



Project: SEC 12-13 T6N R66W
Site: Falken 9-11 PAD
Well: Falken 33N-9A-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	
803.50	12.07	100.00	799.05	-11.00	62.37	2.00	100.00	-62.33	
6298.86	12.07	100.00	6172.92	-210.54	1194.03	0.00	0.00	-1193.21	
7429.12	89.85	269.78	6940.00	-241.88	572.84	9.00	169.56	-571.91	
18704.56	89.85	269.78	6970.00	-284.20	-10702.48	0.00	0.00	10703.49	PBHL_Falken 33N-9A-L

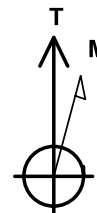
PROJECT DETAILS: SEC 12-13 T6N R66W
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Colorado Northern Zone
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TOP_Falken 33N-9A-L	6940.00	-422.58	572.89	1425706.42	3213061.23	40.4994310	-104.7338870	Point
- plan misses target center by 180.70ft at 7429.75ft MD (6940.00 TVD, -241.88 N, 572.21 E)								
PBHL_Falken 33N-9A-L	6970.00	-384.20	-10702.48	1425647.65	3201785.95	40.4995300	-104.7744310	Point
- plan misses target center by 100.00ft at 18704.56ft MD (6970.00 TVD, -284.20 N, -10702.48 E)								

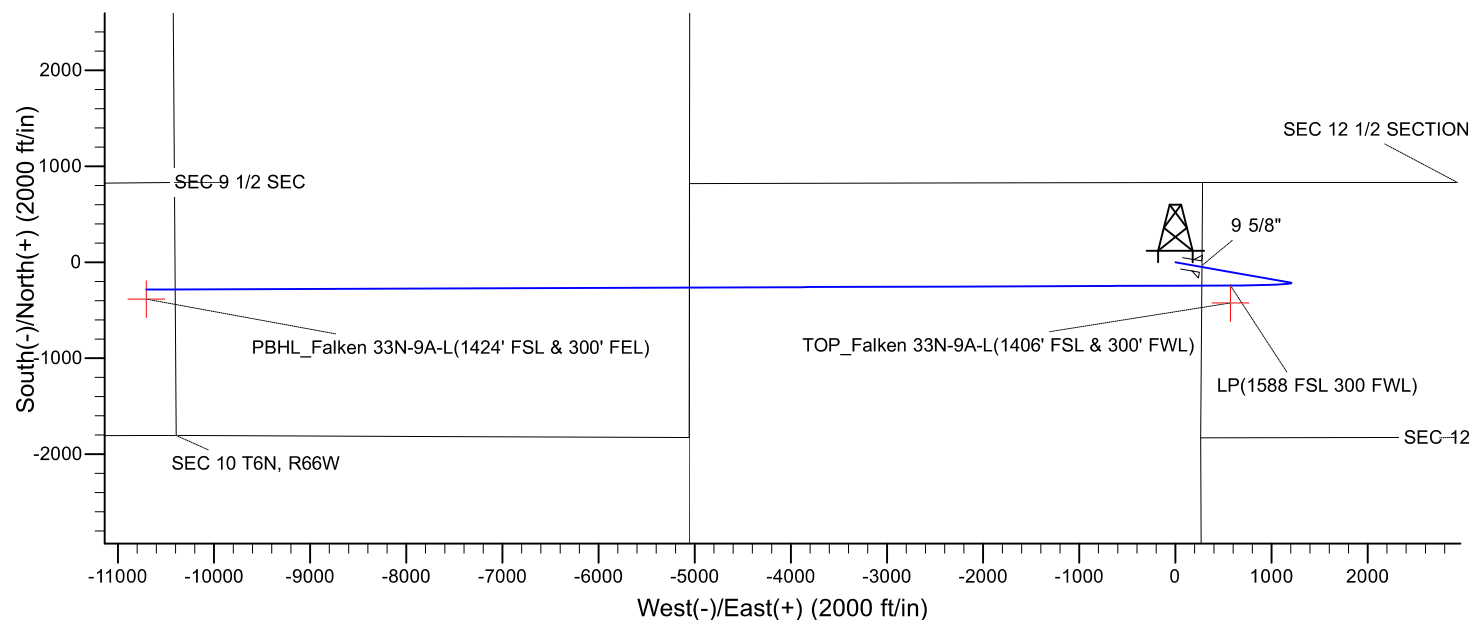
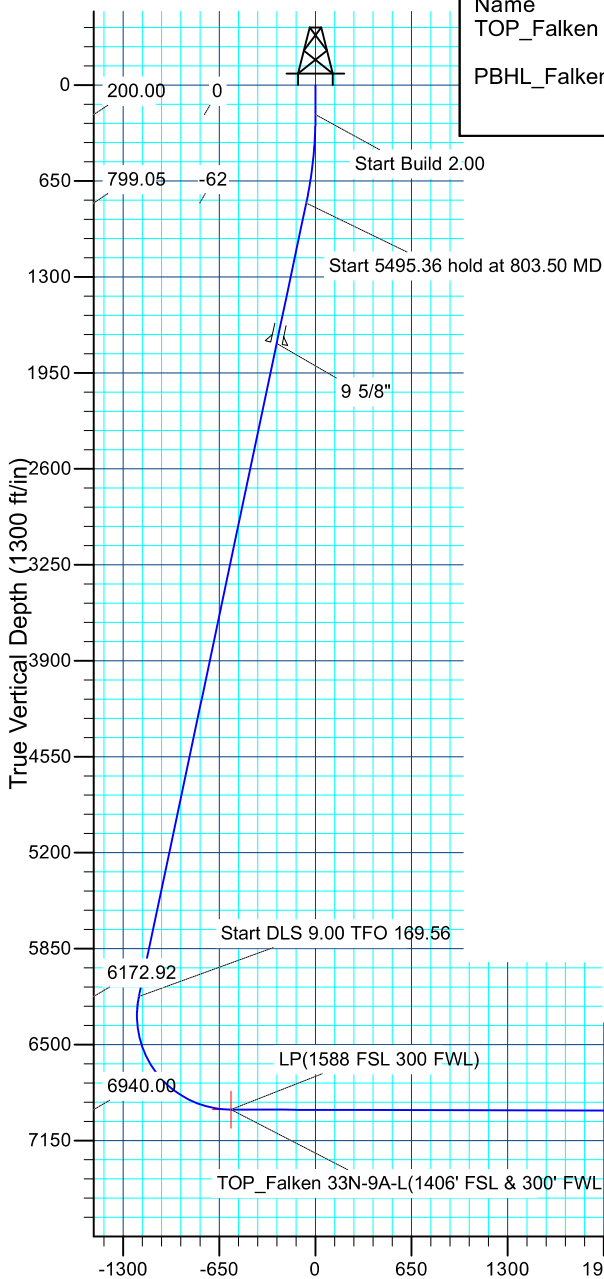
CASING DETAILS

