



Project: SEC 12-13 T6N R66W
Site: Falken 9-11 PAD
Well: Falken 33C-9-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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
939.50	12.79	116.00	934.20	-31.16	63.89	2.00	116.00	-64.01	
6623.48	12.79	116.00	6477.15	-582.77	1194.85	0.00	0.00	-1197.08	
7750.07	89.89	270.22	7237.00	-655.20	571.90	9.00	153.67	-574.41	
19022.43	89.89	270.22	7258.00	-611.16	-10700.36	0.00	0.00	10697.93	PBHL_Falken 33C-9-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 33C-9-L	7237.00	-634.61	571.51	1425479.45	3213061.52	40.4988080	-104.7338930	Point
- plan misses target center by 20.59ft at 7750.54ft MD (7237.00 TVD, -655.20 N, 571.43 E)								
PBHL_Falken 33C-9-L	7258.00	-611.16	-10700.36	1425405.77	3201789.88	40.4988660	-104.7744240	Point
- plan hits target center								

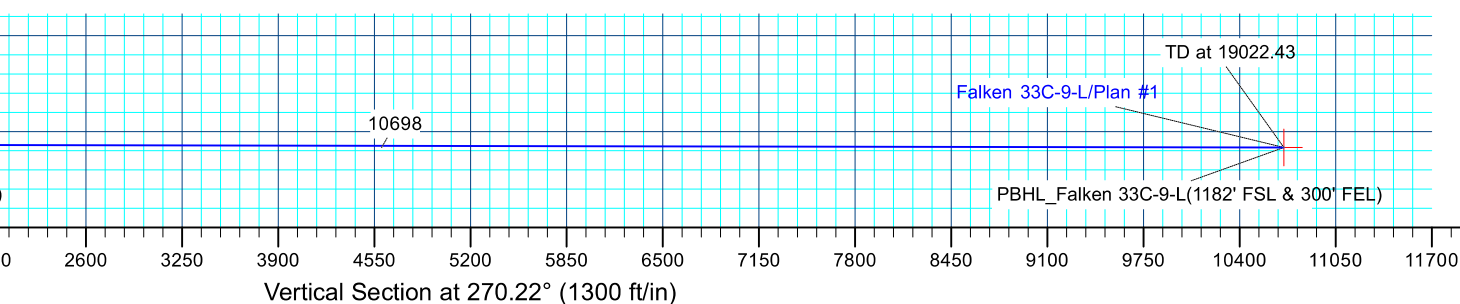
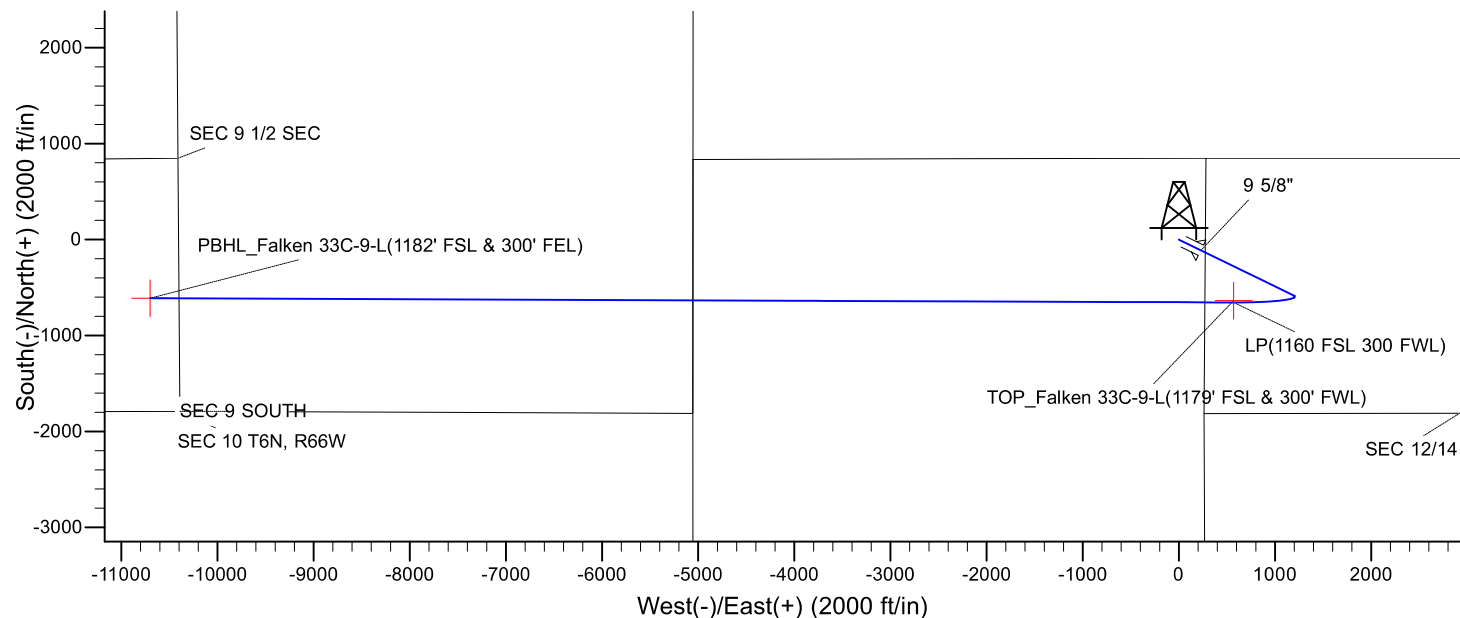
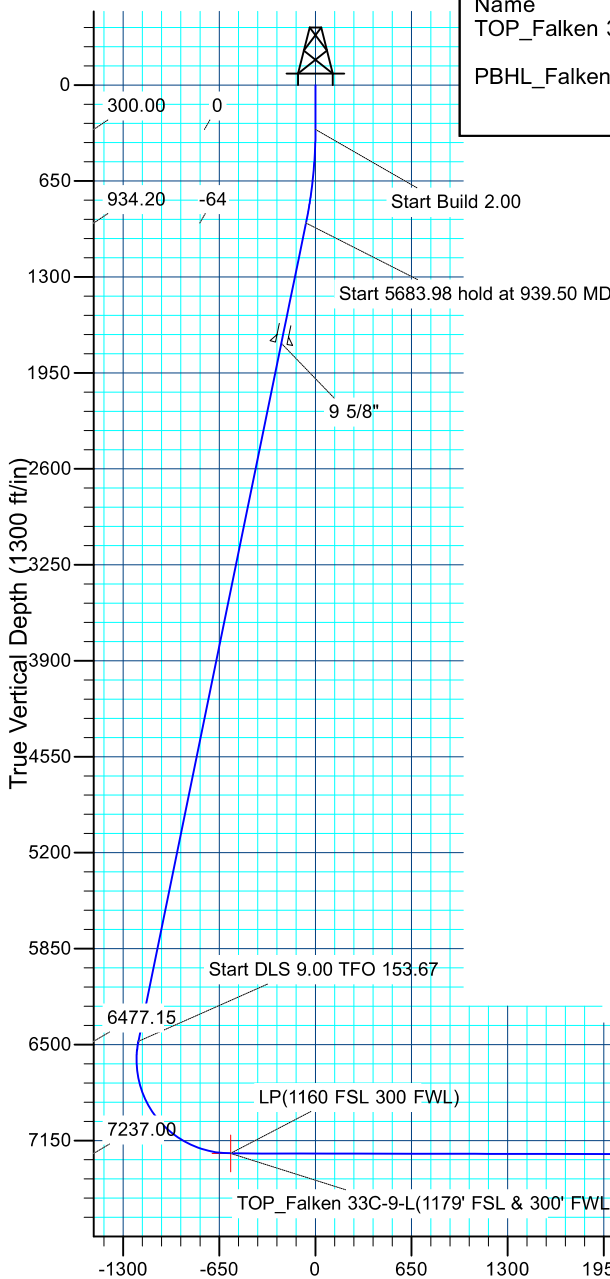
CASING DETAILS

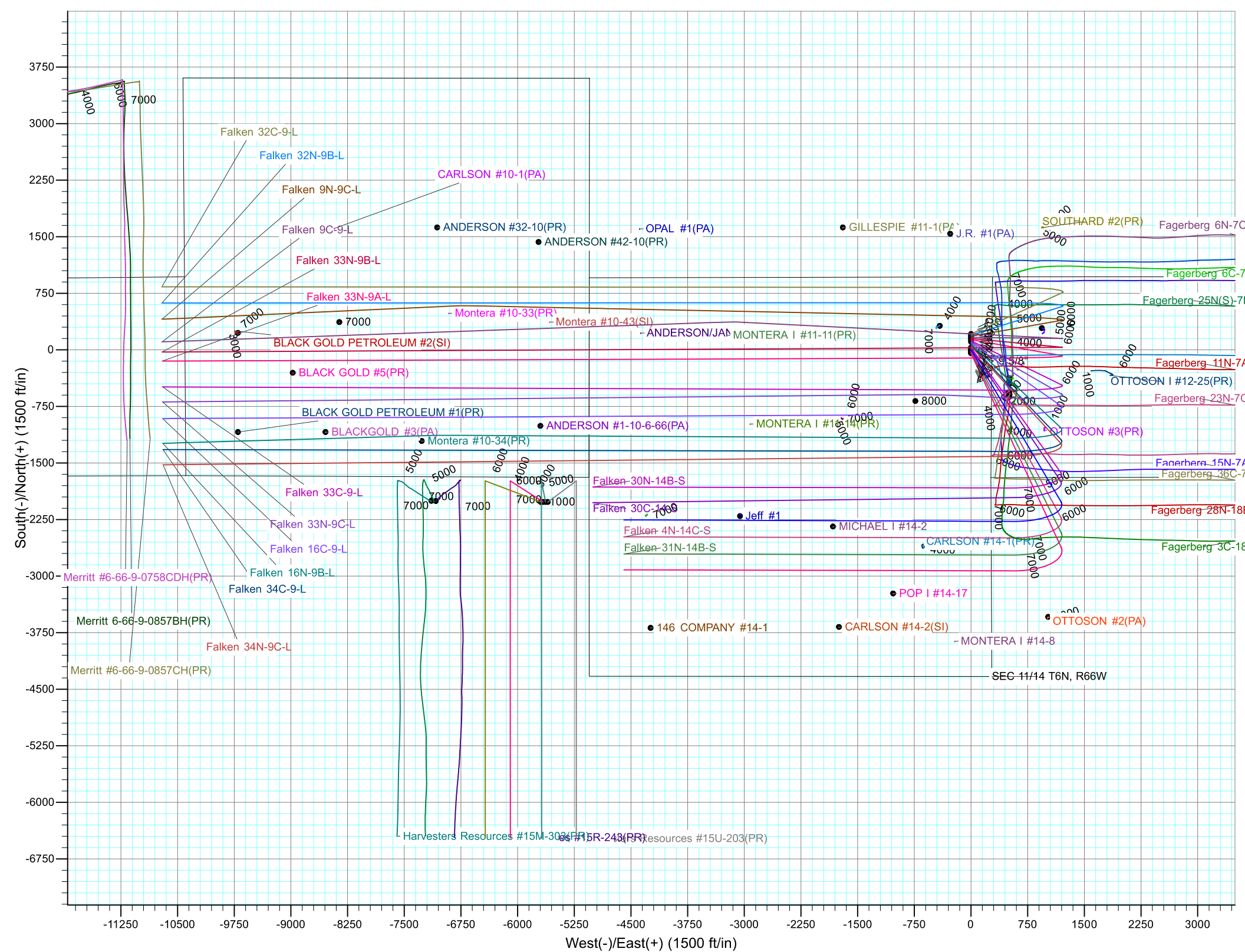
TVD	MD	Name	Size
1750.00	1776.05	9 5/8"	9.625

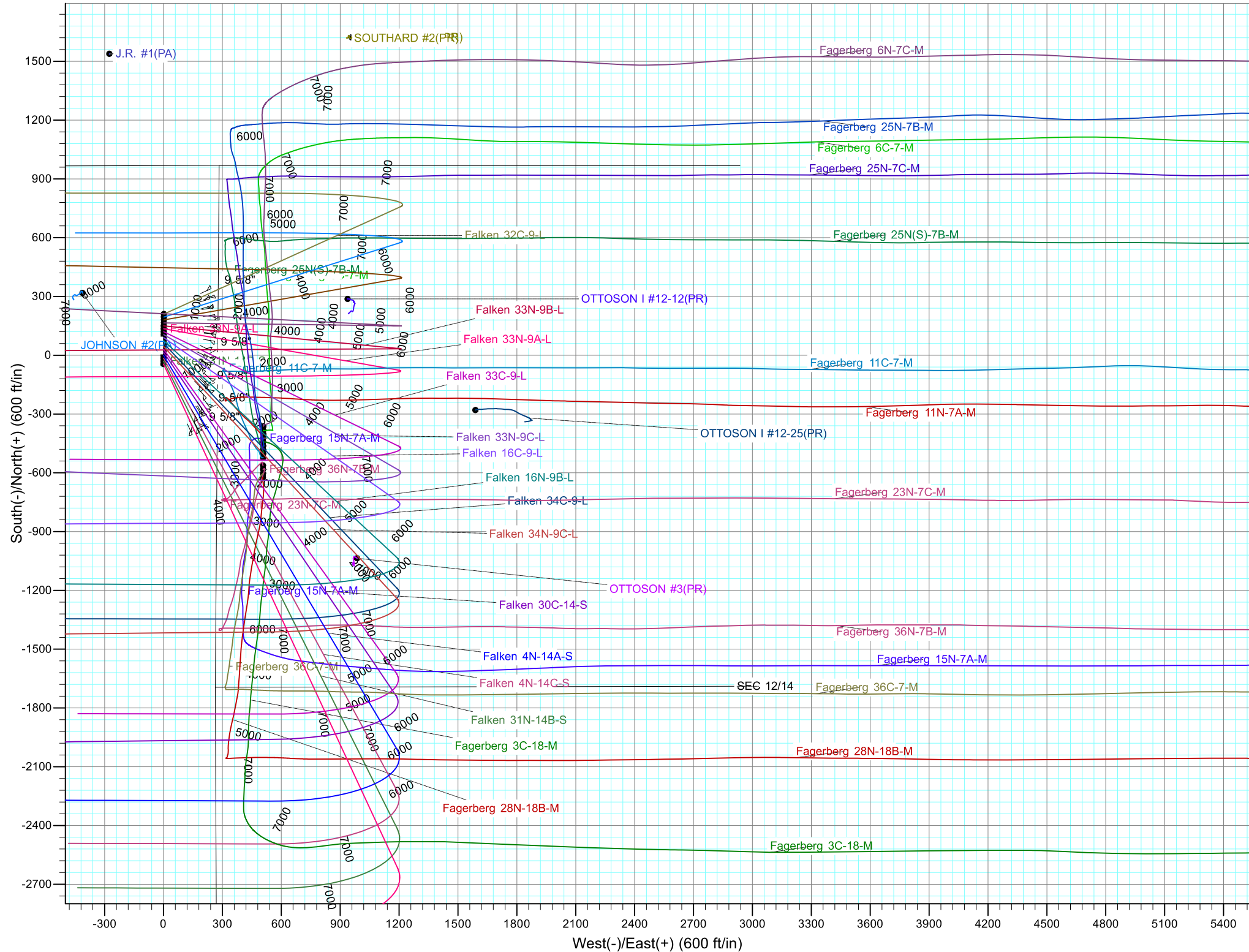


Azimuths to True North
Magnetic North: 8.22°

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 33C-9-L

OH

Plan: Plan #1

Standard Planning Report

25 April, 2017



Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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 33C-9-L, 1814' FSL & 276' FEL					
Well Position	+N/-S	-89.99 ft	Northing:	1,426,109.11 ft	Latitude:	40.5005500
	+E/-W	-0.83 ft	Easting:	3,212,484.57 ft	Longitude:	-104.7359480
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	270.22

Plan Survey Tool Program	Date	4/24/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,022.43 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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
939.50	12.79	116.00	934.20	-31.16	63.89	2.00	2.00	0.00	116.00	
6,623.48	12.79	116.00	6,477.15	-582.77	1,194.85	0.00	0.00	0.00	0.00	
7,750.07	89.89	270.22	7,237.00	-655.20	571.90	9.00	6.84	13.69	153.67	
19,022.43	89.89	270.22	7,258.00	-611.16	-10,700.36	0.00	0.00	0.00	0.00	PBHL_Falken 33C-9-L

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
