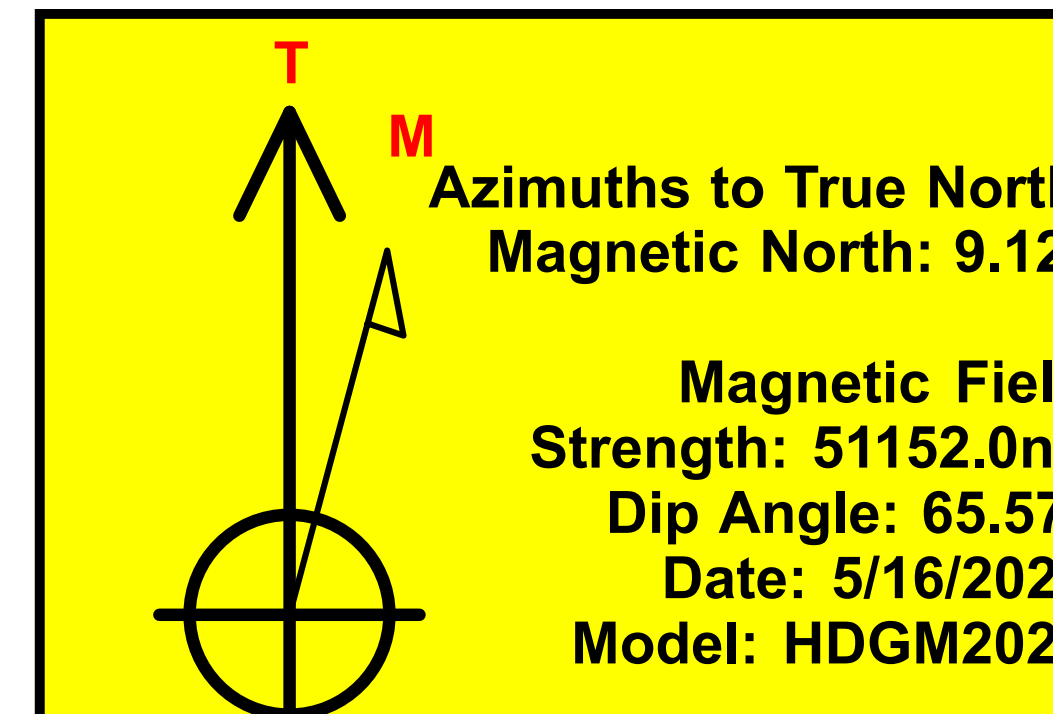


Sec 3, T6S, R94W
NR 441-3
Q220475 & RM-220443
Plan 4

Company Name: Terra Energy Partners, LLP
NR 441-3
Garfield County, CO (Nad 83)
Rig: KB=30' @ 6760.00usft (H&P #329)
Created by: Chase Chambers
Date: 3:19, May 23 2022

PROJECT DETAILS: Garfield County, CO (Nad 83)

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



WELL DETAILS: NR 441-3

Ground Elevation: 6730.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	NR 441-3
0.00	0.00	1635524.40	2329264.80	39.554188	-107.879042	

