



Mud Properties Record

Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2018-11-08 18:00	1	4230.00	Oil Based Mud	8.9	23	N/A	3.5	77/23	Active Pit	27992	0.00
2018-11-10 17:13	1	8084.00	Oil Based Mud	9.2	24	N/A	3.0	76/24	Active Pit	27992	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	NaviGamma	10350727	Gamma (single)	6.55	58.66	6.500	7.750
1	NaviGamma	10350727	Directional (mag)	10.01	62.12	6.500	7.750
1	NaviGamma	10350727	VSS	10.01	62.12	6.500	7.750

Service and Tool Mnemonics

Mnemonic	Name	Description
GAM	NaviGamma	Probe Based Gamma Module, NaviTrak Platform

Comments

- 1
- Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
- 2
- A sliding indicator is shown to the left edge of track 1 as a heavy line. The indicator has been depth shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.
- 3
- Baker Hughes run 1 utilized 6 1/2 inch EvoOne MWD services (Gamma Ray and Directional) behind a 7 7/8 inch bit and steerable assembly from 1848 to 13212 feet MD (1842 to 7491 feet TVD).
- 4
- Gamma Ray (GRAX) scale is presented 0 to 200 API per customer request.
- 5
- Multiple gaps in Gamma Ray (GRAX) log due to surveying while drilling ahead and decoding issues.

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	13160.00	7.875	1	The interval from 13152 to 13212 feet MD (7489 to 7491 feet TVD) was not logged due to sensor to bit offset at TD.

Curve Mnemonics

Presented Curves	Description	Units
TCDX	Downhole Temperature	degF
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAX	Gamma Ray - Apparent - Real-Time 0.5 ft Average	API
GRIX	Gamma Ray - Data Point Indicator - Real-Time	unitless
GRTX	Gamma Ray - Time Since Drilled - Real-Time	min
GRSI	Sliding Indicator Flag	unitless

