

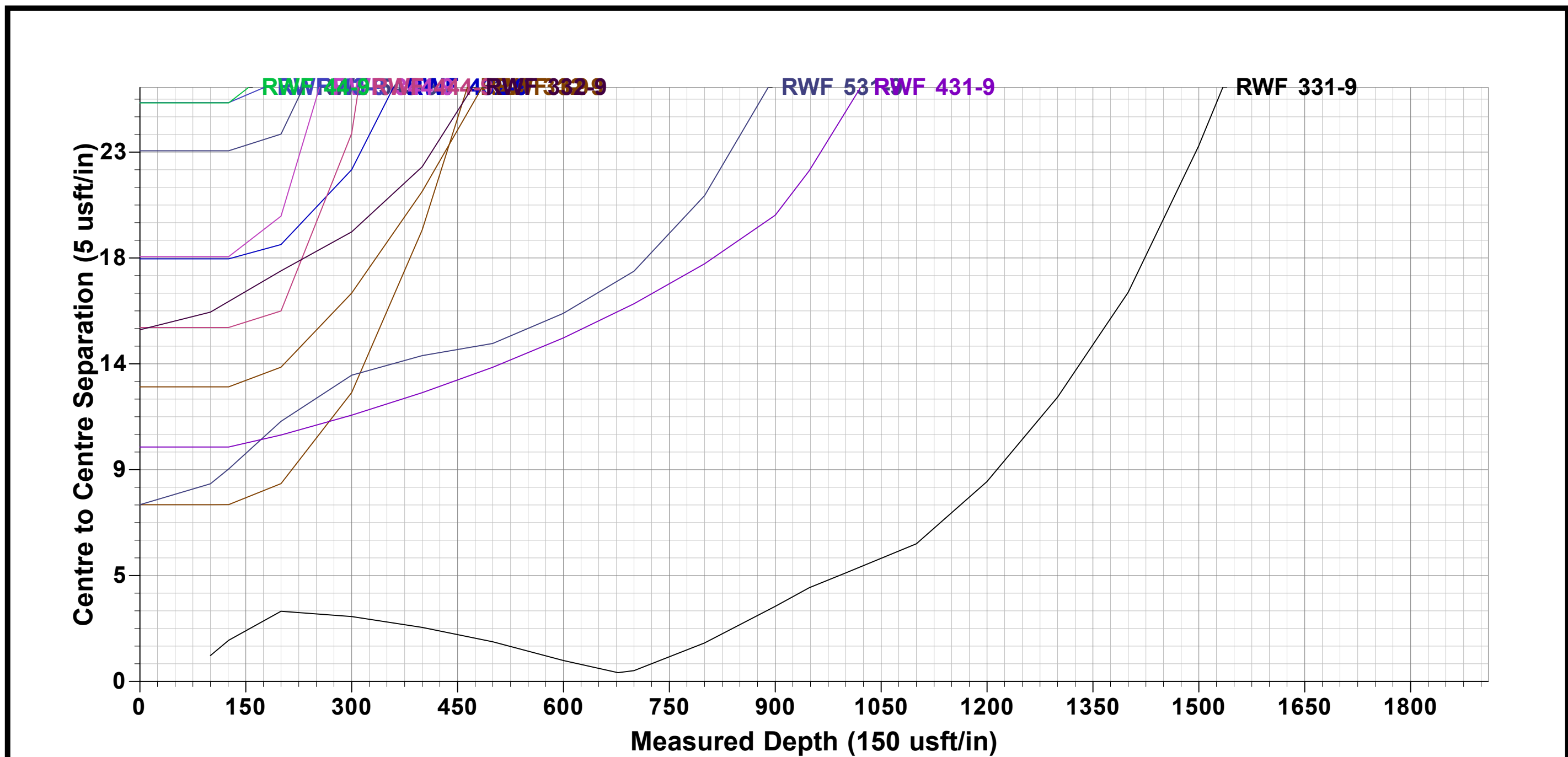
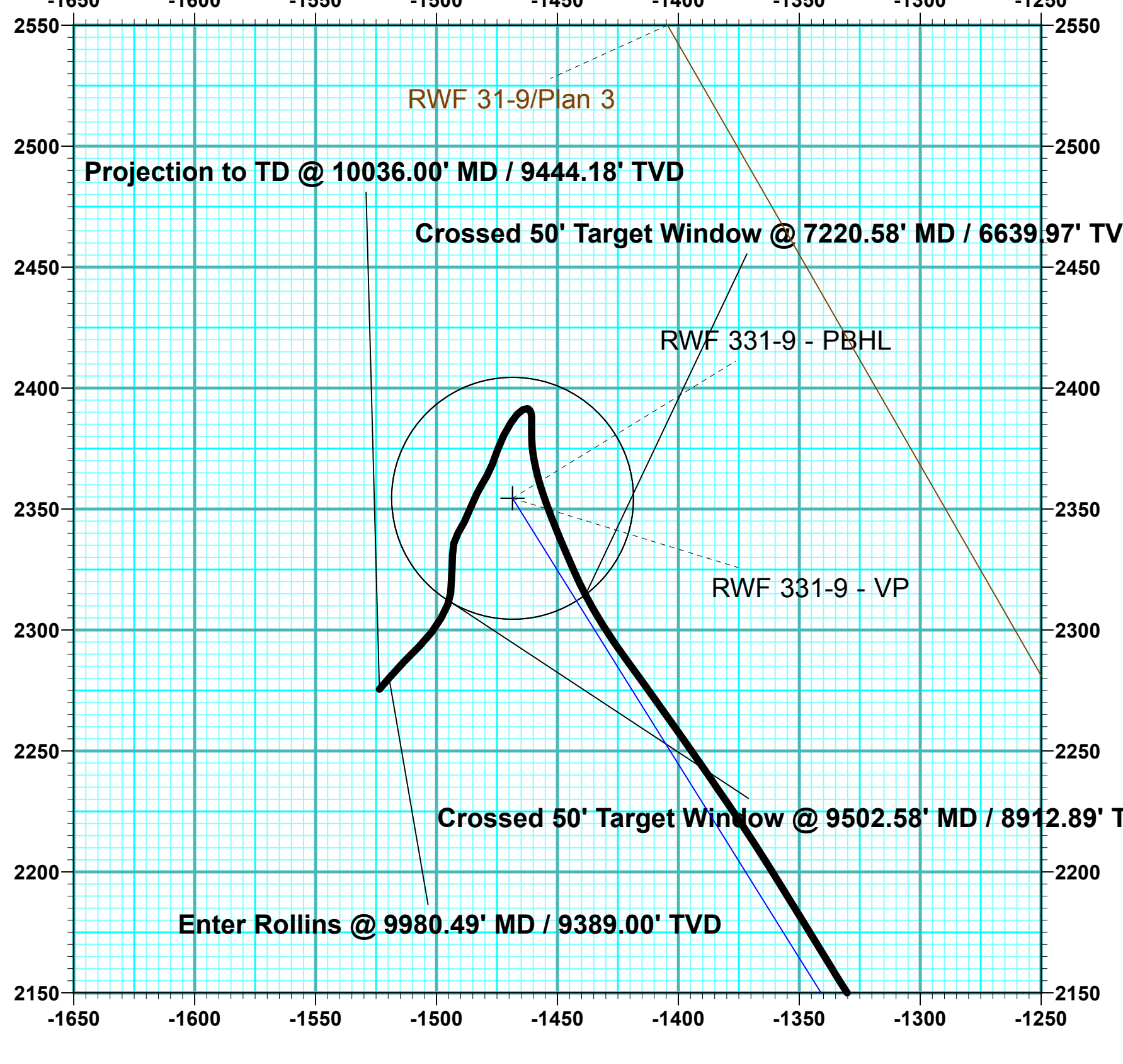
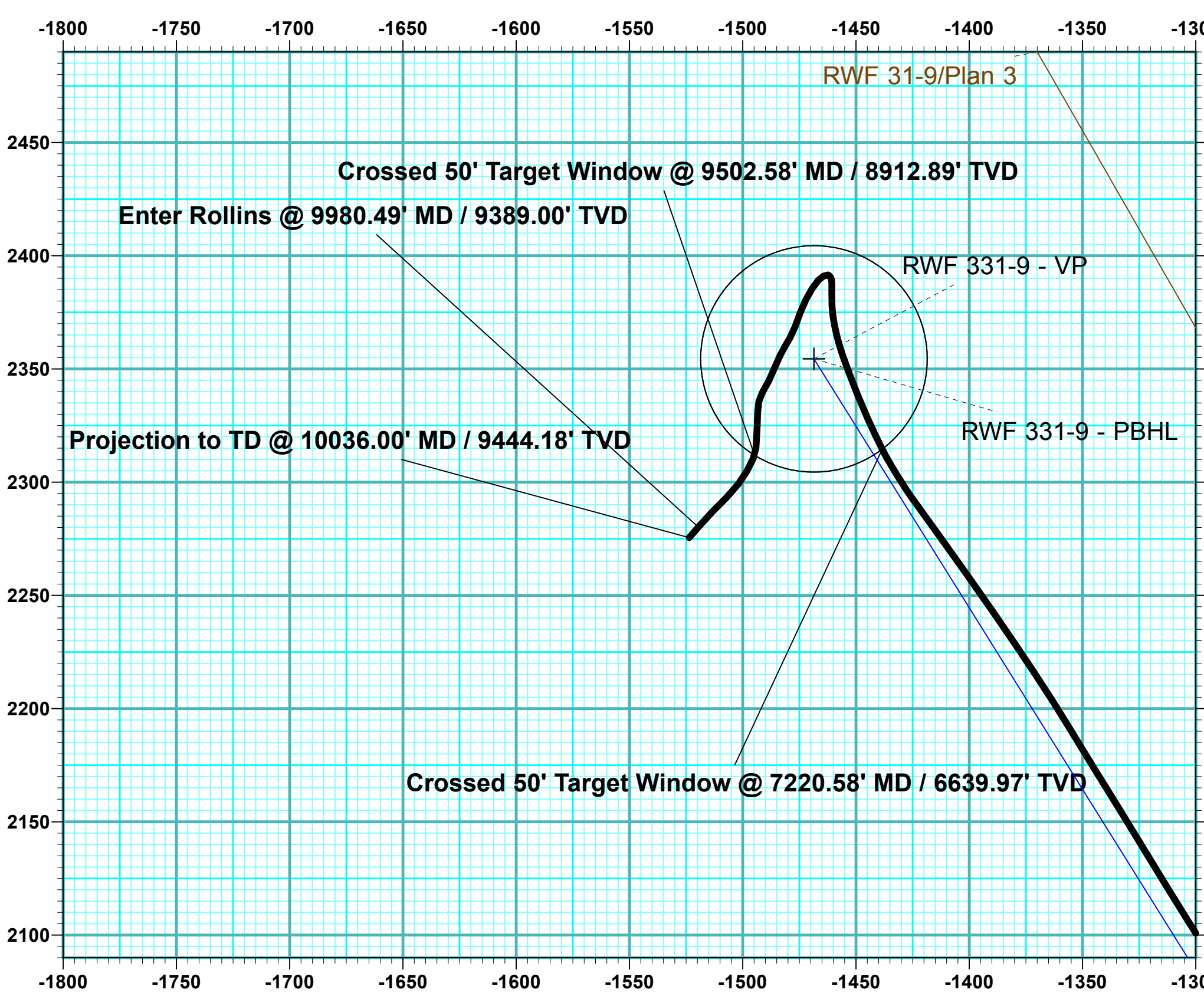
