



Project: SEC 12-13 T6N R66W  
Site: Falken 9-11 PAD  
Well: Falken 31C-14-S  
Wellbore: Plan #1  
Design: Plan #1

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1651.50	27.03	155.12	1601.92	-283.88	131.65	2.00	155.12	-132.40	
7197.64	27.03	155.12	6542.25	-2570.44	1192.07	0.00	0.00	-1198.79	
8317.45	89.67	270.15	7232.00	-2885.60	569.61	9.00	112.73	-577.41	
13480.77	89.67	270.15	7262.00	-2872.12	-4593.35	0.00	0.00	4585.82	PBHL_Falken 31C-14-S

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 31C-14-S	7232.00	-2885.65	569.61	1423063.43	3213079.06	40.4921760	-104.7339050	Point
- plan misses target center by 0.05ft at 8317.70ft MD (7232.00 TVD, -2885.60 N, 569.61 E)								
PBHL_Falken 31C-14-S	7262.00	-2872.12	-4593.35	1423032.48	3207916.17	40.4922120	-104.7524680	Point
- plan hits target center								

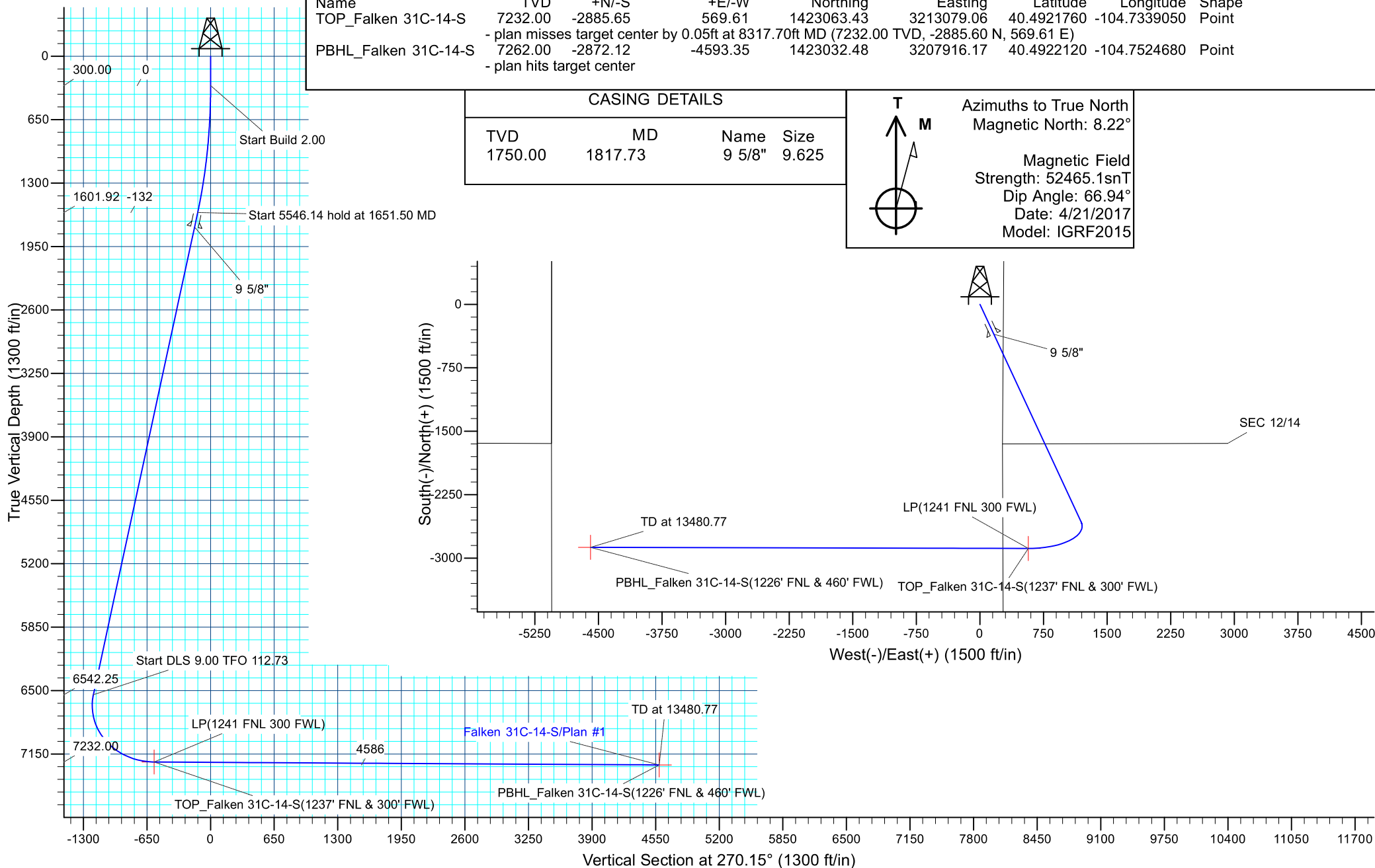
#### CASING DETAILS

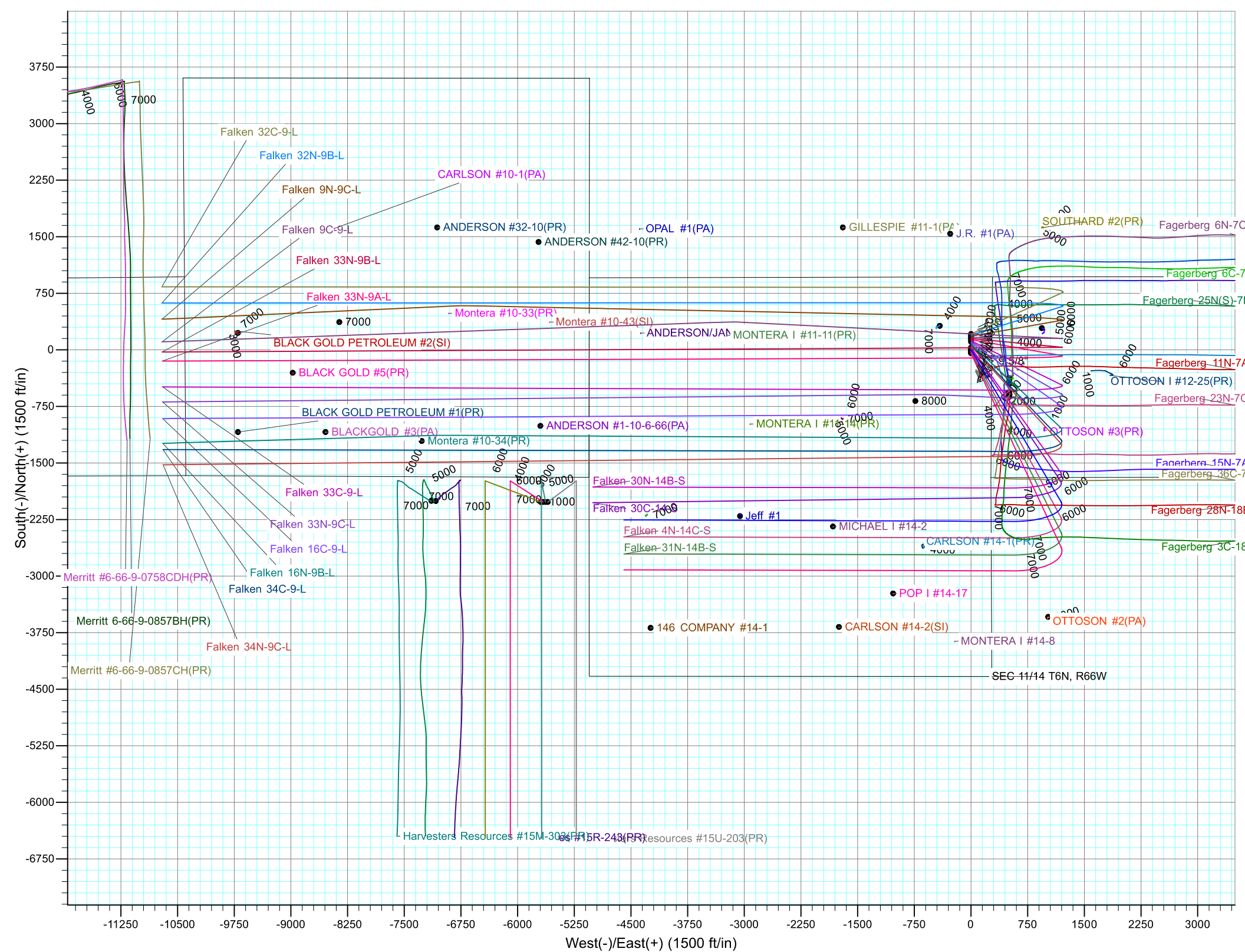
TVD	MD	Name	Size
1750.00	1817.73	9 5/8"	9.625

