



Project: SEC 5-T5N-R66W
Site: Boomerang 21-5
Well: Boomerang 33N-6C-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	
774.77	11.50	73.15	770.92	16.66	55.00	2.00	73.15	-55.63	
4507.81	11.50	73.15	4429.08	232.34	767.00	0.00	0.00	-775.81	
5082.58	0.00	0.00	5000.00	249.00	822.00	2.00	180.00	-831.44	
6476.01	0.00	0.00	6393.43	249.00	822.00	0.00	0.00	-831.44	
7483.86	90.71	267.67	7030.00	222.76	178.06	9.00	267.67	-186.97	
15589.88	90.71	267.67	6930.00	-107.28	-7920.62	0.00	0.00	7918.43	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

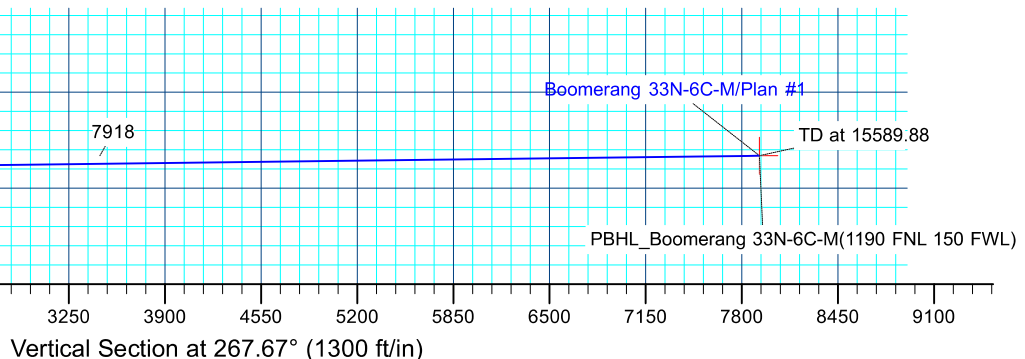
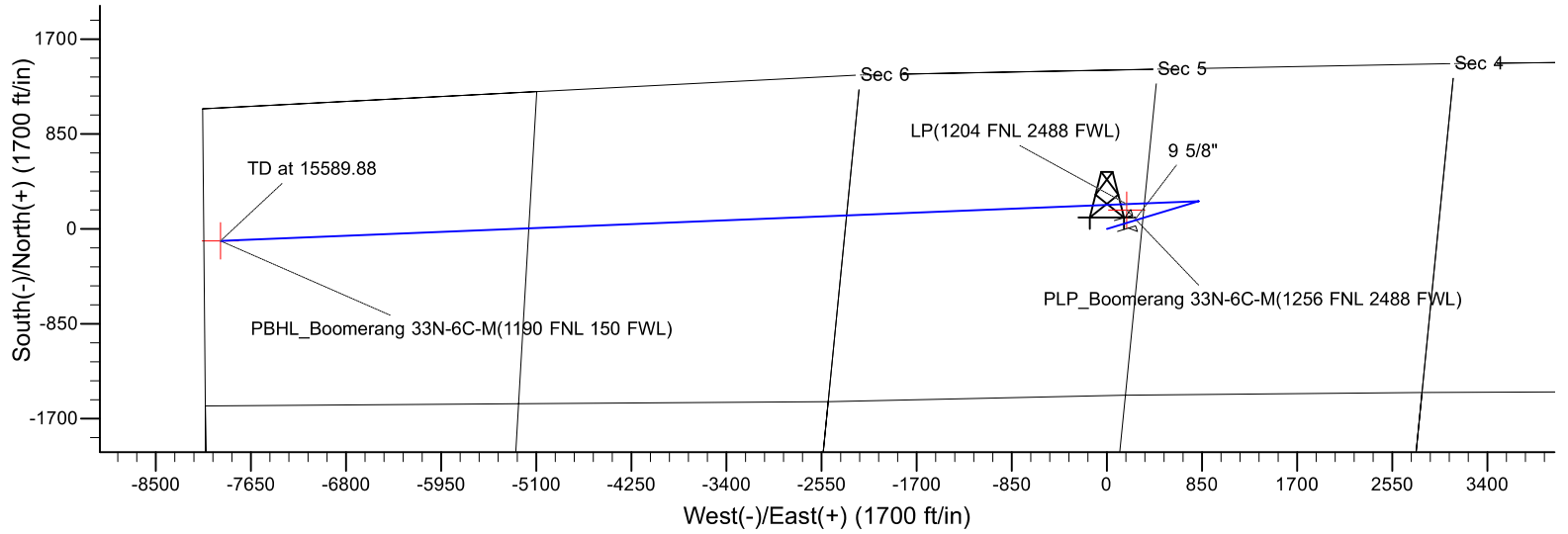
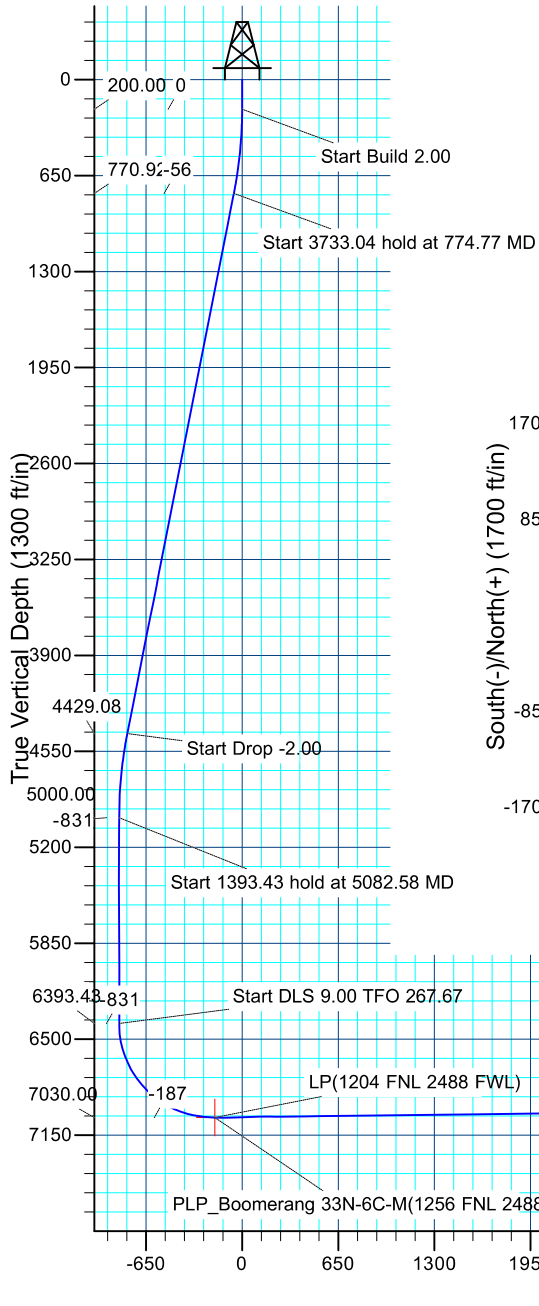
DESIGN TARGET DETAILS