TVD	MD	Name	Size
1750.00	1775.95	9 5/8"	9.625



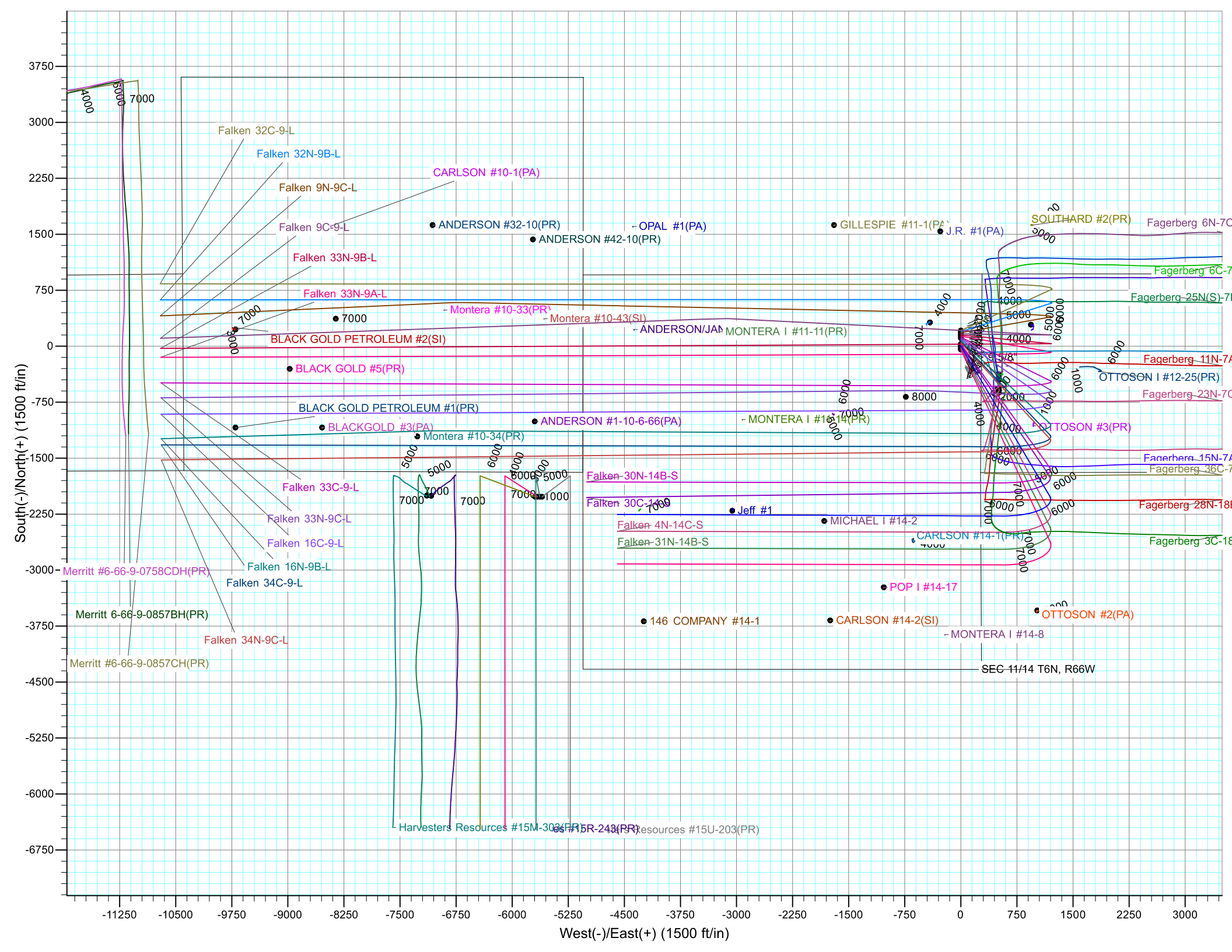
Azimuths to True North
Magnetic North: 8.22°

