

Synergy Resources

Well Name: **SRC Kiehn 31-4NHZ**

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

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

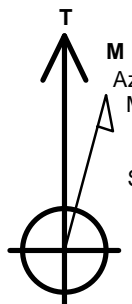
Ground Elevation: 5064.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1365559.79	3137886.52	40.335807	-105.005380	

Original Well Elev WELL @ 5077.0ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 201'FSL & 1806'FEL	1.0	0.0	0.0	Point
BHL 470'FNL & 2252'FEL	7000.0	4425.6	-664.5	Point



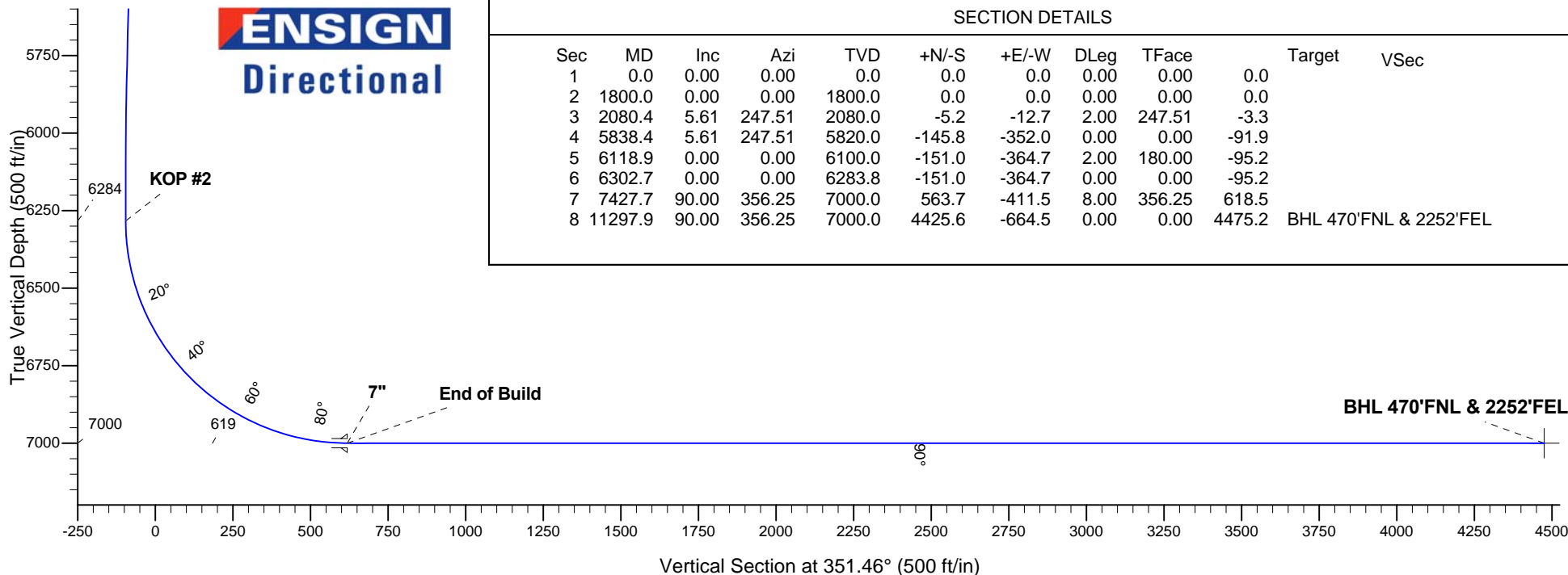
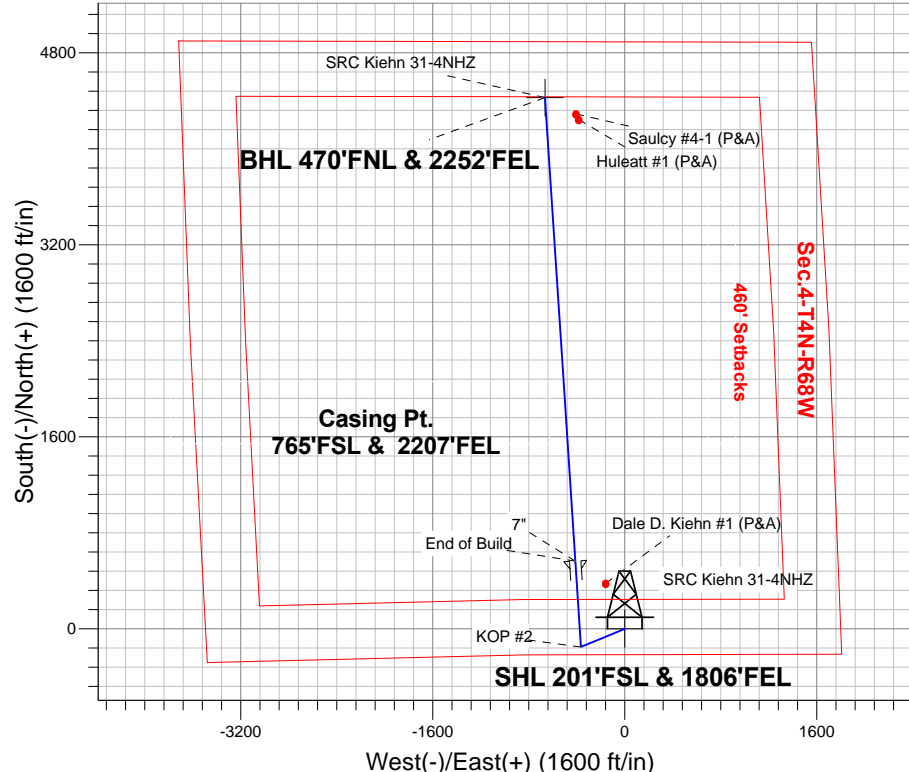
Azimuths to True North
Magnetic North: 8.60°

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

ANNOTATIONS

TVD	MD	Annotation
1800.0	1800.0	KOP #1
6283.8	6302.7	KOP #2
7000.0	7427.7	End of Build

SRC Kiehn Pad Sec.4-T4N-R68W
SRC Kiehn 31-4NHZ
Plan #2 (4-25-14)
9:46, 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	1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	
3	2080.4	5.61	247.51	2080.0	-5.2	-12.7	2.00	247.51	-3.3	
4	5838.4	5.61	247.51	5820.0	-145.8	-352.0	0.00	0.00	-91.9	
5	6118.9	0.00	0.00	6100.0	-151.0	-364.7	2.00	180.00	-95.2	
6	6302.7	0.00	0.00	6283.8	-151.0	-364.7	0.00	0.00	-95.2	
7	7427.7	90.00	356.25	7000.0	563.7	-411.5	8.00	356.25	618.5	
8	11297.9	90.00	356.25	7000.0	4425.6	-664.5	0.00	0.00	4475.2	BHL 470'FNL & 2252'FEL



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn 31-4NHZ

Wellbore #1

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

Standard Planning Report

29 April, 2014

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 31-4NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (4-25-14)		

Project	SEC.4-T4N-R68W, Weld, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site						SRC Kiehn Pad Sec.4-T4N-R68W							
Site Position: From: Position Uncertainty:			Lat/Long 0.0 ft			Northing:		1,365,561.75 ft		Latitude:		40.335811	
						Easting:		3,137,974.04 ft		Longitude:		-105.005066	
						Slot Radius:		"		Grid Convergence:		0.32 °	

Well	SRC Kiehn 31-4NHZ					
Well Position	+N/-S	-1.5 ft	Northing:	1,365,559.79 ft	Latitude:	40.335807
	+E/-W	-87.5 ft	Easting:	3,137,886.52 ft	Longitude:	-105.005380
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,064.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/25/2014	8.60	66.86	52,769

Design	Plan #2 (4-25-14)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	351.46

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	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,080.4	5.61	247.51	2,080.0	-5.2	-12.7	2.00	2.00	0.00	247.51	
5,838.4	5.61	247.51	5,820.0	-145.8	-352.0	0.00	0.00	0.00	0.00	
6,118.9	0.00	0.00	6,100.0	-151.0	-364.7	2.00	-2.00	0.00	180.00	
6,302.7	0.00	0.00	6,283.8	-151.0	-364.7	0.00	0.00	0.00	0.00	
7,427.7	90.00	356.25	7,000.0	563.7	-411.5	8.00	8.00	0.00	356.25	
11,297.9	90.00	356.25	7,000.0	4,425.6	-664.5	0.00	0.00	0.00	0.00	BHL 470'FNL & 225°

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 31-4NHZ	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 & 1806'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
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,900.0	2.00	247.51	1,900.0	-0.7	-1.6	-0.4	2.00	2.00	0.00
2,000.0	4.00	247.51	1,999.8	-2.7	-6.4	-1.7	2.00	2.00	0.00
2,080.4	5.61	247.51	2,080.0	-5.2	-12.7	-3.3	2.00	2.00	0.00
2,100.0	5.61	247.51	2,099.5	-6.0	-14.4	-3.8	0.00	0.00	0.00
2,200.0	5.61	247.51	2,199.0	-9.7	-23.5	-6.1	0.00	0.00	0.00
2,300.0	5.61	247.51	2,298.5	-13.5	-32.5	-8.5	0.00	0.00	0.00
2,400.0	5.61	247.51	2,398.0	-17.2	-41.5	-10.8	0.00	0.00	0.00
2,500.0	5.61	247.51	2,497.5	-20.9	-50.6	-13.2	0.00	0.00	0.00
2,600.0	5.61	247.51	2,597.1	-24.7	-59.6	-15.6	0.00	0.00	0.00
2,700.0	5.61	247.51	2,696.6	-28.4	-68.6	-17.9	0.00	0.00	0.00
2,800.0	5.61	247.51	2,796.1	-32.2	-77.6	-20.3	0.00	0.00	0.00
2,900.0	5.61	247.51	2,895.6	-35.9	-86.7	-22.6	0.00	0.00	0.00
3,000.0	5.61	247.51	2,995.1	-39.6	-95.7	-25.0	0.00	0.00	0.00
3,100.0	5.61	247.51	3,094.7	-43.4	-104.7	-27.3	0.00	0.00	0.00
3,200.0	5.61	247.51	3,194.2	-47.1	-113.8	-29.7	0.00	0.00	0.00
3,300.0	5.61	247.51	3,293.7	-50.8	-122.8	-32.0	0.00	0.00	0.00
3,400.0	5.61	247.51	3,393.2	-54.6	-131.8	-34.4	0.00	0.00	0.00
3,500.0	5.61	247.51	3,492.8	-58.3	-140.9	-36.8	0.00	0.00	0.00
3,600.0	5.61	247.51	3,592.3	-62.1	-149.9	-39.1	0.00	0.00	0.00
3,700.0	5.61	247.51	3,691.8	-65.8	-158.9	-41.5	0.00	0.00	0.00
3,800.0	5.61	247.51	3,791.3	-69.5	-168.0	-43.8	0.00	0.00	0.00
3,900.0	5.61	247.51	3,890.8	-73.3	-177.0	-46.2	0.00	0.00	0.00
4,000.0	5.61	247.51	3,990.4	-77.0	-186.0	-48.5	0.00	0.00	0.00
4,100.0	5.61	247.51	4,089.9	-80.8	-195.0	-50.9	0.00	0.00	0.00
4,200.0	5.61	247.51	4,189.4	-84.5	-204.1	-53.3	0.00	0.00	0.00
4,300.0	5.61	247.51	4,288.9	-88.2	-213.1	-55.6	0.00	0.00	0.00
4,400.0	5.61	247.51	4,388.4	-92.0	-222.1	-58.0	0.00	0.00	0.00
4,500.0	5.61	247.51	4,488.0	-95.7	-231.2	-60.3	0.00	0.00	0.00
4,600.0	5.61	247.51	4,587.5	-99.4	-240.2	-62.7	0.00	0.00	0.00
4,700.0	5.61	247.51	4,687.0	-103.2	-249.2	-65.0	0.00	0.00	0.00
4,800.0	5.61	247.51	4,786.5	-106.9	-258.3	-67.4	0.00	0.00	0.00
4,900.0	5.61	247.51	4,886.1	-110.7	-267.3	-69.8	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Project:	SEC.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site:	SRC Kiehn Pad Sec.4-T4N-R68W	North Reference:	True
Well:	SRC Kiehn 31-4NHZ	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	5.61	247.51	4,985.6	-114.4	-276.3	-72.1	0.00	0.00	0.00
5,100.0	5.61	247.51	5,085.1	-118.1	-285.3	-74.5	0.00	0.00	0.00
5,200.0	5.61	247.51	5,184.6	-121.9	-294.4	-76.8	0.00	0.00	0.00
5,300.0	5.61	247.51	5,284.1	-125.6	-303.4	-79.2	0.00	0.00	0.00
5,400.0	5.61	247.51	5,383.7	-129.4	-312.4	-81.5	0.00	0.00	0.00
5,500.0	5.61	247.51	5,483.2	-133.1	-321.5	-83.9	0.00	0.00	0.00
5,600.0	5.61	247.51	5,582.7	-136.8	-330.5	-86.2	0.00	0.00	0.00
5,700.0	5.61	247.51	5,682.2	-140.6	-339.5	-88.6	0.00	0.00	0.00
5,800.0	5.61	247.51	5,781.7	-144.3	-348.6	-91.0	0.00	0.00	0.00
5,838.4	5.61	247.51	5,820.0	-145.8	-352.0	-91.9	0.00	0.00	0.00
5,900.0	4.38	247.51	5,881.3	-147.8	-357.0	-93.2	2.00	-2.00	0.00
6,000.0	2.38	247.51	5,981.1	-150.1	-362.4	-94.6	2.00	-2.00	0.00
6,100.0	0.38	247.51	6,081.1	-151.0	-364.6	-95.2	2.00	-2.00	0.00
6,118.9	0.00	0.00	6,100.0	-151.0	-364.7	-95.2	2.00	-2.00	0.00
6,200.0	0.00	0.00	6,181.1	-151.0	-364.7	-95.2	0.00	0.00	0.00
6,300.0	0.00	0.00	6,281.1	-151.0	-364.7	-95.2	0.00	0.00	0.00
6,302.7	0.00	0.00	6,283.8	-151.0	-364.7	-95.2	0.00	0.00	0.00
KOP #2									
6,400.0	7.78	356.25	6,380.8	-144.4	-365.1	-88.6	8.00	8.00	0.00
6,500.0	15.78	356.25	6,478.6	-124.0	-366.5	-68.3	8.00	8.00	0.00
6,600.0	23.78	356.25	6,572.6	-90.3	-368.7	-34.6	8.00	8.00	0.00
6,700.0	31.78	356.25	6,661.0	-43.8	-371.7	11.9	8.00	8.00	0.00
6,800.0	39.78	356.25	6,742.1	14.5	-375.5	70.1	8.00	8.00	0.00
6,900.0	47.78	356.25	6,814.2	83.5	-380.1	139.0	8.00	8.00	0.00
7,000.0	55.78	356.25	6,876.0	161.8	-385.2	217.2	8.00	8.00	0.00
7,100.0	63.78	356.25	6,926.3	248.0	-390.8	303.3	8.00	8.00	0.00
7,200.0	71.78	356.25	6,964.1	340.3	-396.9	395.4	8.00	8.00	0.00
7,300.0	79.78	356.25	6,988.6	436.9	-403.2	492.0	8.00	8.00	0.00
7,400.0	87.78	356.25	6,999.5	536.0	-409.7	590.9	8.00	8.00	0.00
7,427.7	90.00	356.25	7,000.0	563.7	-411.5	618.5	8.00	8.00	0.00
End of Build - 7"									
7,500.0	90.00	356.25	7,000.0	635.8	-416.2	690.6	0.00	0.00	0.00
7,600.0	90.00	356.25	7,000.0	735.6	-422.8	790.2	0.00	0.00	0.00
7,700.0	90.00	356.25	7,000.0	835.4	-429.3	889.9	0.00	0.00	0.00
7,800.0	90.00	356.25	7,000.0	935.2	-435.9	989.5	0.00	0.00	0.00
7,900.0	90.00	356.25	7,000.0	1,035.0	-442.4	1,089.2	0.00	0.00	0.00
8,000.0	90.00	356.25	7,000.0	1,134.8	-448.9	1,188.8	0.00	0.00	0.00
8,100.0	90.00	356.25	7,000.0	1,234.5	-455.5	1,288.5	0.00	0.00	0.00
8,200.0	90.00	356.25	7,000.0	1,334.3	-462.0	1,388.1	0.00	0.00	0.00
8,300.0	90.00	356.25	7,000.0	1,434.1	-468.5	1,487.8	0.00	0.00	0.00
8,400.0	90.00	356.25	7,000.0	1,533.9	-475.1	1,587.4	0.00	0.00	0.00
8,500.0	90.00	356.25	7,000.0	1,633.7	-481.6	1,687.1	0.00	0.00	0.00
8,600.0	90.00	356.25	7,000.0	1,733.5	-488.1	1,786.7	0.00	0.00	0.00
8,700.0	90.00	356.25	7,000.0	1,833.3	-494.7	1,886.4	0.00	0.00	0.00
8,800.0	90.00	356.25	7,000.0	1,933.0	-501.2	1,986.0	0.00	0.00	0.00
8,900.0	90.00	356.25	7,000.0	2,032.8	-507.8	2,085.7	0.00	0.00	0.00
9,000.0	90.00	356.25	7,000.0	2,132.6	-514.3	2,185.3	0.00	0.00	0.00
9,100.0	90.00	356.25	7,000.0	2,232.4	-520.8	2,285.0	0.00	0.00	0.00
9,200.0	90.00	356.25	7,000.0	2,332.2	-527.4	2,384.6	0.00	0.00	0.00
9,300.0	90.00	356.25	7,000.0	2,432.0	-533.9	2,484.3	0.00	0.00	0.00
9,400.0	90.00	356.25	7,000.0	2,531.8	-540.4	2,583.9	0.00	0.00	0.00
9,500.0	90.00	356.25	7,000.0	2,631.5	-547.0	2,683.6	0.00	0.00	0.00
9,600.0	90.00	356.25	7,000.0	2,731.3	-553.5	2,783.2	0.00	0.00	0.00
9,700.0	90.00	356.25	7,000.0	2,831.1	-560.1	2,882.9	0.00	0.00	0.00

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S	+E/-W	
			(ft)	(ft)	
	1,800.0	1,800.0	0.0	0.0	KOP #1
	6,302.7	6,283.8	-151.0	-364.7	KOP #2
	7,427.7	7,000.0	563.7	-411.5	End of Build



Synergy Resources

SEC.4-T4N-R68W

SRC Kiehn Pad Sec.4-T4N-R68W

SRC Kiehn 31-4NHZ

Wellbore #1

Plan #2 (4-25-14)

