

Well Name: **SRC Margil 34-34D**

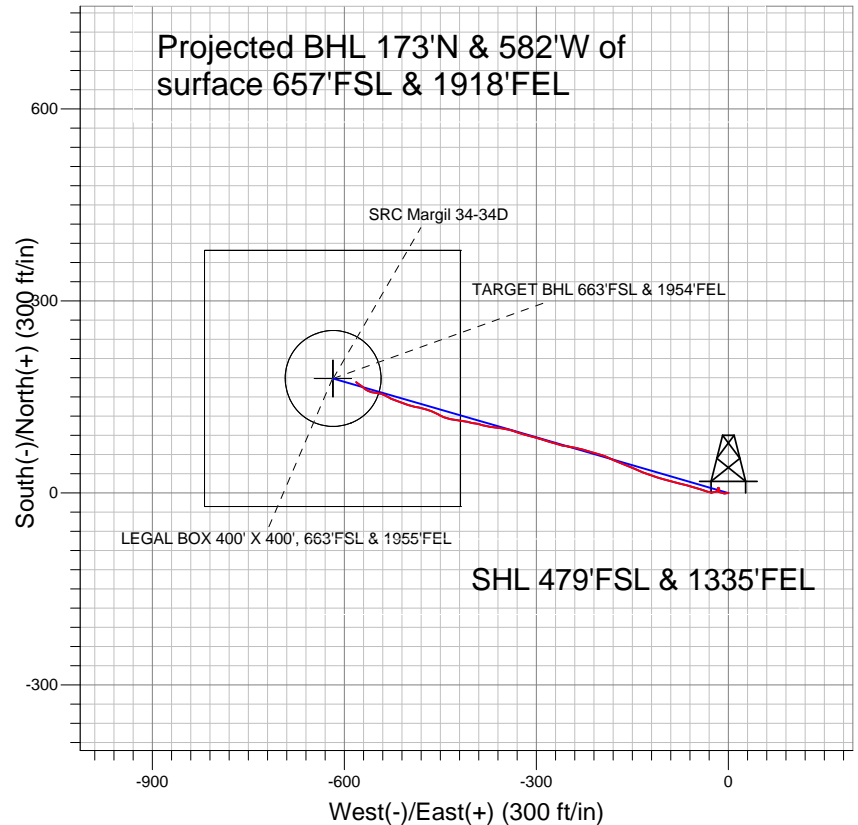
Surface Location: SRC Margil 34-34D Pad Sec.34-T4N-R68W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5090.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1339412.37	3143817.01	40.263939	-104.984652	

Original Well Elev WELL @ 5103.0ft (Original Well Elev)

