

Sec 9, T6S, R94W
RWF 543-9
Q211063 & RM-210928
Plan 3

Company Name: Terra Energy Partners, LLP
RWF 543-9
Garfield County, CO (Nad 83)
Rig: KB=30' @ 6399.40usft (H&P #329)
Created by: Chase Chambers
Date: 21:42, January 06 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



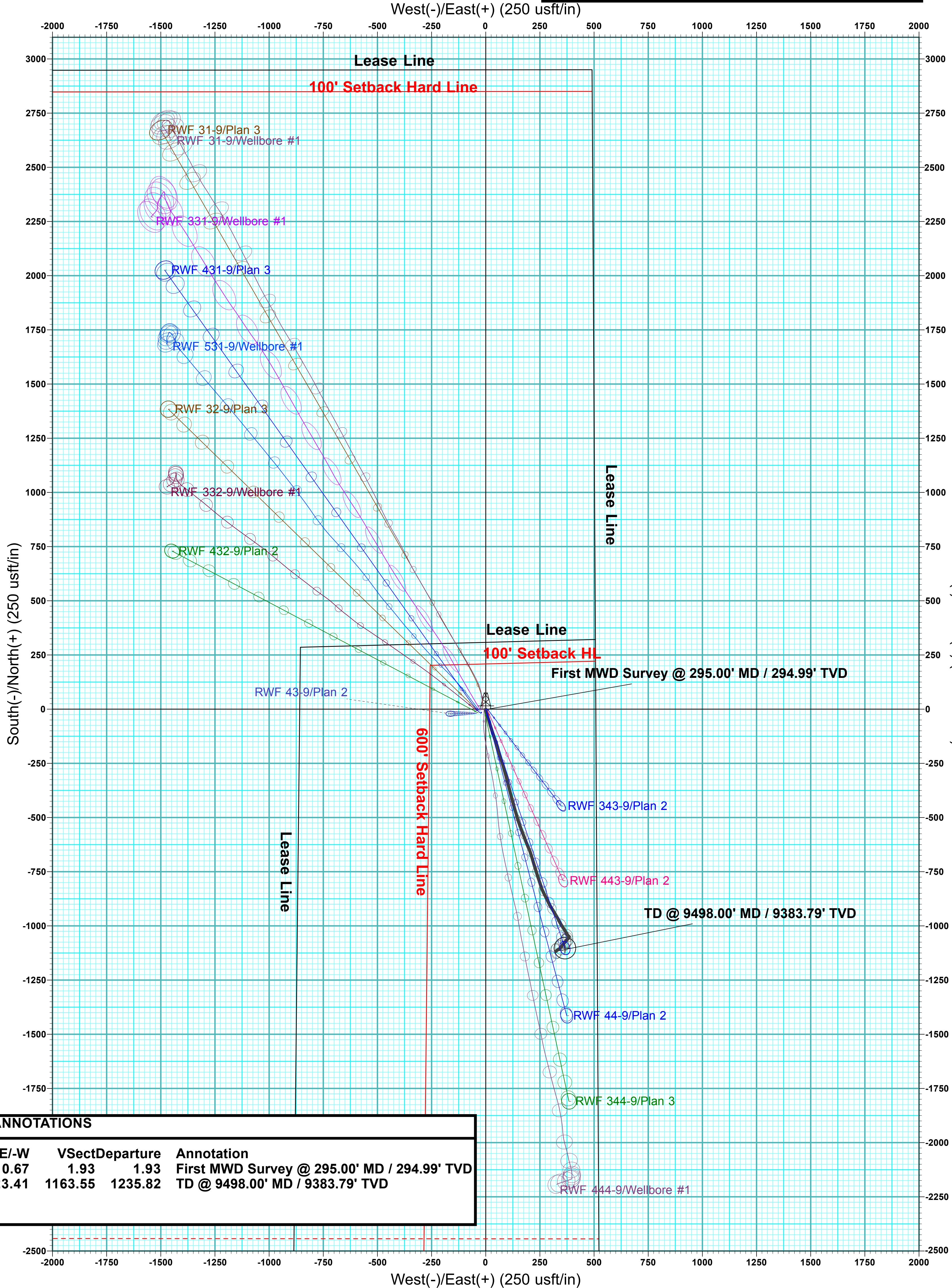
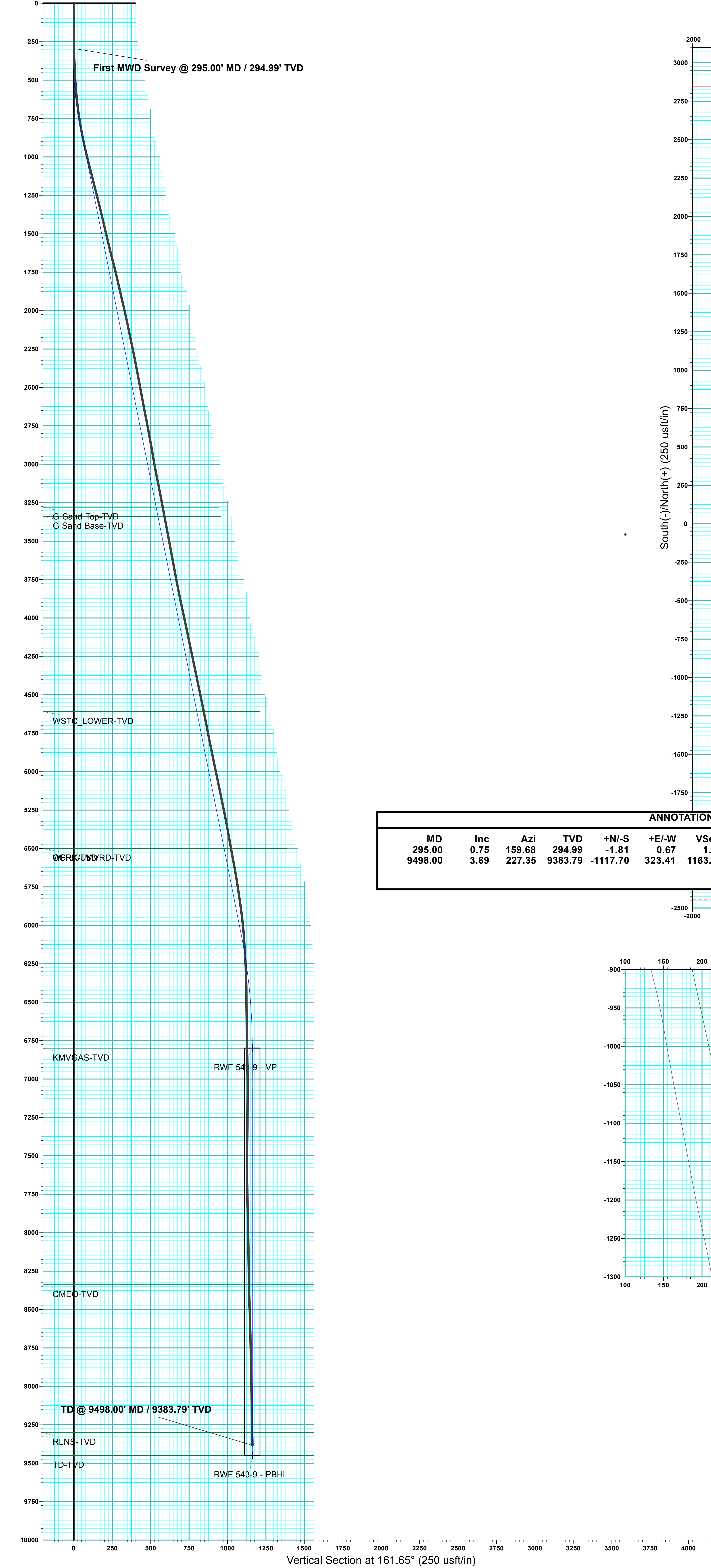
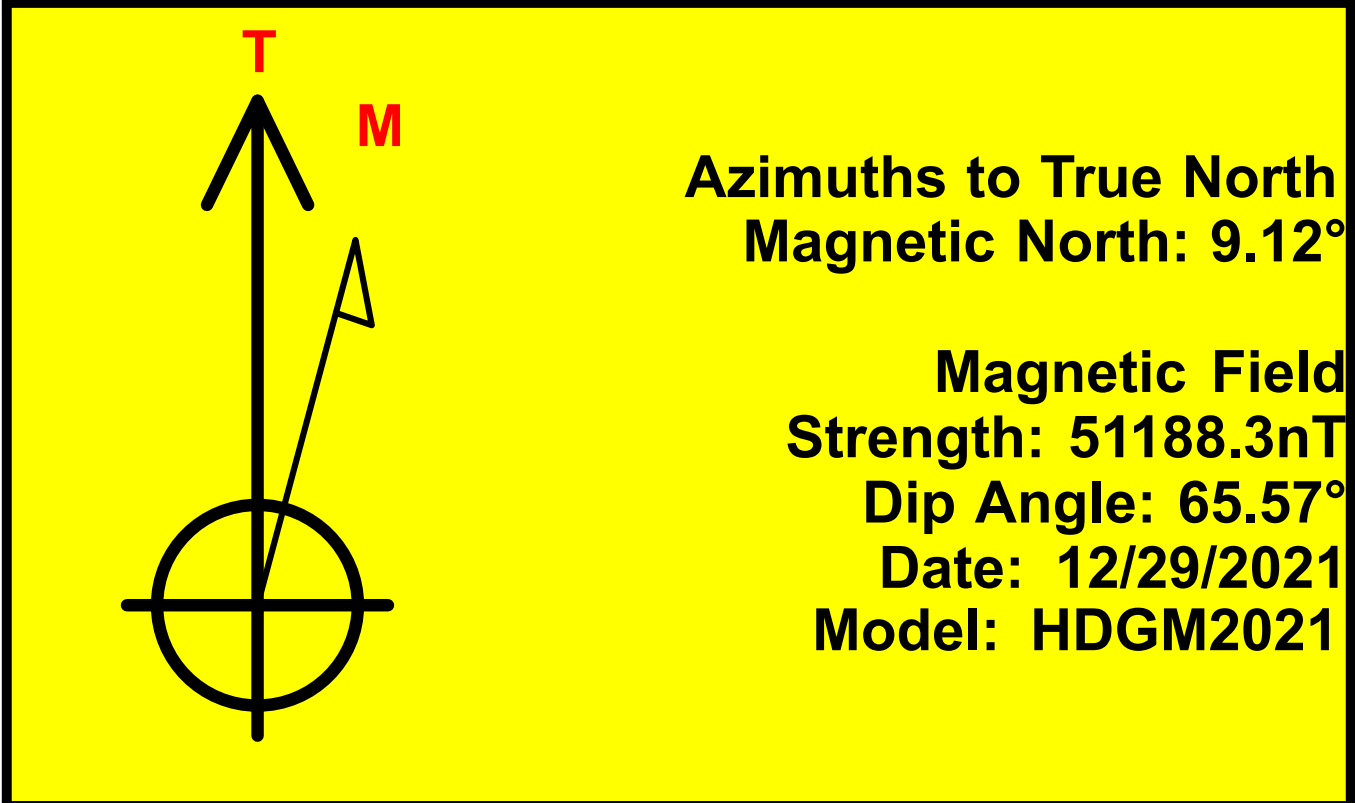
WELL DETAILS: RWF 543-9						
Ground Elevation: 6369.40						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	RWF 543-9
0.00	0.00	1630193.80	2327373.40	39.539422	-107.885252	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
RWF 543-9 - VP	6799.00	-1102.58	365.67	1629082.00	2327710.00	39.536395	-107.883955
RWF 543-9 - PBHL	9449.00	-1102.58	365.67	1629082.00	2327710.00	39.536395	-107.883955

