

Synergy Resources

Well Name: **SRC Kiehn 22-4NHZ**

Surface Location: SRC Kiehn Pad Sec.4-T4N-R68W

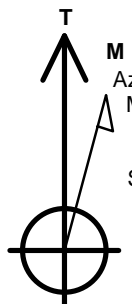
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 5064.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1365557.83	3137796.76	40.335803	-105.005702	
RKB - 13' WELL @ 5077.0ft (RKB - 13')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 201'FSL & 1895'FEL	1.0	0.0	0.0	Point
BHL 470'FNL & 2145'FWL	7000.0	4428.6	-1456.4	Point



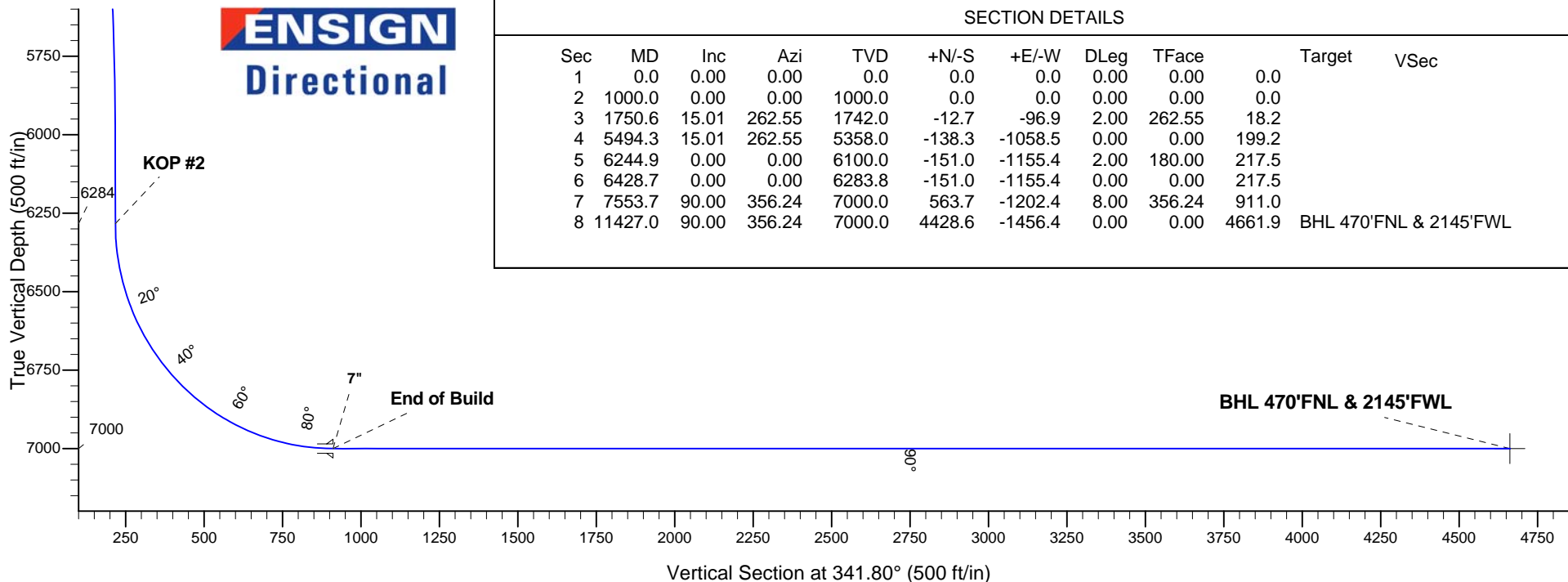
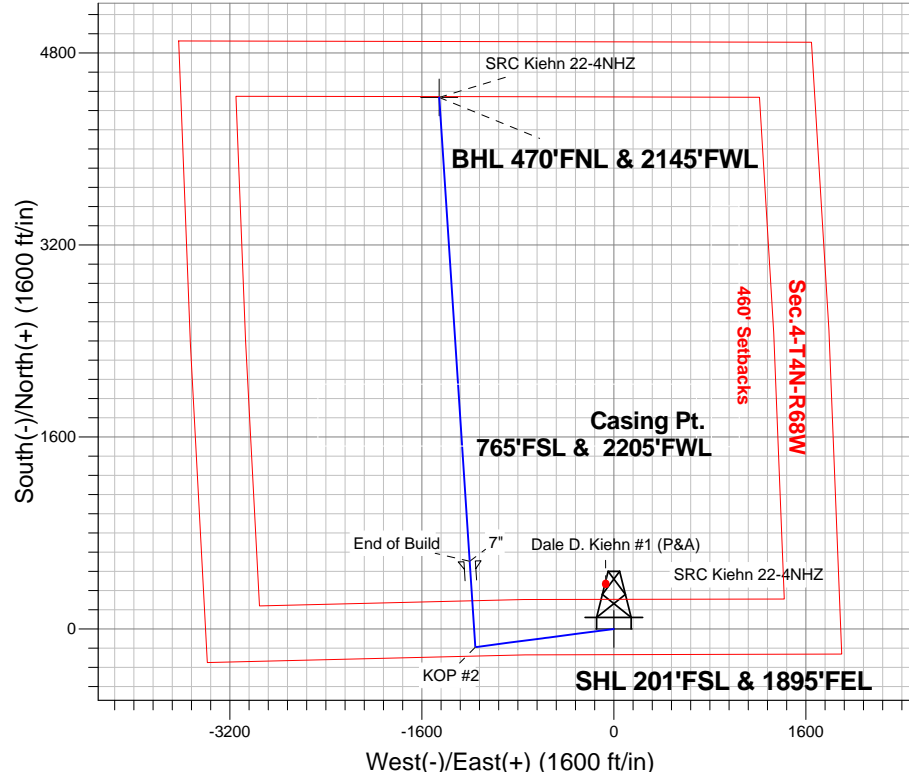
Azimuths to True North
Magnetic North: 8.60°

Magnetic Field
Strength: 52768.9snT
Dip Angle: 66.86°
Date: 4/25/2014
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6283.8	6428.7	KOP #2
7000.0	7553.7	End of Build

SRC Kiehn Pad Sec.4-T4N-R68W
SRC Kiehn 22-4NHZ
Plan #2 (4-25-14)
8:52, April 29 2014



ENSIGN
Directional

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	Target	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1750.6	15.01	262.55	1742.0	-12.7	-96.9	2.00	262.55	18.2	
4	5494.3	15.01	262.55	5358.0	-138.3	-1058.5	0.00	0.00	199.2	
5	6244.9	0.00	0.00	6100.0	-151.0	-1155.4	2.00	180.00	217.5	
6	6428.7	0.00	0.00	6283.8	-151.0	-1155.4	0.00	0.00	217.5	
7	7553.7	90.00	356.24	7000.0	563.7	-1202.4	8.00	356.24	911.0	
8	11427.0	90.00	356.24	7000.0	4428.6	-1456.4	0.00	0.00	4661.9	BHL 470'FNL & 2145'FWL



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn 22-4NHZ

Wellbore #1

Plan: Plan #2 (4-25-14)

Standard Planning Report

29 April, 2014

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,750.6	15.01	262.55	1,742.0	-12.7	-96.9	2.00	2.00	0.00	262.55	
5,494.3	15.01	262.55	5,358.0	-138.3	-1,058.5	0.00	0.00	0.00	0.00	
6,244.9	0.00	0.00	6,100.0	-151.0	-1,155.4	2.00	-2.00	0.00	180.00	
6,428.7	0.00	0.00	6,283.8	-151.0	-1,155.4	0.00	0.00	0.00	0.00	
7,553.7	90.00	356.24	7,000.0	563.7	-1,202.4	8.00	8.00	0.00	356.24	
11,427.0	90.00	356.24	7,000.0	4,428.6	-1,456.4	0.00	0.00	0.00	0.00	BHL 470'FNL & 214'

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 22-4NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-25-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 201'FSL & 1895'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,100.0	2.00	262.55	1,100.0	-0.2	-1.7	0.3	2.00	2.00	0.00
1,200.0	4.00	262.55	1,199.8	-0.9	-6.9	1.3	2.00	2.00	0.00
1,300.0	6.00	262.55	1,299.5	-2.0	-15.6	2.9	2.00	2.00	0.00
1,400.0	8.00	262.55	1,398.7	-3.6	-27.6	5.2	2.00	2.00	0.00
1,500.0	10.00	262.55	1,497.5	-5.6	-43.2	8.1	2.00	2.00	0.00
1,600.0	12.00	262.55	1,595.6	-8.1	-62.1	11.7	2.00	2.00	0.00
1,700.0	14.00	262.55	1,693.1	-11.0	-84.4	15.9	2.00	2.00	0.00
1,750.6	15.01	262.55	1,742.0	-12.7	-96.9	18.2	2.00	2.00	0.00
1,800.0	15.01	262.55	1,789.8	-14.3	-109.6	20.6	0.00	0.00	0.00
1,900.0	15.01	262.55	1,886.3	-17.7	-135.3	25.5	0.00	0.00	0.00
2,000.0	15.01	262.55	1,982.9	-21.0	-161.0	30.3	0.00	0.00	0.00
2,100.0	15.01	262.55	2,079.5	-24.4	-186.7	35.1	0.00	0.00	0.00
2,200.0	15.01	262.55	2,176.1	-27.8	-212.4	40.0	0.00	0.00	0.00
2,300.0	15.01	262.55	2,272.7	-31.1	-238.1	44.8	0.00	0.00	0.00
2,400.0	15.01	262.55	2,369.3	-34.5	-263.7	49.6	0.00	0.00	0.00
2,500.0	15.01	262.55	2,465.9	-37.8	-289.4	54.5	0.00	0.00	0.00
2,600.0	15.01	262.55	2,562.5	-41.2	-315.1	59.3	0.00	0.00	0.00
2,700.0	15.01	262.55	2,659.0	-44.5	-340.8	64.1	0.00	0.00	0.00
2,800.0	15.01	262.55	2,755.6	-47.9	-366.5	69.0	0.00	0.00	0.00
2,900.0	15.01	262.55	2,852.2	-51.3	-392.2	73.8	0.00	0.00	0.00
3,000.0	15.01	262.55	2,948.8	-54.6	-417.8	78.6	0.00	0.00	0.00
3,100.0	15.01	262.55	3,045.4	-58.0	-443.5	83.5	0.00	0.00	0.00
3,200.0	15.01	262.55	3,142.0	-61.3	-469.2	88.3	0.00	0.00	0.00
3,300.0	15.01	262.55	3,238.6	-64.7	-494.9	93.1	0.00	0.00	0.00
3,400.0	15.01	262.55	3,335.2	-68.0	-520.6	98.0	0.00	0.00	0.00
3,500.0	15.01	262.55	3,431.7	-71.4	-546.3	102.8	0.00	0.00	0.00
3,600.0	15.01	262.55	3,528.3	-74.7	-571.9	107.6	0.00	0.00	0.00
3,700.0	15.01	262.55	3,624.9	-78.1	-597.6	112.5	0.00	0.00	0.00
3,800.0	15.01	262.55	3,721.5	-81.5	-623.3	117.3	0.00	0.00	0.00
3,900.0	15.01	262.55	3,818.1	-84.8	-649.0	122.1	0.00	0.00	0.00
4,000.0	15.01	262.55	3,914.7	-88.2	-674.7	127.0	0.00	0.00	0.00
4,100.0	15.01	262.55	4,011.3	-91.5	-700.4	131.8	0.00	0.00	0.00
4,200.0	15.01	262.55	4,107.8	-94.9	-726.0	136.6	0.00	0.00	0.00
4,300.0	15.01	262.55	4,204.4	-98.2	-751.7	141.5	0.00	0.00	0.00
4,400.0	15.01	262.55	4,301.0	-101.6	-777.4	146.3	0.00	0.00	0.00
4,500.0	15.01	262.55	4,397.6	-105.0	-803.1	151.1	0.00	0.00	0.00
4,600.0	15.01	262.55	4,494.2	-108.3	-828.8	156.0	0.00	0.00	0.00
4,700.0	15.01	262.55	4,590.8	-111.7	-854.5	160.8	0.00	0.00	0.00
4,800.0	15.01	262.55	4,687.4	-115.0	-880.1	165.6	0.00	0.00	0.00
4,900.0	15.01	262.55	4,784.0	-118.4	-905.8	170.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 22-4NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-25-14)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,000.0	15.01	262.55	4,880.5	-121.7	-931.5	175.3	0.00	0.00	0.00	
5,100.0	15.01	262.55	4,977.1	-125.1	-957.2	180.1	0.00	0.00	0.00	
5,200.0	15.01	262.55	5,073.7	-128.5	-982.9	185.0	0.00	0.00	0.00	
5,300.0	15.01	262.55	5,170.3	-131.8	-1,008.6	189.8	0.00	0.00	0.00	
5,400.0	15.01	262.55	5,266.9	-135.2	-1,034.2	194.7	0.00	0.00	0.00	
5,494.3	15.01	262.55	5,358.0	-138.3	-1,058.5	199.2	0.00	0.00	0.00	
5,500.0	14.90	262.55	5,363.5	-138.5	-1,059.9	199.5	2.00	-2.00	0.00	
5,600.0	12.90	262.55	5,460.6	-141.6	-1,083.7	204.0	2.00	-2.00	0.00	
5,700.0	10.90	262.55	5,558.4	-144.3	-1,104.2	207.8	2.00	-2.00	0.00	
5,800.0	8.90	262.55	5,656.9	-146.5	-1,121.2	211.0	2.00	-2.00	0.00	
5,900.0	6.90	262.55	5,756.0	-148.3	-1,134.8	213.6	2.00	-2.00	0.00	
6,000.0	4.90	262.55	5,855.4	-149.6	-1,145.0	215.5	2.00	-2.00	0.00	
6,100.0	2.90	262.55	5,955.2	-150.5	-1,151.8	216.8	2.00	-2.00	0.00	
6,200.0	0.90	262.55	6,055.1	-151.0	-1,155.1	217.4	2.00	-2.00	0.00	
6,244.9	0.00	0.00	6,100.0	-151.0	-1,155.4	217.5	2.00	-2.00	0.00	
6,300.0	0.00	0.00	6,155.1	-151.0	-1,155.4	217.5	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,255.1	-151.0	-1,155.4	217.5	0.00	0.00	0.00	
6,428.7	0.00	0.00	6,283.8	-151.0	-1,155.4	217.5	0.00	0.00	0.00	
KOP #2										
6,500.0	5.71	356.24	6,355.0	-147.5	-1,155.6	220.9	8.00	8.00	0.00	
6,600.0	13.71	356.24	6,453.5	-130.7	-1,156.7	237.2	8.00	8.00	0.00	
6,700.0	21.71	356.24	6,548.7	-100.3	-1,158.7	266.6	8.00	8.00	0.00	
6,800.0	29.71	356.24	6,638.7	-57.1	-1,161.6	308.6	8.00	8.00	0.00	
6,900.0	37.71	356.24	6,721.8	-1.8	-1,165.2	362.3	8.00	8.00	0.00	
7,000.0	45.71	356.24	6,796.4	64.6	-1,169.6	426.7	8.00	8.00	0.00	
7,100.0	53.71	356.24	6,861.0	140.6	-1,174.6	500.5	8.00	8.00	0.00	
7,200.0	61.71	356.24	6,914.4	224.9	-1,180.1	582.3	8.00	8.00	0.00	
7,300.0	69.71	356.24	6,955.5	315.8	-1,186.1	670.5	8.00	8.00	0.00	
7,400.0	77.71	356.24	6,983.6	411.5	-1,192.4	763.3	8.00	8.00	0.00	
7,500.0	85.71	356.24	6,998.0	510.1	-1,198.9	859.1	8.00	8.00	0.00	
7,553.7	90.00	356.24	7,000.0	563.7	-1,202.4	911.0	8.00	8.00	0.00	
End of Build - 7"										
7,600.0	90.00	356.24	7,000.0	609.9	-1,205.4	955.9	0.00	0.00	0.00	
7,700.0	90.00	356.24	7,000.0	709.7	-1,212.0	1,052.7	0.00	0.00	0.00	
7,800.0	90.00	356.24	7,000.0	809.4	-1,218.5	1,149.6	0.00	0.00	0.00	
7,900.0	90.00	356.24	7,000.0	909.2	-1,225.1	1,246.4	0.00	0.00	0.00	
8,000.0	90.00	356.24	7,000.0	1,009.0	-1,231.6	1,343.2	0.00	0.00	0.00	
8,100.0	90.00	356.24	7,000.0	1,108.8	-1,238.2	1,440.1	0.00	0.00	0.00	
8,200.0	90.00	356.24	7,000.0	1,208.6	-1,244.8	1,536.9	0.00	0.00	0.00	
8,300.0	90.00	356.24	7,000.0	1,308.4	-1,251.3	1,633.8	0.00	0.00	0.00	
8,400.0	90.00	356.24	7,000.0	1,408.2	-1,257.9	1,730.6	0.00	0.00	0.00	
8,500.0	90.00	356.24	7,000.0	1,507.9	-1,264.4	1,827.4	0.00	0.00	0.00	
8,600.0	90.00	356.24	7,000.0	1,607.7	-1,271.0	1,924.3	0.00	0.00	0.00	
8,700.0	90.00	356.24	7,000.0	1,707.5	-1,277.6	2,021.1	0.00	0.00	0.00	
8,800.0	90.00	356.24	7,000.0	1,807.3	-1,284.1	2,118.0	0.00	0.00	0.00	
8,900.0	90.00	356.24	7,000.0	1,907.1	-1,290.7	2,214.8	0.00	0.00	0.00	
9,000.0	90.00	356.24	7,000.0	2,006.9	-1,297.2	2,311.6	0.00	0.00	0.00	
9,100.0	90.00	356.24	7,000.0	2,106.6	-1,303.8	2,408.5	0.00	0.00	0.00	
9,200.0	90.00	356.24	7,000.0	2,206.4	-1,310.3	2,505.3	0.00	0.00	0.00	
9,300.0	90.00	356.24	7,000.0	2,306.2	-1,316.9	2,602.2	0.00	0.00	0.00	
9,400.0	90.00	356.24	7,000.0	2,406.0	-1,323.5	2,699.0	0.00	0.00	0.00	
9,500.0	90.00	356.24	7,000.0	2,505.8	-1,330.0	2,795.8	0.00	0.00	0.00	
9,600.0	90.00	356.24	7,000.0	2,605.6	-1,336.6	2,892.7	0.00	0.00	0.00	
9,700.0	90.00	356.24	7,000.0	2,705.4	-1,343.1	2,989.5	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 22-4NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-25-14)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,800.0	90.00	356.24	7,000.0	2,805.1	-1,349.7	3,086.4	0.00	0.00	0.00	
9,900.0	90.00	356.24	7,000.0	2,904.9	-1,356.3	3,183.2	0.00	0.00	0.00	
10,000.0	90.00	356.24	7,000.0	3,004.7	-1,362.8	3,280.0	0.00	0.00	0.00	
10,100.0	90.00	356.24	7,000.0	3,104.5	-1,369.4	3,376.9	0.00	0.00	0.00	
10,200.0	90.00	356.24	7,000.0	3,204.3	-1,375.9	3,473.7	0.00	0.00	0.00	
10,300.0	90.00	356.24	7,000.0	3,304.1	-1,382.5	3,570.6	0.00	0.00	0.00	
10,400.0	90.00	356.24	7,000.0	3,403.8	-1,389.0	3,667.4	0.00	0.00	0.00	
10,500.0	90.00	356.24	7,000.0	3,503.6	-1,395.6	3,764.3	0.00	0.00	0.00	
10,600.0	90.00	356.24	7,000.0	3,603.4	-1,402.2	3,861.1	0.00	0.00	0.00	
10,700.0	90.00	356.24	7,000.0	3,703.2	-1,408.7	3,957.9	0.00	0.00	0.00	
10,800.0	90.00	356.24	7,000.0	3,803.0	-1,415.3	4,054.8	0.00	0.00	0.00	
10,900.0	90.00	356.24	7,000.0	3,902.8	-1,421.8	4,151.6	0.00	0.00	0.00	
11,000.0	90.00	356.24	7,000.0	4,002.6	-1,428.4	4,248.5	0.00	0.00	0.00	
11,100.0	90.00	356.24	7,000.0	4,102.3	-1,435.0	4,345.3	0.00	0.00	0.00	
11,200.0	90.00	356.24	7,000.0	4,202.1	-1,441.5	4,442.1	0.00	0.00	0.00	
11,300.0	90.00	356.24	7,000.0	4,301.9	-1,448.1	4,539.0	0.00	0.00	0.00	
11,400.0	90.00	356.24	7,000.0	4,401.7	-1,454.6	4,635.8	0.00	0.00	0.00	
11,427.0	90.00	356.24	7,000.0	4,428.6	-1,456.4	4,661.9	0.00	0.00	0.00	
BHL 470'FNL & 2145'FWL										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,553.7	7,000.0	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.0	1,000.0	0.0	0.0	KOP #1	
6,428.7	6,283.8	-151.0	-1,155.4	KOP #2	
7,553.7	7,000.0	563.7	-1,202.4	End of Build	



