

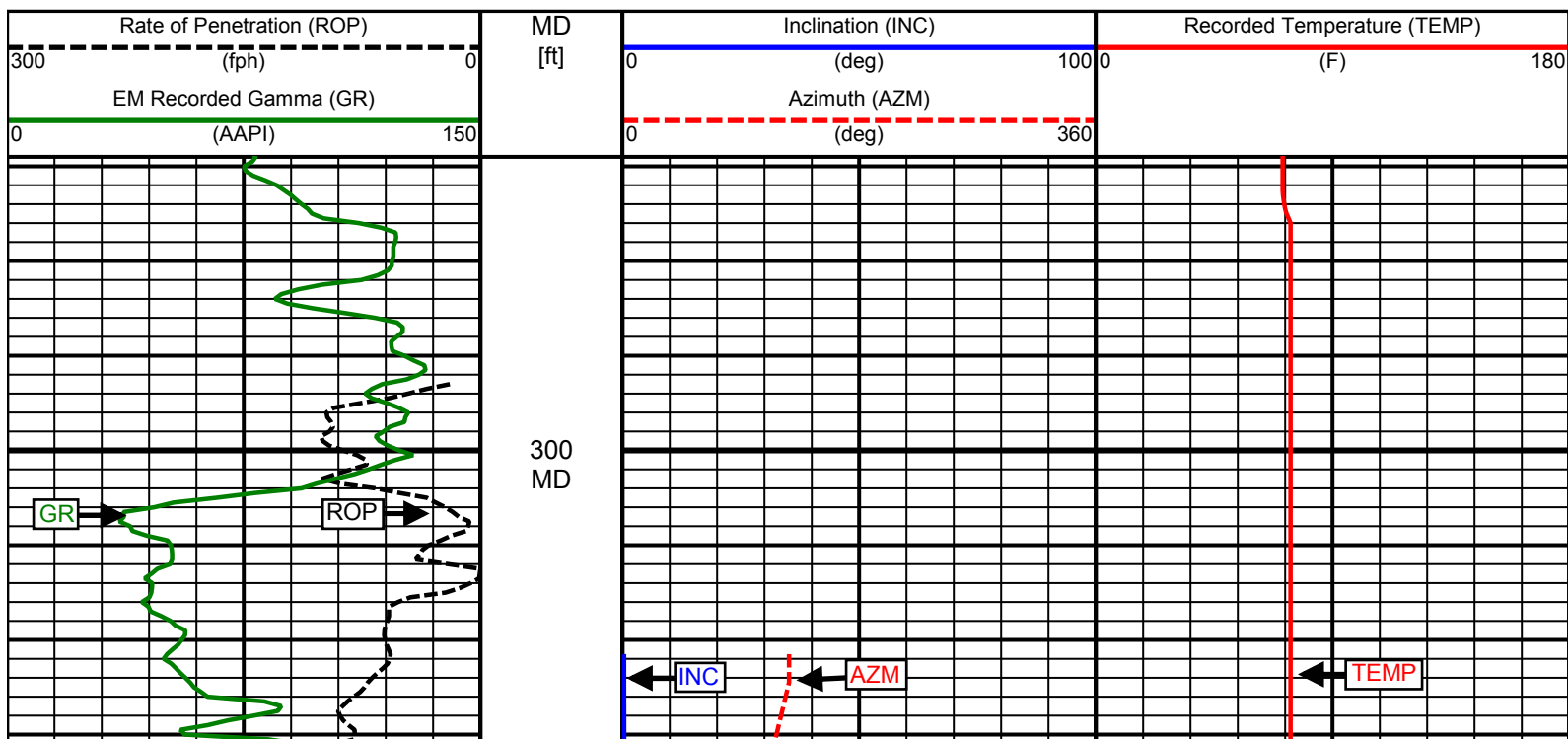
Top Log Interval	ft	269	2219				
Bottom Log Interval	ft	2219	2879				
Begin Log Time	hh:mm	10:09	12:25				
Begin Log Date	DD-MMM-YY	08-May-14	11-May-14				
End Log Time	hh:mm	07:10	05:30				
End Log Date	DD-MMM-YY	11-May-14	12-May-14				
Drill or Wipe		Drill	Drill				
Surface/Bit RPM	RPM	40 / 140	50 / 140				
Flow Rate	gpm	450	450				
Min Inc @ Depth	deg @ ft	0.30 @ 323	10.77 @ 2774				
Max Inc @ Depth	deg @ ft	13.67 @ 1473	11.83 @ 2400				

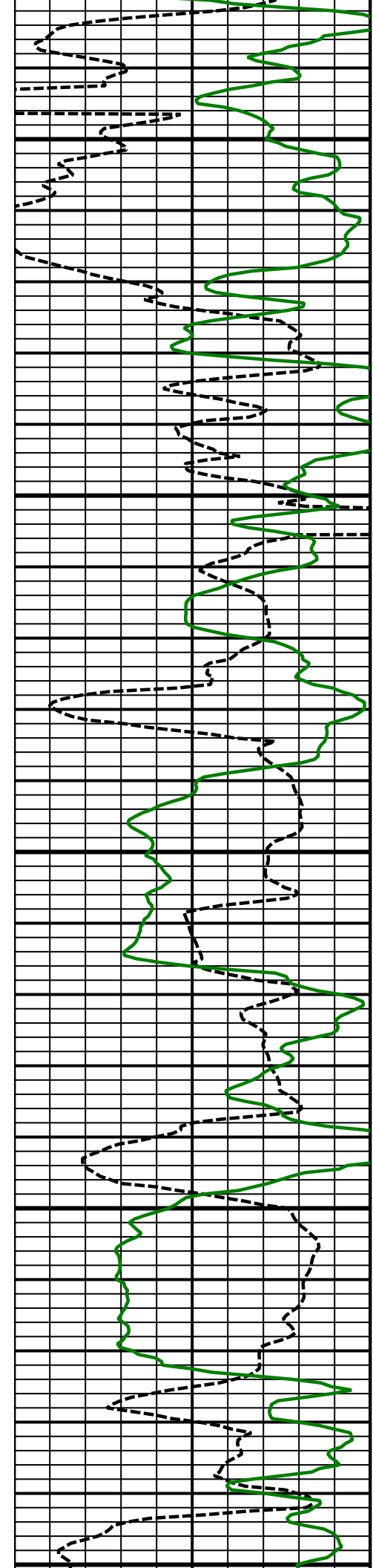
MUD DATA							
Fluid Type		Water	Water				
Mud Weight	ppg	8.90	8.90				
PV / YP	cp / YP	8 / 5	8 / 3				
Solids / Sands	%	3.50 / 0.50	3.5 / .50				
ph / Fluid Loss	??????						
Oil:Water Ratio	% Vol	.0 : 97.0	.0 : 97.0				
Client Representative		Coffee	Coffee				
Weatherford Engineer		Rivera	Rivera				

CURVE SPECIFICATIONS

MNEMONIC	CURVE TITLE	UNITS	SMOOTHING			GAP FILL
			Window	Resolution	Type	
ROP	Rate of Penetration (ROP)	fph	3 ft	0.5 ft	Exponential	3 ft
GR	EM Recorded Gamma (GR)	AAPI	3 ft	0.5 ft	Exponential	5 ft
INC	Inclination (INC)	deg	3 ft	0.5 ft	AvgCent	150 ft
AZM	Azimuth (AZM)	deg	3 ft	0.5 ft	AvgCent	150 ft
TEMP	Recorded Temperature (TEMP)	F	3 ft	0.5 ft	AvgCent	200 ft