DESIGN TARGET DETAILS

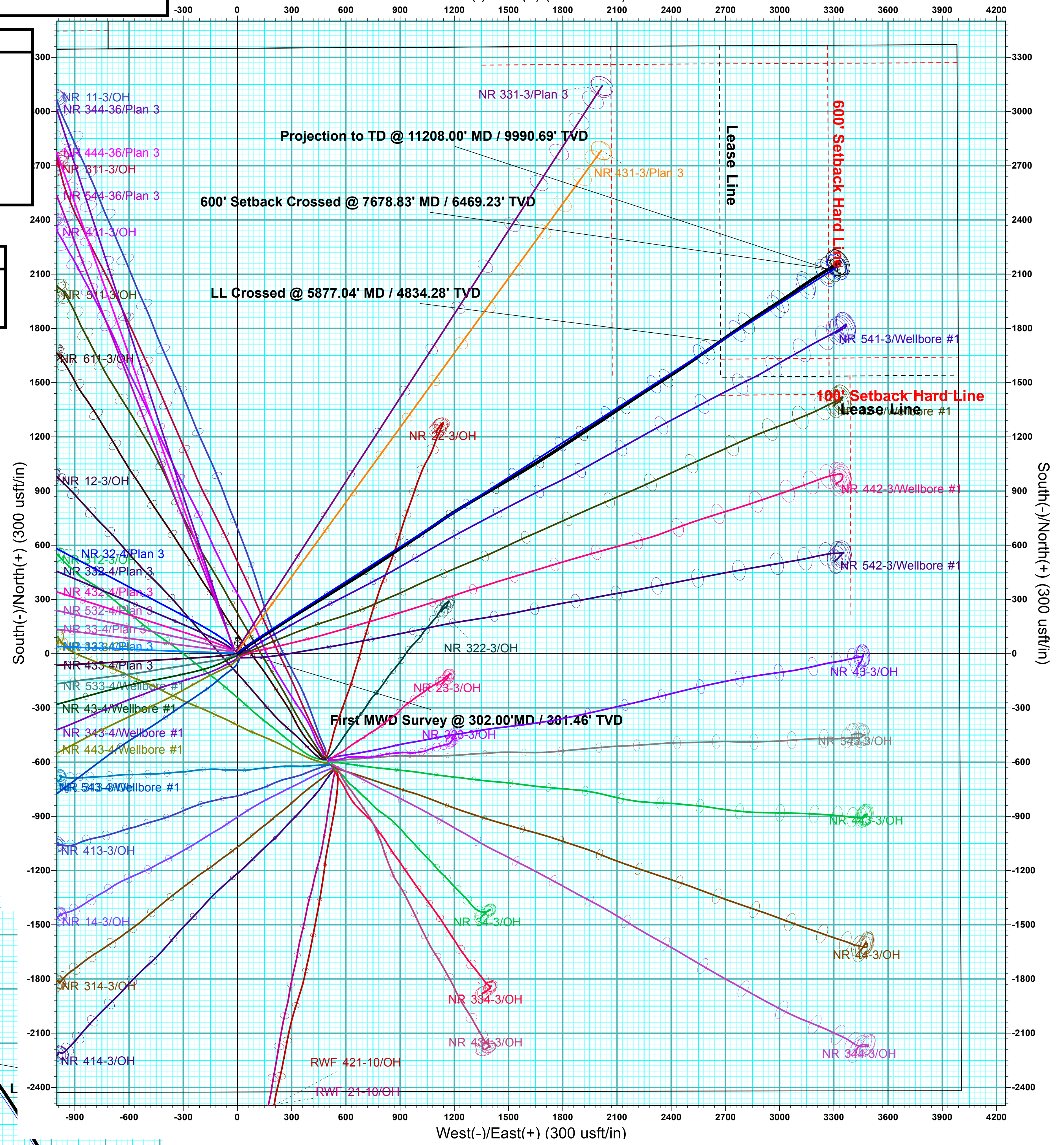
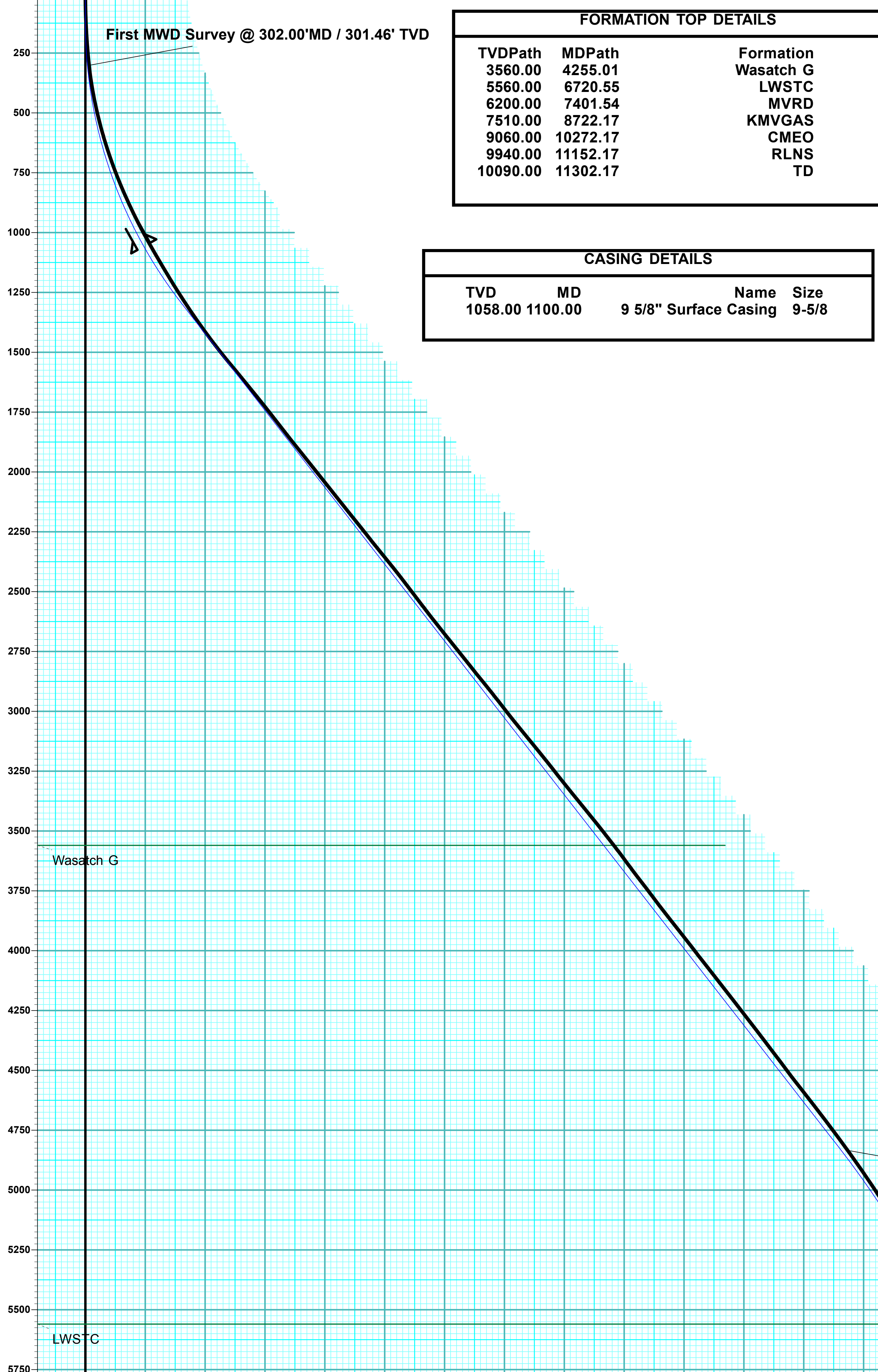
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
NR 441-3 - VP	7510.00	2141.58	3320.66	1637578.30	2332640.40	39.560067	-107.867265
NR 441-3 - PBHL	10090.00	2141.58	3320.66	1637578.30	2332640.40	39.560067	-107.867265

