



Project: SEC 12-13 T6N R66W  
Site: Falken 9-11 PAD  
Well: Falken 34N-9C-L  
Wellbore: OH  
Design: Plan #1

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
1044.50	16.89	137.25	1032.32	-90.74	83.88	2.00	137.25	-82.98	
6636.04	16.89	137.25	6382.67	-1283.68	1186.62	0.00	0.00	-1173.79	
7759.54	89.86	269.43	7125.00	-1456.53	565.42	9.00	130.95	-550.90	
19018.30	89.86	269.43	7152.00	-1569.29	-10692.74	0.00	0.00	10707.82	PBHL_Falken 34N-9C-L

PROJECT DETAILS: SEC 12-13 T6N R66W

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Northern Zone  
Colorado Northern Zone  
System Datum: Mean Sea Level

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TOP_Falken 34N-9C-L	7125.00	-1656.85	564.02	1424382.13	3213062.94	40.4957960	-104.7339220	Point
- plan misses target center by 200.30ft at 7762.95ft MD (7125.01 TVD, -1456.56 N, 562.02 E)								
PBHL_Falken 34N-9C-L	7152.00	-1569.29	-10692.74	1424372.69	3201805.84	40.4960300	-104.7743970	Point
- plan hits target center								

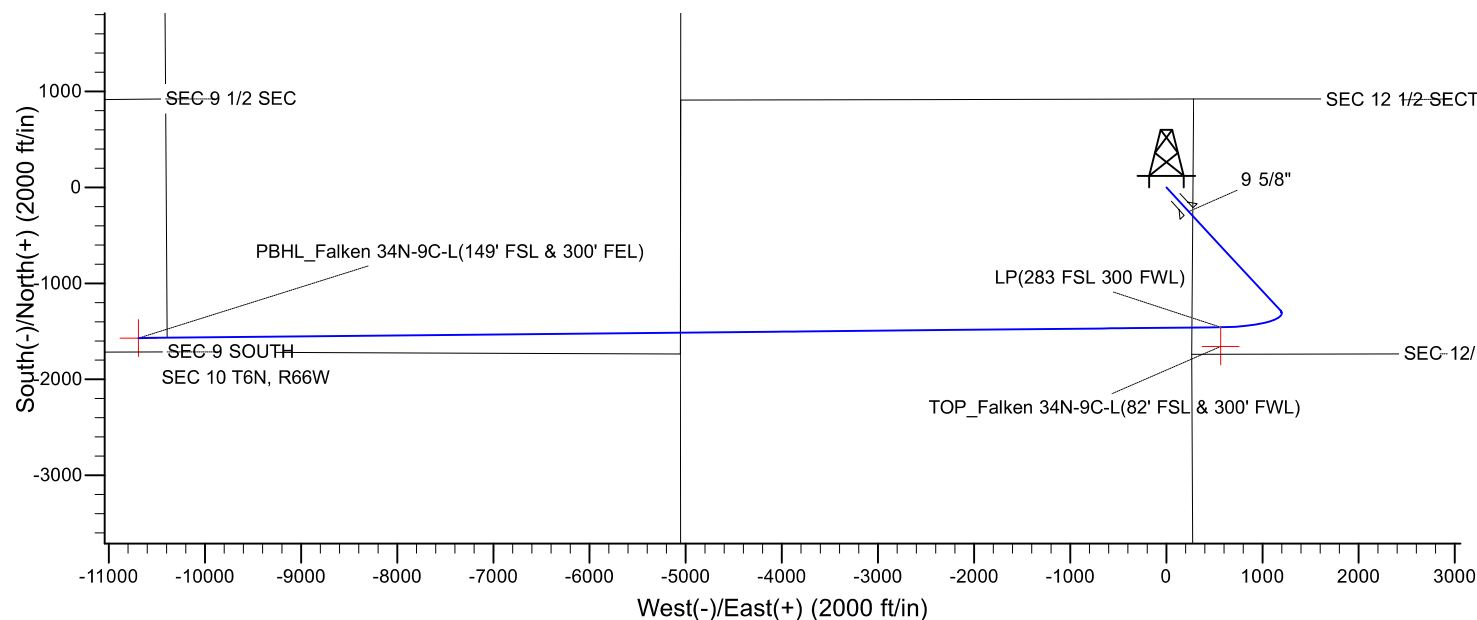
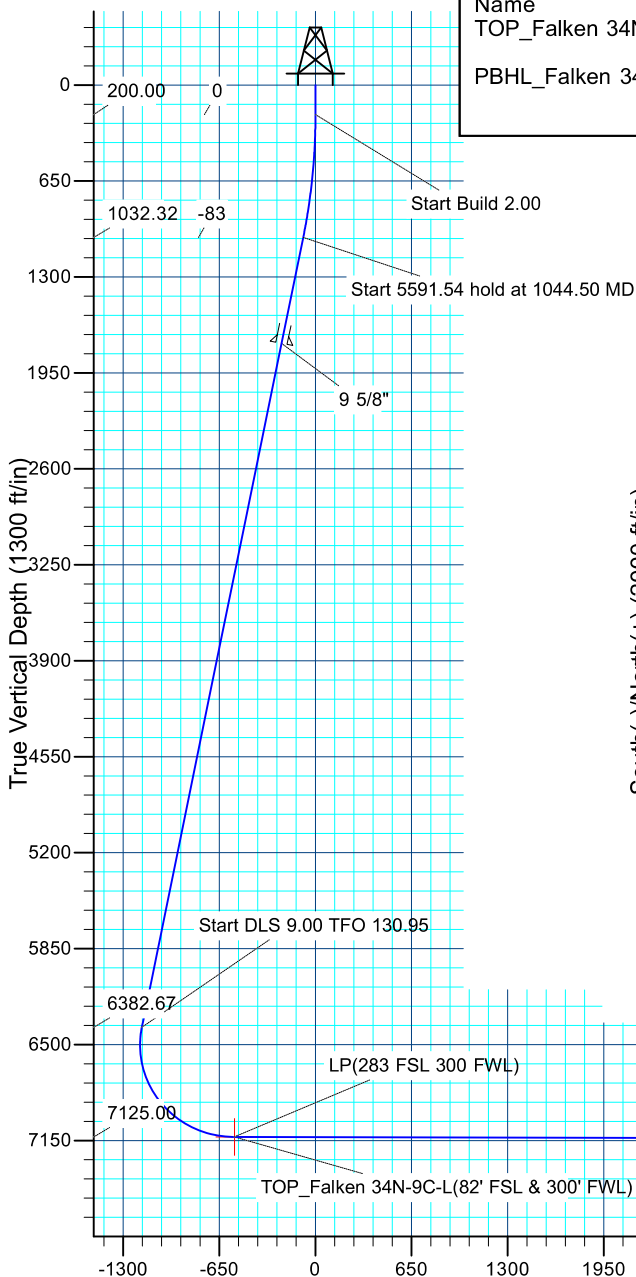
#### CASING DETAILS

