



Project: SEC 5-T5N-R66W
Site: Boomerang 21-5
Well: Boomerang 28C-3-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	
1235.00	20.70	193.82	1212.63	-179.58	-44.19	2.00	193.82	-44.76	
3666.72	20.70	193.82	3487.37	-1014.24	-249.58	0.00	0.00	-252.76	
4701.72	0.00	0.00	4500.00	-1193.82	-293.77	2.00	180.00	-297.52	
6794.10	0.00	0.00	6592.38	-1193.82	-293.77	0.00	0.00	-297.52	
7793.42	89.94	89.82	7229.00	-1191.78	342.17	9.00	89.82	338.42	
18095.23	89.94	89.82	7240.00	-1158.71	10643.92	0.00	0.00	10640.22	PBHL

PROJECT DETAILS: SEC 5-T5N-R66W

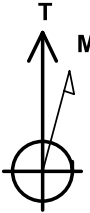
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Colorado Northern Zone
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PLP	7229.00	-1218.93	342.14	1400101.25	3194214.30	40.4295750	-104.8023790	Point
- plan misses target center by 27.15ft at 7793.31ft MD (7229.00 TVD, -1191.78 N, 342.05 E)								
PBHL	7240.00	-1158.71	10643.92	1400242.36	3204515.28	40.4297340	-104.7653740	Point
- plan hits target center								

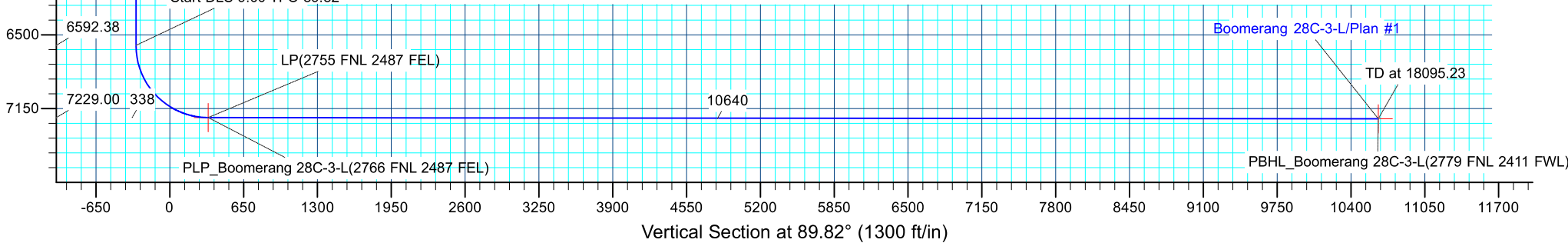
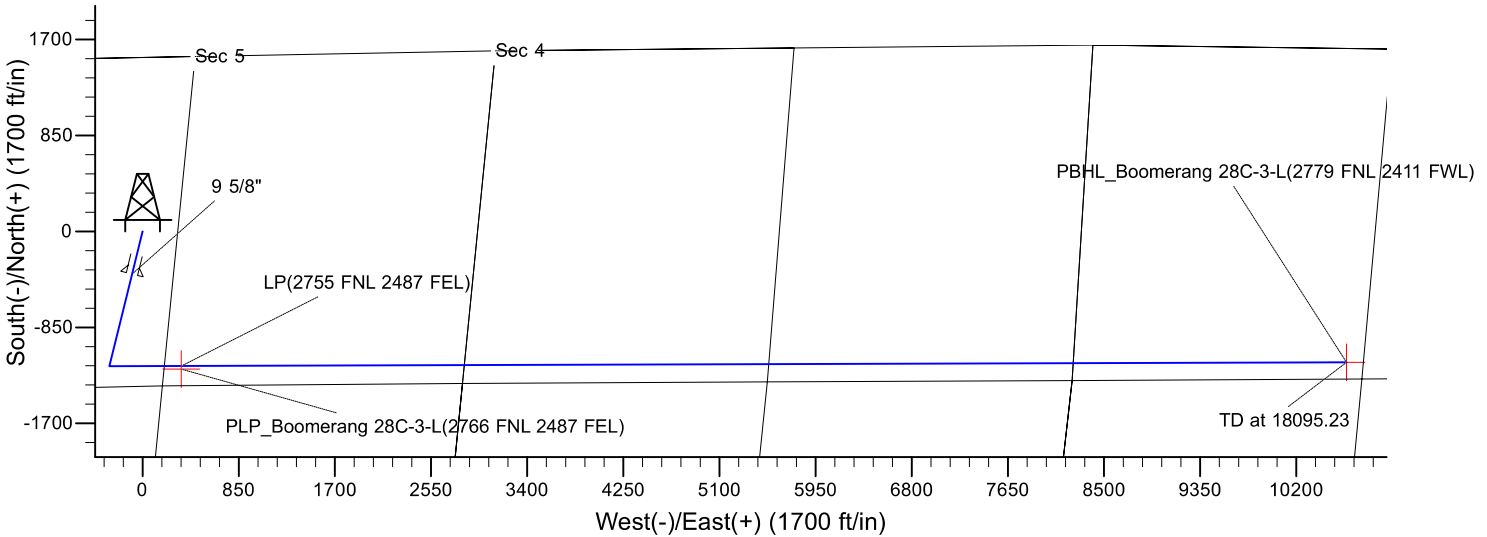
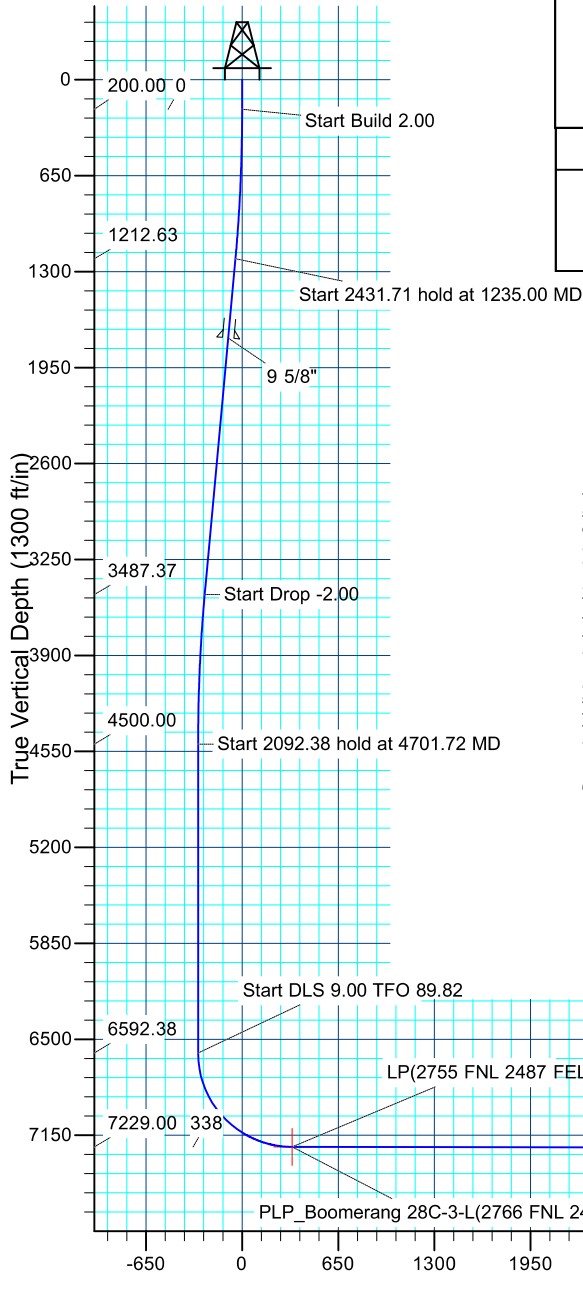
CASING DETAILS