DESIGN ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 3.00
286.67	5.00	45.00	286.46	5.14	5.14	7.10	7.27	Start DLS 3.00 TFO 13.96
1387.67	37.90	57.36	1297.41	227.67	332.94	403.19	403.70	Start 4464.69 hold at 1387.67 MD
5852.36	37.90	57.36	4820.45	1707.03	2642.30	3145.74	3146.26	Start Drop -1.50
7708.73	10.05	57.36	6500.00	2109.95	3271.27	3892.70	3893.12	600' Setback @ 7708.73' MD / 6500.00' TVD
8378.99	0.00	0.00	7166.82	2141.58	3320.66	3951.35	3951.87	Start 2923.18 hold at 8378.99 MD
11302.17	0.00	0.00	10090.00	2141.58	3320.66	3951.35	3951.87	TD at 11302.17

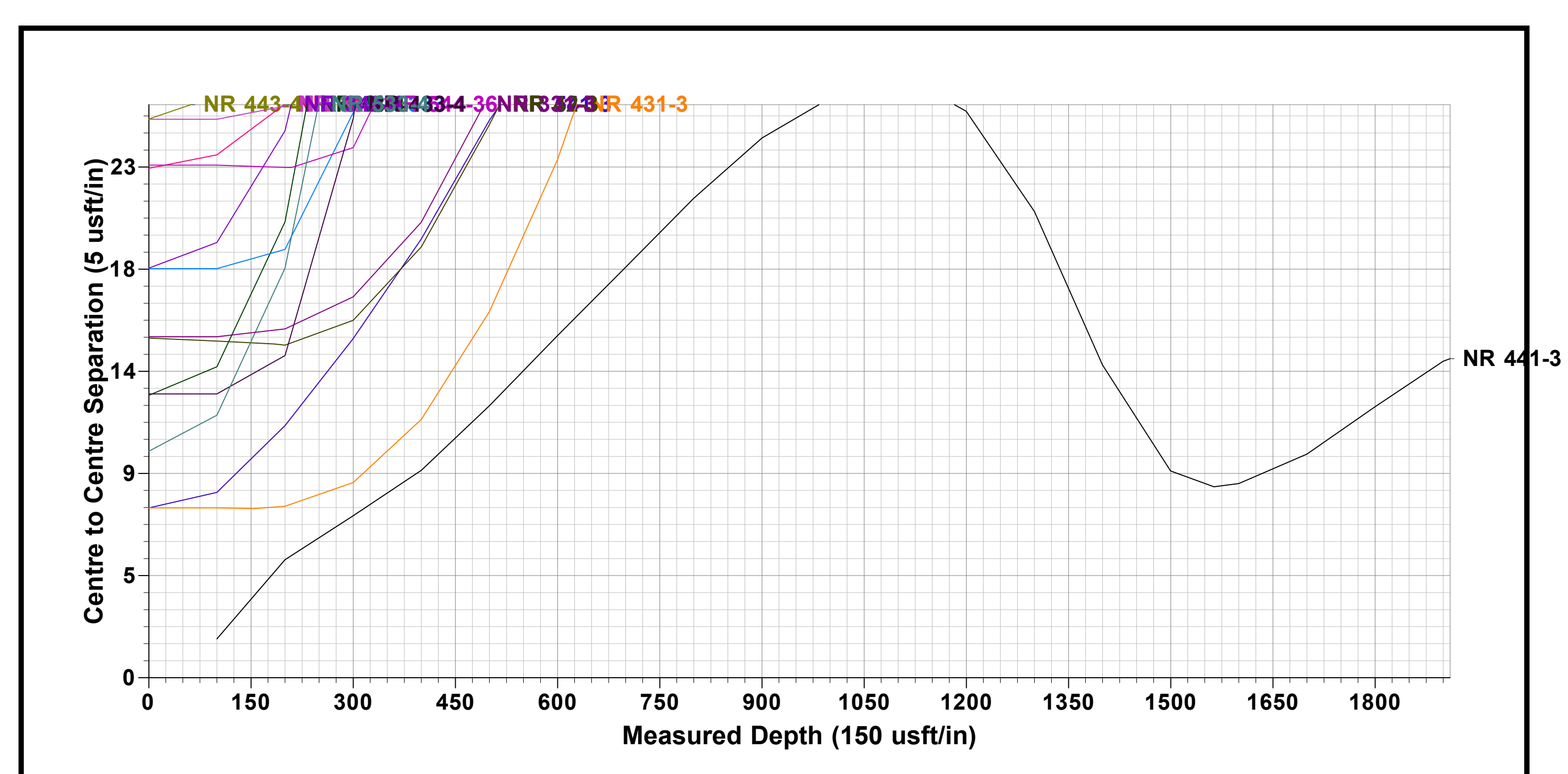
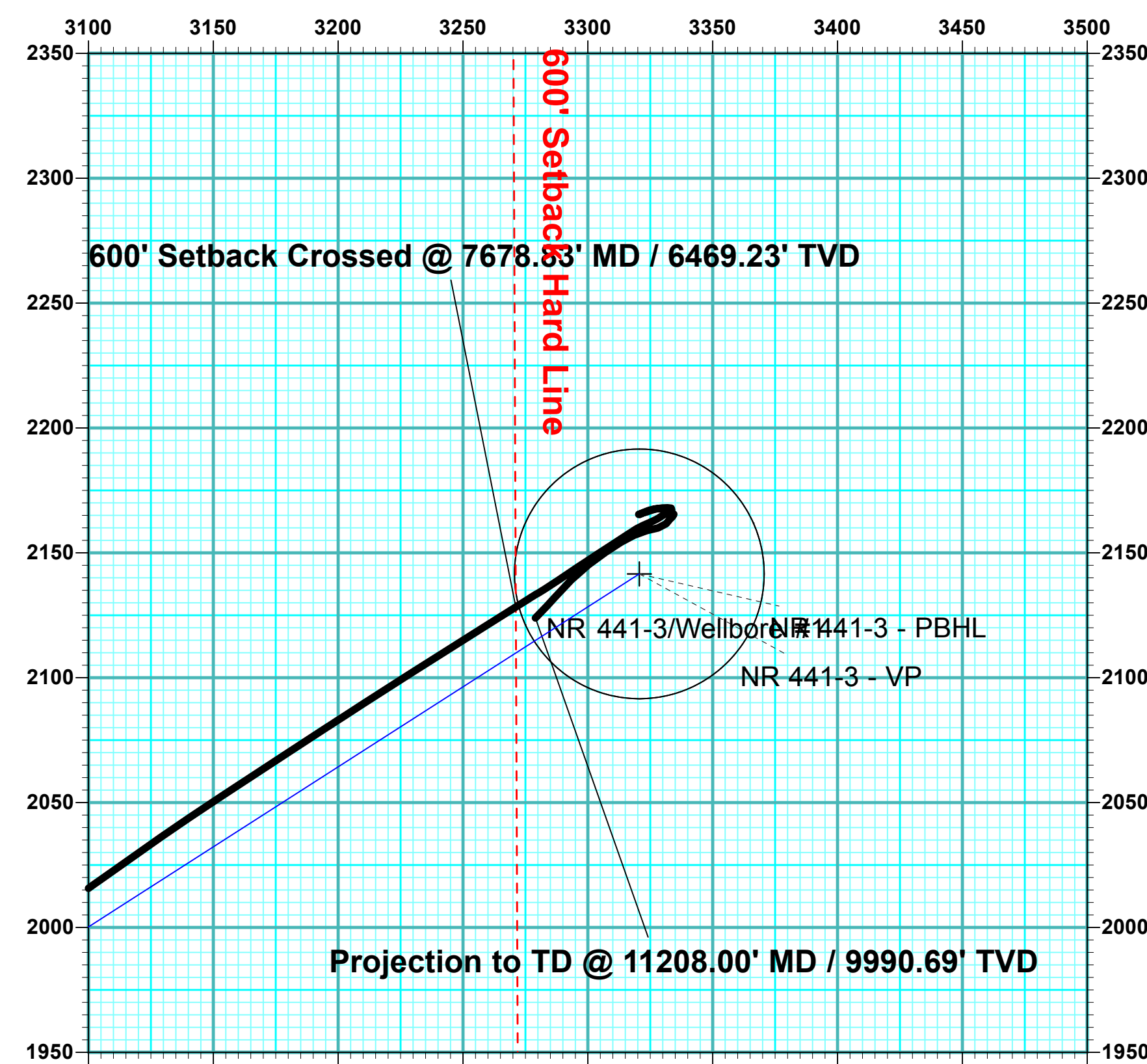
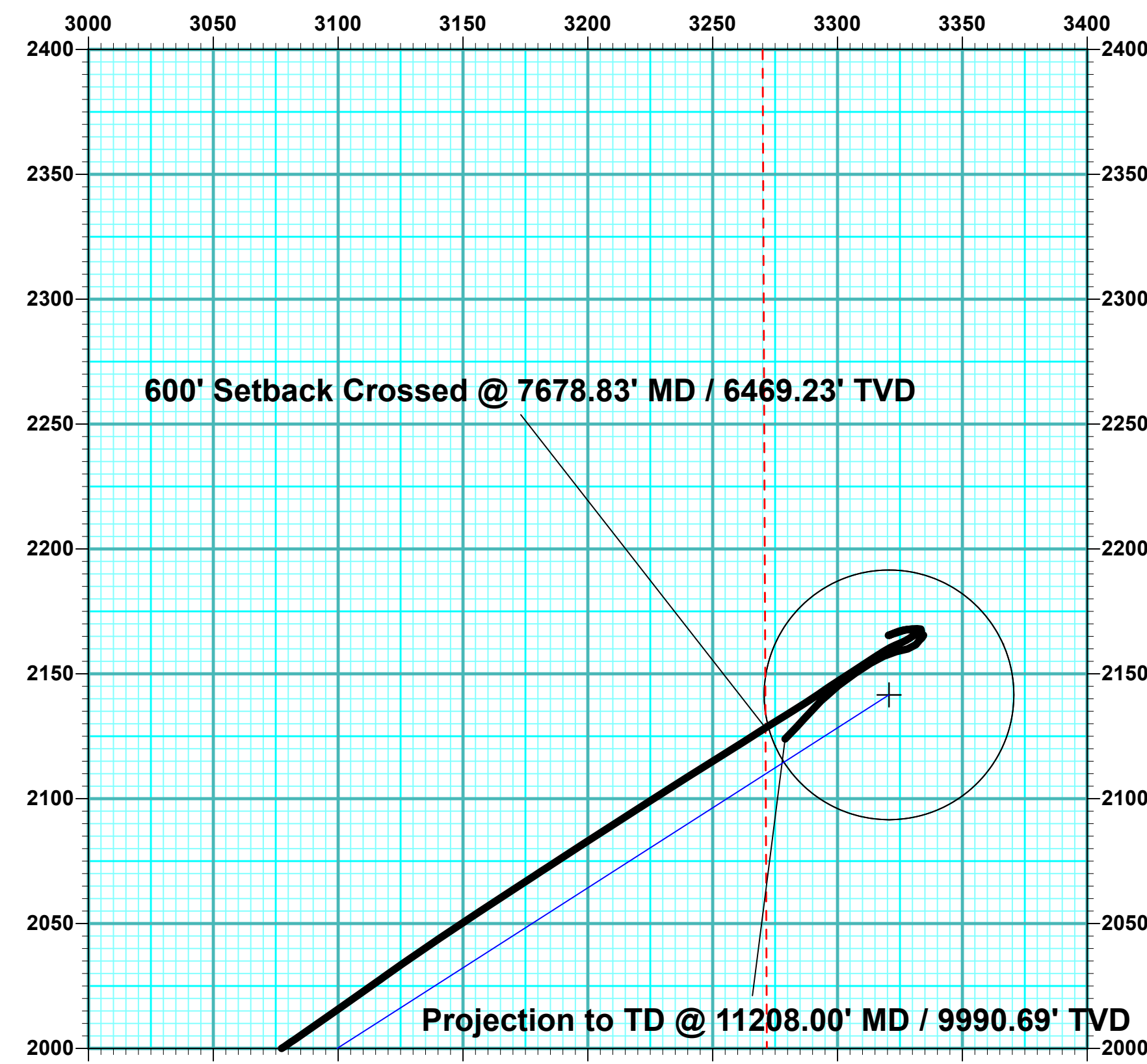
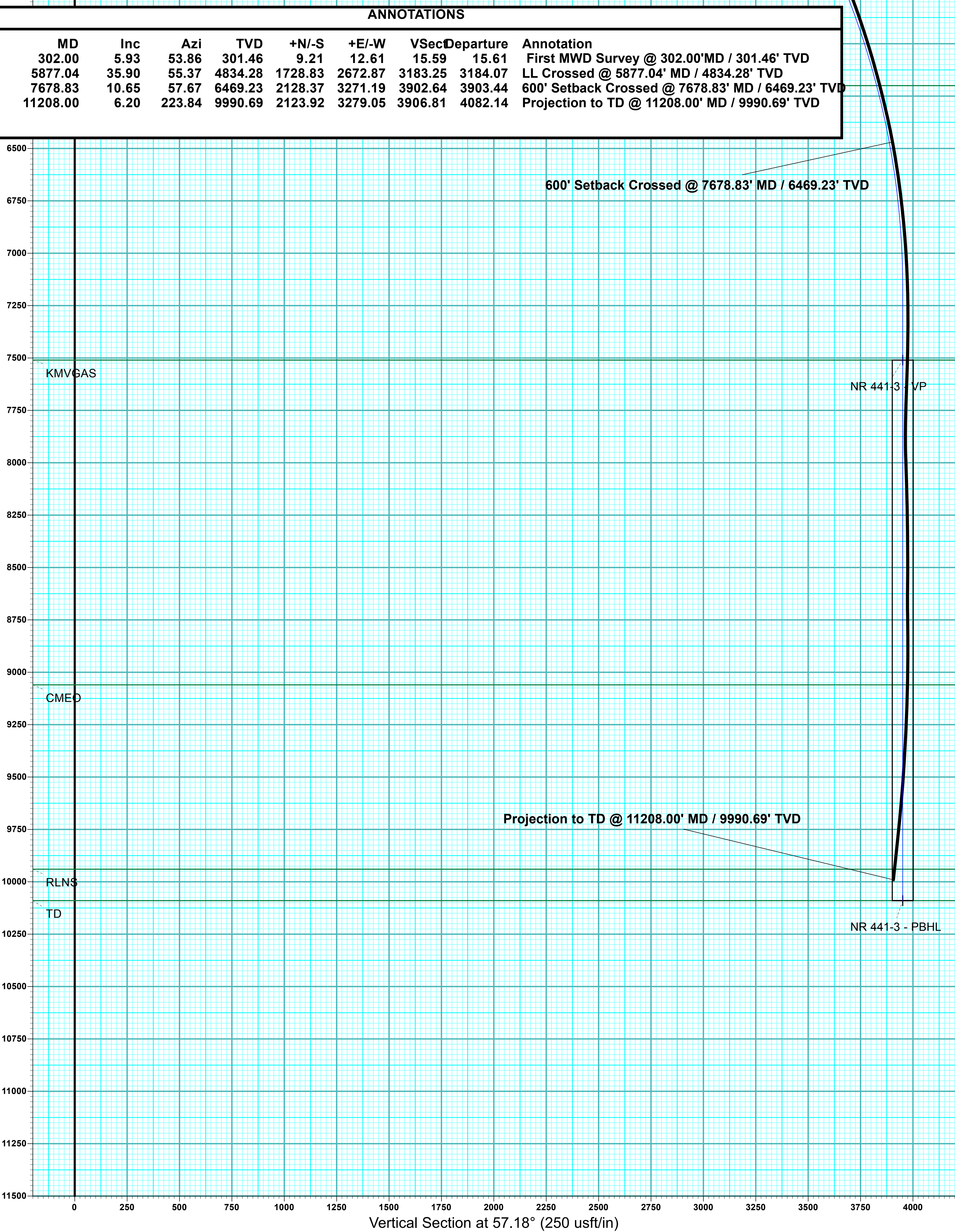
SLOTS

