

Synergy Resources

Well Name: **SRC Union A-5NHZ**

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

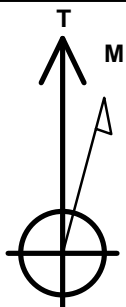
Ground Elevation: 4963.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1305176.79	3129907.75	40.170171	-105.035136	

Ensign 131 RKB - 13.5' WELL @ 4976.5ft (Ensign 131 RKB - 13.5')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1676'FNL & 369'FWL	1.0	0.0	0.0	Point
BHL 1242'FNL & 460'FEL	7083.0	466.4	4509.4	Point



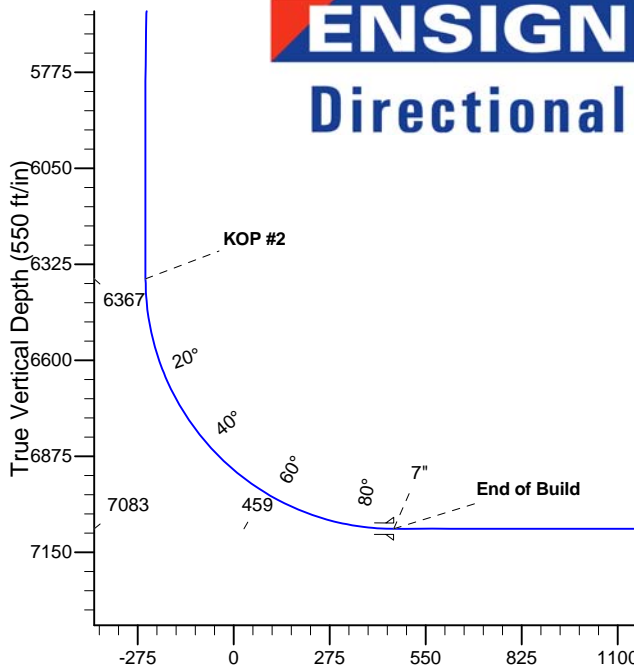
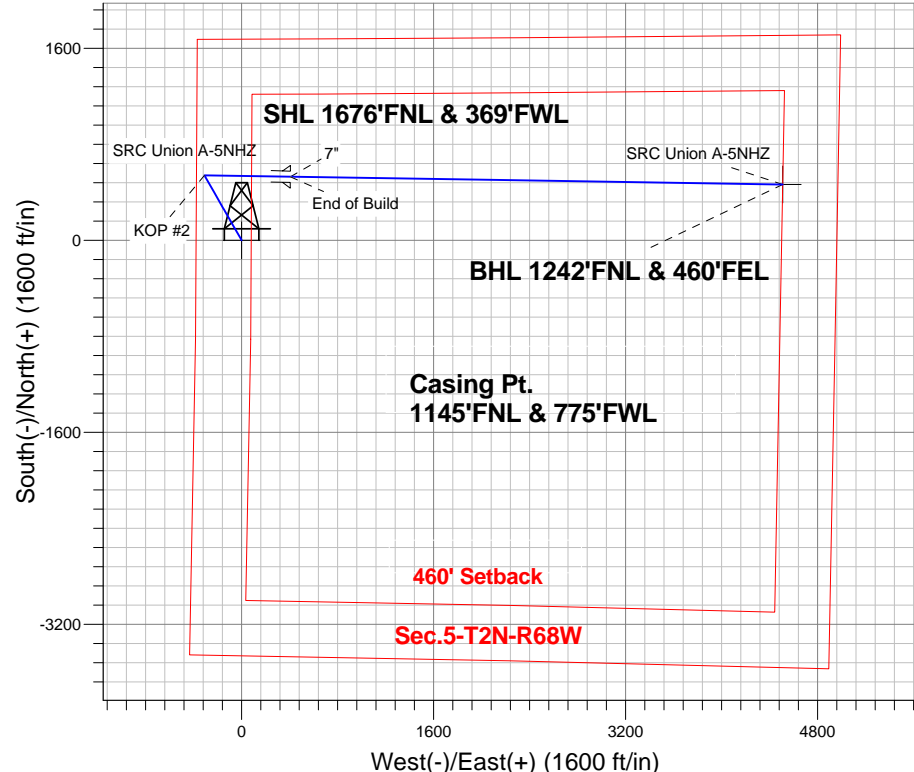
Azimuths to True North
Magnetic North: 8.64°

Magnetic Field
Strength: 52712.0snT
Dip Angle: 66.73°
Date: 1/2/2014
Model: IGRF2010

SRC Union Pad Sec.5-T2N-R68W
SRC Union A-5NHZ
Plan #3 (1-2-14)
12:55, January 03 2014

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6366.8	6411.0	KOP #2
7083.0	7536.0	End of Build



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSoc	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1853.9	8.54	330.23	1850.8	55.1	-31.5	1.00	330.23	-25.7	
4	5417.3	8.54	330.23	5374.6	514.4	-294.2	0.00	0.00	-239.8	
5	5844.2	0.00	0.00	5800.0	542.0	-310.0	2.00	180.00	-252.6	
6	6411.0	0.00	0.00	6366.8	542.0	-310.0	0.00	0.00	-252.6	
7	7536.0	90.00	90.90	7083.0	530.8	406.1	8.00	90.90	458.6	
8	11639.8	90.00	90.90	7083.0	466.4	4509.4	0.00	0.00	4533.4	BHL 1242'FNL & 460'FEL

BHL 1242'FNL & 460'FEL

Vertical Section at 84.10° (550 ft/in)



Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union A-5NHZ

Wellbore #1

Plan: Plan #3 (1-2-14)

Standard Planning Report

03 January, 2014

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union A-5NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (1-2-14)		

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 A-5NHZ					
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	1/2/2014	8.65	66.73	52,712

Design	Plan #3 (1-2-14)			
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	84.10

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,853.9	8.54	330.23	1,850.8	55.1	-31.5	1.00	1.00	0.00	330.23	
5,417.3	8.54	330.23	5,374.6	514.4	-294.2	0.00	0.00	0.00	0.00	
5,844.2	0.00	0.00	5,800.0	542.0	-310.0	2.00	-2.00	0.00	180.00	
6,411.0	0.00	0.00	6,366.8	542.0	-310.0	0.00	0.00	0.00	0.00	
7,536.0	90.00	90.90	7,083.0	530.8	406.1	8.00	8.00	0.00	90.90	
11,639.8	90.00	90.90	7,083.0	466.4	4,509.4	0.00	0.00	0.00	0.00	BHL 1242'FNL & 46

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union A-5NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (1-2-14)		

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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 1676'FNL & 369'FWL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,100.0	1.00	330.23	1,100.0	0.8	-0.4	-0.4	1.00	1.00	0.00
1,200.0	2.00	330.23	1,200.0	3.0	-1.7	-1.4	1.00	1.00	0.00
1,300.0	3.00	330.23	1,299.9	6.8	-3.9	-3.2	1.00	1.00	0.00
1,400.0	4.00	330.23	1,399.7	12.1	-6.9	-5.6	1.00	1.00	0.00
1,500.0	5.00	330.23	1,499.4	18.9	-10.8	-8.8	1.00	1.00	0.00
1,600.0	6.00	330.23	1,598.9	27.2	-15.6	-12.7	1.00	1.00	0.00
1,700.0	7.00	330.23	1,698.3	37.1	-21.2	-17.3	1.00	1.00	0.00
1,800.0	8.00	330.23	1,797.4	48.4	-27.7	-22.6	1.00	1.00	0.00
1,853.9	8.54	330.23	1,850.8	55.1	-31.5	-25.7	1.00	1.00	0.00
1,900.0	8.54	330.23	1,896.3	61.1	-34.9	-28.5	0.00	0.00	0.00
2,000.0	8.54	330.23	1,995.2	74.0	-42.3	-34.5	0.00	0.00	0.00
2,100.0	8.54	330.23	2,094.1	86.9	-49.7	-40.5	0.00	0.00	0.00
2,200.0	8.54	330.23	2,193.0	99.7	-57.0	-46.5	0.00	0.00	0.00
2,300.0	8.54	330.23	2,291.9	112.6	-64.4	-52.5	0.00	0.00	0.00
2,400.0	8.54	330.23	2,390.8	125.5	-71.8	-58.5	0.00	0.00	0.00
2,500.0	8.54	330.23	2,489.7	138.4	-79.2	-64.5	0.00	0.00	0.00
2,600.0	8.54	330.23	2,588.6	151.3	-86.5	-70.5	0.00	0.00	0.00
2,700.0	8.54	330.23	2,687.5	164.2	-93.9	-76.5	0.00	0.00	0.00
2,800.0	8.54	330.23	2,786.4	177.1	-101.3	-82.5	0.00	0.00	0.00
2,900.0	8.54	330.23	2,885.2	190.0	-108.7	-88.5	0.00	0.00	0.00
3,000.0	8.54	330.23	2,984.1	202.9	-116.0	-94.5	0.00	0.00	0.00
3,100.0	8.54	330.23	3,083.0	215.7	-123.4	-100.5	0.00	0.00	0.00
3,200.0	8.54	330.23	3,181.9	228.6	-130.8	-106.6	0.00	0.00	0.00
3,300.0	8.54	330.23	3,280.8	241.5	-138.1	-112.6	0.00	0.00	0.00
3,400.0	8.54	330.23	3,379.7	254.4	-145.5	-118.6	0.00	0.00	0.00
3,500.0	8.54	330.23	3,478.6	267.3	-152.9	-124.6	0.00	0.00	0.00
3,600.0	8.54	330.23	3,577.5	280.2	-160.3	-130.6	0.00	0.00	0.00
3,700.0	8.54	330.23	3,676.4	293.1	-167.6	-136.6	0.00	0.00	0.00
3,800.0	8.54	330.23	3,775.3	306.0	-175.0	-142.6	0.00	0.00	0.00
3,900.0	8.54	330.23	3,874.2	318.9	-182.4	-148.6	0.00	0.00	0.00
4,000.0	8.54	330.23	3,973.1	331.8	-189.7	-154.6	0.00	0.00	0.00
4,100.0	8.54	330.23	4,071.9	344.6	-197.1	-160.6	0.00	0.00	0.00
4,200.0	8.54	330.23	4,170.8	357.5	-204.5	-166.6	0.00	0.00	0.00
4,300.0	8.54	330.23	4,269.7	370.4	-211.9	-172.6	0.00	0.00	0.00
4,400.0	8.54	330.23	4,368.6	383.3	-219.2	-178.6	0.00	0.00	0.00
4,500.0	8.54	330.23	4,467.5	396.2	-226.6	-184.7	0.00	0.00	0.00
4,600.0	8.54	330.23	4,566.4	409.1	-234.0	-190.7	0.00	0.00	0.00
4,700.0	8.54	330.23	4,665.3	422.0	-241.4	-196.7	0.00	0.00	0.00
4,800.0	8.54	330.23	4,764.2	434.9	-248.7	-202.7	0.00	0.00	0.00
4,900.0	8.54	330.23	4,863.1	447.8	-256.1	-208.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union A-5NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (1-2-14)		