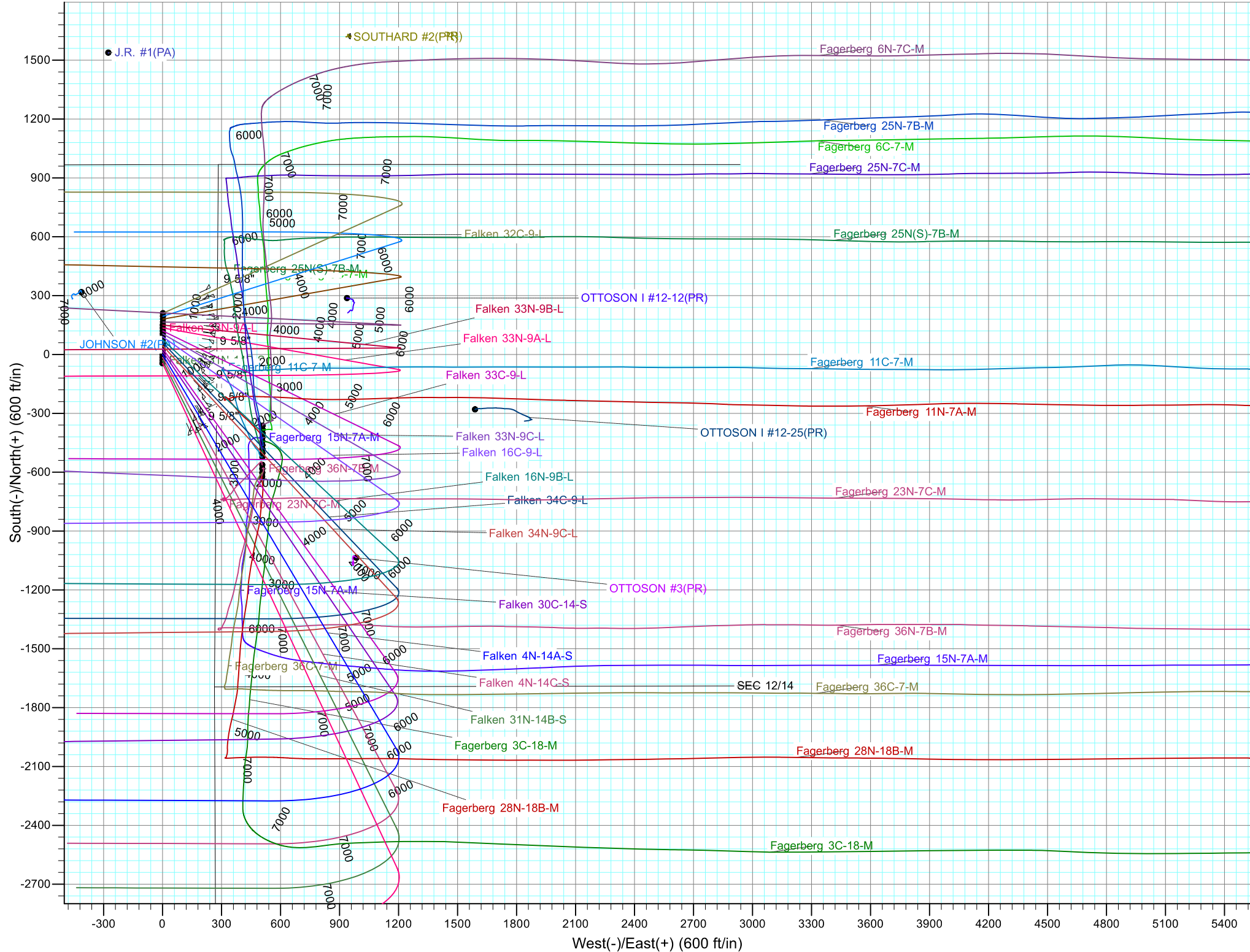


Azimuths to True North  
Magnetic North: 8.22°

Magnetic Field  
Strength: 52465.1snT  
Dip Angle: 66.94°  
Date: 4/21/2017  
Model: IGRF2015









# **Synergy Resources Corporation**

**SEC 12-13 T6N R66W**

**Falken 9-11 PAD**

**Falken 31C-14-S**

**Plan #1**

**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 31C-14-S
<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 31C-14-S	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan #1		
<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 31C-14-S, 1649' FSL & 276' FEL					
Well Position	+N/-S	-255.02 ft	Northing:	1,425,944.07 ft	Latitude:	40.5000970
	+E/-W	-2.22 ft	Easting:	3,212,484.60 ft	Longitude:	-104.7359530
Position Uncertainty		3.28 ft	Wellhead Elevation:		Ground Level:	4,810.00 ft

<b>Wellbore</b>	Plan #1				
<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	270.15

<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	13,480.77 Plan #1 (Plan #1)	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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,651.50	27.03	155.12	1,601.92	-283.88	131.65	2.00	2.00	0.00	155.12	
7,197.64	27.03	155.12	6,542.25	-2,570.44	1,192.07	0.00	0.00	0.00	0.00	
8,317.45	89.67	270.15	7,232.00	-2,885.60	569.86	9.00	5.59	10.27	112.73	
13,480.77	89.67	270.15	7,262.00	-2,872.12	-4,593.35	0.00	0.00	0.00	0.00	PBHL_Falken 31C-14

