



Project: SEC 5-T5N-R66W
Site: Boomerang 21-5
Well: Boomerang 32N-6B-M
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	
550.00	5.00	30.14	549.68	9.43	5.47	2.00	30.14	-5.90	
1039.84	14.70	39.37	1031.75	76.10	55.74	2.00	13.84	-59.20	
6397.75	14.70	39.37	6214.28	1127.17	918.17	0.00	0.00	-969.31	
7512.10	90.52	267.35	6945.00	1241.56	279.15	9.00	-130.97	-336.25	
15737.90	90.52	267.35	6870.00	861.77	-7937.54	0.00	0.00	7889.21	PBHL

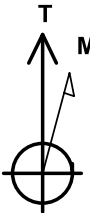
PROJECT DETAILS: SEC 5-T5N-R66W
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Colorado Northern Zone
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	6870.00	861.77	-7937.54	1402311.17	3185935.93	40.4358160	-104.8320550	Point
- plan hits target center								
PLP	6945.00	1193.46	279.75	1402707.39	3194150.37	40.4367300	-104.8025350	Point
- plan misses target center by 48.07ft at 7513.72ft MD (6944.98 TVD, 1241.49 N, 277.53 E)								

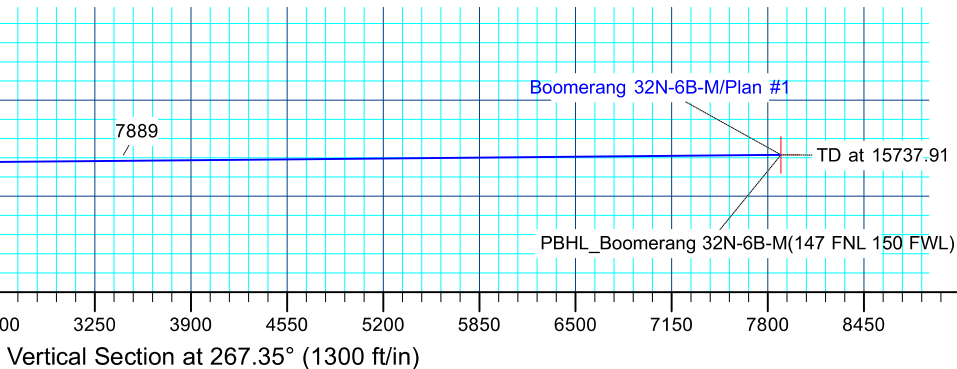
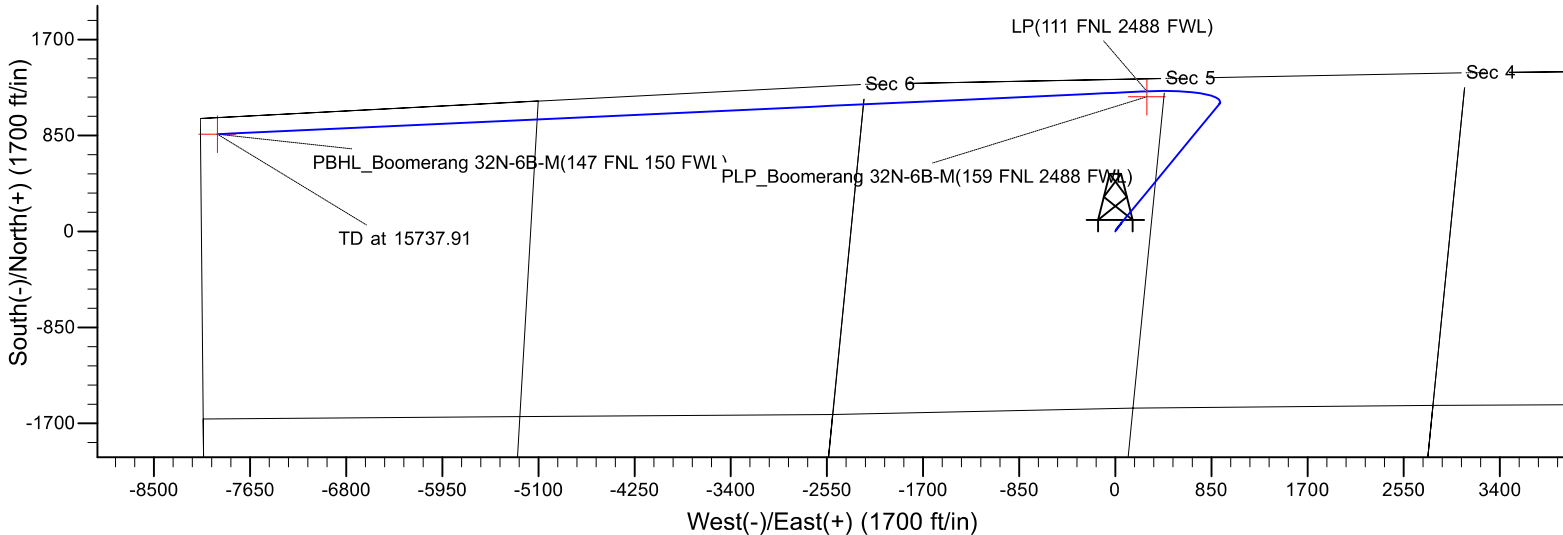
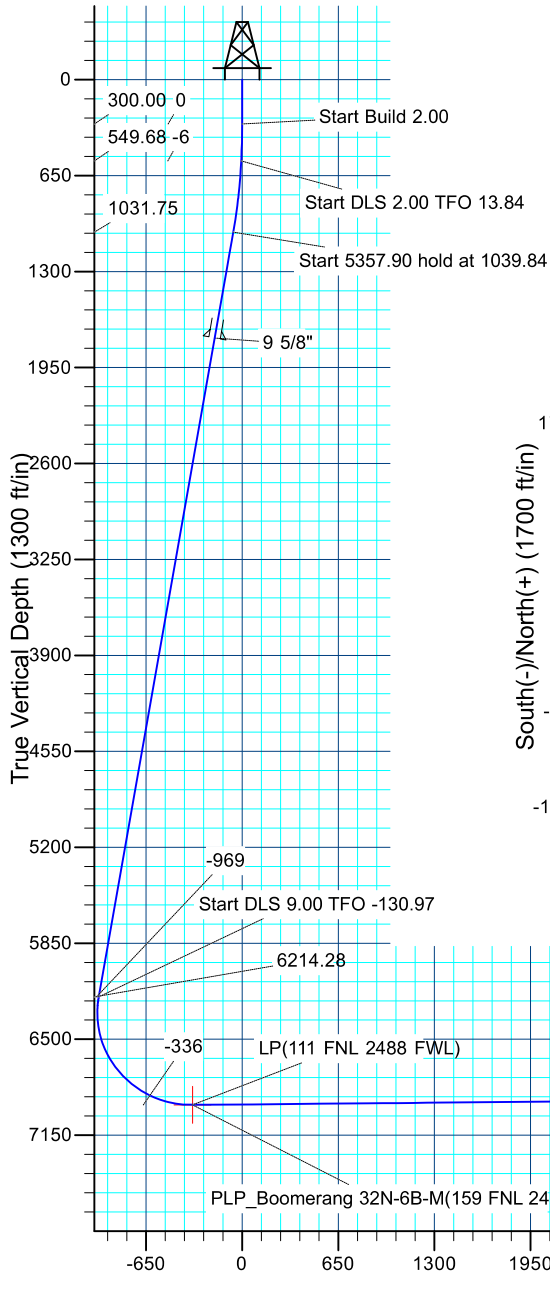
CASING DETAILS

