



Project: SEC 12-13 T6N R66W
Site: Falken 9-11 PAD
Well: Falken 33N-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	
865.50	13.31	120.00	859.53	-38.48	66.64	2.00	120.00	-66.26	
6520.81	13.31	120.00	6362.93	-689.46	1194.18	0.00	0.00	-1187.38	
7650.18	89.86	272.47	7125.00	-745.70	569.48	9.00	151.84	-562.16	
8689.38	89.86	272.47	7127.49	-700.89	-468.76	0.00	0.00	475.59	
8841.07	89.86	269.44	7127.85	-698.36	-620.41	2.00	-90.00	627.20	
18920.23	89.86	269.44	7152.00	-797.33	-10699.05	0.00	0.00	10706.34	PBHL_Falken 33N-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 33N-9C-L	7125.00	-825.87	569.84	1425273.24	3213061.64	40.4982420	-104.7338990	Point	
- plan misses target center by 80.09ft at 7646.70ft MD (7124.98 TVD, -745.85 N, 572.95 E)									
PBHL_Falken 33N-9C-L	7152.00	-797.33	-10699.05	1425204.69	3201792.91	40.4983140	-104.7744190	Point	
- plan hits target center									

CASING DETAILS			
TVD	MD	Name	Size
1750.00	1780.55	9 5/8"	9.625

T

M

Azimuths to True North

Magnetic North: 8.22°

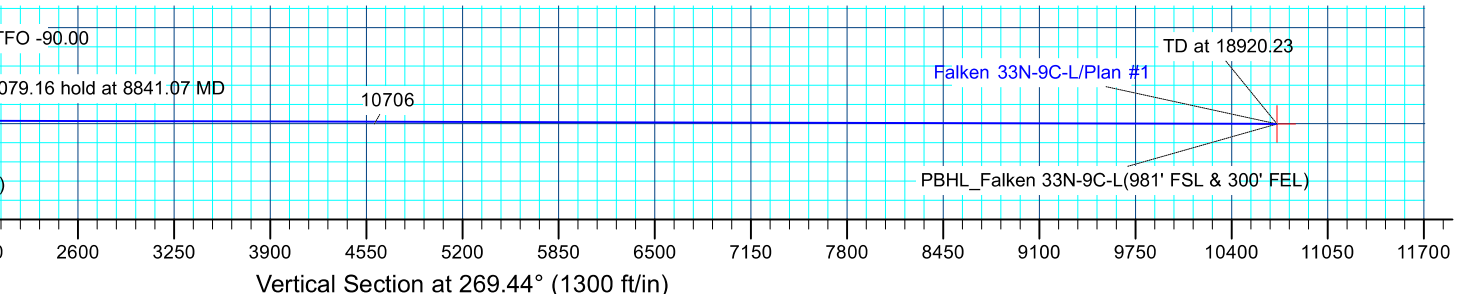
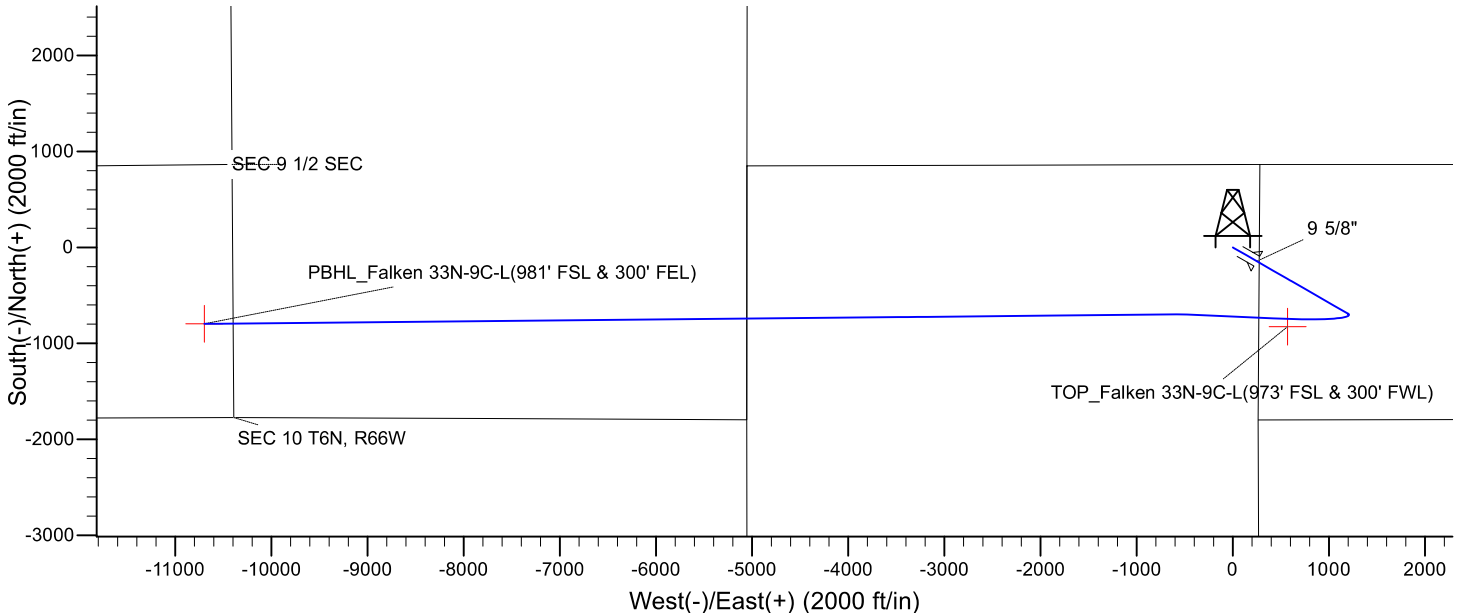
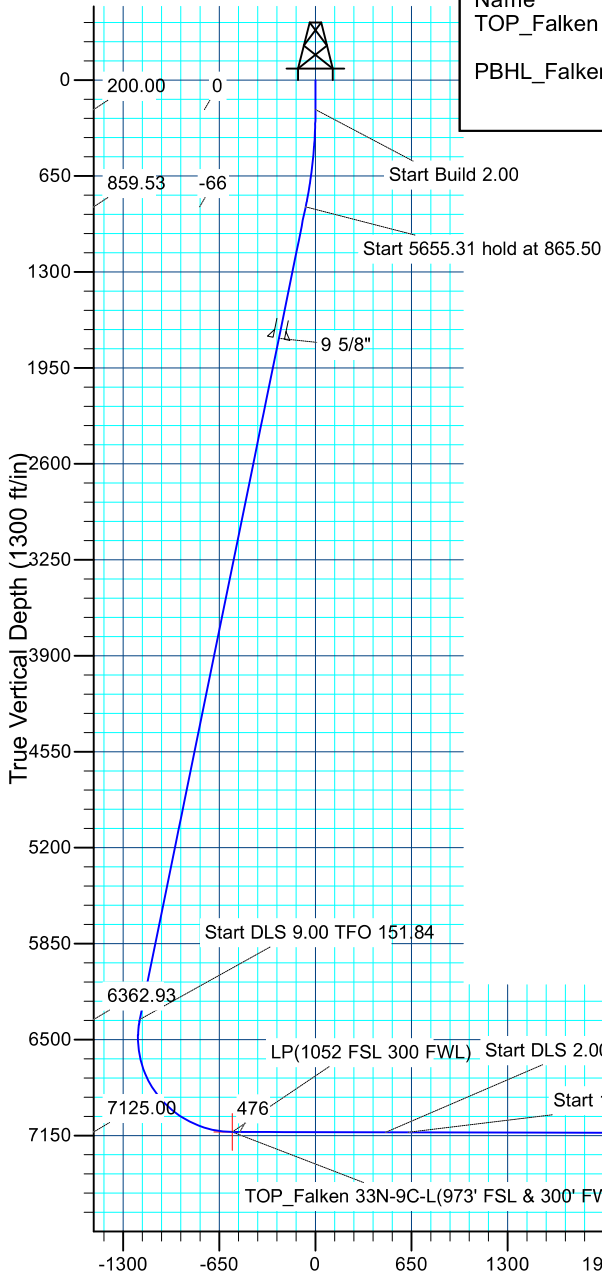
Magnetic Field

