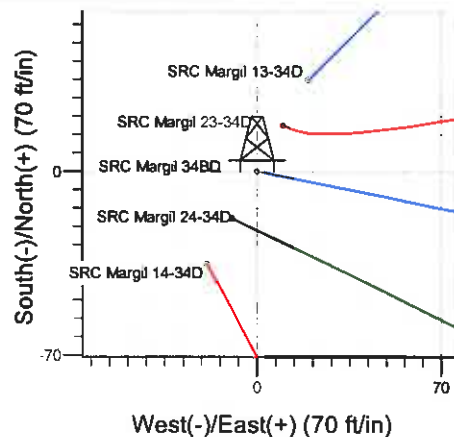
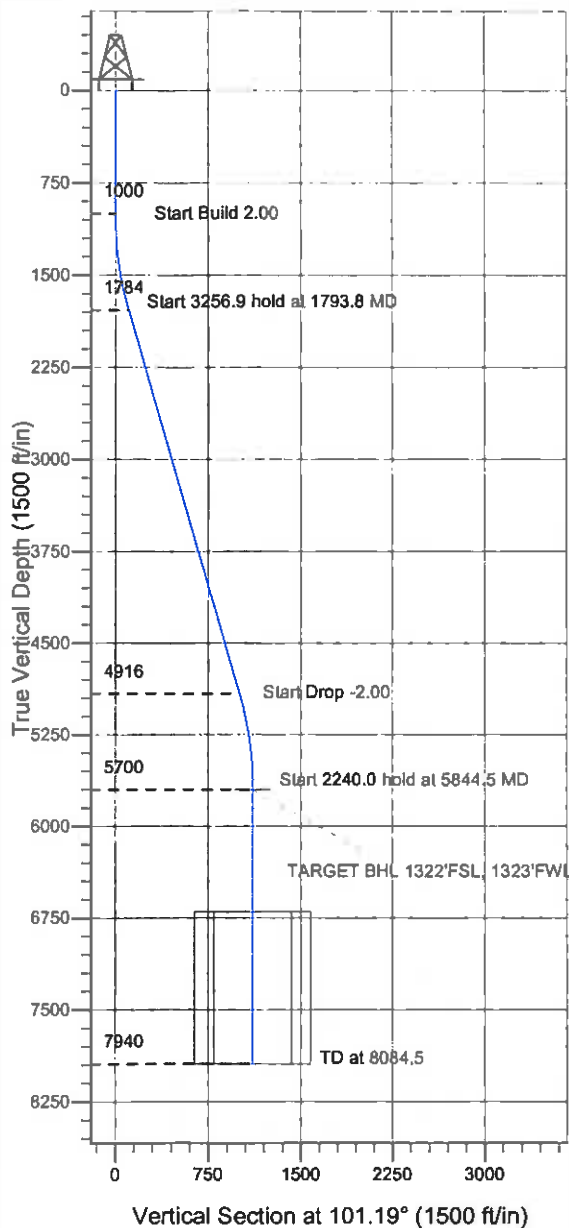
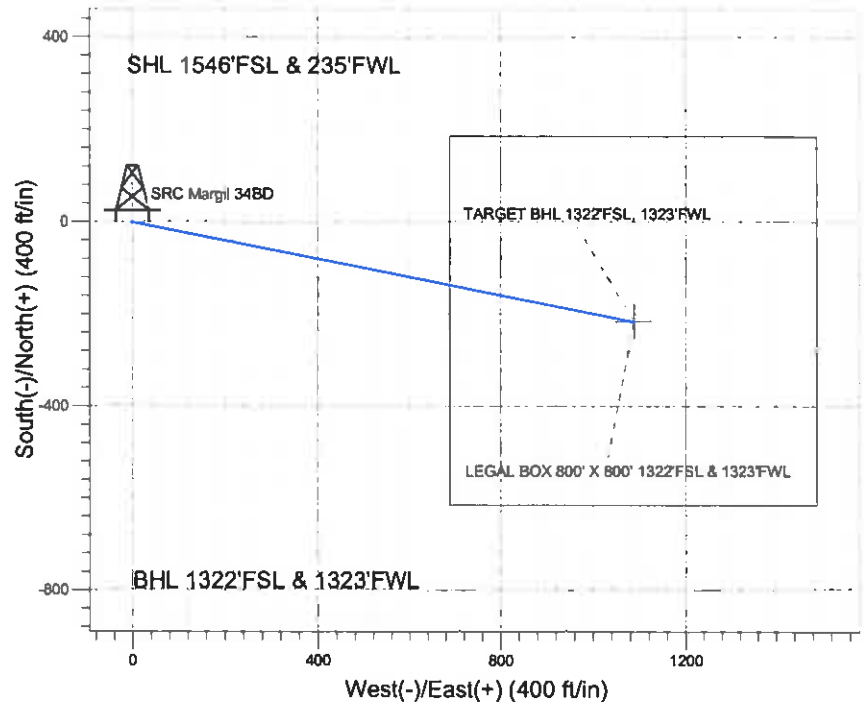


ENSIGN**Directional****Well Name: SRC Margil 34BD**Surface Location: SRC Margil 13-34D Pad Sec.34-T4N-R68W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5133.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1340428.74	3140130.55	40.266787	-104.997841	

Original Well Elev WELL @ 5146.0ft (Original Well Elev)

Synergy Resources

SRC Margil 13-34D Pad Sec 34-T4N-R68W
SRC Margil 34BD
Plan #1 (6-07-11)
8 18, June 17 2011



Azimuths to True North
Magnetic North: 8.98°

Magnetic Field
Strength: 53032.9snT
Dip Angle: 66.90°
Date: 6/17/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1322'FSL, 1323'FWL	5700.0	-215.3	1088.4	40.266196	-104.993941	Point
LEGAL BOX 800' X 800' 1322'FSL & 1323'FWL	6700.0	-215.3	1088.4	40.266196	-104.993941	Rectangle (Sides: L800.0 W800.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1793.8	15.88	101.19	1783.7	-21.2	107.2	2.00	101.19	109.3	
4	5050.7	15.88	101.19	4916.3	-194.1	981.2	0.00	0.00	1000.2	
5	5844.5	0.00	0.00	5700.0	-215.3	1088.4	2.00	180.00	1109.5	TARGET BHL 1322'FSL, 1323'FWL
6	8084.5	0.00	0.00	7940.0	-215.3	1088.4	0.00	0.00	1109.5	



Directional

Synergy Resources

SEC.34-T4N-R68W

SRC Margil 13-34D Pad Sec.34-T4N-R68W

SRC Margil 34BD

Wellbore #1

Plan: Plan #1 (6-07-11)

Standard Planning Report

17 June, 2011

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.34-T4N-R68W, Weld County, Colorado		
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 Margil 13-34D Pad Sec.34-T4N-R68W			
Site Position:		Northing:	1,340,463.83 ft	Latitude: 40.266883
From:	Lat/Long	Easting:	3,140,149.60 ft	Longitude: -104.997772
Position Uncertainty:	0.0 ft	Slot Radius:	-	Grid Convergence: 0.32 °

