

ENSIGN

Directional

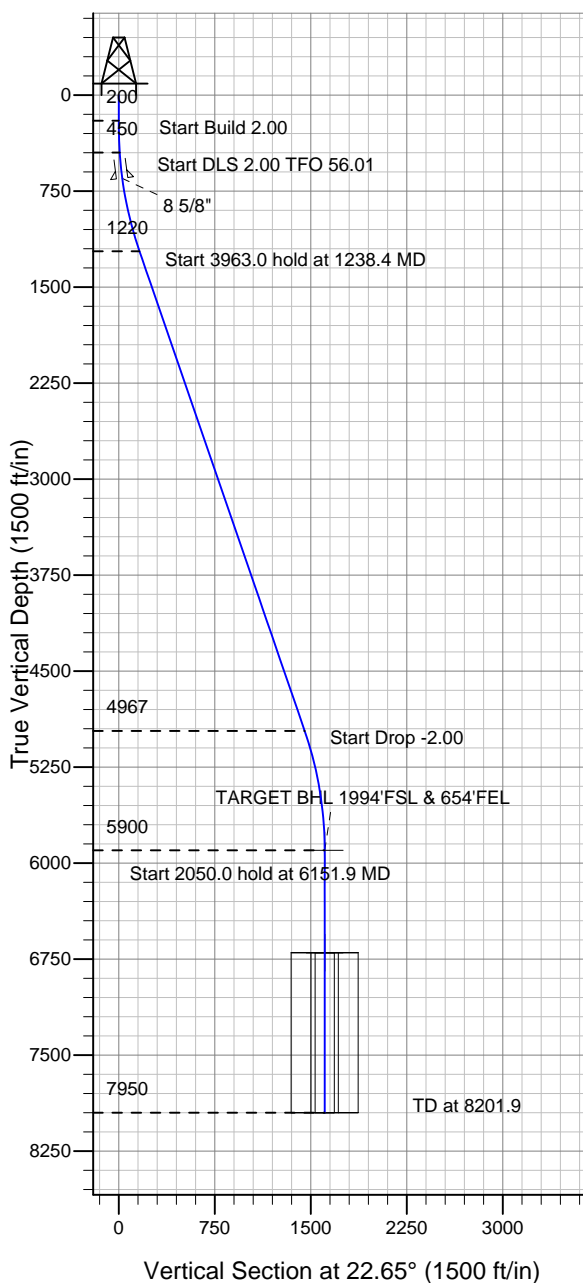
Well Name: SRC Margil 43-34D

Surface Location: SRC Margil 34-34D Pad Sec.34-T4N-R68W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

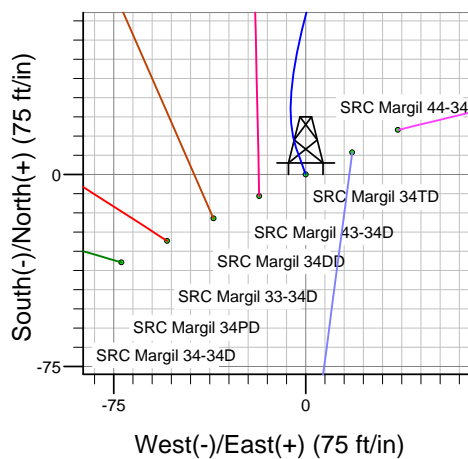
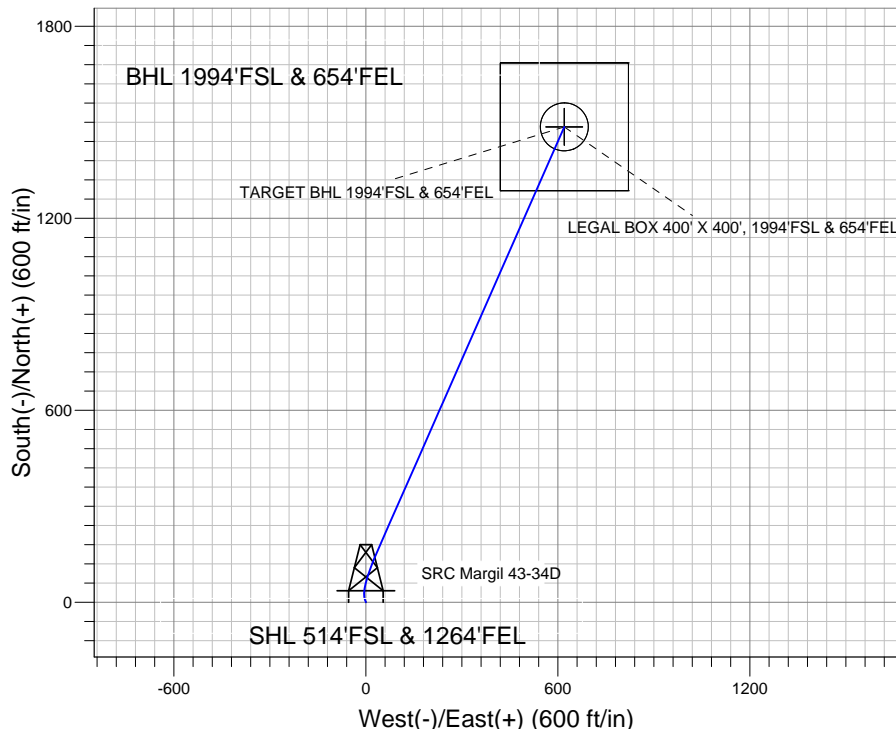
Ground Elevation: 5091.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1339447.14	3143888.81	40.264033	-104.984394	

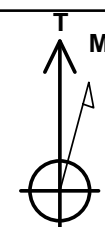
Original Well Elev WELL @ 5104.0ft (Original Well Elev)



Synergy Resources



SRC Margil 34-34D Pad Sec.34-T4N-R68W
SRC Margil 43-34D
Plan #1 (12-28-11)
10:58, December 29 2011



Azimuths to True North
Magnetic North: 8.90°

Magnetic Field
Strength: 52977.4snT
Dip Angle: 66.89°
Date: 12/28/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1994'FSL & 654'FEL	5900.0	1485.3	619.8	40.268110	-104.982173	Point
LEGAL BOX 400' X 400', 1994'FSL & 654'FEL	6700.0	1485.3	619.8	40.268110	-104.982173	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1994'FSL & 654'FEL	6700.0	1485.3	619.8	40.268110	-104.982173	Circle (Radius: 75.0)

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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	450.0	5.00	340.00	449.7	10.2	-3.7	2.00	340.00	8.0	
4	1238.4	19.01	23.77	1220.0	161.0	36.5	2.00	56.01	162.6	
5	5201.4	19.01	23.77	4966.9	1342.3	556.8	0.00	0.00	1453.2	
6	6151.9	0.00	0.00	5900.0	1485.3	619.8	2.00	180.00	1609.4	TARGET BHL 1994'FSL & 654'FEL
7	8201.9	0.00	0.00	7950.0	1485.3	619.8	0.00	0.00	1609.4	



Directional

Synergy Resources

SEC.34-T4N-R68W

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

SRC Margil 43-34D

Wellbore #1

Plan: Plan #1 (12-28-11)

