

Synergy Resources

Well Name: SRC Union 12HZC

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

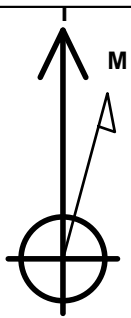
Ground Elevation: 4964.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1305184.16	3129926.16	40.170191	-105.035070	

RKB - 13' WELL @ 4977.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINES BHL 460'FEL	0.0	-956.6	4484.3	Polygon
HARDLINES SHL 460'FWL	0.0	-956.6	73.1	Polygon
BHL 2076'FNL, 460'FEL	7310.0	-374.8	4475.4	Point
Landing Pt 2004'FNL & 510'FWL	7310.0	-335.5	121.0	Point
T1 - SRC Union 12HZC	7310.0	-335.5	143.4	Point



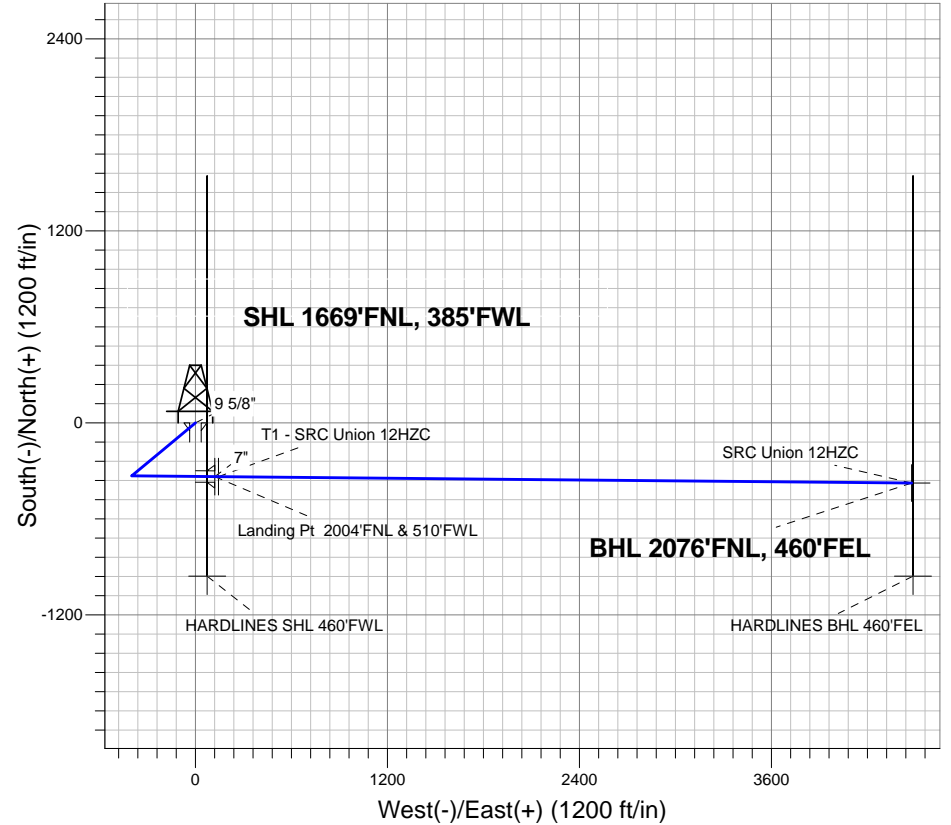
Azimuths to True North
Magnetic North: 8.74°

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

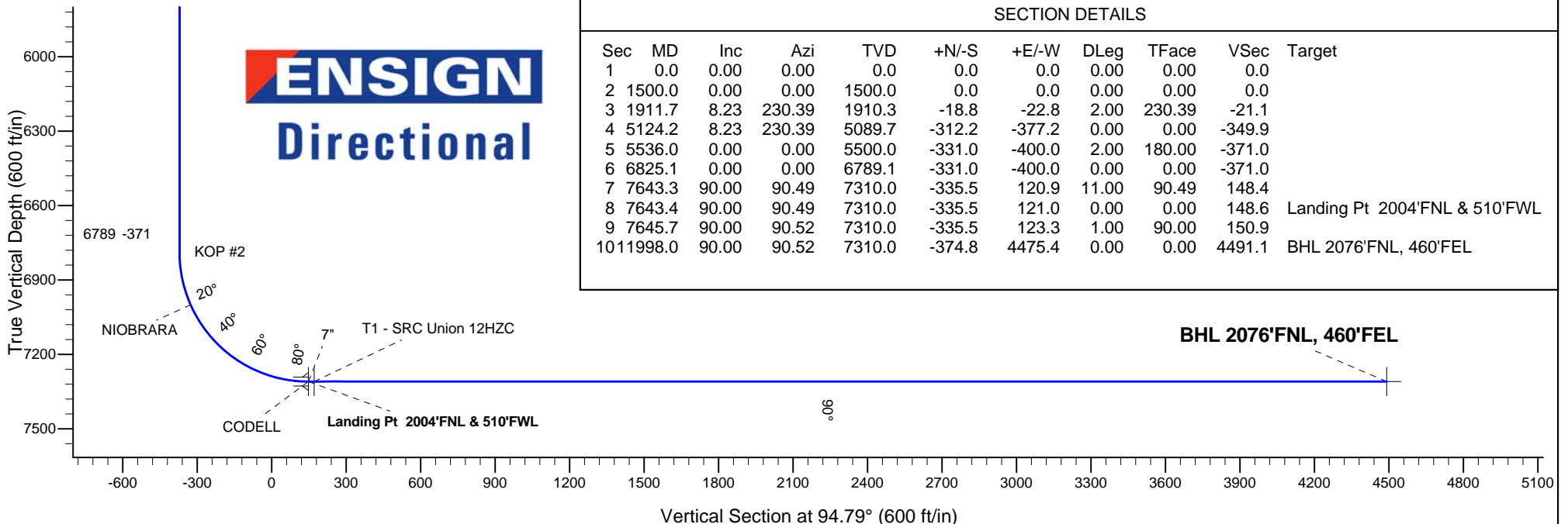
ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP #1
6789.1	6825.1	KOP #2

SRC Union Pad Sec.5-T2N-R68W
SRC Union 12HZC
Plan #2 (4-08-13)



ENSIGN
Directional



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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1911.7	8.23	230.39	1910.3	-18.8	-22.8	2.00	230.39	-21.1	
4	5124.2	8.23	230.39	5089.7	-312.2	-377.2	0.00	0.00	-349.9	
5	5536.0	0.00	0.00	5500.0	-331.0	-400.0	2.00	180.00	-371.0	
6	6825.1	0.00	0.00	6789.1	-331.0	-400.0	0.00	0.00	-371.0	
7	7643.3	90.00	90.49	7310.0	-335.5	120.9	11.00	90.49	148.4	
8	7643.4	90.00	90.49	7310.0	-335.5	121.0	0.00	0.00	148.6	Landing Pt 2004'FNL & 510'FWL
9	7645.7	90.00	90.52	7310.0	-335.5	123.3	1.00	90.00	150.9	
10	11998.0	90.00	90.52	7310.0	-374.8	4475.4	0.00	0.00	4491.1	BHL 2076'FNL, 460'FEL



Directional

Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union 12HZC

Wellbore #1

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

Standard Planning Report

08 April, 2013

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,911.7	8.23	230.39	1,910.3	-18.8	-22.8	2.00	2.00	0.00	230.39	
5,124.2	8.23	230.39	5,089.7	-312.2	-377.2	0.00	0.00	0.00	0.00	
5,536.0	0.00	0.00	5,500.0	-331.0	-400.0	2.00	-2.00	0.00	180.00	
6,825.1	0.00	0.00	6,789.1	-331.0	-400.0	0.00	0.00	0.00	0.00	
7,643.3	90.00	90.49	7,310.0	-335.5	120.9	11.00	11.00	0.00	90.49	
7,643.4	90.00	90.49	7,310.0	-335.5	121.0	0.00	0.00	0.00	0.00	Landing Pt 2004'FT
7,645.7	90.00	90.52	7,310.0	-335.5	123.3	1.00	0.00	1.00	90.00	
11,998.0	90.00	90.52	7,310.0	-374.8	4,475.4	0.00	0.00	0.00	0.00	BHL 2076'FNL, 460'

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
9 5/8"									
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,520.0	0.40	230.39	1,520.0	0.0	-0.1	0.0	2.00	2.00	0.00
1,560.0	1.20	230.39	1,560.0	-0.4	-0.5	-0.4	2.00	2.00	0.00
1,600.0	2.00	230.39	1,600.0	-1.1	-1.3	-1.2	2.00	2.00	0.00
1,640.0	2.80	230.39	1,639.9	-2.2	-2.6	-2.4	2.00	2.00	0.00
1,680.0	3.60	230.39	1,679.9	-3.6	-4.4	-4.0	2.00	2.00	0.00
1,720.0	4.40	230.39	1,719.8	-5.4	-6.5	-6.0	2.00	2.00	0.00
1,760.0	5.20	230.39	1,759.6	-7.5	-9.1	-8.4	2.00	2.00	0.00
1,800.0	6.00	230.39	1,799.5	-10.0	-12.1	-11.2	2.00	2.00	0.00
1,840.0	6.80	230.39	1,839.2	-12.8	-15.5	-14.4	2.00	2.00	0.00
1,880.0	7.60	230.39	1,878.9	-16.0	-19.4	-18.0	2.00	2.00	0.00
1,911.7	8.23	230.39	1,910.3	-18.8	-22.8	-21.1	2.00	2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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)
1,920.0	8.23	230.39	1,918.5	-19.6	-23.7	-22.0	0.00	0.00	0.00
1,960.0	8.23	230.39	1,958.1	-23.2	-28.1	-26.0	0.00	0.00	0.00
2,000.0	8.23	230.39	1,997.7	-26.9	-32.5	-30.1	0.00	0.00	0.00
2,040.0	8.23	230.39	2,037.3	-30.5	-36.9	-34.2	0.00	0.00	0.00
2,080.0	8.23	230.39	2,076.8	-34.2	-41.3	-38.3	0.00	0.00	0.00
2,120.0	8.23	230.39	2,116.4	-37.8	-45.7	-42.4	0.00	0.00	0.00
2,160.0	8.23	230.39	2,156.0	-41.5	-50.2	-46.5	0.00	0.00	0.00
2,200.0	8.23	230.39	2,195.6	-45.2	-54.6	-50.6	0.00	0.00	0.00
2,240.0	8.23	230.39	2,235.2	-48.8	-59.0	-54.7	0.00	0.00	0.00
2,280.0	8.23	230.39	2,274.8	-52.5	-63.4	-58.8	0.00	0.00	0.00
2,320.0	8.23	230.39	2,314.4	-56.1	-67.8	-62.9	0.00	0.00	0.00
2,360.0	8.23	230.39	2,354.0	-59.8	-72.2	-67.0	0.00	0.00	0.00
2,400.0	8.23	230.39	2,393.5	-63.4	-76.6	-71.1	0.00	0.00	0.00
2,440.0	8.23	230.39	2,433.1	-67.1	-81.0	-75.2	0.00	0.00	0.00
2,480.0	8.23	230.39	2,472.7	-70.7	-85.5	-79.3	0.00	0.00	0.00
2,520.0	8.23	230.39	2,512.3	-74.4	-89.9	-83.4	0.00	0.00	0.00
2,560.0	8.23	230.39	2,551.9	-78.0	-94.3	-87.4	0.00	0.00	0.00
2,600.0	8.23	230.39	2,591.5	-81.7	-98.7	-91.5	0.00	0.00	0.00
2,640.0	8.23	230.39	2,631.1	-85.3	-103.1	-95.6	0.00	0.00	0.00
2,680.0	8.23	230.39	2,670.7	-89.0	-107.5	-99.7	0.00	0.00	0.00
2,720.0	8.23	230.39	2,710.3	-92.6	-111.9	-103.8	0.00	0.00	0.00
2,760.0	8.23	230.39	2,749.8	-96.3	-116.4	-107.9	0.00	0.00	0.00
2,800.0	8.23	230.39	2,789.4	-99.9	-120.8	-112.0	0.00	0.00	0.00
2,840.0	8.23	230.39	2,829.0	-103.6	-125.2	-116.1	0.00	0.00	0.00
2,880.0	8.23	230.39	2,868.6	-107.2	-129.6	-120.2	0.00	0.00	0.00
2,920.0	8.23	230.39	2,908.2	-110.9	-134.0	-124.3	0.00	0.00	0.00
2,960.0	8.23	230.39	2,947.8	-114.5	-138.4	-128.4	0.00	0.00	0.00
3,000.0	8.23	230.39	2,987.4	-118.2	-142.8	-132.5	0.00	0.00	0.00
3,040.0	8.23	230.39	3,027.0	-121.9	-147.3	-136.6	0.00	0.00	0.00
3,080.0	8.23	230.39	3,066.5	-125.5	-151.7	-140.7	0.00	0.00	0.00
3,120.0	8.23	230.39	3,106.1	-129.2	-156.1	-144.8	0.00	0.00	0.00
3,160.0	8.23	230.39	3,145.7	-132.8	-160.5	-148.9	0.00	0.00	0.00
3,200.0	8.23	230.39	3,185.3	-136.5	-164.9	-152.9	0.00	0.00	0.00
3,240.0	8.23	230.39	3,224.9	-140.1	-169.3	-157.0	0.00	0.00	0.00
3,280.0	8.23	230.39	3,264.5	-143.8	-173.7	-161.1	0.00	0.00	0.00
3,320.0	8.23	230.39	3,304.1	-147.4	-178.2	-165.2	0.00	0.00	0.00
3,360.0	8.23	230.39	3,343.7	-151.1	-182.6	-169.3	0.00	0.00	0.00
3,400.0	8.23	230.39	3,383.2	-154.7	-187.0	-173.4	0.00	0.00	0.00
3,440.0	8.23	230.39	3,422.8	-158.4	-191.4	-177.5	0.00	0.00	0.00
3,480.0	8.23	230.39	3,462.4	-162.0	-195.8	-181.6	0.00	0.00	0.00
3,520.0	8.23	230.39	3,502.0	-165.7	-200.2	-185.7	0.00	0.00	0.00
3,560.0	8.23	230.39	3,541.6	-169.3	-204.6	-189.8	0.00	0.00	0.00
3,600.0	8.23	230.39	3,581.2	-173.0	-209.1	-193.9	0.00	0.00	0.00
3,640.0	8.23	230.39	3,620.8	-176.6	-213.5	-198.0	0.00	0.00	0.00
3,680.0	8.23	230.39	3,660.4	-180.3	-217.9	-202.1	0.00	0.00	0.00
3,720.0	8.23	230.39	3,699.9	-183.9	-222.3	-206.2	0.00	0.00	0.00
3,760.0	8.23	230.39	3,739.5	-187.6	-226.7	-210.3	0.00	0.00	0.00
3,800.0	8.23	230.39	3,779.1	-191.3	-231.1	-214.4	0.00	0.00	0.00
3,840.0	8.23	230.39	3,818.7	-194.9	-235.5	-218.4	0.00	0.00	0.00
3,880.0	8.23	230.39	3,858.3	-198.6	-239.9	-222.5	0.00	0.00	0.00
3,920.0	8.23	230.39	3,897.9	-202.2	-244.4	-226.6	0.00	0.00	0.00
3,960.0	8.23	230.39	3,937.5	-205.9	-248.8	-230.7	0.00	0.00	0.00
4,000.0	8.23	230.39	3,977.1	-209.5	-253.2	-234.8	0.00	0.00	0.00
4,040.0	8.23	230.39	4,016.6	-213.2	-257.6	-238.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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)
4,080.0	8.23	230.39	4,056.2	-216.8	-262.0	-243.0	0.00	0.00	0.00
4,104.0	8.23	230.39	4,080.0	-219.0	-264.7	-245.5	0.00	0.00	0.00
SUSSEX									
4,120.0	8.23	230.39	4,095.8	-220.5	-266.4	-247.1	0.00	0.00	0.00
4,160.0	8.23	230.39	4,135.4	-224.1	-270.8	-251.2	0.00	0.00	0.00
4,200.0	8.23	230.39	4,175.0	-227.8	-275.3	-255.3	0.00	0.00	0.00
4,240.0	8.23	230.39	4,214.6	-231.4	-279.7	-259.4	0.00	0.00	0.00
4,280.0	8.23	230.39	4,254.2	-235.1	-284.1	-263.5	0.00	0.00	0.00
4,320.0	8.23	230.39	4,293.8	-238.7	-288.5	-267.6	0.00	0.00	0.00
4,360.0	8.23	230.39	4,333.3	-242.4	-292.9	-271.7	0.00	0.00	0.00
4,400.0	8.23	230.39	4,372.9	-246.0	-297.3	-275.8	0.00	0.00	0.00
4,440.0	8.23	230.39	4,412.5	-249.7	-301.7	-279.9	0.00	0.00	0.00
4,480.0	8.23	230.39	4,452.1	-253.3	-306.2	-283.9	0.00	0.00	0.00
4,520.0	8.23	230.39	4,491.7	-257.0	-310.6	-288.0	0.00	0.00	0.00
4,528.4	8.23	230.39	4,500.0	-257.8	-311.5	-288.9	0.00	0.00	0.00
SHANNON									
4,560.0	8.23	230.39	4,531.3	-260.6	-315.0	-292.1	0.00	0.00	0.00
4,600.0	8.23	230.39	4,570.9	-264.3	-319.4	-296.2	0.00	0.00	0.00
4,640.0	8.23	230.39	4,610.5	-268.0	-323.8	-300.3	0.00	0.00	0.00
4,680.0	8.23	230.39	4,650.0	-271.6	-328.2	-304.4	0.00	0.00	0.00
4,720.0	8.23	230.39	4,689.6	-275.3	-332.6	-308.5	0.00	0.00	0.00
4,760.0	8.23	230.39	4,729.2	-278.9	-337.1	-312.6	0.00	0.00	0.00
4,800.0	8.23	230.39	4,768.8	-282.6	-341.5	-316.7	0.00	0.00	0.00
4,840.0	8.23	230.39	4,808.4	-286.2	-345.9	-320.8	0.00	0.00	0.00
4,880.0	8.23	230.39	4,848.0	-289.9	-350.3	-324.9	0.00	0.00	0.00
4,920.0	8.23	230.39	4,887.6	-293.5	-354.7	-329.0	0.00	0.00	0.00
4,960.0	8.23	230.39	4,927.2	-297.2	-359.1	-333.1	0.00	0.00	0.00
5,000.0	8.23	230.39	4,966.7	-300.8	-363.5	-337.2	0.00	0.00	0.00
5,040.0	8.23	230.39	5,006.3	-304.5	-368.0	-341.3	0.00	0.00	0.00
5,080.0	8.23	230.39	5,045.9	-308.1	-372.4	-345.4	0.00	0.00	0.00
5,120.0	8.23	230.39	5,085.5	-311.8	-376.8	-349.4	0.00	0.00	0.00
5,124.2	8.23	230.39	5,089.7	-312.2	-377.2	-349.9	0.00	0.00	0.00
5,160.0	7.52	230.39	5,125.1	-315.3	-381.0	-353.4	2.00	-2.00	0.00
5,200.0	6.72	230.39	5,164.8	-318.5	-384.8	-356.9	2.00	-2.00	0.00
5,240.0	5.92	230.39	5,204.6	-321.3	-388.2	-360.1	2.00	-2.00	0.00
5,280.0	5.12	230.39	5,244.4	-323.7	-391.2	-362.8	2.00	-2.00	0.00
5,320.0	4.32	230.39	5,284.3	-325.8	-393.7	-365.2	2.00	-2.00	0.00
5,360.0	3.52	230.39	5,324.2	-327.6	-395.8	-367.1	2.00	-2.00	0.00
5,400.0	2.72	230.39	5,364.1	-328.9	-397.5	-368.7	2.00	-2.00	0.00
5,440.0	1.92	230.39	5,404.1	-330.0	-398.8	-369.8	2.00	-2.00	0.00
5,480.0	1.12	230.39	5,444.0	-330.7	-399.6	-370.6	2.00	-2.00	0.00
5,520.0	0.32	230.39	5,484.0	-331.0	-400.0	-370.9	2.00	-2.00	0.00
5,536.0	0.00	0.00	5,500.0	-331.0	-400.0	-371.0	2.00	-2.00	0.00
5,560.0	0.00	0.00	5,524.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,564.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,640.0	0.00	0.00	5,604.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,680.0	0.00	0.00	5,644.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,720.0	0.00	0.00	5,684.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,760.0	0.00	0.00	5,724.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,764.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,840.0	0.00	0.00	5,804.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,880.0	0.00	0.00	5,844.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
5,920.0	0.00	0.00	5,884.0	-331.0	-400.0	-371.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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)
5,960.0	0.00	0.00	5,924.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,964.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,040.0	0.00	0.00	6,004.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,080.0	0.00	0.00	6,044.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,120.0	0.00	0.00	6,084.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,160.0	0.00	0.00	6,124.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,164.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,240.0	0.00	0.00	6,204.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,280.0	0.00	0.00	6,244.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,320.0	0.00	0.00	6,284.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,360.0	0.00	0.00	6,324.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,364.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,440.0	0.00	0.00	6,404.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,480.0	0.00	0.00	6,444.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,520.0	0.00	0.00	6,484.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,560.0	0.00	0.00	6,524.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,564.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,640.0	0.00	0.00	6,604.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,680.0	0.00	0.00	6,644.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,720.0	0.00	0.00	6,684.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,760.0	0.00	0.00	6,724.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,764.0	-331.0	-400.0	-371.0	0.00	0.00	0.00
6,825.1	0.00	0.00	6,789.1	-331.0	-400.0	-371.0	0.00	0.00	0.00
KOP #2									
6,840.0	1.64	90.49	6,804.0	-331.0	-399.8	-370.8	11.01	11.01	0.00
6,880.0	6.04	90.49	6,843.9	-331.0	-397.1	-368.1	11.00	11.00	0.00
6,920.0	10.44	90.49	6,883.5	-331.1	-391.4	-362.4	11.00	11.00	0.00
6,960.0	14.84	90.49	6,922.5	-331.1	-382.6	-353.7	11.00	11.00	0.00
7,000.0	19.24	90.49	6,960.8	-331.3	-370.9	-342.0	11.00	11.00	0.00
7,040.0	23.64	90.49	6,998.0	-331.4	-356.3	-327.4	11.00	11.00	0.00
7,042.2	23.88	90.49	7,000.0	-331.4	-355.4	-326.5	11.00	11.00	0.00
NIORARA									
7,080.0	28.04	90.49	7,034.0	-331.5	-338.9	-310.0	11.00	11.00	0.00
7,120.0	32.44	90.49	7,068.5	-331.7	-318.7	-289.9	11.00	11.00	0.00
7,160.0	36.84	90.49	7,101.4	-331.9	-296.0	-267.3	11.00	11.00	0.00
7,200.0	41.24	90.49	7,132.5	-332.1	-270.8	-242.1	11.00	11.00	0.00
7,240.0	45.64	90.49	7,161.5	-332.4	-243.3	-214.7	11.00	11.00	0.00
7,280.0	50.04	90.49	7,188.4	-332.6	-213.7	-185.2	11.00	11.00	0.00
7,320.0	54.44	90.49	7,212.9	-332.9	-182.0	-153.6	11.00	11.00	0.00
7,360.0	58.84	90.49	7,234.9	-333.2	-148.6	-120.3	11.00	11.00	0.00
7,400.0	63.24	90.49	7,254.2	-333.5	-113.7	-85.4	11.00	11.00	0.00
7,440.0	67.64	90.49	7,270.8	-333.8	-77.3	-49.2	11.00	11.00	0.00
7,480.0	72.04	90.49	7,284.6	-334.1	-39.7	-11.7	11.00	11.00	0.00
7,520.0	76.44	90.49	7,295.5	-334.4	-1.3	26.7	11.00	11.00	0.00
7,560.0	80.84	90.49	7,303.4	-334.8	37.9	65.8	11.00	11.00	0.00
7,600.0	85.24	90.49	7,308.2	-335.1	77.6	105.3	11.00	11.00	0.00
7,640.0	89.64	90.49	7,310.0	-335.5	117.6	145.2	11.00	11.00	0.00
7,643.3	90.00	90.49	7,310.0	-335.5	120.9	148.5	10.89	10.89	0.00
CODELL - 7"									
7,643.4	90.00	90.49	7,310.0	-335.5	121.0	148.6	0.00	0.00	0.00
Landing Pt 2004'FNL & 510'FWL									
7,645.7	90.00	90.52	7,310.0	-335.5	123.3	150.9	1.00	0.00	1.00
7,665.8	90.00	90.52	7,310.0	-335.7	143.4	170.9	0.00	0.00	0.00
T1 - SRC Union 12HZC									