Well	SRC Margil 34BD			
Well Position	+N/-S	-35.0 ft	Northing:	1,340,428.74 ft
	+E/-W	-19.3 ft	Easting:	3,140,130.55 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level: 5,133.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/17/2011	8.98	66.90	53,033

Design	Plan #1 (6-07-11)			
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	101.19

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,793.8	15.88	101.19	1,783.7	-21.2	107.2	2.00	2.00	0.00	101.19	
5,050.7	15.88	101.19	4,916.3	-194.1	981.2	0.00	0.00	0.00	0.00	
5,844.5	0.00	0.00	5,700.0	-215.3	1,088.4	2.00	-2.00	0.00	180.00	TARGET BHL 1322
8,084.5	0.00	0.00	7,940.0	-215.3	1,088.4	0.00	0.00	0.00	0.00	

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.80	101.19	1,040.0	-0.1	0.3	0.3	2.00	2.00	0.00
1,080.0	1.60	101.19	1,080.0	-0.2	1.1	1.1	2.00	2.00	0.00
1,120.0	2.40	101.19	1,120.0	-0.5	2.5	2.5	2.00	2.00	0.00
1,160.0	3.20	101.19	1,159.9	-0.9	4.4	4.5	2.00	2.00	0.00
1,200.0	4.00	101.19	1,199.8	-1.4	6.8	7.0	2.00	2.00	0.00
1,240.0	4.80	101.19	1,239.7	-1.9	9.9	10.0	2.00	2.00	0.00
1,280.0	5.60	101.19	1,279.6	-2.7	13.4	13.7	2.00	2.00	0.00
1,320.0	6.40	101.19	1,319.3	-3.5	17.5	17.9	2.00	2.00	0.00
1,360.0	7.20	101.19	1,359.1	-4.4	22.2	22.6	2.00	2.00	0.00
1,400.0	8.00	101.19	1,398.7	-5.4	27.4	27.9	2.00	2.00	0.00
1,440.0	8.80	101.19	1,438.3	-6.5	33.1	33.7	2.00	2.00	0.00
1,480.0	9.60	101.19	1,477.8	-7.8	39.4	40.1	2.00	2.00	0.00
1,520.0	10.40	101.19	1,517.1	-9.1	46.2	47.1	2.00	2.00	0.00
1,560.0	11.20	101.19	1,556.4	-10.6	53.5	54.6	2.00	2.00	0.00
1,600.0	12.00	101.19	1,595.6	-12.1	61.4	62.6	2.00	2.00	0.00
1,640.0	12.80	101.19	1,634.7	-13.8	69.8	71.2	2.00	2.00	0.00
1,680.0	13.60	101.19	1,673.6	-15.6	78.8	80.3	2.00	2.00	0.00
1,720.0	14.40	101.19	1,712.4	-17.5	88.3	90.0	2.00	2.00	0.00
1,760.0	15.20	101.19	1,751.1	-19.4	98.3	100.2	2.00	2.00	0.00
1,793.8	15.88	101.19	1,783.7	-21.2	107.2	109.3	2.00	2.00	0.00
1,800.0	15.88	101.19	1,789.6	-21.5	108.9	111.0	0.00	0.00	0.00
1,840.0	15.88	101.19	1,828.1	-23.7	119.6	121.9	0.00	0.00	0.00
1,880.0	15.88	101.19	1,866.6	-25.8	130.3	132.9	0.00	0.00	0.00
1,920.0	15.88	101.19	1,905.1	-27.9	141.1	143.8	0.00	0.00	0.00
1,960.0	15.88	101.19	1,943.5	-30.0	151.8	154.7	0.00	0.00	0.00
2,000.0	15.88	101.19	1,982.0	-32.1	162.5	165.7	0.00	0.00	0.00
2,040.0	15.88	101.19	2,020.5	-34.3	173.3	176.6	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Bulld Rate (°/100ft)	Turn Rate (°/100ft)
2,080.0	15.88	101.19	2,059.0	-36.4	184.0	187.6	0.00	0.00	0.00
2,120.0	15.88	101.19	2,097.4	-38.5	194.7	198.5	0.00	0.00	0.00
2,160.0	15.88	101.19	2,135.9	-40.6	205.5	209.4	0.00	0.00	0.00
2,200.0	15.88	101.19	2,174.4	-42.8	216.2	220.4	0.00	0.00	0.00
2,240.0	15.88	101.19	2,212.9	-44.9	226.9	231.3	0.00	0.00	0.00
2,280.0	15.88	101.19	2,251.3	-47.0	237.7	242.3	0.00	0.00	0.00
2,320.0	15.88	101.19	2,289.8	-49.1	248.4	253.2	0.00	0.00	0.00
2,360.0	15.88	101.19	2,328.3	-51.3	259.1	264.2	0.00	0.00	0.00
2,400.0	15.88	101.19	2,366.8	-53.4	269.9	275.1	0.00	0.00	0.00
2,440.0	15.88	101.19	2,405.2	-55.5	280.6	286.0	0.00	0.00	0.00
2,480.0	15.88	101.19	2,443.7	-57.6	291.3	297.0	0.00	0.00	0.00
2,520.0	15.88	101.19	2,482.2	-59.7	302.1	307.9	0.00	0.00	0.00
2,560.0	15.88	101.19	2,520.7	-61.9	312.8	318.9	0.00	0.00	0.00
2,600.0	15.88	101.19	2,559.1	-64.0	323.5	329.8	0.00	0.00	0.00
2,640.0	15.88	101.19	2,597.6	-66.1	334.3	340.8	0.00	0.00	0.00
2,680.0	15.88	101.19	2,636.1	-68.2	345.0	351.7	0.00	0.00	0.00
2,720.0	15.88	101.19	2,674.6	-70.4	355.7	362.6	0.00	0.00	0.00
2,760.0	15.88	101.19	2,713.0	-72.5	366.5	373.6	0.00	0.00	0.00
2,800.0	15.88	101.19	2,751.5	-74.6	377.2	384.5	0.00	0.00	0.00
2,840.0	15.88	101.19	2,790.0	-76.7	387.9	395.5	0.00	0.00	0.00
2,880.0	15.88	101.19	2,828.5	-78.9	398.7	406.4	0.00	0.00	0.00
2,920.0	15.88	101.19	2,866.9	-81.0	409.4	417.3	0.00	0.00	0.00
2,960.0	15.88	101.19	2,905.4	-83.1	420.2	428.3	0.00	0.00	0.00
3,000.0	15.88	101.19	2,943.9	-85.2	430.9	439.2	0.00	0.00	0.00
3,040.0	15.88	101.19	2,982.3	-87.3	441.6	450.2	0.00	0.00	0.00
3,080.0	15.88	101.19	3,020.8	-89.5	452.4	461.1	0.00	0.00	0.00
3,120.0	15.88	101.19	3,059.3	-91.6	463.1	472.1	0.00	0.00	0.00
3,160.0	15.88	101.19	3,097.8	-93.7	473.8	483.0	0.00	0.00	0.00
3,200.0	15.88	101.19	3,136.2	-95.8	484.6	493.9	0.00	0.00	0.00
3,240.0	15.88	101.19	3,174.7	-98.0	495.3	504.9	0.00	0.00	0.00
3,280.0	15.88	101.19	3,213.2	-100.1	506.0	515.8	0.00	0.00	0.00
3,320.0	15.88	101.19	3,251.7	-102.2	516.8	526.8	0.00	0.00	0.00
3,360.0	15.88	101.19	3,290.1	-104.3	527.5	537.7	0.00	0.00	0.00
3,400.0	15.88	101.19	3,328.6	-106.5	538.2	548.7	0.00	0.00	0.00
3,440.0	15.88	101.19	3,367.1	-108.6	549.0	559.6	0.00	0.00	0.00
3,480.0	15.88	101.19	3,405.6	-110.7	559.7	570.5	0.00	0.00	0.00
3,520.0	15.88	101.19	3,444.0	-112.8	570.4	581.5	0.00	0.00	0.00
3,560.0	15.88	101.19	3,482.5	-114.9	581.2	592.4	0.00	0.00	0.00