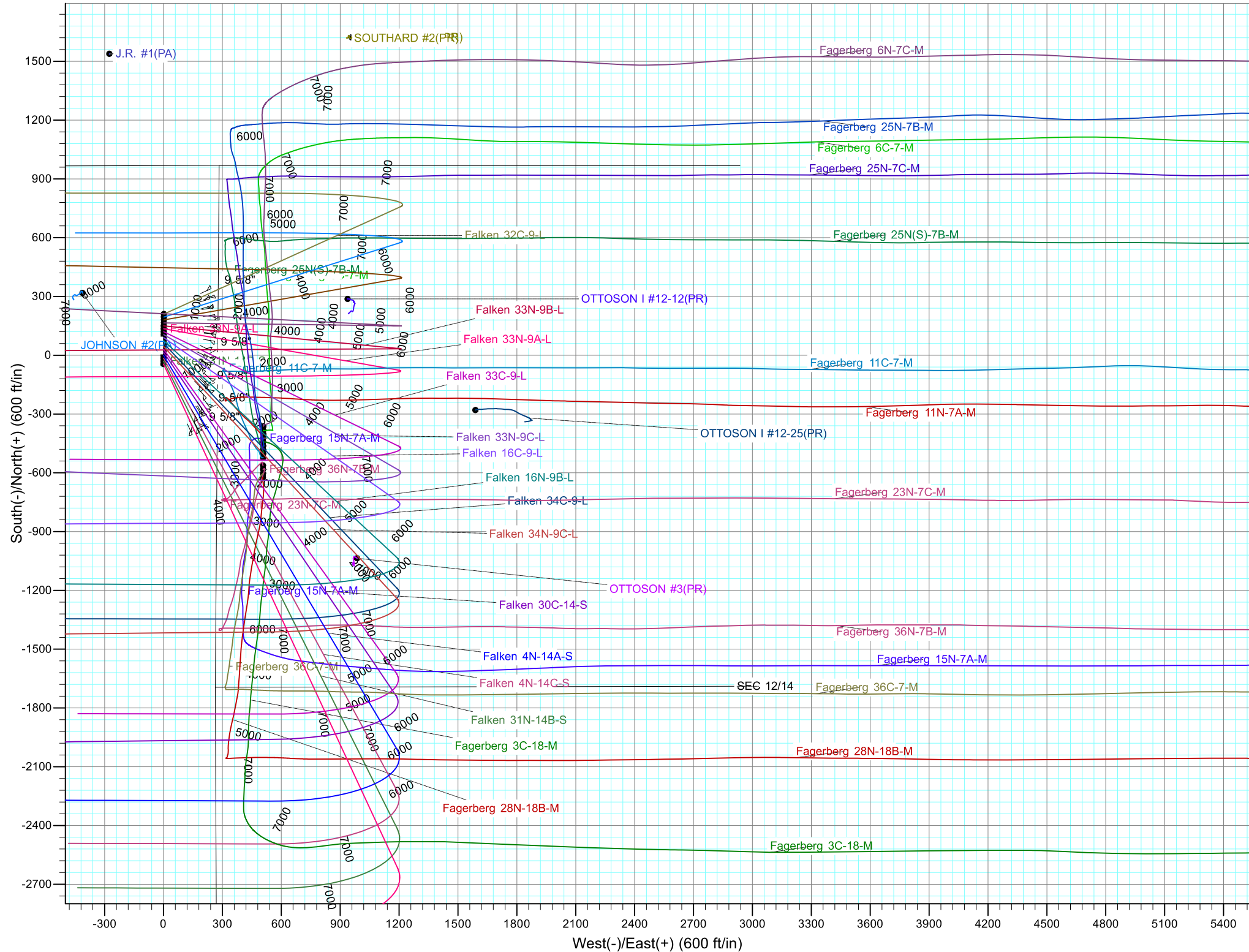
Magnetic Field
Strength: 52465.4snT
Dip Angle: 66.94°
Date: 4/21/2017
Model: IGRF2015



Vertical Section at 269.78° (1300 ft/in)

Falken 33N-9A-L/Plan #1
PBHL_Falken 33N-9A-L(1424' FSL & 300' FEL)







Synergy Resources Corporation

SEC 12-13 T6N R66W

Falken 9-11 PAD

Falken 33N-9A-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-9A-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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-9A-L, 1829' FSL & 276' FEL					
Well Position	+N/-S	-75.05 ft	Northing:	1,426,124.05 ft	Latitude:	40.5005910
	+E/-W	-0.56 ft	Easting:	3,212,484.72 ft	Longitude:	-104.7359470
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	269.78