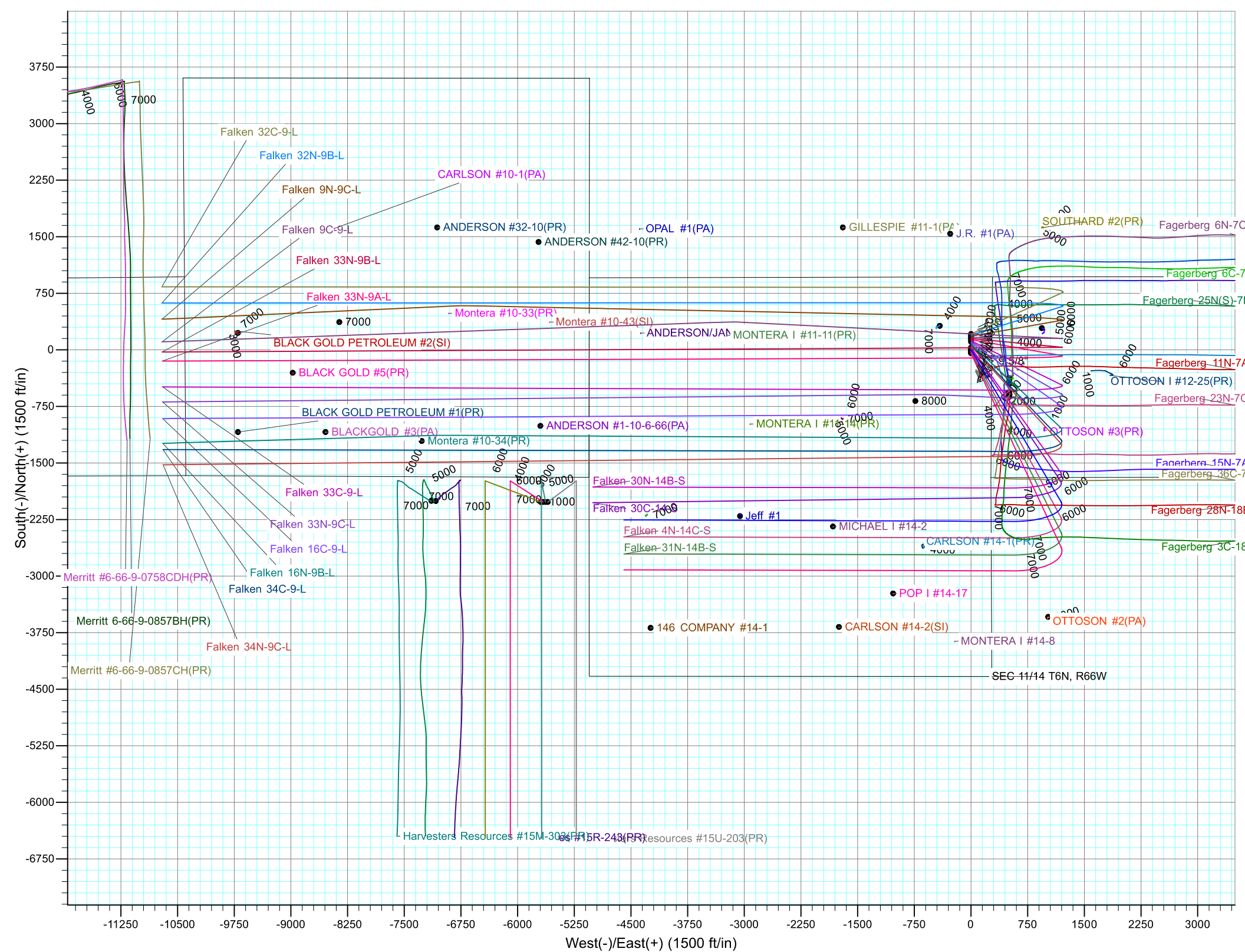
Strength: 52465.4snT

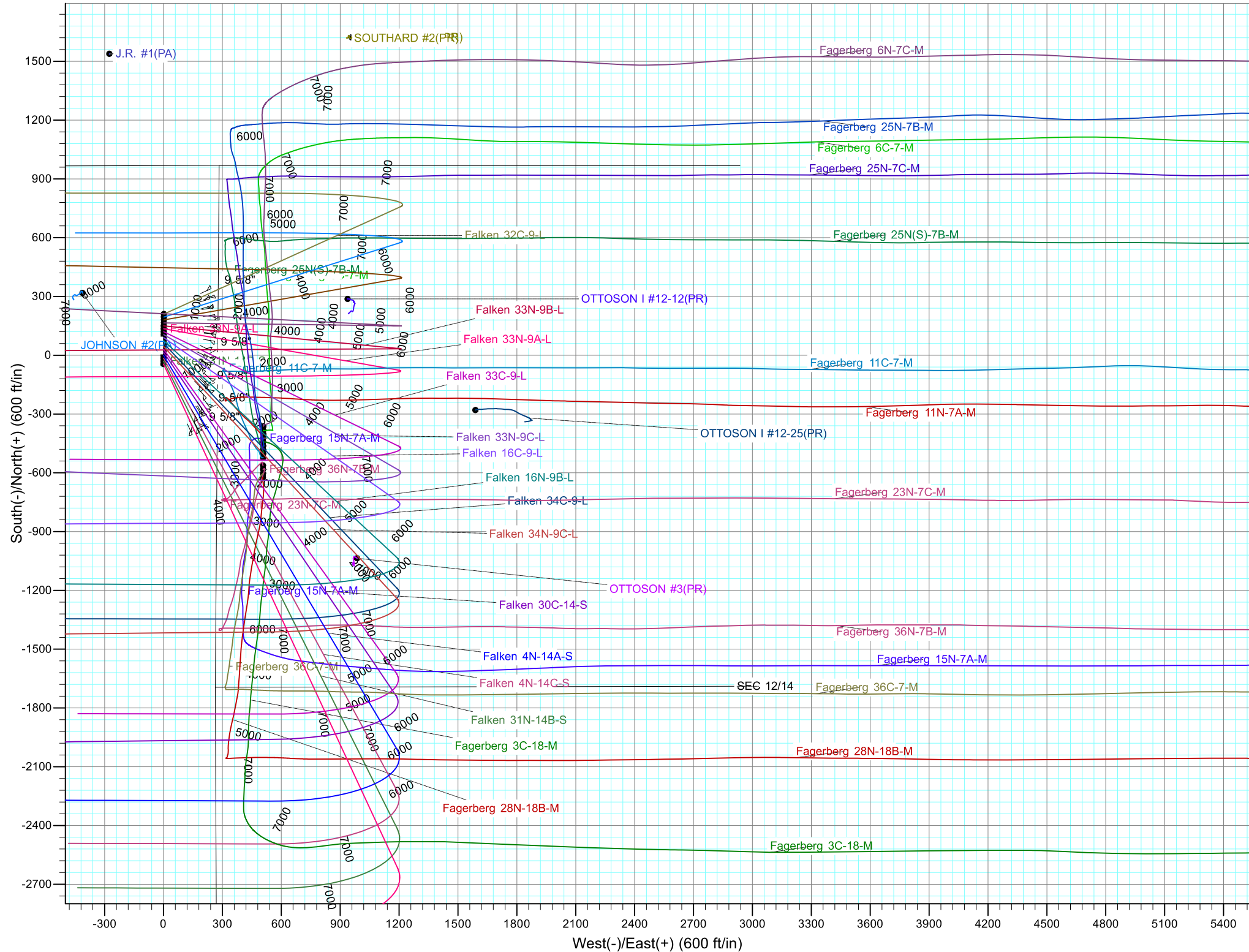
Dip Angle: 66.94°

Date: 4/21/2017

Model: IGRF2015









Synergy Resources Corporation

SEC 12-13 T6N R66W

Falken 9-11 PAD

Falken 33N-9C-L

OH

Plan: Plan #1

Standard Planning Report

25 April, 2017



Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9C-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	SEC 12-13 T6N R66W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	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 33N-9C-L, 1799' FSL & 276' FEL			
Well Position	+N/-S	-104.92 ft	Northing:	1,426,094.18 ft
	+E/-W	-0.83 ft	Easting:	3,212,484.70 ft
Position Uncertainty		3.28 ft	Wellhead Elevation:	Ground Level: 4,810.00 ft