400.00	2.00	116.00	399.98	-0.77	1.57	-1.57	2.00	2.00	0.00
500.00	4.00	116.00	499.84	-3.06	6.27	-6.28	2.00	2.00	0.00
600.00	6.00	116.00	599.45	-6.88	14.11	-14.13	2.00	2.00	0.00
700.00	8.00	116.00	698.70	-12.22	25.06	-25.11	2.00	2.00	0.00
800.00	10.00	116.00	797.47	-19.08	39.12	-39.19	2.00	2.00	0.00
900.00	12.00	116.00	895.62	-27.44	56.27	-56.37	2.00	2.00	0.00
939.50	12.79	116.00	934.20	-31.16	63.89	-64.01	2.00	2.00	0.00
Start 5683.98 hold at 939.50 MD									
1,000.00	12.79	116.00	993.20	-37.03	75.93	-76.07	0.00	0.00	0.00
1,100.00	12.79	116.00	1,090.72	-46.74	95.82	-96.00	0.00	0.00	0.00
1,200.00	12.79	116.00	1,188.24	-56.44	115.72	-115.94	0.00	0.00	0.00
1,300.00	12.79	116.00	1,285.76	-66.14	135.62	-135.87	0.00	0.00	0.00
1,400.00	12.79	116.00	1,383.28	-75.85	155.51	-155.80	0.00	0.00	0.00
1,500.00	12.79	116.00	1,480.80	-85.55	175.41	-175.74	0.00	0.00	0.00
1,600.00	12.79	116.00	1,578.31	-95.26	195.31	-195.67	0.00	0.00	0.00
1,700.00	12.79	116.00	1,675.83	-104.96	215.21	-215.61	0.00	0.00	0.00
1,776.05	12.79	116.00	1,750.00	-112.34	230.34	-230.77	0.00	0.00	0.00
9 5/8"									
1,800.00	12.79	116.00	1,773.35	-114.67	235.10	-235.54	0.00	0.00	0.00
1,900.00	12.79	116.00	1,870.87	-124.37	255.00	-255.48	0.00	0.00	0.00
2,000.00	12.79	116.00	1,968.39	-134.08	274.90	-275.41	0.00	0.00	0.00
2,100.00	12.79	116.00	2,065.91	-143.78	294.80	-295.35	0.00	0.00	0.00
2,200.00	12.79	116.00	2,163.43	-153.49	314.69	-315.28	0.00	0.00	0.00
2,300.00	12.79	116.00	2,260.95	-163.19	334.59	-335.21	0.00	0.00	0.00
2,400.00	12.79	116.00	2,358.46	-172.90	354.49	-355.15	0.00	0.00	0.00
2,500.00	12.79	116.00	2,455.98	-182.60	374.39	-375.08	0.00	0.00	0.00
2,600.00	12.79	116.00	2,553.50	-192.30	394.28	-395.02	0.00	0.00	0.00
2,700.00	12.79	116.00	2,651.02	-202.01	414.18	-414.95	0.00	0.00	0.00
2,800.00	12.79	116.00	2,748.54	-211.71	434.08	-434.89	0.00	0.00	0.00
2,900.00	12.79	116.00	2,846.06	-221.42	453.97	-454.82	0.00	0.00	0.00
3,000.00	12.79	116.00	2,943.58	-231.12	473.87	-474.76	0.00	0.00	0.00
3,100.00	12.79	116.00	3,041.10	-240.83	493.77	-494.69	0.00	0.00	0.00
3,200.00	12.79	116.00	3,138.61	-250.53	513.67	-514.63	0.00	0.00	0.00
3,300.00	12.79	116.00	3,236.13	-260.24	533.56	-534.56	0.00	0.00	0.00