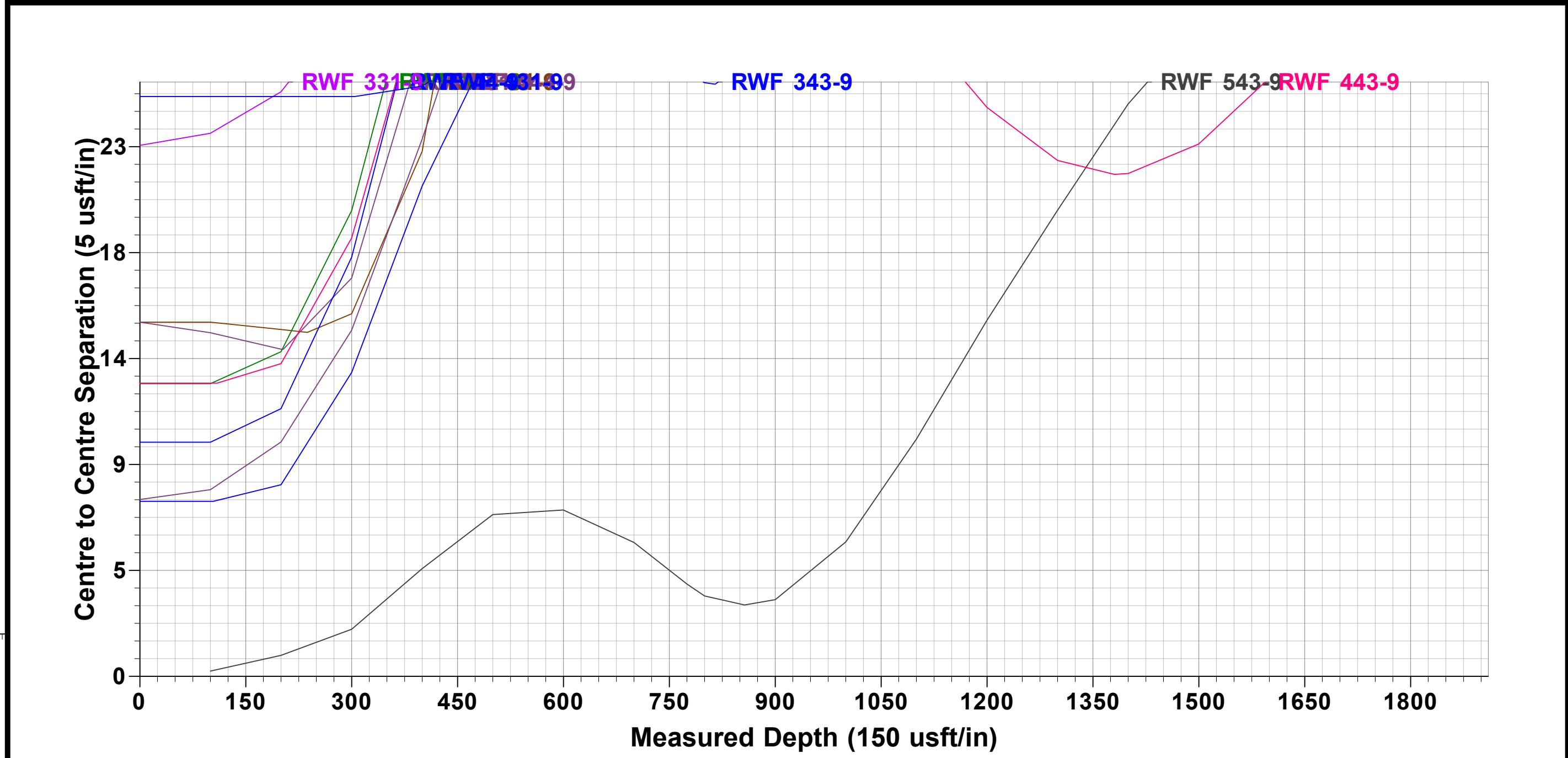
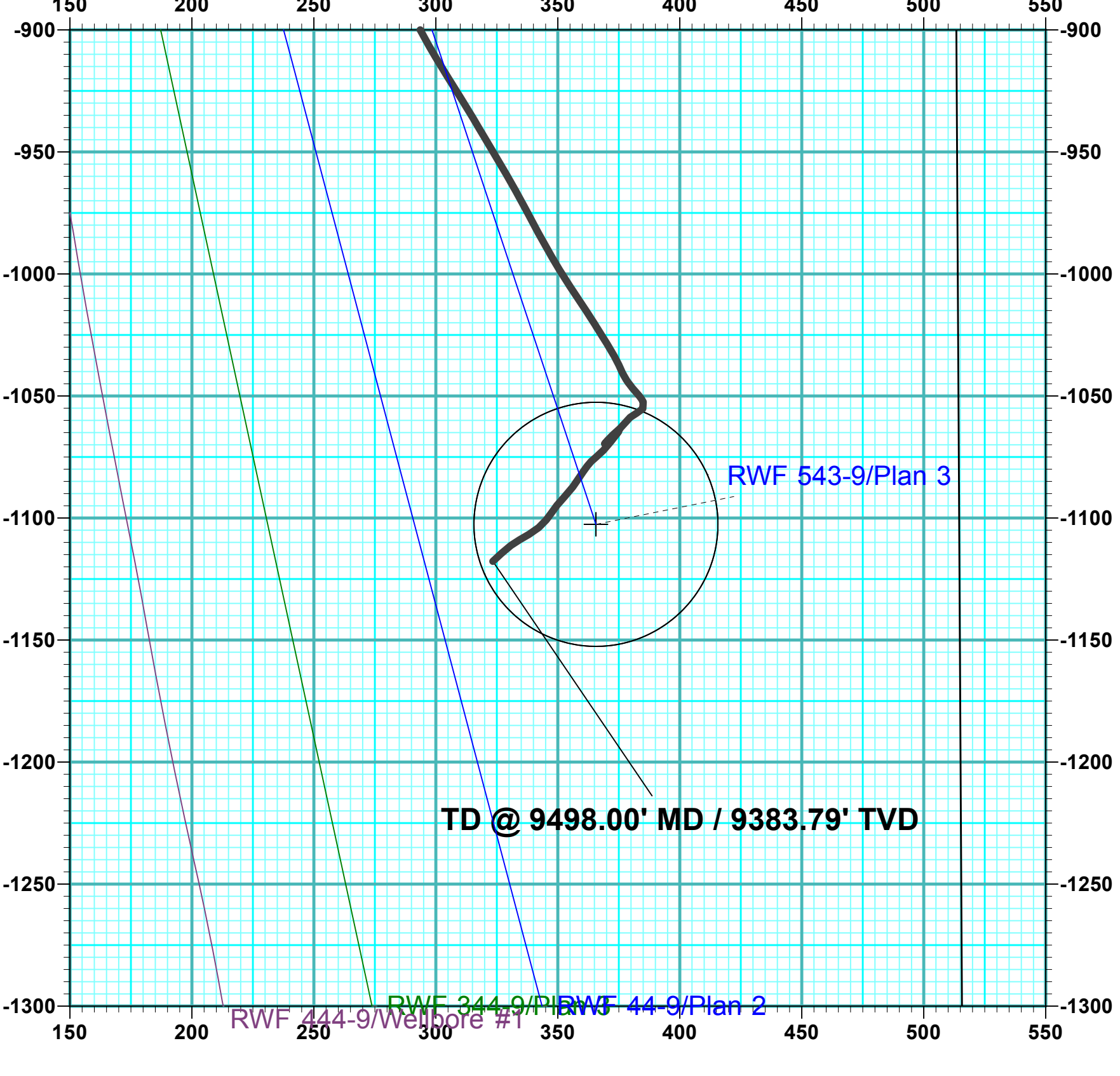
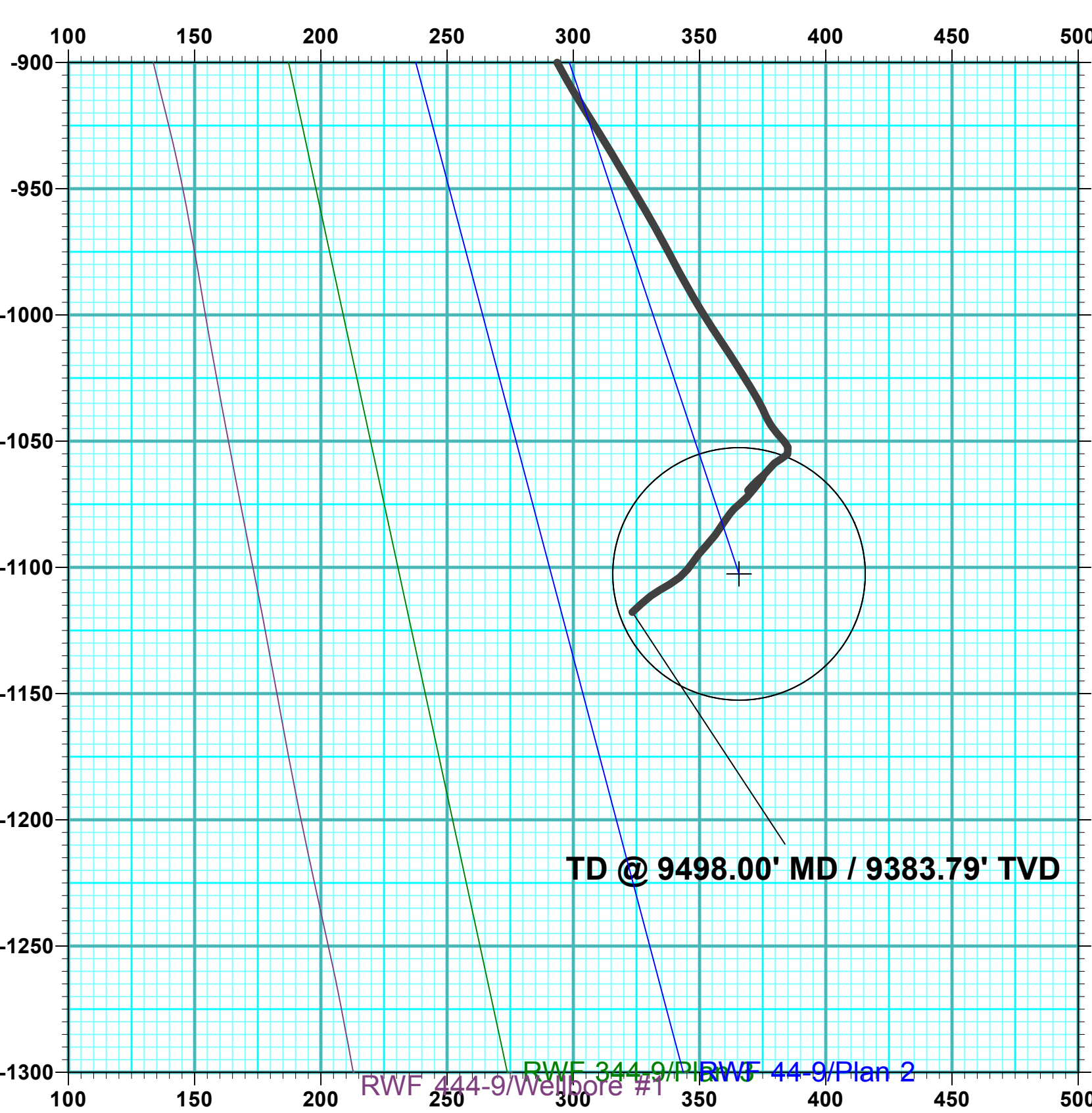
DESIGN ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSectDeparture	Annotation	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	Start Build 3.00	
775.36	11.26	161.65	772.95	-34.90	11.57	36.77	Start 5383.79 hold at 775.36 MD	
6159.16	11.26	161.65	6053.10	-1032.78	342.52	1088.10	Start Drop -1.50	
6909.88	0.00	0.00	6799.00	-1102.58	365.67	1161.64	Start 2650.00 hold at 6909.88 MD	
9559.88	0.00	0.00	9449.00	-1102.58	365.67	1161.64	TD at 9559.88	

SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
RWF 31-9	-3.09	-14.72	1630191.10	2327358.60
RWF 32-9	-15.92	-27.39	1630178.60	2327345.60
RWF 331-9	-4.58	-22.09	1630189.80	2327351.20
RWF 332-9	-7.67	-36.71	1630187.10	2327336.50
RWF 343-9	1.59	7.26	1630195.20	2327380.70
RWF 344-9	-11.24	-5.31	1630182.70	2327367.80
RWF 431-9	-14.33	-20.03	1630180.00	2327353.00
RWF 432-9	-17.42	-34.65	1630177.30	2327338.30
RWF 43-9	-19.01	-42.02	1630175.90	2327330.90
RWF 443-9	-8.26	9.32	1630185.30	2327382.50
RWF 444-9	-1.49	-7.36	1630192.50	2327366.00
RWF 44-9	-9.75	1.96	1630184.00	2327375.10
RWF 531-9	-6.08	-29.45	1630188.50	2327343.80
RWF 543-9	0.00	0.00	1630193.80	2327373.40

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3279.00	3330.61	G Sand Top-TVD
3339.00	3391.78	G Sand Base-TVD
4609.00	4686.71	WSTC_LOWER-TVD
5499.00	5594.18	WFRK/UMVRD-TVD
6799.00	6909.88	KMV GAS-TVD
8339.00	8449.88	CMEO-TVD
9299.00	9409.88	RLNS-TVD
9449.00	9559.88	TD-TVD