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

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	269.44

Plan Survey Tool Program	Date	4/24/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,920.22 Plan #1 (OH)	MWD+IFR1	
			OWSG MWD + IFR1	

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
0.00	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	
865.50	13.31	120.00	859.53	-38.48	66.64	2.00	2.00	0.00	120.00	
6,520.81	13.31	120.00	6,362.93	-689.46	1,194.18	0.00	0.00	0.00	0.00	
7,650.18	89.86	272.47	7,125.00	-745.70	569.48	9.00	6.78	13.50	151.84	
8,689.38	89.86	272.47	7,127.49	-700.89	-468.76	0.00	0.00	0.00	0.00	
8,841.07	89.86	269.44	7,127.85	-698.36	-620.41	2.00	0.00	-2.00	-90.00	
18,920.23	89.86	269.44	7,152.00	-797.33	-10,699.05	0.00	0.00	0.00	0.00	PBHL_Falken 33N-9C

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9C-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
Start Build 2.00									
300.00	2.00	120.00	299.98	-0.87	1.51	-1.50	2.00	2.00	0.00
400.00	4.00	120.00	399.84	-3.49	6.04	-6.01	2.00	2.00	0.00
500.00	6.00	120.00	499.45	-7.85	13.59	-13.51	2.00	2.00	0.00
600.00	8.00	120.00	598.70	-13.94	24.14	-24.01	2.00	2.00	0.00
700.00	10.00	120.00	697.47	-21.76	37.69	-37.48	2.00	2.00	0.00
800.00	12.00	120.00	795.62	-31.30	54.22	-53.91	2.00	2.00	0.00
865.50	13.31	120.00	859.53	-38.48	66.64	-66.26	2.00	2.00	0.00
Start 5655.31 hold at 865.50 MD									
900.00	13.31	120.00	893.10	-42.45	73.52	-73.10	0.00	0.00	0.00
1,000.00	13.31	120.00	990.42	-53.96	93.46	-92.93	0.00	0.00	0.00
1,100.00	13.31	120.00	1,087.73	-65.47	113.40	-112.75	0.00	0.00	0.00
1,200.00	13.31	120.00	1,185.05	-76.98	133.33	-132.57	0.00	0.00	0.00
1,300.00	13.31	120.00	1,282.36	-88.49	153.27	-152.40	0.00	0.00	0.00
1,400.00	13.31	120.00	1,379.67	-100.00	173.21	-172.22	0.00	0.00	0.00
1,500.00	13.31	120.00	1,476.99	-111.51	193.15	-192.05	0.00	0.00	0.00
1,600.00	13.31	120.00	1,574.30	-123.02	213.08	-211.87	0.00	0.00	0.00
1,700.00	13.31	120.00	1,671.61	-134.54	233.02	-231.70	0.00	0.00	0.00
1,780.55	13.31	120.00	1,750.00	-143.81	249.08	-247.66	0.00	0.00	0.00
9 5/8"									
1,800.00	13.31	120.00	1,768.93	-146.05	252.96	-251.52	0.00	0.00	0.00
1,900.00	13.31	120.00	1,866.24	-157.56	272.90	-271.34	0.00	0.00	0.00
2,000.00	13.31	120.00	1,963.56	-169.07	292.83	-291.17	0.00	0.00	0.00
2,100.00	13.31	120.00	2,060.87	-180.58	312.77	-310.99	0.00	0.00	0.00
2,200.00	13.31	120.00	2,158.18	-192.09	332.71	-330.82	0.00	0.00	0.00
2,300.00	13.31	120.00	2,255.50	-203.60	352.65	-350.64	0.00	0.00	0.00
2,400.00	13.31	120.00	2,352.81	-215.11	372.58	-370.46	0.00	0.00	0.00
2,500.00	13.31	120.00	2,450.13	-226.62	392.52	-390.29	0.00	0.00	0.00
2,600.00	13.31	120.00	2,547.44	-238.13	412.46	-410.11	0.00	0.00	0.00
2,700.00	13.31	120.00	2,644.75	-249.64	432.40	-429.94	0.00	0.00	0.00
2,800.00	13.31	120.00	2,742.07	-261.16	452.34	-449.76	0.00	0.00	0.00
2,900.00	13.31	120.00	2,839.38	-272.67	472.27	-469.59	0.00	0.00	0.00
3,000.00	13.31	120.00	2,936.70	-284.18	492.21	-489.41	0.00	0.00	0.00
3,100.00	13.31	120.00	3,034.01	-295.69	512.15	-509.23	0.00	0.00	0.00
3,200.00	13.31	120.00	3,131.32	-307.20	532.09	-529.06	0.00	0.00	0.00
3,300.00	13.31	120.00	3,228.64	-318.71	552.02	-548.88	0.00	0.00	0.00
3,400.00	13.31	120.00	3,325.95	-330.22	571.96	-568.71	0.00	0.00	0.00
3,500.00	13.31	120.00	3,423.26	-341.73	591.90	-588.53	0.00	0.00	0.00
3,600.00	13.31	120.00	3,520.58	-353.24	611.84	-608.35	0.00	0.00	0.00
3,700.00	13.31	120.00	3,617.89	-364.75	631.77	-628.18	0.00	0.00	0.00
3,800.00	13.31	120.00	3,715.21	-376.27	651.71	-648.00	0.00	0.00	0.00
3,900.00	13.31	120.00	3,812.52	-387.78	671.65	-667.83	0.00	0.00	0.00
4,000.00	13.31	120.00	3,909.83	-399.29	691.59	-687.65	0.00	0.00	0.00
4,100.00	13.31	120.00	4,007.15	-410.80	711.52	-707.48	0.00	0.00	0.00
4,200.00	13.31	120.00	4,104.46	-422.31	731.46	-727.30	0.00	0.00	0.00
4,300.00	13.31	120.00	4,201.78	-433.82	751.40	-747.12	0.00	0.00	0.00
4,400.00	13.31	120.00	4,299.09	-445.33	771.34	-766.95	0.00	0.00	0.00