Standard Planning Report

29 December, 2011

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Company:	Synergy Resources	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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 34-34D Pad Sec.34-T4N-R68W											
Site Position:						Northing:			1,339,412.39ft			Latitude:			40.263939		
From:			Lat/Long			Easting:			3,143,817.01ft			Longitude:			-104.984652		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.33 °		

Well	SRC Margil 43-34D					
Well Position	+N/-S	34.3 ft	Northing:	1,339,447.14 ft	Latitude:	40.264033
	+E/-W	72.0 ft	Easting:	3,143,888.81 ft	Longitude:	-104.984394
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,091.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/28/2011	8.90	66.89	52,977

Design	Plan #1 (12-28-11)			
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	22.65

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
450.0	5.00	340.00	449.7	10.2	-3.7	2.00	2.00	0.00	340.00	
1,238.4	19.01	23.77	1,220.0	161.0	36.5	2.00	1.78	5.55	56.01	
5,201.4	19.01	23.77	4,966.9	1,342.3	556.8	0.00	0.00	0.00	0.00	
6,151.9	0.00	0.00	5,900.0	1,485.3	619.8	2.00	-2.00	0.00	180.00	TARGET BHL 1994
8,201.9	0.00	0.00	7,950.0	1,485.3	619.8	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Company:	Synergy Resources	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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	0.80	340.00	240.0	0.3	-0.1	0.2	2.00	2.00	0.00
280.0	1.60	340.00	280.0	1.0	-0.4	0.8	2.00	2.00	0.00
320.0	2.40	340.00	320.0	2.4	-0.9	1.8	2.00	2.00	0.00
360.0	3.20	340.00	359.9	4.2	-1.5	3.3	2.00	2.00	0.00
400.0	4.00	340.00	399.8	6.6	-2.4	5.1	2.00	2.00	0.00
440.0	4.80	340.00	439.7	9.4	-3.4	7.4	2.00	2.00	0.00
450.0	5.00	340.00	449.7	10.2	-3.7	8.0	2.00	2.00	0.00
480.0	5.36	345.33	479.6	12.8	-4.5	10.1	2.00	1.19	17.78
520.0	5.90	351.37	519.4	16.7	-5.3	13.3	2.00	1.35	15.09
560.0	6.49	356.35	559.1	21.0	-5.8	17.1	2.00	1.48	12.46
600.0	7.12	0.48	598.9	25.7	-5.9	21.4	2.00	1.58	10.32
640.0	7.79	3.92	638.5	30.9	-5.7	26.3	2.00	1.66	8.60
651.6	7.99	4.81	650.0	32.5	-5.6	27.8	2.00	1.70	7.68
8 5/8"									
680.0	8.48	6.82	678.1	36.5	-5.1	31.7	2.00	1.73	7.06
720.0	9.18	9.28	717.6	42.6	-4.3	37.7	2.00	1.76	6.15
760.0	9.90	11.39	757.1	49.1	-3.1	44.1	2.00	1.80	5.27
800.0	10.63	13.21	796.4	56.1	-1.6	51.1	2.00	1.83	4.56
840.0	11.37	14.80	835.7	63.5	0.3	58.7	2.00	1.85	3.97
880.0	12.12	16.19	874.9	71.3	2.5	66.8	2.00	1.87	3.49
920.0	12.87	17.43	913.9	79.6	5.0	75.4	2.00	1.89	3.09
960.0	13.63	18.53	952.9	88.3	7.8	84.5	2.00	1.90	2.75
1,000.0	14.40	19.52	991.7	97.5	11.0	94.2	2.00	1.91	2.47
1,040.0	15.16	20.41	1,030.3	107.1	14.4	104.4	2.00	1.92	2.22
1,080.0	15.93	21.21	1,068.9	117.1	18.3	115.1	2.00	1.93	2.01
1,120.0	16.71	21.94	1,107.3	127.5	22.4	126.3	2.00	1.93	1.83
1,160.0	17.48	22.61	1,145.5	138.4	26.9	138.1	2.00	1.94	1.67
1,200.0	18.26	23.23	1,183.6	149.7	31.6	150.4	2.00	1.94	1.54
1,238.4	19.01	23.77	1,220.0	161.0	36.5	162.6	2.00	1.95	1.42
1,240.0	19.01	23.77	1,221.5	161.5	36.7	163.2	0.00	0.00	0.00
1,280.0	19.01	23.77	1,259.3	173.4	42.0	176.2	0.00	0.00	0.00
1,320.0	19.01	23.77	1,297.1	185.3	47.2	189.2	0.00	0.00	0.00
1,360.0	19.01	23.77	1,334.9	197.2	52.5	202.2	0.00	0.00	0.00
1,400.0	19.01	23.77	1,372.7	209.2	57.7	215.3	0.00	0.00	0.00
1,440.0	19.01	23.77	1,410.6	221.1	63.0	228.3	0.00	0.00	0.00
1,480.0	19.01	23.77	1,448.4	233.0	68.2	241.3	0.00	0.00	0.00
1,520.0	19.01	23.77	1,486.2	244.9	73.5	254.3	0.00	0.00	0.00
1,560.0	19.01	23.77	1,524.0	256.9	78.8	267.4	0.00	0.00	0.00
1,600.0	19.01	23.77	1,561.8	268.8	84.0	280.4	0.00	0.00	0.00
1,640.0	19.01	23.77	1,599.7	280.7	89.3	293.4	0.00	0.00	0.00
1,680.0	19.01	23.77	1,637.5	292.6	94.5	306.4	0.00	0.00	0.00
1,720.0	19.01	23.77	1,675.3	304.5	99.8	319.5	0.00	0.00	0.00
1,760.0	19.01	23.77	1,713.1	316.5	105.0	332.5	0.00	0.00	0.00
1,800.0	19.01	23.77	1,750.9	328.4	110.3	345.5	0.00	0.00	0.00
1,840.0	19.01	23.77	1,788.7	340.3	115.5	358.6	0.00	0.00	0.00
1,880.0	19.01	23.77	1,826.6	352.2	120.8	371.6	0.00	0.00	0.00
1,920.0	19.01	23.77	1,864.4	364.2	126.0	384.6	0.00	0.00	0.00
1,960.0	19.01	23.77	1,902.2	376.1	131.3	397.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Company:	Synergy Resources	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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)
2,000.0	19.01	23.77	1,940.0	388.0	136.5	410.7	0.00	0.00	0.00
2,040.0	19.01	23.77	1,977.8	399.9	141.8	423.7	0.00	0.00	0.00
2,080.0	19.01	23.77	2,015.7	411.9	147.0	436.7	0.00	0.00	0.00
2,120.0	19.01	23.77	2,053.5	423.8	152.3	449.7	0.00	0.00	0.00
2,160.0	19.01	23.77	2,091.3	435.7	157.5	462.8	0.00	0.00	0.00
2,200.0	19.01	23.77	2,129.1	447.6	162.8	475.8	0.00	0.00	0.00
2,240.0	19.01	23.77	2,166.9	459.6	168.0	488.8	0.00	0.00	0.00
2,280.0	19.01	23.77	2,204.8	471.5	173.3	501.8	0.00	0.00	0.00
2,320.0	19.01	23.77	2,242.6	483.4	178.5	514.9	0.00	0.00	0.00
2,360.0	19.01	23.77	2,280.4	495.3	183.8	527.9	0.00	0.00	0.00
2,400.0	19.01	23.77	2,318.2	507.2	189.0	540.9	0.00	0.00	0.00
2,440.0	19.01	23.77	2,356.0	519.2	194.3	553.9	0.00	0.00	0.00
2,480.0	19.01	23.77	2,393.8	531.1	199.5	567.0	0.00	0.00	0.00
2,520.0	19.01	23.77	2,431.7	543.0	204.8	580.0	0.00	0.00	0.00
2,560.0	19.01	23.77	2,469.5	554.9	210.0	593.0	0.00	0.00	0.00
2,600.0	19.01	23.77	2,507.3	566.9	215.3	606.1	0.00	0.00	0.00
2,640.0	19.01	23.77	2,545.1	578.8	220.5	619.1	0.00	0.00	0.00
2,680.0	19.01	23.77	2,582.9	590.7	225.8	632.1	0.00	0.00	0.00
2,720.0	19.01	23.77	2,620.8	602.6	231.0	645.1	0.00	0.00	0.00
2,760.0	19.01	23.77	2,658.6	614.6	236.3	658.2	0.00	0.00	0.00
2,800.0	19.01	23.77	2,696.4	626.5	241.5	671.2	0.00	0.00	0.00
2,840.0	19.01	23.77	2,734.2	638.4	246.8	684.2	0.00	0.00	0.00
2,880.0	19.01	23.77	2,772.0	650.3	252.1	697.2	0.00	0.00	0.00
2,920.0	19.01	23.77	2,809.9	662.2	257.3	710.3	0.00	0.00	0.00
2,960.0	19.01	23.77	2,847.7	674.2	262.6	723.3	0.00	0.00	0.00
3,000.0	19.01	23.77	2,885.5	686.1	267.8	736.3	0.00	0.00	0.00
3,040.0	19.01	23.77	2,923.3	698.0	273.1	749.3	0.00	0.00	0.00
3,080.0	19.01	23.77	2,961.1	709.9	278.3	762.4	0.00	0.00	0.00
3,120.0	19.01	23.77	2,998.9	721.9	283.6	775.4	0.00	0.00	0.00
3,160.0	19.01	23.77	3,036.8	733.8	288.8	788.4	0.00	0.00	0.00
3,200.0	19.01	23.77	3,074.6	745.7	294.1	801.4	0.00	0.00	0.00
3,240.0	19.01	23.77	3,112.4	757.6	299.3	814.5	0.00	0.00	0.00
3,280.0	19.01	23.77	3,150.2	769.6	304.6	827.5	0.00	0.00	0.00
3,320.0	19.01	23.77	3,188.0	781.5	309.8	840.5	0.00	0.00	0.00
3,360.0	19.01	23.77	3,225.9	793.4	315.1	853.5	0.00	0.00	0.00
3,400.0	19.01	23.77	3,263.7	805.3	320.3	866.6	0.00	0.00	0.00
3,440.0	19.01	23.77	3,301.5	817.3	325.6	879.6	0.00	0.00	0.00
3,480.0	19.01	23.77	3,339.3	829.2	330.8	892.6	0.00	0.00	0.00
3,520.0	19.01	23.77	3,377.1	841.1	336.1	905.7	0.00	0.00	0.00
3,560.0	19.01	23.77	3,414.9	853.0	341.3	918.7	0.00	0.00	0.00
3,600.0	19.01	23.77	3,452.8	864.9	346.6	931.7	0.00	0.00	0.00
3,640.0	19.01	23.77	3,490.6	876.9	351.8	944.7	0.00	0.00	0.00
3,680.0	19.01	23.77	3,528.4	888.8	357.1	957.8	0.00	0.00	0.00
3,720.0	19.01	23.77	3,566.2	900.7	362.3	970.8	0.00	0.00	0.00
3,760.0	19.01	23.77	3,604.0	912.6	367.6	983.8	0.00	0.00	0.00
3,800.0	19.01	23.77	3,641.9	924.6	372.8	996.8	0.00	0.00	0.00
3,840.0	19.01	23.77	3,679.7	936.5	378.1	1,009.9	0.00	0.00	0.00
3,880.0	19.01	23.77	3,717.5	948.4	383.3	1,022.9	0.00	0.00	0.00
3,920.0	19.01	23.77	3,755.3	960.3	388.6	1,035.9	0.00	0.00	0.00
3,960.0	19.01	23.77	3,793.1	972.3	393.8	1,048.9	0.00	0.00	0.00
4,000.0	19.01	23.77	3,831.0	984.2	399.1	1,062.0	0.00	0.00	0.00
4,040.0	19.01	23.77	3,868.8	996.1	404.3	1,075.0	0.00	0.00	0.00
4,080.0	19.01	23.77	3,906.6	1,008.0	409.6	1,088.0	0.00	0.00	0.00
4,120.0	19.01	23.77	3,944.4	1,020.0	414.8	1,101.0	0.00	0.00	0.00