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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)
7,680.0	90.00	90.52	7,310.0	-335.8	157.6	185.1	0.00	0.00	0.00
7,720.0	90.00	90.52	7,310.0	-336.2	197.6	225.0	0.00	0.00	0.00
7,760.0	90.00	90.52	7,310.0	-336.5	237.6	264.8	0.00	0.00	0.00
7,800.0	90.00	90.52	7,310.0	-336.9	277.6	304.7	0.00	0.00	0.00
7,840.0	90.00	90.52	7,310.0	-337.3	317.6	344.6	0.00	0.00	0.00
7,880.0	90.00	90.52	7,310.0	-337.6	357.6	384.5	0.00	0.00	0.00
7,920.0	90.00	90.52	7,310.0	-338.0	397.6	424.4	0.00	0.00	0.00
7,960.0	90.00	90.52	7,310.0	-338.4	437.6	464.3	0.00	0.00	0.00
8,000.0	90.00	90.52	7,310.0	-338.7	477.6	504.2	0.00	0.00	0.00
8,040.0	90.00	90.52	7,310.0	-339.1	517.6	544.1	0.00	0.00	0.00
8,080.0	90.00	90.52	7,310.0	-339.4	557.6	584.0	0.00	0.00	0.00
8,120.0	90.00	90.52	7,310.0	-339.8	597.6	623.8	0.00	0.00	0.00
8,160.0	90.00	90.52	7,310.0	-340.2	637.6	663.7	0.00	0.00	0.00
8,200.0	90.00	90.52	7,310.0	-340.5	677.6	703.6	0.00	0.00	0.00
8,240.0	90.00	90.52	7,310.0	-340.9	717.6	743.5	0.00	0.00	0.00
8,280.0	90.00	90.52	7,310.0	-341.2	757.6	783.4	0.00	0.00	0.00
8,320.0	90.00	90.52	7,310.0	-341.6	797.6	823.3	0.00	0.00	0.00
8,360.0	90.00	90.52	7,310.0	-342.0	837.6	863.2	0.00	0.00	0.00
8,400.0	90.00	90.52	7,310.0	-342.3	877.6	903.1	0.00	0.00	0.00
8,440.0	90.00	90.52	7,310.0	-342.7	917.6	943.0	0.00	0.00	0.00
8,480.0	90.00	90.52	7,310.0	-343.0	957.6	982.8	0.00	0.00	0.00
8,520.0	90.00	90.52	7,310.0	-343.4	997.6	1,022.7	0.00	0.00	0.00
8,560.0	90.00	90.52	7,310.0	-343.8	1,037.5	1,062.6	0.00	0.00	0.00
8,600.0	90.00	90.52	7,310.0	-344.1	1,077.5	1,102.5	0.00	0.00	0.00
8,640.0	90.00	90.52	7,310.0	-344.5	1,117.5	1,142.4	0.00	0.00	0.00
8,680.0	90.00	90.52	7,310.0	-344.9	1,157.5	1,182.3	0.00	0.00	0.00
8,720.0	90.00	90.52	7,310.0	-345.2	1,197.5	1,222.2	0.00	0.00	0.00
8,760.0	90.00	90.52	7,310.0	-345.6	1,237.5	1,262.1	0.00	0.00	0.00
8,800.0	90.00	90.52	7,310.0	-345.9	1,277.5	1,302.0	0.00	0.00	0.00
8,840.0	90.00	90.52	7,310.0	-346.3	1,317.5	1,341.8	0.00	0.00	0.00
8,880.0	90.00	90.52	7,310.0	-346.7	1,357.5	1,381.7	0.00	0.00	0.00
8,920.0	90.00	90.52	7,310.0	-347.0	1,397.5	1,421.6	0.00	0.00	0.00
8,960.0	90.00	90.52	7,310.0	-347.4	1,437.5	1,461.5	0.00	0.00	0.00
9,000.0	90.00	90.52	7,310.0	-347.7	1,477.5	1,501.4	0.00	0.00	0.00
9,040.0	90.00	90.52	7,310.0	-348.1	1,517.5	1,541.3	0.00	0.00	0.00
9,080.0	90.00	90.52	7,310.0	-348.5	1,557.5	1,581.2	0.00	0.00	0.00
9,120.0	90.00	90.52	7,310.0	-348.8	1,597.5	1,621.1	0.00	0.00	0.00
9,160.0	90.00	90.52	7,310.0	-349.2	1,637.5	1,661.0	0.00	0.00	0.00
9,200.0	90.00	90.52	7,310.0	-349.5	1,677.5	1,700.8	0.00	0.00	0.00
9,240.0	90.00	90.52	7,310.0	-349.9	1,717.5	1,740.7	0.00	0.00	0.00
9,280.0	90.00	90.52	7,310.0	-350.3	1,757.5	1,780.6	0.00	0.00	0.00
9,320.0	90.00	90.52	7,310.0	-350.6	1,797.5	1,820.5	0.00	0.00	0.00
9,360.0	90.00	90.52	7,310.0	-351.0	1,837.5	1,860.4	0.00	0.00	0.00
9,400.0	90.00	90.52	7,310.0	-351.4	1,877.5	1,900.3	0.00	0.00	0.00
9,440.0	90.00	90.52	7,310.0	-351.7	1,917.5	1,940.2	0.00	0.00	0.00
9,480.0	90.00	90.52	7,310.0	-352.1	1,957.5	1,980.1	0.00	0.00	0.00
9,520.0	90.00	90.52	7,310.0	-352.4	1,997.5	2,020.0	0.00	0.00	0.00
9,560.0	90.00	90.52	7,310.0	-352.8	2,037.5	2,059.8	0.00	0.00	0.00
9,600.0	90.00	90.52	7,310.0	-353.2	2,077.5	2,099.7	0.00	0.00	0.00
9,640.0	90.00	90.52	7,310.0	-353.5	2,117.5	2,139.6	0.00	0.00	0.00
9,680.0	90.00	90.52	7,310.0	-353.9	2,157.5	2,179.5	0.00	0.00	0.00
9,720.0	90.00	90.52	7,310.0	-354.2	2,197.5	2,219.4	0.00	0.00	0.00
9,760.0	90.00	90.52	7,310.0	-354.6	2,237.5	2,259.3	0.00	0.00	0.00
9,800.0	90.00	90.52	7,310.0	-355.0	2,277.5	2,299.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Union 12HZC
Company:	Synergy Resources	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Project:	SEC.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site:	SRC Union Pad Sec.5-T2N-R68W	North Reference:	True
Well:	SRC Union 12HZC	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)
9,840.0	90.00	90.52	7,310.0	-355.3	2,317.5	2,339.1	0.00	0.00	0.00
9,880.0	90.00	90.52	7,310.0	-355.7	2,357.5	2,379.0	0.00	0.00	0.00
9,920.0	90.00	90.52	7,310.0	-356.0	2,397.5	2,418.8	0.00	0.00	0.00
9,960.0	90.00	90.52	7,310.0	-356.4	2,437.5	2,458.7	0.00	0.00	0.00
10,000.0	90.00	90.52	7,310.0	-356.8	2,477.5	2,498.6	0.00	0.00	0.00
10,040.0	90.00	90.52	7,310.0	-357.1	2,517.5	2,538.5	0.00	0.00	0.00
10,080.0	90.00	90.52	7,310.0	-357.5	2,557.5	2,578.4	0.00	0.00	0.00
10,120.0	90.00	90.52	7,310.0	-357.9	2,597.5	2,618.3	0.00	0.00	0.00
10,160.0	90.00	90.52	7,310.0	-358.2	2,637.5	2,658.2	0.00	0.00	0.00
10,200.0	90.00	90.52	7,310.0	-358.6	2,677.5	2,698.1	0.00	0.00	0.00
10,240.0	90.00	90.52	7,310.0	-358.9	2,717.5	2,738.0	0.00	0.00	0.00
10,280.0	90.00	90.52	7,310.0	-359.3	2,757.5	2,777.8	0.00	0.00	0.00
10,320.0	90.00	90.52	7,310.0	-359.7	2,797.5	2,817.7	0.00	0.00	0.00
10,360.0	90.00	90.52	7,310.0	-360.0	2,837.5	2,857.6	0.00	0.00	0.00
10,400.0	90.00	90.52	7,310.0	-360.4	2,877.5	2,897.5	0.00	0.00	0.00
10,440.0	90.00	90.52	7,310.0	-360.7	2,917.5	2,937.4	0.00	0.00	0.00
10,480.0	90.00	90.52	7,310.0	-361.1	2,957.5	2,977.3	0.00	0.00	0.00
10,520.0	90.00	90.52	7,310.0	-361.5	2,997.5	3,017.2	0.00	0.00	0.00
10,560.0	90.00	90.52	7,310.0	-361.8	3,037.5	3,057.1	0.00	0.00	0.00
10,600.0	90.00	90.52	7,310.0	-362.2	3,077.5	3,097.0	0.00	0.00	0.00
10,640.0	90.00	90.52	7,310.0	-362.5	3,117.5	3,136.8	0.00	0.00	0.00
10,680.0	90.00	90.52	7,310.0	-362.9	3,157.5	3,176.7	0.00	0.00	0.00
10,720.0	90.00	90.52	7,310.0	-363.3	3,197.5	3,216.6	0.00	0.00	0.00
10,760.0	90.00	90.52	7,310.0	-363.6	3,237.5	3,256.5	0.00	0.00	0.00
10,800.0	90.00	90.52	7,310.0	-364.0	3,277.5	3,296.4	0.00	0.00	0.00
10,840.0	90.00	90.52	7,310.0	-364.4	3,317.5	3,336.3	0.00	0.00	0.00
10,880.0	90.00	90.52	7,310.0	-364.7	3,357.5	3,376.2	0.00	0.00	0.00
10,920.0	90.00	90.52	7,310.0	-365.1	3,397.5	3,416.1	0.00	0.00	0.00
10,960.0	90.00	90.52	7,310.0	-365.4	3,437.5	3,456.0	0.00	0.00	0.00
11,000.0	90.00	90.52	7,310.0	-365.8	3,477.5	3,495.8	0.00	0.00	0.00
11,040.0	90.00	90.52	7,310.0	-366.2	3,517.4	3,535.7	0.00	0.00	0.00
11,080.0	90.00	90.52	7,310.0	-366.5	3,557.4	3,575.6	0.00	0.00	0.00
11,120.0	90.00	90.52	7,310.0	-366.9	3,597.4	3,615.5	0.00	0.00	0.00
11,160.0	90.00	90.52	7,310.0	-367.2	3,637.4	3,655.4	0.00	0.00	0.00
11,200.0	90.00	90.52	7,310.0	-367.6	3,677.4	3,695.3	0.00	0.00	0.00
11,240.0	90.00	90.52	7,310.0	-368.0	3,717.4	3,735.2	0.00	0.00	0.00
11,280.0	90.00	90.52	7,310.0	-368.3	3,757.4	3,775.1	0.00	0.00	0.00
11,320.0	90.00	90.52	7,310.0	-368.7	3,797.4	3,815.0	0.00	0.00	0.00
11,360.0	90.00	90.52	7,310.0	-369.0	3,837.4	3,854.8	0.00	0.00	0.00
11,400.0	90.00	90.52	7,310.0	-369.4	3,877.4	3,894.7	0.00	0.00	0.00
11,440.0	90.00	90.52	7,310.0	-369.8	3,917.4	3,934.6	0.00	0.00	0.00
11,480.0	90.00	90.52	7,310.0	-370.1	3,957.4	3,974.5	0.00	0.00	0.00
11,520.0	90.00	90.52	7,310.0	-370.5	3,997.4	4,014.4	0.00	0.00	0.00
11,560.0	90.00	90.52	7,310.0	-370.9	4,037.4	4,054.3	0.00	0.00	0.00
11,600.0	90.00	90.52	7,310.0	-371.2	4,077.4	4,094.2	0.00	0.00	0.00
11,640.0	90.00	90.52	7,310.0	-371.6	4,117.4	4,134.1	0.00	0.00	0.00
11,680.0	90.00	90.52	7,310.0	-371.9	4,157.4	4,174.0	0.00	0.00	0.00
11,720.0	90.00	90.52	7,310.0	-372.3	4,197.4	4,213.8	0.00	0.00	0.00
11,760.0	90.00	90.52	7,310.0	-372.7	4,237.4	4,253.7	0.00	0.00	0.00
11,800.0	90.00	90.52	7,310.0	-373.0	4,277.4	4,293.6	0.00	0.00	0.00
11,840.0	90.00	90.52	7,310.0	-373.4	4,317.4	4,333.5	0.00	0.00	0.00
11,880.0	90.00	90.52	7,310.0	-373.7	4,357.4	4,373.4	0.00	0.00	0.00
11,920.0	90.00	90.52	7,310.0	-374.1	4,397.4	4,413.3	0.00	0.00	0.00
11,960.0	90.00	90.52	7,310.0	-374.5	4,437.4	4,453.2	0.00	0.00	0.00