TVD	MD	Name	Size
1750.00	1794.53	9 5/8"	9.625

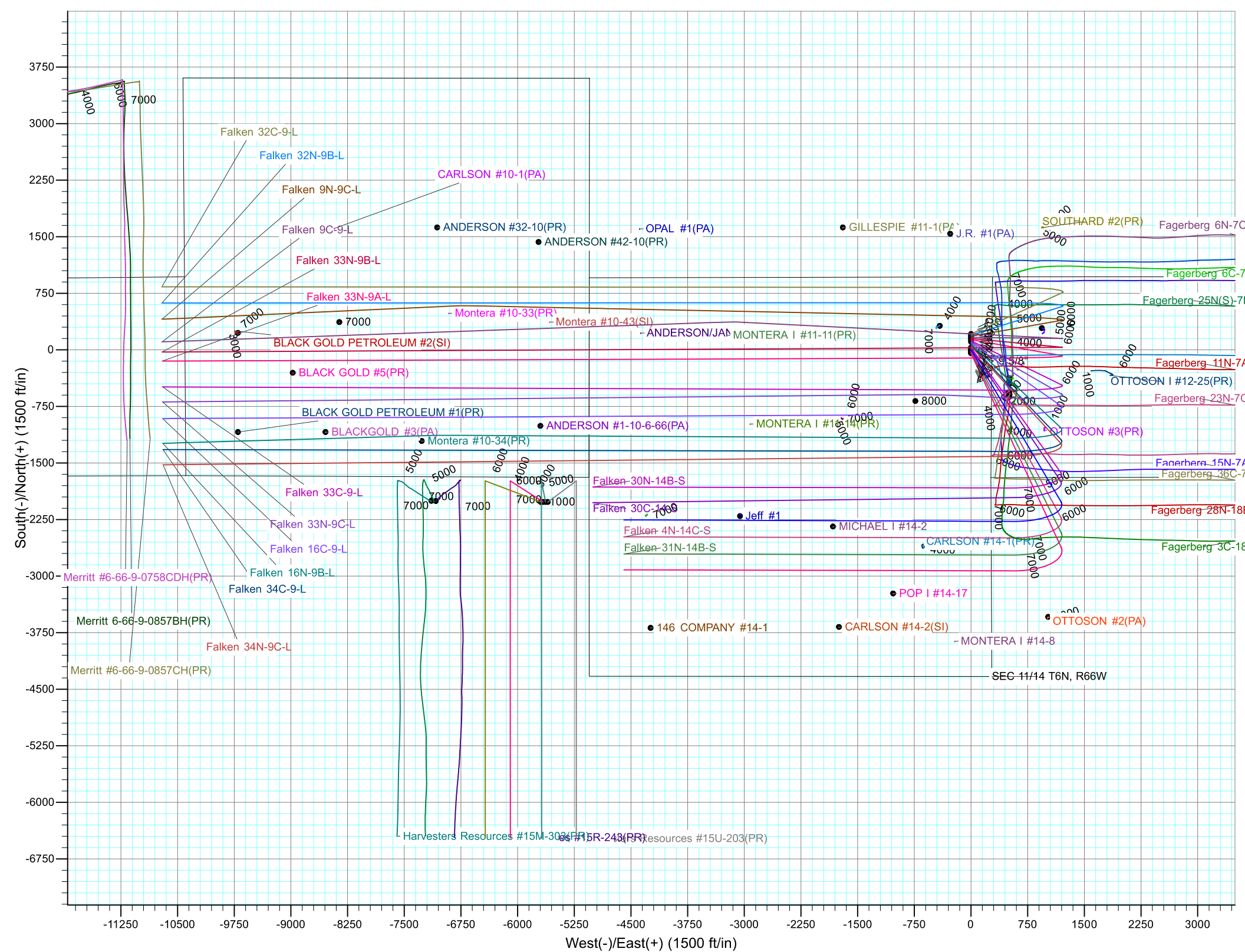


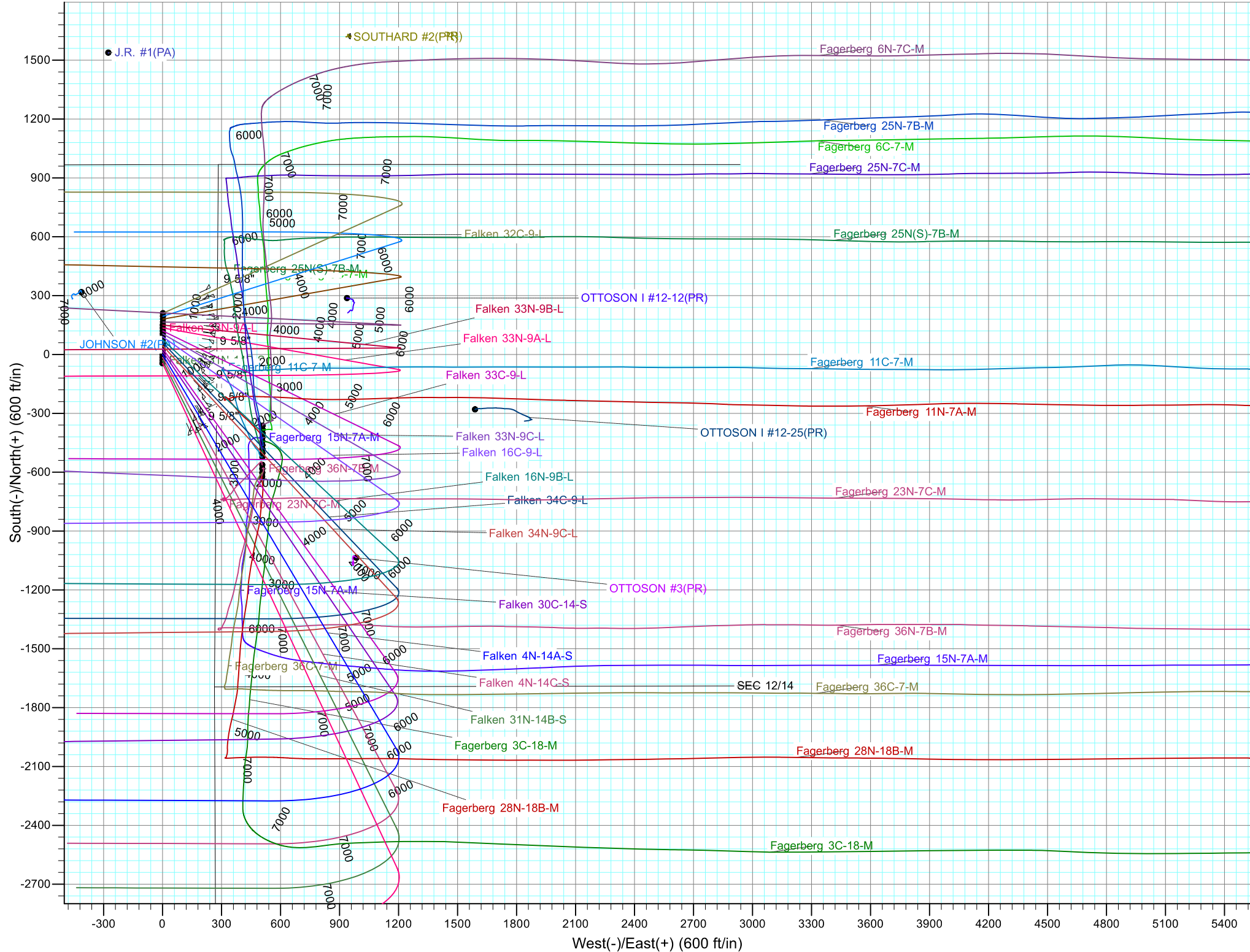
Azimuths to True North  
Magnetic North: 8.22°

Magnetic Field  
Strength: 52465.3snT  
Dip Angle: 66.94°  
Date: 4/21/2017  
Model: IGRF2015



Vertical Section at 269.43° (1300 ft/in)







# **Synergy Resources Corporation**

**SEC 12-13 T6N R66W**

**Falken 9-11 PAD**

**Falken 34N-9C-L**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**25 April, 2017**



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	SEC 12-13 T6N R66W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	Falken 9-11 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,426,199.10 ft	<b>Latitude:</b> 40.5007970
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,212,484.63 ft	<b>Longitude:</b> -104.7359450
<b>Position Uncertainty:</b>	3.28 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 0.49 °

<b>Well</b>	Falken 34N-9C-L, 1739' FSL & 276' FEL			
<b>Well Position</b>	<b>+N/-S</b>	-165.03 ft	<b>Northing:</b>	1,426,034.06 ft
	<b>+E/-W</b>	-1.39 ft	<b>Easting:</b>	3,212,484.66 ft
<b>Position Uncertainty</b>		3.28 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 4,810.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	4/21/2017	8.22	66.94	52,465