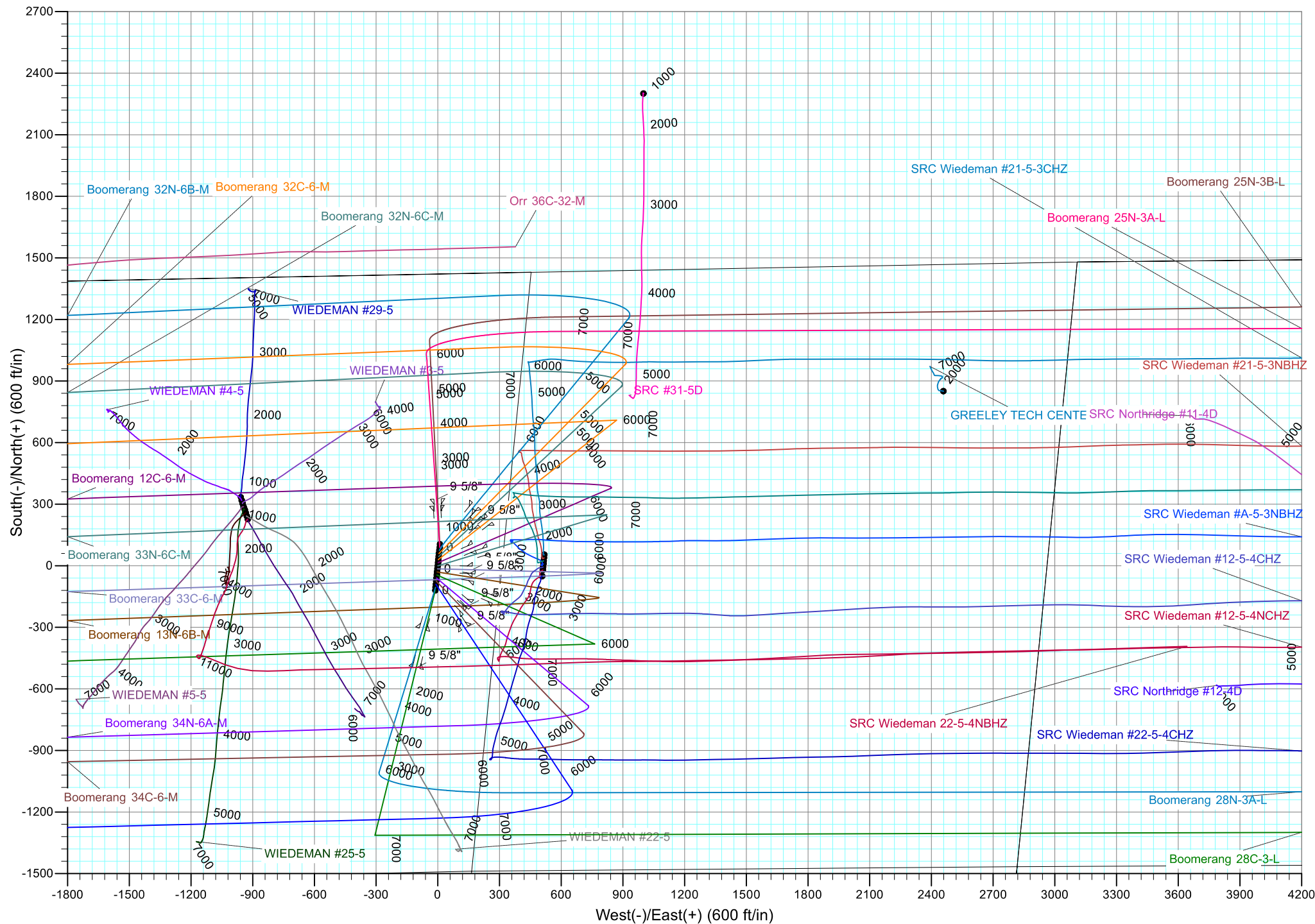
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	6930.00	-107.28	-7920.62	1401267.55	3185953.81	40.4329510	-104.8320190	Point
- plan hits target center								
PLP	7030.00	169.05	178.16	1401607.48	3194050.17	40.4337130	-104.8029260	Point
- plan misses target center by 53.67ft at 7485.95ft MD (7029.98 TVD, 222.67 N, 175.97 E)								