4,500.00	13.31	120.00	4,396.40	-456.84	791.27	-786.77	0.00	0.00	0.00
4,600.00	13.31	120.00	4,493.72	-468.35	811.21	-806.60	0.00	0.00	0.00
4,700.00	13.31	120.00	4,591.03	-479.86	831.15	-826.42	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9C-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	13.31	120.00	4,688.34	-491.38	851.09	-846.24	0.00	0.00	0.00
4,900.00	13.31	120.00	4,785.66	-502.89	871.02	-866.07	0.00	0.00	0.00
5,000.00	13.31	120.00	4,882.97	-514.40	890.96	-885.89	0.00	0.00	0.00
5,100.00	13.31	120.00	4,980.29	-525.91	910.90	-905.72	0.00	0.00	0.00
5,200.00	13.31	120.00	5,077.60	-537.42	930.84	-925.54	0.00	0.00	0.00
5,300.00	13.31	120.00	5,174.91	-548.93	950.78	-945.36	0.00	0.00	0.00
5,400.00	13.31	120.00	5,272.23	-560.44	970.71	-965.19	0.00	0.00	0.00
5,500.00	13.31	120.00	5,369.54	-571.95	990.65	-985.01	0.00	0.00	0.00
5,600.00	13.31	120.00	5,466.86	-583.46	1,010.59	-1,004.84	0.00	0.00	0.00
5,700.00	13.31	120.00	5,564.17	-594.97	1,030.53	-1,024.66	0.00	0.00	0.00
5,800.00	13.31	120.00	5,661.48	-606.49	1,050.46	-1,044.49	0.00	0.00	0.00
5,900.00	13.31	120.00	5,758.80	-618.00	1,070.40	-1,064.31	0.00	0.00	0.00
6,000.00	13.31	120.00	5,856.11	-629.51	1,090.34	-1,084.13	0.00	0.00	0.00
6,100.00	13.31	120.00	5,953.43	-641.02	1,110.28	-1,103.96	0.00	0.00	0.00
6,200.00	13.31	120.00	6,050.74	-652.53	1,130.21	-1,123.78	0.00	0.00	0.00
6,300.00	13.31	120.00	6,148.05	-664.04	1,150.15	-1,143.61	0.00	0.00	0.00
6,400.00	13.31	120.00	6,245.37	-675.55	1,170.09	-1,163.43	0.00	0.00	0.00
6,500.00	13.31	120.00	6,342.68	-687.06	1,190.03	-1,183.25	0.00	0.00	0.00
6,520.81	13.31	120.00	6,362.93	-689.46	1,194.18	-1,187.38	0.00	0.00	0.00
Start DLS 9.00 TFO 151.84									
6,600.00	7.78	145.64	6,440.79	-698.45	1,205.11	-1,198.22	9.00	-6.99	32.38
6,700.00	7.60	217.46	6,540.10	-709.30	1,204.91	-1,197.92	9.00	-0.18	71.82
6,800.00	14.71	247.88	6,638.22	-719.35	1,189.09	-1,182.01	9.00	7.11	30.42
6,900.00	23.16	257.68	6,732.75	-728.34	1,158.06	-1,150.89	9.00	8.45	9.80
7,000.00	31.90	262.37	6,821.36	-736.06	1,112.57	-1,105.32	9.00	8.74	4.69
7,100.00	40.74	265.20	6,901.85	-742.31	1,053.74	-1,046.44	9.00	8.85	2.82
7,200.00	49.64	267.16	6,972.26	-746.95	983.03	-975.68	9.00	8.89	1.96
7,300.00	58.55	268.65	7,030.85	-749.84	902.17	-894.79	9.00	8.92	1.50
7,400.00	67.49	269.89	7,076.17	-750.94	813.15	-805.77	9.00	8.93	1.24
7,500.00	76.43	270.97	7,107.11	-750.20	718.17	-710.80	9.00	8.94	1.08
7,600.00	85.37	271.98	7,122.91	-747.64	619.56	-612.22	9.00	8.95	1.01
7,646.70	89.55	272.44	7,124.98	-745.85	572.95	-565.63	9.00	8.95	0.98
TOP_Falken 33N-9C-L(973' FSL & 300' FWL)									
7,650.18	89.86	272.47	7,125.00	-745.70	569.48	-562.16	9.00	8.95	0.98
LP(1052 FSL 300 FWL)									
7,700.00	89.86	272.47	7,125.12	-743.55	519.70	-512.41	0.00	0.00	0.00
7,800.00	89.86	272.47	7,125.36	-739.24	419.79	-412.55	0.00	0.00	0.00
7,900.00	89.86	272.47	7,125.60	-734.93	319.89	-312.69	0.00	0.00	0.00
8,000.00	89.86	272.47	7,125.84	-730.61	219.98	-212.83	0.00	0.00	0.00
8,100.00	89.86	272.47	7,126.08	-726.30	120.07	-112.97	0.00	0.00	0.00
8,200.00	89.86	272.47	7,126.32	-721.99	20.17	-13.11	0.00	0.00	0.00
8,300.00	89.86	272.47	7,126.56	-717.68	-79.74	86.75	0.00	0.00	0.00
8,400.00	89.86	272.47	7,126.80	-713.37	-179.65	186.61	0.00	0.00	0.00
8,500.00	89.86	272.47	7,127.04	-709.06	-279.55	286.47	0.00	0.00	0.00
8,600.00	89.86	272.47	7,127.28	-704.74	-379.46	386.33	0.00	0.00	0.00
8,689.38	89.86	272.47	7,127.49	-700.89	-468.76	475.59	0.00	0.00	0.00
Start DLS 2.00 TFO -90.00									
8,700.00	89.86	272.26	7,127.52	-700.45	-479.37	486.19	2.00	0.00	-2.00
8,800.00	89.86	270.26	7,127.76	-698.26	-579.34	586.13	2.00	0.00	-2.00
8,841.07	89.86	269.44	7,127.85	-698.36	-620.41	627.20	2.00	0.00	-2.00
Start 10079.16 hold at 8841.07 MD									
8,900.00	89.86	269.44	7,128.00	-698.94	-679.33	686.13	0.00	0.00	0.00
9,000.00	89.86	269.44	7,128.23	-699.92	-779.33	786.13	0.00	0.00	0.00
9,100.00	89.86	269.44	7,128.47	-700.91	-879.32	886.13	0.00	0.00	0.00