Plan Survey Tool Program	Date	4/24/2017			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,703.77 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	
803.50	12.07	100.00	799.05	-11.00	62.37	2.00	2.00	0.00	100.00	
6,298.86	12.07	100.00	6,172.92	-210.54	1,194.03	0.00	0.00	0.00	0.00	
7,429.12	89.85	269.78	6,940.00	-241.88	572.84	9.00	6.88	15.02	169.56	
18,704.56	89.85	269.78	6,970.00	-284.20	-10,702.48	0.00	0.00	0.00	0.00	

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9A-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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	100.00	299.98	-0.30	1.72	-1.72	2.00	2.00	0.00
400.00	4.00	100.00	399.84	-1.21	6.87	-6.87	2.00	2.00	0.00
500.00	6.00	100.00	499.45	-2.73	15.46	-15.44	2.00	2.00	0.00
600.00	8.00	100.00	598.70	-4.84	27.46	-27.44	2.00	2.00	0.00
700.00	10.00	100.00	697.47	-7.56	42.86	-42.83	2.00	2.00	0.00
800.00	12.00	100.00	795.62	-10.87	61.65	-61.61	2.00	2.00	0.00
803.50	12.07	100.00	799.05	-11.00	62.37	-62.33	2.00	2.00	0.00
Start 5495.36 hold at 803.50 MD									
900.00	12.07	100.00	893.41	-14.50	82.24	-82.19	0.00	0.00	0.00
1,000.00	12.07	100.00	991.20	-18.13	102.84	-102.76	0.00	0.00	0.00
1,100.00	12.07	100.00	1,088.99	-21.76	123.43	-123.34	0.00	0.00	0.00
1,200.00	12.07	100.00	1,186.78	-25.39	144.02	-143.92	0.00	0.00	0.00
1,300.00	12.07	100.00	1,284.57	-29.03	164.61	-164.50	0.00	0.00	0.00
1,400.00	12.07	100.00	1,382.36	-32.66	185.21	-185.08	0.00	0.00	0.00
1,500.00	12.07	100.00	1,480.15	-36.29	205.80	-205.66	0.00	0.00	0.00
1,600.00	12.07	100.00	1,577.94	-39.92	226.39	-226.24	0.00	0.00	0.00
1,700.00	12.07	100.00	1,675.73	-43.55	246.99	-246.82	0.00	0.00	0.00
1,775.95	12.07	100.00	1,750.00	-46.31	262.63	-262.45	0.00	0.00	0.00
9 5/8"									
1,800.00	12.07	100.00	1,773.52	-47.18	267.58	-267.40	0.00	0.00	0.00
1,900.00	12.07	100.00	1,871.31	-50.81	288.17	-287.97	0.00	0.00	0.00
2,000.00	12.07	100.00	1,969.10	-54.44	308.77	-308.55	0.00	0.00	0.00
2,100.00	12.07	100.00	2,066.88	-58.07	329.36	-329.13	0.00	0.00	0.00
2,200.00	12.07	100.00	2,164.67	-61.71	349.95	-349.71	0.00	0.00	0.00
2,300.00	12.07	100.00	2,262.46	-65.34	370.54	-370.29	0.00	0.00	0.00
2,400.00	12.07	100.00	2,360.25	-68.97	391.14	-390.87	0.00	0.00	0.00
2,500.00	12.07	100.00	2,458.04	-72.60	411.73	-411.45	0.00	0.00	0.00
2,600.00	12.07	100.00	2,555.83	-76.23	432.32	-432.03	0.00	0.00	0.00
2,700.00	12.07	100.00	2,653.62	-79.86	452.92	-452.61	0.00	0.00	0.00
2,800.00	12.07	100.00	2,751.41	-83.49	473.51	-473.18	0.00	0.00	0.00
2,900.00	12.07	100.00	2,849.20	-87.12	494.10	-493.76	0.00	0.00	0.00
3,000.00	12.07	100.00	2,946.99	-90.75	514.69	-514.34	0.00	0.00	0.00
3,100.00	12.07	100.00	3,044.78	-94.39	535.29	-534.92	0.00	0.00	0.00
3,200.00	12.07	100.00	3,142.57	-98.02	555.88	-555.50	0.00	0.00	0.00
3,300.00	12.07	100.00	3,240.36	-101.65	576.47	-576.08	0.00	0.00	0.00
3,400.00	12.07	100.00	3,338.15	-105.28	597.07	-596.66	0.00	0.00	0.00
3,500.00	12.07	100.00	3,435.93	-108.91	617.66	-617.24	0.00	0.00	0.00
3,600.00	12.07	100.00	3,533.72	-112.54	638.25	-637.82	0.00	0.00	0.00
3,700.00	12.07	100.00	3,631.51	-116.17	658.85	-658.39	0.00	0.00	0.00
3,800.00	12.07	100.00	3,729.30	-119.80	679.44	-678.97	0.00	0.00	0.00
3,900.00	12.07	100.00	3,827.09	-123.43	700.03	-699.55	0.00	0.00	0.00
4,000.00	12.07	100.00	3,924.88	-127.07	720.62	-720.13	0.00	0.00	0.00
4,100.00	12.07	100.00	4,022.67	-130.70	741.22	-740.71	0.00	0.00	0.00
4,200.00	12.07	100.00	4,120.46	-134.33	761.81	-761.29	0.00	0.00	0.00
4,300.00	12.07	100.00	4,218.25	-137.96	782.40	-781.87	0.00	0.00	0.00
4,400.00	12.07	100.00	4,316.04	-141.59	803.00	-802.45	0.00	0.00	0.00
4,500.00	12.07	100.00	4,413.83	-145.22	823.59	-823.03	0.00	0.00	0.00
4,600.00	12.07	100.00	4,511.62	-148.85	844.18	-843.60	0.00	0.00	0.00