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 31C-14-S
<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 31C-14-S	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan #1		
<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
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	155.12	399.98	-1.58	0.73	-0.74	2.00	2.00	0.00
500.00	4.00	155.12	499.84	-6.33	2.94	-2.95	2.00	2.00	0.00
600.00	6.00	155.12	599.45	-14.24	6.60	-6.64	2.00	2.00	0.00
700.00	8.00	155.12	698.70	-25.29	11.73	-11.80	2.00	2.00	0.00
800.00	10.00	155.12	797.47	-39.48	18.31	-18.41	2.00	2.00	0.00
900.00	12.00	155.12	895.62	-56.79	26.34	-26.49	2.00	2.00	0.00
1,000.00	14.00	155.12	993.06	-77.20	35.80	-36.00	2.00	2.00	0.00
1,100.00	16.00	155.12	1,089.64	-100.68	46.69	-46.95	2.00	2.00	0.00
1,200.00	18.00	155.12	1,185.27	-127.20	58.99	-59.32	2.00	2.00	0.00
1,300.00	20.00	155.12	1,279.82	-156.73	72.69	-73.10	2.00	2.00	0.00
1,400.00	22.00	155.12	1,373.17	-189.24	87.76	-88.26	2.00	2.00	0.00
1,500.00	24.00	155.12	1,465.21	-224.69	104.20	-104.79	2.00	2.00	0.00
1,600.00	26.00	155.12	1,555.84	-263.03	121.98	-122.67	2.00	2.00	0.00
1,651.50	27.03	155.12	1,601.92	-283.88	131.65	-132.40	2.00	2.00	0.00
Start 5546.14 hold at 1651.50 MD									
1,700.00	27.03	155.12	1,645.13	-303.88	140.93	-141.72	0.00	0.00	0.00
1,800.00	27.03	155.12	1,734.20	-345.11	160.05	-160.95	0.00	0.00	0.00
1,817.73	27.03	155.12	1,750.00	-352.42	163.44	-164.36	0.00	0.00	0.00
9 5/8"									
1,900.00	27.03	155.12	1,823.28	-386.33	179.17	-180.18	0.00	0.00	0.00
2,000.00	27.03	155.12	1,912.36	-427.56	198.29	-199.40	0.00	0.00	0.00
2,100.00	27.03	155.12	2,001.43	-468.79	217.41	-218.63	0.00	0.00	0.00
2,200.00	27.03	155.12	2,090.51	-510.02	236.53	-237.86	0.00	0.00	0.00
2,300.00	27.03	155.12	2,179.59	-551.25	255.65	-257.09	0.00	0.00	0.00
2,400.00	27.03	155.12	2,268.66	-592.47	274.77	-276.32	0.00	0.00	0.00
2,500.00	27.03	155.12	2,357.74	-633.70	293.89	-295.54	0.00	0.00	0.00
2,600.00	27.03	155.12	2,446.82	-674.93	313.01	-314.77	0.00	0.00	0.00
2,700.00	27.03	155.12	2,535.89	-716.16	332.13	-334.00	0.00	0.00	0.00
2,800.00	27.03	155.12	2,624.97	-757.39	351.25	-353.23	0.00	0.00	0.00
2,900.00	27.03	155.12	2,714.05	-798.61	370.37	-372.45	0.00	0.00	0.00
3,000.00	27.03	155.12	2,803.12	-839.84	389.48	-391.68	0.00	0.00	0.00
3,100.00	27.03	155.12	2,892.20	-881.07	408.60	-410.91	0.00	0.00	0.00