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn 22-4NHZ

Wellbore #1

Plan #2 (4-25-14)

Anticollision Report

29 April, 2014

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (4-25-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 4/29/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,426.9	Plan #2 (4-25-14) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SRC Kiehn (Existing) Pad Sec.4-T4N-R68W						
Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1	1,328.9	4,001.2	384.9	302.1	4.645	CC
Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1	1,600.0	4,268.6	387.4	298.5	4.356	ES
Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1	2,000.0	4,655.9	410.8	312.9	4.194	SF
SRC Kiehn Pad Sec.4-T4N-R68W						
SRC Kiehn 21-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	800.0	800.0	22.6	19.2	6.701	CC, ES
SRC Kiehn 21-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,460.5	219.7	40.7	1.227	Level 2, SF
SRC Kiehn 21-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	600.0	600.0	45.2	42.7	18.272	CC, ES
SRC Kiehn 21-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,497.2	439.7	260.6	2.455	SF
SRC Kiehn 22-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	1,000.0	1,000.0	22.3	18.0	5.223	CC, ES
SRC Kiehn 22-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,384.9	220.5	41.9	1.235	Level 2, SF
SRC Kiehn 31-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	1,000.0	1,000.0	67.5	63.2	15.800	CC, ES
SRC Kiehn 31-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,319.7	661.2	483.2	3.714	SF
SRC Kiehn A-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	400.0	400.0	67.5	65.9	42.890	CC, ES
SRC Kiehn A-4CHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,537.9	659.7	480.5	3.681	SF
SRC Kiehn A-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	200.0	200.0	87.6	86.9	129.841	CC, ES
SRC Kiehn A-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,582.5	879.3	700.0	4.904	SF
SRC Kiehn N-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	1,000.0	1,000.0	44.9	40.6	10.512	CC, ES
SRC Kiehn N-4NHZ - Wellbore #1 - Plan #2 (4-25-14)	11,427.8	11,349.0	441.0	262.7	2.473	SF

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 7790-UNKNOWN												Offset Well Error:	0.0 ft
SRC Kiehn (Existing) Pad Sec.4-T4N-R68W - Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1													
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
0.0	0.0	2,673.0	2,673.0	0.0	53.5	-10.25	379.2	-68.6	385.4	331.9	53.46	7.209	
100.0	100.0	2,773.0	2,773.0	0.1	55.5	-10.25	379.2	-68.6	385.4	329.8	55.57	6.935	
200.0	200.0	2,873.0	2,873.0	0.3	57.5	-10.25	379.2	-68.6	385.4	327.6	57.80	6.668	
300.0	300.0	2,973.0	2,973.0	0.6	59.5	-10.25	379.2	-68.6	385.4	325.4	60.02	6.421	
400.0	400.0	3,073.0	3,073.0	0.8	61.5	-10.25	379.2	-68.6	385.4	323.1	62.25	6.191	
500.0	500.0	3,173.0	3,173.0	1.0	63.5	-10.25	379.2	-68.6	385.4	320.9	64.47	5.978	
600.0	600.0	3,273.0	3,273.0	1.2	65.5	-10.25	379.2	-68.6	385.4	318.7	66.70	5.778	
700.0	700.0	3,373.0	3,373.0	1.5	67.5	-10.25	379.2	-68.6	385.4	316.5	68.92	5.592	
800.0	800.0	3,473.0	3,473.0	1.7	69.5	-10.25	379.2	-68.6	385.4	314.2	71.15	5.417	

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

Offset Design													Offset Site Error:		0.0 ft
Survey Program: 7790-UNKNOWN													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
900.0	900.0	3,573.0	3,573.0	1.9	71.5	-10.25	379.2	-68.6	385.4	312.0	73.37	5.253			
1,000.0	1,000.0	3,673.0	3,673.0	2.1	73.5	-10.25	379.2	-68.6	385.4	309.8	75.60	5.098			
1,100.0	1,100.0	3,773.0	3,773.0	2.3	75.5	87.46	379.2	-68.6	385.3	307.5	77.80	4.952			
1,200.0	1,199.8	3,872.8	3,872.8	2.5	77.5	88.24	379.2	-68.6	385.1	305.1	80.00	4.813			
1,300.0	1,299.5	3,972.5	3,972.5	2.8	79.4	89.53	379.2	-68.6	384.9	302.7	82.21	4.682			
1,328.9	1,328.2	4,001.2	4,001.2	2.8	80.0	90.00	379.2	-68.6	384.9	302.1	82.86	4.645 CC			
1,400.0	1,398.7	4,071.7	4,071.7	3.0	81.4	91.33	379.2	-68.6	385.0	300.6	84.44	4.560			
1,500.0	1,497.5	4,170.5	4,170.5	3.3	83.4	93.61	379.2	-68.6	385.7	299.0	86.68	4.450			
1,600.0	1,595.6	4,268.6	4,268.6	3.6	85.4	96.34	379.2	-68.6	387.4	298.5	88.94	4.356 ES			
1,700.0	1,693.1	4,366.1	4,366.1	4.0	87.3	99.48	379.2	-68.6	390.6	299.4	91.20	4.283			
1,800.0	1,789.8	4,462.8	4,462.8	4.4	89.3	102.96	379.2	-68.6	395.7	302.2	93.45	4.234			
1,900.0	1,886.3	4,559.3	4,559.3	4.8	91.2	106.44	379.2	-68.6	402.5	306.8	95.71	4.205			
2,000.0	1,982.9	4,655.9	4,655.9	5.3	93.1	109.80	379.2	-68.6	410.8	312.9	97.95	4.194 SF			
2,100.0	2,079.5	4,752.5	4,752.5	5.8	95.1	113.03	379.2	-68.6	420.6	320.4	100.17	4.198			
2,200.0	2,176.1	4,849.1	4,849.1	6.3	97.0	116.11	379.2	-68.6	431.6	329.3	102.37	4.217			
2,300.0	2,272.7	4,945.7	4,945.7	6.8	98.9	119.03	379.2	-68.6	444.0	339.4	104.55	4.247			
2,400.0	2,369.3	5,042.3	5,042.3	7.3	100.8	121.80	379.2	-68.6	457.4	350.7	106.70	4.287			
2,500.0	2,465.9	5,138.9	5,138.9	7.9	102.8	124.41	379.2	-68.6	471.9	363.1	108.84	4.336			
2,600.0	2,562.5	5,235.5	5,235.5	8.4	104.7	126.87	379.2	-68.6	487.4	376.4	110.97	4.392			
2,700.0	2,659.0	5,332.0	5,332.0	8.9	106.6	129.18	379.2	-68.6	503.7	390.6	113.08	4.454			
2,800.0	2,755.6	5,428.6	5,428.6	9.5	108.6	131.35	379.2	-68.6	520.7	405.6	115.18	4.521			
2,900.0	2,852.2	5,525.2	5,525.2	10.0	110.5	133.38	379.2	-68.6	538.5	421.3	117.27	4.592			
3,000.0	2,948.8	5,621.8	5,621.8	10.5	112.4	135.29	379.2	-68.6	556.9	437.6	119.36	4.666			
3,100.0	3,045.4	5,718.4	5,718.4	11.1	114.4	137.07	379.2	-68.6	575.9	454.5	121.44	4.743			
3,200.0	3,142.0	5,815.0	5,815.0	11.6	116.3	138.74	379.2	-68.6	595.5	471.9	123.52	4.821			
3,300.0	3,238.6	5,911.6	5,911.6	12.2	118.2	140.31	379.2	-68.6	615.5	489.9	125.59	4.900			
3,400.0	3,335.2	6,008.2	6,008.2	12.7	120.2	141.78	379.2	-68.6	635.9	508.2	127.67	4.981			
3,500.0	3,431.7	6,104.7	6,104.7	13.3	122.1	143.17	379.2	-68.6	656.7	526.9	129.74	5.061			
3,600.0	3,528.3	6,201.3	6,201.3	13.8	124.0	144.46	379.2	-68.6	677.8	546.0	131.82	5.142			
3,700.0	3,624.9	6,297.9	6,297.9	14.4	126.0	145.68	379.2	-68.6	699.3	565.4	133.89	5.223			
3,800.0	3,721.5	6,394.5	6,394.5	14.9	127.9	146.83	379.2	-68.6	721.1	585.1	135.96	5.303			
3,900.0	3,818.1	6,491.1	6,491.1	15.5	129.8	147.91	379.2	-68.6	743.1	605.1	138.04	5.383			
4,000.0	3,914.7	6,587.7	6,587.7	16.0	131.8	148.94	379.2	-68.6	765.4	625.3	140.12	5.462			
4,100.0	4,011.3	6,684.3	6,684.3	16.6	133.7	149.90	379.2	-68.6	787.9	645.7	142.20	5.541			
4,200.0	4,107.8	6,780.8	6,780.8	17.1	135.6	150.81	379.2	-68.6	810.6	666.3	144.28	5.618			
4,300.0	4,204.4	6,877.4	6,877.4	17.7	137.5	151.67	379.2	-68.6	833.5	687.1	146.36	5.694			
4,400.0	4,301.0	6,974.0	6,974.0	18.2	139.5	152.49	379.2	-68.6	856.5	708.1	148.45	5.770			
4,500.0	4,397.6	7,070.6	7,070.6	18.8	141.4	153.26	379.2	-68.6	879.7	729.2	150.54	5.844			
4,600.0	4,494.2	7,167.2	7,167.2	19.4	143.3	154.00	379.2	-68.6	903.1	750.5	152.63	5.917			
4,700.0	4,590.8	7,263.8	7,263.8	19.9	145.3	154.69	379.2	-68.6	926.6	771.9	154.72	5.989			
4,800.0	4,687.4	7,360.4	7,360.4	20.5	147.2	155.36	379.2	-68.6	950.2	793.4	156.81	6.060			
4,900.0	4,784.0	7,457.0	7,457.0	21.0	149.1	155.99	379.2	-68.6	974.0	815.0	158.91	6.129			
5,000.0	4,880.5	7,553.5	7,553.5	21.6	151.1	156.59	379.2	-68.6	997.8	836.8	161.01	6.197			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4CHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-91.85	-0.7	-22.6	22.6					
100.0	100.0	100.0	100.0	0.1	0.1	-91.85	-0.7	-22.6	22.6	22.4	0.22	100.520		
200.0	200.0	200.0	200.0	0.3	0.3	-91.85	-0.7	-22.6	22.6	21.9	0.67	33.507		
300.0	300.0	300.0	300.0	0.6	0.6	-91.85	-0.7	-22.6	22.6	21.5	1.12	20.104		
400.0	400.0	400.0	400.0	0.8	0.8	-91.85	-0.7	-22.6	22.6	21.0	1.57	14.360		
500.0	500.0	500.0	500.0	1.0	1.0	-91.85	-0.7	-22.6	22.6	20.6	2.02	11.169		
600.0	600.0	600.0	600.0	1.2	1.2	-91.85	-0.7	-22.6	22.6	20.1	2.47	9.138		
700.0	700.0	700.0	700.0	1.5	1.5	-91.85	-0.7	-22.6	22.6	19.7	2.92	7.732		
800.0	800.0	800.0	800.0	1.7	1.7	-91.85	-0.7	-22.6	22.6	19.2	3.37	6.701 CC, ES		
900.0	900.0	899.2	899.2	1.9	1.9	-92.17	-0.9	-24.3	24.3	20.5	3.81	6.391		
1,000.0	1,000.0	998.1	998.0	2.1	2.1	-92.90	-1.5	-29.4	29.5	25.3	4.23	6.969		
1,100.0	1,100.0	1,096.8	1,096.2	2.3	2.3	3.94	-2.4	-37.8	36.4	31.7	4.64	7.840		
1,200.0	1,199.8	1,195.2	1,193.9	2.5	2.6	3.61	-3.7	-49.6	43.2	38.2	5.04	8.575		
1,300.0	1,299.5	1,293.3	1,290.9	2.8	2.8	3.45	-5.4	-64.7	50.0	44.5	5.44	9.181		
1,400.0	1,398.7	1,391.3	1,387.1	3.0	3.2	3.39	-7.5	-83.0	56.7	50.8	5.86	9.682		
1,500.0	1,497.5	1,489.0	1,482.4	3.3	3.5	3.40	-9.9	-104.5	63.3	57.1	6.28	10.091		
1,600.0	1,595.6	1,586.5	1,576.7	3.6	4.0	3.47	-12.6	-129.2	69.9	63.2	6.71	10.420		
1,700.0	1,693.1	1,684.7	1,670.8	4.0	4.4	3.58	-15.7	-157.1	76.2	69.0	7.15	10.650		
1,800.0	1,789.8	1,784.6	1,766.3	4.4	5.0	3.79	-19.0	-186.2	80.2	72.6	7.64	10.501		
1,900.0	1,886.3	1,884.5	1,861.8	4.8	5.5	4.01	-22.2	-215.3	83.8	75.6	8.16	10.270		
2,000.0	1,982.9	1,984.5	1,957.4	5.3	6.1	4.20	-25.5	-244.4	87.3	78.6	8.69	10.052		
2,100.0	2,079.5	2,084.4	2,052.9	5.8	6.7	4.39	-28.7	-273.5	90.9	81.7	9.23	9.849		
2,200.0	2,176.1	2,184.4	2,148.5	6.3	7.3	4.56	-32.0	-302.6	94.4	84.7	9.78	9.661		
2,300.0	2,272.7	2,284.3	2,244.0	6.8	7.9	4.71	-35.2	-331.7	98.0	87.7	10.33	9.486		
2,400.0	2,369.3	2,384.2	2,339.6	7.3	8.5	4.86	-38.5	-360.8	101.6	90.7	10.89	9.325		
2,500.0	2,465.9	2,484.2	2,435.1	7.9	9.1	5.00	-41.7	-389.9	105.1	93.7	11.46	9.175		
2,600.0	2,562.5	2,584.1	2,530.7	8.4	9.7	5.12	-45.0	-419.0	108.7	96.7	12.03	9.036		
2,700.0	2,659.0	2,684.0	2,626.2	8.9	10.3	5.24	-48.2	-448.1	112.3	99.7	12.61	8.906		
2,800.0	2,755.6	2,784.0	2,721.8	9.5	10.9	5.35	-51.5	-477.2	115.8	102.7	13.18	8.786		
2,900.0	2,852.2	2,883.9	2,817.3	10.0	11.5	5.46	-54.7	-506.3	119.4	105.6	13.77	8.674		
3,000.0	2,948.8	2,983.8	2,912.9	10.5	12.1	5.56	-58.0	-535.4	123.0	108.6	14.35	8.569		
3,100.0	3,045.4	3,083.8	3,008.4	11.1	12.8	5.65	-61.2	-564.5	126.5	111.6	14.94	8.471		
3,200.0	3,142.0	3,183.7	3,104.0	11.6	13.4	5.74	-64.5	-593.6	130.1	114.6	15.53	8.380		
3,300.0	3,238.6	3,283.6	3,199.5	12.2	14.0	5.82	-67.7	-622.7	133.7	117.6	16.12	8.294		
3,400.0	3,335.2	3,383.6	3,295.1	12.7	14.6	5.90	-71.0	-651.8	137.2	120.5	16.71	8.213		
3,500.0	3,431.7	3,483.5	3,390.6	13.3	15.2	5.98	-74.2	-680.9	140.8	123.5	17.30	8.137		
3,600.0	3,528.3	3,583.5	3,486.2	13.8	15.9	6.05	-77.5	-710.0	144.4	126.5	17.90	8.066		
3,700.0	3,624.9	3,683.4	3,581.7	14.4	16.5	6.12	-80.7	-739.1	147.9	129.5	18.50	7.998		
3,800.0	3,721.5	3,783.3	3,677.3	14.9	17.1	6.18	-84.0	-768.2	151.5	132.4	19.10	7.935		
3,900.0	3,818.1	3,883.3	3,772.8	15.5	17.7	6.24	-87.2	-797.3	155.1	135.4	19.70	7.874		
4,000.0	3,914.7	3,983.2	3,868.4	16.0	18.4	6.30	-90.5	-826.4	158.7	138.4	20.30	7.817		
4,100.0	4,011.3	4,083.1	3,963.9	16.6	19.0	6.36	-93.7	-855.5	162.2	141.3	20.90	7.763		
4,200.0	4,107.8	4,183.1	4,059.5	17.1	19.6	6.41	-96.9	-884.6	165.8	144.3	21.50	7.711		
4,300.0	4,204.4	4,283.0	4,155.0	17.7	20.2	6.46	-100.2	-913.7	169.4	147.3	22.10	7.662		
4,400.0	4,301.0	4,382.9	4,250.6	18.2	20.9	6.51	-103.4	-942.8	172.9	150.2	22.71	7.616		
4,500.0	4,397.6	4,482.9	4,346.1	18.8	21.5	6.56	-106.7	-971.9	176.5	153.2	23.31	7.571		
4,600.0	4,494.2	4,582.8	4,441.7	19.4	22.1	6.61	-109.9	-1,001.0	180.1	156.2	23.92	7.529		
4,700.0	4,590.8	4,682.8	4,537.2	19.9	22.7	6.65	-113.2	-1,030.1	183.6	159.1	24.52	7.488		
4,800.0	4,687.4	4,782.7	4,632.8	20.5	23.4	6.69	-116.4	-1,059.2	187.2	162.1	25.13	7.450		
4,900.0	4,784.0	4,882.6	4,728.3	21.0	24.0	6.73	-119.7	-1,088.3	190.8	165.0	25.74	7.412		
5,000.0	4,880.5	4,982.6	4,823.9	21.6	24.6	6.77	-122.9	-1,117.4	194.4	168.0	26.35	7.377		
5,100.0	4,977.1	5,082.5	4,919.4	22.1	25.2	6.81	-126.2	-1,146.5	197.9	171.0	26.95	7.343		

