



Project: SEC 5-T5N-R66W
Site: Boomerang 21-5
Well: Boomerang 13N-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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
584.50	7.69	99.00	583.35	-4.03	25.45	2.00	99.00	-25.28	
6304.69	7.69	99.00	6252.09	-123.77	781.46	0.00	0.00	-776.45	
7396.89	90.75	267.91	6972.00	-166.02	143.10	9.00	168.79	-136.98	
15460.11	90.75	267.91	6866.00	-459.92	-7914.06	0.00	0.00	7925.54	PBHL

PROJECT DETAILS: SEC 5-T5N-R66W

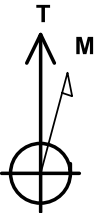
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Colorado Northern Zone
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	6866.00	-459.92	-7914.06	1400885.08	3185960.32	40.4319010	-104.8320060	Point
- plan hits target center								
PLP	6972.00	-185.05	143.09	1401223.22	3194015.05	40.4326590	-104.8030630	Point
- plan misses target center by 19.02ft at 7397.60ft MD (6971.99 TVD, -166.04 N, 142.39 E)								

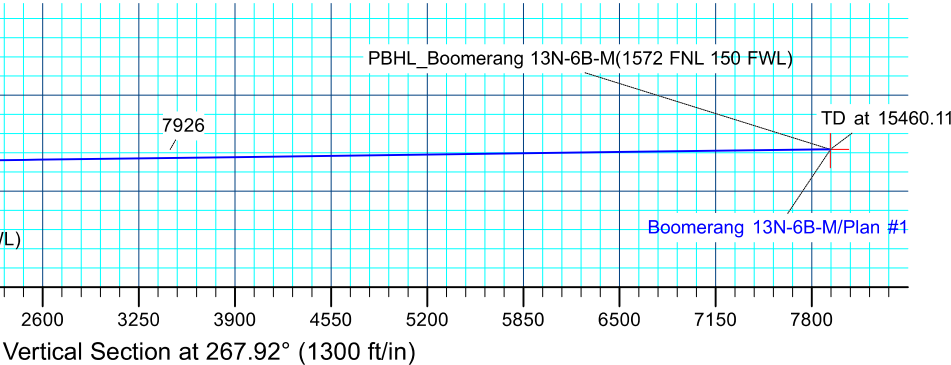
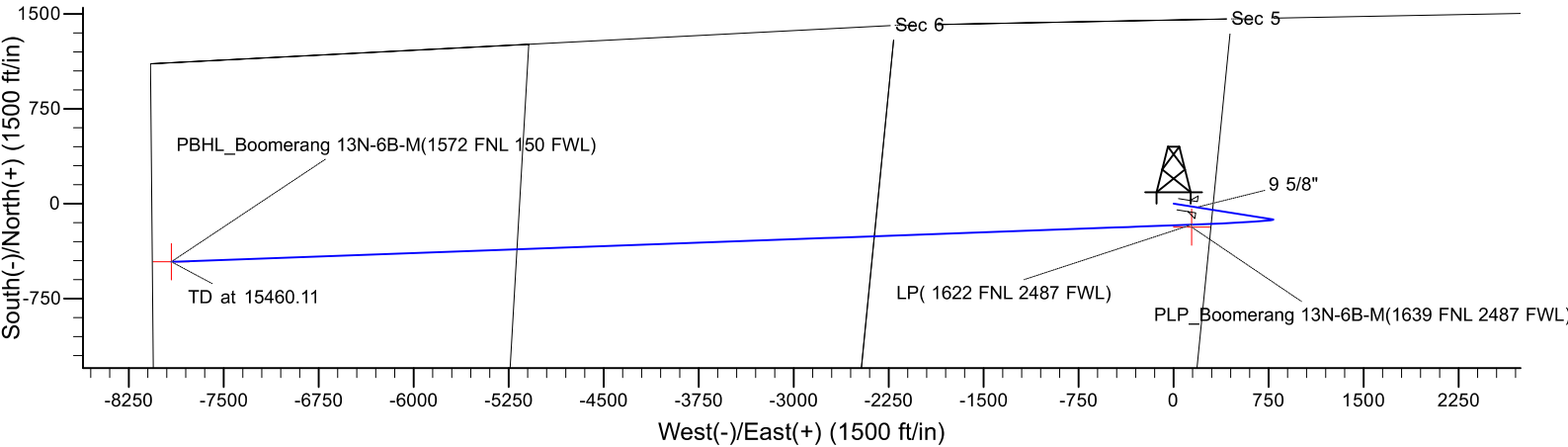
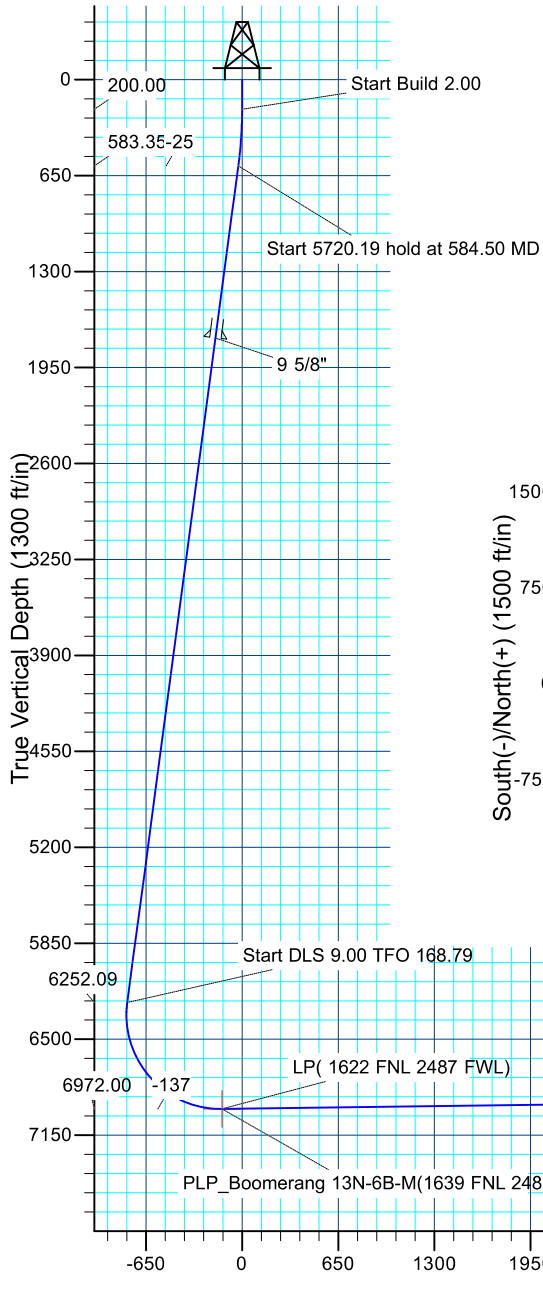
CASING DETAILS