## Synergy Resources



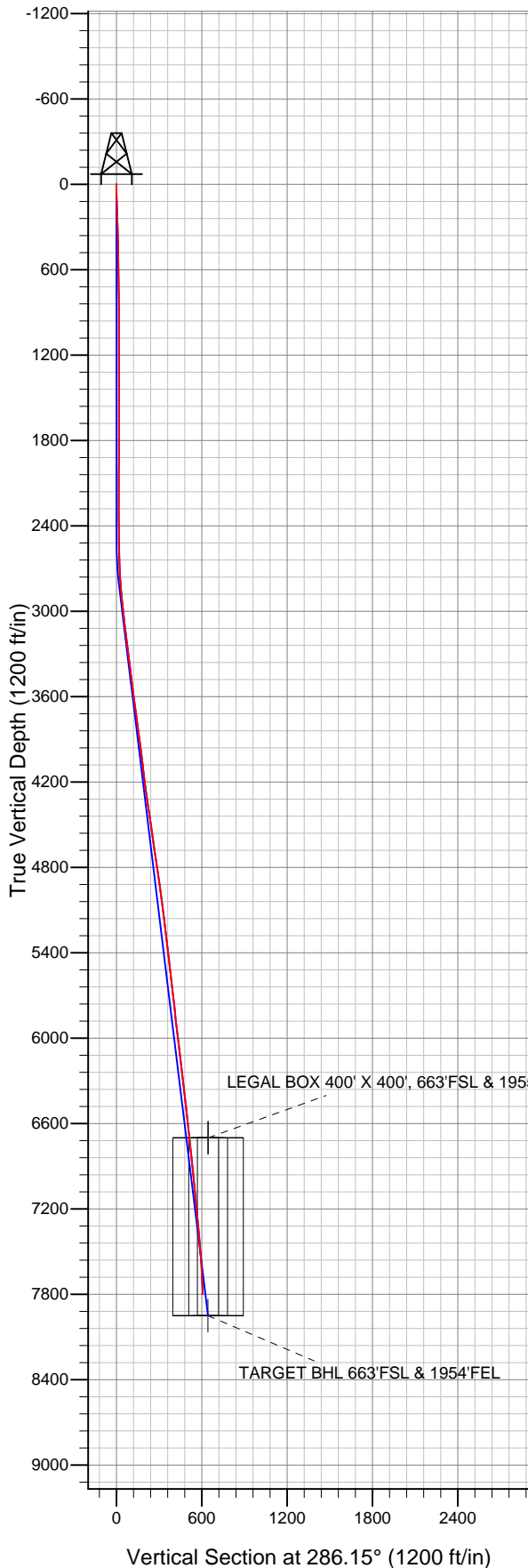
### LEGEND

- + SRC Margil 34-34D, Wellbore #1, Plan #2 (5-23-12) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
 7833'MD & 7797'TVD @ 607'VS  
 2.7 deg Inc 303.4 deg AZ

Project: SEC.34-T4N-R68W  
 Site: SRC Margil 34-34D Pad Sec.34-T4N-R68W  
 Well: SRC Margil 34-34D  
 Plan: Wellbore #1





# **Directional**

## **Synergy Resources**

**SEC.34-T4N-R68W**

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

**SRC Margil 34-34D**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**08 June, 2012**

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Margil 34-34D
<b>Project:</b>	SEC.34-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5103.0ft (Original Well Elev)
<b>Site:</b>	SRC Margil 34-34D Pad Sec.34-T4N-R68W	<b>MD Reference:</b>	WELL @ 5103.0ft (Original Well Elev)
<b>Well:</b>	SRC Margil 34-34D	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.34-T4N-R68W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

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

Well	SRC Margil 34-34D					
Well Position	+N/-S	0.0 ft	Northing:	1,339,412.37 ft	Latitude:	40.263939
	+E/-W	0.0 ft	Easting:	3,143,817.01 ft	Longitude:	-104.984652
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,090.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/23/2012	8.84	66.87	52,935

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	286.15	

Survey Program		Date	6/8/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
89.0	7,833.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey	Wellbore Data									
	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)
Survey A	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	89.0	1.40	265.80	89.0	-0.1	-1.1	1.0	1.57	1.57	0.00
	179.0	1.80	256.70	179.0	-0.5	-3.6	3.3	0.53	0.44	-10.11
	269.0	1.80	272.00	268.9	-0.8	-6.3	5.9	0.53	0.00	17.00
	364.0	1.70	300.60	363.9	0.0	-9.0	8.7	0.92	-0.11	30.11
	456.0	1.20	279.00	455.8	0.9	-11.2	11.0	0.80	-0.54	-23.48
	547.0	1.40	270.90	546.8	1.0	-13.2	13.0	0.30	0.22	-8.90
	639.0	0.90	307.50	638.8	1.5	-14.9	14.7	0.94	-0.54	39.78
	729.0	1.10	311.90	728.8	2.5	-16.1	16.2	0.24	0.22	4.89
	820.0	0.10	233.80	819.8	3.0	-16.8	17.0	1.19	-1.10	-85.82
	912.0	0.40	103.90	911.8	2.9	-16.6	16.7	0.51	0.33	-141.20
	965.0	0.20	201.10	964.8	2.8	-16.4	16.6	0.89	-0.38	183.40
1,012.0	0.20	113.30	1,011.8	2.7	-16.4	16.5	0.59	0.00	-186.81	

