



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

SECTION DETAILS									
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	
785.50	11.71	80.00	781.43	10.35	58.72	2.00	80.00	-58.49	
6490.03	11.71	80.00	6367.24	211.40	1198.91	0.00	0.00	-1194.26	
7616.41	89.89	271.19	7130.00	254.88	577.04	9.00	-168.59	-571.62	
14838.32	89.89	271.19	7144.00	404.25	-6643.32	0.00	0.00	6650.28	
15027.81	89.89	267.40	7144.37	401.90	-6832.76	2.00	-90.03	6839.63	
18906.26	89.89	267.40	7152.00	225.65	-10707.20	0.00	0.00	10709.58	PBHL_Falken 9N-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 9N-9C-L	7130.00	196.01	577.33	1426370.20	3213060.22	40.5012530	-104.7338700	Point	
- plan misses target center by 58.85ft at 7614.87ft MD (7129.99 TVD, 254.85 N, 578.57 E)									
PBHL_Falken 9N-9C-L	7152.00	225.65	-10707.20	1426302.61	3201775.86	40.5013280	-104.7744480	Point	
- plan hits target center									

CASING DETAILS			
TVD	MD	Name	Size
1750.00	1774.65	9 5/8"	9.625

T

M

Azimuths to True North

Magnetic North: 8.22°

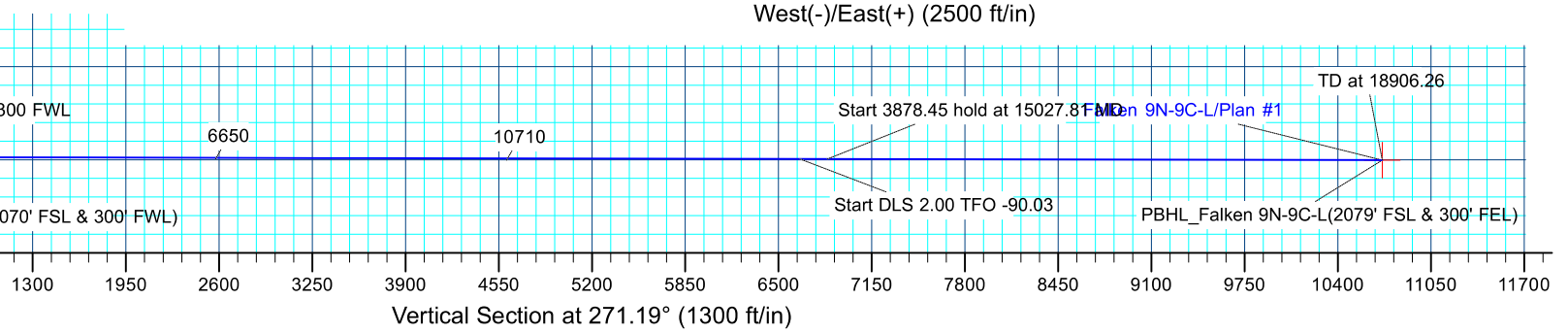
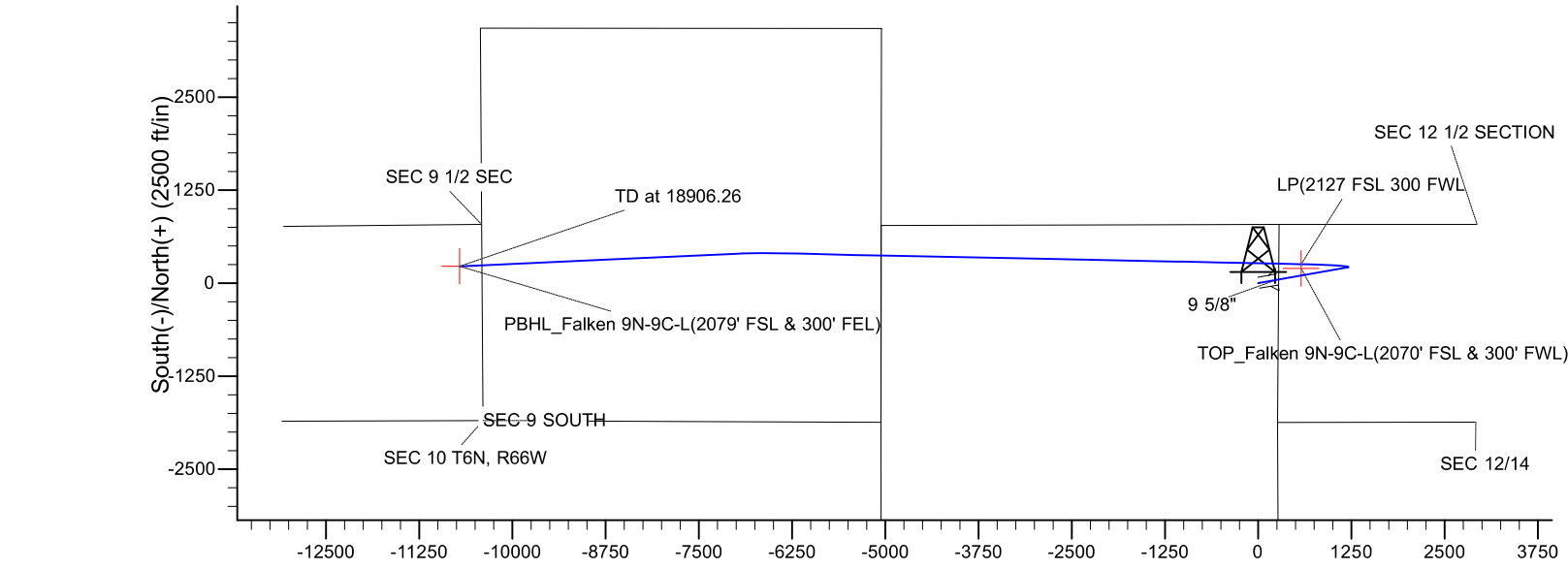
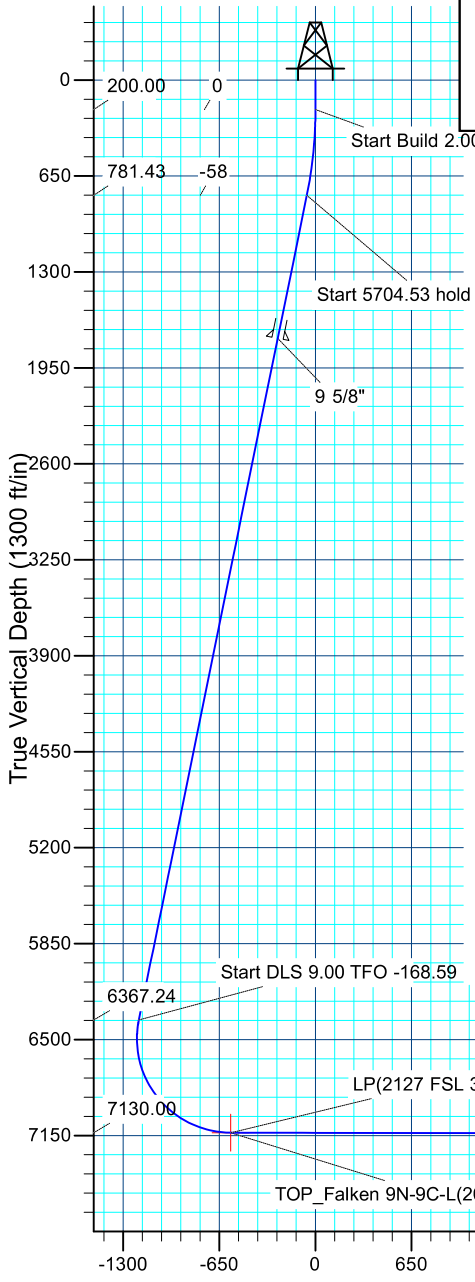
Magnetic Field