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Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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)
4,160.0	19.01	23.77	3,982.2	1,031.9	420.1	1,114.1	0.00	0.00	0.00
4,200.0	19.01	23.77	4,020.0	1,043.8	425.4	1,127.1	0.00	0.00	0.00
4,240.0	19.01	23.77	4,057.9	1,055.7	430.6	1,140.1	0.00	0.00	0.00
4,280.0	19.01	23.77	4,095.7	1,067.6	435.9	1,153.2	0.00	0.00	0.00
4,320.0	19.01	23.77	4,133.5	1,079.6	441.1	1,166.2	0.00	0.00	0.00
4,360.0	19.01	23.77	4,171.3	1,091.5	446.4	1,179.2	0.00	0.00	0.00
4,400.0	19.01	23.77	4,209.1	1,103.4	451.6	1,192.2	0.00	0.00	0.00
4,440.0	19.01	23.77	4,247.0	1,115.3	456.9	1,205.3	0.00	0.00	0.00
4,480.0	19.01	23.77	4,284.8	1,127.3	462.1	1,218.3	0.00	0.00	0.00
4,520.0	19.01	23.77	4,322.6	1,139.2	467.4	1,231.3	0.00	0.00	0.00
4,560.0	19.01	23.77	4,360.4	1,151.1	472.6	1,244.3	0.00	0.00	0.00
4,600.0	19.01	23.77	4,398.2	1,163.0	477.9	1,257.4	0.00	0.00	0.00
4,640.0	19.01	23.77	4,436.1	1,175.0	483.1	1,270.4	0.00	0.00	0.00
4,680.0	19.01	23.77	4,473.9	1,186.9	488.4	1,283.4	0.00	0.00	0.00
4,720.0	19.01	23.77	4,511.7	1,198.8	493.6	1,296.4	0.00	0.00	0.00
4,760.0	19.01	23.77	4,549.5	1,210.7	498.9	1,309.5	0.00	0.00	0.00
4,800.0	19.01	23.77	4,587.3	1,222.7	504.1	1,322.5	0.00	0.00	0.00
4,840.0	19.01	23.77	4,625.1	1,234.6	509.4	1,335.5	0.00	0.00	0.00
4,880.0	19.01	23.77	4,663.0	1,246.5	514.6	1,348.5	0.00	0.00	0.00
4,920.0	19.01	23.77	4,700.8	1,258.4	519.9	1,361.6	0.00	0.00	0.00
4,960.0	19.01	23.77	4,738.6	1,270.3	525.1	1,374.6	0.00	0.00	0.00
5,000.0	19.01	23.77	4,776.4	1,282.3	530.4	1,387.6	0.00	0.00	0.00
5,040.0	19.01	23.77	4,814.2	1,294.2	535.6	1,400.7	0.00	0.00	0.00
5,080.0	19.01	23.77	4,852.1	1,306.1	540.9	1,413.7	0.00	0.00	0.00
5,120.0	19.01	23.77	4,889.9	1,318.0	546.1	1,426.7	0.00	0.00	0.00
5,160.0	19.01	23.77	4,927.7	1,330.0	551.4	1,439.7	0.00	0.00	0.00
5,200.0	19.01	23.77	4,965.5	1,341.9	556.6	1,452.8	0.00	0.00	0.00
5,201.4	19.01	23.77	4,966.9	1,342.3	556.8	1,453.2	0.00	0.00	0.00
5,240.0	18.24	23.77	5,003.4	1,353.6	561.8	1,465.5	2.00	-2.00	0.00
5,280.0	17.44	23.77	5,041.5	1,364.8	566.7	1,477.8	2.00	-2.00	0.00
5,320.0	16.64	23.77	5,079.7	1,375.5	571.5	1,489.5	2.00	-2.00	0.00
5,360.0	15.84	23.77	5,118.1	1,385.8	576.0	1,500.7	2.00	-2.00	0.00
5,400.0	15.04	23.77	5,156.7	1,395.5	580.3	1,511.3	2.00	-2.00	0.00
5,440.0	14.24	23.77	5,195.4	1,404.8	584.3	1,521.4	2.00	-2.00	0.00
5,480.0	13.44	23.77	5,234.2	1,413.5	588.2	1,531.0	2.00	-2.00	0.00
5,520.0	12.64	23.77	5,273.2	1,421.8	591.8	1,540.0	2.00	-2.00	0.00
5,560.0	11.84	23.77	5,312.3	1,429.5	595.2	1,548.5	2.00	-2.00	0.00
5,600.0	11.04	23.77	5,351.5	1,436.8	598.4	1,556.4	2.00	-2.00	0.00
5,640.0	10.24	23.77	5,390.8	1,443.5	601.4	1,563.8	2.00	-2.00	0.00
5,680.0	9.44	23.77	5,430.2	1,449.8	604.2	1,570.7	2.00	-2.00	0.00
5,720.0	8.64	23.77	5,469.7	1,455.6	606.7	1,576.9	2.00	-2.00	0.00
5,760.0	7.84	23.77	5,509.3	1,460.8	609.0	1,582.7	2.00	-2.00	0.00
5,800.0	7.04	23.77	5,549.0	1,465.5	611.1	1,587.8	2.00	-2.00	0.00
5,840.0	6.24	23.77	5,588.7	1,469.8	613.0	1,592.5	2.00	-2.00	0.00
5,880.0	5.44	23.77	5,628.5	1,473.5	614.6	1,596.5	2.00	-2.00	0.00
5,920.0	4.64	23.77	5,668.3	1,476.7	616.0	1,600.0	2.00	-2.00	0.00
5,960.0	3.84	23.77	5,708.2	1,479.4	617.2	1,603.0	2.00	-2.00	0.00
6,000.0	3.04	23.77	5,748.2	1,481.6	618.2	1,605.4	2.00	-2.00	0.00
6,040.0	2.24	23.77	5,788.1	1,483.3	618.9	1,607.2	2.00	-2.00	0.00
6,080.0	1.44	23.77	5,828.1	1,484.5	619.4	1,608.5	2.00	-2.00	0.00
6,120.0	0.64	23.77	5,868.1	1,485.1	619.7	1,609.2	2.00	-2.00	0.00
6,151.9	0.00	0.00	5,900.0	1,485.3	619.8	1,609.4	2.00	-2.00	0.00
TARGET BHL 1994'FSL & 654'FEL									
6,160.0	0.00	0.00	5,908.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Company:	Synergy Resources	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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)
6,200.0	0.00	0.00	5,948.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,240.0	0.00	0.00	5,988.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,280.0	0.00	0.00	6,028.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,068.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,108.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,148.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,188.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,228.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,268.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,308.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,348.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,388.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,428.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,468.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,508.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,548.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,588.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,628.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,668.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
6,951.9	0.00	0.00	6,700.0	1,485.3	619.8	1,609.4	0.00	0.00	0.00
TARGET CIRCLE 1994'FSL & 654'FEL - LEGAL BOX 400' X 400', 1994'FSL & 654'FEL									
6,960.0	0.00	0.00	6,708.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,748.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,040.0	0.00	0.00	6,788.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,828.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,120.0	0.00	0.00	6,868.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,160.0	0.00	0.00	6,908.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,200.0	0.00	0.00	6,948.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,240.0	0.00	0.00	6,988.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,280.0	0.00	0.00	7,028.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,320.0	0.00	0.00	7,068.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,360.0	0.00	0.00	7,108.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,148.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,440.0	0.00	0.00	7,188.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,480.0	0.00	0.00	7,228.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,520.0	0.00	0.00	7,268.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,560.0	0.00	0.00	7,308.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,348.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,640.0	0.00	0.00	7,388.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,680.0	0.00	0.00	7,428.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,720.0	0.00	0.00	7,468.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,760.0	0.00	0.00	7,508.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,548.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,840.0	0.00	0.00	7,588.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,880.0	0.00	0.00	7,628.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,920.0	0.00	0.00	7,668.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
7,960.0	0.00	0.00	7,708.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,748.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,040.0	0.00	0.00	7,788.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,080.0	0.00	0.00	7,828.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,120.0	0.00	0.00	7,868.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,160.0	0.00	0.00	7,908.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00
8,200.0	0.00	0.00	7,948.1	1,485.3	619.8	1,609.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Company:	Synergy Resources	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Project:	SEC.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	North Reference:	True
Well:	SRC Margil 43-34D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-28-11)		