Slot Name	+N/-S	+E/-W	Northing	Easting
NR 32-4	34.76	-28.62	1635559.90	2329237.10
NR 331-3	11.55	-9.61	1635536.20	2329255.50
NR 332-4	28.36	-36.36	1635537.70	2329229.20
NR 333-4	8.25	-17.24	1635530.10	2329247.70
NR 33-4	11.03	-22.00	1635536.00	2329243.10
NR 343-4	-17.96	1.77	1635506.40	2329266.10
NR 344-36	28.98	-23.87	1635554.00	2329241.70
NR 42-3	-11.56	9.51	1635512.60	2329274.00
NR 431-3	5.78	-4.75	1635530.30	2329260.20
NR 432-4	22.58	-31.60	1635547.80	2329233.80
NR 433-4	-0.53	-12.49	1635524.20	2329252.30
NR 43-4	-12.08	-2.98	1635512.40	2329261.50
NR 441-3	0.00	0.00	1635524.40	2329264.80
NR 442-3	-17.33	14.26	1635506.70	2329278.60
NR 443-4	-23.74	6.52	1635500.50	2329270.70
NR 444-36	23.21	-19.11	1635548.10	2329246.30
NR 532-4	16.80	-26.85	1635541.90	2329238.40
NR 533-4	-6.30	-7.74	1635518.50	2329256.90
NR 541-3	-5.78	4.75	1635518.50	2329269.40
NR 542-3	-23.11	19.01	1635500.80	2329283.20
NR 543-4	-29.51	11.38	1635494.60	2329275.40
NR 544-36	17.43	-14.36	1635542.20	2329250.90