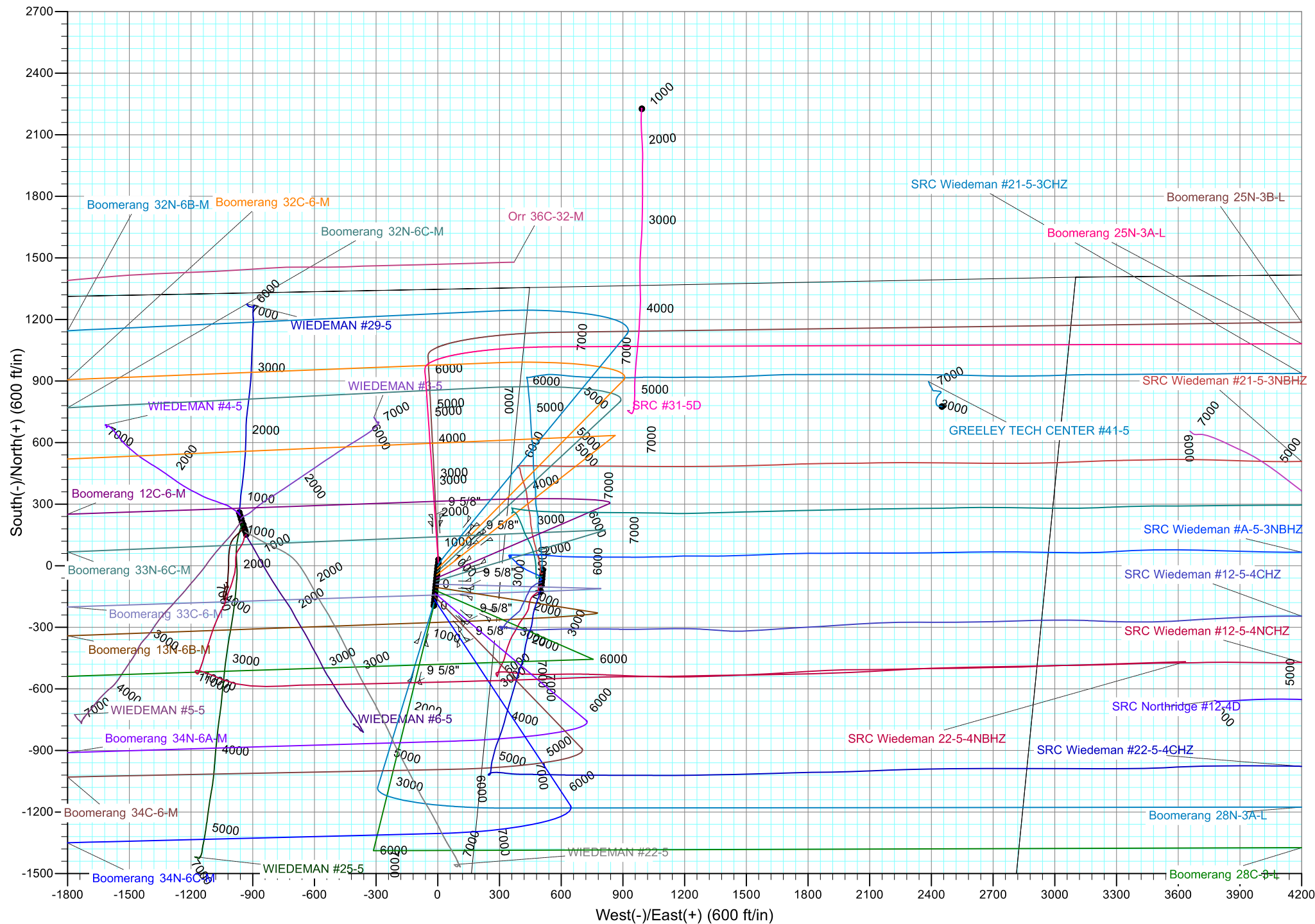
TVD	MD	Name	Size
1750.00	1782.40	9 5/8"	9.625