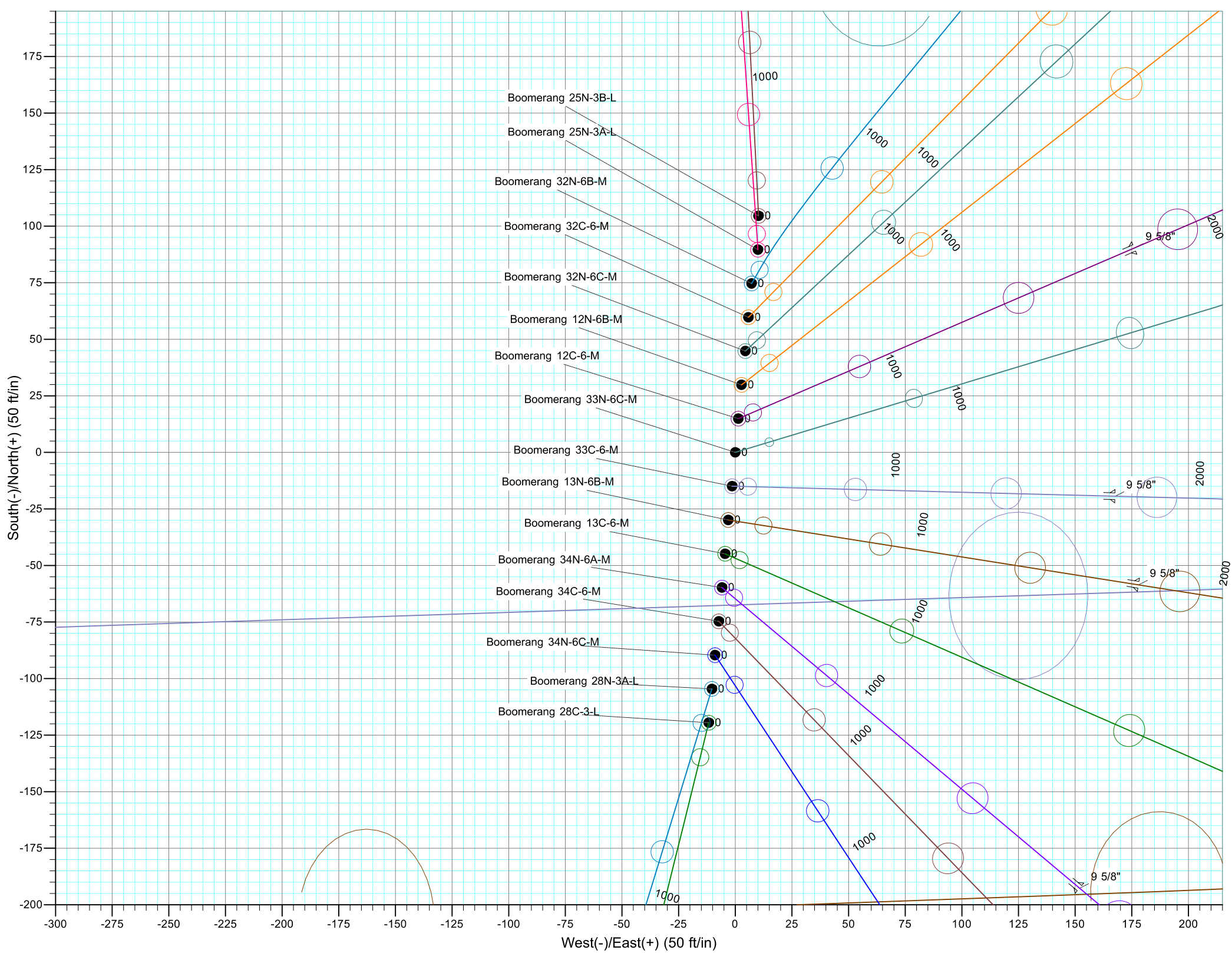
CASING DETAILS

TVD	MD	Name	Size
1750.00	1773.89	9 5/8"	9.625

Compass rose showing True North (T) and Magnetic North (M).
Azimuths to True North
Magnetic North: 8.26°
Magnetic Field
Strength: 52430.0snT
Dip Angle: 66.88°
Date: 4/1/2017
Model: IGRF2015









Synergy Resources Corporation

SEC 5-T5N-R66W

Boomerang 21-5

Boomerang 33N-6C-M

OH

Plan: Plan #1

Standard Planning Report

05 April, 2017

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 33N-6C-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 33N-6C-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 33N-6C-M, 1421 FNL 2327 FWL					
Well Position	+N/-S	-104.57 ft	Northing:	1,401,437.04 ft	Latitude:	40.4332490
	+E/-W	-10.30 ft	Easting:	3,193,873.35 ft	Longitude:	-104.8035660
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	267.67

Plan Survey Tool Program	Date	4/5/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	15,589.88 Plan #1 (OH)	MWD	
			OWSG MWD - Standard	

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	
774.77	11.50	73.15	770.92	16.66	55.00	2.00	2.00	0.00	73.15	
4,507.81	11.50	73.15	4,429.08	232.34	767.00	0.00	0.00	0.00	0.00	
5,082.58	0.00	0.00	5,000.00	249.00	822.00	2.00	-2.00	0.00	180.00	
6,476.01	0.00	0.00	6,393.43	249.00	822.00	0.00	0.00	0.00	0.00	
7,483.86	90.71	267.67	7,030.00	222.76	178.06	9.00	9.00	-9.16	267.67	
15,589.88	90.71	267.67	6,930.00	-107.28	-7,920.62	0.00	0.00	0.00	0.00	PBHL_Boomerang 33