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S	+E/-W	
			(ft)	(ft)	
	1,500.0	1,500.0	0.0	0.0	KOP #1
	6,825.1	6,789.1	-331.0	-400.0	KOP #2



Directional

Synergy Resources

SEC.5-T2N-R68W

SRC Union Pad Sec.5-T2N-R68W

SRC Union 12HZC

Wellbore #1

Plan #2 (4-08-13)

Anticollision Report

08 April, 2013

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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		
700.0	700.0	700.0	700.0	1.5	1.5	68.74	7.3	18.7	20.1	17.2	2.92	6.876		
800.0	800.0	800.0	800.0	1.7	1.7	68.74	7.3	18.7	20.1	16.7	3.37	5.959		
900.0	900.0	900.0	900.0	1.9	1.9	68.74	7.3	18.7	20.1	16.3	3.82	5.258 CC, ES		
1,000.0	1,000.0	999.6	999.6	2.1	2.1	66.22	8.5	19.2	21.0	16.8	4.27	4.926 SF		
1,100.0	1,100.0	1,099.1	1,099.0	2.4	2.4	59.92	12.0	20.8	24.0	19.3	4.72	5.098		
1,200.0	1,200.0	1,198.3	1,198.0	2.6	2.6	52.45	18.0	23.4	29.5	24.4	5.17	5.716		
1,300.0	1,300.0	1,297.1	1,296.4	2.8	2.8	45.80	26.2	26.9	37.8	32.1	5.62	6.717		
1,400.0	1,400.0	1,395.4	1,394.0	3.0	3.1	40.64	36.7	31.5	48.7	42.7	6.08	8.017		
1,500.0	1,500.0	1,493.0	1,490.6	3.3	3.3	36.85	49.4	37.0	62.5	55.9	6.55	9.538		
1,600.0	1,600.0	1,590.7	1,587.0	3.5	3.6	163.98	64.0	43.4	80.1	73.1	6.95	11.513		
1,700.0	1,699.8	1,688.4	1,683.4	3.6	3.9	162.91	78.8	49.8	101.2	93.9	7.36	13.761		
1,800.0	1,799.5	1,785.4	1,779.0	3.8	4.2	162.63	93.5	56.2	125.7	117.9	7.75	16.205		
1,900.0	1,898.7	1,881.5	1,873.8	4.1	4.5	162.78	108.0	62.5	153.3	145.2	8.15	18.812		
2,000.0	1,997.7	1,977.0	1,968.0	4.3	4.8	163.19	122.5	68.8	182.9	174.3	8.57	21.348		
2,100.0	2,096.6	2,072.5	2,062.2	4.5	5.2	163.50	137.0	75.1	212.6	203.6	9.00	23.622		
2,200.0	2,195.6	2,168.0	2,156.4	4.8	5.5	163.73	151.4	81.4	242.2	232.8	9.43	25.671		
2,300.0	2,294.6	2,263.5	2,250.6	5.1	5.8	163.91	165.9	87.6	271.8	262.0	9.88	27.525		
2,400.0	2,393.5	2,359.0	2,344.8	5.4	6.2	164.06	180.3	93.9	301.5	291.2	10.32	29.208		
2,500.0	2,492.5	2,454.5	2,438.9	5.7	6.5	164.18	194.8	100.2	331.1	320.3	10.77	30.739		
2,600.0	2,591.5	2,550.0	2,533.1	6.0	6.8	164.28	209.3	106.5	360.8	349.5	11.23	32.137		
2,700.0	2,690.5	2,645.5	2,627.3	6.3	7.2	164.37	223.7	112.8	390.4	378.7	11.68	33.417		
2,800.0	2,789.4	2,741.0	2,721.5	6.6	7.5	164.44	238.2	119.0	420.1	407.9	12.14	34.593		
2,900.0	2,888.4	2,836.5	2,815.7	6.9	7.9	164.50	252.6	125.3	449.7	437.1	12.61	35.675		
3,000.0	2,987.4	2,932.0	2,909.9	7.2	8.2	164.56	267.1	131.6	479.4	466.3	13.07	36.675		
3,100.0	3,086.3	3,027.5	3,004.1	7.6	8.6	164.61	281.6	137.9	509.0	495.5	13.54	37.601		
3,200.0	3,185.3	3,123.0	3,098.3	7.9	8.9	164.65	296.0	144.2	538.7	524.7	14.01	38.460		
3,300.0	3,284.3	3,218.5	3,192.5	8.2	9.3	164.69	310.5	150.5	568.3	553.8	14.48	39.258		
3,400.0	3,383.2	3,314.0	3,286.7	8.5	9.6	164.73	324.9	156.7	598.0	583.0	14.95	40.003		
3,500.0	3,482.2	3,409.5	3,380.9	8.9	10.0	164.76	339.4	163.0	627.6	612.2	15.42	40.698		
3,600.0	3,581.2	3,505.0	3,475.1	9.2	10.3	164.79	353.9	169.3	657.3	641.4	15.90	41.348		
3,700.0	3,680.1	3,600.5	3,569.2	9.5	10.7	164.82	368.3	175.6	686.9	670.5	16.37	41.958		
3,800.0	3,779.1	3,696.0	3,663.4	9.9	11.0	164.84	382.8	181.9	716.6	699.7	16.85	42.531		
3,900.0	3,878.1	3,791.5	3,757.6	10.2	11.4	164.86	397.3	188.2	746.2	728.9	17.33	43.070		
4,000.0	3,977.1	3,887.0	3,851.8	10.6	11.7	164.88	411.7	194.4	775.9	758.1	17.80	43.577		
4,100.0	4,076.0	3,982.5	3,946.0	10.9	12.1	164.90	426.2	200.7	805.5	787.2	18.28	44.056		
4,200.0	4,175.0	4,078.0	4,040.2	11.3	12.4	164.92	440.6	207.0	835.2	816.4	18.76	44.509		
4,300.0	4,274.0	4,173.5	4,134.4	11.6	12.8	164.94	455.1	213.3	864.8	845.6	19.25	44.937		
4,400.0	4,372.9	4,269.0	4,228.6	11.9	13.2	164.95	469.6	219.6	894.5	874.8	19.73	45.343		
4,500.0	4,471.9	4,364.5	4,322.8	12.3	13.5	164.97	484.0	225.9	924.1	903.9	20.21	45.728		
4,600.0	4,570.9	4,460.0	4,417.0	12.6	13.9	164.98	498.5	232.1	953.8	933.1	20.69	46.094		
4,700.0	4,669.8	4,555.5	4,511.2	13.0	14.2	164.99	512.9	238.4	983.4	962.3	21.18	46.442		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12H2C
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12H2C	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 11H2C - 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	0.0	0.0	0.0	0.0	-110.92	-14.2	-37.2	39.8				
100.0	100.0	99.0	99.0	0.1	0.1	-110.92	-14.2	-37.2	39.8	39.6	0.22	177.932	
200.0	200.0	199.0	199.0	0.3	0.3	-110.92	-14.2	-37.2	39.8	39.1	0.67	59.212	
300.0	300.0	299.1	299.1	0.6	0.6	-108.46	-12.6	-37.6	39.7	38.6	1.12	35.330	
337.5	337.5	336.5	336.5	0.6	0.7	-106.24	-11.1	-38.1	39.7	38.4	1.30	30.615 CC	
400.0	400.0	398.9	398.7	0.8	0.8	-100.98	-7.6	-39.1	39.8	38.2	1.58	25.175 ES	
500.0	500.0	498.3	497.7	1.0	1.0	-89.06	0.7	-41.5	41.5	39.5	2.05	20.239	
600.0	600.0	596.9	595.6	1.2	1.3	-74.85	12.1	-44.8	46.6	44.0	2.55	18.256	
700.0	700.0	694.6	692.1	1.5	1.6	-61.47	26.7	-49.1	56.3	53.2	3.09	18.194 SF	
800.0	800.0	791.1	787.0	1.7	2.0	-50.82	44.1	-54.2	70.9	67.2	3.67	19.305	
900.0	900.0	886.7	880.1	1.9	2.4	-43.00	64.4	-60.1	90.1	85.8	4.28	21.044	
1,000.0	1,000.0	983.9	974.7	2.1	2.8	-37.61	86.2	-66.4	111.5	106.6	4.91	22.718	
1,100.0	1,100.0	1,081.1	1,069.2	2.4	3.3	-33.97	108.0	-72.8	133.6	128.1	5.53	24.139	
1,200.0	1,200.0	1,178.4	1,163.7	2.6	3.7	-31.36	129.8	-79.1	156.1	149.9	6.16	25.335	
1,300.0	1,300.0	1,275.6	1,258.3	2.8	4.2	-29.41	151.6	-85.5	178.7	172.0	6.78	26.345	
1,400.0	1,400.0	1,372.8	1,352.8	3.0	4.7	-27.90	173.4	-91.8	201.6	194.2	7.41	27.206	
1,500.0	1,500.0	1,470.1	1,447.4	3.3	5.1	-26.69	195.2	-98.2	224.5	216.5	8.03	27.947	
1,600.0	1,600.0	1,567.1	1,541.7	3.5	5.6	103.83	217.0	-104.5	248.0	240.7	7.29	34.026	
1,700.0	1,699.8	1,663.7	1,635.7	3.6	6.1	105.20	238.7	-110.8	272.4	264.7	7.71	35.316	
1,800.0	1,799.5	1,759.8	1,729.1	3.8	6.5	106.91	260.2	-117.1	298.1	289.9	8.14	36.604	
1,900.0	1,898.7	1,855.2	1,821.8	4.1	7.0	108.82	281.6	-123.3	325.2	316.6	8.58	37.884	
2,000.0	1,997.7	1,950.1	1,914.1	4.3	7.4	111.16	302.9	-129.5	353.5	344.5	9.05	39.073	
2,100.0	2,096.6	2,045.0	2,006.4	4.5	7.9	113.21	324.2	-135.7	382.4	372.8	9.53	40.102	
2,200.0	2,195.6	2,139.9	2,098.7	4.8	8.4	114.98	345.4	-141.9	411.6	401.5	10.04	40.997	
2,300.0	2,294.6	2,234.8	2,190.9	5.1	8.8	116.51	366.7	-148.1	441.1	430.6	10.56	41.779	
2,400.0	2,393.5	2,329.7	2,283.2	5.4	9.3	117.85	388.0	-154.3	470.9	459.8	11.09	42.467	
2,500.0	2,492.5	2,424.6	2,375.5	5.7	9.8	119.04	409.3	-160.5	500.9	489.3	11.63	43.075	
2,600.0	2,591.5	2,519.5	2,467.8	6.0	10.2	120.09	430.6	-166.7	531.1	518.9	12.18	43.616	
2,700.0	2,690.5	2,614.4	2,560.1	6.3	10.7	121.03	451.9	-172.9	561.4	548.7	12.73	44.100	
2,800.0	2,789.4	2,709.3	2,652.3	6.6	11.1	121.87	473.1	-179.1	591.9	578.6	13.29	44.536	
2,900.0	2,888.4	2,804.2	2,744.6	6.9	11.6	122.63	494.4	-185.3	622.5	608.6	13.85	44.929	
3,000.0	2,987.4	2,899.1	2,836.9	7.2	12.1	123.32	515.7	-191.5	653.1	638.7	14.42	45.287	
3,100.0	3,086.3	2,994.0	2,929.2	7.6	12.5	123.95	537.0	-197.7	683.8	668.8	14.99	45.612	
3,200.0	3,185.3	3,088.9	3,021.5	7.9	13.0	124.52	558.3	-203.9	714.6	699.1	15.57	45.910	
3,300.0	3,284.3	3,183.8	3,113.7	8.2	13.5	125.05	579.6	-210.1	745.5	729.3	16.14	46.184	
3,400.0	3,383.2	3,278.7	3,206.0	8.5	13.9	125.54	600.8	-216.3	776.4	759.7	16.72	46.437	
3,500.0	3,482.2	3,373.6	3,298.3	8.9	14.4	125.99	622.1	-222.5	807.4	790.1	17.30	46.670	
3,600.0	3,581.2	3,468.5	3,390.6	9.2	14.9	126.40	643.4	-228.7	838.4	820.5	17.88	46.887	
3,700.0	3,680.1	3,563.4	3,482.8	9.5	15.3	126.79	664.7	-234.9	869.4	850.9	18.46	47.088	
3,800.0	3,779.1	3,658.3	3,575.1	9.9	15.8	127.15	686.0	-241.1	900.5	881.4	19.05	47.275	
3,900.0	3,878.1	3,753.2	3,667.4	10.2	16.2	127.48	707.3	-247.3	931.6	911.9	19.63	47.450	
4,000.0	3,977.1	3,848.2	3,759.7	10.6	16.7	127.80	728.5	-253.5	962.7	942.5	20.22	47.614	
4,100.0	4,076.0	3,943.1	3,852.0	10.9	17.2	128.09	749.8	-259.7	993.8	973.0	20.81	47.768	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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 11HZN - Wellbore #1 - Plan #2 (4-08-13)													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	-111.54	-7.3	-18.4	19.9	19.9	0.00	N/A		
100.0	100.0	99.0	99.0	0.1	0.1	-111.54	-7.3	-18.4	19.8	19.6	0.22	88.668		
200.0	200.0	199.0	199.0	0.3	0.3	-111.54	-7.3	-18.4	19.8	19.2	0.67	29.507		
300.0	300.0	299.0	299.0	0.6	0.6	-111.54	-7.3	-18.4	19.8	18.7	1.12	17.681		
400.0	400.0	399.0	399.0	0.8	0.8	-111.54	-7.3	-18.4	19.8	18.3	1.57	12.622		
500.0	500.0	499.0	499.0	1.0	1.0	-111.54	-7.3	-18.4	19.8	17.8	2.02	9.814		
600.0	600.0	599.0	599.0	1.2	1.2	-111.54	-7.3	-18.4	19.8	17.4	2.47	8.028		
672.1	672.1	671.1	671.1	1.4	1.4	-108.99	-6.4	-18.7	19.8	17.0	2.79	7.090 CC		
700.0	700.0	699.0	699.0	1.5	1.5	-106.60	-5.7	-19.0	19.8	16.9	2.92	6.791 ES		
800.0	800.0	798.7	798.6	1.7	1.7	-92.12	-0.8	-20.7	20.7	17.3	3.37	6.142 SF		
900.0	900.0	898.0	897.5	1.9	1.9	-72.60	7.4	-23.5	24.7	20.8	3.83	6.440		
1,000.0	1,000.0	996.6	995.3	2.1	2.2	-55.75	18.6	-27.4	33.3	29.0	4.31	7.737		
1,100.0	1,100.0	1,094.2	1,091.7	2.4	2.5	-44.44	32.9	-32.3	46.7	41.9	4.80	9.715		
1,200.0	1,200.0	1,190.7	1,186.5	2.6	2.8	-37.33	50.1	-38.2	64.2	58.9	5.33	12.050		
1,300.0	1,300.0	1,288.1	1,281.8	2.8	3.1	-32.87	69.4	-44.8	84.4	78.5	5.88	14.358		
1,400.0	1,400.0	1,385.9	1,377.4	3.0	3.5	-30.12	88.8	-51.5	104.9	98.4	6.44	16.297		
1,500.0	1,500.0	1,483.7	1,473.0	3.3	3.9	-28.28	108.2	-58.2	125.5	118.5	7.00	17.930		
1,600.0	1,600.0	1,581.3	1,568.5	3.5	4.3	102.91	127.5	-64.8	146.7	139.6	7.04	20.824		
1,700.0	1,699.8	1,678.6	1,663.5	3.6	4.7	105.14	146.8	-71.5	168.8	161.3	7.46	22.617		
1,800.0	1,799.5	1,775.3	1,758.2	3.8	5.1	107.73	166.0	-78.1	192.2	184.3	7.89	24.354		
1,900.0	1,898.7	1,871.5	1,852.2	4.1	5.5	110.51	185.1	-84.7	217.3	208.9	8.34	26.056		
2,000.0	1,997.7	1,967.2	1,945.7	4.3	5.9	113.51	204.0	-91.2	243.6	234.8	8.81	27.654		
2,100.0	2,096.6	2,062.9	2,039.3	4.5	6.3	115.97	223.0	-97.7	270.6	261.3	9.30	29.083		
2,200.0	2,195.6	2,158.6	2,132.9	4.8	6.8	118.00	242.0	-104.3	297.9	288.1	9.81	30.360		
2,300.0	2,294.6	2,254.3	2,226.5	5.1	7.2	119.68	261.0	-110.8	325.5	315.1	10.33	31.502		
2,400.0	2,393.5	2,350.0	2,320.1	5.4	7.6	121.10	280.0	-117.3	353.3	342.4	10.86	32.527		
