



FILE NO: US091582
API NO: 05045224600000
COMPANY: COACHMAN ENERGY
WELL: FEDERAL 14 15-7-21
FIELD: KOKOPELLI
COUNTY: GARFIELD STATE CO

Ver. 4.01
PAD: FEDERAL 21B
RIG: FRONTIER 28
LOCATION: SHL: SWNE 2345' FNL 713' FEL
LAT: 39.51358000; LON: -107.55279000
OTHER SERVICES: NONE
SEC 21 TWP 6S RGE 91W

PERMANENT DATUM: GL ELEVATION 6932 FT
LOG MEASURED FROM: KB 23 FT ABOVE P.D.
DRILL MEAS. FROM: KB
ELEVATIONS: KB 6956 FT, DF, GL 6932 FT

DATE	31-Dec-2014
RUN	1
SERVICE ORDER	US091582
DEPTH DRILLER	9065 FT
DEPTH LOGGER	9001 FT
BOTTOM LOGGED INTERVAL	8998 FT
TOP LOGGED INTERVAL	0 FT
CASING DRILLER	9.625 IN @ 1510 FT
CASING LOGGER	1503 FT
BIT SIZE	8.75 IN
TYPE OF FLUID IN HOLE	LSND
DENSITY	9.2 LB/G
PH	8.7
SOURCE OF SAMPLE	FLOWLINE
RM AT MEAS. TEMP.	1.2 OHMM @ 56 DEGF
RMF AT MEAS. TEMP.	9 OHMM @ 51 DEGF
RMC AT MEAS. TEMP.	1.5 OHMM @ 51 DEGF
SOURCE OF RMF	CALCULATED
RM AT BHT	854 OHMM @ 186 DEGF
TIME SINCE CIRCULATION	6 HR
MAX. RECORDED TEMP.	189 DEGF
EQUIP. NO.	6685
RECORDED BY	D SMITH
WITNESSED BY	P BLACKMER

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

BOREHOLE RECORD		
BIT SIZE	FROM	TO
13.5 IN	0 FT	1510 FT
8.75 IN	1510 FT	9065 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	36 LB/F	J-55	0 FT	1510 FT

REMARKS

RUN 1 TRIP 1: HDIL DAL ZDL CN RAN IN COMBINATION

BVOL CVOL CALCULATED IN CUBIC FT
CVOL CALCULATED USING PROPOSED 7" CASING
CALIPER VERIFIED INSIDE CASING

RHO MATRIX: 2.65 G/CC
RHO FLUID: 1.00 G/CC

DT MATRIX: 53 USEC

CN MATRIX: SANDSTONE
CN RAN DECENTRALIZED

HDIL RAN WITH 1.5" STANDOFFS
ABC TO CALCULATE MUD CONDUCTIVITY

THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES

CREW: OLSON/HOLLER/SMITH

RIG: FRONTIER 28

RUN 1: BRIDGED AT 3500 FT POOH FOR BIT TRIP

RUN 2: BRIDGED AT 6370 FT POOH FOR FULL WIPER TRIP

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	SWIVEL	3950XA	10102176	FREE
1	1	TTMA	3980XA	10121559	FREE
1	1	TEL/GR	3518FB/EG	10126400/10139870	FREE
1	1	NEUTRON	2436XA	10137930	FREE
1	1	DENSITY	2223XA	10123024	DECENTRALIZED
1	1	KNUCKLE	3930XA	10102172/10087285	FREE
1	1	DAL	1630EA	10146207	CENTRALIZED
1	1	DAL	1630MA	10142582	CENTRALIZED
1	1	HDIL	1530XA	10118612	STOOD OFF

MAIN LOG 5"/100FT SCALE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 5

Plotted: Fri Jan 2 10:37:41 2015

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/OH091582/n970a03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1393.000 ft BOTTOM DEPTH: 9013.995 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR LOW RES	FILTER (.i)	medium (1)		TOP	BOTTOM
GR MED RES	FILTER Q	medium (1)		"	"
CALIPER	FILTER Q	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
TENSION	FILTER Q	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
CN LOW RES	FILTER Q	medium (1)		"	"
CN MED RES	FILTER Q	medium (1)		"	"
ZDL MED RES	FILTER (hrd1*)	medium		"	"
	FILTER (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"

BOREHOLE & CEMENT

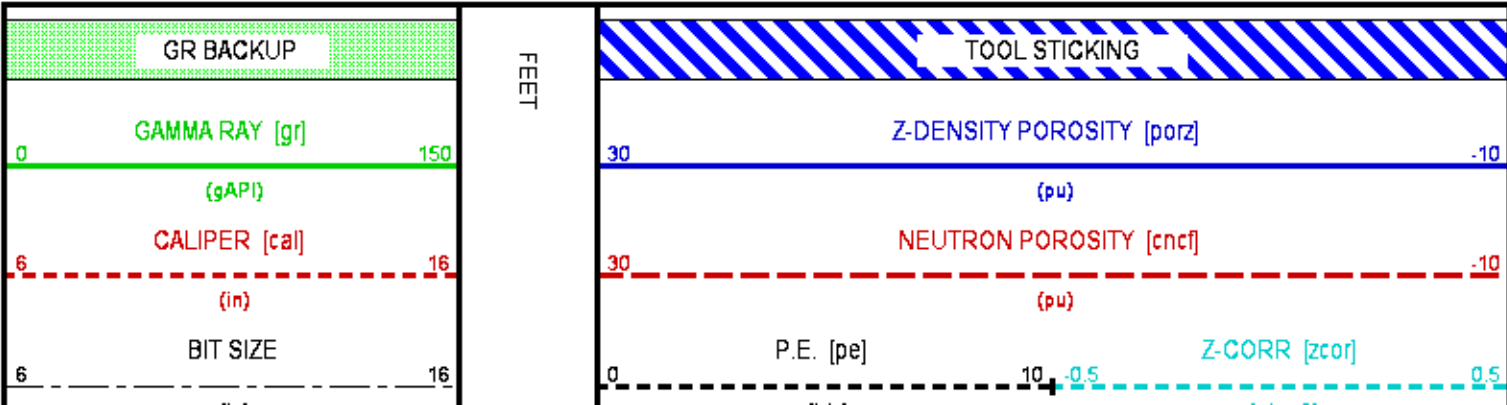
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.000	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	8.750	in	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (zdbh*)	USE CALIPER		"	"

BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	8.755	in	"	"
MUD DENSITY	MUD DENSITY	8.35	lbm/gal	"	"
ACCELERATION PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM
CN PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CN MATRIX	2436 MATRIX	SANDSTONE		TOP	BOTTOM
CN BOREHOLE CORRECTION	SALINITY	1100	ppm	"	"
	BOREHOLE CORRECTION	ON		"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	8.750	in	"	"
ZDL PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	Air Filled Borehole	NO		TOP	BOTTOM
	RHOmatrix	2.650	g/cm3	"	"
	RHOfluid	1.000	g/cm3	"	"

CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Jan 2 06:28:17 2015	BIT SIZE
F1:CAL	Jan 2 06:28:17 2015	CALIPER
F1:CNCF	Jan 2 06:28:17 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:GR	Jan 2 06:28:17 2015	GAMMA RAY
F1:PE	Jan 2 06:28:17 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Jan 2 06:28:17 2015	POROSITY FOR SELECTABLE MATRIX
F1:TEN	Jan 2 06:28:17 2015	DIFFERENTIAL TENSION
F1:ZCOR	Jan 2 06:28:17 2015	DENSITY CORRECTION
F1:ZDEN	Jan 2 06:28:17 2015	FORMATION BULK DENSITY

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	46.00	TEN	0.00		
CAL	29.12	PE	29.12	ZCOR	29.12		
CNCF	38.50	PORZ	29.12	ZDEN	29.12		

Presentation	: cas6685:ZDEN_CN_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 6.25 - 9018.25 Feet
Data File 1	: F1 : cas6685:/dat1a/OH091582/MAIN.xtf
Created On	: Jan 2 06:28:17 2015
Company	: COACHMAN ENERGY
Well	: FEDERAL 14 15-7-21
Field	: KOKOPELLI
File Interval	: 6.25 - 9018.25 Feet
OCT	: n970a



(in)

(b/e)

(g/cm³)

BULK DENSITY [zden]

1.9

2.9

(g/cm³)

DIFF. TENSION [ten]

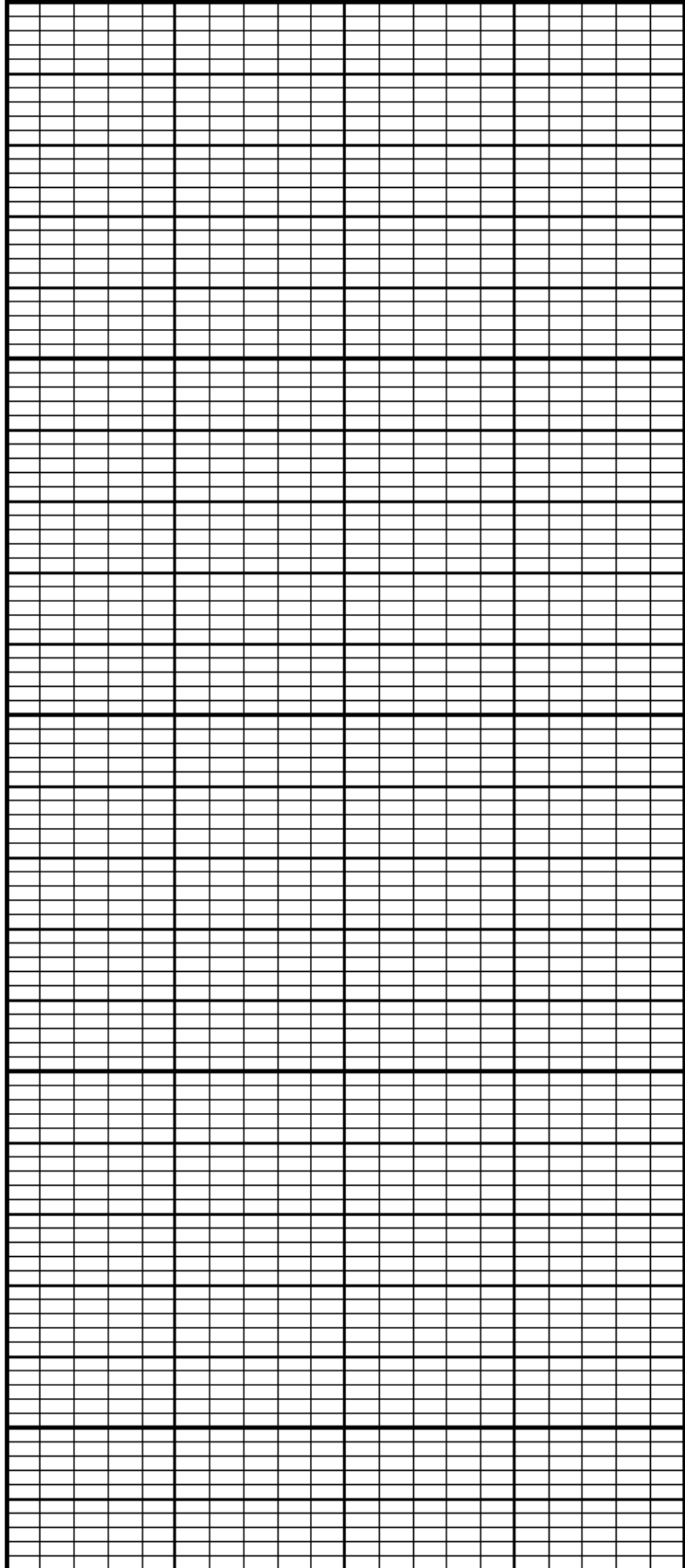
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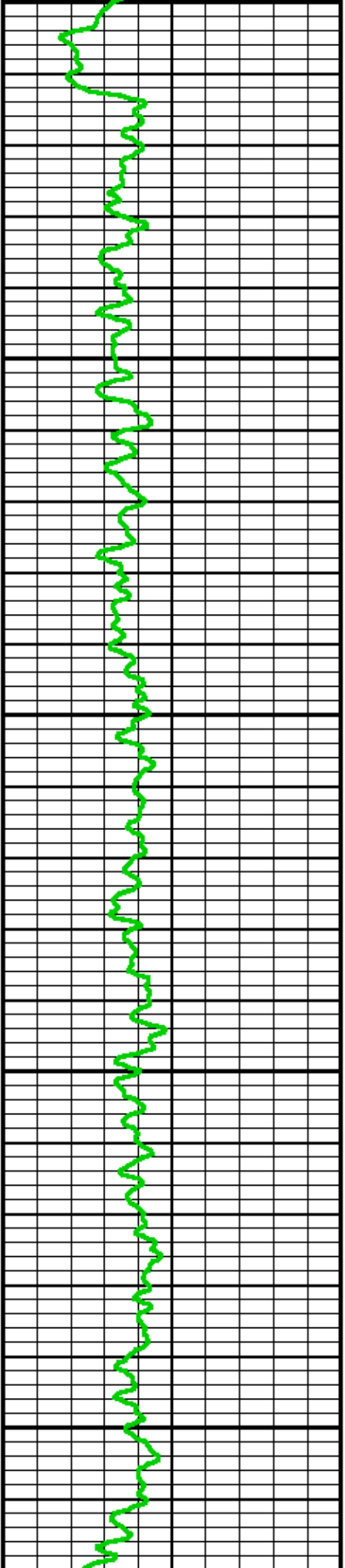
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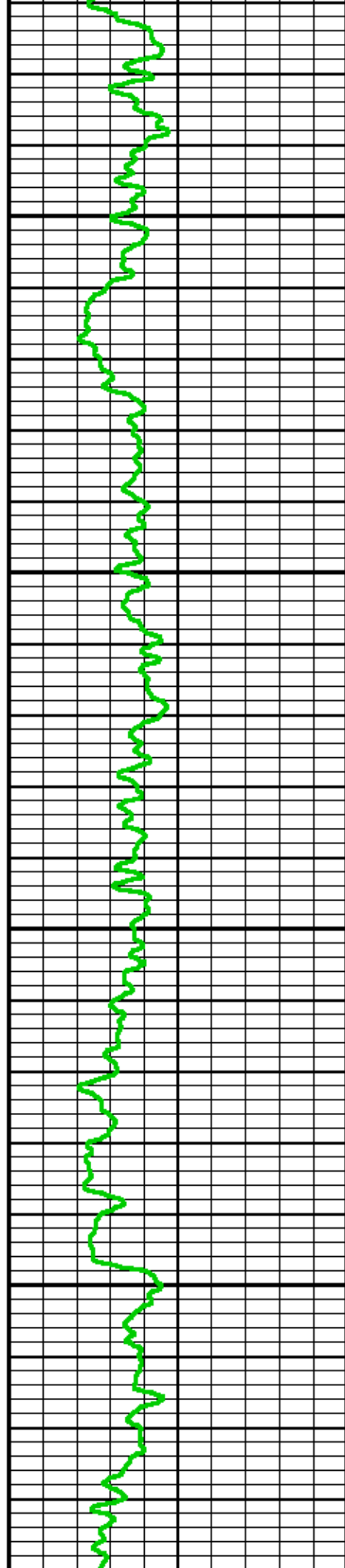
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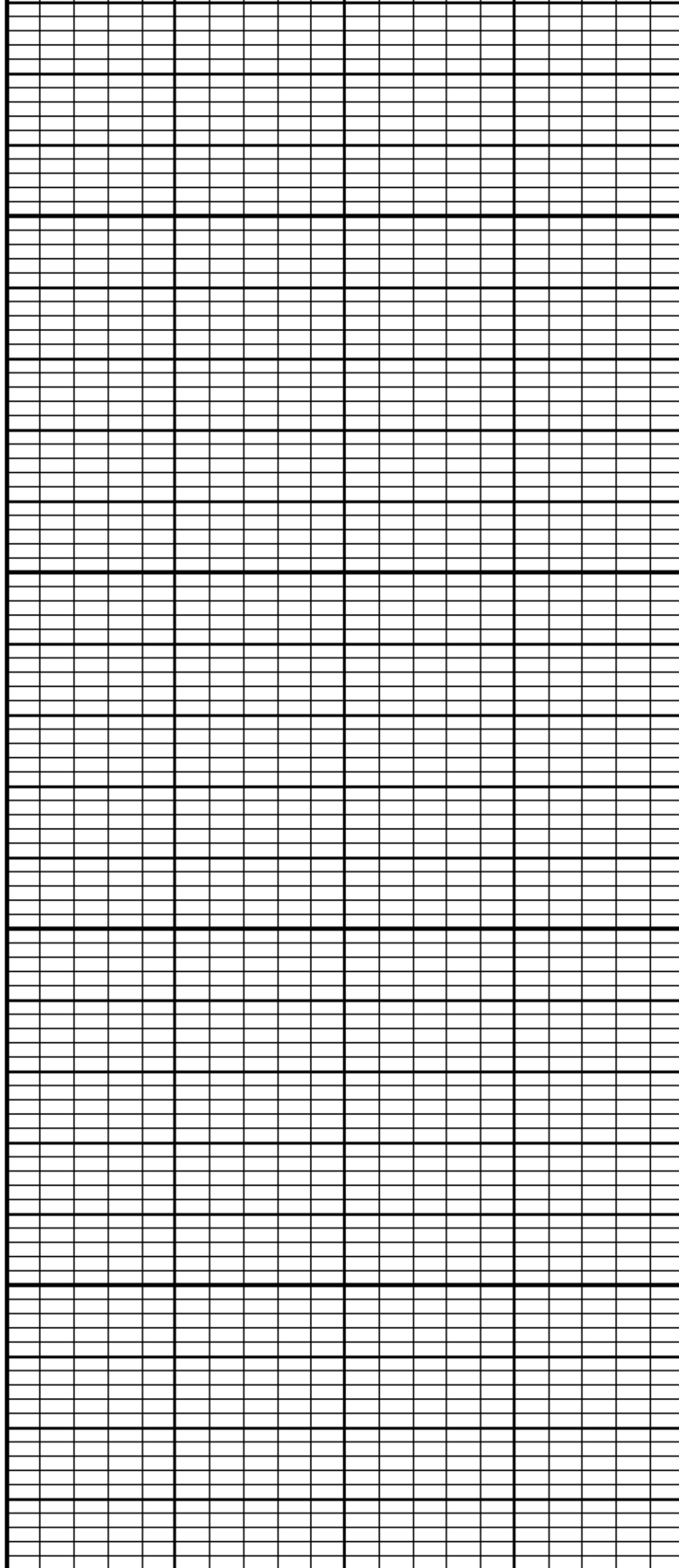
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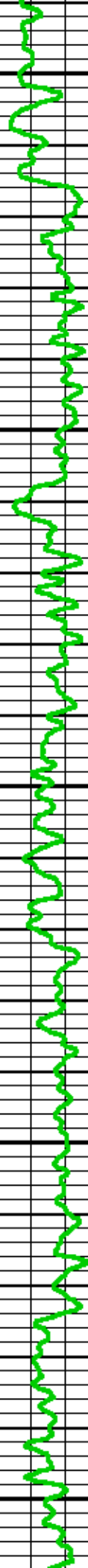
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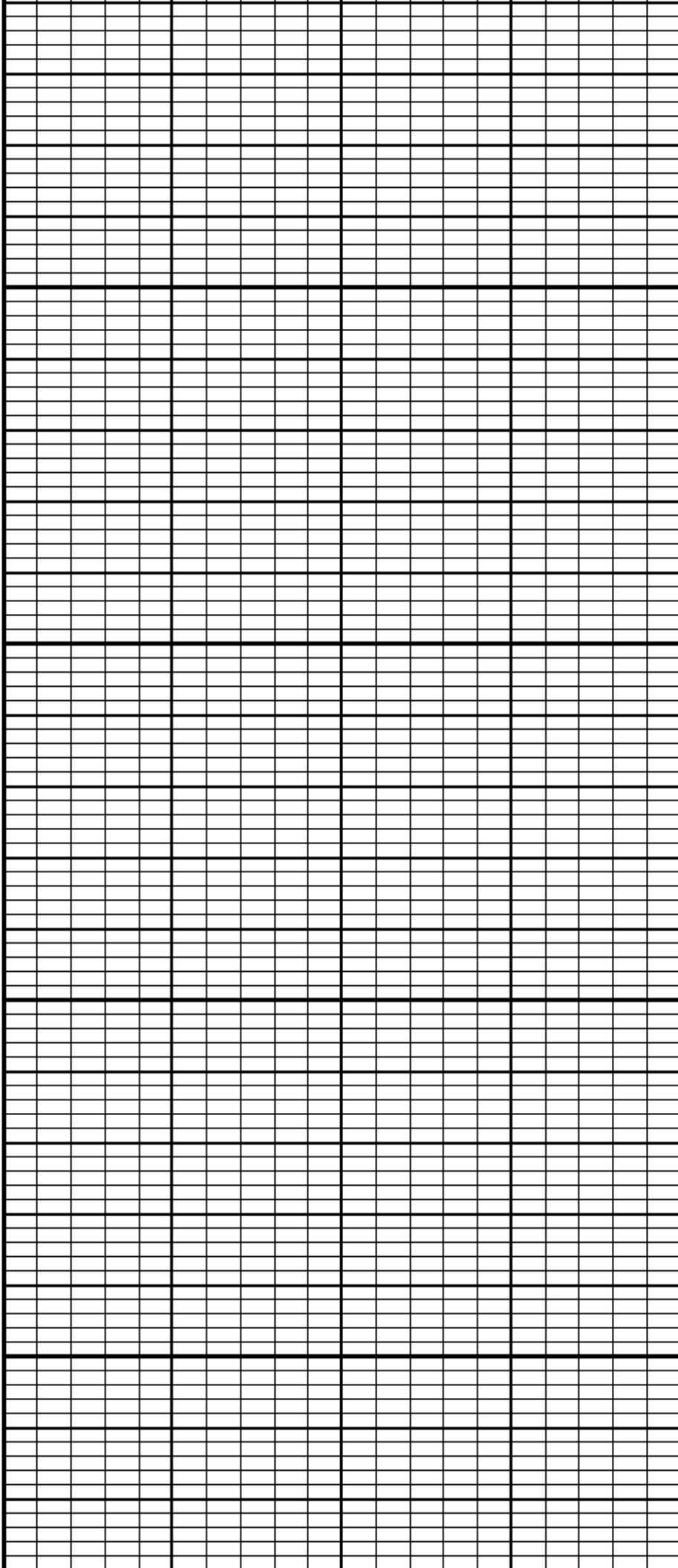
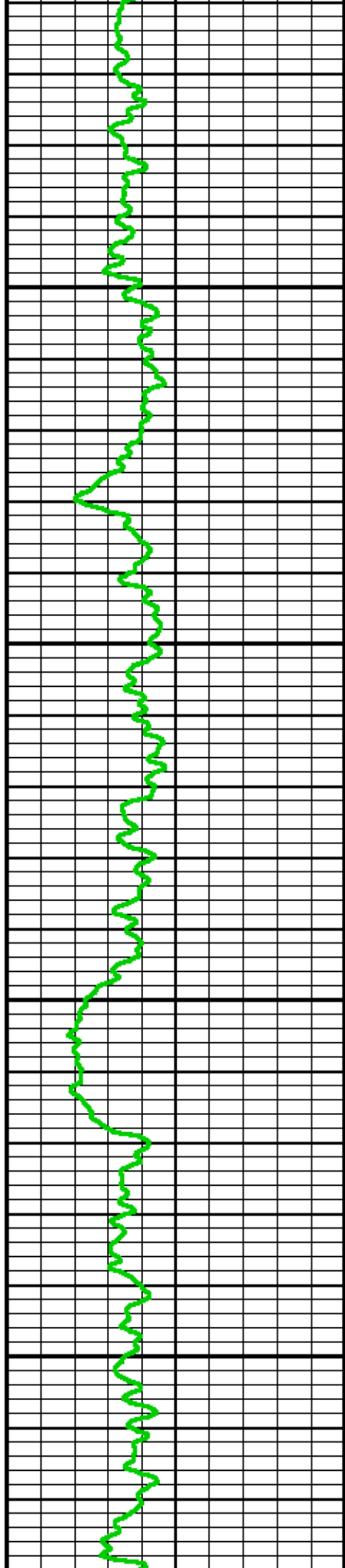
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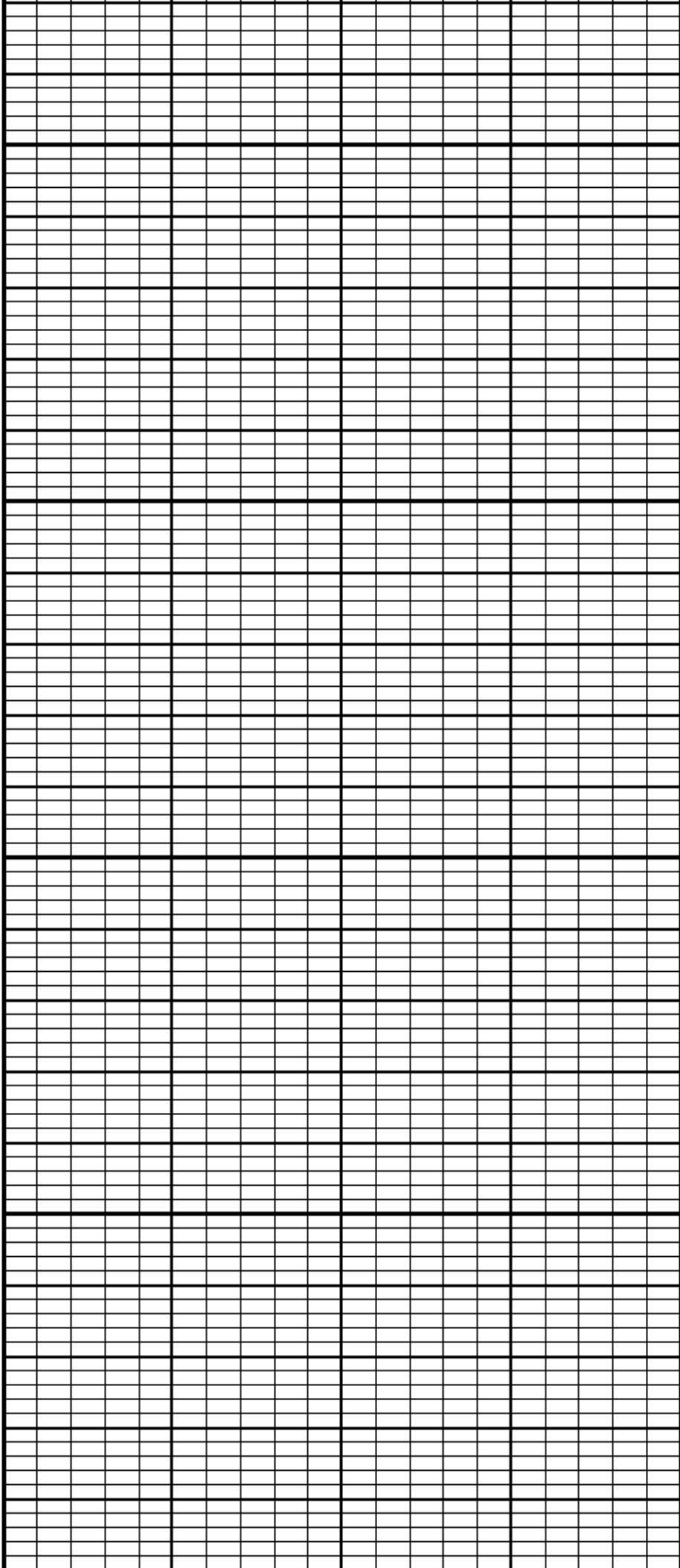
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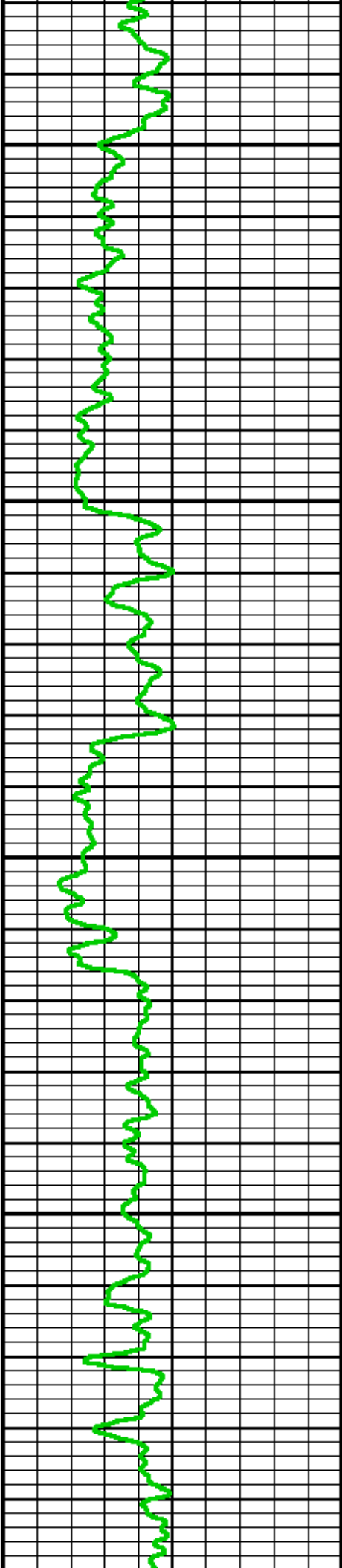