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Margil 34-34D
<b>Project:</b>	SEC.34-T4N-R68W	<b>TVD Reference:</b>	WELL @ 5103.0ft (Original Well Elev)
<b>Site:</b>	SRC Margil 34-34D Pad Sec.34-T4N-R68W	<b>MD Reference:</b>	WELL @ 5103.0ft (Original Well Elev)
<b>Well:</b>	SRC Margil 34-34D	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)	
1,106.0	0.10	85.30	1,105.8	2.6	-16.2	16.3	0.13	-0.11	-29.79	
1,199.0	0.30	30.50	1,198.8	2.8	-16.0	16.1	0.28	0.22	-58.92	
1,293.0	0.30	19.00	1,292.8	3.3	-15.8	16.0	0.06	0.00	-12.23	
1,387.0	0.30	344.80	1,386.8	3.7	-15.7	16.2	0.19	0.00	-36.38	
1,480.0	0.50	348.30	1,479.8	4.4	-15.9	16.5	0.22	0.22	3.76	
1,574.0	0.70	350.00	1,573.8	5.3	-16.1	16.9	0.21	0.21	1.81	
1,668.0	1.10	339.10	1,667.8	6.7	-16.5	17.7	0.46	0.43	-11.60	
1,761.0	1.00	64.20	1,760.7	7.9	-16.1	17.7	1.53	-0.11	91.51	
1,855.0	0.50	151.20	1,854.7	7.9	-15.1	16.8	1.16	-0.53	92.55	
1,949.0	0.40	151.20	1,948.7	7.3	-14.8	16.2	0.11	-0.11	0.00	
2,043.0	0.40	162.10	2,042.7	6.7	-14.5	15.8	0.08	0.00	11.60	
2,136.0	0.60	174.10	2,135.7	5.9	-14.4	15.5	0.24	0.22	12.90	
2,230.0	0.40	218.70	2,229.7	5.1	-14.5	15.4	0.45	-0.21	47.45	
2,324.0	0.30	229.10	2,323.7	4.7	-14.9	15.7	0.13	-0.11	11.06	
2,417.0	0.70	196.80	2,416.7	4.0	-15.3	15.8	0.51	0.43	-34.73	
2,511.0	1.60	251.60	2,510.7	3.1	-16.7	16.9	1.41	0.96	58.30	
2,605.0	1.70	255.50	2,604.7	2.3	-19.3	19.2	0.16	0.11	4.15	
2,699.0	2.60	251.10	2,698.6	1.2	-22.7	22.1	0.97	0.96	-4.68	
2,792.0	4.00	277.40	2,791.4	1.0	-27.9	27.0	2.18	1.51	28.28	
2,886.0	5.20	288.70	2,885.1	2.8	-35.2	34.5	1.59	1.28	12.02	
2,980.0	6.40	288.00	2,978.7	5.8	-44.2	44.0	1.28	1.28	-0.74	
3,073.0	6.80	285.70	3,071.0	8.8	-54.4	54.7	0.52	0.43	-2.47	
3,167.0	7.20	286.80	3,164.3	12.1	-65.4	66.2	0.45	0.43	1.17	
3,261.0	7.20	281.10	3,257.6	14.9	-76.8	77.9	0.76	0.00	-6.06	
3,355.0	7.00	286.80	3,350.9	17.7	-88.1	89.5	0.78	-0.21	6.06	
3,448.0	7.30	285.70	3,443.2	20.9	-99.2	101.1	0.35	0.32	-1.18	
3,542.0	7.10	285.70	3,536.4	24.1	-110.5	112.9	0.21	-0.21	0.00	
3,636.0	7.60	290.80	3,629.6	27.9	-121.9	124.9	0.87	0.53	5.43	
3,729.0	7.70	290.80	3,721.8	32.3	-133.5	137.2	0.11	0.11	0.00	
3,823.0	7.80	293.30	3,815.0	37.0	-145.3	149.8	0.37	0.11	2.66	
3,917.0	7.70	292.70	3,908.1	42.0	-156.9	162.4	0.14	-0.11	-0.64	
4,011.0	7.20	291.50	4,001.3	46.6	-168.2	174.5	0.56	-0.53	-1.28	
4,104.0	6.90	296.20	4,093.6	51.2	-178.6	185.8	0.70	-0.32	5.05	
4,198.0	6.40	292.90	4,187.0	55.7	-188.5	196.6	0.67	-0.53	-3.51	
4,292.0	8.90	286.60	4,280.1	59.8	-200.3	209.1	2.80	2.66	-6.70	
4,385.0	8.30	286.80	4,372.1	63.8	-213.7	223.0	0.65	-0.65	0.22	
4,479.0	8.40	285.20	4,465.1	67.6	-226.8	236.6	0.27	0.11	-1.70	
4,573.0	7.80	281.30	4,558.2	70.6	-239.7	249.9	0.87	-0.64	-4.15	
4,666.0	8.60	279.40	4,650.2	73.0	-252.7	263.0	0.91	0.86	-2.04	
4,760.0	8.20	285.70	4,743.2	76.0	-266.1	276.7	1.07	-0.43	6.70	
4,854.0	8.70	287.60	4,836.2	79.9	-279.3	290.5	0.61	0.53	2.02	
4,947.0	7.80	286.90	4,928.2	83.9	-292.1	303.9	0.97	-0.97	-0.75	
5,041.0	7.40	284.50	5,021.4	87.3	-304.0	316.3	0.54	-0.43	-2.55	
5,135.0	7.10	284.80	5,114.6	90.3	-315.5	328.2	0.32	-0.32	0.32	
5,229.0	7.20	289.00	5,207.9	93.7	-326.7	339.9	0.57	0.11	4.47	
5,322.0	6.90	288.70	5,300.2	97.4	-337.5	351.3	0.33	-0.32	-0.32	
5,416.0	6.90	278.70	5,393.5	100.0	-348.4	362.5	1.28	0.00	-10.64	
5,510.0	6.60	275.90	5,486.9	101.4	-359.4	373.4	0.47	-0.32	-2.98	
5,604.0	6.90	279.20	5,580.2	102.9	-370.3	384.3	0.52	0.32	3.51	
5,698.0	6.40	286.80	5,673.6	105.3	-380.9	395.2	1.08	-0.53	8.09	
5,791.0	5.80	281.30	5,766.1	107.7	-390.5	405.0	0.90	-0.65	-5.91	
5,885.0	6.90	277.60	5,859.5	109.4	-400.7	415.4	1.25	1.17	-3.94	
5,979.0	7.00	285.30	5,952.8	111.7	-411.9	426.7	1.00	0.11	8.19	
6,073.0	6.80	275.90	6,046.1	113.7	-422.9	437.9	1.22	-0.21	-10.00	