2,500.0	2,492.5	2,445.7	2,413.7	5.7	8.0	122.32	298.9	-123.9	381.3	369.9	11.40	33.448		
2,600.0	2,591.5	2,541.4	2,507.2	6.0	8.4	123.37	317.9	-130.4	409.4	397.5	11.94	34.278		
2,700.0	2,690.5	2,637.2	2,600.8	6.3	8.9	124.28	336.9	-136.9	437.6	425.1	12.49	35.030		
2,800.0	2,789.4	2,732.9	2,694.4	6.6	9.3	125.09	355.9	-143.5	466.0	452.9	13.05	35.713		
2,900.0	2,888.4	2,828.6	2,788.0	6.9	9.7	125.80	374.8	-150.0	494.4	480.8	13.61	36.335		
3,000.0	2,987.4	2,924.3	2,881.6	7.2	10.1	126.43	393.8	-156.5	522.8	508.7	14.17	36.904		
3,100.0	3,086.3	3,020.0	2,975.1	7.6	10.6	127.00	412.8	-163.1	551.3	536.6	14.73	37.425		
3,200.0	3,185.3	3,115.7	3,068.7	7.9	11.0	127.52	431.8	-169.6	579.9	564.6	15.30	37.905		
3,300.0	3,284.3	3,211.4	3,162.3	8.2	11.4	127.98	450.8	-176.1	608.5	592.6	15.87	38.347		
3,400.0	3,383.2	3,307.1	3,255.9	8.5	11.8	128.41	469.7	-182.7	637.1	620.7	16.44	38.756		
3,500.0	3,482.2	3,402.8	3,349.5	8.9	12.3	128.79	488.7	-189.2	665.8	648.8	17.01	39.136		
3,600.0	3,581.2	3,498.6	3,443.1	9.2	12.7	129.15	507.7	-195.7	694.5	676.9	17.59	39.488		
3,700.0	3,680.1	3,594.3	3,536.6	9.5	13.1	129.48	526.7	-202.3	723.2	705.0	18.16	39.816		
3,800.0	3,779.1	3,690.0	3,630.2	9.9	13.6	129.78	545.7	-208.8	751.9	733.2	18.74	40.122		
3,900.0	3,878.1	3,785.7	3,723.8	10.2	14.0	130.06	564.6	-215.3	780.7	761.4	19.32	40.409		
4,000.0	3,977.1	3,881.4	3,817.4	10.6	14.4	130.32	583.6	-221.9	809.5	789.6	19.90	40.677		
4,100.0	4,076.0	3,977.1	3,911.0	10.9	14.8	130.56	602.6	-228.4	838.2	817.8	20.48	40.929		
4,200.0	4,175.0	4,072.8	4,004.6	11.3	15.3	130.79	621.6	-234.9	867.0	846.0	21.06	41.166		
4,300.0	4,274.0	4,168.5	4,098.1	11.6	15.7	131.00	640.6	-241.5	895.8	874.2	21.64	41.389		
4,400.0	4,372.9	4,264.2	4,191.7	11.9	16.1	131.20	659.5	-248.0	924.6	902.4	22.23	41.600		
4,500.0	4,471.9	4,359.9	4,285.3	12.3	16.5	131.38	678.5	-254.5	953.5	930.7	22.81	41.799		
4,600.0	4,570.9	4,455.7	4,378.9	12.6	17.0	131.56	697.5	-261.0	982.3	958.9	23.40	41.987		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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	1.0	1.0	0.0	0.0	68.87	36.1	93.3	100.1	100.1	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	68.87	36.1	93.3	100.1	99.8	0.23	440.804		
200.0	200.0	201.0	201.0	0.3	0.3	68.87	36.1	93.3	100.1	99.4	0.68	147.911		
300.0	300.0	301.0	301.0	0.6	0.6	68.87	36.1	93.3	100.1	98.9	1.13	88.884		
400.0	400.0	401.6	401.6	0.8	0.8	69.36	35.2	93.3	99.7	98.2	1.55	64.306		
500.0	500.0	502.2	502.1	1.0	1.0	70.80	32.5	93.3	98.8	96.9	1.97	50.193		
600.0	600.0	602.6	602.5	1.2	1.2	73.26	28.1	93.3	97.5	95.1	2.40	40.593		
700.0	700.0	702.5	702.2	1.5	1.4	76.24	22.9	93.3	96.1	93.3	2.84	33.841		
800.0	800.0	802.3	801.9	1.7	1.6	79.31	17.6	93.3	95.0	91.7	3.28	28.934		
900.0	900.0	902.2	901.6	1.9	1.9	82.43	12.4	93.3	94.2	90.4	3.73	25.235		
934.6	934.6	936.2	935.6	2.0	1.9	83.50	10.6	93.5	94.1	90.2	3.88	24.214 CC, ES		
1,000.0	1,000.0	1,000.0	999.3	2.1	2.1	85.46	7.5	94.2	94.5	90.3	4.17	22.646		
1,100.0	1,100.0	1,098.7	1,097.9	2.4	2.3	88.27	2.9	96.7	96.8	92.2	4.62	20.962		
1,200.0	1,200.0	1,196.9	1,195.9	2.6	2.5	90.70	-1.2	100.8	101.0	95.9	5.07	19.917		
1,300.0	1,300.0	1,294.9	1,293.7	2.8	2.7	92.68	-5.0	106.6	106.9	101.4	5.53	19.343		
1,400.0	1,400.0	1,392.7	1,391.2	3.0	3.0	94.19	-8.4	113.9	114.7	108.7	6.00	19.124		
1,500.0	1,500.0	1,490.3	1,488.3	3.3	3.2	95.26	-11.3	122.9	124.1	117.6	6.47	19.174		
1,600.0	1,600.0	1,589.6	1,587.0	3.5	3.5	-134.70	-14.1	132.9	135.6	128.7	6.86	19.772		
1,700.0	1,699.8	1,688.6	1,685.5	3.6	3.7	-135.23	-16.9	142.9	149.6	142.3	7.26	20.596		
1,800.0	1,799.5	1,787.1	1,783.5	3.8	4.0	-136.45	-19.7	152.8	166.0	158.4	7.67	21.646		
1,900.0	1,898.7	1,885.1	1,880.9	4.1	4.3	-138.12	-22.4	162.7	185.1	177.1	8.09	22.896		
2,000.0	1,997.7	1,982.7	1,978.0	4.3	4.5	-140.04	-25.2	172.5	206.0	197.5	8.53	24.163		
2,100.0	2,096.6	2,080.3	2,075.0	4.5	4.8	-141.64	-27.9	182.3	227.1	218.1	8.98	25.294		
2,200.0	2,195.6	2,177.8	2,172.0	4.8	5.1	-142.97	-30.7	192.1	248.3	238.9	9.44	26.309		
2,300.0	2,294.6	2,275.4	2,269.1	5.1	5.4	-144.09	-33.4	202.0	269.7	259.8	9.91	27.222		
2,400.0	2,393.5	2,373.0	2,366.1	5.4	5.6	-145.04	-36.2	211.8	291.1	280.7	10.38	28.047		
2,500.0	2,492.5	2,470.6	2,463.2	5.7	5.9	-145.87	-38.9	221.6	312.6	301.7	10.86	28.794		
2,600.0	2,591.5	2,568.1	2,560.2	6.0	6.2	-146.59	-41.7	231.4	334.1	322.8	11.34	29.472		
2,700.0	2,690.5	2,665.7	2,657.2	6.3	6.5	-147.22	-44.4	241.2	355.7	343.9	11.82	30.091		
2,800.0	2,789.4	2,763.3	2,754.3	6.6	6.8	-147.78	-47.2	251.1	377.3	365.0	12.31	30.656		
2,900.0	2,888.4	2,860.9	2,851.3	6.9	7.1	-148.28	-49.9	260.9	399.0	386.2	12.80	31.174		
3,000.0	2,987.4	2,958.4	2,948.4	7.2	7.3	-148.72	-52.7	270.7	420.6	407.3	13.29	31.651		
3,100.0	3,086.3	3,056.0	3,045.4	7.6	7.6	-149.13	-55.4	280.5	442.3	428.5	13.78	32.091		
3,200.0	3,185.3	3,153.6	3,142.4	7.9	7.9	-149.49	-58.2	290.4	464.0	449.8	14.28	32.498		
3,300.0	3,284.3	3,251.1	3,239.5	8.2	8.2	-149.83	-60.9	300.2	485.8	471.0	14.78	32.875		
3,400.0	3,383.2	3,348.7	3,336.5	8.5	8.5	-150.13	-63.7	310.0	507.5	492.2	15.28	33.225		
3,500.0	3,482.2	3,446.3	3,433.5	8.9	8.8	-150.41	-66.4	319.8	529.3	513.5	15.78	33.551		
3,600.0	3,581.2	3,543.9	3,530.6	9.2	9.1	-150.67	-69.2	329.7	551.0	534.8	16.28	33.855		
3,700.0	3,680.1	3,641.4	3,627.6	9.5	9.3	-150.90	-71.9	339.5	572.8	556.0	16.78	34.140		
3,800.0	3,779.1	3,739.0	3,724.7	9.9	9.6	-151.13	-74.7	349.3	594.6	577.3	17.28	34.407		
3,900.0	3,878.1	3,836.6	3,821.7	10.2	9.9	-151.33	-77.4	359.1	616.4	598.6	17.79	34.657		
4,000.0	3,977.1	3,936.1	3,920.7	10.6	10.2	-151.53	-80.2	369.1	638.2	619.9	18.29	34.894		
4,100.0	4,076.0	4,044.9	4,029.0	10.9	10.5	-151.78	-82.9	378.7	658.9	640.1	18.77	35.095		
4,200.0	4,175.0	4,154.3	4,138.1	11.3	10.7	-152.10	-85.1	386.4	677.9	658.7	19.24	35.240		
4,300.0	4,274.0	4,264.3	4,248.0	11.6	10.9	-152.49	-86.7	392.1	695.3	675.6	19.70	35.300		
4,400.0	4,372.9	4,374.9	4,358.5	11.9	11.1	-152.94	-87.7	395.7	711.1	690.9	20.15	35.284		
4,500.0	4,471.9	4,485.9	4,469.5	12.3	11.3	-153.46	-88.1	397.3	725.2	704.6	20.60	35.197		
4,600.0	4,570.9	4,588.3	4,571.9	12.6	11.5	-153.97	-88.1	397.4	738.1	717.1	21.05	35.065		
4,700.0	4,669.8	4,687.3	4,670.8	13.0	11.6	-154.44	-88.1	397.4	751.0	729.6	21.49	34.948		
4,800.0	4,768.8	4,786.2	4,769.8	13.3	11.8	-154.91	-88.1	397.4	764.0	742.1	21.93	34.838		
4,900.0	4,867.8	4,885.2	4,868.8	13.7	12.0	-155.35	-88.1	397.4	777.0	754.7	22.37	34.734		
5,000.0	4,966.7	4,984.2	4,967.7	14.0	12.2	-155.79	-88.1	397.4	790.1	767.3	22.81	34.634		

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 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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	5,065.7	5,083.1	5,066.7	14.4	12.3	-156.20	-88.1	397.4	803.2	780.0	23.25	34.540		
5,200.0	5,164.8	5,182.2	5,165.8	14.7	12.5	-156.65	-88.1	397.4	815.4	791.7	23.72	34.375		
5,300.0	5,264.3	5,281.7	5,265.3	14.9	12.7	-157.00	-88.1	397.4	824.6	800.5	24.15	34.140		
5,400.0	5,364.1	5,381.5	5,365.1	15.1	12.9	-157.22	-88.1	397.4	830.6	806.0	24.56	33.820		
5,500.0	5,464.0	5,481.5	5,465.0	15.3	13.1	-157.32	-88.1	397.4	833.4	808.4	24.94	33.418		
5,600.0	5,564.0	5,581.5	5,565.0	15.4	13.2	73.06	-88.1	397.4	833.6	805.8	27.72	30.068		
5,700.0	5,664.0	5,681.5	5,665.0	15.6	13.4	73.06	-88.1	397.4	833.6	805.5	28.08	29.687		
5,800.0	5,764.0	5,781.5	5,765.0	15.8	13.6	73.06	-88.1	397.4	833.6	805.1	28.44	29.313		
5,900.0	5,864.0	5,881.5	5,865.0	15.9	13.8	73.06	-88.1	397.4	833.6	804.8	28.80	28.945		
6,000.0	5,964.0	5,981.5	5,965.0	16.1	14.0	73.06	-88.1	397.4	833.6	804.4	29.16	28.585		
6,100.0	6,064.0	6,081.5	6,065.0	16.2	14.2	73.06	-88.1	397.4	833.6	804.0	29.53	28.231		
6,200.0	6,164.0	6,181.5	6,165.0	16.4	14.4	73.06	-88.1	397.4	833.6	803.7	29.89	27.884		
6,300.0	6,264.0	6,281.5	6,265.0	16.6	14.6	73.06	-88.1	397.4	833.6	803.3	30.26	27.543		
6,400.0	6,364.0	6,381.5	6,365.0	16.7	14.8	73.06	-88.1	397.4	833.6	802.9	30.64	27.208		
6,500.0	6,464.0	6,481.5	6,465.0	16.9	15.0	73.06	-88.1	397.4	833.6	802.6	31.01	26.880		
6,600.0	6,564.0	6,581.5	6,565.0	17.1	15.2	73.06	-88.1	397.4	833.6	802.2	31.39	26.559		
6,700.0	6,664.0	6,681.5	6,665.0	17.2	15.4	73.06	-88.1	397.4	833.6	801.8	31.76	26.243		
6,800.0	6,764.0	6,781.5	6,765.0	17.4	15.6	73.06	-88.1	397.4	833.6	801.4	32.14	25.933		
6,900.0	6,863.8	6,881.2	6,864.8	17.5	15.8	-17.72	-88.1	397.4	828.4	798.3	30.10	27.524		
7,000.0	6,960.8	6,978.2	6,961.8	17.6	16.0	-19.05	-88.1	397.4	805.9	776.4	29.42	27.388		
7,100.0	7,051.5	7,068.9	7,052.5	17.5	16.1	-21.75	-88.1	397.4	766.2	738.1	28.12	27.251		
7,200.0	7,132.5	7,149.9	7,133.5	17.4	16.3	-26.50	-88.1	397.4	711.3	684.7	26.61	26.730		
7,300.0	7,200.9	7,218.4	7,201.9	17.4	16.4	-34.50	-88.1	397.4	643.8	617.9	25.88	24.873		
7,400.0	7,254.2	7,271.6	7,255.2	17.4	16.5	-47.46	-88.1	397.4	566.9	539.4	27.47	20.634		
7,500.0	7,290.4	7,307.8	7,291.4	17.8	16.6	-65.66	-88.1	397.4	485.1	453.6	31.50	15.398		
7,600.0	7,308.2	7,325.6	7,309.2	18.6	16.6	-83.98	-88.1	397.4	404.0	369.2	34.85	11.593		
7,700.0	7,310.0	7,327.4	7,311.0	20.0	16.7	-90.00	-88.1	397.4	331.3	294.8	36.45	9.088		
7,800.0	7,310.0	7,327.4	7,311.0	21.6	16.7	-90.00	-88.1	397.4	276.1	238.0	38.08	7.251		
7,900.0	7,310.0	7,327.4	7,311.0	23.4	16.7	-90.00	-88.1	397.4	250.5	210.5	39.93	6.272		
7,917.6	7,310.0	7,327.4	7,311.0	23.8	16.7	-90.00	-88.1	397.4	249.8	209.5	40.29	6.201 SF		
8,000.0	7,310.0	7,327.4	7,311.0	25.5	16.7	-90.00	-88.1	397.4	263.1	221.1	41.96	6.270		
8,100.0	7,310.0	7,327.4	7,311.0	27.7	16.7	-90.00	-88.1	397.4	309.4	265.2	44.12	7.011		
8,200.0	7,310.0	7,327.4	7,311.0	29.9	16.7	-90.00	-88.1	397.4	377.1	330.7	46.39	8.127		
8,300.0	7,310.0	7,327.4	7,311.0	32.3	16.7	-90.00	-88.1	397.4	456.8	408.1	48.75	9.370		
8,400.0	7,310.0	7,327.4	7,311.0	34.7	16.7	-90.00	-88.1	397.4	543.3	492.1	51.17	10.617		
8,500.0	7,310.0	7,327.4	7,311.0	37.2	16.7	-90.00	-88.1	397.4	633.8	580.1	53.65	11.813		
8,600.0	7,310.0	7,327.4	7,311.0	39.7	16.7	-90.00	-88.1	397.4	726.7	670.6	56.17	12.938		
8,700.0	7,310.0	7,327.4	7,311.0	42.3	16.7	-90.00	-88.1	397.4	821.3	762.6	58.73	13.986		
8,800.0	7,310.0	7,327.4	7,311.0	44.9	16.7	-90.00	-88.1	397.4	917.1	855.8	61.31	14.958		