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	269.43

<b>Plan Survey Tool Program</b>	<b>Date</b>	4/24/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	19,018.09 Plan #1 (OH)	MWD+IFR1	
			OWSG MWD + IFR1	

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,044.50	16.89	137.25	1,032.32	-90.74	83.88	2.00	2.00	0.00	137.25	
6,636.04	16.89	137.25	6,382.67	-1,283.68	1,186.62	0.00	0.00	0.00	0.00	
7,759.54	89.86	269.43	7,125.00	-1,456.53	565.42	9.00	6.50	11.76	130.95	
19,018.30	89.86	269.43	7,152.00	-1,569.29	-10,692.74	0.00	0.00	0.00	0.00	PBHL_Falken 34N-9C

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
300.00	2.00	137.25	299.98	-1.28	1.18	-1.17	2.00	2.00	0.00
400.00	4.00	137.25	399.84	-5.12	4.74	-4.69	2.00	2.00	0.00
500.00	6.00	137.25	499.45	-11.52	10.65	-10.54	2.00	2.00	0.00
600.00	8.00	137.25	598.70	-20.47	18.92	-18.72	2.00	2.00	0.00
700.00	10.00	137.25	697.47	-31.96	29.54	-29.22	2.00	2.00	0.00
800.00	12.00	137.25	795.62	-45.97	42.49	-42.04	2.00	2.00	0.00
900.00	14.00	137.25	893.06	-62.49	57.76	-57.14	2.00	2.00	0.00
1,000.00	16.00	137.25	989.64	-81.49	75.33	-74.52	2.00	2.00	0.00
1,044.50	16.89	137.25	1,032.32	-90.74	83.88	-82.98	2.00	2.00	0.00
<b>Start 5591.54 hold at 1044.50 MD</b>									
1,100.00	16.89	137.25	1,085.43	-102.58	94.83	-93.80	0.00	0.00	0.00
1,200.00	16.89	137.25	1,181.11	-123.92	114.55	-113.31	0.00	0.00	0.00
1,300.00	16.89	137.25	1,276.80	-145.25	134.27	-132.82	0.00	0.00	0.00
1,400.00	16.89	137.25	1,372.49	-166.59	153.99	-152.33	0.00	0.00	0.00
1,500.00	16.89	137.25	1,468.17	-187.92	173.71	-171.84	0.00	0.00	0.00
1,600.00	16.89	137.25	1,563.86	-209.26	193.44	-191.34	0.00	0.00	0.00
1,700.00	16.89	137.25	1,659.55	-230.59	213.16	-210.85	0.00	0.00	0.00
1,794.53	16.89	137.25	1,750.00	-250.76	231.80	-229.29	0.00	0.00	0.00
<b>9 5/8"</b>									
1,800.00	16.89	137.25	1,755.23	-251.93	232.88	-230.36	0.00	0.00	0.00
1,900.00	16.89	137.25	1,850.92	-273.26	252.60	-249.87	0.00	0.00	0.00
2,000.00	16.89	137.25	1,946.61	-294.60	272.32	-269.38	0.00	0.00	0.00
2,100.00	16.89	137.25	2,042.29	-315.93	292.04	-288.89	0.00	0.00	0.00
2,200.00	16.89	137.25	2,137.98	-337.27	311.77	-308.39	0.00	0.00	0.00
2,300.00	16.89	137.25	2,233.67	-358.60	331.49	-327.90	0.00	0.00	0.00
2,400.00	16.89	137.25	2,329.35	-379.93	351.21	-347.41	0.00	0.00	0.00
2,500.00	16.89	137.25	2,425.04	-401.27	370.93	-366.92	0.00	0.00	0.00
2,600.00	16.89	137.25	2,520.72	-422.60	390.65	-386.43	0.00	0.00	0.00
2,700.00	16.89	137.25	2,616.41	-443.94	410.37	-405.94	0.00	0.00	0.00
2,800.00	16.89	137.25	2,712.10	-465.27	430.09	-425.44	0.00	0.00	0.00
2,900.00	16.89	137.25	2,807.78	-486.61	449.82	-444.95	0.00	0.00	0.00
3,000.00	16.89	137.25	2,903.47	-507.94	469.54	-464.46	0.00	0.00	0.00
3,100.00	16.89	137.25	2,999.16	-529.28	489.26	-483.97	0.00	0.00	0.00
3,200.00	16.89	137.25	3,094.84	-550.61	508.98	-503.48	0.00	0.00	0.00
3,300.00	16.89	137.25	3,190.53	-571.95	528.70	-522.99	0.00	0.00	0.00
3,400.00	16.89	137.25	3,286.22	-593.28	548.42	-542.49	0.00	0.00	0.00
3,500.00	16.89	137.25	3,381.90	-614.62	568.15	-562.00	0.00	0.00	0.00
3,600.00	16.89	137.25	3,477.59	-635.95	587.87	-581.51	0.00	0.00	0.00
3,700.00	16.89	137.25	3,573.28	-657.29	607.59	-601.02	0.00	0.00	0.00
3,800.00	16.89	137.25	3,668.96	-678.62	627.31	-620.53	0.00	0.00	0.00
3,900.00	16.89	137.25	3,764.65	-699.95	647.03	-640.04	0.00	0.00	0.00
4,000.00	16.89	137.25	3,860.33	-721.29	666.75	-659.54	0.00	0.00	0.00
4,100.00	16.89	137.25	3,956.02	-742.62	686.47	-679.05	0.00	0.00	0.00
4,200.00	16.89	137.25	4,051.71	-763.96	706.20	-698.56	0.00	0.00	0.00
4,300.00	16.89	137.25	4,147.39	-785.29	725.92	-718.07	0.00	0.00	0.00
4,400.00	16.89	137.25	4,243.08	-806.63	745.64	-737.58	0.00	0.00	0.00
4,500.00	16.89	137.25	4,338.77	-827.96	765.36	-757.09	0.00	0.00	0.00
4,600.00	16.89	137.25	4,434.45	-849.30	785.08	-776.59	0.00	0.00	0.00
4,700.00	16.89	137.25	4,530.14	-870.63	804.80	-796.10	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