3,600.0	15.88	101.19	3,521.0	-117.1	591.9	603.4	0.00	0.00	0.00
3,640.0	15.88	101.19	3,559.5	-119.2	602.6	614.3	0.00	0.00	0.00
3,680.0	15.88	101.19	3,597.9	-121.3	613.4	625.2	0.00	0.00	0.00
3,720.0	15.88	101.19	3,636.4	-123.4	624.1	636.2	0.00	0.00	0.00
3,760.0	15.88	101.19	3,674.9	-125.6	634.8	647.1	0.00	0.00	0.00
3,800.0	15.88	101.19	3,713.4	-127.7	645.6	658.1	0.00	0.00	0.00
3,840.0	15.88	101.19	3,751.8	-129.8	656.3	669.0	0.00	0.00	0.00
3,880.0	15.88	101.19	3,790.3	-131.9	667.0	680.0	0.00	0.00	0.00
3,920.0	15.88	101.19	3,828.8	-134.1	677.8	690.9	0.00	0.00	0.00
3,960.0	15.88	101.19	3,867.3	-136.2	688.5	701.8	0.00	0.00	0.00
4,000.0	15.88	101.19	3,905.7	-138.3	699.2	712.8	0.00	0.00	0.00
4,040.0	15.88	101.19	3,944.2	-140.4	710.0	723.7	0.00	0.00	0.00
4,080.0	15.88	101.19	3,982.7	-142.5	720.7	734.7	0.00	0.00	0.00
4,120.0	15.88	101.19	4,021.2	-144.7	731.4	745.6	0.00	0.00	0.00
4,160.0	15.88	101.19	4,059.6	-146.8	742.2	756.6	0.00	0.00	0.00
4,200.0	15.88	101.19	4,098.1	-148.9	752.9	767.5	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well SRC Margil 34BD
 WELL @ 5146.0ft (Original Well Elev)
 WELL @ 5146.0ft (Original Well Elev)
 True
 Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,240.0	15.88	101.19	4,136.6	-151.0	763.6	778.4	0.00	0.00	0.00
4,280.0	15.88	101.19	4,175.1	-153.2	774.4	789.4	0.00	0.00	0.00
4,320.0	15.88	101.19	4,213.5	-155.3	785.1	800.3	0.00	0.00	0.00
4,360.0	15.88	101.19	4,252.0	-157.4	795.8	811.3	0.00	0.00	0.00
4,400.0	15.88	101.19	4,290.5	-159.5	806.6	822.2	0.00	0.00	0.00
4,440.0	15.88	101.19	4,328.9	-161.7	817.3	833.1	0.00	0.00	0.00
4,480.0	15.88	101.19	4,367.4	-163.8	828.0	844.1	0.00	0.00	0.00
4,520.0	15.88	101.19	4,405.9	-165.9	838.8	855.0	0.00	0.00	0.00
4,560.0	15.88	101.19	4,444.4	-168.0	849.5	866.0	0.00	0.00	0.00
4,600.0	15.88	101.19	4,482.8	-170.1	860.2	876.9	0.00	0.00	0.00
4,640.0	15.88	101.19	4,521.3	-172.3	871.0	887.9	0.00	0.00	0.00
4,680.0	15.88	101.19	4,559.8	-174.4	881.7	898.8	0.00	0.00	0.00
4,720.0	15.88	101.19	4,598.3	-176.5	892.5	909.7	0.00	0.00	0.00
4,760.0	15.88	101.19	4,636.7	-178.6	903.2	920.7	0.00	0.00	0.00
4,800.0	15.88	101.19	4,675.2	-180.8	913.9	931.6	0.00	0.00	0.00
4,840.0	15.88	101.19	4,713.7	-182.9	924.7	942.6	0.00	0.00	0.00
4,880.0	15.88	101.19	4,752.2	-185.0	935.4	953.5	0.00	0.00	0.00
4,920.0	15.88	101.19	4,790.6	-187.1	946.1	964.5	0.00	0.00	0.00
4,960.0	15.88	101.19	4,829.1	-189.3	956.9	975.4	0.00	0.00	0.00
5,000.0	15.88	101.19	4,867.6	-191.4	967.6	986.3	0.00	0.00	0.00
5,040.0	15.88	101.19	4,906.1	-193.5	978.3	997.3	0.00	0.00	0.00
5,050.7	15.88	101.19	4,916.3	-194.1	981.2	1,000.2	0.00	0.00	0.00
5,080.0	15.29	101.19	4,944.6	-195.6	988.9	1,008.1	2.00	-2.00	0.00
5,120.0	14.49	101.19	4,983.2	-197.6	999.0	1,018.4	2.00	-2.00	0.00
5,160.0	13.69	101.19	5,022.0	-199.5	1,008.6	1,028.1	2.00	-2.00	0.00
5,200.0	12.89	101.19	5,061.0	-201.3	1,017.6	1,037.3	2.00	-2.00	0.00
5,240.0	12.09	101.19	5,100.0	-202.9	1,026.1	1,045.9	2.00	-2.00	0.00
5,280.0	11.29	101.19	5,139.2	-204.5	1,034.0	1,054.0	2.00	-2.00	0.00
5,320.0	10.49	101.19	5,178.5	-206.0	1,041.4	1,061.6	2.00	-2.00	0.00
5,360.0	9.69	101.19	5,217.8	-207.3	1,048.3	1,068.6	2.00	-2.00	0.00
5,400.0	8.89	101.19	5,257.3	-208.6	1,054.6	1,075.1	2.00	-2.00	0.00
5,440.0	8.09	101.19	5,296.9	-209.7	1,060.4	1,081.0	2.00	-2.00	0.00
5,480.0	7.29	101.19	5,336.5	-210.8	1,065.7	1,086.3	2.00	-2.00	0.00
5,520.0	6.49	101.19	5,376.2	-211.7	1,070.4	1,091.1	2.00	-2.00	0.00
5,560.0	5.69	101.19	5,416.0	-212.5	1,074.5	1,095.4	2.00	-2.00	0.00
5,600.0	4.89	101.19	5,455.8	-213.2	1,078.2	1,099.0	2.00	-2.00	0.00
5,640.0	4.09	101.19	5,495.7	-213.9	1,081.2	1,102.2	2.00	-2.00	0.00
5,680.0	3.29	101.19	5,535.6	-214.4	1,083.8	1,104.7	2.00	-2.00	0.00
5,720.0	2.49	101.19	5,575.6	-214.7	1,085.7	1,106.8	2.00	-2.00	0.00
5,760.0	1.69	101.19	5,615.5	-215.0	1,087.2	1,108.2	2.00	-2.00	0.00
5,800.0	0.89	101.19	5,655.5	-215.2	1,088.0	1,109.1	2.00	-2.00	0.00
5,840.0	0.09	101.19	5,695.5	-215.3	1,088.4	1,109.5	2.00	-2.00	0.00
5,844.5	0.00	0.00	5,700.0	-215.3	1,088.4	1,109.5	2.00	-2.00	0.00
TARGET BHL 1322'FSL, 1323'FWL									
5,880.0	0.00	0.00	5,735.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
5,920.0	0.00	0.00	5,775.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
5,960.0	0.00	0.00	5,815.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,855.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,040.0	0.00	0.00	5,895.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,080.0	0.00	0.00	5,935.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,120.0	0.00	0.00	5,975.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,160.0	0.00	0.00	6,015.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,055.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,095.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00