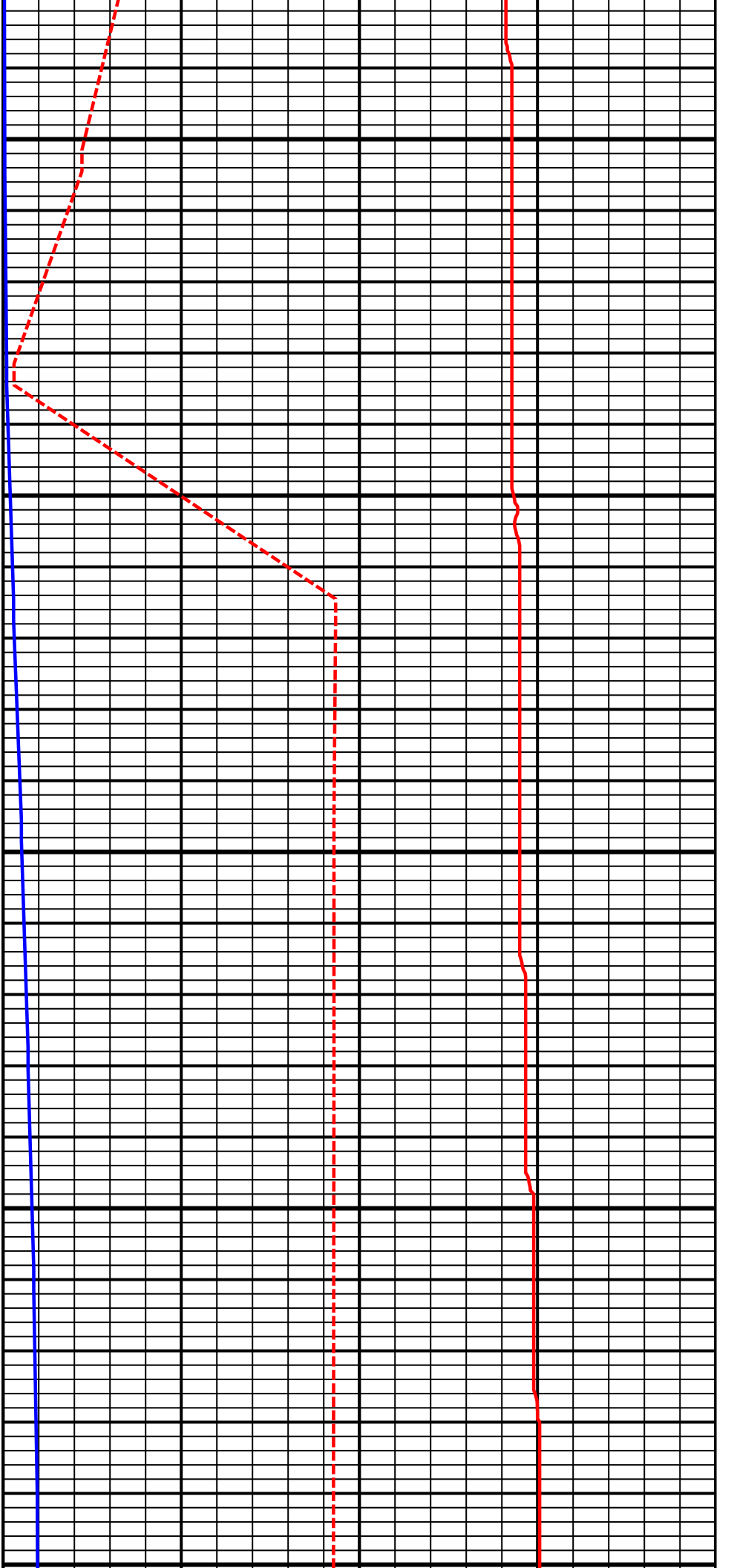
5 Inch - Measured Depth

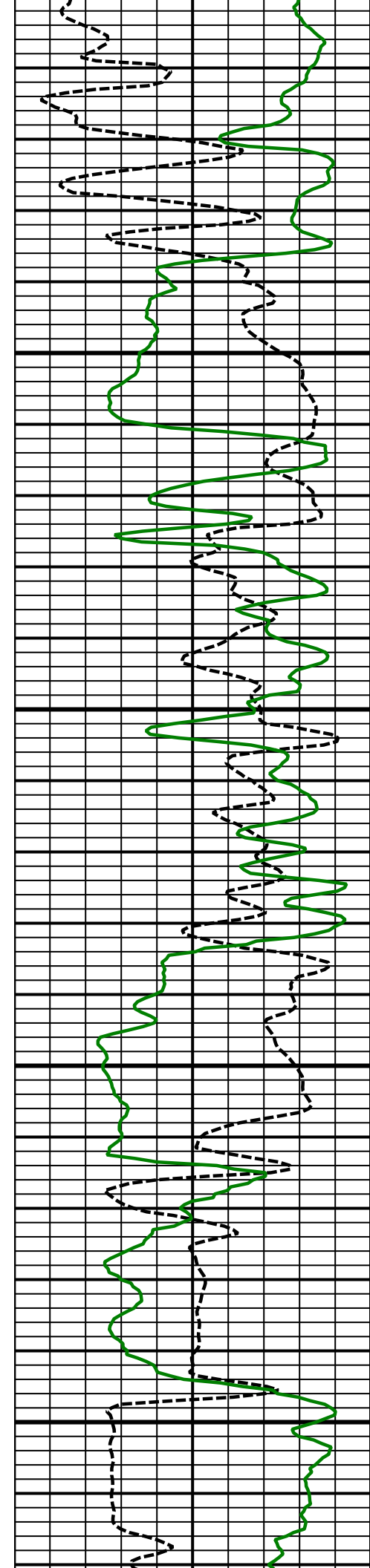




400
MD

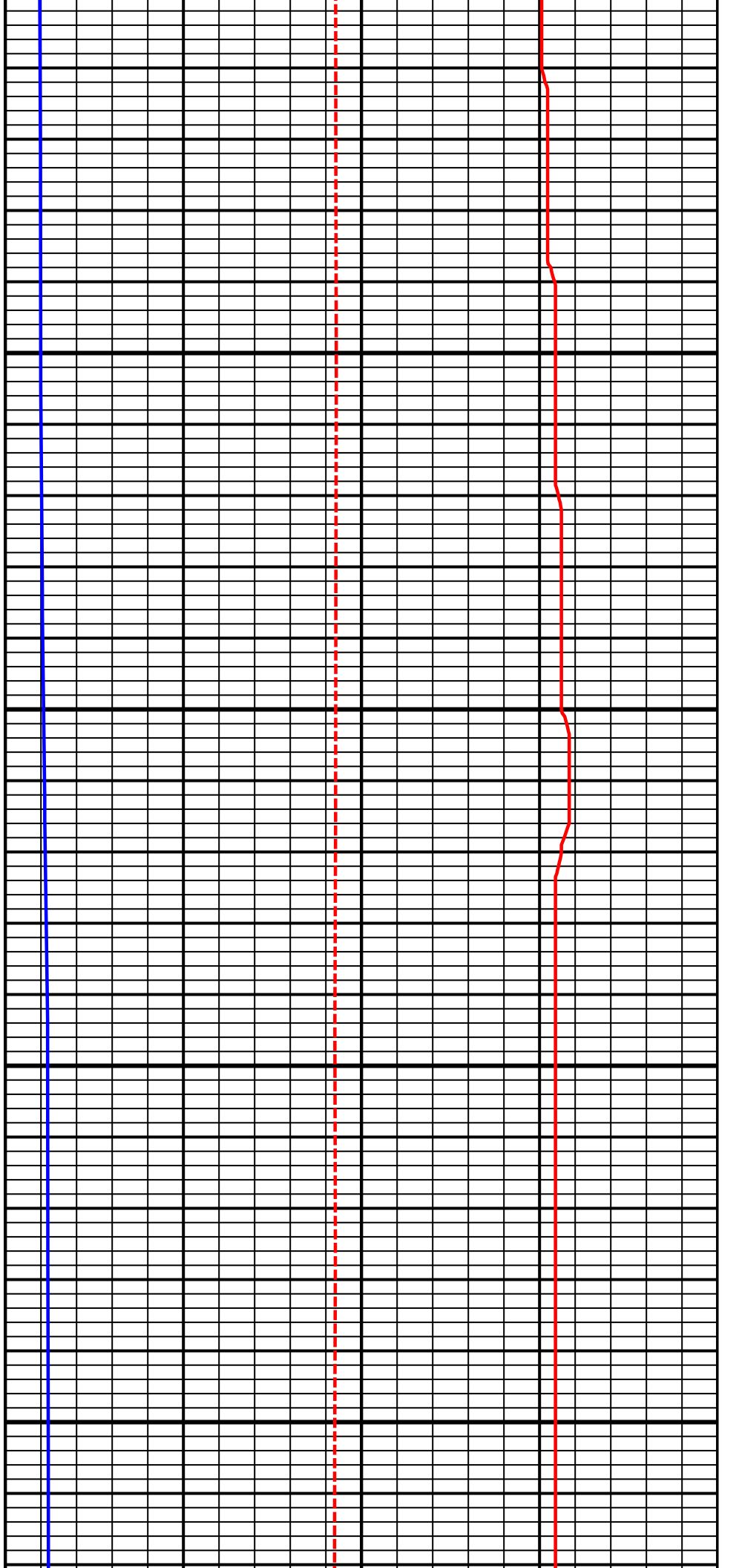
500
MD

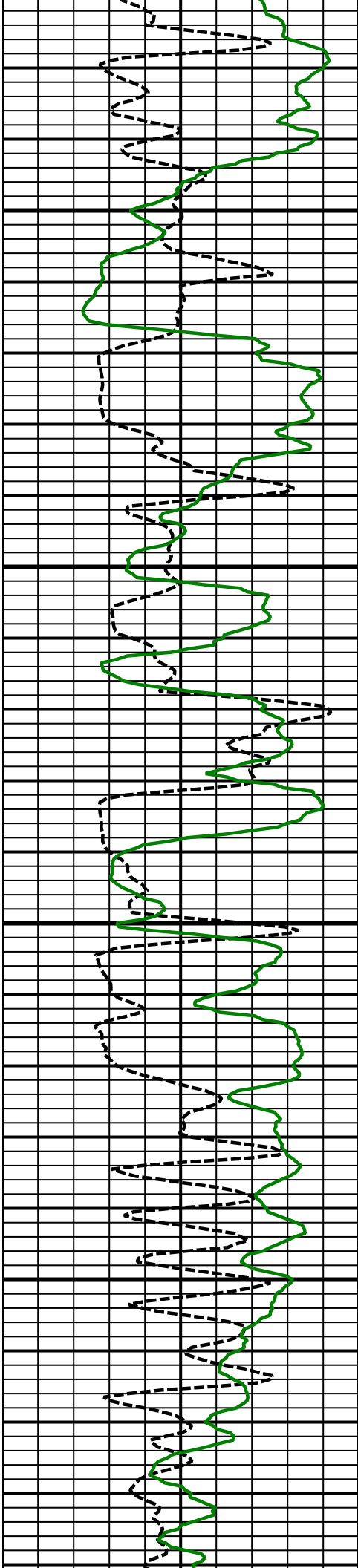




600
MD

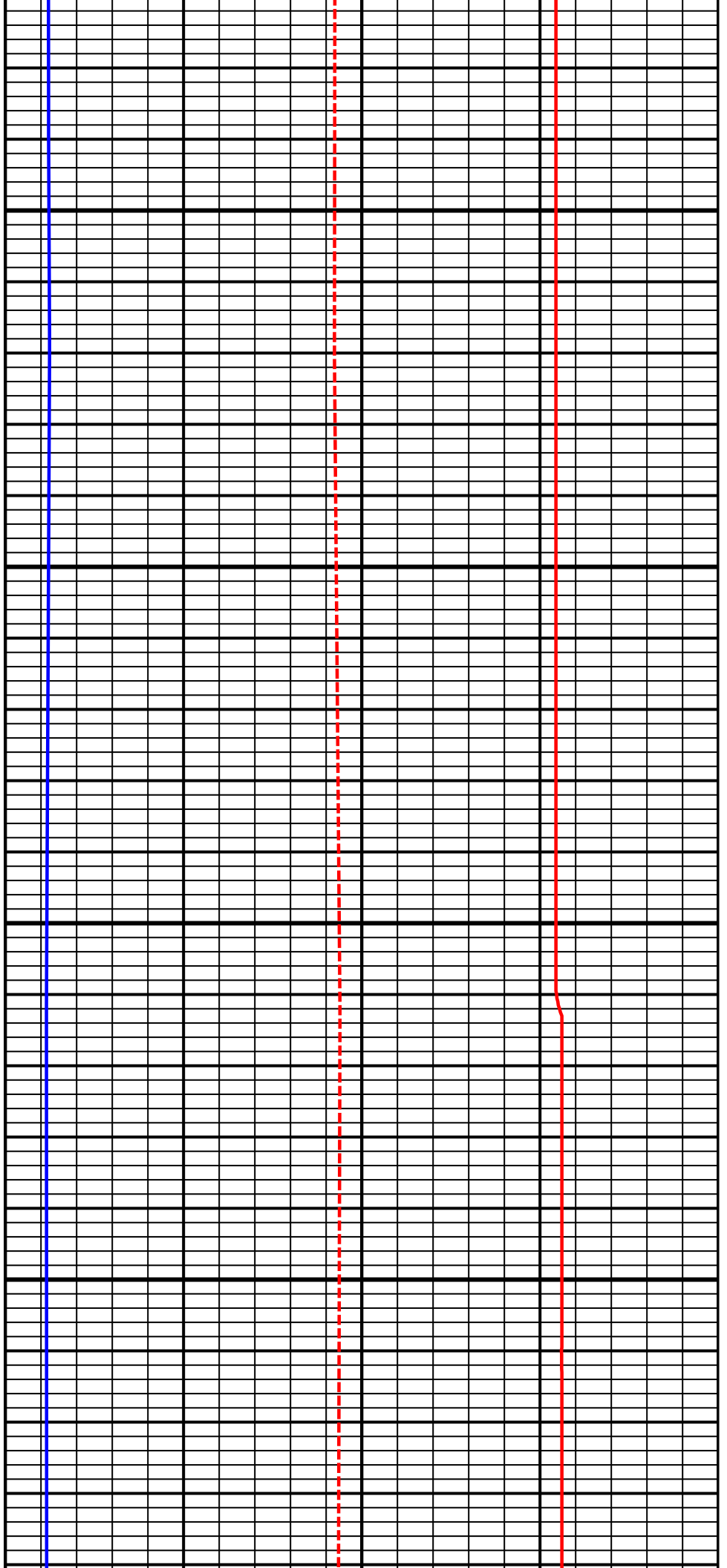
700
MD

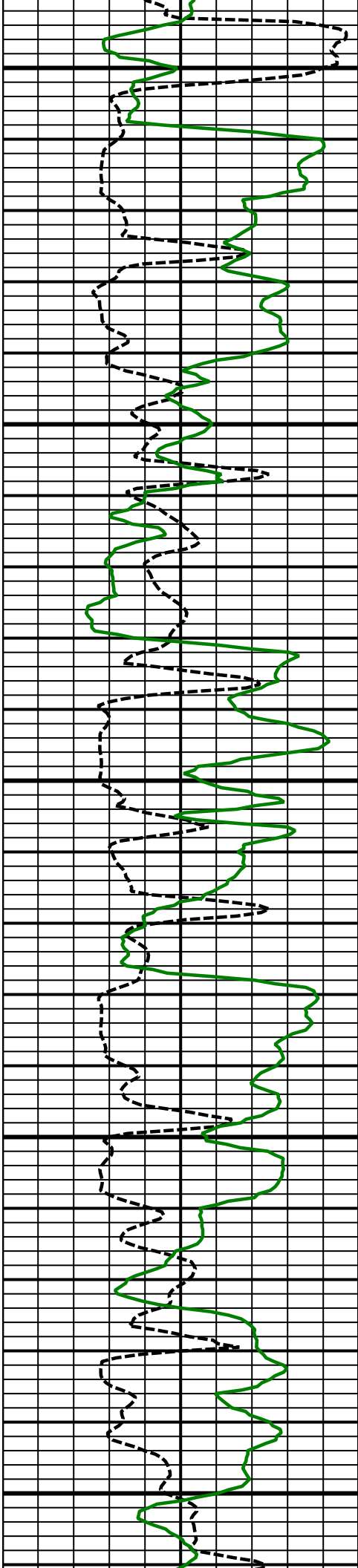




800
MD

900
MD

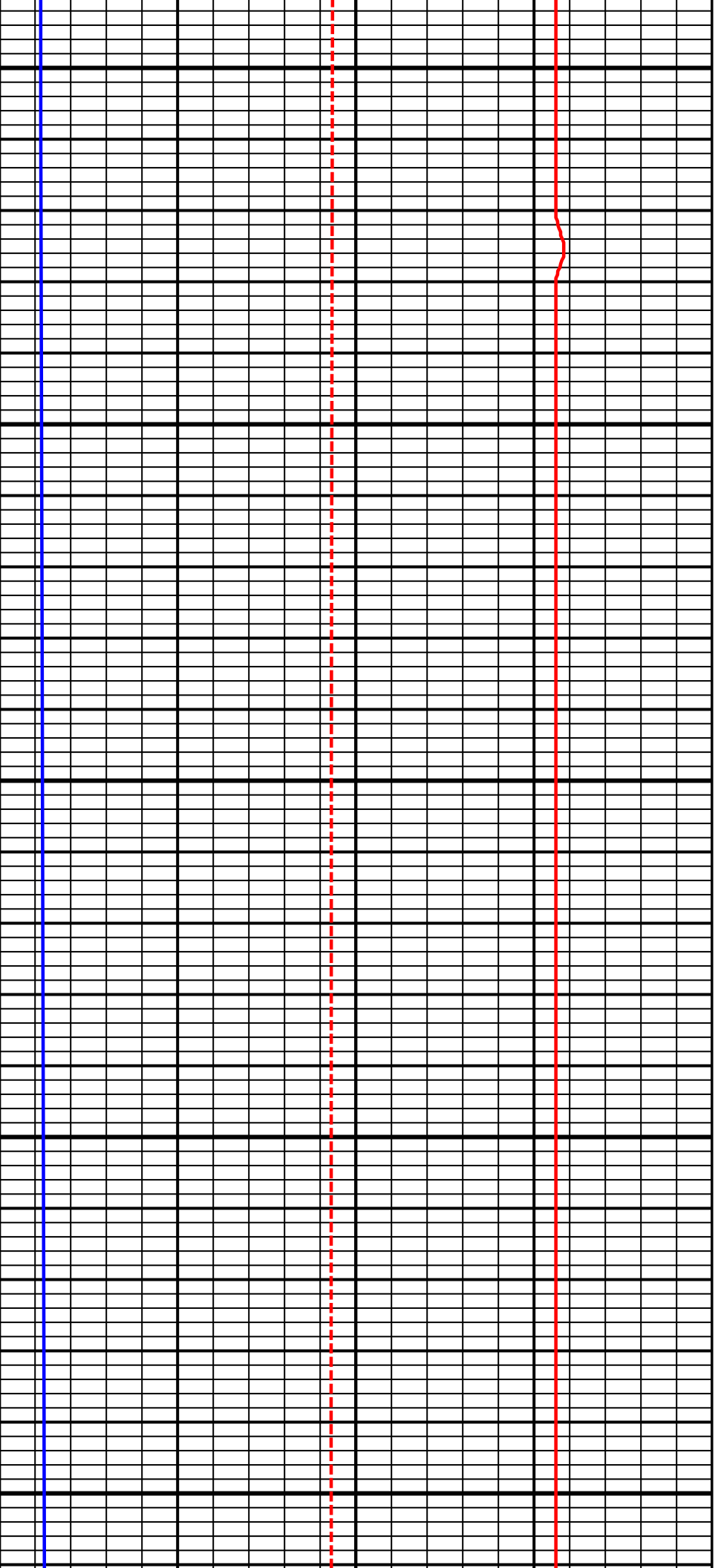


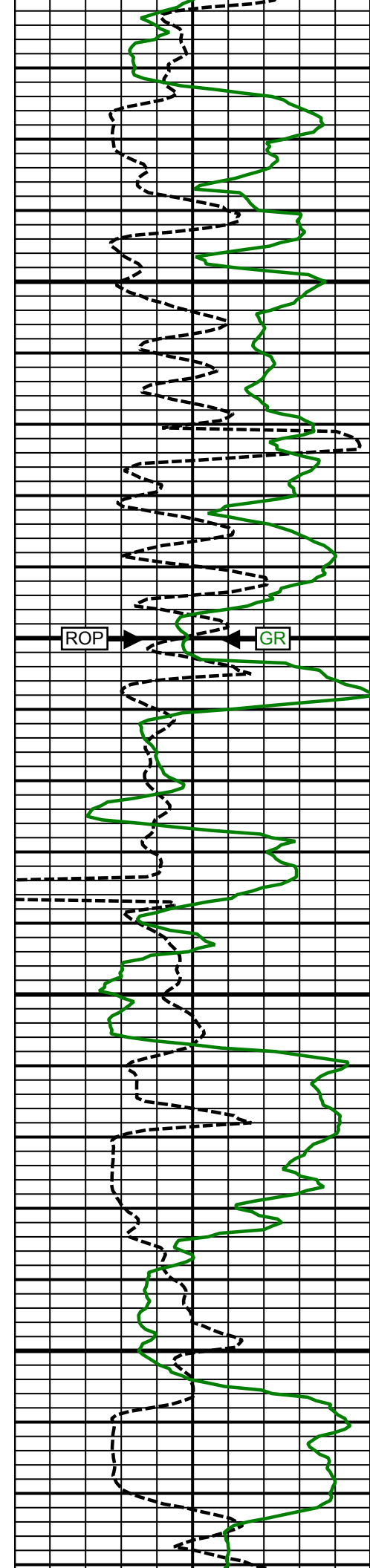


1000
MD

1100
MD

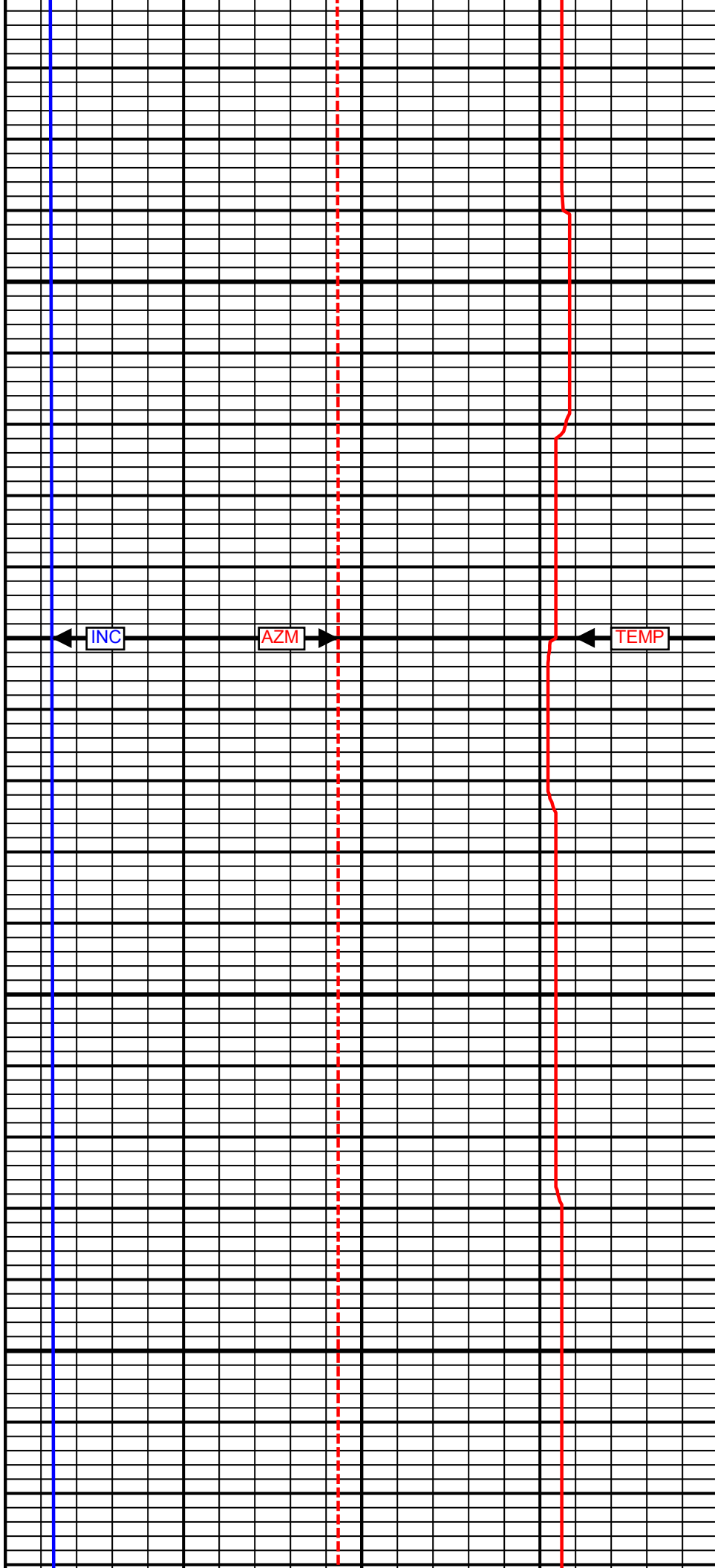
1200
MD





1300
MD

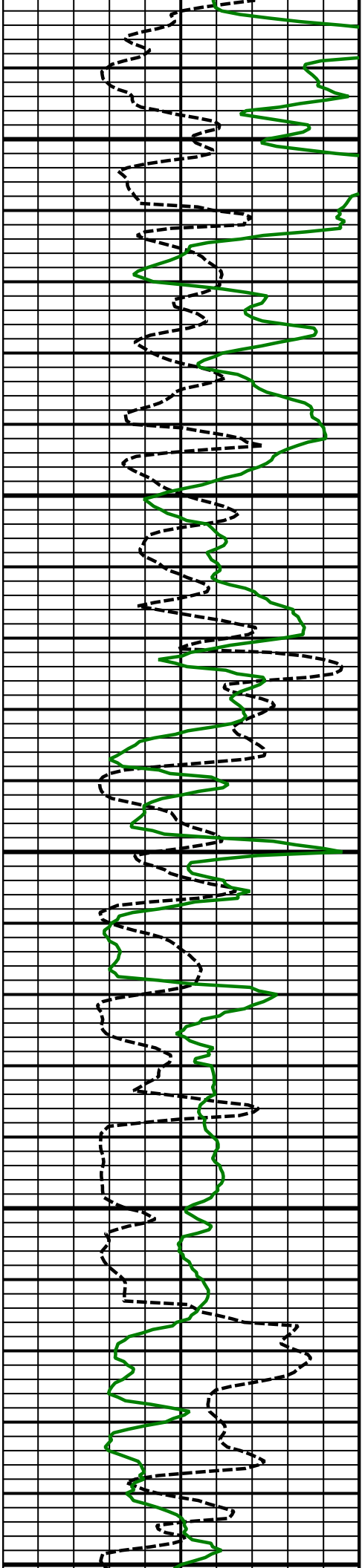
1400
MD



INC