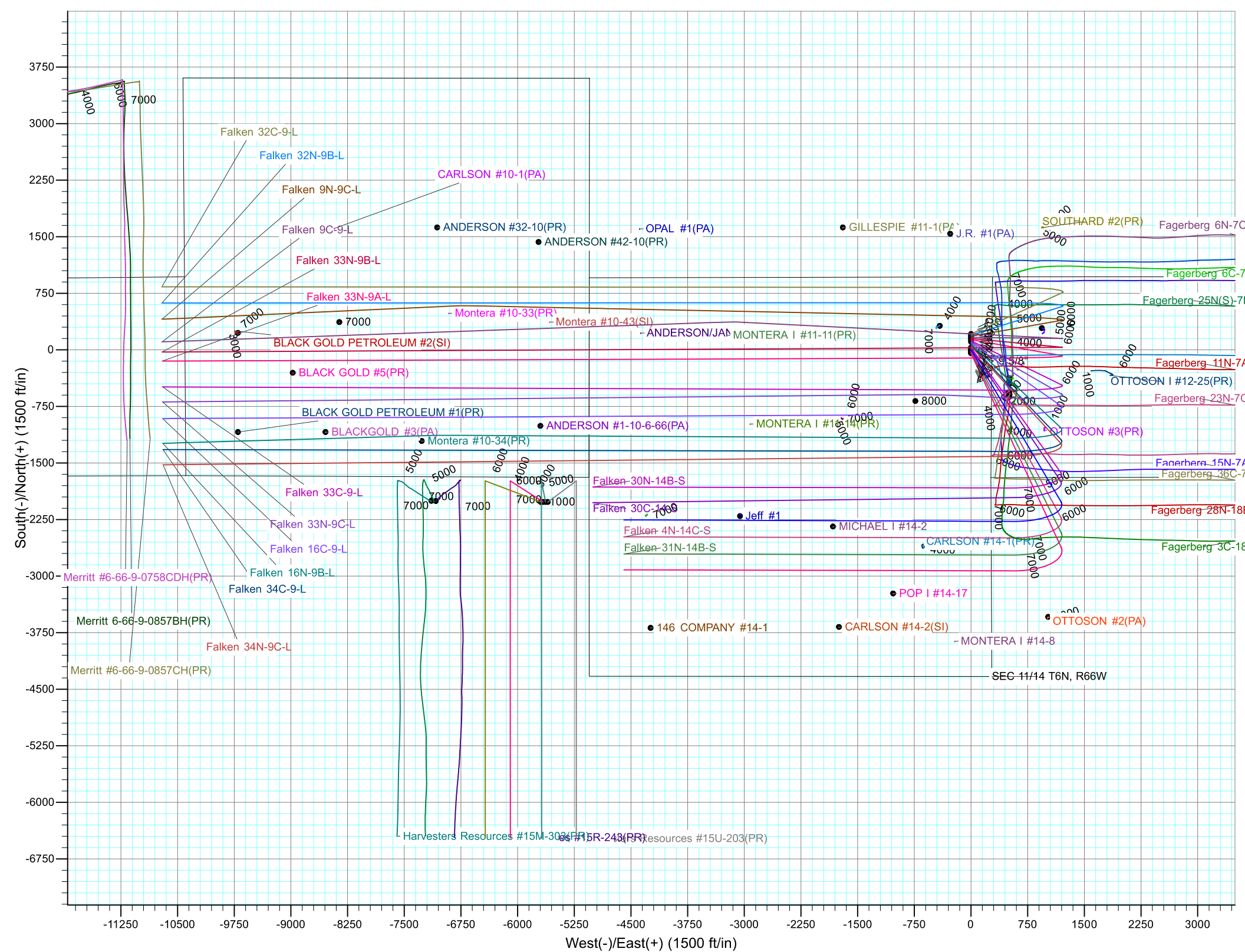
Strength: 52465.5snT

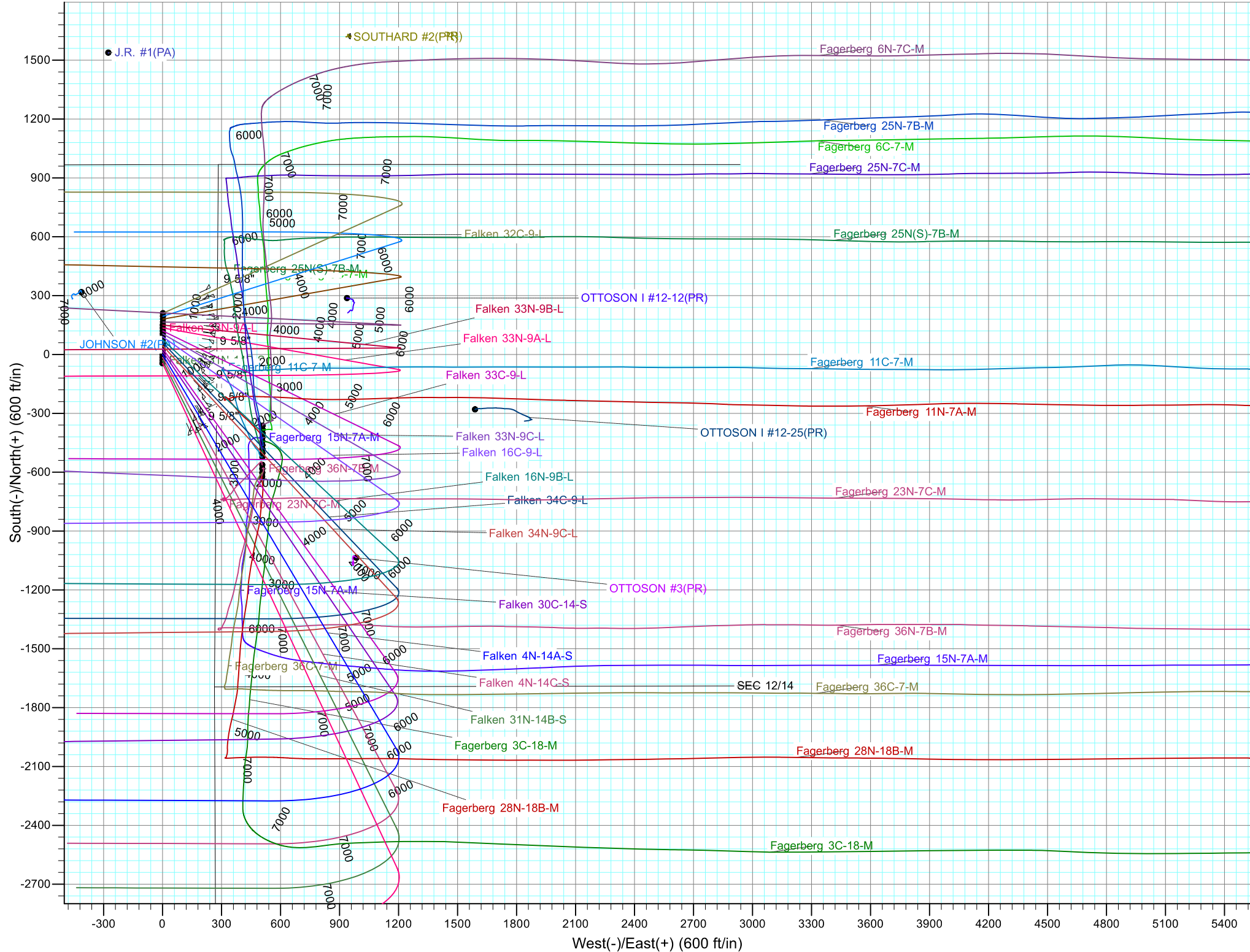
Dip Angle: 66.94°

Date: 4/21/2017

Model: IGRF2015









# **Synergy Resources Corporation**

**SEC 12-13 T6N R66W**

**Falken 9-11 PAD**

**Falken 9N-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 9N-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 9N-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		