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)
5,000.0	8.54	330.23	4,962.0	460.6	-263.5	-214.7	0.00	0.00	0.00
5,100.0	8.54	330.23	5,060.9	473.5	-270.8	-220.7	0.00	0.00	0.00
5,200.0	8.54	330.23	5,159.7	486.4	-278.2	-226.7	0.00	0.00	0.00
5,300.0	8.54	330.23	5,258.6	499.3	-285.6	-232.7	0.00	0.00	0.00
5,400.0	8.54	330.23	5,357.5	512.2	-293.0	-238.7	0.00	0.00	0.00
5,417.3	8.54	330.23	5,374.6	514.4	-294.2	-239.8	0.00	0.00	0.00
5,500.0	6.88	330.23	5,456.6	524.1	-299.7	-244.2	2.00	-2.00	0.00
5,600.0	4.88	330.23	5,556.1	533.0	-304.8	-248.4	2.00	-2.00	0.00
5,700.0	2.88	330.23	5,655.8	538.8	-308.2	-251.1	2.00	-2.00	0.00
5,800.0	0.88	330.23	5,755.8	541.7	-309.8	-252.5	2.00	-2.00	0.00
5,844.2	0.00	0.00	5,800.0	542.0	-310.0	-252.6	2.00	-2.00	0.00
5,900.0	0.00	0.00	5,855.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,955.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,055.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,155.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,255.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,355.8	542.0	-310.0	-252.6	0.00	0.00	0.00
6,411.0	0.00	0.00	6,366.8	542.0	-310.0	-252.6	0.00	0.00	0.00
KOP #2									
6,500.0	7.12	90.90	6,455.5	541.9	-304.5	-247.1	8.00	8.00	0.00
6,600.0	15.12	90.90	6,553.6	541.6	-285.2	-228.0	8.00	8.00	0.00
6,700.0	23.12	90.90	6,648.0	541.1	-252.5	-195.5	8.00	8.00	0.00
6,800.0	31.12	90.90	6,736.9	540.4	-207.0	-150.3	8.00	8.00	0.00
6,900.0	39.12	90.90	6,818.7	539.5	-149.5	-93.2	8.00	8.00	0.00
7,000.0	47.12	90.90	6,891.6	538.4	-81.2	-25.4	8.00	8.00	0.00
7,100.0	55.12	90.90	6,954.3	537.2	-3.4	51.8	8.00	8.00	0.00
7,200.0	63.12	90.90	7,005.6	535.8	82.3	137.0	8.00	8.00	0.00
7,300.0	71.12	90.90	7,044.5	534.4	174.3	228.4	8.00	8.00	0.00
7,400.0	79.12	90.90	7,070.1	532.9	270.9	324.3	8.00	8.00	0.00
7,500.0	87.12	90.90	7,082.1	531.3	370.1	422.8	8.00	8.00	0.00
7,536.0	90.00	90.90	7,083.0	530.8	406.1	458.5	8.00	8.00	0.00
End of Build - 7"									
7,600.0	90.00	90.90	7,083.0	529.8	470.1	522.1	0.01	0.01	0.00
7,700.0	90.00	90.90	7,083.0	528.2	570.0	621.4	0.00	0.00	0.00
7,800.0	90.00	90.90	7,083.0	526.6	670.0	720.7	0.00	0.00	0.00
7,900.0	90.00	90.90	7,083.0	525.0	770.0	819.9	0.00	0.00	0.00
8,000.0	90.00	90.90	7,083.0	523.5	870.0	919.2	0.00	0.00	0.00
8,100.0	90.00	90.90	7,083.0	521.9	970.0	1,018.5	0.00	0.00	0.00
8,200.0	90.00	90.90	7,083.0	520.3	1,070.0	1,117.8	0.00	0.00	0.00
8,300.0	90.00	90.90	7,083.0	518.8	1,170.0	1,217.1	0.00	0.00	0.00
8,400.0	90.00	90.90	7,083.0	517.2	1,270.0	1,316.4	0.00	0.00	0.00
8,500.0	90.00	90.90	7,083.0	515.6	1,369.9	1,415.7	0.00	0.00	0.00
8,600.0	90.00	90.90	7,083.0	514.1	1,469.9	1,515.0	0.00	0.00	0.00
8,700.0	90.00	90.90	7,083.0	512.5	1,569.9	1,614.3	0.00	0.00	0.00
8,800.0	90.00	90.90	7,083.0	510.9	1,669.9	1,713.6	0.00	0.00	0.00
8,900.0	90.00	90.90	7,083.0	509.4	1,769.9	1,812.9	0.00	0.00	0.00
9,000.0	90.00	90.90	7,083.0	507.8	1,869.9	1,912.2	0.00	0.00	0.00
9,100.0	90.00	90.90	7,083.0	506.2	1,969.9	2,011.5	0.00	0.00	0.00
9,200.0	90.00	90.90	7,083.0	504.6	2,069.9	2,110.8	0.00	0.00	0.00
9,300.0	90.00	90.90	7,083.0	503.1	2,169.9	2,210.1	0.00	0.00	0.00
9,400.0	90.00	90.90	7,083.0	501.5	2,269.8	2,309.4	0.00	0.00	0.00
9,500.0	90.00	90.90	7,083.0	499.9	2,369.8	2,408.7	0.00	0.00	0.00
9,600.0	90.00	90.90	7,083.0	498.4	2,469.8	2,508.0	0.00	0.00	0.00
9,700.0	90.00	90.90	7,083.0	496.8	2,569.8	2,607.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union A-5NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (1-2-14)		

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)	
9,800.0	90.00	90.90	7,083.0	495.2	2,669.8	2,706.6	0.00	0.00	0.00	
9,900.0	90.00	90.90	7,083.0	493.7	2,769.8	2,805.9	0.00	0.00	0.00	
10,000.0	90.00	90.90	7,083.0	492.1	2,869.8	2,905.2	0.00	0.00	0.00	
10,100.0	90.00	90.90	7,083.0	490.5	2,969.8	3,004.5	0.00	0.00	0.00	
10,200.0	90.00	90.90	7,083.0	488.9	3,069.7	3,103.8	0.00	0.00	0.00	
10,300.0	90.00	90.90	7,083.0	487.4	3,169.7	3,203.0	0.00	0.00	0.00	
10,400.0	90.00	90.90	7,083.0	485.8	3,269.7	3,302.3	0.00	0.00	0.00	
10,500.0	90.00	90.90	7,083.0	484.2	3,369.7	3,401.6	0.00	0.00	0.00	
10,600.0	90.00	90.90	7,083.0	482.7	3,469.7	3,500.9	0.00	0.00	0.00	
10,700.0	90.00	90.90	7,083.0	481.1	3,569.7	3,600.2	0.00	0.00	0.00	
10,800.0	90.00	90.90	7,083.0	479.5	3,669.7	3,699.5	0.00	0.00	0.00	
10,900.0	90.00	90.90	7,083.0	478.0	3,769.7	3,798.8	0.00	0.00	0.00	
11,000.0	90.00	90.90	7,083.0	476.4	3,869.6	3,898.1	0.00	0.00	0.00	
11,100.0	90.00	90.90	7,083.0	474.8	3,969.6	3,997.4	0.00	0.00	0.00	
11,200.0	90.00	90.90	7,083.0	473.3	4,069.6	4,096.7	0.00	0.00	0.00	
11,300.0	90.00	90.90	7,083.0	471.7	4,169.6	4,196.0	0.00	0.00	0.00	
11,400.0	90.00	90.90	7,083.0	470.1	4,269.6	4,295.3	0.00	0.00	0.00	
11,500.0	90.00	90.90	7,083.0	468.5	4,369.6	4,394.6	0.00	0.00	0.00	
11,600.0	90.00	90.90	7,083.0	467.0	4,469.6	4,493.9	0.00	0.00	0.00	
11,639.8	90.00	90.90	7,083.0	466.4	4,509.4	4,533.4	0.00	0.00	0.00	
BHL 1242'FNL & 460'FEL										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,536.0	7,083.0	7"	7	8-3/4	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.0	1,000.0	0.0	0.0	KOP #1	
6,411.0	6,366.8	542.0	-310.0	KOP #2	
7,536.0	7,083.0	530.8	406.1	End of Build	



Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union A-5NHZ

Wellbore #1

Plan #3 (1-2-14)

Anticollision Report

03 January, 2014

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design													SRC Union Pad Sec.5-T2N-R68W - SRC Union 12-5CHZ - Wellbore #1 - Plan #3 (1-2-14)		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				
1,500.0	1,499.4	1,501.4	1,501.4	3.3	3.3	113.11	28.8	74.6	86.0	79.5	6.52	13.196				
1,600.0	1,598.9	1,602.4	1,602.4	3.5	3.5	118.95	28.5	73.8	89.4	82.4	6.96	12.847				
1,700.0	1,698.3	1,703.3	1,703.2	3.8	3.7	125.64	27.5	71.2	93.0	85.6	7.38	12.601				
1,800.0	1,797.4	1,803.8	1,803.7	4.0	3.9	133.06	26.0	67.1	97.5	89.7	7.80	12.491				
1,900.0	1,896.3	1,904.1	1,903.8	4.3	4.1	140.91	23.8	61.3	103.3	95.1	8.23	12.555				
2,000.0	1,995.2	2,004.2	2,003.6	4.6	4.3	148.56	21.1	53.8	109.9	101.3	8.66	12.693				
2,100.0	2,094.1	2,104.1	2,102.9	4.9	4.5	155.94	17.7	44.8	117.3	108.2	9.10	12.890				
2,200.0	2,193.0	2,203.6	2,201.9	5.2	4.7	163.04	13.8	34.2	125.5	116.0	9.55	13.144				
2,300.0	2,291.9	2,302.9	2,300.2	5.5	5.0	169.85	9.2	22.0	134.9	124.9	10.03	13.454				
2,400.0	2,390.8	2,401.1	2,397.5	5.9	5.3	175.99	4.5	9.1	145.7	135.2	10.52	13.842				
2,500.0	2,489.7	2,499.4	2,494.8	6.2	5.5	-178.76	-0.3	-3.7	157.9	146.9	11.04	14.299				
2,600.0	2,588.6	2,597.7	2,592.1	6.5	5.8	-174.27	-5.1	-16.6	171.3	159.7	11.58	14.792				
2,700.0	2,687.5	2,695.9	2,689.4	6.9	6.1	-170.45	-9.9	-29.5	185.6	173.5	12.13	15.298				
2,800.0	2,786.4	2,794.2	2,786.7	7.2	6.4	-167.18	-14.6	-42.3	200.6	187.9	12.69	15.803				
2,900.0	2,885.2	2,892.4	2,884.0	7.5	6.7	-164.37	-19.4	-55.2	216.1	202.9	13.26	16.298				
3,000.0	2,984.1	2,990.7	2,981.3	7.9	7.0	-161.93	-24.2	-68.0	232.1	218.3	13.84	16.776				
3,100.0	3,083.0	3,089.0	3,078.6	8.2	7.3	-159.81	-28.9	-80.9	248.4	234.0	14.41	17.235				
3,200.0	3,181.9	3,187.2	3,175.9	8.5	7.6	-157.95	-33.7	-93.7	265.1	250.1	15.00	17.673				
3,300.0	3,280.8	3,285.5	3,273.2	8.9	7.9	-156.31	-38.5	-106.6	281.9	266.4	15.59	18.090				
3,400.0	3,379.7	3,383.7	3,370.5	9.2	8.2	-154.86	-43.3	-119.4	299.0	282.8	16.18	18.486				
3,500.0	3,478.6	3,482.0	3,467.9	9.6	8.6	-153.56	-48.0	-132.3	316.3	299.5	16.77	18.861				
3,600.0	3,577.5	3,580.3	3,565.2	9.9	8.9	-152.40	-52.8	-145.1	333.6	316.3	17.36	19.217				
3,700.0	3,676.4	3,678.5	3,662.5	10.2	9.2	-151.35	-57.6	-158.0	351.2	333.2	17.96	19.553				
3,800.0	3,775.3	3,776.8	3,759.8	10.6	9.5	-150.40	-62.3	-170.9	368.8	350.2	18.56	19.873				
3,900.0	3,874.2	3,875.1	3,857.1	10.9	9.8	-149.54	-67.1	-183.7	386.5	367.3	19.16	20.175				
4,000.0	3,973.1	3,973.3	3,954.4	11.3	10.2	-148.76	-71.9	-196.6	404.2	384.5	19.76	20.462				
4,100.0	4,071.9	4,071.6	4,051.7	11.6	10.5	-148.04	-76.7	-209.4	422.1	401.7	20.36	20.734				
4,200.0	4,170.8	4,169.8	4,149.0	12.0	10.8	-147.37	-81.4	-222.3	440.0	419.0	20.96	20.992				
4,300.0	4,269.7	4,268.1	4,246.3	12.3	11.2	-146.76	-86.2	-235.1	457.9	436.4	21.56	21.237				
4,400.0	4,368.6	4,366.4	4,343.6	12.7	11.5	-146.20	-91.0	-248.0	475.9	453.8	22.17	21.471				
4,500.0	4,467.5	4,464.6	4,440.9	13.0	11.8	-145.68	-95.7	-260.8	494.0	471.2	22.77	21.693				
4,600.0	4,566.4	4,562.9	4,538.2	13.4	12.2	-145.19	-100.5	-273.7	512.0	488.7	23.38	21.904				
4,700.0	4,665.3	4,661.2	4,635.5	13.7	12.5	-144.74	-105.3	-286.5	530.2	506.2	23.98	22.106				
4,800.0	4,764.2	4,762.4	4,735.8	14.1	12.8	-144.32	-110.1	-299.6	548.2	523.6	24.58	22.300				
4,900.0	4,863.1	4,870.1	4,842.8	14.4	13.1	-144.20	-114.2	-310.5	565.0	539.9	25.13	22.484				
5,000.0	4,962.0	4,978.4	4,950.8	14.8	13.3	-144.45	-116.9	-317.7	580.2	554.6	25.63	22.635				
5,100.0	5,060.9	5,086.9	5,059.3	15.1	13.5	-145.05	-118.1	-321.1	593.8	567.7	26.10	22.752				
5,200.0	5,159.7	5,189.4	5,161.7	15.5	13.7	-145.85	-118.2	-321.4	606.2	579.7	26.54	22.845				
5,300.0	5,258.6	5,288.3	5,260.6	15.8	13.8	-146.62	-118.2	-321.4	618.6	591.6	26.97	22.935				
5,400.0	5,357.5	5,387.2	5,359.5	16.2	14.0	-147.36	-118.2	-321.4	631.1	603.7	27.41	23.027				
5,500.0	5,456.6	5,486.2	5,458.6	16.5	14.2	-148.12	-118.2	-321.4	642.7	614.8	27.85	23.075				
5,600.0	5,556.1	5,585.7	5,558.1	16.7	14.3	-148.68	-118.2	-321.4	651.4	623.2	28.24	23.067				
5,700.0	5,655.8	5,685.5	5,657.8	16.9	14.5	-149.05	-118.2	-321.4	657.2	628.6	28.60	22.979				
5,800.0	5,755.8	5,785.4	5,757.8	17.1	14.7	-149.23	-118.2	-321.4	660.0	631.1	28.93	22.811				
5,900.0	5,855.8	5,885.4	5,857.8	17.2	14.9	-179.01	-118.2	-321.4	660.3	631.0	29.33	22.515				
6,000.0	5,955.8	5,985.4	5,957.8	17.4	15.1	-179.01	-118.2	-321.4	660.3	630.6	29.70	22.233				
6,100.0	6,055.8	6,085.4	6,057.8	17.6	15.2	-179.01	-118.2	-321.4	660.3	630.2	30.07	21.957				
6,200.0	6,155.8	6,185.4	6,157.8	17.7	15.4	-179.01	-118.2	-321.4	660.3	629.9	30.45	21.686				
6,300.0	6,255.8	6,285.4	6,257.8	17.9	15.6	-179.01	-118.2	-321.4	660.3	629.5	30.83	21.421				
6,400.0	6,355.8	6,385.4	6,357.8	18.1	15.8	-179.01	-118.2	-321.4	660.3	629.1	31.21	21.160				
6,500.0	6,455.5	6,485.6	6,457.8	18.2	15.9	90.24	-118.3	-317.5	660.3	628.8	31.49	20.970				
6,600.0	6,553.6	6,586.1	6,556.7	18.2	16.0	90.41	-118.6	-300.2	660.3	628.7	31.64	20.873				