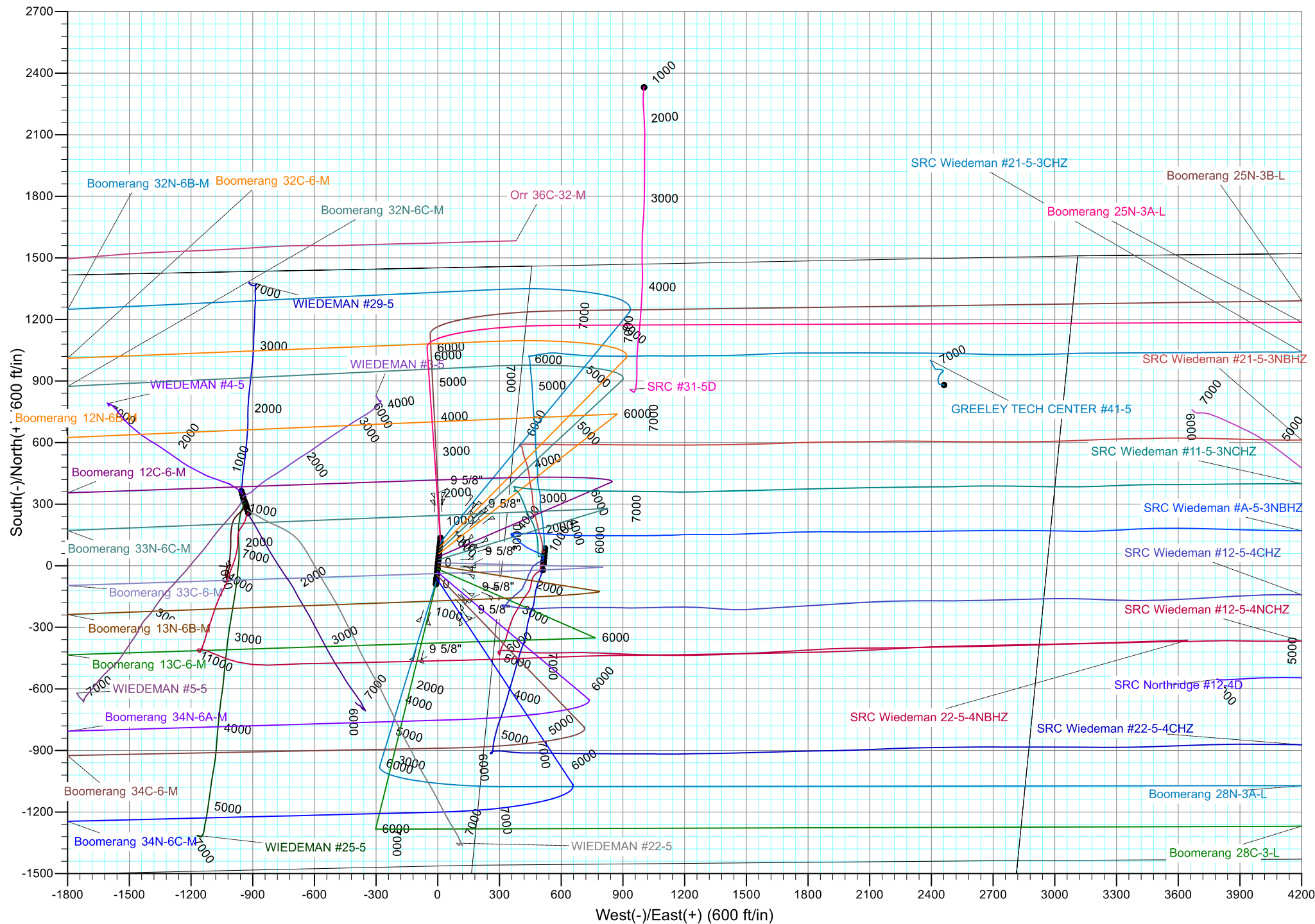
TVD	MD	Name	Size
1750.00	1761.74	9 5/8"	9.625