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

Well	Falken 9N-9C-L, 1874' FSL & 276' FEL					
Well Position	+N/-S	-29.88 ft	Northing:	1,426,169.22 ft	Latitude:	40.5007150
	+E/-W	-0.28 ft	Easting:	3,212,484.61 ft	Longitude:	-104.7359460
Position Uncertainty		3.28 ft	Wellhead Elevation:		Ground Level:	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	271.19

<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	18,906.22 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	
785.50	11.71	80.00	781.43	10.35	58.72	2.00	2.00	0.00	80.00	
6,490.03	11.71	80.00	6,367.24	211.40	1,198.91	0.00	0.00	0.00	0.00	
7,616.41	89.89	271.19	7,130.00	254.88	577.04	9.00	6.94	-14.99	-168.59	
14,838.32	89.89	271.19	7,144.00	404.25	-6,643.32	0.00	0.00	0.00	0.00	
15,027.81	89.89	267.40	7,144.37	401.90	-6,832.76	2.00	0.00	-2.00	-90.03	
18,906.26	89.89	267.40	7,152.00	225.65	-10,707.20	0.00	0.00	0.00	0.00	PBHL_Falken 9N-9C-

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 9N-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 9N-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	80.00	299.98	0.30	1.72	-1.71	2.00	2.00	0.00
400.00	4.00	80.00	399.84	1.21	6.87	-6.85	2.00	2.00	0.00
500.00	6.00	80.00	499.45	2.73	15.46	-15.40	2.00	2.00	0.00
600.00	8.00	80.00	598.70	4.84	27.46	-27.35	2.00	2.00	0.00
700.00	10.00	80.00	697.47	7.56	42.86	-42.70	2.00	2.00	0.00
785.50	11.71	80.00	781.43	10.35	58.72	-58.49	2.00	2.00	0.00
<b>Start 5704.53 hold at 785.50 MD</b>									
800.00	11.71	80.00	795.63	10.86	61.62	-61.38	0.00	0.00	0.00
900.00	11.71	80.00	893.55	14.39	81.60	-81.29	0.00	0.00	0.00
1,000.00	11.71	80.00	991.47	17.91	101.59	-101.20	0.00	0.00	0.00
1,100.00	11.71	80.00	1,089.39	21.44	121.58	-121.11	0.00	0.00	0.00
1,200.00	11.71	80.00	1,187.31	24.96	141.57	-141.02	0.00	0.00	0.00
1,300.00	11.71	80.00	1,285.22	28.49	161.55	-160.93	0.00	0.00	0.00
1,400.00	11.71	80.00	1,383.14	32.01	181.54	-180.84	0.00	0.00	0.00
1,500.00	11.71	80.00	1,481.06	35.53	201.53	-200.75	0.00	0.00	0.00
1,600.00	11.71	80.00	1,578.98	39.06	221.52	-220.66	0.00	0.00	0.00
1,700.00	11.71	80.00	1,676.90	42.58	241.50	-240.57	0.00	0.00	0.00
1,774.65	11.71	80.00	1,750.00	45.21	256.42	-255.43	0.00	0.00	0.00
<b>9 5/8"</b>									
1,800.00	11.71	80.00	1,774.82	46.11	261.49	-260.48	0.00	0.00	0.00
1,900.00	11.71	80.00	1,872.74	49.63	281.48	-280.39	0.00	0.00	0.00
2,000.00	11.71	80.00	1,970.66	53.16	301.47	-300.30	0.00	0.00	0.00
2,100.00	11.71	80.00	2,068.57	56.68	321.45	-320.21	0.00	0.00	0.00
2,200.00	11.71	80.00	2,166.49	60.21	341.44	-340.12	0.00	0.00	0.00
2,300.00	11.71	80.00	2,264.41	63.73	361.43	-360.03	0.00	0.00	0.00
2,400.00	11.71	80.00	2,362.33	67.25	381.42	-379.94	0.00	0.00	0.00
2,500.00	11.71	80.00	2,460.25	70.78	401.40	-399.85	0.00	0.00	0.00
2,600.00	11.71	80.00	2,558.17	74.30	421.39	-419.76	0.00	0.00	0.00
2,700.00	11.71	80.00	2,656.09	77.83	441.38	-439.67	0.00	0.00	0.00
2,800.00	11.71	80.00	2,754.01	81.35	461.37	-459.58	0.00	0.00	0.00
2,900.00	11.71	80.00	2,851.92	84.88	481.35	-479.49	0.00	0.00	0.00
3,000.00	11.71	80.00	2,949.84	88.40	501.34	-499.40	0.00	0.00	0.00
3,100.00	11.71	80.00	3,047.76	91.92	521.33	-519.31	0.00	0.00	0.00
3,200.00	11.71	80.00	3,145.68	95.45	541.32	-539.22	0.00	0.00	0.00
3,300.00	11.71	80.00	3,243.60	98.97	561.30	-559.13	0.00	0.00	0.00
3,400.00	11.71	80.00	3,341.52	102.50	581.29	-579.04	0.00	0.00	0.00
3,500.00	11.71	80.00	3,439.44	106.02	601.28	-598.95	0.00	0.00	0.00
3,600.00	11.71	80.00	3,537.36	109.55	621.27	-618.86	0.00	0.00	0.00
3,700.00	11.71	80.00	3,635.27	113.07	641.25	-638.77	0.00	0.00	0.00
3,800.00	11.71	80.00	3,733.19	116.59	661.24	-658.68	0.00	0.00	0.00
3,900.00	11.71	80.00	3,831.11	120.12	681.23	-678.59	0.00	0.00	0.00
4,000.00	11.71	80.00	3,929.03	123.64	701.22	-698.50	0.00	0.00	0.00
4,100.00	11.71	80.00	4,026.95	127.17	721.20	-718.41	0.00	0.00	0.00
4,200.00	11.71	80.00	4,124.87	130.69	741.19	-738.32	0.00	0.00	0.00
4,300.00	11.71	80.00	4,222.79	134.22	761.18	-758.23	0.00	0.00	0.00
4,400.00	11.71	80.00	4,320.71	137.74	781.17	-778.14	0.00	0.00	0.00
4,500.00	11.71	80.00	4,418.62	141.26	801.15	-798.05	0.00	0.00	0.00
4,600.00	11.71	80.00	4,516.54	144.79	821.14	-817.96	0.00	0.00	0.00
4,700.00	11.71	80.00	4,614.46	148.31	841.13	-837.87	0.00	0.00	0.00

