,300.0	1,293.4	1,296.5	1,295.7	3.2	2.8	140.63	33.4	45.4	85.7	80.0	5.75	14.899		
1,400.0	1,391.2	1,395.8	1,394.4	3.6	3.1	141.66	44.0	50.0	100.3	94.0	6.29	15.945		
1,500.0	1,489.0	1,495.2	1,492.8	4.0	3.3	141.14	57.0	55.6	114.5	107.7	6.87	16.664		
1,600.0	1,586.7	1,594.4	1,590.6	4.4	3.6	139.81	71.9	62.1	128.4	120.9	7.50	17.132		
1,700.0	1,684.5	1,693.4	1,688.3	4.8	3.9	138.66	86.8	68.6	142.4	134.2	8.14	17.479		
1,800.0	1,782.3	1,792.4	1,785.9	5.2	4.2	137.72	101.8	75.1	156.3	147.5	8.81	17.744		
1,900.0	1,880.1	1,891.3	1,883.5	5.6	4.6	136.93	116.8	81.6	170.4	160.9	9.49	17.951		
2,000.0	1,977.8	1,990.3	1,981.2	6.1	4.9	136.27	131.8	88.1	184.4	174.2	10.18	18.112		
2,100.0	2,075.6	2,089.3	2,078.8	6.5	5.2	135.69	146.8	94.6	198.5	187.6	10.88	18.239		
2,200.0	2,173.4	2,188.3	2,176.4	6.9	5.6	135.19	161.8	101.1	212.5	201.0	11.59	18.341		
2,300.0	2,271.2	2,287.3	2,274.1	7.4	5.9	134.76	176.8	107.6	226.6	214.3	12.30	18.423		
2,400.0	2,368.9	2,386.3	2,371.7	7.8	6.3	134.37	191.8	114.2	240.7	227.7	13.02	18.490		
2,500.0	2,466.7	2,485.3	2,469.3	8.3	6.6	134.03	206.7	120.7	254.9	241.1	13.74	18.544		
2,600.0	2,564.5	2,584.3	2,566.9	8.7	7.0	133.73	221.7	127.2	269.0	254.5	14.47	18.589		
2,700.0	2,662.3	2,683.2	2,664.6	9.1	7.3	133.45	236.7	133.7	283.1	267.9	15.20	18.626		
2,800.0	2,760.0	2,782.2	2,762.2	9.6	7.7	133.20	251.7	140.2	297.2	281.3	15.93	18.657		
2,900.0	2,857.8	2,881.2	2,859.8	10.0	8.0	132.97	266.7	146.7	311.4	294.7	16.67	18.683		
3,000.0	2,955.6	2,980.2	2,957.5	10.5	8.4	132.77	281.7	153.2	325.5	308.1	17.40	18.705		
3,100.0	3,053.4	3,079.2	3,055.1	10.9	8.8	132.58	296.7	159.7	339.7	321.5	18.14	18.723		
3,200.0	3,151.1	3,178.2	3,152.7	11.4	9.1	132.40	311.7	166.3	353.8	334.9	18.88	18.739		
3,300.0	3,248.9	3,277.2	3,250.3	11.8	9.5	132.24	326.7	172.8	368.0	348.4	19.62	18.752		
3,400.0	3,346.7	3,376.2	3,348.0	12.3	9.9	132.09	341.6	179.3	382.1	361.8	20.37	18.763		
3,500.0	3,444.5	3,475.2	3,445.6	12.7	10.2	131.95	356.6	185.8	396.3	375.2	21.11	18.773		
3,600.0	3,542.3	3,574.1	3,543.2	13.1	10.6	131.82	371.6	192.3	410.5	388.6	21.86	18.781		
3,700.0	3,640.0	3,673.1	3,640.9	13.6	10.9	131.70	386.6	198.8	424.6	402.0	22.60	18.788		
3,800.0	3,737.8	3,772.1	3,738.5	14.0	11.3	131.59	401.6	205.3	438.8	415.4	23.35	18.794		
3,900.0	3,835.6	3,871.1	3,836.1	14.5	11.7	131.49	416.6	211.8	453.0	428.9	24.10	18.799		
4,000.0	3,933.4	3,970.1	3,933.8	14.9	12.0	131.39	431.6	218.4	467.1	442.3	24.84	18.803		
4,100.0	4,031.1	4,069.1	4,031.4	15.4	12.4	131.29	446.6	224.9	481.3	455.7	25.59	18.806		
4,200.0	4,128.9	4,168.1	4,129.0	15.8	12.8	131.21	461.5	231.4	495.5	469.1	26.34	18.809		
4,300.0	4,226.7	4,267.1	4,226.6	16.3	13.1	131.12	476.5	237.9	509.6	482.5	27.09	18.812		
4,400.0	4,324.5	4,366.0	4,324.3	16.7	13.5	131.04	491.5	244.4	523.8	496.0	27.84	18.814		
4,500.0	4,422.2	4,465.0	4,421.9	17.2	13.9	130.97	506.5	250.9	538.0	509.4	28.59	18.816		
4,600.0	4,520.0	4,564.0	4,519.5	17.6	14.3	130.90	521.5	257.4	552.2	522.8	29.34	18.817		
4,700.0	4,617.8	4,663.0	4,617.2	18.1	14.6	130.83	536.5	263.9	566.3	536.2	30.10	18.818		
4,800.0	4,715.6	4,762.0	4,714.8	18.5	15.0	130.77	551.5	270.4	580.5	549.7	30.85	18.819		
4,900.0	4,813.3	4,861.0	4,812.4	19.0	15.4	130.71	566.5	277.0	594.7	563.1	31.60	18.820		
5,000.0	4,911.1	4,960.0	4,910.1	19.4	15.7	130.65	581.5	283.5	608.9	576.5	32.35	18.820		
5,100.0	5,008.9	5,059.0	5,007.7	19.9	16.1	130.59	596.4	290.0	623.0	589.9	33.10	18.820		

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Offset Wellbore Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
5,200.0	5,106.7	5,157.9	5,105.3	20.3	16.5	130.54	611.4	296.5	637.2	603.4	33.86	18.821		
5,300.0	5,204.5	5,256.9	5,202.9	20.8	16.8	130.49	626.4	303.0	651.4	616.8	34.61	18.821		
5,400.0	5,302.2	5,355.9	5,300.6	21.2	17.2	130.44	641.4	309.5	665.6	630.2	35.36	18.820		
5,500.0	5,400.0	5,454.9	5,398.2	21.7	17.6	130.39	656.4	316.0	679.8	643.6	36.12	18.820		
5,600.0	5,497.8	5,553.9	5,495.8	22.1	18.0	130.35	671.4	322.5	693.9	657.1	36.87	18.820		
5,700.0	5,595.6	5,652.9	5,593.5	22.6	18.3	130.31	686.4	329.1	708.1	670.5	37.63	18.820		
5,800.0	5,693.3	5,751.9	5,691.1	23.0	18.7	130.27	701.4	335.6	722.3	683.9	38.38	18.819		
5,900.0	5,791.1	5,850.9	5,788.7	23.5	19.1	130.25	716.3	342.1	736.5	697.3	39.13	18.819		
6,000.0	5,889.3	5,950.0	5,886.5	23.8	19.4	130.28	731.4	348.6	749.3	709.4	39.84	18.806		
6,100.0	5,988.1	6,049.3	5,984.5	24.1	19.8	130.08	746.4	355.1	759.8	719.3	40.53	18.745		
6,200.0	6,087.4	6,148.7	6,082.5	24.3	20.2	129.66	761.4	361.7	768.2	727.0	41.21	18.640		
6,300.0	6,187.0	6,248.0	6,180.4	24.5	20.6	129.02	776.5	368.2	774.5	732.6	41.88	18.495		
6,400.0	6,286.9	6,347.1	6,278.2	24.7	20.9	128.16	791.5	374.7	778.7	736.2	42.52	18.316		
6,500.0	6,386.9	6,445.9	6,375.6	24.8	21.3	108.09	806.4	381.2	781.0	745.8	35.28	22.139		
6,600.0	6,486.9	6,544.5	6,472.9	24.9	21.7	17.01	821.4	387.7	782.7	739.0	43.76	17.886		
6,700.0	6,586.1	6,643.1	6,570.1	25.0	22.0	16.31	836.3	394.2	774.2	730.8	43.39	17.843		
6,800.0	6,681.4	6,739.1	6,664.8	25.0	22.4	16.56	850.8	400.5	747.7	706.2	41.55	17.995		
6,900.0	6,769.3	6,828.9	6,753.3	24.9	22.7	17.97	864.4	406.4	704.1	665.7	38.35	18.359		
7,000.0	6,846.5	6,909.2	6,832.6	24.9	23.0	21.08	876.6	411.7	644.9	610.8	34.10	18.912		
7,100.0	6,910.2	6,977.1	6,899.5	24.7	23.3	27.24	886.9	416.2	572.5	542.8	29.66	19.301		
7,200.0	6,958.1	7,030.1	6,951.8	24.6	23.5	39.41	894.9	419.7	489.8	462.1	27.67	17.701		
7,300.0	6,988.3	7,066.3	6,987.5	24.6	23.6	61.92	900.4	422.0	400.7	368.4	32.37	12.381		
7,400.0	6,999.9	7,084.2	7,005.2	24.6	23.7	89.53	903.1	423.2	310.8	272.4	38.36	8.102		
7,500.0	7,000.0	7,090.9	7,011.8	24.8	23.7	94.21	904.1	423.7	227.6	187.5	40.09	5.677		
7,600.0	7,000.0	7,097.5	7,018.3	25.4	23.7	96.79	905.1	424.1	164.2	122.3	41.84	3.924		
7,674.8	7,000.0	7,102.5	7,023.2	26.3	23.8	98.72	905.9	424.4	146.2	103.0	43.25	3.381 SF		
7,700.0	7,000.0	7,104.1	7,024.8	26.7	23.8	99.37	906.1	424.5	148.4	104.7	43.71	3.395		
7,800.0	7,000.0	7,110.8	7,031.3	28.4	23.8	101.95	907.1	425.0	192.3	146.7	45.62	4.215		
7,900.0	7,000.0	7,117.4	7,037.8	30.4	23.8	104.52	908.1	425.4	268.1	220.5	47.55	5.638		
8,000.0	7,000.0	7,124.0	7,044.4	32.6	23.8	107.06	909.1	425.8	355.9	306.5	49.44	7.199		
8,100.0	7,000.0	7,130.6	7,050.9	34.8	23.9	109.57	910.1	426.3	448.8	397.5	51.28	8.752		
8,200.0	7,000.0	7,137.2	7,057.4	37.2	23.9	112.04	911.1	426.7	544.1	491.0	53.03	10.259		
8,300.0	7,000.0	7,143.8	7,063.9	39.6	23.9	114.46	912.1	427.1	640.7	586.0	54.69	11.716		
8,400.0	7,000.0	7,150.4	7,070.4	42.1	23.9	116.83	913.1	427.6	738.2	682.0	56.24	13.125		
8,500.0	7,000.0	7,157.0	7,076.9	44.6	24.0	119.13	914.1	428.0	836.3	778.6	57.69	14.497		
8,600.0	7,000.0	7,163.6	7,083.5	47.1	24.0	121.36	915.1	428.4	934.7	875.7	59.01	15.838		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	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	-110.31	-6.9	-18.7	20.0	20.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-110.31	-6.9	-18.7	20.0	19.7	0.22	88.828		
200.0	200.0	200.0	200.0	0.3	0.3	-110.31	-6.9	-18.7	20.0	19.3	0.67	29.609		
290.1	290.1	290.1	290.1	0.5	0.5	-106.24	-5.6	-19.1	19.9	18.8	1.08	18.459 CC		
300.0	300.0	300.0	300.0	0.6	0.6	-105.30	-5.3	-19.2	19.9	18.8	1.12	17.729 ES		
400.0	400.0	399.8	399.6	0.8	0.8	-90.68	-0.2	-20.7	20.7	19.1	1.58	13.086		
500.0	500.0	499.1	498.5	1.0	1.0	-70.79	8.0	-23.1	24.5	22.4	2.05	11.957		
600.0	600.0	597.6	596.3	1.2	1.3	-53.55	19.5	-26.4	33.1	30.5	2.52	13.134		
700.0	700.0	695.5	693.1	1.5	1.6	-23.74	34.1	-30.7	44.8	41.8	2.99	14.988		
800.0	799.8	793.0	788.8	1.7	2.0	-17.41	51.8	-35.8	57.4	53.9	3.46	16.600		
900.0	899.5	890.3	883.7	1.9	2.4	-13.27	72.5	-41.9	70.2	66.2	3.93	17.864		
1,000.0	998.7	989.7	980.3	2.2	2.9	-10.62	94.8	-48.3	81.0	76.6	4.40	18.397		
1,100.0	1,097.5	1,089.4	1,077.2	2.5	3.3	-8.94	117.1	-54.9	88.5	83.7	4.89	18.120		
1,200.0	1,195.6	1,189.3	1,174.3	2.8	3.8	-7.83	139.5	-61.4	92.7	87.3	5.38	17.231		
1,300.0	1,293.4	1,289.2	1,271.5	3.2	4.3	-6.96	162.0	-67.9	94.9	89.1	5.89	16.112		
1,400.0	1,391.2	1,389.2	1,368.7	3.6	4.7	-6.13	184.4	-74.4	97.2	90.8	6.42	15.154		
1,500.0	1,489.0	1,489.2	1,465.9	4.0	5.2	-5.33	206.8	-81.0	99.5	92.6	6.94	14.340		
1,600.0	1,586.7	1,589.1	1,563.1	4.4	5.7	-4.58	229.2	-87.5	101.8	94.4	7.47	13.638		
1,700.0	1,684.5	1,689.1	1,660.3	4.8	6.2	-3.86	251.6	-94.0	104.2	96.2	8.00	13.028		
1,800.0	1,782.3	1,789.0	1,757.5	5.2	6.7	-3.16	274.0	-100.6	106.5	98.0	8.53	12.493		