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)
4,800.00	16.89	137.25	4,625.83	-891.97	824.53	-815.61	0.00	0.00	0.00
4,900.00	16.89	137.25	4,721.51	-913.30	844.25	-835.12	0.00	0.00	0.00
5,000.00	16.89	137.25	4,817.20	-934.64	863.97	-854.63	0.00	0.00	0.00
5,100.00	16.89	137.25	4,912.89	-955.97	883.69	-874.14	0.00	0.00	0.00
5,200.00	16.89	137.25	5,008.57	-977.31	903.41	-893.64	0.00	0.00	0.00
5,300.00	16.89	137.25	5,104.26	-998.64	923.13	-913.15	0.00	0.00	0.00
5,400.00	16.89	137.25	5,199.94	-1,019.97	942.85	-932.66	0.00	0.00	0.00
5,500.00	16.89	137.25	5,295.63	-1,041.31	962.58	-952.17	0.00	0.00	0.00
5,600.00	16.89	137.25	5,391.32	-1,062.64	982.30	-971.68	0.00	0.00	0.00
5,700.00	16.89	137.25	5,487.00	-1,083.98	1,002.02	-991.19	0.00	0.00	0.00
5,800.00	16.89	137.25	5,582.69	-1,105.31	1,021.74	-1,010.69	0.00	0.00	0.00
5,900.00	16.89	137.25	5,678.38	-1,126.65	1,041.46	-1,030.20	0.00	0.00	0.00
6,000.00	16.89	137.25	5,774.06	-1,147.98	1,061.18	-1,049.71	0.00	0.00	0.00
6,100.00	16.89	137.25	5,869.75	-1,169.32	1,080.91	-1,069.22	0.00	0.00	0.00
6,200.00	16.89	137.25	5,965.44	-1,190.65	1,100.63	-1,088.73	0.00	0.00	0.00
6,300.00	16.89	137.25	6,061.12	-1,211.99	1,120.35	-1,108.24	0.00	0.00	0.00
6,400.00	16.89	137.25	6,156.81	-1,233.32	1,140.07	-1,127.74	0.00	0.00	0.00
6,500.00	16.89	137.25	6,252.50	-1,254.66	1,159.79	-1,147.25	0.00	0.00	0.00
6,600.00	16.89	137.25	6,348.18	-1,275.99	1,179.51	-1,166.76	0.00	0.00	0.00
6,636.04	16.89	137.25	6,382.67	-1,283.68	1,186.62	-1,173.79	0.00	0.00	0.00
Start DLS 9.00 TFO 130.95									
6,700.00	13.80	155.77	6,444.38	-1,297.47	1,196.07	-1,183.10	9.00	-4.83	28.95
6,800.00	13.14	195.03	6,541.82	-1,319.37	1,198.02	-1,184.83	9.00	-0.66	39.27
6,900.00	17.73	224.75	6,638.34	-1,341.21	1,184.32	-1,170.92	9.00	4.59	29.72
7,000.00	24.81	240.34	6,731.54	-1,362.44	1,155.31	-1,141.70	9.00	7.07	15.58
7,100.00	32.79	249.03	6,819.14	-1,382.56	1,111.71	-1,097.90	9.00	7.99	8.69
7,200.00	41.17	254.55	6,898.98	-1,401.06	1,054.58	-1,040.59	9.00	8.37	5.53
7,300.00	49.72	258.47	6,969.08	-1,417.48	985.34	-971.19	9.00	8.56	3.92
7,400.00	58.39	261.50	7,027.74	-1,431.43	905.68	-891.40	9.00	8.66	3.03
7,500.00	67.11	264.01	7,073.49	-1,442.56	817.58	-803.19	9.00	8.72	2.51
7,600.00	75.86	266.21	7,105.22	-1,450.59	723.20	-708.73	9.00	8.76	2.20
7,700.00	84.64	268.25	7,122.15	-1,455.32	624.86	-610.35	9.00	8.77	2.04
7,759.54	89.86	269.43	7,125.00	-1,456.53	565.42	-550.90	9.00	8.78	1.98
LP(283 FSL 300 FWL)									
7,762.95	89.86	269.43	7,125.01	-1,456.56	562.02	-547.50	0.00	0.00	0.00
TOP_Falken 34N-9C-L(82' FSL & 300' FWL)									
7,800.00	89.86	269.43	7,125.10	-1,456.94	524.96	-510.44	0.00	0.00	0.00