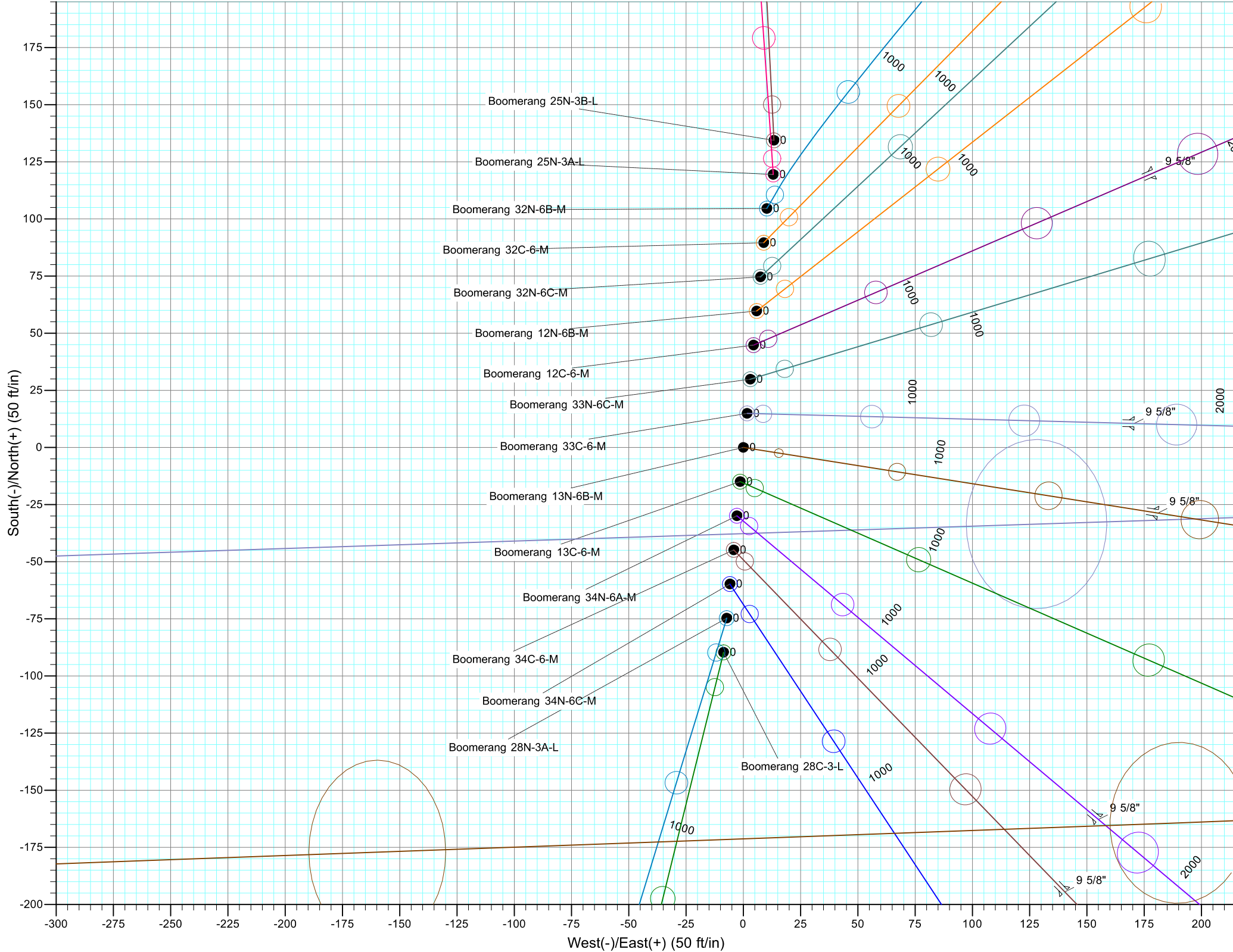


Azimuths to True North
Magnetic North: 8.26°

Magnetic Field
Strength: 52429.9snT
Dip Angle: 66.88°
Date: 4/1/2017
Model: IGRF2015









Synergy Resources Corporation

SEC 5-T5N-R66W

Boomerang 21-5

Boomerang 13N-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 13N-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 13N-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 13N-6B-M, 1451 FNL 2327 FWL					
Well Position	+N/-S	-134.44 ft	Northing:	1,401,407.14 ft	Latitude:	40.4331670
	+E/-W	-13.36 ft	Easting:	3,193,870.52 ft	Longitude:	-104.8035770
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	267.92

Plan Survey Tool Program	Date	4/5/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	15,460.11 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	
584.50	7.69	99.00	583.35	-4.03	25.45	2.00	2.00	0.00	99.00	
6,304.69	7.69	99.00	6,252.09	-123.77	781.46	0.00	0.00	0.00	0.00	
7,396.89	90.75	267.91	6,972.00	-166.02	143.10	9.00	7.61	15.47	168.79	
15,460.11	90.75	267.91	6,866.00	-459.92	-7,914.06	0.00	0.00	0.00	0.00	PBHL_Boomerang 13