1,900.0	1,880.1	1,889.0	1,854.7	5.6	7.2	-2.50	296.5	-107.1	108.9	99.8	9.06	12.020		
2,000.0	1,977.8	1,989.0	1,951.9	6.1	7.6	-1.87	318.9	-113.6	111.2	101.7	9.59	11.599		
2,100.0	2,075.6	2,088.9	2,049.1	6.5	8.1	-1.26	341.3	-120.1	113.6	103.5	10.13	11.221		
2,200.0	2,173.4	2,188.9	2,146.3	6.9	8.6	-0.68	363.7	-126.7	116.0	105.4	10.66	10.881		
2,300.0	2,271.2	2,288.9	2,243.5	7.4	9.1	-0.13	386.1	-133.2	118.4	107.2	11.20	10.573		
2,400.0	2,368.9	2,388.8	2,340.7	7.8	9.6	0.41	408.6	-139.7	120.9	109.1	11.74	10.293		
2,500.0	2,466.7	2,488.8	2,437.9	8.3	10.1	0.92	431.0	-146.3	123.3	111.0	12.29	10.037		
2,600.0	2,564.5	2,588.8	2,535.1	8.7	10.6	1.42	453.4	-152.8	125.7	112.9	12.83	9.801		
2,700.0	2,662.3	2,688.7	2,632.3	9.1	11.0	1.89	475.8	-159.3	128.2	114.8	13.38	9.585		
2,800.0	2,760.0	2,788.7	2,729.5	9.6	11.5	2.35	498.2	-165.8	130.7	116.7	13.92	9.384		
2,900.0	2,857.8	2,888.7	2,826.7	10.0	12.0	2.79	520.6	-172.4	133.1	118.7	14.47	9.198		
3,000.0	2,955.6	2,988.6	2,923.9	10.5	12.5	3.22	543.1	-178.9	135.6	120.6	15.02	9.026		
3,100.0	3,053.4	3,088.6	3,021.1	10.9	13.0	3.62	565.5	-185.4	138.1	122.5	15.58	8.865		
3,200.0	3,151.1	3,188.5	3,118.3	11.4	13.5	4.02	587.9	-192.0	140.6	124.4	16.13	8.714		
3,300.0	3,248.9	3,288.5	3,215.5	11.8	14.0	4.40	610.3	-198.5	143.1	126.4	16.69	8.573		
3,400.0	3,346.7	3,388.5	3,312.7	12.3	14.5	4.77	632.7	-205.0	145.6	128.3	17.25	8.440		
3,500.0	3,444.5	3,488.4	3,409.9	12.7	15.0	5.12	655.1	-211.5	148.1	130.3	17.81	8.316		
3,600.0	3,542.3	3,588.4	3,507.1	13.1	15.4	5.47	677.6	-218.1	150.6	132.2	18.37	8.198		
3,700.0	3,640.0	3,688.4	3,604.3	13.6	15.9	5.80	700.0	-224.6	153.1	134.2	18.93	8.087		
3,800.0	3,737.8	3,788.3	3,701.5	14.0	16.4	6.12	722.4	-231.1	155.6	136.1	19.50	7.982		
3,900.0	3,835.6	3,888.3	3,798.7	14.5	16.9	6.43	744.8	-237.7	158.2	138.1	20.06	7.883		
4,000.0	3,933.4	3,988.3	3,895.9	14.9	17.4	6.73	767.2	-244.2	160.7	140.1	20.63	7.789		
4,100.0	4,031.1	4,088.2	3,993.1	15.4	17.9	7.03	789.7	-250.7	163.2	142.0	21.20	7.699		
4,200.0	4,128.9	4,188.2	4,090.3	15.8	18.4	7.31	812.1	-257.2	165.8	144.0	21.77	7.614		
4,300.0	4,226.7	4,288.2	4,187.5	16.3	18.9	7.58	834.5	-263.8	168.3	146.0	22.35	7.533		
4,400.0	4,324.5	4,388.1	4,284.7	16.7	19.4	7.85	856.9	-270.3	170.9	148.0	22.92	7.455		
4,500.0	4,422.2	4,488.1	4,381.9	17.2	19.8	8.11	879.3	-276.8	173.4	149.9	23.50	7.381		
4,600.0	4,520.0	4,588.0	4,479.1	17.6	20.3	8.36	901.7	-283.4	176.0	151.9	24.07	7.311		
4,700.0	4,617.8	4,688.0	4,576.3	18.1	20.8	8.60	924.2	-289.9	178.5	153.9	24.65	7.243		
4,800.0	4,715.6	4,788.0	4,673.5	18.5	21.3	8.84	946.6	-296.4	181.1	155.9	25.23	7.178		
4,900.0	4,813.3	4,887.9	4,770.7	19.0	21.8	9.07	969.0	-302.9	183.7	157.9	25.81	7.116		
5,000.0	4,911.1	4,987.9	4,867.9	19.4	22.3	9.30	991.4	-309.5	186.2	159.8	26.39	7.057		

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWID												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,008.9	5,087.9	4,965.1	19.9	22.8	9.51	1,013.8	-316.0	188.8	161.8	26.97	7.000	
5,200.0	5,106.7	5,187.8	5,062.3	20.3	23.3	9.73	1,036.3	-322.5	191.4	163.8	27.56	6.945	
5,300.0	5,204.5	5,287.8	5,159.5	20.8	23.8	9.93	1,058.7	-329.1	194.0	165.8	28.14	6.892	
5,400.0	5,302.2	5,387.8	5,256.7	21.2	24.2	10.13	1,081.1	-335.6	196.5	167.8	28.73	6.841	
5,500.0	5,400.0	5,489.5	5,355.6	21.7	24.7	10.34	1,103.8	-342.2	199.0	169.7	29.32	6.789	
5,600.0	5,497.8	5,596.9	5,460.7	22.1	25.1	10.66	1,125.1	-348.4	198.9	169.0	29.88	6.656	
5,700.0	5,595.6	5,704.1	5,566.4	22.6	25.4	11.15	1,142.6	-353.5	195.0	164.6	30.45	6.404	
5,800.0	5,693.3	5,810.8	5,672.1	23.0	25.7	11.85	1,156.2	-357.5	187.5	156.4	31.04	6.039	
5,900.0	5,791.1	5,916.8	5,777.6	23.5	25.9	12.82	1,166.0	-360.3	176.4	144.7	31.67	5.569	
6,000.0	5,889.3	6,022.1	5,882.7	23.8	26.1	13.93	1,172.0	-362.1	163.8	131.5	32.24	5.080	
6,100.0	5,988.1	6,126.9	5,987.5	24.1	26.2	15.18	1,174.2	-362.7	151.1	118.3	32.80	4.606	
6,200.0	6,087.4	6,226.8	6,087.4	24.3	26.3	16.41	1,174.3	-362.7	139.6	106.3	33.33	4.188	
6,300.0	6,187.0	6,326.4	6,187.0	24.5	26.5	17.40	1,174.3	-362.7	131.5	97.7	33.80	3.889	
6,400.0	6,286.9	6,426.3	6,286.9	24.7	26.6	18.05	1,174.3	-362.7	126.7	92.6	34.16	3.709	
6,500.0	6,386.9	6,526.3	6,386.9	24.8	26.7	-0.74	1,174.3	-362.7	125.3	75.2	50.04	2.504 SF	
6,563.9	6,450.8	6,590.2	6,450.8	24.9	26.7	-90.78	1,174.3	-362.7	125.3	90.7	34.59	3.622	
6,600.0	6,486.9	6,626.3	6,486.9	24.9	26.8	-90.67	1,174.3	-362.7	125.3	90.5	34.75	3.605	
6,700.0	6,586.1	6,725.5	6,586.1	25.0	26.9	-95.58	1,174.3	-362.7	125.9	91.9	33.96	3.707	
6,800.0	6,681.4	6,820.8	6,681.4	25.0	27.0	-107.28	1,174.3	-362.7	132.2	99.7	32.51	4.067	
6,900.0	6,769.3	6,908.7	6,769.3	24.9	27.1	-120.74	1,174.3	-362.7	154.1	122.4	31.68	4.864	
7,000.0	6,846.5	7,008.5	6,868.8	24.9	27.2	-133.78	1,174.3	-356.9	194.5	164.3	30.28	6.425	
7,100.0	6,910.2	7,133.2	6,988.7	24.7	27.2	-143.95	1,174.3	-323.7	241.4	214.1	27.28	8.850	
7,200.0	6,958.1	7,289.2	7,122.0	24.6	27.2	-151.31	1,174.4	-243.7	286.3	263.2	23.10	12.393	
7,300.0	6,988.3	7,488.3	7,247.9	24.6	27.0	-156.18	1,174.6	-91.0	320.8	301.5	19.32	16.607	
7,400.0	6,999.9	7,744.5	7,310.0	24.6	26.9	-158.04	1,174.9	154.6	334.4	315.9	18.54	18.037	
7,442.0	7,000.6	7,782.0	7,310.0	24.6	27.0	-158.01	1,174.9	191.1	333.7	314.8	18.97	17.588	
7,500.0	7,000.0	7,840.1	7,310.0	24.8	27.1	-158.04	1,175.0	249.1	334.2	314.6	19.62	17.035	
7,600.0	7,000.0	7,940.1	7,310.0	25.4	27.6	-158.04	1,175.2	349.1	334.2	313.3	20.97	15.940	
7,700.0	7,000.0	8,040.1	7,310.0	26.7	28.5	-158.04	1,175.4	449.1	334.2	311.7	22.51	14.847	
7,800.0	7,000.0	8,140.1	7,310.0	28.4	30.0	-158.04	1,175.6	549.1	334.2	310.0	24.21	13.804	
7,900.0	7,000.0	8,240.1	7,310.0	30.4	31.7	-158.04	1,175.8	649.1	334.2	308.2	26.04	12.834	
8,000.0	7,000.0	8,340.1	7,310.0	32.6	33.8	-158.04	1,176.0	749.1	334.2	306.3	27.97	11.948	
8,100.0	7,000.0	8,440.1	7,310.0	34.8	35.9	-158.04	1,176.2	849.1	334.2	304.3	29.99	11.146	
8,200.0	7,000.0	8,540.1	7,310.0	37.2	38.2	-158.04	1,176.3	949.1	334.2	302.2	32.07	10.422	
8,300.0	7,000.0	8,640.1	7,310.0	39.6	40.6	-158.04	1,176.5	1,049.1	334.2	300.0	34.21	9.771	
8,400.0	7,000.0	8,740.1	7,310.0	42.1	43.0	-158.04	1,176.7	1,149.1	334.2	297.9	36.39	9.186	
8,500.0	7,000.0	8,840.1	7,310.0	44.6	45.4	-158.04	1,176.9	1,249.1	334.2	295.6	38.61	8.658	
8,600.0	7,000.0	8,940.1	7,310.0	47.1	47.9	-158.04	1,177.1	1,349.1	334.2	293.4	40.86	8.181	
8,700.0	7,000.0	9,040.1	7,310.0	49.7	50.5	-158.04	1,177.3	1,449.1	334.2	291.1	43.13	7.749	
8,800.0	7,000.0	9,140.1	7,310.0	52.3	53.0	-158.04	1,177.4	1,549.1	334.2	288.8	45.43	7.357	
8,900.0	7,000.0	9,240.1	7,310.0	54.9	55.6	-158.04	1,177.6	1,649.1	334.2	286.5	47.75	7.000	
9,000.0	7,000.0	9,340.1	7,310.0	57.5	58.2	-158.04	1,177.8	1,749.1	334.2	284.2	50.09	6.673	
9,100.0	7,000.0	9,440.1	7,310.0	60.1	60.8	-158.04	1,178.0	1,849.1	334.2	281.8	52.43	6.374	
9,200.0	7,000.0	9,540.1	7,310.0	62.8	63.5	-158.04	1,178.2	1,949.1	334.2	279.4	54.80	6.100	
9,300.0	7,000.0	9,640.1	7,310.0	65.5	66.1	-158.04	1,178.4	2,049.1	334.2	277.1	57.17	5.847	
9,400.0	7,000.0	9,740.1	7,310.0	68.1	68.8	-158.04	1,178.6	2,149.1	334.2	274.7	59.55	5.613	
9,500.0	7,000.0	9,840.1	7,310.0	70.8	71.5	-158.04	1,178.7	2,249.1	334.2	272.3	61.94	5.396	
9,600.0	7,000.0	9,940.1	7,310.0	73.5	74.1	-158.04	1,178.9	2,349.1	334.2	269.9	64.34	5.195	
9,700.0	7,000.0	10,040.1	7,310.0	76.2	76.8	-158.05	1,179.1	2,449.1	334.2	267.5	66.75	5.008	
9,800.0	7,000.0	10,140.1	7,310.0	78.9	79.5	-158.05	1,179.3	2,549.1	334.2	265.1	69.16	4.833	
9,900.0	7,000.0	10,240.1	7,310.0	81.7	82.2	-158.05	1,179.5	2,649.1	334.2	262.7	71.57	4.670	
10,000.0	7,000.0	10,340.1	7,310.0	84.4	84.9	-158.05	1,179.7	2,749.1	334.2	260.2	73.99	4.517	

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

SRC Union Pad Sec.5-T2N-R68W - SRC Union 11HZC - Wellbore #1 - Plan #2 (4-08-13)												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
10,100.0	7,000.0	10,440.1	7,310.0	87.1	87.7	-158.05	1,179.8	2,849.1	334.2	257.8	76.42	4.374	
10,200.0	7,000.0	10,540.1	7,310.0	89.8	90.4	-158.05	1,180.0	2,949.1	334.2	255.4	78.85	4.239	
10,300.0	7,000.0	10,640.1	7,310.0	92.6	93.1	-158.05	1,180.2	3,049.1	334.2	253.0	81.28	4.112	
10,400.0	7,000.0	10,740.1	7,310.0	95.3	95.9	-158.05	1,180.4	3,149.1	334.2	250.5	83.72	3.992	
10,500.0	7,000.0	10,840.1	7,310.0	98.1	98.6	-158.05	1,180.6	3,249.1	334.2	248.1	86.16	3.879	
10,600.0	7,000.0	10,940.1	7,310.0	100.8	101.3	-158.05	1,180.8	3,349.1	334.2	245.6	88.60	3.772	
