

Synergy Resources

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

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

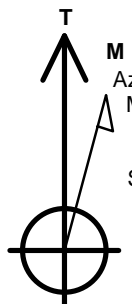
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 5064.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1365561.73	3137974.04	40.335811	-105.005066	
RKB - 13' WELL @ 5077.0ft (RKB - 13')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 201' FSL & 1718'FEL	1.0	0.0	0.0	Point
BHL 470'FNL & 1372'FEL	7000.0	4422.7	129.3	Point



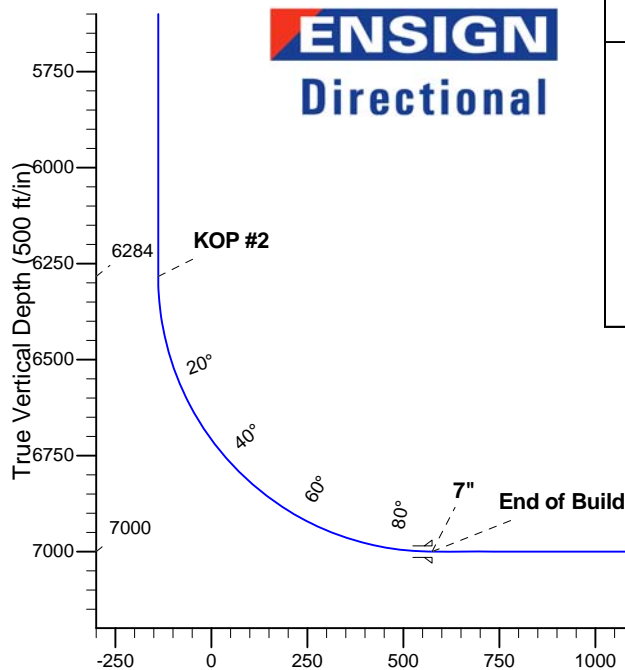
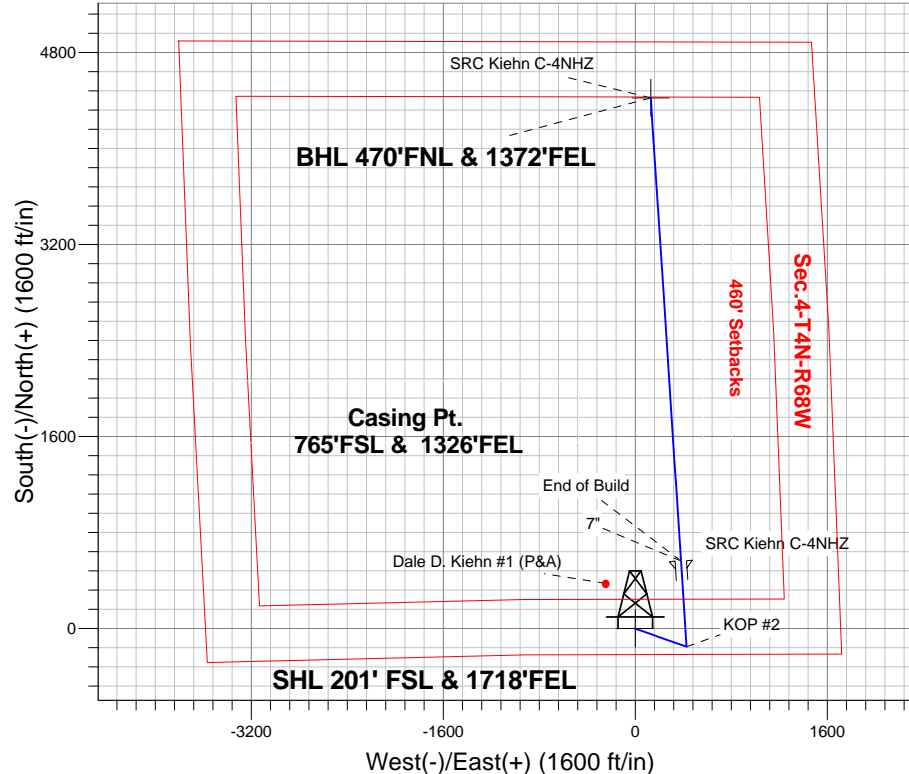
Azimuths to True North
Magnetic North: 8.60°

Magnetic Field
Strength: 52769.0snT
Dip Angle: 66.86°
Date: 4/25/2014
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP #1
6283.8	6315.6	KOP #2
7000.0	7440.6	End of Build

SRC Kiehn Pad Sec.4-T4N-R68W
SRC Kiehn C-4NHZ
Plan #2 (4-25-14)
11:38, April 29 2014



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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1919.2	8.38	109.43	1917.7	-10.2	28.9	2.00	109.43	-9.3	
4	4612.6	8.38	109.43	4582.3	-140.8	399.2	0.00	0.00	-129.1	
5	5031.8	0.00	0.00	5000.0	-151.0	428.1	2.00	180.00	-138.4	
6	6315.6	0.00	0.00	6283.8	-151.0	428.1	0.00	0.00	-138.4	
7	7440.6	90.00	356.26	7000.0	563.7	381.4	8.00	356.26	574.6	
8	11307.8	90.00	356.26	7000.0	4422.7	129.3	0.00	0.00	4424.6	BHL 470'FNL & 1372'FEL

Vertical Section at 1.67° (500 ft/in)



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn C-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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,919.2	8.38	109.43	1,917.7	-10.2	28.9	2.00	2.00	0.00	109.43	
4,612.6	8.38	109.43	4,582.3	-140.8	399.2	0.00	0.00	0.00	0.00	
5,031.8	0.00	0.00	5,000.0	-151.0	428.1	2.00	-2.00	0.00	180.00	
6,315.6	0.00	0.00	6,283.8	-151.0	428.1	0.00	0.00	0.00	0.00	
7,440.6	90.00	356.26	7,000.0	563.7	381.4	8.00	8.00	0.00	356.26	
11,307.8	90.00	356.26	7,000.0	4,422.7	129.3	0.00	0.00	0.00	0.00	BHL 470°FNL & 137°

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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 & 1718'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,600.0	2.00	109.43	1,600.0	-0.6	1.6	-0.5	2.00	2.00	0.00
1,700.0	4.00	109.43	1,699.8	-2.3	6.6	-2.1	2.00	2.00	0.00
1,800.0	6.00	109.43	1,799.5	-5.2	14.8	-4.8	2.00	2.00	0.00
1,900.0	8.00	109.43	1,898.7	-9.3	26.3	-8.5	2.00	2.00	0.00
1,919.2	8.38	109.43	1,917.7	-10.2	28.9	-9.3	2.00	2.00	0.00
2,000.0	8.38	109.43	1,997.6	-14.1	40.0	-12.9	0.00	0.00	0.00
2,100.0	8.38	109.43	2,096.6	-19.0	53.7	-17.4	0.00	0.00	0.00
2,200.0	8.38	109.43	2,195.5	-23.8	67.5	-21.8	0.00	0.00	0.00
2,300.0	8.38	109.43	2,294.4	-28.7	81.2	-26.3	0.00	0.00	0.00
2,400.0	8.38	109.43	2,393.4	-33.5	95.0	-30.7	0.00	0.00	0.00
2,500.0	8.38	109.43	2,492.3	-38.4	108.7	-35.2	0.00	0.00	0.00
2,600.0	8.38	109.43	2,591.2	-43.2	122.5	-39.6	0.00	0.00	0.00
2,700.0	8.38	109.43	2,690.2	-48.1	136.2	-44.1	0.00	0.00	0.00
2,800.0	8.38	109.43	2,789.1	-52.9	150.0	-48.5	0.00	0.00	0.00
2,900.0	8.38	109.43	2,888.0	-57.8	163.7	-52.9	0.00	0.00	0.00
3,000.0	8.38	109.43	2,987.0	-62.6	177.5	-57.4	0.00	0.00	0.00
3,100.0	8.38	109.43	3,085.9	-67.5	191.2	-61.8	0.00	0.00	0.00
3,200.0	8.38	109.43	3,184.8	-72.3	205.0	-66.3	0.00	0.00	0.00
3,300.0	8.38	109.43	3,283.7	-77.2	218.7	-70.7	0.00	0.00	0.00
3,400.0	8.38	109.43	3,382.7	-82.0	232.5	-75.2	0.00	0.00	0.00
3,500.0	8.38	109.43	3,481.6	-86.9	246.2	-79.6	0.00	0.00	0.00
3,600.0	8.38	109.43	3,580.5	-91.7	260.0	-84.1	0.00	0.00	0.00
3,700.0	8.38	109.43	3,679.5	-96.6	273.7	-88.5	0.00	0.00	0.00
3,800.0	8.38	109.43	3,778.4	-101.4	287.5	-93.0	0.00	0.00	0.00
3,900.0	8.38	109.43	3,877.3	-106.3	301.2	-97.4	0.00	0.00	0.00
4,000.0	8.38	109.43	3,976.3	-111.1	315.0	-101.9	0.00	0.00	0.00
4,100.0	8.38	109.43	4,075.2	-116.0	328.7	-106.3	0.00	0.00	0.00
4,200.0	8.38	109.43	4,174.1	-120.8	342.5	-110.7	0.00	0.00	0.00
4,300.0	8.38	109.43	4,273.1	-125.7	356.2	-115.2	0.00	0.00	0.00
4,400.0	8.38	109.43	4,372.0	-130.5	370.0	-119.6	0.00	0.00	0.00
4,500.0	8.38	109.43	4,470.9	-135.4	383.7	-124.1	0.00	0.00	0.00
4,600.0	8.38	109.43	4,569.9	-140.2	397.5	-128.5	0.00	0.00	0.00
4,612.6	8.38	109.43	4,582.3	-140.8	399.2	-129.1	0.00	0.00	0.00
4,700.0	6.64	109.43	4,669.0	-144.6	410.0	-132.6	2.00	-2.00	0.00
4,800.0	4.64	109.43	4,768.5	-147.9	419.3	-135.6	2.00	-2.00	0.00