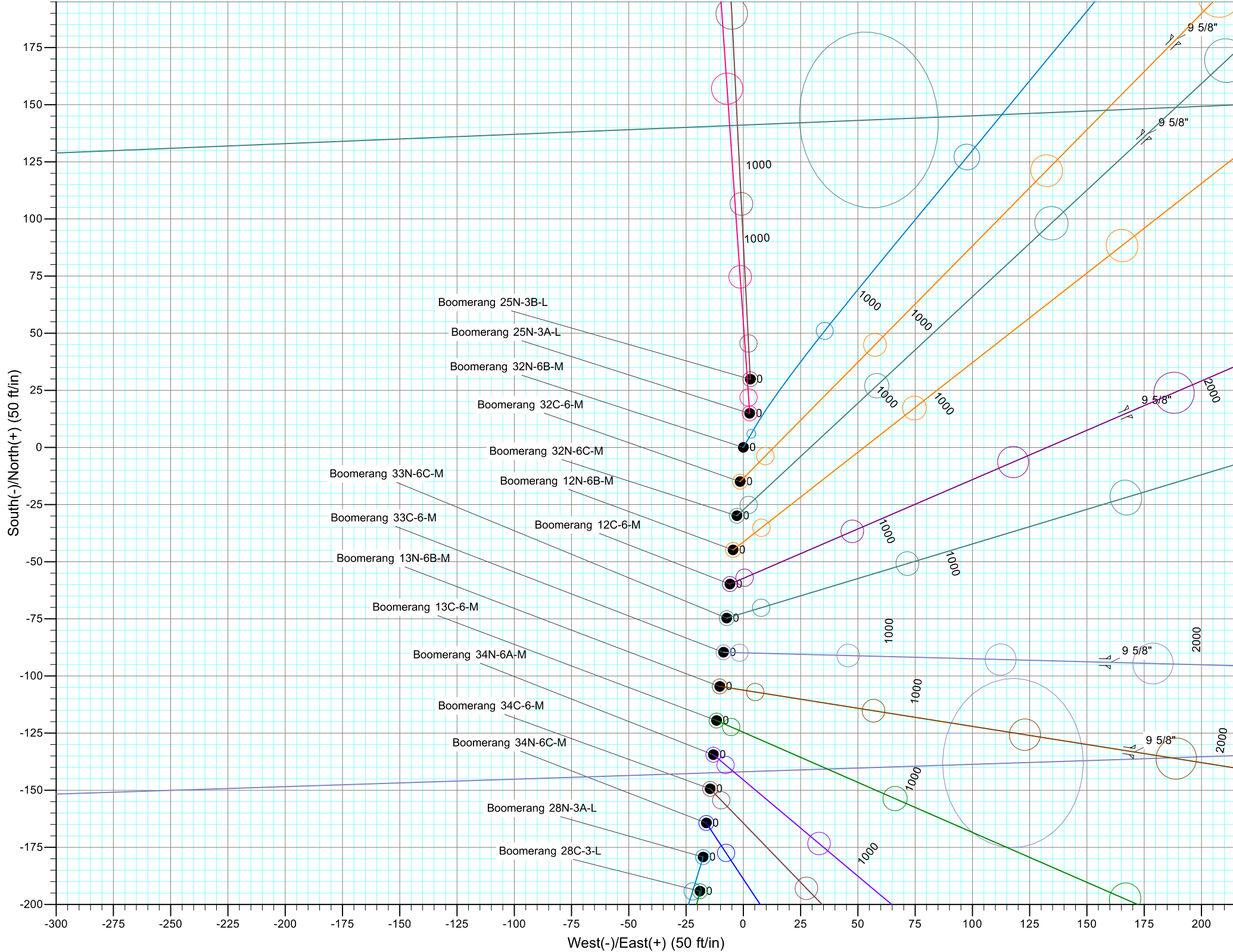


Azimuths to True North
Magnetic North: 8.26°

Magnetic Field
Strength: 52429.8snT
Dip Angle: 66.88°
Date: 4/2/2017
Model: IGRF2015









Synergy Resources Corporation

SEC 5-T5N-R66W

Boomerang 21-5

Boomerang 32N-6B-M

OH

Plan: Plan #1

Standard Planning Report

05 April, 2017

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 32N-6B-M
Company:	Synergy Resources Corporation	TVD Reference:	GL 4770+KB 20 @ 4790.00ft
Project:	SEC 5-T5N-R66W	MD Reference:	GL 4770+KB 20 @ 4790.00ft
Site:	Boomerang 21-5	North Reference:	True
Well:	Boomerang 32N-6B-M	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	SEC 5-T5N-R66W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Boomerang 21-5				
Site Position:		Northing:	1,401,541.68 ft	Latitude:	40.4335360
From:	Lat/Long	Easting:	3,193,882.83 ft	Longitude:	-104.8035290
Position Uncertainty:	3.28 ft	Slot Radius:	13.200 in	Grid Convergence:	0.45 °

Well	Boomerang 32N-6B-M, 1347 FNL 2327 FWL					
Well Position	+N/-S	-29.88 ft	Northing:	1,401,511.77 ft	Latitude:	40.4334540
	+E/-W	-3.06 ft	Easting:	3,193,880.00 ft	Longitude:	-104.8035400
Position Uncertainty		3.28 ft	Wellhead Elevation:		Ground Level:	4,770.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/2/2017	8.26	66.88	52,430

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	267.35

Plan Survey Tool Program	Date	4/5/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	15,737.91 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	
550.00	5.00	30.14	549.68	9.43	5.47	2.00	2.00	0.00	30.14	
1,039.84	14.70	39.37	1,031.75	76.10	55.74	2.00	1.98	1.88	13.84	
6,397.75	14.70	39.37	6,214.28	1,127.17	918.17	0.00	0.00	0.00	0.00	
7,512.10	90.52	267.35	6,945.00	1,241.56	279.15	9.00	6.80	-11.85	-130.97	
15,737.91	90.52	267.35	6,870.00	861.77	-7,937.54	0.00	0.00	0.00	0.00	PBHL_Boomerang 32