TVD	MD	Name	Size
1058.00	1100.00	9 5/8" Surface Casing	9-5/8

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
302.00	5.93	53.86	301.46	9.21	12.61	15.59	15.61	First MWD Survey @ 302.00' MD / 301.46' TVD
5877.04	35.90	55.37	4834.28	1728.83	2672.87	3183.25	3184.07	LL Crossed @ 5877.04' MD / 4834.28' TVD
7678.83	10.65	57.67	6469.23	2128.37	3271.19	3902.64	3903.44	600' Setback Crossed @ 7678.83' MD / 6469.23' TVD
11208.00	6.20	223.84	9990.69	2123.92	3279.05	3906.81	4082.14	Projection to TD @ 11208.00' MD / 9990.69' TVD





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Sec 3, T6S, R94W

NR 441-3 - Slot NR 441-3

Wellbore #1

Design: Wellbore #1

KLX Survey Certification Report

23 May, 2022



KLX Directional Drilling, INC.

11390 FM 830
Willis, TX 77318
Phone: (936) 856-4332
Fax: (936) 856-8678



Survey Certification Sheet

Company	Job Number	Date
TEP Rocky Mountain, LLC	RM-220443	5/23/2022

Lease	Well Name	County & State
NWSW 3 6S94W 6	Federal #NR 441-3	Garfield, CO

API No.	Survey Depth Range	Survey Type
05-045-24479	302 feet to 11208 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
Click here to enter text.	Robert Cuevas

Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by KLX Directional Drilling. This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

Kristopher Ray
Regulatory Compliance Manager
KLX Directional Drilling, Inc.

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well NR 441-3 - Slot NR 441-3
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6760.00usft (H&P #329)
Site:	Sec 3, T6S, R94W	MD Reference:	KB=30' @ 6760.00usft (H&P #329)
Well:	NR 441-3	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Garfield County, CO (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Sec 3, T6S, R94W				
Site Position:		Northing:	1,635,500.80 usft	Latitude:	39.554125
From:	Map	Easting:	2,329,283.20 usft	Longitude:	-107.878975
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.50 °

Well	NR 441-3 - Slot NR 441-3					
Well Position	+N/-S	0.00 usft	Northing:	1,635,524.40 usft	Latitude:	39.554188
	+E/-W	0.00 usft	Easting:	2,329,264.80 usft	Longitude:	-107.879042
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,730.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	5/16/2022	9.12	65.57	51,152.00000000

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	57.07	

Survey Program	Date	5/23/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
302.00	11,208.00	KLX MWD Surveys (Wellbore #1)	OWSG (REV5) MWD HDGM	OWSG MWD - Standard	

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
302.00	5.93	53.86	301.46	9.21	12.61	15.61	53.86	
First MWD Survey @ 302.00'MD / 301.46' TVD								
395.00	9.80	52.71	393.57	16.84	22.79	28.34	53.54	
489.00	12.61	55.00	485.77	27.57	37.56	46.60	53.72	
583.00	15.82	52.98	576.88	41.18	56.20	69.67	53.77	
676.00	18.28	56.23	665.79	56.92	78.45	96.93	54.04	
767.00	21.18	56.49	751.44	73.93	104.03	127.62	54.60	
857.00	23.64	56.49	834.63	92.87	132.63	161.92	55.00	
947.00	25.66	58.34	916.43	113.07	164.27	199.42	55.46	
1,038.00	28.48	57.28	997.45	135.14	199.30	240.80	55.86	
1,173.00	30.23	56.23	1,115.11	171.43	254.64	306.97	56.05	