ENSIGN **Directional**

Planning Report

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
6,280.0	0.00	0.00	6,135.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,320.0	0.00	0.00	6,175.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,215.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,255.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,295.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,335.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,375.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,415.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,455.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,495.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,535.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,575.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,760.0	0.00	0.00	6,615.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,655.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,695.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,844.5	0.00	0.00	6,700.0	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
LEGAL BOX 800' X 800' 1322'FSL & 1323'FWL									
6,880.0	0.00	0.00	6,735.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,775.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,815.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,855.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,895.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,080.0	0.00	0.00	6,935.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,975.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,160.0	0.00	0.00	7,015.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,055.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,240.0	0.00	0.00	7,095.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,280.0	0.00	0.00	7,135.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,320.0	0.00	0.00	7,175.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,360.0	0.00	0.00	7,215.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,255.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,440.0	0.00	0.00	7,295.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,480.0	0.00	0.00	7,335.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,520.0	0.00	0.00	7,375.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,560.0	0.00	0.00	7,415.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,455.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,640.0	0.00	0.00	7,495.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,680.0	0.00	0.00	7,535.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,720.0	0.00	0.00	7,575.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,760.0	0.00	0.00	7,615.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,655.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,840.0	0.00	0.00	7,695.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,880.0	0.00	0.00	7,735.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,920.0	0.00	0.00	7,775.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
7,960.0	0.00	0.00	7,815.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,855.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
8,040.0	0.00	0.00	7,895.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
8,080.0	0.00	0.00	7,935.5	-215.3	1,088.4	1,109.5	0.00	0.00	0.00
8,084.5	0.00	0.00	7,940.0	-215.3	1,088.4	1,109.5	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.34-T4N-R68W
Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Well: SRC Margil 34BD
Wellbore: Wellbore #1
Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
TARGET BHL 1322'F - plan hits target center - Point	0.00	0.00	5,700.0	-215.3	1,088.4	1,340,219.85	3,141,220.08	40.266196	-104.993941
LEGAL BOX 800' X 800' - plan hits target center - Rectangle (sides W800.0 H800.0 D1,240.0)	0.00	0.00	6,700.0	-215.3	1,088.4	1,340,219.62	3,141,220.10	40.266196	-104.993941

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
640.0	640.0	8 5/8"	8-5/8	12-1/4



Directional

Synergy Resources

SEC.34-T4N-R68W

SRC Margil 13-34D Pad Sec.34-T4N-R68W

SRC Margil 34BD

Wellbore #1

Plan #1 (6-07-11)

Anticollision Report

17 June, 2011

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Margil 34BD
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5146.0ft (Original Well Elev)
Reference Site:	SRC Margil 13-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5146.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 34BD	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 #1 (6-07-11)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (6-07-11)
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.0ft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic

Survey Tool Program		Date 6/17/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	8,084.5	Plan #1 (6-07-11) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SRC Margil 13-34D Pad Sec.34-T4N-R68W						
SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)	738.4	738.4	20.0	16.9	6.472 CC	
SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)	800.0	800.0	20.1	16.7	5.974 ES	
SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)	900.0	899.8	20.8	17.0	5.510 SF	
SRC Margil 24-34D - Wellbore #1 - Plan #1 (6-07-11)	816.8	815.8	20.2	16.8	5.891 CC	
SRC Margil 24-34D - Wellbore #1 - Plan #1 (6-07-11)	900.0	898.9	20.4	16.7	5.414 ES	
SRC Margil 24-34D - Wellbore #1 - Plan #1 (6-07-11)	1,000.0	998.4	22.6	18.4	5.368 SF	

Offset Design SRC Margil 13-34D Pad Sec.34-T4N-R68W - SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)												
Survey Program: 0-MWD												
Reference												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N-S (ft)	Offset Wellbore Centre +E-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	29.19	17.5	9.8	20.0			
100.0	100.0	100.0	100.0	0.1	0.1	29.19	17.5	9.8	20.0	19.8	0.22	89.113
200.0	200.0	200.0	200.0	0.3	0.3	29.19	17.5	9.8	20.0	19.4	0.67	29.704
300.0	300.0	300.0	300.0	0.6	0.6	29.19	17.5	9.8	20.0	18.9	1.12	17.823
400.0	400.0	400.0	400.0	0.8	0.8	29.19	17.5	9.8	20.0	18.5	1.57	12.730
500.0	500.0	500.0	500.0	1.0	1.0	29.19	17.5	9.8	20.0	18.0	2.02	9.901
600.0	600.0	600.0	600.0	1.2	1.2	29.19	17.5	9.8	20.0	17.6	2.47	8.101
700.0	700.0	700.0	700.0	1.5	1.5	29.19	17.5	9.8	20.0	17.1	2.92	6.855
738.4	738.4	738.4	738.4	1.5	1.5	29.19	17.5	9.8	20.0	16.9	3.09	6.472 CC
800.0	800.0	800.0	800.0	1.7	1.7	30.42	17.3	10.2	20.1	16.7	3.36	5.974 ES
900.0	900.0	899.8	899.7	1.9	1.9	39.96	16.0	13.4	20.8	17.0	3.78	5.510 SF
1,000.0	1,000.0	998.8	998.5	2.1	2.1	53.72	14.5	19.7	24.5	20.3	4.21	5.826
1,100.0	1,100.0	1,097.6	1,096.8	2.3	2.3	-38.79	14.2	29.3	31.3	26.7	4.65	6.744
1,200.0	1,199.8	1,196.0	1,194.4	2.5	2.6	-35.79	15.0	42.0	39.2	34.1	5.07	7.724
1,300.0	1,299.5	1,294.2	1,291.3	2.8	2.9	-35.83	16.8	57.9	47.6	42.1	5.50	8.646
1,400.0	1,398.7	1,392.0	1,387.2	3.0	3.2	-37.54	19.8	76.7	56.6	50.7	5.96	9.494
1,500.0	1,497.5	1,489.4	1,482.1	3.3	3.6	-40.16	23.9	98.6	66.4	59.9	6.47	10.265
1,600.0	1,595.6	1,586.4	1,575.7	3.6	4.0	-43.25	29.0	123.3	77.0	70.0	7.03	10.953
1,700.0	1,693.1	1,682.9	1,667.9	3.9	4.5	-46.52	35.2	150.9	88.6	80.9	7.68	11.544
1,793.8	1,783.7	1,772.9	1,753.1	4.3	5.0	-49.61	41.9	179.3	100.5	92.2	8.38	11.999
1,800.0	1,789.6	1,778.9	1,758.7	4.4	5.1	-49.82	42.4	181.2	101.4	93.0	8.43	12.025