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Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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)
4,700.00	12.07	100.00	4,609.41	-152.48	864.78	-864.18	0.00	0.00	0.00
4,800.00	12.07	100.00	4,707.20	-156.11	885.37	-884.76	0.00	0.00	0.00
4,900.00	12.07	100.00	4,804.98	-159.75	905.96	-905.34	0.00	0.00	0.00
5,000.00	12.07	100.00	4,902.77	-163.38	926.55	-925.92	0.00	0.00	0.00
5,100.00	12.07	100.00	5,000.56	-167.01	947.15	-946.50	0.00	0.00	0.00
5,200.00	12.07	100.00	5,098.35	-170.64	967.74	-967.08	0.00	0.00	0.00
5,300.00	12.07	100.00	5,196.14	-174.27	988.33	-987.66	0.00	0.00	0.00
5,400.00	12.07	100.00	5,293.93	-177.90	1,008.93	-1,008.24	0.00	0.00	0.00
5,500.00	12.07	100.00	5,391.72	-181.53	1,029.52	-1,028.81	0.00	0.00	0.00
5,600.00	12.07	100.00	5,489.51	-185.16	1,050.11	-1,049.39	0.00	0.00	0.00
5,700.00	12.07	100.00	5,587.30	-188.79	1,070.71	-1,069.97	0.00	0.00	0.00
5,800.00	12.07	100.00	5,685.09	-192.43	1,091.30	-1,090.55	0.00	0.00	0.00
5,900.00	12.07	100.00	5,782.88	-196.06	1,111.89	-1,111.13	0.00	0.00	0.00
6,000.00	12.07	100.00	5,880.67	-199.69	1,132.48	-1,131.71	0.00	0.00	0.00
6,100.00	12.07	100.00	5,978.46	-203.32	1,153.08	-1,152.29	0.00	0.00	0.00
6,200.00	12.07	100.00	6,076.25	-206.95	1,173.67	-1,172.87	0.00	0.00	0.00
6,298.86	12.07	100.00	6,172.92	-210.54	1,194.03	-1,193.21	0.00	0.00	0.00
Start DLS 9.00 TFO 169.56									
6,300.00	11.97	100.09	6,174.03	-210.58	1,194.26	-1,193.44	9.00	-8.85	7.86
6,400.00	3.52	127.81	6,273.06	-214.29	1,206.92	-1,206.09	9.00	-8.45	27.72
6,500.00	6.59	250.65	6,372.84	-218.08	1,203.93	-1,203.08	9.00	3.07	122.84
6,600.00	15.38	261.87	6,470.92	-221.87	1,185.35	-1,184.49	9.00	8.78	11.22
6,700.00	24.32	264.98	6,564.89	-225.55	1,151.64	-1,150.77	9.00	8.94	3.11
6,800.00	33.29	266.48	6,652.43	-229.04	1,103.64	-1,102.75	9.00	8.97	1.50
6,900.00	42.27	267.40	6,731.38	-232.26	1,042.53	-1,041.63	9.00	8.98	0.92
7,000.00	51.26	268.05	6,799.81	-235.12	969.80	-968.89	9.00	8.99	0.65
7,100.00	60.25	268.55	6,856.03	-237.55	887.26	-886.34	9.00	8.99	0.50
7,200.00	69.24	268.97	6,898.65	-239.50	796.93	-796.01	9.00	8.99	0.42
7,300.00	78.24	269.34	6,926.62	-240.91	701.04	-700.11	9.00	8.99	0.37
7,400.00	87.23	269.69	6,939.26	-241.75	601.95	-601.02	9.00	8.99	0.35
7,429.12	89.85	269.78	6,940.00	-241.88	572.84	-571.91	9.00	8.99	0.34
LP(1588 FSL 300 FWL)									
7,429.75	89.85	269.78	6,940.00	-241.88	572.21	-571.28	0.00	0.00	0.00
TOP_Falken 33N-9A-L(1406' FSL & 300' FWL)									
7,500.00	89.85	269.78	6,940.19	-242.15	501.96	-501.03	0.00	0.00	0.00
7,600.00	89.85	269.78	6,940.46	-242.52	401.96	-401.03	0.00	0.00	0.00
7,700.00	89.85	269.78	6,940.72	-242.90	301.97	-301.03	0.00	0.00	0.00
7,800.00	89.85	269.78	6,940.99	-243.27	201.97	-201.03	0.00	0.00	0.00
7,900.00	89.85	269.78	6,941.25	-243.65	101.97	-101.03	0.00	0.00	0.00
8,000.00	89.85	269.78	6,941.52	-244.02	1.97	-1.03	0.00	0.00	0.00
8,100.00	89.85	269.78	6,941.79	-244.40	-98.03	98.97	0.00	0.00	0.00
8,200.00	89.85	269.78	6,942.05	-244.77	-198.03	198.97	0.00	0.00	0.00
8,300.00	89.85	269.78	6,942.32	-245.15	-298.03	298.97	0.00	0.00	0.00
8,400.00	89.85	269.78	6,942.58	-245.53	-398.03	398.97	0.00	0.00	0.00
8,500.00	89.85	269.78	6,942.85	-245.90	-498.03	498.97	0.00	0.00	0.00
8,600.00	89.85	269.78	6,943.12	-246.28	-598.02	598.97	0.00	0.00	0.00
8,700.00	89.85	269.78	6,943.38	-246.65	-698.02	698.97	0.00	0.00	0.00
8,800.00	89.85	269.78	6,943.65	-247.03	-798.02	798.97	0.00	0.00	0.00
8,900.00	89.85	269.78	6,943.91	-247.40	-898.02	898.96	0.00	0.00	0.00
9,000.00	89.85	269.78	6,944.18	-247.78	-998.02	998.96	0.00	0.00	0.00
9,100.00	89.85	269.78	6,944.45	-248.15	-1,098.02	1,098.96	0.00	0.00	0.00