BAKER HUGHES

a GE company



Company

Well

Interval

Created

Anadarko

Hendu 23-13HZ

Date From: 2018-11-09 04:12

Date To: 2018-11-11 19:40

2018-11-11 20:03:18

Top: 1848.00 ft

Bottom: 13212.00 ft

Gamma Ray - Apparent 0.5 ft Average

0200

API

True Vertical Depth

80006000

MD 1:240 feet

Gamma Ray-Time Since Drilled

0600

min

Depth Averaged ROP 3 ft Average

12000

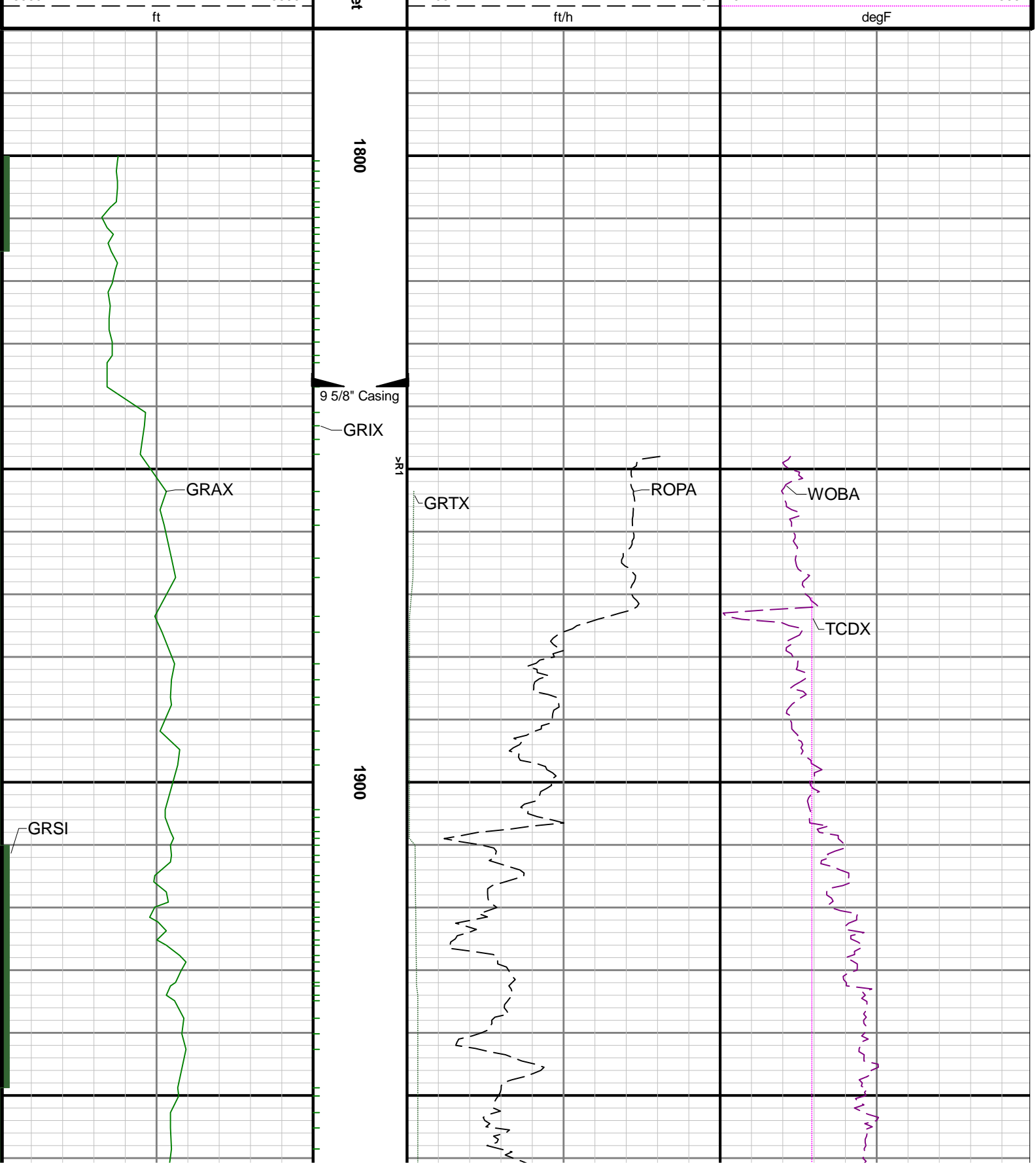
Weight On Bit, Average 1 ft Average

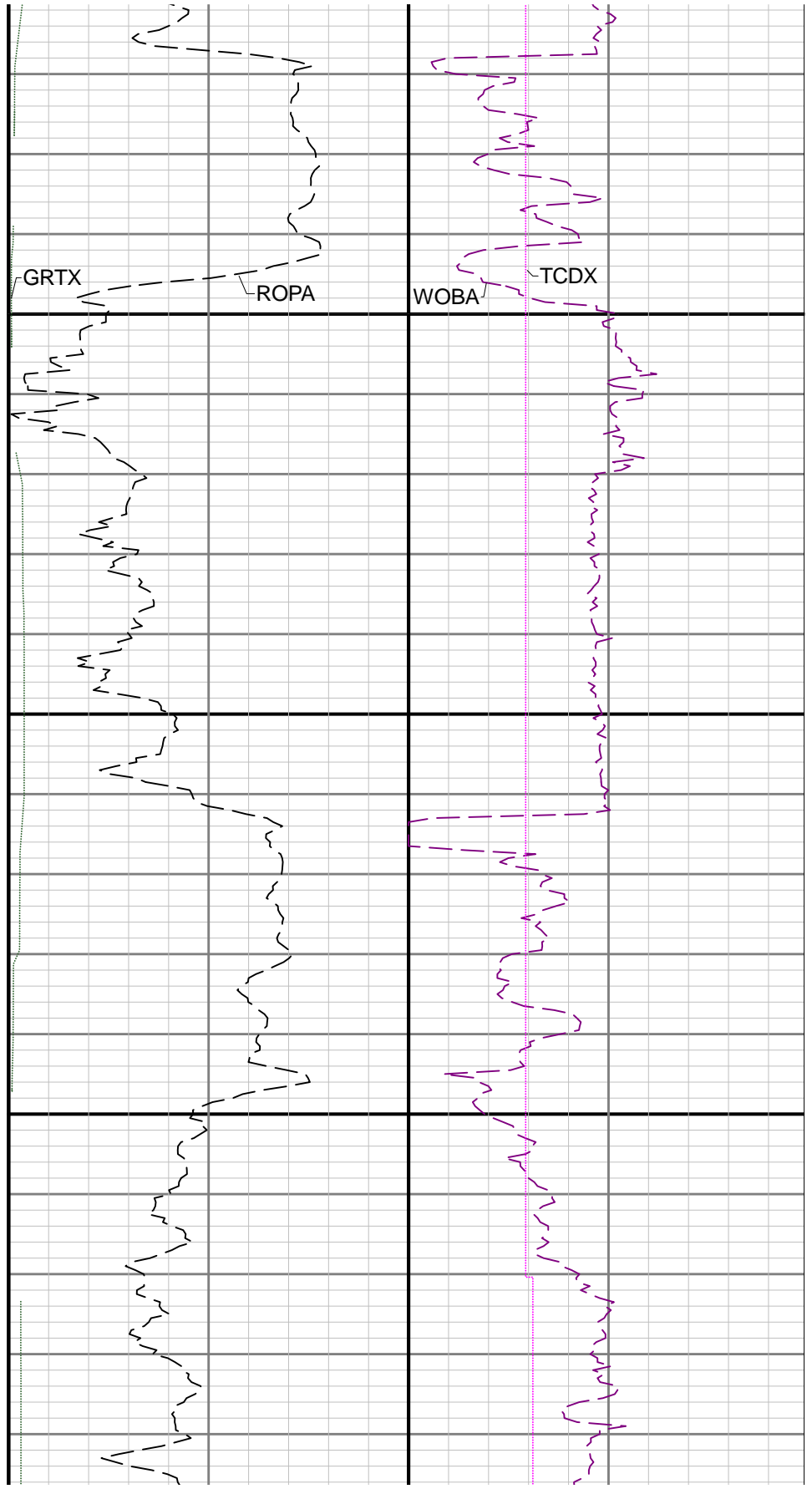
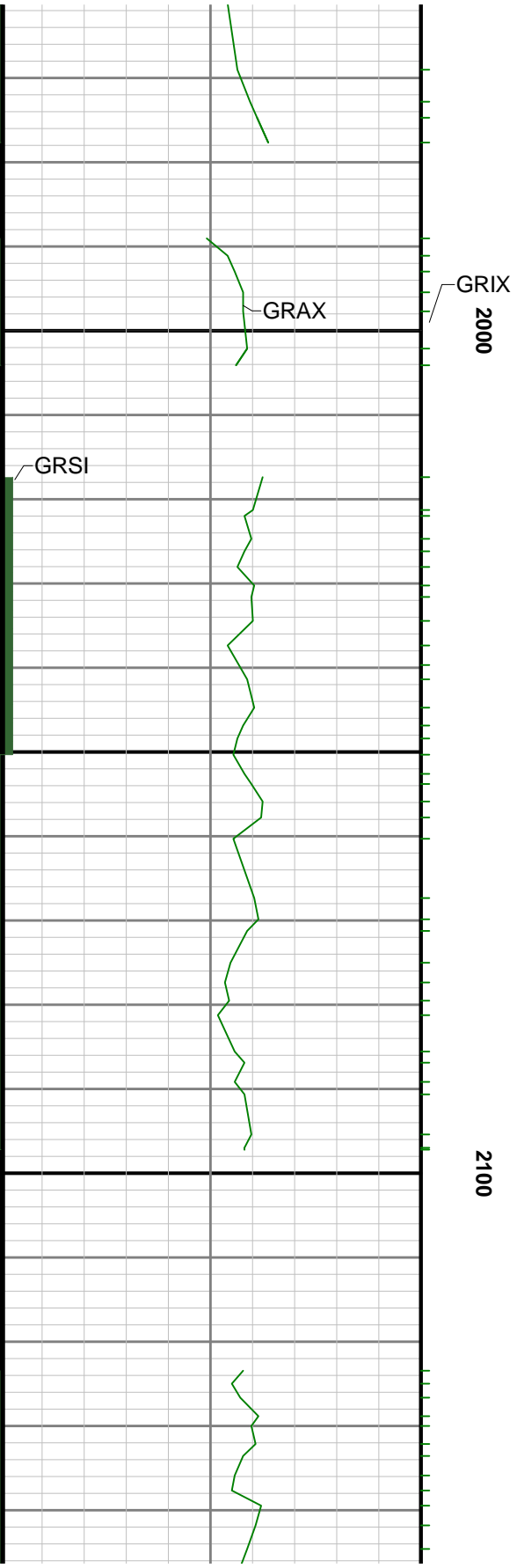
050