10,700.0	7,000.0	11,040.1	7,310.0	103.6	104.1	-158.05	1,181.0	3,449.1	334.2	243.2	91.05	3.671	
10,800.0	7,000.0	11,140.1	7,310.0	106.3	106.8	-158.05	1,181.1	3,549.1	334.2	240.7	93.50	3.575	
10,900.0	7,000.0	11,240.1	7,310.0	109.1	109.6	-158.05	1,181.3	3,649.1	334.2	238.3	95.95	3.484	
11,000.0	7,000.0	11,340.1	7,310.0	111.8	112.3	-158.05	1,181.5	3,749.1	334.2	235.8	98.40	3.397	
11,100.0	7,000.0	11,440.1	7,310.0	114.6	115.1	-158.05	1,181.7	3,849.1	334.2	233.4	100.85	3.314	
11,200.0	7,000.0	11,540.1	7,310.0	117.4	117.8	-158.05	1,181.9	3,949.1	334.2	230.9	103.31	3.235	
11,300.0	7,000.0	11,640.1	7,310.0	120.1	120.6	-158.05	1,182.1	4,049.1	334.2	228.5	105.77	3.160	
11,400.0	7,000.0	11,740.1	7,310.0	122.9	123.4	-158.05	1,182.2	4,149.1	334.2	226.0	108.22	3.088	
11,500.0	7,000.0	11,840.1	7,310.0	125.7	126.1	-158.05	1,182.4	4,249.1	334.2	223.6	110.68	3.020	
11,600.0	7,000.0	11,940.1	7,310.0	128.4	128.9	-158.05	1,182.6	4,349.1	334.2	221.1	113.15	2.954	
11,700.0	7,000.0	12,040.1	7,310.0	131.2	131.6	-158.05	1,182.8	4,449.1	334.2	218.6	115.61	2.891	
11,771.1	7,000.0	12,111.2	7,310.0	133.2	133.6	-158.05	1,182.9	4,520.2	334.2	216.9	117.36	2.848	

SRC Union Pad Sec.5-T2N-R68W - SRC Union 12-5D - Wellbore #1 - Plan #1 (1-03-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	2.0	2.0	0.0	0.0	68.80	43.4	111.8	119.9	119.9	0.00	N/A		
100.0	100.0	102.0	102.0	0.1	0.1	68.80	43.4	111.8	119.9	119.7	0.23	522.976		
200.0	200.0	202.0	202.0	0.3	0.3	68.80	43.4	111.8	119.9	119.2	0.68	176.634		
300.0	300.0	302.0	302.0	0.6	0.6	68.80	43.4	111.8	119.9	118.8	1.13	106.308		
400.0	400.0	402.8	402.8	0.8	0.8	69.22	42.4	111.8	119.6	118.0	1.55	77.014		
500.0	500.0	503.5	503.4	1.0	1.0	70.43	39.7	111.8	118.6	116.7	1.97	60.214		
600.0	600.0	604.0	603.8	1.2	1.2	72.48	35.3	111.8	117.2	114.8	2.41	48.718		
700.0	700.0	703.7	703.5	1.5	1.4	94.82	30.1	111.8	115.9	113.1	2.85	40.643		
778.6	778.5	782.0	781.6	1.6	1.6	98.68	26.0	111.8	115.5	112.3	3.21	35.988 CC		
800.0	799.8	803.2	802.8	1.7	1.6	99.91	24.9	111.8	115.5	112.2	3.31	34.940 ES		
900.0	899.5	902.2	901.7	1.9	1.9	106.55	19.7	111.8	117.0	113.2	3.77	31.002		
1,000.0	998.7	998.8	998.1	2.2	2.1	114.05	14.8	112.6	122.3	118.0	4.24	28.809		
1,100.0	1,097.5	1,094.6	1,093.8	2.5	2.3	121.64	10.4	115.0	132.9	128.2	4.72	28.162 SF		
1,200.0	1,195.6	1,189.6	1,188.6	2.8	2.5	128.59	6.3	118.9	149.2	144.0	5.20	28.698		
1,300.0	1,293.4	1,283.9	1,282.7	3.2	2.7	134.44	2.7	124.3	170.1	164.4	5.68	29.959		
1,400.0	1,391.2	1,378.0	1,376.4	3.6	2.9	138.71	-0.6	131.2	193.5	187.4	6.15	31.462		
1,500.0	1,489.0	1,471.7	1,469.8	4.0	3.2	141.75	-3.5	139.5	218.9	212.3	6.62	33.040		
1,600.0	1,586.7	1,567.2	1,564.7	4.4	3.4	144.02	-6.2	149.1	245.4	238.3	7.10	34.546		
1,700.0	1,684.5	1,663.2	1,660.2	4.8	3.7	145.84	-8.9	158.7	272.3	264.7	7.59	35.894		
1,800.0	1,782.3	1,759.2	1,755.6	5.2	3.9	147.34	-11.6	168.4	299.4	291.3	8.07	37.088		
1,900.0	1,880.1	1,855.1	1,851.1	5.6	4.2	148.59	-14.3	178.1	326.6	318.0	8.56	38.140		
2,000.0	1,977.8	1,951.1	1,946.6	6.1	4.5	149.65	-17.0	187.7	354.0	344.9	9.06	39.084		
2,100.0	2,075.6	2,047.1	2,042.0	6.5	4.7	150.56	-19.7	197.4	381.4	371.9	9.55	39.924		
2,200.0	2,173.4	2,143.1	2,137.5	6.9	5.0	151.35	-22.4	207.1	408.9	398.9	10.05	40.676		
2,300.0	2,271.2	2,239.1	2,233.0	7.4	5.3	152.03	-25.1	216.7	436.5	426.0	10.56	41.352		
2,400.0	2,368.9	2,335.1	2,328.5	7.8	5.5	152.64	-27.8	226.4	464.2	453.1	11.06	41.962		
2,500.0	2,466.7	2,431.1	2,423.9	8.3	5.8	153.17	-30.5	236.1	491.9	480.3	11.57	42.515		
2,600.0	2,564.5	2,527.1	2,519.4	8.7	6.1	153.65	-33.3	245.7	519.6	507.5	12.08	43.018		
2,700.0	2,662.3	2,623.1	2,614.9	9.1	6.4	154.09	-36.0	255.4	547.3	534.7	12.59	43.476		
2,800.0	2,760.0	2,719.1	2,710.3	9.6	6.6	154.48	-38.7	265.1	575.1	562.0	13.10	43.896		
2,900.0	2,857.8	2,815.1	2,805.8	10.0	6.9	154.83	-41.4	274.7	602.9	589.3	13.62	44.281		
3,000.0	2,955.6	2,911.1	2,901.3	10.5	7.2	155.15	-44.1	284.4	630.7	616.6	14.13	44.636		
3,100.0	3,053.4	3,007.1	2,996.7	10.9	7.5	155.45	-46.8	294.1	658.6	643.9	14.65	44.964		
3,200.0	3,151.1	3,103.1	3,092.2	11.4	7.8	155.72	-49.5	303.7	686.4	671.3	15.16	45.267		
3,300.0	3,248.9	3,199.1	3,187.7	11.8	8.0	155.97	-52.2	313.4	714.3	698.6	15.68	45.549		
3,400.0	3,346.7	3,295.1	3,283.1	12.3	8.3	156.20	-54.9	323.1	742.2	726.0	16.20	45.811		
3,500.0	3,444.5	3,391.1	3,378.6	12.7	8.6	156.42	-57.6	332.7	770.1	753.3	16.72	46.055		
3,600.0	3,542.3	3,487.0	3,474.1	13.1	8.9	156.62	-60.3	342.4	797.9	780.7	17.24	46.283		
3,700.0	3,640.0	3,583.0	3,569.5	13.6	9.2	156.80	-63.0	352.1	825.9	808.1	17.76	46.496		
3,800.0	3,737.8	3,679.0	3,665.0	14.0	9.5	156.98	-65.7	361.7	853.8	835.5	18.28	46.696		
3,900.0	3,835.6	3,775.0	3,760.5	14.5	9.7	157.14	-68.4	371.4	881.7	862.9	18.81	46.884		
4,000.0	3,933.4	3,871.0	3,855.9	14.9	10.0	157.29	-71.1	381.1	909.6	890.3	19.33	47.061		
4,100.0	4,031.1	3,975.0	3,959.4	15.4	10.3	157.46	-74.0	391.2	937.3	917.5	19.86	47.207		
4,200.0	4,128.9	4,086.9	4,070.9	15.8	10.6	157.69	-76.5	400.4	963.7	943.3	20.36	47.323		
4,300.0	4,226.7	4,199.7	4,183.4	16.3	10.8	157.99	-78.5	407.4	988.4	967.6	20.86	47.386		

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union 12HZC - Wellbore #1 - Plan #2 (4-08-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	1.0	1.0	0.0	0.0	68.46	7.3	18.4	19.8	19.8	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	68.46	7.3	18.4	19.8	19.6	0.23	87.352		
200.0	200.0	201.0	201.0	0.3	0.3	68.46	7.3	18.4	19.8	19.2	0.68	29.311		
300.0	300.0	301.0	301.0	0.6	0.6	68.46	7.3	18.4	19.8	18.7	1.13	17.610		
400.0	400.0	401.0	401.0	0.8	0.8	68.46	7.3	18.4	19.8	18.3	1.58	12.586		
500.0	500.0	501.0	501.0	1.0	1.0	68.46	7.3	18.4	19.8	17.8	2.03	9.792		
600.0	600.0	601.0	601.0	1.2	1.2	68.46	7.3	18.4	19.8	17.4	2.47	8.013		
671.1	671.1	672.1	672.1	1.4	1.4	90.00	7.3	18.4	19.8	17.0	2.79	7.092 CC		
700.0	700.0	701.0	701.0	1.5	1.5	92.49	7.3	18.4	19.8	16.9	2.92	6.784 ES		
800.0	799.8	800.8	800.8	1.7	1.7	107.07	7.3	18.4	20.7	17.4	3.37	6.147 SF		
900.0	899.5	900.5	900.5	1.9	1.9	126.63	7.3	18.4	24.7	20.9	3.83	6.465		
1,000.0	998.7	999.7	999.7	2.2	2.1	143.46	7.3	18.4	33.5	29.2	4.28	7.826		
1,100.0	1,097.5	1,098.5	1,098.5	2.5	2.4	154.74	7.3	18.4	47.0	42.3	4.73	9.949		
1,200.0	1,195.6	1,196.6	1,196.6	2.8	2.6	161.83	7.3	18.4	64.8	59.7	5.17	12.541		
1,300.0	1,293.4	1,294.4	1,294.4	3.2	2.8	166.23	7.3	18.4	85.0	79.4	5.62	15.121		
1,400.0	1,391.2	1,392.2	1,392.2	3.6	3.0	168.94	7.3	18.4	105.5	99.5	6.08	17.348		
1,500.0	1,489.0	1,490.0	1,490.0	4.0	3.2	170.77	7.3	18.4	126.2	119.6	6.55	19.274		
1,600.0	1,586.7	1,586.7	1,586.7	4.4	3.4	172.58	6.4	17.4	147.2	140.3	6.99	21.058		
1,700.0	1,684.5	1,682.7	1,682.6	4.8	3.6	175.00	3.6	14.0	169.3	161.8	7.42	22.808		
1,800.0	1,782.3	1,777.8	1,777.4	5.2	3.8	177.79	-1.3	8.1	192.5	184.7	7.86	24.497		
1,900.0	1,880.1	1,871.8	1,870.8	5.6	4.0	-179.25	-8.1	-0.1	217.3	208.9	8.31	26.129		
2,000.0	1,977.8	1,966.4	1,964.4	6.1	4.2	-176.30	-16.5	-10.3	243.5	234.7	8.80	27.686		
2,100.0	2,075.6	2,062.1	2,059.1	6.5	4.4	-173.83	-25.3	-20.9	270.5	261.2	9.30	29.088		
2,200.0	2,173.4	2,157.8	2,153.9	6.9	4.7	-171.80	-34.0	-31.5	297.8	288.0	9.81	30.344		
2,300.0	2,271.2	2,253.5	2,248.6	7.4	5.0	-170.12	-42.8	-42.0	325.4	315.0	10.34	31.469		
2,400.0	2,368.9	2,349.2	2,343.3	7.8	5.2	-168.69	-51.5	-52.6	353.2	342.3	10.88	32.474		
2,500.0	2,466.7	2,445.0	2,438.0	8.3	5.5	-167.48	-60.2	-63.1	381.2	369.7	11.42	33.384		
2,600.0	2,564.5	2,540.7	2,532.8	8.7	5.8	-166.43	-69.0	-73.7	409.3	397.3	11.97	34.203		
2,700.0	2,662.3	2,636.4	2,627.5	9.1	6.1	-165.51	-77.7	-84.3	437.5	425.0	12.52	34.946		
2,800.0	2,760.0	2,732.1	2,722.2	9.6	6.4	-164.71	-86.5	-94.8	465.8	452.8	13.08	35.621		
2,900.0	2,857.8	2,827.8	2,816.9	10.0	6.7	-164.00	-95.2	-105.4	494.2	480.6	13.64	36.236		
3,000.0	2,955.6	2,923.5	2,911.7	10.5	7.0	-163.36	-103.9	-116.0	522.7	508.5	14.20	36.799		
3,100.0	3,053.4	3,019.2	3,006.4	10.9	7.3	-162.79	-112.7	-126.5	551.2	536.5	14.77	37.316		
3,200.0	3,151.1	3,114.9	3,101.1	11.4	7.6	-162.28	-121.4	-137.1	579.8	564.4	15.34	37.791		
3,300.0	3,248.9	3,210.6	3,195.8	11.8	7.9	-161.81	-130.2	-147.6	608.4	592.5	15.91	38.230		
3,400.0	3,346.7	3,306.3	3,290.6	12.3	8.2	-161.39	-138.9	-158.2	637.0	620.5	16.49	38.636		
3,500.0	3,444.5	3,402.1	3,385.3	12.7	8.5	-161.00	-147.6	-168.8	665.7	648.6	17.06	39.012		
3,600.0	3,542.3	3,497.8	3,480.0	13.1	8.9	-160.64	-156.4	-179.3	694.4	676.7	17.64	39.362		