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)
8,201.9	0.00	0.00	7,950.0	1,485.3	619.8	1,609.4	0.00	0.00	0.00

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
651.6	650.0	8 5/8"	8-5/8	12-1/4	



Directional

Synergy Resources

SEC.34-T4N-R68W

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

SRC Margil 43-34D

Wellbore #1

Plan #1 (12-28-11)

Anticollision Report

29 December, 2011

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Reference Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 43-34D	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 (12-28-11)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (12-28-11)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 12/29/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	8,201.9	Plan #1 (12-28-11) (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 34-34D Pad Sec.34-T4N-R68W						
SRC Margil 34DD - Wellbore #1 - Plan #1 (12-28-11)	200.0	200.0	20.0	19.3	29.694	CC
SRC Margil 34DD - Wellbore #1 - Plan #1 (12-28-11)	300.0	300.0	20.3	19.1	18.025	ES
SRC Margil 34DD - Wellbore #1 - Plan #1 (12-28-11)	500.0	499.5	26.7	24.6	12.977	SF
SRC Margil 34TD - Wellbore #1 - Plan #1 (12-28-11)	304.9	304.9	20.0	18.9	17.463	CC, ES
SRC Margil 34TD - Wellbore #1 - Plan #1 (12-28-11)	500.0	499.5	23.9	21.8	11.678	SF