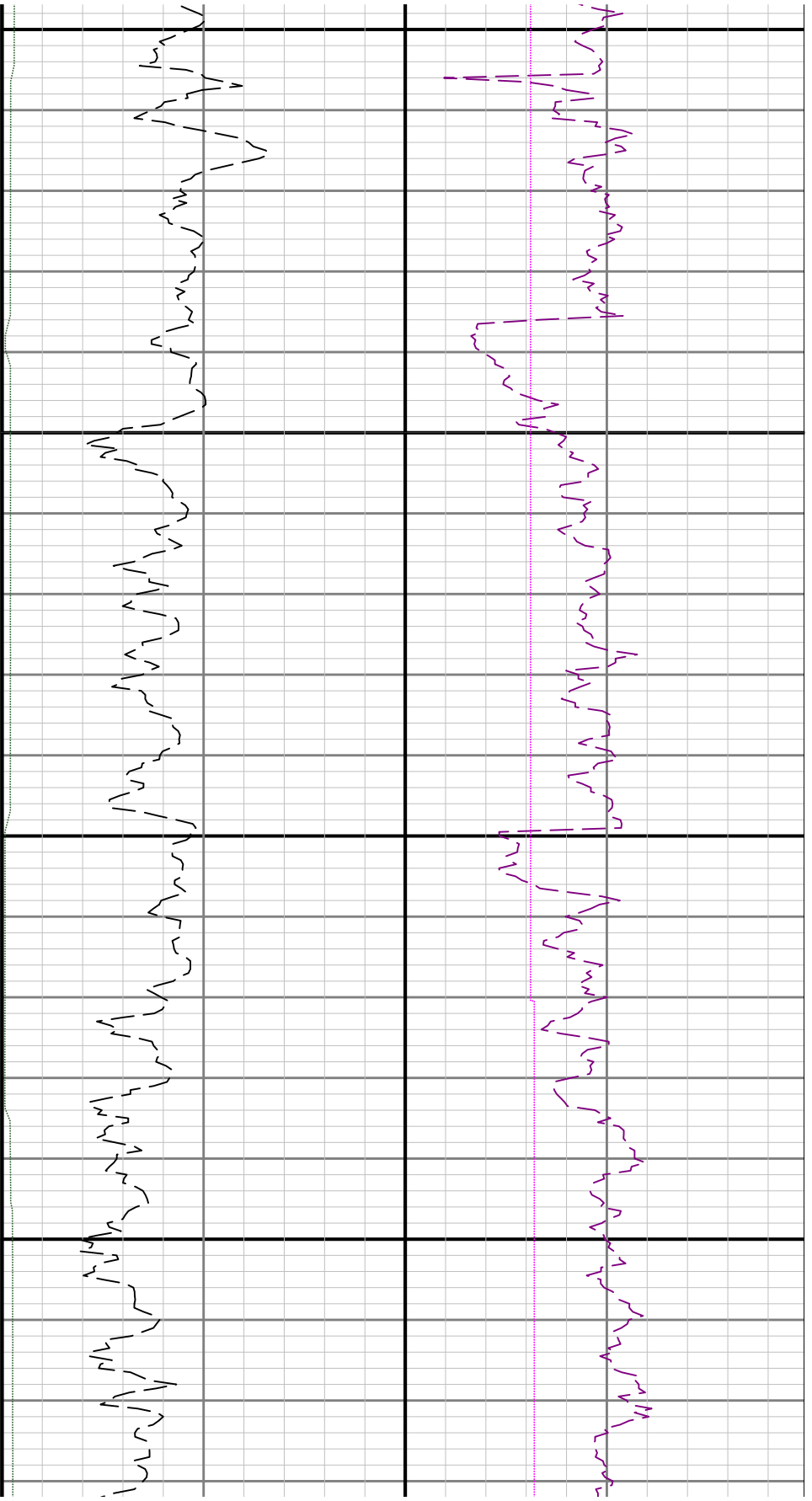
klb

Downhole Temperature

0300