3,700.0	3,640.0	3,593.5	3,574.7	13.6	9.2	-160.32	-165.1	-189.9	723.1	704.9	18.22	39.688		
3,800.0	3,737.8	3,689.2	3,669.4	14.0	9.5	-160.01	-173.9	-200.4	751.8	733.0	18.80	39.992		
3,900.0	3,835.6	3,784.9	3,764.2	14.5	9.8	-159.73	-182.6	-211.0	780.6	761.2	19.38	40.277		
4,000.0	3,933.4	3,880.6	3,858.9	14.9	10.2	-159.47	-191.3	-221.6	809.3	789.4	19.96	40.544		
4,100.0	4,031.1	3,976.3	3,953.6	15.4	10.5	-159.23	-200.1	-232.1	838.1	817.6	20.54	40.795		
4,200.0	4,128.9	4,072.0	4,048.3	15.8	10.8	-159.00	-208.8	-242.7	866.9	845.8	21.13	41.031		
4,300.0	4,226.7	4,167.7	4,143.1	16.3	11.1	-158.79	-217.5	-253.3	895.7	874.0	21.71	41.253		
4,400.0	4,324.5	4,263.5	4,237.8	16.7	11.5	-158.59	-226.3	-263.8	924.5	902.2	22.30	41.462		
4,500.0	4,422.2	4,359.2	4,332.5	17.2	11.8	-158.41	-235.0	-274.4	953.4	930.5	22.88	41.660		
4,600.0	4,520.0	4,454.9	4,427.2	17.6	12.1	-158.23	-243.8	-284.9	982.2	958.7	23.47	41.848		

SRC Union Pad Sec.5-T2N-R68W - SRC Union 12HZN - Wellbore #1 - Plan #2 (4-08-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	2.0	2.0	0.0	0.0	68.91	28.8	74.6	80.0	80.0	0.00	N/A		
100.0	100.0	102.0	102.0	0.1	0.1	68.91	28.8	74.6	80.0	79.7	0.23	348.832		
200.0	200.0	202.0	202.0	0.3	0.3	68.91	28.8	74.6	80.0	79.3	0.68	117.818		
300.0	300.0	302.0	302.0	0.6	0.6	68.91	28.8	74.6	80.0	78.8	1.13	70.878		
400.0	400.0	402.0	402.0	0.8	0.8	68.91	28.8	74.6	80.0	78.4	1.58	50.685		
500.0	500.0	502.0	502.0	1.0	1.0	68.91	28.8	74.6	80.0	77.9	2.03	39.447		
600.0	600.0	602.0	602.0	1.2	1.2	68.91	28.8	74.6	80.0	77.5	2.48	32.288		
700.0	700.0	702.0	702.0	1.5	1.5	89.16	28.8	74.6	79.9	77.0	2.93	27.325		
729.4	729.3	731.3	731.3	1.5	1.5	90.00	28.8	74.6	79.9	76.9	3.06	26.140 CC		
800.0	799.8	801.8	801.8	1.7	1.7	92.90	28.8	74.6	80.0	76.6	3.37	23.712 ES		
900.0	899.5	901.5	901.5	1.9	1.9	99.03	28.8	74.6	80.9	77.1	3.83	21.110		
1,000.0	998.7	1,000.7	1,000.7	2.2	2.1	107.18	28.8	74.6	83.7	79.4	4.31	19.431		
1,100.0	1,097.5	1,099.5	1,099.5	2.5	2.4	116.58	28.8	74.6	89.6	84.8	4.80	18.680 SF		
1,200.0	1,195.6	1,197.6	1,197.6	2.8	2.6	126.15	28.8	74.6	99.7	94.5	5.29	18.842		
1,300.0	1,293.4	1,295.4	1,295.4	3.2	2.8	134.62	28.8	74.6	113.5	107.8	5.78	19.636		
1,400.0	1,391.2	1,393.2	1,393.2	3.6	3.0	141.19	28.8	74.6	129.3	123.0	6.26	20.649		
1,500.0	1,489.0	1,491.0	1,491.0	4.0	3.2	146.31	28.8	74.6	146.3	139.6	6.73	21.736		
1,600.0	1,586.7	1,588.7	1,588.7	4.4	3.5	150.34	28.8	74.6	164.3	157.1	7.20	22.819		
1,700.0	1,684.5	1,686.5	1,686.5	4.8	3.7	153.58	28.8	74.6	182.9	175.2	7.67	23.858		
1,800.0	1,782.3	1,784.3	1,784.3	5.2	3.9	156.22	28.8	74.6	202.0	193.9	8.13	24.835		
1,900.0	1,880.1	1,883.5	1,883.5	5.6	4.1	158.74	28.2	73.5	221.1	212.5	8.58	25.771		
2,000.0	1,977.8	1,982.7	1,982.6	6.1	4.3	161.66	26.2	69.4	240.0	231.0	9.00	26.666		
2,100.0	2,075.6	2,081.3	2,080.8	6.5	4.5	164.89	22.6	62.3	258.9	249.5	9.42	27.497		
2,200.0	2,173.4	2,178.9	2,177.8	6.9	4.7	168.34	17.6	52.2	278.2	268.4	9.84	28.270		
2,300.0	2,271.2	2,275.5	2,273.5	7.4	4.9	171.78	11.5	40.2	298.4	288.1	10.29	29.002		
2,400.0	2,368.9	2,371.9	2,368.9	7.8	5.2	174.80	5.4	28.1	319.5	308.7	10.76	29.687		
2,500.0	2,466.7	2,468.3	2,464.4	8.3	5.4	177.44	-0.6	15.9	341.4	330.1	11.26	30.323		
2,600.0	2,564.5	2,564.8	2,559.8	8.7	5.7	179.77	-6.7	3.8	363.8	352.1	11.77	30.913		
2,700.0	2,662.3	2,661.2	2,655.5	9.1	5.9	-178.16	-12.8	-8.4	386.8	374.5	12.30	31.451		
2,800.0	2,760.0	2,757.6	2,750.7	9.6	6.2	-176.33	-18.9	-20.5	410.3	397.4	12.84	31.949		
2,900.0	2,857.8	2,854.0	2,846.2	10.0	6.5	-174.69	-25.0	-32.6	434.1	420.7	13.39	32.406		
3,000.0	2,955.6	2,950.4	2,941.6	10.5	6.8	-173.23	-31.0	-44.8	458.2	444.2	13.96	32.827		
3,100.0	3,053.4	3,046.8	3,037.1	10.9	7.0	-171.91	-37.1	-56.9	482.5	468.0	14.53	33.216		
3,200.0	3,151.1	3,143.2	3,132.5	11.4	7.3	-170.71	-43.2	-69.0	507.1	492.0	15.10	33.575		
3,300.0	3,248.9	3,239.6	3,228.0	11.8	7.6	-169.62	-49.3	-81.2	531.8	516.2	15.68	33.908		
3,400.0	3,346.7	3,336.0	3,323.4	12.3	7.9	-168.63	-55.4	-93.3	556.8	540.5	16.27	34.218		
3,500.0	3,444.5	3,432.5	3,418.9	12.7	8.2	-167.73	-61.4	-105.4	581.8	565.0	16.86	34.506		
3,600.0	3,542.3	3,528.9	3,514.3	13.1	8.6	-166.90	-67.5	-117.6	607.0	589.6	17.46	34.775		
3,700.0	3,640.0	3,625.3	3,609.8	13.6	8.9	-166.13	-73.6	-129.7	632.3	614.3	18.05	35.027		
3,800.0	3,737.8	3,721.7	3,705.2	14.0	9.2	-165.43	-79.7	-141.8	657.7	639.1	18.65	35.263		
3,900.0	3,835.6	3,818.1	3,800.7	14.5	9.5	-164.77	-85.8	-154.0	683.2	664.0	19.25	35.484		
4,000.0	3,933.4	3,914.5	3,896.1	14.9	9.8	-164.17	-91.8	-166.1	708.8	688.9	19.86	35.692		
4,100.0	4,031.1	4,010.9	3,991.6	15.4	10.1	-163.60	-97.9	-178.2	734.4	714.0	20.46	35.888		
4,200.0	4,128.9	4,107.3	4,087.0	15.8	10.4	-163.07	-104.0	-190.4	760.1	739.1	21.07	36.074		
4,300.0	4,226.7	4,203.7	4,182.5	16.3	10.8	-162.58	-110.1	-202.5	785.9	764.2	21.68	36.249		
4,400.0	4,324.5	4,300.2	4,277.9	16.7	11.1	-162.12	-116.2	-214.6	811.7	789.4	22.29	36.414		
4,500.0	4,422.2	4,396.6	4,373.4	17.2	11.4	-161.69	-122.3	-226.8	837.6	814.7	22.90	36.571		
4,600.0	4,520.0	4,493.0	4,468.8	17.6	11.7	-161.28	-128.3	-238.9	863.5	840.0	23.51	36.720		
4,700.0	4,617.8	4,589.4	4,564.3	18.1	12.1	-160.89	-134.4	-251.0	889.4	865.3	24.13	36.862		
4,800.0	4,715.6	4,685.8	4,659.7	18.5	12.4	-160.53	-140.5	-263.2	915.4	890.6	24.74	36.997		
4,900.0	4,813.3	4,782.2	4,755.2	19.0	12.7	-160.19	-146.6	-275.3	941.4	916.0	25.36	37.125		
5,000.0	4,911.1	4,878.6	4,850.6	19.4	13.0	-159.87	-152.7	-287.5	967.4	941.4	25.97	37.247		

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Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
SRC Union Pad Sec.5-T2N-R68W - SRC Union 12HZN - Wellbore #1 - Plan #2 (4-08-13)												Offset Well Error:	0.0 ft
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	Warning
5,100.0	5,008.9	4,975.0	4,946.1	19.9	13.4	-159.56	-158.7	-299.6	993.5	966.9	26.59	37.364	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union 5AHZC - Wellbore #1 - Plan #2 (4-08-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	2.0	2.0	0.0	0.0	68.88	36.1	93.3	100.1	100.1	0.00	N/A		
100.0	100.0	102.0	102.0	0.1	0.1	68.88	36.1	93.3	100.1	99.8	0.23	436.470		
200.0	200.0	202.0	202.0	0.3	0.3	68.88	36.1	93.3	100.1	99.4	0.68	147.417		
300.0	300.0	302.0	302.0	0.6	0.6	68.88	36.1	93.3	100.1	98.9	1.13	88.685		
400.0	400.0	402.0	402.0	0.8	0.8	68.88	36.1	93.3	100.1	98.5	1.58	63.419		
500.0	500.0	502.0	502.0	1.0	1.0	68.88	36.1	93.3	100.1	98.0	2.03	49.357		
600.0	600.0	602.0	602.0	1.2	1.2	68.88	36.1	93.3	100.1	97.6	2.48	40.399		
700.0	700.0	702.0	702.0	1.5	1.5	88.87	36.1	93.3	100.0	97.1	2.93	34.192		
745.9	745.9	747.9	747.9	1.6	1.6	90.00	36.1	93.3	100.0	96.9	3.13	31.929 CC		
800.0	799.8	801.8	801.8	1.7	1.7	91.86	36.1	93.3	100.0	96.7	3.37	29.645		
900.0	899.5	901.5	901.5	1.9	1.9	96.79	36.1	93.3	100.7	96.9	3.83	26.265		
1,000.0	998.7	1,002.4	1,002.4	2.2	2.1	102.69	37.6	92.3	102.0	97.7	4.31	23.661		
1,100.0	1,097.5	1,103.7	1,103.5	2.5	2.4	108.60	42.1	89.3	103.5	98.7	4.81	21.517		
1,200.0	1,195.6	1,205.3	1,204.7	2.8	2.6	114.54	49.5	84.2	105.3	100.0	5.34	19.712		
1,300.0	1,293.4	1,307.4	1,306.0	3.2	2.9	119.81	60.0	77.2	106.6	100.7	5.90	18.078		
1,400.0	1,391.2	1,409.9	1,407.2	3.6	3.1	123.67	73.6	68.0	106.1	99.6	6.47	16.392		
1,500.0	1,489.0	1,509.8	1,505.5	4.0	3.5	126.82	88.3	58.1	104.5	97.5	7.05	14.830		
1,600.0	1,586.7	1,609.6	1,603.7	4.4	3.8	130.06	103.0	48.1	103.3	95.7	7.61	13.565		
1,700.0	1,684.5	1,709.4	1,702.0	4.8	4.1	133.36	117.7	38.2	102.4	94.2	8.16	12.540		
1,800.0	1,782.3	1,809.3	1,800.2	5.2	4.5	136.71	132.4	28.3	101.8	93.1	8.69	11.714		
1,900.0	1,880.1	1,909.1	1,898.4	5.6	4.8	140.09	147.1	18.3	101.6	92.4	9.20	11.046		
1,904.3	1,884.3	1,913.4	1,902.7	5.7	4.8	140.24	147.8	17.9	101.6	92.4	9.22	11.020		
2,000.0	1,977.8	2,008.9	1,996.7	6.1	5.2	143.46	161.9	8.4	101.8	92.1	9.69	10.508 ES		
2,100.0	2,075.6	2,108.7	2,094.9	6.5	5.6	146.82	176.6	-1.6	102.3	92.2	10.16	10.074		
2,200.0	2,173.4	2,208.5	2,193.1	6.9	5.9	150.13	191.3	-11.5	103.2	92.6	10.61	9.725		
2,300.0	2,271.2	2,308.3	2,291.3	7.4	6.3	153.37	206.0	-21.4	104.4	93.3	11.05	9.444		
2,400.0	2,368.9	2,408.2	2,389.6	7.8	6.7	156.53	220.7	-31.4	105.9	94.4	11.49	9.216		
2,500.0	2,466.7	2,508.0	2,487.8	8.3	7.1	159.59	235.4	-41.3	107.8	95.8	11.93	9.029		
2,600.0	2,564.5	2,607.8	2,586.0	8.7	7.5	162.54	250.1	-51.2	109.9	97.5	12.38	8.875		
2,700.0	2,662.3	2,707.6	2,684.2	9.1	7.8	165.37	264.9	-61.2	112.3	99.5	12.84	8.746		
2,800.0	2,760.0	2,807.4	2,782.5	9.6	8.2	168.08	279.6	-71.1	115.0	101.7	13.32	8.635		