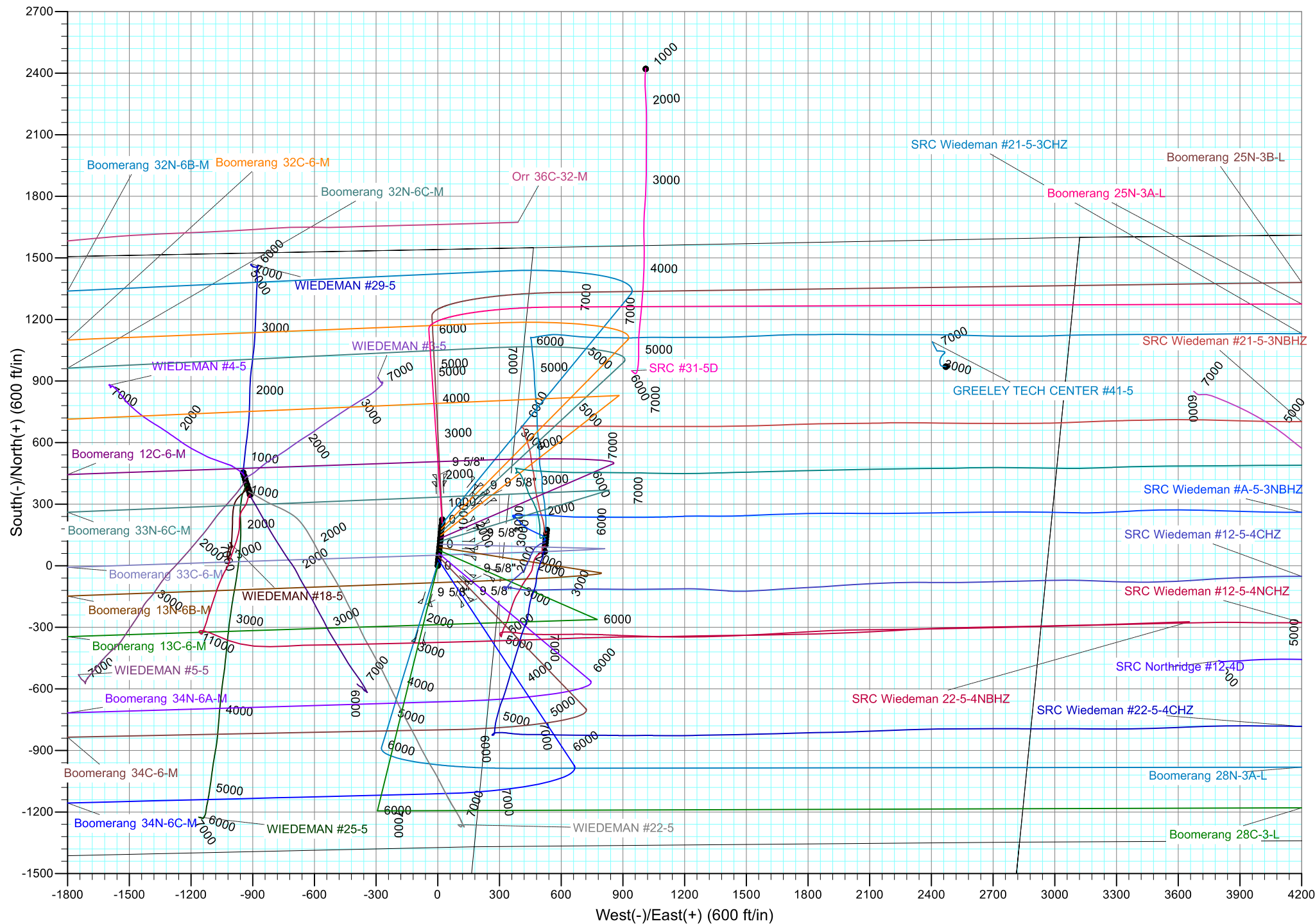
TVD	MD	Name	Size
1750.00	1809.45	9 5/8"	9.625