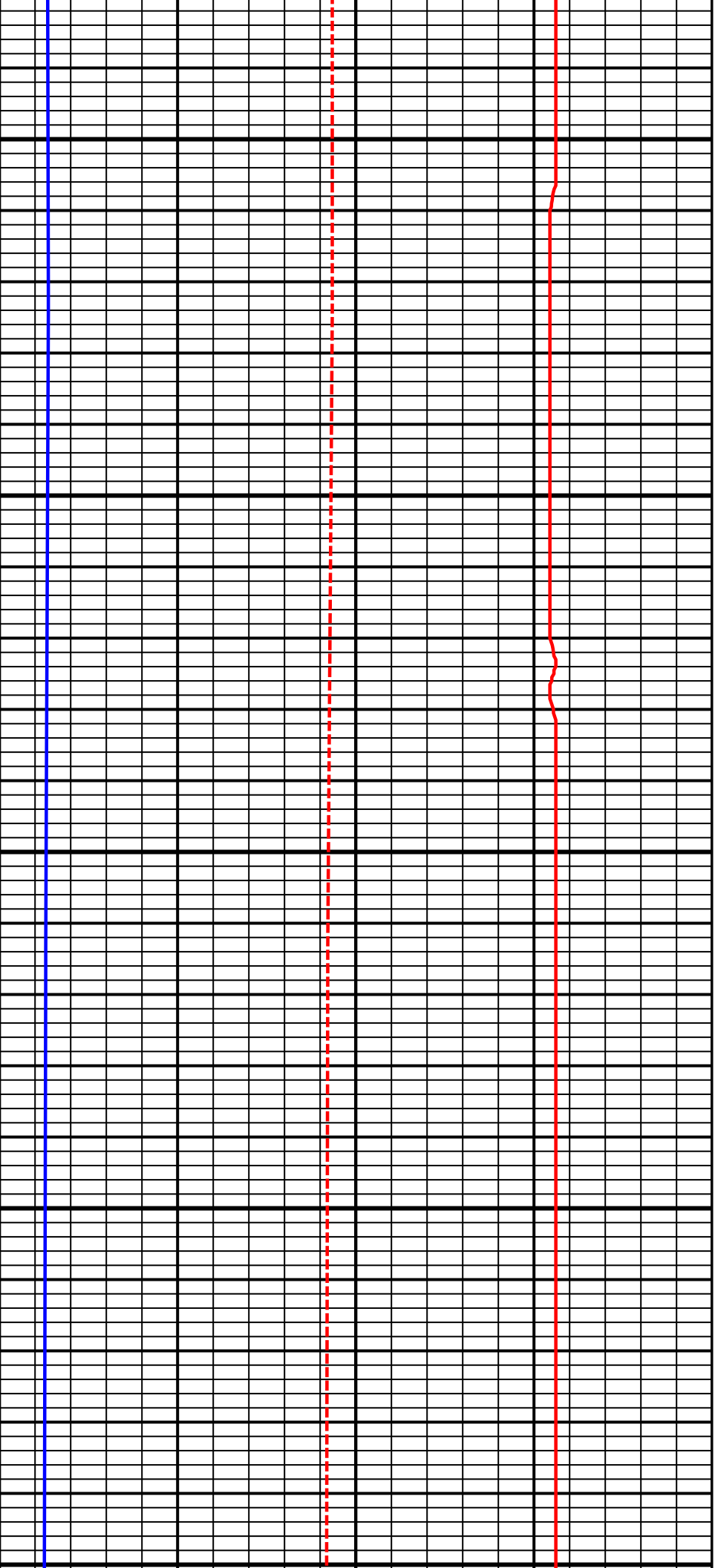
AZM

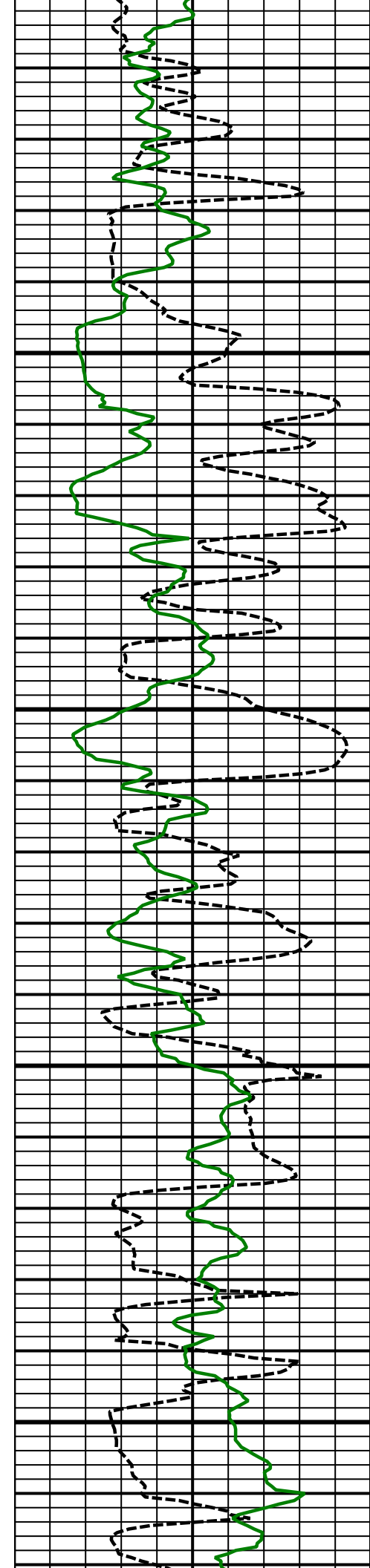
TEMP



1500
MD

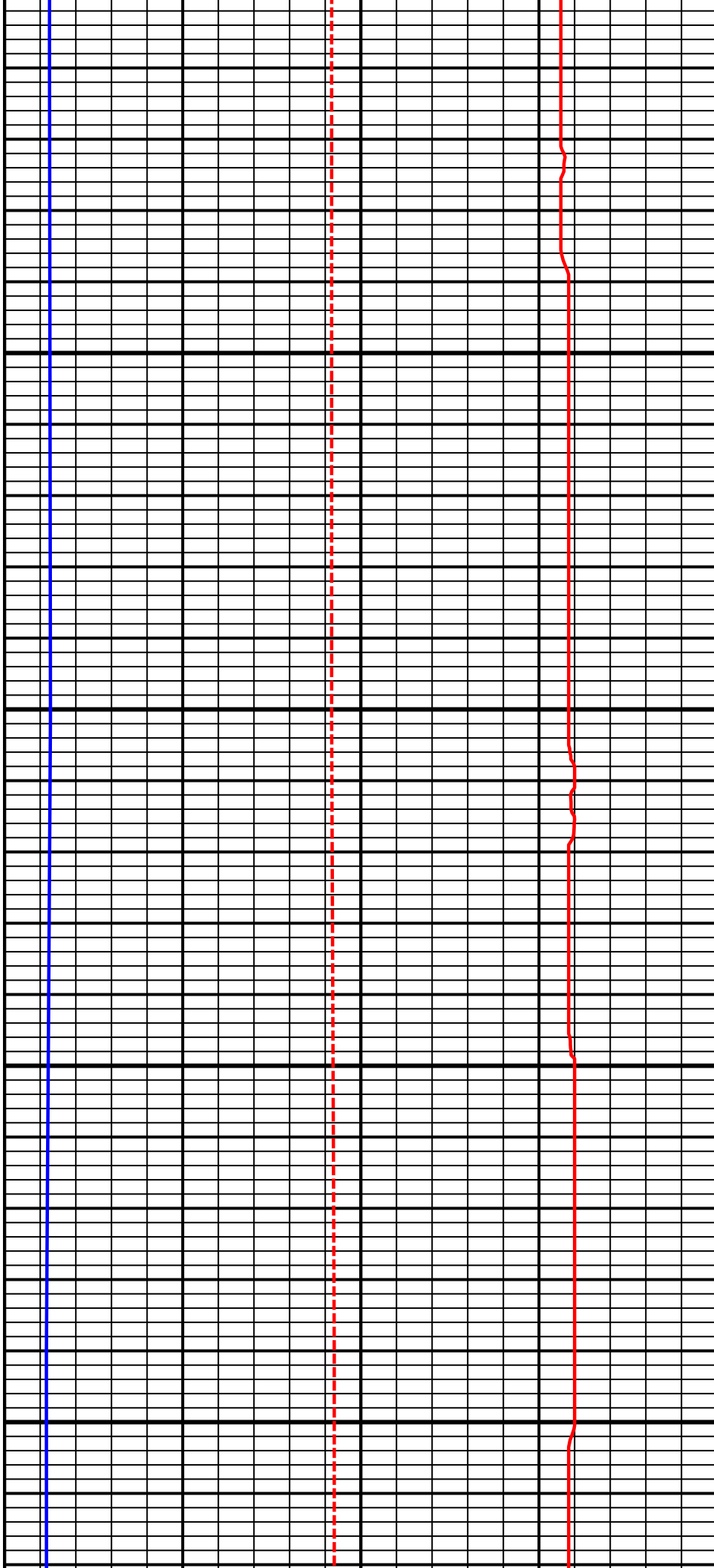
1600
MD

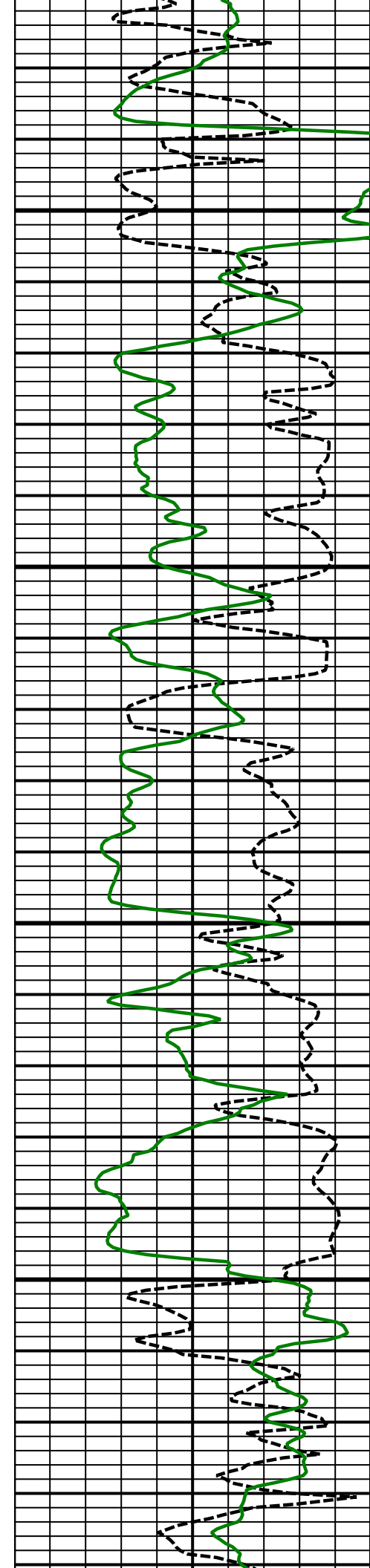




1700
MD

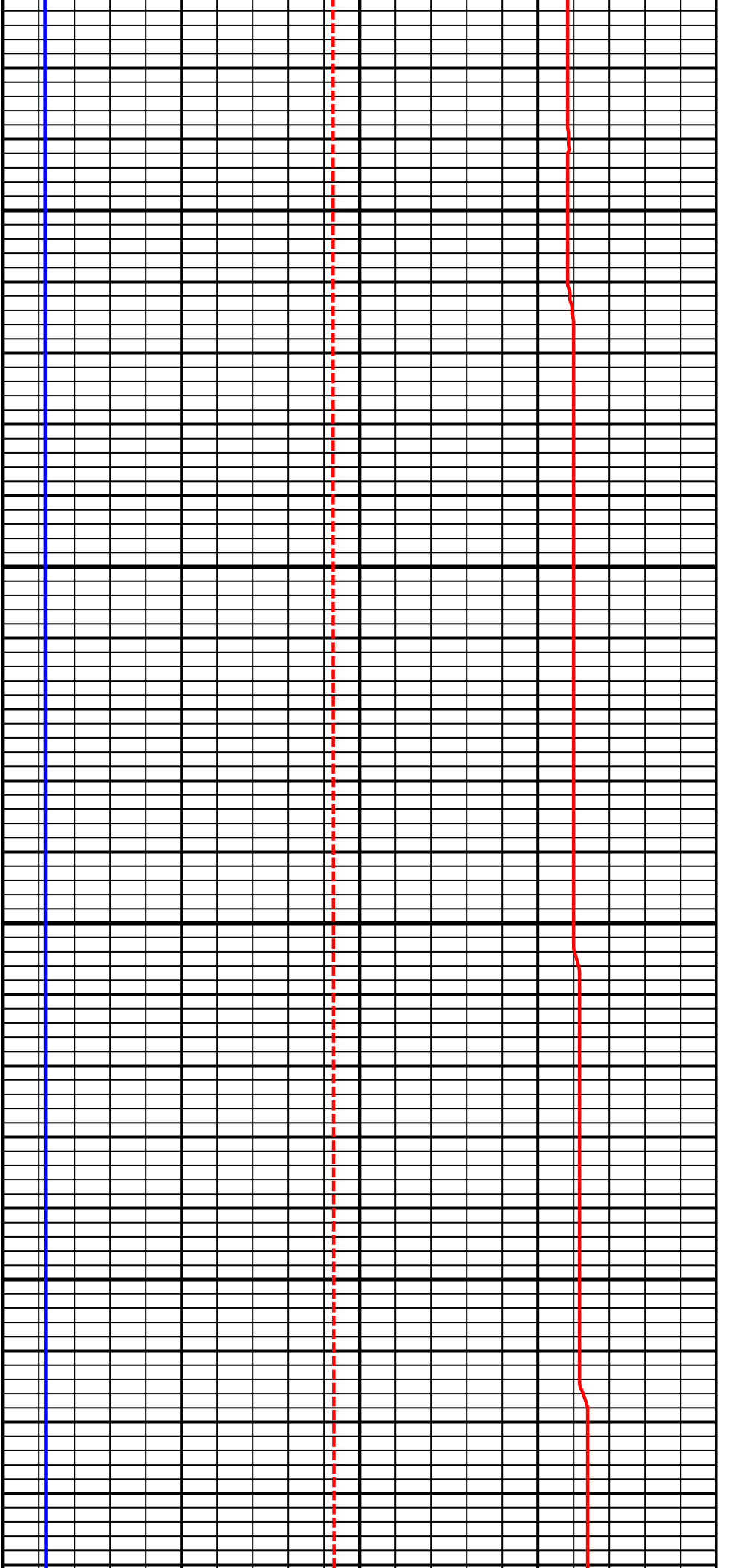
1800
MD

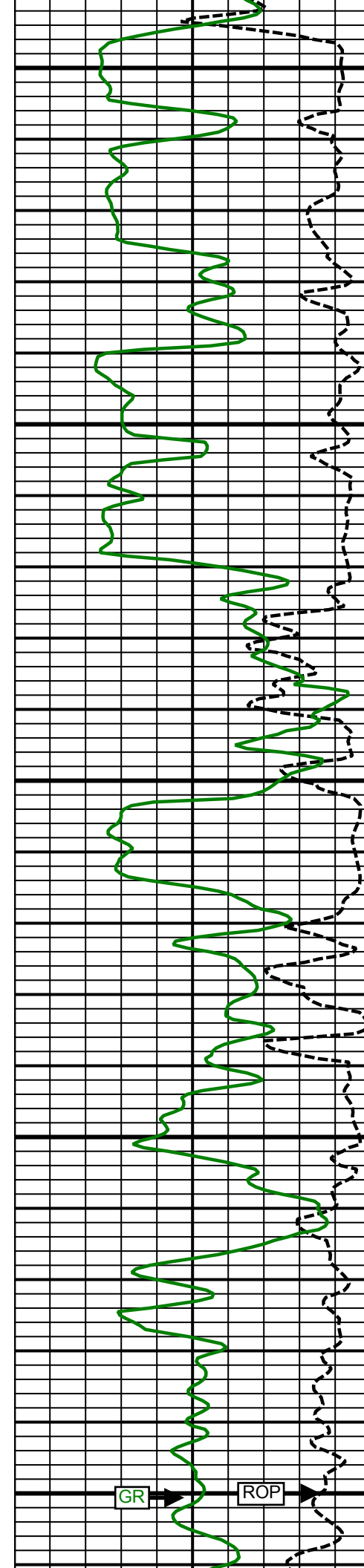




1900
MD

2000
MD





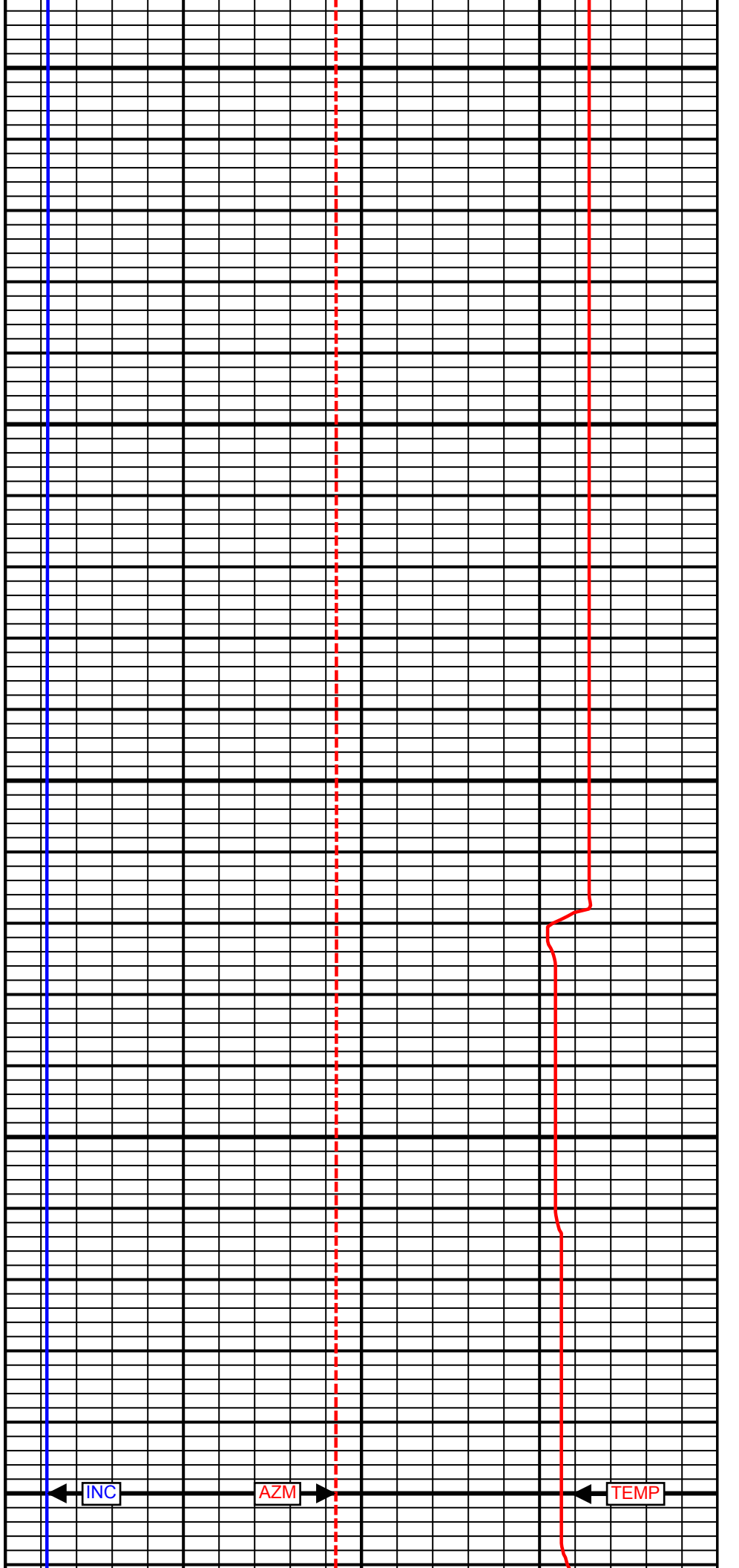
2100
MD

2200
MD

2300
MD

GR

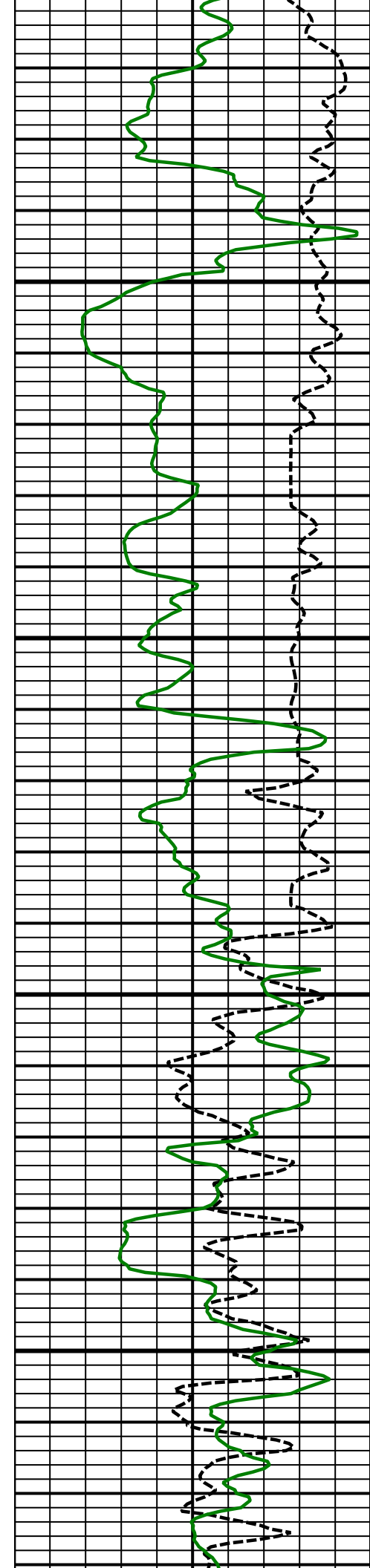
ROP



INC

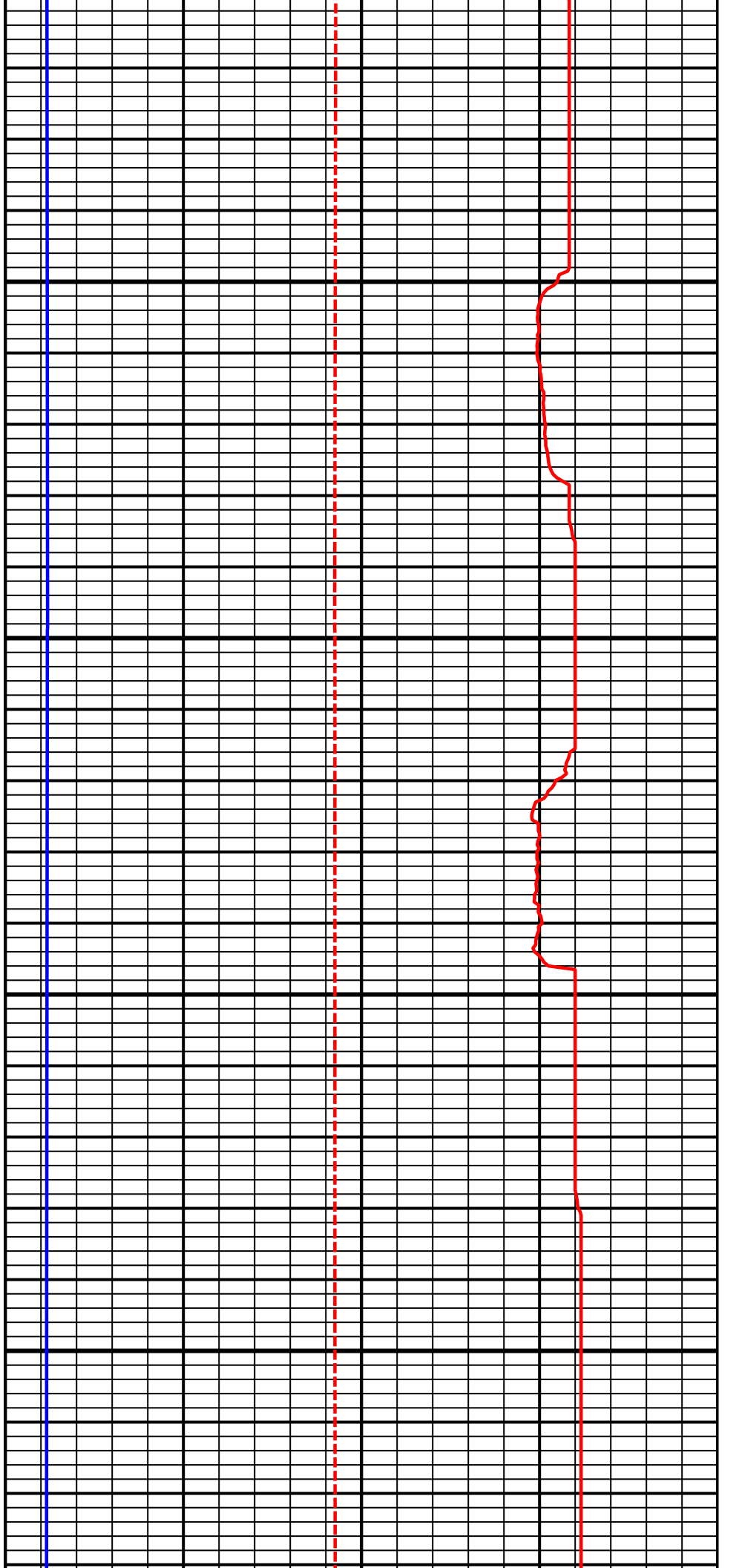
AZM

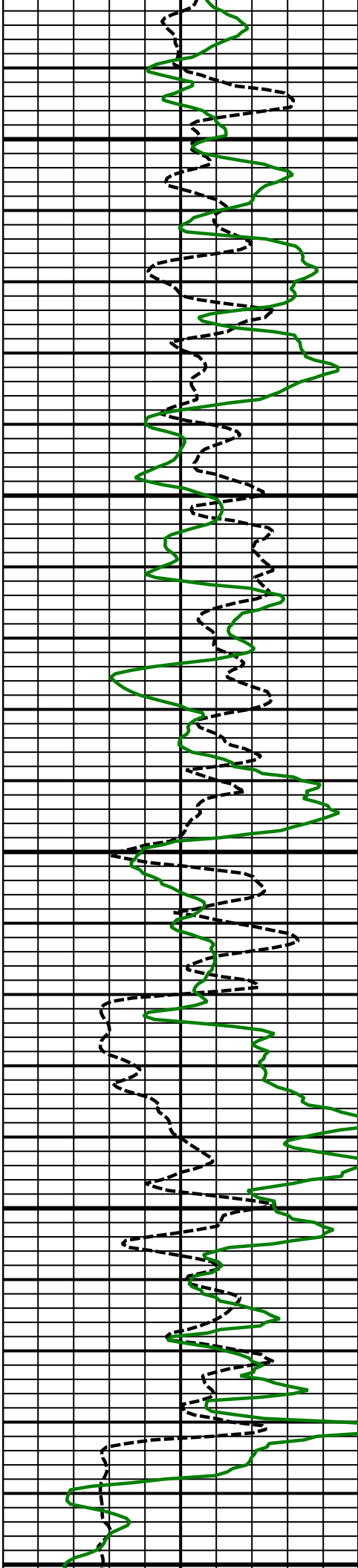
TEMP



2400
MD

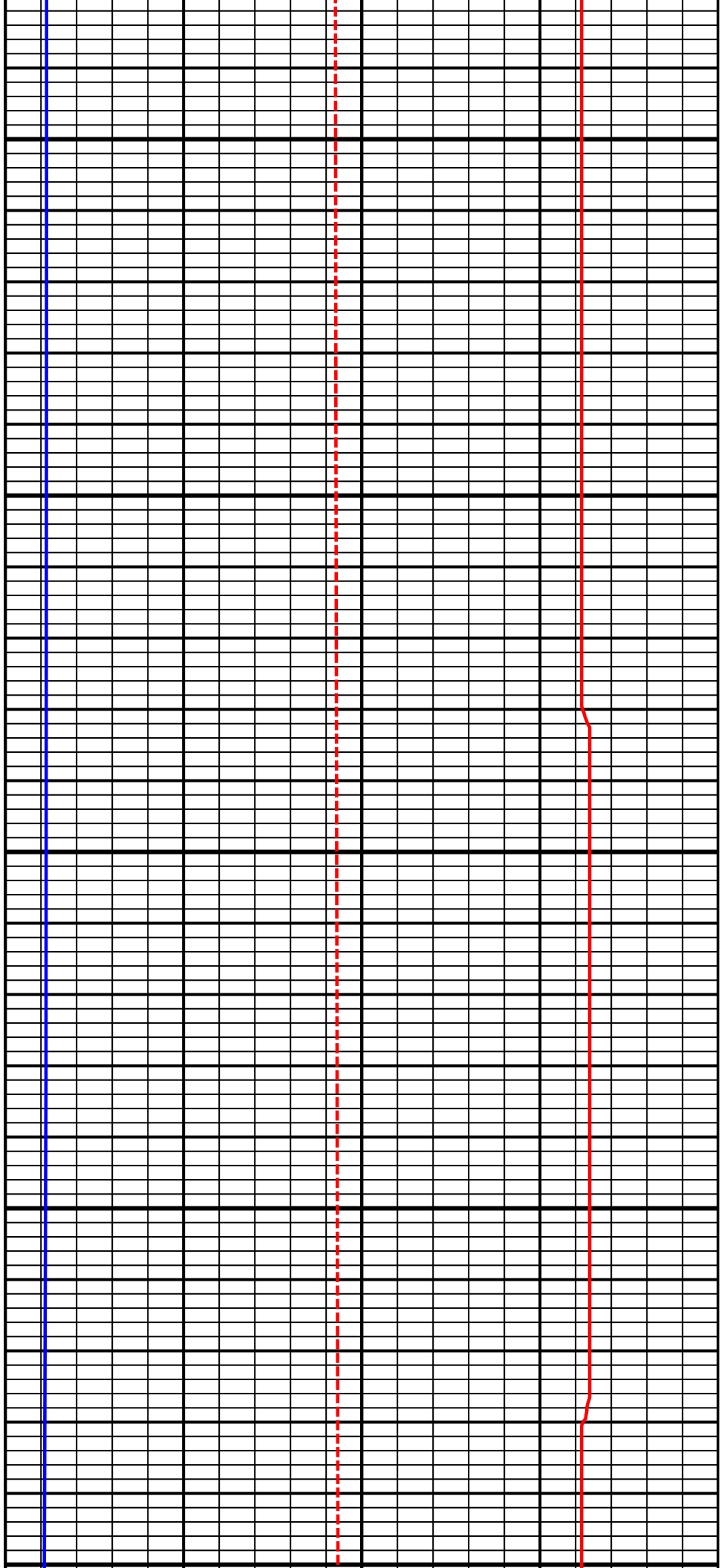