3,400.00	12.79	116.00	3,333.65	-269.94	553.46	-554.49	0.00	0.00	0.00
3,500.00	12.79	116.00	3,431.17	-279.65	573.36	-574.43	0.00	0.00	0.00
3,600.00	12.79	116.00	3,528.69	-289.35	593.26	-594.36	0.00	0.00	0.00
3,700.00	12.79	116.00	3,626.21	-299.06	613.15	-614.30	0.00	0.00	0.00
3,800.00	12.79	116.00	3,723.73	-308.76	633.05	-634.23	0.00	0.00	0.00
3,900.00	12.79	116.00	3,821.25	-318.46	652.95	-654.17	0.00	0.00	0.00
4,000.00	12.79	116.00	3,918.77	-328.17	672.85	-674.10	0.00	0.00	0.00
4,100.00	12.79	116.00	4,016.28	-337.87	692.74	-694.04	0.00	0.00	0.00
4,200.00	12.79	116.00	4,113.80	-347.58	712.64	-713.97	0.00	0.00	0.00
4,300.00	12.79	116.00	4,211.32	-357.28	732.54	-733.90	0.00	0.00	0.00
4,400.00	12.79	116.00	4,308.84	-366.99	752.44	-753.84	0.00	0.00	0.00
4,500.00	12.79	116.00	4,406.36	-376.69	772.33	-773.77	0.00	0.00	0.00
4,600.00	12.79	116.00	4,503.88	-386.40	792.23	-793.71	0.00	0.00	0.00
4,700.00	12.79	116.00	4,601.40	-396.10	812.13	-813.64	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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	12.79	116.00	4,698.92	-405.81	832.02	-833.58	0.00	0.00	0.00
4,900.00	12.79	116.00	4,796.43	-415.51	851.92	-853.51	0.00	0.00	0.00
5,000.00	12.79	116.00	4,893.95	-425.21	871.82	-873.45	0.00	0.00	0.00
5,100.00	12.79	116.00	4,991.47	-434.92	891.72	-893.38	0.00	0.00	0.00
5,200.00	12.79	116.00	5,088.99	-444.62	911.61	-913.31	0.00	0.00	0.00
5,300.00	12.79	116.00	5,186.51	-454.33	931.51	-933.25	0.00	0.00	0.00
5,400.00	12.79	116.00	5,284.03	-464.03	951.41	-953.18	0.00	0.00	0.00
5,500.00	12.79	116.00	5,381.55	-473.74	971.31	-973.12	0.00	0.00	0.00
5,600.00	12.79	116.00	5,479.07	-483.44	991.20	-993.05	0.00	0.00	0.00
5,700.00	12.79	116.00	5,576.58	-493.15	1,011.10	-1,012.99	0.00	0.00	0.00
5,800.00	12.79	116.00	5,674.10	-502.85	1,031.00	-1,032.92	0.00	0.00	0.00
5,900.00	12.79	116.00	5,771.62	-512.56	1,050.90	-1,052.86	0.00	0.00	0.00
6,000.00	12.79	116.00	5,869.14	-522.26	1,070.79	-1,072.79	0.00	0.00	0.00
6,100.00	12.79	116.00	5,966.66	-531.97	1,090.69	-1,092.72	0.00	0.00	0.00
6,200.00	12.79	116.00	6,064.18	-541.67	1,110.59	-1,112.66	0.00	0.00	0.00
6,300.00	12.79	116.00	6,161.70	-551.37	1,130.48	-1,132.59	0.00	0.00	0.00