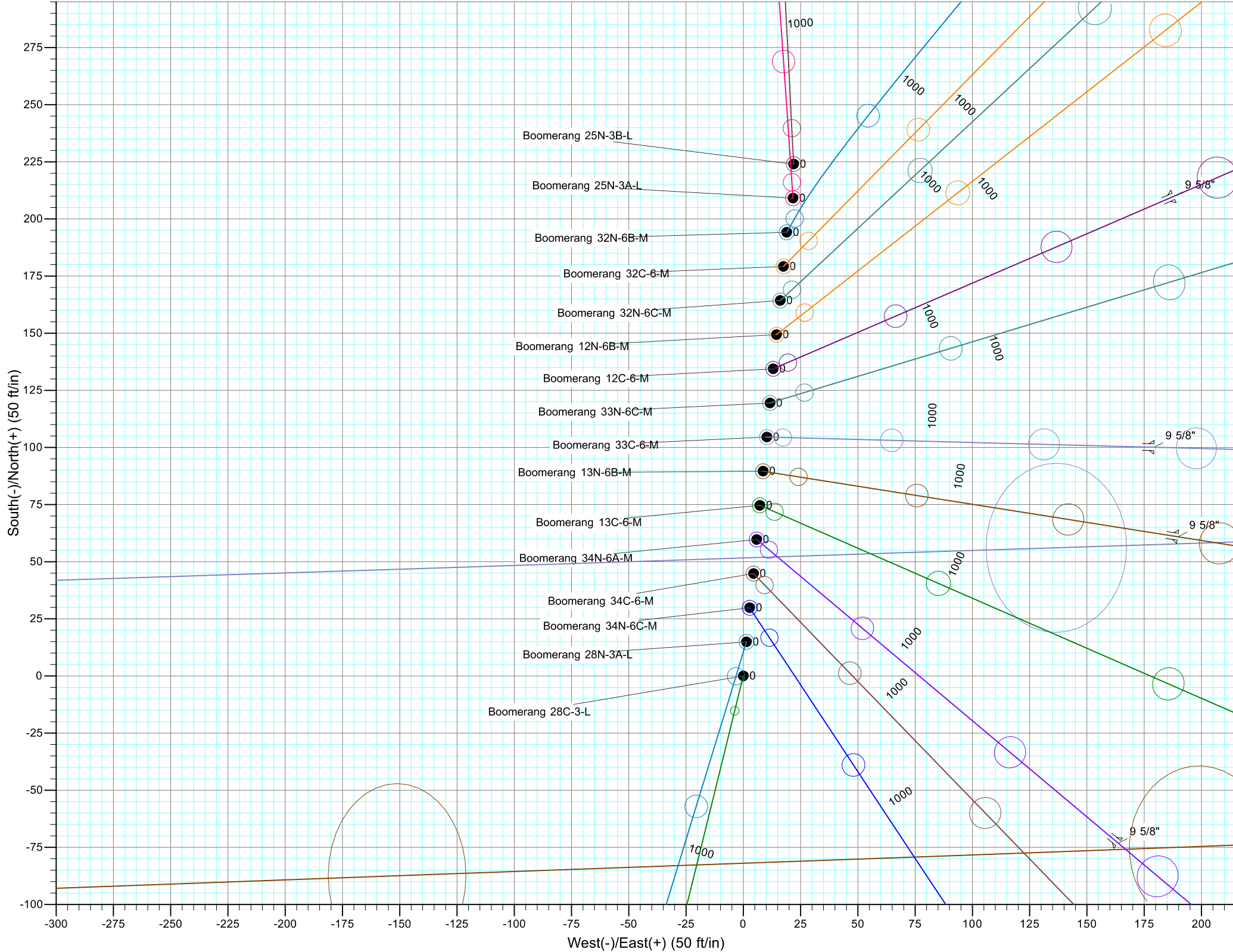


Azimuths to True North
Magnetic North: 8.26°

Magnetic Field
Strength: 52429.8snT
Dip Angle: 66.88°
Date: 4/1/2017
Model: IGRF2015