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Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
9,200.00	89.86	269.44	7,128.71	-701.89	-979.32	986.13	0.00	0.00	0.00
9,300.00	89.86	269.44	7,128.95	-702.87	-1,079.31	1,086.13	0.00	0.00	0.00
9,400.00	89.86	269.44	7,129.19	-703.85	-1,179.31	1,186.13	0.00	0.00	0.00
9,500.00	89.86	269.44	7,129.43	-704.83	-1,279.30	1,286.13	0.00	0.00	0.00
9,600.00	89.86	269.44	7,129.67	-705.82	-1,379.30	1,386.13	0.00	0.00	0.00
9,700.00	89.86	269.44	7,129.91	-706.80	-1,479.29	1,486.13	0.00	0.00	0.00
9,800.00	89.86	269.44	7,130.15	-707.78	-1,579.29	1,586.13	0.00	0.00	0.00
9,900.00	89.86	269.44	7,130.39	-708.76	-1,679.28	1,686.13	0.00	0.00	0.00
10,000.00	89.86	269.44	7,130.63	-709.74	-1,779.28	1,786.13	0.00	0.00	0.00
10,100.00	89.86	269.44	7,130.87	-710.72	-1,879.27	1,886.13	0.00	0.00	0.00
10,200.00	89.86	269.44	7,131.11	-711.71	-1,979.27	1,986.13	0.00	0.00	0.00
10,300.00	89.86	269.44	7,131.35	-712.69	-2,079.26	2,086.13	0.00	0.00	0.00
10,400.00	89.86	269.44	7,131.59	-713.67	-2,179.26	2,186.13	0.00	0.00	0.00
10,500.00	89.86	269.44	7,131.83	-714.65	-2,279.25	2,286.13	0.00	0.00	0.00
10,600.00	89.86	269.44	7,132.07	-715.63	-2,379.25	2,386.13	0.00	0.00	0.00
10,700.00	89.86	269.44	7,132.31	-716.62	-2,479.24	2,486.13	0.00	0.00	0.00
10,800.00	89.86	269.44	7,132.55	-717.60	-2,579.24	2,586.13	0.00	0.00	0.00
10,900.00	89.86	269.44	7,132.79	-718.58	-2,679.23	2,686.13	0.00	0.00	0.00
11,000.00	89.86	269.44	7,133.03	-719.56	-2,779.23	2,786.13	0.00	0.00	0.00
11,100.00	89.86	269.44	7,133.27	-720.54	-2,879.22	2,886.13	0.00	0.00	0.00
11,200.00	89.86	269.44	7,133.51	-721.53	-2,979.22	2,986.13	0.00	0.00	0.00
11,300.00	89.86	269.44	7,133.74	-722.51	-3,079.21	3,086.13	0.00	0.00	0.00
11,400.00	89.86	269.44	7,133.98	-723.49	-3,179.21	3,186.13	0.00	0.00	0.00
11,500.00	89.86	269.44	7,134.22	-724.47	-3,279.20	3,286.13	0.00	0.00	0.00
11,600.00	89.86	269.44	7,134.46	-725.45	-3,379.20	3,386.13	0.00	0.00	0.00
11,700.00	89.86	269.44	7,134.70	-726.43	-3,479.19	3,486.12	0.00	0.00	0.00
11,800.00	89.86	269.44	7,134.94	-727.42	-3,579.19	3,586.12	0.00	0.00	0.00
11,900.00	89.86	269.44	7,135.18	-728.40	-3,679.18	3,686.12	0.00	0.00	0.00
12,000.00	89.86	269.44	7,135.42	-729.38	-3,779.18	3,786.12	0.00	0.00	0.00
12,100.00	89.86	269.44	7,135.66	-730.36	-3,879.17	3,886.12	0.00	0.00	0.00
12,200.00	89.86	269.44	7,135.90	-731.34	-3,979.17	3,986.12	0.00	0.00	0.00
12,300.00	89.86	269.44	7,136.14	-732.33	-4,079.16	4,086.12	0.00	0.00	0.00
12,400.00	89.86	269.44	7,136.38	-733.31	-4,179.16	4,186.12	0.00	0.00	0.00
12,500.00	89.86	269.44	7,136.62	-734.29	-4,279.15	4,286.12	0.00	0.00	0.00
12,600.00	89.86	269.44	7,136.86	-735.27	-4,379.15	4,386.12	0.00	0.00	0.00
12,700.00	89.86	269.44	7,137.10	-736.25	-4,479.14	4,486.12	0.00	0.00	0.00
12,800.00	89.86	269.44	7,137.34	-737.24	-4,579.13	4,586.12	0.00	0.00	0.00
12,900.00	89.86	269.44	7,137.58	-738.22	-4,679.13	4,686.12	0.00	0.00	0.00
13,000.00	89.86	269.44	7,137.82	-739.20	-4,779.12	4,786.12	0.00	0.00	0.00
13,100.00	89.86	269.44	7,138.06	-740.18	-4,879.12	4,886.12	0.00	0.00	0.00
13,200.00	89.86	269.44	7,138.30	-741.16	-4,979.11	4,986.12	0.00	0.00	0.00
13,300.00	89.86	269.44	7,138.54	-742.14	-5,079.11	5,086.12	0.00	0.00	0.00
13,400.00	89.86	269.44	7,138.78	-743.13	-5,179.10	5,186.12	0.00	0.00	0.00
13,500.00	89.86	269.44	7,139.02	-744.11	-5,279.10	5,286.12	0.00	0.00	0.00
13,600.00	89.86	269.44	7,139.25	-745.09	-5,379.09	5,386.12	0.00	0.00	0.00
13,700.00	89.86	269.44	7,139.49	-746.07	-5,479.09	5,486.12	0.00	0.00	0.00
13,800.00	89.86	269.44	7,139.73	-747.05	-5,579.08	5,586.12	0.00	0.00	0.00
13,900.00	89.86	269.44	7,139.97	-748.04	-5,679.08	5,686.12	0.00	0.00	0.00
14,000.00	89.86	269.44	7,140.21	-749.02	-5,779.07	5,786.12	0.00	0.00	0.00
14,100.00	89.86	269.44	7,140.45	-750.00	-5,879.07	5,886.12	0.00	0.00	0.00
14,200.00	89.86	269.44	7,140.69	-750.98	-5,979.06	5,986.12	0.00	0.00	0.00
14,300.00	89.86	269.44	7,140.93	-751.96	-6,079.06	6,086.12	0.00	0.00	0.00
14,400.00	89.86	269.44	7,141.17	-752.94	-6,179.05	6,186.12	0.00	0.00	0.00
14,500.00	89.86	269.44	7,141.41	-753.93	-6,279.05	6,286.12	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9C-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
14,600.00	89.86	269.44	7,141.65	-754.91	-6,379.04	6,386.12	0.00	0.00	0.00
14,700.00	89.86	269.44	7,141.89	-755.89	-6,479.04	6,486.12	0.00	0.00	0.00