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 13N-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 13N-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
Start Build 2.00									
300.00	2.00	99.00	299.98	-0.27	1.72	-1.71	2.00	2.00	0.00
400.00	4.00	99.00	399.84	-1.09	6.89	-6.85	2.00	2.00	0.00
500.00	6.00	99.00	499.45	-2.46	15.50	-15.40	2.00	2.00	0.00
584.50	7.69	99.00	583.35	-4.03	25.45	-25.28	2.00	2.00	0.00
Start 5720.19 hold at 584.50 MD									
600.00	7.69	99.00	598.71	-4.35	27.50	-27.32	0.00	0.00	0.00
700.00	7.69	99.00	697.81	-6.45	40.71	-40.45	0.00	0.00	0.00
800.00	7.69	99.00	796.91	-8.54	53.93	-53.58	0.00	0.00	0.00
900.00	7.69	99.00	896.01	-10.63	67.15	-66.72	0.00	0.00	0.00
1,000.00	7.69	99.00	995.11	-12.73	80.36	-79.85	0.00	0.00	0.00
1,100.00	7.69	99.00	1,094.21	-14.82	93.58	-92.98	0.00	0.00	0.00
1,200.00	7.69	99.00	1,193.31	-16.91	106.80	-106.11	0.00	0.00	0.00
1,300.00	7.69	99.00	1,292.41	-19.01	120.01	-119.24	0.00	0.00	0.00
1,400.00	7.69	99.00	1,391.51	-21.10	133.23	-132.37	0.00	0.00	0.00
1,500.00	7.69	99.00	1,490.61	-23.19	146.44	-145.51	0.00	0.00	0.00
1,600.00	7.69	99.00	1,589.71	-25.29	159.66	-158.64	0.00	0.00	0.00
1,700.00	7.69	99.00	1,688.81	-27.38	172.88	-171.77	0.00	0.00	0.00
1,761.74	7.69	99.00	1,750.00	-28.67	181.04	-179.88	0.00	0.00	0.00
9 5/8"									
1,800.00	7.69	99.00	1,787.92	-29.47	186.09	-184.90	0.00	0.00	0.00
1,900.00	7.69	99.00	1,887.02	-31.57	199.31	-198.03	0.00	0.00	0.00
2,000.00	7.69	99.00	1,986.12	-33.66	212.53	-211.17	0.00	0.00	0.00
2,100.00	7.69	99.00	2,085.22	-35.75	225.74	-224.30	0.00	0.00	0.00
2,200.00	7.69	99.00	2,184.32	-37.85	238.96	-237.43	0.00	0.00	0.00
2,300.00	7.69	99.00	2,283.42	-39.94	252.18	-250.56	0.00	0.00	0.00
2,400.00	7.69	99.00	2,382.52	-42.03	265.39	-263.69	0.00	0.00	0.00
2,500.00	7.69	99.00	2,481.62	-44.13	278.61	-276.83	0.00	0.00	0.00
2,600.00	7.69	99.00	2,580.72	-46.22	291.83	-289.96	0.00	0.00	0.00
2,700.00	7.69	99.00	2,679.82	-48.31	305.04	-303.09	0.00	0.00	0.00
2,800.00	7.69	99.00	2,778.92	-50.41	318.26	-316.22	0.00	0.00	0.00
2,900.00	7.69	99.00	2,878.02	-52.50	331.48	-329.35	0.00	0.00	0.00
3,000.00	7.69	99.00	2,977.12	-54.59	344.69	-342.48	0.00	0.00	0.00
3,100.00	7.69	99.00	3,076.22	-56.69	357.91	-355.62	0.00	0.00	0.00
3,200.00	7.69	99.00	3,175.32	-58.78	371.13	-368.75	0.00	0.00	0.00
3,300.00	7.69	99.00	3,274.43	-60.87	384.34	-381.88	0.00	0.00	0.00
3,400.00	7.69	99.00	3,373.53	-62.97	397.56	-395.01	0.00	0.00	0.00
3,500.00	7.69	99.00	3,472.63	-65.06	410.78	-408.14	0.00	0.00	0.00
3,600.00	7.69	99.00	3,571.73	-67.15	423.99	-421.28	0.00	0.00	0.00
3,700.00	7.69	99.00	3,670.83	-69.25	437.21	-434.41	0.00	0.00	0.00
3,800.00	7.69	99.00	3,769.93	-71.34	450.43	-447.54	0.00	0.00	0.00
3,900.00	7.69	99.00	3,869.03	-73.43	463.64	-460.67	0.00	0.00	0.00
4,000.00	7.69	99.00	3,968.13	-75.53	476.86	-473.80	0.00	0.00	0.00
4,100.00	7.69	99.00	4,067.23	-77.62	490.08	-486.94	0.00	0.00	0.00
4,200.00	7.69	99.00	4,166.33	-79.71	503.29	-500.07	0.00	0.00	0.00
4,300.00	7.69	99.00	4,265.43	-81.81	516.51	-513.20	0.00	0.00	0.00
4,400.00	7.69	99.00	4,364.53	-83.90	529.73	-526.33	0.00	0.00	0.00
4,500.00	7.69	99.00	4,463.63	-85.99	542.94	-539.46	0.00	0.00	0.00