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<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 9N-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	11.71	80.00	4,712.38	151.84	861.12	-857.78	0.00	0.00	0.00
4,900.00	11.71	80.00	4,810.30	155.36	881.10	-877.69	0.00	0.00	0.00
5,000.00	11.71	80.00	4,908.22	158.89	901.09	-897.60	0.00	0.00	0.00
5,100.00	11.71	80.00	5,006.14	162.41	921.08	-917.51	0.00	0.00	0.00
5,200.00	11.71	80.00	5,104.06	165.94	941.07	-937.42	0.00	0.00	0.00
5,300.00	11.71	80.00	5,201.97	169.46	961.05	-957.33	0.00	0.00	0.00
5,400.00	11.71	80.00	5,299.89	172.98	981.04	-977.24	0.00	0.00	0.00
5,500.00	11.71	80.00	5,397.81	176.51	1,001.03	-997.15	0.00	0.00	0.00
5,600.00	11.71	80.00	5,495.73	180.03	1,021.02	-1,017.06	0.00	0.00	0.00
5,700.00	11.71	80.00	5,593.65	183.56	1,041.00	-1,036.97	0.00	0.00	0.00
5,800.00	11.71	80.00	5,691.57	187.08	1,060.99	-1,056.88	0.00	0.00	0.00
5,900.00	11.71	80.00	5,789.49	190.61	1,080.98	-1,076.79	0.00	0.00	0.00
6,000.00	11.71	80.00	5,887.41	194.13	1,100.97	-1,096.70	0.00	0.00	0.00
6,100.00	11.71	80.00	5,985.32	197.65	1,120.95	-1,116.61	0.00	0.00	0.00
6,200.00	11.71	80.00	6,083.24	201.18	1,140.94	-1,136.52	0.00	0.00	0.00
6,300.00	11.71	80.00	6,181.16	204.70	1,160.93	-1,156.43	0.00	0.00	0.00
6,400.00	11.71	80.00	6,279.08	208.23	1,180.92	-1,176.34	0.00	0.00	0.00
6,490.03	11.71	80.00	6,367.24	211.40	1,198.91	-1,194.26	0.00	0.00	0.00
<b>Start DLS 9.00 TFO -168.59</b>									
6,500.00	10.83	79.06	6,377.01	211.75	1,200.83	-1,196.17	9.00	-8.81	-9.48
6,600.00	2.80	35.80	6,476.27	215.52	1,211.50	-1,206.76	9.00	-8.04	-43.26
6,700.00	7.76	288.34	6,575.96	219.63	1,206.51	-1,201.69	9.00	4.96	-107.46
6,800.00	16.57	278.94	6,673.62	223.98	1,185.97	-1,181.07	9.00	8.81	-9.39
6,900.00	25.51	276.01	6,766.86	228.46	1,150.40	-1,145.41	9.00	8.94	-2.93
7,000.00	34.48	274.54	6,853.38	232.97	1,100.67	-1,095.59	9.00	8.97	-1.48
7,100.00	43.46	273.61	6,931.05	237.38	1,038.00	-1,032.84	9.00	8.98	-0.92
7,200.00	52.45	272.95	6,997.96	241.60	963.93	-958.71	9.00	8.99	-0.66
7,300.00	61.44	272.43	7,052.45	245.51	880.30	-875.01	9.00	8.99	-0.52
7,400.00	70.43	272.00	7,093.19	249.03	789.15	-783.81	9.00	8.99	-0.43
7,500.00	79.42	271.61	7,119.17	252.06	692.74	-687.36	9.00	8.99	-0.39
7,600.00	88.41	271.24	7,129.75	254.53	593.44	-588.02	9.00	8.99	-0.37
7,614.87	89.75	271.19	7,129.99	254.85	578.57	-573.16	9.00	8.99	-0.36
<b>TOP_Falken 9N-9C-L(2070' FSL &amp; 300' FWL)</b>									
7,616.41	89.89	271.19	7,130.00	254.88	577.04	-571.62	9.00	8.99	-0.36
<b>LP(2127 FSL 300 FWL</b>									
7,700.00	89.89	271.19	7,130.16	256.61	493.46	-488.02	0.00	0.00	0.00
7,800.00	89.89	271.19	7,130.35	258.68	393.48	-388.03	0.00	0.00	0.00
7,900.00	89.89	271.19	7,130.55	260.74	293.50	-288.03	0.00	0.00	0.00
8,000.00	89.89	271.19	7,130.74	262.81	193.53	-188.03	0.00	0.00	0.00
8,100.00	89.89	271.19	7,130.94	264.88	93.55	-88.03	0.00	0.00	0.00
8,200.00	89.89	271.19	7,131.13	266.95	-6.43	11.97	0.00	0.00	0.00
8,300.00	89.89	271.19	7,131.32	269.02	-106.41	111.97	0.00	0.00	0.00
8,400.00	89.89	271.19	7,131.52	271.09	-206.39	211.97	0.00	0.00	0.00