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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	
6,700.0	6,648.0	6,686.9	6,652.5	18.3	16.0	90.58	-119.0	-269.1	660.4	628.7	31.68	20.843	
6,800.0	6,736.9	6,788.0	6,743.2	18.2	16.0	90.74	-119.7	-224.7	660.4	628.7	31.71	20.825	
6,900.0	6,818.7	6,889.3	6,827.0	18.2	16.0	90.88	-120.6	-167.8	660.4	628.5	31.84	20.740	
7,000.0	6,891.6	6,990.8	6,902.0	18.1	16.1	91.01	-121.7	-99.6	660.4	628.2	32.24	20.484	
7,100.0	6,954.3	7,092.6	6,966.8	18.1	16.4	91.11	-122.9	-21.2	660.4	627.3	33.09	19.959	
7,200.0	7,005.6	7,194.5	7,019.9	18.0	17.1	91.20	-124.3	65.6	660.4	625.9	34.54	19.121	
7,300.0	7,044.5	7,296.5	7,060.2	18.6	18.1	91.26	-125.7	159.3	660.4	623.8	36.67	18.010	
7,400.0	7,070.1	7,398.6	7,086.8	20.1	19.5	91.29	-127.3	257.7	660.4	621.0	39.46	16.736	
7,500.0	7,082.1	7,500.7	7,099.1	21.8	21.1	91.30	-128.8	359.0	660.4	617.6	42.80	15.432	
7,600.0	7,083.0	7,601.5	7,100.0	23.7	23.0	91.30	-130.4	459.8	660.4	613.9	46.51	14.201	
7,700.0	7,083.0	7,701.5	7,100.0	25.8	25.0	91.30	-132.0	559.7	660.4	609.9	50.55	13.065	
7,800.0	7,083.0	7,801.5	7,100.0	27.9	27.2	91.30	-133.5	659.7	660.4	605.5	54.87	12.036	
7,900.0	7,083.0	7,901.5	7,100.0	30.2	29.4	91.30	-135.1	759.7	660.4	601.0	59.40	11.117	
8,000.0	7,083.0	8,001.5	7,100.0	32.5	31.8	91.30	-136.7	859.7	660.4	596.3	64.11	10.300	
8,100.0	7,083.0	8,101.5	7,100.0	35.0	34.2	91.30	-138.2	959.7	660.4	591.4	68.96	9.577	
8,200.0	7,083.0	8,201.5	7,100.0	37.4	36.7	91.30	-139.8	1,059.7	660.4	586.5	73.91	8.935	
8,300.0	7,083.0	8,301.5	7,100.0	40.0	39.2	91.30	-141.3	1,159.7	660.4	581.4	78.95	8.364	
8,400.0	7,083.0	8,401.5	7,100.0	42.5	41.8	91.30	-142.9	1,259.7	660.3	576.3	84.07	7.855	
8,500.0	7,083.0	8,501.5	7,100.0	45.1	44.4	91.30	-144.5	1,359.6	660.3	571.1	89.24	7.400	
8,600.0	7,083.0	8,601.5	7,100.0	47.7	47.0	91.30	-146.0	1,459.6	660.3	565.9	94.47	6.990	
8,700.0	7,083.0	8,701.5	7,100.0	50.3	49.6	91.30	-147.6	1,559.6	660.3	560.6	99.73	6.621	
8,800.0	7,083.0	8,801.5	7,100.0	53.0	52.3	91.30	-149.1	1,659.6	660.3	555.3	105.04	6.286	
8,900.0	7,083.0	8,901.5	7,100.0	55.6	54.9	91.30	-150.7	1,759.6	660.3	549.9	110.37	5.983	
9,000.0	7,083.0	9,001.5	7,100.0	58.3	57.6	91.30	-152.3	1,859.6	660.3	544.6	115.73	5.705	
9,100.0	7,083.0	9,101.5	7,100.0	61.0	60.3	91.30	-153.8	1,959.6	660.3	539.2	121.12	5.452	
9,200.0	7,083.0	9,201.5	7,100.0	63.7	63.0	91.30	-155.4	2,059.6	660.3	533.7	126.52	5.219	
9,300.0	7,083.0	9,301.5	7,100.0	66.4	65.7	91.30	-156.9	2,159.6	660.3	528.3	131.94	5.004	
9,400.0	7,083.0	9,401.5	7,100.0	69.1	68.4	91.30	-158.5	2,259.5	660.2	522.9	137.38	4.806	
9,500.0	7,083.0	9,501.5	7,100.0	71.8	71.2	91.30	-160.1	2,359.5	660.2	517.4	142.83	4.623	
9,600.0	7,083.0	9,601.5	7,100.0	74.5	73.9	91.30	-161.6	2,459.5	660.2	511.9	148.29	4.452	
9,700.0	7,083.0	9,701.5	7,100.0	77.3	76.6	91.30	-163.2	2,559.5	660.2	506.5	153.77	4.294	
9,800.0	7,083.0	9,801.5	7,100.0	80.0	79.4	91.30	-164.7	2,659.5	660.2	501.0	159.25	4.146	
9,900.0	7,083.0	9,901.5	7,100.0	82.8	82.1	91.30	-166.3	2,759.5	660.2	495.5	164.74	4.007	
10,000.0	7,083.0	10,001.5	7,100.0	85.5	84.9	91.30	-167.9	2,859.5	660.2	489.9	170.24	3.878	
10,100.0	7,083.0	10,101.5	7,100.0	88.3	87.6	91.30	-169.4	2,959.5	660.2	484.4	175.75	3.756	
10,200.0	7,083.0	10,201.5	7,100.0	91.0	90.4	91.30	-171.0	3,059.4	660.2	478.9	181.27	3.642	
10,300.0	7,083.0	10,301.5	7,100.0	93.8	93.2	91.30	-172.5	3,159.4	660.2	473.4	186.79	3.534	
10,400.0	7,083.0	10,401.5	7,100.0	96.5	95.9	91.30	-174.1	3,259.4	660.2	467.8	192.31	3.433	
10,500.0	7,083.0	10,501.5	7,100.0	99.3	98.7	91.30	-175.7	3,359.4	660.1	462.3	197.84	3.337	
10,600.0	7,083.0	10,601.5	7,100.0	102.1	101.5	91.30	-177.2	3,459.4	660.1	456.8	203.38	3.246	
10,700.0	7,083.0	10,701.5	7,100.0	104.8	104.2	91.30	-178.8	3,559.4	660.1	451.2	208.92	3.160	
10,800.0	7,083.0	10,801.5	7,100.0	107.6	107.0	91.30	-180.3	3,659.4	660.1	445.7	214.46	3.078	
10,900.0	7,083.0	10,901.5	7,100.0	110.4	109.8	91.30	-181.9	3,759.4	660.1	440.1	220.01	3.000	
11,000.0	7,083.0	11,001.5	7,100.0	113.1	112.6	91.30	-183.5	3,859.3	660.1	434.5	225.56	2.926	
11,100.0	7,083.0	11,101.5	7,100.0	115.9	115.3	91.30	-185.0	3,959.3	660.1	429.0	231.12	2.856	
11,200.0	7,083.0	11,201.5	7,100.0	118.7	118.1	91.30	-186.6	4,059.3	660.1	423.4	236.67	2.789	
11,300.0	7,083.0	11,301.5	7,100.0	121.5	120.9	91.30	-188.1	4,159.3	660.1	417.8	242.23	2.725	
11,400.0	7,083.0	11,401.5	7,100.0	124.3	123.7	91.30	-189.7	4,259.3	660.1	412.3	247.80	2.664	
11,500.0	7,083.0	11,501.5	7,100.0	127.0	126.5	91.30	-191.3	4,359.3	660.1	406.7	253.36	2.605	
11,600.0	7,083.0	11,601.5	7,100.0	129.8	129.2	91.30	-192.8	4,459.3	660.0	401.1	258.93	2.549	
11,631.4	7,083.0	11,632.9	7,100.0	130.7	130.1	91.30	-193.3	4,490.7	660.0	399.4	260.67	2.532	
11,639.8	7,083.0	11,639.2	7,100.0	130.9	130.3	91.30	-193.4	4,496.9	660.0	399.0	261.08	2.528 SF	

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	1.0	1.0	0.0	0.0	68.45	7.3	18.4	19.8	19.8	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	68.45	7.3	18.4	19.8	19.6	0.23	87.359		
200.0	200.0	201.0	201.0	0.3	0.3	68.45	7.3	18.4	19.8	19.2	0.68	29.313		
300.0	300.0	301.0	301.0	0.6	0.6	68.45	7.3	18.4	19.8	18.7	1.13	17.611		
400.0	400.0	401.0	401.0	0.8	0.8	68.45	7.3	18.4	19.8	18.3	1.58	12.587		
500.0	500.0	501.0	501.0	1.0	1.0	68.45	7.3	18.4	19.8	17.8	2.03	9.793		
600.0	600.0	601.0	601.0	1.2	1.2	68.45	7.3	18.4	19.8	17.4	2.47	8.014		
700.0	700.0	701.0	701.0	1.5	1.5	68.45	7.3	18.4	19.8	16.9	2.92	6.782		
800.0	800.0	801.0	801.0	1.7	1.7	68.45	7.3	18.4	19.8	16.5	3.37	5.878		
900.0	900.0	901.0	901.0	1.9	1.9	68.45	7.3	18.4	19.8	16.0	3.82	5.187		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	68.45	7.3	18.4	19.8	15.6	4.27	4.641 CC		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	100.69	7.3	18.4	20.0	15.3	4.72	4.232 ES		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	107.85	7.3	18.4	20.6	15.5	5.17	3.992		
1,300.0	1,299.9	1,300.9	1,300.9	2.8	2.8	118.53	7.3	18.4	22.3	16.7	5.61	3.983		
1,400.0	1,399.7	1,400.9	1,400.9	3.0	3.0	132.17	6.7	17.8	25.3	19.3	6.03	4.202		
1,500.0	1,499.4	1,500.7	1,500.7	3.3	3.2	147.51	4.8	16.0	30.3	23.9	6.43	4.710		
1,600.0	1,598.9	1,600.1	1,600.0	3.5	3.4	161.55	1.7	12.9	38.2	31.4	6.83	5.596		
1,700.0	1,698.3	1,699.1	1,698.8	3.8	3.6	172.72	-2.6	8.6	49.6	42.4	7.25	6.845		
1,800.0	1,797.4	1,797.5	1,796.8	4.0	3.8	-178.93	-8.0	3.2	64.3	56.7	7.67	8.384		
1,900.0	1,896.3	1,895.1	1,894.1	4.3	4.0	-172.76	-14.6	-3.4	82.0	73.9	8.12	10.109		
2,000.0	1,995.2	1,992.3	1,990.6	4.6	4.2	-167.99	-22.3	-11.1	101.4	92.8	8.58	11.812		
2,100.0	2,094.1	2,088.9	2,086.5	4.9	4.5	-164.09	-31.1	-19.8	122.0	112.9	9.06	13.462		
2,200.0	2,193.0	2,185.9	2,182.5	5.2	4.7	-160.88	-40.8	-29.5	143.7	134.2	9.56	15.037		
2,300.0	2,291.9	2,283.3	2,278.8	5.5	5.0	-158.48	-50.7	-39.3	165.8	155.8	10.06	16.482		
2,400.0	2,390.8	2,380.6	2,375.1	5.9	5.3	-156.65	-60.5	-49.1	188.1	177.6	10.57	17.796		
2,500.0	2,489.7	2,477.9	2,471.5	6.2	5.6	-155.20	-70.3	-58.9	210.6	199.5	11.09	18.995		
2,600.0	2,588.6	2,575.2	2,567.8	6.5	5.9	-154.04	-80.1	-68.7	233.1	221.5	11.61	20.086		
2,700.0	2,687.5	2,672.6	2,664.1	6.9	6.2	-153.08	-89.9	-78.5	255.8	243.6	12.13	21.082		
2,800.0	2,786.4	2,769.9	2,760.5	7.2	6.5	-152.27	-99.8	-88.3	278.4	265.8	12.66	21.994		
2,900.0	2,885.2	2,867.2	2,856.8	7.5	6.8	-151.59	-109.6	-98.1	301.2	288.0	13.19	22.829		
3,000.0	2,984.1	2,964.5	2,953.1	7.9	7.1	-151.00	-119.4	-107.9	323.9	310.2	13.73	23.597		
3,100.0	3,083.0	3,061.9	3,049.4	8.2	7.4	-150.49	-129.2	-117.7	346.7	332.5	14.27	24.305		
3,200.0	3,181.9	3,159.2	3,145.8	8.5	7.7	-150.04	-139.0	-127.5	369.6	354.8	14.81	24.958		
3,300.0	3,280.8	3,256.5	3,242.1	8.9	8.0	-149.65	-148.9	-137.2	392.4	377.0	15.35	25.563		
3,400.0	3,379.7	3,353.8	3,338.4	9.2	8.4	-149.30	-158.7	-147.0	415.3	399.4	15.90	26.125		
3,500.0	3,478.6	3,451.1	3,434.8	9.6	8.7	-148.98	-168.5	-156.8	438.1	421.7	16.44	26.647		
3,600.0	3,577.5	3,548.5	3,531.1	9.9	9.0	-148.70	-178.3	-166.6	461.0	444.0	16.99	27.133		
3,700.0	3,676.4	3,645.8	3,627.4	10.2	9.3	-148.44	-188.1	-176.4	483.9	466.3	17.54	27.587		
3,800.0	3,775.3	3,743.1	3,723.8	10.6	9.7	-148.21	-198.0	-186.2	506.8	488.7	18.09	28.012		
3,900.0	3,874.2	3,840.4	3,820.1	10.9	10.0	-147.99	-207.8	-196.0	529.7	511.0	18.64	28.411		
4,000.0	3,973.1	3,937.8	3,916.4	11.3	10.3	-147.80	-217.6	-205.8	552.6	533.4	19.20	28.785		
4,100.0	4,071.9	4,035.1	4,012.8	11.6	10.7	-147.62	-227.4	-215.6	575.5	555.8	19.75	29.137		
4,200.0	4,170.8	4,132.4	4,109.1	12.0	11.0	-147.45	-237.2	-225.4	598.4	578.1	20.31	29.468		
4,300.0	4,269.7	4,229.7	4,205.4	12.3	11.3	-147.30	-247.1	-235.2	621.4	600.5	20.86	29.781		
4,400.0	4,368.6	4,327.1	4,301.7	12.7	11.7	-147.15	-256.9	-244.9	644.3	622.9	21.42	30.076		
4,500.0	4,467.5	4,424.4	4,398.1	13.0	12.0	-147.02	-266.7	-254.7	667.2	645.2	21.98	30.356		
4,600.0	4,566.4	4,521.7	4,494.4	13.4	12.3	-146.89	-276.5	-264.5	690.1	667.6	22.54	30.621		
4,700.0	4,665.3	4,619.0	4,590.7	13.7	12.7	-146.78	-286.3	-274.3	713.1	690.0	23.10	30.872		
4,800.0	4,764.2	4,716.4	4,687.1	14.1	13.0	-146.67	-296.1	-284.1	736.0	712.4	23.66	31.111		
4,900.0	4,863.1	4,813.7	4,783.4	14.4	13.4	-146.57	-306.0	-293.9	759.0	734.8	24.22	31.338		
5,000.0	4,962.0	4,911.0	4,879.7	14.8	13.7	-146.47	-315.8	-303.7	781.9	757.1	24.78	31.554		
5,100.0	5,060.9	5,030.9	4,998.7	15.1	14.0	-146.45	-326.5	-314.3	803.7	778.3	25.36	31.695		