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

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4CHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,200.0	5,073.7	5,182.4	5,015.0	22.7	25.9	6.85	-129.4	-1,175.6	201.5	173.9	27.56	7.310		
5,300.0	5,170.3	5,282.4	5,110.5	23.3	26.5	6.88	-132.7	-1,204.7	205.1	176.9	28.17	7.279		
5,400.0	5,266.9	5,382.3	5,206.1	23.8	27.1	6.92	-135.9	-1,233.8	208.6	179.9	28.78	7.249		
5,500.0	5,363.5	5,485.7	5,305.0	24.4	27.7	6.96	-139.2	-1,263.6	211.9	182.5	29.39	7.209		
5,600.0	5,460.6	5,593.6	5,409.3	24.8	28.2	7.04	-142.4	-1,291.4	213.9	184.0	29.93	7.147		
5,700.0	5,558.4	5,701.7	5,514.6	25.1	28.6	7.10	-145.0	-1,315.3	215.6	185.2	30.40	7.094		
5,800.0	5,656.9	5,809.8	5,620.8	25.4	29.0	7.15	-147.3	-1,335.3	217.1	186.3	30.80	7.047		
5,900.0	5,756.0	5,917.9	5,727.8	25.7	29.3	7.19	-149.0	-1,351.2	218.2	187.1	31.15	7.006		
6,000.0	5,855.4	6,026.1	5,835.3	25.9	29.5	7.22	-150.4	-1,363.2	219.1	187.7	31.43	6.971		
6,100.0	5,955.2	6,134.4	5,943.2	26.1	29.7	7.25	-151.3	-1,371.1	219.7	188.0	31.65	6.941		
6,200.0	6,055.1	6,242.6	6,051.4	26.2	29.8	7.26	-151.7	-1,375.0	220.0	188.1	31.81	6.915		
6,300.0	6,155.1	6,346.3	6,155.1	26.3	29.9	-90.19	-151.7	-1,375.4	220.0	187.2	32.74	6.719		
6,400.0	6,255.1	6,446.3	6,255.1	26.4	30.0	-90.19	-151.7	-1,375.4	220.0	186.9	33.07	6.653		
6,500.0	6,355.0	6,545.0	6,353.7	26.5	30.1	-86.45	-148.3	-1,375.6	220.0	187.3	32.72	6.723		
6,600.0	6,453.5	6,643.2	6,450.4	26.6	30.2	-86.53	-132.1	-1,376.7	220.0	187.0	33.00	6.666		
6,700.0	6,548.7	6,741.4	6,544.0	26.7	30.3	-86.68	-102.9	-1,378.6	219.9	186.7	33.22	6.621		
6,800.0	6,638.7	6,839.7	6,632.9	26.8	30.4	-86.89	-61.1	-1,381.3	219.9	186.4	33.44	6.575		
6,900.0	6,721.8	6,938.1	6,715.3	26.9	30.5	-87.16	-7.5	-1,384.9	219.8	186.1	33.76	6.512		
7,000.0	6,796.4	7,036.7	6,789.6	27.0	30.6	-87.49	57.0	-1,389.1	219.8	185.5	34.26	6.416		
7,100.0	6,861.0	7,135.4	6,854.5	27.2	30.7	-87.86	131.2	-1,394.0	219.7	184.7	35.01	6.277		
7,200.0	6,914.4	7,234.4	6,908.7	27.5	30.9	-88.28	213.7	-1,399.4	219.7	183.6	36.08	6.089		
7,300.0	6,955.5	7,333.6	6,951.0	27.8	31.2	-88.73	303.1	-1,405.3	219.6	182.1	37.49	5.858		
7,400.0	6,983.6	7,433.0	6,980.6	28.2	31.6	-89.21	397.8	-1,411.5	219.6	180.4	39.22	5.599		
7,500.0	6,998.0	7,532.7	6,996.8	28.8	32.1	-89.70	495.8	-1,418.0	219.6	178.4	41.22	5.326		
7,533.6	7,000.1	7,566.2	6,999.2	29.0	32.3	-89.77	529.2	-1,420.2	219.6	177.6	41.97	5.232		
7,600.0	7,000.0	7,632.6	7,000.0	29.5	32.7	-90.00	595.5	-1,424.5	219.6	176.1	43.47	5.052		
7,700.0	7,000.0	7,732.6	7,000.0	30.3	33.4	-90.00	695.2	-1,431.1	219.6	173.6	45.95	4.779		
7,800.0	7,000.0	7,832.6	7,000.0	31.2	34.2	-90.00	795.0	-1,437.6	219.6	171.0	48.61	4.517		
7,900.0	7,000.0	7,932.6	7,000.0	32.2	35.1	-90.00	894.8	-1,444.2	219.6	168.2	51.44	4.269		
8,000.0	7,000.0	8,032.6	7,000.0	33.3	36.1	-90.00	994.6	-1,450.8	219.6	165.2	54.39	4.037		
8,100.0	7,000.0	8,132.6	7,000.0	34.5	37.2	-90.00	1,094.4	-1,457.3	219.6	162.1	57.46	3.821		
8,200.0	7,000.0	8,232.6	7,000.0	35.8	38.3	-90.00	1,194.2	-1,463.9	219.6	159.0	60.63	3.622		
8,300.0	7,000.0	8,332.6	7,000.0	37.1	39.5	-90.00	1,294.0	-1,470.4	219.6	155.7	63.87	3.438		
8,400.0	7,000.0	8,432.6	7,000.0	38.5	40.8	-90.00	1,393.7	-1,477.0	219.6	152.4	67.19	3.269		
8,500.0	7,000.0	8,532.6	7,000.0	40.0	42.2	-90.00	1,493.5	-1,483.6	219.6	149.0	70.56	3.112		
8,600.0	7,000.0	8,632.6	7,000.0	41.5	43.6	-90.00	1,593.3	-1,490.1	219.6	145.6	73.99	2.968		
8,700.0	7,000.0	8,732.6	7,000.0	43.0	45.0	-90.00	1,693.1	-1,496.7	219.6	142.2	77.46	2.835		
8,800.0	7,000.0	8,832.6	7,000.0	44.6	46.5	-90.00	1,792.9	-1,503.3	219.6	138.7	80.97	2.712		
8,900.0	7,000.0	8,932.6	7,000.0	46.2	48.1	-90.00	1,892.7	-1,509.8	219.6	135.1	84.51	2.599		
9,000.0	7,000.0	9,032.6	7,000.0	47.8	49.6	-90.00	1,992.4	-1,516.4	219.6	131.5	88.08	2.493		
9,100.0	7,000.0	9,132.6	7,000.0	49.5	51.2	-90.00	2,092.2	-1,522.9	219.6	127.9	91.68	2.396		
9,200.0	7,000.0	9,232.6	7,000.0	51.2	52.8	-90.00	2,192.0	-1,529.5	219.6	124.3	95.30	2.305		
9,300.0	7,000.0	9,332.6	7,000.0	52.9	54.4	-90.00	2,291.8	-1,536.1	219.6	120.7	98.95	2.220		
9,400.0	7,000.0	9,432.6	7,000.0	54.6	56.1	-90.00	2,391.6	-1,542.6	219.6	117.0	102.61	2.141		
9,500.0	7,000.0	9,532.6	7,000.0	56.3	57.8	-90.00	2,491.4	-1,549.2	219.6	113.4	106.29	2.067		
9,600.0	7,000.0	9,632.6	7,000.0	58.1	59.5	-90.00	2,591.2	-1,555.8	219.6	109.7	109.98	1.997		
9,700.0	7,000.0	9,732.6	7,000.0	59.8	61.2	-90.00	2,690.9	-1,562.3	219.6	106.0	113.69	1.932		
9,800.0	7,000.0	9,832.6	7,000.0	61.6	62.9	-90.00	2,790.7	-1,568.9	219.7	102.2	117.41	1.871		
9,900.0	7,000.0	9,932.6	7,000.0	63.4	64.7	-90.00	2,890.5	-1,575.4	219.7	98.5	121.14	1.813		
10,000.0	7,000.0	10,032.6	7,000.0	65.2	66.4	-90.00	2,990.3	-1,582.0	219.7	94.8	124.88	1.759		
10,100.0	7,000.0	10,132.6	7,000.0	67.0	68.2	-90.00	3,090.1	-1,588.6	219.7	91.0	128.63	1.708		
10,200.0	7,000.0	10,232.6	7,000.0	68.8	69.9	-90.00	3,189.9	-1,595.1	219.7	87.3	132.39	1.659		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4CHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,332.6	7,000.0	70.6	71.7	-90.00	3,289.6	-1,601.7	219.7	83.5	136.15	1.613	
10,400.0	7,000.0	10,432.6	7,000.0	72.4	73.5	-90.00	3,389.4	-1,608.2	219.7	79.7	139.93	1.570	
10,500.0	7,000.0	10,532.6	7,000.0	74.2	75.3	-90.00	3,489.2	-1,614.8	219.7	76.0	143.71	1.529	
10,600.0	7,000.0	10,632.6	7,000.0	76.1	77.1	-90.00	3,589.0	-1,621.4	219.7	72.2	147.49	1.489 Level 3	
10,700.0	7,000.0	10,732.6	7,000.0	77.9	78.9	-90.00	3,688.8	-1,627.9	219.7	68.4	151.28	1.452 Level 3	
10,800.0	7,000.0	10,832.6	7,000.0	79.7	80.7	-90.00	3,788.6	-1,634.5	219.7	64.6	155.08	1.417 Level 3	
10,900.0	7,000.0	10,932.6	7,000.0	81.6	82.6	-90.00	3,888.4	-1,641.1	219.7	60.8	158.88	1.383 Level 3	
11,000.0	7,000.0	11,032.6	7,000.0	83.5	84.4	-90.00	3,988.1	-1,647.6	219.7	57.0	162.69	1.350 Level 3	
11,100.0	7,000.0	11,132.6	7,000.0	85.3	86.2	-90.00	4,087.9	-1,654.2	219.7	53.2	166.50	1.320 Level 3	
11,200.0	7,000.0	11,232.6	7,000.0	87.2	88.1	-90.00	4,187.7	-1,660.7	219.7	49.4	170.31	1.290 Level 3	
11,300.0	7,000.0	11,332.6	7,000.0	89.0	89.9	-90.00	4,287.5	-1,667.3	219.7	45.6	174.13	1.262 Level 3	
11,400.0	7,000.0	11,432.6	7,000.0	90.9	91.8	-90.00	4,387.3	-1,673.9	219.7	41.8	177.95	1.235 Level 2	
11,427.8	7,000.0	11,460.5	7,000.0	91.5	92.3	-90.00	4,415.1	-1,675.7	219.7	40.7	179.01	1.227 Level 2, SF	

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4NHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-91.39	-1.1	-45.2	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	-91.39	-1.1	-45.2	45.2	45.0	0.22	200.994		
200.0	200.0	200.0	200.0	0.3	0.3	-91.39	-1.1	-45.2	45.2	44.5	0.67	66.998		
300.0	300.0	300.0	300.0	0.6	0.6	-91.39	-1.1	-45.2	45.2	44.1	1.12	40.199		
400.0	400.0	400.0	400.0	0.8	0.8	-91.39	-1.1	-45.2	45.2	43.6	1.57	28.713		
500.0	500.0	500.0	500.0	1.0	1.0	-91.39	-1.1	-45.2	45.2	43.2	2.02	22.333		
600.0	600.0	600.0	600.0	1.2	1.2	-91.39	-1.1	-45.2	45.2	42.7	2.47	18.272 CC, ES		
700.0	700.0	698.4	698.4	1.5	1.4	-91.54	-1.3	-46.8	46.9	44.0	2.90	16.141		
800.0	800.0	796.6	796.4	1.7	1.6	-91.93	-1.7	-51.9	52.0	48.7	3.33	15.605		
900.0	900.0	894.3	893.8	1.9	1.9	-92.43	-2.6	-60.2	60.6	56.8	3.78	16.023		
1,000.0	1,000.0	991.4	990.1	2.1	2.1	-92.94	-3.7	-71.7	72.5	68.2	4.25	17.051		
1,100.0	1,100.0	1,087.8	1,085.4	2.3	2.4	4.12	-5.1	-86.4	86.0	81.4	4.63	18.594		
1,200.0	1,199.8	1,183.8	1,179.7	2.5	2.7	3.91	-6.8	-104.2	99.5	94.4	5.04	19.738		
1,300.0	1,299.5	1,279.3	1,273.0	2.8	3.1	3.80	-8.9	-125.0	112.8	107.3	5.46	20.651		
1,400.0	1,398.7	1,374.5	1,365.1	3.0	3.5	3.76	-11.2	-148.7	125.9	120.0	5.89	21.372		
1,500.0	1,497.5	1,469.3	1,456.0	3.3	4.0	3.78	-13.8	-175.4	138.9	132.5	6.33	21.930		
1,600.0	1,595.6	1,564.6	1,546.5	3.6	4.6	3.83	-16.7	-205.2	151.6	144.8	6.79	22.330		
1,700.0	1,693.1	1,664.1	1,640.6	4.0	5.2	3.95	-19.8	-237.3	161.9	154.7	7.26	22.314		
1,800.0	1,789.8	1,763.8	1,735.0	4.4	5.8	4.14	-22.9	-269.5	169.2	161.4	7.77	21.774		
1,900.0	1,886.3	1,863.6	1,829.3	4.8	6.5	4.32	-26.1	-301.7	176.1	167.7	8.31	21.176		
2,000.0	1,982.9	1,963.3	1,923.7	5.3	7.1	4.49	-29.2	-333.9	182.9	174.0	8.87	20.629		
2,100.0	2,079.5	2,063.1	2,018.1	5.8	7.8	4.65	-32.3	-366.1	189.8	180.3	9.43	20.127		
2,200.0	2,176.1	2,162.9	2,112.5	6.3	8.5	4.80	-35.5	-398.2	196.6	186.6	10.00	19.667		
2,300.0	2,272.7	2,262.6	2,206.8	6.8	9.1	4.94	-38.6	-430.4	203.5	192.9	10.57	19.246		
2,400.0	2,369.3	2,362.4	2,301.2	7.3	9.8	5.07	-41.8	-462.6	210.3	199.2	11.15	18.859		
2,500.0	2,465.9	2,462.2	2,395.6	7.9	10.5	5.19	-44.9	-494.8	217.2	205.5	11.74	18.503		
2,600.0	2,562.5	2,561.9	2,490.0	8.4	11.2	5.31	-48.0	-527.0	224.1	211.7	12.33	18.175		
2,700.0	2,659.0	2,661.7	2,584.3	8.9	11.9	5.41	-51.2	-559.2	230.9	218.0	12.92	17.872		
2,800.0	2,755.6	2,761.4	2,678.7	9.5	12.5	5.52	-54.3	-591.4	237.8	224.3	13.52	17.592		
2,900.0	2,852.2	2,861.2	2,773.1	10.0	13.2	5.61	-57.4	-623.6	244.6	230.5	14.12	17.331		
3,000.0	2,948.8	2,961.0	2,867.5	10.5	13.9	5.70	-60.6	-655.7	251.5	236.8	14.72	17.090		
3,100.0	3,045.4	3,060.7	2,961.8	11.1	14.6	5.79	-63.7	-687.9	258.4	243.0	15.32	16.864		
3,200.0	3,142.0	3,160.5	3,056.2	11.6	15.3	5.87	-66.8	-720.1	265.2	249.3	15.93	16.654		
3,300.0	3,238.6	3,260.3	3,150.6	12.2	16.0	5.94	-70.0	-752.3	272.1	255.6	16.53	16.458		
3,400.0	3,335.2	3,360.0	3,245.0	12.7	16.7	6.02	-73.1	-784.5	279.0	261.8	17.14	16.273		
3,500.0	3,431.7	3,459.8	3,339.3	13.3	17.4	6.09	-76.2	-816.7	285.8	268.1	17.75	16.101		
3,600.0	3,528.3	3,559.6	3,433.7	13.8	18.0	6.15	-79.4	-848.9	292.7	274.3	18.36	15.938		
3,700.0	3,624.9	3,659.3	3,528.1	14.4	18.7	6.22	-82.5	-881.1	299.5	280.6	18.98	15.785		
3,800.0	3,721.5	3,759.1	3,622.5	14.9	19.4	6.28	-85.6	-913.2	306.4	286.8	19.59	15.641		
3,900.0	3,818.1	3,858.8	3,716.9	15.5	20.1	6.34	-88.8	-945.4	313.3	293.1	20.21	15.504		
4,000.0	3,914.7	3,958.6	3,811.2	16.0	20.8	6.39	-91.9	-977.6	320.1	299.3	20.82	15.375		
4,100.0	4,011.3	4,058.4	3,905.6	16.6	21.5	6.44	-95.0	-1,009.8	327.0	305.6	21.44	15.253		
4,200.0	4,107.8	4,158.1	4,000.0	17.1	22.2	6.49	-98.2	-1,042.0	333.9	311.8	22.06	15.137		
4,300.0	4,204.4	4,257.9	4,094.4	17.7	22.9	6.54	-101.3	-1,074.2	340.7	318.1	22.68	15.027		
4,400.0	4,301.0	4,357.7	4,188.7	18.2	23.6	6.59	-104.5	-1,106.4	347.6	324.3	23.30	14.922		
4,500.0	4,397.6	4,457.4	4,283.1	18.8	24.3	6.63	-107.6	-1,138.6	354.5	330.6	23.92	14.823		
4,600.0	4,494.2	4,557.2	4,377.5	19.4	25.0	6.68	-110.7	-1,170.7	361.4	336.8	24.54	14.728		
4,700.0	4,590.8	4,657.0	4,471.9	19.9	25.7	6.72	-113.9	-1,202.9	368.2	343.1	25.16	14.637		
4,800.0	4,687.4	4,756.7	4,566.2	20.5	26.3	6.76	-117.0	-1,235.1	375.1	349.3	25.78	14.550		
4,900.0	4,784.0	4,856.5	4,660.6	21.0	27.0	6.80	-120.1	-1,267.3	382.0	355.6	26.40	14.468		
5,000.0	4,880.5	4,956.2	4,755.0	21.6	27.7	6.84	-123.3	-1,299.5	388.8	361.8	27.02	14.388		
5,100.0	4,977.1	5,056.0	4,849.4	22.1	28.4	6.87	-126.4	-1,331.7	395.7	368.0	27.65	14.313		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4NHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,073.7	5,155.8	4,943.7	22.7	29.1	6.91	-129.5	-1,363.9	402.6	374.3	28.27	14.240	
5,300.0	5,170.3	5,255.5	5,038.1	23.3	29.8	6.94	-132.7	-1,396.1	409.4	380.5	28.89	14.170	
5,400.0	5,266.9	5,355.3	5,132.5	23.8	30.5	6.97	-135.8	-1,428.2	416.3	386.8	29.52	14.103	
5,500.0	5,363.5	5,465.2	5,236.7	24.4	31.1	7.02	-139.2	-1,462.9	422.5	392.3	30.14	14.015	
5,600.0	5,460.6	5,562.4	5,349.1	24.8	31.7	7.09	-142.4	-1,495.8	426.8	396.2	30.69	13.906	
5,700.0	5,558.4	5,699.8	5,463.1	25.1	32.2	7.15	-145.1	-1,524.1	430.6	399.4	31.18	13.811	
5,800.0	5,656.9	5,817.4	5,578.3	25.4	32.6	7.20	-147.4	-1,547.8	433.8	402.2	31.60	13.728	
5,900.0	5,756.0	5,935.2	5,694.5	25.7	32.9	7.24	-149.3	-1,566.8	436.3	404.3	31.94	13.658	
6,000.0	5,855.4	6,053.1	5,811.5	25.9	33.2	7.27	-150.7	-1,581.0	438.1	405.9	32.22	13.598	
6,100.0	5,955.2	6,171.1	5,929.1	26.1	33.4	7.29	-151.6	-1,590.4	439.4	407.0	32.43	13.549	
6,200.0	6,055.1	6,289.1	6,047.0	26.2	33.6	7.30	-152.0	-1,595.0	440.0	407.4	32.57	13.509	
6,300.0	6,155.1	6,397.2	6,155.1	26.3	33.6	-90.14	-152.1	-1,595.5	440.1	406.5	33.55	13.115	
6,400.0	6,255.1	6,497.2	6,255.1	26.4	33.7	-90.14	-152.1	-1,595.5	440.1	406.2	33.87	12.994	
6,500.0	6,355.0	6,594.6	6,352.4	26.5	33.8	-86.40	-148.8	-1,595.7	440.1	406.6	33.45	13.154	
6,600.0	6,453.5	6,690.9	6,447.3	26.6	33.9	-86.48	-133.2	-1,596.7	440.0	406.3	33.73	13.046	
6,700.0	6,548.7	6,787.3	6,539.4	26.7	34.0	-86.63	-105.0	-1,598.6	440.0	406.0	33.95	12.960	
6,800.0	6,638.7	6,883.9	6,627.1	26.8	34.0	-86.84	-64.7	-1,601.2	439.9	405.7	34.17	12.873	
6,900.0	6,721.8	6,980.7	6,708.7	26.9	34.1	-87.11	-12.8	-1,604.6	439.8	405.3	34.48	12.755	
7,000.0	6,796.4	7,077.8	6,782.7	27.0	34.2	-87.44	49.8	-1,608.8	439.6	404.7	34.96	12.574	
7,100.0	6,861.0	7,175.3	6,847.8	27.2	34.4	-87.81	122.1	-1,613.5	439.5	403.8	35.69	12.316	
7,200.0	6,914.4	7,273.2	6,902.7	27.5	34.6	-88.23	202.9	-1,618.8	439.4	402.7	36.73	11.963	
7,300.0	6,955.5	7,371.5	6,946.2	27.8	34.8	-88.68	290.8	-1,624.6	439.4	401.2	38.11	11.528	
7,400.0	6,983.6	7,470.3	6,977.3	28.2	35.2	-89.16	384.2	-1,630.8	439.3	399.5	39.81	11.035	
7,500.0	6,998.0	7,569.6	6,995.4	28.8	35.6	-89.66	481.6	-1,637.2	439.3	397.5	41.77	10.515	
7,525.9	6,999.7	7,595.4	6,997.9	28.9	35.7	-89.76	507.2	-1,638.9	439.3	396.9	42.33	10.377	
7,600.0	7,000.0	7,669.4	7,000.0	29.5	36.1	-90.00	581.0	-1,643.7	439.3	395.3	43.97	9.991	
7,700.0	7,000.0	7,769.4	7,000.0	30.3	36.7	-90.00	680.8	-1,650.3	439.3	392.9	46.42	9.462	
7,800.0	7,000.0	7,869.4	7,000.0	31.2	37.4	-90.00	780.6	-1,656.9	439.3	390.2	49.06	8.954	
7,900.0	7,000.0	7,969.4	7,000.0	32.2	38.2	-90.00	880.4	-1,663.4	439.3	387.4	51.86	8.471	
8,000.0	7,000.0	8,069.4	7,000.0	33.3	39.1	-90.00	980.2	-1,670.0	439.3	384.5	54.79	8.018	
8,100.0	7,000.0	8,169.4	7,000.0	34.5	40.1	-90.00	1,079.9	-1,676.6	439.3	381.5	57.83	7.596	
8,200.0	7,000.0	8,269.4	7,000.0	35.8	41.1	-90.00	1,179.7	-1,683.1	439.3	378.4	60.98	7.205	
8,300.0	7,000.0	8,369.4	7,000.0	37.1	42.3	-90.00	1,279.5	-1,689.7	439.3	375.1	64.20	6.843	
8,400.0	7,000.0	8,469.4	7,000.0	38.5	43.5	-90.00	1,379.3	-1,696.3	439.4	371.9	67.50	6.509	
8,500.0	7,000.0	8,569.4	7,000.0	40.0	44.7	-90.00	1,479.1	-1,702.9	439.4	368.5	70.85	6.201	
8,600.0	7,000.0	8,669.4	7,000.0	41.5	46.0	-90.00	1,578.9	-1,709.4	439.4	365.1	74.26	5.917	
8,700.0	7,000.0	8,769.4	7,000.0	43.0	47.4	-90.00	1,678.6	-1,716.0	439.4	361.7	77.72	5.654	
8,800.0	7,000.0	8,869.4	7,000.0	44.6	48.8	-90.00	1,778.4	-1,722.6	439.4	358.2	81.21	5.411	
8,900.0	7,000.0	8,969.4	7,000.0	46.2	50.2	-90.00	1,878.2	-1,729.1	439.4	354.7	84.74	5.185	
9,000.0	7,000.0	9,069.4	7,000.0	47.8	51.7	-90.00	1,978.0	-1,735.7	439.4	351.1	88.30	4.976	
9,100.0	7,000.0	9,169.4	7,000.0	49.5	53.2	-90.00	2,077.8	-1,742.3	439.4	347.5	91.89	4.782	
9,200.0	7,000.0	9,269.4	7,000.0	51.2	54.7	-90.00	2,177.6	-1,748.8	439.4	343.9	95.50	4.601	
9,300.0	7,000.0	9,369.4	7,000.0	52.9	56.3	-90.00	2,277.3	-1,755.4	439.5	340.3	99.14	4.433	
9,400.0	7,000.0	9,469.4	7,000.0	54.6	57.9	-90.00	2,377.1	-1,762.0	439.5	336.7	102.79	4.275	
9,500.0	7,000.0	9,569.4	7,000.0	56.3	59.5	-90.00	2,476.9	-1,768.5	439.5	333.0	106.46	4.128	
9,600.0	7,000.0	9,669.4	7,000.0	58.1	61.2	-90.00	2,576.7	-1,775.1	439.5	329.3	110.15	3.990	
9,700.0	7,000.0	9,769.4	7,000.0	59.8	62.8	-90.00	2,676.5	-1,781.7	439.5	325.7	113.85	3.860	
9,800.0	7,000.0	9,869.4	7,000.0	61.6	64.5	-90.00	2,776.3	-1,788.3	439.5	322.0	117.56	3.739	
9,900.0	7,000.0	9,969.4	7,000.0	63.4	66.2	-90.00	2,876.0	-1,794.8	439.5	318.2	121.28	3.624	
10,000.0	7,000.0	10,069.4	7,000.0	65.2	67.9	-90.00	2,975.8	-1,801.4	439.5	314.5	125.02	3.516	
10,100.0	7,000.0	10,169.4	7,000.0	67.0	69.6	-90.00	3,075.6	-1,808.0	439.5	310.8	128.76	3.414	
10,200.0	7,000.0	10,269.4	7,000.0	68.8	71.3	-90.00	3,175.4	-1,814.5	439.6	307.0	132.51	3.317	