Offset Design												
SRC Margil 34-34D Pad Sec.34-T4N-R68W - SRC Margil 34DD - Wellbore #1 - Plan #1 (12-28-11)												
Survey Program: 0-MWD												
Reference		Offset		Semi Major Axis			Distance					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	-115.04	-8.5	-18.1	20.0			
100.0	100.0	100.0	100.0	0.1	0.1	-115.04	-8.5	-18.1	20.0	19.8	0.22	89.083
200.0	200.0	200.0	200.0	0.3	0.3	-115.04	-8.5	-18.1	20.0	19.3	0.67	29.694 CC
300.0	300.0	300.0	300.0	0.6	0.6	-99.96	-8.5	-18.1	20.3	19.1	1.12	18.025 ES
400.0	399.8	399.8	399.8	0.8	0.8	-113.61	-8.5	-18.1	21.8	20.2	1.58	13.765
450.0	449.7	449.7	449.7	0.9	0.9	-122.31	-8.5	-18.1	23.6	21.8	1.82	12.997
500.0	499.5	499.5	499.5	1.0	1.0	-138.73	-8.5	-18.1	26.7	24.6	2.05	12.977 SF
600.0	598.9	598.9	598.9	1.3	1.2	-160.61	-8.5	-18.1	36.3	33.8	2.52	14.428
700.0	697.9	697.9	697.9	1.6	1.5	-172.41	-8.5	-18.1	49.8	46.8	2.97	16.753
800.0	796.4	796.4	796.4	1.9	1.7	-178.78	-8.5	-18.1	66.6	63.2	3.43	19.440
900.0	894.4	894.4	894.4	2.3	1.9	177.69	-8.5	-18.1	86.7	82.8	3.88	22.314
1,000.0	991.7	991.7	991.7	2.7	2.1	175.71	-8.5	-18.1	109.9	105.5	4.34	25.304
1,100.0	1,088.1	1,092.2	1,092.2	3.2	2.3	174.82	-7.0	-18.2	134.9	130.1	4.80	28.082
1,200.0	1,183.6	1,193.9	1,193.8	3.8	2.6	174.84	-1.9	-18.3	160.0	154.7	5.27	30.376
1,238.4	1,220.0	1,233.2	1,232.9	4.0	2.7	175.02	1.0	-18.3	169.6	164.2	5.45	31.138
1,300.0	1,278.2	1,296.5	1,296.0	4.4	2.8	176.23	6.8	-18.5	184.5	178.8	5.76	32.055
1,400.0	1,372.7	1,400.5	1,399.2	5.0	3.1	178.17	19.5	-18.8	206.2	200.0	6.28	32.845
1,500.0	1,467.3	1,505.7	1,503.1	5.6	3.3	-179.85	36.0	-19.1	224.9	218.0	6.83	32.929
1,600.0	1,561.8	1,609.5	1,604.9	6.2	3.7	-177.83	55.9	-19.6	240.6	233.2	7.40	32.496
1,700.0	1,656.4	1,708.0	1,701.5	6.8	4.0	-176.06	75.7	-20.0	255.8	247.8	8.00	31.983
1,800.0	1,750.9	1,806.6	1,798.0	7.5	4.3	-174.49	95.4	-20.4	271.2	262.6	8.61	31.493
1,900.0	1,845.5	1,905.1	1,894.6	8.1	4.7	-173.09	115.2	-20.9	286.8	277.6	9.24	31.033