8,500.00	89.89	271.19	7,131.71	273.15	-306.37	311.97	0.00	0.00	0.00
8,600.00	89.89	271.19	7,131.90	275.22	-406.35	411.97	0.00	0.00	0.00
8,700.00	89.89	271.19	7,132.10	277.29	-506.32	511.97	0.00	0.00	0.00
8,800.00	89.89	271.19	7,132.29	279.36	-606.30	611.97	0.00	0.00	0.00
8,900.00	89.89	271.19	7,132.49	281.43	-706.28	711.97	0.00	0.00	0.00
9,000.00	89.89	271.19	7,132.68	283.50	-806.26	811.97	0.00	0.00	0.00
9,100.00	89.89	271.19	7,132.87	285.56	-906.24	911.97	0.00	0.00	0.00
9,200.00	89.89	271.19	7,133.07	287.63	-1,006.22	1,011.97	0.00	0.00	0.00
9,300.00	89.89	271.19	7,133.26	289.70	-1,106.19	1,111.97	0.00	0.00	0.00
9,400.00	89.89	271.19	7,133.46	291.77	-1,206.17	1,211.97	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 9N-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 9N-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	89.89	271.19	7,133.65	293.84	-1,306.15	1,311.97	0.00	0.00	0.00
9,600.00	89.89	271.19	7,133.84	295.91	-1,406.13	1,411.97	0.00	0.00	0.00
9,700.00	89.89	271.19	7,134.04	297.97	-1,506.11	1,511.97	0.00	0.00	0.00
9,800.00	89.89	271.19	7,134.23	300.04	-1,606.09	1,611.97	0.00	0.00	0.00
9,900.00	89.89	271.19	7,134.43	302.11	-1,706.06	1,711.97	0.00	0.00	0.00
10,000.00	89.89	271.19	7,134.62	304.18	-1,806.04	1,811.97	0.00	0.00	0.00
10,100.00	89.89	271.19	7,134.81	306.25	-1,906.02	1,911.97	0.00	0.00	0.00
10,200.00	89.89	271.19	7,135.01	308.32	-2,006.00	2,011.97	0.00	0.00	0.00
10,300.00	89.89	271.19	7,135.20	310.38	-2,105.98	2,111.97	0.00	0.00	0.00
10,400.00	89.89	271.19	7,135.39	312.45	-2,205.96	2,211.97	0.00	0.00	0.00
10,500.00	89.89	271.19	7,135.59	314.52	-2,305.94	2,311.97	0.00	0.00	0.00
10,600.00	89.89	271.19	7,135.78	316.59	-2,405.91	2,411.97	0.00	0.00	0.00
10,700.00	89.89	271.19	7,135.98	318.66	-2,505.89	2,511.97	0.00	0.00	0.00
10,800.00	89.89	271.19	7,136.17	320.73	-2,605.87	2,611.97	0.00	0.00	0.00
10,900.00	89.89	271.19	7,136.36	322.79	-2,705.85	2,711.97	0.00	0.00	0.00
11,000.00	89.89	271.19	7,136.56	324.86	-2,805.83	2,811.97	0.00	0.00	0.00
11,100.00	89.89	271.19	7,136.75	326.93	-2,905.81	2,911.97	0.00	0.00	0.00
11,200.00	89.89	271.19	7,136.95	329.00	-3,005.78	3,011.97	0.00	0.00	0.00
11,300.00	89.89	271.19	7,137.14	331.07	-3,105.76	3,111.97	0.00	0.00	0.00
11,400.00	89.89	271.19	7,137.33	333.14	-3,205.74	3,211.97	0.00	0.00	0.00
11,500.00	89.89	271.19	7,137.53	335.20	-3,305.72	3,311.97	0.00	0.00	0.00
11,600.00	89.89	271.19	7,137.72	337.27	-3,405.70	3,411.97	0.00	0.00	0.00
11,700.00	89.89	271.19	7,137.92	339.34	-3,505.68	3,511.97	0.00	0.00	0.00
11,800.00	89.89	271.19	7,138.11	341.41	-3,605.65	3,611.97	0.00	0.00	0.00
11,900.00	89.89	271.19	7,138.30	343.48	-3,705.63	3,711.97	0.00	0.00	0.00
12,000.00	89.89	271.19	7,138.50	345.55	-3,805.61	3,811.97	0.00	0.00	0.00
12,100.00	89.89	271.19	7,138.69	347.61	-3,905.59	3,911.97	0.00	0.00	0.00
12,200.00	89.89	271.19	7,138.88	349.68	-4,005.57	4,011.97	0.00	0.00	0.00
12,300.00	89.89	271.19	7,139.08	351.75	-4,105.55	4,111.97	0.00	0.00	0.00
12,400.00	89.89	271.19	7,139.27	353.82	-4,205.53	4,211.97	0.00	0.00	0.00
12,500.00	89.89	271.19	7,139.47	355.89	-4,305.50	4,311.97	0.00	0.00	0.00