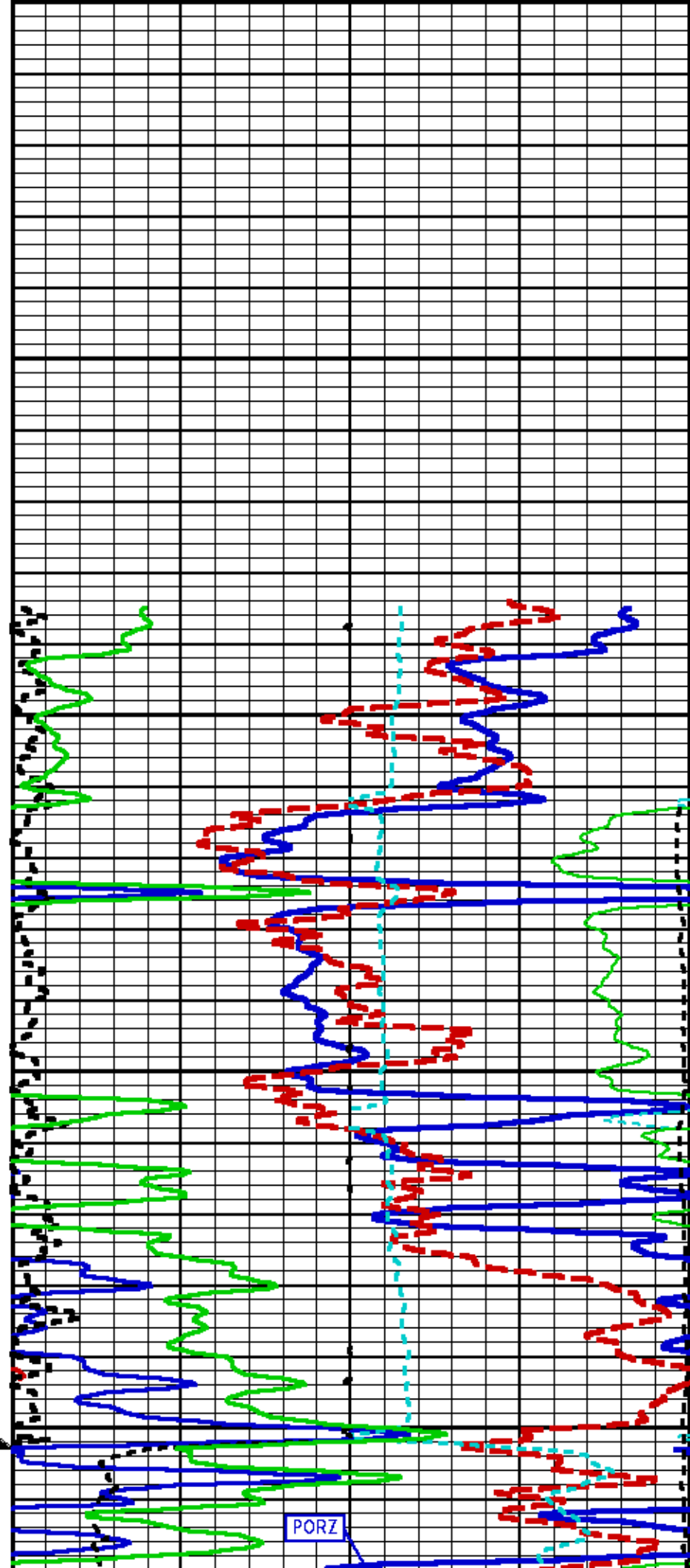


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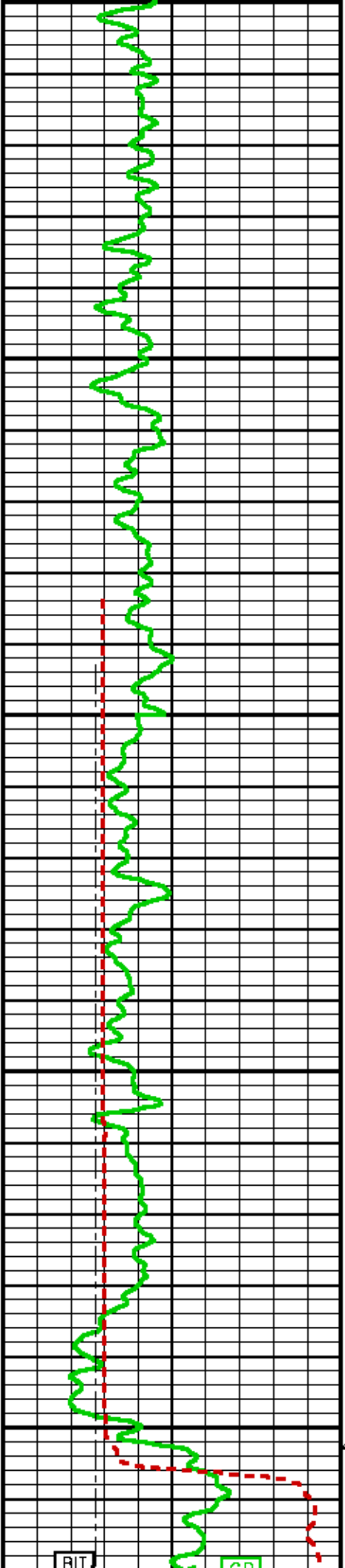


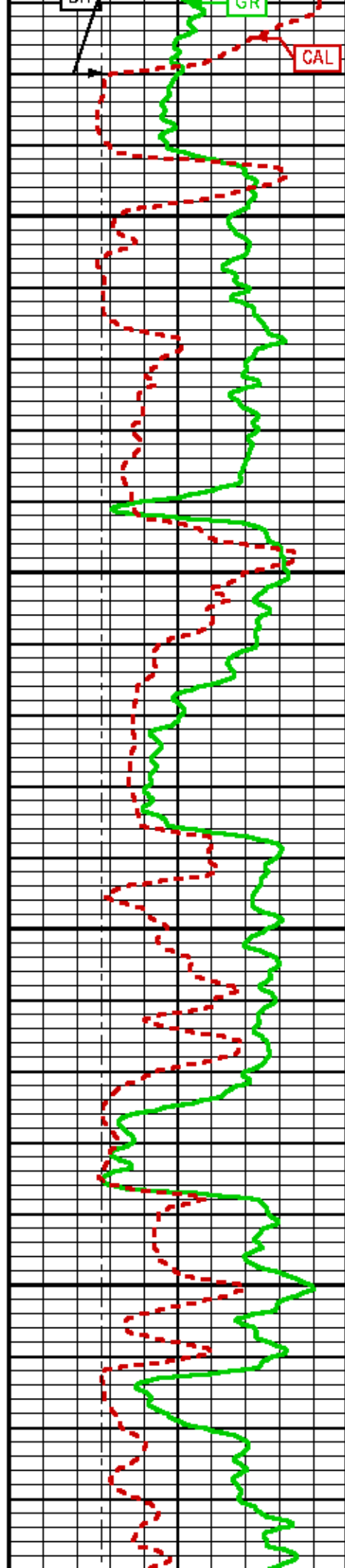


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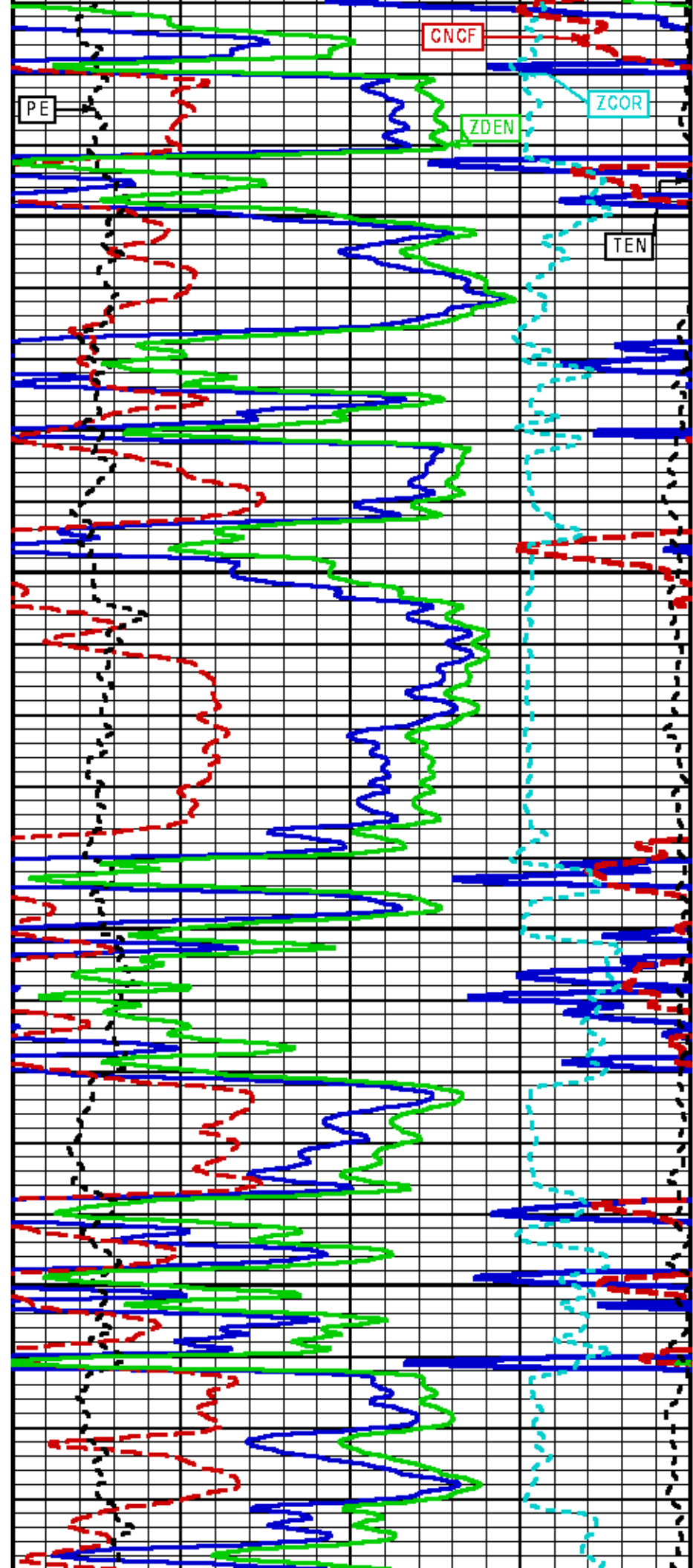
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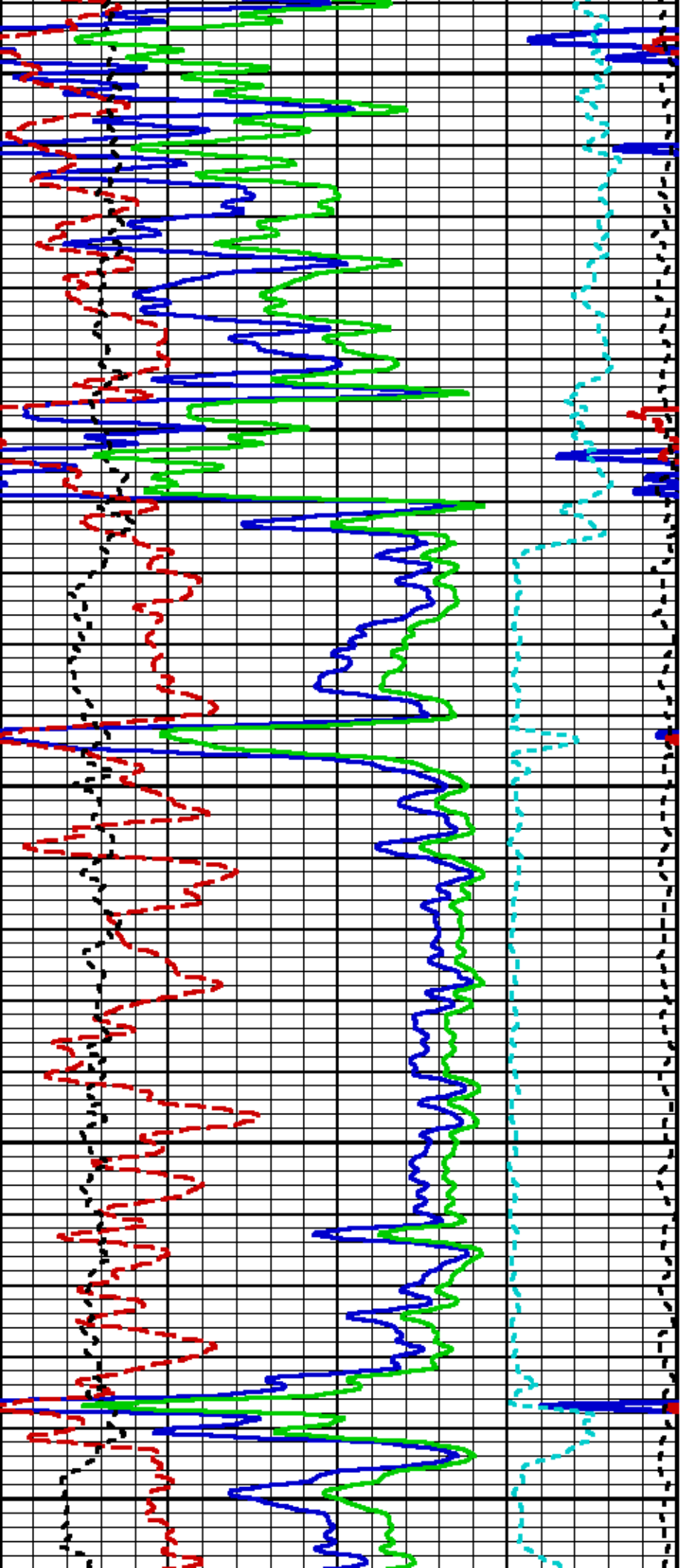




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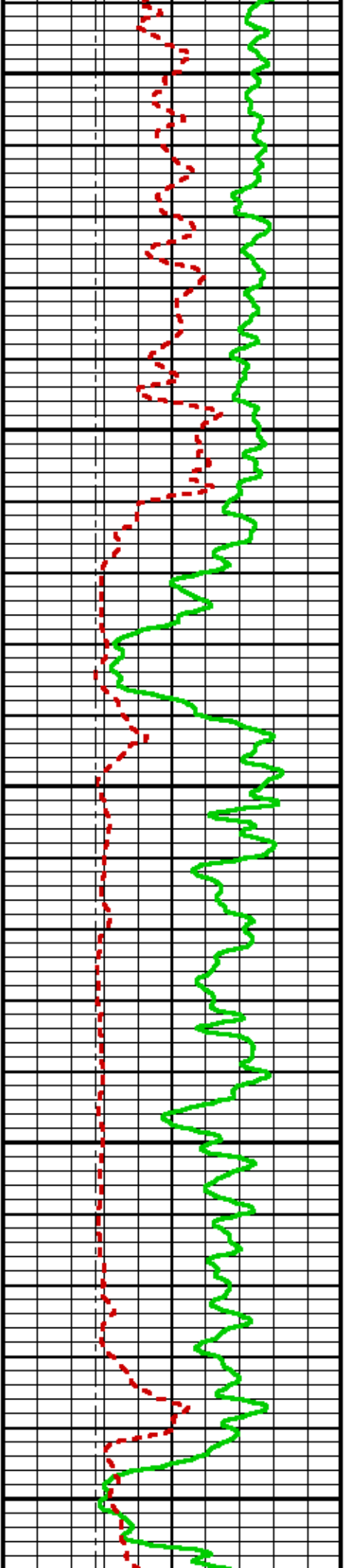
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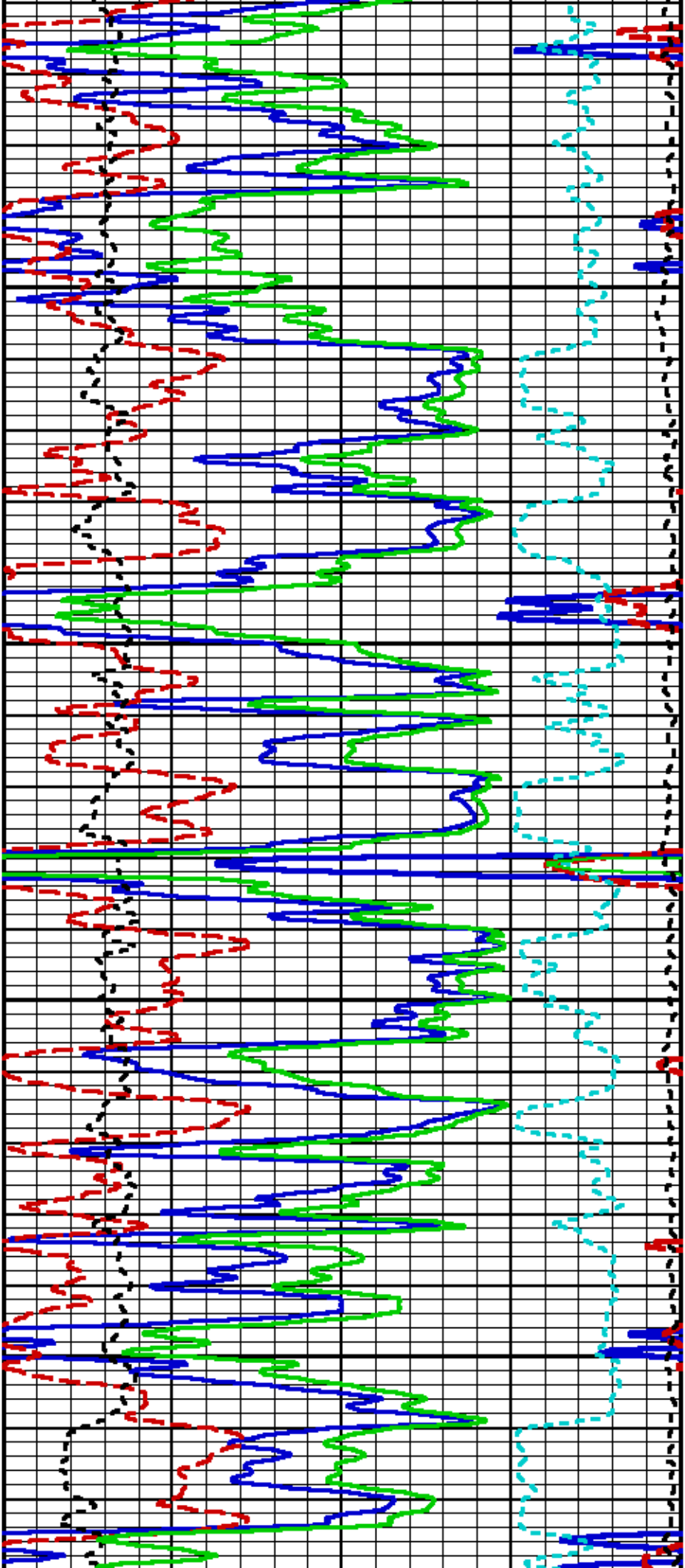




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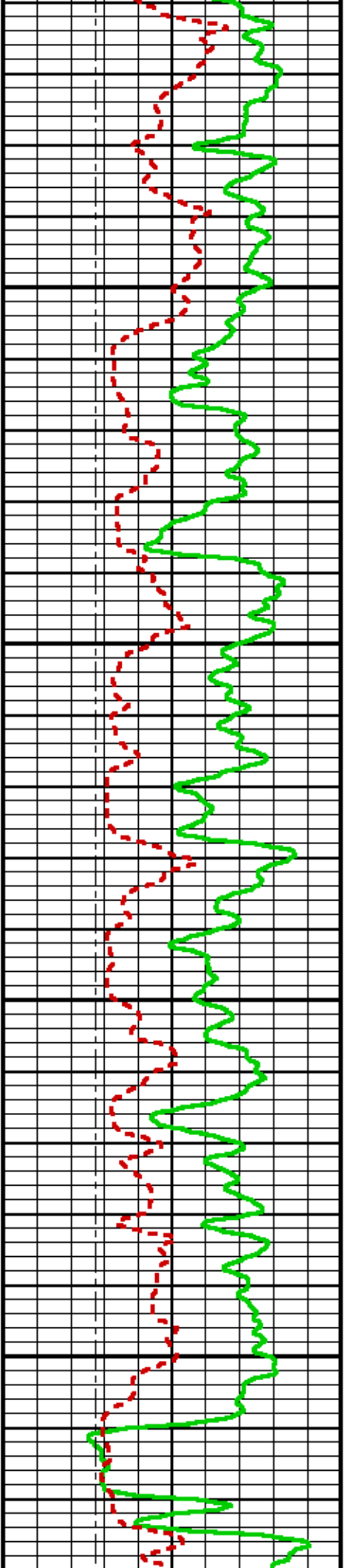
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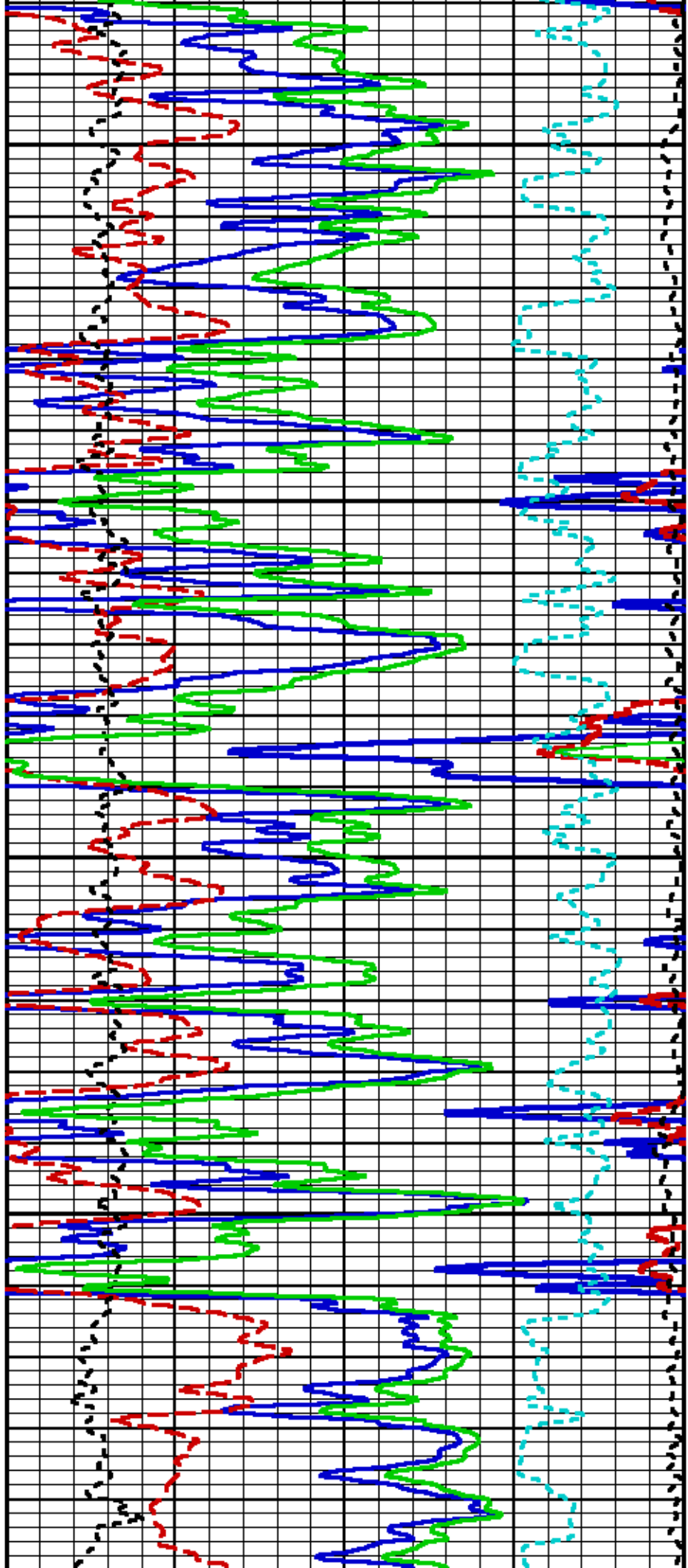




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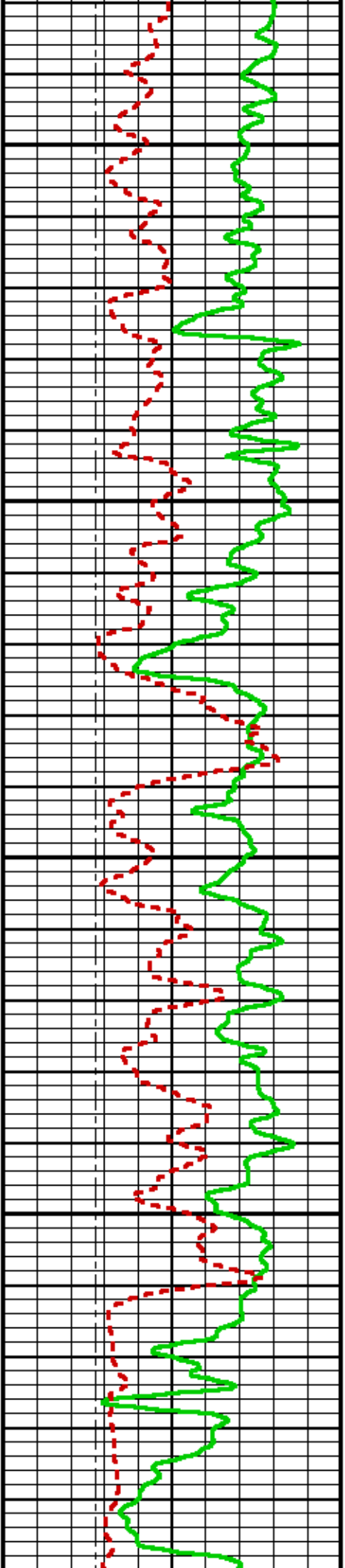


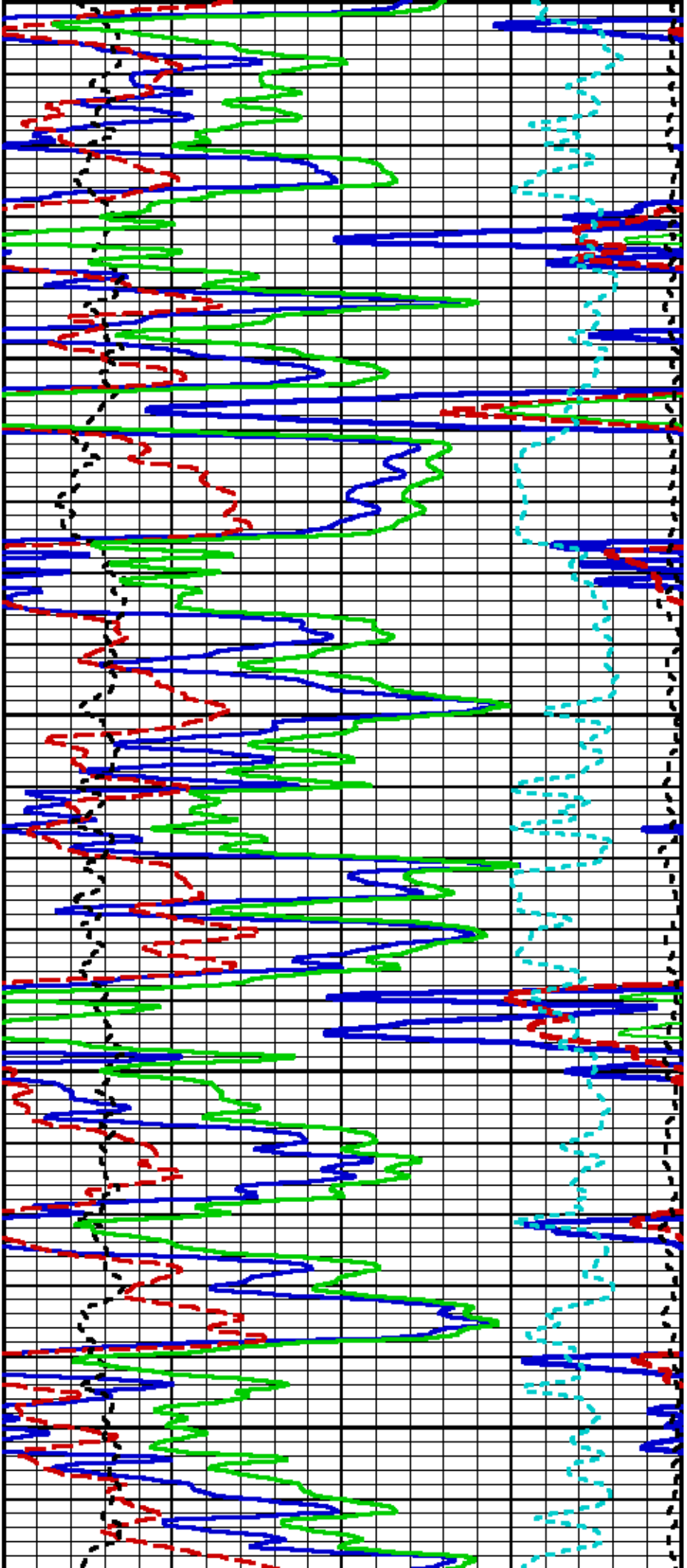


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2300

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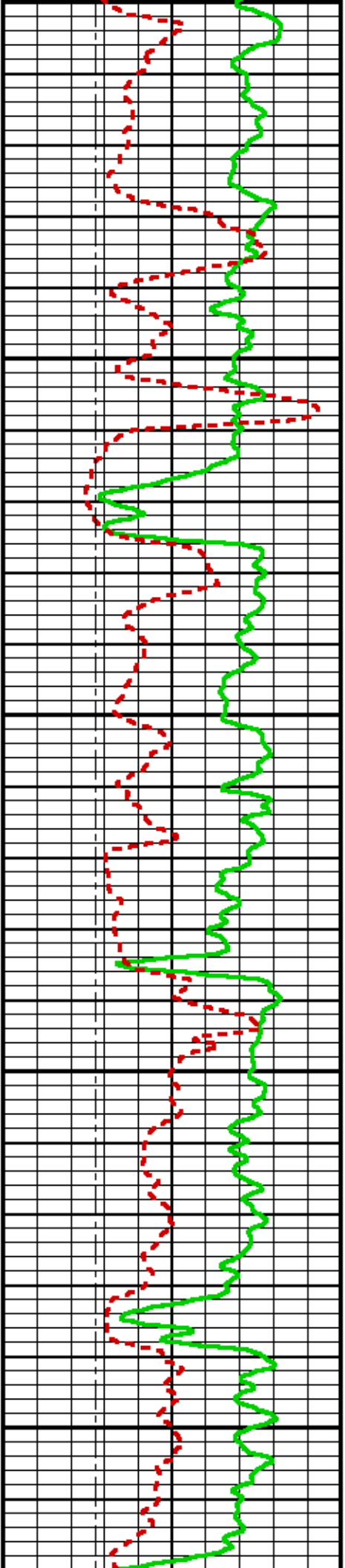