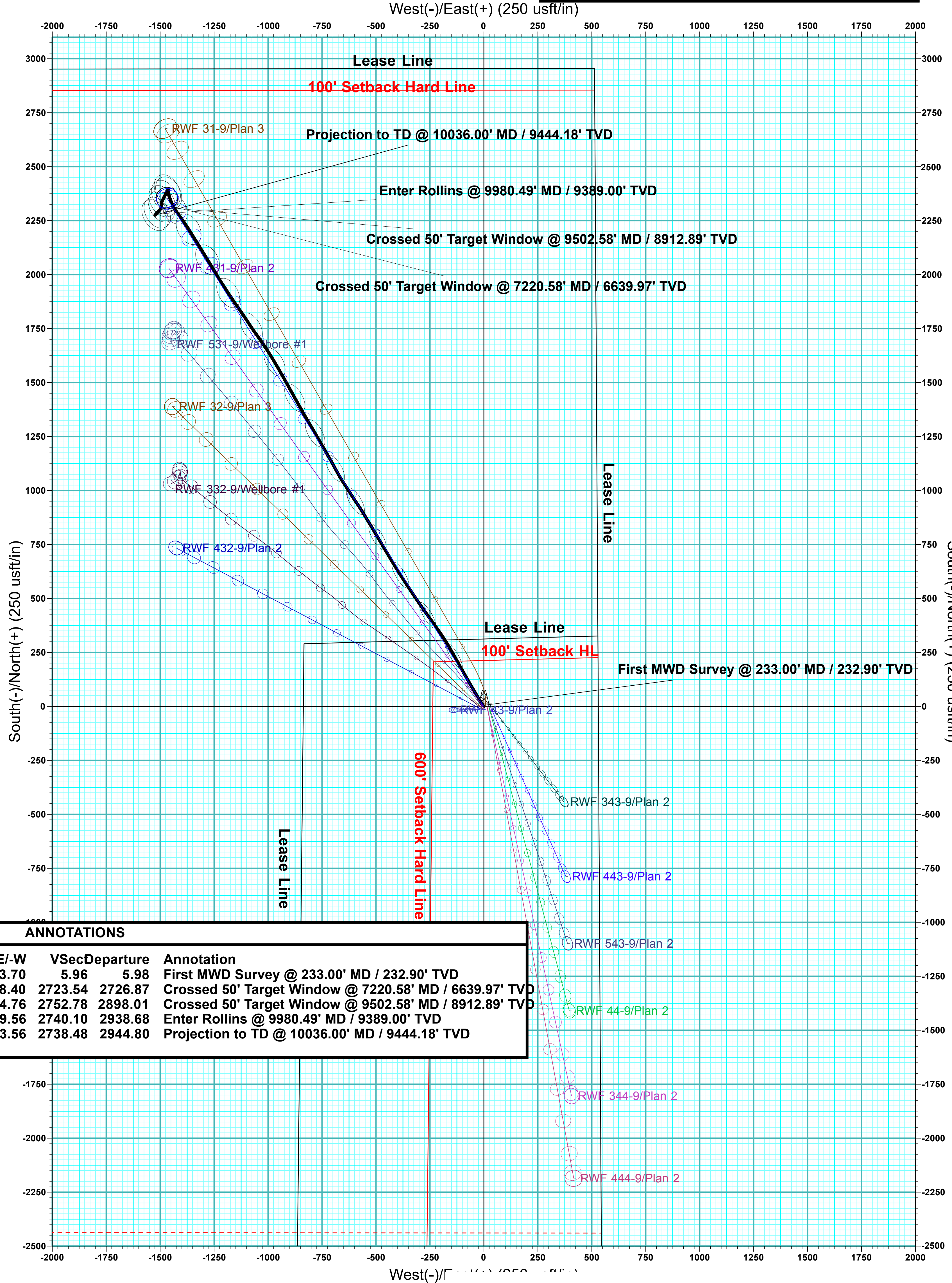
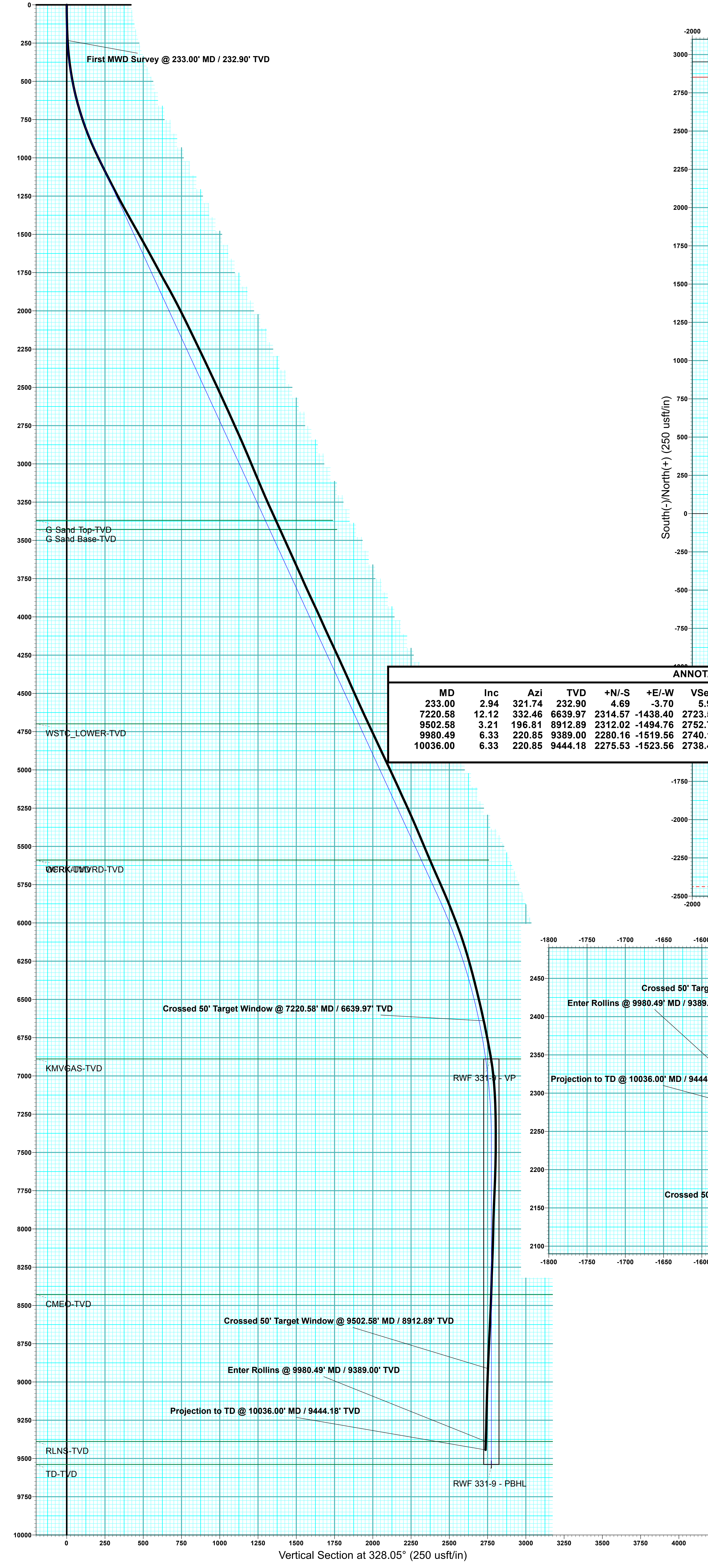