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well NR 441-3 - Slot NR 441-3
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6760.00usft (H&P #329)
Site:	Sec 3, T6S, R94W	MD Reference:	KB=30' @ 6760.00usft (H&P #329)
Well:	NR 441-3	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
1,263.00	31.38	58.25	1,192.42	196.36	293.40	353.04	56.21	
1,353.00	32.65	57.81	1,268.73	221.62	333.87	400.73	56.42	
1,443.00	34.41	58.16	1,343.75	247.97	376.02	450.43	56.60	
1,533.00	36.04	58.69	1,417.27	275.15	420.25	502.31	56.79	
1,623.00	38.23	58.34	1,489.01	303.53	466.58	556.62	56.95	
1,715.00	39.64	57.99	1,560.57	334.03	515.70	614.42	57.07	
1,805.00	39.07	58.34	1,630.16	364.13	564.18	671.48	57.16	
1,896.00	39.02	58.08	1,700.84	394.33	612.90	728.80	57.24	
1,987.00	37.79	57.81	1,772.15	424.33	660.82	785.32	57.29	
2,077.00	38.01	57.20	1,843.17	454.03	707.45	840.61	57.31	
2,168.00	39.02	56.14	1,914.37	485.17	754.79	897.27	57.27	
2,260.00	38.19	56.49	1,986.26	517.01	802.55	954.67	57.21	
2,351.00	38.89	56.23	2,057.44	548.42	849.75	1,011.36	57.16	
2,441.00	38.19	55.88	2,127.83	579.73	896.27	1,067.42	57.10	
2,532.00	38.98	55.88	2,198.97	611.56	943.26	1,124.16	57.04	
2,622.00	38.14	55.97	2,269.34	643.00	989.72	1,180.25	56.99	
2,714.00	39.33	56.32	2,341.11	675.06	1,037.53	1,237.81	56.95	
2,804.00	38.41	55.88	2,411.18	706.56	1,084.41	1,294.29	56.91	
2,896.00	37.22	54.74	2,483.86	738.66	1,130.79	1,350.67	56.85	
2,987.00	37.27	57.37	2,556.30	769.40	1,176.47	1,405.73	56.82	
3,079.00	38.23	58.51	2,629.05	799.30	1,224.21	1,462.04	56.86	
3,171.00	39.07	59.48	2,700.89	828.89	1,273.46	1,519.46	56.94	
3,263.00	38.36	58.87	2,772.68	858.37	1,322.87	1,576.95	57.02	
3,354.00	38.89	59.92	2,843.77	887.29	1,371.76	1,633.71	57.10	
3,446.00	38.79	59.74	2,915.43	916.28	1,421.64	1,691.34	57.20	
3,538.00	37.75	59.66	2,987.66	945.03	1,470.84	1,748.27	57.28	
3,629.00	39.07	59.22	3,058.97	973.78	1,519.52	1,804.77	57.35	
3,721.00	39.33	58.51	3,130.26	1,003.85	1,569.29	1,862.90	57.39	
3,812.00	38.85	58.69	3,200.89	1,033.74	1,618.27	1,920.26	57.43	
3,904.00	37.84	58.51	3,273.04	1,063.48	1,666.98	1,977.33	57.46	
3,996.00	39.38	57.55	3,344.93	1,093.88	1,715.68	2,034.73	57.48	
4,088.00	39.07	56.93	3,416.20	1,125.36	1,764.60	2,092.91	57.47	
4,180.00	38.36	56.58	3,487.99	1,156.90	1,812.73	2,150.44	57.45	
4,271.00	37.75	56.05	3,559.64	1,188.01	1,859.40	2,206.52	57.42	
4,363.00	36.25	57.11	3,633.11	1,218.51	1,905.61	2,261.88	57.40	
4,454.00	37.75	56.58	3,705.79	1,248.47	1,951.45	2,316.64	57.39	
4,545.00	36.91	57.46	3,778.15	1,278.51	1,997.74	2,371.82	57.38	
4,636.00	37.88	55.95	3,850.44	1,308.85	2,043.93	2,427.08	57.37	
4,728.00	38.58	55.79	3,922.71	1,340.79	2,091.05	2,483.99	57.33	
4,819.00	37.35	56.41	3,994.46	1,372.02	2,137.51	2,539.96	57.30	
4,911.00	38.45	56.23	4,067.05	1,403.36	2,184.54	2,596.46	57.28	
5,002.00	37.53	56.84	4,138.77	1,434.25	2,231.26	2,652.47	57.27	
5,093.00	38.36	57.11	4,210.53	1,464.74	2,278.18	2,708.43	57.26	
5,185.00	37.09	57.99	4,283.30	1,494.95	2,325.68	2,764.71	57.27	