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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 C-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)
4,900.0	2.64	109.43	4,868.3	-150.0	425.2	-137.5	2.00	-2.00	0.00
5,000.0	0.64	109.43	4,968.2	-150.9	427.9	-138.4	2.00	-2.00	0.00
5,031.8	0.00	0.00	5,000.0	-151.0	428.1	-138.4	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,068.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,168.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,300.0	0.00	0.00	5,268.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,368.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,468.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,568.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,668.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,768.2	-151.0	428.1	-138.4	0.00	0.00	0.00
5,900.0	0.00	0.00	5,868.2	-151.0	428.1	-138.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,968.2	-151.0	428.1	-138.4	0.00	0.00	0.00
6,100.0	0.00	0.00	6,068.2	-151.0	428.1	-138.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,168.2	-151.0	428.1	-138.4	0.00	0.00	0.00
6,300.0	0.00	0.00	6,268.2	-151.0	428.1	-138.4	0.00	0.00	0.00
6,315.6	0.00	0.00	6,283.8	-151.0	428.1	-138.4	0.00	0.00	0.00
KOP #2									
6,400.0	6.75	356.26	6,368.0	-146.0	427.8	-133.5	8.00	8.00	0.00
6,500.0	14.75	356.26	6,466.2	-127.4	426.6	-114.9	8.00	8.00	0.00
6,600.0	22.75	356.26	6,560.8	-95.4	424.5	-82.9	8.00	8.00	0.00
6,700.0	30.75	356.26	6,650.0	-50.5	421.5	-38.2	8.00	8.00	0.00
6,800.0	38.75	356.26	6,732.1	6.3	417.8	18.5	8.00	8.00	0.00
6,900.0	46.75	356.26	6,805.5	74.0	413.4	86.1	8.00	8.00	0.00
7,000.0	54.75	356.26	6,868.7	151.2	408.4	163.1	8.00	8.00	0.00
7,100.0	62.75	356.26	6,920.5	236.5	402.8	248.2	8.00	8.00	0.00
7,200.0	70.75	356.26	6,960.0	328.1	396.8	339.6	8.00	8.00	0.00
7,300.0	78.75	356.26	6,986.2	424.3	390.5	435.5	8.00	8.00	0.00
7,400.0	86.75	356.26	6,998.9	523.2	384.1	534.2	8.00	8.00	0.00
7,440.6	90.00	356.26	7,000.0	563.7	381.4	574.6	8.00	8.00	0.00
End of Build - 7"									
7,500.0	90.00	356.26	7,000.0	623.0	377.5	633.7	0.00	0.00	0.00
7,600.0	90.00	356.26	7,000.0	722.8	371.0	733.3	0.00	0.00	0.00
7,700.0	90.00	356.26	7,000.0	822.5	364.5	832.8	0.00	0.00	0.00
7,800.0	90.00	356.26	7,000.0	922.3	358.0	932.4	0.00	0.00	0.00
7,900.0	90.00	356.26	7,000.0	1,022.1	351.5	1,032.0	0.00	0.00	0.00
8,000.0	90.00	356.26	7,000.0	1,121.9	345.0	1,131.5	0.00	0.00	0.00
8,100.0	90.00	356.26	7,000.0	1,221.7	338.4	1,231.1	0.00	0.00	0.00
8,200.0	90.00	356.26	7,000.0	1,321.5	331.9	1,330.6	0.00	0.00	0.00
8,300.0	90.00	356.26	7,000.0	1,421.3	325.4	1,430.2	0.00	0.00	0.00
8,400.0	90.00	356.26	7,000.0	1,521.1	318.9	1,529.7	0.00	0.00	0.00
8,500.0	90.00	356.26	7,000.0	1,620.8	312.4	1,629.3	0.00	0.00	0.00
8,600.0	90.00	356.26	7,000.0	1,720.6	305.8	1,728.8	0.00	0.00	0.00
8,700.0	90.00	356.26	7,000.0	1,820.4	299.3	1,828.4	0.00	0.00	0.00
8,800.0	90.00	356.26	7,000.0	1,920.2	292.8	1,927.9	0.00	0.00	0.00
8,900.0	90.00	356.26	7,000.0	2,020.0	286.3	2,027.5	0.00	0.00	0.00
9,000.0	90.00	356.26	7,000.0	2,119.8	279.8	2,127.1	0.00	0.00	0.00
9,100.0	90.00	356.26	7,000.0	2,219.6	273.2	2,226.6	0.00	0.00	0.00
9,200.0	90.00	356.26	7,000.0	2,319.4	266.7	2,326.2	0.00	0.00	0.00
9,300.0	90.00	356.26	7,000.0	2,419.1	260.2	2,425.7	0.00	0.00	0.00
9,400.0	90.00	356.26	7,000.0	2,518.9	253.7	2,525.3	0.00	0.00	0.00
9,500.0	90.00	356.26	7,000.0	2,618.7	247.2	2,624.8	0.00	0.00	0.00
9,600.0	90.00	356.26	7,000.0	2,718.5	240.7	2,724.4	0.00	0.00	0.00
9,700.0	90.00	356.26	7,000.0	2,818.3	234.1	2,823.9	0.00	0.00	0.00

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	356.26	7,000.0	2,918.1	227.6	2,923.5	0.00	0.00	0.00	
9,900.0	90.00	356.26	7,000.0	3,017.9	221.1	3,023.0	0.00	0.00	0.00	
10,000.0	90.00	356.26	7,000.0	3,117.7	214.6	3,122.6	0.00	0.00	0.00	
10,100.0	90.00	356.26	7,000.0	3,217.4	208.1	3,222.1	0.00	0.00	0.00	
10,200.0	90.00	356.26	7,000.0	3,317.2	201.5	3,321.7	0.00	0.00	0.00	
10,300.0	90.00	356.26	7,000.0	3,417.0	195.0	3,421.3	0.00	0.00	0.00	
10,400.0	90.00	356.26	7,000.0	3,516.8	188.5	3,520.8	0.00	0.00	0.00	
10,500.0	90.00	356.26	7,000.0	3,616.6	182.0	3,620.4	0.00	0.00	0.00	
10,600.0	90.00	356.26	7,000.0	3,716.4	175.5	3,719.9	0.00	0.00	0.00	
10,700.0	90.00	356.26	7,000.0	3,816.2	169.0	3,819.5	0.00	0.00	0.00	
10,800.0	90.00	356.26	7,000.0	3,916.0	162.4	3,919.0	0.00	0.00	0.00	
10,900.0	90.00	356.26	7,000.0	4,015.7	155.9	4,018.6	0.00	0.00	0.00	
11,000.0	90.00	356.26	7,000.0	4,115.5	149.4	4,118.1	0.00	0.00	0.00	
11,100.0	90.00	356.26	7,000.0	4,215.3	142.9	4,217.7	0.00	0.00	0.00	
11,200.0	90.00	356.26	7,000.0	4,315.1	136.4	4,317.2	0.00	0.00	0.00	
11,300.0	90.00	356.26	7,000.0	4,414.9	129.8	4,416.8	0.00	0.00	0.00	
11,307.8	90.00	356.26	7,000.0	4,422.7	129.3	4,424.6	0.00	0.00	0.00	
BHL 470'FNL & 1372'FEL										

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S	+E/-W	
			(ft)	(ft)	
	1,500.0	1,500.0	0.0	0.0	KOP #1
	6,315.6	6,283.8	-151.0	428.1	KOP #2
	7,440.6	7,000.0	563.7	381.4	End of Build



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn C-4NHZ

Wellbore #1

Plan #2 (4-25-14)