6,400.00	12.79	116.00	6,259.22	-561.08	1,150.38	-1,152.53	0.00	0.00	0.00
6,500.00	12.79	116.00	6,356.74	-570.78	1,170.28	-1,172.46	0.00	0.00	0.00
6,600.00	12.79	116.00	6,454.25	-580.49	1,190.18	-1,192.40	0.00	0.00	0.00
6,623.48	12.79	116.00	6,477.15	-582.77	1,194.85	-1,197.08	0.00	0.00	0.00
Start DLS 9.00 TFO 153.67									
6,700.00	7.28	140.83	6,552.50	-590.25	1,205.54	-1,207.79	9.00	-7.20	32.44
6,800.00	7.14	218.23	6,651.92	-600.06	1,205.69	-1,207.99	9.00	-0.14	77.41
6,900.00	14.50	247.81	6,750.14	-609.69	1,190.22	-1,192.55	9.00	7.37	29.58
7,000.00	23.05	256.82	6,844.75	-618.90	1,159.50	-1,161.87	9.00	8.55	9.01
7,100.00	31.84	261.09	6,933.42	-627.46	1,114.29	-1,116.69	9.00	8.79	4.27
7,200.00	40.71	263.65	7,013.96	-635.17	1,055.70	-1,058.13	9.00	8.87	2.56
7,300.00	49.62	265.42	7,084.39	-641.83	985.17	-987.63	9.00	8.91	1.77
7,400.00	58.56	266.78	7,142.99	-647.28	904.45	-906.93	9.00	8.93	1.35
7,500.00	67.50	267.89	7,188.30	-651.39	815.51	-818.01	9.00	8.94	1.12
7,600.00	76.45	268.87	7,219.20	-654.05	720.55	-723.06	9.00	8.95	0.98
7,700.00	85.41	269.78	7,234.95	-655.20	621.91	-624.42	9.00	8.96	0.91
7,750.07	89.89	270.22	7,237.00	-655.20	571.90	-574.41	9.00	8.96	0.89
LP(1160 FSL 300 FWL)									
7,750.54	89.89	270.22	7,237.00	-655.20	571.43	-573.94	0.00	0.00	0.00
TOP_Falken 33C-9-L(1179' FSL & 300' FWL)									
7,800.00	89.89	270.22	7,237.09	-655.01	521.97	-524.48	0.00	0.00	0.00
7,900.00	89.89	270.22	7,237.28	-654.61	421.97	-424.48	0.00	0.00	0.00
8,000.00	89.89	270.22	7,237.47	-654.22	321.97	-324.48	0.00	0.00	0.00
8,100.00	89.89	270.22	7,237.65	-653.83	221.97	-224.48	0.00	0.00	0.00
8,200.00	89.89	270.22	7,237.84	-653.44	121.97	-124.48	0.00	0.00	0.00
8,300.00	89.89	270.22	7,238.02	-653.05	21.97	-24.48	0.00	0.00	0.00
8,400.00	89.89	270.22	7,238.21	-652.66	-78.03	75.52	0.00	0.00	0.00
8,500.00	89.89	270.22	7,238.40	-652.27	-178.03	175.52	0.00	0.00	0.00
8,600.00	89.89	270.22	7,238.58	-651.88	-278.03	275.52	0.00	0.00	0.00
8,700.00	89.89	270.22	7,238.77	-651.49	-378.03	375.52	0.00	0.00	0.00
8,800.00	89.89	270.22	7,238.96	-651.10	-478.03	475.52	0.00	0.00	0.00
8,900.00	89.89	270.22	7,239.14	-650.71	-578.02	575.52	0.00	0.00	0.00