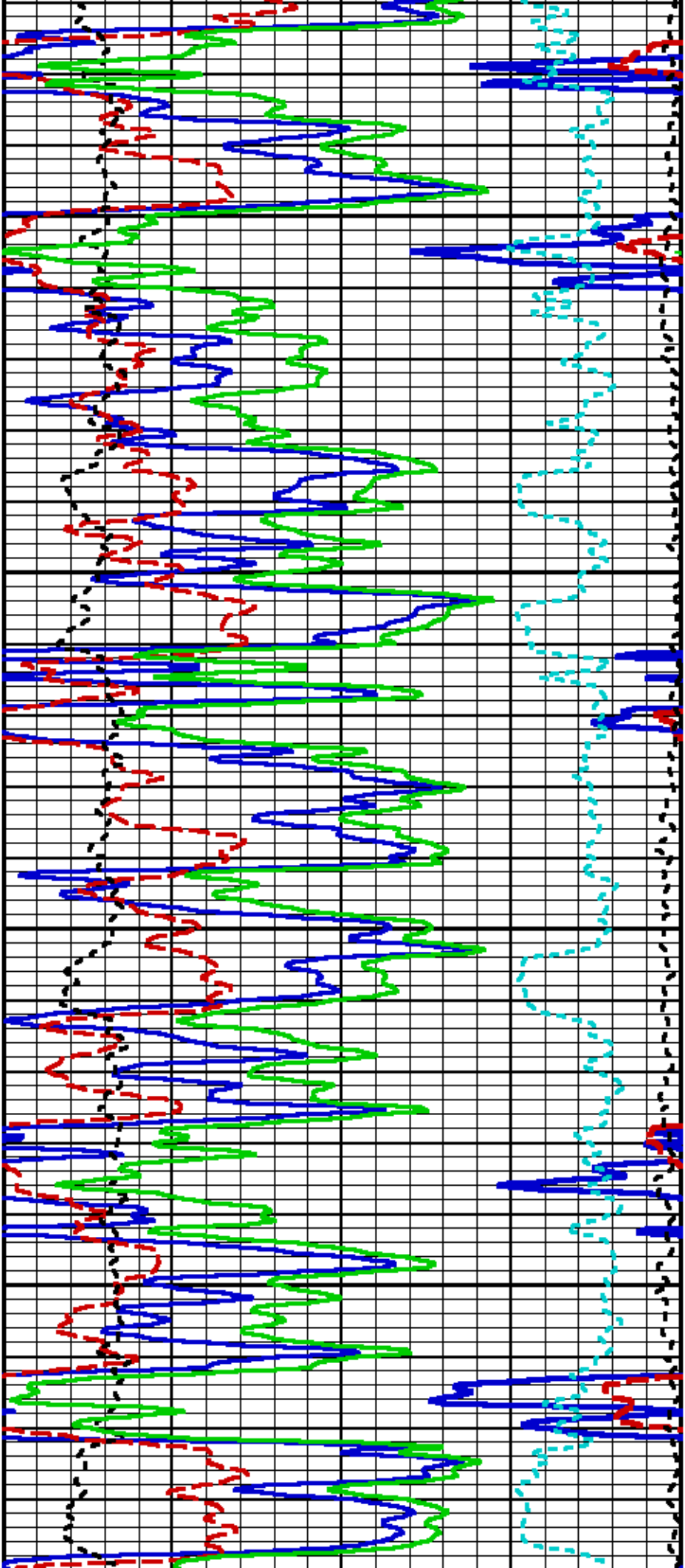


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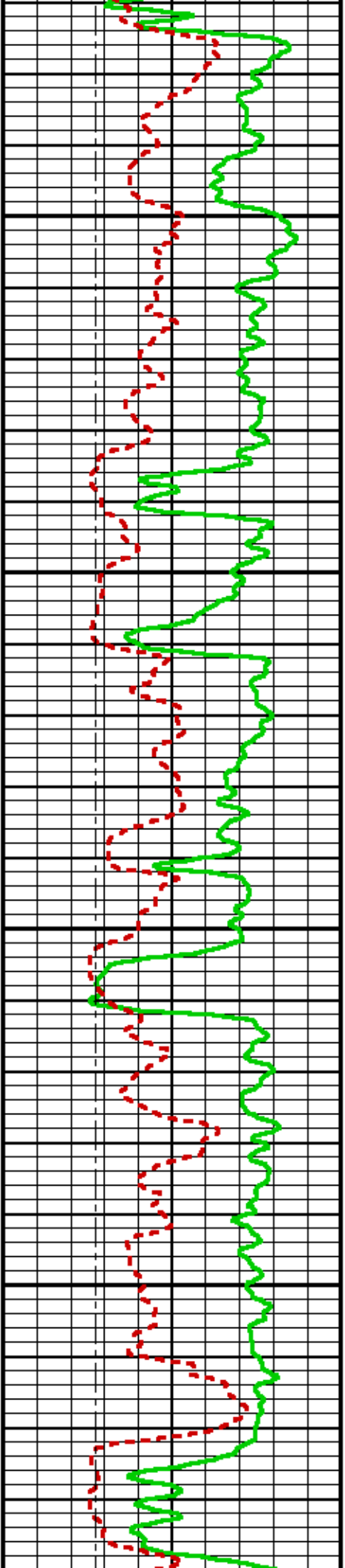
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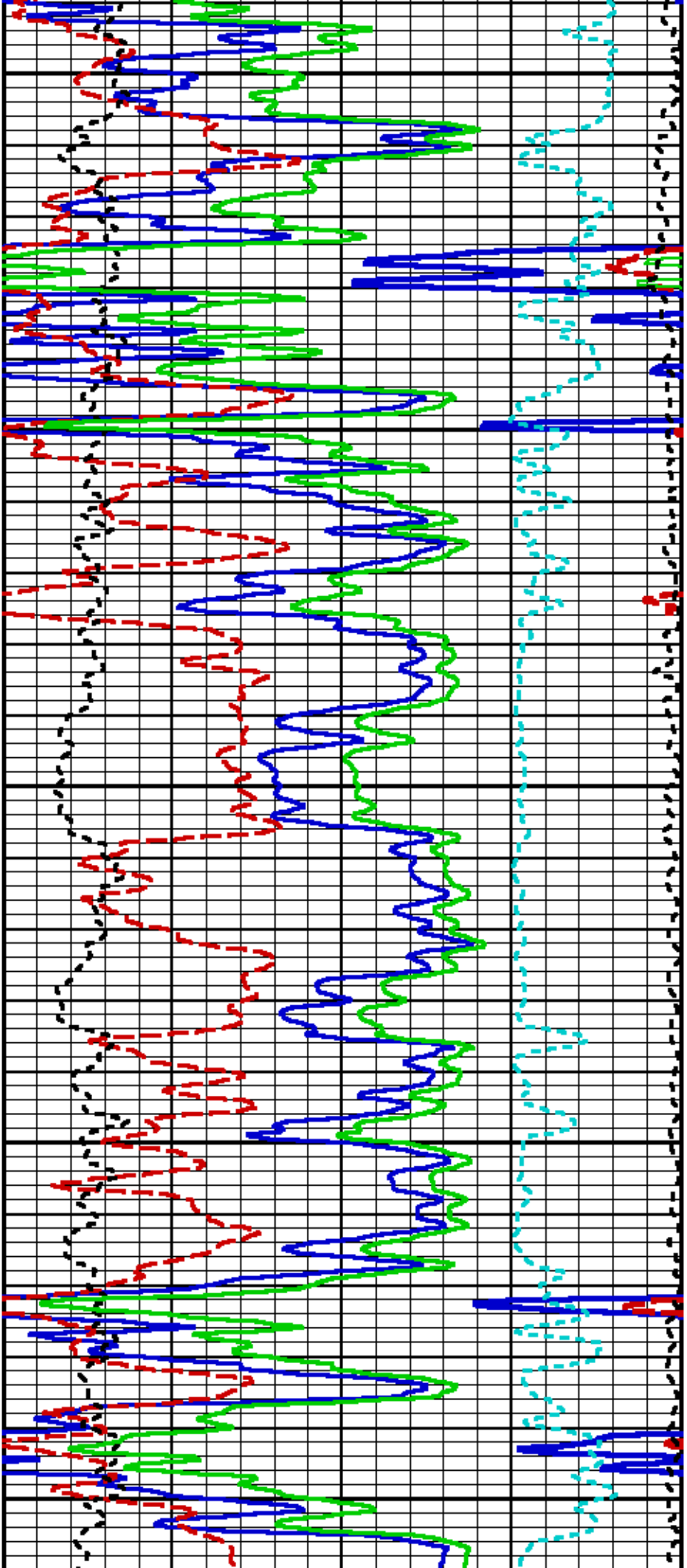




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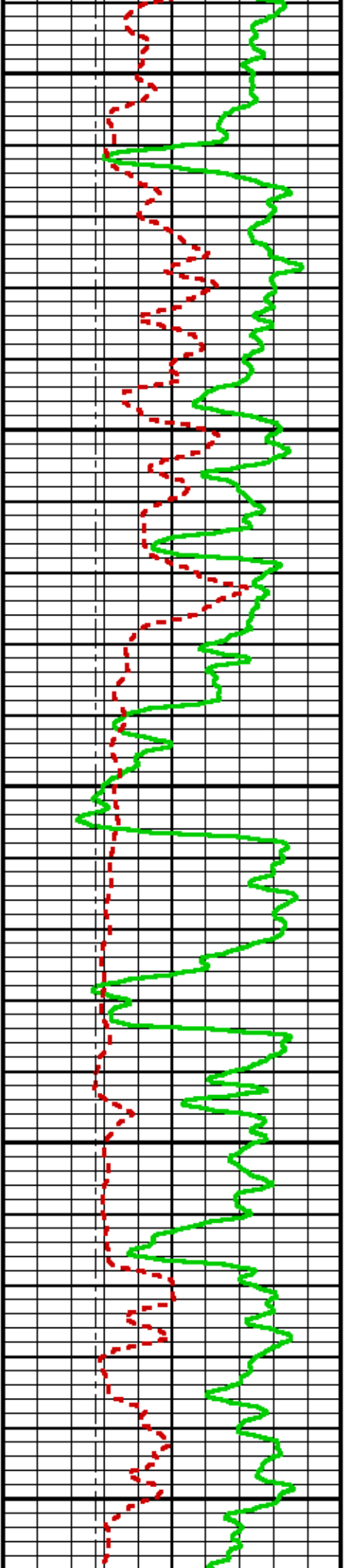
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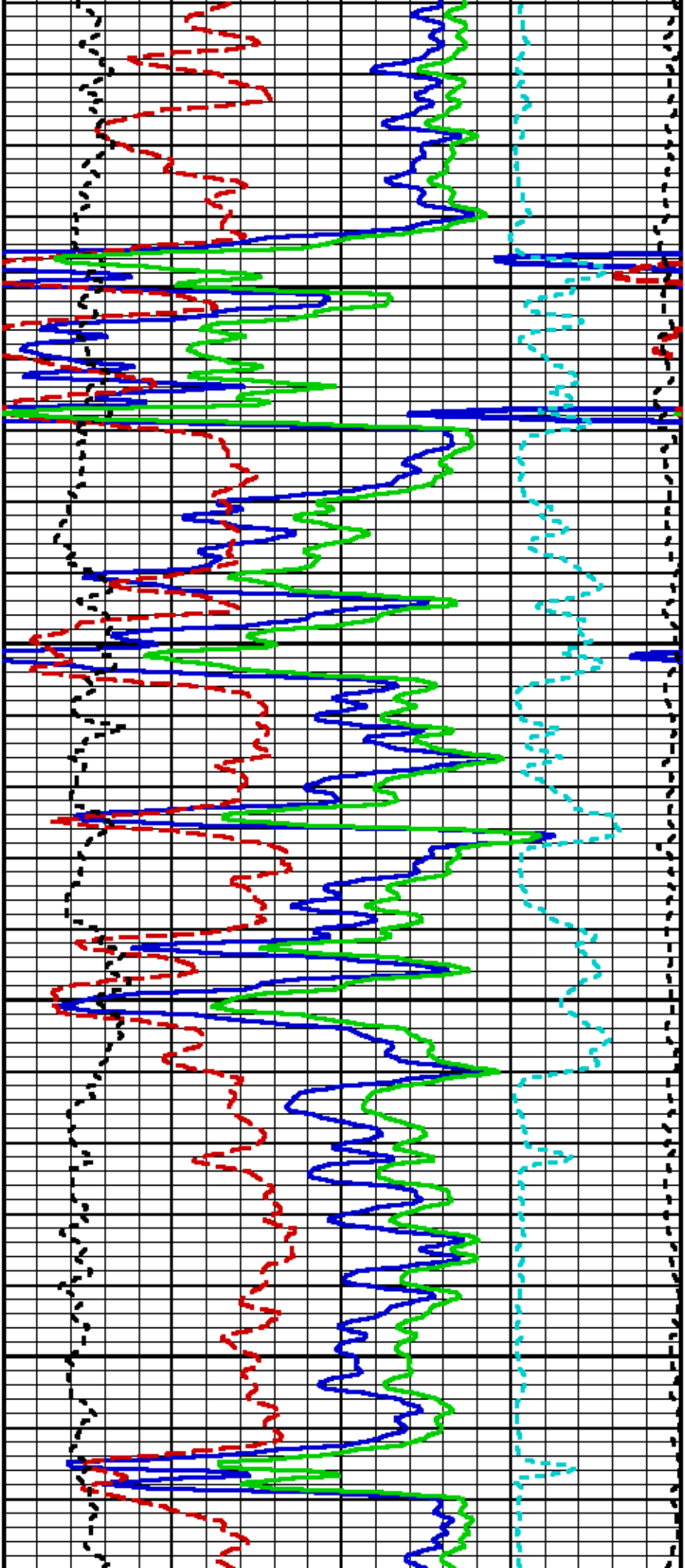




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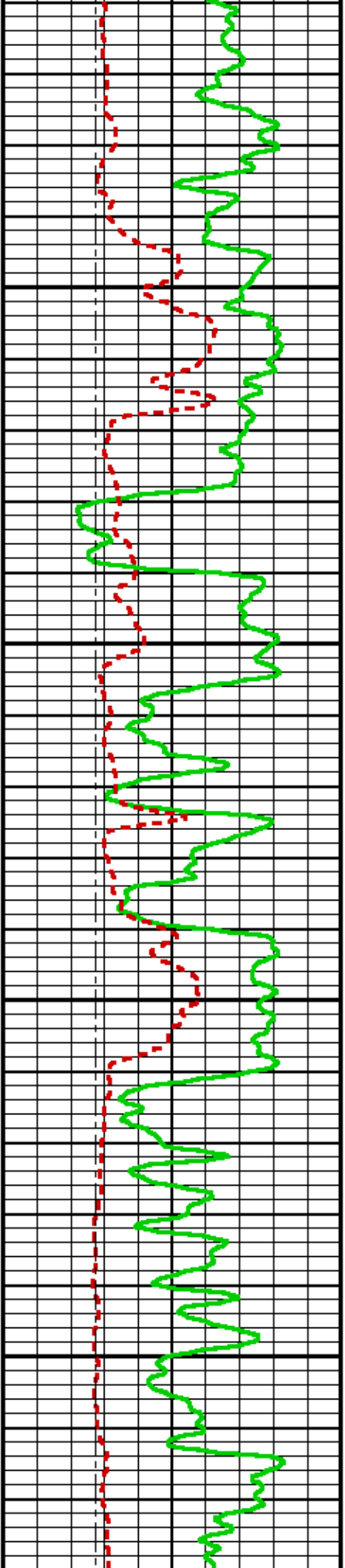
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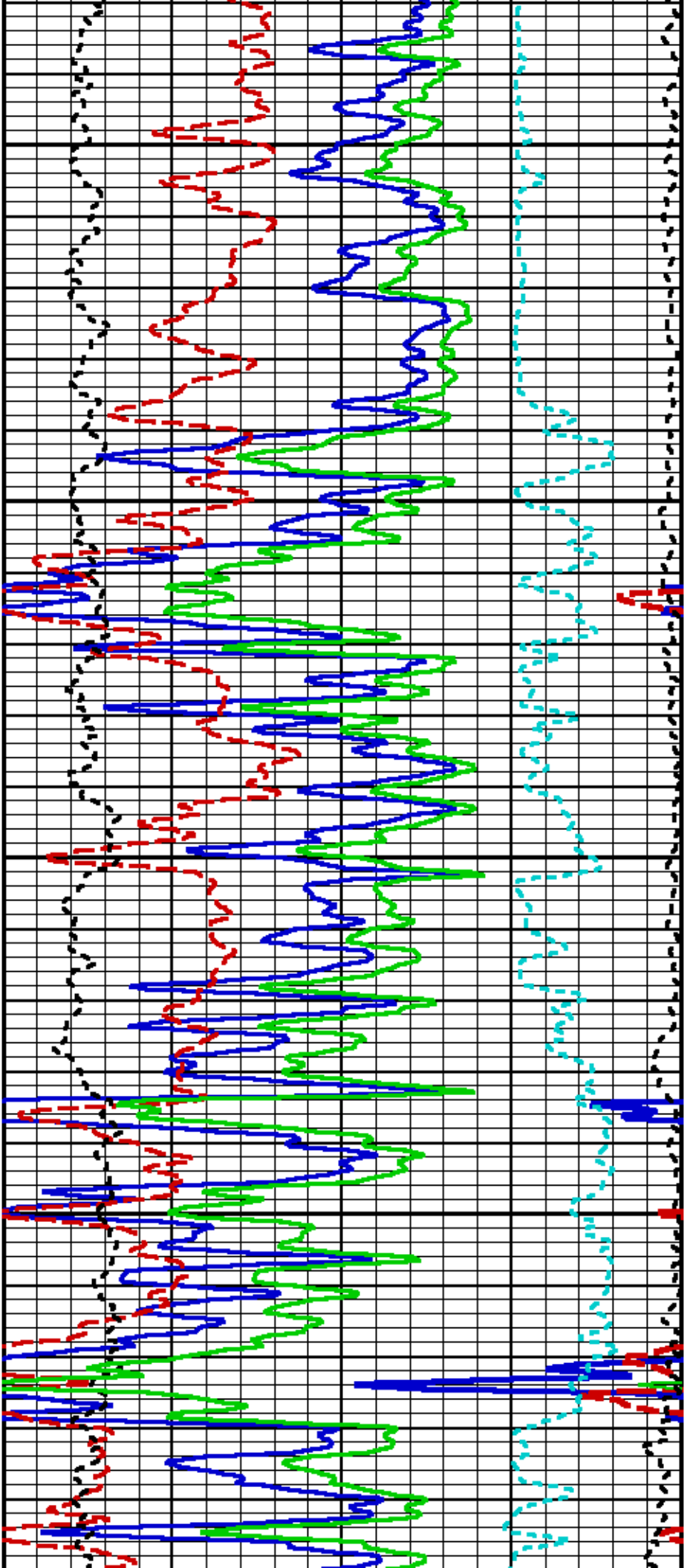




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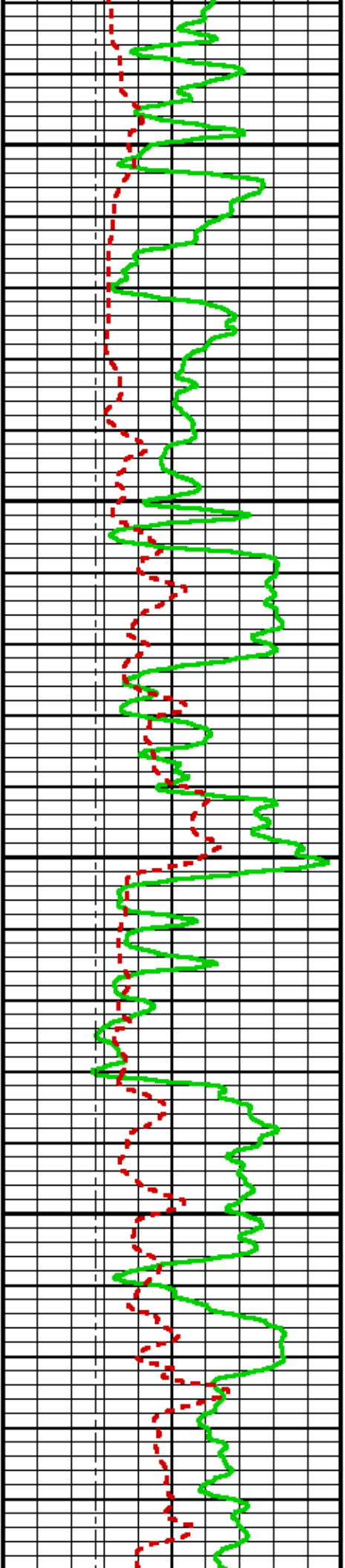


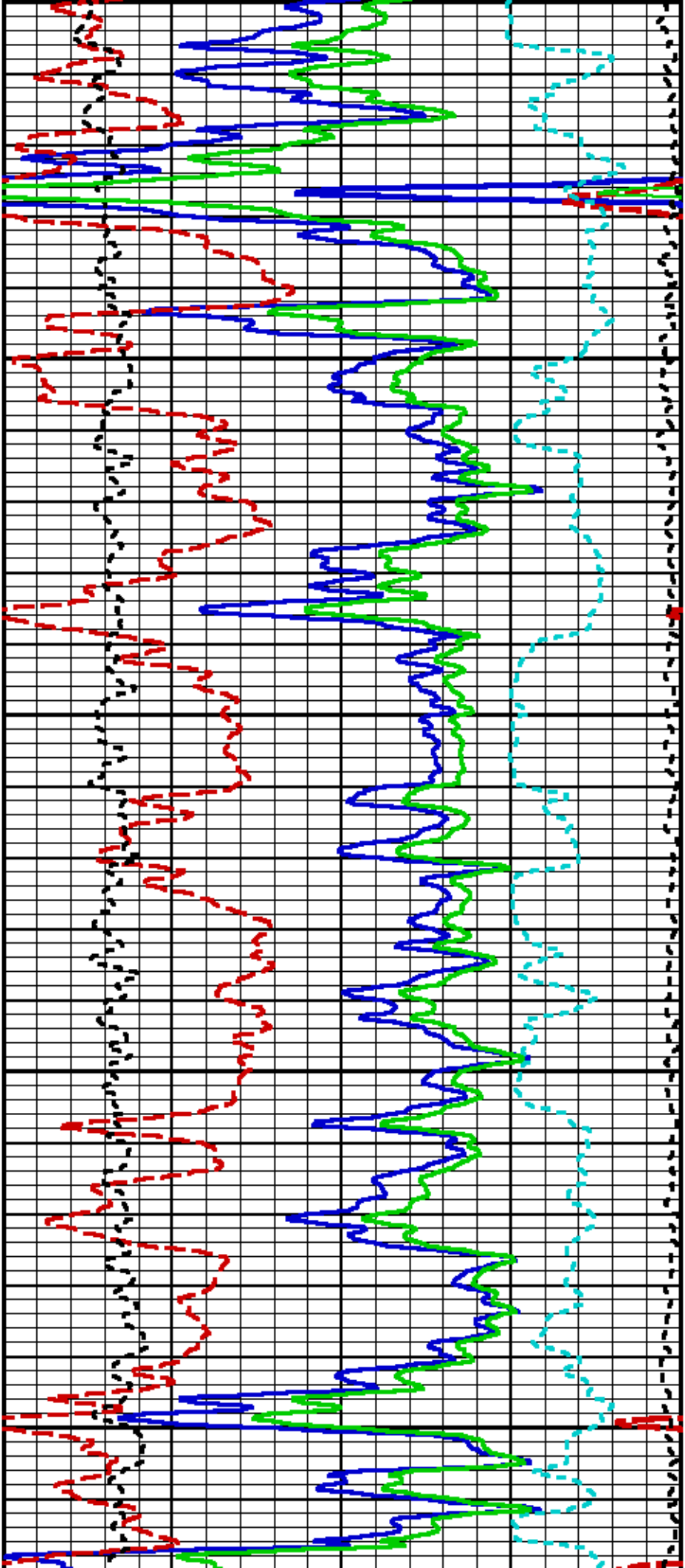


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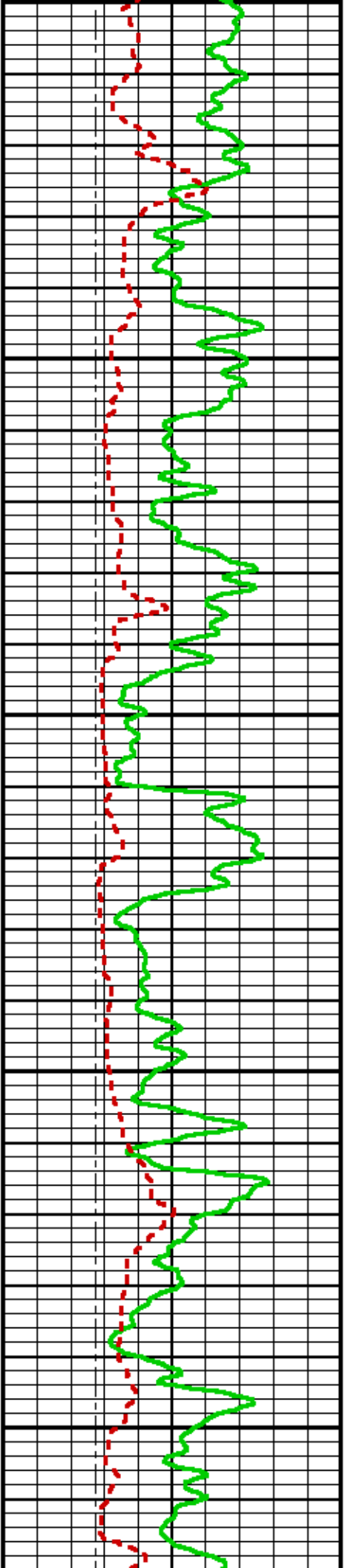