12,600.00	89.89	271.19	7,139.66	357.95	-4,405.48	4,411.97	0.00	0.00	0.00
12,700.00	89.89	271.19	7,139.85	360.02	-4,505.46	4,511.97	0.00	0.00	0.00
12,800.00	89.89	271.19	7,140.05	362.09	-4,605.44	4,611.97	0.00	0.00	0.00
12,900.00	89.89	271.19	7,140.24	364.16	-4,705.42	4,711.97	0.00	0.00	0.00
13,000.00	89.89	271.19	7,140.44	366.23	-4,805.40	4,811.97	0.00	0.00	0.00
13,100.00	89.89	271.19	7,140.63	368.30	-4,905.37	4,911.97	0.00	0.00	0.00
13,200.00	89.89	271.19	7,140.82	370.36	-5,005.35	5,011.96	0.00	0.00	0.00
13,300.00	89.89	271.19	7,141.02	372.43	-5,105.33	5,111.96	0.00	0.00	0.00
13,400.00	89.89	271.19	7,141.21	374.50	-5,205.31	5,211.96	0.00	0.00	0.00
13,500.00	89.89	271.19	7,141.41	376.57	-5,305.29	5,311.96	0.00	0.00	0.00
13,600.00	89.89	271.19	7,141.60	378.64	-5,405.27	5,411.96	0.00	0.00	0.00
13,700.00	89.89	271.19	7,141.79	380.71	-5,505.24	5,511.96	0.00	0.00	0.00
13,800.00	89.89	271.19	7,141.99	382.77	-5,605.22	5,611.96	0.00	0.00	0.00
13,900.00	89.89	271.19	7,142.18	384.84	-5,705.20	5,711.96	0.00	0.00	0.00
14,000.00	89.89	271.19	7,142.37	386.91	-5,805.18	5,811.96	0.00	0.00	0.00
14,100.00	89.89	271.19	7,142.57	388.98	-5,905.16	5,911.96	0.00	0.00	0.00
14,200.00	89.89	271.19	7,142.76	391.05	-6,005.14	6,011.96	0.00	0.00	0.00
14,300.00	89.89	271.19	7,142.96	393.12	-6,105.12	6,111.96	0.00	0.00	0.00
14,400.00	89.89	271.19	7,143.15	395.18	-6,205.09	6,211.96	0.00	0.00	0.00
14,500.00	89.89	271.19	7,143.34	397.25	-6,305.07	6,311.96	0.00	0.00	0.00
14,600.00	89.89	271.19	7,143.54	399.32	-6,405.05	6,411.96	0.00	0.00	0.00
14,700.00	89.89	271.19	7,143.73	401.39	-6,505.03	6,511.96	0.00	0.00	0.00
14,800.00	89.89	271.19	7,143.93	403.46	-6,605.01	6,611.96	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 9N-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 9N-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)
14,838.32	89.89	271.19	7,144.00	404.25	-6,643.32	6,650.28	0.00	0.00	0.00
<b>Start DLS 2.00 TFO -90.03</b>									
14,900.00	89.89	269.95	7,144.12	404.86	-6,704.99	6,711.96	2.00	0.00	-2.00
15,000.00	89.89	267.95	7,144.32	403.03	-6,804.97	6,811.88	2.00	0.00	-2.00
15,027.81	89.89	267.40	7,144.37	401.90	-6,832.76	6,839.63	2.00	0.00	-2.00
<b>Start 3878.45 hold at 15027.81 MD</b>									
15,100.00	89.89	267.40	7,144.51	398.62	-6,904.88	6,911.66	0.00	0.00	0.00
15,200.00	89.89	267.40	7,144.71	394.08	-7,004.77	7,011.44	0.00	0.00	0.00
15,300.00	89.89	267.40	7,144.91	389.53	-7,104.67	7,111.23	0.00	0.00	0.00
15,400.00	89.89	267.40	7,145.10	384.99	-7,204.56	7,211.01	0.00	0.00	0.00
15,500.00	89.89	267.40	7,145.30	380.45	-7,304.46	7,310.79	0.00	0.00	0.00
15,600.00	89.89	267.40	7,145.50	375.90	-7,404.36	7,410.57	0.00	0.00	0.00
15,700.00	89.89	267.40	7,145.69	371.36	-7,504.25	7,510.35	0.00	0.00	0.00
15,800.00	89.89	267.40	7,145.89	366.81	-7,604.15	7,610.13	0.00	0.00	0.00
15,900.00	89.89	267.40	7,146.09	362.27	-7,704.05	7,709.91	0.00	0.00	0.00
16,000.00	89.89	267.40	7,146.28	357.72	-7,803.94	7,809.69	0.00	0.00	0.00
16,100.00	89.89	267.40	7,146.48	353.18	-7,903.84	7,909.47	0.00	0.00	0.00
16,200.00	89.89	267.40	7,146.68	348.63	-8,003.74	8,009.25	0.00	0.00	0.00