9,000.00	89.89	270.22	7,239.33	-650.32	-678.02	675.52	0.00	0.00	0.00
9,100.00	89.89	270.22	7,239.52	-649.93	-778.02	775.52	0.00	0.00	0.00
9,200.00	89.89	270.22	7,239.70	-649.54	-878.02	875.52	0.00	0.00	0.00
9,300.00	89.89	270.22	7,239.89	-649.15	-978.02	975.52	0.00	0.00	0.00
9,400.00	89.89	270.22	7,240.07	-648.75	-1,078.02	1,075.52	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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)
9,500.00	89.89	270.22	7,240.26	-648.36	-1,178.02	1,175.52	0.00	0.00	0.00
9,600.00	89.89	270.22	7,240.45	-647.97	-1,278.02	1,275.52	0.00	0.00	0.00
9,700.00	89.89	270.22	7,240.63	-647.58	-1,378.02	1,375.52	0.00	0.00	0.00
9,800.00	89.89	270.22	7,240.82	-647.19	-1,478.02	1,475.52	0.00	0.00	0.00
9,900.00	89.89	270.22	7,241.01	-646.80	-1,578.02	1,575.52	0.00	0.00	0.00
10,000.00	89.89	270.22	7,241.19	-646.41	-1,678.01	1,675.52	0.00	0.00	0.00
10,100.00	89.89	270.22	7,241.38	-646.02	-1,778.01	1,775.52	0.00	0.00	0.00
10,200.00	89.89	270.22	7,241.56	-645.63	-1,878.01	1,875.52	0.00	0.00	0.00
10,300.00	89.89	270.22	7,241.75	-645.24	-1,978.01	1,975.52	0.00	0.00	0.00
10,400.00	89.89	270.22	7,241.94	-644.85	-2,078.01	2,075.52	0.00	0.00	0.00
10,500.00	89.89	270.22	7,242.12	-644.46	-2,178.01	2,175.52	0.00	0.00	0.00
10,600.00	89.89	270.22	7,242.31	-644.07	-2,278.01	2,275.52	0.00	0.00	0.00
10,700.00	89.89	270.22	7,242.50	-643.68	-2,378.01	2,375.52	0.00	0.00	0.00
10,800.00	89.89	270.22	7,242.68	-643.29	-2,478.01	2,475.52	0.00	0.00	0.00
10,900.00	89.89	270.22	7,242.87	-642.89	-2,578.01	2,575.52	0.00	0.00	0.00
11,000.00	89.89	270.22	7,243.05	-642.50	-2,678.00	2,675.52	0.00	0.00	0.00
11,100.00	89.89	270.22	7,243.24	-642.11	-2,778.00	2,775.52	0.00	0.00	0.00
11,200.00	89.89	270.22	7,243.43	-641.72	-2,878.00	2,875.52	0.00	0.00	0.00
11,300.00	89.89	270.22	7,243.61	-641.33	-2,978.00	2,975.52	0.00	0.00	0.00
11,400.00	89.89	270.22	7,243.80	-640.94	-3,078.00	3,075.52	0.00	0.00	0.00
11,500.00	89.89	270.22	7,243.99	-640.55	-3,178.00	3,175.52	0.00	0.00	0.00
11,600.00	89.89	270.22	7,244.17	-640.16	-3,278.00	3,275.52	0.00	0.00	0.00
11,700.00	89.89	270.22	7,244.36	-639.77	-3,378.00	3,375.52	0.00	0.00	0.00