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 Margil 43-34D
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Reference Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 43-34D	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 (12-28-11)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,000.0	1,940.0	2,003.7	1,991.1	8.7	5.1	-171.83	135.0	-21.3	302.6	292.7	9.89	30.593		
2,100.0	2,034.6	2,102.2	2,087.6	9.4	5.4	-170.70	154.7	-21.7	318.5	307.9	10.55	30.179		
2,200.0	2,129.1	2,200.7	2,184.2	10.0	5.8	-169.68	174.5	-22.2	334.4	323.2	11.23	29.790		
2,300.0	2,223.7	2,299.3	2,280.7	10.7	6.2	-168.74	194.2	-22.6	350.5	338.6	11.91	29.424		
2,400.0	2,318.2	2,397.8	2,377.3	11.3	6.6	-167.89	214.0	-23.0	366.7	354.1	12.61	29.082		
2,500.0	2,412.8	2,496.4	2,473.8	11.9	7.0	-167.12	233.7	-23.5	382.9	369.6	13.31	28.761		
2,600.0	2,507.3	2,594.9	2,570.3	12.6	7.4	-166.40	253.5	-23.9	399.2	385.2	14.03	28.461		
2,700.0	2,601.8	2,693.5	2,666.9	13.2	7.8	-165.74	273.3	-24.4	415.6	400.8	14.75	28.180		
2,800.0	2,696.4	2,792.0	2,763.4	13.9	8.2	-165.13	293.0	-24.8	432.0	416.5	15.47	27.917		
2,900.0	2,790.9	2,890.6	2,860.0	14.5	8.6	-164.57	312.8	-25.2	448.5	432.2	16.21	27.671		
3,000.0	2,885.5	2,989.1	2,956.5	15.2	9.0	-164.04	332.5	-25.7	464.9	448.0	16.94	27.440		
3,100.0	2,980.0	3,087.6	3,053.1	15.8	9.4	-163.56	352.3	-26.1	481.5	463.8	17.69	27.224		
3,200.0	3,074.6	3,186.2	3,149.6	16.4	9.8	-163.10	372.0	-26.5	498.0	479.6	18.43	27.020		
3,300.0	3,169.1	3,284.7	3,246.1	17.1	10.3	-162.67	391.8	-27.0	514.6	495.4	19.18	26.829		
3,400.0	3,263.7	3,383.3	3,342.7	17.7	10.7	-162.27	411.6	-27.4	531.2	511.3	19.93	26.649		
3,500.0	3,358.2	3,481.8	3,439.2	18.4	11.1	-161.90	431.3	-27.8	547.9	527.2	20.69	26.479		
3,600.0	3,452.8	3,580.4	3,535.8	19.0	11.5	-161.54	451.1	-28.3	564.5	543.1	21.45	26.319		
3,700.0	3,547.3	3,678.9	3,632.3	19.7	11.9	-161.21	470.8	-28.7	581.2	559.0	22.21	26.167		
3,800.0	3,641.9	3,777.5	3,728.9	20.3	12.3	-160.89	490.6	-29.1	597.9	574.9	22.98	26.024		
3,900.0	3,736.4	3,876.0	3,825.4	21.0	12.8	-160.60	510.3	-29.6	614.6	590.9	23.74	25.888		
4,000.0	3,831.0	3,974.5	3,921.9	21.6	13.2	-160.31	530.1	-30.0	631.3	606.8	24.51	25.760		
4,100.0	3,925.5	4,073.1	4,018.5	22.3	13.6	-160.05	549.9	-30.5	648.1	622.8	25.28	25.638		
4,200.0	4,020.0	4,171.6	4,115.0	22.9	14.0	-159.79	569.6	-30.9	664.8	638.8	26.05	25.522		
4,300.0	4,114.6	4,270.2	4,211.6	23.5	14.4	-159.55	589.4	-31.3	681.6	654.8	26.82	25.412		
4,400.0	4,209.1	4,368.7	4,308.1	24.2	14.8	-159.32	609.1	-31.8	698.4	670.8	27.60	25.307		
4,500.0	4,303.7	4,467.3	4,404.7	24.8	15.3	-159.10	628.9	-32.2	715.2	686.8	28.37	25.207		
4,600.0	4,398.2	4,565.8	4,501.2	25.5	15.7	-158.89	648.7	-32.6	732.0	702.8	29.15	25.112		
4,700.0	4,492.8	4,664.4	4,597.7	26.1	16.1	-158.69	668.4	-33.1	748.8	718.9	29.93	25.021		
4,800.0	4,587.3	4,762.9	4,694.3	26.8	16.5	-158.50	688.2	-33.5	765.6	734.9	30.71	24.934		
4,900.0	4,681.9	4,861.4	4,790.8	27.4	17.0	-158.32	707.9	-33.9	782.4	751.0	31.49	24.850		
5,000.0	4,776.4	4,960.0	4,887.4	28.1	17.4	-158.14	727.7	-34.4	799.3	767.0	32.27	24.771		
5,100.0	4,871.0	5,058.5	4,983.9	28.7	17.8	-157.98	747.4	-34.8	816.1	783.1	33.05	24.694		
5,201.4	4,966.9	5,148.9	5,072.5	29.4	18.2	-157.85	765.2	-35.2	833.5	799.8	33.77	24.680		
5,300.0	5,060.6	5,229.6	5,152.1	29.9	18.4	-157.94	778.9	-35.5	850.6	816.2	34.40	24.726		
5,400.0	5,156.7	5,311.4	5,233.1	30.4	18.6	-158.06	790.5	-35.8	866.8	831.9	34.92	24.821		
5,500.0	5,253.7	5,400.0	5,321.0	30.8	18.9	-158.22	800.5	-36.0	881.7	846.3	35.38	24.921		
5,600.0	5,351.5	5,474.8	5,395.6	31.1	19.0	-158.40	806.8	-36.1	895.2	859.5	35.73	25.055		
5,700.0	5,450.0	5,566.3	5,476.9	31.4	19.2	-158.61	811.5	-36.2	907.6	871.6	36.02	25.195		
5,800.0	5,549.0	5,637.7	5,558.3	31.7	19.3	-158.84	813.8	-36.3	918.6	882.4	36.24	25.351		
5,900.0	5,648.4	5,727.8	5,648.4	31.9	19.4	-159.11	814.1	-36.3	928.2	891.8	36.40	25.499		
6,000.0	5,748.2	5,827.6	5,748.2	32.1	19.5	-159.31	814.1	-36.3	934.8	898.2	36.56	25.566		
6,100.0	5,848.1	5,927.5	5,848.1	32.2	19.7	-159.41	814.1	-36.3	938.1	901.4	36.71	25.555		
6,151.9	5,900.0	5,979.4	5,900.0	32.2	19.8	-135.65	814.1	-36.3	938.6	901.8	36.78	25.518		
6,200.0	5,948.1	6,027.5	5,948.1	32.3	19.8	-135.65	814.1	-36.3	938.6	901.6	36.92	25.421		
6,300.0	6,048.1	6,127.5	6,048.1	32.4	20.0	-135.65	814.1	-36.3	938.6	901.3	37.22	25.215		
6,400.0	6,148.1	6,227.5	6,148.1	32.5	20.1	-135.65	814.1	-36.3	938.6	901.0	37.53	25.010		
6,500.0	6,248.1	6,327.5	6,248.1	32.5	20.3	-135.65	814.1	-36.3	938.6	900.7	37.83	24.807		
6,600.0	6,348.1	6,427.5	6,348.1	32.6	20.4	-135.65	814.1	-36.3	938.6	900.4	38.14	24.605		
6,700.0	6,448.1	6,527.5	6,448.1	32.7	20.5	-135.65	814.1	-36.3	938.6	900.1	38.46	24.405		
6,800.0	6,548.1	6,627.5	6,548.1	32.8	20.7	-135.65	814.1	-36.3	938.6	899.8	38.77	24.207		
6,900.0	6,648.1	6,727.5	6,648.1	32.9	20.8	-135.65	814.1	-36.3	938.6	899.5	39.09	24.010		
7,000.0	6,748.1	6,827.5	6,748.1	33.0	21.0	-135.65	814.1	-36.3	938.6	899.2	39.41	23.814		