Synergy Resources Corporation

SEC 5-T5N-R66W

Boomerang 21-5

Boomerang 28C-3-L

OH

Plan: Plan #1

Standard Planning Report

05 April, 2017

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-L	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 28C-3-L, 1541 FNL 2327 FWL					
Well Position	+N/-S	-224.06 ft	Northing:	1,401,317.45 ft	Latitude:	40.4329210
	+E/-W	-21.99 ft	Easting:	3,193,862.60 ft	Longitude:	-104.8036080
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	4/1/2017	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	89.82

Plan Survey Tool Program	Date	4/5/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,095.23 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	
1,235.00	20.70	193.82	1,212.63	-179.58	-44.19	2.00	2.00	0.00	193.82	
3,666.72	20.70	193.82	3,487.37	-1,014.24	-249.58	0.00	0.00	0.00	0.00	
4,701.72	0.00	0.00	4,500.00	-1,193.82	-293.77	2.00	-2.00	0.00	180.00	
6,794.10	0.00	0.00	6,592.38	-1,193.82	-293.77	0.00	0.00	0.00	0.00	
7,793.42	89.94	89.82	7,229.00	-1,191.78	342.17	9.00	9.00	8.99	89.82	
18,095.23	89.94	89.82	7,240.00	-1,158.71	10,643.92	0.00	0.00	0.00	0.00	PBHL_Boomerang 28