Anticollision Report

29 April, 2014

Offset Design SRC Kiehn (Existing) Pad Sec.4-T4N-R68W - Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft	
Survey Program: 7790-UNKNOWN													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,700.0	1,699.8	4,372.8	4,372.8	3.7	87.5	-143.06	376.3	-245.9	455.1	364.1	90.97	5.002	4.970 SF	
1,800.0	1,799.5	4,472.5	4,472.5	3.9	89.4	-143.62	376.3	-245.9	462.1	369.1	92.98	4.970 SF		
1,900.0	1,898.7	4,571.7	4,571.7	4.1	91.4	-144.38	376.3	-245.9	472.0	377.1	94.89	4.974		
2,000.0	1,997.6	4,670.6	4,670.6	4.3	93.4	-145.35	376.3	-245.9	483.9	386.9	97.00	4.989		
2,100.0	2,096.6	4,769.6	4,769.6	4.6	95.4	-146.31	376.3	-245.9	496.0	396.8	99.17	5.002		
2,200.0	2,195.5	4,868.5	4,868.5	4.9	97.4	-147.22	376.3	-245.9	508.2	406.9	101.34	5.015		
2,300.0	2,294.4	4,967.4	4,967.4	5.2	99.3	-148.08	376.3	-245.9	520.6	417.1	103.52	5.029		
2,400.0	2,393.4	5,066.4	5,066.4	5.4	101.3	-148.91	376.3	-245.9	533.1	427.3	105.71	5.043		
2,500.0	2,492.3	5,165.3	5,165.3	5.8	103.3	-149.70	376.3	-245.9	545.6	437.7	107.89	5.057		
2,600.0	2,591.2	5,264.2	5,264.2	6.1	105.3	-150.45	376.3	-245.9	558.3	448.2	110.08	5.072		
2,700.0	2,690.2	5,363.2	5,363.2	6.4	107.3	-151.17	376.3	-245.9	571.1	458.8	112.27	5.086		
2,800.0	2,789.1	5,462.1	5,462.1	6.7	109.2	-151.86	376.3	-245.9	583.9	469.4	114.46	5.101		
2,900.0	2,888.0	5,561.0	5,561.0	7.0	111.2	-152.52	376.3	-245.9	596.8	480.2	116.65	5.116		
3,000.0	2,987.0	5,660.0	5,660.0	7.3	113.2	-153.15	376.3	-245.9	609.8	491.0	118.85	5.131		
3,100.0	3,085.9	5,758.9	5,758.9	7.7	115.2	-153.75	376.3	-245.9	622.9	501.9	121.04	5.146		
3,200.0	3,184.8	5,857.8	5,857.8	8.0	117.2	-154.33	376.3	-245.9	636.0	512.8	123.23	5.161		
3,300.0	3,283.7	5,956.7	5,956.7	8.3	119.1	-154.89	376.3	-245.9	649.2	523.8	125.43	5.176		
3,400.0	3,382.7	6,055.7	6,055.7	8.7	121.1	-155.42	376.3	-245.9	662.5	534.9	127.62	5.191		
3,500.0	3,481.6	6,154.6	6,154.6	9.0	123.1	-155.94	376.3	-245.9	675.8	546.0	129.82	5.206		
3,600.0	3,580.5	6,253.5	6,253.5	9.3	125.1	-156.43	376.3	-245.9	689.2	557.2	132.01	5.221		
3,700.0	3,679.5	6,352.5	6,352.5	9.7	127.0	-156.90	376.3	-245.9	702.6	568.4	134.21	5.235		
3,800.0	3,778.4	6,451.4	6,451.4	10.0	129.0	-157.36	376.3	-245.9	716.0	579.6	136.40	5.250		
3,900.0	3,877.3	6,550.3	6,550.3	10.4	131.0	-157.80	376.3	-245.9	729.5	590.9	138.60	5.264		
4,000.0	3,976.3	6,649.3	6,649.3	10.7	133.0	-158.23	376.3	-245.9	743.1	602.3	140.79	5.278		
4,100.0	4,075.2	6,748.2	6,748.2	11.1	135.0	-158.63	376.3	-245.9	756.7	613.7	142.99	5.292		
4,200.0	4,174.1	6,847.1	6,847.1	11.4	136.9	-159.03	376.3	-245.9	770.3	625.1	145.19	5.305		
4,300.0	4,273.1	6,946.1	6,946.1	11.7	138.9	-159.41	376.3	-245.9	783.9	636.5	147.38	5.319		
4,400.0	4,372.0	7,045.0	7,045.0	12.1	140.9	-159.78	376.3	-245.9	797.6	648.0	149.58	5.332		
4,500.0	4,470.9	7,143.9	7,143.9	12.4	142.9	-160.13	376.3	-245.9	811.3	659.6	151.77	5.346		
4,600.0	4,569.9	7,242.9	7,242.9	12.8	144.9	-160.48	376.3	-245.9	825.1	671.1	153.97	5.359		
4,700.0	4,669.0	7,342.0	7,342.0	13.1	146.8	-160.85	376.3	-245.9	837.6	680.9	156.68	5.346		
4,800.0	4,768.5	7,441.5	7,441.5	13.3	148.8	-161.13	376.3	-245.9	846.9	687.6	159.31	5.316		
4,900.0	4,868.3	7,541.3	7,541.3	13.5	150.8	-161.31	376.3	-245.9	852.9	691.1	161.78	5.272		
5,000.0	4,968.2	7,641.2	7,641.2	13.7	152.8	-161.38	376.3	-245.9	855.6	691.5	164.08	5.214		
5,100.0	5,068.2	7,741.2	7,741.2	13.8	154.8	-51.96	376.3	-245.9	855.8	689.4	166.39	5.143		
5,131.6	5,099.9	7,772.9	7,772.9	13.9	155.5	-51.96	376.3	-245.9	855.8	688.7	167.09	5.122		
5,200.0	5,168.2	7,790.0	7,790.0	14.0	155.8	-51.96	376.3	-245.9	857.3	689.7	167.56	5.116		
5,300.0	5,268.2	7,790.0	7,790.0	14.2	155.8	-51.96	376.3	-245.9	869.0	701.3	167.76	5.180		
5,400.0	5,368.2	7,790.0	7,790.0	14.4	155.8	-51.96	376.3	-245.9	891.9	723.9	167.95	5.310		
5,500.0	5,468.2	7,790.0	7,790.0	14.5	155.8	-51.96	376.3	-245.9	925.0	756.9	168.15	5.501		
5,600.0	5,568.2	7,790.0	7,790.0	14.7	155.8	-51.96	376.3	-245.9	967.4	799.1	168.35	5.747		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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	-1.1	-65.0	65.0					
100.0	100.0	100.0	100.0	0.1	0.1	-90.96	-1.1	-65.0	65.0	64.7	0.22	289.040		
200.0	200.0	200.0	200.0	0.3	0.3	-90.96	-1.1	-65.0	65.0	64.3	0.67	96.347		
300.0	300.0	300.0	300.0	0.6	0.6	-90.96	-1.1	-65.0	65.0	63.8	1.12	57.808		
400.0	400.0	400.0	400.0	0.8	0.8	-90.96	-1.1	-65.0	65.0	63.4	1.57	41.291		
500.0	500.0	500.0	500.0	1.0	1.0	-90.96	-1.1	-65.0	65.0	62.9	2.02	32.116		
600.0	600.0	600.0	600.0	1.2	1.2	-90.96	-1.1	-65.0	65.0	62.5	2.47	26.276		
700.0	700.0	700.0	700.0	1.5	1.5	-90.96	-1.1	-65.0	65.0	62.0	2.92	22.234		
800.0	800.0	800.0	800.0	1.7	1.7	-90.96	-1.1	-65.0	65.0	61.6	3.37	19.269		
900.0	900.0	900.0	900.0	1.9	1.9	-90.96	-1.1	-65.0	65.0	61.1	3.82	17.002		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.96	-1.1	-65.0	65.0	60.7	4.27	15.213		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.96	-1.1	-65.0	65.0	60.2	4.72	13.764		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.96	-1.1	-65.0	65.0	59.8	5.17	12.567		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.96	-1.1	-65.0	65.0	59.3	5.62	11.562		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.96	-1.1	-65.0	65.0	58.9	6.07	10.705		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.96	-1.1	-65.0	65.0	58.4	6.52	9.967 CC, ES		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	160.12	-1.1	-65.0	66.6	59.7	6.95	9.589		
1,700.0	1,699.8	1,699.8	1,699.8	3.7	3.7	161.52	-1.1	-65.0	71.5	64.2	7.35	9.731		
1,800.0	1,799.5	1,799.5	1,799.5	3.9	3.9	163.45	-1.1	-65.0	79.9	72.1	7.76	10.298		
1,900.0	1,898.7	1,898.7	1,898.7	4.1	4.2	165.56	-1.1	-65.0	91.6	83.5	8.15	11.237		
2,000.0	1,997.6	1,997.6	1,997.6	4.3	4.4	167.51	-1.1	-65.0	105.7	97.2	8.57	12.337		
2,100.0	2,096.6	2,094.1	2,094.1	4.6	4.6	168.40	-2.2	-66.1	121.0	112.0	8.97	13.485		
2,200.0	2,195.5	2,190.4	2,190.2	4.9	4.7	168.03	-5.4	-69.5	138.3	129.0	9.36	14.772		
2,300.0	2,294.4	2,288.7	2,288.4	5.2	4.9	167.42	-9.5	-73.8	156.4	146.6	9.76	16.017		
2,400.0	2,393.4	2,387.1	2,386.6	5.4	5.1	166.93	-13.6	-78.1	174.4	164.2	10.17	17.152		
2,500.0	2,492.3	2,485.4	2,484.8	5.8	5.3	166.53	-17.7	-82.5	192.5	181.9	10.58	18.187		
2,600.0	2,591.2	2,583.8	2,582.9	6.1	5.5	166.20	-21.8	-86.8	210.5	199.5	11.00	19.133		
2,700.0	2,690.2	2,682.1	2,681.1	6.4	5.7	165.93	-25.8	-91.1	228.6	217.2	11.43	19.998		
2,800.0	2,789.1	2,780.5	2,779.3	6.7	5.9	165.69	-29.9	-95.4	246.7	234.8	11.86	20.793		
2,900.0	2,888.0	2,878.8	2,877.4	7.0	6.1	165.49	-34.0	-99.7	264.7	252.4	12.30	21.523		
3,000.0	2,987.0	2,977.2	2,975.6	7.3	6.3	165.31	-38.1	-104.0	282.8	270.1	12.74	22.195		
3,100.0	3,085.9	3,075.5	3,073.8	7.7	6.6	165.15	-42.2	-108.3	300.9	287.7	13.19	22.816		
3,200.0	3,184.8	3,173.9	3,171.9	8.0	6.8	165.02	-46.3	-112.7	319.0	305.3	13.64	23.389		
3,300.0	3,283.7	3,272.2	3,270.1	8.3	7.0	164.89	-50.4	-117.0	337.1	323.0	14.09	23.921		
3,400.0	3,382.7	3,370.6	3,368.3	8.7	7.2	164.78	-54.5	-121.3	355.1	340.6	14.55	24.415		
3,500.0	3,481.6	3,468.9	3,466.4	9.0	7.4	164.68	-58.5	-125.6	373.2	358.2	15.00	24.874		
3,600.0	3,580.5	3,567.3	3,564.6	9.3	7.7	164.59	-62.6	-129.9	391.3	375.9	15.47	25.302		
3,700.0	3,679.5	3,665.6	3,662.8	9.7	7.9	164.51	-66.7	-134.2	409.4	393.5	15.93	25.702		
3,800.0	3,778.4	3,764.0	3,761.0	10.0	8.1	164.43	-70.8	-138.5	427.5	411.1	16.39	26.075		
3,900.0	3,877.3	3,862.3	3,859.1	10.4	8.4	164.36	-74.9	-142.9	445.6	428.7	16.86	26.426		
4,000.0	3,976.3	3,960.7	3,957.3	10.7	8.6	164.30	-79.0	-147.2	463.7	446.3	17.33	26.754		
4,100.0	4,075.2	4,059.0	4,055.5	11.1	8.8	164.24	-83.1	-151.5	481.8	464.0	17.80	27.063		
4,200.0	4,174.1	4,157.4	4,153.6	11.4	9.1	164.18	-87.1	-155.8	499.9	481.6	18.27	27.354		
4,300.0	4,273.1	4,255.7	4,251.8	11.7	9.3	164.13	-91.2	-160.1	517.9	499.2	18.75	27.628		
4,400.0	4,372.0	4,354.1	4,350.0	12.1	9.5	164.08	-95.3	-164.4	536.0	516.8	19.22	27.886		
4,500.0	4,470.9	4,452.4	4,448.1	12.4	9.8	164.04	-99.4	-168.7	554.1	534.4	19.70	28.131		
4,600.0	4,569.9	4,550.8	4,546.3	12.8	10.0	163.99	-103.5	-173.1	572.2	552.1	20.18	28.362		
4,700.0	4,669.0	4,649.3	4,644.7	13.1	10.2	164.00	-107.6	-177.4	589.1	568.4	20.68	28.491		
4,800.0	4,768.5	4,748.4	4,743.6	13.3	10.5	163.91	-111.7	-181.7	602.6	581.5	21.14	28.510		
4,900.0	4,868.3	4,847.8	4,842.8	13.5	10.7	163.72	-115.8	-186.1	612.8	591.2	21.58	28.403		
5,000.0	4,968.2	4,947.5	4,942.3	13.7	11.0	163.43	-120.0	-190.5	619.7	597.7	21.99	28.181		
5,100.0	5,068.2	5,047.3	5,042.0	13.8	11.2	-87.53	-124.1	-194.8	624.1	601.7	22.35	27.929		