2500
MD

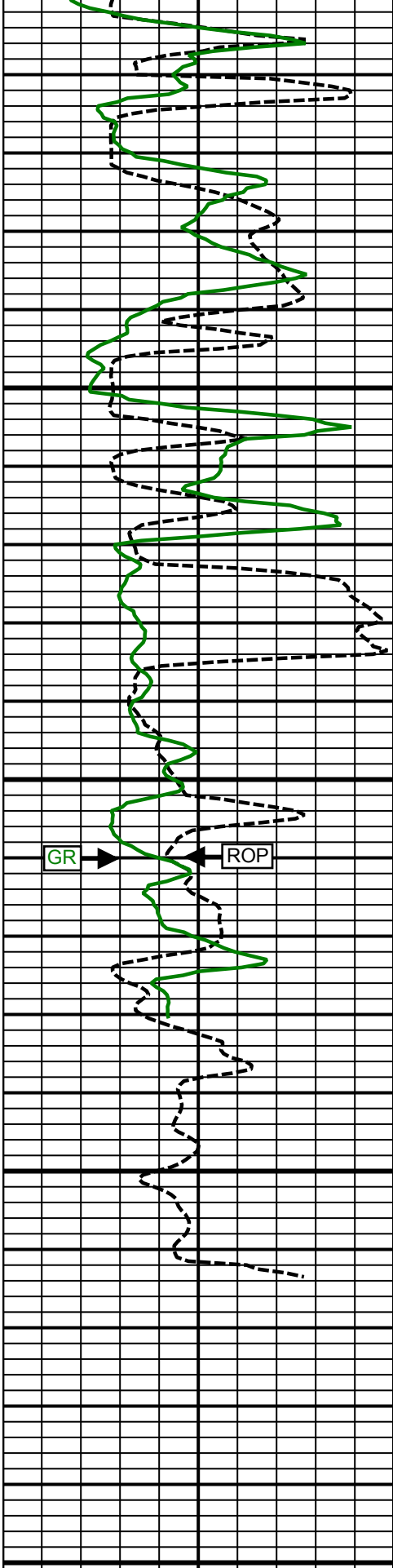




2600
MD

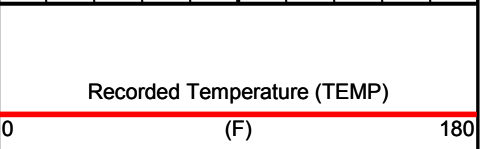
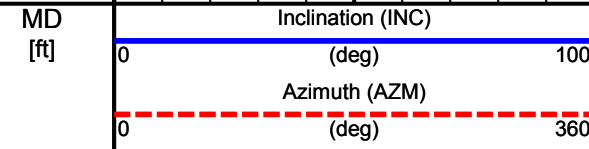
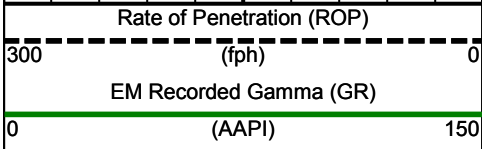
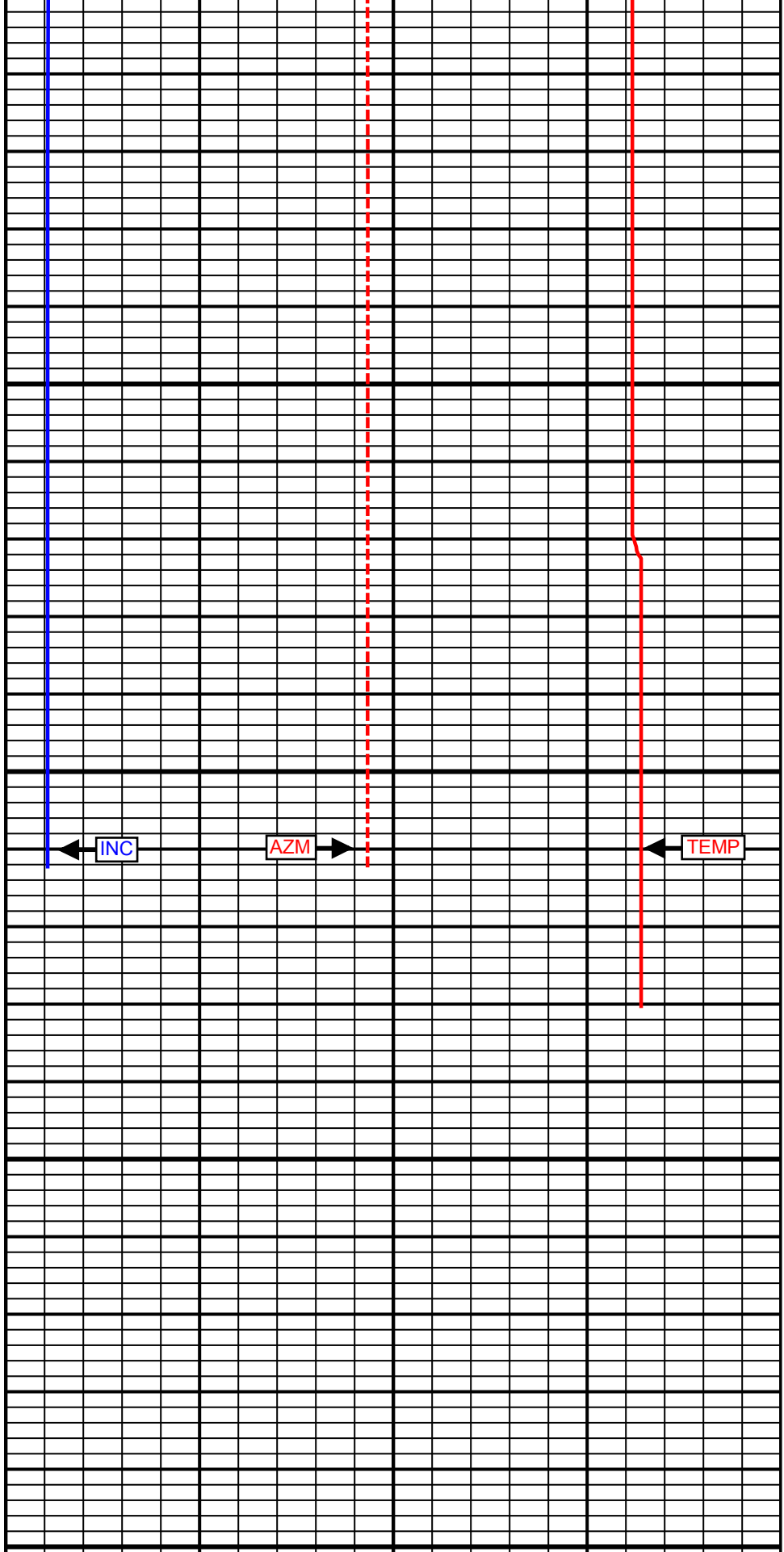
2700
MD





2800
MD

2900
MD



SURVEY REPORT

Survey Calculation Method: Minimum Curvature

Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True	334.18 deg	50613 nT	63.69 deg	9.55 deg	0.00 deg	9.55 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	0.00 ft	0.00 deg	0.00 deg	0.00 ft	0.00 ft	0.00 ft

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