14,800.00	89.86	269.44	7,142.13	-756.87	-6,579.03	6,586.12	0.00	0.00	0.00
14,900.00	89.86	269.44	7,142.37	-757.85	-6,679.03	6,686.12	0.00	0.00	0.00
15,000.00	89.86	269.44	7,142.61	-758.84	-6,779.02	6,786.12	0.00	0.00	0.00
15,100.00	89.86	269.44	7,142.85	-759.82	-6,879.02	6,886.12	0.00	0.00	0.00
15,200.00	89.86	269.44	7,143.09	-760.80	-6,979.01	6,986.11	0.00	0.00	0.00
15,300.00	89.86	269.44	7,143.33	-761.78	-7,079.01	7,086.11	0.00	0.00	0.00
15,400.00	89.86	269.44	7,143.57	-762.76	-7,179.00	7,186.11	0.00	0.00	0.00
15,500.00	89.86	269.44	7,143.81	-763.75	-7,279.00	7,286.11	0.00	0.00	0.00
15,600.00	89.86	269.44	7,144.05	-764.73	-7,378.99	7,386.11	0.00	0.00	0.00
15,700.00	89.86	269.44	7,144.29	-765.71	-7,478.99	7,486.11	0.00	0.00	0.00
15,800.00	89.86	269.44	7,144.53	-766.69	-7,578.98	7,586.11	0.00	0.00	0.00
15,900.00	89.86	269.44	7,144.76	-767.67	-7,678.98	7,686.11	0.00	0.00	0.00
16,000.00	89.86	269.44	7,145.00	-768.65	-7,778.97	7,786.11	0.00	0.00	0.00
16,100.00	89.86	269.44	7,145.24	-769.64	-7,878.97	7,886.11	0.00	0.00	0.00
16,200.00	89.86	269.44	7,145.48	-770.62	-7,978.96	7,986.11	0.00	0.00	0.00
16,300.00	89.86	269.44	7,145.72	-771.60	-8,078.96	8,086.11	0.00	0.00	0.00
16,400.00	89.86	269.44	7,145.96	-772.58	-8,178.95	8,186.11	0.00	0.00	0.00
16,500.00	89.86	269.44	7,146.20	-773.56	-8,278.95	8,286.11	0.00	0.00	0.00
16,600.00	89.86	269.44	7,146.44	-774.55	-8,378.94	8,386.11	0.00	0.00	0.00
16,700.00	89.86	269.44	7,146.68	-775.53	-8,478.94	8,486.11	0.00	0.00	0.00
16,800.00	89.86	269.44	7,146.92	-776.51	-8,578.93	8,586.11	0.00	0.00	0.00
16,900.00	89.86	269.44	7,147.16	-777.49	-8,678.93	8,686.11	0.00	0.00	0.00
17,000.00	89.86	269.44	7,147.40	-778.47	-8,778.92	8,786.11	0.00	0.00	0.00
17,100.00	89.86	269.44	7,147.64	-779.45	-8,878.92	8,886.11	0.00	0.00	0.00
17,200.00	89.86	269.44	7,147.88	-780.44	-8,978.91	8,986.11	0.00	0.00	0.00
17,300.00	89.86	269.44	7,148.12	-781.42	-9,078.91	9,086.11	0.00	0.00	0.00
17,400.00	89.86	269.44	7,148.36	-782.40	-9,178.90	9,186.11	0.00	0.00	0.00
17,500.00	89.86	269.44	7,148.60	-783.38	-9,278.89	9,286.11	0.00	0.00	0.00
17,600.00	89.86	269.44	7,148.84	-784.36	-9,378.89	9,386.11	0.00	0.00	0.00
17,700.00	89.86	269.44	7,149.08	-785.35	-9,478.88	9,486.11	0.00	0.00	0.00
17,800.00	89.86	269.44	7,149.32	-786.33	-9,578.88	9,586.11	0.00	0.00	0.00
17,900.00	89.86	269.44	7,149.56	-787.31	-9,678.87	9,686.11	0.00	0.00	0.00
18,000.00	89.86	269.44	7,149.80	-788.29	-9,778.87	9,786.11	0.00	0.00	0.00
18,100.00	89.86	269.44	7,150.04	-789.27	-9,878.86	9,886.11	0.00	0.00	0.00
18,200.00	89.86	269.44	7,150.27	-790.26	-9,978.86	9,986.11	0.00	0.00	0.00
18,300.00	89.86	269.44	7,150.51	-791.24	-10,078.85	10,086.11	0.00	0.00	0.00
18,400.00	89.86	269.44	7,150.75	-792.22	-10,178.85	10,186.11	0.00	0.00	0.00
18,500.00	89.86	269.44	7,150.99	-793.20	-10,278.84	10,286.11	0.00	0.00	0.00
18,600.00	89.86	269.44	7,151.23	-794.18	-10,378.84	10,386.11	0.00	0.00	0.00
18,700.00	89.86	269.44	7,151.47	-795.16	-10,478.83	10,486.10	0.00	0.00	0.00
18,800.00	89.86	269.44	7,151.71	-796.15	-10,578.83	10,586.10	0.00	0.00	0.00
18,900.00	89.86	269.44	7,151.95	-797.13	-10,678.82	10,686.10	0.00	0.00	0.00
18,920.23	89.86	269.44	7,152.00	-797.33	-10,699.05	10,706.34	0.00	0.00	0.00
TD at 18920.23 - PBHL_Falken 33N-9C-L(981' FSL & 300' FEL)									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9C-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (ASSUMED)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9C-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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 33N-9C-L(0.00	0.00	7,125.00	-825.87	569.84	1,425,273.25	3,213,061.64	40.4982420	-104.7338990
- plan misses target center by 80.09ft at 7646.70ft MD (7124.98 TVD, -745.85 N, 572.95 E)									
- Point									
PBHL_Falken 33N-9C-L	0.00	0.00	7,152.00	-797.33	-10,699.05	1,425,204.69	3,201,792.91	40.4983140	-104.7744190
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,780.55	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
865.50	859.53	-38.48	66.64	Start 5655.31 hold at 865.50 MD
6,520.81	6,362.93	-689.46	1,194.18	Start DLS 9.00 TFO 151.84
7,650.18	7,125.00	-745.70	569.48	LP(1052 FSL 300 FWL)
8,689.38	7,127.49	-700.89	-468.76	Start DLS 2.00 TFO -90.00
8,841.07	7,127.85	-698.36	-620.41	Start 10079.16 hold at 8841.07 MD
18,920.23	7,152.00	-797.33	-10,699.05	TD at 18920.23