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 32-4CHZ - 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	5,168.2	5,147.1	5,141.6	14.0	11.4	-87.93	-128.3	-199.2	628.3	605.5	22.78	27.579		
5,300.0	5,268.2	5,247.0	5,241.2	14.2	11.7	-88.32	-132.4	-203.6	632.6	609.3	23.22	27.242		
5,400.0	5,368.2	5,346.8	5,340.9	14.4	11.9	-88.70	-136.6	-208.0	636.8	613.2	23.66	26.918		
5,500.0	5,468.2	5,446.6	5,440.5	14.5	12.2	-89.08	-140.7	-212.4	641.1	617.0	24.10	26.606		
5,600.0	5,568.2	5,546.4	5,540.1	14.7	12.4	-89.46	-144.9	-216.7	645.5	620.9	24.54	26.306		
5,700.0	5,668.2	5,648.8	5,642.3	14.9	12.7	-89.83	-149.1	-221.2	649.8	624.8	24.98	26.012		
5,800.0	5,768.2	5,768.5	5,761.9	15.0	12.9	-90.08	-151.9	-224.2	652.3	626.9	25.43	25.649		
5,900.0	5,868.2	5,874.8	5,868.2	15.2	13.1	-90.10	-152.1	-224.4	652.5	626.6	25.84	25.245		
6,000.0	5,968.2	5,974.8	5,968.2	15.4	13.3	-90.10	-152.1	-224.4	652.5	626.2	26.24	24.862		
6,100.0	6,068.2	6,074.8	6,068.2	15.6	13.5	-90.10	-152.1	-224.4	652.5	625.8	26.64	24.490		
6,200.0	6,168.2	6,174.8	6,168.2	15.8	13.7	-90.10	-152.1	-224.4	652.5	625.4	27.04	24.127		
6,300.0	6,268.2	6,274.8	6,268.2	15.9	13.9	-90.10	-152.1	-224.4	652.5	625.0	27.45	23.773		
6,400.0	6,368.0	6,369.4	6,362.7	16.1	14.1	-86.38	-147.7	-224.7	652.5	624.6	27.86	23.422		
6,500.0	6,466.2	6,463.1	6,454.9	16.2	14.2	-86.47	-131.4	-225.9	652.6	624.5	28.14	23.191		
6,600.0	6,560.8	6,557.0	6,544.4	16.3	14.3	-86.62	-103.2	-228.1	652.8	624.4	28.38	23.005		
6,700.0	6,650.0	6,650.0	6,628.5	16.4	14.5	-86.84	-63.9	-231.1	653.1	624.5	28.62	22.821		
6,800.0	6,732.1	6,745.8	6,709.2	16.5	14.6	-87.11	-12.5	-235.1	653.5	624.6	28.94	22.580		
6,900.0	6,805.5	6,840.9	6,781.7	16.5	14.7	-87.44	48.7	-239.7	654.1	624.6	29.42	22.229		
7,000.0	6,868.7	6,936.5	6,845.8	16.6	14.9	-87.82	119.3	-245.1	654.7	624.5	30.14	21.721		
7,100.0	6,920.5	7,032.8	6,900.2	16.9	15.4	-88.23	198.4	-251.2	655.4	624.3	31.16	21.033		
7,200.0	6,960.0	7,129.8	6,943.8	17.3	16.1	-88.68	284.8	-257.8	656.3	623.7	32.53	20.175		
7,300.0	6,986.2	7,227.6	6,975.5	18.1	17.0	-89.16	377.0	-264.9	657.2	622.9	34.25	19.191		
7,400.0	6,998.9	7,326.3	6,994.5	19.0	18.0	-89.65	473.5	-272.3	658.2	621.9	36.29	18.138		
7,500.0	7,000.0	7,426.0	7,000.0	20.2	19.2	-90.00	572.6	-279.9	659.3	620.7	38.61	17.079		
7,600.0	7,000.0	7,526.0	7,000.0	21.4	20.4	-90.00	672.3	-287.5	660.5	619.3	41.16	16.046		
7,700.0	7,000.0	7,626.0	7,000.0	22.7	21.8	-90.00	772.0	-295.1	661.6	617.7	43.90	15.068		
7,800.0	7,000.0	7,725.9	7,000.0	24.2	23.3	-90.00	871.7	-302.8	662.7	615.9	46.82	14.156		
7,900.0	7,000.0	7,825.9	7,000.0	25.7	24.8	-90.00	971.4	-310.4	663.8	614.0	49.86	13.313		
8,000.0	7,000.0	7,925.9	7,000.0	27.2	26.4	-90.00	1,071.1	-318.1	664.9	611.9	53.02	12.541		
8,100.0	7,000.0	8,025.9	7,000.0	28.8	28.0	-90.00	1,170.8	-325.7	666.1	609.8	56.27	11.837		
8,200.0	7,000.0	8,125.9	7,000.0	30.4	29.7	-90.00	1,270.5	-333.3	667.2	607.6	59.60	11.194		
8,300.0	7,000.0	8,225.9	7,000.0	32.1	31.4	-90.00	1,370.2	-341.0	668.3	605.3	63.00	10.609		
8,400.0	7,000.0	8,325.9	7,000.0	33.8	33.1	-90.00	1,469.9	-348.6	669.4	603.0	66.45	10.075		
8,500.0	7,000.0	8,425.9	7,000.0	35.5	34.9	-90.00	1,569.6	-356.2	670.6	600.6	69.95	9.587		
8,600.0	7,000.0	8,525.9	7,000.0	37.3	36.7	-90.00	1,669.3	-363.9	671.7	598.2	73.48	9.140		
8,700.0	7,000.0	8,625.9	7,000.0	39.1	38.5	-90.00	1,769.0	-371.5	672.8	595.7	77.06	8.731		
8,800.0	7,000.0	8,725.9	7,000.0	40.8	40.3	-90.00	1,868.7	-379.1	673.9	593.3	80.66	8.355		
8,900.0	7,000.0	8,825.9	7,000.0	42.6	42.1	-90.00	1,968.4	-386.8	675.0	590.7	84.29	8.008		
9,000.0	7,000.0	8,925.9	7,000.0	44.4	43.9	-90.00	2,068.1	-394.4	676.2	588.2	87.95	7.688		
9,100.0	7,000.0	9,025.9	7,000.0	46.3	45.8	-90.00	2,167.8	-402.1	677.3	585.7	91.62	7.392		
9,200.0	7,000.0	9,125.9	7,000.0	48.1	47.6	-90.00	2,267.5	-409.7	678.4	583.1	95.31	7.118		
9,300.0	7,000.0	9,225.9	7,000.0	49.9	49.5	-90.00	2,367.2	-417.3	679.5	580.5	99.02	6.862		
9,400.0	7,000.0	9,325.8	7,000.0	51.8	51.3	-90.00	2,466.9	-425.0	680.6	577.9	102.75	6.625		
9,500.0	7,000.0	9,425.8	7,000.0	53.6	53.2	-90.00	2,566.6	-432.6	681.8	575.3	106.48	6.403		
9,600.0	7,000.0	9,525.8	7,000.0	55.5	55.1	-90.00	2,666.4	-440.2	682.9	572.7	110.23	6.195		
9,700.0	7,000.0	9,625.8	7,000.0	57.4	57.0	-90.00	2,766.1	-447.9	684.0	570.0	113.99	6.001		
9,800.0	7,000.0	9,725.8	7,000.0	59.2	58.9	-90.00	2,865.8	-455.5	685.1	567.4	117.75	5.818		
9,900.0	7,000.0	9,825.8	7,000.0	61.1	60.7	-90.00	2,965.5	-463.2	686.3	564.7	121.53	5.647		
10,000.0	7,000.0	9,925.8	7,000.0	63.0	62.6	-90.00	3,065.2	-470.8	687.4	562.1	125.31	5.485		
10,100.0	7,000.0	10,025.8	7,000.0	64.9	64.5	-90.00	3,164.9	-478.4	688.5	559.4	129.10	5.333		
10,200.0	7,000.0	10,125.8	7,000.0	66.8	66.4	-90.00	3,264.6	-486.1	689.6	556.7	132.90	5.189		
10,300.0	7,000.0	10,225.8	7,000.0	68.6	68.3	-90.00	3,364.3	-493.7	690.7	554.0	136.70	5.053		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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 32-4CHZ - 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
10,400.0	7,000.0	10,325.8	7,000.0	70.5	70.3	-90.00	3,464.0	-501.3	691.9	551.4	140.51	4.924	
10,500.0	7,000.0	10,425.8	7,000.0	72.4	72.2	-90.00	3,563.7	-509.0	693.0	548.7	144.32	4.802	
10,600.0	7,000.0	10,525.8	7,000.0	74.3	74.1	-90.00	3,663.4	-516.6	694.1	546.0	148.14	4.686	
10,700.0	7,000.0	10,625.8	7,000.0	76.2	76.0	-90.00	3,763.1	-524.2	695.2	543.3	151.96	4.575	
10,800.0	7,000.0	10,725.8	7,000.0	78.1	77.9	-90.00	3,862.8	-531.9	696.4	540.6	155.78	4.470	
10,900.0	7,000.0	10,825.8	7,000.0	80.0	79.8	-90.00	3,962.5	-539.5	697.5	537.9	159.61	4.370	
11,000.0	7,000.0	10,925.7	7,000.0	82.0	81.7	-90.00	4,062.2	-547.2	698.6	535.2	163.45	4.274	
11,100.0	7,000.0	11,025.7	7,000.0	83.9	83.7	-90.00	4,161.9	-554.8	699.7	532.4	167.28	4.183	
11,200.0	7,000.0	11,125.7	7,000.0	85.8	85.6	-90.00	4,261.6	-562.4	700.8	529.7	171.12	4.096	
11,300.0	7,000.0	11,225.7	7,000.0	87.7	87.4	-90.00	4,361.3	-570.1	702.0	527.1	174.86	4.014	
11,308.2	7,000.0	11,234.0	7,000.0	87.9	87.5	-90.00	4,369.5	-570.7	702.1	526.9	175.15	4.008 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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 32-4NHZ - 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		
0.0	0.0	0.0	0.0	0.0	0.0	-90.98	-0.7	-42.4	42.4					
100.0	100.0	100.0	100.0	0.1	0.1	-90.98	-0.7	-42.4	42.4	42.2	0.22	188.559		
200.0	200.0	200.0	200.0	0.3	0.3	-90.98	-0.7	-42.4	42.4	41.7	0.67	62.853		
300.0	300.0	300.0	300.0	0.6	0.6	-90.98	-0.7	-42.4	42.4	41.3	1.12	37.712		
400.0	400.0	400.0	400.0	0.8	0.8	-90.98	-0.7	-42.4	42.4	40.8	1.57	26.937		
500.0	500.0	500.0	500.0	1.0	1.0	-90.98	-0.7	-42.4	42.4	40.4	2.02	20.951		
600.0	600.0	600.0	600.0	1.2	1.2	-90.98	-0.7	-42.4	42.4	39.9	2.47	17.142		
700.0	700.0	700.0	700.0	1.5	1.5	-90.98	-0.7	-42.4	42.4	39.5	2.92	14.505		
800.0	800.0	800.0	800.0	1.7	1.7	-90.98	-0.7	-42.4	42.4	39.0	3.37	12.571		
900.0	900.0	900.0	900.0	1.9	1.9	-90.98	-0.7	-42.4	42.4	38.6	3.82	11.092		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.98	-0.7	-42.4	42.4	38.1	4.27	9.924		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.98	-0.7	-42.4	42.4	37.7	4.72	8.979		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.98	-0.7	-42.4	42.4	37.2	5.17	8.198		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.98	-0.7	-42.4	42.4	36.8	5.62	7.542		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.98	-0.7	-42.4	42.4	36.3	6.07	6.984		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.98	-0.7	-42.4	42.4	35.9	6.52	6.502 CC, ES		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	160.37	-0.7	-42.4	44.0	37.1	6.95	6.337		
1,700.0	1,699.8	1,699.8	1,699.8	3.7	3.7	162.40	-0.7	-42.4	49.0	41.6	7.35	6.662		
1,800.0	1,799.5	1,799.5	1,799.5	3.9	3.9	164.99	-0.7	-42.4	57.4	49.6	7.75	7.396		
1,900.0	1,898.7	1,898.7	1,898.7	4.1	4.2	167.55	-0.7	-42.4	69.2	61.0	8.15	8.489		
2,000.0	1,997.6	1,997.6	1,997.6	4.3	4.4	169.69	-0.7	-42.4	83.4	74.9	8.57	9.737		
2,100.0	2,096.6	2,096.6	2,096.6	4.6	4.6	171.22	-0.7	-42.4	97.8	88.8	9.00	10.872		
2,200.0	2,195.5	2,195.5	2,195.5	4.9	4.8	172.35	-0.7	-42.4	112.3	102.8	9.43	11.905		
2,300.0	2,294.4	2,296.1	2,296.1	5.2	5.0	172.57	-2.3	-42.1	126.1	116.2	9.84	12.813		
2,400.0	2,393.4	2,396.0	2,395.9	5.4	5.2	171.66	-6.7	-41.2	138.8	128.6	10.23	13.570		
2,500.0	2,492.3	2,495.2	2,494.9	5.8	5.4	170.81	-11.2	-40.3	151.5	140.8	10.63	14.253		
2,600.0	2,591.2	2,594.3	2,594.0	6.1	5.5	170.10	-15.8	-39.3	164.1	153.1	11.03	14.879		
2,700.0	2,690.2	2,693.5	2,693.1	6.4	5.7	169.48	-20.4	-38.4	176.8	165.4	11.45	15.452		
2,800.0	2,789.1	2,792.7	2,792.1	6.7	5.9	168.95	-25.0	-37.5	189.6	177.7	11.86	15.978		
2,900.0	2,888.0	2,891.9	2,891.2	7.0	6.1	168.49	-29.6	-36.6	202.3	190.0	12.29	16.461		
3,000.0	2,987.0	2,991.0	2,990.3	7.3	6.3	168.08	-34.1	-35.6	215.1	202.3	12.72	16.905		
3,100.0	3,085.9	3,090.2	3,089.3	7.7	6.5	167.71	-38.7	-34.7	227.8	214.6	13.16	17.314		
3,200.0	3,184.8	3,189.4	3,188.4	8.0	6.7	167.39	-43.3	-33.8	240.6	227.0	13.60	17.691		
3,300.0	3,283.7	3,288.6	3,287.4	8.3	6.9	167.10	-47.9	-32.9	253.3	239.3	14.04	18.040		
3,400.0	3,382.7	3,387.7	3,386.5	8.7	7.1	166.83	-52.5	-32.0	266.1	251.6	14.49	18.363		
3,500.0	3,481.6	3,486.9	3,485.6	9.0	7.3	166.59	-57.1	-31.0	278.9	264.0	14.94	18.663		
3,600.0	3,580.5	3,586.1	3,584.6	9.3	7.5	166.38	-61.6	-30.1	291.7	276.3	15.40	18.942		
3,700.0	3,679.5	3,685.2	3,683.7	9.7	7.7	166.18	-66.2	-29.2	304.5	288.6	15.86	19.201		
3,800.0	3,778.4	3,784.4	3,782.8	10.0	8.0	165.99	-70.8	-28.3	317.3	301.0	16.32	19.443		
3,900.0	3,877.3	3,883.6	3,881.8	10.4	8.2	165.82	-75.4	-27.3	330.1	313.3	16.78	19.669		
4,000.0	3,976.3	3,982.8	3,980.9	10.7	8.4	165.66	-80.0	-26.4	342.9	325.6	17.25	19.880		
4,100.0	4,075.2	4,081.9	4,079.9	11.1	8.6	165.52	-84.5	-25.5	355.7	338.0	17.71	20.078		
4,200.0	4,174.1	4,181.1	4,179.0	11.4	8.8	165.38	-89.1	-24.6	368.5	350.3	18.18	20.264		
4,300.0	4,273.1	4,280.3	4,278.1	11.7	9.0	165.25	-93.7	-23.7	381.3	362.6	18.66	20.438		
4,400.0	4,372.0	4,379.5	4,377.1	12.1	9.3	165.14	-98.3	-22.7	394.1	375.0	19.13	20.602		
4,500.0	4,470.9	4,478.6	4,476.2	12.4	9.5	165.03	-102.9	-21.8	406.9	387.3	19.60	20.757		
4,600.0	4,569.9	4,577.8	4,575.3	12.8	9.7	164.92	-107.5	-20.9	419.7	399.6	20.08	20.903		
4,700.0	4,669.0	4,677.1	4,674.5	13.1	9.9	164.83	-112.0	-20.0	432.2	410.7	20.57	20.964		
4,800.0	4,768.5	4,776.8	4,774.0	13.3	10.2	164.62	-116.6	-19.0	439.4	418.4	21.03	20.901		
4,900.0	4,868.3	4,876.6	4,873.7	13.5	10.4	164.27	-121.3	-18.1	444.3	422.9	21.46	20.706		
5,000.0	4,968.2	4,976.5	4,973.5	13.7	10.6	163.80	-125.9	-17.2	445.9	424.0	21.87	20.386		
5,100.0	5,068.2	5,076.4	5,073.3	13.8	10.9	-87.36	-130.5	-16.3	444.9	422.7	22.19	20.051		