11,800.00	89.89	270.22	7,244.55	-639.38	-3,478.00	3,475.52	0.00	0.00	0.00
11,900.00	89.89	270.22	7,244.73	-638.99	-3,578.00	3,575.52	0.00	0.00	0.00
12,000.00	89.89	270.22	7,244.92	-638.60	-3,678.00	3,675.52	0.00	0.00	0.00
12,100.00	89.89	270.22	7,245.10	-638.21	-3,777.99	3,775.52	0.00	0.00	0.00
12,200.00	89.89	270.22	7,245.29	-637.82	-3,877.99	3,875.52	0.00	0.00	0.00
12,300.00	89.89	270.22	7,245.48	-637.42	-3,977.99	3,975.52	0.00	0.00	0.00
12,400.00	89.89	270.22	7,245.66	-637.03	-4,077.99	4,075.52	0.00	0.00	0.00
12,500.00	89.89	270.22	7,245.85	-636.64	-4,177.99	4,175.52	0.00	0.00	0.00
12,600.00	89.89	270.22	7,246.04	-636.25	-4,277.99	4,275.52	0.00	0.00	0.00
12,700.00	89.89	270.22	7,246.22	-635.86	-4,377.99	4,375.52	0.00	0.00	0.00
12,800.00	89.89	270.22	7,246.41	-635.47	-4,477.99	4,475.52	0.00	0.00	0.00
12,900.00	89.89	270.22	7,246.59	-635.08	-4,577.99	4,575.51	0.00	0.00	0.00
13,000.00	89.89	270.22	7,246.78	-634.69	-4,677.99	4,675.51	0.00	0.00	0.00
13,100.00	89.89	270.22	7,246.97	-634.30	-4,777.99	4,775.51	0.00	0.00	0.00
13,200.00	89.89	270.22	7,247.15	-633.91	-4,877.98	4,875.51	0.00	0.00	0.00
13,300.00	89.89	270.22	7,247.34	-633.52	-4,977.98	4,975.51	0.00	0.00	0.00
13,400.00	89.89	270.22	7,247.53	-633.13	-5,077.98	5,075.51	0.00	0.00	0.00
13,500.00	89.89	270.22	7,247.71	-632.74	-5,177.98	5,175.51	0.00	0.00	0.00
13,600.00	89.89	270.22	7,247.90	-632.35	-5,277.98	5,275.51	0.00	0.00	0.00
13,700.00	89.89	270.22	7,248.08	-631.96	-5,377.98	5,375.51	0.00	0.00	0.00
13,800.00	89.89	270.22	7,248.27	-631.56	-5,477.98	5,475.51	0.00	0.00	0.00
13,900.00	89.89	270.22	7,248.46	-631.17	-5,577.98	5,575.51	0.00	0.00	0.00
14,000.00	89.89	270.22	7,248.64	-630.78	-5,677.98	5,675.51	0.00	0.00	0.00
14,100.00	89.89	270.22	7,248.83	-630.39	-5,777.98	5,775.51	0.00	0.00	0.00
14,200.00	89.89	270.22	7,249.02	-630.00	-5,877.98	5,875.51	0.00	0.00	0.00
14,300.00	89.89	270.22	7,249.20	-629.61	-5,977.97	5,975.51	0.00	0.00	0.00
14,400.00	89.89	270.22	7,249.39	-629.22	-6,077.97	6,075.51	0.00	0.00	0.00
14,500.00	89.89	270.22	7,249.58	-628.83	-6,177.97	6,175.51	0.00	0.00	0.00
14,600.00	89.89	270.22	7,249.76	-628.44	-6,277.97	6,275.51	0.00	0.00	0.00
14,700.00	89.89	270.22	7,249.95	-628.05	-6,377.97	6,375.51	0.00	0.00	0.00