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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	5,159.7	5,155.5	5,122.9	15.5	14.3	-146.69	-333.8	-321.7	822.3	796.4	25.89	31.759		
5,300.0	5,258.6	5,281.3	5,248.5	15.8	14.5	-147.17	-337.4	-325.2	837.7	811.3	26.40	31.731		
5,400.0	5,357.5	5,391.3	5,358.5	16.2	14.7	-147.75	-337.7	-325.6	850.5	823.7	26.87	31.654		
5,500.0	5,456.6	5,490.4	5,457.6	16.5	14.9	-148.33	-337.7	-325.6	862.2	834.8	27.34	31.536		
5,600.0	5,556.1	5,589.8	5,557.1	16.7	15.0	-148.78	-337.7	-325.6	870.9	843.2	27.75	31.385		
5,700.0	5,655.8	5,689.6	5,656.8	16.9	15.2	-149.07	-337.7	-325.6	876.7	848.6	28.13	31.169		
5,800.0	5,755.8	5,789.6	5,756.8	17.1	15.3	-149.20	-337.7	-325.6	879.6	851.1	28.47	30.889		
5,900.0	5,855.8	5,889.5	5,856.8	17.2	15.5	-178.99	-337.7	-325.6	879.9	849.3	30.51	28.841		
6,000.0	5,955.8	5,989.5	5,956.8	17.4	15.6	-178.99	-337.7	-325.6	879.9	849.0	30.85	28.518		
6,100.0	6,055.8	6,089.5	6,056.8	17.6	15.8	-178.99	-337.7	-325.6	879.9	848.7	31.20	28.200		
6,200.0	6,155.8	6,189.5	6,156.8	17.7	16.0	-178.99	-337.7	-325.6	879.9	848.3	31.55	27.886		
6,300.0	6,255.8	6,289.5	6,256.8	17.9	16.1	-178.99	-337.7	-325.6	879.9	847.9	31.90	27.578		
6,400.0	6,355.8	6,389.5	6,356.8	18.1	16.3	-178.99	-337.7	-325.6	879.9	847.6	32.26	27.274		
6,500.0	6,455.5	6,489.8	6,456.7	18.2	16.4	90.10	-337.8	-319.9	879.9	848.9	31.00	28.384		
6,600.0	6,553.6	6,590.0	6,555.0	18.2	16.5	90.09	-338.1	-300.4	879.8	848.7	31.14	28.256		
6,700.0	6,648.0	6,690.2	6,649.5	18.3	16.5	90.08	-338.6	-267.4	879.8	848.7	31.19	28.212		
6,800.0	6,736.9	6,790.3	6,738.4	18.2	16.5	90.06	-339.3	-221.6	879.8	848.6	31.23	28.177		
6,900.0	6,818.7	6,890.5	6,820.1	18.2	16.4	90.05	-340.2	-163.8	879.8	848.5	31.38	28.035		
7,000.0	6,891.6	6,990.5	6,892.9	18.1	16.4	90.03	-341.3	-95.3	879.8	848.0	31.83	27.646		
7,100.0	6,954.3	7,090.6	6,955.5	18.1	16.5	90.01	-342.5	-17.3	879.8	847.1	32.73	26.884		
7,200.0	7,005.6	7,190.6	7,006.5	18.0	16.8	89.99	-343.9	68.6	879.8	845.6	34.23	25.701		
7,300.0	7,044.5	7,290.6	7,045.1	18.6	17.8	89.98	-345.3	160.7	879.8	843.4	36.41	24.161		
7,400.0	7,070.1	7,390.5	7,070.5	20.1	19.3	89.96	-346.8	257.3	879.8	840.6	39.24	22.421		
7,500.0	7,082.1	7,490.4	7,082.2	21.8	21.0	89.94	-348.4	356.4	879.8	837.2	42.60	20.655		
7,600.0	7,083.0	7,590.3	7,083.0	23.7	22.9	89.93	-349.9	456.3	879.8	833.5	46.34	18.984		
7,700.0	7,083.0	7,690.3	7,083.0	25.8	25.0	89.93	-351.5	556.3	879.8	829.4	50.44	17.441		
7,800.0	7,083.0	7,790.3	7,083.0	27.9	27.2	89.93	-353.1	656.3	879.8	825.0	54.80	16.056		
7,900.0	7,083.0	7,890.3	7,083.0	30.2	29.5	89.93	-354.6	756.3	879.8	820.4	59.37	14.819		
8,000.0	7,083.0	7,990.3	7,083.0	32.5	31.9	89.93	-356.2	856.3	879.8	815.7	64.11	13.724		
8,100.0	7,083.0	8,090.3	7,083.0	35.0	34.3	89.93	-357.8	956.2	879.8	810.8	68.98	12.755		
8,200.0	7,083.0	8,190.3	7,083.0	37.4	36.8	89.93	-359.3	1,056.2	879.8	805.8	73.95	11.896		
8,300.0	7,083.0	8,290.3	7,083.0	40.0	39.4	89.93	-360.9	1,156.2	879.8	800.7	79.02	11.134		
8,400.0	7,083.0	8,390.3	7,083.0	42.5	41.9	89.93	-362.5	1,256.2	879.8	795.6	84.15	10.455		
8,500.0	7,083.0	8,490.3	7,083.0	45.1	44.5	89.93	-364.0	1,356.2	879.8	790.4	89.34	9.847		
8,600.0	7,083.0	8,590.3	7,083.0	47.7	47.2	89.93	-365.6	1,456.2	879.7	785.2	94.58	9.302		
8,700.0	7,083.0	8,690.3	7,083.0	50.3	49.8	89.93	-367.1	1,556.2	879.7	779.9	99.86	8.810		
8,800.0	7,083.0	8,790.3	7,083.0	53.0	52.5	89.93	-368.7	1,656.2	879.7	774.6	105.17	8.365		
8,900.0	7,083.0	8,890.3	7,083.0	55.6	55.1	89.93	-370.3	1,756.1	879.7	769.2	110.52	7.960		
9,000.0	7,083.0	8,990.3	7,083.0	58.3	57.8	89.93	-371.8	1,856.1	879.7	763.8	115.89	7.591		
9,100.0	7,083.0	9,090.3	7,083.0	61.0	60.5	89.93	-373.4	1,956.1	879.7	758.4	121.28	7.253		
9,200.0	7,083.0	9,190.3	7,083.0	63.7	63.2	89.93	-375.0	2,056.1	879.7	753.0	126.69	6.944		
9,300.0	7,083.0	9,290.3	7,083.0	66.4	66.0	89.93	-376.5	2,156.1	879.7	747.6	132.12	6.658		
9,400.0	7,083.0	9,390.3	7,083.0	69.1	68.7	89.93	-378.1	2,256.1	879.7	742.1	137.57	6.395		
9,500.0	7,083.0	9,490.3	7,083.0	71.8	71.4	89.93	-379.7	2,356.1	879.7	736.7	143.03	6.151		
9,600.0	7,083.0	9,590.3	7,083.0	74.5	74.2	89.93	-381.2	2,456.1	879.7	731.2	148.49	5.924		
9,700.0	7,083.0	9,690.3	7,083.0	77.3	76.9	89.93	-382.8	2,556.0	879.7	725.7	153.97	5.713		
9,800.0	7,083.0	9,790.3	7,083.0	80.0	79.6	89.93	-384.3	2,656.0	879.7	720.2	159.46	5.516		
9,900.0	7,083.0	9,890.3	7,083.0	82.8	82.4	89.93	-385.9	2,756.0	879.7	714.7	164.96	5.333		
10,000.0	7,083.0	9,990.3	7,083.0	85.5	85.1	89.93	-387.5	2,856.0	879.7	709.2	170.47	5.160		
10,100.0	7,083.0	10,090.3	7,083.0	88.3	87.9	89.93	-389.0	2,956.0	879.7	703.7	175.98	4.999		
10,200.0	7,083.0	10,190.3	7,083.0	91.0	90.7	89.93	-390.6	3,056.0	879.7	698.2	181.50	4.847		
10,300.0	7,083.0	10,290.3	7,083.0	93.8	93.4	89.93	-392.2	3,156.0	879.6	692.6	187.02	4.703		