2,900.0	2,857.8	2,907.3	2,880.7	10.0	8.6	170.66	294.3	-81.1	117.9	104.1	13.81	8.538		
3,000.0	2,955.6	3,007.1	2,978.9	10.5	9.0	173.10	309.0	-91.0	121.1	106.7	14.33	8.451		
3,100.0	3,053.4	3,106.9	3,077.2	10.9	9.4	175.42	323.7	-100.9	124.4	109.6	14.86	8.373		
3,200.0	3,151.1	3,206.7	3,175.4	11.4	9.8	177.62	338.4	-110.9	128.0	112.6	15.42	8.300		
3,300.0	3,248.9	3,306.5	3,273.6	11.8	10.2	179.69	353.1	-120.8	131.7	115.7	16.00	8.234		
3,400.0	3,346.7	3,406.4	3,371.8	12.3	10.6	-178.35	367.9	-130.8	135.6	119.0	16.60	8.171		
3,500.0	3,444.5	3,506.2	3,470.1	12.7	11.0	-176.51	382.6	-140.7	139.7	122.5	17.22	8.113		
3,600.0	3,542.3	3,606.0	3,568.3	13.1	11.4	-174.77	397.3	-150.6	143.9	126.0	17.85	8.059		
3,700.0	3,640.0	3,705.8	3,666.5	13.6	11.8	-173.12	412.0	-160.6	148.2	129.7	18.51	8.007		
3,800.0	3,737.8	3,805.6	3,764.8	14.0	12.1	-171.58	426.7	-170.5	152.6	133.4	19.17	7.960		
3,900.0	3,835.6	3,905.5	3,863.0	14.5	12.5	-170.12	441.4	-180.4	157.1	137.3	19.85	7.915		
4,000.0	3,933.4	4,005.3	3,961.2	14.9	12.9	-168.74	456.1	-190.4	161.8	141.2	20.54	7.874		
4,100.0	4,031.1	4,105.1	4,059.4	15.4	13.3	-167.44	470.9	-200.3	166.5	145.2	21.25	7.835		
4,200.0	4,128.9	4,204.9	4,157.7	15.8	13.7	-166.22	485.6	-210.3	171.3	149.3	21.96	7.799		
4,300.0	4,226.7	4,304.7	4,255.9	16.3	14.1	-165.06	500.3	-220.2	176.1	153.5	22.68	7.766		
4,400.0	4,324.5	4,404.6	4,354.1	16.7	14.5	-163.96	515.0	-230.1	181.1	157.7	23.41	7.736		
4,500.0	4,422.2	4,504.4	4,452.3	17.2	14.9	-162.92	529.7	-240.1	186.1	161.9	24.14	7.708		
4,600.0	4,520.0	4,604.2	4,550.6	17.6	15.3	-161.94	544.4	-250.0	191.1	166.3	24.88	7.682		
4,700.0	4,617.8	4,704.0	4,648.8	18.1	15.7	-161.00	559.1	-259.9	196.2	170.6	25.63	7.658		
4,800.0	4,715.6	4,803.8	4,747.0	18.5	16.1	-160.12	573.8	-269.9	201.4	175.0	26.38	7.636		
4,900.0	4,813.3	4,903.7	4,845.3	19.0	16.5	-159.28	588.6	-279.8	206.6	179.5	27.13	7.616		

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

SRC Union Pad Sec.5-T2N-R68W - SRC Union 5AHZC - Wellbore #1 - Plan #2 (4-08-13)												Offset Site Error:	0.0 ft	
Survey Program: 0-MWD												Offset Well Error:	0.0 ft	
Reference		Offset		Semi Major Axis			Distance		Between Centres		Between Ellipses	Minimum Separation	Separation Factor	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		
5,000.0	4,911.1	5,003.5	4,943.5	19.4	16.9	-158.48	603.3	-289.8	211.9	184.0	27.88	7.598		
5,100.0	5,008.9	5,103.3	5,041.7	19.9	17.3	-157.72	618.0	-299.7	217.1	188.5	28.64	7.581		
5,200.0	5,106.7	5,203.1	5,139.9	20.3	17.7	-156.99	632.7	-309.6	222.5	193.1	29.40	7.566		
5,300.0	5,204.5	5,302.9	5,238.2	20.8	18.1	-156.30	647.4	-319.6	227.8	197.7	30.17	7.552		
5,400.0	5,302.2	5,402.8	5,336.4	21.2	18.5	-155.64	662.1	-329.5	233.2	202.3	30.93	7.539		
5,500.0	5,400.0	5,502.6	5,434.6	21.7	18.9	-155.01	676.8	-339.4	238.6	206.9	31.70	7.528		
5,600.0	5,497.8	5,600.0	5,530.5	22.1	19.3	-154.47	691.0	-349.0	244.3	211.9	32.43	7.533		
5,700.0	5,595.6	5,693.3	5,622.8	22.6	19.5	-154.36	702.4	-356.7	252.1	219.1	32.98	7.643		
5,800.0	5,693.3	5,786.4	5,715.3	23.0	19.7	-154.68	711.3	-362.7	262.3	228.9	33.41	7.851		
5,900.0	5,791.1	5,878.8	5,807.4	23.5	19.9	-155.40	717.7	-367.0	275.1	241.3	33.73	8.154		
6,000.0	5,889.3	5,970.8	5,899.3	23.8	20.1	-156.36	721.6	-369.7	288.4	254.4	33.93	8.499		
6,100.0	5,988.1	6,062.5	5,990.9	24.1	20.2	-157.33	723.0	-370.7	301.0	267.0	34.06	8.839		
6,200.0	6,087.4	6,161.0	6,089.4	24.3	20.4	-158.25	723.1	-370.7	312.1	277.9	34.19	9.129		
6,300.0	6,187.0	6,260.6	6,189.0	24.5	20.5	-158.87	723.1	-370.7	320.0	285.6	34.36	9.314		
6,400.0	6,286.9	6,360.5	6,288.9	24.7	20.7	-159.22	723.1	-370.7	324.7	290.1	34.54	9.398		
6,500.0	6,386.9	6,460.5	6,388.9	24.8	20.8	-178.32	723.1	-370.7	326.1	283.4	42.72	7.632		
6,563.9	6,450.8	6,524.3	6,452.8	24.9	20.9	91.83	723.1	-370.7	326.1	291.1	34.99	9.318		
6,600.0	6,486.9	6,560.5	6,488.9	24.9	20.9	91.79	723.1	-370.7	326.1	291.0	35.11	9.286		
6,700.0	6,586.1	6,659.7	6,588.1	25.0	21.1	93.65	723.1	-370.7	326.6	290.8	35.82	9.119		
6,800.0	6,681.4	6,755.0	6,683.4	25.0	21.2	98.21	723.1	-370.7	329.9	292.9	36.95	8.927		
6,900.0	6,769.3	6,842.9	6,771.3	24.9	21.4	104.08	723.1	-370.7	340.5	302.5	37.94	8.974		
7,000.0	6,846.5	6,945.9	6,874.0	24.9	21.5	111.39	723.1	-363.7	361.7	323.4	38.29	9.446		
7,100.0	6,910.2	7,074.5	6,997.0	24.7	21.5	118.88	723.1	-327.4	389.4	352.0	37.36	10.422		
7,200.0	6,958.1	7,235.4	7,132.3	24.6	21.3	125.88	723.1	-241.6	418.2	382.9	35.35	11.830		
7,300.0	6,988.3	7,438.6	7,255.5	24.6	20.9	131.33	723.1	-81.7	440.9	407.3	33.65	13.104		
7,400.0	6,999.9	7,676.8	7,310.0	24.6	20.6	133.31	723.1	148.1	449.2	414.3	34.89	12.873		
7,429.1	7,000.4	7,705.9	7,310.0	24.6	20.7	133.26	723.0	177.3	448.9	413.4	35.51	12.641		
7,500.0	7,000.0	7,776.8	7,310.0	24.8	21.5	133.26	722.7	248.1	449.4	412.4	37.06	12.128		
7,600.0	7,000.0	7,876.8	7,310.0	25.4	23.2	133.21	722.4	348.1	449.8	410.3	39.54	11.378		
7,700.0	7,000.0	7,976.8	7,310.0	26.7	25.0	133.16	722.0	448.1	450.3	408.0	42.30	10.645		
7,800.0	7,000.0	8,076.8	7,310.0	28.4	27.1	133.11	721.6	548.1	450.7	405.4	45.29	9.951		
7,900.0	7,000.0	8,176.8	7,310.0	30.4	29.2	133.07	721.3	648.1	451.1	402.6	48.47	9.306		
8,000.0	7,000.0	8,276.8	7,310.0	32.6	31.5	133.02	720.9	748.1	451.5	399.7	51.81	8.714		
8,100.0	7,000.0	8,376.8	7,310.0	34.8	33.8	132.97	720.6	848.1	451.9	396.6	55.28	8.175		
8,200.0	7,000.0	8,476.8	7,310.0	37.2	36.2	132.92	720.2	948.1	452.3	393.4	58.85	7.685		
8,300.0	7,000.0	8,576.8	7,310.0	39.6	38.6	132.88	719.8	1,048.1	452.7	390.1	62.52	7.240		
8,400.0	7,000.0	8,676.8	7,310.0	42.1	41.1	132.83	719.5	1,148.1	453.1	386.8	66.27	6.837		
8,500.0	7,000.0	8,776.8	7,310.0	44.6	43.6	132.78	719.1	1,248.1	453.5	383.4	70.07	6.471		
8,600.0	7,000.0	8,876.8	7,310.0	47.1	46.2	132.73	718.7	1,348.1	453.9	379.9	73.94	6.138		
8,700.0	7,000.0	8,976.8	7,310.0	49.7	48.8	132.69	718.4	1,448.1	454.3	376.4	77.86	5.835		
8,800.0	7,000.0	9,076.8	7,310.0	52.3	51.4	132.64	718.0	1,548.1	454.7	372.9	81.81	5.558		
8,900.0	7,000.0	9,176.8	7,310.0	54.9	54.0	132.59	717.6	1,648.1	455.1	369.3	85.81	5.304		
9,000.0	7,000.0	9,276.8	7,310.0	57.5	56.6	132.55	717.3	1,748.1	455.5	365.7	89.83	5.070		
9,100.0	7,000.0	9,376.8	7,310.0	60.1	59.3	132.50	716.9	1,848.1	455.9	362.0	93.89	4.856		
9,200.0	7,000.0	9,476.8	7,310.0	62.8	61.9	132.45	716.5	1,948.1	456.3	358.3	97.98	4.657		
9,300.0	7,000.0	9,576.8	7,310.0	65.5	64.6	132.41	716.2	2,048.1	456.7	354.6	102.08	4.474		
9,400.0	7,000.0	9,676.8	7,310.0	68.1	67.3	132.36	715.8	2,148.1	457.1	350.9	106.22	4.304		
9,500.0	7,000.0	9,776.8	7,310.0	70.8	70.0	132.31	715.4	2,248.1	457.5	347.2	110.37	4.146		
9,600.0	7,000.0	9,876.8	7,310.0	73.5	72.7	132.27	715.1	2,348.1	457.9	343.4	114.54	3.998		
9,700.0	7,000.0	9,976.8	7,310.0	76.2	75.4	132.22	714.7	2,448.1	458.4	339.6	118.72	3.861		
9,800.0	7,000.0	10,076.8	7,310.0	78.9	78.1	132.17	714.3	2,548.1	458.8	335.8	122.92	3.732		
9,900.0	7,000.0	10,176.8	7,310.0	81.7	80.9	132.13	714.0	2,648.1	459.2	332.0	127.14	3.611		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union 5AHZC - Wellbore #1 - Plan #2 (4-08-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	7,000.0	10,276.8	7,310.0	84.4	83.6	132.08	713.6	2,748.1	459.6	328.2	131.37	3.498	
10,100.0	7,000.0	10,376.8	7,310.0	87.1	86.3	132.04	713.2	2,848.1	460.0	324.4	135.62	3.392	
10,200.0	7,000.0	10,476.8	7,310.0	89.8	89.1	131.99	712.9	2,948.1	460.4	320.5	139.87	3.292	
10,300.0	7,000.0	10,576.8	7,310.0	92.6	91.8	131.94	712.5	3,048.1	460.8	316.7	144.14	3.197	
10,400.0	7,000.0	10,676.8	7,310.0	95.3	94.6	131.90	712.1	3,148.1	461.2	312.8	148.42	3.107	
10,500.0	7,000.0	10,776.8	7,310.0	98.1	97.3	131.85	711.8	3,248.1	461.6	308.9	152.71	3.023	
10,600.0	7,000.0	10,876.8	7,310.0	100.8	100.1	131.81	711.4	3,348.1	462.0	305.0	157.01	2.943	
10,700.0	7,000.0	10,976.8	7,310.0	103.6	102.8	131.76	711.0	3,448.1	462.4	301.1	161.32	2.867	
10,800.0	7,000.0	11,076.8	7,310.0	106.3	105.6	131.72	710.7	3,548.1	462.9	297.2	165.64	2.794	
10,900.0	7,000.0	11,176.8	7,310.0	109.1	108.3	131.67	710.3	3,648.1	463.3	293.3	169.97	2.726	
11,000.0	7,000.0	11,276.8	7,310.0	111.8	111.1	131.63	709.9	3,748.1	463.7	289.4	174.31	2.660	
11,100.0	7,000.0	11,376.8	7,310.0	114.6	113.9	131.58	709.6	3,848.1	464.1	285.4	178.66	2.598	
11,200.0	7,000.0	11,476.8	7,310.0	117.4	116.6	131.53	709.2	3,948.1	464.5	281.5	183.01	2.538	