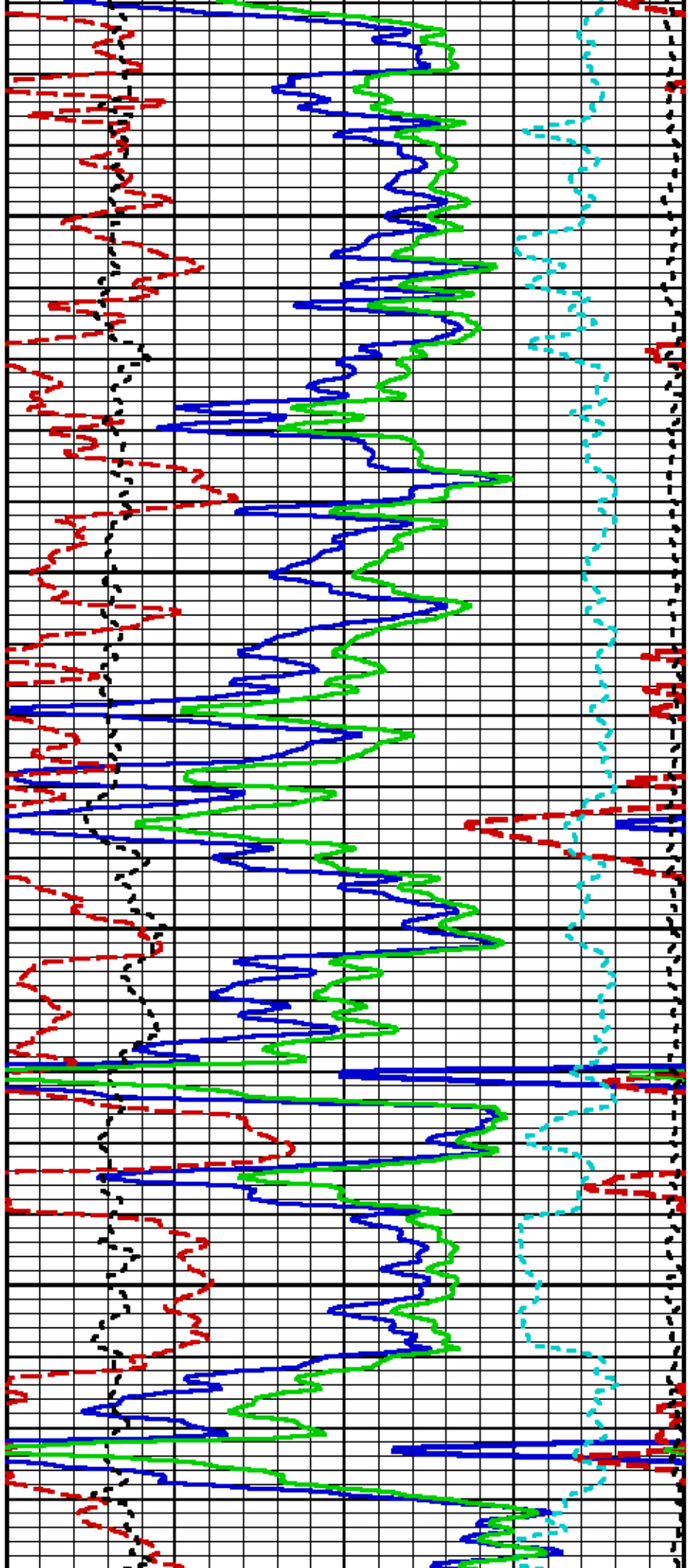


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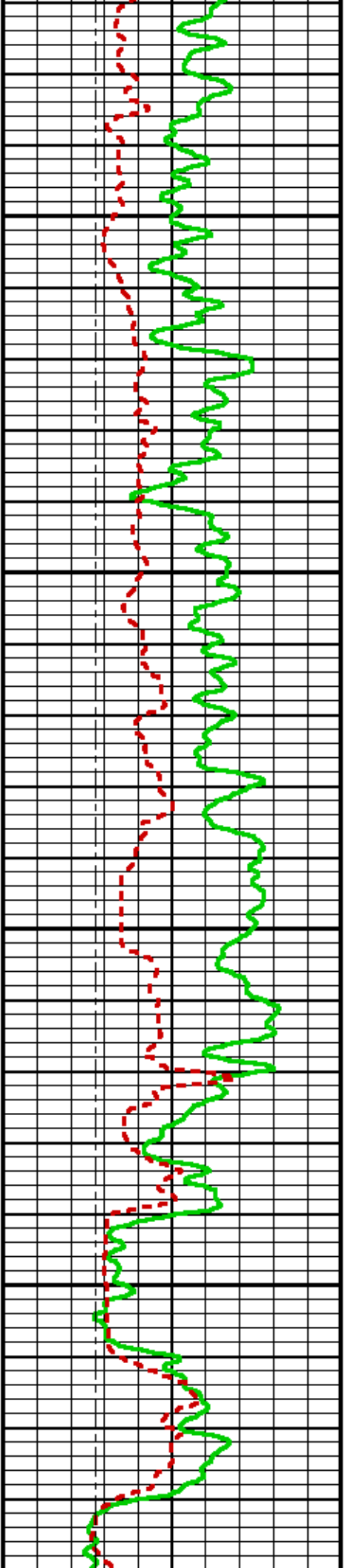
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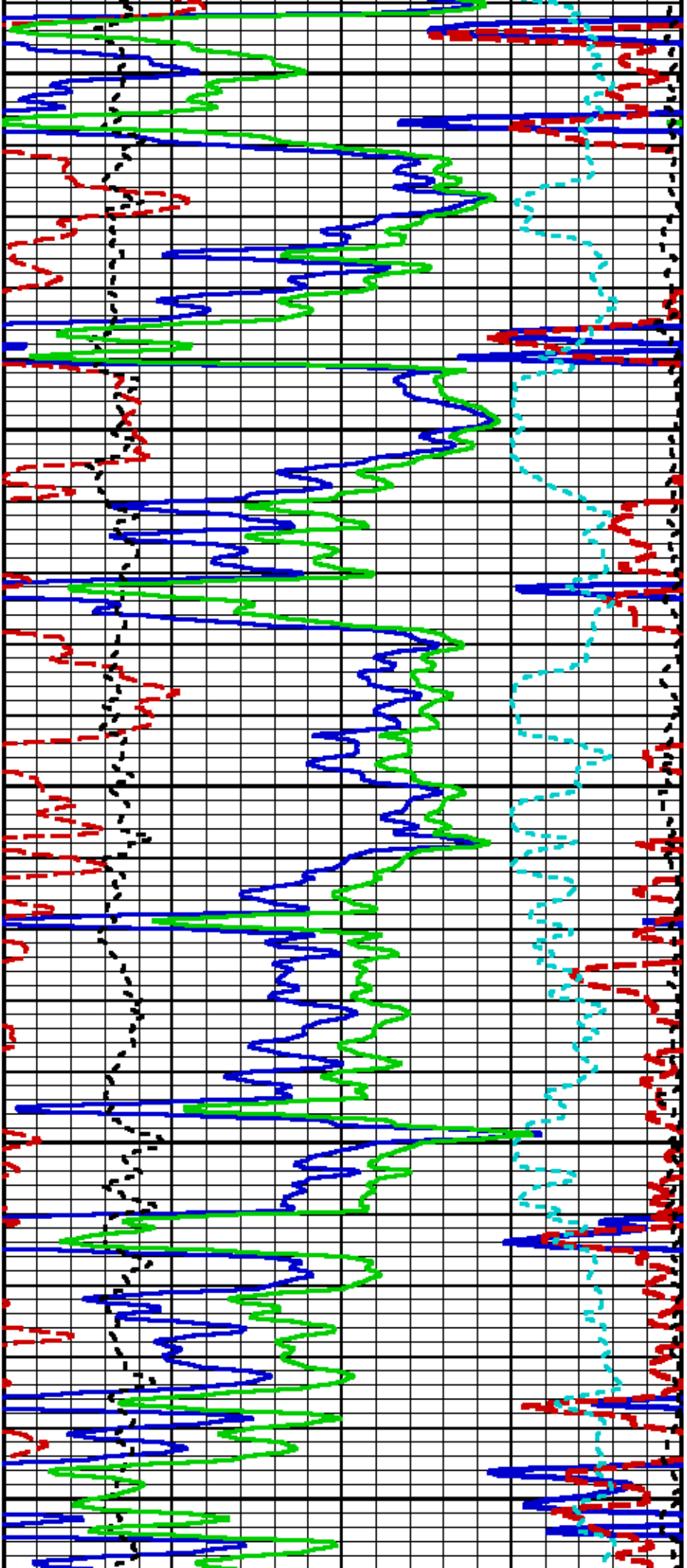




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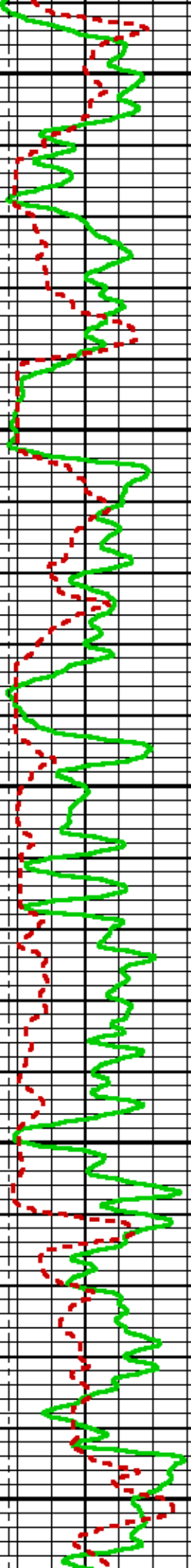
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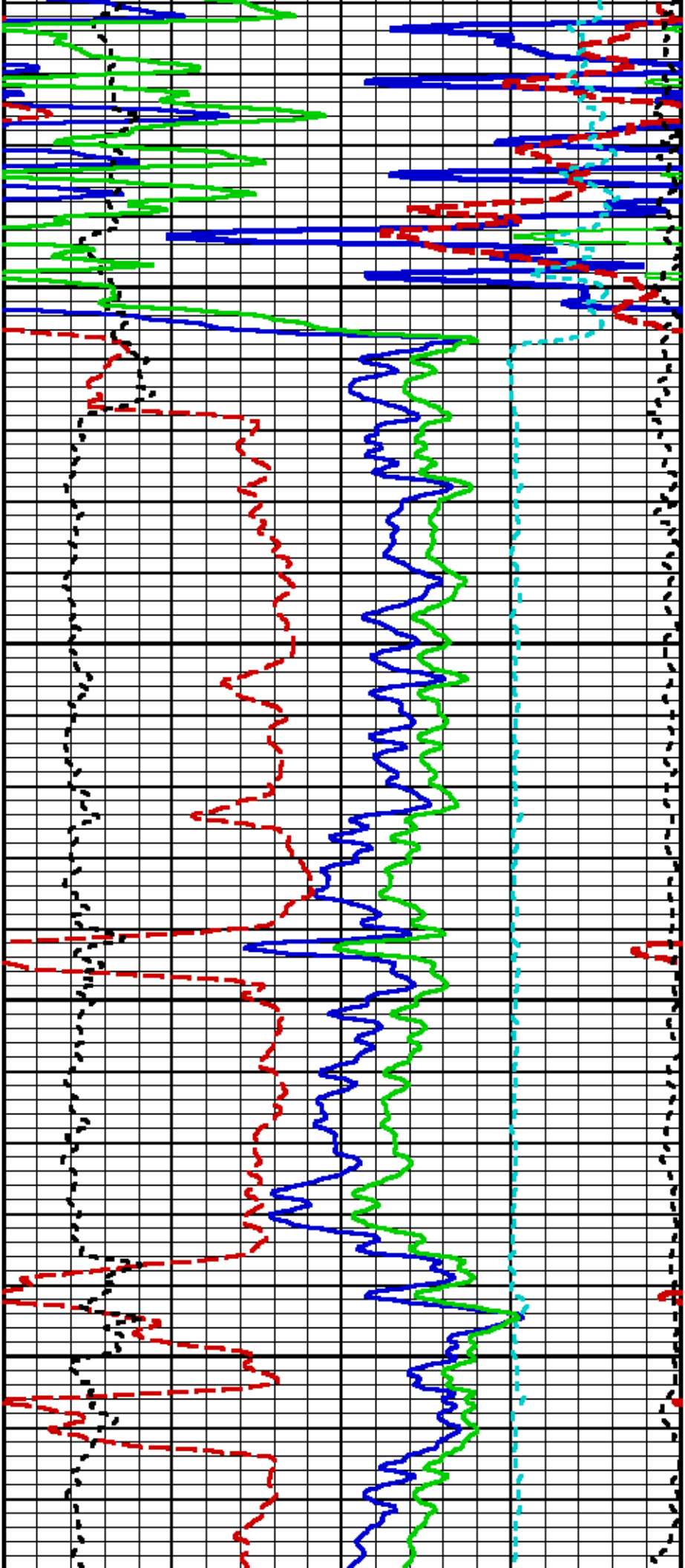




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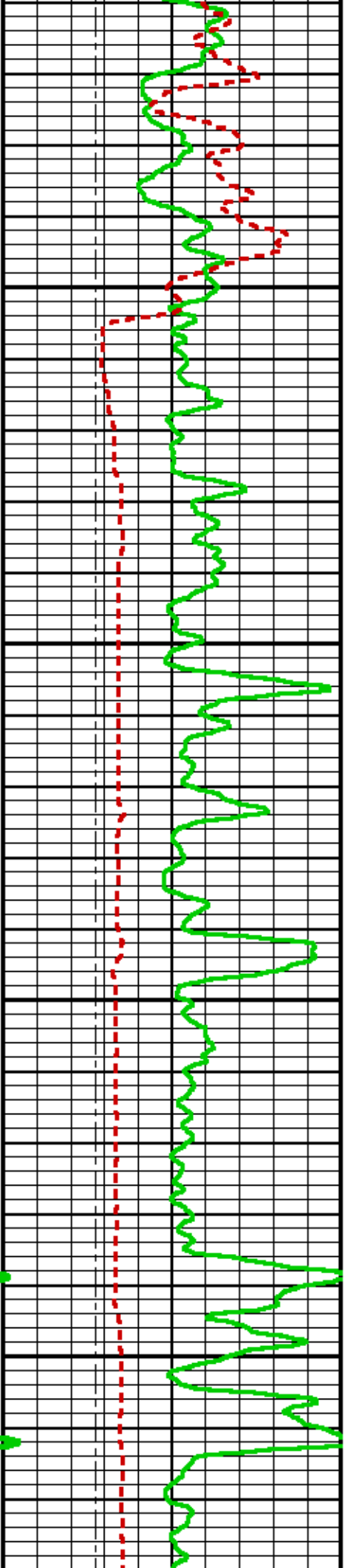
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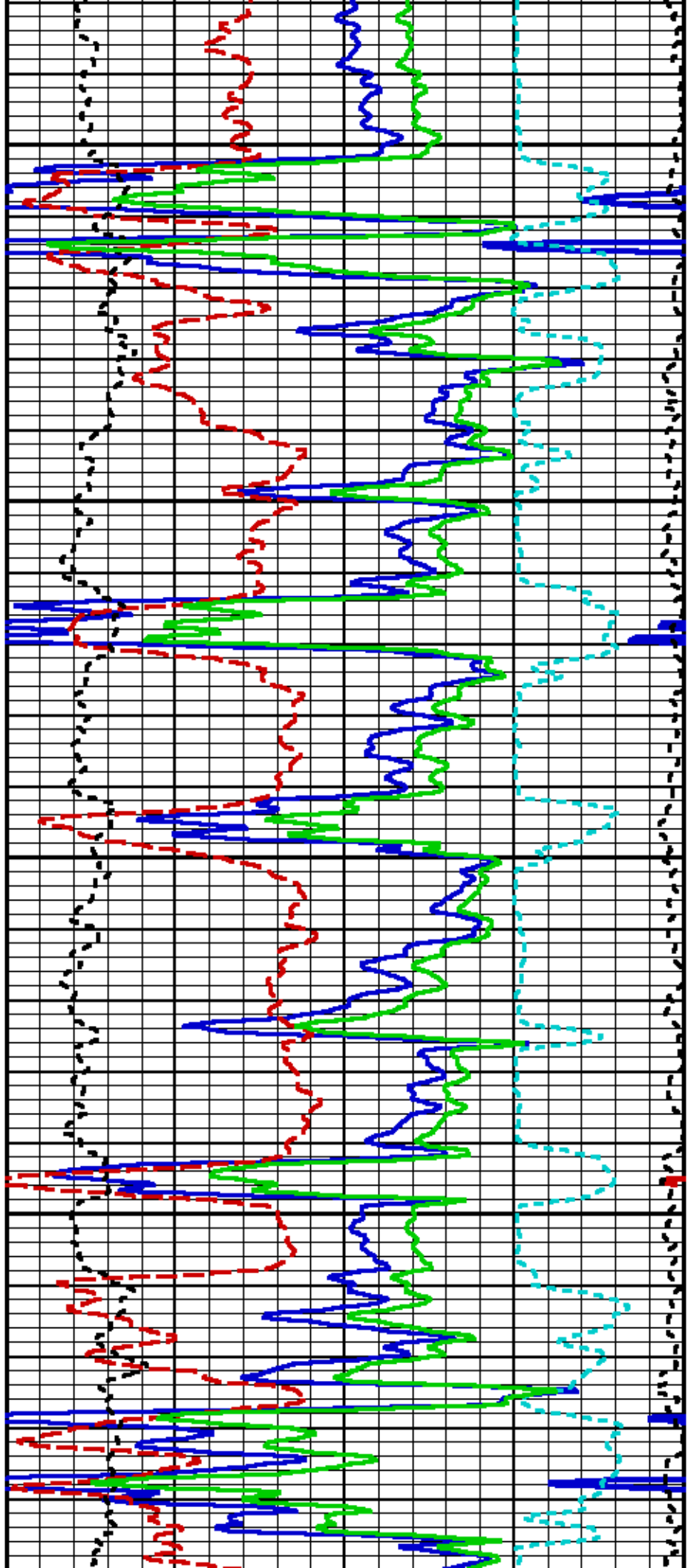




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4300

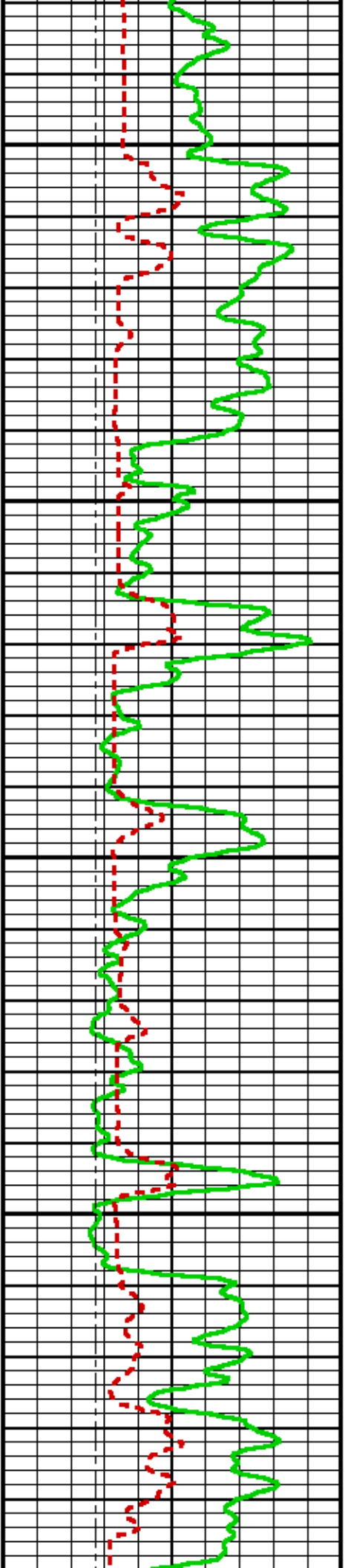


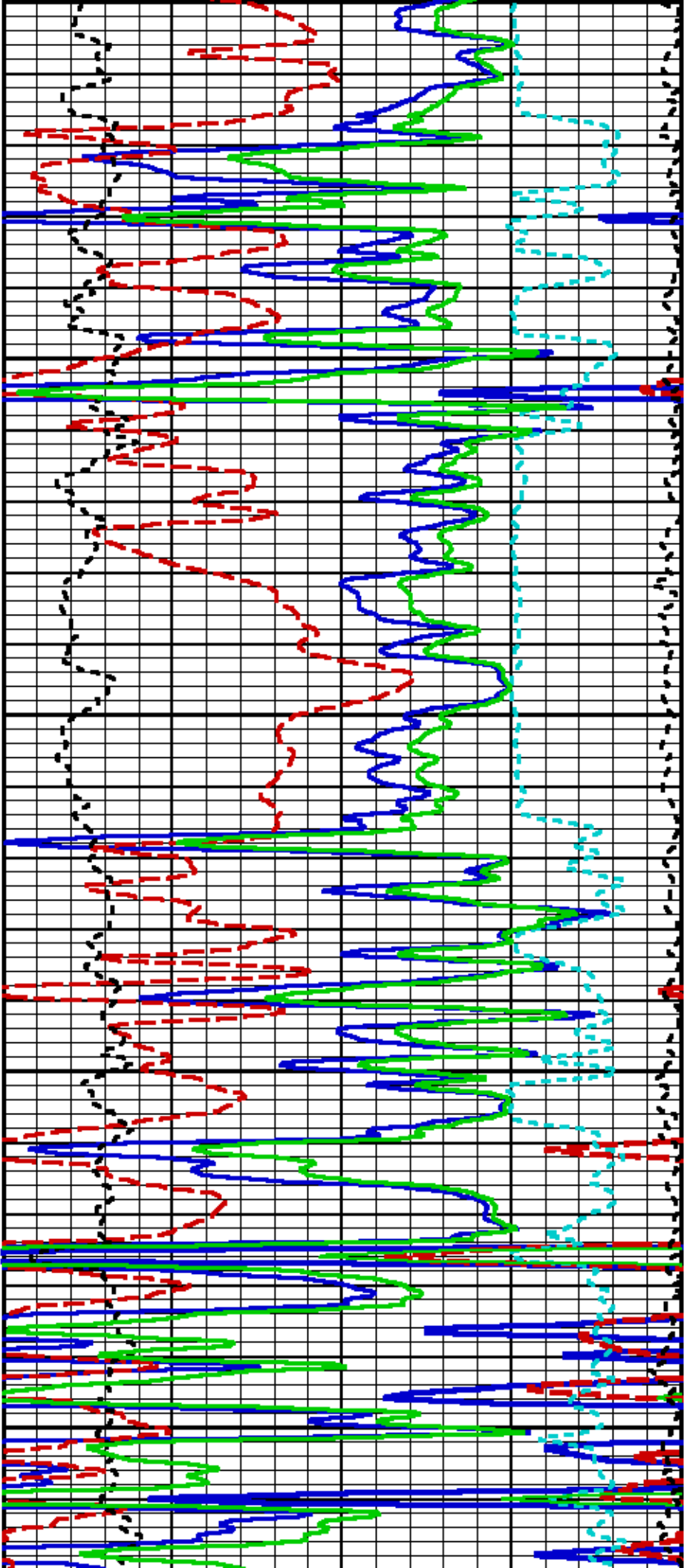


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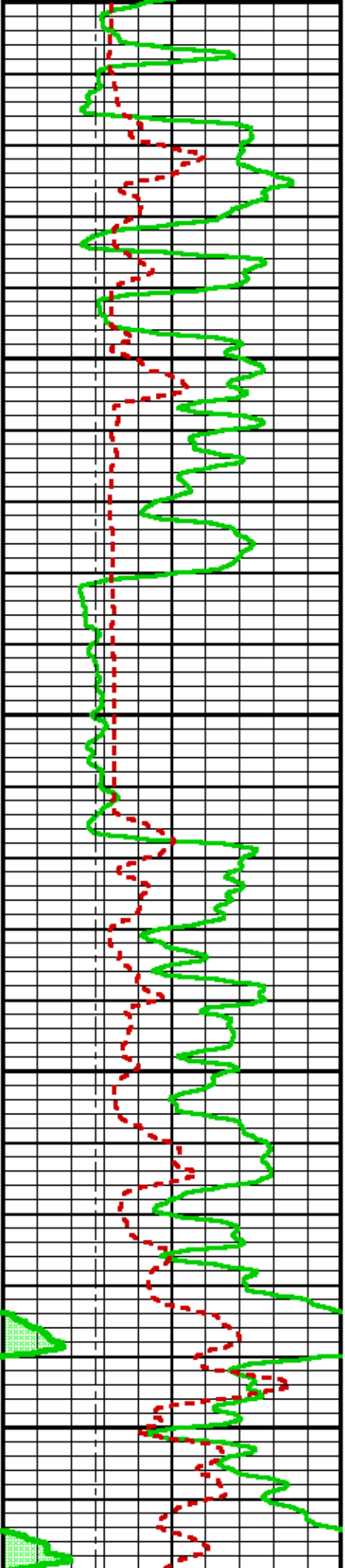


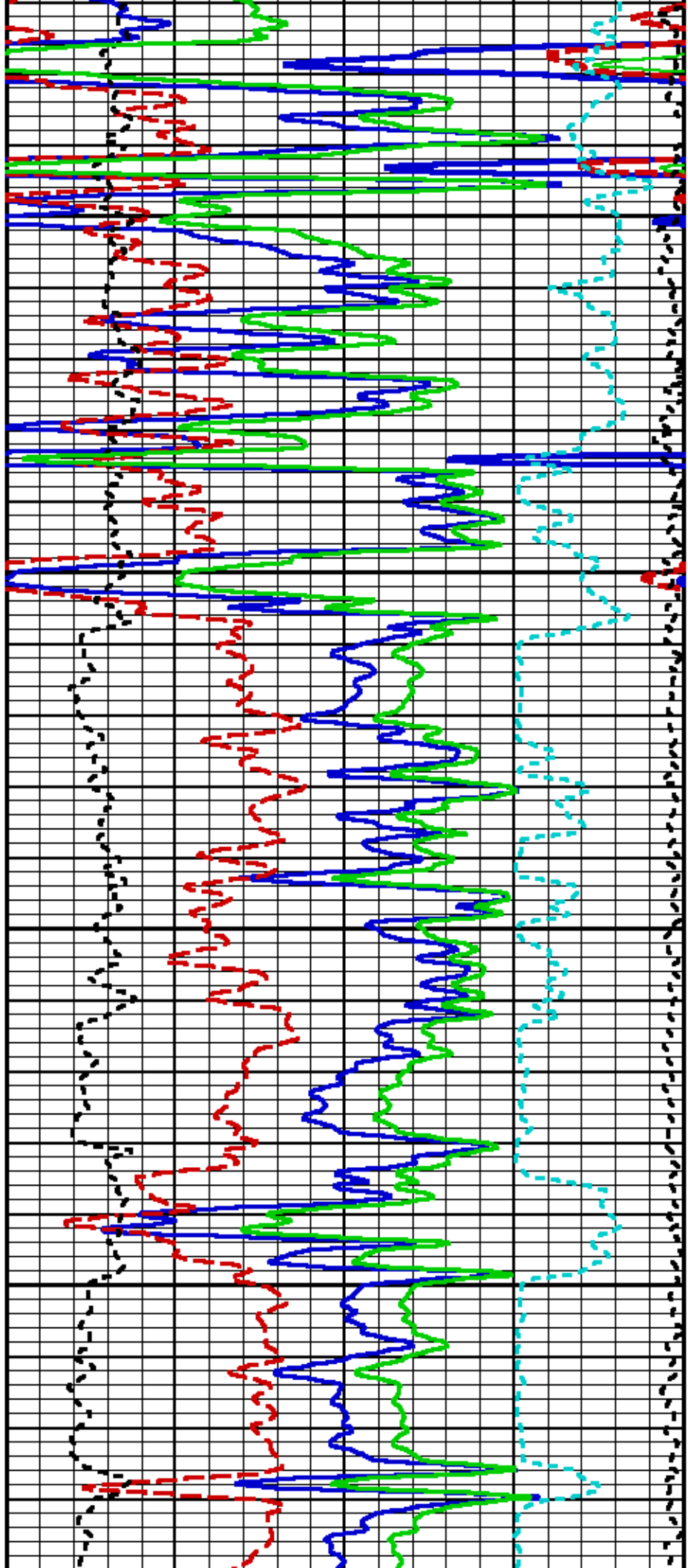


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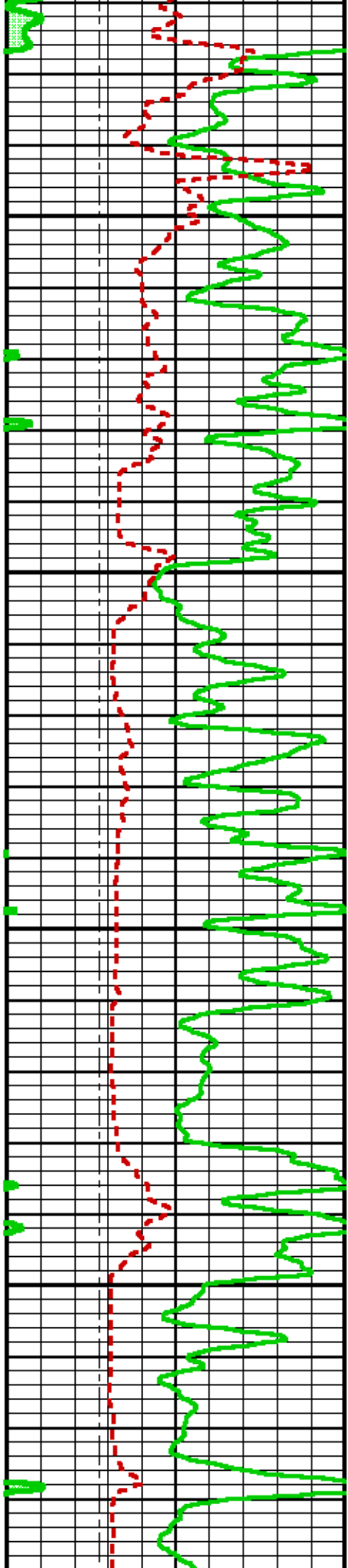
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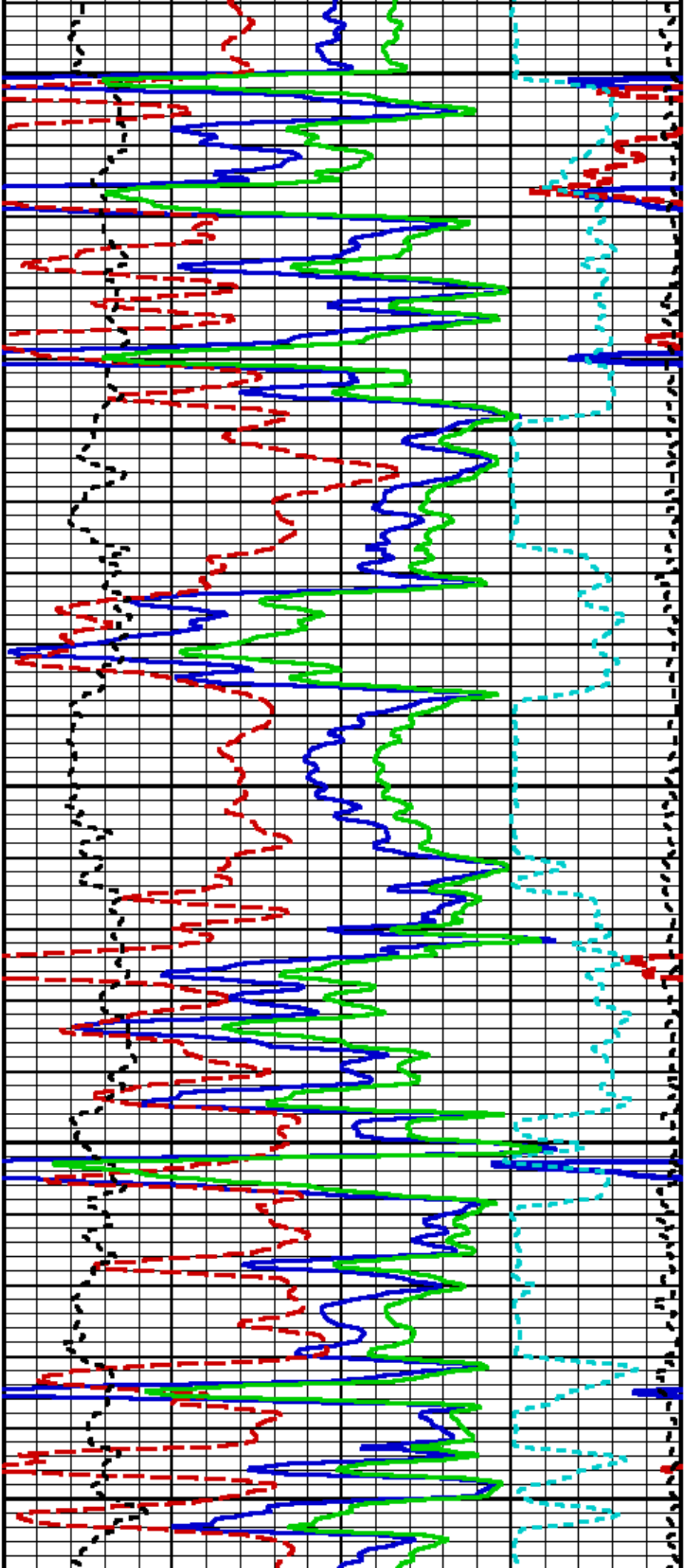