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union 12-5NHZ - Wellbore #1 - Plan #3 (1-2-14)												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
10,400.0	7,083.0	10,390.3	7,083.0	96.5	96.2	89.93	-393.7	3,256.0	879.6	687.1	192.55	4.568	
10,500.0	7,083.0	10,490.3	7,083.0	99.3	99.0	89.93	-395.3	3,355.9	879.6	681.5	198.09	4.441	
10,600.0	7,083.0	10,590.3	7,083.0	102.1	101.7	89.93	-396.9	3,455.9	879.6	676.0	203.63	4.320	
10,700.0	7,083.0	10,690.3	7,083.0	104.8	104.5	89.93	-398.4	3,555.9	879.6	670.5	209.17	4.205	
10,800.0	7,083.0	10,790.3	7,083.0	107.6	107.3	89.93	-400.0	3,655.9	879.6	664.9	214.72	4.097	
10,900.0	7,083.0	10,890.3	7,083.0	110.4	110.1	89.93	-401.5	3,755.9	879.6	659.3	220.27	3.993	
11,000.0	7,083.0	10,990.3	7,083.0	113.1	112.8	89.93	-403.1	3,855.9	879.6	653.8	225.83	3.895	
11,100.0	7,083.0	11,090.3	7,083.0	115.9	115.6	89.93	-404.7	3,955.9	879.6	648.2	231.38	3.802	
11,200.0	7,083.0	11,190.3	7,083.0	118.7	118.4	89.93	-406.2	4,055.9	879.6	642.7	236.94	3.712	
11,300.0	7,083.0	11,290.3	7,083.0	121.5	121.2	89.93	-407.8	4,155.9	879.6	637.1	242.50	3.627	
11,400.0	7,083.0	11,390.3	7,083.0	124.3	124.0	89.93	-409.4	4,255.8	879.6	631.5	248.07	3.546	
11,500.0	7,083.0	11,490.3	7,083.0	127.0	126.7	89.93	-410.9	4,355.8	879.6	625.9	253.64	3.468	
11,600.0	7,083.0	11,590.3	7,083.0	129.8	129.5	89.93	-412.5	4,455.8	879.6	620.4	259.21	3.393	
11,630.9	7,083.0	11,621.3	7,083.0	130.7	130.4	89.93	-413.0	4,486.7	879.6	618.6	260.93	3.371	
11,639.8	7,083.0	11,627.3	7,083.0	130.9	130.6	89.93	-413.1	4,492.8	879.6	618.2	261.35	3.366 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
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	-110.29	-6.9	-18.7	20.0	20.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-110.29	-6.9	-18.7	20.0	19.7	0.22	88.815		
200.0	200.0	200.0	200.0	0.3	0.3	-110.29	-6.9	-18.7	20.0	19.3	0.67	29.605		
300.0	300.0	300.0	300.0	0.6	0.6	-110.29	-6.9	-18.7	20.0	18.8	1.12	17.763		
400.0	400.0	400.0	400.0	0.8	0.8	-110.29	-6.9	-18.7	20.0	18.4	1.57	12.688		
500.0	500.0	500.0	500.0	1.0	1.0	-110.29	-6.9	-18.7	20.0	17.9	2.02	9.868		
600.0	600.0	600.0	600.0	1.2	1.2	-110.29	-6.9	-18.7	20.0	17.5	2.47	8.074		
641.5	641.5	641.5	641.5	1.3	1.3	-109.86	-6.8	-18.8	20.0	17.3	2.66	7.508 CC		
700.0	700.0	700.0	700.0	1.5	1.5	-107.78	-6.1	-19.0	20.0	17.1	2.92	6.839		
800.0	800.0	799.9	799.9	1.7	1.7	-100.36	-3.6	-19.9	20.2	16.9	3.37	6.008		
900.0	900.0	899.7	899.6	1.9	1.9	-88.79	0.5	-21.4	21.4	17.6	3.82	5.603		
1,000.0	1,000.0	999.4	999.0	2.1	2.1	-75.27	6.2	-23.4	24.3	20.0	4.27	5.683		
1,100.0	1,100.0	1,098.8	1,098.2	2.4	2.4	-33.81	13.5	-26.1	28.7	24.0	4.72	6.079		
1,200.0	1,200.0	1,198.2	1,197.1	2.6	2.6	-25.07	22.4	-29.3	33.8	28.7	5.17	6.544		
1,300.0	1,299.9	1,297.4	1,295.6	2.8	2.9	-18.35	32.9	-33.1	39.4	33.8	5.62	7.013		
1,400.0	1,399.7	1,396.4	1,393.9	3.0	3.2	-13.00	45.1	-37.5	45.3	39.2	6.07	7.462		
1,500.0	1,499.4	1,495.4	1,491.8	3.3	3.5	-8.60	58.8	-42.4	51.4	44.9	6.52	7.880		
1,600.0	1,598.9	1,594.2	1,589.3	3.5	3.8	-4.86	74.0	-48.0	57.7	50.7	6.98	8.266		
1,700.0	1,698.3	1,693.6	1,687.1	3.8	4.1	-1.65	90.6	-54.0	63.8	56.3	7.44	8.576		
1,800.0	1,797.4	1,793.5	1,785.3	4.0	4.5	1.04	107.5	-60.0	68.4	60.5	7.90	8.665		
1,900.0	1,896.3	1,893.4	1,883.6	4.3	4.8	3.46	124.3	-66.1	71.6	63.3	8.37	8.561		
2,000.0	1,995.2	1,993.3	1,981.9	4.6	5.2	5.69	141.1	-72.2	74.7	65.9	8.85	8.442		
2,100.0	2,094.1	2,093.2	2,080.2	4.9	5.6	7.74	158.0	-78.3	77.9	68.6	9.34	8.341		
2,200.0	2,193.0	2,193.1	2,178.5	5.2	5.9	9.63	174.8	-84.4	81.2	71.4	9.84	8.254		
2,300.0	2,291.9	2,293.0	2,276.8	5.5	6.3	11.37	191.7	-90.4	84.6	74.2	10.34	8.178		
2,400.0	2,390.8	2,392.9	2,375.0	5.9	6.7	12.97	208.5	-96.5	88.0	77.1	10.85	8.111		
2,500.0	2,489.7	2,492.8	2,473.3	6.2	7.1	14.45	225.3	-102.6	91.5	80.1	11.36	8.050		
2,600.0	2,588.6	2,592.8	2,571.6	6.5	7.5	15.82	242.2	-108.7	95.0	83.2	11.89	7.995		
2,700.0	2,687.5	2,692.7	2,669.9	6.9	7.9	17.10	259.0	-114.8	98.6	86.2	12.42	7.945		
2,800.0	2,786.4	2,792.6	2,768.2	7.2	8.2	18.28	275.8	-120.8	102.3	89.3	12.95	7.899		
2,900.0	2,885.2	2,892.5	2,866.5	7.5	8.6	19.38	292.7	-126.9	106.0	92.5	13.49	7.855		
3,000.0	2,984.1	2,992.4	2,964.8	7.9	9.0	20.41	309.5	-133.0	109.7	95.7	14.04	7.815		
3,100.0	3,083.0	3,092.3	3,063.1	8.2	9.4	21.36	326.3	-139.1	113.5	98.9	14.59	7.777		
3,200.0	3,181.9	3,192.2	3,161.4	8.5	9.8	22.26	343.2	-145.2	117.3	102.1	15.15	7.742		
3,300.0	3,280.8	3,292.1	3,259.7	8.9	10.2	23.10	360.0	-151.2	121.1	105.4	15.71	7.708		
3,400.0	3,379.7	3,392.1	3,358.0	9.2	10.6	23.89	376.9	-157.3	124.9	108.6	16.27	7.676		
3,500.0	3,478.6	3,492.0	3,456.3	9.6	11.0	24.63	393.7	-163.4	128.8	111.9	16.84	7.646		
3,600.0	3,577.5	3,591.9	3,554.6	9.9	11.4	25.33	410.5	-169.5	132.6	115.2	17.41	7.618		
3,700.0	3,676.4	3,691.8	3,652.9	10.2	11.8	25.99	427.4	-175.5	136.5	118.6	17.99	7.590		
3,800.0	3,775.3	3,791.7	3,751.2	10.6	12.2	26.61	444.2	-181.6	140.5	121.9	18.57	7.565		
3,900.0	3,874.2	3,891.6	3,849.5	10.9	12.6	27.20	461.0	-187.7	144.4	125.2	19.15	7.540		
4,000.0	3,973.1	3,991.5	3,947.8	11.3	13.0	27.76	477.9	-193.8	148.3	128.6	19.74	7.516		
4,100.0	4,071.9	4,091.4	4,046.1	11.6	13.4	28.29	494.7	-199.9	152.3	132.0	20.32	7.494		
4,200.0	4,170.8	4,191.3	4,144.4	12.0	13.7	28.79	511.5	-205.9	156.3	135.4	20.91	7.472		
4,300.0	4,269.7	4,291.3	4,242.7	12.3	14.1	29.26	528.4	-212.0	160.3	138.8	21.51	7.452		
4,400.0	4,368.6	4,391.2	4,341.0	12.7	14.5	29.72	545.2	-218.1	164.3	142.2	22.10	7.432		
4,500.0	4,467.5	4,491.1	4,439.2	13.0	14.9	30.15	562.1	-224.2	168.3	145.6	22.70	7.413		
4,600.0	4,566.4	4,591.0	4,537.5	13.4	15.3	30.56	578.9	-230.3	172.3	149.0	23.30	7.395		
4,700.0	4,665.3	4,690.9	4,635.8	13.7	15.7	30.95	595.7	-236.3	176.3	152.4	23.90	7.378		
4,800.0	4,764.2	4,790.8	4,734.1	14.1	16.1	31.33	612.6	-242.4	180.3	155.8	24.50	7.361		
4,900.0	4,863.1	4,890.7	4,832.4	14.4	16.5	31.69	629.4	-248.5	184.4	159.3	25.10	7.345		
5,000.0	4,962.0	4,990.6	4,930.7	14.8	16.9	32.03	646.2	-254.6	188.4	162.7	25.71	7.330		