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 Margil 43-34D
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Reference Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 43-34D	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 (12-28-11)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
SRC Margil 34-34D Pad Sec.34-T4N-R68W - SRC Margil 34DD - Wellbore #1 - Plan #1 (12-28-11)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,100.0	6,848.1	6,927.5	6,848.1	33.1	21.2	-135.65	814.1	-36.3	938.6	898.8	39.74	23.621	
7,200.0	6,948.1	7,027.5	6,948.1	33.2	21.3	-135.65	814.1	-36.3	938.6	898.5	40.06	23.429	
7,300.0	7,048.1	7,127.5	7,048.1	33.3	21.5	-135.65	814.1	-36.3	938.6	898.2	40.39	23.238	
7,400.0	7,148.1	7,227.5	7,148.1	33.4	21.6	-135.65	814.1	-36.3	938.6	897.8	40.72	23.050	
7,500.0	7,248.1	7,327.5	7,248.1	33.5	21.8	-135.65	814.1	-36.3	938.6	897.5	41.05	22.863	
7,600.0	7,348.1	7,427.5	7,348.1	33.6	21.9	-135.65	814.1	-36.3	938.6	897.2	41.39	22.678	
7,700.0	7,448.1	7,527.5	7,448.1	33.7	22.1	-135.65	814.1	-36.3	938.6	896.8	41.72	22.495	
7,800.0	7,548.1	7,627.5	7,548.1	33.8	22.3	-135.65	814.1	-36.3	938.6	896.5	42.06	22.314	
7,900.0	7,648.1	7,727.5	7,648.1	33.9	22.4	-135.65	814.1	-36.3	938.6	896.2	42.40	22.135	
8,000.0	7,748.1	7,827.5	7,748.1	34.0	22.6	-135.65	814.1	-36.3	938.6	895.8	42.75	21.957	
8,100.0	7,848.1	7,927.5	7,848.1	34.1	22.7	-135.65	814.1	-36.3	938.6	895.5	43.09	21.782	
8,201.9	7,950.0	8,029.4	7,950.0	34.2	22.9	-135.65	814.1	-36.3	938.6	895.1	43.44	21.605	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Reference Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 43-34D	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 (12-28-11)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	64.52	8.6	18.1	20.1					
100.0	100.0	100.0	100.0	0.1	0.1	64.52	8.6	18.1	20.1	19.9	0.22	89.406		
200.0	200.0	200.0	200.0	0.3	0.3	64.52	8.6	18.1	20.1	19.4	0.67	29.802		
300.0	300.0	300.0	300.0	0.6	0.6	89.50	8.6	18.1	20.0	18.9	1.12	17.811		
304.9	304.9	304.9	304.9	0.6	0.6	90.00	8.6	18.1	20.0	18.9	1.15	17.463 CC, ES		
400.0	399.8	399.8	399.8	0.8	0.8	104.16	8.6	18.1	20.6	19.1	1.58	13.070		
450.0	449.7	449.7	449.7	0.9	0.9	114.10	8.6	18.1	21.9	20.1	1.81	12.096		
500.0	499.5	499.5	499.5	1.0	1.0	116.06	8.6	18.1	23.9	21.8	2.04	11.678 SF		
600.0	598.9	598.9	598.9	1.3	1.2	124.66	8.6	18.1	29.5	26.9	2.51	11.735		
700.0	697.9	697.9	697.9	1.6	1.5	134.98	8.6	18.1	38.4	35.4	2.98	12.907		
800.0	796.4	796.4	796.4	1.9	1.7	143.76	8.6	18.1	51.4	47.9	3.44	14.931		
900.0	894.4	894.4	894.4	2.3	1.9	150.36	8.6	18.1	68.3	64.4	3.90	17.508		
1,000.0	991.7	991.7	991.7	2.7	2.1	155.17	8.6	18.1	89.1	84.8	4.36	20.421		
1,100.0	1,088.1	1,088.1	1,088.1	3.2	2.3	158.71	8.6	18.1	113.6	108.8	4.83	23.535		
1,200.0	1,183.6	1,183.6	1,183.6	3.8	2.5	161.36	8.6	18.1	141.7	136.4	5.29	26.767		
1,238.4	1,220.0	1,220.0	1,220.0	4.0	2.6	162.20	8.6	18.1	153.5	148.0	5.47	28.030		
1,300.0	1,278.2	1,278.2	1,278.2	4.4	2.8	164.22	8.6	18.1	172.7	167.0	5.77	29.925		
1,400.0	1,372.7	1,372.7	1,372.7	5.0	3.0	166.70	8.6	18.1	204.4	198.1	6.26	32.638		
1,500.0	1,467.3	1,462.2	1,462.2	5.6	3.2	168.41	8.0	18.1	237.0	230.3	6.73	35.191		
1,600.0	1,561.8	1,547.9	1,547.9	6.2	3.3	169.61	4.9	17.6	272.5	265.3	7.20	37.861		
1,700.0	1,656.4	1,631.7	1,631.5	6.8	3.5	170.47	-0.6	16.9	310.8	303.1	7.65	40.600		
1,800.0	1,750.9	1,713.5	1,712.9	7.5	3.6	171.09	-8.3	15.9	351.8	343.7	8.11	43.353		
1,900.0	1,845.5	1,793.2	1,792.0	8.1	3.8	171.51	-18.1	14.7	395.3	386.7	8.57	46.105		
2,000.0	1,940.0	1,870.8	1,868.7	8.7	3.9	171.81	-29.6	13.1	441.3	432.2	9.04	48.839		
2,100.0	2,034.6	1,955.6	1,952.3	9.4	4.2	172.04	-43.9	11.3	489.0	479.5	9.51	51.417		
2,200.0	2,129.1	2,043.5	2,038.8	10.0	4.4	172.24	-58.7	9.4	536.7	526.8	9.98	53.775		
2,300.0	2,223.7	2,131.3	2,125.4	10.7	4.6	172.40	-73.6	7.4	584.5	574.1	10.46	55.896		
2,400.0	2,318.2	2,219.1	2,211.9	11.3	4.9	172.54	-88.4	5.5	632.3	621.4	10.94	57.798		
2,500.0	2,412.8	2,307.0	2,298.5	11.9	5.2	172.66	-103.3	3.5	680.1	668.7	11.43	59.522		
2,600.0	2,507.3	2,394.8	2,385.0	12.6	5.5	172.76	-118.1	1.6	727.9	716.0	11.92	61.087		
2,700.0	2,601.8	2,482.6	2,471.6	13.2	5.7	172.85	-133.0	-0.3	775.7	763.3	12.41	62.511		
2,800.0	2,696.4	2,570.5	2,558.1	13.9	6.0	172.93	-147.8	-2.3	823.5	810.6	12.90	63.811		
2,900.0	2,790.9	2,658.3	2,644.7	14.5	6.3	173.01	-162.7	-4.2	871.3	857.9	13.40	65.003		
3,000.0	2,885.5	2,746.1	2,731.2	15.2	6.6	173.07	-177.5	-6.1	919.0	905.1	13.90	66.097		
3,100.0	2,980.0	2,834.0	2,817.8	15.8	7.0	173.13	-192.4	-8.1	966.8	952.4	14.41	67.105		
3,200.0	3,074.6	2,921.8	2,904.3	16.4	7.3	173.18	-207.2	-10.0	1,014.6	999.7	14.91	68.035		
3,300.0	3,169.1	3,009.7	2,990.9	17.1	7.6	173.23	-222.0	-11.9	1,062.4	1,047.0	15.42	68.896		
3,400.0	3,263.7	3,097.5	3,077.4	17.7	7.9	173.27	-236.9	-13.9	1,110.2	1,094.3	15.93	69.695		
3,500.0	3,358.2	3,185.3	3,164.0	18.4	8.2	173.31	-251.7	-15.8	1,158.0	1,141.6	16.44	70.436		
3,600.0	3,452.8	3,273.2	3,250.5	19.0	8.5	173.35	-266.6	-17.7	1,205.8	1,188.9	16.95	71.127		
3,700.0	3,547.3	3,361.0	3,337.1	19.7	8.9	173.38	-281.4	-19.7	1,253.6	1,236.1	17.47	71.771		
3,800.0	3,641.9	3,448.8	3,423.6	20.3	9.2	173.41	-296.3	-21.6	1,301.4	1,283.4	17.98	72.374		
3,900.0	3,736.4	3,536.7	3,510.2	21.0	9.5	173.44	-311.1	-23.6	1,349.2	1,330.7	18.50	72.938		
4,000.0	3,831.0	3,624.5	3,596.7	21.6	9.9	173.47	-326.0	-25.5	1,397.0	1,378.0	19.02	73.468		
4,100.0	3,925.5	3,712.3	3,683.3	22.3	10.2	173.50	-340.8	-27.4	1,444.8	1,425.3	19.53	73.966		
4,200.0	4,020.0	3,800.2	3,769.8	22.9	10.5	173.52	-355.7	-29.4	1,492.6	1,472.5	20.05	74.434		
4,300.0	4,114.6	3,888.0	3,856.4	23.5	10.9	173.54	-370.5	-31.3	1,540.4	1,519.8	20.57	74.875		
4,400.0	4,209.1	3,975.8	3,942.9	24.2	11.2	173.56	-385.3	-33.2	1,588.2	1,567.1	21.09	75.291		
4,500.0	4,303.7	4,066.8	4,052.3	24.8	11.6	173.59	-400.8	-35.6	1,635.9	1,614.2	21.66	75.519		
4,600.0	4,398.2	4,295.9	4,259.8	25.5	12.1	173.71	-428.7	-38.9	1,679.2	1,656.8	22.39	74.990		
4,700.0	4,492.8	4,518.8	4,482.4	26.1	12.5	173.92	-438.7	-40.2	1,715.8	1,692.7	23.12	74.203		
4,800.0	4,587.3	4,623.7	4,587.3	26.8	12.7	174.05	-438.7	-40.2	1,748.3	1,724.6	23.64	73.954		

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 34-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 43-34D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (12-28-11)