Anticollision Report

29 April, 2014

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							
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)			
500.0	500.0	3,173.0	3,173.0	1.0	63.5	-22.74	377.8	-158.3	409.6	345.1	64.47	6.353		
600.0	600.0	3,273.0	3,273.0	1.2	65.5	-22.74	377.8	-158.3	409.6	342.9	66.70	6.141		
700.0	700.0	3,373.0	3,373.0	1.5	67.5	-22.74	377.8	-158.3	409.6	340.7	68.92	5.943		
800.0	800.0	3,473.0	3,473.0	1.7	69.5	-22.74	377.8	-158.3	409.6	338.5	71.15	5.757		
900.0	900.0	3,573.0	3,573.0	1.9	71.5	-22.74	377.8	-158.3	409.6	336.2	73.37	5.583		
1,000.0	1,000.0	3,673.0	3,673.0	2.1	73.5	-22.74	377.8	-158.3	409.6	334.0	75.60	5.418		
1,100.0	1,100.0	3,773.0	3,773.0	2.4	75.5	-22.74	377.8	-158.3	409.6	331.8	77.82	5.264		
1,200.0	1,200.0	3,873.0	3,873.0	2.6	77.5	-22.74	377.8	-158.3	409.6	329.6	80.04	5.117		
1,300.0	1,300.0	3,973.0	3,973.0	2.8	79.5	-22.74	377.8	-158.3	409.6	327.3	82.27	4.979		
1,400.0	1,400.0	4,073.0	4,073.0	3.0	81.5	-22.74	377.8	-158.3	409.6	325.1	84.49	4.848		
1,500.0	1,500.0	4,173.0	4,173.0	3.3	83.5	-22.74	377.8	-158.3	409.6	322.9	86.72	4.723		
1,600.0	1,600.0	4,273.0	4,273.0	3.5	85.5	-22.74	377.8	-158.3	409.6	320.7	88.94	4.605		
1,700.0	1,700.0	4,373.0	4,373.0	3.7	87.5	-22.74	377.8	-158.3	409.6	318.4	91.17	4.493		
1,800.0	1,800.0	4,473.0	4,473.0	3.9	89.5	-22.74	377.8	-158.3	409.6	316.2	93.39	4.386		
1,900.0	1,900.0	4,573.0	4,573.0	4.1	91.5	89.99	377.8	-158.3	409.6	314.0	95.60	4.285		
1,901.3	1,901.3	4,574.3	4,574.3	4.1	91.5	90.00	377.8	-158.3	409.6	314.0	95.63	4.283 CC		
2,000.0	1,999.8	4,672.8	4,672.8	4.3	93.5	90.72	377.8	-158.3	409.6	311.9	97.79	4.189		
2,100.0	2,099.5	4,772.5	4,772.5	4.5	95.4	91.93	377.8	-158.3	409.8	309.9	99.98	4.099		
2,200.0	2,199.0	4,872.0	4,872.0	4.7	97.4	93.28	377.8	-158.3	410.3	308.1	102.18	4.015		
2,300.0	2,298.5	4,971.5	4,971.5	5.0	99.4	94.64	377.8	-158.3	411.0	306.6	104.39	3.937		
2,400.0	2,398.0	5,071.0	5,071.0	5.2	101.4	95.99	377.8	-158.3	411.9	305.3	106.61	3.863		
2,500.0	2,497.5	5,170.5	5,170.5	5.4	103.4	97.33	377.8	-158.3	413.0	304.2	108.83	3.795		
2,600.0	2,597.1	5,270.1	5,270.1	5.7	105.4	98.66	377.8	-158.3	414.4	303.3	111.06	3.731		
2,700.0	2,696.6	5,369.6	5,369.6	5.9	107.4	99.99	377.8	-158.3	416.0	302.7	113.29	3.672		
2,800.0	2,796.1	5,469.1	5,469.1	6.2	109.4	101.30	377.8	-158.3	417.8	302.3	115.52	3.617		
2,900.0	2,895.6	5,568.6	5,568.6	6.4	111.4	102.60	377.8	-158.3	419.8	302.1	117.75	3.565 ES		
3,000.0	2,995.1	5,668.1	5,668.1	6.7	113.4	103.89	377.8	-158.3	422.1	302.1	119.99	3.518		
3,100.0	3,094.7	5,767.7	5,767.7	6.9	115.4	105.17	377.8	-158.3	424.5	302.3	122.22	3.473		
3,200.0	3,194.2	5,867.2	5,867.2	7.2	117.3	106.43	377.8	-158.3	427.2	302.7	124.46	3.432		
3,300.0	3,293.7	5,966.7	5,966.7	7.5	119.3	107.67	377.8	-158.3	430.1	303.4	126.70	3.394		
3,400.0	3,393.2	6,066.2	6,066.2	7.7	121.3	108.90	377.8	-158.3	433.2	304.2	128.94	3.359		
3,500.0	3,492.8	6,165.8	6,165.8	8.0	123.3	110.11	377.8	-158.3	436.4	305.3	131.18	3.327		
3,600.0	3,592.3	6,265.3	6,265.3	8.3	125.3	111.30	377.8	-158.3	439.9	306.5	133.41	3.297		
3,700.0	3,691.8	6,364.8	6,364.8	8.5	127.3	112.47	377.8	-158.3	443.6	307.9	135.65	3.270		
3,800.0	3,791.3	6,464.3	6,464.3	8.8	129.3	113.62	377.8	-158.3	447.4	309.5	137.89	3.245		
3,900.0	3,890.8	6,563.8	6,563.8	9.1	131.3	114.75	377.8	-158.3	451.4	311.3	140.12	3.222		
4,000.0	3,990.4	6,663.4	6,663.4	9.4	133.3	115.86	377.8	-158.3	455.6	313.3	142.35	3.201		
4,100.0	4,089.9	6,762.9	6,762.9	9.6	135.3	116.96	377.8	-158.3	460.0	315.4	144.59	3.181		
4,200.0	4,189.4	6,862.4	6,862.4	9.9	137.2	118.03	377.8	-158.3	464.5	317.7	146.82	3.164		
4,300.0	4,288.9	6,961.9	6,961.9	10.2	139.2	119.08	377.8	-158.3	469.2	320.2	149.05	3.148		
4,400.0	4,388.4	7,061.4	7,061.4	10.5	141.2	120.10	377.8	-158.3	474.1	322.8	151.28	3.134		
4,500.0	4,488.0	7,161.0	7,161.0	10.8	143.2	121.11	377.8	-158.3	479.0	325.5	153.50	3.121		
4,600.0	4,587.5	7,260.5	7,260.5	11.0	145.2	122.10	377.8	-158.3	484.2	328.5	155.73	3.109		
4,700.0	4,687.0	7,360.0	7,360.0	11.3	147.2	123.07	377.8	-158.3	489.5	331.5	157.95	3.099		
4,800.0	4,786.5	7,459.5	7,459.5	11.6	149.2	124.01	377.8	-158.3	494.9	334.7	160.18	3.090		
4,900.0	4,886.1	7,559.1	7,559.1	11.9	151.2	124.94	377.8	-158.3	500.4	338.0	162.40	3.081		
5,000.0	4,985.6	7,658.6	7,658.6	12.2	153.2	125.84	377.8	-158.3	506.1	341.5	164.62	3.074		
5,100.0	5,085.1	7,758.1	7,758.1	12.5	155.2	126.72	377.8	-158.3	511.9	345.1	166.84	3.068 SF		
5,200.0	5,184.6	7,790.0	7,790.0	12.7	155.8	127.00	377.8	-158.3	522.2	354.5	167.73	3.113		
5,300.0	5,284.1	7,790.0	7,790.0	13.0	155.8	127.00	377.8	-158.3	549.9	381.9	168.00	3.273		
5,400.0	5,383.7	7,790.0	7,790.0	13.3	155.8	127.00	377.8	-158.3	593.3	425.1	168.26	3.526		
5,500.0	5,483.2	7,790.0	7,790.0	13.6	155.8	127.00	377.8	-158.3	649.4	480.8	168.53	3.853		

COMPASS 2003.21 Build 46

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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
SRC Kiehn (Existing) Pad Sec.4-T4N-R68W - Dale D. Kiehn #1 (P&A) - Wellbore #1 - Wellbore #1												Offset Well Error:	0.0 ft
Survey Program: 7790-UNKNOWN													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,600.0	5,582.7	7,790.0	7,790.0	13.9	155.8	127.00	377.8	-158.3	715.1	546.3	168.79	4.236	
5,700.0	5,682.2	7,790.0	7,790.0	14.2	155.8	127.00	377.8	-158.3	788.0	619.0	169.06	4.661	
5,800.0	5,781.7	7,790.0	7,790.0	14.5	155.8	127.00	377.8	-158.3	866.4	697.1	169.32	5.117	
5,900.0	5,881.3	7,790.0	7,790.0	14.7	155.8	128.44	377.8	-158.3	948.6	779.0	169.62	5.593	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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
SRC Kiehn (Existing) Pad Sec.4-T4N-R68W - Huleatt #1 (P&A) - Wellbore #1 - Wellbore #1												Offset Well Error:	0.0 ft
Survey Program: 7000-UNKNOWN													
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	7,000.0	7,000.0	67.7	140.0	89.36	4,243.1	-384.4	936.5	729.1	207.45	4.514	
10,300.0	7,000.0	7,000.0	7,000.0	69.6	140.0	89.36	4,243.1	-384.4	841.2	631.8	209.35	4.018	
10,400.0	7,000.0	7,000.0	7,000.0	71.5	140.0	89.36	4,243.1	-384.4	747.1	535.8	211.25	3.536	
10,500.0	7,000.0	7,000.0	7,000.0	73.4	140.0	89.36	4,243.1	-384.4	654.7	441.5	213.16	3.071	
10,600.0	7,000.0	7,000.0	7,000.0	75.3	140.0	89.36	4,243.1	-384.4	564.9	349.8	215.06	2.627	
10,700.0	7,000.0	7,000.0	7,000.0	77.2	140.0	89.36	4,243.1	-384.4	479.2	262.2	216.97	2.208	
10,800.0	7,000.0	7,000.0	7,000.0	79.1	140.0	89.36	4,243.1	-384.4	400.1	181.2	218.88	1.828	
10,900.0	7,000.0	7,000.0	7,000.0	81.0	140.0	89.36	4,243.1	-384.4	332.6	111.8	220.80	1.506	
11,000.0	7,000.0	7,000.0	7,000.0	82.9	140.0	89.36	4,243.1	-384.4	284.8	62.1	222.71	1.279	Level 3
11,097.5	7,000.0	7,000.0	7,000.0	84.8	140.0	89.36	4,243.1	-384.4	267.6	43.0	224.58	1.192	Level 2, CC
11,100.0	7,000.0	7,000.0	7,000.0	84.8	140.0	89.36	4,243.1	-384.4	267.6	43.0	224.63	1.191	Level 2, ES, SF
11,200.0	7,000.0	7,000.0	7,000.0	86.7	140.0	89.36	4,243.1	-384.4	286.6	60.0	226.54	1.265	Level 3
11,297.9	7,000.0	7,000.0	7,000.0	88.6	140.0	89.36	4,243.1	-384.4	334.4	105.9	228.42	1.464	Level 3

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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 (Existing) Pad Sec.4-T4N-R68W - Saulcy #4-1 (P&A) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 8163-UNKNOWN												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	7,043.0	7,043.0	67.7	140.9	90.00	4,290.5	-406.7	978.3	769.9	208.34	4.696	
10,300.0	7,000.0	7,043.0	7,043.0	69.6	140.9	90.00	4,290.5	-406.7	881.9	671.7	210.23	4.195	
10,400.0	7,000.0	7,043.0	7,043.0	71.5	140.9	90.00	4,290.5	-406.7	786.5	574.3	212.14	3.707	
10,500.0	7,000.0	7,043.0	7,043.0	73.4	140.9	90.00	4,290.5	-406.7	692.3	478.3	214.04	3.234	
10,600.0	7,000.0	7,043.0	7,043.0	75.3	140.9	90.00	4,290.5	-406.7	600.0	384.1	215.95	2.779	
10,700.0	7,000.0	7,043.0	7,043.0	77.2	140.9	90.00	4,290.5	-406.7	510.7	292.8	217.86	2.344	
10,800.0	7,000.0	7,043.0	7,043.0	79.1	140.9	90.00	4,290.5	-406.7	426.1	206.3	219.77	1.939	
10,900.0	7,000.0	7,043.0	7,043.0	81.0	140.9	90.00	4,290.5	-406.7	349.8	128.1	221.68	1.578	
11,000.0	7,000.0	7,043.0	7,043.0	82.9	140.9	90.00	4,290.5	-406.7	288.3	64.7	223.60	1.289	Level 3
11,100.0	7,000.0	7,043.0	7,043.0	84.8	140.9	90.00	4,290.5	-406.7	252.7	27.2	225.51	1.121	Level 2
11,146.2	7,000.0	7,043.0	7,043.0	85.7	140.9	90.00	4,290.5	-406.7	248.4	22.0	226.40	1.097	Level 2, CC, ES, SF
11,200.0	7,000.0	7,043.0	7,043.0	86.7	140.9	90.00	4,290.5	-406.7	254.2	26.8	227.43	1.118	Level 2
11,297.9	7,000.0	7,043.0	7,043.0	88.6	140.9	90.00	4,290.5	-406.7	291.1	61.8	229.31	1.270	Level 3

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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							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	-90.93	-1.1	-67.5	67.5					
100.0	100.0	100.0	100.0	0.1	0.1	-90.93	-1.1	-67.5	67.5	67.3	0.22	300.202		
200.0	200.0	200.0	200.0	0.3	0.3	-90.93	-1.1	-67.5	67.5	66.8	0.67	100.067		
300.0	300.0	300.0	300.0	0.6	0.6	-90.93	-1.1	-67.5	67.5	66.4	1.12	60.040		
400.0	400.0	400.0	400.0	0.8	0.8	-90.93	-1.1	-67.5	67.5	65.9	1.57	42.886		
500.0	500.0	500.0	500.0	1.0	1.0	-90.93	-1.1	-67.5	67.5	65.5	2.02	33.356		
600.0	600.0	600.0	600.0	1.2	1.2	-90.93	-1.1	-67.5	67.5	65.0	2.47	27.291		
700.0	700.0	700.0	700.0	1.5	1.5	-90.93	-1.1	-67.5	67.5	64.6	2.92	23.092		
800.0	800.0	800.0	800.0	1.7	1.7	-90.93	-1.1	-67.5	67.5	64.1	3.37	20.013		
900.0	900.0	900.0	900.0	1.9	1.9	-90.93	-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	-90.93	-1.1	-67.5	67.5	63.2	4.27	15.800		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.93	-1.1	-67.5	67.5	62.8	4.72	14.295		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.93	-1.1	-67.5	67.5	62.3	5.17	13.052 CC, ES		
1,300.0	1,300.0	1,297.7	1,297.7	2.8	2.8	-91.12	-1.4	-69.1	69.2	63.6	5.60	12.353		
1,400.0	1,400.0	1,395.1	1,395.0	3.0	3.0	-91.65	-2.1	-74.0	74.2	68.2	6.02	12.331		
1,500.0	1,500.0	1,492.1	1,491.6	3.3	3.2	-92.38	-3.4	-82.2	82.7	76.2	6.45	12.817		
1,600.0	1,600.0	1,588.5	1,587.3	3.5	3.4	-93.18	-5.2	-93.4	94.4	87.6	6.89	13.700		
1,700.0	1,700.0	1,683.9	1,681.6	3.7	3.7	-93.95	-7.4	-107.7	109.6	102.2	7.36	14.889		
1,800.0	1,800.0	1,778.3	1,774.4	3.9	3.9	-94.65	-10.2	-124.9	127.9	120.1	7.85	16.300		
1,900.0	1,900.0	1,873.4	1,867.2	4.1	4.3	17.32	-13.3	-145.1	147.7	139.6	8.14	18.147		
2,000.0	1,999.8	1,971.9	1,963.3	4.3	4.6	17.24	-16.7	-166.7	165.0	156.5	8.54	19.324		
2,100.0	2,099.5	2,070.9	2,059.8	4.5	5.0	17.52	-20.2	-188.4	179.0	170.1	8.94	20.015		
2,200.0	2,199.0	2,170.0	2,156.5	4.7	5.4	17.93	-23.6	-210.2	192.0	182.6	9.38	20.476		
2,300.0	2,298.5	2,269.2	2,253.1	5.0	5.8	18.28	-27.0	-231.9	205.0	195.2	9.82	20.878		
2,400.0	2,398.0	2,368.3	2,349.8	5.2	6.3	18.59	-30.5	-253.7	218.0	207.7	10.27	21.231		
2,500.0	2,497.5	2,467.5	2,446.5	5.4	6.7	18.87	-33.9	-275.5	231.0	220.3	10.72	21.541		
2,600.0	2,597.1	2,566.6	2,543.1	5.7	7.1	19.11	-37.3	-297.2	244.0	232.8	11.18	21.815		
2,700.0	2,696.6	2,665.8	2,639.8	5.9	7.6	19.33	-40.8	-319.0	257.0	245.3	11.65	22.057		
2,800.0	2,796.1	2,764.9	2,736.5	6.2	8.0	19.53	-44.2	-340.7	270.0	257.9	12.12	22.272		
2,900.0	2,895.6	2,864.0	2,833.2	6.4	8.5	19.72	-47.6	-362.5	283.0	270.4	12.60	22.463		
3,000.0	2,995.1	2,963.2	2,929.8	6.7	8.9	19.88	-51.0	-384.2	296.0	282.9	13.08	22.634		
3,100.0	3,094.7	3,062.3	3,026.5	6.9	9.4	20.03	-54.5	-406.0	309.0	295.5	13.56	22.787		
3,200.0	3,194.2	3,161.5	3,123.2	7.2	9.9	20.17	-57.9	-427.7	322.1	308.0	14.05	22.925		
3,300.0	3,293.7	3,260.6	3,219.8	7.5	10.3	20.30	-61.3	-449.5	335.1	320.5	14.54	23.049		
3,400.0	3,393.2	3,359.8	3,316.5	7.7	10.8	20.42	-64.8	-471.2	348.1	333.1	15.03	23.161		
3,500.0	3,492.8	3,458.9	3,413.2	8.0	11.3	20.53	-68.2	-493.0	361.1	345.6	15.52	23.262		
3,600.0	3,592.3	3,558.1	3,509.8	8.3	11.7	20.63	-71.6	-514.7	374.2	358.1	16.02	23.354		
3,700.0	3,691.8	3,657.2	3,606.5	8.5	12.2	20.73	-75.1	-536.5	387.2	370.7	16.52	23.438		
3,800.0	3,791.3	3,756.4	3,703.2	8.8	12.7	20.82	-78.5	-558.2	400.2	383.2	17.02	23.515		
3,900.0	3,890.8	3,855.5	3,799.9	9.1	13.2	20.90	-81.9	-580.0	413.2	395.7	17.52	23.585		
4,000.0	3,990.4	3,954.7	3,896.5	9.4	13.6	20.98	-85.3	-601.7	426.3	408.2	18.02	23.649		
4,100.0	4,089.9	4,053.8	3,993.2	9.6	14.1	21.06	-88.8	-623.5	439.3	420.8	18.53	23.708		
4,200.0	4,189.4	4,152.9	4,089.9	9.9	14.6	21.13	-92.2	-645.2	452.3	433.3	19.04	23.762		
4,300.0	4,288.9	4,252.1	4,186.5	10.2	15.1	21.19	-95.6	-667.0	465.4	445.8	19.54	23.812		
4,400.0	4,388.4	4,351.2	4,283.2	10.5	15.5	21.26	-99.1	-688.7	478.4	458.3	20.05	23.859		
4,500.0	4,488.0	4,450.4	4,379.9	10.8	16.0	21.31	-102.5	-710.5	491.4	470.9	20.56	23.901		
4,600.0	4,587.5	4,549.5	4,476.5	11.0	16.5	21.37	-105.9	-732.3	504.5	483.4	21.07	23.941		
4,700.0	4,687.0	4,648.7	4,573.2	11.3	17.0	21.42	-109.4	-754.0	517.5	495.9	21.58	23.978		
4,800.0	4,786.5	4,747.8	4,669.9	11.6	17.5	21.47	-112.8	-775.8	530.5	508.4	22.09	24.012		
4,900.0	4,886.1	4,847.0	4,766.5	11.9	17.9	21.52	-116.2	-797.5	543.6	520.9	22.61	24.043		
5,000.0	4,985.6	4,946.1	4,863.2	12.2	18.4	21.57	-119.6	-819.3	556.6	533.5	23.12	24.073		
5,100.0	5,085.1	5,045.3	4,959.9	12.5	18.9	21.61	-123.1	-841.0	569.6	546.0	23.64	24.101		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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							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	5,184.6	5,144.4	5,056.6	12.7	19.4	21.65	-126.5	-862.8	582.7	558.5	24.15	24.127		
5,300.0	5,284.1	5,243.5	5,153.2	13.0	19.9	21.69	-129.9	-884.5	595.7	571.0	24.67	24.151		
5,400.0	5,383.7	5,342.7	5,249.9	13.3	20.3	21.73	-133.4	-906.3	608.7	583.5	25.18	24.173		
5,500.0	5,483.2	5,441.8	5,346.6	13.6	20.8	21.77	-136.8	-928.0	621.8	596.1	25.70	24.194		
5,600.0	5,582.7	5,541.0	5,443.2	13.9	21.3	21.80	-140.2	-949.8	634.8	608.6	26.22	24.214		
5,700.0	5,682.2	5,662.6	5,562.2	14.2	21.8	21.87	-144.2	-974.8	646.5	619.7	26.75	24.164		
5,800.0	5,781.7	5,791.2	5,689.0	14.5	22.2	22.01	-147.5	-995.8	653.9	626.6	27.28	23.968		
5,900.0	5,881.3	5,920.3	5,817.2	14.7	22.5	22.20	-149.9	-1,011.2	657.4	629.6	27.76	23.682		
6,000.0	5,981.1	6,049.7	5,946.1	14.9	22.7	22.34	-151.5	-1,021.0	659.5	631.3	28.15	23.429		
6,100.0	6,081.1	6,179.2	6,075.5	15.1	22.9	22.39	-152.1	-1,025.0	660.3	631.9	28.49	23.179		
6,200.0	6,181.1	6,284.7	6,181.1	15.3	23.0	-90.10	-152.1	-1,025.1	660.4	631.2	29.21	22.609		
6,300.0	6,281.1	6,384.7	6,281.1	15.4	23.1	-90.10	-152.1	-1,025.1	660.4	630.8	29.58	22.326		
6,400.0	6,380.8	6,479.3	6,375.5	15.6	23.3	-86.38	-146.2	-1,025.5	660.3	630.8	29.57	22.331		
6,500.0	6,478.6	6,573.9	6,468.2	15.8	23.4	-86.48	-128.0	-1,026.6	660.3	630.4	29.84	22.129		
6,600.0	6,572.6	6,668.6	6,557.8	15.9	23.4	-86.64	-97.7	-1,028.6	660.2	630.1	30.06	21.961		
6,700.0	6,661.0	6,763.6	6,642.9	16.0	23.5	-86.87	-55.8	-1,031.4	660.0	629.7	30.30	21.781		
6,800.0	6,742.1	6,858.9	6,722.0	16.1	23.6	-87.15	-2.7	-1,034.9	659.9	629.2	30.64	21.534		
6,900.0	6,814.2	6,954.7	6,793.6	16.2	23.8	-87.49	60.6	-1,039.0	659.7	628.5	31.17	21.166		
7,000.0	6,876.0	7,051.0	6,856.4	16.5	23.9	-87.88	133.3	-1,043.8	659.5	627.6	31.96	20.636		
7,100.0	6,926.3	7,147.9	6,909.2	16.9	24.2	-88.30	214.3	-1,049.1	659.4	626.3	33.08	19.934		
7,200.0	6,964.1	7,245.5	6,950.8	17.5	24.5	-88.76	302.3	-1,054.9	659.2	624.7	34.55	19.083		
7,300.0	6,988.6	7,343.7	6,980.2	18.4	25.0	-89.25	395.8	-1,061.0	659.2	622.8	36.35	18.133		
7,400.0	6,999.5	7,442.7	6,996.6	19.4	25.6	-89.75	493.1	-1,067.4	659.1	620.7	38.45	17.143		
7,414.1	7,000.0	7,456.8	6,997.8	19.6	25.7	-89.81	507.1	-1,068.3	659.1	620.4	38.77	17.001		
7,500.0	7,000.0	7,542.6	7,000.0	20.6	26.3	-90.00	592.6	-1,074.0	659.1	618.3	40.80	16.154		
7,600.0	7,000.0	7,642.6	7,000.0	21.9	27.2	-90.00	692.4	-1,080.5	659.1	615.8	43.39	15.192		
7,700.0	7,000.0	7,742.6	7,000.0	23.3	28.2	-90.00	792.2	-1,087.1	659.2	613.0	46.15	14.282		
7,800.0	7,000.0	7,842.6	7,000.0	24.8	29.3	-90.00	892.0	-1,093.6	659.2	610.1	49.07	13.432		
7,900.0	7,000.0	7,942.6	7,000.0	26.3	30.6	-90.00	991.8	-1,100.2	659.2	607.1	52.12	12.647		
8,000.0	7,000.0	8,042.6	7,000.0	27.9	31.9	-90.00	1,091.6	-1,106.7	659.2	603.9	55.28	11.926		
8,100.0	7,000.0	8,142.6	7,000.0	29.5	33.2	-90.00	1,191.4	-1,113.3	659.2	600.7	58.52	11.265		
8,200.0	7,000.0	8,242.6	7,000.0	31.2	34.7	-90.00	1,291.1	-1,119.8	659.2	597.4	61.84	10.661		
8,300.0	7,000.0	8,342.6	7,000.0	32.9	36.2	-90.00	1,390.9	-1,126.4	659.2	594.0	65.22	10.108		
8,400.0	7,000.0	8,442.6	7,000.0	34.6	37.7	-90.00	1,490.7	-1,132.9	659.3	590.6	68.66	9.602		
8,500.0	7,000.0	8,542.6	7,000.0	36.3	39.3	-90.00	1,590.5	-1,139.5	659.3	587.1	72.14	9.139		
8,600.0	7,000.0	8,642.6	7,000.0	38.1	40.9	-90.00	1,690.3	-1,146.0	659.3	583.6	75.67	8.713		
8,700.0	7,000.0	8,742.6	7,000.0	39.9	42.5	-90.00	1,790.1	-1,152.6	659.3	580.1	79.23	8.322		
8,800.0	7,000.0	8,842.6	7,000.0	41.7	44.2	-90.00	1,889.8	-1,159.1	659.3	576.5	82.81	7.961		
8,900.0	7,000.0	8,942.6	7,000.0	43.5	45.9	-90.00	1,989.6	-1,165.7	659.3	572.9	86.43	7.628		
9,000.0	7,000.0	9,042.6	7,000.0	45.3	47.6	-90.00	2,089.4	-1,172.2	659.3	569.3	90.07	7.320		
9,100.0	7,000.0	9,142.6	7,000.0	47.1	49.3	-90.00	2,189.2	-1,178.8	659.4	565.6	93.73	7.035		
9,200.0	7,000.0	9,242.6	7,000.0	49.0	51.1	-90.00	2,289.0	-1,185.3	659.4	562.0	97.41	6.769		
9,300.0	7,000.0	9,342.6	7,000.0	50.8	52.8	-90.00	2,388.8	-1,191.9	659.4	558.3	101.10	6.522		
9,400.0	7,000.0	9,442.6	7,000.0	52.7	54.6	-90.00	2,488.6	-1,198.4	659.4	554.6	104.81	6.291		
9,500.0	7,000.0	9,542.6	7,000.0	54.5	56.4	-90.00	2,588.3	-1,205.0	659.4	550.9	108.54	6.076		
9,600.0	7,000.0	9,642.6	7,000.0	56.4	58.2	-90.00	2,688.1	-1,211.5	659.4	547.2	112.27	5.874		
9,700.0	7,000.0	9,742.6	7,000.0	58.3	60.0	-90.00	2,787.9	-1,218.1	659.5	543.4	116.01	5.684		
9,800.0	7,000.0	9,842.6	7,000.0	60.1	61.8	-90.00	2,887.7	-1,224.6	659.5	539.7	119.77	5.506		
9,900.0	7,000.0	9,942.6	7,000.0	62.0	63.6	-90.00	2,987.5	-1,231.2	659.5	535.9	123.53	5.339		
10,000.0	7,000.0	10,042.6	7,000.0	63.9	65.4	-90.00	3,087.3	-1,237.7	659.5	532.2	127.30	5.180		
10,100.0	7,000.0	10,142.6	7,000.0	65.8	67.3	-90.00	3,187.1	-1,244.3	659.5	528.4	131.08	5.031		
10,200.0	7,000.0	10,242.6	7,000.0	67.7	69.1	-90.00	3,286.8	-1,250.8	659.5	524.7	134.87	4.890		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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							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				
10,300.0	7,000.0	10,342.6	7,000.0	69.6	70.9	-90.00	3,386.6	-1,257.4	659.5	520.9	138.66	4.757				
10,400.0	7,000.0	10,442.6	7,000.0	71.5	72.8	-90.00	3,486.4	-1,263.9	659.6	517.1	142.46	4.630				
10,500.0	7,000.0	10,542.6	7,000.0	73.4	74.7	-90.00	3,586.2	-1,270.5	659.6	513.3	146.26	4.510				
10,600.0	7,000.0	10,642.6	7,000.0	75.3	76.5	-90.00	3,686.0	-1,277.0	659.6	509.5	150.06	4.395				
10,700.0	7,000.0	10,742.6	7,000.0	77.2	78.4	-90.00	3,785.8	-1,283.6	659.6	505.7	153.88	4.287				
10,800.0	7,000.0	10,842.6	7,000.0	79.1	80.2	-90.00	3,885.6	-1,290.2	659.6	501.9	157.69	4.183				
10,900.0	7,000.0	10,942.6	7,000.0	81.0	82.1	-90.00	3,985.3	-1,296.7	659.6	498.1	161.51	4.084				
11,000.0	7,000.0	11,042.6	7,000.0	82.9	84.0	-90.00	4,085.1	-1,303.3	659.6	494.3	165.33	3.990				
11,100.0	7,000.0	11,142.6	7,000.0	84.8	85.9	-90.00	4,184.9	-1,309.8	659.7	490.5	169.16	3.900				
11,200.0	7,000.0	11,242.6	7,000.0	86.7	87.8	-90.00	4,284.7	-1,316.4	659.7	486.7	172.99	3.813				
11,297.9	7,000.0	11,340.5	7,000.0	88.6	89.6	-90.00	4,382.4	-1,322.8	659.7	482.9	176.74	3.732 SF				