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 32N-6B-M
Company:	Synergy Resources Corporation	TVD Reference:	GL 4770+KB 20 @ 4790.00ft
Project:	SEC 5-T5N-R66W	MD Reference:	GL 4770+KB 20 @ 4790.00ft
Site:	Boomerang 21-5	North Reference:	True
Well:	Boomerang 32N-6B-M	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	30.14	399.98	1.51	0.88	-0.95	2.00	2.00	0.00
500.00	4.00	30.14	499.84	6.03	3.50	-3.78	2.00	2.00	0.00
550.00	5.00	30.14	549.68	9.43	5.47	-5.90	2.00	2.00	0.00
Start DLS 2.00 TFO 13.84									
600.00	5.98	32.44	599.45	13.51	7.96	-8.58	2.00	1.95	4.60
700.00	7.95	35.34	698.71	23.54	14.75	-15.83	2.00	1.97	2.90
800.00	9.93	37.09	797.49	36.06	23.95	-25.59	2.00	1.98	1.75
900.00	11.91	38.26	895.68	51.04	35.54	-37.86	2.00	1.99	1.17
1,000.00	13.91	39.10	993.14	68.47	49.51	-52.63	2.00	1.99	0.84
1,039.84	14.70	39.37	1,031.75	76.10	55.74	-59.20	2.00	1.99	0.68
Start 5357.90 hold at 1039.84 MD									
1,100.00	14.70	39.37	1,089.94	87.90	65.42	-69.42	0.00	0.00	0.00
1,200.00	14.70	39.37	1,186.67	107.52	81.52	-86.40	0.00	0.00	0.00
1,300.00	14.70	39.37	1,283.39	127.13	97.61	-103.39	0.00	0.00	0.00
1,400.00	14.70	39.37	1,380.12	146.75	113.71	-120.37	0.00	0.00	0.00
1,500.00	14.70	39.37	1,476.85	166.37	129.81	-137.36	0.00	0.00	0.00
1,600.00	14.70	39.37	1,573.57	185.98	145.90	-154.35	0.00	0.00	0.00
1,700.00	14.70	39.37	1,670.30	205.60	162.00	-171.33	0.00	0.00	0.00
1,782.40	14.70	39.37	1,750.00	221.76	175.26	-185.33	0.00	0.00	0.00
9 5/8"									
1,800.00	14.70	39.37	1,767.03	225.22	178.10	-188.32	0.00	0.00	0.00
1,900.00	14.70	39.37	1,863.75	244.84	194.19	-205.31	0.00	0.00	0.00
2,000.00	14.70	39.37	1,960.48	264.45	210.29	-222.29	0.00	0.00	0.00
2,100.00	14.70	39.37	2,057.21	284.07	226.39	-239.28	0.00	0.00	0.00
2,200.00	14.70	39.37	2,153.93	303.69	242.48	-256.26	0.00	0.00	0.00
2,300.00	14.70	39.37	2,250.66	323.30	258.58	-273.25	0.00	0.00	0.00
2,400.00	14.70	39.37	2,347.39	342.92	274.68	-290.24	0.00	0.00	0.00
2,500.00	14.70	39.37	2,444.11	362.54	290.77	-307.22	0.00	0.00	0.00
2,600.00	14.70	39.37	2,540.84	382.16	306.87	-324.21	0.00	0.00	0.00
2,700.00	14.70	39.37	2,637.57	401.77	322.97	-341.20	0.00	0.00	0.00
2,800.00	14.70	39.37	2,734.30	421.39	339.06	-358.18	0.00	0.00	0.00
2,900.00	14.70	39.37	2,831.02	441.01	355.16	-375.17	0.00	0.00	0.00
3,000.00	14.70	39.37	2,927.75	460.62	371.26	-392.16	0.00	0.00	0.00
3,100.00	14.70	39.37	3,024.48	480.24	387.35	-409.14	0.00	0.00	0.00
3,200.00	14.70	39.37	3,121.20	499.86	403.45	-426.13	0.00	0.00	0.00
3,300.00	14.70	39.37	3,217.93	519.48	419.54	-443.11	0.00	0.00	0.00
3,400.00	14.70	39.37	3,314.66	539.09	435.64	-460.10	0.00	0.00	0.00
3,500.00	14.70	39.37	3,411.38	558.71	451.74	-477.09	0.00	0.00	0.00
3,600.00	14.70	39.37	3,508.11	578.33	467.83	-494.07	0.00	0.00	0.00
3,700.00	14.70	39.37	3,604.84	597.94	483.93	-511.06	0.00	0.00	0.00
3,800.00	14.70	39.37	3,701.56	617.56	500.03	-528.05	0.00	0.00	0.00
3,900.00	14.70	39.37	3,798.29	637.18	516.12	-545.03	0.00	0.00	0.00
4,000.00	14.70	39.37	3,895.02	656.80	532.22	-562.02	0.00	0.00	0.00
4,100.00	14.70	39.37	3,991.74	676.41	548.32	-579.00	0.00	0.00	0.00
4,200.00	14.70	39.37	4,088.47	696.03	564.41	-595.99	0.00	0.00	0.00
4,300.00	14.70	39.37	4,185.20	715.65	580.51	-612.98	0.00	0.00	0.00
4,400.00	14.70	39.37	4,281.92	735.26	596.61	-629.96	0.00	0.00	0.00
4,500.00	14.70	39.37	4,378.65	754.88	612.70	-646.95	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 32N-6B-M