Local Co-ordinate Reference: Well SRC Margil 43-34D
TVD Reference: WELL @ 5104.0ft (Original Well Elev)
MD Reference: WELL @ 5104.0ft (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 34-34D Pad Sec.34-T4N-R68W - SRC Margil 34TD - Wellbore #1 - Plan #1 (12-28-11)												Offset Site Error:	0.0ft
Survey Program: 0-MWD												Offset Well Error:	0.0ft
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
4,900.0	4,681.9	4,718.2	4,681.9	27.4	12.8	174.16	-438.7	-40.2	1,780.7	1,756.5	24.14	73.771	
5,000.0	4,776.4	4,812.7	4,776.4	28.1	13.0	174.26	-438.7	-40.2	1,813.1	1,788.5	24.64	73.592	
5,100.0	4,871.0	4,907.3	4,871.0	28.7	13.1	174.36	-438.7	-40.2	1,845.5	1,820.4	25.14	73.416	
5,201.4	4,966.9	5,003.2	4,966.9	29.4	13.3	174.46	-438.7	-40.2	1,878.4	1,852.8	25.65	73.243	
5,300.0	5,060.6	5,096.9	5,060.6	29.9	13.4	174.61	-438.7	-40.2	1,908.8	1,882.6	26.24	72.746	
5,400.0	5,156.7	5,193.0	5,156.7	30.4	13.6	174.74	-438.7	-40.2	1,936.3	1,909.5	26.78	72.295	
5,500.0	5,253.7	5,290.0	5,253.7	30.8	13.7	174.85	-438.7	-40.2	1,960.5	1,933.2	27.29	71.838	
5,600.0	5,351.5	5,387.8	5,351.5	31.1	13.9	174.94	-438.7	-40.2	1,981.3	1,953.5	27.76	71.376	
5,700.0	5,450.0	5,486.3	5,450.0	31.4	14.1	175.02	-438.7	-40.2	1,998.6	1,970.4	28.18	70.911	
5,800.0	5,549.0	5,585.3	5,549.0	31.7	14.2	175.07	-438.7	-40.2	2,012.5	1,984.0	28.57	70.443	
5,900.0	5,648.4	5,684.7	5,648.4	31.9	14.4	175.12	-438.7	-40.2	2,023.0	1,994.1	28.91	69.971	
6,000.0	5,748.2	5,784.5	5,748.2	32.1	14.6	175.15	-438.7	-40.2	2,030.0	2,000.8	29.21	69.494	
6,100.0	5,848.1	5,884.4	5,848.1	32.2	14.7	175.16	-438.7	-40.2	2,033.6	2,004.1	29.47	69.012	
6,151.9	5,900.0	5,936.3	5,900.0	32.2	14.8	-161.07	-438.7	-40.2	2,034.1	2,004.5	29.58	68.759	
6,200.0	5,948.1	5,984.4	5,948.1	32.3	14.9	-161.07	-438.7	-40.2	2,034.1	2,004.3	29.75	68.370	
6,300.0	6,048.1	6,084.4	6,048.1	32.4	15.1	-161.07	-438.7	-40.2	2,034.1	2,003.9	30.12	67.540	
6,400.0	6,148.1	6,184.4	6,148.1	32.5	15.2	-161.07	-438.7	-40.2	2,034.1	2,003.6	30.48	66.726	
6,500.0	6,248.1	6,284.4	6,248.1	32.5	15.4	-161.07	-438.7	-40.2	2,034.1	2,003.2	30.85	65.926	
6,600.0	6,348.1	6,384.4	6,348.1	32.6	15.6	-161.07	-438.7	-40.2	2,034.1	2,002.8	31.23	65.142	
6,700.0	6,448.1	6,484.4	6,448.1	32.7	15.8	-161.07	-438.7	-40.2	2,034.1	2,002.5	31.60	64.372	
6,800.0	6,548.1	6,584.4	6,548.1	32.8	16.0	-161.07	-438.7	-40.2	2,034.1	2,002.1	31.97	63.616	
6,900.0	6,648.1	6,684.4	6,648.1	32.9	16.1	-161.07	-438.7	-40.2	2,034.1	2,001.7	32.35	62.875	
7,000.0	6,748.1	6,784.4	6,748.1	33.0	16.3	-161.07	-438.7	-40.2	2,034.1	2,001.3	32.73	62.147	
7,100.0	6,848.1	6,884.4	6,848.1	33.1	16.5	-161.07	-438.7	-40.2	2,034.1	2,000.9	33.11	61.433	
7,200.0	6,948.1	6,984.4	6,948.1	33.2	16.7	-161.07	-438.7	-40.2	2,034.1	2,000.6	33.49	60.732	
7,300.0	7,048.1	7,084.4	7,048.1	33.3	16.9	-161.07	-438.7	-40.2	2,034.1	2,000.2	33.88	60.044	
7,400.0	7,148.1	7,184.4	7,148.1	33.4	17.1	-161.07	-438.7	-40.2	2,034.1	1,999.8	34.26	59.369	
7,500.0	7,248.1	7,284.4	7,248.1	33.5	17.2	-161.07	-438.7	-40.2	2,034.1	1,999.4	34.65	58.707	
7,600.0	7,348.1	7,384.4	7,348.1	33.6	17.4	-161.07	-438.7	-40.2	2,034.1	1,999.0	35.04	58.057	
7,700.0	7,448.1	7,484.4	7,448.1	33.7	17.6	-161.07	-438.7	-40.2	2,034.1	1,998.6	35.42	57.419	
7,800.0	7,548.1	7,584.4	7,548.1	33.8	17.8	-161.07	-438.7	-40.2	2,034.1	1,998.2	35.82	56.793	
7,900.0	7,648.1	7,684.4	7,648.1	33.9	18.0	-161.07	-438.7	-40.2	2,034.1	1,997.8	36.21	56.178	
8,000.0	7,748.1	7,784.4	7,748.1	34.0	18.2	-161.07	-438.7	-40.2	2,034.1	1,997.5	36.60	55.574	
8,100.0	7,848.1	7,884.4	7,848.1	34.1	18.4	-161.07	-438.7	-40.2	2,034.1	1,997.1	37.00	54.982	
8,201.9	7,950.0	7,986.3	7,950.0	34.2	18.6	-161.07	-438.7	-40.2	2,034.1	1,996.7	37.40	54.389	

Company: Synergy Resources
Project: SEC.34-T4N-R68W
Reference Site: SRC Margil 34-34D Pad Sec.34-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Margil 43-34D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (12-28-11)

Local Co-ordinate Reference: Well SRC Margil 43-34D
TVD Reference: WELL @ 5104.0ft (Original Well Elev)
MD Reference: WELL @ 5104.0ft (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 @ 5104.0ft (Original Well Elev) Coordinates are relative to: SRC Margil 43-34D
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: 0.33°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Margil 43-34D
Project:	SEC.34-T4N-R68W	TVD Reference:	WELL @ 5104.0ft (Original Well Elev)
Reference Site:	SRC Margil 34-34D Pad Sec.34-T4N-R68W	MD Reference:	WELL @ 5104.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Margil 43-34D	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 (12-28-11)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5104.0ft (Original Well Elev) Coordinates are relative to: SRC Margil 43-34D
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: 0.33°