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-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	193.82	299.98	-1.69	-0.42	-0.42	2.00	2.00	0.00
400.00	4.00	193.82	399.84	-6.78	-1.67	-1.69	2.00	2.00	0.00
500.00	6.00	193.82	499.45	-15.24	-3.75	-3.80	2.00	2.00	0.00
600.00	8.00	193.82	598.70	-27.07	-6.66	-6.75	2.00	2.00	0.00
700.00	10.00	193.82	697.47	-42.26	-10.40	-10.53	2.00	2.00	0.00
800.00	12.00	193.82	795.62	-60.79	-14.96	-15.15	2.00	2.00	0.00
900.00	14.00	193.82	893.06	-82.63	-20.33	-20.59	2.00	2.00	0.00
1,000.00	16.00	193.82	989.64	-107.76	-26.52	-26.86	2.00	2.00	0.00
1,100.00	18.00	193.82	1,085.27	-136.15	-33.50	-33.93	2.00	2.00	0.00
1,200.00	20.00	193.82	1,179.82	-167.76	-41.28	-41.81	2.00	2.00	0.00
1,235.00	20.70	193.82	1,212.63	-179.58	-44.19	-44.76	2.00	2.00	0.00
Start 2431.71 hold at 1235.00 MD									
1,300.00	20.70	193.82	1,273.43	-201.89	-49.68	-50.31	0.00	0.00	0.00
1,400.00	20.70	193.82	1,366.98	-236.22	-58.13	-58.87	0.00	0.00	0.00
1,500.00	20.70	193.82	1,460.52	-270.54	-66.57	-67.42	0.00	0.00	0.00
1,600.00	20.70	193.82	1,554.07	-304.86	-75.02	-75.98	0.00	0.00	0.00
1,700.00	20.70	193.82	1,647.61	-339.19	-83.47	-84.53	0.00	0.00	0.00
1,800.00	20.70	193.82	1,741.16	-373.51	-91.91	-93.08	0.00	0.00	0.00
1,809.45	20.70	193.82	1,750.00	-376.76	-92.71	-93.89	0.00	0.00	0.00
9 5/8"									
1,900.00	20.70	193.82	1,834.70	-407.83	-100.36	-101.64	0.00	0.00	0.00
2,000.00	20.70	193.82	1,928.25	-442.16	-108.80	-110.19	0.00	0.00	0.00
2,100.00	20.70	193.82	2,021.79	-476.48	-117.25	-118.75	0.00	0.00	0.00
2,200.00	20.70	193.82	2,115.33	-510.81	-125.70	-127.30	0.00	0.00	0.00
2,300.00	20.70	193.82	2,208.88	-545.13	-134.14	-135.85	0.00	0.00	0.00
2,400.00	20.70	193.82	2,302.42	-579.45	-142.59	-144.41	0.00	0.00	0.00
2,500.00	20.70	193.82	2,395.97	-613.78	-151.04	-152.96	0.00	0.00	0.00
2,600.00	20.70	193.82	2,489.51	-648.10	-159.48	-161.52	0.00	0.00	0.00
2,700.00	20.70	193.82	2,583.06	-682.42	-167.93	-170.07	0.00	0.00	0.00
2,800.00	20.70	193.82	2,676.60	-716.75	-176.37	-178.62	0.00	0.00	0.00
2,900.00	20.70	193.82	2,770.14	-751.07	-184.82	-187.18	0.00	0.00	0.00
3,000.00	20.70	193.82	2,863.69	-785.39	-193.27	-195.73	0.00	0.00	0.00
3,100.00	20.70	193.82	2,957.23	-819.72	-201.71	-204.29	0.00	0.00	0.00
3,200.00	20.70	193.82	3,050.78	-854.04	-210.16	-212.84	0.00	0.00	0.00
3,300.00	20.70	193.82	3,144.32	-888.37	-218.61	-221.39	0.00	0.00	0.00
3,400.00	20.70	193.82	3,237.87	-922.69	-227.05	-229.95	0.00	0.00	0.00
3,500.00	20.70	193.82	3,331.41	-957.01	-235.50	-238.50	0.00	0.00	0.00
3,600.00	20.70	193.82	3,424.96	-991.34	-243.94	-247.06	0.00	0.00	0.00
3,666.72	20.70	193.82	3,487.37	-1,014.24	-249.58	-252.76	0.00	0.00	0.00
Start Drop -2.00									
3,700.00	20.03	193.82	3,518.57	-1,025.48	-252.35	-255.57	2.00	-2.00	0.00
3,800.00	18.03	193.82	3,613.09	-1,057.15	-260.14	-263.46	2.00	-2.00	0.00
3,900.00	16.03	193.82	3,708.70	-1,085.60	-267.14	-270.55	2.00	-2.00	0.00
4,000.00	14.03	193.82	3,805.27	-1,110.78	-273.34	-276.83	2.00	-2.00	0.00
4,100.00	12.03	193.82	3,902.69	-1,132.68	-278.73	-282.28	2.00	-2.00	0.00
4,200.00	10.03	193.82	4,000.84	-1,151.27	-283.30	-286.91	2.00	-2.00	0.00
4,300.00	8.03	193.82	4,099.59	-1,166.51	-287.05	-290.71	2.00	-2.00	0.00
4,400.00	6.03	193.82	4,198.84	-1,178.41	-289.98	-293.68	2.00	-2.00	0.00
4,500.00	4.03	193.82	4,298.45	-1,186.93	-292.07	-295.80	2.00	-2.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-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)
4,600.00	2.03	193.82	4,398.30	-1,192.07	-293.34	-297.08	2.00	-2.00	0.00
4,700.00	0.03	193.82	4,498.28	-1,193.82	-293.77	-297.52	2.00	-2.00	0.00
4,701.72	0.00	0.00	4,500.00	-1,193.82	-293.77	-297.52	2.00	-2.00	0.00
Start 2092.38 hold at 4701.72 MD									
4,800.00	0.00	0.00	4,598.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