3,200.00	27.03	155.12	2,981.28	-922.30	427.72	-430.14	0.00	0.00	0.00
3,300.00	27.03	155.12	3,070.36	-963.52	446.84	-449.37	0.00	0.00	0.00
3,400.00	27.03	155.12	3,159.43	-1,004.75	465.96	-468.59	0.00	0.00	0.00
3,500.00	27.03	155.12	3,248.51	-1,045.98	485.08	-487.82	0.00	0.00	0.00
3,600.00	27.03	155.12	3,337.59	-1,087.21	504.20	-507.05	0.00	0.00	0.00
3,700.00	27.03	155.12	3,426.66	-1,128.44	523.32	-526.28	0.00	0.00	0.00
3,800.00	27.03	155.12	3,515.74	-1,169.66	542.44	-545.50	0.00	0.00	0.00
3,900.00	27.03	155.12	3,604.82	-1,210.89	561.56	-564.73	0.00	0.00	0.00
4,000.00	27.03	155.12	3,693.89	-1,252.12	580.68	-583.96	0.00	0.00	0.00
4,100.00	27.03	155.12	3,782.97	-1,293.35	599.80	-603.19	0.00	0.00	0.00
4,200.00	27.03	155.12	3,872.05	-1,334.58	618.92	-622.42	0.00	0.00	0.00
4,300.00	27.03	155.12	3,961.12	-1,375.80	638.04	-641.64	0.00	0.00	0.00
4,400.00	27.03	155.12	4,050.20	-1,417.03	657.16	-660.87	0.00	0.00	0.00
4,500.00	27.03	155.12	4,139.28	-1,458.26	676.28	-680.10	0.00	0.00	0.00
4,600.00	27.03	155.12	4,228.35	-1,499.49	695.40	-699.33	0.00	0.00	0.00
4,700.00	27.03	155.12	4,317.43	-1,540.72	714.52	-718.55	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 31C-14-S	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan #1		
<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	27.03	155.12	4,406.51	-1,581.94	733.64	-737.78	0.00	0.00	0.00
4,900.00	27.03	155.12	4,495.59	-1,623.17	752.76	-757.01	0.00	0.00	0.00
5,000.00	27.03	155.12	4,584.66	-1,664.40	771.88	-776.24	0.00	0.00	0.00
5,100.00	27.03	155.12	4,673.74	-1,705.63	791.00	-795.46	0.00	0.00	0.00
5,200.00	27.03	155.12	4,762.82	-1,746.86	810.12	-814.69	0.00	0.00	0.00
5,300.00	27.03	155.12	4,851.89	-1,788.08	829.24	-833.92	0.00	0.00	0.00
5,400.00	27.03	155.12	4,940.97	-1,829.31	848.36	-853.15	0.00	0.00	0.00
5,500.00	27.03	155.12	5,030.05	-1,870.54	867.48	-872.38	0.00	0.00	0.00
5,600.00	27.03	155.12	5,119.12	-1,911.77	886.60	-891.60	0.00	0.00	0.00
5,700.00	27.03	155.12	5,208.20	-1,952.99	905.72	-910.83	0.00	0.00	0.00
5,800.00	27.03	155.12	5,297.28	-1,994.22	924.84	-930.06	0.00	0.00	0.00
5,900.00	27.03	155.12	5,386.35	-2,035.45	943.96	-949.29	0.00	0.00	0.00
6,000.00	27.03	155.12	5,475.43	-2,076.68	963.08	-968.51	0.00	0.00	0.00
6,100.00	27.03	155.12	5,564.51	-2,117.91	982.20	-987.74	0.00	0.00	0.00