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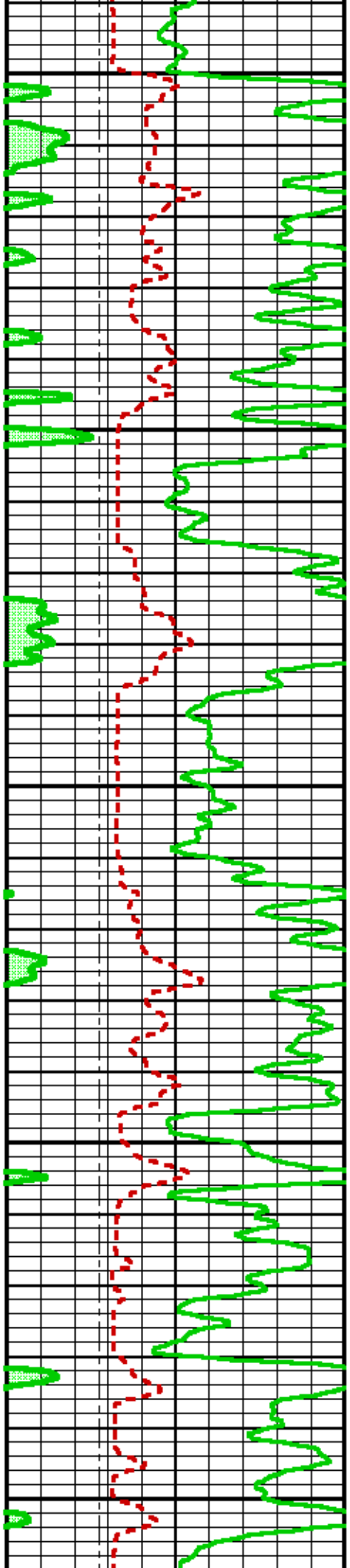
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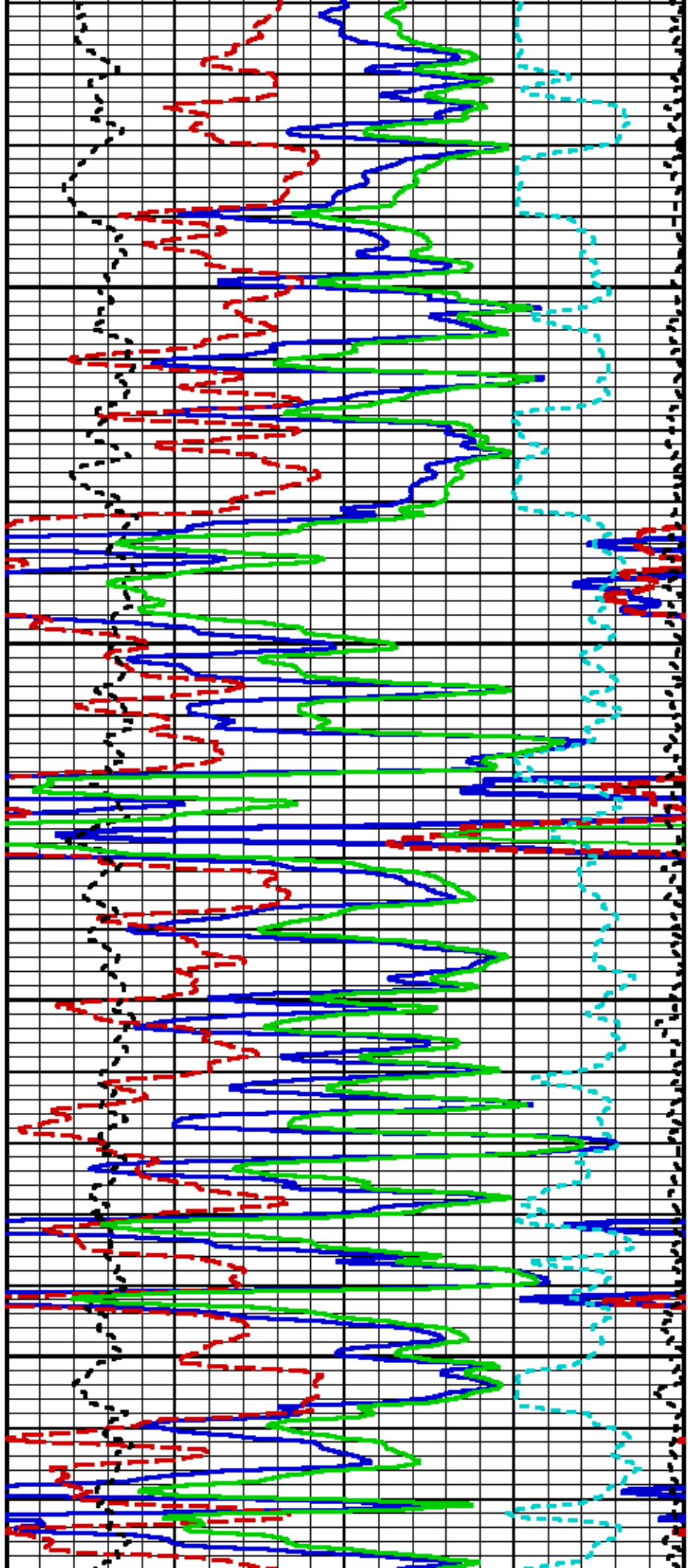




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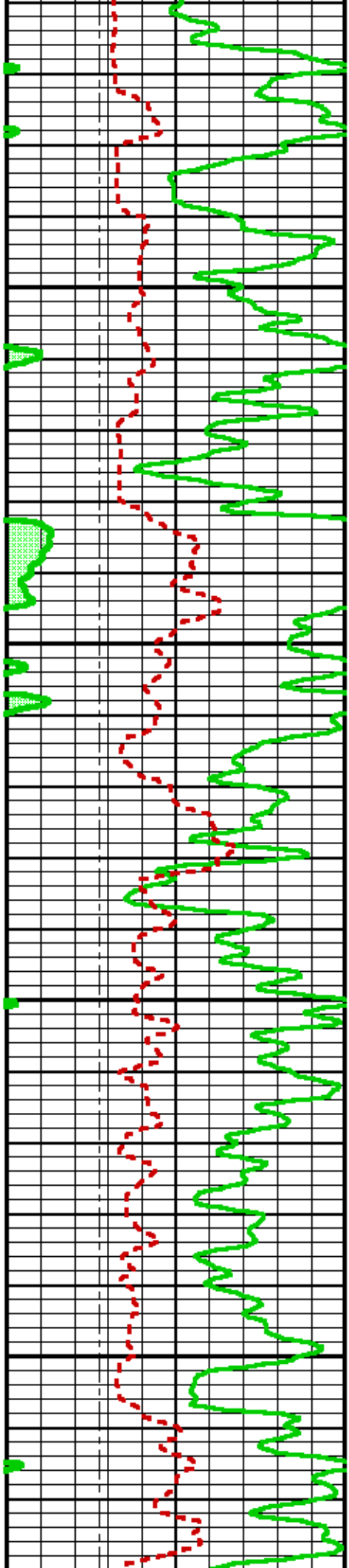
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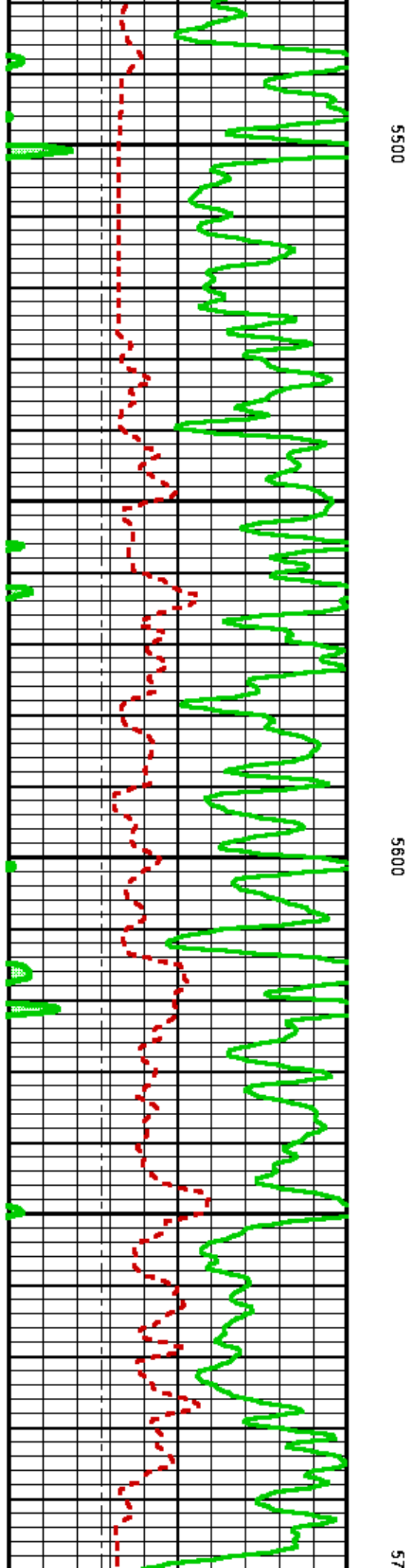
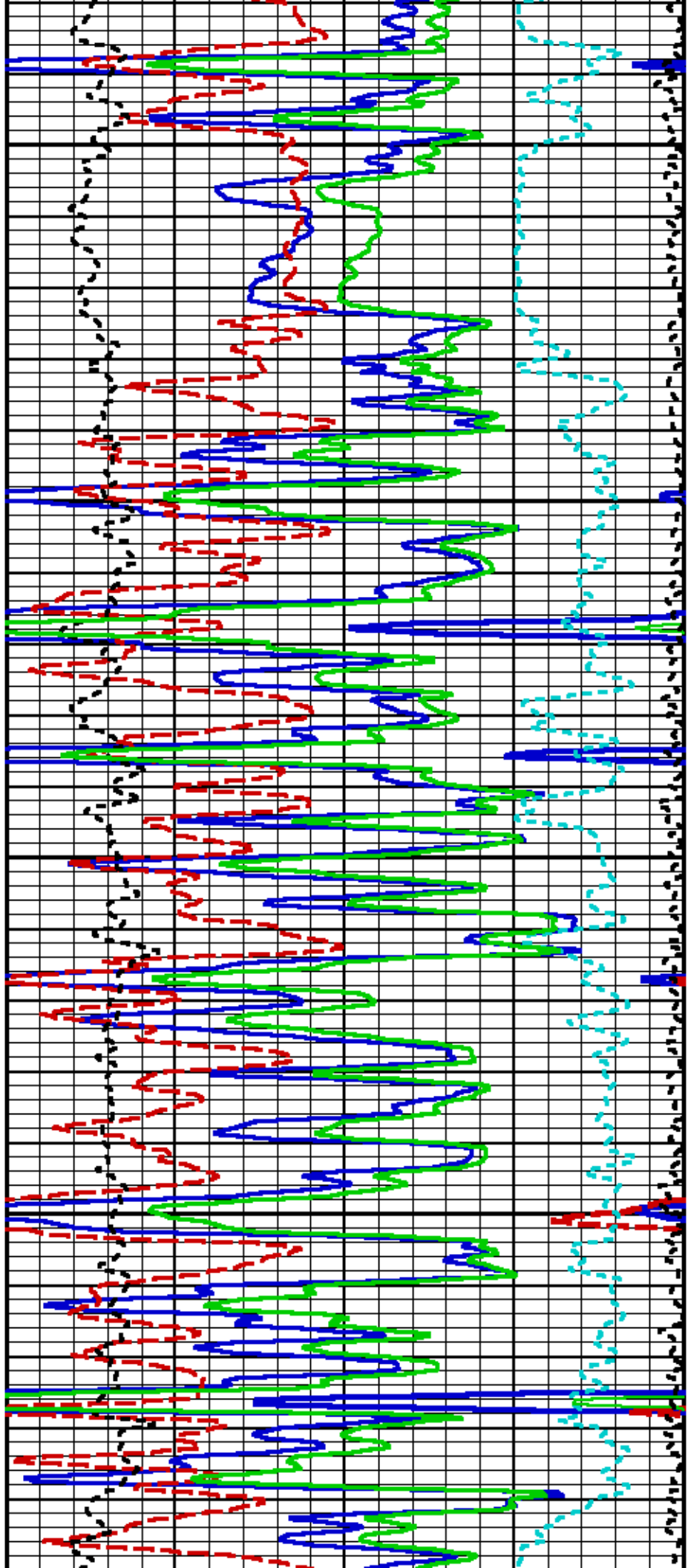


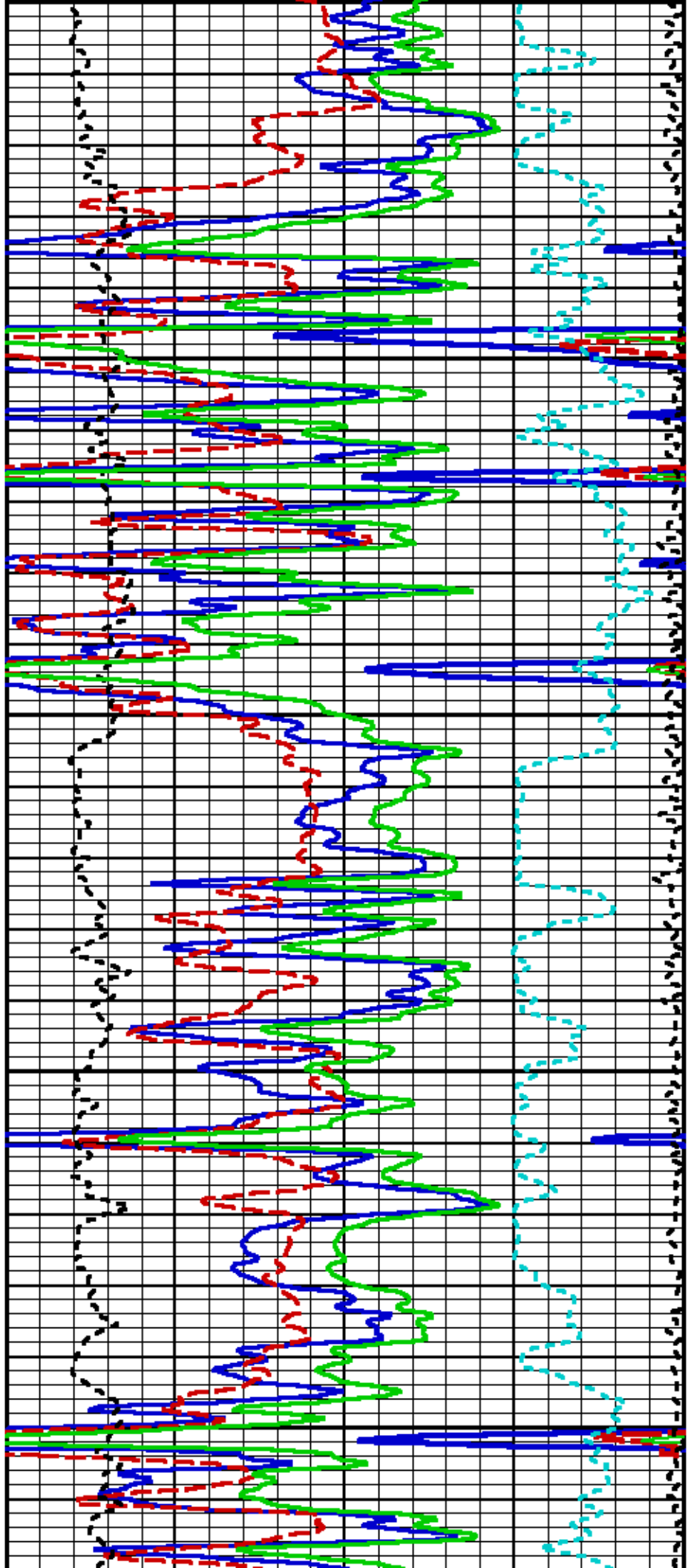


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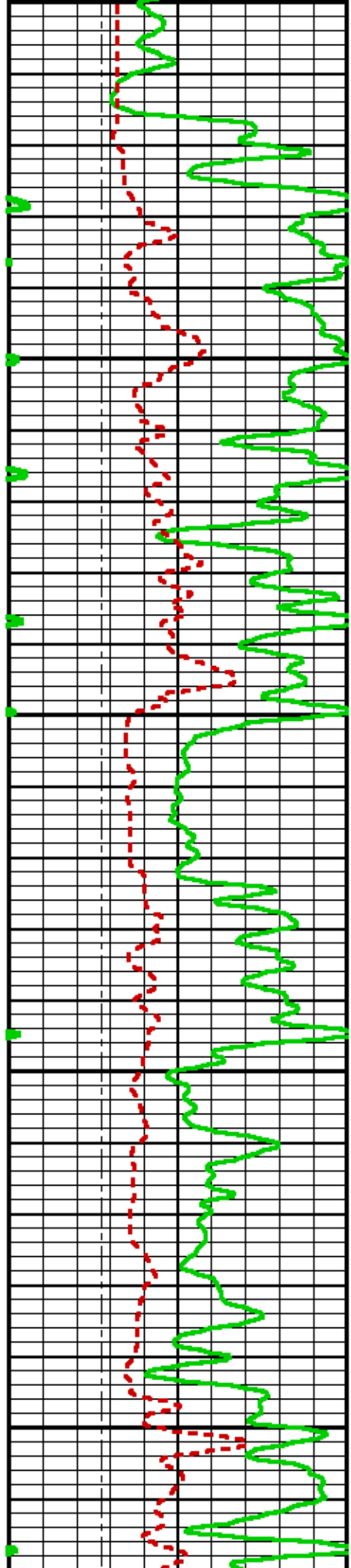


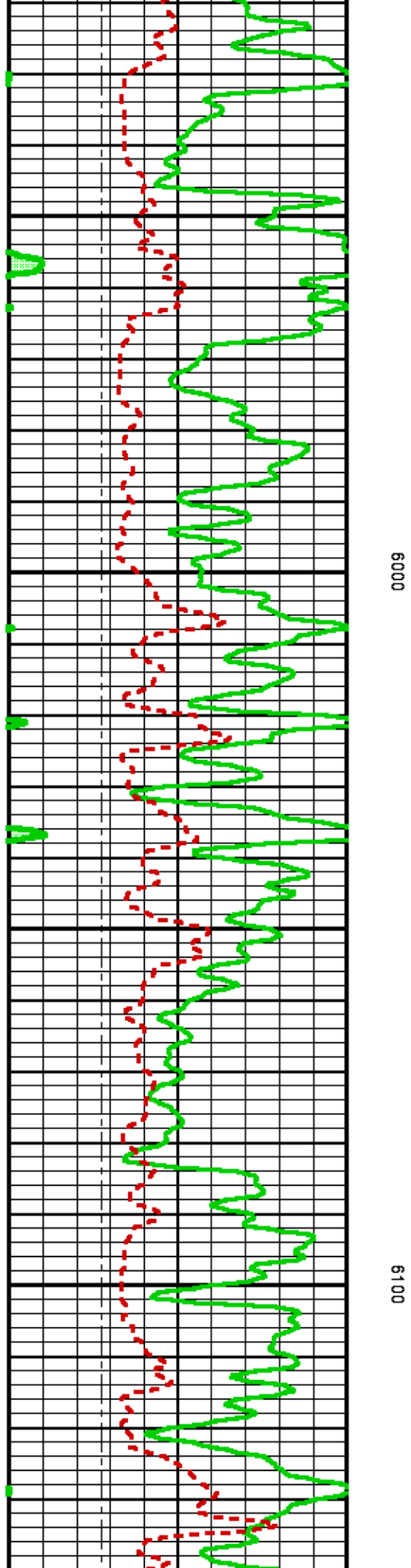
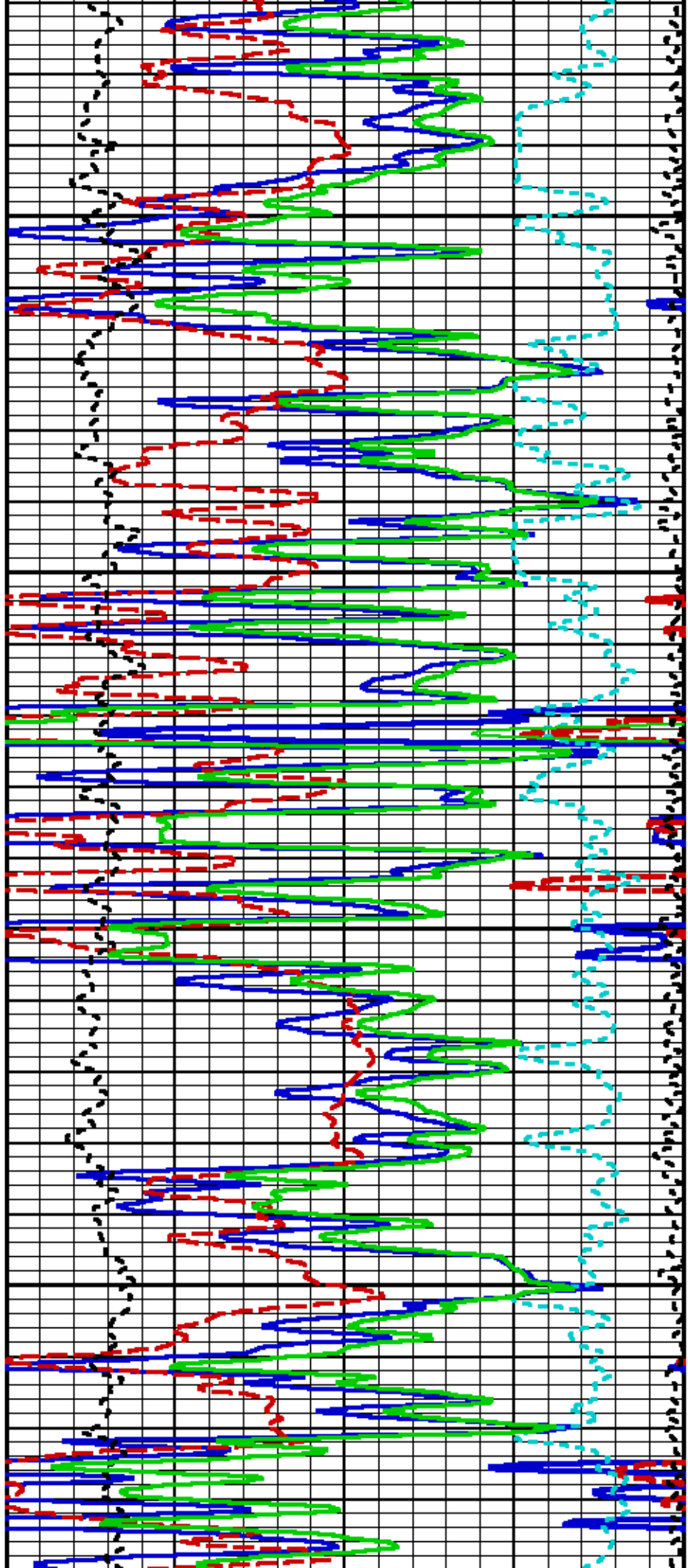


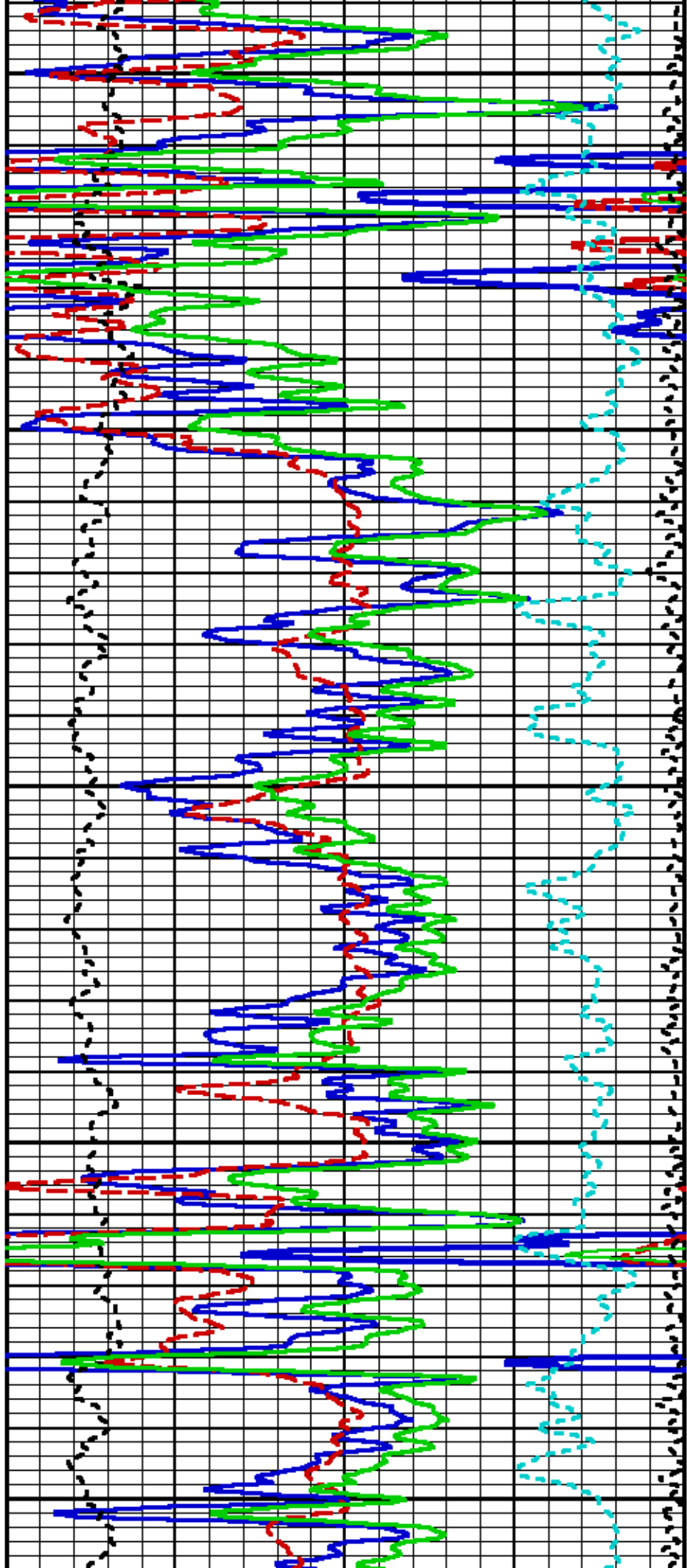
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5800

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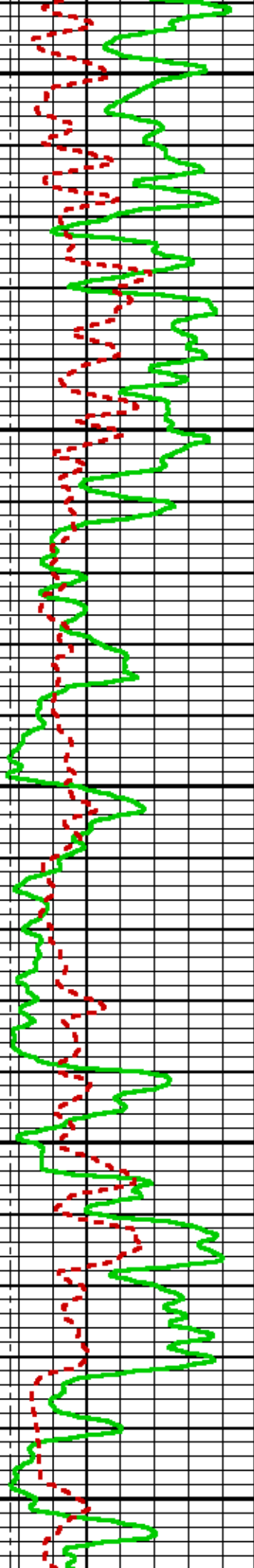