ANNOTATIONS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSectDeparture	Annotation	
295.00	0.75	159.68	294.99	-1.81	0.67	1.93	First MWD Survey @ 295.00' MD / 294.99' TVD	
9498.00	3.69	227.35	9383.79	-1117.70	323.41	1163.55	TD @ 9498.00' MD / 9383.79' TVD	





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Sec 9, T6S, R94W

RWF 543-9 - Slot RWF 543-9

Wellbore #1

Design: Wellbore #1

KLX Survey Report

06 January, 2022



Company:	Terra Energy Partners, LLP	Local Co-ordinate Reference:	Well RWF 543-9 - Slot RWF 543-9
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 543-9	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 543-9 - Slot RWF 543-9					
Well Position	+N/-S	0.00 usft	Northing:	1,630,193.80 usft	Latitude:	39.539422
	+E/-W	0.00 usft	Easting:	2,327,373.40 usft	Longitude:	-107.885252
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	12/29/2021	9.12	65.57	51,188.30000000

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	163.86	

Survey Program	Date	1/6/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
295.00	9,498.00	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 @ 295.00' MD / 294.99' TVD									
295.00	0.75	159.68	294.99	-1.81	0.67	1.93	0.25	0.25	0.00
389.00	2.02	172.16	388.96	-4.03	1.11	4.18	1.38	1.35	13.28
482.00	3.21	169.61	481.86	-8.21	1.80	8.39	1.29	1.28	-2.74
576.00	5.10	164.51	575.61	-14.83	3.39	15.19	2.05	2.01	-5.43
670.00	6.99	164.60	669.09	-24.37	6.03	25.09	2.01	2.01	0.10
764.00	9.05	162.84	762.16	-36.95	9.73	38.20	2.21	2.19	-1.87
858.00	10.94	162.66	854.73	-52.53	14.57	54.51	2.01	2.01	-0.19
952.00	13.10	164.16	946.66	-71.29	20.14	74.08	2.32	2.30	1.60
1,045.00	14.11	163.02	1,037.05	-92.28	26.32	95.96	1.12	1.09	-1.23