6,200.00	27.03	155.12	5,653.58	-2,159.13	1,001.32	-1,006.97	0.00	0.00	0.00
6,300.00	27.03	155.12	5,742.66	-2,200.36	1,020.44	-1,026.20	0.00	0.00	0.00
6,400.00	27.03	155.12	5,831.74	-2,241.59	1,039.56	-1,045.43	0.00	0.00	0.00
6,500.00	27.03	155.12	5,920.82	-2,282.82	1,058.68	-1,064.65	0.00	0.00	0.00
6,600.00	27.03	155.12	6,009.89	-2,324.05	1,077.80	-1,083.88	0.00	0.00	0.00
6,700.00	27.03	155.12	6,098.97	-2,365.27	1,096.92	-1,103.11	0.00	0.00	0.00
6,800.00	27.03	155.12	6,188.05	-2,406.50	1,116.04	-1,122.34	0.00	0.00	0.00
6,900.00	27.03	155.12	6,277.12	-2,447.73	1,135.16	-1,141.56	0.00	0.00	0.00
7,000.00	27.03	155.12	6,366.20	-2,488.96	1,154.28	-1,160.79	0.00	0.00	0.00
7,100.00	27.03	155.12	6,455.28	-2,530.19	1,173.40	-1,180.02	0.00	0.00	0.00
7,197.64	27.03	155.12	6,542.25	-2,570.44	1,192.07	-1,198.79	0.00	0.00	0.00
Start DLS 9.00 TFO 112.73									
7,200.00	26.95	155.55	6,544.35	-2,571.41	1,192.52	-1,199.24	9.00	-3.45	18.32
7,300.00	24.85	175.69	6,634.48	-2,613.08	1,203.50	-1,210.33	9.00	-2.10	20.14
7,400.00	25.71	196.77	6,725.09	-2,654.89	1,198.81	-1,205.75	9.00	0.85	21.08
7,500.00	29.25	214.79	6,813.94	-2,695.81	1,178.57	-1,185.62	9.00	3.55	18.02
7,600.00	34.67	228.43	6,898.86	-2,734.83	1,143.27	-1,150.43	9.00	5.42	13.64
7,700.00	41.22	238.50	6,977.75	-2,770.99	1,093.80	-1,101.05	9.00	6.55	10.07
7,800.00	48.45	246.15	7,048.67	-2,803.40	1,031.35	-1,038.69	9.00	7.22	7.64
7,900.00	56.07	252.21	7,109.87	-2,831.27	957.48	-964.88	9.00	7.62	6.06
8,000.00	63.94	257.26	7,159.85	-2,853.90	873.99	-881.46	9.00	7.87	5.05
8,100.00	71.97	261.66	7,197.37	-2,870.74	782.95	-790.47	9.00	8.02	4.40
8,200.00	80.08	265.67	7,221.51	-2,881.38	686.60	-694.14	9.00	8.12	4.01
8,300.00	88.24	269.49	7,231.68	-2,885.55	587.31	-594.86	9.00	8.16	3.82
8,317.45	89.67	270.15	7,232.00	-2,885.60	569.86	-577.41	9.00	8.17	3.77
LP(1241 FNL 300 FWL)									
8,317.70	89.67	270.15	7,232.00	-2,885.60	569.61	-577.17	0.00	0.00	0.00
TOP_Falken 31C-14-S(1237' FNL & 300' FWL)									
8,400.00	89.67	270.15	7,232.48	-2,885.39	487.32	-494.87	0.00	0.00	0.00
8,500.00	89.67	270.15	7,233.06	-2,885.13	387.32	-394.87	0.00	0.00	0.00
8,600.00	89.67	270.15	7,233.64	-2,884.86	287.32	-294.87	0.00	0.00	0.00
8,700.00	89.67	270.15	7,234.22	-2,884.60	187.32	-194.87	0.00	0.00	0.00
8,800.00	89.67	270.15	7,234.80	-2,884.34	87.33	-94.88	0.00	0.00	0.00