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

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design SRC Margil 13-34D Pad Sec.34-T4N-R68W - SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,900.0	1,885.8	1,874.2	1,847.8	4.8	5.7	-52.47	50.5	214.2	118.6	107.3	9.29	12.550		
2,000.0	1,982.0	1,968.7	1,935.0	5.3	6.4	-53.94	59.6	249.5	134.9	124.7	10.18	13.251		
2,100.0	2,078.2	2,065.4	2,023.2	5.8	7.1	-54.70	69.6	287.8	155.5	144.4	11.11	13.995		
2,200.0	2,174.4	2,163.2	2,112.4	6.4	7.9	-55.27	79.8	326.6	176.2	164.1	12.07	14.600		
2,300.0	2,270.6	2,261.1	2,201.7	6.9	8.7	-55.72	90.0	365.3	196.9	183.8	13.05	15.092		
2,400.0	2,366.8	2,358.9	2,290.9	7.4	9.5	-56.09	100.2	404.1	217.6	203.6	14.04	15.495		
2,500.0	2,462.9	2,456.7	2,380.1	8.0	10.3	-56.39	110.3	442.9	238.3	223.3	15.06	15.831		
2,600.0	2,559.1	2,554.5	2,469.3	8.5	11.1	-56.64	120.5	481.7	259.1	243.0	16.08	16.113		
2,700.0	2,655.3	2,652.3	2,558.6	9.1	11.9	-56.86	130.7	520.5	279.8	262.7	17.11	16.352		
2,800.0	2,751.5	2,750.2	2,647.8	9.7	12.8	-57.05	140.9	559.3	300.6	282.4	18.15	16.557		
2,900.0	2,847.7	2,848.0	2,737.0	10.2	13.6	-57.21	151.1	598.0	321.3	302.1	19.20	16.734		
3,000.0	2,943.9	2,945.8	2,826.2	10.8	14.4	-57.35	161.2	636.8	342.1	321.8	20.25	16.889		
3,100.0	3,040.1	3,043.6	2,915.5	11.4	15.3	-57.48	171.4	675.6	362.8	341.5	21.31	17.024		
3,200.0	3,136.2	3,141.4	3,004.7	11.9	16.1	-57.59	181.6	714.4	383.6	361.2	22.37	17.143		
3,300.0	3,232.4	3,239.3	3,093.9	12.5	17.0	-57.69	191.8	753.2	404.3	380.9	23.44	17.249		
3,400.0	3,328.6	3,337.1	3,183.1	13.1	17.8	-57.78	202.0	792.0	425.1	400.5	24.51	17.344		
3,500.0	3,424.8	3,434.9	3,272.4	13.7	18.6	-57.87	212.1	830.8	445.8	420.2	25.58	17.429		
3,600.0	3,521.0	3,532.7	3,361.6	14.2	19.5	-57.94	222.3	869.5	466.6	439.9	26.65	17.505		
3,700.0	3,617.2	3,630.5	3,450.8	14.8	20.3	-58.01	232.5	908.3	487.3	459.6	27.73	17.574		
3,800.0	3,713.4	3,728.4	3,540.0	15.4	21.2	-58.08	242.7	947.1	508.1	479.3	28.81	17.637		
3,900.0	3,809.5	3,828.2	3,629.3	16.0	22.0	-58.13	252.9	985.9	528.8	498.9	29.89	17.695		
4,000.0	3,905.7	3,924.0	3,718.5	16.5	22.9	-58.19	263.0	1,024.7	549.6	518.6	30.97	17.747		
4,100.0	4,001.9	4,021.8	3,807.7	17.1	23.7	-58.24	273.2	1,063.5	570.3	538.3	32.05	17.796		
4,200.0	4,098.1	4,119.6	3,896.9	17.7	24.6	-58.28	283.4	1,102.2	591.1	558.0	33.13	17.840		
4,300.0	4,194.3	4,217.5	3,986.2	18.3	25.4	-58.33	293.6	1,141.0	611.9	577.6	34.22	17.881		
4,400.0	4,290.5	4,315.3	4,075.4	18.9	26.3	-58.37	303.8	1,179.8	632.6	597.3	35.30	17.919		
4,500.0	4,386.7	4,413.1	4,164.6	19.5	27.1	-58.41	313.9	1,218.6	653.4	617.0	36.39	17.955		
4,600.0	4,482.8	4,510.9	4,253.8	20.0	28.0	-58.44	324.1	1,257.4	674.1	636.7	37.48	17.988		
4,700.0	4,579.0	4,608.8	4,343.1	20.6	28.8	-58.48	334.3	1,296.2	694.9	656.3	38.57	18.018		
4,800.0	4,675.2	4,706.6	4,432.3	21.2	29.7	-58.51	344.5	1,335.0	715.7	676.0	39.65	18.047		
4,900.0	4,771.4	4,804.4	4,521.5	21.8	30.5	-58.54	354.7	1,373.7	736.4	695.7	40.74	18.074		
5,000.0	4,867.6	4,902.2	4,610.7	22.4	31.4	-58.58	364.8	1,412.5	757.2	715.3	41.83	18.099		
5,050.7	4,916.3	4,951.8	4,655.9	22.7	31.8	-58.58	370.0	1,432.2	767.7	725.3	42.39	18.111		
5,100.0	4,963.9	5,000.0	4,699.9	22.9	32.2	-58.75	375.0	1,451.3	778.2	735.2	42.92	18.129		
5,200.0	5,061.0	5,097.4	4,788.7	23.3	33.1	-58.95	385.1	1,489.9	800.7	756.8	43.86	18.257		
5,300.0	5,158.8	5,212.0	4,893.7	23.7	34.0	-58.94	396.8	1,534.5	824.4	779.7	44.69	18.445		
5,400.0	5,257.3	5,340.7	5,013.4	24.0	34.8	-58.80	408.8	1,580.0	846.5	801.2	45.37	18.657		
5,500.0	5,356.4	5,471.1	5,136.9	24.2	35.5	-58.61	419.5	1,620.7	868.8	820.9	45.94	18.868		
5,600.0	5,455.8	5,603.3	5,263.8	24.5	36.1	-58.35	428.8	1,656.4	885.2	838.8	46.39	19.082		
5,700.0	5,555.6	5,737.0	5,393.7	24.6	36.7	-58.03	436.8	1,686.7	901.5	854.8	46.71	19.301		
5,800.0	5,655.5	5,872.2	5,526.5	24.8	37.1	-57.66	443.3	1,711.3	915.8	868.9	46.91	19.524		
5,844.5	5,700.0	5,932.7	5,586.3	24.8	37.3	43.72	445.6	1,720.4	921.5	874.6	46.96	19.624		
5,900.0	5,755.5	6,008.8	5,661.7	24.9	37.5	44.04	448.2	1,730.1	927.8	880.7	47.01	19.736		
6,000.0	5,855.5	6,146.9	5,799.2	25.0	37.7	44.46	451.5	1,742.6	935.8	888.7	47.14	19.852		
6,100.0	5,955.5	6,285.9	5,938.1	25.1	37.9	44.66	453.1	1,748.8	939.8	892.4	47.34	19.854		
6,200.0	6,055.5	6,403.4	6,055.5	25.2	38.0	44.68	453.3	1,749.5	940.2	892.6	47.56	19.767		
6,300.0	6,155.5	6,503.4	6,155.5	25.3	38.1	44.68	453.3	1,749.5	940.2	892.4	47.80	19.671		
6,400.0	6,255.5	6,603.4	6,255.5	25.4	38.2	44.68	453.3	1,749.5	940.2	892.2	48.03	19.575		
6,500.0	6,355.5	6,703.4	6,355.5	25.5	38.2	44.68	453.3	1,749.5	940.2	891.9	48.27	19.479		
6,600.0	6,455.5	6,803.4	6,455.5	25.7	38.3	44.68	453.3	1,749.5	940.2	891.7	48.51	19.383		
6,700.0	6,555.5	6,903.4	6,555.5	25.8	38.4	44.68	453.3	1,749.5	940.2	891.4	48.75	19.286		
6,800.0	6,655.5	7,003.4	6,655.5	25.9	38.5	44.68	453.3	1,749.5	940.2	891.2	49.00	19.189		