11,300.0	7,000.0	11,576.8	7,310.0	120.1	119.4	131.49	708.8	4,048.1	464.9	277.5	187.38	2.481	
11,400.0	7,000.0	11,676.8	7,310.0	122.9	122.2	131.44	708.5	4,148.1	465.3	273.6	191.75	2.427	
11,500.0	7,000.0	11,776.8	7,310.0	125.7	124.9	131.40	708.1	4,248.1	465.7	269.6	196.12	2.375	
11,600.0	7,000.0	11,876.8	7,310.0	128.4	127.7	131.36	707.7	4,348.1	466.2	265.6	200.51	2.325	
11,700.0	7,000.0	11,976.8	7,310.0	131.2	130.5	131.31	707.4	4,448.1	466.6	261.7	204.90	2.277	
11,771.1	7,000.0	12,042.5	7,310.0	133.2	132.3	131.28	707.1	4,513.8	466.9	259.0	207.91	2.246 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	2.0	2.0	0.0	0.0	68.80	50.6	130.5	140.0	140.0	0.00	N/A	
100.0	100.0	102.0	102.0	0.1	0.1	68.80	50.6	130.5	140.0	139.8	0.23	610.607	
200.0	200.0	202.0	202.0	0.3	0.3	68.80	50.6	130.5	140.0	139.3	0.68	206.232	
300.0	300.0	302.0	302.0	0.6	0.6	68.80	50.6	130.5	140.0	138.9	1.13	124.068	
400.0	400.0	402.0	402.0	0.8	0.8	68.80	50.6	130.5	140.0	138.4	1.58	88.721	
500.0	500.0	502.0	502.0	1.0	1.0	68.80	50.6	130.5	140.0	138.0	2.03	69.049	
600.0	600.0	602.0	602.0	1.2	1.2	68.80	50.6	130.5	140.0	137.5	2.48	56.517	
700.0	700.0	702.0	702.0	1.5	1.5	88.51	50.6	130.5	139.9	137.0	2.93	47.838	
775.9	775.8	777.8	777.8	1.6	1.6	90.00	50.6	130.5	139.9	136.6	3.27	42.824 CC	
800.0	799.8	801.8	801.8	1.7	1.7	90.65	50.6	130.5	139.9	136.5	3.37	41.450	
900.0	899.5	901.5	901.5	1.9	1.9	94.19	50.6	130.5	140.3	136.4	3.83	36.577 ES	
1,000.0	998.7	1,000.7	1,000.7	2.2	2.1	99.04	50.6	130.5	141.7	137.4	4.31	32.847	
1,100.0	1,097.5	1,099.5	1,099.5	2.5	2.4	105.02	50.6	130.5	145.0	140.2	4.82	30.103	
1,200.0	1,195.6	1,197.6	1,197.6	2.8	2.6	111.80	50.6	130.5	151.1	145.8	5.34	28.281	
1,300.0	1,293.4	1,295.4	1,295.4	3.2	2.8	118.65	50.6	130.5	160.2	154.4	5.88	27.261	
1,400.0	1,391.2	1,393.2	1,393.2	3.6	3.0	124.72	50.6	130.5	171.5	165.1	6.40	26.771	
1,500.0	1,489.0	1,491.0	1,491.0	4.0	3.2	130.02	50.6	130.5	184.4	177.5	6.92	26.653	
1,600.0	1,586.7	1,588.7	1,588.7	4.4	3.5	134.60	50.6	130.5	198.7	191.3	7.42	26.782	
1,700.0	1,684.5	1,686.5	1,686.5	4.8	3.7	138.56	50.6	130.5	214.1	206.2	7.91	27.069	
1,800.0	1,782.3	1,784.3	1,784.3	5.2	3.9	141.99	50.6	130.5	230.4	222.0	8.39	27.453	
1,900.0	1,880.1	1,882.1	1,882.1	5.6	4.1	144.96	50.6	130.5	247.4	238.5	8.87	27.892	
2,000.0	1,977.8	1,979.8	1,979.8	6.1	4.3	147.55	50.6	130.5	264.9	255.6	9.34	28.360	
2,100.0	2,075.6	2,077.6	2,077.6	6.5	4.6	149.81	50.6	130.5	282.9	273.1	9.81	28.837	
2,200.0	2,173.4	2,175.4	2,175.4	6.9	4.8	151.81	50.6	130.5	301.3	291.1	10.28	29.312	
2,300.0	2,271.2	2,273.2	2,273.2	7.4	5.0	153.57	50.6	130.5	320.1	309.3	10.75	29.777	
2,400.0	2,368.9	2,370.9	2,370.9	7.8	5.2	155.15	50.6	130.5	339.1	327.8	11.22	30.227	
2,500.0	2,466.7	2,468.7	2,468.7	8.3	5.4	156.55	50.6	130.5	358.3	346.6	11.68	30.661	
2,600.0	2,564.5	2,566.5	2,566.5	8.7	5.7	157.81	50.6	130.5	377.7	365.5	12.15	31.075	
2,700.0	2,662.3	2,664.3	2,664.3	9.1	5.9	158.95	50.6	130.5	397.2	384.6	12.62	31.470	
2,800.0	2,760.0	2,762.0	2,762.0	9.6	6.1	159.98	50.6	130.5	416.9	403.8	13.09	31.847	
2,900.0	2,857.8	2,859.8	2,859.8	10.0	6.3	160.92	50.6	130.5	436.7	423.2	13.56	32.204	
3,000.0	2,955.6	2,957.6	2,957.6	10.5	6.5	161.78	50.6	130.5	456.6	442.6	14.03	32.543	
3,100.0	3,053.4	3,062.6	3,062.6	10.9	6.8	162.68	50.7	129.8	476.2	461.7	14.51	32.828	
3,200.0	3,151.1	3,173.7	3,173.6	11.4	7.0	163.89	51.4	125.3	493.5	478.6	14.97	32.974	
3,300.0	3,248.9	3,285.1	3,284.6	11.8	7.2	165.36	52.6	116.5	508.5	493.1	15.42	32.976	
3,400.0	3,346.7	3,396.4	3,395.2	12.3	7.5	167.11	54.5	103.4	521.2	505.3	15.87	32.836	
3,500.0	3,444.5	3,507.4	3,504.8	12.7	7.7	169.11	57.0	86.1	531.8	515.5	16.33	32.562	
3,600.0	3,542.3	3,607.5	3,603.2	13.1	8.0	171.06	59.6	68.1	541.5	524.7	16.80	32.243	
3,700.0	3,640.0	3,705.4	3,699.4	13.6	8.3	172.90	62.1	50.4	551.8	534.5	17.27	31.943	
3,800.0	3,737.8	3,803.3	3,795.7	14.0	8.5	174.67	64.6	32.7	562.6	544.8	17.77	31.653	
3,900.0	3,835.6	3,901.2	3,891.9	14.5	8.8	176.38	67.2	15.0	573.9	555.6	18.29	31.373	
4,000.0	3,933.4	3,999.0	3,988.1	14.9	9.1	178.02	69.7	-2.7	585.7	566.9	18.83	31.100	
4,100.0	4,031.1	4,096.9	4,084.3	15.4	9.4	179.59	72.2	-20.4	598.0	578.6	19.39	30.836	
4,200.0	4,128.9	4,194.8	4,180.6	15.8	9.7	-178.89	74.8	-38.1	610.8	590.8	19.97	30.579	
4,300.0	4,226.7	4,292.7	4,276.8	16.3	10.1	-177.44	77.3	-55.8	623.9	603.3	20.57	30.331	
4,400.0	4,324.5	4,390.5	4,373.0	16.7	10.4	-176.05	79.8	-73.5	637.5	616.3	21.18	30.091	
4,500.0	4,422.2	4,488.4	4,469.3	17.2	10.7	-174.71	82.4	-91.2	651.4	629.5	21.81	29.859	
4,600.0	4,520.0	4,586.3	4,565.5	17.6	11.0	-173.43	84.9	-108.9	665.6	643.1	22.46	29.636	
4,700.0	4,617.8	4,684.2	4,661.7	18.1	11.4	-172.20	87.4	-126.6	680.2	657.0	23.12	29.422	
4,800.0	4,715.6	4,782.1	4,758.0	18.5	11.7	-171.02	90.0	-144.4	695.0	671.2	23.79	29.217	
4,900.0	4,813.3	4,879.9	4,854.2	19.0	12.1	-169.90	92.5	-162.1	710.2	685.7	24.47	29.021	
5,000.0	4,911.1	4,977.8	4,950.4	19.4	12.4	-168.82	95.0	-179.8	725.6	700.4	25.16	28.835	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	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	5,008.9	5,075.7	5,046.6	19.9	12.8	-167.78	97.6	-197.5	741.2	715.3	25.86	28.657	
5,200.0	5,106.7	5,173.6	5,142.9	20.3	13.1	-166.78	100.1	-215.2	757.1	730.5	26.58	28.488	
5,300.0	5,204.5	5,271.4	5,239.1	20.8	13.5	-165.83	102.6	-232.9	773.2	745.9	27.29	28.328	
5,400.0	5,302.2	5,369.3	5,335.3	21.2	13.9	-164.91	105.2	-250.6	789.5	761.5	28.02	28.176	
5,500.0	5,400.0	5,467.2	5,431.6	21.7	14.2	-164.04	107.7	-268.3	806.0	777.2	28.75	28.032	
5,600.0	5,497.8	5,565.1	5,527.8	22.1	14.6	-163.19	110.2	-286.0	822.6	793.2	29.49	27.896	
5,700.0	5,595.6	5,663.0	5,624.0	22.6	15.0	-162.38	112.8	-303.7	839.5	809.3	30.23	27.768	
5,800.0	5,693.3	5,760.8	5,720.3	23.0	15.4	-161.60	115.3	-321.4	856.5	825.5	30.98	27.646	
5,900.0	5,791.1	5,857.0	5,814.8	23.5	15.7	-160.90	117.8	-338.5	873.7	842.0	31.71	27.555	
6,000.0	5,889.3	5,951.2	5,908.0	23.8	16.0	-160.45	119.8	-352.8	889.3	857.0	32.33	27.509	
6,100.0	5,988.1	6,046.2	6,002.3	24.1	16.2	-160.12	121.4	-364.1	902.3	869.4	32.86	27.460	
6,200.0	6,087.4	6,141.8	6,097.4	24.3	16.4	-159.91	122.6	-372.4	912.4	879.1	33.31	27.394	
6,300.0	6,187.0	6,237.7	6,193.2	24.5	16.6	-159.81	123.4	-377.5	919.7	886.0	33.67	27.311	
6,400.0	6,286.9	6,333.8	6,289.3	24.7	16.8	-159.83	123.6	-379.5	924.1	890.2	33.96	27.210	
6,500.0	6,386.9	6,433.4	6,388.9	24.8	16.9	-178.86	123.6	-379.5	925.5	887.5	38.01	24.351	
6,571.4	6,458.3	6,504.8	6,460.3	24.9	17.1	91.26	123.6	-379.5	925.6	891.1	34.47	26.848	
6,600.0	6,486.9	6,533.7	6,489.2	24.9	17.1	91.24	123.6	-379.4	925.5	891.0	34.57	26.772	
6,700.0	6,586.1	6,636.4	6,591.0	25.0	17.2	91.18	123.6	-367.3	925.6	890.9	34.74	26.644	
6,800.0	6,681.4	6,739.0	6,688.4	25.0	17.1	91.09	123.4	-335.6	925.8	891.1	34.70	26.681	
6,900.0	6,769.3	6,841.2	6,777.4	24.9	17.1	90.95	123.2	-285.6	926.0	891.5	34.57	26.791	
7,000.0	6,846.5	6,943.1	6,854.7	24.9	17.0	90.78	122.9	-219.5	926.4	891.9	34.54	26.824	
7,100.0	6,910.2	7,044.5	6,917.4	24.7	17.2	90.58	122.6	-140.1	926.9	892.0	34.85	26.594	
7,200.0	6,958.1	7,145.4	6,963.4	24.6	17.6	90.36	122.2	-50.4	927.4	891.6	35.75	25.944	
7,300.0	6,988.3	7,245.8	6,991.2	24.6	18.4	90.13	121.7	45.9	928.0	890.6	37.34	24.854	
7,400.0	6,999.9	7,346.4	7,000.0	24.6	19.5	89.89	121.3	146.0	928.6	889.0	39.58	23.460	
7,500.0	7,000.0	7,446.8	7,000.0	24.8	21.0	89.88	121.0	246.3	929.1	886.7	42.43	21.897	
7,600.0	7,000.0	7,546.8	7,000.0	25.4	22.6	89.88	120.7	346.3	929.6	883.8	45.77	20.312	
7,700.0	7,000.0	7,646.8	7,000.0	26.7	24.5	89.88	120.3	446.3	930.1	880.6	49.51	18.785	
7,800.0	7,000.0	7,746.7	7,000.0	28.4	26.6	89.88	120.0	546.3	930.6	877.0	53.59	17.367	
7,900.0	7,000.0	7,846.7	7,000.0	30.4	28.7	89.88	119.7	646.3	931.1	873.2	57.92	16.076	
8,000.0	7,000.0	7,946.7	7,000.0	32.6	31.0	89.88	119.4	746.3	931.6	869.2	62.45	14.917	
8,100.0	7,000.0	8,046.7	7,000.0	34.8	33.4	89.88	119.0	846.3	932.2	865.0	67.15	13.881	
8,200.0	7,000.0	8,146.7	7,000.0	37.2	35.8	89.88	118.7	946.3	932.7	860.7	71.98	12.957	
8,300.0	7,000.0	8,246.7	7,000.0	39.6	38.2	89.88	118.4	1,046.3	933.2	856.3	76.92	12.132	
8,400.0	7,000.0	8,346.7	7,000.0	42.1	40.8	89.88	118.1	1,146.3	933.7	851.7	81.94	11.395	
8,500.0	7,000.0	8,446.7	7,000.0	44.6	43.3	89.88	117.7	1,246.3	934.2	847.2	87.03	10.734	
8,600.0	7,000.0	8,546.7	7,000.0	47.1	45.9	89.88	117.4	1,346.3	934.7	842.5	92.19	10.139	
8,700.0	7,000.0	8,646.7	7,000.0	49.7	48.5	89.88	117.1	1,446.3	935.2	837.8	97.39	9.603	