4,600.00	7.69	99.00	4,562.73	-88.09	556.16	-552.60	0.00	0.00	0.00
4,700.00	7.69	99.00	4,661.83	-90.18	569.38	-565.73	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 13N-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 13N-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)
4,800.00	7.69	99.00	4,760.93	-92.27	582.59	-578.86	0.00	0.00	0.00
4,900.00	7.69	99.00	4,860.04	-94.37	595.81	-591.99	0.00	0.00	0.00
5,000.00	7.69	99.00	4,959.14	-96.46	609.03	-605.12	0.00	0.00	0.00
5,100.00	7.69	99.00	5,058.24	-98.55	622.24	-618.25	0.00	0.00	0.00
5,200.00	7.69	99.00	5,157.34	-100.65	635.46	-631.39	0.00	0.00	0.00
5,300.00	7.69	99.00	5,256.44	-102.74	648.67	-644.52	0.00	0.00	0.00
5,400.00	7.69	99.00	5,355.54	-104.83	661.89	-657.65	0.00	0.00	0.00
5,500.00	7.69	99.00	5,454.64	-106.93	675.11	-670.78	0.00	0.00	0.00
5,600.00	7.69	99.00	5,553.74	-109.02	688.32	-683.91	0.00	0.00	0.00
5,700.00	7.69	99.00	5,652.84	-111.11	701.54	-697.05	0.00	0.00	0.00
5,800.00	7.69	99.00	5,751.94	-113.21	714.76	-710.18	0.00	0.00	0.00
5,900.00	7.69	99.00	5,851.04	-115.30	727.97	-723.31	0.00	0.00	0.00
6,000.00	7.69	99.00	5,950.14	-117.39	741.19	-736.44	0.00	0.00	0.00
6,100.00	7.69	99.00	6,049.24	-119.49	754.41	-749.57	0.00	0.00	0.00
6,200.00	7.69	99.00	6,148.34	-121.58	767.62	-762.71	0.00	0.00	0.00
6,300.00	7.69	99.00	6,247.44	-123.67	780.84	-775.84	0.00	0.00	0.00
6,304.69	7.69	99.00	6,252.09	-123.77	781.46	-776.45	0.00	0.00	0.00
Start DLS 9.00 TFO 168.79									
6,400.00	1.81	212.63	6,347.13	-126.04	786.96	-781.86	9.00	-6.17	119.22
6,500.00	10.14	259.53	6,446.53	-128.98	777.43	-772.23	9.00	8.33	46.90
6,600.00	19.09	263.58	6,543.19	-132.42	752.47	-747.16	9.00	8.95	4.05
6,700.00	28.07	265.09	6,634.75	-136.27	712.69	-707.28	9.00	8.98	1.51
6,800.00	37.06	265.92	6,718.94	-140.43	659.09	-653.56	9.00	8.99	0.82
6,900.00	46.05	266.45	6,793.70	-144.81	592.97	-587.32	9.00	8.99	0.54
7,000.00	55.05	266.85	6,857.18	-149.30	515.96	-510.20	9.00	8.99	0.40
7,100.00	64.04	267.17	6,907.81	-153.78	429.96	-424.10	9.00	9.00	0.32
7,200.00	73.04	267.44	6,944.36	-158.15	337.09	-331.13	9.00	9.00	0.27
7,300.00	82.04	267.68	6,965.92	-162.30	239.64	-233.59	9.00	9.00	0.25
7,396.89	90.75	267.91	6,972.00	-166.02	143.10	-136.98	9.00	9.00	0.24
LP(1622 FNL 2487 FWL)									
7,397.60	90.75	267.91	6,971.99	-166.04	142.39	-136.27	0.00	0.00	0.00
PLP_Boomerang 13N-6B-M(1639 FNL 2487 FWL)									
7,400.00	90.75	267.91	6,971.96	-166.13	140.00	-133.88	0.00	0.00	0.00
7,500.00	90.75	267.91	6,970.65	-169.78	40.07	-33.89	0.00	0.00	0.00
7,600.00	90.75	267.91	6,969.33	-173.42	-59.85	66.11	0.00	0.00	0.00
7,700.00	90.75	267.91	6,968.02	-177.07	-159.78	166.10	0.00	0.00	0.00
7,800.00	90.75	267.91	6,966.70	-180.71	-259.70	266.09	0.00	0.00	0.00
7,900.00	90.75	267.91	6,965.39	-184.36	-359.63	366.08	0.00	0.00	0.00
8,000.00	90.75	267.91	6,964.07	-188.00	-459.55	466.07	0.00	0.00	0.00
8,100.00	90.75	267.91	6,962.76	-191.65	-559.48	566.06	0.00	0.00	0.00
8,200.00	90.75	267.91	6,961.45	-195.29	-659.40	666.05	0.00	0.00	0.00
8,300.00	90.75	267.91	6,960.13	-198.94	-759.33	766.05	0.00	0.00	0.00
8,400.00	90.75	267.91	6,958.82	-202.58	-859.25	866.04	0.00	0.00	0.00
8,500.00	90.75	267.91	6,957.50	-206.23	-959.18	966.03	0.00	0.00	0.00