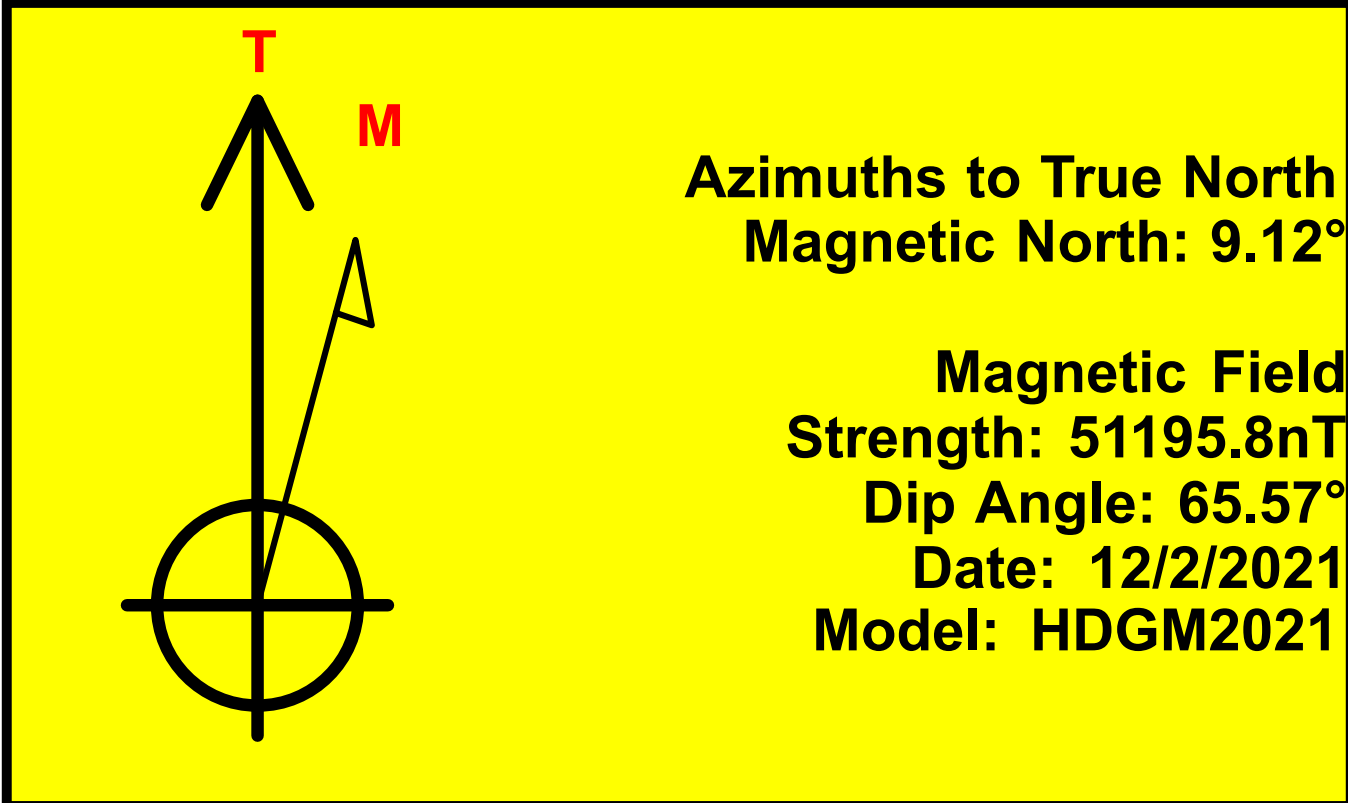
WELL DETAILS: RWF 331-9							
Ground Elevation: 6369.40							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	RWF 331-9	
0.00	0.00	1630189.80	2327351.20	39.539410	-107.885330		