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

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design SRC Margil 13-34D Pad Sec.34-T4N-R68W - SRC Margil 23-34D - Wellbore #1 - Plan #1 (6-07-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
6,900.0	6,755.5	7,103.4	6,755.5	26.0	38.6	44.68	453.3	1,749.5	940.2	890.9	49.24	19.092		
7,000.0	6,855.5	7,203.4	6,855.5	26.1	38.7	44.68	453.3	1,749.5	940.2	890.7	49.50	18.995		
7,100.0	6,955.5	7,303.4	6,955.5	26.3	38.7	44.68	453.3	1,749.5	940.2	890.4	48.75	18.898		
7,200.0	7,055.5	7,403.4	7,055.5	26.4	38.8	44.68	453.3	1,749.5	940.2	890.2	50.01	18.801		
7,300.0	7,155.5	7,503.4	7,155.5	26.5	38.9	44.68	453.3	1,749.5	940.2	889.9	50.27	18.703		
7,400.0	7,255.5	7,603.4	7,255.5	26.6	39.0	44.68	453.3	1,749.5	940.2	889.7	50.53	18.606		
7,500.0	7,355.5	7,703.4	7,355.5	26.8	39.1	44.68	453.3	1,749.5	940.2	889.4	50.80	18.509		
7,600.0	7,455.5	7,803.4	7,455.5	26.9	39.2	44.68	453.3	1,749.5	940.2	889.1	51.06	18.412		
7,700.0	7,555.5	7,903.4	7,555.5	27.0	39.3	44.68	453.3	1,749.5	940.2	888.9	51.33	18.315		
7,800.0	7,655.5	8,003.4	7,655.5	27.2	39.4	44.68	453.3	1,749.5	940.2	888.6	51.61	18.218		
7,900.0	7,755.5	8,103.4	7,755.5	27.3	39.5	44.68	453.3	1,749.5	940.2	888.3	51.88	18.122		
8,000.0	7,855.5	8,203.4	7,855.5	27.4	39.6	44.68	453.3	1,749.5	940.2	888.0	52.16	18.026		
8,084.5	7,940.0	8,287.9	7,940.0	27.5	39.6	44.68	453.3	1,749.5	940.2	887.9	52.34	17.964		