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							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)	Offset Wellbore Centre +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	69.06	21.5	56.2	60.1	60.1	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	69.06	21.5	56.2	60.1	59.9	0.23	264.938		
200.0	200.0	201.0	201.0	0.3	0.3	69.06	21.5	56.2	60.1	59.5	0.68	88.899		
300.0	300.0	301.0	301.0	0.6	0.6	69.06	21.5	56.2	60.1	59.0	1.13	53.411		
400.0	400.0	401.0	401.0	0.8	0.8	69.06	21.5	56.2	60.1	58.6	1.58	38.172		
500.0	500.0	501.0	501.0	1.0	1.0	69.06	21.5	56.2	60.1	58.1	2.03	29.699		
600.0	600.0	601.0	601.0	1.2	1.2	69.06	21.5	56.2	60.1	57.7	2.47	24.304		
700.0	700.0	701.0	701.0	1.5	1.5	69.06	21.5	56.2	60.1	57.2	2.92	20.568		
800.0	800.0	801.0	801.0	1.7	1.7	69.06	21.5	56.2	60.1	56.8	3.37	17.827		
900.0	900.0	901.0	901.0	1.9	1.9	69.06	21.5	56.2	60.1	56.3	3.82	15.731		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	69.06	21.5	56.2	60.1	55.9	4.27	14.076		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	69.06	21.5	56.2	60.1	55.4	4.72	12.736		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	69.06	21.5	56.2	60.1	55.0	5.17	11.629		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	69.06	21.5	56.2	60.1	54.5	5.62	10.699		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	69.06	21.5	56.2	60.1	54.1	6.07	9.907		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	69.06	21.5	56.2	60.1	53.6	6.52	9.224 CC, ES		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-161.84	21.5	56.2	61.8	54.9	6.94	8.900		
1,700.0	1,699.8	1,700.8	1,700.8	3.6	3.7	-163.21	21.5	56.2	66.8	59.5	7.34	9.099		
1,800.0	1,799.5	1,800.5	1,800.5	3.8	3.9	-165.08	21.5	56.2	75.2	67.4	7.74	9.719		
1,900.0	1,898.7	1,902.8	1,902.8	4.1	4.1	-167.16	20.7	54.5	85.2	77.1	8.11	10.512		
2,000.0	1,997.7	2,005.6	2,005.4	4.3	4.3	-169.17	18.2	49.6	93.9	85.4	8.49	11.060		
2,100.0	2,096.6	2,108.9	2,108.3	4.5	4.5	-170.99	14.0	41.3	99.1	90.2	8.89	11.150		
2,200.0	2,195.6	2,212.1	2,210.7	4.8	4.8	-172.82	8.2	29.7	100.8	91.5	9.29	10.843		
2,300.0	2,294.6	2,312.1	2,309.7	5.1	5.0	-174.64	1.9	17.1	101.0	91.3	9.70	10.410		
2,400.0	2,393.5	2,412.0	2,408.6	5.4	5.3	-176.45	-4.4	4.6	101.4	91.3	10.12	10.013		
2,500.0	2,492.5	2,512.0	2,507.6	5.7	5.5	-178.25	-10.7	-8.0	101.8	91.3	10.55	9.652		
2,600.0	2,591.5	2,611.9	2,606.5	6.0	5.8	179.97	-17.0	-20.6	102.4	91.4	10.99	9.319		
2,700.0	2,690.5	2,711.9	2,705.5	6.3	6.1	178.21	-23.3	-33.2	103.0	91.6	11.43	9.014		
2,800.0	2,789.4	2,811.8	2,804.4	6.6	6.4	176.48	-29.6	-45.8	103.8	91.9	11.88	8.733		
2,900.0	2,888.4	2,911.8	2,903.4	6.9	6.6	174.77	-35.9	-58.3	104.6	92.3	12.35	8.475		
3,000.0	2,987.4	3,011.7	3,002.3	7.2	6.9	173.09	-42.2	-70.9	105.6	92.8	12.82	8.236		
3,100.0	3,086.3	3,111.7	3,101.3	7.6	7.2	171.44	-48.5	-83.5	106.6	93.3	13.30	8.015		
3,200.0	3,185.3	3,211.6	3,200.3	7.9	7.6	169.82	-54.8	-96.1	107.7	93.9	13.79	7.809		
3,300.0	3,284.3	3,311.6	3,299.2	8.2	7.9	168.24	-61.1	-108.7	108.9	94.6	14.30	7.618		
3,400.0	3,383.2	3,411.5	3,398.2	8.5	8.2	166.69	-67.4	-121.2	110.2	95.4	14.81	7.441		
3,500.0	3,482.2	3,511.5	3,497.1	8.9	8.5	165.18	-73.7	-133.8	111.5	96.2	15.33	7.275		
3,600.0	3,581.2	3,611.4	3,596.1	9.2	8.8	163.71	-80.0	-146.4	113.0	97.1	15.87	7.120		
3,700.0	3,680.1	3,711.4	3,695.0	9.5	9.1	162.27	-86.3	-159.0	114.5	98.1	16.41	6.976		
3,800.0	3,779.1	3,811.3	3,794.0	9.9	9.5	160.87	-92.6	-171.6	116.0	99.1	16.97	6.840		
3,900.0	3,878.1	3,911.3	3,892.9	10.2	9.8	159.52	-98.9	-184.1	117.7	100.2	17.53	6.713		
4,000.0	3,977.1	4,011.2	3,991.9	10.6	10.1	158.19	-105.2	-196.7	119.4	101.3	18.11	6.594		
4,100.0	4,076.0	4,111.2	4,090.8	10.9	10.5	156.91	-111.5	-209.3	121.2	102.5	18.69	6.482		
4,200.0	4,175.0	4,211.1	4,189.8	11.3	10.8	155.67	-117.8	-221.9	123.0	103.7	19.29	6.377		
4,300.0	4,274.0	4,311.1	4,288.7	11.6	11.1	154.46	-124.1	-234.5	124.9	105.0	19.89	6.279		
4,400.0	4,372.9	4,411.0	4,387.7	11.9	11.5	153.28	-130.4	-247.0	126.8	106.3	20.50	6.186		
4,500.0	4,471.9	4,511.0	4,486.6	12.3	11.8	152.15	-136.7	-259.6	128.8	107.7	21.12	6.099		
4,600.0	4,570.9	4,610.9	4,585.6	12.6	12.1	151.05	-143.1	-272.2	130.8	109.1	21.74	6.017		
4,700.0	4,669.8	4,710.8	4,684.5	13.0	12.5	149.98	-149.4	-284.8	132.9	110.5	22.38	5.940		
4,800.0	4,768.8	4,810.8	4,783.5	13.3	12.8	148.94	-155.7	-297.4	135.0	112.0	23.02	5.867		
4,900.0	4,867.8	4,910.7	4,882.4	13.7	13.2	147.94	-162.0	-309.9	137.2	113.6	23.66	5.799		
5,000.0	4,966.7	5,010.7	4,981.4	14.0	13.5	146.97	-168.3	-322.5	139.4	115.1	24.32	5.734		
5,100.0	5,065.7	5,110.6	5,080.4	14.4	13.8	146.03	-174.6	-335.1	141.7	116.7	24.97	5.673		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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	5,164.8	5,210.6	5,179.3	14.7	14.2	144.90	-180.9	-347.7	143.1	117.5	25.65	5.580	
5,300.0	5,264.3	5,310.5	5,278.2	14.9	14.5	142.97	-187.2	-360.3	141.9	115.6	26.37	5.384	
5,400.0	5,364.1	5,410.1	5,376.9	15.1	14.9	140.06	-193.5	-372.8	138.2	111.1	27.16	5.089	
5,500.0	5,464.0	5,507.5	5,473.4	15.3	15.2	136.43	-199.1	-384.1	132.9	104.9	27.96	4.753	
5,600.0	5,564.0	5,604.7	5,570.2	15.4	15.4	3.33	-203.4	-392.6	127.9	100.9	27.01	4.738	
5,700.0	5,664.0	5,702.5	5,667.7	15.6	15.6	0.87	-206.1	-398.1	124.9	97.8	27.12	4.606	
5,800.0	5,764.0	5,800.5	5,765.7	15.8	15.7	-0.30	-207.4	-400.6	123.6	96.2	27.35	4.519	
5,851.2	5,815.3	5,851.1	5,816.3	15.8	15.8	-0.38	-207.5	-400.8	123.5	96.0	27.52	4.487	
5,900.0	5,864.0	5,899.9	5,865.0	15.9	15.9	-0.38	-207.5	-400.8	123.5	95.8	27.70	4.458	
6,000.0	5,964.0	5,999.9	5,965.0	16.1	16.1	-0.38	-207.5	-400.8	123.5	95.4	28.07	4.400	
6,100.0	6,064.0	6,099.9	6,065.0	16.2	16.2	-0.38	-207.5	-400.8	123.5	95.1	28.43	4.343	
6,200.0	6,164.0	6,199.9	6,165.0	16.4	16.4	-0.38	-207.5	-400.8	123.5	94.7	28.80	4.288	
6,300.0	6,264.0	6,299.9	6,265.0	16.6	16.6	-0.38	-207.5	-400.8	123.5	94.3	29.17	4.233	
6,400.0	6,364.0	6,399.9	6,365.0	16.7	16.7	-0.38	-207.5	-400.8	123.5	93.9	29.55	4.180	
6,500.0	6,464.0	6,499.9	6,465.0	16.9	16.9	-0.38	-207.5	-400.8	123.5	93.6	29.92	4.127	
6,558.5	6,522.5	6,558.4	6,523.5	17.0	17.0	0.50	-207.5	-398.9	123.5	93.3	30.22	4.087	
6,600.0	6,564.0	6,599.4	6,564.2	17.1	17.0	2.86	-207.6	-393.8	123.6	93.0	30.57	4.043	
6,700.0	6,664.0	6,693.1	6,654.8	17.2	17.0	13.54	-207.8	-370.3	127.2	95.3	31.85	3.992	
6,800.0	6,764.0	6,776.2	6,730.5	17.4	16.9	27.44	-208.1	-336.2	142.8	109.5	33.22	4.298	
6,900.0	6,863.8	6,850.0	6,792.4	17.5	16.9	-49.14	-208.4	-296.1	173.2	143.6	29.54	5.863	
7,000.0	6,960.8	6,919.2	6,844.7	17.6	16.8	-39.31	-208.8	-251.0	207.6	179.0	28.57	7.266	
7,100.0	7,051.5	6,986.6	6,889.5	17.5	16.8	-32.74	-209.2	-200.7	240.9	213.7	27.12	8.881	
7,200.0	7,132.5	7,050.0	6,925.4	17.4	16.9	-28.41	-209.7	-148.5	270.6	245.4	25.17	10.751	
7,300.0	7,200.9	7,116.8	6,956.1	17.4	17.1	-25.37	-210.2	-89.2	295.4	272.5	22.98	12.859	
7,400.0	7,254.2	7,180.4	6,978.1	17.4	17.4	-23.44	-210.7	-29.5	314.6	293.6	20.98	14.995	
7,500.0	7,290.4	7,250.0	6,993.5	17.8	18.0	-22.21	-211.3	38.2	327.6	307.8	19.76	16.577	
7,600.0	7,308.2	7,306.2	6,999.4	18.6	18.6	-21.72	-211.8	94.1	333.9	314.1	19.78	16.878	
7,700.0	7,310.0	7,390.8	7,000.0	20.0	19.7	-21.66	-212.5	178.7	334.6	313.8	20.87	16.037	
7,800.0	7,310.0	7,490.8	7,000.0	21.6	21.3	-21.66	-213.4	278.7	334.6	312.5	22.14	15.117	
7,900.0	7,310.0	7,590.8	7,000.0	23.4	23.1	-21.67	-214.2	378.7	334.6	311.0	23.60	14.180	
8,000.0	7,310.0	7,690.8	7,000.0	25.5	25.1	-21.67	-215.1	478.6	334.7	309.4	25.23	13.266	
8,100.0	7,310.0	7,790.8	7,000.0	27.7	27.3	-21.68	-216.0	578.6	334.7	307.7	26.99	12.402	
8,200.0	7,310.0	7,890.8	7,000.0	29.9	29.6	-21.69	-216.9	678.6	334.7	305.8	28.85	11.599	
8,300.0	7,310.0	7,990.8	7,000.0	32.3	31.9	-21.69	-217.7	778.6	334.7	303.9	30.81	10.863	
8,400.0	7,310.0	8,090.8	7,000.0	34.7	34.3	-21.70	-218.6	878.6	334.7	301.9	32.84	10.192	
8,500.0	7,310.0	8,190.8	7,000.0	37.2	36.8	-21.70	-219.5	978.6	334.7	299.8	34.93	9.582	
8,600.0	7,310.0	8,290.8	7,000.0	39.7	39.3	-21.71	-220.3	1,078.6	334.7	297.7	37.07	9.029	
8,700.0	7,310.0	8,390.8	7,000.0	42.3	41.9	-21.71	-221.2	1,178.6	334.7	295.5	39.26	8.527	
8,800.0	7,310.0	8,490.8	7,000.0	44.9	44.5	-21.72	-222.1	1,278.6	334.8	293.3	41.48	8.071	
8,900.0	7,310.0	8,590.8	7,000.0	47.5	47.1	-21.72	-222.9	1,378.6	334.8	291.0	43.73	7.655	
9,000.0	7,310.0	8,690.8	7,000.0	50.1	49.7	-21.73	-223.8	1,478.6	334.8	288.8	46.01	7.277	
9,100.0	7,310.0	8,790.8	7,000.0	52.8	52.4	-21.73	-224.7	1,578.6	334.8	286.5	48.31	6.931	
9,200.0	7,310.0	8,890.8	7,000.0	55.4	55.0	-21.74	-225.5	1,678.6	334.8	284.2	50.63	6.613	
9,300.0	7,310.0	8,990.8	7,000.0	58.1	57.7	-21.74	-226.4	1,778.6	334.8	281.9	52.96	6.322	
9,400.0	7,310.0	9,090.8	7,000.0	60.8	60.4	-21.75	-227.3	1,878.6	334.8	279.5	55.32	6.053	
9,500.0	7,310.0	9,190.8	7,000.0	63.5	63.1	-21.76	-228.2	1,978.6	334.9	277.2	57.68	5.805	
9,600.0	7,310.0	9,290.8	7,000.0	66.2	65.8	-21.76	-229.0	2,078.6	334.9	274.8	60.06	5.576	
9,700.0	7,310.0	9,390.8	7,000.0	68.9	68.5	-21.77	-229.9	2,178.6	334.9	272.4	62.45	5.363	
9,800.0	7,310.0	9,490.8	7,000.0	71.6	71.2	-21.77	-230.8	2,278.6	334.9	270.0	64.84	5.165	
9,900.0	7,310.0	9,590.8	7,000.0	74.4	74.0	-21.78	-231.6	2,378.6	334.9	267.7	67.25	4.980	
10,000.0	7,310.0	9,690.8	7,000.0	77.1	76.7	-21.78	-232.5	2,478.6	334.9	265.3	69.66	4.808	
10,100.0	7,310.0	9,790.8	7,000.0	79.8	79.5	-21.79	-233.4	2,578.6	334.9	262.8	72.08	4.646	