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 Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 21-4NHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,369.4	7,000.0	70.6	73.1	-90.00	3,275.2	-1,821.1	439.6	303.3	136.28	3.226	
10,400.0	7,000.0	10,469.4	7,000.0	72.4	74.8	-90.00	3,375.0	-1,827.7	439.6	299.5	140.04	3.139	
10,500.0	7,000.0	10,569.4	7,000.0	74.2	76.6	-90.00	3,474.8	-1,834.2	439.6	295.8	143.82	3.057	
10,600.0	7,000.0	10,669.4	7,000.0	76.1	78.4	-90.00	3,574.5	-1,840.8	439.6	292.0	147.60	2.978	
10,700.0	7,000.0	10,769.4	7,000.0	77.9	80.2	-90.00	3,674.3	-1,847.4	439.6	288.2	151.39	2.904	
10,800.0	7,000.0	10,869.4	7,000.0	79.7	81.9	-90.00	3,774.1	-1,853.9	439.6	284.4	155.18	2.833	
10,900.0	7,000.0	10,969.4	7,000.0	81.6	83.7	-90.00	3,873.9	-1,860.5	439.6	280.7	158.98	2.765	
11,000.0	7,000.0	11,069.4	7,000.0	83.5	85.5	-90.00	3,973.7	-1,867.1	439.6	276.9	162.78	2.701	
11,100.0	7,000.0	11,169.4	7,000.0	85.3	87.4	-90.00	4,073.5	-1,873.7	439.7	273.1	166.59	2.639	
11,200.0	7,000.0	11,269.4	7,000.0	87.2	89.2	-90.00	4,173.2	-1,880.2	439.7	269.3	170.40	2.580	
11,300.0	7,000.0	11,369.4	7,000.0	89.0	91.0	-90.00	4,273.0	-1,886.8	439.7	265.5	174.21	2.524	
11,400.0	7,000.0	11,469.4	7,000.0	90.9	92.8	-90.00	4,372.8	-1,893.4	439.7	261.7	178.03	2.470	
11,427.8	7,000.0	11,497.2	7,000.0	91.5	93.3	-90.00	4,400.6	-1,895.2	439.7	260.6	179.09	2.455 SF	

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

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 22-4CHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.0	5,073.7	5,207.3	5,117.9	22.7	19.7	-173.08	-127.2	-786.8	201.0	174.7	26.25	7.656		
5,300.0	5,170.3	5,307.2	5,215.3	23.3	20.2	-173.05	-130.7	-808.7	204.8	178.0	26.83	7.635		
5,400.0	5,266.9	5,407.2	5,312.7	23.8	20.7	-173.02	-134.1	-830.6	208.7	181.3	27.41	7.615		
5,500.0	5,363.5	5,507.1	5,410.2	24.4	21.1	-172.98	-137.6	-852.6	212.5	184.6	27.99	7.594		
5,600.0	5,460.6	5,603.9	5,504.7	24.8	21.6	-172.91	-140.9	-873.5	214.8	186.3	28.54	7.527		
5,700.0	5,558.4	5,700.0	5,599.0	25.1	21.9	-172.83	-143.8	-891.7	216.3	187.3	29.00	7.460		
5,800.0	5,656.9	5,790.0	5,687.8	25.4	22.2	-172.77	-146.0	-905.9	217.6	188.2	29.39	7.402		
5,900.0	5,756.0	5,883.0	5,780.1	25.7	22.4	-172.72	-147.8	-917.6	218.6	188.8	29.74	7.349		
6,000.0	5,855.4	5,976.0	5,872.6	25.9	22.6	-172.69	-149.2	-926.4	219.3	189.3	30.04	7.302		
6,100.0	5,955.2	6,069.0	5,965.4	26.1	22.7	-172.66	-150.1	-932.2	219.8	189.6	30.28	7.261		
6,200.0	6,055.1	6,161.9	6,058.3	26.2	22.9	-172.65	-150.6	-935.0	220.1	189.6	30.46	7.224		
6,300.0	6,155.1	6,258.7	6,155.1	26.3	23.0	89.91	-150.6	-935.3	220.1	188.8	31.31	7.029		
6,400.0	6,255.1	6,358.7	6,255.1	26.4	23.1	89.91	-150.6	-935.3	220.1	188.5	31.65	6.954		
6,500.0	6,355.0	6,460.2	6,356.4	26.5	23.2	93.65	-147.0	-935.5	220.1	188.7	31.43	7.003		
6,600.0	6,453.5	6,562.1	6,456.8	26.6	23.3	93.56	-129.5	-936.7	220.1	188.4	31.71	6.940		
6,700.0	6,548.7	6,664.0	6,553.6	26.7	23.4	93.40	-98.0	-938.8	220.0	188.1	31.94	6.890		
6,800.0	6,638.7	6,765.8	6,644.8	26.8	23.5	93.18	-53.2	-941.7	220.0	187.8	32.17	6.838		
6,900.0	6,721.8	6,867.5	6,728.7	26.9	23.7	92.89	4.0	-945.4	219.9	187.4	32.50	6.767		
7,000.0	6,796.4	6,968.9	6,803.5	27.0	23.8	92.54	72.3	-949.9	219.9	186.9	33.02	6.659		
7,100.0	6,861.0	7,070.2	6,867.8	27.2	24.0	92.15	150.3	-955.1	219.8	186.0	33.82	6.500		
7,200.0	6,914.4	7,171.2	6,920.3	27.5	24.3	91.71	236.3	-960.7	219.8	184.8	34.95	6.289		
7,300.0	6,955.5	7,272.0	6,960.0	27.8	24.6	91.24	328.6	-966.8	219.7	183.3	36.42	6.033		
7,400.0	6,983.6	7,372.5	6,986.4	28.2	25.1	90.75	425.3	-973.1	219.7	181.5	38.23	5.748		
7,500.0	6,998.0	7,472.8	6,998.9	28.8	25.8	90.24	524.5	-979.6	219.7	179.4	40.30	5.452		
7,509.6	6,998.7	7,482.4	6,999.4	28.8	25.9	90.18	534.0	-980.2	219.7	179.2	40.51	5.424		
7,600.0	7,000.0	7,572.8	7,000.0	29.5	26.6	90.00	624.3	-986.2	219.7	177.1	42.61	5.157		
7,700.0	7,000.0	7,672.8	7,000.0	30.3	27.5	90.00	724.1	-992.7	219.7	174.6	45.15	4.866		
7,800.0	7,000.0	7,772.8	7,000.0	31.2	28.5	90.00	823.8	-999.3	219.7	171.9	47.87	4.590		
7,900.0	7,000.0	7,872.8	7,000.0	32.2	29.7	90.00	923.6	-1,005.8	219.7	169.0	50.75	4.330		
8,000.0	7,000.0	7,972.8	7,000.0	33.3	30.9	90.00	1,023.4	-1,012.4	219.7	166.0	53.75	4.088		
8,100.0	7,000.0	8,072.8	7,000.0	34.5	32.3	90.00	1,123.2	-1,018.9	219.7	162.9	56.87	3.864		
8,200.0	7,000.0	8,172.8	7,000.0	35.8	33.7	90.00	1,223.0	-1,025.5	219.8	159.7	60.07	3.658		
8,300.0	7,000.0	8,272.8	7,000.0	37.1	35.1	90.00	1,322.8	-1,032.0	219.8	156.4	63.36	3.469		
8,400.0	7,000.0	8,372.8	7,000.0	38.5	36.6	90.00	1,422.5	-1,038.6	219.8	153.1	66.70	3.295		
8,500.0	7,000.0	8,472.8	7,000.0	40.0	38.2	90.00	1,522.3	-1,045.1	219.8	149.7	70.11	3.135		
8,600.0	7,000.0	8,572.8	7,000.0	41.5	39.8	90.00	1,622.1	-1,051.7	219.8	146.2	73.56	2.988		
8,700.0	7,000.0	8,672.8	7,000.0	43.0	41.4	90.00	1,721.9	-1,058.2	219.8	142.7	77.06	2.852		
8,800.0	7,000.0	8,772.8	7,000.0	44.6	43.0	90.00	1,821.7	-1,064.8	219.8	139.2	80.59	2.727		
8,900.0	7,000.0	8,872.8	7,000.0	46.2	44.7	90.00	1,921.5	-1,071.3	219.8	135.6	84.16	2.612		
9,000.0	7,000.0	8,972.8	7,000.0	47.8	46.4	90.00	2,021.3	-1,077.9	219.8	132.1	87.75	2.505		
9,100.0	7,000.0	9,072.8	7,000.0	49.5	48.1	90.00	2,121.0	-1,084.4	219.8	128.4	91.37	2.406		
9,200.0	7,000.0	9,172.8	7,000.0	51.2	49.8	90.00	2,220.8	-1,091.0	219.8	124.8	95.01	2.314		
9,300.0	7,000.0	9,272.8	7,000.0	52.9	51.6	90.00	2,320.6	-1,097.5	219.8	121.2	98.67	2.228		
9,400.0	7,000.0	9,372.8	7,000.0	54.6	53.3	90.00	2,420.4	-1,104.1	219.8	117.5	102.35	2.148		
9,500.0	7,000.0	9,472.8	7,000.0	56.3	55.1	90.00	2,520.2	-1,110.6	219.8	113.8	106.04	2.073		
9,600.0	7,000.0	9,572.8	7,000.0	58.1	56.9	90.00	2,620.0	-1,117.2	219.9	110.1	109.75	2.003		
9,700.0	7,000.0	9,672.8	7,000.0	59.8	58.7	90.00	2,719.8	-1,123.7	219.9	106.4	113.46	1.938		
9,800.0	7,000.0	9,772.8	7,000.0	61.6	60.5	90.00	2,819.5	-1,130.3	219.9	102.7	117.20	1.876		
9,900.0	7,000.0	9,872.8	7,000.0	63.4	62.3	90.00	2,919.3	-1,136.8	219.9	98.9	120.94	1.818		
10,000.0	7,000.0	9,972.8	7,000.0	65.2	64.1	90.00	3,019.1	-1,143.4	219.9	95.2	124.69	1.763		
10,100.0	7,000.0	10,072.8	7,000.0	67.0	66.0	90.00	3,118.9	-1,150.0	219.9	91.4	128.45	1.712		
10,200.0	7,000.0	10,172.8	7,000.0	68.8	67.8	90.00	3,218.7	-1,156.5	219.9	87.7	132.22	1.663		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 22-4CHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,272.8	7,000.0	70.6	69.7	90.00	3,318.5	-1,163.1	219.9	83.9	135.99	1.617	
10,400.0	7,000.0	10,372.8	7,000.0	72.4	71.5	90.00	3,418.3	-1,169.6	219.9	80.1	139.77	1.573	
10,500.0	7,000.0	10,472.8	7,000.0	74.2	73.4	90.00	3,518.0	-1,176.2	219.9	76.4	143.56	1.532	
10,600.0	7,000.0	10,572.8	7,000.0	76.1	75.2	90.00	3,617.8	-1,182.7	219.9	72.6	147.35	1.493 Level 3	
10,700.0	7,000.0	10,672.8	7,000.0	77.9	77.1	90.00	3,717.6	-1,189.3	219.9	68.8	151.15	1.455 Level 3	
10,800.0	7,000.0	10,772.8	7,000.0	79.7	78.9	90.00	3,817.4	-1,195.8	219.9	65.0	154.95	1.419 Level 3	
10,900.0	7,000.0	10,872.8	7,000.0	81.6	80.8	90.00	3,917.2	-1,202.4	219.9	61.2	158.76	1.385 Level 3	
11,000.0	7,000.0	10,972.8	7,000.0	83.5	82.7	90.00	4,017.0	-1,208.9	220.0	57.4	162.57	1.353 Level 3	
11,100.0	7,000.0	11,072.8	7,000.0	85.3	84.6	90.00	4,116.7	-1,215.5	220.0	53.6	166.39	1.322 Level 3	
11,200.0	7,000.0	11,172.8	7,000.0	87.2	86.4	90.00	4,216.5	-1,222.0	220.0	49.8	170.21	1.292 Level 3	
11,300.0	7,000.0	11,272.8	7,000.0	89.0	88.3	90.00	4,316.3	-1,228.6	220.0	45.9	174.03	1.264 Level 3	
11,400.0	7,000.0	11,372.8	7,000.0	90.9	90.2	90.00	4,416.1	-1,235.1	220.0	42.1	177.86	1.237 Level 2	
11,400.9	7,000.0	11,373.7	7,000.0	90.9	90.2	90.00	4,417.0	-1,235.2	220.0	42.1	177.89	1.237 Level 2	
11,427.8	7,000.0	11,384.9	7,000.0	91.5	90.4	90.00	4,428.2	-1,235.9	220.5	41.9	178.62	1.235 Level 2, SF	