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<b>Well:</b>	SRC Margil 34-34D	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)	
6,165.0	6.20	278.80	6,137.5	115.1	-433.3	448.2	0.74	-0.65	3.15	
6,260.0	6.70	294.30	6,231.9	118.1	-443.4	458.7	1.90	0.53	16.32	
6,354.0	6.80	295.70	6,325.3	122.8	-453.4	469.7	0.20	0.11	1.49	
6,448.0	6.80	293.80	6,418.6	127.5	-463.5	480.7	0.24	0.00	-2.02	
6,541.0	6.30	285.50	6,511.0	131.0	-473.5	491.2	1.15	-0.54	-8.92	
6,635.0	6.80	282.00	6,604.4	133.6	-483.9	501.9	0.68	0.53	-3.72	
6,729.0	6.00	281.70	6,697.8	135.7	-494.1	512.4	0.85	-0.85	-0.32	
6,744.9	6.04	283.35	6,713.6	136.1	-495.7	514.0	1.12	0.25	10.39	
LEGAL BOX 400' X 400', 663'FSL & 1955'FEL										
6,745.1	6.04	283.37	6,713.9	136.1	-495.8	514.1	1.12	0.26	10.32	
TARGET CIRCLE 663'FSL & 1954'FEL										
6,823.0	6.30	291.10	6,791.3	138.6	-503.7	522.4	1.12	0.33	9.92	
6,916.0	6.20	289.70	6,883.7	142.1	-513.2	532.5	0.20	-0.11	-1.51	
7,010.0	6.30	290.10	6,977.2	145.6	-522.9	542.7	0.12	0.11	0.43	
7,104.0	4.80	301.00	7,070.7	149.4	-531.1	551.7	1.94	-1.60	11.60	
7,198.0	4.60	296.40	7,164.4	153.1	-537.8	559.2	0.45	-0.21	-4.89	
7,291.0	5.70	279.20	7,257.0	155.5	-545.7	567.4	2.03	1.18	-18.49	
7,385.0	5.80	280.20	7,350.6	157.1	-555.0	576.8	0.15	0.11	1.06	
7,479.0	4.90	296.20	7,444.2	159.7	-563.3	585.5	1.84	-0.96	17.02	
7,573.0	4.60	311.70	7,537.8	164.0	-569.7	592.8	1.40	-0.32	16.49	
7,666.0	3.50	308.00	7,630.6	168.2	-574.7	598.8	1.22	-1.18	-3.98	
7,760.0	2.70	303.40	7,724.5	171.2	-578.8	603.6	0.89	-0.85	-4.89	
7,833.0	2.70	303.40	7,797.4	173.1	-581.7	606.9	0.00	0.00	0.00	
TARGET BHL 663'FSL & 1954'FEL										

Checked By: _____	Approved By: _____	Date: _____
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