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 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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 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						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	
10,200.0	7,310.0	9,890.8	7,000.0	82.6	82.2	-21.79	-234.2	2,678.6	334.9	260.4	74.51	4.495	
10,300.0	7,310.0	9,990.8	7,000.0	85.3	84.9	-21.80	-235.1	2,778.6	335.0	258.0	76.94	4.353	
10,400.0	7,310.0	10,090.8	7,000.0	88.1	87.7	-21.80	-236.0	2,878.6	335.0	255.6	79.38	4.220	
10,500.0	7,310.0	10,190.8	7,000.0	90.8	90.5	-21.81	-236.8	2,978.6	335.0	253.2	81.82	4.094	
10,600.0	7,310.0	10,290.8	7,000.0	93.6	93.2	-21.81	-237.7	3,078.5	335.0	250.7	84.27	3.975	
10,700.0	7,310.0	10,390.8	7,000.0	96.4	96.0	-21.82	-238.6	3,178.5	335.0	248.3	86.73	3.863	
10,800.0	7,310.0	10,490.8	7,000.0	99.1	98.7	-21.83	-239.4	3,278.5	335.0	245.8	89.18	3.756	
10,900.0	7,310.0	10,590.8	7,000.0	101.9	101.5	-21.83	-240.3	3,378.5	335.0	243.4	91.64	3.656	
11,000.0	7,310.0	10,690.8	7,000.0	104.7	104.3	-21.84	-241.2	3,478.5	335.0	240.9	94.11	3.560	
11,100.0	7,310.0	10,790.8	7,000.0	107.4	107.0	-21.84	-242.1	3,578.5	335.1	238.5	96.57	3.469	
11,200.0	7,310.0	10,890.8	7,000.0	110.2	109.8	-21.85	-242.9	3,678.5	335.1	236.0	99.04	3.383	
11,300.0	7,310.0	10,990.8	7,000.0	113.0	112.6	-21.85	-243.8	3,778.5	335.1	233.6	101.52	3.301	
11,400.0	7,310.0	11,090.8	7,000.0	115.7	115.4	-21.86	-244.7	3,878.5	335.1	231.1	103.99	3.222	
11,500.0	7,310.0	11,190.8	7,000.0	118.5	118.1	-21.86	-245.5	3,978.5	335.1	228.6	106.47	3.147	
11,600.0	7,310.0	11,290.8	7,000.0	121.3	120.9	-21.87	-246.4	4,078.5	335.1	226.2	108.95	3.076	
11,700.0	7,310.0	11,390.8	7,000.0	124.1	123.7	-21.87	-247.3	4,178.5	335.1	223.7	111.44	3.007	
11,800.0	7,310.0	11,490.8	7,000.0	126.9	126.5	-21.88	-248.1	4,278.5	335.1	221.2	113.93	2.942	
11,900.0	7,310.0	11,590.8	7,000.0	129.6	129.3	-21.88	-249.0	4,378.5	335.2	218.7	116.41	2.879	
11,998.0	7,310.0	11,688.8	7,000.0	132.4	132.0	-21.89	-249.9	4,476.5	335.2	216.3	118.86	2.820 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12H2C
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12H2C	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	1.0	1.0	0.0	0.0	68.98	28.8	74.9	80.2	80.2	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	68.98	28.8	74.9	80.2	80.0	0.23	353.442	
200.0	200.0	201.0	201.0	0.3	0.3	68.98	28.8	74.9	80.2	79.6	0.68	118.597	
300.0	300.0	301.0	301.0	0.6	0.6	68.98	28.8	74.9	80.2	79.1	1.13	71.253	
400.0	400.0	401.0	401.0	0.8	0.8	68.98	28.8	74.9	80.2	78.7	1.58	50.924	
500.0	500.0	501.0	501.0	1.0	1.0	68.98	28.8	74.9	80.2	78.2	2.03	39.620	
600.0	600.0	601.0	601.0	1.2	1.2	68.98	28.8	74.9	80.2	77.8	2.47	32.423	
700.0	700.0	701.0	701.0	1.5	1.5	68.98	28.8	74.9	80.2	77.3	2.92	27.439	
800.0	800.0	801.0	801.0	1.7	1.7	68.98	28.8	74.9	80.2	76.9	3.37	23.783	
900.0	900.0	901.0	901.0	1.9	1.9	68.98	28.8	74.9	80.2	76.4	3.82	20.986	
1,000.0	1,000.0	1,001.6	1,001.6	2.1	2.1	67.72	30.3	73.9	79.9	75.6	4.27	18.690	
1,100.0	1,100.0	1,101.9	1,101.8	2.4	2.4	63.94	34.7	70.9	78.9	74.2	4.72	16.713	
1,200.0	1,200.0	1,201.8	1,201.2	2.6	2.6	57.57	41.9	66.0	78.2	73.0	5.18	15.097	
1,220.3	1,220.3	1,221.9	1,221.3	2.6	2.6	55.96	43.8	64.8	78.2	72.9	5.27	14.822 CC, ES	
1,300.0	1,300.0	1,300.9	1,299.6	2.8	2.8	48.72	52.0	59.2	78.8	73.2	5.64	13.970	
1,400.0	1,400.0	1,399.1	1,396.5	3.0	3.1	38.04	64.7	50.6	82.3	76.2	6.10	13.488 SF	
1,500.0	1,500.0	1,497.4	1,493.3	3.3	3.4	27.30	79.2	40.9	89.4	82.9	6.55	13.654	
1,600.0	1,600.0	1,595.7	1,590.1	3.5	3.7	148.36	93.7	31.1	100.8	93.6	7.13	14.128	
1,700.0	1,699.8	1,693.9	1,686.7	3.6	4.1	142.57	108.1	21.3	116.6	109.0	7.58	15.382	
1,800.0	1,799.5	1,791.8	1,783.0	3.8	4.4	139.05	122.6	11.5	135.8	127.8	8.03	16.914	
1,900.0	1,898.7	1,889.2	1,878.9	4.1	4.8	137.18	136.9	1.8	157.8	149.4	8.49	18.594	
2,000.0	1,997.7	1,986.4	1,974.5	4.3	5.1	136.43	151.3	-7.8	181.5	172.5	8.98	20.199	
2,100.0	2,096.6	2,083.5	2,070.1	4.5	5.5	135.89	165.6	-17.5	205.1	195.6	9.50	21.603	
2,200.0	2,195.6	2,180.7	2,165.7	4.8	5.8	135.46	179.9	-27.2	228.8	218.8	10.02	22.840	
2,300.0	2,294.6	2,277.8	2,261.3	5.1	6.2	135.11	194.2	-36.8	252.5	242.0	10.55	23.933	
2,400.0	2,393.5	2,374.9	2,356.9	5.4	6.6	134.83	208.5	-46.5	276.2	265.1	11.09	24.902	
2,500.0	2,492.5	2,472.1	2,452.5	5.7	6.9	134.58	222.9	-56.2	299.9	288.3	11.64	25.765	
2,600.0	2,591.5	2,569.2	2,548.0	6.0	7.3	134.38	237.2	-65.9	323.6	311.4	12.19	26.538	
2,700.0	2,690.5	2,666.4	2,643.6	6.3	7.7	134.20	251.5	-75.5	347.3	334.6	12.75	27.231	
2,800.0	2,789.4	2,763.5	2,739.2	6.6	8.1	134.04	265.8	-85.2	371.0	357.7	13.32	27.856	
2,900.0	2,888.4	2,860.7	2,834.8	6.9	8.4	133.90	280.1	-94.9	394.7	380.9	13.89	28.421	
3,000.0	2,987.4	2,957.8	2,930.4	7.2	8.8	133.78	294.5	-104.5	418.5	404.0	14.46	28.934	
3,100.0	3,086.3	3,054.9	3,026.0	7.6	9.2	133.67	308.8	-114.2	442.2	427.1	15.04	29.402	
3,200.0	3,185.3	3,152.1	3,121.6	7.9	9.6	133.58	323.1	-123.9	465.9	450.3	15.62	29.830	
3,300.0	3,284.3	3,249.2	3,217.2	8.2	10.0	133.49	337.4	-133.6	489.6	473.4	16.20	30.222	
3,400.0	3,383.2	3,346.4	3,312.8	8.5	10.3	133.41	351.7	-143.2	513.3	496.6	16.79	30.582	
3,500.0	3,482.2	3,443.5	3,408.4	8.9	10.7	133.33	366.0	-152.9	537.1	519.7	17.37	30.915	
3,600.0	3,581.2	3,540.7	3,504.0	9.2	11.1	133.27	380.4	-162.6	560.8	542.8	17.96	31.222	
3,700.0	3,680.1	3,637.8	3,599.6	9.5	11.5	133.21	394.7	-172.2	584.5	566.0	18.55	31.507	
3,800.0	3,779.1	3,734.9	3,695.2	9.9	11.9	133.15	409.0	-181.9	608.2	589.1	19.14	31.772	
3,900.0	3,878.1	3,832.1	3,790.8	10.2	12.3	133.10	423.3	-191.6	632.0	612.2	19.74	32.019	
4,000.0	3,977.1	3,929.2	3,886.4	10.6	12.6	133.05	437.6	-201.3	655.7	635.4	20.33	32.249	
4,100.0	4,076.0	4,026.4	3,982.0	10.9	13.0	133.00	452.0	-210.9	679.4	658.5	20.93	32.464	
4,200.0	4,175.0	4,123.5	4,077.6	11.3	13.4	132.96	466.3	-220.6	703.1	681.6	21.53	32.666	
4,300.0	4,274.0	4,220.7	4,173.2	11.6	13.8	132.92	480.6	-230.3	726.9	704.7	22.12	32.855	
4,400.0	4,372.9	4,317.8	4,268.7	11.9	14.2	132.88	494.9	-239.9	750.6	727.9	22.72	33.033	
4,500.0	4,471.9	4,414.9	4,364.3	12.3	14.6	132.85	509.2	-249.6	774.3	751.0	23.32	33.200	
4,600.0	4,570.9	4,512.1	4,459.9	12.6	14.9	132.82	523.6	-259.3	798.0	774.1	23.92	33.358	
4,700.0	4,669.8	4,609.2	4,555.5	13.0	15.3	132.79	537.9	-268.9	821.8	797.2	24.53	33.507	
4,800.0	4,768.8	4,706.4	4,651.1	13.3	15.7	132.76	552.2	-278.6	845.5	820.4	25.13	33.648	
4,900.0	4,867.8	4,803.5	4,746.7	13.7	16.1	132.73	566.5	-288.3	869.2	843.5	25.73	33.782	
5,000.0	4,966.7	4,900.7	4,842.3	14.0	16.5	132.70	580.8	-298.0	893.0	866.6	26.33	33.908	

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 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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 5AHZC - 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	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	5,065.7	4,997.8	4,937.9	14.4	16.9	132.68	595.2	-307.6	916.7	889.7	26.94	34.029	
5,200.0	5,164.8	5,095.1	5,033.6	14.7	17.3	132.87	609.5	-317.3	939.7	912.2	27.57	34.082	
5,300.0	5,264.3	5,192.8	5,129.8	14.9	17.7	132.97	623.9	-327.1	960.6	932.4	28.16	34.115	
5,400.0	5,364.1	5,290.9	5,226.3	15.1	18.1	132.88	638.4	-336.8	979.1	950.4	28.70	34.111	
5,500.0	5,464.0	5,389.2	5,323.1	15.3	18.4	132.63	652.9	-346.6	995.3	966.1	29.21	34.078	