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 33N-6C-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 33N-6C-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	73.15	299.98	0.51	1.67	-1.69	2.00	2.00	0.00
400.00	4.00	73.15	399.84	2.02	6.68	-6.76	2.00	2.00	0.00
500.00	6.00	73.15	499.45	4.55	15.02	-15.19	2.00	2.00	0.00
600.00	8.00	73.15	598.70	8.08	26.68	-26.99	2.00	2.00	0.00
700.00	10.00	73.15	697.47	12.62	41.65	-42.13	2.00	2.00	0.00
774.77	11.50	73.15	770.92	16.66	55.00	-55.63	2.00	2.00	0.00
Start 3733.04 hold at 774.77 MD									
800.00	11.50	73.15	795.65	18.12	59.81	-60.50	0.00	0.00	0.00
900.00	11.50	73.15	893.64	23.90	78.88	-79.79	0.00	0.00	0.00
1,000.00	11.50	73.15	991.63	29.67	97.96	-99.08	0.00	0.00	0.00
1,100.00	11.50	73.15	1,089.63	35.45	117.03	-118.37	0.00	0.00	0.00
1,200.00	11.50	73.15	1,187.62	41.23	136.10	-137.67	0.00	0.00	0.00
1,300.00	11.50	73.15	1,285.62	47.01	155.18	-156.96	0.00	0.00	0.00
1,400.00	11.50	73.15	1,383.61	52.78	174.25	-176.25	0.00	0.00	0.00
1,500.00	11.50	73.15	1,481.60	58.56	193.32	-195.54	0.00	0.00	0.00
1,600.00	11.50	73.15	1,579.60	64.34	212.39	-214.83	0.00	0.00	0.00
1,700.00	11.50	73.15	1,677.59	70.12	231.47	-234.13	0.00	0.00	0.00
1,773.89	11.50	73.15	1,750.00	74.39	245.56	-248.38	0.00	0.00	0.00
9 5/8"									
1,800.00	11.50	73.15	1,775.59	75.89	250.54	-253.42	0.00	0.00	0.00
1,900.00	11.50	73.15	1,873.58	81.67	269.61	-272.71	0.00	0.00	0.00
2,000.00	11.50	73.15	1,971.57	87.45	288.69	-292.00	0.00	0.00	0.00
2,100.00	11.50	73.15	2,069.57	93.23	307.76	-311.30	0.00	0.00	0.00
2,200.00	11.50	73.15	2,167.56	99.00	326.83	-330.59	0.00	0.00	0.00
2,300.00	11.50	73.15	2,265.56	104.78	345.91	-349.88	0.00	0.00	0.00
2,400.00	11.50	73.15	2,363.55	110.56	364.98	-369.17	0.00	0.00	0.00
2,500.00	11.50	73.15	2,461.54	116.34	384.05	-388.46	0.00	0.00	0.00
2,600.00	11.50	73.15	2,559.54	122.11	403.12	-407.76	0.00	0.00	0.00
2,700.00	11.50	73.15	2,657.53	127.89	422.20	-427.05	0.00	0.00	0.00
2,800.00	11.50	73.15	2,755.53	133.67	441.27	-446.34	0.00	0.00	0.00
2,900.00	11.50	73.15	2,853.52	139.45	460.34	-465.63	0.00	0.00	0.00
3,000.00	11.50	73.15	2,951.52	145.22	479.42	-484.92	0.00	0.00	0.00
3,100.00	11.50	73.15	3,049.51	151.00	498.49	-504.22	0.00	0.00	0.00
3,200.00	11.50	73.15	3,147.50	156.78	517.56	-523.51	0.00	0.00	0.00
3,300.00	11.50	73.15	3,245.50	162.56	536.64	-542.80	0.00	0.00	0.00
3,400.00	11.50	73.15	3,343.49	168.34	555.71	-562.09	0.00	0.00	0.00
3,500.00	11.50	73.15	3,441.49	174.11	574.78	-581.39	0.00	0.00	0.00
3,600.00	11.50	73.15	3,539.48	179.89	593.86	-600.68	0.00	0.00	0.00
3,700.00	11.50	73.15	3,637.47	185.67	612.93	-619.97	0.00	0.00	0.00
3,800.00	11.50	73.15	3,735.47	191.45	632.00	-639.26	0.00	0.00	0.00
3,900.00	11.50	73.15	3,833.46	197.22	651.07	-658.55	0.00	0.00	0.00
4,000.00	11.50	73.15	3,931.46	203.00	670.15	-677.85	0.00	0.00	0.00
4,100.00	11.50	73.15	4,029.45	208.78	689.22	-697.14	0.00	0.00	0.00
4,200.00	11.50	73.15	4,127.44	214.56	708.29	-716.43	0.00	0.00	0.00
4,300.00	11.50	73.15	4,225.44	220.33	727.37	-735.72	0.00	0.00	0.00
4,400.00	11.50	73.15	4,323.43	226.11	746.44	-755.02	0.00	0.00	0.00
4,500.00	11.50	73.15	4,421.43	231.89	765.51	-774.31	0.00	0.00	0.00
4,507.81	11.50	73.15	4,429.08	232.34	767.00	-775.81	0.00	0.00	0.00
Start Drop -2.00									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 33N-6C-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 33N-6C-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	9.65	73.15	4,519.70	237.24	783.19	-792.19	2.00	-2.00	0.00