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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 22-4NHZ - Wellbore #1 - Plan #2 (4-25-14)													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
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	-90.93	-1.5	-89.8	89.8					
100.0	100.0	100.0	100.0	0.1	0.1	-90.93	-1.5	-89.8	89.8	89.6	0.22	399.443		
200.0	200.0	200.0	200.0	0.3	0.3	-90.93	-1.5	-89.8	89.8	89.1	0.67	133.148		
300.0	300.0	300.0	300.0	0.6	0.6	-90.93	-1.5	-89.8	89.8	88.7	1.12	79.889		
400.0	400.0	400.0	400.0	0.8	0.8	-90.93	-1.5	-89.8	89.8	88.2	1.57	57.063		
500.0	500.0	500.0	500.0	1.0	1.0	-90.93	-1.5	-89.8	89.8	87.8	2.02	44.383		
600.0	600.0	600.0	600.0	1.2	1.2	-90.93	-1.5	-89.8	89.8	87.3	2.47	36.313		
700.0	700.0	700.0	700.0	1.5	1.5	-90.93	-1.5	-89.8	89.8	86.9	2.92	30.726		
800.0	800.0	800.0	800.0	1.7	1.7	-90.93	-1.5	-89.8	89.8	86.4	3.37	26.630		
900.0	900.0	900.0	900.0	1.9	1.9	-90.93	-1.5	-89.8	89.8	86.0	3.82	23.497		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.93	-1.5	-89.8	89.8	85.5	4.27	21.023 CC, ES		
1,100.0	1,100.0	1,096.9	1,096.9	2.4	2.3	-91.05	-1.7	-91.4	91.5	86.8	4.70	19.464		
1,200.0	1,200.0	1,193.7	1,193.5	2.6	2.5	-91.37	-2.3	-96.3	96.5	91.4	5.12	18.849		
1,300.0	1,300.0	1,289.9	1,289.5	2.8	2.7	-91.85	-3.4	-104.3	104.9	99.3	5.55	18.895		
1,400.0	1,400.0	1,385.6	1,384.4	3.0	3.0	-92.39	-4.8	-115.5	116.6	110.6	6.00	19.440		
1,500.0	1,500.0	1,480.3	1,478.1	3.3	3.2	-92.94	-6.7	-129.6	131.6	125.1	6.47	20.351		
1,600.0	1,600.0	1,574.1	1,570.2	3.5	3.5	-93.47	-8.9	-146.6	149.9	142.9	6.96	21.522		
1,700.0	1,700.0	1,666.6	1,660.6	3.7	3.8	-93.94	-11.5	-166.3	171.3	163.8	7.49	22.864		
1,800.0	1,800.0	1,758.2	1,749.3	3.9	4.2	-94.36	-14.4	-188.7	195.9	187.8	8.05	24.318		
1,900.0	1,900.0	1,855.2	1,843.0	4.1	4.6	17.76	-17.6	-213.6	220.1	212.0	8.15	27.018		
2,000.0	1,999.8	1,952.9	1,937.5	4.3	5.1	17.71	-20.9	-238.7	241.2	232.6	8.56	28.175		
2,100.0	2,099.5	2,051.3	2,032.5	4.5	5.6	17.93	-24.2	-263.9	259.0	250.0	8.99	28.823		
2,200.0	2,199.0	2,149.9	2,127.7	4.7	6.0	18.27	-27.5	-289.3	275.8	266.3	9.43	29.232		
2,300.0	2,298.5	2,248.4	2,222.9	5.0	6.5	18.57	-30.8	-314.6	292.6	282.7	9.89	29.579		
2,400.0	2,398.0	2,347.0	2,318.1	5.2	7.1	18.84	-34.2	-339.9	309.3	299.0	10.35	29.876		
2,500.0	2,497.5	2,445.6	2,413.3	5.4	7.6	19.08	-37.5	-365.2	326.2	315.3	10.83	30.129		
2,600.0	2,597.1	2,544.1	2,508.5	5.7	8.1	19.30	-40.8	-390.5	343.0	331.7	11.30	30.346		
2,700.0	2,696.6	2,642.7	2,603.7	5.9	8.6	19.50	-44.1	-415.8	359.8	348.0	11.78	30.532		
2,800.0	2,796.1	2,741.3	2,698.9	6.2	9.1	19.67	-47.4	-441.2	376.6	364.3	12.27	30.692		
2,900.0	2,895.6	2,839.9	2,794.1	6.4	9.7	19.84	-50.7	-466.5	393.4	380.6	12.76	30.831		
3,000.0	2,995.1	2,938.4	2,889.3	6.7	10.2	19.99	-54.0	-491.8	410.2	397.0	13.25	30.951		
3,100.0	3,094.7	3,037.0	2,984.5	6.9	10.7	20.13	-57.3	-517.1	427.0	413.3	13.75	31.055		
3,200.0	3,194.2	3,135.6	3,079.7	7.2	11.3	20.26	-60.6	-542.4	443.9	429.6	14.25	31.145		
3,300.0	3,293.7	3,234.1	3,174.9	7.5	11.8	20.38	-63.9	-567.7	460.7	445.9	14.75	31.223		
3,400.0	3,393.2	3,332.7	3,270.2	7.7	12.4	20.49	-67.2	-593.1	477.5	462.3	15.26	31.292		
3,500.0	3,492.8	3,431.3	3,365.4	8.0	12.9	20.59	-70.5	-618.4	494.4	478.6	15.77	31.351		
3,600.0	3,592.3	3,529.8	3,460.6	8.3	13.4	20.69	-73.9	-643.7	511.2	494.9	16.28	31.403		
3,700.0	3,691.8	3,628.4	3,555.8	8.5	14.0	20.78	-77.2	-669.0	528.0	511.2	16.79	31.449		
3,800.0	3,791.3	3,727.0	3,651.0	8.8	14.5	20.86	-80.5	-694.3	544.9	527.6	17.30	31.489		
3,900.0	3,890.8	3,825.6	3,746.2	9.1	15.1	20.94	-83.8	-719.6	561.7	543.9	17.82	31.523		
4,000.0	3,990.4	3,924.1	3,841.4	9.4	15.6	21.02	-87.1	-745.0	578.5	560.2	18.34	31.553		
4,100.0	4,089.9	4,022.7	3,936.6	9.6	16.2	21.09	-90.4	-770.3	595.4	576.5	18.85	31.580		
4,200.0	4,189.4	4,121.3	4,031.8	9.9	16.7	21.15	-93.7	-795.6	612.2	592.8	19.37	31.603		
4,300.0	4,288.9	4,219.8	4,127.0	10.2	17.2	21.22	-97.0	-820.9	629.1	609.2	19.89	31.623		
4,400.0	4,388.4	4,318.4	4,222.2	10.5	17.8	21.28	-100.3	-846.2	645.9	625.5	20.41	31.640		
4,500.0	4,488.0	4,417.0	4,317.4	10.8	18.3	21.33	-103.6	-871.5	662.7	641.8	20.94	31.655		
4,600.0	4,587.5	4,515.5	4,412.6	11.0	18.9	21.39	-106.9	-896.8	679.6	658.1	21.46	31.668		
4,700.0	4,687.0	4,614.1	4,507.8	11.3	19.4	21.44	-110.2	-922.2	696.4	674.4	21.98	31.679		
4,800.0	4,786.5	4,712.7	4,603.0	11.6	20.0	21.49	-113.6	-947.5	713.3	690.8	22.51	31.688		
4,900.0	4,886.1	4,811.2	4,698.2	11.9	20.5	21.53	-116.9	-972.8	730.1	707.1	23.03	31.696		
5,000.0	4,985.6	4,909.8	4,793.4	12.2	21.1	21.58	-120.2	-998.1	747.0	723.4	23.56	31.703		
5,100.0	5,085.1	5,008.4	4,888.6	12.5	21.6	21.62	-123.5	-1,023.4	763.8	739.7	24.09	31.709		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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 22-4NHZ - 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	5,184.6	5,107.0	4,983.9	12.7	22.2	21.66	-126.8	-1,048.7	780.6	756.0	24.62	31.713		
5,300.0	5,284.1	5,205.5	5,079.1	13.0	22.7	21.70	-130.1	-1,074.1	797.5	772.3	25.14	31.717		
5,400.0	5,383.7	5,304.1	5,174.3	13.3	23.3	21.74	-133.4	-1,099.4	814.3	788.7	25.67	31.719		
5,500.0	5,483.2	5,402.7	5,269.5	13.6	23.8	21.77	-136.7	-1,124.7	831.2	805.0	26.20	31.721		
5,600.0	5,582.7	5,504.1	5,367.5	13.9	24.4	21.81	-140.1	-1,150.7	848.0	821.3	26.74	31.716		
5,700.0	5,682.2	5,644.8	5,504.3	14.2	24.9	21.89	-144.3	-1,183.1	862.1	834.8	27.32	31.560		
5,800.0	5,781.7	5,787.1	5,644.2	14.5	25.4	22.02	-147.7	-1,209.0	871.4	843.5	27.88	31.249		
5,900.0	5,881.3	5,930.3	5,786.1	14.7	25.8	22.21	-150.2	-1,228.1	876.3	847.9	28.39	30.871		
6,000.0	5,981.1	6,073.9	5,929.1	14.9	26.0	22.34	-151.8	-1,240.1	879.2	850.5	28.78	30.548		
6,100.0	6,081.1	6,217.7	6,072.8	15.1	26.2	22.39	-152.4	-1,245.0	880.4	851.3	29.12	30.239		
6,200.0	6,181.1	6,326.0	6,181.1	15.3	26.3	-90.10	-152.5	-1,245.2	880.5	850.6	29.89	29.462		
6,300.0	6,281.1	6,426.0	6,281.1	15.4	26.4	-90.10	-152.5	-1,245.2	880.5	850.2	30.25	29.110		
6,400.0	6,380.8	6,518.9	6,373.8	15.6	26.5	-86.38	-146.8	-1,245.5	880.4	850.3	30.18	29.176		
6,500.0	6,478.6	6,611.8	6,464.9	15.8	26.6	-86.48	-129.2	-1,246.7	880.4	849.9	30.44	28.920		
6,600.0	6,572.6	6,704.8	6,553.1	15.9	26.7	-86.64	-100.0	-1,248.6	880.2	849.5	30.66	28.707		
6,700.0	6,661.0	6,798.2	6,637.2	16.0	26.8	-86.86	-59.4	-1,251.3	880.0	849.1	30.90	28.482		
6,800.0	6,742.1	6,892.1	6,715.5	16.1	26.9	-87.14	-8.0	-1,254.7	879.8	848.6	31.23	28.171		
6,900.0	6,814.2	6,986.4	6,786.9	16.2	27.0	-87.47	53.5	-1,258.7	879.6	847.8	31.75	27.706		
7,000.0	6,876.0	7,081.5	6,849.9	16.5	27.2	-87.85	124.4	-1,263.4	879.4	846.8	32.52	27.040		
7,100.0	6,926.3	7,177.3	6,903.3	16.9	27.4	-88.28	203.6	-1,268.6	879.2	845.5	33.61	26.155		
7,200.0	6,964.1	7,273.9	6,946.0	17.5	27.7	-88.73	290.1	-1,274.3	879.0	843.9	35.05	25.078		
7,300.0	6,988.6	7,371.5	6,976.9	18.4	28.1	-89.22	382.3	-1,280.3	878.9	842.1	36.82	23.869		
7,400.0	6,999.5	7,470.0	6,995.1	19.4	28.6	-89.72	478.9	-1,286.7	878.8	840.0	38.88	22.605		
7,417.7	7,000.1	7,487.6	6,997.0	19.6	28.7	-89.80	496.3	-1,287.8	878.8	839.6	39.27	22.376		
7,500.0	7,000.0	7,569.7	7,000.0	20.6	29.2	-90.00	578.2	-1,293.2	878.8	837.7	41.19	21.337		
7,600.0	7,000.0	7,669.7	7,000.0	21.9	30.0	-90.00	678.0	-1,299.7	878.9	835.1	43.75	20.088		
7,700.0	7,000.0	7,769.7	7,000.0	23.3	30.9	-90.00	777.8	-1,306.3	878.9	832.4	46.49	18.905		
7,800.0	7,000.0	7,869.7	7,000.0	24.8	31.9	-90.00	877.5	-1,312.9	878.9	829.5	49.38	17.798		
7,900.0	7,000.0	7,969.7	7,000.0	26.3	33.0	-90.00	977.3	-1,319.4	878.9	826.5	52.41	16.771		
8,000.0	7,000.0	8,069.7	7,000.0	27.9	34.1	-90.00	1,077.1	-1,326.0	878.9	823.4	55.54	15.826		
8,100.0	7,000.0	8,169.7	7,000.0	29.5	35.4	-90.00	1,176.9	-1,332.5	879.0	820.2	58.76	14.958		
8,200.0	7,000.0	8,269.7	7,000.0	31.2	36.7	-90.00	1,276.7	-1,339.1	879.0	816.9	62.06	14.163		
8,300.0	7,000.0	8,369.7	7,000.0	32.9	38.1	-90.00	1,376.5	-1,345.7	879.0	813.6	65.43	13.434		
8,400.0	7,000.0	8,469.7	7,000.0	34.6	39.5	-90.00	1,476.2	-1,352.2	879.0	810.2	68.85	12.767		
8,500.0	7,000.0	8,569.7	7,000.0	36.3	41.0	-90.00	1,576.0	-1,358.8	879.1	806.7	72.32	12.155		
8,600.0	7,000.0	8,669.7	7,000.0	38.1	42.6	-90.00	1,675.8	-1,365.3	879.1	803.2	75.83	11.592		
8,700.0	7,000.0	8,769.7	7,000.0	39.9	44.1	-90.00	1,775.6	-1,371.9	879.1	799.7	79.38	11.074		
8,800.0	7,000.0	8,869.7	7,000.0	41.7	45.7	-90.00	1,875.4	-1,378.5	879.1	796.2	82.96	10.597		
8,900.0	7,000.0	8,969.7	7,000.0	43.5	47.3	-90.00	1,975.2	-1,385.0	879.1	792.6	86.57	10.156		
9,000.0	7,000.0	9,069.7	7,000.0	45.3	49.0	-90.00	2,075.0	-1,391.6	879.2	789.0	90.20	9.747		
9,100.0	7,000.0	9,169.7	7,000.0	47.1	50.7	-90.00	2,174.7	-1,398.1	879.2	785.3	93.85	9.368		
9,200.0	7,000.0	9,269.7	7,000.0	49.0	52.4	-90.00	2,274.5	-1,404.7	879.2	781.7	97.52	9.016		
9,300.0	7,000.0	9,369.7	7,000.0	50.8	54.1	-90.00	2,374.3	-1,411.2	879.2	778.0	101.21	8.687		
9,400.0	7,000.0	9,469.7	7,000.0	52.7	55.8	-90.00	2,474.1	-1,417.8	879.3	774.3	104.91	8.381		
9,500.0	7,000.0	9,569.7	7,000.0	54.5	57.5	-90.00	2,573.9	-1,424.4	879.3	770.6	108.63	8.094		
9,600.0	7,000.0	9,669.7	7,000.0	56.4	59.3	-90.00	2,673.7	-1,430.9	879.3	766.9	112.35	7.826		
9,700.0	7,000.0	9,769.7	7,000.0	58.3	61.0	-90.00	2,773.4	-1,437.5	879.3	763.2	116.09	7.574		
9,800.0	7,000.0	9,869.7	7,000.0	60.1	62.8	-90.00	2,873.2	-1,444.0	879.3	759.5	119.84	7.337		
9,900.0	7,000.0	9,969.7	7,000.0	62.0	64.6	-90.00	2,973.0	-1,450.6	879.4	755.8	123.60	7.114		
10,000.0	7,000.0	10,069.7	7,000.0	63.9	66.4	-90.00	3,072.8	-1,457.2	879.4	752.0	127.37	6.904		
10,100.0	7,000.0	10,169.7	7,000.0	65.8	68.2	-90.00	3,172.6	-1,463.7	879.4	748.3	131.14	6.706		
10,200.0	7,000.0	10,269.7	7,000.0	67.7	70.0	-90.00	3,272.4	-1,470.3	879.4	744.5	134.92	6.518		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	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)		
10,300.0	7,000.0	10,369.7	7,000.0	69.6	71.8	-90.00	3,372.2	-1,476.8	879.4	740.7	138.71	6.340	
10,400.0	7,000.0	10,469.7	7,000.0	71.5	73.7	-90.00	3,471.9	-1,483.4	879.5	737.0	142.50	6.172	
10,500.0	7,000.0	10,569.7	7,000.0	73.4	75.5	-90.00	3,571.7	-1,489.9	879.5	733.2	146.30	6.011	
10,600.0	7,000.0	10,669.7	7,000.0	75.3	77.3	-90.00	3,671.5	-1,496.5	879.5	729.4	150.11	5.859	
10,700.0	7,000.0	10,769.7	7,000.0	77.2	79.2	-90.00	3,771.3	-1,503.1	879.5	725.6	153.92	5.714	
10,800.0	7,000.0	10,869.7	7,000.0	79.1	81.0	-90.00	3,871.1	-1,509.6	879.6	721.8	157.73	5.576	
10,900.0	7,000.0	10,969.7	7,000.0	81.0	82.9	-90.00	3,970.9	-1,516.2	879.6	718.0	161.55	5.445	
11,000.0	7,000.0	11,069.7	7,000.0	82.9	84.7	-90.00	4,070.6	-1,522.7	879.6	714.2	165.37	5.319	
11,100.0	7,000.0	11,169.7	7,000.0	84.8	86.6	-90.00	4,170.4	-1,529.3	879.6	710.4	169.19	5.199	
11,200.0	7,000.0	11,269.7	7,000.0	86.7	88.5	-90.00	4,270.2	-1,535.9	879.6	706.6	173.02	5.084	
11,297.9	7,000.0	11,367.6	7,000.0	88.6	90.3	-90.00	4,367.9	-1,542.3	879.7	702.9	176.77	4.976 SF	