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
RWF 331-9 - VP	6889.00	2354.46	-1468.52	1632582.00	2325945.00	39.545874	-107.890538
RWF 331-9 - PBHL	9539.00	2354.46	-1468.52	1632582.00	2325945.00	39.545874	-107.890538

DESIGN ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure
126.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00
948.29	24.67	328.05	923.12	147.89	-92.24	174.30	174.30
6343.96	24.67	328.05	5826.37	2058.68	-1284.03	2426.29	2426.29
7988.54	0.00	0.00	7420.60	2354.46	-1468.52	2774.89	2774.89
10106.94	0.00	0.00	9539.00	2354.46	-1468.52	2774.89	2774.89
				Annotation			
				Start Build 3.00			
				Start 5395.67 hold at 948.29 MD			
				Start Drop -1.50			
				Start 2118.40 hold at 7988.54 MD			
				TD at 10106.94			

SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
RWF 31-9	1.49	7.36	1630191.10	2327358.60
RWF 32-9	-11.34	-5.30	1630178.60	2327345.60
RWF 331-9	0.00	0.00	1630189.80	2327351.20
RWF 332-9	-3.08	-14.62	1630187.10	2327336.50
RWF 343-9	6.17	29.35	1630195.20	2327380.70
RWF 344-9	-6.66	16.78	1630182.70	2327367.80
RWF 431-9	-9.75	2.06	1630180.00	2327353.00
RWF 432-9	-12.83	-12.57	1630177.30	2327338.30
RWF 43-9	-14.43	-19.93	1630175.90	2327330.90
RWF 443-9	-3.68	31.41	1630185.30	2327382.50
RWF 444-9	3.09	14.72	1630192.50	2327366.00
RWF 44-9	-5.17	24.04	1630184.00	2327375.10
RWF 531-9	-1.49	-7.36	1630188.50	2327343.80
RWF 543-9	4.58	22.09	1630193.80	2327373.40

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3369.00	3639.81	G Sand Top-TVD
3429.00	3705.83	G Sand Base-TVD
4699.00	5103.38	WSTC_LOWER-TVD
5589.00	6082.76	OCRK-TVD
5589.00	6082.76	WFRK/UMVRD-TVD
6889.00	7455.21	KMVGAS-TVD
8429.00	8996.94	CMEQ-TVD
9389.00	9956.94	RLNS-TVD
9539.00	10106.94	TD-TVD





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Sec 9, T6S, R94W

RWF 331-9 - Slot RWF 331-9

Wellbore #1

Design: Wellbore #1

KLX Survey Report

13 December, 2021



Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well RWF 331-9 - Slot RWF 331-9
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6399.40usft (H&P #329)
Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 331-9	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 9, T6S, R94W			
Site Position:		Northing:	1,630,177.30 usft	Latitude:	39.539375
From:	Map	Easting:	2,327,338.30 usft	Longitude:	-107.885375
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.50 °