Offset Design													Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.07	1.1	67.5	67.5						
100.0	100.0	100.0	100.0	0.1	0.1	89.07	1.1	67.5	67.5	67.3	0.22	300.202			
200.0	200.0	200.0	200.0	0.3	0.3	89.07	1.1	67.5	67.5	66.8	0.67	100.067			
300.0	300.0	300.0	300.0	0.6	0.6	89.07	1.1	67.5	67.5	66.4	1.12	60.040			
400.0	400.0	400.0	400.0	0.8	0.8	89.07	1.1	67.5	67.5	65.9	1.57	42.886			
500.0	500.0	500.0	500.0	1.0	1.0	89.07	1.1	67.5	67.5	65.5	2.02	33.356			
600.0	600.0	600.0	600.0	1.2	1.2	89.07	1.1	67.5	67.5	65.0	2.47	27.291			
700.0	700.0	700.0	700.0	1.5	1.5	89.07	1.1	67.5	67.5	64.6	2.92	23.092			
800.0	800.0	800.0	800.0	1.7	1.7	89.07	1.1	67.5	67.5	64.1	3.37	20.013			
900.0	900.0	900.0	900.0	1.9	1.9	89.07	1.1	67.5	67.5	63.7	3.82	17.659			
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.07	1.1	67.5	67.5	63.2	4.27	15.800 CC, ES			
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.4	-173.64	1.1	67.5	69.2	64.5	4.70	14.715			
1,200.0	1,199.8	1,199.8	1,199.8	2.5	2.6	-174.08	1.1	67.5	74.4	69.3	5.12	14.531			
1,300.0	1,299.5	1,299.5	1,299.5	2.8	2.8	-174.68	1.1	67.5	83.1	77.5	5.54	15.002			
1,400.0	1,398.7	1,398.7	1,398.7	3.0	3.0	-175.34	1.1	67.5	95.2	89.3	5.95	15.995			
1,500.0	1,497.5	1,497.5	1,497.5	3.3	3.3	-175.98	1.1	67.5	110.8	104.5	6.37	17.407			
1,600.0	1,595.6	1,595.6	1,595.6	3.6	3.5	-176.54	1.1	67.5	129.9	123.1	6.78	19.164			
1,700.0	1,693.1	1,698.2	1,698.1	4.0	3.7	-176.94	0.7	65.8	150.8	143.6	7.17	21.017			
1,800.0	1,789.8	1,801.8	1,801.6	4.4	3.9	-177.07	-0.7	60.6	171.2	163.6	7.58	22.600			
1,900.0	1,886.3	1,906.7	1,906.2	4.8	4.1	-176.98	-3.2	51.6	188.5	180.5	8.02	23.522			
2,000.0	1,982.9	2,012.3	2,010.9	5.3	4.3	-176.70	-6.6	38.9	202.3	193.9	8.47	23.881			
2,100.0	2,079.5	2,111.6	2,109.2	5.8	4.6	-176.39	-10.2	25.4	214.6	205.7	8.93	24.023			
2,200.0	2,176.1	2,210.8	2,207.4	6.3	4.8	-176.12	-13.8	11.9	226.8	217.4	9.40	24.122			
2,300.0	2,272.7	2,310.1	2,305.7	6.8	5.1	-175.87	-17.5	-1.6	239.1	229.2	9.88	24.194			
2,400.0	2,369.3	2,409.3	2,403.9	7.3	5.4	-175.65	-21.1	-15.1	251.4	241.0	10.37	24.243			
2,500.0	2,465.9	2,508.5	2,502.2	7.9	5.7	-175.44	-24.7	-28.6	263.6	252.8	10.86	24.274			
2,600.0	2,562.5	2,607.8	2,600.4	8.4	6.0	-175.26	-28.3	-42.1	275.9	264.6	11.36	24.291			
2,700.0	2,659.0	2,707.0	2,698.7	8.9	6.3	-175.09	-31.9	-55.6	288.2	276.3	11.86	24.297			
2,800.0	2,755.6	2,806.3	2,796.9	9.5	6.6	-174.94	-35.6	-69.1	300.5	288.1	12.37	24.294			
2,900.0	2,852.2	2,905.5	2,895.2	10.0	6.9	-174.79	-39.2	-82.6	312.7	299.9	12.88	24.285			
3,000.0	2,948.8	3,004.7	2,993.4	10.5	7.2	-174.66	-42.8	-96.1	325.0	311.6	13.39	24.270			
3,100.0	3,045.4	3,104.0	3,091.7	11.1	7.5	-174.54	-46.4	-109.6	337.3	323.4	13.91	24.251			
3,200.0	3,142.0	3,203.2	3,189.9	11.6	7.8	-174.43	-50.1	-123.1	349.6	335.2	14.43	24.229			
3,300.0	3,238.6	3,302.5	3,288.2	12.2	8.2	-174.32	-53.7	-136.6	361.9	346.9	14.95	24.205			
3,400.0	3,335.2	3,401.7	3,386.4	12.7	8.5	-174.22	-57.3	-150.1	374.2	358.7	15.47	24.179			
3,500.0	3,431.7	3,500.9	3,484.7	13.3	8.8	-174.13	-60.9	-163.6	386.4	370.4	16.00	24.151			
3,600.0	3,528.3	3,600.2	3,582.9	13.8	9.1	-174.04	-64.6	-177.1	398.7	382.2	16.53	24.123			
3,700.0	3,624.9	3,699.4	3,681.2	14.4	9.5	-173.96	-68.2	-190.6	411.0	394.0	17.06	24.094			
3,800.0	3,721.5	3,798.7	3,779.4	14.9	9.8	-173.88	-71.8	-204.1	423.3	405.7	17.59	24.065			
3,900.0	3,818.1	3,897.9	3,877.7	15.5	10.1	-173.81	-75.4	-217.6	435.6	417.5	18.12	24.035			
4,000.0	3,914.7	3,997.1	3,975.9	16.0	10.5	-173.74	-79.1	-231.1	447.9	429.2	18.66	24.006			
4,100.0	4,011.3	4,096.4	4,074.2	16.6	10.8	-173.68	-82.7	-244.6	460.2	441.0	19.19	23.977			
4,200.0	4,107.8	4,195.6	4,172.5	17.1	11.1	-173.62	-86.3	-258.1	472.5	452.7	19.73	23.948			
4,300.0	4,204.4	4,294.9	4,270.7	17.7	11.5	-173.56	-89.9	-271.6	484.8	464.5	20.27	23.919			
4,400.0	4,301.0	4,394.1	4,369.0	18.2	11.8	-173.50	-93.5	-285.1	497.1	476.3	20.81	23.891			
4,500.0	4,397.6	4,493.4	4,467.2	18.8	12.1	-173.45	-97.2	-298.6	509.4	488.0	21.34	23.863			
4,600.0	4,494.2	4,592.6	4,565.5	19.4	12.5	-173.40	-100.8	-312.1	521.6	499.8	21.88	23.836			
4,700.0	4,590.8	4,691.8	4,663.7	19.9	12.8	-173.35	-104.4	-325.6	533.9	511.5	22.43	23.809			
4,800.0	4,687.4	4,791.1	4,762.0	20.5	13.2	-173.31	-108.0	-339.1	546.2	523.3	22.97	23.783			
4,900.0	4,784.0	4,890.3	4,860.2	21.0	13.5	-173.26	-111.7	-352.6	558.5	535.0	23.51	23.757			
5,000.0	4,880.5	4,989.6	4,958.5	21.6	13.8	-173.22	-115.3	-366.1	570.8	546.8	24.05	23.732			
5,100.0	4,977.1	5,088.8	5,056.7	22.1	14.2	-173.18	-118.9	-379.6	583.1	558.5	24.60	23.707			

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Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 31-4CHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.0	5,073.7	5,188.0	5,155.0	22.7	14.5	-173.14	-122.5	-393.1	595.4	570.3	25.14	23.683		
5,300.0	5,170.3	5,287.3	5,253.2	23.3	14.9	-173.10	-126.2	-406.6	607.7	582.0	25.69	23.659		
5,400.0	5,266.9	5,386.5	5,351.5	23.8	15.2	-173.07	-129.8	-420.1	620.0	593.8	26.23	23.636		
5,500.0	5,363.5	5,485.8	5,449.7	24.4	15.6	-173.04	-133.4	-433.6	632.3	605.5	26.78	23.611		
5,600.0	5,460.6	5,585.2	5,548.2	24.8	15.9	-173.01	-137.0	-447.1	642.7	615.3	27.34	23.510		
5,700.0	5,558.4	5,685.0	5,646.9	25.1	16.2	-172.93	-140.7	-460.6	649.6	621.7	27.86	23.316		
5,800.0	5,656.9	5,775.9	5,737.0	25.4	16.5	-172.84	-143.9	-472.7	653.4	625.1	28.32	23.076		
5,900.0	5,756.0	5,877.7	5,818.3	25.7	16.7	-172.76	-146.3	-481.6	656.2	627.5	28.68	22.882		
6,000.0	5,855.4	5,939.6	5,899.9	25.9	16.9	-172.71	-148.1	-488.3	658.3	629.3	28.98	22.711		
6,100.0	5,955.2	6,021.4	5,981.5	26.1	17.1	-172.67	-149.3	-492.7	659.6	630.4	29.24	22.558		
6,200.0	6,055.1	6,100.0	6,060.1	26.2	17.2	-172.65	-149.8	-494.8	660.3	630.9	29.45	22.425		
6,300.0	6,155.1	6,195.0	6,155.1	26.3	17.3	89.91	-149.9	-495.0	660.4	630.2	30.20	21.863		
6,400.0	6,255.1	6,295.0	6,255.1	26.4	17.5	89.91	-149.9	-495.0	660.4	629.8	30.56	21.609		
6,500.0	6,355.0	6,399.4	6,359.4	26.5	17.7	93.65	-145.9	-495.3	660.4	629.9	30.46	21.677		
6,600.0	6,453.5	6,505.6	6,463.8	26.6	17.8	93.55	-127.0	-496.5	660.3	629.5	30.75	21.470		
6,700.0	6,548.7	6,611.5	6,563.9	26.7	17.9	93.39	-93.0	-498.8	660.2	629.2	30.99	21.304		
6,800.0	6,638.7	6,717.0	6,657.6	26.8	18.0	93.16	-44.8	-501.9	660.0	628.8	31.24	21.131		
6,900.0	6,721.8	6,822.0	6,742.9	26.9	18.2	92.86	16.2	-505.9	659.9	628.3	31.59	20.891		
7,000.0	6,796.4	6,926.4	6,817.9	27.0	18.3	92.50	88.6	-510.7	659.7	627.5	32.14	20.527		
7,100.0	6,861.0	7,030.1	6,881.1	27.2	18.5	92.10	170.5	-516.0	659.5	626.5	32.98	19.998		
7,200.0	6,914.4	7,133.1	6,931.6	27.5	18.9	91.65	260.0	-521.9	659.3	625.2	34.16	19.301		
7,300.0	6,955.5	7,235.3	6,968.4	27.8	19.4	91.17	355.0	-528.1	659.2	623.5	35.70	18.465		
7,400.0	6,983.6	7,336.6	6,991.3	28.2	20.2	90.68	453.4	-534.6	659.1	621.6	37.57	17.546		
7,500.0	6,998.0	7,437.1	6,999.9	28.8	21.1	90.17	553.2	-541.1	659.1	619.4	39.70	16.604		
7,506.9	6,998.5	7,444.0	7,000.0	28.8	21.2	90.13	560.1	-541.6	659.1	619.3	39.85	16.539		
7,600.0	7,000.0	7,537.1	7,000.0	29.5	22.2	90.00	653.0	-547.7	659.1	617.1	42.07	15.666		
7,700.0	7,000.0	7,637.1	7,000.0	30.3	23.4	90.00	752.8	-554.2	659.1	614.5	44.66	14.758		
7,800.0	7,000.0	7,737.1	7,000.0	31.2	24.8	90.00	852.6	-560.8	659.2	611.7	47.43	13.897		
7,900.0	7,000.0	7,837.1	7,000.0	32.2	26.2	90.00	952.4	-567.3	659.2	608.8	50.35	13.092		
8,000.0	7,000.0	7,937.1	7,000.0	33.3	27.6	90.00	1,052.1	-573.9	659.2	605.8	53.39	12.346		
8,100.0	7,000.0	8,037.1	7,000.0	34.5	29.2	90.00	1,151.9	-580.4	659.2	602.7	56.54	11.659		
8,200.0	7,000.0	8,137.1	7,000.0	35.8	30.8	90.00	1,251.7	-587.0	659.2	599.4	59.78	11.028		
8,300.0	7,000.0	8,237.1	7,000.0	37.1	32.4	90.00	1,351.5	-593.5	659.2	596.1	63.09	10.450		
8,400.0	7,000.0	8,337.1	7,000.0	38.5	34.0	90.00	1,451.3	-600.0	659.2	592.8	66.46	9.919		
8,500.0	7,000.0	8,437.1	7,000.0	40.0	35.7	90.00	1,551.1	-606.6	659.3	589.4	69.89	9.433		
8,600.0	7,000.0	8,537.1	7,000.0	41.5	37.4	90.00	1,650.9	-613.1	659.3	585.9	73.37	8.986		
8,700.0	7,000.0	8,637.1	7,000.0	43.0	39.2	90.00	1,750.6	-619.7	659.3	582.4	76.88	8.575		
8,800.0	7,000.0	8,737.1	7,000.0	44.6	40.9	90.00	1,850.4	-626.2	659.3	578.9	80.43	8.197		
8,900.0	7,000.0	8,837.1	7,000.0	46.2	42.7	90.00	1,950.2	-632.8	659.3	575.3	84.01	7.848		
9,000.0	7,000.0	8,937.1	7,000.0	47.8	44.5	90.00	2,050.0	-639.3	659.3	571.7	87.62	7.525		
9,100.0	7,000.0	9,037.1	7,000.0	49.5	46.3	90.00	2,149.8	-645.9	659.3	568.1	91.25	7.225		
9,200.0	7,000.0	9,137.1	7,000.0	51.2	48.1	90.00	2,249.6	-652.4	659.4	564.5	94.91	6.948		
9,300.0	7,000.0	9,237.1	7,000.0	52.9	49.9	90.00	2,349.4	-658.9	659.4	560.8	98.58	6.689		
9,400.0	7,000.0	9,337.1	7,000.0	54.6	51.7	90.00	2,449.1	-665.5	659.4	557.1	102.27	6.448		
9,500.0	7,000.0	9,437.1	7,000.0	56.3	53.6	90.00	2,548.9	-672.0	659.4	553.4	105.97	6.223		
9,600.0	7,000.0	9,537.1	7,000.0	58.1	55.4	90.00	2,648.7	-678.6	659.4	549.7	109.69	6.012		
9,700.0	7,000.0	9,637.1	7,000.0	59.8	57.3	90.00	2,748.5	-685.1	659.4	546.0	113.41	5.814		
9,800.0	7,000.0	9,737.1	7,000.0	61.6	59.1	90.00	2,848.3	-691.7	659.4	542.3	117.15	5.629		
9,900.0	7,000.0	9,837.1	7,000.0	63.4	61.0	90.00	2,948.1	-698.2	659.5	538.6	120.90	5.455		
10,000.0	7,000.0	9,937.1	7,000.0	65.2	62.8	90.00	3,047.9	-704.7	659.5	534.8	124.66	5.290		
10,100.0	7,000.0	10,037.1	7,000.0	67.0	64.7	90.00	3,147.6	-711.3	659.5	531.1	128.43	5.135		
10,200.0	7,000.0	10,137.1	7,000.0	68.8	66.6	90.00	3,247.4	-717.8	659.5	527.3	132.20	4.989		