7,900.00	89.86	269.43	7,125.34	-1,457.94	424.97	-410.44	0.00	0.00	0.00
8,000.00	89.86	269.43	7,125.58	-1,458.94	324.97	-310.44	0.00	0.00	0.00
8,100.00	89.86	269.43	7,125.82	-1,459.94	224.98	-210.44	0.00	0.00	0.00
8,200.00	89.86	269.43	7,126.06	-1,460.94	124.98	-110.44	0.00	0.00	0.00
8,300.00	89.86	269.43	7,126.30	-1,461.94	24.99	-10.44	0.00	0.00	0.00
8,400.00	89.86	269.43	7,126.54	-1,462.95	-75.01	89.56	0.00	0.00	0.00
8,500.00	89.86	269.43	7,126.78	-1,463.95	-175.00	189.55	0.00	0.00	0.00
8,600.00	89.86	269.43	7,127.02	-1,464.95	-274.99	289.55	0.00	0.00	0.00
8,700.00	89.86	269.43	7,127.26	-1,465.95	-374.99	389.55	0.00	0.00	0.00
8,800.00	89.86	269.43	7,127.50	-1,466.95	-474.98	489.55	0.00	0.00	0.00
8,900.00	89.86	269.43	7,127.74	-1,467.95	-574.98	589.55	0.00	0.00	0.00
9,000.00	89.86	269.43	7,127.98	-1,468.95	-674.97	689.55	0.00	0.00	0.00
9,100.00	89.86	269.43	7,128.22	-1,469.96	-774.97	789.55	0.00	0.00	0.00
9,200.00	89.86	269.43	7,128.46	-1,470.96	-874.96	889.55	0.00	0.00	0.00
9,300.00	89.86	269.43	7,128.70	-1,471.96	-974.96	989.55	0.00	0.00	0.00
9,400.00	89.86	269.43	7,128.94	-1,472.96	-1,074.95	1,089.55	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,500.00	89.86	269.43	7,129.18	-1,473.96	-1,174.95	1,189.55	0.00	0.00	0.00	
9,600.00	89.86	269.43	7,129.42	-1,474.96	-1,274.94	1,289.55	0.00	0.00	0.00	
9,700.00	89.86	269.43	7,129.66	-1,475.97	-1,374.94	1,389.55	0.00	0.00	0.00	
9,800.00	89.86	269.43	7,129.90	-1,476.97	-1,474.93	1,489.55	0.00	0.00	0.00	
9,900.00	89.86	269.43	7,130.14	-1,477.97	-1,574.93	1,589.55	0.00	0.00	0.00	
10,000.00	89.86	269.43	7,130.38	-1,478.97	-1,674.92	1,689.55	0.00	0.00	0.00	
10,100.00	89.86	269.43	7,130.62	-1,479.97	-1,774.92	1,789.55	0.00	0.00	0.00	
10,200.00	89.86	269.43	7,130.86	-1,480.97	-1,874.91	1,889.55	0.00	0.00	0.00	
10,300.00	89.86	269.43	7,131.09	-1,481.97	-1,974.90	1,989.55	0.00	0.00	0.00	
10,400.00	89.86	269.43	7,131.33	-1,482.98	-2,074.90	2,089.55	0.00	0.00	0.00	
10,500.00	89.86	269.43	7,131.57	-1,483.98	-2,174.89	2,189.55	0.00	0.00	0.00	
10,600.00	89.86	269.43	7,131.81	-1,484.98	-2,274.89	2,289.55	0.00	0.00	0.00	
10,700.00	89.86	269.43	7,132.05	-1,485.98	-2,374.88	2,389.55	0.00	0.00	0.00	
10,800.00	89.86	269.43	7,132.29	-1,486.98	-2,474.88	2,489.55	0.00	0.00	0.00	
10,900.00	89.86	269.43	7,132.53	-1,487.98	-2,574.87	2,589.55	0.00	0.00	0.00	
11,000.00	89.86	269.43	7,132.77	-1,488.99	-2,674.87	2,689.55	0.00	0.00	0.00	
11,100.00	89.86	269.43	7,133.01	-1,489.99	-2,774.86	2,789.55	0.00	0.00	0.00	
11,200.00	89.86	269.43	7,133.25	-1,490.99	-2,874.86	2,889.55	0.00	0.00	0.00	
11,300.00	89.86	269.43	7,133.49	-1,491.99	-2,974.85	2,989.55	0.00	0.00	0.00	
11,400.00	89.86	269.43	7,133.73	-1,492.99	-3,074.85	3,089.55	0.00	0.00	0.00	