14,800.00	89.89	270.22	7,250.13	-627.66	-6,477.97	6,475.51	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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)
14,900.00	89.89	270.22	7,250.32	-627.27	-6,577.97	6,575.51	0.00	0.00	0.00
15,000.00	89.89	270.22	7,250.51	-626.88	-6,677.97	6,675.51	0.00	0.00	0.00
15,100.00	89.89	270.22	7,250.69	-626.49	-6,777.97	6,775.51	0.00	0.00	0.00
15,200.00	89.89	270.22	7,250.88	-626.10	-6,877.97	6,875.51	0.00	0.00	0.00
15,300.00	89.89	270.22	7,251.07	-625.70	-6,977.96	6,975.51	0.00	0.00	0.00
15,400.00	89.89	270.22	7,251.25	-625.31	-7,077.96	7,075.51	0.00	0.00	0.00
15,500.00	89.89	270.22	7,251.44	-624.92	-7,177.96	7,175.51	0.00	0.00	0.00
15,600.00	89.89	270.22	7,251.62	-624.53	-7,277.96	7,275.51	0.00	0.00	0.00
15,700.00	89.89	270.22	7,251.81	-624.14	-7,377.96	7,375.51	0.00	0.00	0.00
15,800.00	89.89	270.22	7,252.00	-623.75	-7,477.96	7,475.51	0.00	0.00	0.00
15,900.00	89.89	270.22	7,252.18	-623.36	-7,577.96	7,575.51	0.00	0.00	0.00
16,000.00	89.89	270.22	7,252.37	-622.97	-7,677.96	7,675.51	0.00	0.00	0.00
16,100.00	89.89	270.22	7,252.56	-622.58	-7,777.96	7,775.51	0.00	0.00	0.00
16,200.00	89.89	270.22	7,252.74	-622.19	-7,877.96	7,875.51	0.00	0.00	0.00
16,300.00	89.89	270.22	7,252.93	-621.80	-7,977.96	7,975.51	0.00	0.00	0.00
16,400.00	89.89	270.22	7,253.11	-621.41	-8,077.95	8,075.51	0.00	0.00	0.00
16,500.00	89.89	270.22	7,253.30	-621.02	-8,177.95	8,175.51	0.00	0.00	0.00
16,600.00	89.89	270.22	7,253.49	-620.63	-8,277.95	8,275.51	0.00	0.00	0.00
16,700.00	89.89	270.22	7,253.67	-620.24	-8,377.95	8,375.51	0.00	0.00	0.00
16,800.00	89.89	270.22	7,253.86	-619.84	-8,477.95	8,475.51	0.00	0.00	0.00
16,900.00	89.89	270.22	7,254.05	-619.45	-8,577.95	8,575.51	0.00	0.00	0.00
17,000.00	89.89	270.22	7,254.23	-619.06	-8,677.95	8,675.51	0.00	0.00	0.00
17,100.00	89.89	270.22	7,254.42	-618.67	-8,777.95	8,775.51	0.00	0.00	0.00
17,200.00	89.89	270.22	7,254.61	-618.28	-8,877.95	8,875.51	0.00	0.00	0.00
17,300.00	89.89	270.22	7,254.79	-617.89	-8,977.95	8,975.51	0.00	0.00	0.00
17,400.00	89.89	270.22	7,254.98	-617.50	-9,077.95	9,075.51	0.00	0.00	0.00
17,500.00	89.89	270.22	7,255.16	-617.11	-9,177.94	9,175.51	0.00	0.00	0.00