4,900.00	0.00	0.00	4,698.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,000.00	0.00	0.00	4,798.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,100.00	0.00	0.00	4,898.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,200.00	0.00	0.00	4,998.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,300.00	0.00	0.00	5,098.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,400.00	0.00	0.00	5,198.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,500.00	0.00	0.00	5,298.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,600.00	0.00	0.00	5,398.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,700.00	0.00	0.00	5,498.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,800.00	0.00	0.00	5,598.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
5,900.00	0.00	0.00	5,698.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,000.00	0.00	0.00	5,798.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,100.00	0.00	0.00	5,898.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,200.00	0.00	0.00	5,998.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,300.00	0.00	0.00	6,098.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,400.00	0.00	0.00	6,198.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,500.00	0.00	0.00	6,298.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,600.00	0.00	0.00	6,398.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,700.00	0.00	0.00	6,498.28	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
6,794.10	0.00	0.00	6,592.38	-1,193.82	-293.77	-297.52	0.00	0.00	0.00
Start DLS 9.00 TFO 89.82									
6,800.00	0.53	89.82	6,598.28	-1,193.82	-293.74	-297.49	9.00	9.00	0.00
6,900.00	9.53	89.82	6,697.79	-1,193.79	-284.98	-288.73	9.00	9.00	0.00
7,000.00	18.53	89.82	6,794.71	-1,193.71	-260.76	-264.51	9.00	9.00	0.00
7,100.00	27.53	89.82	6,886.64	-1,193.59	-221.68	-225.43	9.00	9.00	0.00
7,200.00	36.53	89.82	6,971.33	-1,193.42	-168.70	-172.45	9.00	9.00	0.00
7,300.00	45.53	89.82	7,046.69	-1,193.21	-103.12	-106.87	9.00	9.00	0.00
7,400.00	54.53	89.82	7,110.86	-1,192.96	-26.56	-30.31	9.00	9.00	0.00
7,500.00	63.53	89.82	7,162.27	-1,192.69	59.10	55.35	9.00	9.00	0.00
7,600.00	72.53	89.82	7,199.64	-1,192.39	151.74	147.99	9.00	9.00	0.00
7,700.00	81.53	89.82	7,222.06	-1,192.08	249.09	245.34	9.00	9.00	0.00
7,793.31	89.93	89.82	7,229.00	-1,191.78	342.05	338.31	9.00	9.00	0.00
PLP_Boomerang 28C-3-L(2766 FNL 2487 FEL)									
7,793.42	89.94	89.82	7,229.00	-1,191.78	342.17	338.42	9.00	9.00	0.00
LP(2755 FNL 2487 FEL)									
7,800.00	89.94	89.82	7,229.01	-1,191.76	348.74	345.00	0.00	0.00	0.00
7,900.00	89.94	89.82	7,229.11	-1,191.44	448.74	445.00	0.00	0.00	0.00
8,000.00	89.94	89.82	7,229.22	-1,191.12	548.74	545.00	0.00	0.00	0.00
8,100.00	89.94	89.82	7,229.33	-1,190.79	648.74	645.00	0.00	0.00	0.00
8,200.00	89.94	89.82	7,229.43	-1,190.47	748.74	745.00	0.00	0.00	0.00
8,300.00	89.94	89.82	7,229.54	-1,190.15	848.74	845.00	0.00	0.00	0.00
8,400.00	89.94	89.82	7,229.65	-1,189.83	948.74	945.00	0.00	0.00	0.00
8,500.00	89.94	89.82	7,229.75	-1,189.51	1,048.74	1,045.00	0.00	0.00	0.00
8,600.00	89.94	89.82	7,229.86	-1,189.19	1,148.74	1,145.00	0.00	0.00	0.00
8,700.00	89.94	89.82	7,229.97	-1,188.87	1,248.74	1,245.00	0.00	0.00	0.00
8,800.00	89.94	89.82	7,230.07	-1,188.55	1,348.74	1,345.00	0.00	0.00	0.00
8,900.00	89.94	89.82	7,230.18	-1,188.23	1,448.74	1,445.00	0.00	0.00	0.00
9,000.00	89.94	89.82	7,230.29	-1,187.91	1,548.74	1,545.00	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-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)
9,100.00	89.94	89.82	7,230.39	-1,187.59	1,648.74	1,645.00	0.00	0.00	0.00
9,200.00	89.94	89.82	7,230.50	-1,187.26	1,748.74	1,745.00	0.00	0.00	0.00
9,300.00	89.94	89.82	7,230.61	-1,186.94	1,848.74	1,845.00	0.00	0.00	0.00
9,400.00	89.94	89.82	7,230.72	-1,186.62	1,948.74	1,945.00	0.00	0.00	0.00
9,500.00	89.94	89.82	7,230.82	-1,186.30	2,048.74	2,045.00	0.00	0.00	0.00