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							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)	Offset Wellbore Centre +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	68.85	43.4	112.1	120.2	120.2	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	68.85	43.4	112.1	120.2	119.9	0.23	529.302		
200.0	200.0	201.0	201.0	0.3	0.3	68.85	43.4	112.1	120.2	119.5	0.68	177.606		
300.0	300.0	301.0	301.0	0.6	0.6	68.85	43.4	112.1	120.2	119.0	1.13	106.706		
400.0	400.0	401.0	401.0	0.8	0.8	68.85	43.4	112.1	120.2	118.6	1.58	76.262		
500.0	500.0	501.0	501.0	1.0	1.0	68.85	43.4	112.1	120.2	118.1	2.03	59.334		
600.0	600.0	601.0	601.0	1.2	1.2	68.85	43.4	112.1	120.2	117.7	2.47	48.555		
700.0	700.0	701.0	701.0	1.5	1.5	68.85	43.4	112.1	120.2	117.2	2.92	41.091		
800.0	800.0	801.0	801.0	1.7	1.7	68.85	43.4	112.1	120.2	116.8	3.37	35.616		
900.0	900.0	901.0	901.0	1.9	1.9	68.85	43.4	112.1	120.2	116.3	3.82	31.428		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	68.85	43.4	112.1	120.2	115.9	4.27	28.122		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	68.85	43.4	112.1	120.2	115.4	4.72	25.445		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	68.85	43.4	112.1	120.2	115.0	5.17	23.233		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	68.85	43.4	112.1	120.2	114.5	5.62	21.375		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	68.85	43.4	112.1	120.2	114.1	6.07	19.792		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	68.85	43.4	112.1	120.2	113.6	6.52	18.428 CC, ES		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-161.79	43.4	112.1	121.8	114.9	6.94	17.543		
1,700.0	1,699.8	1,700.8	1,700.8	3.6	3.7	-162.50	43.4	112.1	126.8	119.5	7.34	17.272		
1,800.0	1,799.5	1,800.5	1,800.5	3.8	3.9	-163.56	43.4	112.1	135.1	127.4	7.74	17.470		
1,900.0	1,898.7	1,899.7	1,899.7	4.1	4.2	-164.85	43.4	112.1	146.9	138.7	8.13	18.073		
2,000.0	1,997.7	1,998.7	1,998.7	4.3	4.4	-166.17	43.4	112.1	160.7	152.2	8.54	18.817		
2,100.0	2,096.6	2,097.6	2,097.6	4.5	4.6	-167.29	43.4	112.1	174.7	165.7	8.96	19.485		
2,200.0	2,195.6	2,196.6	2,196.6	4.8	4.8	-168.25	43.4	112.1	188.7	179.3	9.39	20.088		
2,300.0	2,294.6	2,295.6	2,295.6	5.1	5.0	-169.07	43.4	112.1	202.7	192.9	9.82	20.635		
2,400.0	2,393.5	2,394.5	2,394.5	5.4	5.3	-169.79	43.4	112.1	216.8	206.6	10.26	21.132		
2,500.0	2,492.5	2,493.5	2,493.5	5.7	5.5	-170.42	43.4	112.1	230.9	220.2	10.70	21.586		
2,600.0	2,591.5	2,592.5	2,592.5	6.0	5.7	-170.98	43.4	112.1	245.1	233.9	11.14	22.001		
2,700.0	2,690.5	2,691.5	2,691.5	6.3	5.9	-171.47	43.4	112.1	259.2	247.6	11.58	22.383		
2,800.0	2,789.4	2,790.4	2,790.4	6.6	6.2	-171.92	43.4	112.1	273.4	261.4	12.03	22.734		
2,900.0	2,888.4	2,889.4	2,889.4	6.9	6.4	-172.32	43.4	112.1	287.6	275.1	12.47	23.058		
3,000.0	2,987.4	2,988.4	2,988.4	7.2	6.6	-172.68	43.4	112.1	301.8	288.9	12.92	23.358		
3,100.0	3,086.3	3,095.2	3,095.2	7.6	6.8	-173.23	43.6	110.5	314.9	301.5	13.37	23.546		
3,200.0	3,185.3	3,203.7	3,203.5	7.9	7.1	-174.21	44.4	104.9	325.3	311.4	13.82	23.539		
3,300.0	3,284.3	3,312.3	3,311.7	8.2	7.3	-175.61	45.8	95.2	332.9	318.7	14.27	23.336		
3,400.0	3,383.2	3,420.8	3,419.3	8.5	7.5	-177.42	47.7	81.5	338.1	323.4	14.73	22.960		
3,500.0	3,482.2	3,528.8	3,525.8	8.9	7.8	-179.66	50.2	63.9	341.0	325.8	15.20	22.435		
3,600.0	3,581.2	3,627.8	3,623.2	9.2	8.1	178.10	52.8	46.0	343.1	327.4	15.67	21.894		
3,700.0	3,680.1	3,726.9	3,720.5	9.5	8.3	175.89	55.4	28.1	345.7	329.6	16.16	21.394		
3,800.0	3,779.1	3,825.9	3,817.9	9.9	8.6	173.72	57.9	10.1	348.9	332.2	16.67	20.929		
3,900.0	3,878.1	3,925.0	3,915.3	10.2	8.9	171.58	60.5	-7.8	352.6	335.4	17.20	20.498		
4,000.0	3,977.1	4,024.1	4,012.7	10.6	9.2	169.50	63.1	-25.7	356.7	339.0	17.75	20.098		
4,100.0	4,076.0	4,123.1	4,110.1	10.9	9.5	167.46	65.6	-43.6	361.4	343.0	18.32	19.727		
4,200.0	4,175.0	4,222.2	4,207.5	11.3	9.8	165.48	68.2	-61.5	366.4	347.5	18.91	19.382		
4,300.0	4,274.0	4,321.3	4,304.9	11.6	10.1	163.55	70.8	-79.4	371.9	352.4	19.51	19.063		
4,400.0	4,372.9	4,420.3	4,402.3	11.9	10.5	161.68	73.3	-97.4	377.9	357.7	20.13	18.768		
4,500.0	4,471.9	4,519.4	4,499.7	12.3	10.8	159.87	75.9	-115.3	384.2	363.4	20.77	18.496		
4,600.0	4,570.9	4,618.4	4,597.1	12.6	11.2	158.11	78.5	-133.2	390.9	369.5	21.43	18.244		
4,700.0	4,669.8	4,717.5	4,694.5	13.0	11.5	156.42	81.0	-151.1	397.9	375.8	22.09	18.013		
4,800.0	4,768.8	4,816.6	4,791.9	13.3	11.8	154.79	83.6	-169.0	405.3	382.6	22.77	17.800		
4,900.0	4,867.8	4,915.6	4,889.3	13.7	12.2	153.21	86.2	-187.0	413.0	389.6	23.46	17.605		
5,000.0	4,966.7	5,014.7	4,986.7	14.0	12.6	151.70	88.7	-204.9	421.0	396.9	24.16	17.427		
5,100.0	5,065.7	5,113.8	5,084.1	14.4	12.9	150.24	91.3	-222.8	429.3	404.5	24.87	17.265		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12H2C
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12H2C	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
5,200.0	5,164.8	5,212.8	5,181.5	14.7	13.3	148.83	93.8	-240.7	437.0	411.5	25.60	17.075	
5,300.0	5,264.3	5,311.9	5,278.9	14.9	13.7	147.23	96.4	-258.6	442.2	415.9	26.30	16.814	
5,400.0	5,364.1	5,410.8	5,376.1	15.1	14.0	145.40	99.0	-276.5	444.8	417.8	26.99	16.481	
5,500.0	5,464.0	5,509.4	5,473.1	15.3	14.4	143.32	101.5	-294.4	445.1	417.5	27.67	16.089	
5,600.0	5,564.0	5,607.7	5,569.8	15.4	14.8	11.42	104.1	-312.1	443.9	417.2	26.68	16.634	
5,700.0	5,664.0	5,706.1	5,666.4	15.6	15.1	9.10	106.6	-329.9	443.2	416.2	26.95	16.445	
5,740.9	5,705.0	5,746.3	5,706.0	15.7	15.3	8.15	107.7	-337.2	443.1	416.1	27.06	16.375	
5,800.0	5,764.0	5,804.4	5,763.1	15.8	15.5	6.77	109.2	-347.7	443.3	416.0	27.22	16.281	
5,900.0	5,864.0	5,903.5	5,860.8	15.9	15.8	4.60	111.6	-364.4	444.0	416.5	27.51	16.141	
6,000.0	5,964.0	6,003.8	5,960.1	16.1	16.1	2.85	113.5	-377.9	445.1	417.3	27.80	16.008	
6,100.0	6,064.0	6,105.0	6,060.7	16.2	16.3	1.54	114.9	-388.0	446.1	418.0	28.12	15.862	
6,200.0	6,164.0	6,206.7	6,162.3	16.4	16.5	0.69	115.9	-394.7	446.9	418.5	28.47	15.701	
6,300.0	6,264.0	6,308.8	6,264.3	16.6	16.7	0.29	116.3	-397.7	447.3	418.5	28.82	15.520	
6,400.0	6,364.0	6,409.5	6,365.0	16.7	16.9	0.26	116.4	-397.9	447.4	418.2	29.20	15.323	
6,500.0	6,464.0	6,509.5	6,465.0	16.9	17.1	0.26	116.4	-397.9	447.4	417.8	29.59	15.119	
6,535.2	6,499.2	6,544.7	6,500.2	17.0	17.1	0.32	116.3	-397.5	447.4	417.6	29.73	15.050	
6,600.0	6,564.0	6,608.8	6,563.9	17.1	17.2	1.15	116.3	-391.0	447.4	417.4	29.98	14.922	
6,700.0	6,664.0	6,702.2	6,654.2	17.2	17.2	4.14	116.2	-367.6	448.5	418.1	30.42	14.743	
6,800.0	6,764.0	6,785.1	6,729.7	17.4	17.1	8.44	116.1	-333.7	453.3	422.4	30.90	14.672	
6,900.0	6,863.8	6,858.1	6,791.1	17.5	17.1	-76.66	115.9	-294.2	464.0	431.1	32.85	14.126	
7,000.0	6,960.8	6,927.8	6,843.9	17.6	17.0	-71.44	115.7	-248.8	478.1	445.6	32.46	14.729	
7,100.0	7,051.5	7,000.0	6,891.8	17.5	17.1	-66.64	115.5	-194.9	493.7	461.7	31.91	15.471	
7,200.0	7,132.5	7,060.8	6,926.0	17.4	17.2	-62.97	115.2	-144.6	509.0	477.7	31.32	16.249	
7,300.0	7,200.9	7,125.3	6,955.6	17.4	17.5	-59.90	115.0	-87.4	522.8	492.0	30.82	16.966	
7,400.0	7,254.2	7,188.9	6,977.7	17.4	17.9	-57.62	114.7	-27.8	534.1	503.4	30.64	17.431	
7,500.0	7,290.4	7,250.0	6,991.9	17.8	18.5	-56.14	114.4	31.6	542.0	511.0	31.04	17.462	
7,600.0	7,308.2	7,314.7	6,999.3	18.6	19.2	-55.40	114.2	95.8	546.1	513.9	32.21	16.955	
7,700.0	7,310.0	7,397.9	7,000.0	20.0	20.2	-55.34	113.9	179.0	546.9	512.7	34.21	15.985	
7,800.0	7,310.0	7,497.9	7,000.0	21.6	21.8	-55.38	113.5	279.0	547.4	510.5	36.84	14.856	
7,900.0	7,310.0	7,597.9	7,000.0	23.4	23.6	-55.41	113.2	379.0	547.9	508.0	39.86	13.744	
8,000.0	7,310.0	7,697.9	7,000.0	25.5	25.5	-55.45	112.9	479.0	548.3	505.1	43.18	12.698	
8,100.0	7,310.0	7,797.9	7,000.0	27.7	27.6	-55.48	112.6	579.0	548.8	502.1	46.75	11.740	
8,200.0	7,310.0	7,897.9	7,000.0	29.9	29.9	-55.51	112.2	679.0	549.3	498.8	50.50	10.876	
8,300.0	7,310.0	7,997.9	7,000.0	32.3	32.2	-55.55	111.9	779.0	549.8	495.3	54.41	10.104	
8,400.0	7,310.0	8,097.9	7,000.0	34.7	34.6	-55.58	111.6	879.0	550.2	491.8	58.44	9.415	
8,500.0	7,310.0	8,197.9	7,000.0	37.2	37.0	-55.62	111.3	979.0	550.7	488.1	62.58	8.801	
8,600.0	7,310.0	8,297.9	7,000.0	39.7	39.5	-55.65	110.9	1,079.0	551.2	484.4	66.79	8.252	
8,700.0	7,310.0	8,397.9	7,000.0	42.3	42.1	-55.68	110.6	1,179.0	551.7	480.6	71.07	7.762	
8,800.0	7,310.0	8,497.9	7,000.0	44.9	44.6	-55.72	110.3	1,279.0	552.1	476.7	75.41	7.322	
8,900.0	7,310.0	8,597.9	7,000.0	47.5	47.2	-55.75	110.0	1,379.0	552.6	472.8	79.80	6.925	
9,000.0	7,310.0	8,697.9	7,000.0	50.1	49.8	-55.79	109.6	1,479.0	553.1	468.9	84.23	6.566	
9,100.0	7,310.0	8,797.9	7,000.0	52.8	52.5	-55.82	109.3	1,579.0	553.6	464.9	88.70	6.241	
9,200.0	7,310.0	8,897.9	7,000.0	55.4	55.1	-55.85	109.0	1,679.0	554.0	460.9	93.19	5.945	
9,300.0	7,310.0	8,997.9	7,000.0	58.1	57.8	-55.89	108.7	1,779.0	554.5	456.8	97.72	5.675	
9,400.0	7,310.0	9,097.9	7,000.0	60.8	60.5	-55.92	108.3	1,879.0	555.0	452.7	102.26	5.427	
9,500.0	7,310.0	9,197.9	7,000.0	63.5	63.2	-55.95	108.0	1,979.0	555.5	448.7	106.83	5.200	
9,600.0	7,310.0	9,297.9	7,000.0	66.2	65.9	-55.99	107.7	2,079.0	556.0	444.5	111.42	4.990	
9,700.0	7,310.0	9,397.9	7,000.0	68.9	68.6	-56.02	107.4	2,179.0	556.4	440.4	116.03	4.796	
9,800.0	7,310.0	9,497.9	7,000.0	71.6	71.3	-56.05	107.0	2,279.0	556.9	436.3	120.65	4.616	
9,900.0	7,310.0	9,597.9	7,000.0	74.4	74.0	-56.09	106.7	2,379.0	557.4	432.1	125.28	4.449	
10,000.0	7,310.0	9,697.9	7,000.0	77.1	76.7	-56.12	106.4	2,479.0	557.9	427.9	129.93	4.294	
10,100.0	7,310.0	9,797.9	7,000.0	79.8	79.5	-56.15	106.0	2,579.0	558.4	423.8	134.60	4.148	

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 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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 5AHZN - 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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	7,310.0	9,897.9	7,000.0	82.6	82.2	-56.18	105.7	2,679.0	558.8	419.6	139.27	4.013	
10,300.0	7,310.0	9,997.9	7,000.0	85.3	85.0	-56.22	105.4	2,779.0	559.3	415.4	143.95	3.885	
10,400.0	7,310.0	10,097.9	7,000.0	88.1	87.7	-56.25	105.1	2,879.0	559.8	411.2	148.64	3.766	
10,500.0	7,310.0	10,197.9	7,000.0	90.8	90.5	-56.28	104.7	2,979.0	560.3	406.9	153.35	3.654	
10,600.0	7,310.0	10,297.9	7,000.0	93.6	93.2	-56.32	104.4	3,079.0	560.8	402.7	158.06	3.548	
10,700.0	7,310.0	10,397.9	7,000.0	96.4	96.0	-56.35	104.1	3,179.0	561.2	398.5	162.77	3.448	
10,800.0	7,310.0	10,497.9	7,000.0	99.1	98.7	-56.38	103.8	3,279.0	561.7	394.2	167.50	3.354	
10,900.0	7,310.0	10,597.9	7,000.0	101.9	101.5	-56.41	103.4	3,379.0	562.2	390.0	172.23	3.264	
11,000.0	7,310.0	10,697.9	7,000.0	104.7	104.3	-56.45	103.1	3,479.0	562.7	385.7	176.97	3.179	
11,100.0	7,310.0	10,797.9	7,000.0	107.4	107.0	-56.48	102.8	3,579.0	563.2	381.4	181.72	3.099	
11,200.0	7,310.0	10,897.9	7,000.0	110.2	109.8	-56.51	102.5	3,679.0	563.6	377.2	186.47	3.023	
11,300.0	7,310.0	10,997.9	7,000.0	113.0	112.6	-56.54	102.1	3,779.0	564.1	372.9	191.23	2.950	
11,400.0	7,310.0	11,097.9	7,000.0	115.7	115.3	-56.58	101.8	3,879.0	564.6	368.6	196.00	2.881	
11,500.0	7,310.0	11,197.9	7,000.0	118.5	118.1	-56.61	101.5	3,979.0	565.1	364.3	200.77	2.815	
11,600.0	7,310.0	11,297.9	7,000.0	121.3	120.9	-56.64	101.2	4,079.0	565.6	360.0	205.55	2.752	
11,700.0	7,310.0	11,397.9	7,000.0	124.1	123.7	-56.67	100.8	4,179.0	566.1	355.7	210.33	2.691	
11,800.0	7,310.0	11,497.9	7,000.0	126.9	126.4	-56.70	100.5	4,279.0	566.5	351.4	215.12	2.634	
11,900.0	7,310.0	11,597.9	7,000.0	129.6	129.2	-56.74	100.2	4,379.0	567.0	347.1	219.91	2.578	
11,998.0	7,310.0	11,695.9	7,000.0	132.4	131.9	-56.77	99.9	4,477.0	567.5	342.9	224.61	2.527 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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	-111.03	-21.5	-55.9	59.9					
100.0	100.0	99.0	99.0	0.1	0.1	-111.03	-21.5	-55.9	59.9	59.7	0.22	267.763		
200.0	200.0	199.0	199.0	0.3	0.3	-111.03	-21.5	-55.9	59.9	59.2	0.67	89.106		
300.0	300.0	299.0	299.0	0.6	0.6	-111.03	-21.5	-55.9	59.9	58.8	1.12	53.392		
400.0	400.0	399.0	399.0	0.8	0.8	-111.03	-21.5	-55.9	59.9	58.3	1.57	38.115		
500.0	500.0	499.0	499.0	1.0	1.0	-111.03	-21.5	-55.9	59.9	57.9	2.02	29.636		
600.0	600.0	599.0	599.0	1.2	1.2	-111.03	-21.5	-55.9	59.9	57.4	2.47	24.243		
700.0	700.0	699.0	699.0	1.5	1.5	-111.03	-21.5	-55.9	59.9	57.0	2.92	20.510		
800.0	800.0	799.0	799.0	1.7	1.7	-111.03	-21.5	-55.9	59.9	56.5	3.37	17.774		
900.0	900.0	899.0	899.0	1.9	1.9	-111.03	-21.5	-55.9	59.9	56.1	3.82	15.681		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	-111.03	-21.5	-55.9	59.9	55.6	4.27	14.030 CC		
1,100.0	1,100.0	1,098.8	1,098.7	2.4	2.4	-109.83	-20.4	-56.5	60.1	55.4	4.72	12.741 ES		
1,200.0	1,200.0	1,198.4	1,198.3	2.6	2.6	-106.23	-17.0	-58.4	60.9	55.7	5.16	11.787		
1,300.0	1,300.0	1,297.7	1,297.4	2.8	2.8	-100.48	-11.4	-61.6	62.7	57.1	5.61	11.163		
1,400.0	1,400.0	1,397.2	1,396.6	3.0	3.0	-93.64	-4.2	-65.7	65.9	59.8	6.07	10.848		
1,500.0	1,500.0	1,496.9	1,495.9	3.3	3.3	-87.45	3.1	-69.8	69.9	63.4	6.53	10.705		
1,600.0	1,600.0	1,596.5	1,595.1	3.5	3.5	48.55	10.4	-73.9	73.6	66.6	6.95	10.592		
1,700.0	1,699.8	1,695.9	1,694.2	3.6	3.8	56.40	17.7	-78.0	76.1	68.7	7.35	10.348		
1,800.0	1,799.5	1,795.0	1,793.0	3.8	4.0	65.84	24.9	-82.1	78.5	70.7	7.77	10.102		
1,900.0	1,898.7	1,893.8	1,891.3	4.1	4.3	76.75	32.1	-86.2	82.0	73.8	8.20	10.000 SF		
2,000.0	1,997.7	1,992.2	1,989.4	4.3	4.5	87.83	39.3	-90.3	88.2	79.6	8.66	10.187		
2,100.0	2,096.6	2,090.6	2,087.5	4.5	4.8	97.21	46.5	-94.4	97.3	88.2	9.13	10.653		
2,200.0	2,195.6	2,189.0	2,185.5	4.8	5.0	104.86	53.7	-98.4	108.6	99.0	9.62	11.288		
2,300.0	2,294.6	2,287.4	2,283.6	5.1	5.3	111.00	60.9	-102.5	121.4	111.3	10.11	12.010		
2,400.0	2,393.5	2,385.8	2,381.6	5.4	5.5	115.94	68.1	-106.6	135.4	124.8	10.60	12.766		
2,500.0	2,492.5	2,484.2	2,479.7	5.7	5.8	119.95	75.3	-110.7	150.1	139.0	11.10	13.526		
2,600.0	2,591.5	2,582.6	2,577.8	6.0	6.1	123.23	82.5	-114.7	165.5	153.9	11.60	14.269		
2,700.0	2,690.5	2,681.0	2,675.8	6.3	6.3	125.94	89.7	-118.8	181.3	169.2	12.10	14.986		
2,800.0	2,789.4	2,779.4	2,773.9	6.6	6.6	128.23	96.9	-122.9	197.4	184.8	12.60	15.670		
2,900.0	2,888.4	2,877.8	2,871.9	6.9	6.8	130.16	104.1	-127.0	213.8	200.7	13.10	16.321		
3,000.0	2,987.4	2,976.2	2,970.0	7.2	7.1	131.82	111.3	-131.0	230.4	216.8	13.61	16.936		
3,100.0	3,086.3	3,074.6	3,068.1	7.6	7.4	133.26	118.5	-135.1	247.2	233.1	14.11	17.518		
3,200.0	3,185.3	3,173.1	3,166.1	7.9	7.6	134.51	125.7	-139.2	264.1	249.5	14.62	18.067		
3,300.0	3,284.3	3,271.5	3,264.2	8.2	7.9	135.62	132.9	-143.2	281.1	266.0	15.12	18.586		
3,400.0	3,383.2	3,369.9	3,362.2	8.5	8.1	136.59	140.1	-147.3	298.2	282.6	15.63	19.075		
3,500.0	3,482.2	3,468.3	3,460.3	8.9	8.4	137.46	147.3	-151.4	315.4	299.2	16.14	19.537		
3,600.0	3,581.2	3,566.7	3,558.4	9.2	8.7	138.24	154.5	-155.5	332.6	315.9	16.65	19.973		
3,700.0	3,680.1	3,665.1	3,656.4	9.5	8.9	138.95	161.7	-159.5	349.9	332.7	17.16	20.386		
3,800.0	3,779.1	3,763.5	3,754.5	9.9	9.2	139.59	168.9	-163.6	367.2	349.5	17.67	20.777		
3,900.0	3,878.1	3,861.9	3,852.5	10.2	9.5	140.17	176.1	-167.7	384.6	366.4	18.19	21.147		
4,000.0	3,977.1	3,960.3	3,950.6	10.6	9.7	140.70	183.3	-171.7	402.0	383.3	18.70	21.498		
4,100.0	4,076.0	4,058.7	4,048.7	10.9	10.0	141.18	190.5	-175.8	419.4	400.2	19.21	21.831		
4,200.0	4,175.0	4,157.1	4,146.7	11.3	10.3	141.63	197.7	-179.9	436.9	417.2	19.73	22.148		
4,300.0	4,274.0	4,255.5	4,244.8	11.6	10.5	142.04	204.9	-184.0	454.4	434.2	20.24	22.449		
4,400.0	4,372.9	4,353.9	4,342.8	11.9	10.8	142.43	212.1	-188.0	471.9	451.2	20.76	22.735		
4,500.0	4,471.9	4,452.3	4,440.9	12.3	11.0	142.78	219.3	-192.1	489.5	468.2	21.27	23.009		
4,600.0	4,570.9	4,550.8	4,538.9	12.6	11.3	143.11	226.5	-196.2	507.0	485.2	21.79	23.269		
4,700.0	4,669.8	4,649.2	4,637.0	13.0	11.6	143.42	233.7	-200.3	524.6	502.3	22.31	23.518		
4,800.0	4,768.8	4,747.6	4,735.1	13.3	11.8	143.71	240.9	-204.3	542.1	519.3	22.82	23.755		
4,900.0	4,867.8	4,846.0	4,833.1	13.7	12.1	143.98	248.1	-208.4	559.7	536.4	23.34	23.983		
5,000.0	4,966.7	4,944.4	4,931.2	14.0	12.4	144.23	255.3	-212.5	577.3	553.5	23.86	24.200		
5,100.0	5,065.7	5,042.8	5,029.2	14.4	12.6	144.47	262.5	-216.5	595.0	570.6	24.37	24.409		