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Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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	89.85	269.78	6,944.71	-248.53	-1,198.02	1,198.96	0.00	0.00	0.00
9,300.00	89.85	269.78	6,944.98	-248.90	-1,298.02	1,298.96	0.00	0.00	0.00
9,400.00	89.85	269.78	6,945.24	-249.28	-1,398.02	1,398.96	0.00	0.00	0.00
9,500.00	89.85	269.78	6,945.51	-249.65	-1,498.02	1,498.96	0.00	0.00	0.00
9,600.00	89.85	269.78	6,945.78	-250.03	-1,598.01	1,598.96	0.00	0.00	0.00
9,700.00	89.85	269.78	6,946.04	-250.40	-1,698.01	1,698.96	0.00	0.00	0.00
9,800.00	89.85	269.78	6,946.31	-250.78	-1,798.01	1,798.96	0.00	0.00	0.00
9,900.00	89.85	269.78	6,946.57	-251.15	-1,898.01	1,898.96	0.00	0.00	0.00
10,000.00	89.85	269.78	6,946.84	-251.53	-1,998.01	1,998.96	0.00	0.00	0.00
10,100.00	89.85	269.78	6,947.11	-251.91	-2,098.01	2,098.96	0.00	0.00	0.00
10,200.00	89.85	269.78	6,947.37	-252.28	-2,198.01	2,198.96	0.00	0.00	0.00
10,300.00	89.85	269.78	6,947.64	-252.66	-2,298.01	2,298.96	0.00	0.00	0.00
10,400.00	89.85	269.78	6,947.90	-253.03	-2,398.01	2,398.96	0.00	0.00	0.00
10,500.00	89.85	269.78	6,948.17	-253.41	-2,498.00	2,498.96	0.00	0.00	0.00
10,600.00	89.85	269.78	6,948.44	-253.78	-2,598.00	2,598.96	0.00	0.00	0.00
10,700.00	89.85	269.78	6,948.70	-254.16	-2,698.00	2,698.96	0.00	0.00	0.00
10,800.00	89.85	269.78	6,948.97	-254.53	-2,798.00	2,798.96	0.00	0.00	0.00
10,900.00	89.85	269.78	6,949.24	-254.91	-2,898.00	2,898.96	0.00	0.00	0.00
11,000.00	89.85	269.78	6,949.50	-255.28	-2,998.00	2,998.96	0.00	0.00	0.00
11,100.00	89.85	269.78	6,949.77	-255.66	-3,098.00	3,098.96	0.00	0.00	0.00
11,200.00	89.85	269.78	6,950.03	-256.03	-3,198.00	3,198.96	0.00	0.00	0.00
11,300.00	89.85	269.78	6,950.30	-256.41	-3,298.00	3,298.96	0.00	0.00	0.00
11,400.00	89.85	269.78	6,950.57	-256.78	-3,398.00	3,398.96	0.00	0.00	0.00
11,500.00	89.85	269.78	6,950.83	-257.16	-3,497.99	3,498.96	0.00	0.00	0.00
11,600.00	89.85	269.78	6,951.10	-257.54	-3,597.99	3,598.96	0.00	0.00	0.00
11,700.00	89.85	269.78	6,951.36	-257.91	-3,697.99	3,698.96	0.00	0.00	0.00
11,800.00	89.85	269.78	6,951.63	-258.29	-3,797.99	3,798.95	0.00	0.00	0.00
11,900.00	89.85	269.78	6,951.90	-258.66	-3,897.99	3,898.95	0.00	0.00	0.00
12,000.00	89.85	269.78	6,952.16	-259.04	-3,997.99	3,998.95	0.00	0.00	0.00
12,100.00	89.85	269.78	6,952.43	-259.41	-4,097.99	4,098.95	0.00	0.00	0.00
12,200.00	89.85	269.78	6,952.69	-259.79	-4,197.99	4,198.95	0.00	0.00	0.00
12,300.00	89.85	269.78	6,952.96	-260.16	-4,297.99	4,298.95	0.00	0.00	0.00
12,400.00	89.85	269.78	6,953.23	-260.54	-4,397.98	4,398.95	0.00	0.00	0.00
12,500.00	89.85	269.78	6,953.49	-260.91	-4,497.98	4,498.95	0.00	0.00	0.00
12,600.00	89.85	269.78	6,953.76	-261.29	-4,597.98	4,598.95	0.00	0.00	0.00
12,700.00	89.85	269.78	6,954.02	-261.66	-4,697.98	4,698.95	0.00	0.00	0.00
12,800.00	89.85	269.78	6,954.29	-262.04	-4,797.98	4,798.95	0.00	0.00	0.00