Well	RWF 331-9 - Slot RWF 331-9					
Well Position	+N/-S	0.00 usft	Northing:	1,630,189.80 usft	Latitude:	39.539410
	+E/-W	0.00 usft	Easting:	2,327,351.20 usft	Longitude:	-107.885330
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,369.40 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021	12/2/2021	9.12	65.57	51,195.80000000

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	326.20	

Survey Program	Date	12/13/2021			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
233.00	10,036.00	KLX MWD Surveys (Wellbore #1)	OWSG (REV5) MWD HDGM	OWSG MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
First MWD Survey @ 233.00' MD / 232.90' TVD									
233.00	2.94	321.74	232.90	4.69	-3.70	5.96	1.26	1.26	0.00
859.00	21.40	330.01	842.21	117.19	-71.32	137.06	2.95	2.95	1.32
953.00	24.35	330.18	928.80	148.87	-89.53	173.51	3.14	3.14	0.18
1,047.00	26.06	331.06	1,013.85	183.75	-109.16	213.42	1.86	1.82	0.94
1,176.00	27.07	330.62	1,129.23	234.13	-137.27	270.92	0.80	0.78	-0.34
1,270.00	27.38	329.57	1,212.82	271.40	-158.71	313.82	0.61	0.33	-1.12
1,364.00	28.21	327.72	1,295.97	308.82	-181.53	357.61	1.27	0.88	-1.97
1,458.00	29.44	325.26	1,378.33	346.59	-206.56	402.92	1.82	1.31	-2.62
1,552.00	29.44	323.94	1,460.19	384.25	-233.32	449.10	0.69	0.00	-1.40

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well RWF 331-9 - Slot RWF 331-9
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6399.40usft (H&P #329)
Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 331-9	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,646.00	29.27	324.65	1,542.12	421.67	-260.21	495.15	0.41	-0.18	0.76
1,741.00	28.74	324.47	1,625.21	459.20	-286.92	541.20	0.57	-0.56	-0.19
1,835.00	28.17	326.67	1,707.85	496.13	-312.25	585.98	1.27	-0.61	2.34
1,929.00	29.31	325.70	1,790.27	533.68	-337.41	631.17	1.31	1.21	-1.03
2,023.00	28.70	327.20	1,872.48	571.66	-362.60	676.75	1.01	-0.65	1.60
2,117.00	27.29	327.37	1,955.48	608.78	-386.45	720.86	1.50	-1.50	0.18
2,211.00	26.50	328.60	2,039.31	644.83	-408.99	763.36	1.03	-0.84	1.31
2,305.00	25.88	329.48	2,123.66	680.40	-430.34	804.80	0.78	-0.66	0.94
2,399.00	25.75	328.51	2,208.28	715.49	-451.42	845.68	0.47	-0.14	-1.03
2,493.00	25.18	329.83	2,293.15	750.19	-472.14	886.04	0.86	-0.61	1.40
2,587.00	25.62	328.51	2,378.06	784.81	-492.80	926.30	0.76	0.47	-1.40
2,681.00	25.14	329.75	2,462.99	819.38	-513.48	966.54	0.76	-0.51	1.32
2,775.00	24.39	329.48	2,548.35	853.35	-533.39	1,005.84	0.81	-0.80	-0.29
2,870.00	24.70	328.16	2,634.76	887.11	-553.83	1,045.26	0.66	0.33	-1.39
2,961.00	24.04	327.02	2,717.65	918.81	-573.95	1,082.80	0.89	-0.73	-1.25
3,053.00	24.48	326.05	2,801.53	950.34	-594.79	1,120.60	0.65	0.48	-1.05
3,144.00	22.90	327.90	2,884.86	980.99	-614.73	1,157.15	1.92	-1.74	2.03
3,235.00	23.12	326.93	2,968.62	1,010.96	-633.89	1,192.72	0.48	0.24	-1.07
3,326.00	22.37	326.84	3,052.54	1,040.42	-653.11	1,227.90	0.83	-0.82	-0.10
3,417.00	22.94	330.27	3,136.53	1,070.32	-671.38	1,262.90	1.58	0.63	3.77
3,508.00	23.64	331.68	3,220.11	1,101.78	-688.83	1,298.76	0.98	0.77	1.55
3,599.00	24.70	331.24	3,303.13	1,134.51	-706.63	1,335.86	1.18	1.16	-0.48
3,690.00	24.52	330.01	3,385.87	1,167.54	-725.22	1,373.64	0.60	-0.20	-1.35
3,781.00	24.08	329.04	3,468.80	1,199.81	-744.21	1,411.02	0.65	-0.48	-1.07
3,872.00	24.52	330.89	3,551.74	1,232.23	-762.94	1,448.38	0.97	0.48	2.03
3,963.00	24.57	329.75	3,634.52	1,265.07	-781.66	1,486.09	0.52	0.05	-1.25
4,054.00	23.95	328.87	3,717.48	1,297.23	-800.74	1,523.42	0.79	-0.68	-0.97
4,145.00	24.08	329.83	3,800.61	1,329.09	-819.62	1,560.40	0.45	0.14	1.05
4,237.00	25.31	330.71	3,884.19	1,362.46	-838.68	1,598.73	1.40	1.34	0.96
4,329.00	24.83	330.98	3,967.52	1,396.51	-857.67	1,637.59	0.54	-0.52	0.29
4,421.00	23.86	330.54	4,051.34	1,429.60	-876.19	1,675.39	1.07	-1.05	-0.48
4,512.00	25.09	330.98	4,134.16	1,462.50	-894.60	1,712.97	1.37	1.35	0.48
4,604.00	24.87	331.06	4,217.56	1,496.49	-913.43	1,751.69	0.24	-0.24	0.09
4,694.00	24.70	330.45	4,299.27	1,529.41	-931.86	1,789.30	0.34	-0.19	-0.68
4,786.00	24.08	329.75	4,383.06	1,562.34	-950.79	1,827.20	0.74	-0.67	-0.76
4,878.00	23.64	329.31	4,467.19	1,594.42	-969.66	1,864.35	0.52	-0.48	-0.48
4,971.00	24.43	328.16	4,552.13	1,626.79	-989.33	1,902.19	0.99	0.85	-1.24
5,062.00	24.92	326.67	4,634.82	1,658.79	-1,009.79	1,940.17	0.87	0.54	-1.64
5,154.00	25.36	325.26	4,718.11	1,691.18	-1,031.66	1,979.25	0.81	0.48	-1.53
5,247.00	24.87	324.03	4,802.32	1,723.37	-1,054.50	2,018.70	0.77	-0.53	-1.32
5,340.00	25.62	326.23	4,886.43	1,755.92	-1,077.16	2,058.35	1.29	0.81	2.37
5,431.00	25.14	326.49	4,968.65	1,788.39	-1,098.77	2,097.36	0.54	-0.53	0.29
5,523.00	24.61	325.70	5,052.12	1,820.51	-1,120.36	2,136.06	0.68	-0.58	-0.86