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 A-5CHZ - Wellbore #1 - Plan #3 (1-2-14)													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)			
5,100.0	5,060.9	5,090.6	5,029.0	15.1	17.3	32.36	663.1	-260.7	192.5	166.2	26.31	7.315		
5,200.0	5,159.7	5,190.5	5,127.3	15.5	17.7	32.68	679.9	-266.7	196.5	169.6	26.92	7.301		
5,300.0	5,258.6	5,290.4	5,225.6	15.8	18.1	32.98	696.8	-272.8	200.6	173.1	27.53	7.287		
5,400.0	5,357.5	5,390.3	5,323.9	16.2	18.5	33.27	713.6	-278.9	204.7	176.5	28.14	7.274		
5,500.0	5,456.6	5,490.2	5,422.2	16.5	18.9	33.42	730.4	-285.0	209.7	181.0	28.69	7.311		
5,600.0	5,556.1	5,592.4	5,522.8	16.7	19.3	33.11	747.4	-291.1	217.5	188.4	29.10	7.474		
5,700.0	5,655.8	5,699.7	5,628.9	16.9	19.6	32.60	762.4	-296.5	225.4	196.1	29.39	7.672		
5,800.0	5,755.8	5,807.3	5,735.9	17.1	19.9	32.01	773.6	-300.6	232.9	203.3	29.61	7.866		
5,900.0	5,855.8	5,915.4	5,843.6	17.2	20.1	1.61	781.1	-303.3	239.5	203.8	35.65	6.717		
6,000.0	5,955.8	6,023.8	5,952.0	17.4	20.2	1.28	784.7	-304.6	242.8	206.8	36.03	6.738		
6,100.0	6,055.8	6,127.6	6,055.8	17.6	20.4	1.24	785.1	-304.7	243.1	206.8	36.35	6.688		
6,200.0	6,155.8	6,227.6	6,155.8	17.7	20.5	1.24	785.1	-304.7	243.1	206.5	36.67	6.630		
6,300.0	6,255.8	6,327.6	6,255.8	17.9	20.7	1.24	785.1	-304.7	243.1	206.1	36.99	6.573		
6,400.0	6,355.8	6,427.6	6,355.8	18.1	20.8	1.24	785.1	-304.7	243.1	205.8	37.32	6.516		
6,474.4	6,430.1	6,502.0	6,430.1	18.2	20.9	-90.11	785.1	-303.2	243.1	211.3	31.87	7.628		
6,500.0	6,455.5	6,527.5	6,455.6	18.2	20.9	-90.11	785.0	-301.1	243.1	211.2	31.94	7.612		
6,600.0	6,553.6	6,627.7	6,554.2	18.2	21.0	-90.67	784.8	-284.2	243.2	211.1	32.04	7.589		
6,700.0	6,648.0	6,728.3	6,649.9	18.3	21.0	-91.21	784.3	-253.5	243.2	211.1	32.07	7.585		
6,800.0	6,736.9	6,829.1	6,740.6	18.2	21.0	-91.74	783.6	-209.6	243.3	211.2	32.10	7.578		
6,900.0	6,818.7	6,930.3	6,824.4	18.2	21.0	-92.23	782.8	-153.2	243.4	211.1	32.27	7.542		
7,000.0	6,891.6	7,031.7	6,899.7	18.1	20.9	-92.67	781.7	-85.3	243.5	210.8	32.72	7.441		
7,100.0	6,954.3	7,133.4	6,964.8	18.1	20.9	-93.06	780.5	-7.3	243.6	210.0	33.62	7.245		
7,200.0	7,005.6	7,235.4	7,018.4	18.0	20.9	-93.40	779.2	79.4	243.7	208.6	35.11	6.942		
7,300.0	7,044.5	7,337.5	7,059.1	18.6	21.0	-93.66	777.8	172.9	243.8	206.6	37.24	6.546		
7,400.0	7,070.1	7,439.8	7,086.2	20.1	21.6	-93.86	776.2	271.4	243.9	203.9	40.01	6.096		
7,500.0	7,082.1	7,542.2	7,099.0	21.8	22.9	-93.97	774.7	372.9	244.0	200.7	43.30	5.635		
7,600.0	7,083.0	7,643.1	7,100.0	23.7	24.6	-94.00	773.1	473.8	244.0	197.0	47.00	5.192		
7,700.0	7,083.0	7,743.1	7,100.0	25.8	26.6	-93.99	771.6	573.8	244.0	193.0	51.02	4.783		
7,800.0	7,083.0	7,843.1	7,100.0	27.9	28.7	-93.99	770.1	673.8	244.1	188.7	55.33	4.412		
7,900.0	7,083.0	7,943.1	7,100.0	30.2	30.9	-93.99	768.5	773.8	244.1	184.3	59.84	4.079		
8,000.0	7,083.0	8,043.1	7,100.0	32.5	33.2	-93.99	767.0	873.7	244.1	179.6	64.53	3.783		
8,100.0	7,083.0	8,143.1	7,100.0	35.0	35.6	-93.99	765.5	973.7	244.2	174.8	69.35	3.521		
8,200.0	7,083.0	8,243.1	7,100.0	37.4	38.1	-93.99	763.9	1,073.7	244.2	169.9	74.29	3.287		
8,300.0	7,083.0	8,343.1	7,100.0	40.0	40.6	-93.99	762.4	1,173.7	244.3	164.9	79.31	3.080		
8,400.0	7,083.0	8,443.1	7,100.0	42.5	43.1	-93.99	760.9	1,273.7	244.3	159.9	84.41	2.894		
8,500.0	7,083.0	8,543.1	7,100.0	45.1	45.6	-93.99	759.3	1,373.7	244.3	154.8	89.56	2.728		
8,600.0	7,083.0	8,643.1	7,100.0	47.7	48.2	-93.99	757.8	1,473.7	244.4	149.6	94.77	2.578		
8,700.0	7,083.0	8,743.1	7,100.0	50.3	50.8	-93.99	756.3	1,573.7	244.4	144.4	100.02	2.443		
8,800.0	7,083.0	8,843.1	7,100.0	53.0	53.5	-93.99	754.7	1,673.7	244.4	139.1	105.31	2.321		
8,900.0	7,083.0	8,943.1	7,100.0	55.6	56.1	-93.99	753.2	1,773.6	244.5	133.8	110.63	2.210		
9,000.0	7,083.0	9,043.1	7,100.0	58.3	58.8	-93.99	751.7	1,873.6	244.5	128.5	115.97	2.108		
9,100.0	7,083.0	9,143.1	7,100.0	61.0	61.4	-93.99	750.1	1,973.6	244.5	123.2	121.34	2.015		
9,200.0	7,083.0	9,243.1	7,100.0	63.7	64.1	-93.99	748.6	2,073.6	244.6	117.8	126.73	1.930		
9,300.0	7,083.0	9,343.1	7,100.0	66.4	66.8	-93.99	747.1	2,173.6	244.6	112.5	132.13	1.851		
9,400.0	7,083.0	9,443.1	7,100.0	69.1	69.5	-93.98	745.5	2,273.6	244.6	107.1	137.55	1.779		
9,500.0	7,083.0	9,543.1	7,100.0	71.8	72.2	-93.98	744.0	2,373.6	244.7	101.7	142.99	1.711		
9,600.0	7,083.0	9,643.1	7,100.0	74.5	74.9	-93.98	742.5	2,473.6	244.7	96.3	148.44	1.649		
9,700.0	7,083.0	9,743.1	7,100.0	77.3	77.7	-93.98	740.9	2,573.5	244.8	90.9	153.90	1.590		
9,800.0	7,083.0	9,843.1	7,100.0	80.0	80.4	-93.98	739.4	2,673.5	244.8	85.4	159.37	1.536		
9,900.0	7,083.0	9,943.1	7,100.0	82.8	83.1	-93.98	737.9	2,773.5	244.8	80.0	164.85	1.485 Level 3		
10,000.0	7,083.0	10,043.1	7,100.0	85.5	85.9	-93.98	736.3	2,873.5	244.9	74.5	170.33	1.438 Level 3		
10,100.0	7,083.0	10,143.1	7,100.0	88.3	88.6	-93.98	734.8	2,973.5	244.9	69.1	175.83	1.393 Level 3		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union A-5CHZ - Wellbore #1 - Plan #3 (1-2-14)												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	7,083.0	10,243.1	7,100.0	91.0	91.4	-93.98	733.3	3,073.5	244.9	63.6	181.33	1.351 Level 3	
10,300.0	7,083.0	10,343.1	7,100.0	93.8	94.1	-93.98	731.7	3,173.5	245.0	58.1	186.83	1.311 Level 3	
10,400.0	7,083.0	10,443.1	7,100.0	96.5	96.9	-93.98	730.2	3,273.5	245.0	52.7	192.35	1.274 Level 3	
10,500.0	7,083.0	10,543.1	7,100.0	99.3	99.6	-93.98	728.7	3,373.5	245.0	47.2	197.86	1.238 Level 2	
10,600.0	7,083.0	10,643.1	7,100.0	102.1	102.4	-93.98	727.1	3,473.4	245.1	41.7	203.38	1.205 Level 2	
10,700.0	7,083.0	10,743.1	7,100.0	104.8	105.1	-93.98	725.6	3,573.4	245.1	36.2	208.91	1.173 Level 2	
10,800.0	7,083.0	10,843.1	7,100.0	107.6	107.9	-93.98	724.1	3,673.4	245.1	30.7	214.44	1.143 Level 2	
10,900.0	7,083.0	10,943.1	7,100.0	110.4	110.7	-93.98	722.5	3,773.4	245.2	25.2	219.98	1.115 Level 2	
11,000.0	7,083.0	11,043.1	7,100.0	113.1	113.4	-93.98	721.0	3,873.4	245.2	19.7	225.51	1.087 Level 2	
11,100.0	7,083.0	11,143.1	7,100.0	115.9	116.2	-93.97	719.5	3,973.4	245.3	14.2	231.05	1.061 Level 2	
11,200.0	7,083.0	11,243.1	7,100.0	118.7	119.0	-93.97	717.9	4,073.4	245.3	8.7	236.60	1.037 Level 2	
11,300.0	7,083.0	11,343.1	7,100.0	121.5	121.8	-93.97	716.4	4,173.4	245.3	3.2	242.14	1.013 Level 2	
11,400.0	7,083.0	11,443.1	7,100.0	124.3	124.5	-93.97	714.9	4,273.3	245.4	-2.3	247.69	0.991 Level 1	
11,500.0	7,083.0	11,543.1	7,100.0	127.0	127.3	-93.97	713.3	4,373.3	245.4	-7.8	253.24	0.969 Level 1	
11,600.0	7,083.0	11,643.1	7,100.0	129.8	130.1	-93.97	711.8	4,473.3	245.4	-13.4	258.80	0.948 Level 1	
11,639.8	7,083.0	11,682.9	7,100.0	130.9	131.2	-93.97	711.2	4,513.1	245.4	-15.6	261.01	0.940 Level 1, ES, SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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	2.0	2.0	0.0	0.0	68.87	36.1	93.3	100.1	100.1	0.00	N/A		
100.0	100.0	102.0	102.0	0.1	0.1	68.87	36.1	93.3	100.1	99.8	0.23	436.476		
200.0	200.0	202.0	202.0	0.3	0.3	68.87	36.1	93.3	100.1	99.4	0.68	147.419		
300.0	300.0	302.0	302.0	0.6	0.6	68.87	36.1	93.3	100.1	98.9	1.13	88.686		
400.0	400.0	402.0	402.0	0.8	0.8	68.87	36.1	93.3	100.1	98.5	1.58	63.420		
500.0	500.0	502.0	502.0	1.0	1.0	68.87	36.1	93.3	100.1	98.0	2.03	49.358		
600.0	600.0	602.0	602.0	1.2	1.2	68.87	36.1	93.3	100.1	97.6	2.48	40.400		
700.0	700.0	702.0	702.0	1.5	1.5	68.87	36.1	93.3	100.1	97.1	2.93	34.194		
800.0	800.0	802.0	802.0	1.7	1.7	68.87	36.1	93.3	100.1	96.7	3.38	29.641		
900.0	900.0	902.0	902.0	1.9	1.9	68.87	36.1	93.3	100.1	96.2	3.83	26.158		
1,000.0	1,000.0	1,002.0	1,002.0	2.1	2.1	68.87	36.1	93.3	100.1	95.8	4.28	23.407 CC		
1,100.0	1,100.0	1,102.0	1,102.0	2.4	2.4	99.13	36.1	93.3	100.2	95.5	4.72	21.218		
1,200.0	1,200.0	1,202.0	1,202.0	2.6	2.6	100.60	36.1	93.3	100.7	95.5	5.17	19.475		
1,300.0	1,299.9	1,301.9	1,301.9	2.8	2.8	103.01	36.1	93.3	101.5	95.9	5.62	18.083		
1,400.0	1,399.7	1,401.7	1,401.7	3.0	3.0	106.30	36.1	93.3	103.1	97.0	6.07	16.997		
1,500.0	1,499.4	1,501.4	1,501.4	3.3	3.3	110.35	36.1	93.3	105.6	99.0	6.52	16.194		
1,600.0	1,598.9	1,600.9	1,600.9	3.5	3.5	115.02	36.1	93.3	109.3	102.3	6.98	15.663		
1,700.0	1,698.3	1,700.3	1,700.3	3.8	3.7	120.08	36.1	93.3	114.5	107.1	7.44	15.400		
1,800.0	1,797.4	1,799.4	1,799.4	4.0	3.9	125.32	36.1	93.3	121.7	113.8	7.90	15.396		
1,900.0	1,896.3	1,900.4	1,900.4	4.3	4.2	130.43	36.6	92.6	129.9	121.5	8.36	15.531		
2,000.0	1,995.2	2,001.8	2,001.8	4.6	4.4	134.77	38.1	90.4	137.6	128.7	8.82	15.590		
2,100.0	2,094.1	2,103.6	2,103.4	4.9	4.6	138.44	40.7	86.8	144.2	134.9	9.29	15.531		
2,200.0	2,193.0	2,205.7	2,205.3	5.2	4.8	141.62	44.3	81.6	149.7	139.9	9.75	15.353		
2,300.0	2,291.9	2,308.0	2,307.3	5.5	5.1	144.46	49.0	74.9	153.8	143.6	10.21	15.058		
2,400.0	2,390.8	2,410.4	2,409.3	5.9	5.3	147.05	54.7	66.7	156.4	145.8	10.68	14.655		
2,500.0	2,489.7	2,513.0	2,511.2	6.2	5.5	149.49	61.5	57.0	157.6	146.5	11.14	14.151		
2,600.0	2,588.6	2,615.5	2,612.7	6.5	5.8	151.84	69.3	45.9	157.3	145.7	11.60	13.558		
2,700.0	2,687.5	2,715.2	2,711.5	6.9	6.1	154.14	77.4	34.4	156.5	144.4	12.06	12.972		
2,800.0	2,786.4	2,815.0	2,810.3	7.2	6.4	156.46	85.4	22.9	155.9	143.3	12.52	12.449		
2,900.0	2,885.2	2,914.8	2,909.1	7.5	6.6	158.79	93.5	11.3	155.5	142.5	12.98	11.982		
2,983.6	2,967.9	2,998.2	2,991.7	7.8	6.9	160.75	100.2	1.7	155.4	142.1	13.36	11.631		
3,000.0	2,984.1	3,014.6	3,007.9	7.9	6.9	161.13	101.6	-0.2	155.4	142.0	13.44	11.565		
3,100.0	3,083.0	3,114.4	3,106.7	8.2	7.2	163.47	109.6	-11.7	155.6	141.7	13.90	11.192		
3,200.0	3,181.9	3,214.2	3,205.5	8.5	7.5	165.80	117.7	-23.2	156.0	141.7	14.37	10.857		
3,300.0	3,280.8	3,314.0	3,304.3	8.9	7.8	168.11	125.7	-34.7	156.7	141.9	14.85	10.557		
3,400.0	3,379.7	3,413.8	3,403.1	9.2	8.1	170.40	133.8	-46.2	157.7	142.3	15.33	10.286		
3,500.0	3,478.6	3,513.6	3,501.9	9.6	8.4	172.66	141.9	-57.8	158.9	143.0	15.82	10.042		
3,600.0	3,577.5	3,613.4	3,600.7	9.9	8.7	174.88	149.9	-69.3	160.3	144.0	16.32	9.822		
3,700.0	3,676.4	3,713.2	3,699.5	10.2	9.1	177.06	158.0	-80.8	162.0	145.1	16.83	9.622		
3,800.0	3,775.3	3,813.0	3,798.3	10.6	9.4	179.19	166.1	-92.3	163.9	146.5	17.36	9.441		
3,900.0	3,874.2	3,912.8	3,897.1	10.9	9.7	-178.73	174.1	-103.8	166.0	148.1	17.90	9.276		
4,000.0	3,973.1	4,012.6	3,995.9	11.3	10.0	-176.71	182.2	-115.3	168.3	149.9	18.45	9.126		
4,100.0	4,071.9	4,112.4	4,094.7	11.6	10.3	-174.74	190.3	-126.9	170.9	151.9	19.01	8.990		
4,200.0	4,170.8	4,212.2	4,193.5	12.0	10.7	-172.83	198.3	-138.4	173.6	154.0	19.58	8.865		
4,300.0	4,269.7	4,312.0	4,292.3	12.3	11.0	-170.99	206.4	-149.9	176.5	156.4	20.17	8.752		
4,400.0	4,368.6	4,411.8	4,391.1	12.7	11.3	-169.20	214.5	-161.4	179.7	158.9	20.77	8.648		
4,500.0	4,467.5	4,511.6	4,489.9	13.0	11.6	-167.48	222.5	-172.9	182.9	161.5	21.38	8.554		
4,600.0	4,566.4	4,611.4	4,588.7	13.4	12.0	-165.82	230.6	-184.5	186.4	164.4	22.01	8.468		
4,700.0	4,665.3	4,711.2	4,687.5	13.7	12.3	-164.22	238.7	-196.0	189.9	167.3	22.64	8.390		
4,800.0	4,764.2	4,811.0	4,786.3	14.1	12.6	-162.68	246.7	-207.5	193.7	170.4	23.28	8.320		
4,900.0	4,863.1	4,910.8	4,885.1	14.4	13.0	-161.20	254.8	-219.0	197.5	173.6	23.93	8.255		
5,000.0	4,962.0	5,010.6	4,984.0	14.8	13.3	-159.78	262.8	-230.5	201.5	176.9	24.59	8.197		