8,800.0	7,000.0	8,746.7	7,000.0	52.3	51.1	89.88	116.8	1,546.3	935.7	833.1	102.64	9.117	
8,900.0	7,000.0	8,846.7	7,000.0	54.9	53.8	89.88	116.4	1,646.3	936.2	828.3	107.92	8.675	
9,000.0	7,000.0	8,946.7	7,000.0	57.5	56.4	89.88	116.1	1,746.3	936.8	823.5	113.23	8.273	
9,100.0	7,000.0	9,046.7	7,000.0	60.1	59.1	89.88	115.8	1,846.3	937.3	818.7	118.58	7.904	
9,200.0	7,000.0	9,146.7	7,000.0	62.8	61.8	89.88	115.5	1,946.3	937.8	813.8	123.94	7.566	
9,300.0	7,000.0	9,246.7	7,000.0	65.5	64.5	89.88	115.1	2,046.3	938.3	809.0	129.33	7.255	
9,400.0	7,000.0	9,346.7	7,000.0	68.1	67.2	89.88	114.8	2,146.3	938.8	804.1	134.73	6.968	
9,500.0	7,000.0	9,446.7	7,000.0	70.8	69.9	89.88	114.5	2,246.3	939.3	799.2	140.15	6.702	
9,600.0	7,000.0	9,546.7	7,000.0	73.5	72.6	89.88	114.1	2,346.3	939.8	794.2	145.59	6.455	
9,700.0	7,000.0	9,646.7	7,000.0	76.2	75.4	89.88	113.8	2,446.3	940.3	789.3	151.03	6.226	
9,800.0	7,000.0	9,746.7	7,000.0	78.9	78.1	89.88	113.5	2,546.3	940.8	784.3	156.49	6.012	
9,900.0	7,000.0	9,846.7	7,000.0	81.7	80.8	89.88	113.2	2,646.3	941.3	779.4	161.96	5.812	
10,000.0	7,000.0	9,946.7	7,000.0	84.4	83.6	89.88	112.8	2,746.3	941.9	774.4	167.44	5.625	
10,100.0	7,000.0	10,046.7	7,000.0	87.1	86.3	89.88	112.5	2,846.3	942.4	769.4	172.93	5.450	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union 5AHZN - Wellbore #1 - Plan #2 (4-08-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	7,000.0	10,146.7	7,000.0	89.8	89.1	89.88	112.2	2,946.3	942.9	764.5	178.42	5.285	
10,300.0	7,000.0	10,246.7	7,000.0	92.6	91.8	89.88	111.9	3,046.3	943.4	759.5	183.92	5.129	
10,400.0	7,000.0	10,346.7	7,000.0	95.3	94.6	89.88	111.5	3,146.3	943.9	754.5	189.43	4.983	
10,500.0	7,000.0	10,446.7	7,000.0	98.1	97.3	89.88	111.2	3,246.3	944.4	749.5	194.94	4.845	
10,600.0	7,000.0	10,546.7	7,000.0	100.8	100.1	89.88	110.9	3,346.3	944.9	744.5	200.46	4.714	
10,700.0	7,000.0	10,646.7	7,000.0	103.6	102.8	89.88	110.6	3,446.3	945.4	739.4	205.98	4.590	
10,800.0	7,000.0	10,746.7	7,000.0	106.3	105.6	89.88	110.2	3,546.3	945.9	734.4	211.51	4.472	
10,900.0	7,000.0	10,846.7	7,000.0	109.1	108.4	89.88	109.9	3,646.3	946.5	729.4	217.04	4.361	
11,000.0	7,000.0	10,946.7	7,000.0	111.8	111.1	89.88	109.6	3,746.3	947.0	724.4	222.58	4.255	
11,100.0	7,000.0	11,046.7	7,000.0	114.6	113.9	89.88	109.3	3,846.3	947.5	719.4	228.12	4.153	
11,200.0	7,000.0	11,146.7	7,000.0	117.4	116.7	89.88	108.9	3,946.3	948.0	714.3	233.66	4.057	
11,300.0	7,000.0	11,246.7	7,000.0	120.1	119.5	89.88	108.6	4,046.3	948.5	709.3	239.21	3.965	
11,400.0	7,000.0	11,346.7	7,000.0	122.9	122.2	89.88	108.3	4,146.3	949.0	704.2	244.76	3.877	
11,500.0	7,000.0	11,446.7	7,000.0	125.7	125.0	89.88	108.0	4,246.2	949.5	699.2	250.31	3.793	
11,600.0	7,000.0	11,546.7	7,000.0	128.4	127.8	89.88	107.6	4,346.2	950.0	694.2	255.86	3.713	
11,700.0	7,000.0	11,646.7	7,000.0	131.2	130.6	89.88	107.3	4,446.2	950.5	689.1	261.42	3.636	
11,771.1	7,000.0	11,703.2	7,000.0	133.2	132.1	89.88	107.1	4,502.8	951.0	686.0	264.96	3.589 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-110.78	-14.2	-37.4	40.1				
100.0	100.0	100.0	100.0	0.1	0.1	-110.78	-14.2	-37.4	40.1	39.8	0.22	178.206	
200.0	200.0	200.0	200.0	0.3	0.3	-110.78	-14.2	-37.4	40.1	39.4	0.67	59.402	
300.0	300.0	300.0	300.0	0.6	0.6	-110.78	-14.2	-37.4	40.1	38.9	1.12	35.641	
400.0	400.0	400.0	400.0	0.8	0.8	-110.78	-14.2	-37.4	40.1	38.5	1.57	25.458	
500.0	500.0	500.0	500.0	1.0	1.0	-110.78	-14.2	-37.4	40.1	38.0	2.02	19.801	
600.0	600.0	600.0	600.0	1.2	1.2	-110.78	-14.2	-37.4	40.1	37.6	2.47	16.201 CC	
700.0	700.0	700.0	700.0	1.5	1.5	-94.27	-14.2	-37.4	40.1	37.2	2.92	13.746 ES	
800.0	799.8	799.8	799.8	1.7	1.7	-101.59	-14.2	-37.4	40.9	37.5	3.37	12.124	
900.0	899.5	899.5	899.5	1.9	1.9	-112.82	-14.2	-37.4	43.5	39.6	3.83	11.345 SF	
1,000.0	998.7	998.7	998.7	2.2	2.1	-125.77	-14.2	-37.4	49.5	45.2	4.30	11.508	
1,100.0	1,097.5	1,098.4	1,098.4	2.5	2.4	-136.90	-13.1	-38.1	59.3	54.5	4.77	12.428	
1,200.0	1,195.6	1,198.3	1,198.2	2.8	2.6	-144.78	-9.7	-40.0	71.7	66.5	5.24	13.694	
1,300.0	1,293.4	1,298.8	1,298.4	3.2	2.8	-149.91	-4.0	-43.2	84.7	79.0	5.72	14.828	
1,400.0	1,391.2	1,398.3	1,397.7	3.6	3.0	-152.97	3.2	-47.3	96.8	90.6	6.20	15.605	
1,500.0	1,489.0	1,497.5	1,496.5	4.0	3.3	-155.31	10.4	-51.4	109.0	102.3	6.70	16.280	
1,600.0	1,586.7	1,596.6	1,595.3	4.4	3.5	-157.18	17.7	-55.5	121.4	114.2	7.19	16.878	
1,700.0	1,684.5	1,695.8	1,694.1	4.8	3.8	-158.70	24.9	-59.6	133.8	126.1	7.69	17.411	
1,800.0	1,782.3	1,795.0	1,792.9	5.2	4.0	-159.96	32.2	-63.7	146.4	138.2	8.18	17.886	
1,900.0	1,880.1	1,894.1	1,891.7	5.6	4.3	-161.03	39.5	-67.8	159.0	150.3	8.68	18.312	
2,000.0	1,977.8	1,993.3	1,990.5	6.1	4.5	-161.94	46.7	-71.9	171.6	162.4	9.18	18.695	
2,100.0	2,075.6	2,092.4	2,089.3	6.5	4.8	-162.72	54.0	-76.0	184.3	174.6	9.68	19.041	
2,200.0	2,173.4	2,191.6	2,188.2	6.9	5.0	-163.40	61.2	-80.1	197.0	186.8	10.18	19.354	
2,300.0	2,271.2	2,290.8	2,287.0	7.4	5.3	-164.00	68.5	-84.2	209.7	199.1	10.68	19.640	
2,400.0	2,368.9	2,389.9	2,385.8	7.8	5.5	-164.53	75.7	-88.3	222.5	211.3	11.18	19.900	
2,500.0	2,466.7	2,489.1	2,484.6	8.3	5.8	-165.00	83.0	-92.4	235.3	223.6	11.68	20.139	
2,600.0	2,564.5	2,588.3	2,583.4	8.7	6.1	-165.43	90.2	-96.5	248.1	235.9	12.18	20.359	
2,700.0	2,662.3	2,687.4	2,682.2	9.1	6.3	-165.81	97.5	-100.6	260.9	248.2	12.69	20.562	
2,800.0	2,760.0	2,786.6	2,781.0	9.6	6.6	-166.16	104.7	-104.7	273.7	260.5	13.19	20.750	
2,900.0	2,857.8	2,885.8	2,879.8	10.0	6.9	-166.47	112.0	-108.8	286.5	272.8	13.69	20.924	
3,000.0	2,955.6	2,984.9	2,978.7	10.5	7.1	-166.76	119.3	-112.9	299.3	285.1	14.19	21.085	
3,100.0	3,053.4	3,084.1	3,077.5	10.9	7.4	-167.03	126.5	-117.0	312.1	297.4	14.70	21.236	
3,200.0	3,151.1	3,183.2	3,176.3	11.4	7.6	-167.27	133.8	-121.1	325.0	309.8	15.20	21.377	
3,300.0	3,248.9	3,282.4	3,275.1	11.8	7.9	-167.50	141.0	-125.3	337.8	322.1	15.71	21.509	
3,400.0	3,346.7	3,381.6	3,373.9	12.3	8.2	-167.71	148.3	-129.4	350.7	334.4	16.21	21.632	
3,500.0	3,444.5	3,480.7	3,472.7	12.7	8.4	-167.90	155.5	-133.5	363.5	346.8	16.71	21.748	
3,600.0	3,542.3	3,579.9	3,571.5	13.1	8.7	-168.08	162.8	-137.6	376.4	359.1	17.22	21.858	
3,700.0	3,640.0	3,679.1	3,670.3	13.6	9.0	-168.25	170.0	-141.7	389.2	371.5	17.72	21.961	
3,800.0	3,737.8	3,778.2	3,769.2	14.0	9.2	-168.41	177.3	-145.8	402.1	383.9	18.23	22.058	
3,900.0	3,835.6	3,877.4	3,868.0	14.5	9.5	-168.56	184.5	-149.9	415.0	396.2	18.73	22.150	
4,000.0	3,933.4	3,976.6	3,966.8	14.9	9.8	-168.70	191.8	-154.0	427.8	408.6	19.24	22.238	
4,100.0	4,031.1	4,075.7	4,065.6	15.4	10.0	-168.83	199.1	-158.1	440.7	420.9	19.74	22.320	
4,200.0	4,128.9	4,174.9	4,164.4	15.8	10.3	-168.95	206.3	-162.2	453.6	433.3	20.25	22.399	
4,300.0	4,226.7	4,274.0	4,263.2	16.3	10.6	-169.07	213.6	-166.3	466.4	445.7	20.75	22.474	
4,400.0	4,324.5	4,373.2	4,362.0	16.7	10.8	-169.18	220.8	-170.4	479.3	458.1	21.26	22.545	
4,500.0	4,422.2	4,472.4	4,460.8	17.2	11.1	-169.28	228.1	-174.5	492.2	470.4	21.77	22.613	
4,600.0	4,520.0	4,571.5	4,559.7	17.6	11.4	-169.38	235.3	-178.6	505.1	482.8	22.27	22.677	
4,700.0	4,617.8	4,670.7	4,658.5	18.1	11.6	-169.48	242.6	-182.7	517.9	495.2	22.78	22.739	
4,800.0	4,715.6	4,769.9	4,757.3	18.5	11.9	-169.57	249.8	-186.8	530.8	507.5	23.28	22.798	
4,900.0	4,813.3	4,869.0	4,856.1	19.0	12.2	-169.65	257.1	-190.9	543.7	519.9	23.79	22.855	
5,000.0	4,911.1	4,968.2	4,954.9	19.4	12.4	-169.74	264.3	-195.0	556.6	532.3	24.30	22.909	
5,100.0	5,008.9	5,067.3	5,053.7	19.9	12.7	-169.81	271.6	-199.1	569.5	544.7	24.80	22.961	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	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
5,200.0	5,106.7	5,166.5	5,152.5	20.3	13.0	-169.89	278.9	-203.2	582.4	557.1	25.31	23.011		
5,300.0	5,204.5	5,265.7	5,251.3	20.8	13.2	-169.96	286.1	-207.3	595.3	569.4	25.82	23.058		
5,400.0	5,302.2	5,364.8	5,350.2	21.2	13.5	-170.03	293.4	-211.4	608.1	581.8	26.32	23.104		
5,500.0	5,400.0	5,464.0	5,449.0	21.7	13.8	-170.09	300.6	-215.5	621.0	594.2	26.83	23.149		
5,600.0	5,497.8	5,563.2	5,547.8	22.1	14.0	-170.16	307.9	-219.6	633.9	606.6	27.33	23.191		
5,700.0	5,595.6	5,662.3	5,646.6	22.6	14.3	-170.22	315.1	-223.7	646.8	619.0	27.84	23.232		
5,800.0	5,693.3	5,761.5	5,745.4	23.0	14.6	-170.28	322.4	-227.8	659.7	631.4	28.35	23.271		
5,900.0	5,791.1	5,860.7	5,844.2	23.5	14.8	-170.34	329.6	-231.9	672.6	643.7	28.86	23.305		
6,000.0	5,889.3	5,960.1	5,943.3	23.8	15.1	-170.40	336.9	-236.1	683.3	654.0	29.35	23.280		
6,100.0	5,988.1	6,059.8	6,042.7	24.1	15.4	-170.39	344.2	-240.2	690.7	660.9	29.81	23.166		