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	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	-90.95	-0.4	-22.3	22.3					
100.0	100.0	100.0	100.0	0.1	0.1	-90.95	-0.4	-22.3	22.3	22.1	0.22	99.241		
200.0	200.0	200.0	200.0	0.3	0.3	-90.95	-0.4	-22.3	22.3	21.6	0.67	33.080		
300.0	300.0	300.0	300.0	0.6	0.6	-90.95	-0.4	-22.3	22.3	21.2	1.12	19.848		
400.0	400.0	400.0	400.0	0.8	0.8	-90.95	-0.4	-22.3	22.3	20.7	1.57	14.177		
500.0	500.0	500.0	500.0	1.0	1.0	-90.95	-0.4	-22.3	22.3	20.3	2.02	11.027		
600.0	600.0	600.0	600.0	1.2	1.2	-90.95	-0.4	-22.3	22.3	19.8	2.47	9.022		
700.0	700.0	700.0	700.0	1.5	1.5	-90.95	-0.4	-22.3	22.3	19.4	2.92	7.634		
800.0	800.0	800.0	800.0	1.7	1.7	-90.95	-0.4	-22.3	22.3	18.9	3.37	6.616		
900.0	900.0	900.0	900.0	1.9	1.9	-90.95	-0.4	-22.3	22.3	18.5	3.82	5.838		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.95	-0.4	-22.3	22.3	18.0	4.27	5.223		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.95	-0.4	-22.3	22.3	17.6	4.72	4.726		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.95	-0.4	-22.3	22.3	17.1	5.17	4.315		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.95	-0.4	-22.3	22.3	16.7	5.62	3.970		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.95	-0.4	-22.3	22.3	16.2	6.07	3.676		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.95	-0.4	-22.3	22.3	15.8	6.52	3.422		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-90.95	-0.4	-22.3	22.3	15.3	6.97	3.201 CC, ES		
1,700.0	1,700.0	1,699.2	1,699.2	3.7	3.7	-91.95	-0.8	-24.0	24.0	16.6	7.40	3.242		
1,800.0	1,800.0	1,798.2	1,798.0	3.9	3.9	-94.24	-2.1	-28.9	29.1	21.2	7.82	3.718		
1,900.0	1,900.0	1,896.8	1,896.3	4.1	4.1	16.52	-4.4	-37.1	35.9	27.7	8.21	4.375		
2,000.0	1,999.8	1,995.3	1,994.0	4.3	4.3	15.94	-7.4	-48.6	42.8	34.2	8.58	4.989		
2,100.0	2,099.5	2,095.0	2,092.7	4.5	4.6	16.26	-11.1	-62.1	48.4	39.5	8.96	5.406		
2,200.0	2,199.0	2,194.9	2,191.6	4.7	4.8	16.88	-14.7	-75.7	53.0	43.6	9.37	5.660		
2,300.0	2,298.5	2,294.8	2,290.5	5.0	5.1	17.40	-18.4	-89.3	57.6	47.8	9.78	5.888		
2,400.0	2,398.0	2,394.6	2,389.4	5.2	5.4	17.85	-22.0	-102.9	62.2	52.0	10.20	6.094		
2,500.0	2,497.5	2,494.5	2,488.3	5.4	5.6	18.23	-25.7	-116.5	66.7	56.1	10.63	6.279		
2,600.0	2,597.1	2,594.4	2,587.2	5.7	5.9	18.57	-29.3	-130.1	71.3	60.3	11.06	6.447		
2,700.0	2,696.6	2,694.3	2,686.1	5.9	6.2	18.86	-32.9	-143.7	75.9	64.4	11.50	6.599		
2,800.0	2,796.1	2,794.2	2,785.0	6.2	6.5	19.13	-36.6	-157.2	80.5	68.5	11.95	6.737		
2,900.0	2,895.6	2,894.1	2,883.9	6.4	6.8	19.36	-40.2	-170.8	85.1	72.7	12.40	6.863		
3,000.0	2,995.1	2,994.0	2,982.8	6.7	7.2	19.57	-43.9	-184.4	89.7	76.8	12.85	6.978		
3,100.0	3,094.7	3,093.9	3,081.7	6.9	7.5	19.76	-47.5	-198.0	94.3	80.9	13.31	7.084		
3,200.0	3,194.2	3,193.8	3,180.6	7.2	7.8	19.93	-51.2	-211.6	98.8	85.1	13.77	7.180		
3,300.0	3,293.7	3,293.7	3,279.5	7.5	8.1	20.08	-54.8	-225.2	103.4	89.2	14.23	7.269		
3,400.0	3,393.2	3,393.6	3,378.4	7.7	8.4	20.23	-58.5	-238.8	108.0	93.3	14.69	7.351		
3,500.0	3,492.8	3,493.5	3,477.3	8.0	8.8	20.36	-62.1	-252.4	112.6	97.5	15.16	7.427		
3,600.0	3,592.3	3,593.4	3,576.2	8.3	9.1	20.48	-65.8	-265.9	117.2	101.6	15.63	7.498		
3,700.0	3,691.8	3,693.3	3,675.1	8.5	9.4	20.59	-69.4	-279.5	121.8	105.7	16.11	7.563		
3,800.0	3,791.3	3,793.2	3,774.0	8.8	9.8	20.69	-73.1	-293.1	126.4	109.8	16.58	7.624		
3,900.0	3,890.8	3,893.1	3,872.9	9.1	10.1	20.79	-76.7	-306.7	131.0	113.9	17.06	7.680		
4,000.0	3,990.4	3,993.0	3,971.8	9.4	10.4	20.88	-80.4	-320.3	135.6	118.1	17.53	7.733		
4,100.0	4,089.9	4,092.8	4,070.7	9.6	10.8	20.96	-84.0	-333.9	140.2	122.2	18.01	7.782		
4,200.0	4,189.4	4,192.7	4,169.6	9.9	11.1	21.04	-87.7	-347.5	144.8	126.3	18.49	7.829		
4,300.0	4,288.9	4,292.6	4,268.5	10.2	11.5	21.12	-91.3	-361.0	149.4	130.4	18.98	7.872		
4,400.0	4,388.4	4,392.5	4,367.4	10.5	11.8	21.19	-94.9	-374.6	154.0	134.5	19.46	7.913		
4,500.0	4,488.0	4,492.4	4,466.3	10.8	12.1	21.25	-98.6	-388.2	158.6	138.6	19.94	7.951		
4,600.0	4,587.5	4,592.3	4,565.2	11.0	12.5	21.31	-102.2	-401.8	163.2	142.7	20.43	7.988		
4,700.0	4,687.0	4,692.2	4,664.1	11.3	12.8	21.37	-105.9	-415.4	167.8	146.8	20.91	8.022		
4,800.0	4,786.5	4,792.1	4,763.0	11.6	13.2	21.43	-109.5	-429.0	172.4	151.0	21.40	8.054		
4,900.0	4,886.1	4,892.0	4,861.9	11.9	13.5	21.48	-113.2	-442.6	177.0	155.1	21.89	8.085		
5,000.0	4,985.6	4,991.9	4,960.8	12.2	13.8	21.53	-116.8	-456.1	181.6	159.2	22.38	8.114		
5,100.0	5,085.1	5,091.8	5,059.7	12.5	14.2	21.58	-120.5	-469.7	186.1	163.3	22.87	8.141		

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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	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	5,184.6	5,191.7	5,158.6	12.7	14.5	21.62	-124.1	-483.3	190.7	167.4	23.36	8.167		
5,300.0	5,284.1	5,291.6	5,257.5	13.0	14.9	21.66	-127.8	-496.9	195.3	171.5	23.85	8.192		
5,400.0	5,383.7	5,391.5	5,356.4	13.3	15.2	21.70	-131.4	-510.5	199.9	175.6	24.34	8.215		
5,500.0	5,483.2	5,491.4	5,455.3	13.6	15.6	21.74	-135.1	-524.1	204.5	179.7	24.83	8.238		
5,600.0	5,582.7	5,591.3	5,554.2	13.9	15.9	21.78	-138.7	-537.7	209.1	183.8	25.32	8.259		
5,700.0	5,682.2	5,691.2	5,653.1	14.2	16.3	21.82	-142.4	-551.3	213.7	187.9	25.81	8.280		
5,800.0	5,781.7	5,795.5	5,756.5	14.5	16.6	21.89	-146.0	-564.8	217.8	191.5	26.30	8.278		
5,900.0	5,881.3	5,903.5	5,863.9	14.7	16.8	22.15	-148.8	-575.4	219.1	192.4	26.76	8.188		
6,000.0	5,981.1	6,011.4	5,971.6	14.9	17.0	22.32	-150.6	-582.0	219.8	192.7	27.14	8.098		
6,100.0	6,081.1	6,119.5	6,079.6	15.1	17.2	22.39	-151.3	-584.7	220.1	192.6	27.48	8.008		
6,200.0	6,181.1	6,221.0	6,181.1	15.3	17.4	-90.10	-151.4	-584.8	220.1	192.0	28.11	7.831		
6,300.0	6,281.1	6,321.0	6,281.1	15.4	17.5	-90.10	-151.4	-584.8	220.1	191.6	28.49	7.725		
6,400.0	6,380.8	6,419.1	6,379.0	15.6	17.7	-86.38	-145.0	-585.2	220.1	191.5	28.60	7.695		
6,500.0	6,478.6	6,517.2	6,475.0	15.8	17.8	-86.48	-125.4	-586.5	220.1	191.2	28.88	7.620		
6,600.0	6,572.6	6,615.4	6,567.5	15.9	17.9	-86.65	-92.9	-588.6	220.0	190.9	29.11	7.559		
6,700.0	6,661.0	6,713.7	6,654.8	16.0	18.0	-86.88	-48.0	-591.6	220.0	190.6	29.36	7.492		
6,800.0	6,742.1	6,812.1	6,735.3	16.1	18.1	-87.18	8.5	-595.3	219.9	190.2	29.72	7.400		
6,900.0	6,814.2	6,910.7	6,807.3	16.2	18.3	-87.53	75.6	-599.7	219.9	189.6	30.27	7.263		
7,000.0	6,876.0	7,009.5	6,869.5	16.5	18.5	-87.92	152.0	-604.7	219.8	188.7	31.11	7.067		
7,100.0	6,926.3	7,108.5	6,920.7	16.9	18.8	-88.36	236.5	-610.2	219.8	187.5	32.27	6.810		
7,200.0	6,964.1	7,207.7	6,959.9	17.5	19.3	-88.83	327.4	-616.2	219.7	185.9	33.80	6.501		
7,300.0	6,988.6	7,307.2	6,986.1	18.4	19.9	-89.32	423.1	-622.5	219.7	184.0	35.67	6.159		
7,393.2	6,999.2	7,400.1	6,998.4	19.4	20.8	-89.79	514.9	-628.5	219.7	182.0	37.68	5.831		
7,400.0	6,999.5	7,407.0	6,998.8	19.4	20.8	-89.82	521.7	-628.9	219.7	181.9	37.83	5.807		
7,500.0	7,000.0	7,506.9	7,000.0	20.6	21.9	-90.00	621.4	-635.5	219.7	179.5	40.25	5.459		
7,600.0	7,000.0	7,606.9	7,000.0	21.9	23.1	-90.00	721.2	-642.0	219.7	176.8	42.88	5.124		
7,700.0	7,000.0	7,706.9	7,000.0	23.3	24.4	-90.00	821.0	-648.6	219.7	174.0	45.69	4.809		
7,800.0	7,000.0	7,806.9	7,000.0	24.8	25.7	-90.00	920.8	-655.1	219.7	171.1	48.66	4.516		
7,900.0	7,000.0	7,906.9	7,000.0	26.3	27.2	-90.00	1,020.6	-661.7	219.7	168.0	51.74	4.247		
8,000.0	7,000.0	8,006.9	7,000.0	27.9	28.7	-90.00	1,120.4	-668.2	219.7	164.8	54.94	4.000		
8,100.0	7,000.0	8,106.9	7,000.0	29.5	30.3	-90.00	1,220.2	-674.7	219.8	161.5	58.21	3.775		
8,200.0	7,000.0	8,206.9	7,000.0	31.2	31.9	-90.00	1,319.9	-681.3	219.8	158.2	61.56	3.570		
8,300.0	7,000.0	8,306.9	7,000.0	32.9	33.5	-90.00	1,419.7	-687.8	219.8	154.8	64.97	3.383		
8,400.0	7,000.0	8,406.9	7,000.0	34.6	35.2	-90.00	1,519.5	-694.4	219.8	151.3	68.43	3.212		
8,500.0	7,000.0	8,506.9	7,000.0	36.3	36.9	-90.00	1,619.3	-700.9	219.8	147.8	71.94	3.055		
8,600.0	7,000.0	8,606.9	7,000.0	38.1	38.6	-90.00	1,719.1	-707.5	219.8	144.3	75.48	2.912		
8,700.0	7,000.0	8,706.9	7,000.0	39.9	40.4	-90.00	1,818.9	-714.0	219.8	140.7	79.06	2.780		
8,800.0	7,000.0	8,806.9	7,000.0	41.7	42.2	-90.00	1,918.7	-720.6	219.8	137.1	82.67	2.659		
8,900.0	7,000.0	8,906.9	7,000.0	43.5	43.9	-90.00	2,018.4	-727.1	219.8	133.5	86.30	2.547		
9,000.0	7,000.0	9,006.9	7,000.0	45.3	45.7	-90.00	2,118.2	-733.6	219.8	129.9	89.95	2.444		
9,100.0	7,000.0	9,106.9	7,000.0	47.1	47.5	-90.00	2,218.0	-740.2	219.8	126.2	93.63	2.348		
9,200.0	7,000.0	9,206.9	7,000.0	49.0	49.3	-90.00	2,317.8	-746.7	219.8	122.5	97.32	2.259		
9,300.0	7,000.0	9,306.9	7,000.0	50.8	51.2	-90.00	2,417.6	-753.3	219.8	118.8	101.02	2.176		
9,400.0	7,000.0	9,406.9	7,000.0	52.7	53.0	-90.00	2,517.4	-759.8	219.9	115.1	104.74	2.099		
9,500.0	7,000.0	9,506.9	7,000.0	54.5	54.8	-90.00	2,617.2	-766.4	219.9	111.4	108.47	2.027		
9,600.0	7,000.0	9,606.9	7,000.0	56.4	56.7	-90.00	2,716.9	-772.9	219.9	107.6	112.22	1.959		
9,700.0	7,000.0	9,706.9	7,000.0	58.3	58.6	-90.00	2,816.7	-779.5	219.9	103.9	115.97	1.896		
9,800.0	7,000.0	9,806.9	7,000.0	60.1	60.4	-90.00	2,916.5	-786.0	219.9	100.1	119.73	1.836		
9,900.0	7,000.0	9,906.9	7,000.0	62.0	62.3	-90.00	3,016.3	-792.5	219.9	96.4	123.50	1.780		
10,000.0	7,000.0	10,006.9	7,000.0	63.9	64.2	-90.00	3,116.1	-799.1	219.9	92.6	127.28	1.728		
10,100.0	7,000.0	10,106.9	7,000.0	65.8	66.0	-90.00	3,215.9	-805.6	219.9	88.8	131.07	1.678		
10,200.0	7,000.0	10,206.9	7,000.0	67.7	67.9	-90.00	3,315.7	-812.2	219.9	85.0	134.86	1.631		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	10,306.9	7,000.0	69.6	69.8	-90.00	3,415.4	-818.7	219.9	81.3	138.66	1.586	
10,400.0	7,000.0	10,406.9	7,000.0	71.5	71.7	-90.00	3,515.2	-825.3	219.9	77.5	142.46	1.544	
10,500.0	7,000.0	10,506.9	7,000.0	73.4	73.6	-90.00	3,615.0	-831.8	219.9	73.7	146.27	1.504	
10,600.0	7,000.0	10,606.9	7,000.0	75.3	75.5	-90.00	3,714.8	-838.4	219.9	69.9	150.08	1.465 Level 3	
10,700.0	7,000.0	10,706.9	7,000.0	77.2	77.4	-90.00	3,814.6	-844.9	219.9	66.0	153.90	1.429 Level 3	
10,800.0	7,000.0	10,806.9	7,000.0	79.1	79.3	-90.00	3,914.4	-851.4	220.0	62.2	157.72	1.395 Level 3	
10,900.0	7,000.0	10,906.9	7,000.0	81.0	81.2	-90.00	4,014.2	-858.0	220.0	58.4	161.54	1.362 Level 3	
11,000.0	7,000.0	11,006.9	7,000.0	82.9	83.1	-90.00	4,113.9	-864.5	220.0	54.6	165.37	1.330 Level 3	
11,100.0	7,000.0	11,106.9	7,000.0	84.8	85.0	-90.00	4,213.7	-871.1	220.0	50.8	169.20	1.300 Level 3	
11,200.0	7,000.0	11,206.9	7,000.0	86.7	86.9	-90.00	4,313.5	-877.6	220.0	46.9	173.03	1.271 Level 3	
11,297.9	7,000.0	11,304.9	7,000.0	88.6	88.7	-90.00	4,411.2	-884.0	220.0	43.2	176.77	1.244 Level 2, SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	89.09	0.4	22.6	22.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.09	0.4	22.6	22.6	22.4	0.22	100.480		
200.0	200.0	200.0	200.0	0.3	0.3	89.09	0.4	22.6	22.6	21.9	0.67	33.493		
300.0	300.0	300.0	300.0	0.6	0.6	89.09	0.4	22.6	22.6	21.5	1.12	20.096		
400.0	400.0	400.0	400.0	0.8	0.8	89.09	0.4	22.6	22.6	21.0	1.57	14.354		
500.0	500.0	500.0	500.0	1.0	1.0	89.09	0.4	22.6	22.6	20.6	2.02	11.164		
600.0	600.0	600.0	600.0	1.2	1.2	89.09	0.4	22.6	22.6	20.1	2.47	9.135		
700.0	700.0	700.0	700.0	1.5	1.5	89.09	0.4	22.6	22.6	19.7	2.92	7.729		
800.0	800.0	800.0	800.0	1.7	1.7	89.09	0.4	22.6	22.6	19.2	3.37	6.699		
900.0	900.0	900.0	900.0	1.9	1.9	89.09	0.4	22.6	22.6	18.8	3.82	5.911		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.09	0.4	22.6	22.6	18.3	4.27	5.288		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.09	0.4	22.6	22.6	17.9	4.72	4.785		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.09	0.4	22.6	22.6	17.4	5.17	4.369		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.09	0.4	22.6	22.6	17.0	5.62	4.019		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.09	0.4	22.6	22.6	16.5	6.07	3.721		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.09	0.4	22.6	22.6	16.1	6.52	3.465		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.09	0.4	22.6	22.6	15.6	6.97	3.241		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.09	0.4	22.6	22.6	15.2	7.42	3.045		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.09	0.4	22.6	22.6	14.7	7.87	2.871 CC		
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.2	-159.93	0.4	22.6	24.2	15.9	8.29	2.920		
2,000.0	1,999.8	1,999.8	1,999.8	4.3	4.4	-163.43	0.4	22.6	29.2	20.5	8.69	3.357		
2,100.0	2,099.5	2,100.5	2,100.5	4.5	4.6	-165.64	-0.9	21.3	36.1	27.1	9.07	3.983		
2,200.0	2,199.0	2,201.2	2,201.0	4.7	4.8	-164.89	-4.4	17.6	41.4	32.0	9.44	4.386		
2,300.0	2,298.5	2,301.1	2,300.7	5.0	5.0	-163.64	-8.6	13.2	46.0	36.2	9.83	4.680		
2,400.0	2,398.0	2,400.9	2,400.4	5.2	5.1	-162.61	-12.7	8.8	50.6	40.4	10.22	4.950		
2,500.0	2,497.5	2,500.8	2,500.1	5.4	5.3	-161.75	-16.9	4.4	55.2	44.6	10.62	5.197		
2,600.0	2,597.1	2,600.7	2,599.8	5.7	5.5	-161.03	-21.0	0.0	59.8	48.8	11.03	5.423		
2,700.0	2,696.6	2,700.6	2,699.5	5.9	5.8	-160.41	-25.2	-4.4	64.4	53.0	11.44	5.631		
2,800.0	2,796.1	2,800.5	2,799.3	6.2	6.0	-159.87	-29.3	-8.7	69.0	57.2	11.86	5.822		
2,900.0	2,895.6	2,900.4	2,899.0	6.4	6.2	-159.40	-33.5	-13.1	73.7	61.4	12.29	5.997		
3,000.0	2,995.1	3,000.3	2,998.7	6.7	6.4	-158.98	-37.6	-17.5	78.3	65.6	12.72	6.159		
3,100.0	3,094.7	3,100.2	3,098.4	6.9	6.6	-158.61	-41.8	-21.9	83.0	69.8	13.15	6.308		
3,200.0	3,194.2	3,200.1	3,198.1	7.2	6.8	-158.29	-45.9	-26.3	87.6	74.0	13.59	6.446		
3,300.0	3,293.7	3,300.0	3,297.8	7.5	7.1	-157.99	-50.1	-30.7	92.2	78.2	14.03	6.573		
3,400.0	3,393.2	3,399.9	3,397.5	7.7	7.3	-157.72	-54.2	-35.0	96.9	82.4	14.48	6.692		
3,500.0	3,492.8	3,499.7	3,497.2	8.0	7.5	-157.48	-58.4	-39.4	101.5	86.6	14.93	6.802		
3,600.0	3,592.3	3,599.6	3,596.9	8.3	7.7	-157.26	-62.5	-43.8	106.2	90.8	15.38	6.905		
3,700.0	3,691.8	3,699.5	3,696.6	8.5	8.0	-157.05	-66.7	-48.2	110.9	95.0	15.84	7.000		
3,800.0	3,791.3	3,799.4	3,796.3	8.8	8.2	-156.87	-70.8	-52.6	115.5	99.2	16.29	7.090		
3,900.0	3,890.8	3,899.3	3,896.0	9.1	8.4	-156.69	-75.0	-56.9	120.2	103.4	16.75	7.173		
4,000.0	3,990.4	3,999.2	3,995.8	9.4	8.7	-156.54	-79.1	-61.3	124.8	107.6	17.21	7.252		
4,100.0	4,089.9	4,099.1	4,095.5	9.6	8.9	-156.39	-83.3	-65.7	129.5	111.8	17.68	7.325		
4,200.0	4,189.4	4,199.0	4,195.2	9.9	9.1	-156.25	-87.4	-70.1	134.1	116.0	18.14	7.394		
4,300.0	4,288.9	4,298.9	4,294.9	10.2	9.4	-156.12	-91.6	-74.5	138.8	120.2	18.61	7.459		
4,400.0	4,388.4	4,398.8	4,394.6	10.5	9.6	-156.00	-95.7	-78.9	143.5	124.4	19.08	7.521		
4,500.0	4,488.0	4,498.7	4,494.3	10.8	9.9	-155.89	-99.9	-83.2	148.1	128.6	19.54	7.578		
4,600.0	4,587.5	4,598.5	4,594.0	11.0	10.1	-155.78	-104.0	-87.6	152.8	132.8	20.02	7.633		
4,700.0	4,687.0	4,698.4	4,693.7	11.3	10.3	-155.68	-108.2	-92.0	157.4	137.0	20.49	7.685		
4,800.0	4,786.5	4,798.3	4,793.4	11.6	10.6	-155.59	-112.3	-96.4	162.1	141.1	20.96	7.734		
4,900.0	4,886.1	4,898.2	4,893.1	11.9	10.8	-155.50	-116.5	-100.8	166.8	145.3	21.43	7.781		
5,000.0	4,985.6	4,998.1	4,992.8	12.2	11.1	-155.42	-120.6	-105.2	171.4	149.5	21.91	7.825		
5,100.0	5,085.1	5,098.0	5,092.5	12.5	11.3	-155.34	-124.8	-109.5	176.1	153.7	22.38	7.867		