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 C-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 C-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 32-4NHZ - 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	5,168.2	5,176.3	5,173.1	14.0	11.1	-87.95	-135.1	-15.3	443.7	421.1	22.63	19.610		
5,300.0	5,268.2	5,276.2	5,272.9	14.2	11.3	-88.54	-139.7	-14.4	442.7	419.6	23.07	19.187		
5,400.0	5,368.2	5,376.1	5,372.6	14.4	11.5	-89.13	-144.3	-13.5	441.6	418.1	23.52	18.781		
5,500.0	5,468.2	5,475.7	5,472.2	14.5	11.8	-89.73	-148.9	-12.5	440.7	416.7	23.96	18.392		
5,600.0	5,568.2	5,572.7	5,569.2	14.7	12.0	-90.07	-151.6	-12.0	440.1	415.7	24.37	18.057		
5,648.8	5,617.1	5,620.6	5,617.1	14.8	12.1	-90.09	-151.7	-12.0	440.1	415.5	24.57	17.911		
5,700.0	5,668.2	5,671.8	5,668.2	14.9	12.2	-90.09	-151.7	-12.0	440.1	415.3	24.78	17.763		
5,800.0	5,768.2	5,771.8	5,768.2	15.0	12.4	-90.09	-151.7	-12.0	440.1	414.9	25.17	17.481		
5,900.0	5,868.2	5,871.8	5,868.2	15.2	12.6	-90.09	-151.7	-12.0	440.1	414.5	25.57	17.209		
6,000.0	5,968.2	5,971.8	5,968.2	15.4	12.8	-90.09	-151.7	-12.0	440.1	414.1	25.97	16.944		
6,100.0	6,068.2	6,071.8	6,068.2	15.6	13.0	-90.09	-151.7	-12.0	440.1	413.7	26.37	16.686		
6,200.0	6,168.2	6,171.8	6,168.2	15.8	13.2	-90.09	-151.7	-12.0	440.1	413.3	26.78	16.435		
6,300.0	6,268.2	6,271.8	6,268.2	15.9	13.4	-90.09	-151.7	-12.0	440.1	412.9	27.18	16.190		
6,400.0	6,368.0	6,368.6	6,364.9	16.1	13.6	-86.38	-147.1	-12.3	440.1	412.4	27.65	15.917		
6,500.0	6,466.2	6,464.9	6,459.5	16.2	13.7	-86.47	-129.9	-13.4	440.0	412.1	27.93	15.752		
6,600.0	6,560.8	6,561.4	6,551.1	16.3	13.8	-86.63	-100.1	-15.4	440.0	411.8	28.18	15.611		
6,700.0	6,650.0	6,658.0	6,638.1	16.4	14.0	-86.85	-58.2	-18.1	439.9	411.4	28.44	15.466		
6,800.0	6,732.1	6,754.8	6,718.7	16.5	14.1	-87.13	-4.9	-21.6	439.8	411.0	28.78	15.278		
6,900.0	6,805.5	6,851.9	6,791.7	16.5	14.4	-87.47	59.1	-25.8	439.6	410.3	29.29	15.009		
7,000.0	6,868.7	6,950.0	6,855.9	16.6	14.8	-87.85	132.9	-30.6	439.5	409.5	30.05	14.628		
7,100.0	6,920.5	7,047.4	6,909.0	16.9	15.3	-88.28	214.3	-35.9	439.4	408.3	31.11	14.124		
7,200.0	6,960.0	7,145.7	6,950.9	17.3	16.0	-88.74	302.9	-41.7	439.3	406.8	32.53	13.508		
7,300.0	6,986.2	7,244.6	6,980.4	18.1	16.9	-89.22	397.0	-47.9	439.3	405.0	34.29	12.811		
7,400.0	6,998.9	7,343.9	6,996.7	19.0	18.0	-89.72	494.7	-54.3	439.3	402.9	36.38	12.076		
7,413.6	6,999.6	7,357.5	6,997.9	19.2	18.2	-89.78	508.2	-55.2	439.3	402.6	36.69	11.973		
7,500.0	7,000.0	7,443.8	7,000.0	20.2	19.2	-90.00	594.3	-60.8	439.3	400.5	38.73	11.342		
7,600.0	7,000.0	7,543.8	7,000.0	21.4	20.5	-90.00	694.1	-67.3	439.3	398.0	41.30	10.637		
7,700.0	7,000.0	7,643.8	7,000.0	22.7	21.9	-90.00	793.9	-73.9	439.3	395.2	44.06	9.970		
7,800.0	7,000.0	7,743.8	7,000.0	24.2	23.4	-90.00	893.6	-80.4	439.3	392.3	46.98	9.350		
7,900.0	7,000.0	7,843.8	7,000.0	25.7	24.9	-90.00	993.4	-86.9	439.3	389.3	50.04	8.779		
8,000.0	7,000.0	7,943.8	7,000.0	27.2	26.5	-90.00	1,093.2	-93.4	439.3	386.1	53.21	8.257		
8,100.0	7,000.0	8,043.8	7,000.0	28.8	28.1	-90.00	1,193.0	-100.0	439.3	382.9	56.46	7.781		
8,200.0	7,000.0	8,143.8	7,000.0	30.4	29.8	-90.00	1,292.8	-106.5	439.4	379.6	59.80	7.347		
8,300.0	7,000.0	8,243.8	7,000.0	32.1	31.5	-90.00	1,392.6	-113.0	439.4	376.2	63.19	6.953		
8,400.0	7,000.0	8,343.8	7,000.0	33.8	33.3	-90.00	1,492.4	-119.6	439.4	372.7	66.65	6.592		
8,500.0	7,000.0	8,443.8	7,000.0	35.5	35.0	-90.00	1,592.2	-126.1	439.4	369.2	70.15	6.264		
8,600.0	7,000.0	8,543.8	7,000.0	37.3	36.8	-90.00	1,691.9	-132.6	439.4	365.7	73.69	5.963		
8,700.0	7,000.0	8,643.8	7,000.0	39.1	38.6	-90.00	1,791.7	-139.1	439.4	362.1	77.26	5.687		
8,800.0	7,000.0	8,743.8	7,000.0	40.8	40.4	-90.00	1,891.5	-145.7	439.4	358.6	80.86	5.434		
8,900.0	7,000.0	8,843.8	7,000.0	42.6	42.2	-90.00	1,991.3	-152.2	439.4	354.9	84.49	5.201		
9,000.0	7,000.0	8,943.8	7,000.0	44.4	44.0	-90.00	2,091.1	-158.7	439.4	351.3	88.14	4.985		
9,100.0	7,000.0	9,043.8	7,000.0	46.3	45.9	-90.00	2,190.9	-165.3	439.5	347.6	91.82	4.786		
9,200.0	7,000.0	9,143.8	7,000.0	48.1	47.7	-90.00	2,290.7	-171.8	439.5	344.0	95.51	4.601		
9,300.0	7,000.0	9,243.8	7,000.0	49.9	49.6	-90.00	2,390.4	-178.3	439.5	340.3	99.21	4.430		
9,400.0	7,000.0	9,343.8	7,000.0	51.8	51.5	-90.00	2,490.2	-184.9	439.5	336.6	102.93	4.270		
9,500.0	7,000.0	9,443.8	7,000.0	53.6	53.3	-90.00	2,590.0	-191.4	439.5	332.8	106.66	4.120		
9,600.0	7,000.0	9,543.8	7,000.0	55.5	55.2	-90.00	2,689.8	-197.9	439.5	329.1	110.41	3.981		
9,700.0	7,000.0	9,643.8	7,000.0	57.4	57.1	-90.00	2,789.6	-204.4	439.5	325.4	114.16	3.850		
9,800.0	7,000.0	9,743.8	7,000.0	59.2	59.0	-90.00	2,889.4	-211.0	439.5	321.6	117.92	3.727		
9,900.0	7,000.0	9,843.8	7,000.0	61.1	60.9	-90.00	2,989.2	-217.5	439.5	317.8	121.70	3.612		
10,000.0	7,000.0	9,943.8	7,000.0	63.0	62.7	-90.00	3,089.0	-224.0	439.6	314.1	125.47	3.503		
10,100.0	7,000.0	10,043.8	7,000.0	64.9	64.6	-90.00	3,188.7	-230.6	439.6	310.3	129.26	3.401		