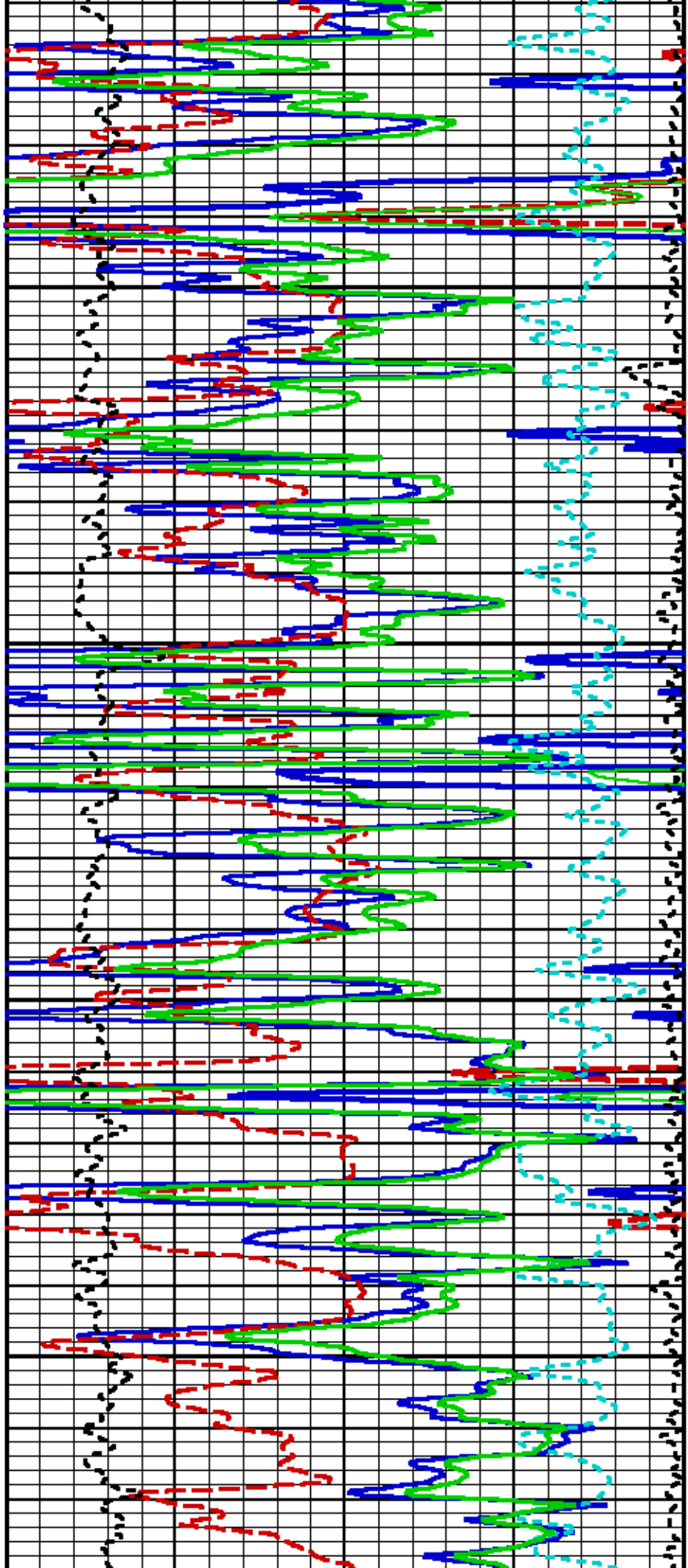




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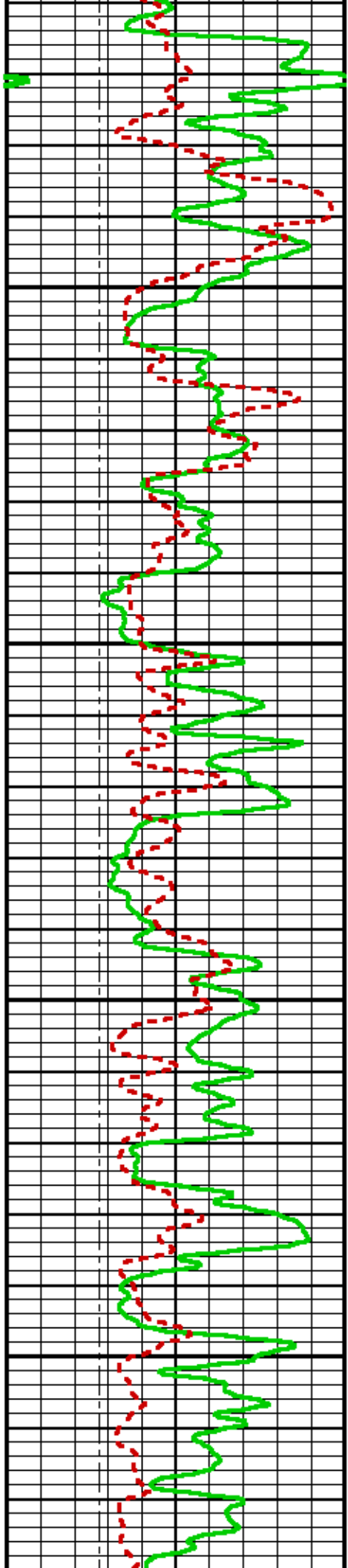
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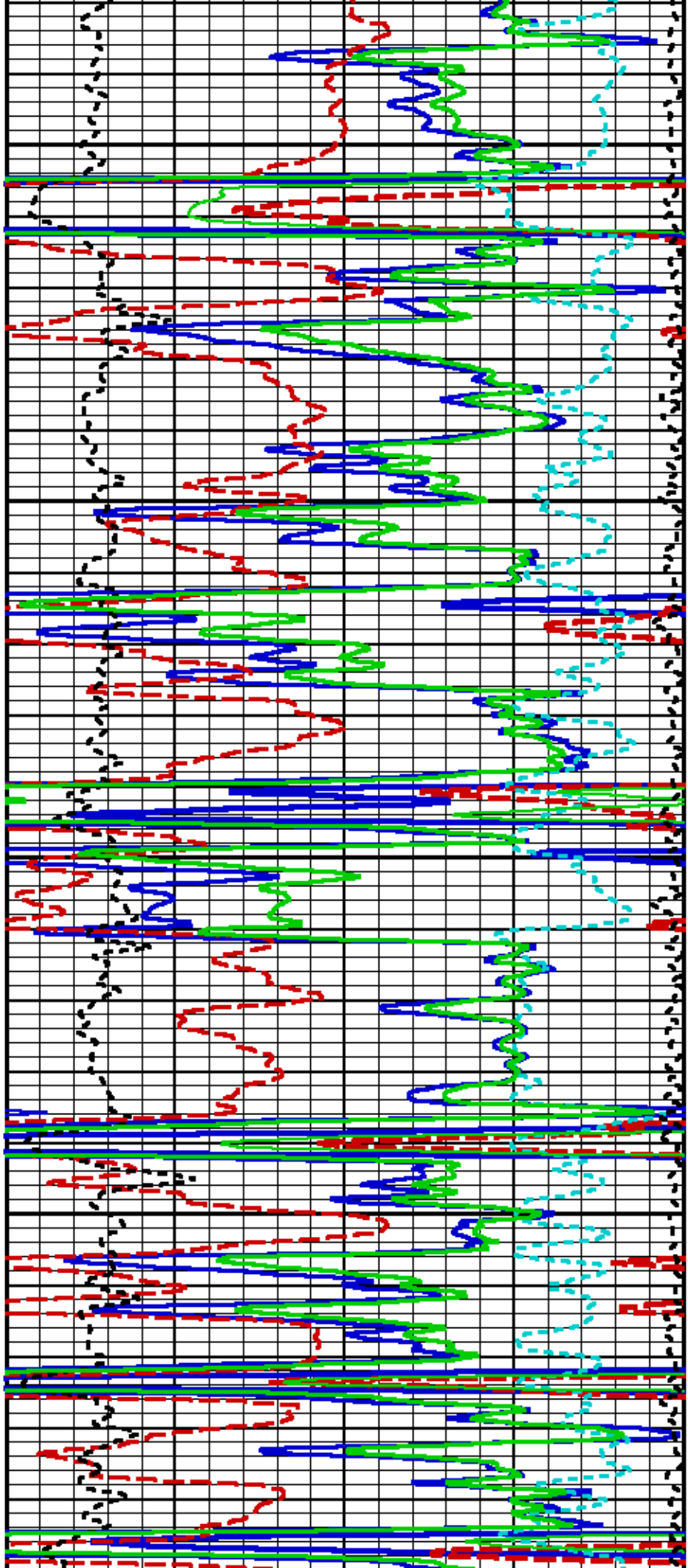




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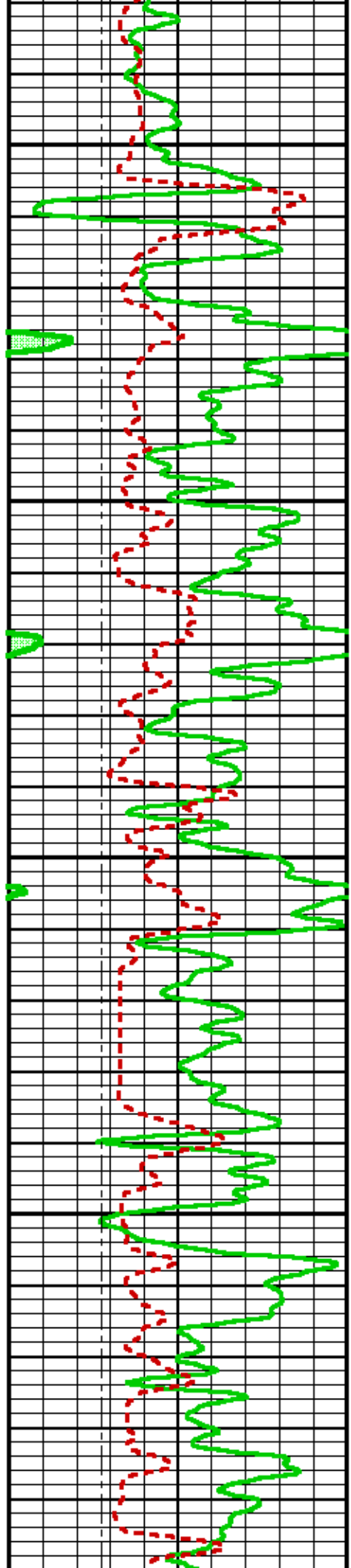


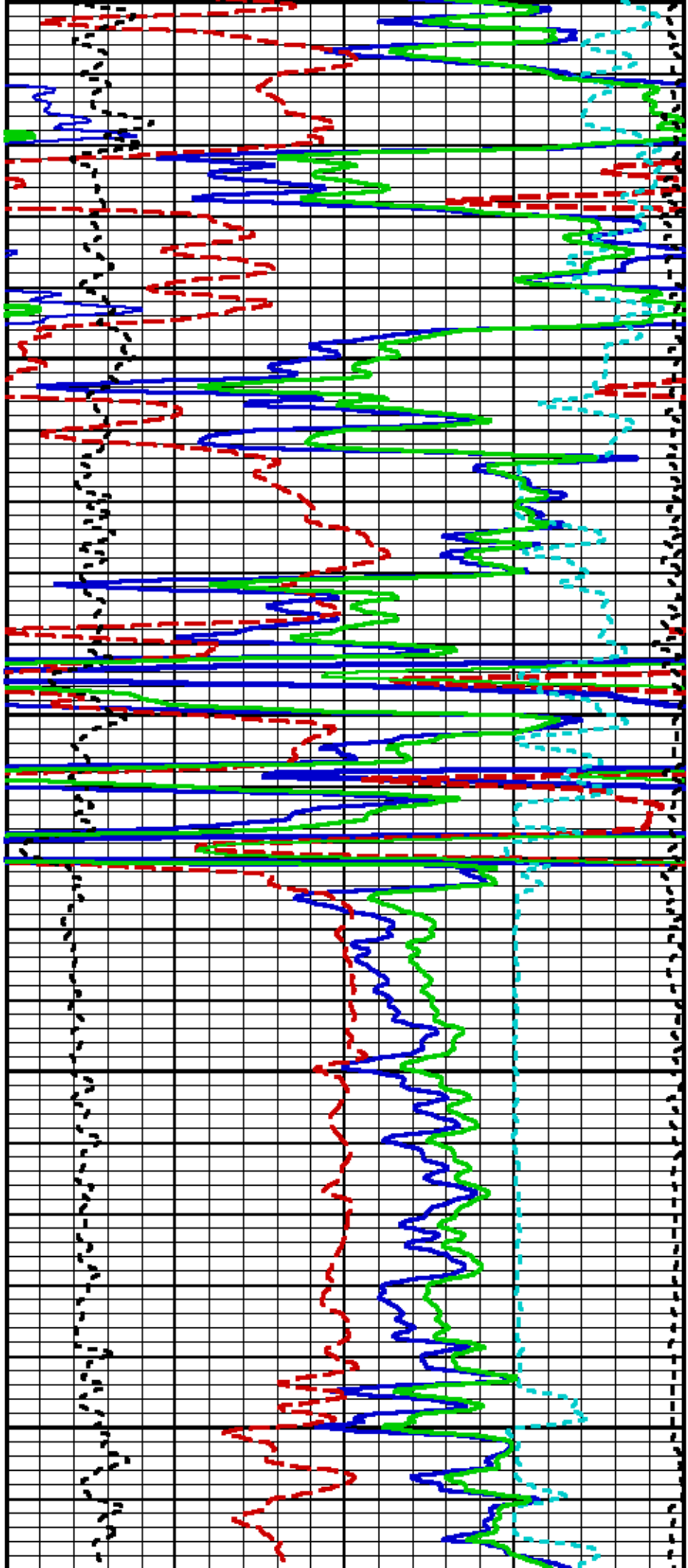


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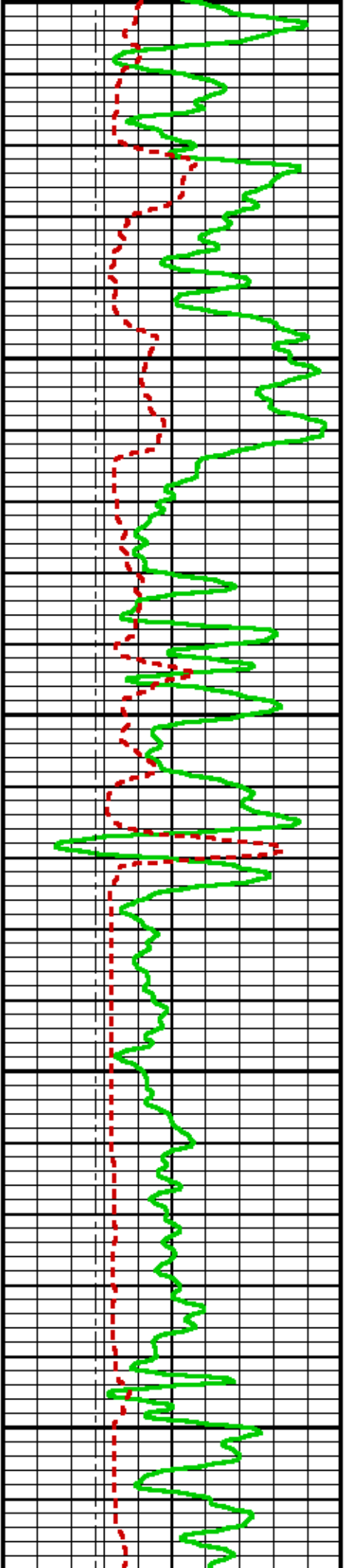


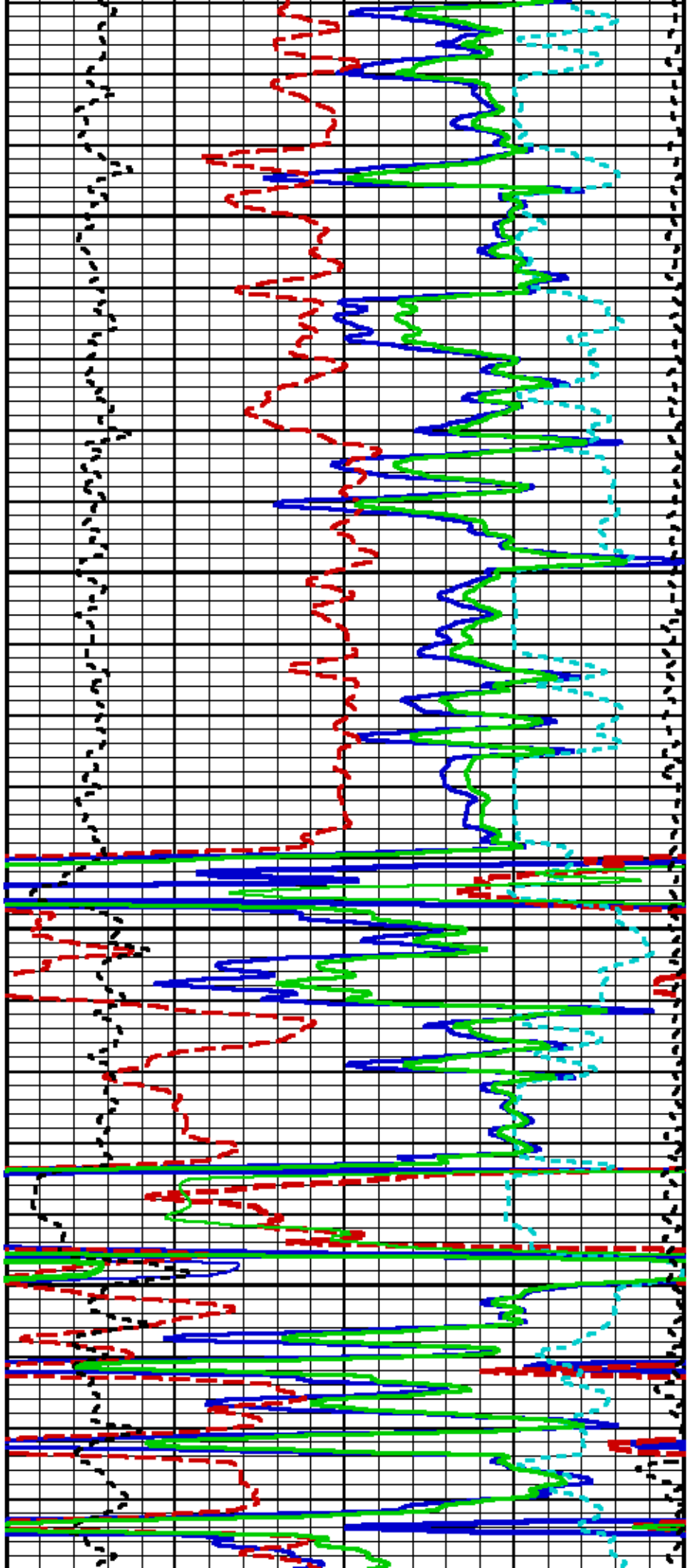


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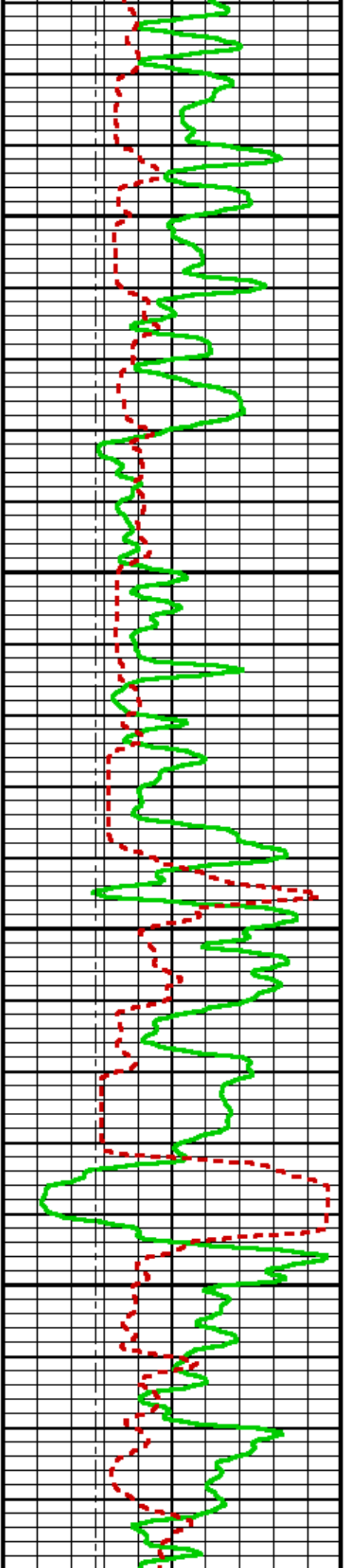
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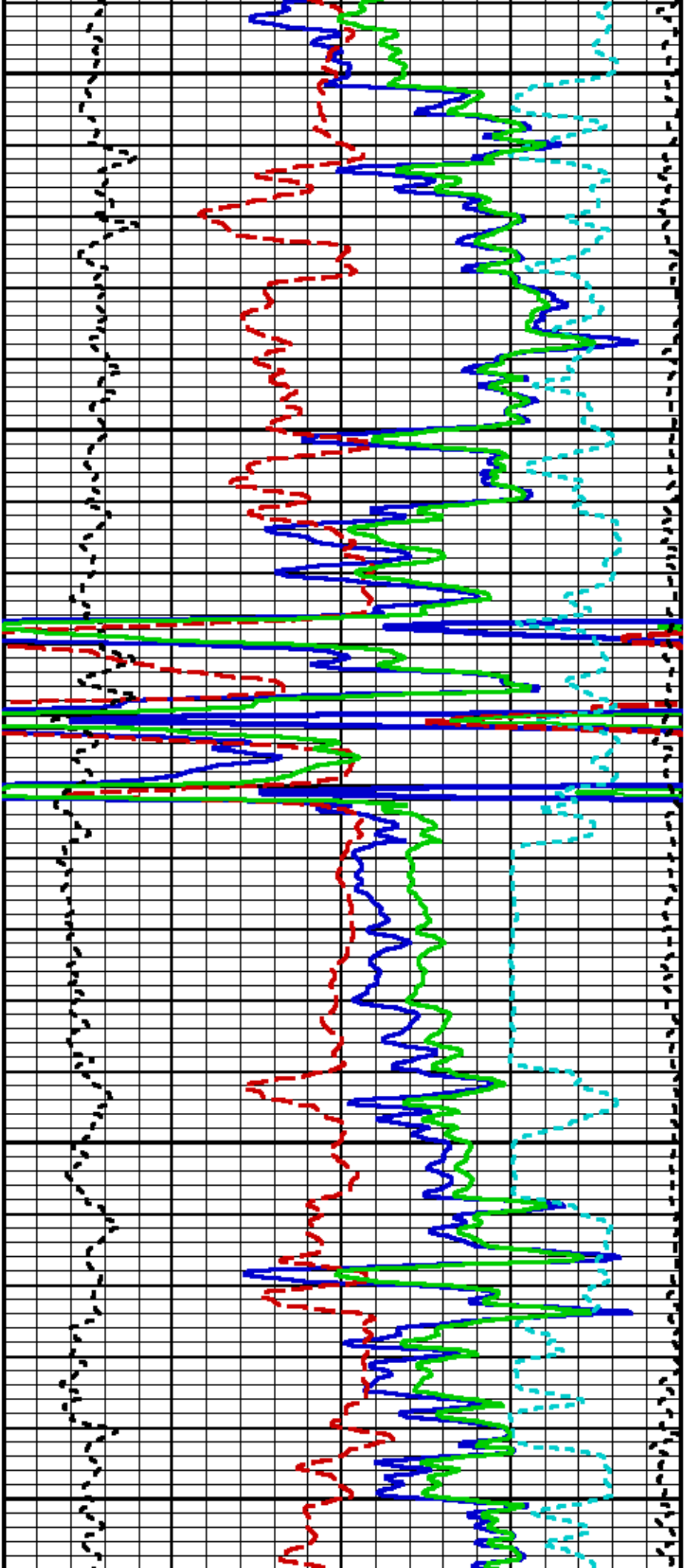




7100

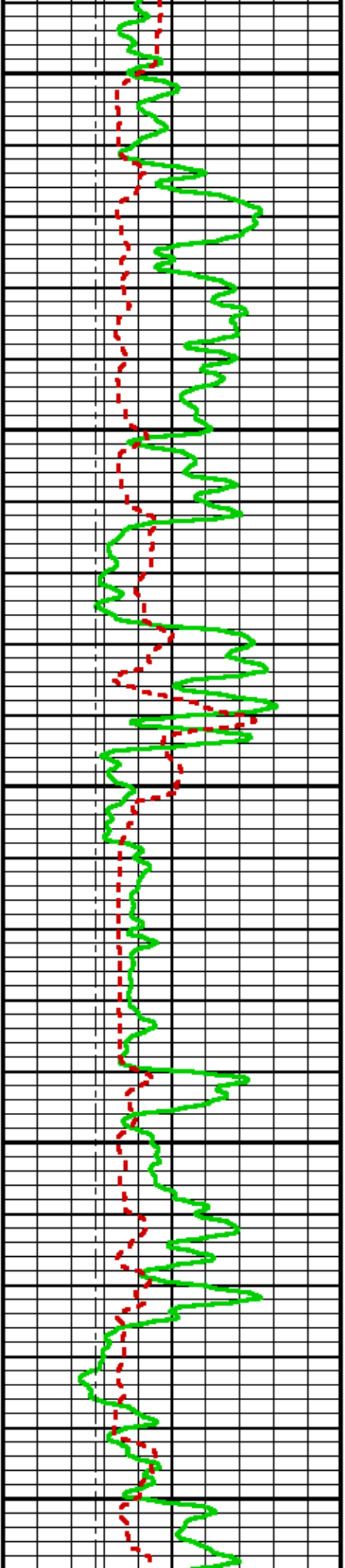
7200

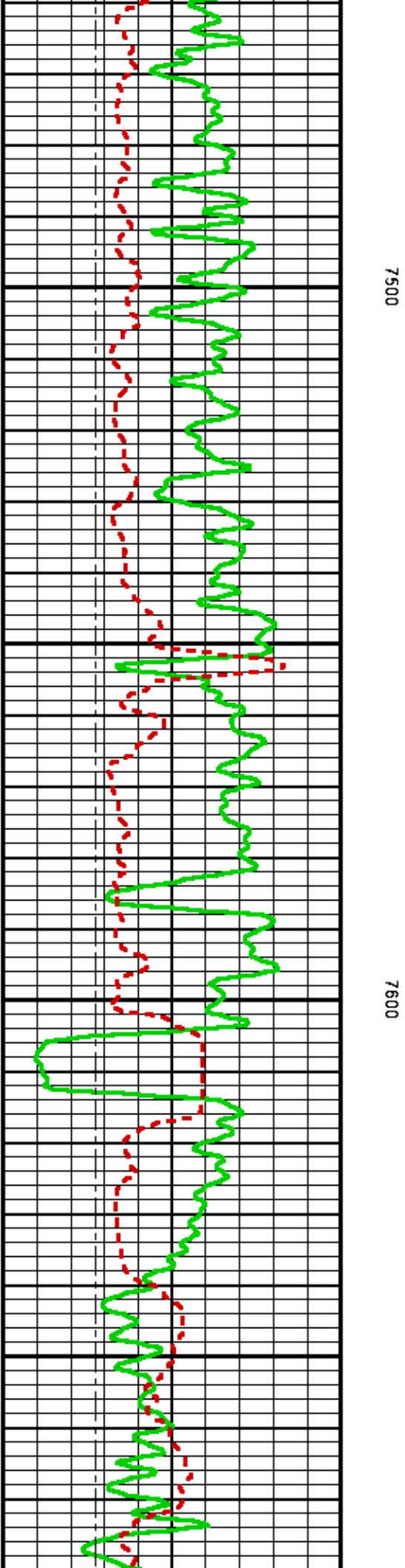
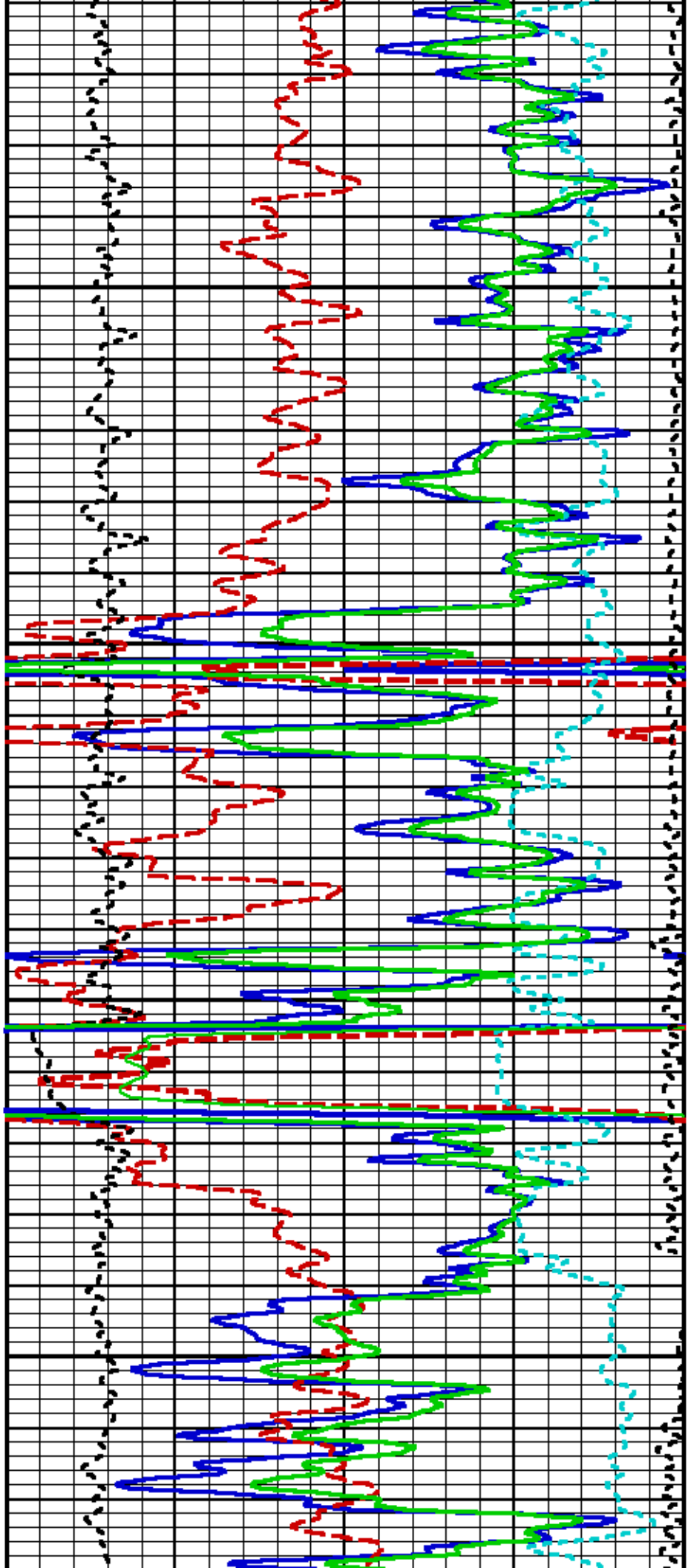