4,700.00	7.65	73.15	4,618.56	241.61	797.59	-806.75	2.00	-2.00	0.00
4,800.00	5.65	73.15	4,717.88	244.96	808.67	-817.96	2.00	-2.00	0.00
4,900.00	3.65	73.15	4,817.54	247.31	816.43	-825.81	2.00	-2.00	0.00
5,000.00	1.65	73.15	4,917.43	248.65	820.86	-830.29	2.00	-2.00	0.00
5,082.58	0.00	0.00	5,000.00	249.00	822.00	-831.44	2.00	-2.00	0.00
Start 1393.43 hold at 5082.58 MD									
5,100.00	0.00	0.00	5,017.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,200.00	0.00	0.00	5,117.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,300.00	0.00	0.00	5,217.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,400.00	0.00	0.00	5,317.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,500.00	0.00	0.00	5,417.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,600.00	0.00	0.00	5,517.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,700.00	0.00	0.00	5,617.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,800.00	0.00	0.00	5,717.42	249.00	822.00	-831.44	0.00	0.00	0.00
5,900.00	0.00	0.00	5,817.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,000.00	0.00	0.00	5,917.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,100.00	0.00	0.00	6,017.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,200.00	0.00	0.00	6,117.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,300.00	0.00	0.00	6,217.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,400.00	0.00	0.00	6,317.42	249.00	822.00	-831.44	0.00	0.00	0.00
6,476.01	0.00	0.00	6,393.43	249.00	822.00	-831.44	0.00	0.00	0.00
Start DLS 9.00 TFO 267.67									
6,500.00	2.16	267.67	6,417.42	248.98	821.55	-830.99	9.00	9.00	0.00
6,600.00	11.16	267.67	6,516.64	248.51	809.97	-819.41	9.00	9.00	0.00
6,700.00	20.16	267.67	6,612.83	247.41	783.03	-792.44	9.00	9.00	0.00
6,800.00	29.16	267.67	6,703.62	245.71	741.39	-750.76	9.00	9.00	0.00
6,900.00	38.16	267.67	6,786.76	243.46	686.07	-695.40	9.00	9.00	0.00
7,000.00	47.16	267.67	6,860.23	240.70	618.43	-627.70	9.00	9.00	0.00
7,100.00	56.16	267.67	6,922.20	237.51	540.14	-549.35	9.00	9.00	0.00
7,200.00	65.16	267.67	6,971.15	233.97	453.13	-462.27	9.00	9.00	0.00
7,300.00	74.16	267.67	7,005.87	230.15	359.54	-368.60	9.00	9.00	0.00
7,400.00	83.16	267.67	7,025.52	226.17	261.67	-270.65	9.00	9.00	0.00
7,483.86	90.71	267.67	7,030.00	222.76	178.06	-186.97	9.00	9.00	0.00
LP(1204 FNL 2488 FWL)									
7,485.95	90.71	267.67	7,029.98	222.67	175.97	-184.88	0.00	0.00	0.00
PLP_Boomerang 33N-6C-M(1256 FNL 2488 FWL)									
7,500.00	90.71	267.67	7,029.80	222.10	161.94	-170.83	0.00	0.00	0.00
7,600.00	90.71	267.67	7,028.57	218.03	62.03	-70.84	0.00	0.00	0.00
7,700.00	90.71	267.67	7,027.34	213.96	-37.88	29.15	0.00	0.00	0.00
7,800.00	90.71	267.67	7,026.10	209.89	-137.79	129.14	0.00	0.00	0.00
7,900.00	90.71	267.67	7,024.87	205.82	-237.70	229.14	0.00	0.00	0.00
8,000.00	90.71	267.67	7,023.63	201.74	-337.61	329.13	0.00	0.00	0.00
8,100.00	90.71	267.67	7,022.40	197.67	-437.52	429.12	0.00	0.00	0.00
8,200.00	90.71	267.67	7,021.17	193.60	-537.43	529.11	0.00	0.00	0.00
8,300.00	90.71	267.67	7,019.93	189.53	-637.34	629.11	0.00	0.00	0.00
8,400.00	90.71	267.67	7,018.70	185.46	-737.25	729.10	0.00	0.00	0.00
8,500.00	90.71	267.67	7,017.47	181.39	-837.16	829.09	0.00	0.00	0.00
8,600.00	90.71	267.67	7,016.23	177.31	-937.07	929.08	0.00	0.00	0.00
8,700.00	90.71	267.67	7,015.00	173.24	-1,036.98	1,029.07	0.00	0.00	0.00
8,800.00	90.71	267.67	7,013.76	169.17	-1,136.88	1,129.07	0.00	0.00	0.00
8,900.00	90.71	267.67	7,012.53	165.10	-1,236.79	1,229.06	0.00	0.00	0.00
9,000.00	90.71	267.67	7,011.30	161.03	-1,336.70	1,329.05	0.00	0.00	0.00