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 Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn 31-4CHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,237.1	7,000.0	70.6	68.5	90.00	3,347.2	-724.4	659.5	523.5	135.98	4.850	
10,400.0	7,000.0	10,337.1	7,000.0	72.4	70.4	90.00	3,447.0	-730.9	659.5	519.8	139.77	4.719	
10,500.0	7,000.0	10,437.1	7,000.0	74.2	72.3	90.00	3,546.8	-737.5	659.6	516.0	143.56	4.594	
10,600.0	7,000.0	10,537.1	7,000.0	76.1	74.1	90.00	3,646.6	-744.0	659.6	512.2	147.36	4.476	
10,700.0	7,000.0	10,637.1	7,000.0	77.9	76.0	90.00	3,746.4	-750.6	659.6	508.4	151.16	4.363	
10,800.0	7,000.0	10,737.1	7,000.0	79.7	77.9	90.00	3,846.1	-757.1	659.6	504.6	154.97	4.256	
10,900.0	7,000.0	10,837.1	7,000.0	81.6	79.8	90.00	3,945.9	-763.6	659.6	500.8	158.79	4.154	
11,000.0	7,000.0	10,937.1	7,000.0	83.5	81.7	90.00	4,045.7	-770.2	659.6	497.0	162.60	4.057	
11,100.0	7,000.0	11,037.1	7,000.0	85.3	83.6	90.00	4,145.5	-776.7	659.6	493.2	166.42	3.964	
11,200.0	7,000.0	11,137.1	7,000.0	87.2	85.5	90.00	4,245.3	-783.3	659.7	489.4	170.25	3.875	
11,300.0	7,000.0	11,237.1	7,000.0	89.0	87.5	90.00	4,345.1	-789.8	659.7	485.6	174.07	3.790	
11,353.7	7,000.0	11,290.8	7,000.0	90.0	88.5	90.00	4,398.7	-793.3	659.7	483.5	176.13	3.745	
11,400.0	7,000.0	11,319.7	7,000.0	90.9	89.0	90.00	4,427.5	-795.2	659.9	482.4	177.49	3.718	
11,427.8	7,000.0	11,319.7	7,000.0	91.5	89.0	90.00	4,427.5	-795.2	661.2	483.2	178.02	3.714 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-91.24	-1.5	-67.5	67.5					
100.0	100.0	100.0	100.0	0.1	0.1	-91.24	-1.5	-67.5	67.5	67.3	0.22	300.232		
200.0	200.0	200.0	200.0	0.3	0.3	-91.24	-1.5	-67.5	67.5	66.8	0.67	100.077		
300.0	300.0	300.0	300.0	0.6	0.6	-91.24	-1.5	-67.5	67.5	66.4	1.12	60.046		
400.0	400.0	400.0	400.0	0.8	0.8	-91.24	-1.5	-67.5	67.5	65.9	1.57	42.890 CC, ES		
500.0	500.0	497.7	497.6	1.0	1.0	-91.33	-1.6	-69.1	69.2	67.2	2.01	34.503		
600.0	600.0	595.1	595.0	1.2	1.2	-91.57	-2.0	-74.1	74.3	71.8	2.44	30.481		
700.0	700.0	692.1	691.6	1.5	1.4	-91.91	-2.7	-82.3	82.8	79.9	2.89	28.641		
800.0	800.0	788.4	787.2	1.7	1.7	-92.27	-3.7	-93.7	94.6	91.2	3.37	28.066		
900.0	900.0	883.9	881.6	1.9	2.0	-92.63	-5.0	-108.1	109.8	105.9	3.89	28.232		
1,000.0	1,000.0	978.2	974.3	2.1	2.3	-92.95	-6.5	-125.4	128.2	123.7	4.45	28.828		
1,100.0	1,100.0	1,071.7	1,065.6	2.3	2.7	4.24	-8.2	-145.6	148.1	143.4	4.66	31.773		
1,200.0	1,199.8	1,164.6	1,155.6	2.5	3.1	4.09	-10.2	-168.5	167.8	162.7	5.09	32.977		
1,300.0	1,299.5	1,257.0	1,244.3	2.8	3.6	4.02	-12.4	-194.2	187.3	181.8	5.53	33.883		
1,400.0	1,398.7	1,348.8	1,331.6	3.0	4.2	3.99	-14.9	-222.6	206.5	200.5	5.98	34.544		
1,500.0	1,497.5	1,440.8	1,418.0	3.3	4.8	4.01	-17.5	-253.7	225.4	218.9	6.44	34.978		
1,600.0	1,595.6	1,539.3	1,510.3	3.6	5.5	4.07	-20.5	-288.4	242.2	235.2	6.93	34.953		
1,700.0	1,693.1	1,638.4	1,603.0	4.0	6.2	4.19	-23.5	-323.2	255.5	248.1	7.43	34.378		
1,800.0	1,789.8	1,737.9	1,696.1	4.4	6.9	4.35	-26.6	-358.1	265.8	257.9	7.97	33.367		
1,900.0	1,886.3	1,837.4	1,789.2	4.8	7.6	4.52	-29.6	-393.1	275.7	267.2	8.53	32.320		
2,000.0	1,982.9	1,936.9	1,882.3	5.3	8.4	4.67	-32.6	-428.0	285.6	276.5	9.10	31.371		
2,100.0	2,079.5	2,036.4	1,975.4	5.8	9.1	4.81	-35.6	-463.0	295.5	285.8	9.68	30.509		
2,200.0	2,176.1	2,135.9	2,068.5	6.3	9.9	4.95	-38.6	-497.9	305.4	295.1	10.27	29.727		
2,300.0	2,272.7	2,235.4	2,161.7	6.8	10.6	5.07	-41.7	-532.9	315.2	304.4	10.87	29.014		
2,400.0	2,369.3	2,334.9	2,254.8	7.3	11.3	5.19	-44.7	-567.9	325.1	313.7	11.46	28.364		
2,500.0	2,465.9	2,434.5	2,347.9	7.9	12.1	5.30	-47.7	-602.8	335.0	322.9	12.06	27.768		
2,600.0	2,562.5	2,534.0	2,441.0	8.4	12.8	5.41	-50.7	-637.8	344.9	332.2	12.67	27.221		
2,700.0	2,659.0	2,633.5	2,534.1	8.9	13.6	5.51	-53.7	-672.7	354.8	341.5	13.28	26.717		
2,800.0	2,755.6	2,733.0	2,627.2	9.5	14.3	5.60	-56.8	-707.7	364.7	350.8	13.89	26.253		
2,900.0	2,852.2	2,832.5	2,720.4	10.0	15.1	5.69	-59.8	-742.6	374.6	360.1	14.51	25.823		
3,000.0	2,948.8	2,932.0	2,813.5	10.5	15.8	5.78	-62.8	-777.6	384.5	369.3	15.12	25.425		
3,100.0	3,045.4	3,031.5	2,906.6	11.1	16.6	5.86	-65.8	-812.6	394.3	378.6	15.74	25.054		
3,200.0	3,142.0	3,131.0	2,999.7	11.6	17.3	5.93	-68.8	-847.5	404.2	387.9	16.36	24.709		
3,300.0	3,238.6	3,230.5	3,092.8	12.2	18.1	6.00	-71.9	-882.5	414.1	397.2	16.98	24.387		
3,400.0	3,335.2	3,330.0	3,186.0	12.7	18.8	6.07	-74.9	-917.4	424.0	406.4	17.61	24.085		
3,500.0	3,431.7	3,429.5	3,279.1	13.3	19.6	6.14	-77.9	-952.4	433.9	415.7	18.23	23.802		
3,600.0	3,528.3	3,529.0	3,372.2	13.8	20.3	6.20	-80.9	-987.3	443.8	425.0	18.86	23.537		
3,700.0	3,624.9	3,628.6	3,465.3	14.4	21.1	6.26	-83.9	-1,022.3	453.7	434.2	19.48	23.287		
3,800.0	3,721.5	3,728.1	3,558.4	14.9	21.8	6.32	-87.0	-1,057.2	463.6	443.5	20.11	23.052		
3,900.0	3,818.1	3,827.6	3,651.5	15.5	22.6	6.37	-90.0	-1,092.2	473.5	452.8	20.74	22.830		
4,000.0	3,914.7	3,927.1	3,744.7	16.0	23.3	6.43	-93.0	-1,127.2	483.4	462.0	21.37	22.620		
4,100.0	4,011.3	4,026.6	3,837.8	16.6	24.1	6.48	-96.0	-1,162.1	493.3	471.3	22.00	22.421		
4,200.0	4,107.8	4,126.1	3,930.9	17.1	24.9	6.53	-99.0	-1,197.1	503.2	480.6	22.63	22.233		
4,300.0	4,204.4	4,225.6	4,024.0	17.7	25.6	6.57	-102.1	-1,232.0	513.1	489.8	23.27	22.054		
4,400.0	4,301.0	4,325.1	4,117.1	18.2	26.4	6.62	-105.1	-1,267.0	523.0	499.1	23.90	21.884		
4,500.0	4,397.6	4,424.6	4,210.2	18.8	27.1	6.66	-108.1	-1,301.9	532.9	508.4	24.53	21.723		
4,600.0	4,494.2	4,524.1	4,303.4	19.4	27.9	6.71	-111.1	-1,336.9	542.8	517.6	25.17	21.568		
4,700.0	4,590.8	4,623.6	4,396.5	19.9	28.6	6.75	-114.1	-1,371.9	552.7	526.9	25.80	21.422		
4,800.0	4,687.4	4,723.1	4,489.6	20.5	29.4	6.78	-117.2	-1,406.8	562.6	536.2	26.44	21.281		
4,900.0	4,784.0	4,822.6	4,582.7	21.0	30.1	6.82	-120.2	-1,441.8	572.5	545.4	27.07	21.147		
5,000.0	4,880.5	4,922.2	4,675.8	21.6	30.9	6.86	-123.2	-1,476.7	582.4	554.7	27.71	21.019		
5,100.0	4,977.1	5,021.7	4,768.9	22.1	31.6	6.89	-126.2	-1,511.7	592.3	563.9	28.34	20.896		

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 Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,073.7	5,121.2	4,862.1	22.7	32.4	6.93	-129.2	-1,546.6	602.2	573.2	28.98	20.779	
5,300.0	5,170.3	5,220.7	4,955.2	23.3	33.1	6.96	-132.3	-1,581.6	612.1	582.5	29.62	20.666	
5,400.0	5,266.9	5,320.2	5,048.3	23.8	33.9	6.99	-135.3	-1,616.5	622.0	591.7	30.26	20.558	
5,500.0	5,363.5	5,435.2	5,156.2	24.4	34.7	7.04	-138.7	-1,656.1	631.2	600.3	30.92	20.415	
5,600.0	5,460.6	5,563.2	5,278.0	24.8	35.3	7.11	-142.1	-1,695.4	638.4	606.9	31.50	20.269	
5,700.0	5,558.4	5,691.7	5,401.9	25.1	35.9	7.17	-145.0	-1,729.4	644.5	612.5	32.00	20.141	
5,800.0	5,656.9	5,820.6	5,527.5	25.4	36.4	7.22	-147.5	-1,757.9	649.7	617.3	32.43	20.033	
5,900.0	5,756.0	5,949.8	5,654.7	25.7	36.8	7.26	-149.5	-1,780.8	653.8	621.0	32.79	19.943	
6,000.0	5,855.4	6,079.3	5,783.0	25.9	37.1	7.29	-150.9	-1,797.9	656.9	623.9	33.06	19.868	
6,100.0	5,955.2	6,208.9	5,912.1	26.1	37.4	7.31	-151.9	-1,809.3	659.0	625.7	33.27	19.808	
6,200.0	6,055.1	6,338.7	6,041.7	26.2	37.5	7.32	-152.4	-1,814.9	660.0	626.6	33.39	19.763	
6,300.0	6,155.1	6,452.1	6,155.1	26.3	37.6	-90.13	-152.5	-1,815.5	660.1	625.6	34.43	19.173	
6,400.0	6,255.1	6,552.1	6,255.1	26.4	37.7	-90.13	-152.5	-1,815.5	660.1	625.3	34.73	19.004	
6,500.0	6,355.0	6,648.1	6,351.1	26.5	37.7	-86.38	-149.3	-1,815.7	660.1	625.8	34.25	19.270	
6,600.0	6,453.5	6,742.7	6,444.3	26.6	37.8	-86.46	-134.3	-1,816.7	660.0	625.5	34.52	19.117	
6,700.0	6,548.7	6,837.3	6,534.9	26.7	37.9	-86.61	-107.1	-1,818.5	659.9	625.2	34.74	18.995	
6,800.0	6,638.7	6,932.3	6,621.4	26.8	38.0	-86.82	-68.1	-1,821.0	659.8	624.8	34.96	18.872	
6,900.0	6,721.8	7,027.5	6,702.2	26.9	38.0	-87.09	-17.8	-1,824.3	659.6	624.4	35.26	18.707	
7,000.0	6,796.4	7,123.2	6,775.9	27.0	38.1	-87.41	42.9	-1,828.3	659.5	623.7	35.73	18.456	
7,100.0	6,861.0	7,219.4	6,841.1	27.2	38.3	-87.78	113.3	-1,833.0	659.3	622.9	36.44	18.093	
7,200.0	6,914.4	7,316.1	6,896.6	27.5	38.5	-88.20	192.3	-1,838.2	659.1	621.7	37.46	17.596	
7,300.0	6,955.5	7,413.5	6,941.2	27.8	38.7	-88.65	278.6	-1,843.9	659.0	620.2	38.80	16.983	
7,400.0	6,983.6	7,511.6	6,973.8	28.2	39.0	-89.13	370.8	-1,850.0	658.9	618.5	40.46	16.284	
7,500.0	6,998.0	7,610.4	6,993.7	28.8	39.3	-89.62	467.4	-1,856.3	658.9	616.5	42.39	15.544	
7,525.4	6,999.7	7,635.7	6,996.6	28.9	39.5	-89.73	492.4	-1,858.0	658.9	616.0	42.92	15.350	
7,600.0	7,000.0	7,710.1	7,000.0	29.5	39.8	-90.00	566.5	-1,862.9	658.9	614.4	44.54	14.794	
7,700.0	7,000.0	7,810.1	7,000.0	30.3	40.3	-90.00	666.3	-1,869.4	658.9	611.9	46.96	14.032	
7,800.0	7,000.0	7,910.1	7,000.0	31.2	41.0	-90.00	766.1	-1,876.0	658.9	609.4	49.57	13.294	
7,900.0	7,000.0	8,010.1	7,000.0	32.2	41.7	-90.00	865.9	-1,882.6	658.9	606.6	52.33	12.591	
8,000.0	7,000.0	8,110.1	7,000.0	33.3	42.5	-90.00	965.7	-1,889.2	659.0	603.7	55.24	11.930	
8,100.0	7,000.0	8,210.1	7,000.0	34.5	43.4	-90.00	1,065.4	-1,895.8	659.0	600.7	58.26	11.312	
8,200.0	7,000.0	8,310.1	7,000.0	35.8	44.3	-90.00	1,165.2	-1,902.3	659.0	597.6	61.37	10.738	
8,300.0	7,000.0	8,410.1	7,000.0	37.1	45.3	-90.00	1,265.0	-1,908.9	659.0	594.5	64.58	10.205	
8,400.0	7,000.0	8,510.1	7,000.0	38.5	46.4	-90.00	1,364.8	-1,915.5	659.1	591.2	67.85	9.713	
8,500.0	7,000.0	8,610.1	7,000.0	40.0	47.5	-90.00	1,464.6	-1,922.1	659.1	587.9	71.19	9.258	
8,600.0	7,000.0	8,710.1	7,000.0	41.5	48.8	-90.00	1,564.4	-1,928.7	659.1	584.5	74.58	8.837	
8,700.0	7,000.0	8,810.1	7,000.0	43.0	50.0	-90.00	1,664.1	-1,935.2	659.1	581.1	78.02	8.448	
8,800.0	7,000.0	8,910.1	7,000.0	44.6	51.3	-90.00	1,763.9	-1,941.8	659.1	577.6	81.50	8.088	
8,900.0	7,000.0	9,010.1	7,000.0	46.2	52.7	-90.00	1,863.7	-1,948.4	659.2	574.1	85.02	7.753	
9,000.0	7,000.0	9,110.1	7,000.0	47.8	54.1	-90.00	1,963.5	-1,955.0	659.2	570.6	88.56	7.443	
9,100.0	7,000.0	9,210.1	7,000.0	49.5	55.5	-90.00	2,063.3	-1,961.6	659.2	567.1	92.14	7.154	
9,200.0	7,000.0	9,310.1	7,000.0	51.2	57.0	-90.00	2,163.1	-1,968.1	659.2	563.5	95.74	6.885	
9,300.0	7,000.0	9,410.1	7,000.0	52.9	58.4	-90.00	2,262.8	-1,974.7	659.2	559.9	99.36	6.635	
9,400.0	7,000.0	9,510.1	7,000.0	54.6	60.0	-90.00	2,362.6	-1,981.3	659.3	556.2	103.01	6.400	
9,500.0	7,000.0	9,610.1	7,000.0	56.3	61.5	-90.00	2,462.4	-1,987.9	659.3	552.6	106.67	6.181	
9,600.0	7,000.0	9,710.1	7,000.0	58.1	63.1	-90.00	2,562.2	-1,994.4	659.3	549.0	110.34	5.975	
9,700.0	7,000.0	9,810.1	7,000.0	59.8	64.7	-90.00	2,662.0	-2,001.0	659.3	545.3	114.04	5.782	
9,800.0	7,000.0	9,910.1	7,000.0	61.6	66.3	-90.00	2,761.8	-2,007.6	659.3	541.6	117.74	5.600	
9,900.0	7,000.0	10,010.1	7,000.0	63.4	68.0	-90.00	2,861.5	-2,014.2	659.4	537.9	121.46	5.429	
10,000.0	7,000.0	10,110.1	7,000.0	65.2	69.6	-90.00	2,961.3	-2,020.8	659.4	534.2	125.19	5.267	
10,100.0	7,000.0	10,210.1	7,000.0	67.0	71.3	-90.00	3,061.1	-2,027.3	659.4	530.5	128.92	5.115	
10,200.0	7,000.0	10,310.1	7,000.0	68.8	73.0	-90.00	3,160.9	-2,033.9	659.4	526.7	132.67	4.970	