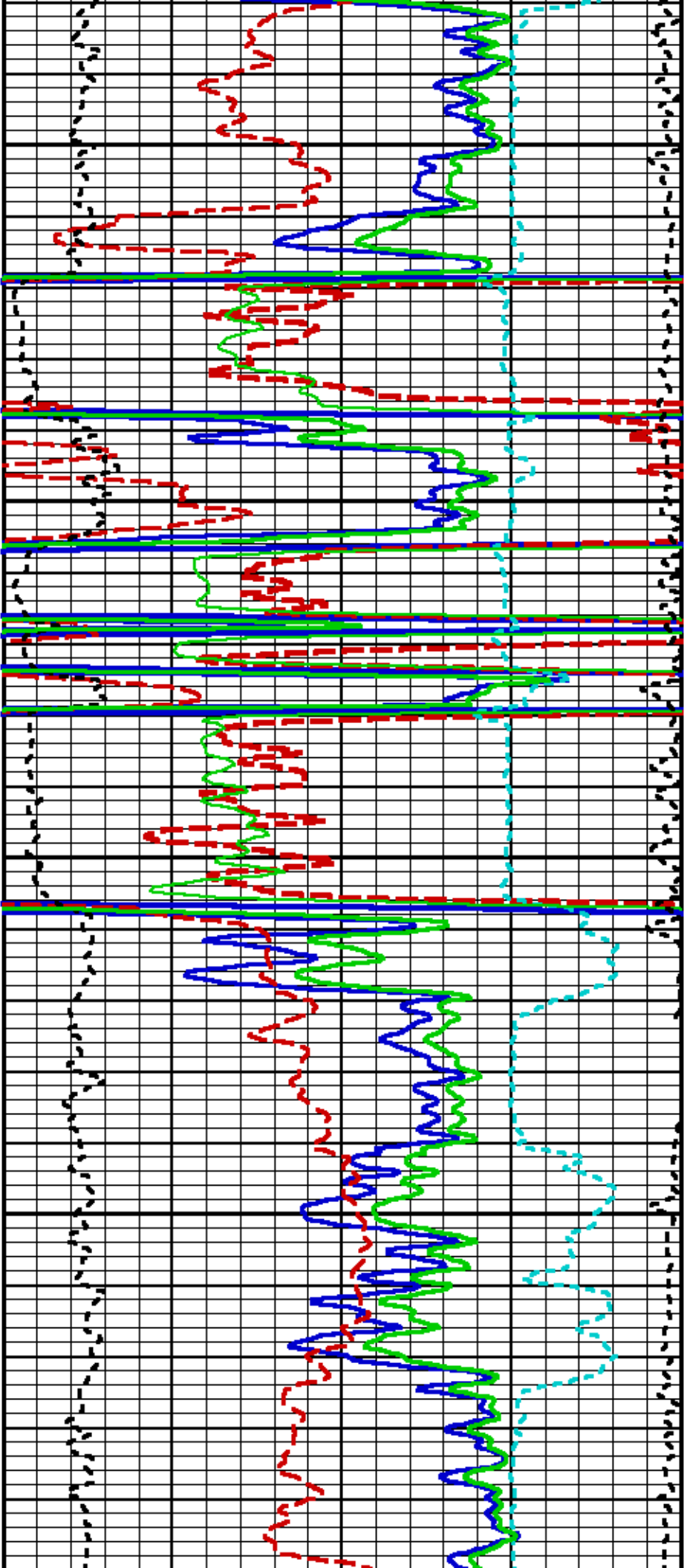


7300

7400



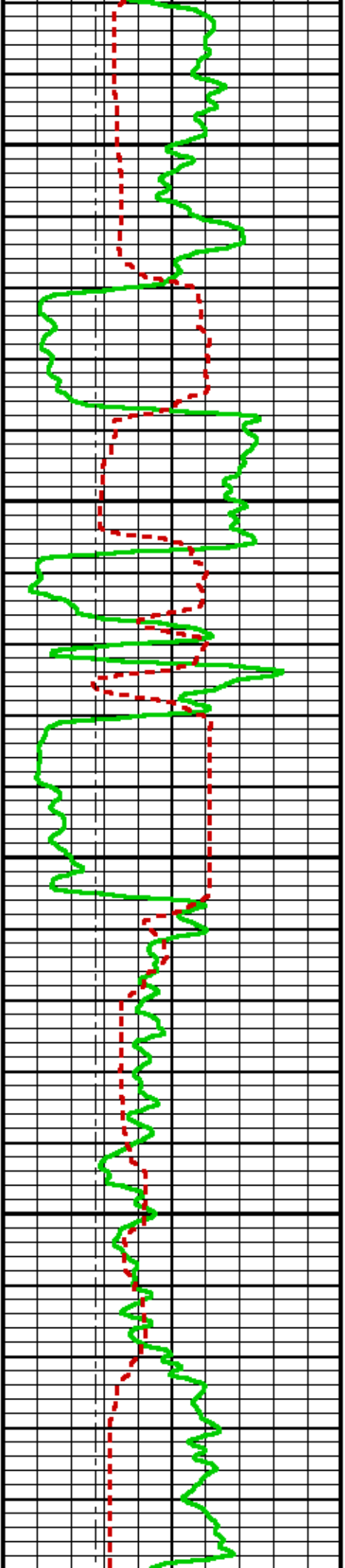


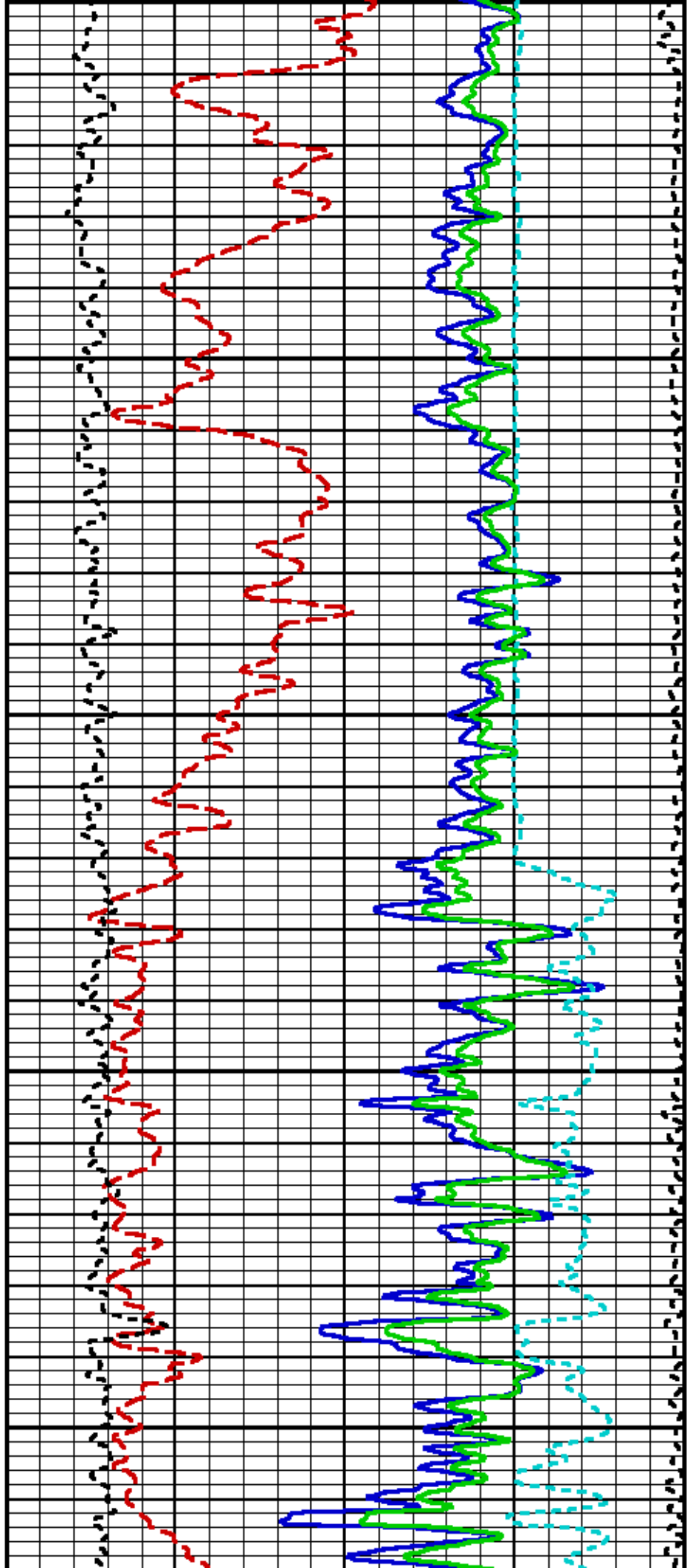


7700

7800

79

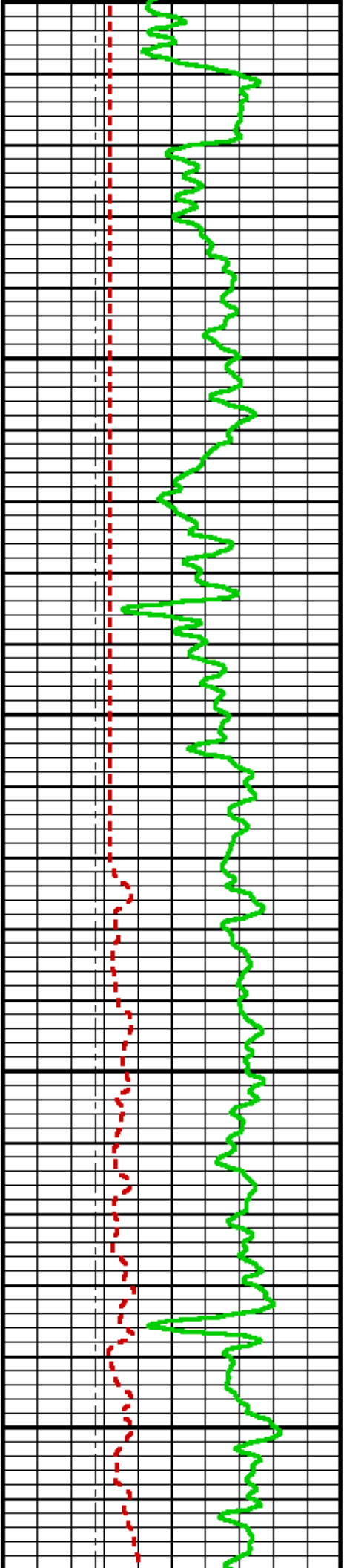


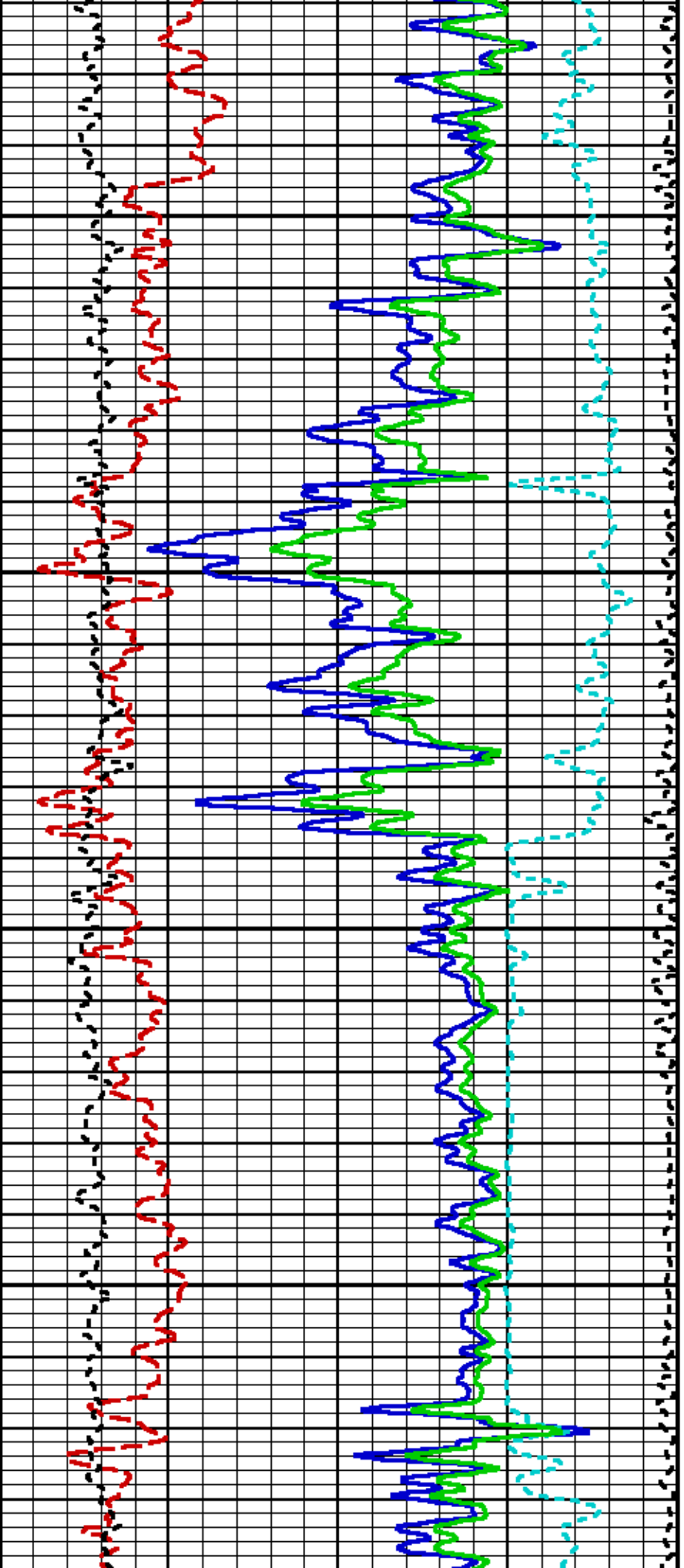


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8000

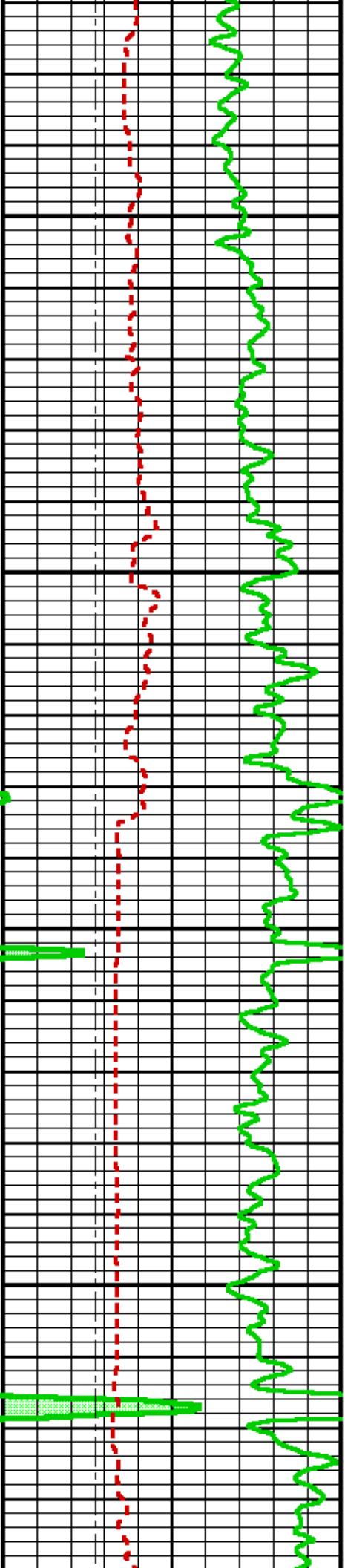
8100

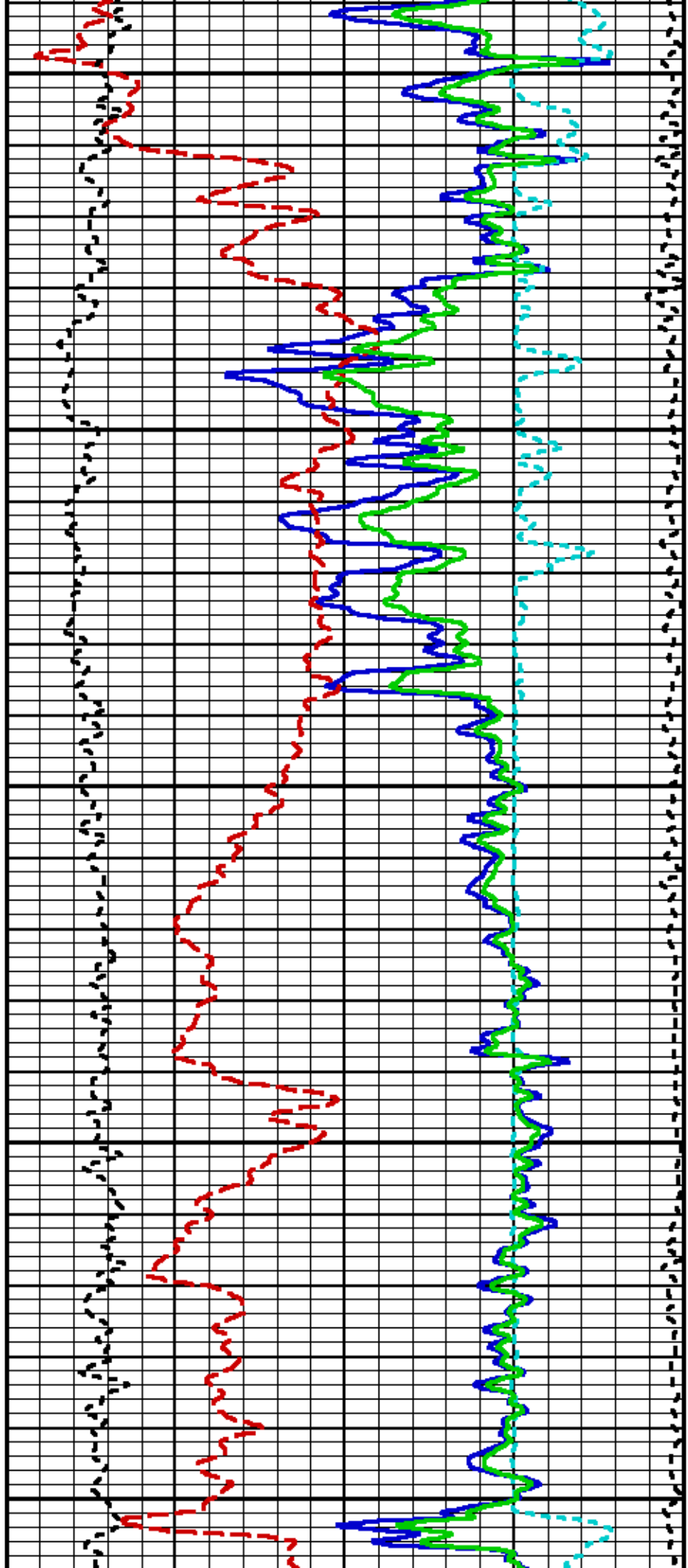




8200

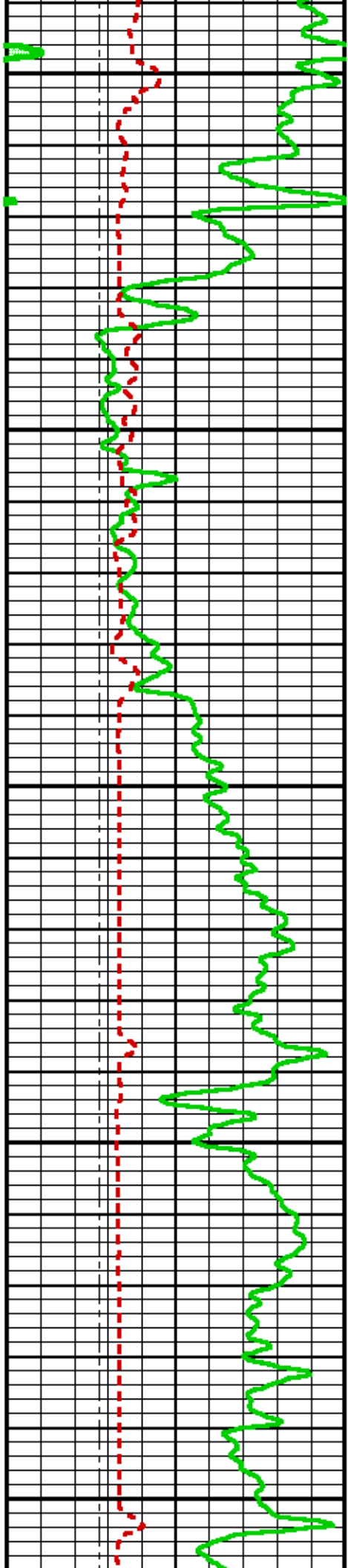
8300

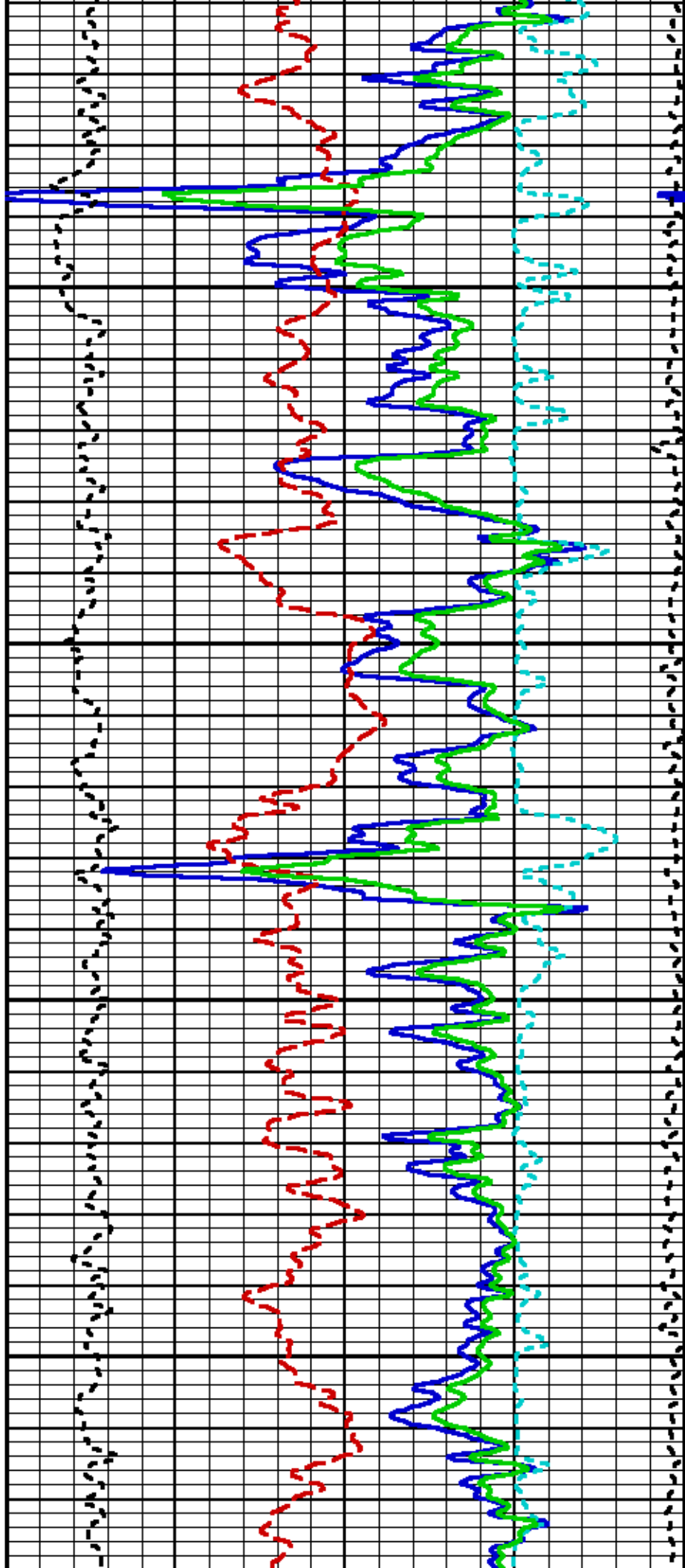




8400

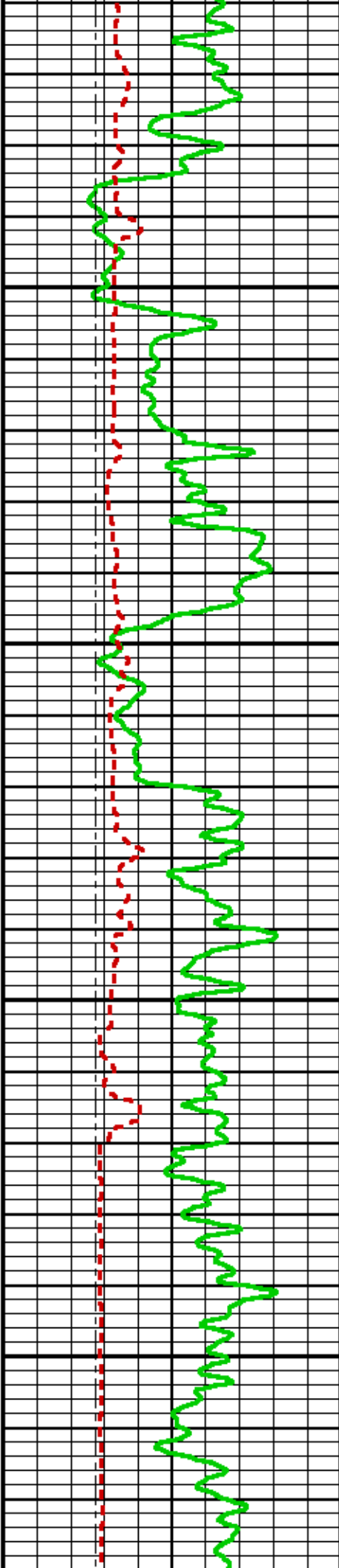
8500

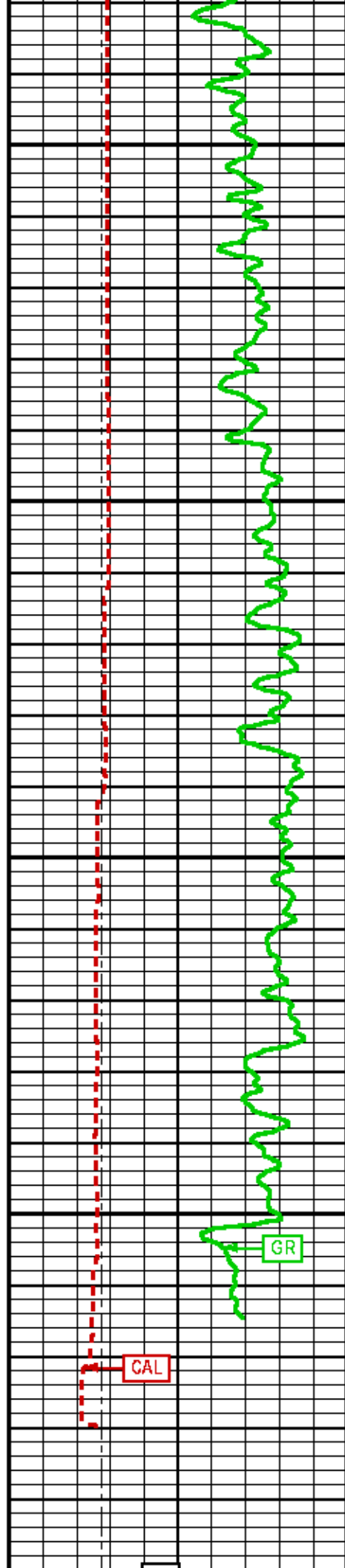




8600

8700

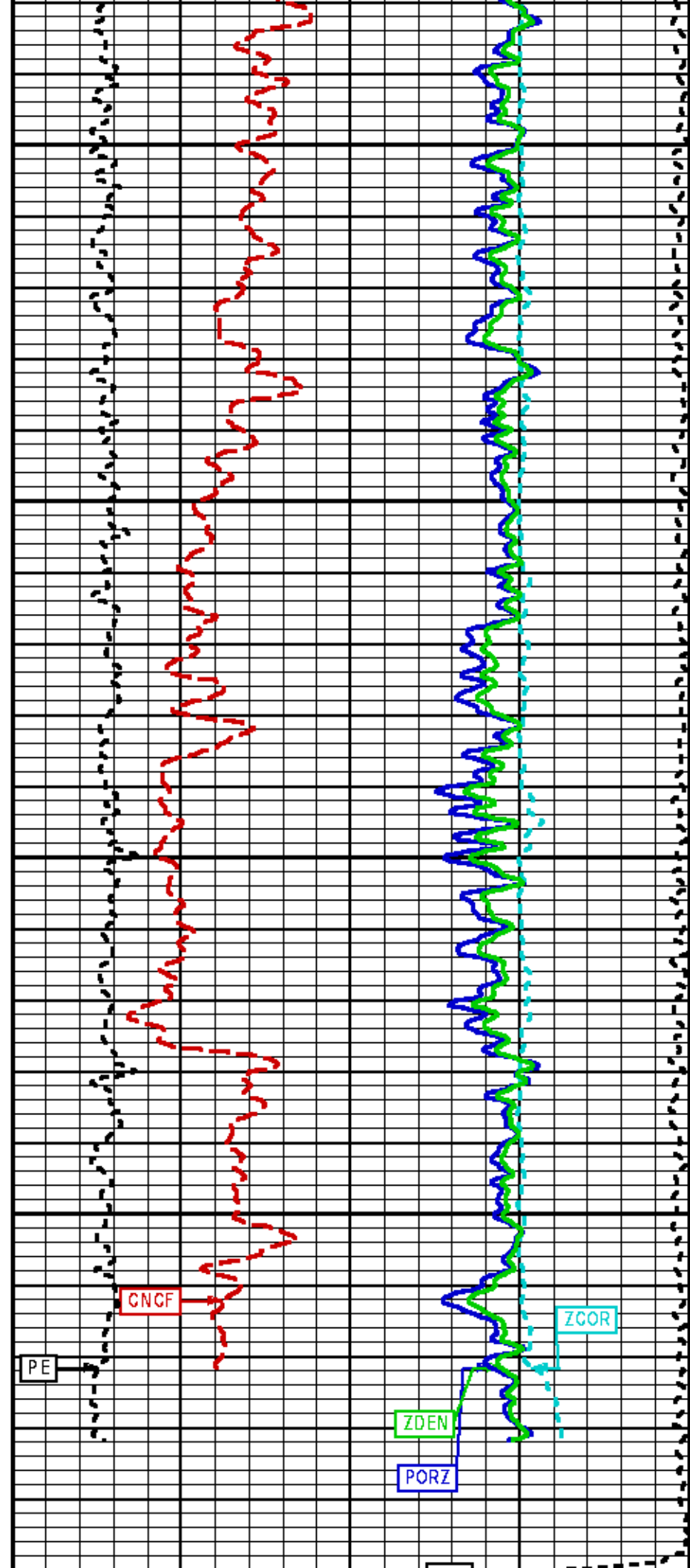


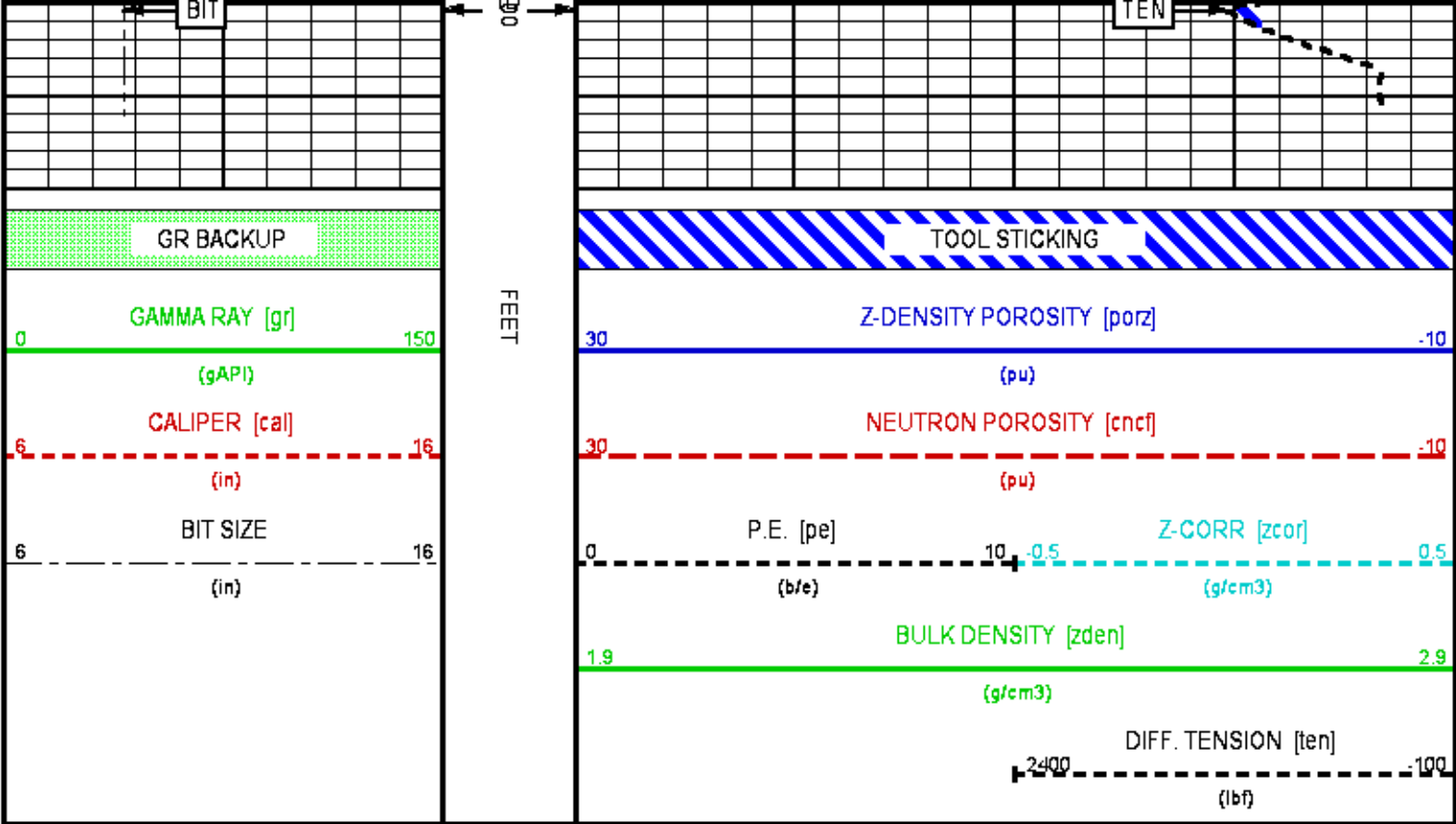


96

0068

0088





REPEAT LOG

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 5

Plotted: Fri Jan 2 07:57:11 2015

PARAMETER AND FILTER SUMMARY REPORT					
File: /dat1a/OH091582/n970a02.prm					
LOGGING MODE: DEPTH DIRECTION: UP					
TOP DEPTH: 8527.241 ft BOTTOM DEPTH: 9005.913 ft					
SYMMETRIC FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR LOW RES	FILTER (.i)	medium (1)		TOP	BOTTOM
GR MED RES	FILTER ()	medium (1)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
CN LOW RES	FILTER (.i)	medium (1)		"	"
CN MED RES	FILTER ()	medium (1)		"	"
ZDL MED RES	FILTER (hrd1*)	medium		"	"
	FILTER (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"
BOREHOLE & CEMENT					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING, BOREHOLE & CEMENT VOLUME	CASING O.D.	7.000	in	TOP	BOTTOM

CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.000	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	8.750	in	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (zdbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	8.755	in	"	"
MUD DENSITY	MUD DENSITY	8.35	lbm/gal	"	"

ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CN MATRIX	2436 MATRIX	SANDSTONE		TOP	BOTTOM
CN BOREHOLE CORRECTION	SALINITY	1100	ppm	"	"
	BOREHOLE CORRECTION	ON		"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	8.750	in	"	"

ZDL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	Air Filled Borehole	NO		TOP	BOTTOM
	RHOmatrix	2.650	g/cm3	"	"
	RHOfluid	1.000	g/cm3	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Jan 2 06:06:09 2015	BIT SIZE
F1:CAL	Jan 2 06:06:09 2015	CALIPER
F1:CNCF	Jan 2 06:06:09 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:GR	Jan 2 06:06:09 2015	GAMMA RAY
F1:PE	Jan 2 06:06:09 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Jan 2 06:06:09 2015	POROSITY FOR SELECTABLE MATRIX
F1:TEN	Jan 2 06:06:09 2015	DIFFERENTIAL TENSION
F1:ZCOR	Jan 2 06:06:09 2015	DENSITY CORRECTION
F1:ZDEN	Jan 2 06:06:09 2015	FORMATION BULK DENSITY

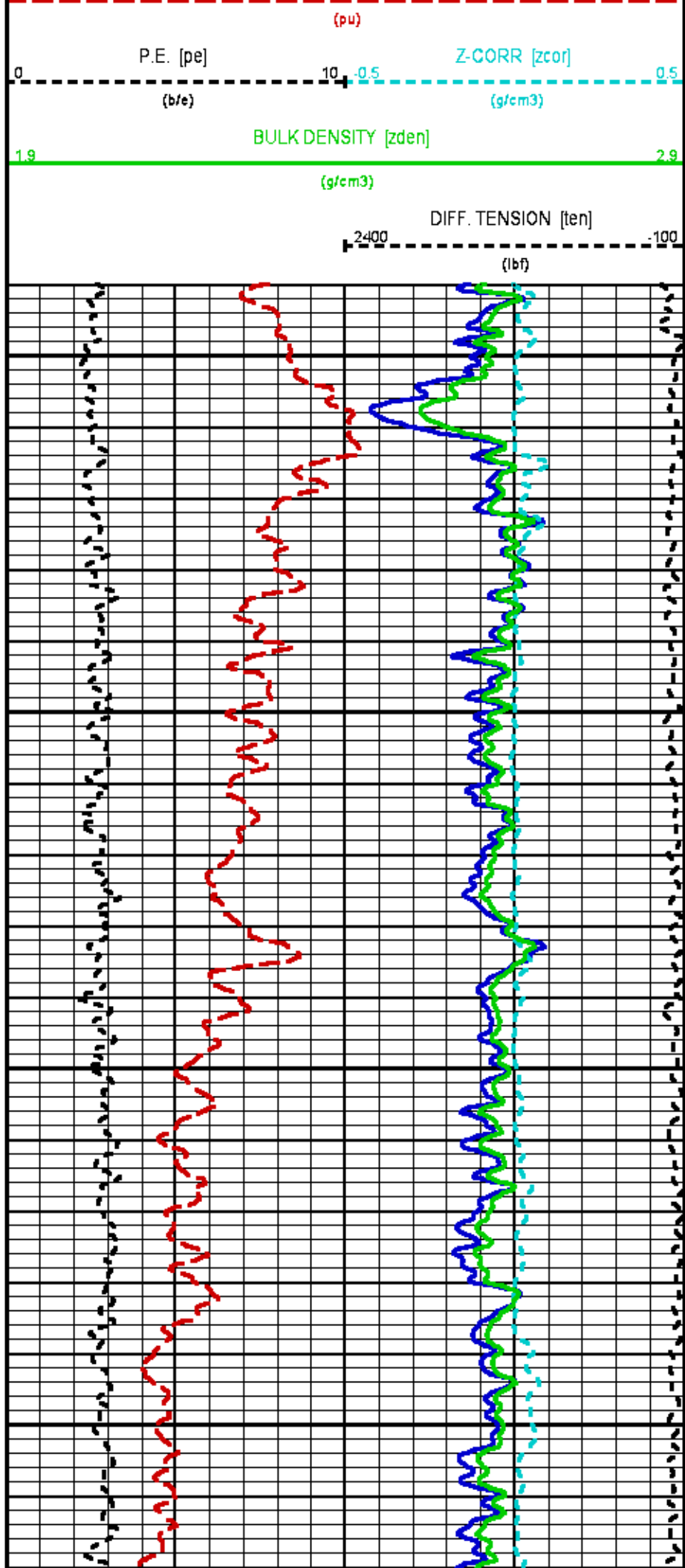
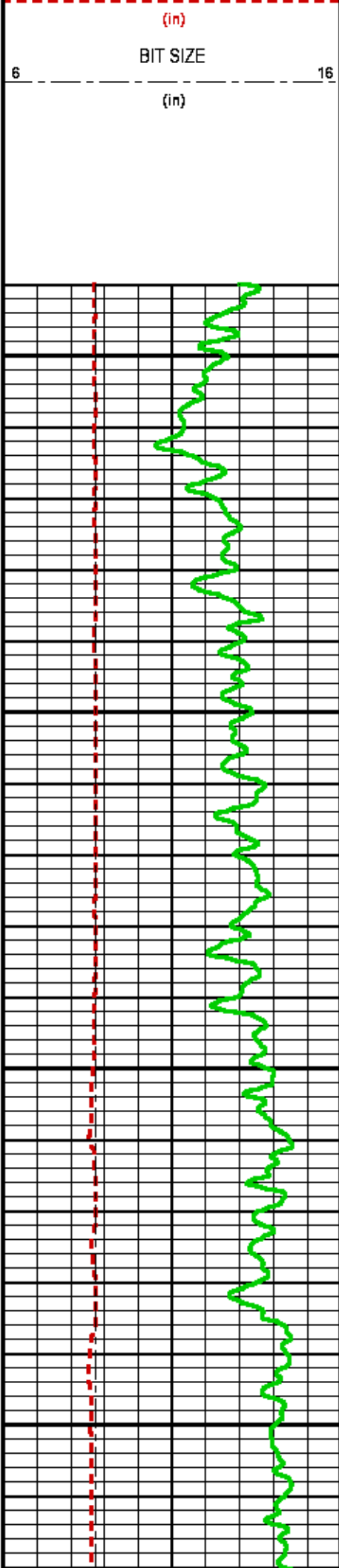
CURVE MEASURE POINT OFFSET

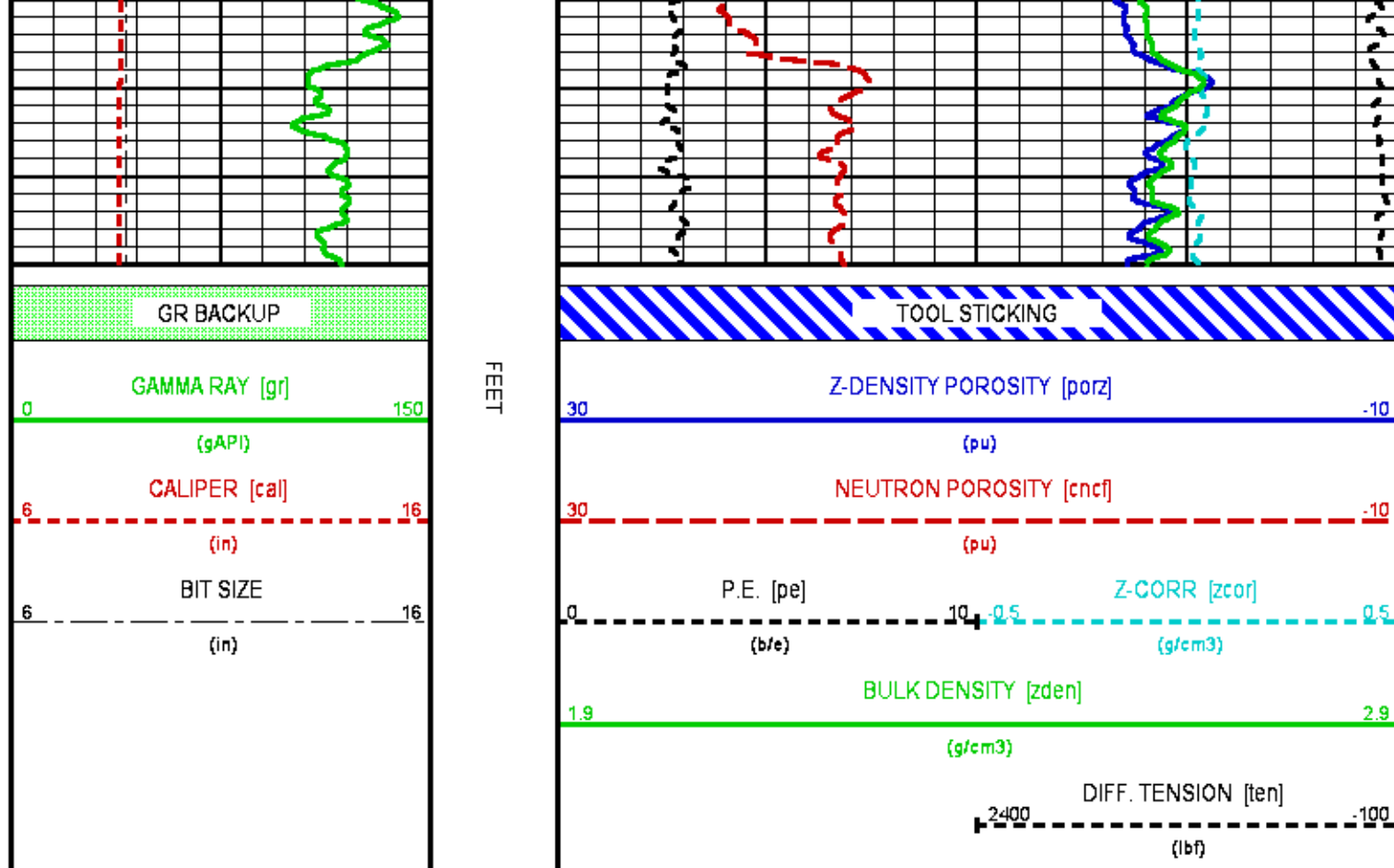
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	46.00	TEN	0.00		
CAL	29.12	PE	29.12	ZCOR	29.12		
CNCF	38.50	PORZ	29.12	ZDEN	29.12		

Presentation : cas6685:ZDEN_CN_REPEAT.fvpdf [5"/100" Scale]
Plot Interval : 8740 - 8950 Feet

Data File 1 : F1 : cas6685:/dat1a/OH091582/REPEAT.xtf
Created On : Jan 2 06:06:09 2015
Company : COACHMAN ENERGY
Well : FEDERAL 14 15-7-21
Field : KOKOPELLI
File Interval : 0 - 9008.5 Feet
OCT : n970a







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/OH091582/FINAL_n970a.tp1

TTMA PRIMARY CALIBRATION SUMMARY

TOOL #: 398DXA 1D121559

DATE/TIME PERFORMED: Wed Dec 31 11:31:24 2014

UNIT #: 3885TC 6685

ACCEL #: 398DXA 1D121559

ACCEL CAL DATE: 13:40 06/07/2004

GAIN
Rm K Factors 0.14570

OFFSET
(ohm.m)
-0.01679

Rm Measurements

Sig Low (ohm)	Sig High (ohm)	Mult Factor	Add Factor	Engr Low (ohm)	Engr High (ohm)
0.25	9.99	1.001301	-0.000164	0.25	10.00

TTMA BEFORE LOG VERIFICATION SUMMARY

TOOL #: 398DXA 1D121559

DATE/TIME PERFORMED: Thu Jan 1 01:26:15 2015

DAYS SINCE CAL: 0

UNIT #: 3885TC 6685

	CHT (lbf)	MUD TEMP (degF)	RES M Q (ohm)	ACCEL Q
CAL	19446	499.49	9.99	1001.94
ZERO	-24412	-436.02	0.250	1001.935

TTMA AFTER LOG VERIFICATION SUMMARY

TOOL #: 398DXA 1D121559 DATE/TIME PERFORMED: Fri Jan 2 09:41:12 2015 DAYS SINCE CAL: 1

UNIT #: 3885TC 6685

	CHT (lbf)	MUD TEMP (degF)	RES M Q (ohm)	ACCEL Q
CAL	19460	501.17	9.98	1005.55
	18669 20259	489.20 503.60	8.00 12.00	980.00 1030.00
ZERO	-24412	-436.02	0.250	1004.423
	-25212 -23612	-443.20 -428.80	0.200 0.300	980.000 1020.000

GR PRIMARY CALIBRATION SUMMARY

Tool #: 3518EG 1D13987D DATE/TIME PERFORMED: Sun Dec 21 06:10:41 2014

Unit #: 3885TC 6685 Jig Series: 47D2NK VBA-9D5

Background	Calibrator ON	Jig Value (gAPI)	Mult	Background (gAPI)	Calibrator ON (gAPI)
47.34	826.11	185	0.238	11.25	196.25
			0.230 0.250		

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 3518EG 1D13987D DATE/TIME PERFORMED: Thu Jan 1 01:26:31 2015 DAYS SINCE CAL: 10

UNIT #: 3885TC 6685 Jig: INTRNL N/A

Counts	TEMP (degF)	HV (V)
976.67	43.14	1361.74
929.00 1027.00	536.00	1237.00 1512.00

GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 3518EG 1D13987D DATE/TIME PERFORMED: Fri Jan 2 09:40:48 2015 DAYS SINCE CAL: 12

UNIT #: 3885TC 6685 Jig: INTRNL N/A

Counts	TEMP (degF)	HV (V)
976.67	98.45	1363.22
929.00 1027.00	536.00	1237.00 1512.00

CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2436XA 1D13793D DATE/TIME PERFORMED: Wed Dec 24 10:51:21 2014

UNIT #: 3885TC 6685 CALIBRATOR #: 2437XB 112674 SOURCE #: 4718XA N-D897

SSN DT CPS	LSN DT CPS	SSN/LSN	MCF	CNRATIO	CN PU
4561.05	785.11	5.80945	0.98753	5.73700	25.241
			0.95000 1.05000		

CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2436XA 1D13793D DATE/TIME PERFORMED: Thu Jan 1 01:26:51 2015 DAYS SINCE CAL: 7