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 C-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 C-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 32-4NHZ - 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
10,200.0	7,000.0	10,143.8	7,000.0	66.8	66.5	-90.00	3,288.5	-237.1	439.6	306.5	133.05	3.304	
10,300.0	7,000.0	10,243.8	7,000.0	68.6	68.4	-90.00	3,388.3	-243.6	439.6	302.7	136.85	3.212	
10,400.0	7,000.0	10,343.8	7,000.0	70.5	70.3	-90.00	3,488.1	-250.2	439.6	298.9	140.65	3.125	
10,500.0	7,000.0	10,443.8	7,000.0	72.4	72.3	-90.00	3,587.9	-256.7	439.6	295.1	144.46	3.043	
10,600.0	7,000.0	10,543.8	7,000.0	74.3	74.2	-90.00	3,687.7	-263.2	439.6	291.3	148.28	2.965	
10,700.0	7,000.0	10,643.8	7,000.0	76.2	76.1	-90.00	3,787.5	-269.7	439.6	287.5	152.09	2.891	
10,800.0	7,000.0	10,743.8	7,000.0	78.1	78.0	-90.00	3,887.2	-276.3	439.6	283.7	155.91	2.820	
10,900.0	7,000.0	10,843.8	7,000.0	80.0	79.9	-90.00	3,987.0	-282.8	439.7	279.9	159.74	2.752	
11,000.0	7,000.0	10,943.8	7,000.0	82.0	81.8	-90.00	4,086.8	-289.3	439.7	276.1	163.57	2.688	
11,100.0	7,000.0	11,043.8	7,000.0	83.9	83.7	-90.00	4,186.6	-295.9	439.7	272.3	167.40	2.627	
11,200.0	7,000.0	11,143.8	7,000.0	85.8	85.6	-90.00	4,286.4	-302.4	439.7	268.5	171.23	2.568	
11,300.0	7,000.0	11,243.8	7,000.0	87.7	87.6	-90.00	4,386.2	-308.9	439.7	264.6	175.07	2.512	
11,308.2	7,000.0	11,252.0	7,000.0	87.9	87.7	-90.00	4,394.4	-309.5	439.7	264.3	175.38	2.507 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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 C-4CHZ - Wellbore #1 - Plan #2 (4-25-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-91.04	-0.4	-19.8	19.8	19.8	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	-91.04	-0.4	-19.8	19.8	19.6	0.22	88.079	
200.0	200.0	200.0	200.0	0.3	0.3	-91.04	-0.4	-19.8	19.8	19.1	0.67	29.360	
300.0	300.0	300.0	300.0	0.6	0.6	-91.04	-0.4	-19.8	19.8	18.7	1.12	17.616	
400.0	400.0	400.0	400.0	0.8	0.8	-91.04	-0.4	-19.8	19.8	18.2	1.57	12.583	
500.0	500.0	500.0	500.0	1.0	1.0	-91.04	-0.4	-19.8	19.8	17.8	2.02	9.787	
600.0	600.0	600.0	600.0	1.2	1.2	-91.04	-0.4	-19.8	19.8	17.3	2.47	8.007	
700.0	700.0	700.0	700.0	1.5	1.5	-91.04	-0.4	-19.8	19.8	16.9	2.92	6.775	
800.0	800.0	800.0	800.0	1.7	1.7	-91.04	-0.4	-19.8	19.8	16.4	3.37	5.872	
900.0	900.0	900.0	900.0	1.9	1.9	-91.04	-0.4	-19.8	19.8	16.0	3.82	5.181	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-91.04	-0.4	-19.8	19.8	15.5	4.27	4.636	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-91.04	-0.4	-19.8	19.8	15.1	4.72	4.194	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-91.04	-0.4	-19.8	19.8	14.6	5.17	3.830	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-91.04	-0.4	-19.8	19.8	14.2	5.62	3.523	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-91.04	-0.4	-19.8	19.8	13.7	6.07	3.262	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-91.04	-0.4	-19.8	19.8	13.3	6.52	3.037 CC, ES	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	161.15	-0.4	-19.8	21.4	14.5	6.95	3.087	
1,700.0	1,699.8	1,699.8	1,699.8	3.7	3.7	164.79	-0.4	-19.8	26.4	19.1	7.35	3.597	
1,800.0	1,799.5	1,799.5	1,799.5	3.9	3.9	168.51	-0.4	-19.8	34.9	27.2	7.75	4.506	
1,900.0	1,898.7	1,898.7	1,898.7	4.1	4.2	171.44	-0.4	-19.8	46.9	38.8	8.15	5.760	
2,000.0	1,997.6	1,997.6	1,997.6	4.3	4.4	173.45	-0.4	-19.8	61.3	52.8	8.57	7.160	
2,100.0	2,096.6	2,096.6	2,096.6	4.6	4.6	174.71	-0.4	-19.8	75.8	66.8	8.99	8.432	
2,200.0	2,195.5	2,195.5	2,195.5	4.9	4.8	175.56	-0.4	-19.8	90.4	80.9	9.43	9.587	
2,300.0	2,294.4	2,294.4	2,294.4	5.2	5.0	176.18	-0.4	-19.8	104.9	95.1	9.86	10.639	
2,400.0	2,393.4	2,393.4	2,393.4	5.4	5.3	176.64	-0.4	-19.8	119.5	109.2	10.30	11.599	
2,500.0	2,492.3	2,492.3	2,492.3	5.8	5.5	177.01	-0.4	-19.8	134.0	123.3	10.74	12.479	
2,600.0	2,591.2	2,591.2	2,591.2	6.1	5.7	177.30	-0.4	-19.8	148.6	137.4	11.18	13.287	
2,700.0	2,690.2	2,690.2	2,690.2	6.4	5.9	177.54	-0.4	-19.8	163.2	151.5	11.63	14.031	
2,800.0	2,789.1	2,789.1	2,789.1	6.7	6.2	177.74	-0.4	-19.8	177.7	165.7	12.08	14.718	
2,900.0	2,888.0	2,888.0	2,888.0	7.0	6.4	177.91	-0.4	-19.8	192.3	179.8	12.52	15.354	
3,000.0	2,987.0	2,987.0	2,987.0	7.3	6.6	178.06	-0.4	-19.8	206.9	193.9	12.97	15.944	
3,100.0	3,085.9	3,092.8	3,092.7	7.7	6.8	178.09	-1.2	-18.5	220.1	206.7	13.42	16.402	
3,200.0	3,184.8	3,200.4	3,200.2	8.0	7.0	177.84	-4.2	-14.0	229.8	216.0	13.85	16.598	
3,300.0	3,283.7	3,308.6	3,308.0	8.3	7.2	177.33	-9.5	-5.9	235.9	221.6	14.28	16.523	
3,400.0	3,382.7	3,413.0	3,411.6	8.7	7.4	176.62	-16.6	4.6	238.8	224.1	14.71	16.236	
3,500.0	3,481.6	3,512.9	3,510.8	9.0	7.7	175.92	-23.6	15.2	241.3	226.2	15.14	15.937	
3,600.0	3,580.5	3,612.9	3,609.9	9.3	7.9	175.23	-30.6	25.8	243.8	228.2	15.58	15.652	
3,700.0	3,679.5	3,712.8	3,709.0	9.7	8.1	174.56	-37.6	36.4	246.3	230.3	16.02	15.379	
3,800.0	3,778.4	3,812.7	3,808.1	10.0	8.3	173.90	-44.6	47.0	248.9	232.4	16.46	15.118	
3,900.0	3,877.3	3,912.6	3,907.2	10.4	8.6	173.26	-51.6	57.6	251.5	234.6	16.92	14.868	
4,000.0	3,976.3	4,012.6	4,006.3	10.7	8.8	172.62	-58.6	68.1	254.2	236.8	17.37	14.628	
4,100.0	4,075.2	4,112.5	4,105.5	11.1	9.1	172.00	-65.6	78.7	256.8	239.0	17.84	14.398	
4,200.0	4,174.1	4,212.4	4,204.6	11.4	9.3	171.40	-72.6	89.3	259.5	241.2	18.30	14.178	
4,300.0	4,273.1	4,312.3	4,303.7	11.7	9.6	170.80	-79.7	99.9	262.2	243.5	18.78	13.966	
4,400.0	4,372.0	4,412.3	4,402.8	12.1	9.9	170.22	-86.7	110.5	265.0	245.7	19.25	13.763	