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	5,184.6	5,197.9	5,192.3	12.7	11.6	-155.26	-128.9	-113.9	180.8	157.9	22.86	7.907		
5,300.0	5,284.1	5,297.8	5,292.0	13.0	11.8	-155.19	-133.1	-118.3	185.4	162.1	23.34	7.945		
5,400.0	5,383.7	5,397.7	5,391.7	13.3	12.1	-155.12	-137.2	-122.7	190.1	166.3	23.82	7.981		
5,500.0	5,483.2	5,497.6	5,491.4	13.6	12.3	-155.06	-141.4	-127.1	194.8	170.5	24.30	8.016		
5,600.0	5,582.7	5,597.5	5,591.1	13.9	12.5	-155.00	-145.5	-131.4	199.4	174.6	24.78	8.049		
5,700.0	5,682.2	5,694.3	5,687.8	14.2	12.8	-155.07	-149.1	-135.2	204.6	179.3	25.23	8.107		
5,800.0	5,781.7	5,789.2	5,782.6	14.5	13.0	-155.71	-150.6	-136.8	211.9	186.2	25.64	8.263		
5,900.0	5,881.3	5,887.9	5,881.3	14.7	13.1	-156.71	-150.6	-136.8	220.2	194.1	26.04	8.455		
6,000.0	5,981.1	5,987.7	5,981.1	14.9	13.3	-157.34	-150.6	-136.8	225.6	199.2	26.41	8.542		
6,100.0	6,081.1	6,087.6	6,081.1	15.1	13.5	-157.59	-150.6	-136.8	227.8	201.1	26.77	8.512		
6,200.0	6,181.1	6,187.6	6,181.1	15.3	13.7	89.91	-150.6	-136.8	227.9	200.6	27.29	8.351		
6,300.0	6,281.1	6,287.6	6,281.1	15.4	13.9	89.91	-150.6	-136.8	227.9	200.2	27.68	8.232		
6,400.0	6,380.8	6,390.0	6,383.2	15.6	14.1	93.62	-143.7	-137.3	227.8	199.9	27.91	8.161		
6,500.0	6,478.6	6,492.4	6,483.2	15.8	14.3	93.52	-122.4	-139.0	227.5	199.3	28.20	8.070		
6,600.0	6,572.6	6,594.7	6,579.1	15.9	14.4	93.35	-87.1	-141.7	227.1	198.7	28.44	7.985		
6,700.0	6,661.0	6,696.8	6,668.8	16.0	14.5	93.11	-38.7	-145.4	226.5	197.8	28.72	7.888		
6,800.0	6,742.1	6,798.8	6,750.6	16.1	14.6	92.82	21.9	-150.0	225.8	196.7	29.11	7.757		
6,900.0	6,814.2	6,900.5	6,822.8	16.2	14.8	92.46	93.2	-155.5	224.9	195.2	29.71	7.571		
7,000.0	6,876.0	7,001.9	6,884.0	16.5	15.2	92.06	173.8	-161.7	224.0	193.4	30.60	7.319		
7,100.0	6,926.3	7,103.1	6,933.0	16.9	15.9	91.61	261.9	-168.4	223.0	191.1	31.85	7.001		
7,200.0	6,964.1	7,203.9	6,969.0	17.5	16.7	91.13	355.7	-175.6	221.9	188.4	33.46	6.632		
7,300.0	6,988.6	7,304.5	6,991.4	18.4	17.7	90.62	453.3	-183.1	220.8	185.4	35.41	6.235		
7,400.0	6,999.5	7,404.7	6,999.9	19.4	18.9	90.09	552.8	-190.7	219.6	182.0	37.64	5.835		
7,500.0	7,000.0	7,504.6	7,000.0	20.6	20.2	90.00	652.5	-198.3	218.5	178.4	40.12	5.447		
7,600.0	7,000.0	7,604.6	7,000.0	21.9	21.5	90.00	752.2	-206.0	217.4	174.6	42.82	5.079		
7,700.0	7,000.0	7,704.6	7,000.0	23.3	23.0	90.00	851.9	-213.6	216.3	170.7	45.68	4.736		
7,800.0	7,000.0	7,804.6	7,000.0	24.8	24.5	90.00	951.6	-221.2	215.2	166.5	48.69	4.420		
7,900.0	7,000.0	7,904.6	7,000.0	26.3	26.1	90.00	1,051.3	-228.9	214.1	162.3	51.82	4.132		
8,000.0	7,000.0	8,004.6	7,000.0	27.9	27.7	90.00	1,151.0	-236.5	213.0	158.0	55.05	3.870		
8,100.0	7,000.0	8,104.6	7,000.0	29.5	29.4	90.00	1,250.7	-244.2	211.9	153.6	58.36	3.631		
8,200.0	7,000.0	8,204.6	7,000.0	31.2	31.0	90.00	1,350.4	-251.8	210.8	149.1	61.74	3.415		
8,300.0	7,000.0	8,304.6	7,000.0	32.9	32.8	90.00	1,450.1	-259.4	209.7	144.5	65.18	3.218		
8,400.0	7,000.0	8,404.6	7,000.0	34.6	34.5	90.00	1,549.8	-267.1	208.6	140.0	68.66	3.038		
8,500.0	7,000.0	8,504.6	7,000.0	36.3	36.3	90.00	1,649.5	-274.7	207.5	135.3	72.19	2.874		
8,600.0	7,000.0	8,604.6	7,000.0	38.1	38.1	90.00	1,749.2	-282.3	206.4	130.6	75.76	2.724		
8,700.0	7,000.0	8,704.6	7,000.0	39.9	39.9	90.00	1,848.9	-290.0	205.3	125.9	79.36	2.587		
8,800.0	7,000.0	8,804.6	7,000.0	41.7	41.7	90.00	1,948.6	-297.6	204.2	121.2	82.98	2.461		
8,900.0	7,000.0	8,904.6	7,000.0	43.5	43.5	90.00	2,048.3	-305.3	203.1	116.5	86.63	2.344		
9,000.0	7,000.0	9,004.6	7,000.0	45.3	45.4	90.00	2,148.0	-312.9	202.0	111.7	90.30	2.237		
9,100.0	7,000.0	9,104.5	7,000.0	47.1	47.2	90.00	2,247.7	-320.5	200.9	106.9	93.99	2.137		
9,200.0	7,000.0	9,204.5	7,000.0	49.0	49.1	90.00	2,347.4	-328.2	199.8	102.1	97.70	2.045		
9,300.0	7,000.0	9,304.5	7,000.0	50.8	50.9	90.00	2,447.1	-335.8	198.7	97.3	101.42	1.959		
9,400.0	7,000.0	9,404.5	7,000.0	52.7	52.8	90.00	2,546.8	-343.4	197.6	92.4	105.15	1.879		
9,500.0	7,000.0	9,504.5	7,000.0	54.5	54.7	90.00	2,646.5	-351.1	196.5	87.6	108.90	1.804		
9,600.0	7,000.0	9,604.5	7,000.0	56.4	56.6	90.00	2,746.3	-358.7	195.4	82.7	112.65	1.734		
9,700.0	7,000.0	9,704.5	7,000.0	58.3	58.5	90.00	2,846.0	-366.3	194.3	77.9	116.42	1.669		
9,800.0	7,000.0	9,804.5	7,000.0	60.1	60.3	90.00	2,945.7	-374.0	193.2	73.0	120.19	1.607		
9,900.0	7,000.0	9,904.5	7,000.0	62.0	62.2	90.00	3,045.4	-381.6	192.1	68.1	123.97	1.549		
10,000.0	7,000.0	10,004.5	7,000.0	63.9	64.1	90.00	3,145.1	-389.3	191.0	63.2	127.76	1.495 Level 3		
10,100.0	7,000.0	10,104.5	7,000.0	65.8	66.0	90.00	3,244.8	-396.9	189.9	58.3	131.56	1.443 Level 3		
10,200.0	7,000.0	10,204.5	7,000.0	67.7	67.9	90.00	3,344.5	-404.5	188.8	53.4	135.36	1.394 Level 3		
10,300.0	7,000.0	10,304.5	7,000.0	69.6	69.8	90.00	3,444.2	-412.2	187.7	48.5	139.17	1.348 Level 3		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	10,404.5	7,000.0	71.5	71.8	90.00	3,543.9	-419.8	186.6	43.6	142.98	1.305 Level 3	
10,500.0	7,000.0	10,504.5	7,000.0	73.4	73.7	90.00	3,643.6	-427.4	185.4	38.7	146.79	1.263 Level 3	
10,600.0	7,000.0	10,604.5	7,000.0	75.3	75.6	90.00	3,743.3	-435.1	184.3	33.7	150.62	1.224 Level 2	
10,700.0	7,000.0	10,704.4	7,000.0	77.2	77.5	90.00	3,843.0	-442.7	183.2	28.8	154.44	1.186 Level 2	
10,800.0	7,000.0	10,804.4	7,000.0	79.1	79.4	90.00	3,942.7	-450.4	182.1	23.9	158.27	1.151 Level 2	
10,900.0	7,000.0	10,904.4	7,000.0	81.0	81.3	90.00	4,042.4	-458.0	181.0	18.9	162.10	1.117 Level 2	
11,000.0	7,000.0	11,004.4	7,000.0	82.9	83.3	90.00	4,142.1	-465.6	179.9	14.0	165.94	1.084 Level 2	
11,100.0	7,000.0	11,104.4	7,000.0	84.8	85.2	90.00	4,241.8	-473.3	178.8	9.1	169.78	1.053 Level 2	
11,200.0	7,000.0	11,204.4	7,000.0	86.7	87.1	90.00	4,341.5	-480.9	177.7	4.1	173.60	1.024 Level 2	
11,272.9	7,000.0	11,277.3	7,000.0	88.1	88.2	90.00	4,414.2	-486.5	176.9	0.8	176.12	1.005 Level 2	
11,297.9	7,000.0	11,288.8	7,000.0	88.6	88.4	90.00	4,425.6	-487.3	177.2	0.4	176.78	1.002 Level 2, ES, SF	

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	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	89.08	0.7	45.2	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	89.08	0.7	45.2	45.2	44.9	0.22	200.961		
200.0	200.0	200.0	200.0	0.3	0.3	89.08	0.7	45.2	45.2	44.5	0.67	66.987		
300.0	300.0	300.0	300.0	0.6	0.6	89.08	0.7	45.2	45.2	44.0	1.12	40.192		
400.0	400.0	400.0	400.0	0.8	0.8	89.08	0.7	45.2	45.2	43.6	1.57	28.709		
500.0	500.0	500.0	500.0	1.0	1.0	89.08	0.7	45.2	45.2	43.1	2.02	22.329		
600.0	600.0	600.0	600.0	1.2	1.2	89.08	0.7	45.2	45.2	42.7	2.47	18.269		
700.0	700.0	700.0	700.0	1.5	1.5	89.08	0.7	45.2	45.2	42.2	2.92	15.459		
800.0	800.0	800.0	800.0	1.7	1.7	89.08	0.7	45.2	45.2	41.8	3.37	13.397		
900.0	900.0	900.0	900.0	1.9	1.9	89.08	0.7	45.2	45.2	41.3	3.82	11.821		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.08	0.7	45.2	45.2	40.9	4.27	10.577		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.08	0.7	45.2	45.2	40.4	4.72	9.570		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.08	0.7	45.2	45.2	40.0	5.17	8.737		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.08	0.7	45.2	45.2	39.6	5.62	8.038		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.08	0.7	45.2	45.2	39.1	6.07	7.443		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.08	0.7	45.2	45.2	38.7	6.52	6.930		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.08	0.7	45.2	45.2	38.2	6.97	6.483		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.08	0.7	45.2	45.2	37.8	7.42	6.090		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.08	0.7	45.2	45.2	37.3	7.87	5.742 CC, ES		
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.2	-159.20	0.7	45.2	46.8	38.5	8.29	5.643		
2,000.0	1,999.8	1,999.8	1,999.8	4.3	4.4	-161.23	0.7	45.2	51.7	43.0	8.69	5.949		
2,100.0	2,099.5	2,099.5	2,099.5	4.5	4.6	-163.85	0.7	45.2	60.0	50.9	9.09	6.596		
2,200.0	2,199.0	2,199.0	2,199.0	4.7	4.8	-166.10	0.7	45.2	69.4	59.9	9.51	7.299		
2,300.0	2,298.5	2,298.4	2,298.4	5.0	5.0	-166.57	-0.9	45.5	79.0	69.1	9.90	7.976		
2,400.0	2,398.0	2,397.9	2,397.8	5.2	5.2	-165.14	-5.3	46.4	88.7	78.4	10.28	8.632		
2,500.0	2,497.5	2,497.4	2,497.1	5.4	5.4	-163.86	-9.9	47.3	98.5	87.8	10.66	9.241		
2,600.0	2,597.1	2,596.9	2,596.5	5.7	5.5	-162.82	-14.5	48.2	108.3	97.3	11.05	9.804		
2,700.0	2,696.6	2,696.4	2,695.9	5.9	5.7	-161.94	-19.1	49.2	118.1	106.7	11.44	10.324		
2,800.0	2,796.1	2,795.9	2,795.3	6.2	5.9	-161.21	-23.7	50.1	128.0	116.2	11.85	10.804		
2,900.0	2,895.6	2,895.4	2,894.7	6.4	6.1	-160.57	-28.3	51.0	137.9	125.6	12.26	11.249		
3,000.0	2,995.1	2,994.9	2,994.1	6.7	6.3	-160.02	-32.9	51.9	147.8	135.1	12.67	11.661		
3,100.0	3,094.7	3,094.4	3,093.5	6.9	6.5	-159.55	-37.5	52.9	157.7	144.6	13.10	12.042		
3,200.0	3,194.2	3,193.9	3,192.9	7.2	6.7	-159.12	-42.1	53.8	167.6	154.1	13.52	12.397		
3,300.0	3,293.7	3,293.4	3,292.3	7.5	6.9	-158.75	-46.7	54.7	177.6	163.6	13.95	12.726		
3,400.0	3,393.2	3,392.9	3,391.6	7.7	7.1	-158.41	-51.3	55.6	187.5	173.1	14.39	13.032		
3,500.0	3,492.8	3,492.4	3,491.0	8.0	7.3	-158.11	-55.9	56.6	197.4	182.6	14.83	13.318		
3,600.0	3,592.3	3,591.9	3,590.4	8.3	7.5	-157.84	-60.5	57.5	207.4	192.1	15.27	13.584		
3,700.0	3,691.8	3,691.4	3,689.8	8.5	7.8	-157.59	-65.1	58.4	217.3	201.6	15.71	13.833		
3,800.0	3,791.3	3,790.9	3,789.2	8.8	8.0	-157.36	-69.7	59.3	227.3	211.1	16.16	14.066		
3,900.0	3,890.8	3,890.4	3,888.6	9.1	8.2	-157.16	-74.2	60.3	237.3	220.6	16.61	14.285		
4,000.0	3,990.4	3,989.9	3,988.0	9.4	8.4	-156.96	-78.8	61.2	247.2	230.2	17.06	14.490		
4,100.0	4,089.9	4,089.4	4,087.4	9.6	8.6	-156.79	-83.4	62.1	257.2	239.7	17.51	14.683		
4,200.0	4,189.4	4,188.9	4,186.8	9.9	8.8	-156.63	-88.0	63.0	267.1	249.2	17.97	14.865		
4,300.0	4,288.9	4,288.4	4,286.1	10.2	9.1	-156.48	-92.6	64.0	277.1	258.7	18.43	15.036		
4,400.0	4,388.4	4,387.9	4,385.5	10.5	9.3	-156.34	-97.2	64.9	287.1	268.2	18.89	15.198		
4,500.0	4,488.0	4,487.4	4,484.9	10.8	9.5	-156.20	-101.8	65.8	297.1	277.7	19.35	15.351		
4,600.0	4,587.5	4,586.9	4,584.3	11.0	9.7	-156.08	-106.4	66.7	307.0	287.2	19.81	15.495		
4,700.0	4,687.0	4,686.4	4,683.7	11.3	10.0	-155.97	-111.0	67.7	317.0	296.7	20.28	15.632		
4,800.0	4,786.5	4,785.9	4,783.1	11.6	10.2	-155.86	-115.6	68.6	327.0	306.2	20.74	15.762		
4,900.0	4,886.1	4,885.4	4,882.5	11.9	10.4	-155.76	-120.2	69.5	336.9	315.7	21.21	15.885		
5,000.0	4,985.6	4,984.9	4,981.9	12.2	10.6	-155.66	-124.8	70.4	346.9	325.2	21.68	16.003		
5,100.0	5,085.1	5,084.4	5,081.3	12.5	10.9	-155.57	-129.4	71.4	356.9	334.8	22.15	16.114		