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design SRC Margil 13-34D Pad Sec.34-T4N-R68W - SRC Margil 24-34D - Wellbore #1 - Plan #1 (6-07-11)													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	-152.01	-17.9	-9.5	20.2					
100.0	100.0	99.0	99.0	0.1	0.1	-152.01	-17.9	-9.5	20.2	20.0	0.22	90.393		
200.0	200.0	199.0	199.0	0.3	0.3	-152.01	-17.9	-9.5	20.2	19.5	0.67	30.081		
300.0	300.0	299.0	299.0	0.6	0.6	-152.01	-17.9	-9.5	20.2	19.1	1.12	18.024		
400.0	400.0	399.0	399.0	0.8	0.8	-152.01	-17.9	-9.5	20.2	18.6	1.57	12.887		
500.0	500.0	499.0	499.0	1.0	1.0	-152.01	-17.9	-9.5	20.2	18.2	2.02	10.005		
600.0	600.0	599.0	599.0	1.2	1.2	-152.01	-17.9	-9.5	20.2	17.7	2.47	8.184		
700.0	700.0	699.0	699.0	1.5	1.5	-152.01	-17.9	-9.5	20.2	17.3	2.92	6.924		
800.0	800.0	799.0	799.0	1.7	1.7	-153.20	-18.0	-9.1	20.2	16.8	3.36	6.014		
816.8	816.8	815.8	815.8	1.7	1.7	-154.15	-18.2	-8.8	20.2	16.8	3.43	5.891 CC		
900.0	900.0	898.9	898.8	1.9	1.9	-162.91	-19.5	-6.0	20.4	16.7	3.78	5.414 ES		
1,000.0	1,000.0	998.4	998.1	2.1	2.1	179.49	-22.5	0.2	22.6	18.4	4.20	5.368 SF		
1,100.0	1,100.0	1,097.6	1,096.7	2.3	2.3	62.49	-27.0	9.5	27.9	23.3	4.63	6.020		
1,200.0	1,199.8	1,196.4	1,194.6	2.5	2.6	53.26	-33.0	21.7	35.2	30.2	5.05	6.969		
1,300.0	1,299.5	1,294.9	1,291.6	2.8	2.9	48.19	-40.4	37.0	43.7	38.2	5.49	7.952		
1,400.0	1,398.7	1,393.0	1,387.6	3.0	3.2	45.53	-49.2	55.2	52.8	46.9	5.96	8.872		
1,500.0	1,497.5	1,490.8	1,482.6	3.3	3.6	44.29	-59.4	76.2	62.5	56.1	6.45	9.690		
1,600.0	1,595.6	1,588.3	1,576.4	3.6	4.1	43.93	-70.9	100.1	72.7	65.7	7.00	10.386		
1,700.0	1,693.1	1,685.5	1,668.9	3.9	4.6	44.12	-83.8	128.7	83.3	75.7	7.81	10.946		
1,793.8	1,783.7	1,776.3	1,754.4	4.3	5.2	44.63	-97.1	154.2	93.6	85.4	8.25	11.346		
1,800.0	1,789.6	1,782.3	1,760.1	4.4	5.2	44.68	-98.1	156.1	94.4	86.1	8.30	11.367		
1,900.0	1,885.8	1,878.5	1,849.6	4.8	5.9	44.89	-113.5	188.0	107.2	98.1	9.07	11.823		
2,000.0	1,982.0	1,974.0	1,937.1	5.3	6.6	44.28	-130.1	222.3	122.9	113.0	9.84	12.487		
2,100.0	2,078.2	2,069.6	2,023.4	5.8	7.4	43.17	-148.0	259.1	141.3	130.7	10.61	13.317		
2,200.0	2,174.4	2,167.7	2,111.7	6.4	8.3	42.15	-166.6	297.6	160.5	149.1	11.40	14.081		
2,300.0	2,270.6	2,265.8	2,200.0	6.9	9.2	41.34	-185.3	336.1	179.8	167.6	12.20	14.738		
2,400.0	2,366.8	2,363.9	2,288.3	7.4	10.0	40.69	-203.9	374.6	199.1	186.1	13.01	15.303		
2,500.0	2,462.9	2,462.0	2,376.6	8.0	10.9	40.16	-222.6	413.1	218.4	204.6	13.83	15.795		
2,600.0	2,559.1	2,560.1	2,464.8	8.5	11.8	39.71	-241.2	451.6	237.7	223.1	14.65	16.224		
2,700.0	2,655.3	2,658.2	2,553.1	9.1	12.8	39.33	-259.9	490.1	257.1	241.6	15.48	16.603		
2,800.0	2,751.5	2,756.3	2,641.4	9.7	13.7	39.00	-278.5	528.6	276.4	260.1	16.32	16.938		
2,900.0	2,847.7	2,854.3	2,729.7	10.2	14.6	38.72	-297.2	567.1	295.8	278.6	17.16	17.237		
3,000.0	2,943.9	2,952.4	2,818.0	10.8	15.5	38.47	-315.8	605.6	315.1	297.1	18.00	17.505		
3,100.0	3,040.1	3,050.5	2,906.3	11.4	16.4	38.25	-334.5	644.1	334.5	315.6	18.85	17.746		
3,200.0	3,136.2	3,148.6	2,994.5	11.9	17.3	38.05	-353.1	682.6	353.8	334.1	19.70	17.964		
3,300.0	3,232.4	3,246.7	3,082.8	12.5	18.3	37.87	-371.8	721.1	373.2	352.7	20.55	18.163		
3,400.0	3,328.6	3,344.8	3,171.1	13.1	19.2	37.72	-390.4	759.6	392.6	371.2	21.40	18.343		
3,500.0	3,424.8	3,442.9	3,259.4	13.7	20.1	37.57	-409.1	798.1	412.0	389.7	22.26	18.509		
3,600.0	3,521.0	3,541.0	3,347.7	14.2	21.0	37.44	-427.7	836.6	431.4	408.2	23.12	18.661		
3,700.0	3,617.2	3,639.1	3,435.9	14.8	22.0	37.32	-446.4	875.1	450.7	426.8	23.97	18.801		
3,800.0	3,713.4	3,737.2	3,524.2	15.4	22.9	37.21	-465.0	913.6	470.1	445.3	24.83	18.930		
3,900.0	3,809.5	3,835.3	3,612.5	16.0	23.8	37.11	-483.7	952.1	489.5	463.8	25.70	19.050		
4,000.0	3,905.7	3,933.4	3,700.8	16.5	24.7	37.02	-502.3	990.6	508.9	482.3	26.56	19.161		
4,100.0	4,001.9	4,031.5	3,789.1	17.1	25.7	36.93	-521.0	1,029.1	528.3	500.9	27.42	19.265		
4,200.0	4,098.1	4,129.6	3,877.3	17.7	26.6	36.85	-539.6	1,067.6	547.7	519.4	28.29	19.362		
4,300.0	4,194.3	4,227.7	3,965.6	18.3	27.5	36.77	-558.3	1,106.1	567.1	537.9	29.15	19.453		
4,400.0	4,290.5	4,325.8	4,053.9	18.9	28.5	36.70	-576.9	1,144.6	586.5	556.4	30.02	19.537		
4,500.0	4,386.7	4,423.9	4,142.2	19.5	29.4	36.64	-595.6	1,183.1	605.9	575.0	30.88	19.617		
4,600.0	4,482.8	4,522.0	4,230.5	20.0	30.3	36.58	-614.2	1,221.6	625.2	593.5	31.75	19.692		
4,700.0	4,579.0	4,620.1	4,318.7	20.6	31.3	36.52	-632.9	1,260.1	644.6	612.0	32.62	19.763		
4,800.0	4,675.2	4,718.2	4,407.0	21.2	32.2	36.47	-651.5	1,298.6	664.0	630.5	33.49	19.830		
4,900.0	4,771.4	4,816.3	4,495.3	21.8	33.1	36.41	-670.2	1,337.1	683.4	649.1	34.36	19.893		