8,600.00	90.75	267.91	6,956.19	-209.87	-1,059.10	1,066.02	0.00	0.00	0.00
8,700.00	90.75	267.91	6,954.87	-213.52	-1,159.03	1,166.01	0.00	0.00	0.00
8,800.00	90.75	267.91	6,953.56	-217.16	-1,258.95	1,266.00	0.00	0.00	0.00
8,900.00	90.75	267.91	6,952.24	-220.81	-1,358.88	1,365.99	0.00	0.00	0.00
9,000.00	90.75	267.91	6,950.93	-224.45	-1,458.80	1,465.99	0.00	0.00	0.00
9,100.00	90.75	267.91	6,949.61	-228.10	-1,558.72	1,565.98	0.00	0.00	0.00
9,200.00	90.75	267.91	6,948.30	-231.74	-1,658.65	1,665.97	0.00	0.00	0.00
9,300.00	90.75	267.91	6,946.98	-235.39	-1,758.57	1,765.96	0.00	0.00	0.00
9,400.00	90.75	267.91	6,945.67	-239.03	-1,858.50	1,865.95	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 13N-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 13N-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)
9,500.00	90.75	267.91	6,944.35	-242.68	-1,958.42	1,965.94	0.00	0.00	0.00
9,600.00	90.75	267.91	6,943.04	-246.32	-2,058.35	2,065.93	0.00	0.00	0.00
9,700.00	90.75	267.91	6,941.73	-249.97	-2,158.27	2,165.92	0.00	0.00	0.00
9,800.00	90.75	267.91	6,940.41	-253.61	-2,258.20	2,265.92	0.00	0.00	0.00
9,900.00	90.75	267.91	6,939.10	-257.26	-2,358.12	2,365.91	0.00	0.00	0.00
10,000.00	90.75	267.91	6,937.78	-260.90	-2,458.05	2,465.90	0.00	0.00	0.00
10,100.00	90.75	267.91	6,936.47	-264.55	-2,557.97	2,565.89	0.00	0.00	0.00
10,200.00	90.75	267.91	6,935.15	-268.19	-2,657.90	2,665.88	0.00	0.00	0.00
10,300.00	90.75	267.91	6,933.84	-271.84	-2,757.82	2,765.87	0.00	0.00	0.00
10,400.00	90.75	267.91	6,932.52	-275.48	-2,857.75	2,865.86	0.00	0.00	0.00
10,500.00	90.75	267.91	6,931.21	-279.13	-2,957.67	2,965.86	0.00	0.00	0.00
10,600.00	90.75	267.91	6,929.89	-282.77	-3,057.60	3,065.85	0.00	0.00	0.00
10,700.00	90.75	267.91	6,928.58	-286.42	-3,157.52	3,165.84	0.00	0.00	0.00
10,800.00	90.75	267.91	6,927.26	-290.06	-3,257.45	3,265.83	0.00	0.00	0.00
10,900.00	90.75	267.91	6,925.95	-293.71	-3,357.37	3,365.82	0.00	0.00	0.00
11,000.00	90.75	267.91	6,924.64	-297.35	-3,457.30	3,465.81	0.00	0.00	0.00
11,100.00	90.75	267.91	6,923.32	-301.00	-3,557.22	3,565.80	0.00	0.00	0.00
11,200.00	90.75	267.91	6,922.01	-304.64	-3,657.15	3,665.80	0.00	0.00	0.00
11,300.00	90.75	267.91	6,920.69	-308.29	-3,757.07	3,765.79	0.00	0.00	0.00
11,400.00	90.75	267.91	6,919.38	-311.93	-3,857.00	3,865.78	0.00	0.00	0.00
11,500.00	90.75	267.91	6,918.06	-315.58	-3,956.92	3,965.77	0.00	0.00	0.00
11,600.00	90.75	267.91	6,916.75	-319.22	-4,056.85	4,065.76	0.00	0.00	0.00
11,700.00	90.75	267.91	6,915.43	-322.87	-4,156.77	4,165.75	0.00	0.00	0.00
11,800.00	90.75	267.91	6,914.12	-326.51	-4,256.70	4,265.74	0.00	0.00	0.00
11,900.00	90.75	267.91	6,912.80	-330.16	-4,356.62	4,365.73	0.00	0.00	0.00
12,000.00	90.75	267.91	6,911.49	-333.80	-4,456.55	4,465.73	0.00	0.00	0.00
12,100.00	90.75	267.91	6,910.17	-337.45	-4,556.47	4,565.72	0.00	0.00	0.00
12,200.00	90.75	267.91	6,908.86	-341.09	-4,656.40	4,665.71	0.00	0.00	0.00
12,300.00	90.75	267.91	6,907.54	-344.74	-4,756.32	4,765.70	0.00	0.00	0.00
12,400.00	90.75	267.91	6,906.23	-348.38	-4,856.25	4,865.69	0.00	0.00	0.00
12,500.00	90.75	267.91	6,904.92	-352.03	-4,956.17	4,965.68	0.00	0.00	0.00