16,300.00	89.89	267.40	7,146.87	344.09	-8,103.63	8,109.03	0.00	0.00	0.00
16,400.00	89.89	267.40	7,147.07	339.55	-8,203.53	8,208.81	0.00	0.00	0.00
16,500.00	89.89	267.40	7,147.27	335.00	-8,303.43	8,308.59	0.00	0.00	0.00
16,600.00	89.89	267.40	7,147.46	330.46	-8,403.32	8,408.37	0.00	0.00	0.00
16,700.00	89.89	267.40	7,147.66	325.91	-8,503.22	8,508.15	0.00	0.00	0.00
16,800.00	89.89	267.40	7,147.86	321.37	-8,603.12	8,607.93	0.00	0.00	0.00
16,900.00	89.89	267.40	7,148.05	316.82	-8,703.01	8,707.71	0.00	0.00	0.00
17,000.00	89.89	267.40	7,148.25	312.28	-8,802.91	8,807.50	0.00	0.00	0.00
17,100.00	89.89	267.40	7,148.45	307.74	-8,902.81	8,907.28	0.00	0.00	0.00
17,200.00	89.89	267.40	7,148.64	303.19	-9,002.70	9,007.06	0.00	0.00	0.00
17,300.00	89.89	267.40	7,148.84	298.65	-9,102.60	9,106.84	0.00	0.00	0.00
17,400.00	89.89	267.40	7,149.04	294.10	-9,202.49	9,206.62	0.00	0.00	0.00
17,500.00	89.89	267.40	7,149.23	289.56	-9,302.39	9,306.40	0.00	0.00	0.00
17,600.00	89.89	267.40	7,149.43	285.01	-9,402.29	9,406.18	0.00	0.00	0.00
17,700.00	89.89	267.40	7,149.63	280.47	-9,502.18	9,505.96	0.00	0.00	0.00
17,800.00	89.89	267.40	7,149.82	275.92	-9,602.08	9,605.74	0.00	0.00	0.00
17,900.00	89.89	267.40	7,150.02	271.38	-9,701.98	9,705.52	0.00	0.00	0.00
18,000.00	89.89	267.40	7,150.22	266.84	-9,801.87	9,805.30	0.00	0.00	0.00
18,100.00	89.89	267.40	7,150.41	262.29	-9,901.77	9,905.08	0.00	0.00	0.00
18,200.00	89.89	267.40	7,150.61	257.75	-10,001.67	10,004.86	0.00	0.00	0.00
18,300.00	89.89	267.40	7,150.81	253.20	-10,101.56	10,104.64	0.00	0.00	0.00
18,400.00	89.89	267.40	7,151.00	248.66	-10,201.46	10,204.42	0.00	0.00	0.00
18,500.00	89.89	267.40	7,151.20	244.11	-10,301.36	10,304.20	0.00	0.00	0.00
18,600.00	89.89	267.40	7,151.40	239.57	-10,401.25	10,403.98	0.00	0.00	0.00
18,700.00	89.89	267.40	7,151.59	235.03	-10,501.15	10,503.77	0.00	0.00	0.00
18,800.00	89.89	267.40	7,151.79	230.48	-10,601.05	10,603.55	0.00	0.00	0.00
18,900.00	89.89	267.40	7,151.99	225.94	-10,700.94	10,703.33	0.00	0.00	0.00
18,906.26	89.89	267.40	7,152.00	225.65	-10,707.20	10,709.58	0.00	0.00	0.00
<b>TD at 18906.26 - PBHL_Falken 9N-9C-L(2079' FSL &amp; 300' FEL)</b>									

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 9N-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 9N-9C-L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
TOP_Falken 9N-9C-L(20	0.00	0.00	7,130.00	196.01	577.33	1,426,370.20	3,213,060.23	40.5012530	-104.7338700
- plan misses target center by 58.85ft at 7614.90ft MD (7129.99 TVD, 254.85 N, 578.55 E)									
- Point									
PBHL_Falken 9N-9C-L(20	0.00	0.00	7,152.00	225.65	-10,707.20	1,426,302.61	3,201,775.86	40.5013280	-104.7744480
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,774.65	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
785.50	781.43	10.35	58.72	Start 5704.53 hold at 785.50 MD
6,490.03	6,367.24	211.40	1,198.91	Start DLS 9.00 TFO -168.59
7,616.41	7,130.00	254.88	577.04	LP(2127 FSL 300 FWL
14,838.32	7,144.00	404.25	-6,643.32	Start DLS 2.00 TFO -90.03
15,027.81	7,144.37	401.90	-6,832.76	Start 3878.45 hold at 15027.81 MD
18,906.26	7,152.00	225.65	-10,707.20	TD at 18906.26