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Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 543-9	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)
1,162.00	14.59	159.15	1,150.41	-119.69	35.73	124.90	0.92	0.41	-3.31
1,256.00	13.84	162.75	1,241.53	-141.49	43.28	147.94	1.23	-0.80	3.83
1,350.00	14.06	160.64	1,332.76	-163.00	50.40	170.59	0.59	0.23	-2.24
1,445.00	12.96	165.83	1,425.13	-184.22	56.83	192.76	1.72	-1.16	5.46
1,539.00	13.40	163.81	1,516.65	-204.90	62.45	214.18	0.68	0.47	-2.15
1,633.00	13.89	162.31	1,608.00	-226.11	68.92	236.35	0.64	0.52	-1.60
1,727.00	14.55	161.08	1,699.12	-248.03	76.17	259.43	0.77	0.70	-1.31
1,821.00	13.01	164.77	1,790.41	-269.41	82.78	281.80	1.89	-1.64	3.93
1,915.00	12.83	164.69	1,882.03	-289.68	88.32	302.82	0.19	-0.19	-0.09
2,009.00	13.40	164.25	1,973.58	-310.23	94.03	324.14	0.62	0.61	-0.47
2,103.00	11.82	167.15	2,065.31	-330.10	99.13	344.65	1.81	-1.68	3.09
2,197.00	11.91	165.13	2,157.31	-348.86	103.76	363.96	0.45	0.10	-2.15
2,291.00	12.13	165.30	2,249.24	-367.79	108.75	383.53	0.24	0.23	0.18
2,385.00	10.68	165.48	2,341.39	-385.78	113.44	402.11	1.54	-1.54	0.19
2,479.00	10.63	164.42	2,433.77	-402.56	117.96	419.48	0.22	-0.05	-1.13
2,574.00	10.85	165.39	2,527.10	-419.65	122.57	437.18	0.30	0.23	1.02
2,668.00	10.81	163.98	2,619.43	-436.69	127.23	454.84	0.29	-0.04	-1.50
2,762.00	10.94	164.60	2,711.74	-453.76	132.03	472.58	0.19	0.14	0.66
2,856.00	10.46	163.46	2,804.10	-470.54	136.83	490.03	0.56	-0.51	-1.21
2,950.00	10.20	163.72	2,896.58	-486.71	141.59	506.88	0.28	-0.28	0.28
3,044.00	9.80	163.54	2,989.15	-502.37	146.19	523.21	0.43	-0.43	-0.19
3,133.00	11.38	162.05	3,076.63	-517.99	151.04	539.56	1.80	1.78	-1.67
3,223.00	11.16	160.12	3,164.90	-534.62	156.74	557.12	0.49	-0.24	-2.14
3,314.00	10.77	159.06	3,254.24	-550.85	162.78	574.38	0.48	-0.43	-1.16
3,404.00	10.50	159.41	3,342.69	-566.38	168.67	590.94	0.31	-0.30	0.39
3,494.00	10.77	159.68	3,431.15	-581.94	174.47	607.50	0.31	0.30	0.30
3,585.00	10.55	159.15	3,520.57	-597.70	180.39	624.29	0.26	-0.24	-0.58
3,676.00	10.63	157.83	3,610.02	-613.26	186.52	640.93	0.28	0.09	-1.45
3,768.00	10.63	158.01	3,700.45	-628.98	192.90	657.81	0.04	0.00	0.20
3,860.00	11.03	155.55	3,790.81	-644.86	199.72	674.96	0.66	0.43	-2.67
3,950.00	11.91	161.87	3,879.01	-661.53	206.17	692.77	1.70	0.98	7.02
4,041.00	12.17	162.84	3,968.01	-679.62	211.92	711.74	0.36	0.29	1.07
4,133.00	11.78	163.90	4,058.01	-697.90	217.39	730.83	0.49	-0.42	1.15
4,223.00	11.82	163.19	4,146.11	-715.55	222.60	749.23	0.17	0.04	-0.79
4,315.00	11.87	162.05	4,236.15	-733.58	228.24	768.11	0.26	0.05	-1.24
4,406.00	11.82	163.90	4,325.21	-751.43	233.71	786.78	0.42	-0.05	2.03
4,498.00	11.78	162.05	4,415.27	-769.42	239.22	805.59	0.41	-0.04	-2.01
4,589.00	11.73	160.91	4,504.36	-787.00	245.11	824.12	0.26	-0.05	-1.25
4,681.00	11.34	162.31	4,594.50	-804.45	250.92	842.50	0.52	-0.42	1.52
4,772.00	11.34	162.14	4,683.72	-821.49	256.38	860.38	0.04	0.00	-0.19
4,863.00	11.21	154.58	4,772.97	-838.00	262.92	878.06	1.63	-0.14	-8.31
4,954.00	11.43	153.44	4,862.20	-854.05	270.75	895.65	0.34	0.24	-1.25
5,045.00	11.87	153.00	4,951.33	-870.46	279.03	913.71	0.49	0.48	-0.48