Company:	Synergy Resources Corporation	TVD Reference:	GL 4770+KB 20 @ 4790.00ft
Project:	SEC 5-T5N-R66W	MD Reference:	GL 4770+KB 20 @ 4790.00ft
Site:	Boomerang 21-5	North Reference:	True
Well:	Boomerang 32N-6B-M	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)
4,600.00	14.70	39.37	4,475.38	774.50	628.80	-663.94	0.00	0.00	0.00
4,700.00	14.70	39.37	4,572.10	794.12	644.90	-680.92	0.00	0.00	0.00
4,800.00	14.70	39.37	4,668.83	813.73	660.99	-697.91	0.00	0.00	0.00
4,900.00	14.70	39.37	4,765.56	833.35	677.09	-714.89	0.00	0.00	0.00
5,000.00	14.70	39.37	4,862.28	852.97	693.19	-731.88	0.00	0.00	0.00
5,100.00	14.70	39.37	4,959.01	872.58	709.28	-748.87	0.00	0.00	0.00
5,200.00	14.70	39.37	5,055.74	892.20	725.38	-765.85	0.00	0.00	0.00
5,300.00	14.70	39.37	5,152.46	911.82	741.48	-782.84	0.00	0.00	0.00
5,400.00	14.70	39.37	5,249.19	931.44	757.57	-799.83	0.00	0.00	0.00
5,500.00	14.70	39.37	5,345.92	951.05	773.67	-816.81	0.00	0.00	0.00
5,600.00	14.70	39.37	5,442.65	970.67	789.76	-833.80	0.00	0.00	0.00
5,700.00	14.70	39.37	5,539.37	990.29	805.86	-850.79	0.00	0.00	0.00
5,800.00	14.70	39.37	5,636.10	1,009.90	821.96	-867.77	0.00	0.00	0.00
5,900.00	14.70	39.37	5,732.83	1,029.52	838.05	-884.76	0.00	0.00	0.00
6,000.00	14.70	39.37	5,829.55	1,049.14	854.15	-901.74	0.00	0.00	0.00
6,100.00	14.70	39.37	5,926.28	1,068.76	870.25	-918.73	0.00	0.00	0.00
6,200.00	14.70	39.37	6,023.01	1,088.37	886.34	-935.72	0.00	0.00	0.00
6,300.00	14.70	39.37	6,119.73	1,107.99	902.44	-952.70	0.00	0.00	0.00
6,397.75	14.70	39.37	6,214.28	1,127.17	918.17	-969.31	0.00	0.00	0.00
Start DLS 9.00 TFO -130.97									
6,400.00	14.57	38.76	6,216.46	1,127.61	918.53	-969.69	9.00	-5.87	-27.02
6,500.00	11.06	0.36	6,314.12	1,147.05	926.48	-978.53	9.00	-3.51	-38.40
6,600.00	13.87	319.69	6,411.94	1,165.82	918.77	-971.69	9.00	2.81	-40.67
6,700.00	20.55	298.83	6,507.49	1,183.46	895.59	-949.35	9.00	6.68	-20.86
6,800.00	28.50	288.53	6,598.44	1,199.54	857.51	-912.05	9.00	7.95	-10.31
6,900.00	36.91	282.52	6,682.53	1,213.66	805.47	-860.72	9.00	8.40	-6.00
7,000.00	45.52	278.51	6,757.70	1,225.47	740.74	-796.61	9.00	8.61	-4.01
7,100.00	54.23	275.54	6,822.10	1,234.69	664.93	-721.30	9.00	8.71	-2.97
7,200.00	63.00	273.17	6,874.14	1,241.08	579.90	-636.66	9.00	8.77	-2.38
7,300.00	71.80	271.14	6,912.54	1,244.49	487.74	-544.75	9.00	8.80	-2.03
7,400.00	80.62	269.30	6,936.35	1,244.83	390.72	-447.86	9.00	8.82	-1.83
7,500.00	89.45	267.56	6,944.99	1,242.10	291.24	-348.35	9.00	8.83	-1.74
7,512.10	90.52	267.35	6,945.00	1,241.56	279.15	-336.25	9.00	8.83	-1.72
LP(111 FNL 2488 FWL)									
7,513.72	90.52	267.35	6,944.98	1,241.49	277.53	-334.64	0.00	0.00	0.00
PLP_Boomerang 32N-6B-M(159 FNL 2488 FWL)									
7,600.00	90.52	267.35	6,944.19	1,237.50	191.34	-248.36	0.00	0.00	0.00
7,700.00	90.52	267.35	6,943.28	1,232.88	91.46	-148.36	0.00	0.00	0.00
7,800.00	90.52	267.35	6,942.37	1,228.27	-8.43	-48.36	0.00	0.00	0.00
7,900.00	90.52	267.35	6,941.46	1,223.65	-108.32	51.63	0.00	0.00	0.00
8,000.00	90.52	267.35	6,940.55	1,219.03	-208.21	151.63	0.00	0.00	0.00
8,100.00	90.52	267.35	6,939.64	1,214.42	-308.10	251.62	0.00	0.00	0.00
8,200.00	90.52	267.35	6,938.72	1,209.80	-407.99	351.62	0.00	0.00	0.00
8,300.00	90.52	267.35	6,937.81	1,205.18	-507.88	451.62	0.00	0.00	0.00
8,400.00	90.52	267.35	6,936.90	1,200.57	-607.77	551.61	0.00	0.00	0.00
8,500.00	90.52	267.35	6,935.99	1,195.95	-707.66	651.61	0.00	0.00	0.00
8,600.00	90.52	267.35	6,935.08	1,191.33	-807.55	751.60	0.00	0.00	0.00