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

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design SRC Margil 13-34D Pad Sec.34-T4N-R68W - SRC Margil 24-34D - Wellbore #1 - Plan #1 (6-07-11)														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
5,000.0	4,867.6	4,914.4	4,583.8	22.4	34.1	36.37	-688.8	1,375.6	702.8	667.6	35.23	19.952			
5,050.7	4,916.3	4,964.1	4,628.3	22.7	34.5	36.34	-698.3	1,395.1	712.7	677.0	35.67	19.981			
5,100.0	4,963.9	5,012.5	4,671.8	22.9	35.0	36.42	-707.4	1,414.0	722.8	686.5	36.09	20.022			
5,200.0	5,061.0	5,109.9	4,759.5	23.3	35.9	36.48	-726.0	1,452.3	744.7	707.9	36.84	20.216			
5,300.0	5,158.8	5,206.7	4,846.6	23.7	36.8	36.44	-744.4	1,490.3	769.6	732.1	37.48	20.531			
5,400.0	5,257.3	5,334.4	4,962.6	24.0	37.9	36.19	-767.6	1,538.2	795.4	757.3	38.06	20.895			
5,500.0	5,356.4	5,465.6	5,084.3	24.2	38.7	35.91	-789.1	1,582.6	819.8	781.3	38.53	21.279			
5,600.0	5,455.8	5,598.9	5,209.9	24.5	39.5	35.60	-808.4	1,622.5	842.9	804.1	38.90	21.671			
5,700.0	5,555.6	5,734.0	5,339.3	24.6	40.2	35.26	-825.4	1,657.6	864.6	825.4	39.16	22.079			
5,800.0	5,655.5	5,871.1	5,472.2	24.8	40.7	34.89	-839.9	1,687.4	884.7	845.4	39.32	22.499			
5,844.5	5,700.0	5,932.6	5,532.4	24.8	41.0	135.91	-845.5	1,699.0	893.2	853.8	39.36	22.690			
5,900.0	5,755.5	6,010.0	5,608.5	24.9	41.2	135.59	-851.7	1,711.9	902.9	863.4	39.45	22.886			
6,000.0	5,855.5	6,151.3	5,748.2	25.0	41.6	135.15	-860.8	1,730.6	916.8	877.1	39.64	23.125			
6,100.0	5,955.5	6,294.3	5,890.5	25.1	41.9	134.86	-866.9	1,743.2	926.0	886.1	39.88	23.218			
6,200.0	6,055.5	6,438.3	6,034.4	25.2	42.0	134.72	-869.9	1,748.4	930.6	890.4	40.16	23.173			
6,300.0	6,155.5	6,558.5	6,154.5	25.3	42.1	134.71	-870.3	1,750.1	931.1	890.6	40.44	23.023			
6,400.0	6,255.5	6,658.5	6,254.5	25.4	42.2	134.71	-870.3	1,750.1	931.1	890.4	40.71	22.873			
6,500.0	6,355.5	6,758.5	6,354.5	25.5	42.3	134.71	-870.3	1,750.1	931.1	890.1	40.98	22.722			
6,600.0	6,455.5	6,858.5	6,454.5	25.7	42.3	134.71	-870.3	1,750.1	931.1	889.8	41.25	22.572			
6,700.0	6,555.5	6,958.5	6,554.5	25.8	42.4	134.71	-870.3	1,750.1	931.1	889.5	41.52	22.422			
6,800.0	6,655.5	7,058.5	6,654.5	25.9	42.5	134.71	-870.3	1,750.1	931.1	889.3	41.80	22.273			
6,900.0	6,755.5	7,158.5	6,754.5	26.0	42.5	134.71	-870.3	1,750.1	931.1	889.0	42.08	22.124			
7,000.0	6,855.5	7,258.5	6,854.5	26.1	42.6	134.71	-870.3	1,750.1	931.1	888.7	42.37	21.975			
7,100.0	6,955.5	7,358.5	6,954.5	26.3	42.7	134.71	-870.3	1,750.1	931.1	888.4	42.66	21.827			
7,200.0	7,055.5	7,458.5	7,054.5	26.4	42.8	134.71	-870.3	1,750.1	931.1	888.1	42.95	21.680			
7,300.0	7,155.5	7,558.5	7,154.5	26.5	42.8	134.71	-870.3	1,750.1	931.1	887.8	43.24	21.533			
7,400.0	7,255.5	7,658.5	7,254.5	26.6	42.9	134.71	-870.3	1,750.1	931.1	887.5	43.53	21.387			
7,500.0	7,355.5	7,758.5	7,354.5	26.8	43.0	134.71	-870.3	1,750.1	931.1	887.2	43.83	21.242			
7,600.0	7,455.5	7,858.5	7,454.5	26.9	43.1	134.71	-870.3	1,750.1	931.1	886.9	44.13	21.097			
7,700.0	7,555.5	7,958.5	7,554.5	27.0	43.2	134.71	-870.3	1,750.1	931.1	886.6	44.44	20.953			
7,800.0	7,655.5	8,058.5	7,654.5	27.2	43.2	134.71	-870.3	1,750.1	931.1	886.3	44.74	20.810			
7,900.0	7,755.5	8,158.5	7,754.5	27.3	43.3	134.71	-870.3	1,750.1	931.1	886.0	45.05	20.668			
8,000.0	7,855.5	8,258.5	7,854.5	27.4	43.4	134.71	-870.3	1,750.1	931.1	885.7	45.36	20.527			
8,084.5	7,940.0	8,343.0	7,939.0	27.5	43.5	134.71	-870.3	1,750.1	931.1	885.4	45.62	20.408			

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

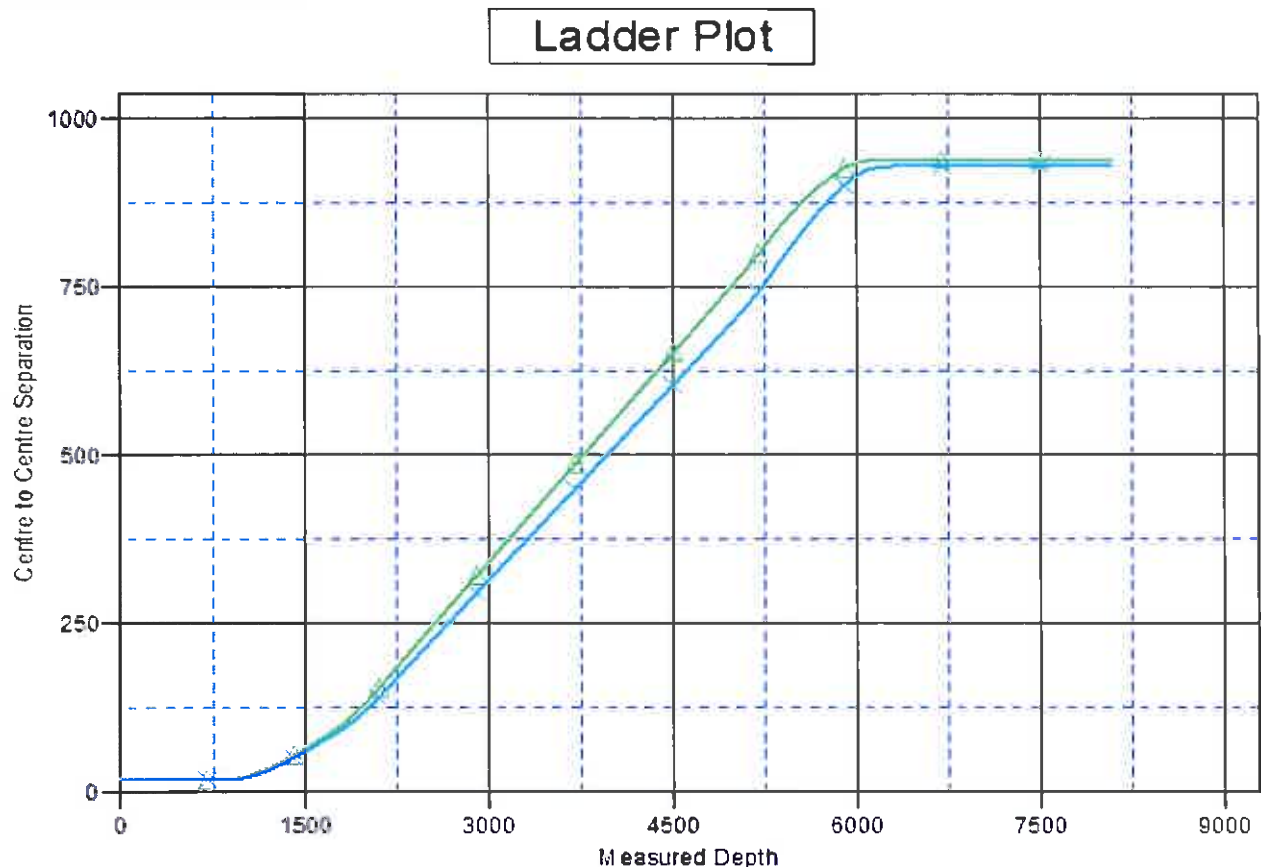
Reference Depths are relative to WELL @ 5146.0ft (Original Well Elev) Coordinates are relative to: SRC Margil 34BD

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°



LEGEND

Margil 23-34D, Wellbore #1, Plan #1 (6-07-11) V X SRC Margil 24-34D, Wellbore #1, Plan #1 (6-07-11) V0

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 13-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 34BD
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (6-07-11)

Local Co-ordinate Reference: Well SRC Margil 34BD
TVD Reference: WELL @ 5146.0ft (Original Well Elev)
MD Reference: WELL @ 5146.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 5146.0ft (Original Well Elev) Coordinates are relative to: SRC Margil 34BD

Offset Depths are relative to Offset Datum

Central Meridian Is -105.500000 °

Coordinate System Is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