323.00	0.30	126.68	323.00	-0.51	0.68	-0.75	0.09
353.00	0.45	79.49	353.00	-0.53	0.86	-0.85	1.10
383.00	0.96	10.85	383.00	-0.26	1.02	-0.68	3.00
416.00	2.87	335.97	415.98	0.76	0.74	0.37	6.53
447.00	5.07	334.22	446.90	2.71	-0.18	2.51	7.11
479.00	6.97	334.18	478.72	5.73	-1.64	5.87	5.94
510.00	8.55	334.00	509.44	9.49	-3.47	10.05	5.10
542.00	9.55	333.81	541.04	14.01	-5.68	15.09	3.13
573.00	9.82	333.90	571.60	18.69	-7.98	20.30	0.87
603.00	9.91	334.56	601.15	23.32	-10.21	25.44	0.48
635.00	10.39	333.92	632.65	28.40	-12.66	31.08	1.54
664.00	11.02	333.83	661.15	33.24	-15.04	36.47	2.17
695.00	11.81	333.12	691.53	38.73	-17.78	42.60	2.59
726.00	11.87	333.44	721.87	44.41	-20.64	48.96	0.29
757.00	12.04	332.86	752.20	50.14	-23.54	55.38	0.67
788.00	12.13	332.46	782.52	55.90	-26.52	61.87	0.40
819.00	12.35	332.33	812.81	61.73	-29.56	68.44	0.72
913.00	11.49	337.74	904.79	79.29	-37.78	87.83	1.50
1006.00	11.60	336.20	995.90	96.42	-45.06	106.42	0.35
1097.00	12.04	335.17	1084.97	113.41	-52.74	125.05	0.54
1191.00	12.51	335.04	1176.83	131.53	-61.15	145.04	0.50
1285.00	12.99	336.20	1268.51	150.43	-69.71	165.77	0.58