8,700.00	90.52	267.35	6,934.17	1,186.71	-907.44	851.60	0.00	0.00	0.00
8,800.00	90.52	267.35	6,933.25	1,182.10	-1,007.33	951.59	0.00	0.00	0.00
8,900.00	90.52	267.35	6,932.34	1,177.48	-1,107.21	1,051.59	0.00	0.00	0.00
9,000.00	90.52	267.35	6,931.43	1,172.86	-1,207.10	1,151.59	0.00	0.00	0.00
9,100.00	90.52	267.35	6,930.52	1,168.25	-1,306.99	1,251.58	0.00	0.00	0.00
9,200.00	90.52	267.35	6,929.61	1,163.63	-1,406.88	1,351.58	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 32N-6B-M
Company:	Synergy Resources Corporation	TVD Reference:	GL 4770+KB 20 @ 4790.00ft
Project:	SEC 5-T5N-R66W	MD Reference:	GL 4770+KB 20 @ 4790.00ft
Site:	Boomerang 21-5	North Reference:	True
Well:	Boomerang 32N-6B-M	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)
9,300.00	90.52	267.35	6,928.69	1,159.01	-1,506.77	1,451.57	0.00	0.00	0.00
9,400.00	90.52	267.35	6,927.78	1,154.39	-1,606.66	1,551.57	0.00	0.00	0.00
9,500.00	90.52	267.35	6,926.87	1,149.78	-1,706.55	1,651.57	0.00	0.00	0.00
9,600.00	90.52	267.35	6,925.96	1,145.16	-1,806.44	1,751.56	0.00	0.00	0.00
9,700.00	90.52	267.35	6,925.05	1,140.54	-1,906.33	1,851.56	0.00	0.00	0.00
9,800.00	90.52	267.35	6,924.14	1,135.93	-2,006.22	1,951.55	0.00	0.00	0.00
9,900.00	90.52	267.35	6,923.22	1,131.31	-2,106.11	2,051.55	0.00	0.00	0.00
10,000.00	90.52	267.35	6,922.31	1,126.69	-2,206.00	2,151.54	0.00	0.00	0.00
10,100.00	90.52	267.35	6,921.40	1,122.07	-2,305.89	2,251.54	0.00	0.00	0.00
10,200.00	90.52	267.35	6,920.49	1,117.46	-2,405.77	2,351.54	0.00	0.00	0.00
10,300.00	90.52	267.35	6,919.58	1,112.84	-2,505.66	2,451.53	0.00	0.00	0.00
10,400.00	90.52	267.35	6,918.67	1,108.22	-2,605.55	2,551.53	0.00	0.00	0.00
10,500.00	90.52	267.35	6,917.75	1,103.61	-2,705.44	2,651.52	0.00	0.00	0.00
10,600.00	90.52	267.35	6,916.84	1,098.99	-2,805.33	2,751.52	0.00	0.00	0.00
10,700.00	90.52	267.35	6,915.93	1,094.37	-2,905.22	2,851.52	0.00	0.00	0.00
10,800.00	90.52	267.35	6,915.02	1,089.75	-3,005.11	2,951.51	0.00	0.00	0.00
10,900.00	90.52	267.35	6,914.11	1,085.14	-3,105.00	3,051.51	0.00	0.00	0.00
11,000.00	90.52	267.35	6,913.20	1,080.52	-3,204.89	3,151.50	0.00	0.00	0.00
11,100.00	90.52	267.35	6,912.28	1,075.90	-3,304.78	3,251.50	0.00	0.00	0.00
11,200.00	90.52	267.35	6,911.37	1,071.29	-3,404.67	3,351.49	0.00	0.00	0.00
11,300.00	90.52	267.35	6,910.46	1,066.67	-3,504.56	3,451.49	0.00	0.00	0.00
11,400.00	90.52	267.35	6,909.55	1,062.05	-3,604.44	3,551.49	0.00	0.00	0.00
11,500.00	90.52	267.35	6,908.64	1,057.43	-3,704.33	3,651.48	0.00	0.00	0.00
11,600.00	90.52	267.35	6,907.73	1,052.82	-3,804.22	3,751.48	0.00	0.00	0.00
11,700.00	90.52	267.35	6,906.81	1,048.20	-3,904.11	3,851.47	0.00	0.00	0.00
11,800.00	90.52	267.35	6,905.90	1,043.58	-4,004.00	3,951.47	0.00	0.00	0.00
11,900.00	90.52	267.35	6,904.99	1,038.97	-4,103.89	4,051.47	0.00	0.00	0.00
12,000.00	90.52	267.35	6,904.08	1,034.35	-4,203.78	4,151.46	0.00	0.00	0.00
12,100.00	90.52	267.35	6,903.17	1,029.73	-4,303.67	4,251.46	0.00	0.00	0.00
12,200.00	90.52	267.35	6,902.26	1,025.12	-4,403.56	4,351.45	0.00	0.00	0.00
12,300.00	90.52	267.35	6,901.34	1,020.50	-4,503.45	4,451.45	0.00	0.00	0.00
12,400.00	90.52	267.35	6,900.43	1,015.88	-4,603.34	4,551.44	0.00	0.00	0.00
12,500.00	90.52	267.35	6,899.52	1,011.26	-4,703.23	4,651.44	0.00	0.00	0.00
12,600.00	90.52	267.35	6,898.61	1,006.65	-4,803.12	4,751.44	0.00	0.00	0.00
12,700.00	90.52	267.35	6,897.70	1,002.03	-4,903.00	4,851.43	0.00	0.00	0.00
12,800.00	90.52	267.35	6,896.79	997.41	-5,002.89	4,951.43	0.00	0.00	0.00