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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	5,060.9	5,110.4	5,082.8	15.1	13.6	-158.41	270.9	-242.0	205.6	180.4	25.25	8.144	
5,200.0	5,159.7	5,210.2	5,181.6	15.5	14.0	-157.10	279.0	-253.6	209.8	183.9	25.92	8.096	
5,300.0	5,258.6	5,310.0	5,280.4	15.8	14.3	-155.84	287.0	-265.1	214.2	187.6	26.59	8.053	
5,400.0	5,357.5	5,409.8	5,379.2	16.2	14.6	-154.63	295.1	-276.6	218.6	191.3	27.27	8.015	
5,500.0	5,456.6	5,509.6	5,478.0	16.5	15.0	-153.35	303.2	-288.1	222.1	194.1	27.96	7.941	
5,600.0	5,556.1	5,605.8	5,573.3	16.7	15.2	-151.97	310.3	-298.4	223.2	194.7	28.56	7.817	
5,700.0	5,655.8	5,700.0	5,667.1	16.9	15.5	-150.85	315.6	-305.9	223.4	194.4	29.03	7.696	
5,800.0	5,755.8	5,796.9	5,763.8	17.1	15.6	-149.94	319.2	-311.0	222.6	193.1	29.44	7.561	
5,900.0	5,855.8	5,892.7	5,859.5	17.2	15.8	-179.11	320.9	-313.4	221.1	190.8	30.31	7.296	
5,957.7	5,913.4	5,948.6	5,915.4	17.3	15.9	-179.05	321.1	-313.7	221.0	190.5	30.50	7.246	
6,000.0	5,955.8	5,990.9	5,957.8	17.4	16.0	-179.05	321.1	-313.7	221.0	190.3	30.65	7.210	
6,100.0	6,055.8	6,090.9	6,057.8	17.6	16.1	-179.05	321.1	-313.7	221.0	189.9	31.01	7.124	
6,200.0	6,155.8	6,190.9	6,157.8	17.7	16.3	-179.05	321.1	-313.7	221.0	189.6	31.39	7.040	
6,300.0	6,255.8	6,290.9	6,257.8	17.9	16.5	-179.05	321.1	-313.7	221.0	189.2	31.76	6.957	
6,400.0	6,355.8	6,390.9	6,357.8	18.1	16.7	-179.05	321.1	-313.7	221.0	188.8	32.14	6.875	
6,500.0	6,455.5	6,491.0	6,457.7	18.2	16.8	90.49	321.0	-309.8	221.0	188.9	32.05	6.894	
6,600.0	6,553.6	6,591.4	6,556.5	18.2	16.9	91.02	320.7	-292.5	221.0	188.8	32.24	6.854	
6,700.0	6,648.0	6,692.1	6,652.2	18.3	16.9	91.54	320.3	-261.5	221.0	188.7	32.32	6.839	
6,800.0	6,736.9	6,793.1	6,742.9	18.2	16.8	92.02	319.6	-217.2	221.1	188.7	32.36	6.832	
6,900.0	6,818.7	6,894.3	6,826.6	18.2	16.8	92.47	318.7	-160.4	221.1	188.6	32.48	6.808	
7,000.0	6,891.6	6,995.7	6,901.6	18.1	16.8	92.86	317.6	-92.3	221.2	188.3	32.85	6.733	
7,100.0	6,954.3	7,097.4	6,966.4	18.1	17.0	93.20	316.4	-14.1	221.2	187.6	33.65	6.575	
7,200.0	7,005.6	7,199.2	7,019.5	18.0	17.5	93.48	315.1	72.7	221.3	186.2	35.03	6.316	
7,300.0	7,044.5	7,301.2	7,059.9	18.6	18.4	93.69	313.7	166.2	221.3	184.2	37.10	5.965	
7,400.0	7,070.1	7,403.3	7,086.6	20.1	19.8	93.82	312.1	264.6	221.3	181.5	39.83	5.556	
7,500.0	7,082.1	7,505.4	7,099.1	21.8	21.4	93.88	310.6	365.9	221.3	178.2	43.12	5.132	
7,600.0	7,083.0	7,606.2	7,100.0	23.7	23.2	93.89	309.0	466.7	221.3	174.5	46.78	4.730	
7,700.0	7,083.0	7,706.2	7,100.0	25.8	25.2	93.89	307.5	566.6	221.2	170.5	50.78	4.357	
7,800.0	7,083.0	7,806.2	7,100.0	27.9	27.3	93.89	305.9	666.6	221.2	166.2	55.05	4.018	
7,900.0	7,083.0	7,906.2	7,100.0	30.2	29.6	93.89	304.4	766.6	221.2	161.6	59.55	3.714	
8,000.0	7,083.0	8,006.2	7,100.0	32.5	31.9	93.89	302.8	866.6	221.2	156.9	64.22	3.444	
8,100.0	7,083.0	8,106.2	7,100.0	35.0	34.3	93.89	301.3	966.6	221.1	152.1	69.03	3.203	
8,200.0	7,083.0	8,206.2	7,100.0	37.4	36.8	93.89	299.8	1,066.6	221.1	147.2	73.96	2.990	
8,300.0	7,083.0	8,306.2	7,100.0	40.0	39.3	93.89	298.2	1,166.6	221.1	142.1	78.97	2.800	
8,400.0	7,083.0	8,406.2	7,100.0	42.5	41.8	93.89	296.7	1,266.6	221.1	137.0	84.06	2.630	
8,500.0	7,083.0	8,506.2	7,100.0	45.1	44.4	93.89	295.1	1,366.5	221.0	131.8	89.21	2.478	
8,600.0	7,083.0	8,606.2	7,100.0	47.7	47.0	93.89	293.6	1,466.5	221.0	126.6	94.41	2.341	
8,700.0	7,083.0	8,706.2	7,100.0	50.3	49.6	93.89	292.0	1,566.5	221.0	121.3	99.66	2.217	
8,800.0	7,083.0	8,806.2	7,100.0	53.0	52.3	93.89	290.5	1,666.5	221.0	116.0	104.94	2.106	
8,900.0	7,083.0	8,906.2	7,100.0	55.6	54.9	93.89	289.0	1,766.5	220.9	110.7	110.26	2.004	
9,000.0	7,083.0	9,006.2	7,100.0	58.3	57.6	93.89	287.4	1,866.5	220.9	105.3	115.60	1.911	
9,100.0	7,083.0	9,106.2	7,100.0	61.0	60.3	93.89	285.9	1,966.5	220.9	99.9	120.97	1.826	
9,200.0	7,083.0	9,206.2	7,100.0	63.7	63.0	93.89	284.3	2,066.5	220.9	94.5	126.35	1.748	
9,300.0	7,083.0	9,306.2	7,100.0	66.4	65.7	93.89	282.8	2,166.4	220.8	89.1	131.76	1.676	
9,400.0	7,083.0	9,406.2	7,100.0	69.1	68.4	93.90	281.2	2,266.4	220.8	83.6	137.18	1.610	
9,500.0	7,083.0	9,506.2	7,100.0	71.8	71.1	93.90	279.7	2,366.4	220.8	78.2	142.61	1.548	
9,600.0	7,083.0	9,606.2	7,100.0	74.5	73.9	93.90	278.1	2,466.4	220.8	72.7	148.06	1.491 Level 3	
9,700.0	7,083.0	9,706.2	7,100.0	77.3	76.6	93.90	276.6	2,566.4	220.7	67.2	153.52	1.438 Level 3	
9,800.0	7,083.0	9,806.2	7,100.0	80.0	79.3	93.90	275.1	2,666.4	220.7	61.7	158.99	1.388 Level 3	
9,900.0	7,083.0	9,906.2	7,100.0	82.8	82.1	93.90	273.5	2,766.4	220.7	56.2	164.47	1.342 Level 3	
10,000.0	7,083.0	10,006.2	7,100.0	85.5	84.8	93.90	272.0	2,866.4	220.7	50.7	169.96	1.298 Level 3	
10,100.0	7,083.0	10,106.2	7,100.0	88.3	87.6	93.90	270.4	2,966.4	220.6	45.2	175.45	1.258 Level 3	

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union C-5CHZ - Wellbore #1 - Plan #3 (1-2-14)												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	7,083.0	10,206.2	7,100.0	91.0	90.3	93.90	268.9	3,066.3	220.6	39.7	180.95	1.219	Level 2
10,300.0	7,083.0	10,306.2	7,100.0	93.8	93.1	93.90	267.3	3,166.3	220.6	34.1	186.46	1.183	Level 2
10,400.0	7,083.0	10,406.2	7,100.0	96.5	95.8	93.90	265.8	3,266.3	220.6	28.6	191.97	1.149	Level 2
10,500.0	7,083.0	10,506.2	7,100.0	99.3	98.6	93.90	264.3	3,366.3	220.5	23.0	197.49	1.117	Level 2
10,600.0	7,083.0	10,606.2	7,100.0	102.1	101.4	93.90	262.7	3,466.3	220.5	17.5	203.01	1.086	Level 2
10,700.0	7,083.0	10,706.2	7,100.0	104.8	104.1	93.90	261.2	3,566.3	220.5	11.9	208.54	1.057	Level 2
10,800.0	7,083.0	10,806.2	7,100.0	107.6	106.9	93.90	259.6	3,666.3	220.4	6.4	214.07	1.030	Level 2
10,900.0	7,083.0	10,906.2	7,100.0	110.4	109.7	93.90	258.1	3,766.3	220.4	0.8	219.60	1.004	Level 2
11,000.0	7,083.0	11,006.2	7,100.0	113.1	112.5	93.90	256.5	3,866.2	220.4	-4.7	225.14	0.979	Level 1
11,100.0	7,083.0	11,106.2	7,100.0	115.9	115.2	93.90	255.0	3,966.2	220.4	-10.3	230.68	0.955	Level 1
11,200.0	7,083.0	11,206.2	7,100.0	118.7	118.0	93.90	253.4	4,066.2	220.3	-15.9	236.23	0.933	Level 1
11,300.0	7,083.0	11,306.2	7,100.0	121.5	120.8	93.90	251.9	4,166.2	220.3	-21.5	241.78	0.911	Level 1
11,400.0	7,083.0	11,406.2	7,100.0	124.3	123.6	93.90	250.4	4,266.2	220.3	-27.0	247.33	0.891	Level 1
11,500.0	7,083.0	11,506.2	7,100.0	127.0	126.3	93.90	248.8	4,366.2	220.3	-32.6	252.88	0.871	Level 1
11,600.0	7,083.0	11,606.2	7,100.0	129.8	129.1	93.91	247.3	4,466.2	220.2	-38.1	258.37	0.852	Level 1
11,627.7	7,083.0	11,633.9	7,100.0	130.6	129.6	93.91	246.8	4,493.9	220.2	-39.4	259.63	0.848	Level 1
11,639.8	7,083.0	11,645.2	7,100.0	130.9	129.8	93.91	246.7	4,505.2	220.2	-39.9	260.17	0.847	Level 1, ES, SF

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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	2.0	2.0	0.0	0.0	68.79	50.6	130.5	140.0	140.0	0.00	N/A	
100.0	100.0	102.0	102.0	0.1	0.1	68.79	50.6	130.5	140.0	139.8	0.23	610.614	
200.0	200.0	202.0	202.0	0.3	0.3	68.79	50.6	130.5	140.0	139.3	0.68	206.234	
300.0	300.0	302.0	302.0	0.6	0.6	68.79	50.6	130.5	140.0	138.9	1.13	124.069	
400.0	400.0	402.0	402.0	0.8	0.8	68.79	50.6	130.5	140.0	138.4	1.58	88.722	
500.0	500.0	502.0	502.0	1.0	1.0	68.79	50.6	130.5	140.0	138.0	2.03	69.049	
600.0	600.0	602.0	602.0	1.2	1.2	68.79	50.6	130.5	140.0	137.5	2.48	56.518	
700.0	700.0	702.0	702.0	1.5	1.5	68.79	50.6	130.5	140.0	137.1	2.93	47.836	
800.0	800.0	802.0	802.0	1.7	1.7	68.79	50.6	130.5	140.0	136.6	3.38	41.466	
900.0	900.0	902.0	902.0	1.9	1.9	68.79	50.6	130.5	140.0	136.2	3.83	36.594	
1,000.0	1,000.0	1,002.0	1,002.0	2.1	2.1	68.79	50.6	130.5	140.0	135.7	4.28	32.746 CC	
1,100.0	1,100.0	1,102.0	1,102.0	2.4	2.4	98.91	50.6	130.5	140.1	135.4	4.72	29.672	
1,200.0	1,200.0	1,202.0	1,202.0	2.6	2.6	99.96	50.6	130.5	140.6	135.4	5.17	27.195 ES	
1,300.0	1,299.9	1,301.9	1,301.9	2.8	2.8	101.69	50.6	130.5	141.4	135.8	5.62	25.175	
1,400.0	1,399.7	1,401.7	1,401.7	3.0	3.0	104.08	50.6	130.5	142.7	136.7	6.07	23.531	
1,500.0	1,499.4	1,501.4	1,501.4	3.3	3.3	107.06	50.6	130.5	144.8	138.3	6.52	22.214	
1,600.0	1,598.9	1,600.9	1,600.9	3.5	3.5	110.57	50.6	130.5	148.0	141.0	6.98	21.194	
1,700.0	1,698.3	1,700.3	1,700.3	3.8	3.7	114.50	50.6	130.5	152.3	144.9	7.45	20.454	
1,800.0	1,797.4	1,799.4	1,799.4	4.0	3.9	118.72	50.6	130.5	158.2	150.3	7.92	19.981	
1,900.0	1,896.3	1,898.3	1,898.3	4.3	4.2	123.08	50.6	130.5	165.8	157.4	8.39	19.750	
2,000.0	1,995.2	1,997.2	1,997.2	4.6	4.4	127.15	50.6	130.5	174.4	165.5	8.87	19.658	
2,100.0	2,094.1	2,096.1	2,096.1	4.9	4.6	130.82	50.6	130.5	183.8	174.4	9.35	19.664	
2,200.0	2,193.0	2,195.0	2,195.0	5.2	4.8	134.12	50.6	130.5	193.9	184.1	9.82	19.743	
2,300.0	2,291.9	2,293.9	2,293.9	5.5	5.0	137.23	50.7	129.7	203.8	193.5	10.28	19.813	
2,400.0	2,390.8	2,400.0	2,400.0	5.9	5.2	140.18	51.0	127.0	212.5	201.7	10.73	19.793	
2,500.0	2,489.7	2,502.9	2,502.8	6.2	5.5	143.02	51.5	122.6	219.9	208.7	11.18	19.667	
2,600.0	2,588.6	2,606.0	2,605.7	6.5	5.7	145.82	52.3	116.2	226.2	214.5	11.63	19.449	
2,700.0	2,687.5	2,709.1	2,708.5	6.9	5.9	148.64	53.2	108.1	231.2	219.2	12.07	19.151	
2,800.0	2,786.4	2,812.3	2,811.1	7.2	6.1	151.52	54.3	98.0	235.2	222.7	12.52	18.786	
2,900.0	2,885.2	2,915.3	2,913.4	7.5	6.4	154.50	55.7	86.2	238.1	225.1	12.96	18.365	
3,000.0	2,984.1	3,017.7	3,014.9	7.9	6.6	157.60	57.2	72.7	240.1	226.7	13.41	17.899	
3,100.0	3,083.0	3,116.8	3,113.1	8.2	6.9	160.63	58.8	58.9	242.2	228.3	13.86	17.471	
3,200.0	3,181.9	3,216.0	3,211.3	8.5	7.2	163.60	60.4	45.1	245.0	230.6	14.32	17.105	
3,300.0	3,280.8	3,315.1	3,309.4	8.9	7.4	166.49	61.9	31.4	248.4	233.6	14.79	16.793	
3,400.0	3,379.7	3,414.3	3,407.6	9.2	7.7	169.30	63.5	17.6	252.5	237.2	15.28	16.528	
3,500.0	3,478.6	3,513.4	3,505.8	9.6	8.0	172.02	65.1	3.9	257.1	241.3	15.77	16.302	
3,600.0	3,577.5	3,612.6	3,604.0	9.9	8.3	174.64	66.6	-9.9	262.3	246.1	16.28	16.111	
3,700.0	3,676.4	3,711.7	3,702.1	10.2	8.6	177.15	68.2	-23.6	268.1	251.3	16.81	15.950	
3,800.0	3,775.3	3,810.9	3,800.3	10.6	8.9	179.55	69.8	-37.4	274.3	257.0	17.35	15.814	
3,900.0	3,874.2	3,910.0	3,898.5	10.9	9.2	-178.16	71.3	-51.2	281.1	263.2	17.90	15.700	
4,000.0	3,973.1	4,009.2	3,996.7	11.3	9.5	-175.98	72.9	-64.9	288.2	269.7	18.47	15.605	
4,100.0	4,071.9	4,108.3	4,094.9	11.6	9.8	-173.90	74.5	-78.7	295.7	276.7	19.05	15.527	
4,200.0	4,170.8	4,207.5	4,193.0	12.0	10.1	-171.93	76.0	-92.4	303.7	284.0	19.64	15.464	
4,300.0	4,269.7	4,306.6	4,291.2	12.3	10.4	-170.06	77.6	-106.2	311.9	291.7	20.24	15.414	
4,400.0	4,368.6	4,405.8	4,389.4	12.7	10.7	-168.28	79.2	-120.0	320.5	299.7	20.85	15.375	
4,500.0	4,467.5	4,504.9	4,487.6	13.0	11.0	-166.60	80.7	-133.7	329.4	307.9	21.46	15.346	
4,600.0	4,566.4	4,604.1	4,585.7	13.4	11.3	-165.01	82.3	-147.5	338.5	316.4	22.09	15.326	
4,700.0	4,665.3	4,703.2	4,683.9	13.7	11.7	-163.51	83.8	-161.2	347.9	325.2	22.72	15.313	
4,800.0	4,764.2	4,802.4	4,782.1	14.1	12.0	-162.08	85.4	-175.0	357.5	334.1	23.35	15.308	
4,900.0	4,863.1	4,901.5	4,880.3	14.4	12.3	-160.73	87.0	-188.7	367.3	343.3	24.00	15.308	
5,000.0	4,962.0	5,000.6	4,978.4	14.8	12.6	-159.44	88.5	-202.5	377.3	352.7	24.64	15.314	
5,100.0	5,060.9	5,099.8	5,076.6	15.1	12.9	-158.23	90.1	-216.3	387.5	362.2	25.29	15.324	