8,900.00	89.67	270.15	7,235.39	-2,884.08	-12.67	5.12	0.00	0.00	0.00
9,000.00	89.67	270.15	7,235.97	-2,883.82	-112.67	105.12	0.00	0.00	0.00
9,100.00	89.67	270.15	7,236.55	-2,883.56	-212.67	205.12	0.00	0.00	0.00
9,200.00	89.67	270.15	7,237.13	-2,883.30	-312.67	305.12	0.00	0.00	0.00
9,300.00	89.67	270.15	7,237.71	-2,883.04	-412.66	405.12	0.00	0.00	0.00
9,400.00	89.67	270.15	7,238.29	-2,882.78	-512.66	505.11	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 31C-14-S	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan #1		
<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	89.67	270.15	7,238.87	-2,882.51	-612.66	605.11	0.00	0.00	0.00
9,600.00	89.67	270.15	7,239.45	-2,882.25	-712.66	705.11	0.00	0.00	0.00
9,700.00	89.67	270.15	7,240.03	-2,881.99	-812.66	805.11	0.00	0.00	0.00
9,800.00	89.67	270.15	7,240.61	-2,881.73	-912.65	905.11	0.00	0.00	0.00
9,900.00	89.67	270.15	7,241.20	-2,881.47	-1,012.65	1,005.10	0.00	0.00	0.00
10,000.00	89.67	270.15	7,241.78	-2,881.21	-1,112.65	1,105.10	0.00	0.00	0.00
10,100.00	89.67	270.15	7,242.36	-2,880.95	-1,212.65	1,205.10	0.00	0.00	0.00
10,200.00	89.67	270.15	7,242.94	-2,880.69	-1,312.65	1,305.10	0.00	0.00	0.00
10,300.00	89.67	270.15	7,243.52	-2,880.42	-1,412.64	1,405.10	0.00	0.00	0.00
10,400.00	89.67	270.15	7,244.10	-2,880.16	-1,512.64	1,505.10	0.00	0.00	0.00
10,500.00	89.67	270.15	7,244.68	-2,879.90	-1,612.64	1,605.09	0.00	0.00	0.00
10,600.00	89.67	270.15	7,245.26	-2,879.64	-1,712.64	1,705.09	0.00	0.00	0.00
10,700.00	89.67	270.15	7,245.84	-2,879.38	-1,812.64	1,805.09	0.00	0.00	0.00
10,800.00	89.67	270.15	7,246.42	-2,879.12	-1,912.63	1,905.09	0.00	0.00	0.00
10,900.00	89.67	270.15	7,247.01	-2,878.86	-2,012.63	2,005.09	0.00	0.00	0.00
11,000.00	89.67	270.15	7,247.59	-2,878.60	-2,112.63	2,105.09	0.00	0.00	0.00
11,100.00	89.67	270.15	7,248.17	-2,878.33	-2,212.63	2,205.08	0.00	0.00	0.00
11,200.00	89.67	270.15	7,248.75	-2,878.07	-2,312.63	2,305.08	0.00	0.00	0.00
11,300.00	89.67	270.15	7,249.33	-2,877.81	-2,412.62	2,405.08	0.00	0.00	0.00
11,400.00	89.67	270.15	7,249.91	-2,877.55	-2,512.62	2,505.08	0.00	0.00	0.00
11,500.00	89.67	270.15	7,250.49	-2,877.29	-2,612.62	2,605.08	0.00	0.00	0.00
11,600.00	89.67	270.15	7,251.07	-2,877.03	-2,712.62	2,705.08	0.00	0.00	0.00
11,700.00	89.67	270.15	7,251.65	-2,876.77	-2,812.62	2,805.07	0.00	0.00	0.00
11,800.00	89.67	270.15	7,252.23	-2,876.51	-2,912.61	2,905.07	0.00	0.00	0.00