12,900.00	89.85	269.78	6,954.56	-262.41	-4,897.98	4,898.95	0.00	0.00	0.00
13,000.00	89.85	269.78	6,954.82	-262.79	-4,997.98	4,998.95	0.00	0.00	0.00
13,100.00	89.85	269.78	6,955.09	-263.17	-5,097.98	5,098.95	0.00	0.00	0.00
13,200.00	89.85	269.78	6,955.35	-263.54	-5,197.98	5,198.95	0.00	0.00	0.00
13,300.00	89.85	269.78	6,955.62	-263.92	-5,297.98	5,298.95	0.00	0.00	0.00
13,400.00	89.85	269.78	6,955.89	-264.29	-5,397.97	5,398.95	0.00	0.00	0.00
13,500.00	89.85	269.78	6,956.15	-264.67	-5,497.97	5,498.95	0.00	0.00	0.00
13,600.00	89.85	269.78	6,956.42	-265.04	-5,597.97	5,598.95	0.00	0.00	0.00
13,700.00	89.85	269.78	6,956.68	-265.42	-5,697.97	5,698.95	0.00	0.00	0.00
13,800.00	89.85	269.78	6,956.95	-265.79	-5,797.97	5,798.95	0.00	0.00	0.00
13,900.00	89.85	269.78	6,957.22	-266.17	-5,897.97	5,898.95	0.00	0.00	0.00
14,000.00	89.85	269.78	6,957.48	-266.54	-5,997.97	5,998.95	0.00	0.00	0.00
14,100.00	89.85	269.78	6,957.75	-266.92	-6,097.97	6,098.95	0.00	0.00	0.00
14,200.00	89.85	269.78	6,958.02	-267.29	-6,197.97	6,198.95	0.00	0.00	0.00
14,300.00	89.85	269.78	6,958.28	-267.67	-6,297.96	6,298.95	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9A-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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)
14,400.00	89.85	269.78	6,958.55	-268.04	-6,397.96	6,398.95	0.00	0.00	0.00
14,500.00	89.85	269.78	6,958.81	-268.42	-6,497.96	6,498.95	0.00	0.00	0.00
14,600.00	89.85	269.78	6,959.08	-268.79	-6,597.96	6,598.94	0.00	0.00	0.00
14,700.00	89.85	269.78	6,959.35	-269.17	-6,697.96	6,698.94	0.00	0.00	0.00
14,800.00	89.85	269.78	6,959.61	-269.55	-6,797.96	6,798.94	0.00	0.00	0.00
14,900.00	89.85	269.78	6,959.88	-269.92	-6,897.96	6,898.94	0.00	0.00	0.00
15,000.00	89.85	269.78	6,960.14	-270.30	-6,997.96	6,998.94	0.00	0.00	0.00
15,100.00	89.85	269.78	6,960.41	-270.67	-7,097.96	7,098.94	0.00	0.00	0.00
15,200.00	89.85	269.78	6,960.68	-271.05	-7,197.95	7,198.94	0.00	0.00	0.00
15,300.00	89.85	269.78	6,960.94	-271.42	-7,297.95	7,298.94	0.00	0.00	0.00
15,400.00	89.85	269.78	6,961.21	-271.80	-7,397.95	7,398.94	0.00	0.00	0.00
15,500.00	89.85	269.78	6,961.47	-272.17	-7,497.95	7,498.94	0.00	0.00	0.00
15,600.00	89.85	269.78	6,961.74	-272.55	-7,597.95	7,598.94	0.00	0.00	0.00
15,700.00	89.85	269.78	6,962.01	-272.92	-7,697.95	7,698.94	0.00	0.00	0.00
15,800.00	89.85	269.78	6,962.27	-273.30	-7,797.95	7,798.94	0.00	0.00	0.00
15,900.00	89.85	269.78	6,962.54	-273.67	-7,897.95	7,898.94	0.00	0.00	0.00
16,000.00	89.85	269.78	6,962.80	-274.05	-7,997.95	7,998.94	0.00	0.00	0.00
16,100.00	89.85	269.78	6,963.07	-274.42	-8,097.95	8,098.94	0.00	0.00	0.00
16,200.00	89.85	269.78	6,963.34	-274.80	-8,197.94	8,198.94	0.00	0.00	0.00
16,300.00	89.85	269.78	6,963.60	-275.18	-8,297.94	8,298.94	0.00	0.00	0.00
16,400.00	89.85	269.78	6,963.87	-275.55	-8,397.94	8,398.94	0.00	0.00	0.00
16,500.00	89.85	269.78	6,964.13	-275.93	-8,497.94	8,498.94	0.00	0.00	0.00