COMPASS 2003.21 Build 46

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	5,184.6	5,183.9	5,180.6	12.7	11.1	-155.49	-134.0	72.3	366.9	344.3	22.62	16.220		
5,300.0	5,284.1	5,283.4	5,280.0	13.0	11.3	-155.41	-138.6	73.2	376.9	353.8	23.09	16.321		
5,400.0	5,383.7	5,382.9	5,379.4	13.3	11.6	-155.33	-143.2	74.1	386.8	363.3	23.56	16.418		
5,500.0	5,483.2	5,482.8	5,479.3	13.6	11.8	-155.26	-147.8	75.1	396.8	372.8	24.03	16.510		
5,600.0	5,582.7	5,585.7	5,582.1	13.9	12.0	-155.51	-150.2	75.6	406.3	381.8	24.49	16.592		
5,700.0	5,682.2	5,685.8	5,682.2	14.2	12.2	-156.07	-150.3	75.6	415.2	390.3	24.92	16.662		
5,800.0	5,781.7	5,785.3	5,781.7	14.5	12.4	-156.60	-150.3	75.6	424.2	398.8	25.34	16.736		
5,900.0	5,881.3	5,884.9	5,881.3	14.7	12.6	-157.12	-150.3	75.6	432.5	406.8	25.78	16.781		
6,000.0	5,981.1	5,984.7	5,981.1	14.9	12.8	-157.46	-150.3	75.6	438.0	411.8	26.17	16.735		
6,100.0	6,081.1	6,084.7	6,081.1	15.1	13.0	-157.60	-150.3	75.6	440.2	413.7	26.55	16.583		
6,200.0	6,181.1	6,184.7	6,181.1	15.3	13.2	89.91	-150.3	75.6	440.3	413.2	27.02	16.292		
6,300.0	6,281.1	6,284.7	6,281.1	15.4	13.4	89.91	-150.3	75.6	440.3	412.8	27.42	16.057		
6,400.0	6,380.8	6,388.6	6,384.7	15.6	13.6	93.62	-143.1	75.1	440.2	412.5	27.70	15.894		
6,500.0	6,478.6	6,492.6	6,486.2	15.8	13.7	93.51	-121.1	73.7	440.2	412.2	27.99	15.727		
6,600.0	6,572.6	6,596.4	6,583.3	15.9	13.9	93.33	-84.8	71.3	440.1	411.9	28.25	15.582		
6,700.0	6,661.0	6,700.0	6,673.9	16.0	14.0	93.09	-34.9	68.0	440.0	411.5	28.53	15.420		
6,800.0	6,742.1	6,803.2	6,756.2	16.1	14.3	92.78	27.2	64.0	439.9	411.0	28.95	15.196		
6,900.0	6,814.2	6,906.0	6,828.3	16.2	14.6	92.42	100.2	59.2	439.8	410.2	29.58	14.870		
7,000.0	6,876.0	7,008.4	6,889.0	16.5	15.1	92.01	182.3	53.8	439.7	409.2	30.50	14.415		
7,100.0	6,926.3	7,110.3	6,937.2	16.9	15.8	91.56	271.8	47.9	439.6	407.8	31.77	13.834		
7,200.0	6,964.1	7,211.6	6,972.0	17.5	16.6	91.08	366.7	41.7	439.5	406.1	33.41	13.154		
7,300.0	6,988.6	7,312.5	6,993.0	18.4	17.6	90.58	465.0	35.3	439.4	404.1	35.39	12.418		
7,393.0	6,999.2	7,405.7	7,000.0	19.4	18.7	90.11	557.8	29.2	439.4	401.9	37.48	11.726		
7,400.0	6,999.5	7,412.7	7,000.0	19.4	18.8	90.07	564.7	28.8	439.4	401.8	37.64	11.675		
7,500.0	7,000.0	7,512.7	7,000.0	20.6	20.1	90.00	664.5	22.2	439.4	399.3	40.13	10.950		
7,600.0	7,000.0	7,612.7	7,000.0	21.9	21.4	90.00	764.3	15.7	439.4	396.6	42.83	10.260		
7,700.0	7,000.0	7,712.7	7,000.0	23.3	22.9	90.00	864.1	9.2	439.4	393.7	45.70	9.615		
7,800.0	7,000.0	7,812.7	7,000.0	24.8	24.4	90.00	963.9	2.7	439.4	390.7	48.72	9.021		
7,900.0	7,000.0	7,912.7	7,000.0	26.3	26.0	90.00	1,063.7	-3.9	439.5	387.6	51.85	8.476		
8,000.0	7,000.0	8,012.7	7,000.0	27.9	27.6	90.00	1,163.4	-10.4	439.5	384.4	55.08	7.979		
8,100.0	7,000.0	8,112.7	7,000.0	29.5	29.3	90.00	1,263.2	-16.9	439.5	381.1	58.39	7.527		
8,200.0	7,000.0	8,212.7	7,000.0	31.2	31.0	90.00	1,363.0	-23.5	439.5	377.7	61.77	7.115		
8,300.0	7,000.0	8,312.7	7,000.0	32.9	32.7	90.00	1,462.8	-30.0	439.5	374.3	65.21	6.740		
8,400.0	7,000.0	8,412.7	7,000.0	34.6	34.5	90.00	1,562.6	-36.5	439.5	370.8	68.69	6.398		
8,500.0	7,000.0	8,512.7	7,000.0	36.3	36.2	90.00	1,662.4	-43.0	439.5	367.3	72.22	6.085		
8,600.0	7,000.0	8,612.7	7,000.0	38.1	38.0	90.00	1,762.2	-49.6	439.5	363.7	75.79	5.799		
8,700.0	7,000.0	8,712.7	7,000.0	39.9	39.8	90.00	1,862.0	-56.1	439.5	360.1	79.38	5.537		
8,800.0	7,000.0	8,812.7	7,000.0	41.7	41.7	90.00	1,961.7	-62.6	439.5	356.5	83.00	5.295		
8,900.0	7,000.0	8,912.7	7,000.0	43.5	43.5	90.00	2,061.5	-69.2	439.5	352.9	86.65	5.072		
9,000.0	7,000.0	9,012.7	7,000.0	45.3	45.3	90.00	2,161.3	-75.7	439.5	349.2	90.32	4.867		
9,100.0	7,000.0	9,112.7	7,000.0	47.1	47.2	90.00	2,261.1	-82.2	439.5	345.5	94.00	4.676		
9,200.0	7,000.0	9,212.7	7,000.0	49.0	49.0	90.00	2,360.9	-88.8	439.6	341.8	97.70	4.499		
9,300.0	7,000.0	9,312.7	7,000.0	50.8	50.9	90.00	2,460.7	-95.3	439.6	338.1	101.42	4.334		
9,400.0	7,000.0	9,412.7	7,000.0	52.7	52.7	90.00	2,560.5	-101.8	439.6	334.4	105.15	4.180		
9,500.0	7,000.0	9,512.7	7,000.0	54.5	54.6	90.00	2,660.2	-108.3	439.6	330.7	108.89	4.037		
9,600.0	7,000.0	9,612.7	7,000.0	56.4	56.5	90.00	2,760.0	-114.9	439.6	326.9	112.64	3.902		
9,700.0	7,000.0	9,712.7	7,000.0	58.3	58.4	90.00	2,859.8	-121.4	439.6	323.2	116.40	3.776		
9,800.0	7,000.0	9,812.7	7,000.0	60.1	60.3	90.00	2,959.6	-127.9	439.6	319.4	120.17	3.658		
9,900.0	7,000.0	9,912.7	7,000.0	62.0	62.2	90.00	3,059.4	-134.5	439.6	315.6	123.95	3.547		
10,000.0	7,000.0	10,012.7	7,000.0	63.9	64.1	90.00	3,159.2	-141.0	439.6	311.9	127.74	3.442		
10,100.0	7,000.0	10,112.7	7,000.0	65.8	65.9	90.00	3,259.0	-147.5	439.6	308.1	131.53	3.342		
10,200.0	7,000.0	10,212.7	7,000.0	67.7	67.8	90.00	3,358.8	-154.1	439.6	304.3	135.32	3.249		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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
10,300.0	7,000.0	10,312.7	7,000.0	69.6	69.8	90.00	3,458.5	-160.6	439.6	300.5	139.13	3.160	
10,400.0	7,000.0	10,412.7	7,000.0	71.5	71.7	90.00	3,558.3	-167.1	439.6	296.7	142.93	3.076	
10,500.0	7,000.0	10,512.7	7,000.0	73.4	73.6	90.00	3,658.1	-173.6	439.6	292.9	146.75	2.996	
10,600.0	7,000.0	10,612.7	7,000.0	75.3	75.5	90.00	3,757.9	-180.2	439.7	289.1	150.56	2.920	
10,700.0	7,000.0	10,712.7	7,000.0	77.2	77.4	90.00	3,857.7	-186.7	439.7	285.3	154.38	2.848	
10,800.0	7,000.0	10,812.7	7,000.0	79.1	79.3	90.00	3,957.5	-193.2	439.7	281.5	158.21	2.779	
10,900.0	7,000.0	10,912.7	7,000.0	81.0	81.2	90.00	4,057.3	-199.8	439.7	277.6	162.04	2.713	
11,000.0	7,000.0	11,012.7	7,000.0	82.9	83.1	90.00	4,157.0	-206.3	439.7	273.8	165.87	2.651	
11,100.0	7,000.0	11,112.7	7,000.0	84.8	85.0	90.00	4,256.8	-212.8	439.7	270.0	169.70	2.591	
11,200.0	7,000.0	11,212.7	7,000.0	86.7	87.0	90.00	4,356.6	-219.3	439.7	266.2	173.54	2.534	
11,245.8	7,000.0	11,258.5	7,000.0	87.6	87.8	90.00	4,402.3	-222.3	439.7	264.4	175.30	2.508	
11,297.9	7,000.0	11,281.5	7,000.0	88.6	88.3	90.00	4,425.3	-223.8	440.7	263.9	176.74	2.493 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	89.08	1.1	67.7	67.8					
100.0	100.0	100.0	100.0	0.1	0.1	89.08	1.1	67.7	67.8	67.5	0.22	301.442		
200.0	200.0	200.0	200.0	0.3	0.3	89.08	1.1	67.7	67.8	67.1	0.67	100.481		
300.0	300.0	300.0	300.0	0.6	0.6	89.08	1.1	67.7	67.8	66.6	1.12	60.288		
400.0	400.0	400.0	400.0	0.8	0.8	89.08	1.1	67.7	67.8	66.2	1.57	43.063		
500.0	500.0	500.0	500.0	1.0	1.0	89.08	1.1	67.7	67.8	65.7	2.02	33.494		
600.0	600.0	600.0	600.0	1.2	1.2	89.08	1.1	67.7	67.8	65.3	2.47	27.404		
700.0	700.0	700.0	700.0	1.5	1.5	89.08	1.1	67.7	67.8	64.8	2.92	23.188		
800.0	800.0	800.0	800.0	1.7	1.7	89.08	1.1	67.7	67.8	64.4	3.37	20.096		
900.0	900.0	900.0	900.0	1.9	1.9	89.08	1.1	67.7	67.8	63.9	3.82	17.732		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.08	1.1	67.7	67.8	63.5	4.27	15.865		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.08	1.1	67.7	67.8	63.0	4.72	14.354		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.08	1.1	67.7	67.8	62.6	5.17	13.106		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.08	1.1	67.7	67.8	62.1	5.62	12.058		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.08	1.1	67.7	67.8	61.7	6.07	11.165		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.08	1.1	67.7	67.8	61.2	6.52	10.395		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.08	1.1	67.7	67.8	60.8	6.97	9.724		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.08	1.1	67.7	67.8	60.3	7.42	9.135		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.08	1.1	67.7	67.8	59.9	7.87	8.613 CC, ES		
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.2	-158.95	1.1	67.7	69.4	61.1	8.29	8.366		
2,000.0	1,999.8	1,999.8	1,999.8	4.3	4.4	-160.36	1.1	67.7	74.3	65.6	8.69	8.544		
2,100.0	2,099.5	2,099.5	2,099.5	4.5	4.6	-162.34	1.1	67.7	82.5	73.4	9.09	9.070		
2,200.0	2,199.0	2,199.0	2,199.0	4.7	4.8	-164.19	1.1	67.7	91.9	82.3	9.51	9.656		
2,300.0	2,298.5	2,298.5	2,298.5	5.0	5.1	-165.70	1.1	67.7	101.3	91.4	9.93	10.197		
2,400.0	2,398.0	2,398.0	2,398.0	5.2	5.3	-166.95	1.1	67.7	110.8	100.4	10.36	10.696		
2,500.0	2,497.5	2,497.5	2,497.5	5.4	5.5	-168.00	1.1	67.7	120.3	109.6	10.79	11.156		
2,600.0	2,597.1	2,597.1	2,597.1	5.7	5.7	-168.89	1.1	67.7	129.9	118.7	11.22	11.582		
2,700.0	2,696.6	2,696.6	2,696.6	5.9	5.9	-169.67	1.1	67.7	139.5	127.9	11.65	11.977		
2,800.0	2,796.1	2,796.1	2,796.1	6.2	6.2	-170.34	1.1	67.7	149.1	137.1	12.08	12.343		
2,900.0	2,895.6	2,895.6	2,895.6	6.4	6.4	-170.93	1.1	67.7	158.8	146.3	12.52	12.684		
3,000.0	2,995.1	2,995.1	2,995.1	6.7	6.6	-171.46	1.1	67.7	168.5	155.5	12.96	13.001		
3,100.0	3,094.7	3,090.9	3,090.8	6.9	6.8	-171.56	0.3	68.9	179.1	165.8	13.37	13.400		
3,200.0	3,194.2	3,185.8	3,185.7	7.2	7.0	-170.95	-2.2	72.8	192.0	178.3	13.76	13.953		
3,300.0	3,293.7	3,280.1	3,279.6	7.5	7.2	-169.79	-6.5	79.1	207.2	193.1	14.16	14.635		
3,400.0	3,393.2	3,373.8	3,372.7	7.7	7.4	-168.22	-12.4	88.0	224.8	210.3	14.57	15.434		
3,500.0	3,492.8	3,471.8	3,470.0	8.0	7.6	-166.60	-19.2	98.4	243.5	228.5	14.99	16.250		
3,600.0	3,592.3	3,569.8	3,567.2	8.3	7.8	-165.22	-26.1	108.8	262.4	247.0	15.41	17.025		
3,700.0	3,691.8	3,667.9	3,664.4	8.5	8.0	-164.01	-33.0	119.2	281.4	265.5	15.84	17.760		
3,800.0	3,791.3	3,765.9	3,761.7	8.8	8.2	-162.96	-39.9	129.6	300.5	284.2	16.28	18.458		
3,900.0	3,890.8	3,863.9	3,858.9	9.1	8.5	-162.04	-46.7	139.9	319.6	302.9	16.72	19.118		
4,000.0	3,990.4	3,961.9	3,956.1	9.4	8.7	-161.22	-53.6	150.3	338.9	321.7	17.16	19.745		
4,100.0	4,089.9	4,060.0	4,053.3	9.6	8.9	-160.49	-60.5	160.7	358.2	340.6	17.61	20.338		
4,200.0	4,189.4	4,158.0	4,150.6	9.9	9.2	-159.83	-67.4	171.1	377.5	359.5	18.06	20.901		
4,300.0	4,288.9	4,256.0	4,247.8	10.2	9.5	-159.24	-74.3	181.5	396.9	378.4	18.52	21.435		
4,400.0	4,388.4	4,354.0	4,345.0	10.5	9.7	-158.70	-81.1	191.8	416.4	397.4	18.98	21.942		
4,500.0	4,488.0	4,452.0	4,442.2	10.8	10.0	-158.21	-88.0	202.2	435.9	416.4	19.44	22.423		
4,600.0	4,587.5	4,550.1	4,539.5	11.0	10.2	-157.76	-94.9	212.6	455.4	435.5	19.90	22.881		
4,700.0	4,687.0	4,648.1	4,636.7	11.3	10.5	-157.35	-101.8	223.0	474.9	454.5	20.37	23.317		
4,800.0	4,786.5	4,746.1	4,733.9	11.6	10.8	-156.98	-108.6	233.4	494.4	473.6	20.83	23.732		
4,900.0	4,886.1	4,844.1	4,831.1	11.9	11.1	-156.63	-115.5	243.7	514.0	492.7	21.30	24.127		
5,000.0	4,985.6	4,942.1	4,928.4	12.2	11.3	-156.30	-122.4	254.1	533.6	511.8	21.78	24.503		
5,100.0	5,085.1	5,040.2	5,025.6	12.5	11.6	-156.00	-129.3	264.5	553.2	530.9	22.25	24.863		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	5,184.6	5,138.2	5,122.8	12.7	11.9	-155.72	-136.2	274.9	572.8	550.1	22.72	25.206	
5,300.0	5,284.1	5,254.3	5,238.2	13.0	12.2	-155.51	-143.3	285.7	591.1	567.9	23.22	25.453	
5,400.0	5,383.7	5,374.5	5,358.1	13.3	12.5	-155.55	-148.0	292.7	606.0	582.3	23.72	25.550	
5,500.0	5,483.2	5,495.9	5,479.4	13.6	12.7	-155.84	-149.9	295.6	617.3	593.1	24.20	25.507	
5,600.0	5,582.7	5,599.1	5,582.7	13.9	12.9	-156.21	-149.9	295.6	626.3	601.6	24.64	25.414	
5,700.0	5,682.2	5,698.7	5,682.2	14.2	13.1	-156.57	-149.9	295.6	635.2	610.2	25.09	25.319	
5,800.0	5,781.7	5,798.2	5,781.7	14.5	13.3	-156.91	-149.9	295.6	644.2	618.7	25.54	25.228	
5,900.0	5,881.3	5,897.8	5,881.3	14.7	13.5	-157.26	-149.9	295.6	652.6	626.6	26.00	25.105	
6,000.0	5,981.1	5,997.6	5,981.1	14.9	13.7	-157.50	-149.9	295.6	658.1	631.6	26.42	24.907	
6,100.0	6,081.1	6,097.6	6,081.1	15.1	13.9	-157.60	-149.9	295.6	660.3	633.5	26.82	24.619	
6,200.0	6,181.1	6,197.6	6,181.1	15.3	14.1	89.91	-149.9	295.6	660.3	633.1	27.27	24.218	
6,300.0	6,281.1	6,297.6	6,281.1	15.4	14.3	89.91	-149.9	295.6	660.3	632.7	27.67	23.862	
6,400.0	6,380.8	6,403.6	6,386.8	15.6	14.5	93.62	-142.5	295.2	660.3	632.3	28.01	23.576	
6,500.0	6,478.6	6,509.7	6,490.2	15.8	14.7	93.51	-119.6	293.7	660.2	631.9	28.30	23.331	
6,600.0	6,572.6	6,615.4	6,588.9	15.9	14.8	93.32	-81.8	291.2	660.1	631.6	28.55	23.123	
6,700.0	6,661.0	6,720.8	6,680.6	16.0	14.9	93.07	-30.2	287.8	660.0	631.1	28.83	22.895	
6,800.0	6,742.1	6,825.7	6,763.3	16.1	15.0	92.76	33.9	283.6	659.8	630.6	29.22	22.579	
6,900.0	6,814.2	6,929.9	6,835.4	16.2	15.1	92.39	108.9	278.7	659.6	629.8	29.83	22.113	
7,000.0	6,876.0	7,033.4	6,895.5	16.5	15.4	91.98	193.0	273.2	659.4	628.7	30.73	21.461	
7,100.0	6,926.3	7,136.2	6,942.5	16.9	16.1	91.53	284.1	267.3	659.3	627.3	31.97	20.620	
7,200.0	6,964.1	7,238.1	6,975.7	17.5	16.9	91.04	380.2	261.0	659.2	625.6	33.58	19.631	
7,300.0	6,988.6	7,339.3	6,994.8	18.4	17.9	90.54	479.2	254.5	659.1	623.6	35.52	18.556	
7,378.1	6,998.3	7,417.7	7,000.0	19.2	18.8	90.15	557.2	249.4	659.1	621.9	37.24	17.697	
7,400.0	6,999.5	7,439.5	7,000.0	19.4	19.0	90.05	579.0	248.0	659.1	621.4	37.74	17.463	
7,500.0	7,000.0	7,539.5	7,000.0	20.6	20.3	90.00	678.8	241.5	659.1	618.9	40.21	16.393	
7,600.0	7,000.0	7,639.5	7,000.0	21.9	21.6	90.00	778.6	235.0	659.1	616.3	42.88	15.373	
7,700.0	7,000.0	7,739.5	7,000.0	23.3	23.1	90.00	878.4	228.4	659.2	613.4	45.72	14.417	
7,800.0	7,000.0	7,839.5	7,000.0	24.8	24.6	90.00	978.2	221.9	659.2	610.5	48.71	13.532	
7,900.0	7,000.0	7,939.5	7,000.0	26.3	26.1	90.00	1,078.0	215.4	659.2	607.4	51.82	12.720	
8,000.0	7,000.0	8,039.5	7,000.0	27.9	27.7	90.00	1,177.7	208.9	659.2	604.2	55.03	11.978	
8,100.0	7,000.0	8,139.5	7,000.0	29.5	29.4	90.00	1,277.5	202.3	659.2	600.9	58.33	11.302	
8,200.0	7,000.0	8,239.5	7,000.0	31.2	31.0	90.00	1,377.3	195.8	659.2	597.5	61.69	10.685	
8,300.0	7,000.0	8,339.5	7,000.0	32.9	32.7	90.00	1,477.1	189.3	659.2	594.1	65.12	10.124	
8,400.0	7,000.0	8,439.5	7,000.0	34.6	34.5	90.00	1,576.9	182.8	659.3	590.7	68.59	9.611	
8,500.0	7,000.0	8,539.5	7,000.0	36.3	36.2	90.00	1,676.7	176.3	659.3	587.2	72.11	9.142	
8,600.0	7,000.0	8,639.5	7,000.0	38.1	38.0	90.00	1,776.5	169.7	659.3	583.6	75.67	8.713	
8,700.0	7,000.0	8,739.5	7,000.0	39.9	39.8	90.00	1,876.3	163.2	659.3	580.1	79.25	8.319	
8,800.0	7,000.0	8,839.5	7,000.0	41.7	41.6	90.00	1,976.0	156.7	659.3	576.5	82.87	7.956	
8,900.0	7,000.0	8,939.5	7,000.0	43.5	43.4	90.00	2,075.8	150.2	659.3	572.8	86.51	7.622	
9,000.0	7,000.0	9,039.5	7,000.0	45.3	45.3	90.00	2,175.6	143.7	659.4	569.2	90.17	7.312	
9,100.0	7,000.0	9,139.5	7,000.0	47.1	47.1	90.00	2,275.4	137.1	659.4	565.5	93.85	7.026	
9,200.0	7,000.0	9,239.5	7,000.0	49.0	48.9	90.00	2,375.2	130.6	659.4	561.8	97.55	6.760	
9,300.0	7,000.0	9,339.5	7,000.0	50.8	50.8	90.00	2,475.0	124.1	659.4	558.1	101.26	6.512	
9,400.0	7,000.0	9,439.5	7,000.0	52.7	52.7	90.00	2,574.8	117.6	659.4	554.4	104.98	6.281	
9,500.0	7,000.0	9,539.5	7,000.0	54.5	54.5	90.00	2,674.6	111.0	659.4	550.7	108.72	6.065	
9,600.0	7,000.0	9,639.5	7,000.0	56.4	56.4	90.00	2,774.3	104.5	659.4	547.0	112.47	5.863	
9,700.0	7,000.0	9,739.5	7,000.0	58.3	58.3	90.00	2,874.1	98.0	659.5	543.2	116.23	5.674	
9,800.0	7,000.0	9,839.5	7,000.0	60.1	60.2	90.00	2,973.9	91.5	659.5	539.5	119.99	5.496	
9,900.0	7,000.0	9,939.5	7,000.0	62.0	62.0	90.00	3,073.7	85.0	659.5	535.7	123.77	5.329	
10,000.0	7,000.0	10,039.5	7,000.0	63.9	63.9	90.00	3,173.5	78.4	659.5	532.0	127.55	5.171	
10,100.0	7,000.0	10,139.5	7,000.0	65.8	65.8	90.00	3,273.3	71.9	659.5	528.2	131.34	5.022	
10,200.0	7,000.0	10,239.5	7,000.0	67.7	67.7	90.00	3,373.1	65.4	659.5	524.4	135.13	4.881	