17,600.00	89.89	270.22	7,255.35	-616.72	-9,277.94	9,275.51	0.00	0.00	0.00
17,700.00	89.89	270.22	7,255.54	-616.33	-9,377.94	9,375.51	0.00	0.00	0.00
17,800.00	89.89	270.22	7,255.72	-615.94	-9,477.94	9,475.51	0.00	0.00	0.00
17,900.00	89.89	270.22	7,255.91	-615.55	-9,577.94	9,575.51	0.00	0.00	0.00
18,000.00	89.89	270.22	7,256.10	-615.16	-9,677.94	9,675.51	0.00	0.00	0.00
18,100.00	89.89	270.22	7,256.28	-614.77	-9,777.94	9,775.51	0.00	0.00	0.00
18,200.00	89.89	270.22	7,256.47	-614.38	-9,877.94	9,875.51	0.00	0.00	0.00
18,300.00	89.89	270.22	7,256.65	-613.98	-9,977.94	9,975.51	0.00	0.00	0.00
18,400.00	89.89	270.22	7,256.84	-613.59	-10,077.94	10,075.51	0.00	0.00	0.00
18,500.00	89.89	270.22	7,257.03	-613.20	-10,177.93	10,175.51	0.00	0.00	0.00
18,600.00	89.89	270.22	7,257.21	-612.81	-10,277.93	10,275.51	0.00	0.00	0.00
18,700.00	89.89	270.22	7,257.40	-612.42	-10,377.93	10,375.50	0.00	0.00	0.00
18,800.00	89.89	270.22	7,257.59	-612.03	-10,477.93	10,475.50	0.00	0.00	0.00
18,900.00	89.89	270.22	7,257.77	-611.64	-10,577.93	10,575.50	0.00	0.00	0.00
19,000.00	89.89	270.22	7,257.96	-611.25	-10,677.93	10,675.50	0.00	0.00	0.00
19,022.43	89.89	270.22	7,258.00	-611.16	-10,700.36	10,697.93	0.00	0.00	0.00
TD at 19022.43 - PBHL_Falken 33C-9-L(1182' FSL & 300' FEL)									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33C-9-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 33C-9-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 33C-9-L(11	0.00	0.00	7,237.00	-634.61	571.51	1,425,479.45	3,213,061.52	40.4988080	-104.7338930
- plan misses target center by 20.59ft at 7750.54ft MD (7237.00 TVD, -655.20 N, 571.43 E)									
- Point									
PBHL_Falken 33C-9-L(1	0.00	0.00	7,258.00	-611.16	-10,700.36	1,425,405.77	3,201,789.88	40.4988660	-104.7744240
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,776.05	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)	
300.00	300.00	0.00	0.00	Start Build 2.00
939.50	934.20	-31.16	63.89	Start 5683.98 hold at 939.50 MD
6,623.48	6,477.15	-582.77	1,194.85	Start DLS 9.00 TFO 153.67
7,750.07	7,237.00	-655.20	571.90	LP(1160 FSL 300 FWL)
19,022.43	7,258.00	-611.16	-10,700.36	TD at 19022.43