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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 33N-6C-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)	
9,100.00	90.71	267.67	7,010.06	156.96	-1,436.61	1,429.04	0.00	0.00	0.00	
9,200.00	90.71	267.67	7,008.83	152.89	-1,536.52	1,529.04	0.00	0.00	0.00	
9,300.00	90.71	267.67	7,007.60	148.81	-1,636.43	1,629.03	0.00	0.00	0.00	
9,400.00	90.71	267.67	7,006.36	144.74	-1,736.34	1,729.02	0.00	0.00	0.00	
9,500.00	90.71	267.67	7,005.13	140.67	-1,836.25	1,829.01	0.00	0.00	0.00	
9,600.00	90.71	267.67	7,003.90	136.60	-1,936.16	1,929.01	0.00	0.00	0.00	
9,700.00	90.71	267.67	7,002.66	132.53	-2,036.07	2,029.00	0.00	0.00	0.00	
9,800.00	90.71	267.67	7,001.43	128.46	-2,135.98	2,128.99	0.00	0.00	0.00	
9,900.00	90.71	267.67	7,000.19	124.39	-2,235.89	2,228.98	0.00	0.00	0.00	
10,000.00	90.71	267.67	6,998.96	120.31	-2,335.80	2,328.98	0.00	0.00	0.00	
10,100.00	90.71	267.67	6,997.73	116.24	-2,435.71	2,428.97	0.00	0.00	0.00	
10,200.00	90.71	267.67	6,996.49	112.17	-2,535.62	2,528.96	0.00	0.00	0.00	
10,300.00	90.71	267.67	6,995.26	108.10	-2,635.53	2,628.95	0.00	0.00	0.00	
10,400.00	90.71	267.67	6,994.03	104.03	-2,735.44	2,728.95	0.00	0.00	0.00	
10,500.00	90.71	267.67	6,992.79	99.96	-2,835.35	2,828.94	0.00	0.00	0.00	
10,600.00	90.71	267.67	6,991.56	95.88	-2,935.26	2,928.93	0.00	0.00	0.00	
10,700.00	90.71	267.67	6,990.33	91.81	-3,035.16	3,028.92	0.00	0.00	0.00	
10,800.00	90.71	267.67	6,989.09	87.74	-3,135.07	3,128.91	0.00	0.00	0.00	
10,900.00	90.71	267.67	6,987.86	83.67	-3,234.98	3,228.91	0.00	0.00	0.00	
11,000.00	90.71	267.67	6,986.62	79.60	-3,334.89	3,328.90	0.00	0.00	0.00	
11,100.00	90.71	267.67	6,985.39	75.53	-3,434.80	3,428.89	0.00	0.00	0.00	
11,200.00	90.71	267.67	6,984.16	71.46	-3,534.71	3,528.88	0.00	0.00	0.00	
11,300.00	90.71	267.67	6,982.92	67.38	-3,634.62	3,628.88	0.00	0.00	0.00	
11,400.00	90.71	267.67	6,981.69	63.31	-3,734.53	3,728.87	0.00	0.00	0.00	
11,500.00	90.71	267.67	6,980.46	59.24	-3,834.44	3,828.86	0.00	0.00	0.00	
11,600.00	90.71	267.67	6,979.22	55.17	-3,934.35	3,928.85	0.00	0.00	0.00	
11,700.00	90.71	267.67	6,977.99	51.10	-4,034.26	4,028.85	0.00	0.00	0.00	
11,800.00	90.71	267.67	6,976.75	47.03	-4,134.17	4,128.84	0.00	0.00	0.00	
11,900.00	90.71	267.67	6,975.52	42.96	-4,234.08	4,228.83	0.00	0.00	0.00	
12,000.00	90.71	267.67	6,974.29	38.88	-4,333.99	4,328.82	0.00	0.00	0.00	
12,100.00	90.71	267.67	6,973.05	34.81	-4,433.90	4,428.82	0.00	0.00	0.00	
12,200.00	90.71	267.67	6,971.82	30.74	-4,533.81	4,528.81	0.00	0.00	0.00	
12,300.00	90.71	267.67	6,970.59	26.67	-4,633.72	4,628.80	0.00	0.00	0.00	
12,400.00	90.71	267.67	6,969.35	22.60	-4,733.63	4,728.79	0.00	0.00	0.00	
12,500.00	90.71	267.67	6,968.12	18.53	-4,833.53	4,828.79	0.00	0.00	0.00	
12,600.00	90.71	267.67	6,966.89	14.45	-4,933.44	4,928.78	0.00	0.00	0.00	
12,700.00	90.71	267.67	6,965.65	10.38	-5,033.35	5,028.77	0.00	0.00	0.00	
12,800.00	90.71	267.67	6,964.42	6.31	-5,133.26	5,128.76	0.00	0.00	0.00	
12,900.00	90.71	267.67	6,963.18	2.24	-5,233.17	5,228.76	0.00	0.00	0.00	
13,000.00	90.71	267.67	6,961.95	-1.83	-5,333.08	5,328.75	0.00	0.00	0.00	
13,100.00	90.71	267.67	6,960.72	-5.90	-5,432.99	5,428.74	0.00	0.00	0.00	
13,200.00	90.71	267.67	6,959.48	-9.97	-5,532.90	5,528.73	0.00	0.00	0.00	
13,300.00	90.71	267.67	6,958.25	-14.05	-5,632.81	5,628.72	0.00	0.00	0.00	
13,400.00	90.71	267.67	6,957.02	-18.12	-5,732.72	5,728.72	0.00	0.00	0.00	
13,500.00	90.71	267.67	6,955.78	-22.19	-5,832.63	5,828.71	0.00	0.00	0.00	
13,600.00	90.71	267.67	6,954.55	-26.26	-5,932.54	5,928.70	0.00	0.00	0.00	
13,700.00	90.71	267.67	6,953.32	-30.33	-6,032.45	6,028.69	0.00	0.00	0.00	
13,800.00	90.71	267.67	6,952.08	-34.40	-6,132.36	6,128.69	0.00	0.00	0.00	
13,900.00	90.71	267.67	6,950.85	-38.47	-6,232.27	6,228.68	0.00	0.00	0.00	
14,000.00	90.71	267.67	6,949.61	-42.55	-6,332.18	6,328.67	0.00	0.00	0.00	
14,100.00	90.71	267.67	6,948.38	-46.62	-6,432.09	6,428.66	0.00	0.00	0.00	
14,200.00	90.71	267.67	6,947.15	-50.69	-6,532.00	6,528.66	0.00	0.00	0.00	
14,300.00	90.71	267.67	6,945.91	-54.76	-6,631.91	6,628.65	0.00	0.00	0.00	
14,400.00	90.71	267.67	6,944.68	-58.83	-6,731.81	6,728.64	0.00	0.00	0.00	