1379.00	13.30	336.15	1360.04	169.99	-78.35	187.14	0.33
1473.00	13.67	336.14	1451.45	190.03	-87.21	209.05	0.39
1565.00	12.96	331.47	1540.98	209.04	-96.54	230.22	1.40
1656.00	12.59	330.45	1629.73	226.63	-106.30	250.31	0.48
1750.00	12.81	330.43	1721.43	244.61	-116.50	270.93	0.23
1842.00	11.69	333.08	1811.33	261.79	-125.75	290.42	1.36
1936.00	11.74	332.92	1903.38	278.80	-134.42	309.51	0.06
2030.00	11.84	333.60	1995.39	295.95	-143.06	328.71	0.18
2121.00	11.94	334.26	2084.44	312.79	-151.30	347.46	0.19
2215.00	11.62	334.71	2176.46	330.11	-159.56	366.65	0.35
2400.00	11.83	332.83	2357.60	363.82	-176.18	404.24	0.24
2494.00	11.55	333.01	2449.65	380.78	-184.85	423.28	0.30
2586.00	11.51	333.70	2539.79	397.22	-193.10	441.67	0.16
2680.00	11.34	334.96	2631.93	414.00	-201.17	460.28	0.32
2774.00	10.77	336.05	2724.19	430.40	-208.64	478.30	0.65
2862.00	10.77	335.97	2810.64	445.42	-215.33	494.74	0.02

* Weatherford surveys from 323.00 ft MD to 2862.00 ft MD *
 * TD at 2913.36 ft MD *
 * The total correction is 9.55 deg relative to Grid North *



COMPANY: **XTO Energy**

WELL: **Smith 1H Slant**

FIELD: **Fruitland Coal**

COUNTRY: **United States**

STATE: **Colorado**