11,500.00	89.86	269.43	7,133.97	-1,493.99	-3,174.84	3,189.55	0.00	0.00	0.00	
11,600.00	89.86	269.43	7,134.21	-1,495.00	-3,274.84	3,289.55	0.00	0.00	0.00	
11,700.00	89.86	269.43	7,134.45	-1,496.00	-3,374.83	3,389.55	0.00	0.00	0.00	
11,800.00	89.86	269.43	7,134.69	-1,497.00	-3,474.82	3,489.55	0.00	0.00	0.00	
11,900.00	89.86	269.43	7,134.93	-1,498.00	-3,574.82	3,589.55	0.00	0.00	0.00	
12,000.00	89.86	269.43	7,135.17	-1,499.00	-3,674.81	3,689.54	0.00	0.00	0.00	
12,100.00	89.86	269.43	7,135.41	-1,500.00	-3,774.81	3,789.54	0.00	0.00	0.00	
12,200.00	89.86	269.43	7,135.65	-1,501.00	-3,874.80	3,889.54	0.00	0.00	0.00	
12,300.00	89.86	269.43	7,135.89	-1,502.01	-3,974.80	3,989.54	0.00	0.00	0.00	
12,400.00	89.86	269.43	7,136.13	-1,503.01	-4,074.79	4,089.54	0.00	0.00	0.00	
12,500.00	89.86	269.43	7,136.37	-1,504.01	-4,174.79	4,189.54	0.00	0.00	0.00	
12,600.00	89.86	269.43	7,136.61	-1,505.01	-4,274.78	4,289.54	0.00	0.00	0.00	
12,700.00	89.86	269.43	7,136.85	-1,506.01	-4,374.78	4,389.54	0.00	0.00	0.00	
12,800.00	89.86	269.43	7,137.09	-1,507.01	-4,474.77	4,489.54	0.00	0.00	0.00	
12,900.00	89.86	269.43	7,137.33	-1,508.02	-4,574.77	4,589.54	0.00	0.00	0.00	
13,000.00	89.86	269.43	7,137.57	-1,509.02	-4,674.76	4,689.54	0.00	0.00	0.00	
13,100.00	89.86	269.43	7,137.81	-1,510.02	-4,774.76	4,789.54	0.00	0.00	0.00	
13,200.00	89.86	269.43	7,138.05	-1,511.02	-4,874.75	4,889.54	0.00	0.00	0.00	
13,300.00	89.86	269.43	7,138.29	-1,512.02	-4,974.75	4,989.54	0.00	0.00	0.00	
13,400.00	89.86	269.43	7,138.53	-1,513.02	-5,074.74	5,089.54	0.00	0.00	0.00	
13,500.00	89.86	269.43	7,138.77	-1,514.02	-5,174.73	5,189.54	0.00	0.00	0.00	
13,600.00	89.86	269.43	7,139.01	-1,515.03	-5,274.73	5,289.54	0.00	0.00	0.00	
13,700.00	89.86	269.43	7,139.25	-1,516.03	-5,374.72	5,389.54	0.00	0.00	0.00	
13,800.00	89.86	269.43	7,139.49	-1,517.03	-5,474.72	5,489.54	0.00	0.00	0.00	
13,900.00	89.86	269.43	7,139.73	-1,518.03	-5,574.71	5,589.54	0.00	0.00	0.00	
14,000.00	89.86	269.43	7,139.97	-1,519.03	-5,674.71	5,689.54	0.00	0.00	0.00	
14,100.00	89.86	269.43	7,140.21	-1,520.03	-5,774.70	5,789.54	0.00	0.00	0.00	
14,200.00	89.86	269.43	7,140.45	-1,521.04	-5,874.70	5,889.54	0.00	0.00	0.00	
14,300.00	89.86	269.43	7,140.69	-1,522.04	-5,974.69	5,989.54	0.00	0.00	0.00	
14,400.00	89.86	269.43	7,140.93	-1,523.04	-6,074.69	6,089.54	0.00	0.00	0.00	
14,500.00	89.86	269.43	7,141.17	-1,524.04	-6,174.68	6,189.54	0.00	0.00	0.00	
14,600.00	89.86	269.43	7,141.41	-1,525.04	-6,274.68	6,289.54	0.00	0.00	0.00	
14,700.00	89.86	269.43	7,141.65	-1,526.04	-6,374.67	6,389.54	0.00	0.00	0.00	
14,800.00	89.86	269.43	7,141.89	-1,527.05	-6,474.67	6,489.54	0.00	0.00	0.00	