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 12HZC
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12HZC	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 5FD - Wellbore #1 - Plan #1 (1-03-13)												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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,164.8	5,141.3	5,127.5	14.7	12.9	144.79	269.7	-220.6	611.8	586.9	24.91	24.561	
5,300.0	5,264.3	5,240.3	5,226.1	14.9	13.2	144.94	277.0	-224.7	625.8	600.4	25.40	24.636	
5,400.0	5,364.1	5,339.7	5,325.1	15.1	13.4	144.87	284.2	-228.8	637.1	611.2	25.88	24.620	
5,500.0	5,464.0	5,439.2	5,424.3	15.3	13.7	144.59	291.5	-232.9	645.5	619.2	26.33	24.521	
5,600.0	5,564.0	5,538.9	5,523.6	15.4	14.0	14.50	298.8	-237.1	651.7	624.1	27.67	23.558	
5,700.0	5,664.0	5,638.5	5,622.9	15.6	14.2	14.00	306.1	-241.2	657.8	629.8	28.07	23.438	
5,800.0	5,764.0	5,738.2	5,722.2	15.8	14.5	13.50	313.4	-245.3	664.0	635.5	28.47	23.321	
5,900.0	5,864.0	5,837.8	5,821.5	15.9	14.8	13.01	320.7	-249.4	670.1	641.3	28.88	23.207	
6,000.0	5,964.0	5,937.5	5,920.7	16.1	15.1	12.53	328.0	-253.6	676.4	647.1	29.29	23.096	
6,100.0	6,064.0	6,037.1	6,020.0	16.2	15.3	12.06	335.3	-257.7	682.7	653.0	29.70	22.987	
6,200.0	6,164.0	6,136.8	6,119.3	16.4	15.6	11.59	342.6	-261.8	689.0	658.9	30.11	22.880	
6,300.0	6,264.0	6,236.4	6,218.6	16.6	15.9	11.14	349.8	-265.9	695.3	664.8	30.53	22.776	
6,400.0	6,364.0	6,336.0	6,317.9	16.7	16.1	10.69	357.1	-270.1	701.8	670.8	30.95	22.675	
6,500.0	6,464.0	6,435.7	6,417.2	16.9	16.4	10.26	364.4	-274.2	708.2	676.8	31.37	22.576	
6,600.0	6,564.0	6,535.3	6,516.5	17.1	16.7	9.82	371.7	-278.3	714.7	682.9	31.79	22.479	
6,700.0	6,664.0	6,635.0	6,615.8	17.2	16.9	9.40	379.0	-282.4	721.2	689.0	32.22	22.384	
6,800.0	6,764.0	6,734.6	6,715.1	17.4	17.2	8.99	386.3	-286.6	727.8	695.1	32.65	22.291	
6,900.0	6,863.8	6,833.8	6,813.9	17.5	17.5	-81.86	393.6	-290.7	733.6	701.1	32.50	22.574	
7,000.0	6,960.8	6,929.4	6,909.2	17.6	17.7	-83.56	400.5	-294.6	737.5	704.7	32.79	22.491	
7,100.0	7,051.5	7,018.0	6,997.5	17.5	18.0	-86.30	407.0	-298.3	741.2	708.2	33.01	22.451	
7,200.0	7,132.5	7,096.4	7,075.5	17.4	18.2	-89.31	412.8	-301.5	747.6	714.4	33.20	22.515	
7,300.0	7,200.9	7,161.5	7,140.4	17.4	18.4	-91.68	417.5	-304.2	760.1	726.6	33.45	22.726	
7,400.0	7,254.2	7,211.0	7,189.8	17.4	18.5	-92.51	421.2	-306.3	781.4	747.5	33.89	23.058	
7,500.0	7,290.4	7,243.2	7,221.9	17.8	18.6	-91.12	423.5	-307.6	813.1	778.4	34.68	23.448	
7,600.0	7,308.2	7,256.8	7,235.4	18.6	18.6	-87.05	424.5	-308.2	855.0	819.3	35.74	23.926	
7,700.0	7,310.0	7,254.4	7,233.0	20.0	18.6	-84.26	424.3	-308.1	905.4	868.4	36.96	24.494	
7,800.0	7,310.0	7,250.2	7,228.8	21.6	18.6	-83.94	424.0	-307.9	963.4	924.9	38.55	24.990	

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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	69.22	14.2	37.4	40.1					
100.0	100.0	100.0	100.0	0.1	0.1	69.22	14.2	37.4	40.1	39.8	0.22	178.199		
200.0	200.0	200.0	200.0	0.3	0.3	69.22	14.2	37.4	40.1	39.4	0.67	59.400	CC, ES	
300.0	300.0	299.2	299.2	0.6	0.6	68.09	15.3	38.1	41.1	39.9	1.12	36.603		
400.0	400.0	398.2	398.1	0.8	0.8	65.02	18.7	40.0	44.2	42.6	1.57	28.076		
500.0	500.0	497.0	496.7	1.0	1.0	60.79	24.2	43.3	49.7	47.6	2.03	24.463		
600.0	600.0	595.3	594.6	1.2	1.3	56.27	31.9	47.7	57.6	55.2	2.49	23.139		
700.0	700.0	693.2	691.8	1.5	1.5	52.05	41.7	53.4	68.3	65.3	2.96	23.050	SF	
800.0	800.0	790.4	788.1	1.7	1.8	48.41	53.6	60.4	81.6	78.1	3.45	23.667		
900.0	900.0	886.8	883.1	1.9	2.2	45.42	67.4	68.4	97.5	93.6	3.95	24.691		
1,000.0	1,000.0	982.4	976.9	2.1	2.5	43.01	83.2	77.6	116.1	111.6	4.48	25.943		
1,100.0	1,100.0	1,077.0	1,069.3	2.4	2.9	41.07	100.8	87.9	137.2	132.2	5.02	27.314		
1,200.0	1,200.0	1,170.5	1,160.1	2.6	3.4	39.52	120.2	99.1	160.8	155.2	5.60	28.736		
1,300.0	1,300.0	1,263.5	1,249.8	2.8	3.8	38.26	141.3	111.4	186.9	180.7	6.19	30.165		
1,400.0	1,400.0	1,358.9	1,341.6	3.0	4.3	37.24	164.0	124.6	214.1	207.3	6.82	31.389		
1,500.0	1,500.0	1,455.1	1,434.0	3.3	4.8	36.44	186.8	137.9	241.4	234.0	7.46	32.369		
1,600.0	1,600.0	1,550.8	1,526.0	3.5	5.3	165.36	209.6	151.2	270.4	263.2	7.17	37.696		
1,700.0	1,699.8	1,645.4	1,617.0	3.6	5.9	164.93	232.1	164.3	302.6	295.0	7.59	39.866		
1,800.0	1,799.5	1,738.9	1,706.9	3.8	6.4	164.69	254.3	177.2	338.0	330.0	8.00	42.254		
1,900.0	1,898.7	1,831.2	1,795.7	4.1	6.9	164.59	276.2	189.9	376.5	368.1	8.40	44.835		
2,000.0	1,997.7	1,922.7	1,883.6	4.3	7.4	164.74	297.9	202.6	416.9	408.0	8.83	47.190		
2,100.0	2,096.6	2,014.2	1,971.6	4.5	7.9	164.89	319.6	215.2	457.3	448.0	9.28	49.260		
2,200.0	2,195.6	2,105.6	2,059.5	4.8	8.4	165.01	341.4	227.9	497.7	488.0	9.74	51.108		
2,300.0	2,294.6	2,197.1	2,147.4	5.1	8.9	165.12	363.1	240.5	538.1	527.9	10.20	52.765		
2,400.0	2,393.5	2,288.6	2,235.4	5.4	9.4	165.21	384.8	253.2	578.5	567.9	10.66	54.257		
2,500.0	2,492.5	2,380.0	2,323.3	5.7	9.9	165.29	406.5	265.8	619.0	607.8	11.13	55.604		
2,600.0	2,591.5	2,471.5	2,411.3	6.0	10.4	165.36	428.3	278.5	659.4	647.8	11.60	56.826		
2,700.0	2,690.5	2,562.9	2,499.2	6.3	10.9	165.42	450.0	291.1	699.8	687.7	12.08	57.938		
2,800.0	2,789.4	2,654.4	2,587.2	6.6	11.4	165.48	471.7	303.8	740.2	727.7	12.56	58.954		
2,900.0	2,888.4	2,745.9	2,675.1	6.9	11.9	165.53	493.4	316.4	780.7	767.6	13.04	59.884		
3,000.0	2,987.4	2,837.3	2,763.0	7.2	12.4	165.57	515.2	329.1	821.1	807.6	13.52	60.738		
3,100.0	3,086.3	2,928.8	2,851.0	7.6	12.9	165.61	536.9	341.7	861.5	847.5	14.00	61.525		
3,200.0	3,185.3	3,020.3	2,938.9	7.9	13.5	165.65	558.6	354.3	901.9	887.4	14.49	62.253		
3,300.0	3,284.3	3,111.7	3,026.9	8.2	14.0	165.68	580.3	367.0	942.4	927.4	14.98	62.926		
3,400.0	3,383.2	3,203.2	3,114.8	8.5	14.5	165.71	602.1	379.6	982.8	967.3	15.46	63.551		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12H2C
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12H2C	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 @ 4977.0ft (RKB - 13')

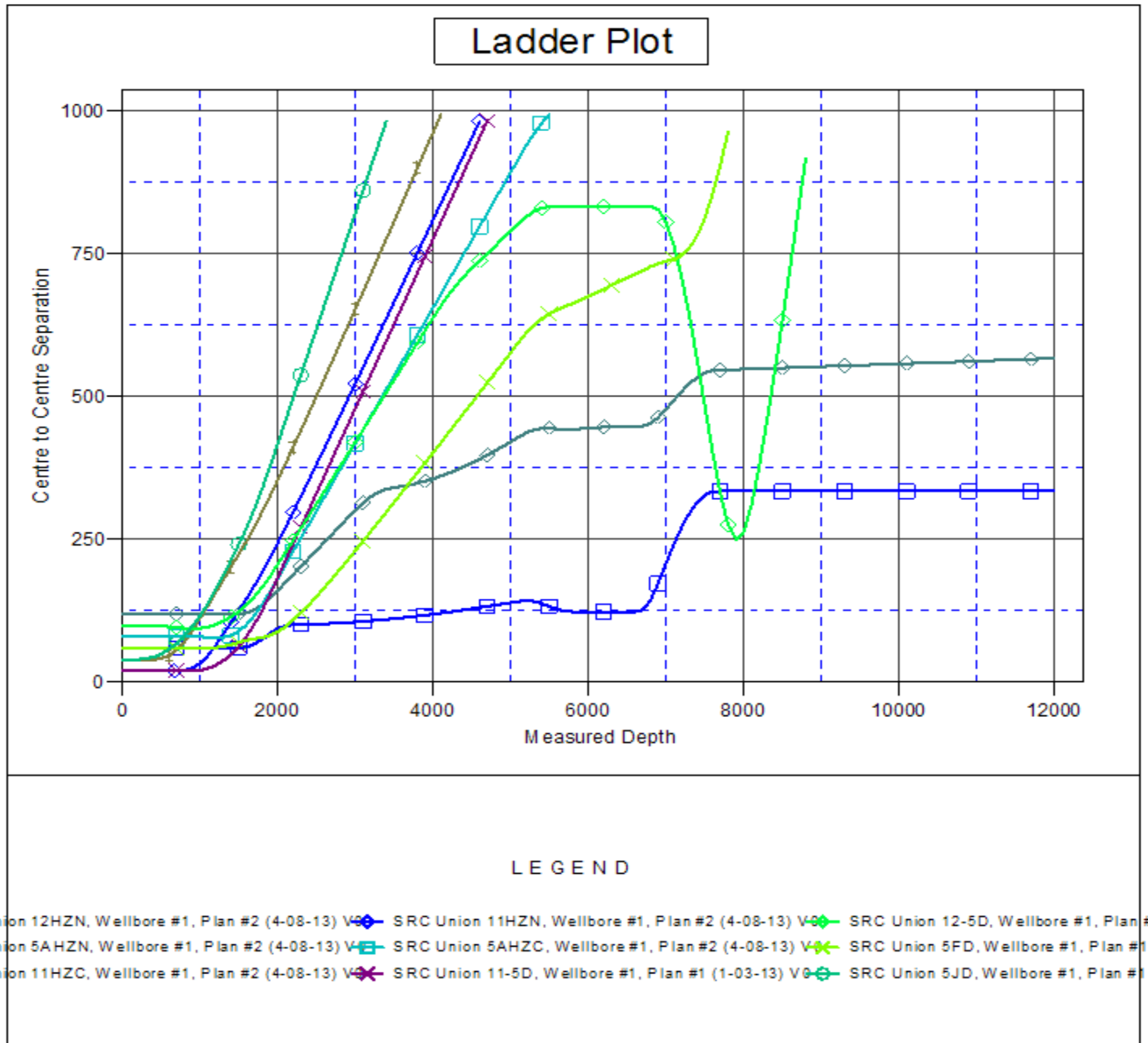
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: SRC Union 12H2C

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.30°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Union 12H2C
Project:	SEC.5-T2N-R68W	TVD Reference:	WELL @ 4977.0ft (RKB - 13')
Reference Site:	SRC Union Pad Sec.5-T2N-R68W	MD Reference:	WELL @ 4977.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Union 12H2C	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 @ 4977.0ft (RKB - 13')
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: SRC Union 12H2C
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.30°