9,600.00	89.94	89.82	7,230.93	-1,185.98	2,148.73	2,145.00	0.00	0.00	0.00
9,700.00	89.94	89.82	7,231.04	-1,185.66	2,248.73	2,245.00	0.00	0.00	0.00
9,800.00	89.94	89.82	7,231.14	-1,185.34	2,348.73	2,345.00	0.00	0.00	0.00
9,900.00	89.94	89.82	7,231.25	-1,185.02	2,448.73	2,445.00	0.00	0.00	0.00
10,000.00	89.94	89.82	7,231.36	-1,184.70	2,548.73	2,545.00	0.00	0.00	0.00
10,100.00	89.94	89.82	7,231.46	-1,184.38	2,648.73	2,645.00	0.00	0.00	0.00
10,200.00	89.94	89.82	7,231.57	-1,184.05	2,748.73	2,745.00	0.00	0.00	0.00
10,300.00	89.94	89.82	7,231.68	-1,183.73	2,848.73	2,845.00	0.00	0.00	0.00
10,400.00	89.94	89.82	7,231.78	-1,183.41	2,948.73	2,945.00	0.00	0.00	0.00
10,500.00	89.94	89.82	7,231.89	-1,183.09	3,048.73	3,045.00	0.00	0.00	0.00
10,600.00	89.94	89.82	7,232.00	-1,182.77	3,148.73	3,145.00	0.00	0.00	0.00
10,700.00	89.94	89.82	7,232.10	-1,182.45	3,248.73	3,245.00	0.00	0.00	0.00
10,800.00	89.94	89.82	7,232.21	-1,182.13	3,348.73	3,345.00	0.00	0.00	0.00
10,900.00	89.94	89.82	7,232.32	-1,181.81	3,448.73	3,445.00	0.00	0.00	0.00
11,000.00	89.94	89.82	7,232.42	-1,181.49	3,548.73	3,545.00	0.00	0.00	0.00
11,100.00	89.94	89.82	7,232.53	-1,181.17	3,648.73	3,645.00	0.00	0.00	0.00
11,200.00	89.94	89.82	7,232.64	-1,180.84	3,748.73	3,745.00	0.00	0.00	0.00
11,300.00	89.94	89.82	7,232.74	-1,180.52	3,848.72	3,845.00	0.00	0.00	0.00
11,400.00	89.94	89.82	7,232.85	-1,180.20	3,948.72	3,945.00	0.00	0.00	0.00
11,500.00	89.94	89.82	7,232.96	-1,179.88	4,048.72	4,045.00	0.00	0.00	0.00
11,600.00	89.94	89.82	7,233.06	-1,179.56	4,148.72	4,145.00	0.00	0.00	0.00
11,700.00	89.94	89.82	7,233.17	-1,179.24	4,248.72	4,245.00	0.00	0.00	0.00
11,800.00	89.94	89.82	7,233.28	-1,178.92	4,348.72	4,345.00	0.00	0.00	0.00
11,900.00	89.94	89.82	7,233.38	-1,178.60	4,448.72	4,445.00	0.00	0.00	0.00
12,000.00	89.94	89.82	7,233.49	-1,178.28	4,548.72	4,545.00	0.00	0.00	0.00
12,100.00	89.94	89.82	7,233.60	-1,177.96	4,648.72	4,645.00	0.00	0.00	0.00
12,200.00	89.94	89.82	7,233.71	-1,177.64	4,748.72	4,745.00	0.00	0.00	0.00
12,300.00	89.94	89.82	7,233.81	-1,177.31	4,848.72	4,845.00	0.00	0.00	0.00
12,400.00	89.94	89.82	7,233.92	-1,176.99	4,948.72	4,945.00	0.00	0.00	0.00
12,500.00	89.94	89.82	7,234.03	-1,176.67	5,048.72	5,045.00	0.00	0.00	0.00
12,600.00	89.94	89.82	7,234.13	-1,176.35	5,148.72	5,145.00	0.00	0.00	0.00
12,700.00	89.94	89.82	7,234.24	-1,176.03	5,248.72	5,245.00	0.00	0.00	0.00
12,800.00	89.94	89.82	7,234.35	-1,175.71	5,348.72	5,345.00	0.00	0.00	0.00
12,900.00	89.94	89.82	7,234.45	-1,175.39	5,448.72	5,445.00	0.00	0.00	0.00
13,000.00	89.94	89.82	7,234.56	-1,175.07	5,548.72	5,545.00	0.00	0.00	0.00
13,100.00	89.94	89.82	7,234.67	-1,174.75	5,648.71	5,645.00	0.00	0.00	0.00
13,200.00	89.94	89.82	7,234.77	-1,174.43	5,748.71	5,745.00	0.00	0.00	0.00
13,300.00	89.94	89.82	7,234.88	-1,174.10	5,848.71	5,845.00	0.00	0.00	0.00
13,400.00	89.94	89.82	7,234.99	-1,173.78	5,948.71	5,945.00	0.00	0.00	0.00
13,500.00	89.94	89.82	7,235.09	-1,173.46	6,048.71	6,045.00	0.00	0.00	0.00
13,600.00	89.94	89.82	7,235.20	-1,173.14	6,148.71	6,145.00	0.00	0.00	0.00
13,700.00	89.94	89.82	7,235.31	-1,172.82	6,248.71	6,245.00	0.00	0.00	0.00
13,800.00	89.94	89.82	7,235.41	-1,172.50	6,348.71	6,345.00	0.00	0.00	0.00
13,900.00	89.94	89.82	7,235.52	-1,172.18	6,448.71	6,445.00	0.00	0.00	0.00
14,000.00	89.94	89.82	7,235.63	-1,171.86	6,548.71	6,545.00	0.00	0.00	0.00
14,100.00	89.94	89.82	7,235.73	-1,171.54	6,648.71	6,645.00	0.00	0.00	0.00
14,200.00	89.94	89.82	7,235.84	-1,171.22	6,748.71	6,745.00	0.00	0.00	0.00
14,300.00	89.94	89.82	7,235.95	-1,170.90	6,848.71	6,845.00	0.00	0.00	0.00
14,400.00	89.94	89.82	7,236.05	-1,170.57	6,948.71	6,945.00	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-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)
14,500.00	89.94	89.82	7,236.16	-1,170.25	7,048.71	7,045.00	0.00	0.00	0.00