4,500.0	4,470.9	4,512.2	4,501.9	12.4	10.1	169.65	-93.7	121.1	267.8	248.0	19.74	13.568	
4,600.0	4,569.9	4,612.1	4,601.0	12.8	10.4	169.09	-100.7	131.6	270.6	250.4	20.22	13.380	
4,700.0	4,669.0	4,712.1	4,700.2	13.1	10.7	168.50	-107.7	142.2	272.1	251.4	20.73	13.128	
4,800.0	4,768.5	4,812.0	4,799.3	13.3	11.0	167.74	-114.7	152.8	270.3	249.1	21.20	12.750	
4,900.0	4,868.3	4,911.8	4,898.2	13.5	11.3	166.79	-121.7	163.4	265.1	243.4	21.65	12.243	
5,000.0	4,968.2	5,011.2	4,996.9	13.7	11.5	165.59	-128.7	173.9	256.6	234.5	22.09	11.616	
5,100.0	5,068.2	5,110.5	5,095.3	13.8	11.8	-86.40	-135.7	184.4	245.7	223.3	22.41	10.961	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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	5,168.2	5,205.8	5,190.0	14.0	12.1	-87.81	-142.1	194.1	235.2	212.3	22.88	10.279	
5,300.0	5,268.2	5,300.0	5,283.8	14.2	12.3	-88.95	-146.8	201.3	227.4	204.1	23.33	9.748	
5,400.0	5,368.2	5,392.7	5,376.3	14.4	12.5	-89.71	-149.9	205.9	222.4	198.6	23.75	9.364	
5,500.0	5,468.2	5,486.6	5,470.1	14.5	12.7	-90.07	-151.3	208.0	220.1	196.0	24.15	9.115	
5,548.9	5,517.1	5,533.5	5,517.1	14.6	12.8	-90.09	-151.4	208.1	220.0	195.7	24.34	9.038	
5,600.0	5,568.2	5,584.7	5,568.2	14.7	12.9	-90.09	-151.4	208.1	220.0	195.4	24.55	8.963	
5,700.0	5,668.2	5,684.7	5,668.2	14.9	13.1	-90.09	-151.4	208.1	220.0	195.0	24.95	8.816	
5,800.0	5,768.2	5,784.7	5,768.2	15.0	13.3	-90.09	-151.4	208.1	220.0	194.6	25.36	8.673	
5,900.0	5,868.2	5,884.7	5,868.2	15.2	13.5	-90.09	-151.4	208.1	220.0	194.2	25.78	8.535	
6,000.0	5,968.2	5,984.7	5,968.2	15.4	13.7	-90.09	-151.4	208.1	220.0	193.8	26.19	8.400	
6,100.0	6,068.2	6,084.7	6,068.2	15.6	13.9	-90.09	-151.4	208.1	220.0	193.4	26.60	8.269	
6,200.0	6,168.2	6,184.7	6,168.2	15.8	14.1	-90.09	-151.4	208.1	220.0	193.0	27.02	8.142	
6,300.0	6,268.2	6,284.7	6,268.2	15.9	14.3	-90.09	-151.4	208.1	220.0	192.6	27.44	8.018	
6,400.0	6,368.0	6,383.1	6,366.4	16.1	14.5	-86.38	-146.6	207.8	220.0	192.0	27.95	7.870	
6,500.0	6,466.2	6,481.2	6,462.8	16.2	14.6	-86.47	-128.7	206.6	220.0	191.7	28.24	7.788	
6,600.0	6,560.8	6,579.4	6,555.9	16.3	14.8	-86.63	-97.8	204.6	219.9	191.4	28.49	7.721	
6,700.0	6,650.0	6,677.6	6,644.0	16.4	14.9	-86.86	-54.4	201.8	219.9	191.1	28.74	7.652	
6,800.0	6,732.1	6,776.0	6,725.4	16.5	15.0	-87.14	0.6	198.2	219.8	190.8	29.06	7.563	
6,900.0	6,805.5	6,874.6	6,798.6	16.5	15.1	-87.48	66.4	193.9	219.8	190.2	29.55	7.436	
7,000.0	6,868.7	6,973.4	6,862.1	16.6	15.2	-87.87	141.7	189.0	219.7	189.4	30.29	7.254	
7,100.0	6,920.5	7,072.3	6,914.8	16.9	15.7	-88.30	225.2	183.5	219.7	188.3	31.33	7.012	
7,200.0	6,960.0	7,171.6	6,955.5	17.3	16.4	-88.77	315.4	177.6	219.6	186.9	32.71	6.713	
7,300.0	6,986.2	7,271.0	6,983.5	18.1	17.2	-89.25	410.6	171.4	219.6	185.1	34.45	6.374	
7,400.0	6,998.9	7,370.7	6,997.9	19.0	18.3	-89.76	509.0	164.9	219.6	183.1	36.51	6.015	
7,420.7	6,999.9	7,391.4	6,999.2	19.3	18.5	-89.82	529.5	163.6	219.6	182.6	36.97	5.939	
7,500.0	7,000.0	7,470.7	7,000.0	20.2	19.4	-90.00	608.7	158.4	219.6	180.8	38.82	5.656	
7,600.0	7,000.0	7,570.7	7,000.0	21.4	20.7	-90.00	708.4	151.9	219.6	178.2	41.36	5.309	
7,700.0	7,000.0	7,670.7	7,000.0	22.7	22.1	-90.00	808.2	145.4	219.6	175.5	44.09	4.980	
7,800.0	7,000.0	7,770.7	7,000.0	24.2	23.5	-90.00	908.0	138.9	219.6	172.6	46.99	4.673	
7,900.0	7,000.0	7,870.7	7,000.0	25.7	25.0	-90.00	1,007.8	132.3	219.6	169.6	50.02	4.390	
8,000.0	7,000.0	7,970.7	7,000.0	27.2	26.6	-90.00	1,107.6	125.8	219.6	166.4	53.17	4.130	
8,100.0	7,000.0	8,070.7	7,000.0	28.8	28.2	-90.00	1,207.4	119.3	219.6	163.2	56.41	3.893	
8,200.0	7,000.0	8,170.7	7,000.0	30.4	29.9	-90.00	1,307.2	112.8	219.6	159.9	59.73	3.677	
8,300.0	7,000.0	8,270.7	7,000.0	32.1	31.6	-90.00	1,406.9	106.3	219.6	156.5	63.12	3.479	
8,400.0	7,000.0	8,370.7	7,000.0	33.8	33.3	-90.00	1,506.7	99.7	219.6	153.1	66.56	3.300	
8,500.0	7,000.0	8,470.7	7,000.0	35.5	35.0	-90.00	1,606.5	93.2	219.6	149.6	70.04	3.135	
8,600.0	7,000.0	8,570.7	7,000.0	37.3	36.8	-90.00	1,706.3	86.7	219.6	146.0	73.57	2.985	
8,700.0	7,000.0	8,670.7	7,000.0	39.1	38.6	-90.00	1,806.1	80.2	219.6	142.5	77.14	2.847	
8,800.0	7,000.0	8,770.7	7,000.0	40.8	40.4	-90.00	1,905.9	73.6	219.6	138.9	80.73	2.720	
8,900.0	7,000.0	8,870.7	7,000.0	42.6	42.2	-90.00	2,005.7	67.1	219.6	135.3	84.36	2.604	
9,000.0	7,000.0	8,970.7	7,000.0	44.4	44.0	-90.00	2,105.5	60.6	219.6	131.6	88.00	2.496	
9,100.0	7,000.0	9,070.7	7,000.0	46.3	45.8	-90.00	2,205.2	54.1	219.6	128.0	91.67	2.396	
9,200.0	7,000.0	9,170.7	7,000.0	48.1	47.7	-90.00	2,305.0	47.6	219.6	124.3	95.35	2.303	
9,300.0	7,000.0	9,270.7	7,000.0	49.9	49.5	-90.00	2,404.8	41.0	219.6	120.6	99.05	2.217	
9,400.0	7,000.0	9,370.7	7,000.0	51.8	51.4	-90.00	2,504.6	34.5	219.6	116.9	102.77	2.137	
9,500.0	7,000.0	9,470.7	7,000.0	53.6	53.2	-90.00	2,604.4	28.0	219.6	113.2	106.50	2.063	
9,600.0	7,000.0	9,570.7	7,000.0	55.5	55.1	-90.00	2,704.2	21.5	219.7	109.4	110.24	1.993	
9,700.0	7,000.0	9,670.7	7,000.0	57.4	57.0	-90.00	2,804.0	15.0	219.7	105.7	113.99	1.927	
9,800.0	7,000.0	9,770.7	7,000.0	59.2	58.9	-90.00	2,903.8	8.4	219.7	101.9	117.75	1.866	
9,900.0	7,000.0	9,870.7	7,000.0	61.1	60.7	-90.00	3,003.5	1.9	219.7	98.1	121.51	1.808	
10,000.0	7,000.0	9,970.7	7,000.0	63.0	62.6	-90.00	3,103.3	-4.6	219.7	94.4	125.29	1.753	
10,100.0	7,000.0	10,070.7	7,000.0	64.9	64.5	-90.00	3,203.1	-11.1	219.7	90.6	129.07	1.702	