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Boomerang 33N-6C-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 33N-6C-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)	
14,500.00	90.71	267.67	6,943.45	-62.90	-6,831.72	6,828.63	0.00	0.00	0.00	
14,600.00	90.71	267.67	6,942.21	-66.98	-6,931.63	6,928.63	0.00	0.00	0.00	
14,700.00	90.71	267.67	6,940.98	-71.05	-7,031.54	7,028.62	0.00	0.00	0.00	
14,800.00	90.71	267.67	6,939.74	-75.12	-7,131.45	7,128.61	0.00	0.00	0.00	
14,900.00	90.71	267.67	6,938.51	-79.19	-7,231.36	7,228.60	0.00	0.00	0.00	
15,000.00	90.71	267.67	6,937.28	-83.26	-7,331.27	7,328.60	0.00	0.00	0.00	
15,100.00	90.71	267.67	6,936.04	-87.33	-7,431.18	7,428.59	0.00	0.00	0.00	
15,200.00	90.71	267.67	6,934.81	-91.40	-7,531.09	7,528.58	0.00	0.00	0.00	
15,300.00	90.71	267.67	6,933.58	-95.48	-7,631.00	7,628.57	0.00	0.00	0.00	
15,400.00	90.71	267.67	6,932.34	-99.55	-7,730.91	7,728.56	0.00	0.00	0.00	
15,500.00	90.71	267.67	6,931.11	-103.62	-7,830.82	7,828.56	0.00	0.00	0.00	
15,589.88	90.71	267.67	6,930.00	-107.28	-7,920.62	7,918.43	0.00	0.00	0.00	
TD at 15589.88 - PBHL_Boomerang 33N-6C-M(1190 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 33N- - plan hits target center - Point	0.00	0.00	6,930.00	-107.28	-7,920.62	1,401,267.55	3,185,953.82	40.4329510	-104.8320190
PLP_Boomerang 33N-6C-M - plan misses target center by 53.67ft at 7485.95ft MD (7029.98 TVD, 222.67 N, 175.97 E) - Point	0.00	0.00	7,030.00	169.05	178.16	1,401,607.48	3,194,050.17	40.4337130	-104.8029260

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,773.89	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	
774.77	770.92	16.66	55.00	Start 3733.04 hold at 774.77 MD	
4,507.81	4,429.08	232.34	767.00	Start Drop -2.00	
5,082.58	5,000.00	249.00	822.00	Start 1393.43 hold at 5082.58 MD	
6,476.01	6,393.43	249.00	822.00	Start DLS 9.00 TFO 267.67	
7,483.86	7,030.00	222.76	178.06	LP(1204 FNL 2488 FWL)	
15,589.88	6,930.00	-107.28	-7,920.62	TD at 15589.88	