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

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)
14,900.00	89.86	269.43	7,142.13	-1,528.05	-6,574.66	6,589.54	0.00	0.00	0.00
15,000.00	89.86	269.43	7,142.36	-1,529.05	-6,674.66	6,689.54	0.00	0.00	0.00
15,100.00	89.86	269.43	7,142.60	-1,530.05	-6,774.65	6,789.54	0.00	0.00	0.00
15,200.00	89.86	269.43	7,142.84	-1,531.05	-6,874.64	6,889.54	0.00	0.00	0.00
15,300.00	89.86	269.43	7,143.08	-1,532.05	-6,974.64	6,989.54	0.00	0.00	0.00
15,400.00	89.86	269.43	7,143.32	-1,533.05	-7,074.63	7,089.54	0.00	0.00	0.00
15,500.00	89.86	269.43	7,143.56	-1,534.06	-7,174.63	7,189.53	0.00	0.00	0.00
15,600.00	89.86	269.43	7,143.80	-1,535.06	-7,274.62	7,289.53	0.00	0.00	0.00
15,700.00	89.86	269.43	7,144.04	-1,536.06	-7,374.62	7,389.53	0.00	0.00	0.00
15,800.00	89.86	269.43	7,144.28	-1,537.06	-7,474.61	7,489.53	0.00	0.00	0.00
15,900.00	89.86	269.43	7,144.52	-1,538.06	-7,574.61	7,589.53	0.00	0.00	0.00
16,000.00	89.86	269.43	7,144.76	-1,539.06	-7,674.60	7,689.53	0.00	0.00	0.00
16,100.00	89.86	269.43	7,145.00	-1,540.07	-7,774.60	7,789.53	0.00	0.00	0.00
16,200.00	89.86	269.43	7,145.24	-1,541.07	-7,874.59	7,889.53	0.00	0.00	0.00
16,300.00	89.86	269.43	7,145.48	-1,542.07	-7,974.59	7,989.53	0.00	0.00	0.00
16,400.00	89.86	269.43	7,145.72	-1,543.07	-8,074.58	8,089.53	0.00	0.00	0.00
16,500.00	89.86	269.43	7,145.96	-1,544.07	-8,174.58	8,189.53	0.00	0.00	0.00
16,600.00	89.86	269.43	7,146.20	-1,545.07	-8,274.57	8,289.53	0.00	0.00	0.00
16,700.00	89.86	269.43	7,146.44	-1,546.07	-8,374.57	8,389.53	0.00	0.00	0.00
16,800.00	89.86	269.43	7,146.68	-1,547.08	-8,474.56	8,489.53	0.00	0.00	0.00
16,900.00	89.86	269.43	7,146.92	-1,548.08	-8,574.55	8,589.53	0.00	0.00	0.00
17,000.00	89.86	269.43	7,147.16	-1,549.08	-8,674.55	8,689.53	0.00	0.00	0.00
17,100.00	89.86	269.43	7,147.40	-1,550.08	-8,774.54	8,789.53	0.00	0.00	0.00
17,200.00	89.86	269.43	7,147.64	-1,551.08	-8,874.54	8,889.53	0.00	0.00	0.00
17,300.00	89.86	269.43	7,147.88	-1,552.08	-8,974.53	8,989.53	0.00	0.00	0.00
17,400.00	89.86	269.43	7,148.12	-1,553.09	-9,074.53	9,089.53	0.00	0.00	0.00
17,500.00	89.86	269.43	7,148.36	-1,554.09	-9,174.52	9,189.53	0.00	0.00	0.00
17,600.00	89.86	269.43	7,148.60	-1,555.09	-9,274.52	9,289.53	0.00	0.00	0.00
17,700.00	89.86	269.43	7,148.84	-1,556.09	-9,374.51	9,389.53	0.00	0.00	0.00
17,800.00	89.86	269.43	7,149.08	-1,557.09	-9,474.51	9,489.53	0.00	0.00	0.00
17,900.00	89.86	269.43	7,149.32	-1,558.09	-9,574.50	9,589.53	0.00	0.00	0.00
18,000.00	89.86	269.43	7,149.56	-1,559.10	-9,674.50	9,689.53	0.00	0.00	0.00
18,100.00	89.86	269.43	7,149.80	-1,560.10	-9,774.49	9,789.53	0.00	0.00	0.00
18,200.00	89.86	269.43	7,150.04	-1,561.10	-9,874.49	9,889.53	0.00	0.00	0.00
18,300.00	89.86	269.43	7,150.28	-1,562.10	-9,974.48	9,989.53	0.00	0.00	0.00
18,400.00	89.86	269.43	7,150.52	-1,563.10	-10,074.48	10,089.53	0.00	0.00	0.00
18,500.00	89.86	269.43	7,150.76	-1,564.10	-10,174.47	10,189.53	0.00	0.00	0.00
18,600.00	89.86	269.43	7,151.00	-1,565.10	-10,274.46	10,289.53	0.00	0.00	0.00
18,700.00	89.86	269.43	7,151.24	-1,566.11	-10,374.46	10,389.53	0.00	0.00	0.00
18,800.00	89.86	269.43	7,151.48	-1,567.11	-10,474.45	10,489.53	0.00	0.00	0.00
18,900.00	89.86	269.43	7,151.72	-1,568.11	-10,574.45	10,589.53	0.00	0.00	0.00
19,000.00	89.86	269.43	7,151.96	-1,569.11	-10,674.44	10,689.52	0.00	0.00	0.00
19,018.30	89.86	269.43	7,152.00	-1,569.29	-10,692.74	10,707.82	0.00	0.00	0.00
TD at 19018.30 - PBHL_Falken 34N-9C-L(149' FSL & 300' FEL)									

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 34N-9C-L
<b>Company:</b>	Synergy Resources Corporation	<b>TVD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Project:</b>	SEC 12-13 T6N R66W	<b>MD Reference:</b>	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
<b>Site:</b>	Falken 9-11 PAD	<b>North Reference:</b>	True
<b>Well:</b>	Falken 34N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
TOP_Falken 34N-9C-L{ - plan misses target center by 200.30ft at 7762.95ft MD (7125.01 TVD, -1456.56 N, 562.02 E) - Point	0.00	0.00	7,125.00	-1,656.85	564.02	1,424,382.13	3,213,062.94	40.4957960	-104.7339220
PBHL_Falken 34N-9C-L - plan hits target center - Point	0.00	0.00	7,152.00	-1,569.29	-10,692.74	1,424,372.70	3,201,805.84	40.4960300	-104.7743970

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)	Name		(in)	(in)
1,794.53	1,750.00	9 5/8"		9.625	13.500

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
1,044.50	1,032.32	-90.74	83.88	Start 5591.54 hold at 1044.50 MD
6,636.04	6,382.67	-1,283.68	1,186.62	Start DLS 9.00 TFO 130.95
7,759.54	7,125.00	-1,456.53	565.42	LP(283 FSL 300 FWL)
19,018.30	7,152.00	-1,569.29	-10,692.74	TD at 19018.30