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	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
5,200.0	5,159.7	5,198.9	5,174.8	15.5	13.3	-157.07	91.7	-230.0	397.9	371.9	25.94	15.338	
5,300.0	5,258.6	5,298.1	5,273.0	15.8	13.6	-155.98	93.2	-243.8	408.4	381.8	26.60	15.356	
5,400.0	5,357.5	5,397.2	5,371.2	16.2	13.9	-154.94	94.8	-257.5	419.1	391.8	27.25	15.376	
5,500.0	5,456.6	5,496.5	5,469.4	16.5	14.3	-153.95	96.4	-271.3	428.8	400.8	27.92	15.357	
5,600.0	5,556.1	5,595.8	5,567.8	16.7	14.6	-152.80	97.9	-285.1	435.6	407.0	28.54	15.263	
5,700.0	5,655.8	5,693.8	5,664.9	16.9	14.9	-151.56	99.4	-297.9	439.6	410.5	29.09	15.110	
5,800.0	5,755.8	5,791.5	5,762.1	17.1	15.1	-150.52	100.5	-307.7	441.2	411.7	29.53	14.940	
5,900.0	5,855.8	5,889.6	5,860.0	17.2	15.3	-179.47	101.3	-314.1	440.8	411.4	29.33	15.029	
6,000.0	5,955.8	5,988.0	5,958.4	17.4	15.5	-179.06	101.6	-317.2	440.5	410.8	29.66	14.851	
6,057.6	6,013.3	6,045.0	6,015.3	17.5	15.6	-179.03	101.6	-317.5	440.4	410.6	29.86	14.749	
6,100.0	6,055.8	6,087.4	6,057.8	17.6	15.6	-179.03	101.6	-317.5	440.4	410.4	30.02	14.673	
6,200.0	6,155.8	6,187.4	6,157.8	17.7	15.8	-179.03	101.6	-317.5	440.4	410.0	30.40	14.489	
6,300.0	6,255.8	6,287.4	6,257.8	17.9	16.0	-179.03	101.6	-317.5	440.4	409.6	30.78	14.308	
6,400.0	6,355.8	6,387.4	6,357.8	18.1	16.2	-179.03	101.6	-317.5	440.4	409.3	31.17	14.131	
6,500.0	6,455.5	6,487.5	6,457.6	18.2	16.3	90.05	101.5	-311.8	440.4	408.3	32.10	13.719	
6,600.0	6,553.6	6,587.5	6,555.6	18.2	16.3	90.02	101.2	-292.3	440.4	408.2	32.22	13.670	
6,700.0	6,648.0	6,687.6	6,650.0	18.3	16.3	89.99	100.7	-259.3	440.4	408.2	32.23	13.663	
6,800.0	6,736.9	6,787.5	6,738.8	18.2	16.3	89.96	100.0	-213.6	440.4	408.2	32.23	13.663	
6,900.0	6,818.7	6,887.5	6,820.4	18.2	16.3	89.93	99.1	-156.0	440.4	408.1	32.34	13.617	
7,000.0	6,891.6	6,987.4	6,893.1	18.1	16.4	89.91	98.1	-87.6	440.4	407.7	32.72	13.460	
7,100.0	6,954.3	7,087.3	6,955.6	18.1	16.8	89.88	96.8	-9.8	440.4	406.8	33.54	13.131	
7,200.0	7,005.6	7,187.2	7,006.7	18.0	17.5	89.86	95.5	75.9	440.4	405.4	34.94	12.602	
7,300.0	7,044.5	7,287.0	7,045.3	18.6	18.4	89.84	94.1	167.9	440.4	403.4	37.01	11.899	
7,400.0	7,070.1	7,386.8	7,070.8	20.1	19.7	89.82	92.6	264.3	440.4	400.6	39.71	11.089	
7,500.0	7,082.1	7,486.6	7,082.6	21.8	21.3	89.81	91.0	363.3	440.3	397.4	42.94	10.254	
7,600.0	7,083.0	7,586.6	7,083.5	23.7	23.1	89.80	89.5	463.2	440.3	393.7	46.58	9.453	
7,700.0	7,083.0	7,686.6	7,083.5	25.8	25.1	89.80	87.9	563.2	440.3	389.7	50.57	8.707	
7,800.0	7,083.0	7,786.6	7,083.5	27.9	27.2	89.80	86.4	663.2	440.3	385.5	54.85	8.028	
7,900.0	7,083.0	7,886.6	7,083.5	30.2	29.4	89.80	84.8	763.2	440.3	380.9	59.35	7.419	
8,000.0	7,083.0	7,986.6	7,083.5	32.5	31.7	89.80	83.3	863.2	440.3	376.3	64.02	6.877	
8,100.0	7,083.0	8,086.6	7,083.5	35.0	34.1	89.80	81.7	963.1	440.3	371.4	68.84	6.395	
8,200.0	7,083.0	8,186.6	7,083.5	37.4	36.6	89.80	80.1	1,063.1	440.2	366.5	73.77	5.968	
8,300.0	7,083.0	8,286.6	7,083.5	40.0	39.1	89.80	78.6	1,163.1	440.2	361.4	78.79	5.587	
8,400.0	7,083.0	8,386.6	7,083.5	42.5	41.6	89.80	77.0	1,263.1	440.2	356.3	83.89	5.248	
8,500.0	7,083.0	8,486.6	7,083.5	45.1	44.2	89.80	75.5	1,363.1	440.2	351.2	89.05	4.943	
8,600.0	7,083.0	8,586.6	7,083.5	47.7	46.8	89.80	73.9	1,463.1	440.2	345.9	94.26	4.670	
8,700.0	7,083.0	8,686.6	7,083.5	50.3	49.4	89.80	72.4	1,563.1	440.2	340.7	99.52	4.423	
8,800.0	7,083.0	8,786.6	7,083.5	53.0	52.0	89.80	70.8	1,663.1	440.2	335.4	104.81	4.200	
8,900.0	7,083.0	8,886.6	7,083.5	55.6	54.7	89.80	69.2	1,763.0	440.2	330.0	110.14	3.996	
9,000.0	7,083.0	8,986.6	7,083.5	58.3	57.4	89.80	67.7	1,863.0	440.1	324.7	115.49	3.811	
9,100.0	7,083.0	9,086.6	7,083.5	61.0	60.1	89.80	66.1	1,963.0	440.1	319.3	120.87	3.641	
9,200.0	7,083.0	9,186.6	7,083.5	63.7	62.8	89.80	64.6	2,063.0	440.1	313.9	126.27	3.486	
9,300.0	7,083.0	9,286.6	7,083.5	66.4	65.5	89.80	63.0	2,163.0	440.1	308.4	131.68	3.342	
9,400.0	7,083.0	9,386.6	7,083.5	69.1	68.2	89.80	61.5	2,263.0	440.1	303.0	137.12	3.210	
9,500.0	7,083.0	9,486.6	7,083.5	71.8	70.9	89.80	59.9	2,363.0	440.1	297.5	142.56	3.087	
9,600.0	7,083.0	9,586.6	7,083.5	74.5	73.6	89.80	58.4	2,463.0	440.1	292.0	148.02	2.973	
9,700.0	7,083.0	9,686.6	7,083.5	77.3	76.4	89.80	56.8	2,563.0	440.1	286.6	153.49	2.867	
9,800.0	7,083.0	9,786.6	7,083.5	80.0	79.1	89.80	55.2	2,662.9	440.0	281.1	158.97	2.768	
9,900.0	7,083.0	9,886.6	7,083.5	82.8	81.8	89.80	53.7	2,762.9	440.0	275.6	164.46	2.676	
10,000.0	7,083.0	9,986.6	7,083.5	85.5	84.6	89.80	52.1	2,862.9	440.0	270.1	169.96	2.589	
10,100.0	7,083.0	10,086.6	7,083.5	88.3	87.3	89.80	50.6	2,962.9	440.0	264.5	175.47	2.508	
10,200.0	7,083.0	10,186.6	7,083.5	91.0	90.1	89.80	49.0	3,062.9	440.0	259.0	180.98	2.431	

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 A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Union Pad Sec.5-T2N-R68W - SRC Union C-5NHZ - Wellbore #1 - Plan #3 (1-2-14)												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
10,300.0	7,083.0	10,286.6	7,083.5	93.8	92.9	89.80	47.5	3,162.9	440.0	253.5	186.50	2.359	
10,400.0	7,083.0	10,386.6	7,083.5	96.5	95.6	89.80	45.9	3,262.9	440.0	247.9	192.02	2.291	
10,500.0	7,083.0	10,486.6	7,083.5	99.3	98.4	89.80	44.3	3,362.9	440.0	242.4	197.55	2.227	
10,600.0	7,083.0	10,586.6	7,083.5	102.1	101.1	89.80	42.8	3,462.8	439.9	236.9	203.09	2.166	
10,700.0	7,083.0	10,686.6	7,083.5	104.8	103.9	89.80	41.2	3,562.8	439.9	231.3	208.63	2.109	
10,800.0	7,083.0	10,786.6	7,083.5	107.6	106.7	89.80	39.7	3,662.8	439.9	225.7	214.17	2.054	
10,900.0	7,083.0	10,886.6	7,083.5	110.4	109.5	89.80	38.1	3,762.8	439.9	220.2	219.71	2.002	
11,000.0	7,083.0	10,986.6	7,083.5	113.1	112.2	89.80	36.6	3,862.8	439.9	214.6	225.26	1.953	
11,100.0	7,083.0	11,086.6	7,083.5	115.9	115.0	89.80	35.0	3,962.8	439.9	209.1	230.82	1.906	
11,200.0	7,083.0	11,186.6	7,083.5	118.7	117.8	89.80	33.4	4,062.8	439.9	203.5	236.37	1.861	
11,300.0	7,083.0	11,286.6	7,083.5	121.5	120.6	89.80	31.9	4,162.8	439.8	197.9	241.93	1.818	
11,400.0	7,083.0	11,386.6	7,083.5	124.3	123.3	89.80	30.3	4,262.7	439.8	192.3	247.49	1.777	
11,500.0	7,083.0	11,486.6	7,083.5	127.0	126.1	89.80	28.8	4,362.7	439.8	186.8	253.06	1.738	
11,600.0	7,083.0	11,586.6	7,083.5	129.8	128.9	89.80	27.2	4,462.7	439.8	181.2	258.62	1.701	
11,631.8	7,083.0	11,618.4	7,083.5	130.7	129.8	89.80	26.7	4,494.6	439.8	179.4	260.40	1.689	
11,639.8	7,083.0	11,624.9	7,083.5	130.9	130.0	89.80	26.6	4,501.1	439.8	179.0	260.80	1.686 SF	

Reference Depths are relative to WELL @ 4976.5ft (Ensign 131 RKB - Coordinates are relative to: SRC Union A-5NHZ
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.30°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union A-5NHZ
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4976.5ft (Ensign 131 RKB - 13.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union A-5NHZ	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 #3 (1-2-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4976.5ft (Ensign 131 RKB - Coordinates are relative to: SRC Union A-5NHZ
Offset Depths are relative to Offset Datum
Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °
Grid Convergence at Surface is: 0.30°