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well NR 441-3 - Slot NR 441-3
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6760.00usft (H&P #329)
Site:	Sec 3, T6S, R94W	MD Reference:	KB=30' @ 6760.00usft (H&P #329)
Well:	NR 441-3	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
5,275.00	37.92	57.02	4,354.69	1,524.39	2,371.89	2,819.51	57.27	
5,365.00	36.69	57.28	4,426.28	1,553.98	2,417.71	2,874.05	57.27	
5,457.00	36.87	55.70	4,499.97	1,584.39	2,463.63	2,929.13	57.25	
5,548.00	38.45	55.09	4,572.01	1,615.97	2,509.39	2,984.69	57.22	
5,638.00	37.53	55.00	4,642.94	1,647.71	2,554.80	3,040.05	57.18	
5,730.00	37.13	55.79	4,716.09	1,679.39	2,600.71	3,095.81	57.15	
5,822.00	36.34	55.53	4,789.82	1,710.43	2,646.15	3,150.82	57.12	
5,914.00	35.60	55.26	4,864.28	1,741.12	2,690.63	3,204.83	57.09	
6,006.00	34.41	54.74	4,939.63	1,771.38	2,733.86	3,257.57	57.06	
6,098.00	32.91	55.70	5,016.21	1,800.48	2,775.73	3,308.54	57.03	
6,189.00	32.17	55.88	5,092.92	1,828.00	2,816.21	3,357.47	57.01	
6,280.00	31.11	55.97	5,170.40	1,854.74	2,855.75	3,405.20	57.00	
6,371.00	29.49	56.93	5,248.96	1,880.12	2,894.01	3,451.11	56.99	
6,463.00	28.78	57.20	5,329.32	1,904.48	2,931.60	3,495.90	56.99	
6,554.00	27.95	56.93	5,409.40	1,927.98	2,967.88	3,539.13	56.99	
6,645.00	26.37	56.84	5,490.36	1,950.67	3,002.68	3,580.67	56.99	
6,736.00	25.44	57.02	5,572.21	1,972.37	3,035.99	3,620.42	56.99	
6,827.00	23.91	55.88	5,654.90	1,993.35	3,067.66	3,658.41	56.98	
6,918.00	21.80	54.91	5,738.75	2,013.41	3,096.75	3,693.74	56.97	
7,010.00	19.82	54.74	5,824.75	2,032.24	3,123.47	3,726.40	56.95	
7,102.00	18.54	56.67	5,911.64	2,049.28	3,148.43	3,756.61	56.94	
7,191.00	17.45	56.67	5,996.29	2,064.39	3,171.40	3,784.11	56.94	
7,283.00	15.86	57.02	6,084.42	2,078.81	3,193.47	3,810.47	56.94	
7,375.00	14.77	57.37	6,173.15	2,091.98	3,213.89	3,834.77	56.94	
7,464.00	14.02	57.28	6,259.36	2,103.92	3,232.52	3,856.90	56.94	
7,555.00	12.44	58.25	6,347.94	2,115.04	3,250.13	3,877.72	56.95	
7,647.00	11.25	57.20	6,437.98	2,125.11	3,266.10	3,896.60	56.95	
7,738.00	9.54	58.69	6,527.48	2,133.84	3,280.00	3,913.02	56.95	
7,830.00	8.26	55.44	6,618.38	2,141.55	3,291.96	3,927.24	56.95	
7,921.00	7.38	57.20	6,708.53	2,148.43	3,302.26	3,939.62	56.95	
8,012.00	6.02	56.67	6,798.91	2,154.22	3,311.16	3,950.24	56.95	
8,104.00	4.66	57.81	6,890.50	2,158.86	3,318.35	3,958.80	56.95	
8,195.00	4.04	68.01	6,981.24	2,162.03	3,324.45	3,965.64	56.96	
8,287.00	2.68	55.26	7,073.08	2,164.47	3,329.22	3,970.98	56.97	
8,378.00	1.63	68.71	7,164.02	2,166.15	3,332.18	3,974.37	56.97	
8,470.00	0.66	25.73	7,256.00	2,167.10	3,333.63	3,976.10	56.97	
8,560.00	0.66	305.40	7,346.00	2,167.87	3,333.43	3,976.36	56.96	
8,652.00	1.27	264.62	7,437.98	2,168.08	3,331.98	3,975.26	56.95	
8,742.00	1.54	270.16	7,527.96	2,167.99	3,329.78	3,973.36	56.93	
8,833.00	2.20	253.90	7,618.91	2,167.51	3,326.88	3,970.67	56.92	
8,924.00	2.15	248.71	7,709.84	2,166.41	3,323.61	3,967.33	56.90	
9,014.00	1.10	263.65	7,799.81	2,165.70	3,321.18	3,964.90	56.89	
9,106.00	0.26	149.04	7,891.80	2,165.42	3,320.41	3,964.11	56.89	
9,196.00	2.20	63.88	7,981.78	2,166.01	3,322.06	3,965.82	56.90	
9,286.00	1.85	74.25	8,071.72	2,167.16	3,325.01	3,968.92	56.90	

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well NR 441-3 - Slot NR 441-3
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6760.00usft (H&P #329)
Site:	Sec 3, T6S, R94W	MD Reference:	KB=30' @ 6760.00usft (H&P #329)
Well:	NR 441-3	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
9,376.00	1.58	84.09	8,161.68	2,167.68	3,327.65	3,971.41	56.92	
9,466.00	1.10	94.29	8,251.66	2,167.75	3,329.74	3,973.20	56.93	
9,557.00	0.97	101.84	8,342.64	2,167.52	3,331.37	3,974.44	56.95	
9,648.00	0.88	132.17	8,433.63	2,166.90	3,332.64	3,975.16	56.97	
9,738.00	0.75	172.86	8,523.62	2,165.85	3,333.22	3,975.08	56.99	
9,830.00	1.01	188.50	8,615.61	2,164.45	3,333.18	3,974.28	57.00	
9,921.00	0.79	45.72	8,706.61	2,164.09	3,333.51	3,974.37	57.01	
10,011.00	0.70	32.50	8,796.60	2,164.99	3,334.25	3,975.47	57.00	
10,101.00	0.09	319.64	8,886.60	2,165.51	3,334.50	3,975.97	57.00	
10,192.00	0.70	218.48	8,977.59	2,165.13	3,334.11	3,975.43	57.00	
10,284.00	1.45	214.61	9,069.58	2,163.73	3,333.10	3,973.82	57.01	
10,375.00	1.93	222.52	9,160.54	2,161.65	3,331.41	3,971.27	57.02	
10,467.00	2.85	256.97	9,252.46	2,159.99	3,328.13	3,967.62	57.02	
10,559.00	3.08	255.65	9,344.34	2,158.86	3,323.51	3,963.13	56.99	
10,651.00	3.52	245.28	9,436.19	2,157.07	3,318.55	3,957.99	56.98	
10,742.00	4.00	239.22	9,526.99	2,154.28	3,313.28	3,952.06	56.97	
10,833.00	5.23	235.09	9,617.69	2,150.28	3,307.16	3,944.74	56.97	
10,923.00	5.58	232.36	9,707.29	2,145.26	3,300.33	3,936.28	56.98	
11,015.00	6.02	225.33	9,798.82	2,139.14	3,293.35	3,927.10	56.99	
11,106.00	6.37	221.11	9,889.29	2,131.98	3,286.64	3,917.57	57.03	
11,146.00	6.20	223.84	9,929.05	2,128.75	3,283.69	3,913.33	57.05	
11,208.00	6.20	223.84	9,990.69	2,123.92	3,279.05	3,906.81	57.07	
Projection to TD @ 11208.00' MD / 9990.69' TVD								

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
302.00	301.46	9.21	12.61	First MWD Survey @ 302.00'MD / 301.46' TVD	
11,208.00	9,990.69	2,123.92	3,279.05	Projection to TD @ 11208.00' MD / 9990.69' TVD	