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Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 543-9	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)
5,136.00	12.26	154.67	5,040.32	-887.53	287.41	932.44	0.58	0.43	1.84
5,228.00	11.73	150.89	5,130.31	-904.53	296.14	951.20	1.03	-0.58	-4.11
5,320.00	11.73	147.55	5,220.39	-920.59	305.71	969.29	0.74	0.00	-3.63
5,411.00	11.56	149.39	5,309.52	-936.25	315.31	986.99	0.45	-0.19	2.02
5,502.00	10.41	148.95	5,398.85	-951.14	324.20	1,003.77	1.27	-1.26	-0.48
5,593.00	10.24	150.98	5,488.37	-965.25	332.36	1,019.60	0.44	-0.19	2.23
5,685.00	10.85	152.12	5,578.82	-980.06	340.38	1,036.05	0.70	0.66	1.24
5,778.00	10.15	149.31	5,670.26	-994.84	348.65	1,052.55	0.93	-0.75	-3.02
5,869.00	8.70	145.97	5,760.03	-1,007.44	356.60	1,066.86	1.70	-1.59	-3.67
5,962.00	8.53	147.55	5,851.98	-1,019.09	364.24	1,080.17	0.31	-0.18	1.70
6,054.00	7.25	148.60	5,943.11	-1,029.80	370.92	1,092.32	1.40	-1.39	1.14
6,145.00	4.97	156.25	6,033.59	-1,038.31	375.50	1,101.77	2.66	-2.51	8.41
6,237.00	3.43	144.65	6,125.34	-1,044.21	378.70	1,108.32	1.90	-1.67	-12.61
6,329.00	3.65	137.70	6,217.17	-1,048.62	382.26	1,113.55	0.52	0.24	-7.55
6,421.00	2.29	154.05	6,309.04	-1,052.44	385.04	1,117.99	1.73	-1.48	17.77
6,513.00	1.80	221.46	6,401.00	-1,055.17	384.88	1,120.57	2.51	-0.53	73.27
6,604.00	2.24	244.40	6,491.94	-1,057.01	382.33	1,121.63	1.00	0.48	25.21
6,697.00	1.67	226.82	6,584.89	-1,058.73	379.71	1,122.55	0.88	-0.61	-18.90
6,788.00	1.93	218.48	6,675.84	-1,060.83	377.79	1,124.04	0.40	0.29	-9.16
6,880.00	2.24	227.26	6,767.78	-1,063.27	375.50	1,125.74	0.48	0.34	9.54
6,972.00	2.50	227.44	6,859.70	-1,065.84	372.70	1,127.44	0.28	0.28	0.20
7,064.00	1.63	221.29	6,951.64	-1,068.18	370.36	1,129.03	0.97	-0.95	-6.68
7,156.00	0.62	211.18	7,043.62	-1,069.59	369.24	1,130.08	1.11	-1.10	-10.99
7,247.00	1.49	41.20	7,134.61	-1,069.12	369.77	1,129.77	2.31	0.96	-186.79
7,339.00	1.63	49.11	7,226.58	-1,067.37	371.54	1,128.58	0.28	0.15	8.60
7,431.00	1.10	53.94	7,318.55	-1,065.99	373.25	1,127.73	0.59	-0.58	5.25
7,522.00	0.75	43.92	7,409.54	-1,065.05	374.37	1,127.13	0.42	-0.38	-11.01
7,613.00	0.44	29.25	7,500.54	-1,064.31	374.95	1,126.59	0.38	-0.34	-16.12
7,704.00	0.13	152.47	7,591.54	-1,064.10	375.17	1,126.45	0.57	-0.34	135.41
7,794.00	0.88	213.91	7,681.53	-1,064.76	374.83	1,126.99	0.92	0.83	68.27
7,885.00	1.54	218.65	7,772.51	-1,066.30	373.68	1,128.15	0.73	0.73	5.21
7,975.00	2.59	218.12	7,862.45	-1,068.84	371.66	1,130.03	1.17	1.17	-0.59
8,066.00	2.99	223.75	7,953.34	-1,072.18	368.75	1,132.42	0.53	0.44	6.19
8,157.00	2.07	231.40	8,044.25	-1,074.92	365.83	1,134.24	1.07	-1.01	8.41
8,248.00	1.58	222.96	8,135.21	-1,076.86	363.69	1,135.51	0.61	-0.54	-9.27
8,339.00	1.63	218.65	8,226.17	-1,078.79	362.03	1,136.90	0.14	0.05	-4.74
8,429.00	1.80	213.20	8,316.13	-1,080.97	360.45	1,138.56	0.26	0.19	-6.06
8,519.00	2.37	213.99	8,406.07	-1,083.70	358.64	1,140.68	0.63	0.63	0.88
8,609.00	3.16	215.14	8,495.97	-1,087.27	356.17	1,143.42	0.88	0.88	1.28
8,701.00	3.52	224.19	8,587.81	-1,091.37	352.74	1,146.41	0.69	0.39	9.84
8,790.00	2.42	218.12	8,676.69	-1,094.80	349.68	1,148.86	1.28	-1.24	-6.82
8,880.00	2.11	214.26	8,766.62	-1,097.67	347.57	1,151.02	0.38	-0.34	-4.29
8,970.00	2.81	218.04	8,856.54	-1,100.77	345.28	1,153.37	0.80	0.78	4.20

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Site:	Sec 9, T6S, R94W	MD Reference:	KB=30' @ 6399.40usft (H&P #329)
Well:	RWF 543-9	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)
9,061.00	2.77	231.22	8,947.43	-1,103.91	342.19	1,155.52	0.70	-0.04	14.48
9,153.00	3.25	238.60	9,039.30	-1,106.66	338.23	1,157.06	0.67	0.52	8.02
9,244.00	2.42	242.03	9,130.19	-1,108.90	334.33	1,158.14	0.93	-0.91	3.77
9,336.00	2.90	232.80	9,222.09	-1,111.22	330.76	1,159.37	0.70	0.52	-10.03
9,426.00	3.69	227.35	9,311.94	-1,114.56	326.82	1,161.48	0.94	0.88	-6.06
TD @ 9498.00' MD / 9383.79' TVD									
9,498.00	3.69	227.35	9,383.79	-1,117.70	323.41	1,163.55	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
295.00	294.99	-1.81	0.67	First MWD Survey @ 295.00' MD / 294.99' TVD
9,498.00	9,383.79	-1,117.70	323.41	TD @ 9498.00' MD / 9383.79' TVD

Checked By: _____ Approved By: _____ Date: _____