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 C-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 C-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 C-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	
10,200.0	7,000.0	10,170.7	7,000.0	66.8	66.4	-90.00	3,302.9	-17.7	219.7	86.8	132.86	1.653	
10,300.0	7,000.0	10,270.7	7,000.0	68.6	68.3	-90.00	3,402.7	-24.2	219.7	83.0	136.66	1.607	
10,400.0	7,000.0	10,370.7	7,000.0	70.5	70.2	-90.00	3,502.5	-30.7	219.7	79.2	140.46	1.564	
10,500.0	7,000.0	10,470.7	7,000.0	72.4	72.1	-90.00	3,602.3	-37.2	219.7	75.4	144.26	1.523	
10,600.0	7,000.0	10,570.7	7,000.0	74.3	74.0	-90.00	3,702.1	-43.7	219.7	71.6	148.08	1.484 Level 3	
10,700.0	7,000.0	10,670.7	7,000.0	76.2	75.9	-90.00	3,801.8	-50.3	219.7	67.8	151.89	1.446 Level 3	
10,800.0	7,000.0	10,770.7	7,000.0	78.1	77.8	-90.00	3,901.6	-56.8	219.7	64.0	155.71	1.411 Level 3	
10,900.0	7,000.0	10,870.7	7,000.0	80.0	79.7	-90.00	4,001.4	-63.3	219.7	60.2	159.53	1.377 Level 3	
11,000.0	7,000.0	10,970.7	7,000.0	82.0	81.7	-90.00	4,101.2	-69.8	219.7	56.3	163.36	1.345 Level 3	
11,100.0	7,000.0	11,070.7	7,000.0	83.9	83.6	-90.00	4,201.0	-76.4	219.7	52.5	167.19	1.314 Level 3	
11,200.0	7,000.0	11,170.7	7,000.0	85.8	85.5	-90.00	4,300.8	-82.9	219.7	48.7	171.02	1.285 Level 3	
11,300.0	7,000.0	11,270.7	7,000.0	87.7	87.4	-90.00	4,400.6	-89.4	219.7	44.9	174.86	1.257 Level 3	
11,308.2	7,000.0	11,278.9	7,000.0	87.9	87.6	-90.00	4,408.8	-89.9	219.7	44.5	175.17	1.254 Level 3, SF	

Reference Depths are relative to WELL @ 5077.0ft (RKB - 13')	Coordinates are relative to: SRC Kiehn C-4NHZ
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: 0.32°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn C-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 C-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 C-4NHZ
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.32°