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 Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn A-4CHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,410.1	7,000.0	70.6	74.7	-90.00	3,260.7	-2,040.5	659.4	523.0	136.43	4.834	
10,400.0	7,000.0	10,510.1	7,000.0	72.4	76.4	-90.00	3,360.5	-2,047.1	659.5	519.3	140.19	4.704	
10,500.0	7,000.0	10,610.1	7,000.0	74.2	78.1	-90.00	3,460.2	-2,053.7	659.5	515.5	143.96	4.581	
10,600.0	7,000.0	10,710.1	7,000.0	76.1	79.8	-90.00	3,560.0	-2,060.2	659.5	511.8	147.74	4.464	
10,700.0	7,000.0	10,810.1	7,000.0	77.9	81.6	-90.00	3,659.8	-2,066.8	659.5	508.0	151.52	4.353	
10,800.0	7,000.0	10,910.1	7,000.0	79.7	83.3	-90.00	3,759.6	-2,073.4	659.5	504.2	155.31	4.247	
10,900.0	7,000.0	11,010.1	7,000.0	81.6	85.1	-90.00	3,859.4	-2,080.0	659.6	500.5	159.10	4.146	
11,000.0	7,000.0	11,110.1	7,000.0	83.5	86.9	-90.00	3,959.2	-2,086.5	659.6	496.7	162.90	4.049	
11,100.0	7,000.0	11,210.1	7,000.0	85.3	88.7	-90.00	4,058.9	-2,093.1	659.6	492.9	166.70	3.957	
11,200.0	7,000.0	11,310.1	7,000.0	87.2	90.4	-90.00	4,158.7	-2,099.7	659.6	489.1	170.51	3.869	
11,300.0	7,000.0	11,410.1	7,000.0	89.0	92.2	-90.00	4,258.5	-2,106.3	659.6	485.3	174.32	3.784	
11,400.0	7,000.0	11,510.1	7,000.0	90.9	94.0	-90.00	4,358.3	-2,112.9	659.7	481.5	178.13	3.703	
11,427.8	7,000.0	11,537.9	7,000.0	91.5	94.5	-90.00	4,386.1	-2,114.7	659.7	480.5	179.19	3.681 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.96	-1.5	-87.5	87.6					
100.0	100.0	100.0	100.0	0.1	0.1	-90.96	-1.5	-87.5	87.6	87.3	0.22	389.522		
200.0	200.0	200.0	200.0	0.3	0.3	-90.96	-1.5	-87.5	87.6	86.9	0.67	129.841 CC, ES		
300.0	300.0	297.0	297.0	0.6	0.5	-91.03	-1.6	-89.2	89.2	88.1	1.11	80.652		
400.0	400.0	393.8	393.6	0.8	0.8	-91.20	-2.0	-94.1	94.3	92.8	1.55	61.006		
500.0	500.0	490.1	489.6	1.0	1.0	-91.46	-2.6	-102.2	102.7	100.7	2.01	51.104		
600.0	600.0	585.8	584.6	1.2	1.3	-91.75	-3.5	-113.4	114.5	112.0	2.51	45.680		
700.0	700.0	680.6	678.4	1.5	1.6	-92.05	-4.6	-127.6	129.5	126.5	3.04	42.606		
800.0	800.0	774.4	770.6	1.7	1.9	-92.34	-5.9	-144.8	147.8	144.2	3.62	40.873		
900.0	900.0	867.0	861.0	1.9	2.3	-92.59	-7.4	-164.6	169.3	165.1	4.24	39.946		
1,000.0	1,000.0	958.1	949.3	2.1	2.8	-92.81	-9.2	-187.0	193.9	189.0	4.91	39.525		
1,100.0	1,100.0	1,048.2	1,035.8	2.3	3.3	4.44	-11.1	-211.8	219.9	215.2	4.76	46.250		
1,200.0	1,199.8	1,137.6	1,120.9	2.5	3.8	4.32	-13.2	-239.1	245.6	240.4	5.20	47.235		
1,300.0	1,299.5	1,226.3	1,204.5	2.8	4.4	4.25	-15.5	-268.9	270.9	265.2	5.66	47.890		
1,400.0	1,398.7	1,314.6	1,286.7	3.0	5.1	4.23	-18.0	-301.0	295.8	289.6	6.13	48.265		
1,500.0	1,497.5	1,411.9	1,376.7	3.3	5.8	4.25	-20.9	-337.8	318.7	312.1	6.63	48.098		
1,600.0	1,595.6	1,510.0	1,467.5	3.6	6.6	4.31	-23.7	-374.8	338.3	331.2	7.14	47.372		
1,700.0	1,693.1	1,608.6	1,558.8	4.0	7.4	4.41	-26.6	-412.1	354.5	346.8	7.67	46.210		
1,800.0	1,789.8	1,707.8	1,650.5	4.4	8.2	4.56	-29.5	-449.5	367.6	359.4	8.23	44.678		
1,900.0	1,886.3	1,807.0	1,742.3	4.8	9.0	4.71	-32.4	-487.0	380.3	371.5	8.81	43.165		
2,000.0	1,982.9	1,906.1	1,834.1	5.3	9.8	4.85	-35.3	-524.4	393.0	383.6	9.40	41.803		
2,100.0	2,079.5	2,005.3	1,925.9	5.8	10.6	4.98	-38.2	-561.9	405.7	395.7	10.00	40.574		
2,200.0	2,176.1	2,104.5	2,017.7	6.3	11.4	5.10	-41.1	-599.4	418.4	407.8	10.60	39.462		
2,300.0	2,272.7	2,203.7	2,109.5	6.8	12.2	5.21	-44.0	-636.8	431.1	419.9	11.21	38.452		
2,400.0	2,369.3	2,302.9	2,201.3	7.3	13.0	5.32	-47.0	-674.3	443.8	432.0	11.82	37.533		
2,500.0	2,465.9	2,402.1	2,293.1	7.9	13.8	5.42	-49.9	-711.8	456.5	444.1	12.44	36.693		
2,600.0	2,562.5	2,501.3	2,384.9	8.4	14.6	5.52	-52.8	-749.2	469.2	456.1	13.06	35.924		
2,700.0	2,659.0	2,600.4	2,476.7	8.9	15.4	5.61	-55.7	-786.7	481.9	468.2	13.68	35.216		
2,800.0	2,755.6	2,699.6	2,568.5	9.5	16.2	5.70	-58.6	-824.2	494.6	480.3	14.31	34.565		
2,900.0	2,852.2	2,798.8	2,660.3	10.0	17.0	5.78	-61.5	-861.6	507.3	492.4	14.94	33.963		
3,000.0	2,948.8	2,898.0	2,752.1	10.5	17.9	5.86	-64.4	-899.1	520.0	504.5	15.57	33.405		
3,100.0	3,045.4	2,997.2	2,843.8	11.1	18.7	5.94	-67.3	-936.6	532.7	516.5	16.20	32.887		
3,200.0	3,142.0	3,096.4	2,935.6	11.6	19.5	6.01	-70.2	-974.0	545.5	528.6	16.83	32.404		
3,300.0	3,238.6	3,195.6	3,027.4	12.2	20.3	6.08	-73.1	-1,011.5	558.2	540.7	17.47	31.954		
3,400.0	3,335.2	3,294.7	3,119.2	12.7	21.1	6.14	-76.0	-1,049.0	570.9	552.8	18.10	31.533		
3,500.0	3,431.7	3,393.9	3,211.0	13.3	21.9	6.20	-78.9	-1,086.4	583.6	564.9	18.74	31.139		
3,600.0	3,528.3	3,493.1	3,302.8	13.8	22.7	6.26	-81.8	-1,123.9	596.3	576.9	19.38	30.769		
3,700.0	3,624.9	3,592.3	3,394.6	14.4	23.5	6.32	-84.7	-1,161.4	609.0	589.0	20.02	30.420		
3,800.0	3,721.5	3,691.5	3,486.4	14.9	24.3	6.38	-87.6	-1,198.8	621.7	601.1	20.66	30.093		
3,900.0	3,818.1	3,790.7	3,578.2	15.5	25.2	6.43	-90.5	-1,236.3	634.5	613.2	21.30	29.783		
4,000.0	3,914.7	3,889.9	3,670.0	16.0	26.0	6.48	-93.4	-1,273.8	647.2	625.2	21.94	29.491		
4,100.0	4,011.3	3,989.1	3,761.8	16.6	26.8	6.53	-96.3	-1,311.2	659.9	637.3	22.59	29.214		
4,200.0	4,107.8	4,088.2	3,853.6	17.1	27.6	6.57	-99.2	-1,348.7	672.6	649.4	23.23	28.952		
4,300.0	4,204.4	4,187.4	3,945.4	17.7	28.4	6.62	-102.1	-1,386.2	685.3	661.4	23.88	28.703		
4,400.0	4,301.0	4,286.6	4,037.1	18.2	29.2	6.66	-105.0	-1,423.6	698.0	673.5	24.52	28.466		
4,500.0	4,397.6	4,385.8	4,128.9	18.8	30.0	6.70	-107.9	-1,461.1	710.8	685.6	25.17	28.241		
4,600.0	4,494.2	4,485.0	4,220.7	19.4	30.8	6.75	-110.8	-1,498.6	723.5	697.7	25.81	28.027		
4,700.0	4,590.8	4,584.2	4,312.5	19.9	31.6	6.78	-113.8	-1,536.0	736.2	709.7	26.46	27.822		
4,800.0	4,687.4	4,683.4	4,404.3	20.5	32.5	6.82	-116.7	-1,573.5	748.9	721.8	27.11	27.627		
4,900.0	4,784.0	4,782.5	4,496.1	21.0	33.3	6.86	-119.6	-1,611.0	761.6	733.9	27.76	27.441		
5,000.0	4,880.5	4,881.7	4,587.9	21.6	34.1	6.89	-122.5	-1,648.4	774.4	746.0	28.40	27.262		
5,100.0	4,977.1	4,980.9	4,679.7	22.1	34.9	6.93	-125.4	-1,685.9	787.1	758.0	29.05	27.092		

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

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn A-4NHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.0	5,073.7	5,080.1	4,771.5	22.7	35.7	6.96	-128.3	-1,723.4	799.8	770.1	29.70	26.928		
5,300.0	5,170.3	5,179.3	4,863.3	23.3	36.5	6.99	-131.2	-1,760.8	812.5	782.2	30.35	26.771		
5,400.0	5,266.9	5,278.5	4,955.1	23.8	37.3	7.02	-134.1	-1,798.3	825.2	794.2	31.00	26.620		
5,500.0	5,363.5	5,392.0	5,060.3	24.4	38.2	7.06	-137.4	-1,840.8	837.7	806.0	31.69	26.436		
5,600.0	5,460.6	5,532.8	5,192.6	24.8	39.0	7.14	-141.1	-1,888.5	848.2	815.9	32.30	26.258		
5,700.0	5,558.4	5,674.4	5,328.0	25.1	39.7	7.20	-144.3	-1,929.9	857.2	824.4	32.84	26.106		
5,800.0	5,656.9	5,816.8	5,466.1	25.4	40.3	7.25	-147.0	-1,964.7	864.8	831.5	33.29	25.977		
5,900.0	5,756.0	5,959.8	5,606.3	25.7	40.8	7.29	-149.2	-1,992.8	870.9	837.3	33.66	25.873		
6,000.0	5,855.4	6,103.3	5,748.2	25.9	41.2	7.32	-150.8	-2,013.9	875.5	841.5	33.95	25.789		
6,100.0	5,955.2	6,247.2	5,891.4	26.1	41.5	7.34	-151.9	-2,028.0	878.5	844.4	34.15	25.729		
6,200.0	6,055.1	6,391.3	6,035.3	26.2	41.6	7.35	-152.4	-2,034.8	880.0	845.7	34.26	25.685		
6,300.0	6,155.1	6,511.1	6,155.1	26.3	41.7	-90.10	-152.5	-2,035.5	880.1	844.8	35.34	24.902		
6,400.0	6,255.1	6,611.1	6,255.1	26.4	41.8	-90.10	-152.5	-2,035.5	880.1	844.5	35.64	24.694		
6,500.0	6,355.0	6,705.9	6,349.8	26.5	41.9	-86.35	-149.4	-2,035.7	880.1	845.0	35.09	25.080		
6,600.0	6,453.5	6,800.0	6,442.7	26.6	41.9	-86.43	-134.7	-2,036.7	880.1	844.7	35.36	24.885		
6,700.0	6,548.7	6,891.7	6,530.5	26.7	42.0	-86.58	-108.7	-2,038.4	879.9	844.3	35.58	24.733		
6,800.0	6,638.7	6,985.0	6,615.7	26.8	42.1	-86.78	-71.1	-2,040.9	879.7	844.0	35.79	24.579		
6,900.0	6,721.8	7,078.7	6,695.7	26.9	42.1	-87.05	-22.5	-2,044.1	879.5	843.4	36.09	24.373		
7,000.0	6,796.4	7,172.9	6,769.0	27.0	42.2	-87.37	36.5	-2,048.0	879.3	842.8	36.54	24.062		
7,100.0	6,861.0	7,267.7	6,834.3	27.2	42.3	-87.74	105.0	-2,052.5	879.1	841.8	37.23	23.610		
7,200.0	6,914.4	7,363.3	6,890.4	27.5	42.5	-88.16	182.2	-2,057.6	878.9	840.6	38.23	22.990		
7,300.0	6,955.5	7,459.7	6,936.0	27.8	42.7	-88.61	266.8	-2,063.2	878.7	839.2	39.54	22.222		
7,400.0	6,983.6	7,557.0	6,970.1	28.2	43.0	-89.09	357.7	-2,069.2	878.6	837.4	41.16	21.343		
7,500.0	6,998.0	7,655.3	6,991.6	28.8	43.3	-89.58	453.3	-2,075.5	878.5	835.4	43.05	20.407		
7,542.3	7,000.5	7,697.2	6,996.8	29.0	43.5	-89.76	494.8	-2,078.2	878.5	834.6	43.93	19.999		
7,600.0	7,000.0	7,754.7	6,999.9	29.5	43.7	-90.00	552.1	-2,082.0	878.5	833.3	45.15	19.456		
7,700.0	7,000.0	7,854.7	7,000.0	30.3	44.2	-90.00	651.8	-2,088.6	878.5	831.0	47.55	18.476		
7,800.0	7,000.0	7,954.7	7,000.0	31.2	44.8	-90.00	751.6	-2,095.2	878.5	828.4	50.12	17.527		
7,900.0	7,000.0	8,054.7	7,000.0	32.2	45.4	-90.00	851.4	-2,101.7	878.6	825.7	52.86	16.620		
8,000.0	7,000.0	8,154.7	7,000.0	33.3	46.1	-90.00	951.2	-2,108.3	878.6	822.9	55.73	15.764		
8,100.0	7,000.0	8,254.7	7,000.0	34.5	46.9	-90.00	1,051.0	-2,114.9	878.6	819.9	58.73	14.961		
8,200.0	7,000.0	8,354.7	7,000.0	35.8	47.7	-90.00	1,150.8	-2,121.5	878.6	816.8	61.82	14.213		
8,300.0	7,000.0	8,454.7	7,000.0	37.1	48.7	-90.00	1,250.5	-2,128.1	878.7	813.7	65.00	13.519		
8,400.0	7,000.0	8,554.7	7,000.0	38.5	49.6	-90.00	1,350.3	-2,134.6	878.7	810.4	68.25	12.875		
8,500.0	7,000.0	8,654.7	7,000.0	40.0	50.7	-90.00	1,450.1	-2,141.2	878.7	807.1	71.57	12.278		
8,600.0	7,000.0	8,754.7	7,000.0	41.5	51.8	-90.00	1,549.9	-2,147.8	878.7	803.8	74.94	11.726		
8,700.0	7,000.0	8,854.7	7,000.0	43.0	53.0	-90.00	1,649.7	-2,154.4	878.7	800.4	78.36	11.214		
8,800.0	7,000.0	8,954.7	7,000.0	44.6	54.2	-90.00	1,749.5	-2,161.0	878.8	796.9	81.82	10.740		
8,900.0	7,000.0	9,054.7	7,000.0	46.2	55.4	-90.00	1,849.2	-2,167.5	878.8	793.5	85.32	10.300		
9,000.0	7,000.0	9,154.7	7,000.0	47.8	56.7	-90.00	1,949.0	-2,174.1	878.8	790.0	88.86	9.890		
9,100.0	7,000.0	9,254.7	7,000.0	49.5	58.1	-90.00	2,048.8	-2,180.7	878.8	786.4	92.42	9.509		
9,200.0	7,000.0	9,354.7	7,000.0	51.2	59.5	-90.00	2,148.6	-2,187.3	878.9	782.8	96.01	9.154		
9,300.0	7,000.0	9,454.7	7,000.0	52.9	60.9	-90.00	2,248.4	-2,193.9	878.9	779.3	99.62	8.822		
9,400.0	7,000.0	9,554.7	7,000.0	54.6	62.3	-90.00	2,348.2	-2,200.5	878.9	775.6	103.25	8.512		
9,500.0	7,000.0	9,654.7	7,000.0	56.3	63.8	-90.00	2,447.9	-2,207.0	878.9	772.0	106.90	8.222		
9,600.0	7,000.0	9,754.7	7,000.0	58.1	65.3	-90.00	2,547.7	-2,213.6	878.9	768.4	110.57	7.949		
9,700.0	7,000.0	9,854.7	7,000.0	59.8	66.9	-90.00	2,647.5	-2,220.2	879.0	764.7	114.25	7.693		
9,800.0	7,000.0	9,954.7	7,000.0	61.6	68.4	-90.00	2,747.3	-2,226.8	879.0	761.0	117.95	7.452		
9,900.0	7,000.0	10,054.7	7,000.0	63.4	70.0	-90.00	2,847.1	-2,233.4	879.0	757.3	121.66	7.225		
10,000.0	7,000.0	10,154.7	7,000.0	65.2	71.6	-90.00	2,946.9	-2,239.9	879.0	753.6	125.38	7.011		
10,100.0	7,000.0	10,254.7	7,000.0	67.0	73.2	-90.00	3,046.6	-2,246.5	879.1	749.9	129.11	6.809		
10,200.0	7,000.0	10,354.7	7,000.0	68.8	74.8	-90.00	3,146.4	-2,253.1	879.1	746.2	132.85	6.617		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn A-4NHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,454.7	7,000.0	70.6	76.5	-90.00	3,246.2	-2,259.7	879.1	742.5	136.60	6.436	
10,400.0	7,000.0	10,554.7	7,000.0	72.4	78.2	-90.00	3,346.0	-2,266.3	879.1	738.8	140.36	6.263	
10,500.0	7,000.0	10,654.7	7,000.0	74.2	79.8	-90.00	3,445.8	-2,272.8	879.1	735.0	144.12	6.100	
10,600.0	7,000.0	10,754.7	7,000.0	76.1	81.5	-90.00	3,545.6	-2,279.4	879.2	731.3	147.89	5.945	
10,700.0	7,000.0	10,854.7	7,000.0	77.9	83.2	-90.00	3,645.3	-2,286.0	879.2	727.5	151.67	5.797	
10,800.0	7,000.0	10,954.7	7,000.0	79.7	84.9	-90.00	3,745.1	-2,292.6	879.2	723.8	155.45	5.656	
10,900.0	7,000.0	11,054.7	7,000.0	81.6	86.7	-90.00	3,844.9	-2,299.2	879.2	720.0	159.24	5.521	
11,000.0	7,000.0	11,154.7	7,000.0	83.5	88.4	-90.00	3,944.7	-2,305.7	879.3	716.2	163.04	5.393	
11,100.0	7,000.0	11,254.7	7,000.0	85.3	90.2	-90.00	4,044.5	-2,312.3	879.3	712.4	166.83	5.270	
11,200.0	7,000.0	11,354.7	7,000.0	87.2	91.9	-90.00	4,144.3	-2,318.9	879.3	708.7	170.64	5.153	
11,300.0	7,000.0	11,454.7	7,000.0	89.0	93.7	-90.00	4,244.0	-2,325.5	879.3	704.9	174.44	5.041	
11,400.0	7,000.0	11,554.7	7,000.0	90.9	95.4	-90.00	4,343.8	-2,332.1	879.3	701.1	178.26	4.933	
11,427.8	7,000.0	11,582.5	7,000.0	91.5	95.9	-90.00	4,371.6	-2,333.9	879.3	700.0	179.31	4.904 SF	