14,600.00	89.94	89.82	7,236.27	-1,169.93	7,148.71	7,145.00	0.00	0.00	0.00
14,700.00	89.94	89.82	7,236.37	-1,169.61	7,248.71	7,245.00	0.00	0.00	0.00
14,800.00	89.94	89.82	7,236.48	-1,169.29	7,348.70	7,345.00	0.00	0.00	0.00
14,900.00	89.94	89.82	7,236.59	-1,168.97	7,448.70	7,445.00	0.00	0.00	0.00
15,000.00	89.94	89.82	7,236.69	-1,168.65	7,548.70	7,545.00	0.00	0.00	0.00
15,100.00	89.94	89.82	7,236.80	-1,168.33	7,648.70	7,645.00	0.00	0.00	0.00
15,200.00	89.94	89.82	7,236.91	-1,168.01	7,748.70	7,745.00	0.00	0.00	0.00
15,300.00	89.94	89.82	7,237.02	-1,167.69	7,848.70	7,845.00	0.00	0.00	0.00
15,400.00	89.94	89.82	7,237.12	-1,167.36	7,948.70	7,944.99	0.00	0.00	0.00
15,500.00	89.94	89.82	7,237.23	-1,167.04	8,048.70	8,044.99	0.00	0.00	0.00
15,600.00	89.94	89.82	7,237.34	-1,166.72	8,148.70	8,144.99	0.00	0.00	0.00
15,700.00	89.94	89.82	7,237.44	-1,166.40	8,248.70	8,244.99	0.00	0.00	0.00
15,800.00	89.94	89.82	7,237.55	-1,166.08	8,348.70	8,344.99	0.00	0.00	0.00
15,900.00	89.94	89.82	7,237.66	-1,165.76	8,448.70	8,444.99	0.00	0.00	0.00
16,000.00	89.94	89.82	7,237.76	-1,165.44	8,548.70	8,544.99	0.00	0.00	0.00
16,100.00	89.94	89.82	7,237.87	-1,165.12	8,648.70	8,644.99	0.00	0.00	0.00
16,200.00	89.94	89.82	7,237.98	-1,164.80	8,748.70	8,744.99	0.00	0.00	0.00
16,300.00	89.94	89.82	7,238.08	-1,164.48	8,848.70	8,844.99	0.00	0.00	0.00
16,400.00	89.94	89.82	7,238.19	-1,164.15	8,948.70	8,944.99	0.00	0.00	0.00
16,500.00	89.94	89.82	7,238.30	-1,163.83	9,048.70	9,044.99	0.00	0.00	0.00
16,600.00	89.94	89.82	7,238.40	-1,163.51	9,148.69	9,144.99	0.00	0.00	0.00
16,700.00	89.94	89.82	7,238.51	-1,163.19	9,248.69	9,244.99	0.00	0.00	0.00
16,800.00	89.94	89.82	7,238.62	-1,162.87	9,348.69	9,344.99	0.00	0.00	0.00
16,900.00	89.94	89.82	7,238.72	-1,162.55	9,448.69	9,444.99	0.00	0.00	0.00
17,000.00	89.94	89.82	7,238.83	-1,162.23	9,548.69	9,544.99	0.00	0.00	0.00
17,100.00	89.94	89.82	7,238.94	-1,161.91	9,648.69	9,644.99	0.00	0.00	0.00
17,200.00	89.94	89.82	7,239.04	-1,161.59	9,748.69	9,744.99	0.00	0.00	0.00
17,300.00	89.94	89.82	7,239.15	-1,161.27	9,848.69	9,844.99	0.00	0.00	0.00
17,400.00	89.94	89.82	7,239.26	-1,160.95	9,948.69	9,944.99	0.00	0.00	0.00
17,500.00	89.94	89.82	7,239.36	-1,160.62	10,048.69	10,044.99	0.00	0.00	0.00
17,600.00	89.94	89.82	7,239.47	-1,160.30	10,148.69	10,144.99	0.00	0.00	0.00
17,700.00	89.94	89.82	7,239.58	-1,159.98	10,248.69	10,244.99	0.00	0.00	0.00
17,800.00	89.94	89.82	7,239.68	-1,159.66	10,348.69	10,344.99	0.00	0.00	0.00
17,900.00	89.94	89.82	7,239.79	-1,159.34	10,448.69	10,444.99	0.00	0.00	0.00
18,000.00	89.94	89.82	7,239.90	-1,159.02	10,548.69	10,544.99	0.00	0.00	0.00
18,095.23	89.94	89.82	7,240.00	-1,158.71	10,643.92	10,640.22	0.00	0.00	0.00
TD at 18095.23 - PBHL_Boomerang 28C-3-L(2779 FNL 2411 FWL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PLP_Boomerang 28C-3- - hit/miss target - Shape - Point	0.00	0.00	7,229.00	-1,218.93	342.14	1,400,101.25	3,194,214.30	40.4295750	-104.8023790
- plan misses target center by 27.15ft at 7793.31ft MD (7229.00 TVD, -1191.78 N, 342.05 E)									
PBHL_Boomerang 28C- - plan hits target center - Point	0.00	0.00	7,240.00	-1,158.71	10,643.92	1,400,242.36	3,204,515.28	40.4297340	-104.7653740

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 28C-3-L
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 28C-3-L	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,809.45	1,750.00	9 5/8"	9.625	13.500	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.00	200.00	0.00	0.00	Start Build 2.00	
1,235.00	1,212.63	-179.58	-44.19	Start 2431.71 hold at 1235.00 MD	
3,666.72	3,487.37	-1,014.24	-249.58	Start Drop -2.00	
4,701.72	4,500.00	-1,193.82	-293.77	Start 2092.38 hold at 4701.72 MD	
6,794.10	6,592.38	-1,193.82	-293.77	Start DLS 9.00 TFO 89.82	
7,793.42	7,229.00	-1,191.78	342.17	LP(2755 FNL 2487 FEL)	
18,095.23	7,240.00	-1,158.71	10,643.92	TD at 18095.23	