6,200.0	6,087.4	6,159.7	6,142.2	24.3	15.7	-170.33	351.5	-244.3	694.6	664.3	30.24	22.969		
6,300.0	6,187.0	6,259.7	6,241.8	24.5	15.9	-170.21	358.8	-248.5	695.1	664.4	30.63	22.691		
6,400.0	6,286.9	6,359.6	6,341.4	24.7	16.2	-170.03	366.1	-252.6	692.1	661.1	30.99	22.336		
6,500.0	6,386.9	6,459.4	6,440.8	24.8	16.5	171.22	373.4	-256.7	685.7	645.0	40.73	16.837		
6,600.0	6,486.9	6,559.0	6,540.1	24.9	16.7	81.64	380.7	-260.8	677.8	646.1	31.76	21.341		
6,700.0	6,586.1	6,657.4	6,638.2	25.0	17.0	83.83	387.9	-264.9	668.6	636.3	32.29	20.703		
6,800.0	6,681.4	6,751.2	6,731.6	25.0	17.3	87.65	394.8	-268.8	658.2	625.2	33.04	19.922		
6,900.0	6,769.3	6,836.8	6,816.9	24.9	17.5	92.39	401.1	-272.3	649.8	616.0	33.88	19.180		
6,976.1	6,829.2	6,894.5	6,874.4	24.9	17.6	95.97	405.3	-274.7	647.4	613.0	34.42	18.809		
7,000.0	6,846.5	6,911.1	6,890.9	24.9	17.7	97.00	406.5	-275.4	647.7	613.1	34.54	18.752		
7,100.0	6,910.2	6,971.4	6,951.0	24.7	17.9	100.30	410.9	-277.9	656.1	621.2	34.89	18.803		
7,200.0	6,958.1	7,015.5	6,995.0	24.6	18.0	101.28	414.1	-279.7	678.4	643.2	35.21	19.269		
7,300.0	6,988.3	7,041.7	7,021.1	24.6	18.0	99.15	416.0	-280.8	715.7	679.8	35.88	19.947		
7,400.0	6,999.9	7,049.2	7,028.5	24.6	18.1	93.37	416.6	-281.1	766.3	729.4	36.88	20.778		
7,500.0	7,000.0	7,045.1	7,024.5	24.8	18.1	92.22	416.3	-281.0	826.7	788.5	38.23	21.627		
7,600.0	7,000.0	7,041.0	7,020.4	25.4	18.0	91.85	416.0	-280.8	894.3	854.4	39.87	22.432		
7,700.0	7,000.0	7,036.9	7,016.3	26.7	18.0	91.47	415.7	-280.6	967.5	925.8	41.71	23.196		

SRC Union Pad Sec.5-T2N-R68W - SRC Union 5JD - Wellbore #1 - Plan #1 (1-03-13)													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	1.0	1.0	0.0	0.0	68.97	21.5	55.9	59.9	59.9	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	68.97	21.5	55.9	59.9	59.7	0.23	263.782		
166.3	166.3	167.3	167.3	0.3	0.3	68.97	21.5	55.9	59.9	59.4	0.53	114.020	CC	
200.0	200.0	201.0	201.0	0.3	0.3	68.97	21.5	55.9	59.9	59.2	0.68	88.517	ES	
300.0	300.0	300.0	300.0	0.6	0.6	68.20	22.6	56.6	60.9	59.8	1.12	54.276		
400.0	400.0	398.4	398.3	0.8	0.8	66.08	25.9	58.5	64.0	62.5	1.57	40.780		
500.0	500.0	496.8	496.5	1.0	1.0	62.99	31.4	61.7	69.4	67.4	2.03	34.248		
600.0	600.0	594.7	594.0	1.2	1.3	59.41	39.1	66.1	77.2	74.7	2.49	30.970		
700.0	700.0	692.3	691.0	1.5	1.5	75.67	48.9	71.8	87.0	84.1	2.95	29.538		
800.0	799.8	789.6	787.2	1.7	1.8	74.74	60.7	78.7	98.4	95.0	3.42	28.803		
900.0	899.5	886.4	882.7	1.9	2.2	75.09	74.6	86.8	111.1	107.2	3.91	28.437		
1,000.0	998.7	982.6	977.2	2.2	2.5	76.30	90.5	96.1	125.2	120.8	4.44	28.232		
1,100.0	1,097.5	1,078.4	1,070.7	2.5	2.9	78.05	108.4	106.5	140.9	135.9	5.02	28.068		
1,200.0	1,195.6	1,173.5	1,163.0	2.8	3.4	80.12	128.1	118.0	158.2	152.5	5.67	27.878		
1,300.0	1,293.4	1,268.1	1,254.3	3.2	3.8	82.20	149.7	130.5	177.5	171.1	6.39	27.754		
1,400.0	1,391.2	1,365.9	1,348.3	3.6	4.4	83.76	172.9	144.1	197.8	190.7	7.16	27.623		
1,500.0	1,489.0	1,463.7	1,442.3	4.0	4.9	85.04	196.2	157.6	218.3	210.3	7.95	27.455		
1,600.0	1,586.7	1,561.4	1,536.3	4.4	5.4	86.09	219.4	171.1	238.8	230.1	8.76	27.265		
1,700.0	1,684.5	1,659.2	1,630.3	4.8	5.9	86.98	242.6	184.6	259.5	249.9	9.58	27.073		
1,800.0	1,782.3	1,757.0	1,724.3	5.2	6.5	87.73	265.8	198.1	280.1	269.7	10.42	26.888		
1,900.0	1,880.1	1,854.8	1,818.3	5.6	7.0	88.38	289.1	211.6	300.9	289.6	11.26	26.712		
2,000.0	1,977.8	1,952.6	1,912.3	6.1	7.5	88.95	312.3	225.2	321.6	309.5	12.11	26.549		
2,100.0	2,075.6	2,050.3	2,006.3	6.5	8.1	89.45	335.5	238.7	342.4	329.4	12.97	26.397		
2,200.0	2,173.4	2,148.1	2,100.4	6.9	8.6	89.89	358.7	252.2	363.2	349.4	13.83	26.257		
2,300.0	2,271.2	2,245.9	2,194.4	7.4	9.2	90.29	382.0	265.7	384.0	369.3	14.70	26.128		
2,400.0	2,368.9	2,343.7	2,288.4	7.8	9.7	90.64	405.2	279.2	404.8	389.3	15.56	26.010		
2,500.0	2,466.7	2,441.4	2,382.4	8.3	10.2	90.96	428.4	292.8	425.7	409.2	16.44	25.900		
2,600.0	2,564.5	2,539.2	2,476.4	8.7	10.8	91.25	451.6	306.3	446.5	429.2	17.31	25.799		
2,700.0	2,662.3	2,637.0	2,570.4	9.1	11.3	91.51	474.9	319.8	467.4	449.2	18.18	25.705		
2,800.0	2,760.0	2,734.8	2,664.4	9.6	11.9	91.75	498.1	333.3	488.3	469.2	19.06	25.618		
2,900.0	2,857.8	2,832.6	2,758.4	10.0	12.4	91.97	521.3	346.8	509.2	489.2	19.94	25.538		
3,000.0	2,955.6	2,930.3	2,852.5	10.5	13.0	92.18	544.5	360.4	530.0	509.2	20.82	25.463		
3,100.0	3,053.4	3,028.1	2,946.5	10.9	13.5	92.37	567.8	373.9	550.9	529.2	21.70	25.393		
3,200.0	3,151.1	3,125.9	3,040.5	11.4	14.0	92.54	591.0	387.4	571.8	549.3	22.58	25.327		
3,300.0	3,248.9	3,223.7	3,134.5	11.8	14.6	92.70	614.2	400.9	592.7	569.3	23.46	25.266		
3,400.0	3,346.7	3,321.4	3,228.5	12.3	15.1	92.86	637.4	414.4	613.7	589.3	24.34	25.208		
3,500.0	3,444.5	3,419.2	3,322.5	12.7	15.7	93.00	660.7	428.0	634.6	609.3	25.23	25.154		
3,600.0	3,542.3	3,517.0	3,416.5	13.1	16.2	93.13	683.9	441.5	655.5	629.4	26.11	25.104		
3,700.0	3,640.0	3,614.8	3,510.5	13.6	16.8	93.25	707.1	455.0	676.4	649.4	27.00	25.056		
3,800.0	3,737.8	3,712.5	3,604.5	14.0	17.3	93.37	730.3	468.5	697.3	669.4	27.88	25.011		
3,900.0	3,835.6	3,810.3	3,698.6	14.5	17.9	93.48	753.6	482.0	718.3	689.5	28.77	24.968		
4,000.0	3,933.4	3,908.1	3,792.6	14.9	18.4	93.58	776.8	495.5	739.2	709.5	29.65	24.928		
4,100.0	4,031.1	4,005.9	3,886.6	15.4	19.0	93.68	800.0	509.1	760.1	729.6	30.54	24.889		
4,200.0	4,128.9	4,103.7	3,980.6	15.8	19.5	93.77	823.2	522.6	781.0	749.6	31.43	24.853		
4,300.0	4,226.7	4,201.4	4,074.6	16.3	20.0	93.86	846.5	536.1	802.0	769.7	32.31	24.818		
4,400.0	4,324.5	4,299.2	4,168.6	16.7	20.6	93.94	869.7	549.6	822.9	789.7	33.20	24.785		
4,500.0	4,422.2	4,397.0	4,262.6	17.2	21.1	94.02	892.9	563.1	843.8	809.8	34.09	24.754		
4,600.0	4,520.0	4,494.8	4,356.6	17.6	21.7	94.10	916.1	576.7	864.8	829.8	34.98	24.724		
4,700.0	4,617.8	4,592.5	4,450.7	18.1	22.2	94.17	939.4	590.2	885.7	849.9	35.87	24.695		
4,800.0	4,715.6	4,690.3	4,544.7	18.5	22.8	94.24	962.6	603.7	906.7	869.9	36.75	24.668		
4,900.0	4,813.3	4,788.1	4,638.7	19.0	23.3	94.30	985.8	617.2	927.6	890.0	37.64	24.642		
5,000.0	4,911.1	4,885.9	4,732.7	19.4	23.9	94.37	1,009.0	630.7	948.6	910.0	38.53	24.617		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,008.9	4,983.7	4,826.7	19.9	24.4	94.43	1,032.3	644.3	969.5	930.1	39.42	24.593	
5,200.0	5,106.7	5,081.4	4,920.7	20.3	25.0	94.48	1,055.5	657.8	990.4	950.1	40.31	24.570	
7,400.0	6,999.9	7,009.9	6,774.9	24.6	35.8	-62.42	1,513.5	924.4	931.0	888.0	43.05	21.628	
7,500.0	7,000.0	7,023.8	6,788.3	24.8	35.8	-65.45	1,516.9	926.3	849.4	804.2	45.15	18.811	
7,600.0	7,000.0	7,037.7	6,801.7	25.4	35.9	-66.97	1,520.2	928.3	771.8	724.8	47.03	16.411	
7,700.0	7,000.0	7,051.6	6,815.0	26.7	36.0	-68.50	1,523.5	930.2	699.7	650.6	49.09	14.252	
7,800.0	7,000.0	7,065.5	6,828.3	28.4	36.1	-70.04	1,526.7	932.1	634.8	583.5	51.31	12.372	
7,900.0	7,000.0	7,079.3	6,841.7	30.4	36.1	-71.59	1,530.0	934.0	579.7	526.1	53.65	10.805	
8,000.0	7,000.0	7,093.2	6,855.0	32.6	36.2	-73.15	1,533.3	935.9	537.4	481.3	56.10	9.580	
8,100.0	7,000.0	7,107.1	6,868.3	34.8	36.3	-74.71	1,536.6	937.9	511.0	452.4	58.62	8.717	
8,191.2	7,000.0	7,119.7	6,880.5	37.0	36.4	-76.14	1,539.6	939.6	502.9	442.0	60.97	8.249	
8,200.0	7,000.0	7,120.9	6,881.7	37.2	36.4	-76.28	1,539.9	939.8	503.0	441.8	61.20	8.219	
8,300.0	7,000.0	7,134.8	6,895.0	39.6	36.5	-77.84	1,543.2	941.7	514.4	450.5	63.82	8.059 SF	
8,400.0	7,000.0	7,148.7	6,908.4	42.1	36.5	-79.40	1,546.5	943.6	543.8	477.3	66.48	8.180	
8,500.0	7,000.0	7,162.5	6,921.7	44.6	36.6	-80.96	1,549.8	945.5	588.6	519.5	69.15	8.512	
8,600.0	7,000.0	7,176.4	6,935.0	47.1	36.7	-82.51	1,553.1	947.4	645.7	573.8	71.83	8.988	
8,700.0	7,000.0	7,190.3	6,948.4	49.7	36.8	-84.05	1,556.4	949.4	712.0	637.4	74.51	9.555	
8,800.0	7,000.0	7,204.2	6,961.7	52.3	36.8	-85.58	1,559.7	951.3	785.2	708.0	77.18	10.173	
8,900.0	7,000.0	7,218.0	6,975.0	54.9	36.9	-87.09	1,563.0	953.2	863.6	783.7	79.83	10.818	
9,000.0	7,000.0	7,231.9	6,988.4	57.5	37.0	-88.59	1,566.3	955.1	945.8	863.4	82.45	11.471	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 11HZN
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 11HZN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (4-08-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4976.0ft (RKB - 13')

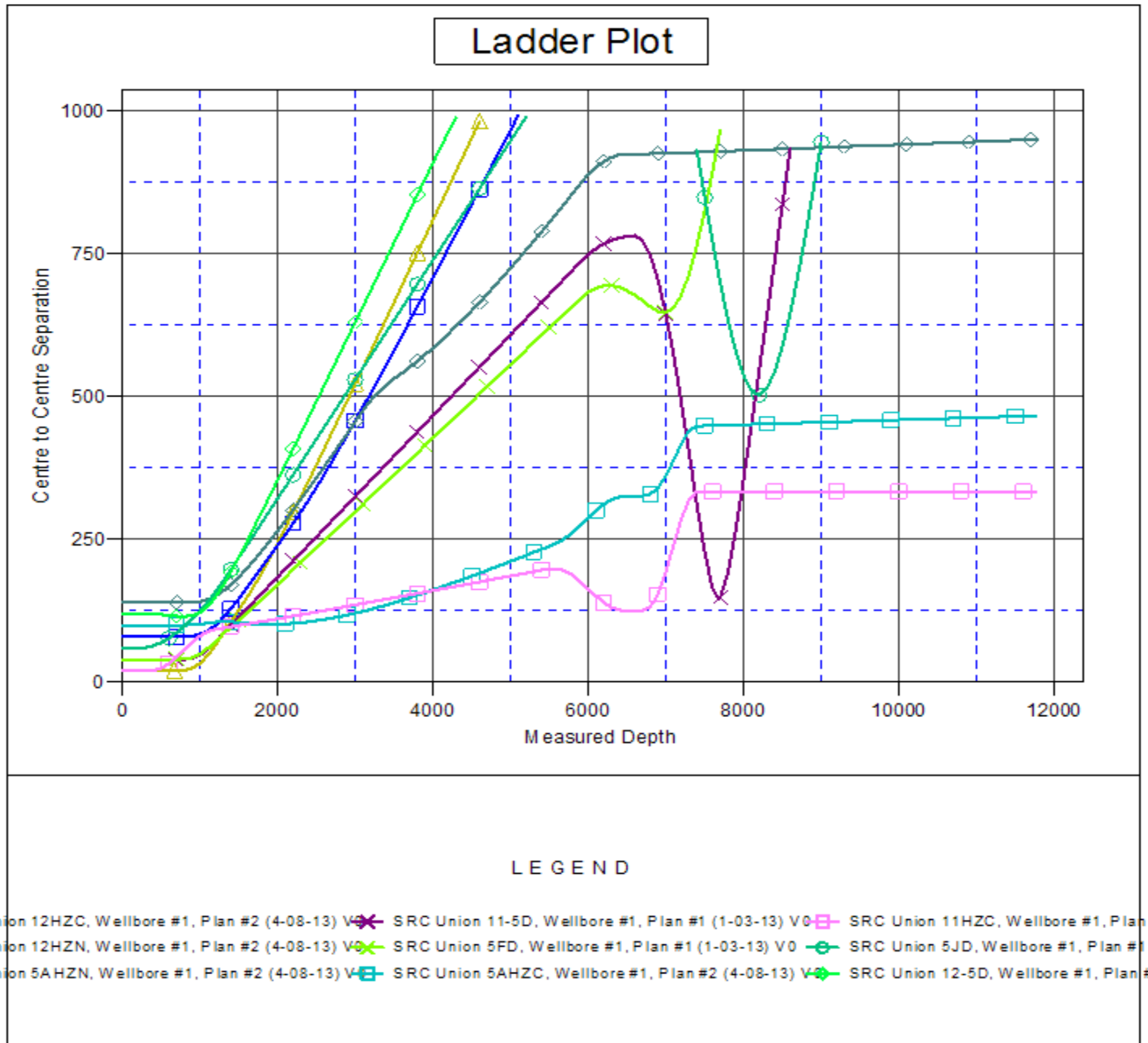
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: SRC Union 11HZN

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.30°



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