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn N-4NHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.07	0.7	44.9	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	89.07	0.7	44.9	44.9	44.7	0.22	199.721		
200.0	200.0	200.0	200.0	0.3	0.3	89.07	0.7	44.9	44.9	44.2	0.67	66.574		
300.0	300.0	300.0	300.0	0.6	0.6	89.07	0.7	44.9	44.9	43.8	1.12	39.944		
400.0	400.0	400.0	400.0	0.8	0.8	89.07	0.7	44.9	44.9	43.3	1.57	28.532		
500.0	500.0	500.0	500.0	1.0	1.0	89.07	0.7	44.9	44.9	42.9	2.02	22.191		
600.0	600.0	600.0	600.0	1.2	1.2	89.07	0.7	44.9	44.9	42.4	2.47	18.156		
700.0	700.0	700.0	700.0	1.5	1.5	89.07	0.7	44.9	44.9	42.0	2.92	15.363		
800.0	800.0	800.0	800.0	1.7	1.7	89.07	0.7	44.9	44.9	41.5	3.37	13.315		
900.0	900.0	900.0	900.0	1.9	1.9	89.07	0.7	44.9	44.9	41.1	3.82	11.748		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.07	0.7	44.9	44.9	40.6	4.27	10.512 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.4	-173.72	0.7	44.9	46.6	41.9	4.70	9.913		
1,200.0	1,199.8	1,199.8	1,199.8	2.5	2.6	-174.35	0.7	44.9	51.8	46.7	5.12	10.121		
1,300.0	1,299.5	1,299.5	1,299.5	2.8	2.8	-175.14	0.7	44.9	60.5	55.0	5.54	10.926		
1,400.0	1,398.7	1,398.7	1,398.7	3.0	3.0	-175.94	0.7	44.9	72.7	66.7	5.95	12.204		
1,500.0	1,497.5	1,500.5	1,500.5	3.3	3.2	-176.52	0.4	43.2	86.6	80.2	6.35	13.629		
1,600.0	1,595.6	1,602.8	1,602.7	3.6	3.4	-176.79	-0.7	37.8	100.4	93.7	6.73	14.916		
1,700.0	1,693.1	1,705.7	1,705.1	4.0	3.7	-176.87	-2.4	28.9	114.2	107.1	7.12	16.043		
1,800.0	1,789.8	1,809.2	1,807.8	4.4	3.9	-176.82	-5.0	16.3	127.5	120.0	7.54	16.914		
1,900.0	1,886.3	1,913.4	1,910.7	4.8	4.2	-176.61	-8.2	-0.1	137.7	129.7	8.00	17.215		
2,000.0	1,982.9	2,013.7	2,009.3	5.3	4.5	-176.31	-11.8	-18.1	145.6	137.2	8.47	17.200		
2,100.0	2,079.5	2,113.4	2,107.3	5.8	4.8	-176.05	-15.3	-35.9	153.6	144.6	8.95	17.161		
2,200.0	2,176.1	2,213.1	2,205.3	6.3	5.1	-175.82	-18.9	-53.8	161.5	152.1	9.43	17.118		
2,300.0	2,272.7	2,312.8	2,303.3	6.8	5.4	-175.61	-22.4	-71.6	169.4	159.5	9.93	17.060		
2,400.0	2,369.3	2,412.5	2,401.3	7.3	5.8	-175.41	-26.0	-89.5	177.4	166.9	10.43	16.997		
2,500.0	2,465.9	2,512.2	2,499.3	7.9	6.1	-175.23	-29.5	-107.4	185.3	174.4	10.94	16.931		
2,600.0	2,562.5	2,611.8	2,597.3	8.4	6.5	-175.07	-33.1	-125.2	193.2	181.8	11.46	16.863		
2,700.0	2,659.0	2,711.5	2,695.4	8.9	6.9	-174.92	-36.6	-143.1	201.2	189.2	11.98	16.794		
2,800.0	2,755.6	2,811.2	2,793.4	9.5	7.3	-174.78	-40.1	-160.9	209.1	196.6	12.50	16.725		
2,900.0	2,852.2	2,910.9	2,891.4	10.0	7.6	-174.65	-43.7	-178.8	217.0	204.0	13.03	16.658		
3,000.0	2,948.8	3,010.6	2,989.4	10.5	8.0	-174.53	-47.2	-196.7	225.0	211.4	13.56	16.592		
3,100.0	3,045.4	3,110.3	3,087.4	11.1	8.4	-174.42	-50.8	-214.5	232.9	218.8	14.09	16.527		
3,200.0	3,142.0	3,209.9	3,185.4	11.6	8.8	-174.32	-54.3	-232.4	240.9	226.2	14.63	16.464		
3,300.0	3,238.6	3,309.6	3,283.4	12.2	9.2	-174.22	-57.9	-250.2	248.8	233.6	15.17	16.403		
3,400.0	3,335.2	3,409.3	3,381.4	12.7	9.6	-174.13	-61.4	-268.1	256.8	241.0	15.71	16.344		
3,500.0	3,431.7	3,509.0	3,479.4	13.3	10.0	-174.05	-65.0	-286.0	264.7	248.5	16.25	16.287		
3,600.0	3,528.3	3,608.7	3,577.4	13.8	10.4	-173.96	-68.5	-303.8	272.6	255.9	16.80	16.232		
3,700.0	3,624.9	3,708.4	3,675.4	14.4	10.8	-173.89	-72.1	-321.7	280.6	263.3	17.34	16.179		
3,800.0	3,721.5	3,808.0	3,773.4	14.9	11.2	-173.82	-75.6	-339.5	288.5	270.6	17.89	16.128		
3,900.0	3,818.1	3,907.7	3,871.4	15.5	11.6	-173.75	-79.2	-357.4	296.5	278.0	18.44	16.078		
4,000.0	3,914.7	4,007.4	3,969.4	16.0	12.0	-173.68	-82.7	-375.3	304.4	285.4	18.99	16.031		
4,100.0	4,011.3	4,107.1	4,067.4	16.6	12.4	-173.62	-86.3	-393.1	312.4	292.8	19.54	15.985		
4,200.0	4,107.8	4,206.8	4,165.4	17.1	12.8	-173.56	-89.8	-411.0	320.3	300.2	20.09	15.941		
4,300.0	4,204.4	4,306.5	4,263.5	17.7	13.2	-173.51	-93.4	-428.8	328.3	307.6	20.65	15.899		
4,400.0	4,301.0	4,406.1	4,361.5	18.2	13.6	-173.46	-96.9	-446.7	336.2	315.0	21.20	15.858		
4,500.0	4,397.6	4,505.8	4,459.5	18.8	14.0	-173.41	-100.4	-464.5	344.2	322.4	21.76	15.818		
4,600.0	4,494.2	4,605.5	4,557.5	19.4	14.5	-173.36	-104.0	-482.4	352.1	329.8	22.31	15.780		
4,700.0	4,590.8	4,705.2	4,655.5	19.9	14.9	-173.31	-107.5	-500.3	360.1	337.2	22.87	15.744		
4,800.0	4,687.4	4,804.9	4,753.5	20.5	15.3	-173.27	-111.1	-518.1	368.0	344.6	23.43	15.708		
4,900.0	4,784.0	4,904.6	4,851.5	21.0	15.7	-173.23	-114.6	-536.0	376.0	352.0	23.99	15.674		
5,000.0	4,880.5	5,004.2	4,949.5	21.6	16.1	-173.18	-118.2	-553.8	383.9	359.4	24.55	15.641		
5,100.0	4,977.1	5,103.9	5,047.5	22.1	16.5	-173.15	-121.7	-571.7	391.9	366.8	25.10	15.609		

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Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn N-4NHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.0	5,073.7	5,203.6	5,145.5	22.7	16.9	-173.11	-125.3	-589.6	399.8	374.2	25.66	15.579		
5,300.0	5,170.3	5,303.3	5,243.5	23.3	17.3	-173.07	-128.8	-607.4	407.8	381.5	26.22	15.549		
5,400.0	5,266.9	5,403.0	5,341.5	23.8	17.7	-173.04	-132.4	-625.3	415.7	388.9	26.79	15.520		
5,500.0	5,363.5	5,502.6	5,439.5	24.4	18.2	-173.01	-135.9	-643.1	423.7	396.3	27.35	15.491		
5,600.0	5,460.6	5,602.5	5,537.7	24.8	18.6	-172.96	-139.5	-661.0	429.7	401.8	27.91	15.394		
5,700.0	5,558.4	5,694.6	5,628.4	25.1	18.9	-172.87	-142.7	-677.1	432.8	404.4	28.41	15.236		
5,800.0	5,656.9	5,781.7	5,714.4	25.4	19.2	-172.79	-145.2	-689.8	435.2	406.4	28.81	15.105		
5,900.0	5,756.0	5,868.6	5,800.8	25.7	19.4	-172.74	-147.2	-700.0	437.1	407.9	29.16	14.989		
6,000.0	5,855.4	5,955.6	5,887.4	25.9	19.6	-172.69	-148.7	-707.7	438.5	409.1	29.46	14.884		
6,100.0	5,955.2	6,042.5	5,974.1	26.1	19.7	-172.66	-149.7	-712.7	439.5	409.8	29.71	14.791		
6,200.0	6,055.1	6,129.4	6,061.0	26.2	19.8	-172.65	-150.2	-715.2	439.9	410.0	29.91	14.708		
6,300.0	6,155.1	6,223.5	6,155.1	26.3	20.0	89.91	-150.3	-715.4	440.0	409.3	30.71	14.326		
6,400.0	6,255.1	6,323.5	6,255.1	26.4	20.1	89.91	-150.3	-715.4	440.0	408.9	31.06	14.165		
6,500.0	6,355.0	6,426.4	6,357.9	26.5	20.3	93.65	-146.4	-715.7	440.0	409.1	30.90	14.238		
6,600.0	6,453.5	6,530.5	6,460.2	26.6	20.4	93.56	-128.3	-716.9	439.9	408.7	31.19	14.105		
6,700.0	6,548.7	6,634.3	6,558.6	26.7	20.5	93.40	-95.6	-719.0	439.9	408.4	31.42	14.000		
6,800.0	6,638.7	6,737.9	6,651.1	26.8	20.6	93.17	-49.1	-722.0	439.8	408.1	31.66	13.891		
6,900.0	6,721.8	6,841.2	6,735.7	26.9	20.7	92.87	9.9	-725.9	439.7	407.7	32.00	13.741		
7,000.0	6,796.4	6,944.2	6,810.6	27.0	20.9	92.52	80.2	-730.5	439.6	407.0	32.53	13.513		
7,100.0	6,861.0	7,046.7	6,874.4	27.2	21.1	92.12	160.2	-735.8	439.4	406.1	33.35	13.178		
7,200.0	6,914.4	7,148.7	6,926.0	27.5	21.4	91.68	247.9	-741.5	439.4	404.9	34.50	12.734		
7,300.0	6,955.5	7,250.2	6,964.3	27.8	21.8	91.21	341.6	-747.7	439.3	403.3	36.01	12.199		
7,400.0	6,983.6	7,351.2	6,988.9	28.2	22.4	90.71	439.2	-754.0	439.2	401.4	37.85	11.606		
7,484.5	6,996.7	7,436.0	6,998.8	28.7	23.1	90.28	523.3	-759.6	439.2	399.6	39.62	11.086		
7,500.0	6,998.0	7,451.6	6,999.5	28.8	23.2	90.20	538.8	-760.6	439.2	399.3	39.95	10.995		
7,600.0	7,000.0	7,551.6	7,000.0	29.5	24.1	90.00	638.6	-767.1	439.2	396.9	42.30	10.384		
7,700.0	7,000.0	7,651.6	7,000.0	30.3	25.2	90.00	738.4	-773.7	439.3	394.4	44.86	9.791		
7,800.0	7,000.0	7,751.6	7,000.0	31.2	26.4	90.00	838.2	-780.2	439.3	391.7	47.61	9.226		
7,900.0	7,000.0	7,851.6	7,000.0	32.2	27.7	90.00	938.0	-786.7	439.3	388.8	50.51	8.697		
8,000.0	7,000.0	7,951.6	7,000.0	33.3	29.0	90.00	1,037.7	-793.3	439.3	385.8	53.53	8.206		
8,100.0	7,000.0	8,051.6	7,000.0	34.5	30.5	90.00	1,137.5	-799.8	439.3	382.7	56.66	7.753		
8,200.0	7,000.0	8,151.6	7,000.0	35.8	32.0	90.00	1,237.3	-806.3	439.4	379.5	59.89	7.336		
8,300.0	7,000.0	8,251.6	7,000.0	37.1	33.5	90.00	1,337.1	-812.9	439.4	376.2	63.18	6.954		
8,400.0	7,000.0	8,351.6	7,000.0	38.5	35.1	90.00	1,436.9	-819.4	439.4	372.8	66.55	6.603		
8,500.0	7,000.0	8,451.6	7,000.0	40.0	36.7	90.00	1,536.7	-826.0	439.4	369.4	69.96	6.281		
8,600.0	7,000.0	8,551.6	7,000.0	41.5	38.4	90.00	1,636.5	-832.5	439.4	366.0	73.43	5.984		
8,700.0	7,000.0	8,651.6	7,000.0	43.0	40.1	90.00	1,736.2	-839.0	439.4	362.5	76.94	5.712		
8,800.0	7,000.0	8,751.6	7,000.0	44.6	41.8	90.00	1,836.0	-845.6	439.5	359.0	80.48	5.461		
8,900.0	7,000.0	8,851.6	7,000.0	46.2	43.5	90.00	1,935.8	-852.1	439.5	355.4	84.05	5.229		
9,000.0	7,000.0	8,951.6	7,000.0	47.8	45.3	90.00	2,035.6	-858.7	439.5	351.9	87.65	5.014		
9,100.0	7,000.0	9,051.6	7,000.0	49.5	47.0	90.00	2,135.4	-865.2	439.5	348.2	91.28	4.815		
9,200.0	7,000.0	9,151.6	7,000.0	51.2	48.8	90.00	2,235.2	-871.7	439.5	344.6	94.93	4.630		
9,300.0	7,000.0	9,251.6	7,000.0	52.9	50.6	90.00	2,335.0	-878.3	439.6	341.0	98.59	4.458		
9,400.0	7,000.0	9,351.6	7,000.0	54.6	52.4	90.00	2,434.7	-884.8	439.6	337.3	102.27	4.298		
9,500.0	7,000.0	9,451.6	7,000.0	56.3	54.2	90.00	2,534.5	-891.4	439.6	333.6	105.97	4.148		
9,600.0	7,000.0	9,551.6	7,000.0	58.1	56.0	90.00	2,634.3	-897.9	439.6	329.9	109.68	4.008		
9,700.0	7,000.0	9,651.6	7,000.0	59.8	57.8	90.00	2,734.1	-904.4	439.6	326.2	113.41	3.877		
9,800.0	7,000.0	9,751.6	7,000.0	61.6	59.7	90.00	2,833.9	-911.0	439.7	322.5	117.14	3.753		
9,900.0	7,000.0	9,851.6	7,000.0	63.4	61.5	90.00	2,933.7	-917.5	439.7	318.8	120.89	3.637		
10,000.0	7,000.0	9,951.6	7,000.0	65.2	63.4	90.00	3,033.5	-924.1	439.7	315.1	124.65	3.528		
10,100.0	7,000.0	10,051.6	7,000.0	67.0	65.2	90.00	3,133.2	-930.6	439.7	311.3	128.41	3.424		
10,200.0	7,000.0	10,151.6	7,000.0	68.8	67.1	90.00	3,233.0	-937.1	439.7	307.6	132.18	3.327		

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 Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Kiehn Pad Sec.4-T4N-R68W - SRC Kiehn N-4NHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,000.0	10,251.6	7,000.0	70.6	68.9	90.00	3,332.8	-943.7	439.8	303.8	135.96	3.235	
10,400.0	7,000.0	10,351.6	7,000.0	72.4	70.8	90.00	3,432.6	-950.2	439.8	300.0	139.74	3.147	
10,500.0	7,000.0	10,451.6	7,000.0	74.2	72.7	90.00	3,532.4	-956.7	439.8	296.3	143.53	3.064	
10,600.0	7,000.0	10,551.6	7,000.0	76.1	74.6	90.00	3,632.2	-963.3	439.8	292.5	147.33	2.985	
10,700.0	7,000.0	10,651.6	7,000.0	77.9	76.4	90.00	3,732.0	-969.8	439.8	288.7	151.13	2.910	
10,800.0	7,000.0	10,751.6	7,000.0	79.7	78.3	90.00	3,831.7	-976.4	439.9	284.9	154.94	2.839	
10,900.0	7,000.0	10,851.6	7,000.0	81.6	80.2	90.00	3,931.5	-982.9	439.9	281.1	158.75	2.771	
11,000.0	7,000.0	10,951.6	7,000.0	83.5	82.1	90.00	4,031.3	-989.4	439.9	277.3	162.56	2.706	
11,100.0	7,000.0	11,051.6	7,000.0	85.3	84.0	90.00	4,131.1	-996.0	439.9	273.5	166.38	2.644	
11,200.0	7,000.0	11,151.6	7,000.0	87.2	85.9	90.00	4,230.9	-1,002.5	439.9	269.7	170.20	2.585	
11,300.0	7,000.0	11,251.6	7,000.0	89.0	87.8	90.00	4,330.7	-1,009.1	440.0	265.9	174.03	2.528	
11,358.5	7,000.0	11,310.1	7,000.0	90.1	88.9	90.00	4,389.0	-1,012.9	440.0	263.7	176.26	2.496	
11,400.0	7,000.0	11,349.0	7,000.0	90.9	89.6	90.00	4,427.8	-1,015.4	440.0	262.2	177.80	2.475	
11,427.8	7,000.0	11,349.0	7,000.0	91.5	89.6	90.00	4,427.8	-1,015.4	441.0	262.7	178.33	2.473 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5077.0ft (RKB - 13')

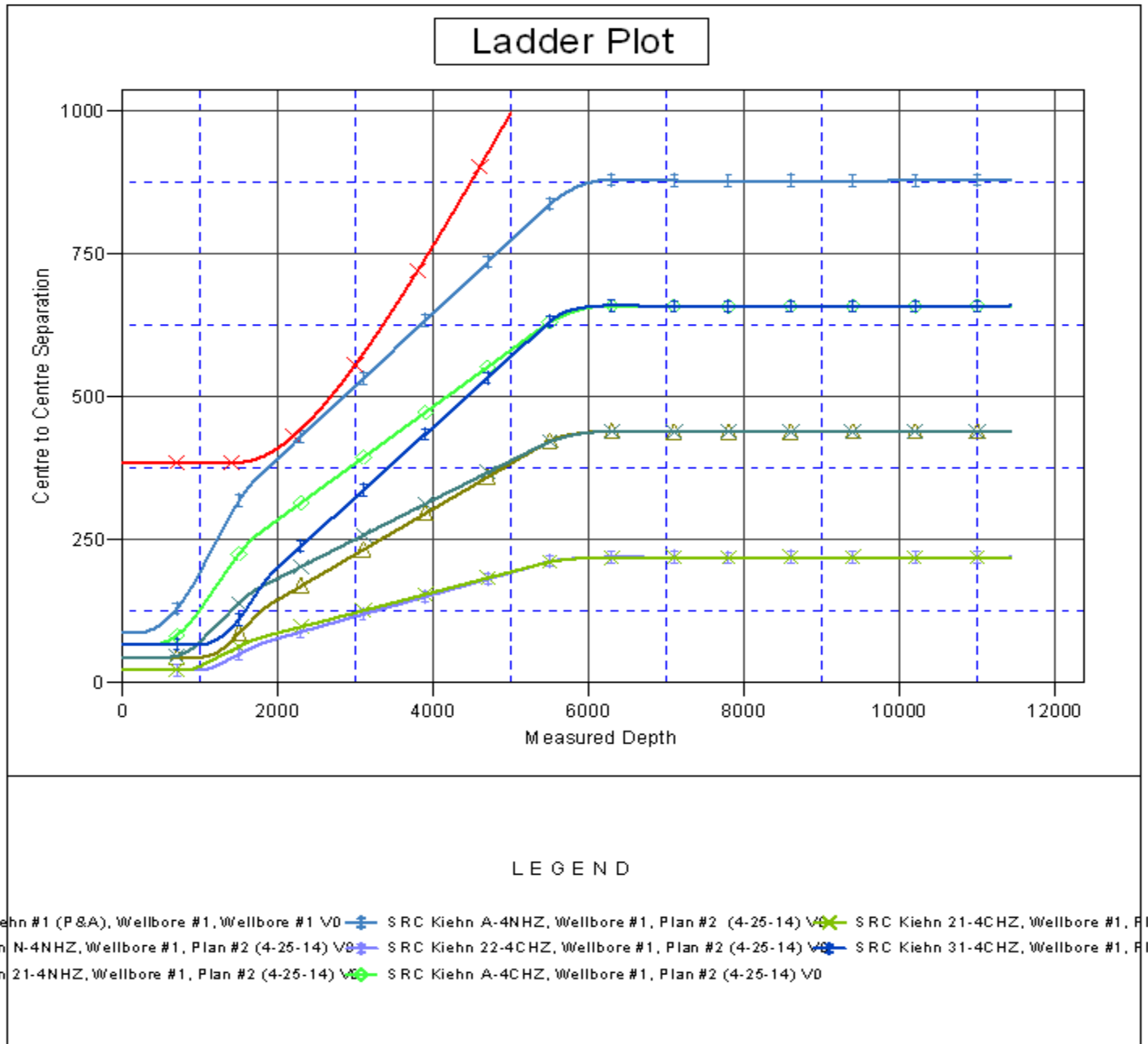
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: SRC Kiehn 22-4NHZ

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 22-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (RKB - 13')
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 22-4NHZ	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 (4-25-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5077.0ft (RKB - 13')
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: SRC Kiehn 22-4NHZ
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.32°