16,600.00	89.85	269.78	6,964.40	-276.30	-8,597.94	8,598.94	0.00	0.00	0.00
16,700.00	89.85	269.78	6,964.67	-276.68	-8,697.94	8,698.94	0.00	0.00	0.00
16,800.00	89.85	269.78	6,964.93	-277.05	-8,797.94	8,798.94	0.00	0.00	0.00
16,900.00	89.85	269.78	6,965.20	-277.43	-8,897.94	8,898.94	0.00	0.00	0.00
17,000.00	89.85	269.78	6,965.46	-277.80	-8,997.94	8,998.94	0.00	0.00	0.00
17,100.00	89.85	269.78	6,965.73	-278.18	-9,097.93	9,098.94	0.00	0.00	0.00
17,200.00	89.85	269.78	6,966.00	-278.55	-9,197.93	9,198.94	0.00	0.00	0.00
17,300.00	89.85	269.78	6,966.26	-278.93	-9,297.93	9,298.94	0.00	0.00	0.00
17,400.00	89.85	269.78	6,966.53	-279.30	-9,397.93	9,398.93	0.00	0.00	0.00
17,500.00	89.85	269.78	6,966.80	-279.68	-9,497.93	9,498.93	0.00	0.00	0.00
17,600.00	89.85	269.78	6,967.06	-280.05	-9,597.93	9,598.93	0.00	0.00	0.00
17,700.00	89.85	269.78	6,967.33	-280.43	-9,697.93	9,698.93	0.00	0.00	0.00
17,800.00	89.85	269.78	6,967.59	-280.81	-9,797.93	9,798.93	0.00	0.00	0.00
17,900.00	89.85	269.78	6,967.86	-281.18	-9,897.93	9,898.93	0.00	0.00	0.00
18,000.00	89.85	269.78	6,968.13	-281.56	-9,997.93	9,998.93	0.00	0.00	0.00
18,100.00	89.85	269.78	6,968.39	-281.93	-10,097.92	10,098.93	0.00	0.00	0.00
18,200.00	89.85	269.78	6,968.66	-282.31	-10,197.92	10,198.93	0.00	0.00	0.00
18,300.00	89.85	269.78	6,968.92	-282.68	-10,297.92	10,298.93	0.00	0.00	0.00
18,400.00	89.85	269.78	6,969.19	-283.06	-10,397.92	10,398.93	0.00	0.00	0.00
18,500.00	89.85	269.78	6,969.46	-283.43	-10,497.92	10,498.93	0.00	0.00	0.00
18,600.00	89.85	269.78	6,969.72	-283.81	-10,597.92	10,598.93	0.00	0.00	0.00
18,700.00	89.85	269.78	6,969.99	-284.18	-10,697.92	10,698.93	0.00	0.00	0.00
18,704.56	89.85	269.78	6,970.00	-284.20	-10,702.48	10,703.49	0.00	0.00	0.00
TD(1521 FSL 287 FEL) - PBHL_Falken 33N-9A-L(1424' FSL & 300' FEL)									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Falken 33N-9A-L
Company:	Synergy Resources Corporation	TVD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Project:	SEC 12-13 T6N R66W	MD Reference:	GL 4810 & KB 20 @ 4830.00ft (Original Well Elev)
Site:	Falken 9-11 PAD	North Reference:	True
Well:	Falken 33N-9A-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-9A-L(1	0.00	0.00	6,940.00	-422.58	572.89	1,425,706.42	3,213,061.23	40.4994310	-104.7338870
- plan misses target center by 180.70ft at 7429.75ft MD (6940.00 TVD, -241.88 N, 572.21 E)									
- Point									
PBHL_Falken 33N-9A-L	0.00	0.00	6,970.00	-384.20	-10,702.48	1,425,647.65	3,201,785.95	40.4995300	-104.7744310
- plan misses target center by 100.00ft at 18704.56ft MD (6970.00 TVD, -284.20 N, -10702.48 E)									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,775.95	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	
803.50	799.05	-11.00	62.37	Start 5495.36 hold at 803.50 MD	
6,298.86	6,172.92	-210.54	1,194.03	Start DLS 9.00 TFO 169.56	
7,429.12	6,940.00	-241.88	572.84	LP(1588 FSL 300 FWL)	
18,704.56	6,970.00	-284.20	-10,702.48	TD(1521 FSL 287 FEL)	