11,900.00	89.67	270.15	7,252.82	-2,876.24	-3,012.61	3,005.07	0.00	0.00	0.00
12,000.00	89.67	270.15	7,253.40	-2,875.98	-3,112.61	3,105.07	0.00	0.00	0.00
12,100.00	89.67	270.15	7,253.98	-2,875.72	-3,212.61	3,205.07	0.00	0.00	0.00
12,200.00	89.67	270.15	7,254.56	-2,875.46	-3,312.61	3,305.07	0.00	0.00	0.00
12,300.00	89.67	270.15	7,255.14	-2,875.20	-3,412.60	3,405.06	0.00	0.00	0.00
12,400.00	89.67	270.15	7,255.72	-2,874.94	-3,512.60	3,505.06	0.00	0.00	0.00
12,500.00	89.67	270.15	7,256.30	-2,874.68	-3,612.60	3,605.06	0.00	0.00	0.00
12,600.00	89.67	270.15	7,256.88	-2,874.42	-3,712.60	3,705.06	0.00	0.00	0.00
12,700.00	89.67	270.15	7,257.46	-2,874.15	-3,812.60	3,805.06	0.00	0.00	0.00
12,800.00	89.67	270.15	7,258.04	-2,873.89	-3,912.59	3,905.06	0.00	0.00	0.00
12,900.00	89.67	270.15	7,258.63	-2,873.63	-4,012.59	4,005.05	0.00	0.00	0.00
13,000.00	89.67	270.15	7,259.21	-2,873.37	-4,112.59	4,105.05	0.00	0.00	0.00
13,100.00	89.67	270.15	7,259.79	-2,873.11	-4,212.59	4,205.05	0.00	0.00	0.00
13,200.00	89.67	270.15	7,260.37	-2,872.85	-4,312.59	4,305.05	0.00	0.00	0.00
13,300.00	89.67	270.15	7,260.95	-2,872.59	-4,412.58	4,405.05	0.00	0.00	0.00
13,400.00	89.67	270.15	7,261.53	-2,872.33	-4,512.58	4,505.05	0.00	0.00	0.00
13,480.77	89.67	270.15	7,262.00	-2,872.12	-4,593.35	4,585.82	0.00	0.00	0.00
TD at 13480.77 - PBHL_Falken 31C-14-S(1226' FNL & 460' FWL)									



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Falken 31C-14-S
<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 31C-14-S	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan #1		
<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 31C-14-S(1	0.00	0.00	7,232.00	-2,885.65	569.61	1,423,063.44	3,213,079.06	40.4921760	-104.7339050
- plan misses target center by 0.05ft at 8317.70ft MD (7232.00 TVD, -2885.60 N, 569.61 E)									
- Point									
PBHL_Falken 31C-14-S	0.00	0.00	7,262.00	-2,872.12	-4,593.35	1,423,032.49	3,207,916.17	40.4922120	-104.7524680
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,817.73	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
1,651.50	1,601.92	-283.88	131.65	Start 5546.14 hold at 1651.50 MD
7,197.64	6,542.25	-2,570.44	1,192.07	Start DLS 9.00 TFO 112.73
8,317.45	7,232.00	-2,885.60	569.86	LP(1241 FNL 300 FWL)
13,480.77	7,262.00	-2,872.12	-4,593.35	TD at 13480.77