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well RWF 331-9 - Slot RWF 331-9
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6399.40usft (H&P #329)
Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 331-9	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,614.00	24.57	324.91	5,134.86	1,851.64	-1,141.91	2,173.92	0.36	-0.04	-0.87
5,706.00	24.83	325.88	5,218.45	1,883.28	-1,163.74	2,212.36	0.52	0.28	1.05
5,798.00	23.69	327.55	5,302.32	1,914.87	-1,184.49	2,250.15	1.45	-1.24	1.82
5,889.00	23.20	327.11	5,385.81	1,945.35	-1,204.04	2,286.35	0.57	-0.54	-0.48
5,981.00	22.68	326.67	5,470.53	1,975.39	-1,223.62	2,322.21	0.60	-0.57	-0.48
6,073.00	22.72	329.48	5,555.41	2,005.51	-1,242.39	2,357.68	1.18	0.04	3.05
6,165.00	23.91	329.39	5,639.90	2,036.86	-1,260.91	2,394.03	1.29	1.29	-0.10
6,257.00	23.60	328.69	5,724.10	2,068.64	-1,279.97	2,431.05	0.46	-0.34	-0.76
6,349.00	23.47	327.64	5,808.45	2,099.85	-1,299.35	2,467.76	0.48	-0.14	-1.14
6,441.00	21.66	328.87	5,893.40	2,129.87	-1,317.93	2,503.04	2.03	-1.97	1.34
6,533.00	21.18	328.07	5,979.05	2,158.50	-1,335.50	2,536.61	0.61	-0.52	-0.87
6,625.00	19.60	328.78	6,065.28	2,185.81	-1,352.29	2,568.64	1.74	-1.72	0.77
6,716.00	17.45	326.93	6,151.56	2,210.30	-1,367.65	2,597.53	2.45	-2.36	-2.03
6,808.00	16.17	325.70	6,239.63	2,232.44	-1,382.39	2,624.14	1.44	-1.39	-1.34
6,900.00	14.72	324.91	6,328.30	2,252.59	-1,396.33	2,648.63	1.59	-1.58	-0.86
6,992.00	13.97	324.38	6,417.43	2,271.18	-1,409.52	2,671.42	0.83	-0.82	-0.58
7,084.00	13.49	324.03	6,506.81	2,288.89	-1,422.29	2,693.24	0.53	-0.52	-0.38
7,174.00	12.66	329.13	6,594.47	2,305.85	-1,433.52	2,713.58	1.58	-0.92	5.67
Crossed 50' Target Window @ 7220.58' MD / 6639.97' TVD									
7,220.58	12.12	332.46	6,639.97	2,314.57	-1,438.40	2,723.54	1.92	-1.15	7.14
7,265.00	11.65	335.90	6,683.44	2,322.80	-1,442.39	2,732.60	1.92	-1.06	7.75
7,356.00	11.03	337.30	6,772.66	2,339.22	-1,449.50	2,750.20	0.75	-0.68	1.54
7,447.00	10.24	341.08	6,862.10	2,354.90	-1,455.48	2,766.56	1.16	-0.87	4.15
7,538.00	8.09	348.91	6,951.93	2,368.84	-1,459.33	2,780.28	2.73	-2.36	8.60
7,628.00	5.58	359.45	7,041.29	2,379.43	-1,460.60	2,789.79	3.11	-2.79	11.71
7,718.00	3.52	0.59	7,131.00	2,386.57	-1,460.61	2,795.73	2.29	-2.29	1.27
7,809.00	1.49	330.89	7,221.91	2,390.40	-1,461.16	2,799.21	2.58	-2.23	-32.64
7,899.00	0.97	279.12	7,311.90	2,391.54	-1,462.48	2,800.90	1.30	-0.58	-57.52
7,990.00	1.58	240.27	7,402.87	2,391.04	-1,464.33	2,801.51	1.13	0.67	-42.69
8,081.00	2.24	222.78	7,493.82	2,389.11	-1,466.62	2,801.19	0.96	0.73	-19.22
8,172.00	3.25	212.76	7,584.72	2,385.64	-1,469.23	2,799.75	1.22	1.11	-11.01
8,264.00	4.04	206.87	7,676.53	2,380.55	-1,472.10	2,797.12	0.95	0.86	-6.40
8,355.00	4.26	199.84	7,767.29	2,374.52	-1,474.70	2,793.55	0.61	0.24	-7.73
8,445.00	3.78	200.63	7,857.07	2,368.60	-1,476.88	2,789.84	0.54	-0.53	0.88
8,535.00	3.08	209.69	7,946.91	2,363.72	-1,479.12	2,787.04	0.98	-0.78	10.07
8,625.00	2.50	211.18	8,036.80	2,359.94	-1,481.34	2,785.13	0.65	-0.64	1.66
8,715.00	3.12	206.08	8,126.70	2,356.06	-1,483.43	2,783.07	0.74	0.69	-5.67
8,805.00	4.22	202.30	8,216.51	2,350.80	-1,485.76	2,779.99	1.25	1.22	-4.20
8,895.00	4.09	205.56	8,306.27	2,344.84	-1,488.40	2,776.51	0.30	-0.14	3.62
8,987.00	2.90	213.55	8,398.10	2,339.94	-1,491.11	2,773.94	1.39	-1.29	8.68
9,077.00	2.99	191.93	8,487.99	2,335.74	-1,492.85	2,771.43	1.23	0.10	-24.02
9,167.00	3.25	180.86	8,577.85	2,330.90	-1,493.37	2,767.69	0.73	0.29	-12.30
9,256.00	3.65	182.79	8,666.69	2,325.54	-1,493.55	2,763.34	0.47	0.45	2.17

Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well RWF 331-9 - Slot RWF 331-9
Project:	Garfield County, CO (Nad 83)	TVD Reference:	KB=30' @ 6399.40usft (H&P #329)
Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 331-9	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,348.00	3.21	183.41	8,758.53	2,320.05	-1,493.84	2,758.94	0.48	-0.48	0.67	
9,440.00	2.81	183.85	8,850.40	2,315.23	-1,494.15	2,755.10	0.44	-0.43	0.48	
Crossed 50' Target Window @ 9502.58' MD / 8912.89' TVD										
9,502.58	3.21	196.81	8,912.89	2,312.02	-1,494.76	2,752.78	1.25	0.63	20.71	
9,531.00	3.43	201.60	8,941.27	2,310.47	-1,495.30	2,751.79	1.25	0.79	16.85	
9,623.00	4.35	210.65	9,033.05	2,304.91	-1,498.09	2,748.72	1.20	1.00	9.84	
9,712.00	4.44	216.45	9,121.79	2,299.23	-1,501.86	2,746.10	0.51	0.10	6.52	
9,802.00	5.41	225.16	9,211.46	2,293.44	-1,506.94	2,744.11	1.36	1.08	9.68	
9,894.00	5.93	224.19	9,303.01	2,286.97	-1,513.33	2,742.30	0.57	0.57	-1.05	
9,979.00	6.33	220.85	9,387.52	2,280.28	-1,519.45	2,740.14	0.63	0.47	-3.93	
Enter Rollins @ 9980.49' MD / 9389.00' TVD										
9,980.49	6.33	220.85	9,389.00	2,280.16	-1,519.56	2,740.10	0.00	0.00	0.00	
Projection to TD @ 10036.00' MD / 9444.18' TVD										
10,036.00	6.33	220.85	9,444.18	2,275.53	-1,523.56	2,738.48	0.00	0.00	0.00	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
233.00	232.90	4.69	-3.70	First MWD Survey @ 233.00' MD / 232.90' TVD	
7,220.58	6,639.97	2,314.57	-1,438.40	Crossed 50' Target Window @ 7220.58' MD / 6639.97' TVD	
9,502.58	8,912.89	2,312.02	-1,494.76	Crossed 50' Target Window @ 9502.58' MD / 8912.89' TVD	
9,980.49	9,389.00	2,280.16	-1,519.56	Enter Rollins @ 9980.49' MD / 9389.00' TVD	
10,036.00	9,444.18	2,275.53	-1,523.56	Projection to TD @ 10036.00' MD / 9444.18' TVD	