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	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)				
10,300.0	7,000.0	10,339.5	7,000.0	69.6	69.6	90.00	3,472.8	58.9	659.5	520.6	138.93	4.747			
10,400.0	7,000.0	10,439.5	7,000.0	71.5	71.5	90.00	3,572.6	52.3	659.6	516.8	142.74	4.621			
10,500.0	7,000.0	10,539.5	7,000.0	73.4	73.4	90.00	3,672.4	45.8	659.6	513.0	146.55	4.501			
10,600.0	7,000.0	10,639.5	7,000.0	75.3	75.3	90.00	3,772.2	39.3	659.6	509.2	150.36	4.387			
10,700.0	7,000.0	10,739.5	7,000.0	77.2	77.2	90.00	3,872.0	32.8	659.6	505.4	154.18	4.278			
10,800.0	7,000.0	10,839.5	7,000.0	79.1	79.1	90.00	3,971.8	26.3	659.6	501.6	158.00	4.175			
10,900.0	7,000.0	10,939.5	7,000.0	81.0	81.1	90.00	4,071.6	19.7	659.6	497.8	161.83	4.076			
11,000.0	7,000.0	11,039.5	7,000.0	82.9	83.0	90.00	4,171.4	13.2	659.7	494.0	165.66	3.982			
11,100.0	7,000.0	11,139.5	7,000.0	84.8	84.9	90.00	4,271.1	6.7	659.7	490.2	169.49	3.892			
11,200.0	7,000.0	11,239.5	7,000.0	86.7	86.8	90.00	4,370.9	0.2	659.7	486.4	173.32	3.806			
11,232.5	7,000.0	11,272.0	7,000.0	87.4	87.4	90.00	4,403.4	-1.9	659.7	485.1	174.57	3.779			
11,297.9	7,000.0	11,293.3	7,000.0	88.6	87.8	90.00	4,424.5	-3.3	661.2	484.9	176.23	3.752 SF			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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-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	89.05	1.4	87.5	87.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.05	1.4	87.5	87.6	87.3	0.22	389.520		
200.0	200.0	200.0	200.0	0.3	0.3	89.05	1.4	87.5	87.6	86.9	0.67	129.840		
300.0	300.0	300.0	300.0	0.6	0.6	89.05	1.4	87.5	87.6	86.4	1.12	77.904		
400.0	400.0	400.0	400.0	0.8	0.8	89.05	1.4	87.5	87.6	86.0	1.57	55.646		
500.0	500.0	500.0	500.0	1.0	1.0	89.05	1.4	87.5	87.6	85.5	2.02	43.280		
600.0	600.0	600.0	600.0	1.2	1.2	89.05	1.4	87.5	87.6	85.1	2.47	35.411		
700.0	700.0	700.0	700.0	1.5	1.5	89.05	1.4	87.5	87.6	84.6	2.92	29.963		
800.0	800.0	800.0	800.0	1.7	1.7	89.05	1.4	87.5	87.6	84.2	3.37	25.968		
900.0	900.0	900.0	900.0	1.9	1.9	89.05	1.4	87.5	87.6	83.7	3.82	22.913		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.05	1.4	87.5	87.6	83.3	4.27	20.501		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.05	1.4	87.5	87.6	82.8	4.72	18.549		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.05	1.4	87.5	87.6	82.4	5.17	16.936		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.05	1.4	87.5	87.6	81.9	5.62	15.581		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.05	1.4	87.5	87.6	81.5	6.07	14.427		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.05	1.4	87.5	87.6	81.0	6.52	13.432 CC, ES		
1,600.0	1,600.0	1,597.2	1,597.2	3.5	3.5	89.42	0.9	89.1	89.1	82.2	6.94	12.838		
1,700.0	1,700.0	1,694.1	1,694.0	3.7	3.6	90.45	-0.7	93.7	93.9	86.6	7.36	12.767		
1,800.0	1,800.0	1,790.6	1,790.1	3.9	3.8	91.95	-3.5	101.4	102.0	94.2	7.78	13.105		
1,900.0	1,900.0	1,886.3	1,885.1	4.1	4.1	-154.09	-7.2	112.1	114.8	106.7	8.17	14.057		
2,000.0	1,999.8	1,983.3	1,981.1	4.3	4.3	-153.21	-11.8	125.2	133.3	124.8	8.55	15.589		
2,100.0	2,099.5	2,080.9	2,077.7	4.5	4.5	-153.08	-16.6	138.6	155.0	146.1	8.93	17.349		
2,200.0	2,199.0	2,178.3	2,174.0	4.7	4.8	-153.26	-21.3	152.0	177.6	168.3	9.33	19.031		
2,300.0	2,298.5	2,275.7	2,270.4	5.0	5.1	-153.41	-26.0	165.4	200.3	190.6	9.75	20.554		
2,400.0	2,398.0	2,373.1	2,366.7	5.2	5.4	-153.52	-30.7	178.8	223.0	212.8	10.16	21.940		
2,500.0	2,497.5	2,470.5	2,463.1	5.4	5.7	-153.62	-35.5	192.2	245.6	235.0	10.59	23.200		
2,600.0	2,597.1	2,567.9	2,559.4	5.7	6.0	-153.70	-40.2	205.6	268.3	257.3	11.02	24.349		
2,700.0	2,696.6	2,665.3	2,655.8	5.9	6.3	-153.76	-44.9	219.0	291.0	279.5	11.46	25.400		
2,800.0	2,796.1	2,762.7	2,752.2	6.2	6.6	-153.82	-49.6	232.4	313.6	301.7	11.90	26.363		
2,900.0	2,895.6	2,860.1	2,848.5	6.4	6.9	-153.87	-54.4	245.8	336.3	324.0	12.34	27.247		
3,000.0	2,995.1	2,957.5	2,944.9	6.7	7.2	-153.91	-59.1	259.2	359.0	346.2	12.79	28.061		
3,100.0	3,094.7	3,054.9	3,041.2	6.9	7.5	-153.95	-63.8	272.6	381.6	368.4	13.25	28.813		
3,200.0	3,194.2	3,152.3	3,137.6	7.2	7.8	-153.98	-68.5	286.0	404.3	390.6	13.70	29.508		
3,300.0	3,293.7	3,249.7	3,233.9	7.5	8.2	-154.01	-73.3	299.4	427.0	412.8	14.16	30.152		
3,400.0	3,393.2	3,347.0	3,330.3	7.7	8.5	-154.04	-78.0	312.7	449.6	435.0	14.62	30.750		
3,500.0	3,492.8	3,444.4	3,426.7	8.0	8.8	-154.06	-82.7	326.1	472.3	457.2	15.09	31.307		
3,600.0	3,592.3	3,541.8	3,523.0	8.3	9.1	-154.09	-87.4	339.5	495.0	479.4	15.55	31.826		
3,700.0	3,691.8	3,639.2	3,619.4	8.5	9.5	-154.11	-92.2	352.9	517.6	501.6	16.02	32.311		
3,800.0	3,791.3	3,736.6	3,715.7	8.8	9.8	-154.13	-96.9	366.3	540.3	523.8	16.49	32.764		
3,900.0	3,890.8	3,834.0	3,812.1	9.1	10.1	-154.14	-101.6	379.7	563.0	546.0	16.96	33.190		
4,000.0	3,990.4	3,931.4	3,908.4	9.4	10.5	-154.16	-106.3	393.1	585.6	568.2	17.43	33.589		
4,100.0	4,089.9	4,028.8	4,004.8	9.6	10.8	-154.17	-111.1	406.5	608.3	590.4	17.91	33.965		
4,200.0	4,189.4	4,126.2	4,101.1	9.9	11.1	-154.19	-115.8	419.9	631.0	612.6	18.38	34.319		
4,300.0	4,288.9	4,223.6	4,197.5	10.2	11.5	-154.20	-120.5	433.3	653.6	634.8	18.86	34.653		
4,400.0	4,388.4	4,321.0	4,293.9	10.5	11.8	-154.21	-125.2	446.7	676.3	656.9	19.34	34.968		
4,500.0	4,488.0	4,418.4	4,390.2	10.8	12.2	-154.22	-130.0	460.1	698.9	679.1	19.82	35.266		
4,600.0	4,587.5	4,515.8	4,486.6	11.0	12.5	-154.23	-134.7	473.5	721.6	701.3	20.30	35.549		
4,700.0	4,687.0	4,613.4	4,583.1	11.3	12.8	-154.24	-139.4	486.9	744.3	723.5	20.78	35.816		
4,800.0	4,786.5	4,744.4	4,713.1	11.6	13.2	-154.32	-144.8	502.1	764.8	743.5	21.30	35.904		
4,900.0	4,886.1	4,877.5	4,845.8	11.9	13.5	-154.52	-148.2	511.7	780.9	759.1	21.80	35.828		
5,000.0	4,985.6	5,012.2	4,980.4	12.2	13.7	-154.85	-149.5	515.6	792.7	770.4	22.29	35.568		
5,100.0	5,085.1	5,116.9	5,085.1	12.5	13.9	-155.16	-149.6	515.6	801.6	778.9	22.73	35.268		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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		
5,200.0	5,184.6	5,216.4	5,184.6	12.7	14.0	-155.45	-149.6	515.6	810.5	787.3	23.17	34.987		
5,300.0	5,284.1	5,315.9	5,284.1	13.0	14.2	-155.73	-149.6	515.6	819.4	795.8	23.60	34.715		
5,400.0	5,383.7	5,415.4	5,383.7	13.3	14.4	-156.01	-149.6	515.6	828.3	804.3	24.04	34.453		
5,500.0	5,483.2	5,515.0	5,483.2	13.6	14.5	-156.28	-149.6	515.6	837.3	812.8	24.48	34.200		
5,600.0	5,582.7	5,614.5	5,582.7	13.9	14.7	-156.55	-149.6	515.6	846.2	821.3	24.92	33.956		
5,700.0	5,682.2	5,714.0	5,682.2	14.2	14.9	-156.81	-149.6	515.6	855.2	829.9	25.36	33.721		
5,800.0	5,781.7	5,813.5	5,781.7	14.5	15.1	-157.06	-149.6	515.6	864.2	838.4	25.80	33.493		
5,900.0	5,881.3	5,913.1	5,881.3	14.7	15.2	-157.33	-149.6	515.6	872.6	846.4	26.27	33.222		
6,000.0	5,981.1	6,012.9	5,981.1	14.9	15.4	-157.52	-149.6	515.6	878.1	851.4	26.70	32.885		
6,100.0	6,081.1	6,112.9	6,081.1	15.1	15.6	-157.60	-149.6	515.6	880.3	853.2	27.11	32.475		
6,200.0	6,181.1	6,212.9	6,181.1	15.3	15.8	89.91	-149.6	515.6	880.3	852.8	27.50	32.010		
6,300.0	6,281.1	6,312.9	6,281.1	15.4	16.0	89.91	-149.6	515.6	880.3	852.4	27.90	31.552		
6,400.0	6,380.8	6,421.1	6,380.8	15.6	16.1	93.62	-141.8	515.1	880.3	852.0	28.27	31.139		
6,500.0	6,478.6	6,529.3	6,494.4	15.8	16.3	93.50	-118.0	513.6	880.2	851.6	28.55	30.826		
6,600.0	6,572.6	6,637.2	6,594.7	15.9	16.4	93.32	-78.7	511.0	880.0	851.2	28.80	30.559		
6,700.0	6,661.0	6,744.4	6,687.5	16.0	16.4	93.06	-25.2	507.5	879.8	850.8	29.07	30.264		
6,800.0	6,742.1	6,850.9	6,770.7	16.1	16.5	92.74	41.0	503.2	879.6	850.1	29.47	29.851		
6,900.0	6,814.2	6,956.6	6,842.6	16.2	16.6	92.37	118.1	498.2	879.4	849.3	30.08	29.236		
7,000.0	6,876.0	7,061.2	6,901.8	16.5	16.8	91.95	204.0	492.5	879.1	848.1	30.98	28.374		
7,100.0	6,926.3	7,164.8	6,947.5	16.9	17.1	91.49	296.7	486.5	878.9	846.7	32.24	27.266		
7,200.0	6,964.1	7,267.2	6,979.1	17.5	17.8	91.01	393.8	480.1	878.8	844.9	33.85	25.965		
7,300.0	6,988.6	7,368.6	6,996.4	18.4	18.7	90.51	493.4	473.6	878.7	842.9	35.79	24.554		
7,372.7	6,997.9	7,441.5	7,000.0	19.1	19.5	90.14	566.1	468.9	878.7	841.3	37.38	23.505		
7,400.0	6,999.5	7,468.8	7,000.0	19.4	19.8	90.04	593.3	467.1	878.7	840.7	38.00	23.121		
7,500.0	7,000.0	7,568.8	7,000.0	20.6	21.0	90.00	693.1	460.6	878.7	838.2	40.46	21.716		
7,600.0	7,000.0	7,668.8	7,000.0	21.9	22.3	90.00	792.9	454.1	878.7	835.6	43.13	20.376		
7,700.0	7,000.0	7,768.8	7,000.0	23.3	23.7	90.00	892.7	447.6	878.7	832.8	45.96	19.118		
7,800.0	7,000.0	7,868.8	7,000.0	24.8	25.2	90.00	992.5	441.0	878.8	829.8	48.95	17.953		
7,900.0	7,000.0	7,968.8	7,000.0	26.3	26.7	90.00	1,092.2	434.5	878.8	826.7	52.05	16.882		
8,000.0	7,000.0	8,068.8	7,000.0	27.9	28.3	90.00	1,192.0	428.0	878.8	823.5	55.26	15.903		
8,100.0	7,000.0	8,168.8	7,000.0	29.5	29.9	90.00	1,291.8	421.5	878.8	820.3	58.55	15.010		
8,200.0	7,000.0	8,268.8	7,000.0	31.2	31.6	90.00	1,391.6	415.0	878.8	816.9	61.91	14.195		
8,300.0	7,000.0	8,368.8	7,000.0	32.9	33.3	90.00	1,491.4	408.4	878.9	813.5	65.33	13.452		
8,400.0	7,000.0	8,468.8	7,000.0	34.6	35.0	90.00	1,591.2	401.9	878.9	810.1	68.80	12.774		
8,500.0	7,000.0	8,568.8	7,000.0	36.3	36.7	90.00	1,691.0	395.4	878.9	806.6	72.31	12.154		
8,600.0	7,000.0	8,668.8	7,000.0	38.1	38.5	90.00	1,790.8	388.9	878.9	803.0	75.87	11.585		
8,700.0	7,000.0	8,768.8	7,000.0	39.9	40.3	90.00	1,890.5	382.4	878.9	799.5	79.45	11.063		
8,800.0	7,000.0	8,868.8	7,000.0	41.7	42.1	90.00	1,990.3	375.9	878.9	795.9	83.06	10.582		
8,900.0	7,000.0	8,968.8	7,000.0	43.5	43.9	90.00	2,090.1	369.3	879.0	792.3	86.70	10.138		
9,000.0	7,000.0	9,068.8	7,000.0	45.3	45.7	90.00	2,189.9	362.8	879.0	788.6	90.36	9.728		
9,100.0	7,000.0	9,168.8	7,000.0	47.1	47.5	90.00	2,289.7	356.3	879.0	785.0	94.03	9.348		
9,200.0	7,000.0	9,268.8	7,000.0	49.0	49.4	90.00	2,389.5	349.8	879.0	781.3	97.73	8.995		
9,300.0	7,000.0	9,368.8	7,000.0	50.8	51.2	90.00	2,489.3	343.3	879.0	777.6	101.44	8.666		
9,400.0	7,000.0	9,468.8	7,000.0	52.7	53.1	90.00	2,589.1	336.7	879.1	773.9	105.16	8.359		
9,500.0	7,000.0	9,568.8	7,000.0	54.5	54.9	90.00	2,688.8	330.2	879.1	770.2	108.89	8.073		
9,600.0	7,000.0	9,668.8	7,000.0	56.4	56.8	90.00	2,788.6	323.7	879.1	766.5	112.64	7.805		
9,700.0	7,000.0	9,768.8	7,000.0	58.3	58.6	90.00	2,888.4	317.2	879.1	762.7	116.40	7.553		
9,800.0	7,000.0	9,868.8	7,000.0	60.1	60.5	90.00	2,988.2	310.7	879.1	759.0	120.16	7.316		
9,900.0	7,000.0	9,968.8	7,000.0	62.0	62.4	90.00	3,088.0	304.2	879.2	755.2	123.93	7.094		
10,000.0	7,000.0	10,068.8	7,000.0	63.9	64.3	90.00	3,187.8	297.6	879.2	751.5	127.71	6.884		
10,100.0	7,000.0	10,168.8	7,000.0	65.8	66.2	90.00	3,287.6	291.1	879.2	747.7	131.50	6.686		
10,200.0	7,000.0	10,268.8	7,000.0	67.7	68.1	90.00	3,387.4	284.6	879.2	743.9	135.29	6.499		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	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)			
10,300.0	7,000.0	10,368.8	7,000.0	69.6	69.9	90.00	3,487.1	278.1	879.2	740.1	139.09	6.321		
10,400.0	7,000.0	10,468.8	7,000.0	71.5	71.8	90.00	3,586.9	271.6	879.2	736.3	142.90	6.153		
10,500.0	7,000.0	10,568.8	7,000.0	73.4	73.7	90.00	3,686.7	265.0	879.3	732.6	146.70	5.993		
10,600.0	7,000.0	10,668.8	7,000.0	75.3	75.6	90.00	3,786.5	258.5	879.3	728.8	150.52	5.842		
10,700.0	7,000.0	10,768.8	7,000.0	77.2	77.5	90.00	3,886.3	252.0	879.3	725.0	154.34	5.697		
10,800.0	7,000.0	10,868.8	7,000.0	79.1	79.5	90.00	3,986.1	245.5	879.3	721.2	158.16	5.560		
10,900.0	7,000.0	10,968.8	7,000.0	81.0	81.4	90.00	4,085.9	239.0	879.3	717.4	161.98	5.429		
11,000.0	7,000.0	11,068.8	7,000.0	82.9	83.3	90.00	4,185.7	232.5	879.4	713.5	165.81	5.303		
11,100.0	7,000.0	11,168.8	7,000.0	84.8	85.2	90.00	4,285.4	225.9	879.4	709.7	169.64	5.184		
11,200.0	7,000.0	11,268.8	7,000.0	86.7	87.1	90.00	4,385.2	219.4	879.4	705.9	173.47	5.069		
11,209.8	7,000.0	11,278.6	7,000.0	86.9	87.3	90.00	4,395.0	218.8	879.4	705.5	173.85	5.058		
11,297.9	7,000.0	11,308.2	7,000.0	88.6	87.9	90.00	4,424.6	216.8	881.4	705.2	176.11	5.005 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	-90.94	-0.7	-44.9	44.9					
100.0	100.0	100.0	100.0	0.1	0.1	-90.94	-0.7	-44.9	44.9	44.7	0.22	199.721		
200.0	200.0	200.0	200.0	0.3	0.3	-90.94	-0.7	-44.9	44.9	44.2	0.67	66.574		
300.0	300.0	300.0	300.0	0.6	0.6	-90.94	-0.7	-44.9	44.9	43.8	1.12	39.944		
400.0	400.0	400.0	400.0	0.8	0.8	-90.94	-0.7	-44.9	44.9	43.3	1.57	28.532		
500.0	500.0	500.0	500.0	1.0	1.0	-90.94	-0.7	-44.9	44.9	42.9	2.02	22.191		
600.0	600.0	600.0	600.0	1.2	1.2	-90.94	-0.7	-44.9	44.9	42.4	2.47	18.156		
700.0	700.0	700.0	700.0	1.5	1.5	-90.94	-0.7	-44.9	44.9	42.0	2.92	15.363		
800.0	800.0	800.0	800.0	1.7	1.7	-90.94	-0.7	-44.9	44.9	41.5	3.37	13.315		
900.0	900.0	900.0	900.0	1.9	1.9	-90.94	-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	-90.94	-0.7	-44.9	44.9	40.6	4.27	10.512		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.94	-0.7	-44.9	44.9	40.2	4.72	9.511		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.94	-0.7	-44.9	44.9	39.7	5.17	8.684		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.94	-0.7	-44.9	44.9	39.3	5.62	7.989		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.94	-0.7	-44.9	44.9	38.8	6.07	7.397 CC, ES		
1,500.0	1,500.0	1,498.4	1,498.4	3.3	3.2	-91.31	-1.1	-46.5	46.6	40.1	6.50	7.168		
1,600.0	1,600.0	1,596.7	1,596.5	3.5	3.4	-92.28	-2.0	-51.5	51.7	44.7	6.92	7.467		
1,700.0	1,700.0	1,694.4	1,693.9	3.7	3.6	-93.52	-3.7	-59.7	60.1	52.8	7.35	8.184		
1,800.0	1,800.0	1,791.5	1,790.3	3.9	3.9	-94.77	-5.9	-71.1	72.0	64.2	7.79	9.241		
1,900.0	1,900.0	1,887.9	1,885.6	4.1	4.1	16.86	-8.8	-85.5	85.5	77.4	8.16	10.479		
2,000.0	1,999.8	1,985.9	1,981.9	4.3	4.4	16.65	-12.2	-102.8	98.5	90.0	8.55	11.524		
2,100.0	2,099.5	2,085.4	2,079.7	4.5	4.7	16.99	-15.8	-120.7	108.5	99.5	8.94	12.135		
2,200.0	2,199.0	2,185.0	2,177.7	4.7	5.0	17.48	-19.3	-138.5	117.4	108.0	9.36	12.545		
2,300.0	2,298.5	2,284.6	2,275.6	5.0	5.3	17.91	-22.9	-156.4	126.3	116.5	9.78	12.910		
2,400.0	2,398.0	2,384.2	2,373.5	5.2	5.7	18.27	-26.4	-174.2	135.2	125.0	10.22	13.234		
2,500.0	2,497.5	2,483.8	2,471.4	5.4	6.0	18.60	-30.0	-192.0	144.2	133.5	10.66	13.523		
2,600.0	2,597.1	2,583.4	2,569.4	5.7	6.4	18.88	-33.5	-209.9	153.1	142.0	11.11	13.783		
2,700.0	2,696.6	2,683.0	2,667.3	5.9	6.8	19.13	-37.0	-227.7	162.0	150.5	11.56	14.016		
2,800.0	2,796.1	2,782.6	2,765.2	6.2	7.2	19.36	-40.6	-245.6	171.0	158.9	12.02	14.225		
2,900.0	2,895.6	2,882.2	2,863.1	6.4	7.5	19.56	-44.1	-263.4	179.9	167.4	12.48	14.415		
3,000.0	2,995.1	2,981.8	2,961.0	6.7	7.9	19.75	-47.7	-281.3	188.8	175.9	12.95	14.586		
3,100.0	3,094.7	3,081.4	3,059.0	6.9	8.3	19.91	-51.2	-299.1	197.8	184.4	13.42	14.742		
3,200.0	3,194.2	3,181.0	3,156.9	7.2	8.7	20.07	-54.8	-317.0	206.7	192.8	13.89	14.884		
3,300.0	3,293.7	3,280.6	3,254.8	7.5	9.1	20.21	-58.3	-334.8	215.7	201.3	14.36	15.014		
3,400.0	3,393.2	3,380.1	3,352.7	7.7	9.5	20.34	-61.9	-352.6	224.6	209.8	14.84	15.133		
3,500.0	3,492.8	3,479.7	3,450.7	8.0	9.9	20.46	-65.4	-370.5	233.6	218.2	15.32	15.242		
3,600.0	3,592.3	3,579.3	3,548.6	8.3	10.3	20.57	-68.9	-388.3	242.5	226.7	15.81	15.342		
3,700.0	3,691.8	3,678.9	3,646.5	8.5	10.7	20.67	-72.5	-406.2	251.5	235.2	16.29	15.435		
3,800.0	3,791.3	3,778.5	3,744.4	8.8	11.1	20.77	-76.0	-424.0	260.4	243.6	16.78	15.520		
3,900.0	3,890.8	3,878.1	3,842.3	9.1	11.5	20.86	-79.6	-441.9	269.4	252.1	17.27	15.599		
4,000.0	3,990.4	3,977.7	3,940.3	9.4	11.9	20.94	-83.1	-459.7	278.3	260.6	17.76	15.673		
4,100.0	4,089.9	4,077.3	4,038.2	9.6	12.3	21.02	-86.7	-477.6	287.3	269.0	18.25	15.741		
4,200.0	4,189.4	4,176.9	4,136.1	9.9	12.7	21.09	-90.2	-495.4	296.2	277.5	18.74	15.805		
4,300.0	4,288.9	4,276.5	4,234.0	10.2	13.1	21.16	-93.8	-513.2	305.2	285.9	19.24	15.864		
4,400.0	4,388.4	4,376.1	4,332.0	10.5	13.5	21.23	-97.3	-531.1	314.1	294.4	19.73	15.920		
4,500.0	4,488.0	4,475.7	4,429.9	10.8	13.9	21.29	-100.8	-548.9	323.1	302.8	20.23	15.972		
4,600.0	4,587.5	4,575.3	4,527.8	11.0	14.3	21.35	-104.4	-566.8	332.0	311.3	20.73	16.020		
4,700.0	4,687.0	4,674.9	4,625.7	11.3	14.7	21.40	-107.9	-584.6	341.0	319.8	21.22	16.066		
4,800.0	4,786.5	4,774.5	4,723.6	11.6	15.1	21.45	-111.5	-602.5	349.9	328.2	21.72	16.109		
4,900.0	4,886.1	4,874.1	4,821.6	11.9	15.6	21.50	-115.0	-620.3	358.9	336.7	22.22	16.150		
5,000.0	4,985.6	4,973.7	4,919.5	12.2	16.0	21.55	-118.6	-638.1	367.8	345.1	22.72	16.188		
5,100.0	5,085.1	5,073.3	5,017.4	12.5	16.4	21.60	-122.1	-656.0	376.8	353.6	23.22	16.224		