12,900.00	90.52	267.35	6,895.87	992.80	-5,102.78	5,051.42	0.00	0.00	0.00
13,000.00	90.52	267.35	6,894.96	988.18	-5,202.67	5,151.42	0.00	0.00	0.00
13,100.00	90.52	267.35	6,894.05	983.56	-5,302.56	5,251.42	0.00	0.00	0.00
13,200.00	90.52	267.35	6,893.14	978.94	-5,402.45	5,351.41	0.00	0.00	0.00
13,300.00	90.52	267.35	6,892.23	974.33	-5,502.34	5,451.41	0.00	0.00	0.00
13,400.00	90.52	267.35	6,891.31	969.71	-5,602.23	5,551.40	0.00	0.00	0.00
13,500.00	90.52	267.35	6,890.40	965.09	-5,702.12	5,651.40	0.00	0.00	0.00
13,600.00	90.52	267.35	6,889.49	960.48	-5,802.01	5,751.39	0.00	0.00	0.00
13,700.00	90.52	267.35	6,888.58	955.86	-5,901.90	5,851.39	0.00	0.00	0.00
13,800.00	90.52	267.35	6,887.67	951.24	-6,001.79	5,951.39	0.00	0.00	0.00
13,900.00	90.52	267.35	6,886.76	946.62	-6,101.67	6,051.38	0.00	0.00	0.00
14,000.00	90.52	267.35	6,885.84	942.01	-6,201.56	6,151.38	0.00	0.00	0.00
14,100.00	90.52	267.35	6,884.93	937.39	-6,301.45	6,251.37	0.00	0.00	0.00
14,200.00	90.52	267.35	6,884.02	932.77	-6,401.34	6,351.37	0.00	0.00	0.00
14,300.00	90.52	267.35	6,883.11	928.16	-6,501.23	6,451.37	0.00	0.00	0.00
14,400.00	90.52	267.35	6,882.20	923.54	-6,601.12	6,551.36	0.00	0.00	0.00
14,500.00	90.52	267.35	6,881.29	918.92	-6,701.01	6,651.36	0.00	0.00	0.00
14,600.00	90.52	267.35	6,880.37	914.30	-6,800.90	6,751.35	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 32N-6B-M
Company:	Synergy Resources Corporation	TVD Reference:	GL 4770+KB 20 @ 4790.00ft
Project:	SEC 5-T5N-R66W	MD Reference:	GL 4770+KB 20 @ 4790.00ft
Site:	Boomerang 21-5	North Reference:	True
Well:	Boomerang 32N-6B-M	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)
14,700.00	90.52	267.35	6,879.46	909.69	-6,900.79	6,851.35	0.00	0.00	0.00
14,800.00	90.52	267.35	6,878.55	905.07	-7,000.68	6,951.35	0.00	0.00	0.00
14,900.00	90.52	267.35	6,877.64	900.45	-7,100.57	7,051.34	0.00	0.00	0.00
15,000.00	90.52	267.35	6,876.73	895.84	-7,200.46	7,151.34	0.00	0.00	0.00
15,100.00	90.52	267.35	6,875.82	891.22	-7,300.34	7,251.33	0.00	0.00	0.00
15,200.00	90.52	267.35	6,874.90	886.60	-7,400.23	7,351.33	0.00	0.00	0.00
15,300.00	90.52	267.35	6,873.99	881.98	-7,500.12	7,451.32	0.00	0.00	0.00
15,400.00	90.52	267.35	6,873.08	877.37	-7,600.01	7,551.32	0.00	0.00	0.00
15,500.00	90.52	267.35	6,872.17	872.75	-7,699.90	7,651.32	0.00	0.00	0.00
15,600.00	90.52	267.35	6,871.26	868.13	-7,799.79	7,751.31	0.00	0.00	0.00
15,700.00	90.52	267.35	6,870.35	863.52	-7,899.68	7,851.31	0.00	0.00	0.00
15,737.91	90.52	267.35	6,870.00	861.77	-7,937.54	7,889.21	0.00	0.00	0.00
TD at 15737.91 - PBHL_Boomerang 32N-6B-M(147 FNL 150 FWL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_Boomerang 32N-	0.00	0.00	6,870.00	861.77	-7,937.54	1,402,311.17	3,185,935.93	40.4358160	-104.8320550
- plan hits target center									
- Point									
PLP_Boomerang 32N-6I	0.00	0.00	6,945.00	1,193.46	279.75	1,402,707.39	3,194,150.37	40.4367300	-104.8025350
- plan misses target center by 48.07ft at 7513.72ft MD (6944.98 TVD, 1241.49 N, 277.53 E)									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,782.40	1,750.00	9 5/8"		9.625	13.500

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
550.00	549.68	9.43	5.47	Start DLS 2.00 TFO 13.84
1,039.84	1,031.75	76.10	55.74	Start 5357.90 hold at 1039.84 MD
6,397.75	6,214.28	1,127.17	918.17	Start DLS 9.00 TFO -130.97
7,512.10	6,945.00	1,241.56	279.15	LP(111 FNL 2488 FWL)
15,737.91	6,870.00	861.77	-7,937.54	TD at 15737.91