12,600.00	90.75	267.91	6,903.60	-355.67	-5,056.10	5,065.67	0.00	0.00	0.00
12,700.00	90.75	267.91	6,902.29	-359.32	-5,156.02	5,165.67	0.00	0.00	0.00
12,800.00	90.75	267.91	6,900.97	-362.96	-5,255.95	5,265.66	0.00	0.00	0.00
12,900.00	90.75	267.91	6,899.66	-366.61	-5,355.87	5,365.65	0.00	0.00	0.00
13,000.00	90.75	267.91	6,898.34	-370.25	-5,455.80	5,465.64	0.00	0.00	0.00
13,100.00	90.75	267.91	6,897.03	-373.90	-5,555.72	5,565.63	0.00	0.00	0.00
13,200.00	90.75	267.91	6,895.71	-377.54	-5,655.65	5,665.62	0.00	0.00	0.00
13,300.00	90.75	267.91	6,894.40	-381.19	-5,755.57	5,765.61	0.00	0.00	0.00
13,400.00	90.75	267.91	6,893.08	-384.83	-5,855.50	5,865.60	0.00	0.00	0.00
13,500.00	90.75	267.91	6,891.77	-388.48	-5,955.42	5,965.60	0.00	0.00	0.00
13,600.00	90.75	267.91	6,890.45	-392.12	-6,055.35	6,065.59	0.00	0.00	0.00
13,700.00	90.75	267.91	6,889.14	-395.77	-6,155.27	6,165.58	0.00	0.00	0.00
13,800.00	90.75	267.91	6,887.82	-399.41	-6,255.20	6,265.57	0.00	0.00	0.00
13,900.00	90.75	267.91	6,886.51	-403.06	-6,355.12	6,365.56	0.00	0.00	0.00
14,000.00	90.75	267.91	6,885.20	-406.70	-6,455.05	6,465.55	0.00	0.00	0.00
14,100.00	90.75	267.91	6,883.88	-410.35	-6,554.97	6,565.54	0.00	0.00	0.00
14,200.00	90.75	267.91	6,882.57	-413.99	-6,654.89	6,665.54	0.00	0.00	0.00
14,300.00	90.75	267.91	6,881.25	-417.64	-6,754.82	6,765.53	0.00	0.00	0.00
14,400.00	90.75	267.91	6,879.94	-421.28	-6,854.74	6,865.52	0.00	0.00	0.00
14,500.00	90.75	267.91	6,878.62	-424.93	-6,954.67	6,965.51	0.00	0.00	0.00
14,600.00	90.75	267.91	6,877.31	-428.57	-7,054.59	7,065.50	0.00	0.00	0.00
14,700.00	90.75	267.91	6,875.99	-432.22	-7,154.52	7,165.49	0.00	0.00	0.00
14,800.00	90.75	267.91	6,874.68	-435.86	-7,254.44	7,265.48	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 13N-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 13N-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)
14,900.00	90.75	267.91	6,873.36	-439.51	-7,354.37	7,365.48	0.00	0.00	0.00
15,000.00	90.75	267.91	6,872.05	-443.15	-7,454.29	7,465.47	0.00	0.00	0.00
15,100.00	90.75	267.91	6,870.73	-446.80	-7,554.22	7,565.46	0.00	0.00	0.00
15,200.00	90.75	267.91	6,869.42	-450.44	-7,654.14	7,665.45	0.00	0.00	0.00
15,300.00	90.75	267.91	6,868.11	-454.09	-7,754.07	7,765.44	0.00	0.00	0.00
15,400.00	90.75	267.91	6,866.79	-457.73	-7,853.99	7,865.43	0.00	0.00	0.00
15,460.11	90.75	267.91	6,866.00	-459.92	-7,914.06	7,925.54	0.00	0.00	0.00
TD at 15460.11 - PBHL_Boomerang 13N-6B-M(1572 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 13N- - plan hits target center - Point	0.00	0.00	6,866.00	-459.92	-7,914.06	1,400,885.08	3,185,960.32	40.4319010	-104.8320060
PLP_Boomerang 13N-6I - plan misses target center by 19.02ft at 7397.60ft MD (6971.99 TVD, -166.04 N, 142.39 E) - Point	0.00	0.00	6,972.00	-185.05	143.09	1,401,223.22	3,194,015.06	40.4326590	-104.8030630

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,761.74	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)	
200.00	200.00	0.00	0.00	Start Build 2.00
584.50	583.35	-4.03	25.45	Start 5720.19 hold at 584.50 MD
6,304.69	6,252.09	-123.77	781.46	Start DLS 9.00 TFO 168.79
7,396.89	6,972.00	-166.02	143.10	LP(1622 FNL 2487 FWL)
15,460.11	6,866.00	-459.92	-7,914.06	TD at 15460.11