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 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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	
5,200.0	5,184.6	5,172.9	5,115.3	12.7	16.8	21.64	-125.6	-673.8	385.8	362.0	23.73	16.258	
5,300.0	5,284.1	5,272.5	5,213.3	13.0	17.2	21.68	-129.2	-691.7	394.7	370.5	24.23	16.290	
5,400.0	5,383.7	5,372.1	5,311.2	13.3	17.6	21.72	-132.7	-709.5	403.7	378.9	24.73	16.321	
5,500.0	5,483.2	5,471.7	5,409.1	13.6	18.0	21.76	-136.3	-727.4	412.6	387.4	25.24	16.350	
5,600.0	5,582.7	5,571.3	5,507.0	13.9	18.4	21.79	-139.8	-745.2	421.6	395.8	25.74	16.377	
5,700.0	5,682.2	5,675.9	5,609.9	14.2	18.9	21.84	-143.5	-763.8	430.4	404.1	26.25	16.394	
5,800.0	5,781.7	5,793.1	5,725.8	14.5	19.2	21.97	-147.0	-781.1	436.2	409.4	26.75	16.305	
5,900.0	5,881.3	5,910.7	5,842.6	14.7	19.5	22.18	-149.5	-793.8	438.6	411.3	27.21	16.115	
6,000.0	5,981.1	6,028.4	5,960.1	14.9	19.7	22.33	-151.1	-801.8	439.9	412.3	27.60	15.939	
6,100.0	6,081.1	6,146.2	6,077.8	15.1	19.9	22.39	-151.7	-805.1	440.5	412.5	27.94	15.765	
6,200.0	6,181.1	6,249.5	6,181.1	15.3	20.0	-90.10	-151.7	-805.2	440.5	411.9	28.61	15.395	
6,300.0	6,281.1	6,349.5	6,281.1	15.4	20.2	-90.10	-151.7	-805.2	440.5	411.5	28.99	15.194	
6,400.0	6,380.8	6,445.9	6,377.2	15.6	20.3	-86.38	-145.6	-805.6	440.5	411.4	29.04	15.166	
6,500.0	6,478.6	6,542.2	6,471.5	15.8	20.4	-86.48	-126.7	-806.8	440.4	411.1	29.31	15.024	
6,600.0	6,572.6	6,638.6	6,562.6	15.9	20.5	-86.65	-95.4	-808.9	440.3	410.8	29.54	14.906	
6,700.0	6,661.0	6,735.2	6,648.8	16.0	20.6	-86.88	-52.0	-811.7	440.2	410.5	29.79	14.779	
6,800.0	6,742.1	6,832.1	6,728.6	16.1	20.7	-87.16	2.8	-815.3	440.1	410.0	30.14	14.604	
6,900.0	6,814.2	6,929.3	6,800.4	16.2	20.8	-87.51	68.0	-819.6	440.0	409.3	30.67	14.345	
7,000.0	6,876.0	7,026.8	6,863.0	16.5	21.0	-87.90	142.5	-824.5	439.9	408.4	31.49	13.970	
7,100.0	6,926.3	7,124.8	6,915.0	16.9	21.3	-88.33	225.3	-829.9	439.8	407.2	32.63	13.477	
7,200.0	6,964.1	7,223.2	6,955.4	17.5	21.7	-88.79	314.7	-835.8	439.7	405.6	34.13	12.883	
7,300.0	6,988.6	7,322.1	6,983.3	18.4	22.2	-89.28	409.4	-842.0	439.6	403.7	35.97	12.223	
7,400.0	6,999.5	7,421.5	6,997.8	19.4	22.9	-89.79	507.4	-848.4	439.6	401.5	38.10	11.539	
7,435.8	7,000.6	7,457.2	6,999.7	19.9	23.2	-89.89	543.0	-850.7	439.6	400.7	38.93	11.292	
7,500.0	7,000.0	7,521.5	7,000.0	20.6	23.8	-90.00	607.1	-854.9	439.6	399.1	40.48	10.859	
7,600.0	7,000.0	7,621.5	7,000.0	21.9	24.9	-90.00	706.9	-861.5	439.6	396.5	43.09	10.202	
7,700.0	7,000.0	7,721.5	7,000.0	23.3	26.0	-90.00	806.6	-868.0	439.6	393.7	45.88	9.581	
7,800.0	7,000.0	7,821.5	7,000.0	24.8	27.3	-90.00	906.4	-874.5	439.6	390.8	48.82	9.004	
7,900.0	7,000.0	7,921.5	7,000.0	26.3	28.6	-90.00	1,006.2	-881.1	439.6	387.7	51.89	8.472	
8,000.0	7,000.0	8,021.5	7,000.0	27.9	30.0	-90.00	1,106.0	-887.6	439.6	384.6	55.07	7.983	
8,100.0	7,000.0	8,121.5	7,000.0	29.5	31.5	-90.00	1,205.8	-894.1	439.6	381.3	58.33	7.537	
8,200.0	7,000.0	8,221.5	7,000.0	31.2	33.1	-90.00	1,305.6	-900.7	439.6	378.0	61.66	7.130	
8,300.0	7,000.0	8,321.5	7,000.0	32.9	34.6	-90.00	1,405.4	-907.2	439.6	374.6	65.06	6.757	
8,400.0	7,000.0	8,421.5	7,000.0	34.6	36.2	-90.00	1,505.1	-913.8	439.6	371.1	68.51	6.417	
8,500.0	7,000.0	8,521.5	7,000.0	36.3	37.9	-90.00	1,604.9	-920.3	439.6	367.6	72.01	6.106	
8,600.0	7,000.0	8,621.5	7,000.0	38.1	39.6	-90.00	1,704.7	-926.8	439.6	364.1	75.54	5.820	
8,700.0	7,000.0	8,721.5	7,000.0	39.9	41.3	-90.00	1,804.5	-933.4	439.6	360.5	79.11	5.557	
8,800.0	7,000.0	8,821.5	7,000.0	41.7	43.0	-90.00	1,904.3	-939.9	439.6	356.9	82.71	5.316	
8,900.0	7,000.0	8,921.5	7,000.0	43.5	44.7	-90.00	2,004.1	-946.5	439.6	353.3	86.33	5.092	
9,000.0	7,000.0	9,021.5	7,000.0	45.3	46.5	-90.00	2,103.9	-953.0	439.6	349.7	89.98	4.886	
9,100.0	7,000.0	9,121.5	7,000.0	47.1	48.3	-90.00	2,203.6	-959.5	439.6	346.0	93.65	4.695	
9,200.0	7,000.0	9,221.5	7,000.0	49.0	50.0	-90.00	2,303.4	-966.1	439.6	342.3	97.33	4.517	
9,300.0	7,000.0	9,321.5	7,000.0	50.8	51.8	-90.00	2,403.2	-972.6	439.7	338.6	101.03	4.352	
9,400.0	7,000.0	9,421.5	7,000.0	52.7	53.6	-90.00	2,503.0	-979.2	439.7	334.9	104.75	4.197	
9,500.0	7,000.0	9,521.5	7,000.0	54.5	55.5	-90.00	2,602.8	-985.7	439.7	331.2	108.48	4.053	
9,600.0	7,000.0	9,621.5	7,000.0	56.4	57.3	-90.00	2,702.6	-992.2	439.7	327.4	112.21	3.918	
9,700.0	7,000.0	9,721.5	7,000.0	58.3	59.1	-90.00	2,802.4	-998.8	439.7	323.7	115.96	3.791	
9,800.0	7,000.0	9,821.5	7,000.0	60.1	61.0	-90.00	2,902.2	-1,005.3	439.7	319.9	119.72	3.672	
9,900.0	7,000.0	9,921.5	7,000.0	62.0	62.8	-90.00	3,001.9	-1,011.9	439.7	316.2	123.49	3.560	
10,000.0	7,000.0	10,021.5	7,000.0	63.9	64.7	-90.00	3,101.7	-1,018.4	439.7	312.4	127.27	3.455	
10,100.0	7,000.0	10,121.5	7,000.0	65.8	66.5	-90.00	3,201.5	-1,024.9	439.7	308.6	131.05	3.355	
10,200.0	7,000.0	10,221.5	7,000.0	67.7	68.4	-90.00	3,301.3	-1,031.5	439.7	304.8	134.84	3.261	

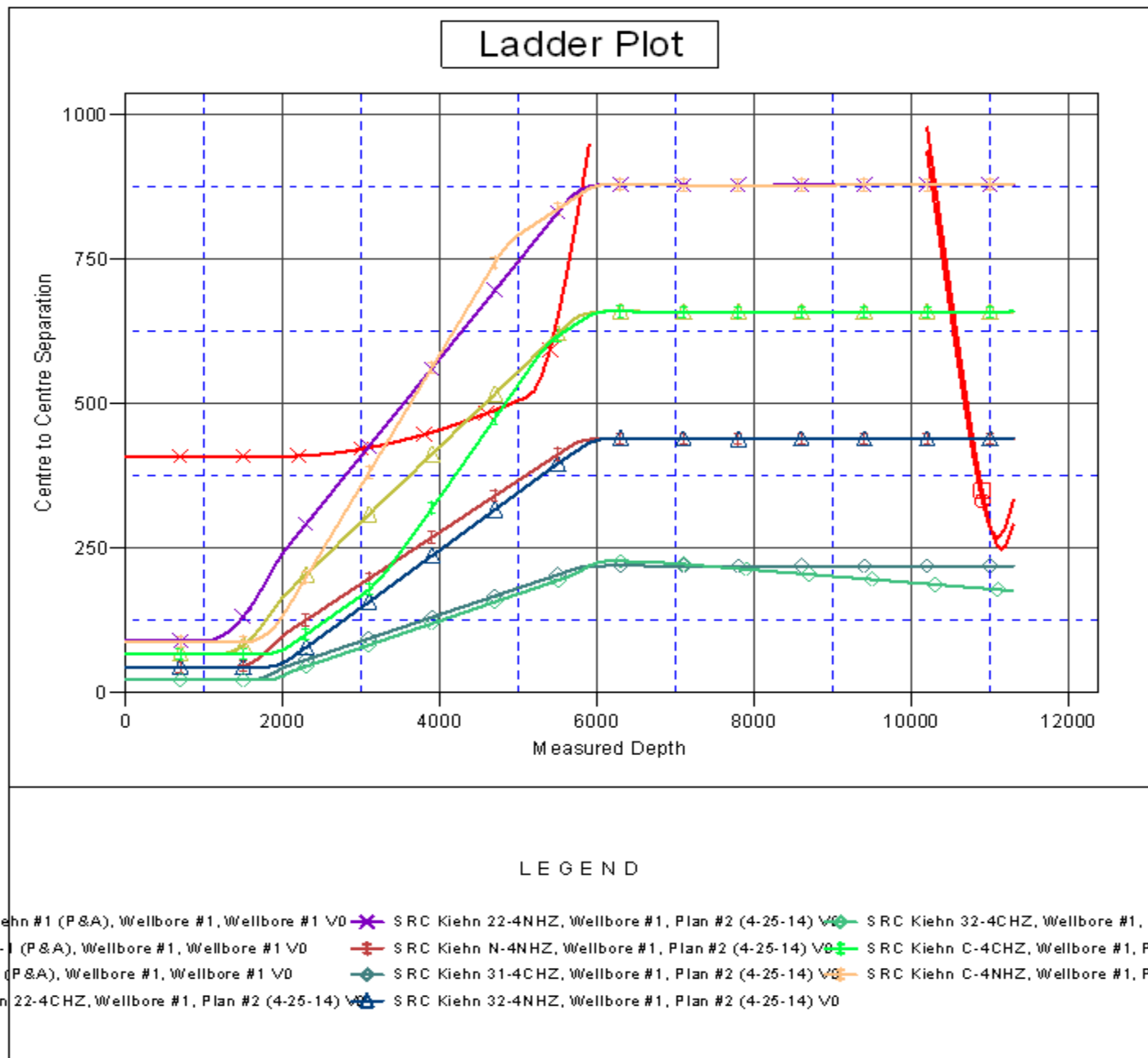
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Kiehn 31-4NHZ
Project:	SEC.4-T4N-R68W	TVD Reference:	WELL @ 5077.0ft (Original Well Elev)
Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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

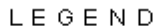
Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,300.0	7,000.0	10,321.5	7,000.0	69.6	70.3	-90.00	3,401.1	-1,038.0	439.7	301.0	138.63	3.172		
10,400.0	7,000.0	10,421.5	7,000.0	71.5	72.1	-90.00	3,500.9	-1,044.5	439.7	297.2	142.43	3.087		
10,500.0	7,000.0	10,521.5	7,000.0	73.4	74.0	-90.00	3,600.7	-1,051.1	439.7	293.4	146.24	3.007		
10,600.0	7,000.0	10,621.5	7,000.0	75.3	75.9	-90.00	3,700.4	-1,057.6	439.7	289.6	150.05	2.930		
10,700.0	7,000.0	10,721.5	7,000.0	77.2	77.8	-90.00	3,800.2	-1,064.2	439.7	285.8	153.86	2.858		
10,800.0	7,000.0	10,821.5	7,000.0	79.1	79.7	-90.00	3,900.0	-1,070.7	439.7	282.0	157.68	2.789		
10,900.0	7,000.0	10,921.5	7,000.0	81.0	81.5	-90.00	3,999.8	-1,077.2	439.7	278.2	161.50	2.723		
11,000.0	7,000.0	11,021.5	7,000.0	82.9	83.4	-90.00	4,099.6	-1,083.8	439.7	274.4	165.33	2.660		
11,100.0	7,000.0	11,121.5	7,000.0	84.8	85.3	-90.00	4,199.4	-1,090.3	439.7	270.5	169.15	2.599		
11,200.0	7,000.0	11,221.5	7,000.0	86.7	87.2	-90.00	4,299.2	-1,096.9	439.7	266.7	172.99	2.542		
11,297.9	7,000.0	11,319.4	7,000.0	88.6	89.1	-90.00	4,396.9	-1,103.3	439.7	263.0	176.74	2.488 SF		








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Reference Site:	SRC Kiehn Pad Sec.4-T4N-R68W	MD Reference:	WELL @ 5077.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Kiehn 31-4NHZ	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 (Original Well Elev) Coordinates are relative to: SRC Kiehn 31-4NHZ
 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°



Reference Depths are relative to WELL @ 5077.0ft (Original Well Elev) Coordinates are relative to: SRC Kiehn 31-4NHZ
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°



Kiehn #1 (P&A), Wellbore #1, Wellbore #1 VD		SRC Kiehn 22-4NHZ, Wellbore #1, Plan #2 (4-25-14) VD		SRC Kiehn 32-4CHZ, Wellbore #1, Plan #2 (4-25-14) VD
4-1 (P&A), Wellbore #1, Wellbore #1 VD		SRC Kiehn N-4NHZ, Wellbore #1, Plan #2 (4-25-14) VD		SRC Kiehn C-4CHZ, Wellbore #1, Plan #2 (4-25-14) VD
1 (P&A), Wellbore #1, Wellbore #1 VD		SRC Kiehn 31-4CHZ, Wellbore #1, Plan #2 (4-25-14) VD		SRC Kiehn C-4NHZ, Wellbore #1, Plan #2 (4-25-14) VD
hn 22-4CHZ, Wellbore #1, Plan #2 (4-25-14) VD		SRC Kiehn 32-4NHZ, Wellbore #1, Plan #2 (4-25-14) VD		