UNIT #: 3885TC 6685 CALIBRATOR #: INTRNL N/A

SSN DT CPS	LSN DT CPS	SSN/LSN	TEMP (degF)	HV (V)	LV (V)
991.06	993.42	0.99762	25.3	1351.3	4.599
		0.95000 1.05000	260.4	1250.0 1450.0	4.300 5.000

CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2436XA 1D13793D DATE/TIME PERFORMED: Fri Jan 2 09:40:09 2015 DAYS SINCE CAL: 8

UNIT #: 3885TC 6685 CALIBRATOR #: INTRNL N/A

SSN DT CPS	LSN DT CPS	SSN/LSN	TEMP (degF)	HV (V)	LV (V)
991.06	993.42	0.99762 0.99000 1.09000	91.3 280.4	1360.1 1250.0 1450.0	4.618 4.300 5.000

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2223XA 1D123024 DATE/TIME PERFORMED: Sun Dec 21 11:42:49 2014

UNIT #: 3885TC 6685

	SIZE (in)	VALUE	MULTIPLIER	ADD
SMALL RING (Arm)	7.000	1428.0		
LARGE RING (Arm)	11.000	2684.0	0.00318	2.45223
PAD CLOSED		1208.4	0.00250	-3.02100

CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 1D123024 DATE/TIME PERFORMED: Thu Jan 1 01:52:39 2015 DAYS SINCE CAL: 10

UNIT #: 3885TC 6685

	VALUE	MULTIPLIER	ADD	SIZE (in)
ARM	2020.0	0.00318	2.45223	8.9
PAD	1414.8	0.00250	-3.02100	0.5

	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	8.921	8.9 8.5 9.3

CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 1D123024 DATE/TIME PERFORMED: Fri Jan 2 09:37:08 2015 DAYS SINCE CAL: 11

UNIT #: 3885TC 6685

	VALUE	MULTIPLIER	ADD	SIZE (in)
ARM	2152.0	0.00318	2.45223	9.3
PAD	1338.8	0.00250	-3.02100	0.3

	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	8.921	8.9 8.5 9.3

ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2223XA 1D123024 DATE/TIME PERFORMED: Thu Dec 11 12:09:19 2014

UNIT: 3885TC 6685 CALB BLKS: 2225XA 094292F CS SRC: 47D5XA PP16D68B PAD TYPE: PADTYP 7.5" PAD

SS CS PK LS CS PK SS_BKGD LS BKGD
(Channel) (Channel) (cps) (cps)

	(channel) 224.4 230.0	(channel) 224.8 230.0	(cps) 1351.8	(cps) 1353.5		
	SS (cps)	LS (cps)	SHR	DEN (g/cm3)	CORR (g/cm3)	PE (b/e)
MG (LO PE)	31717.3	11678.7	0.727 0.720 0.890	1.679	0.000	1.900
AL	19822.1	1306.7		2.667	-0.016	
AL + SHIM	26389.2	2259.7		2.558	0.098	
MG + SHIM (HI PE)	15499.5	5549.8	0.288 0.280 0.360			8.550
RATIO AL + SHIM/AL	1.33 1.30 1.40	1.73 1.60 1.80				
RATIO MG/AL	1.60 1.58 1.70	8.94 8.55 9.55				

ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10123024 DATE/TIME PERFORMED: Thu Jan 1 01:29:13 2015 DAYS SINCE CAL: 20

UNIT #: 3885TC 6685

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	3342.1 3332.1 3352.1	224.9 230.0 230.0	1444.0 1250.0 1550.0
SS	22354.8 22344.8 22364.8	224.2 230.0 230.0	1332.3 1250.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0 4.8 5.2	102.4 50.0 120.0	

ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10123024 DATE/TIME PERFORMED: Fri Jan 2 09:39:44 2015 DAYS SINCE CAL: 21

UNIT #: 3885TC 6685

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	3342.1 3332.1 3352.1	224.6 230.0 230.0	1440.2 1250.0 1550.0
SS	22355.0 22344.8 22364.8	224.1 230.0 230.0	1317.2 1250.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0 4.8 5.2	100.8 50.0 120.0	

INSTRUMENT CONFIGURATION

Source File: /dat1a/OH091582/FINAL TDG-tdg

FOCUS CABLEHEAD
 Diameter : 3.13"
 Length : 3.17"
 Weight : 15 lbs
 Series : CABL31B
 Mnemonic : CBLH

FOCUS SWIVEL
 Diameter : 3.13"
 Length : 2.58"
 Weight : 50 lbs
 Series : 3950XA
 Mnemonic : SWVL



63.42'

FOCUS TEN/TEMP/MUD RES/ACCEL

Diameter : 3.13"
Length : 4.31'
Weight : 61 lbs
Series : 3980XA
Mnemonic : TTMA

FOCUS TELEMETRY (POWER SECTION)

Diameter : 3.13"
Length : 3.71'
Weight : 48 lbs
Series : 351BFB
Mnemonic : TMGR

FOCUS EB/EG TELEMETRY GAMMA RAY

Diameter : 3.13"
Length : 5.83'
Weight : 63 lbs
Series : 351BEG
Mnemonic : GR
Measure Point: 4.24': GR MP

FOCUS COMPENSATED NEUTRON

Diameter : 3.13"
Length : 4.81'
Weight : 65 lbs
Series : 2436XA
Mnemonic : CN
Measure Point: 1.92': LSN MP
Measure Point: 1.46': SSN MP

FOCUS Z-DENSILOG

Diameter : 3.75"
Length : 9.58'
Weight : 200 lbs
Series : 2223XA
Mnemonic : ZDL
Measure Point: 4.33': CR1 MP
Measure Point: 1.69': LSD / CR2 MP
Measure Point: 1.29': SSD MP

FOCUS KNUCKLE JOINT

Diameter : 3.13"
Length : 1.50'

FOCUS KNUCKLE JOINT

Diameter : 3.13"
Length : 1.50'

FOCUS ACOUSTIC ELECTRONICS

Diameter : 3.13"
Length : 3.00'
Weight : 35 lbs
Series : 1630EA
Mnemonic : AC

FOCUS ACOUSTIC MANDREL

Diameter : 3.13"
Length : 8.08'
Weight : 95 lbs
Series : 1630MA
Mnemonic : AC
Measure Point: 7.61': T MP
Measure Point: 4.61': RO MP
Measure Point: 3.61': R1 MP
Measure Point: 3.11': R2 MP
Measure Point: 1.61': R3 MP
Measure Point: 1.11': R4 MP

FOCUS HIGH DEFINITION INDUCTION TOOL

Diameter : 3.13"
Length : 13.33'
Weight : 115 lbs
Series : 1530XA
Mnemonic : HDIL
Measure Point: 7.17': COIL 5 MP
Measure Point: 5.67': COIL 4 MP
Measure Point: 4.17': COIL 3 MP
Measure Point: 3.67': COIL 2 MP
Measure Point: 3.17': COIL 1 MP
Measure Point: 2.67': COIL 0 MP
Measure Point: 1.14': SP MP

GR MP — 48.05'

LSN MP — 40.92'
SSN MP — 40.46'

CR1 MP — 33.75'

LSD / CR2 MP — 31.10'
SSD MP — 30.71'

T MP — 22.94'

RO MP — 19.94'

R1 MP — 17.94'
R2 MP — 17.44'
R3 MP — 16.94'
R4 MP — 16.44'

COIL 5 MP — 9.17'

COIL 4 MP — 7.67'

COIL 3 MP — 6.17'
COIL 2 MP — 5.67'
COIL 1 MP — 5.17'

FOCUS PINEAPPLE / CABBAGE

HOLE FINDER

Diameter : 3.63"
Length : 1.50'

TOTAL LENGTH: 63.43'
TOTAL WEIGHT: 845 lbs
MAX DIAMETER: 0'6.13"

COIL O MP 4.67'
SP MP 3.14'
0.00'



COMPANY COACHMAN ENERGY
WELL FEDERAL 14 15-7-21
FIELD KOKOPELLI
COUNTY GARFIELD STATE CO

FILE NO:

US091582

API NO:

05045224600000

LOCATION:

SHL: SWNE 2345' FNL 713' FEL
LAT: 39.51358000; LON: -107.55279000

ELEVATIONS:

KB 6956 FT

DF

GL 6932 FT

PAD: FEDERAL 21B

RIG: FRONTIER 28

SEC 21 TWP 6S RGE 91W

DATE 31-Dec-2014