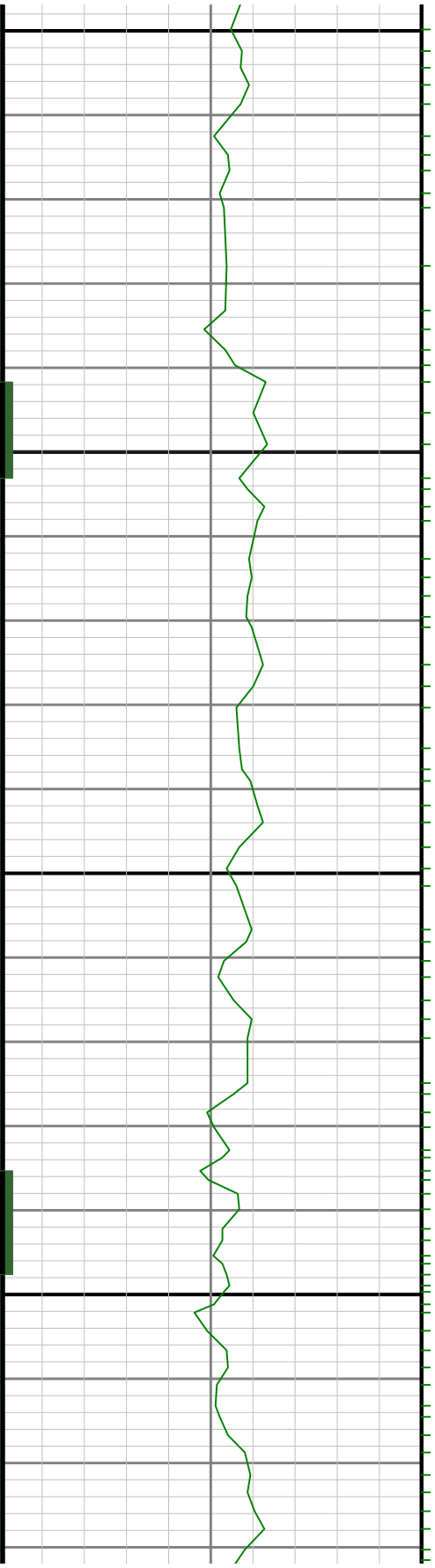


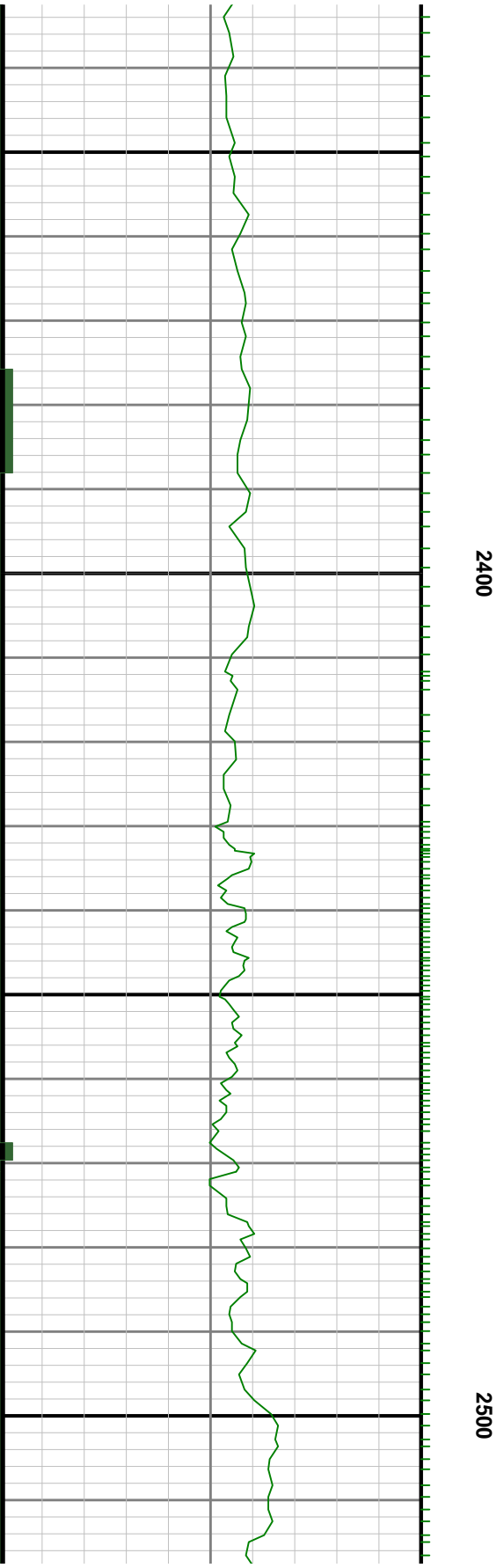
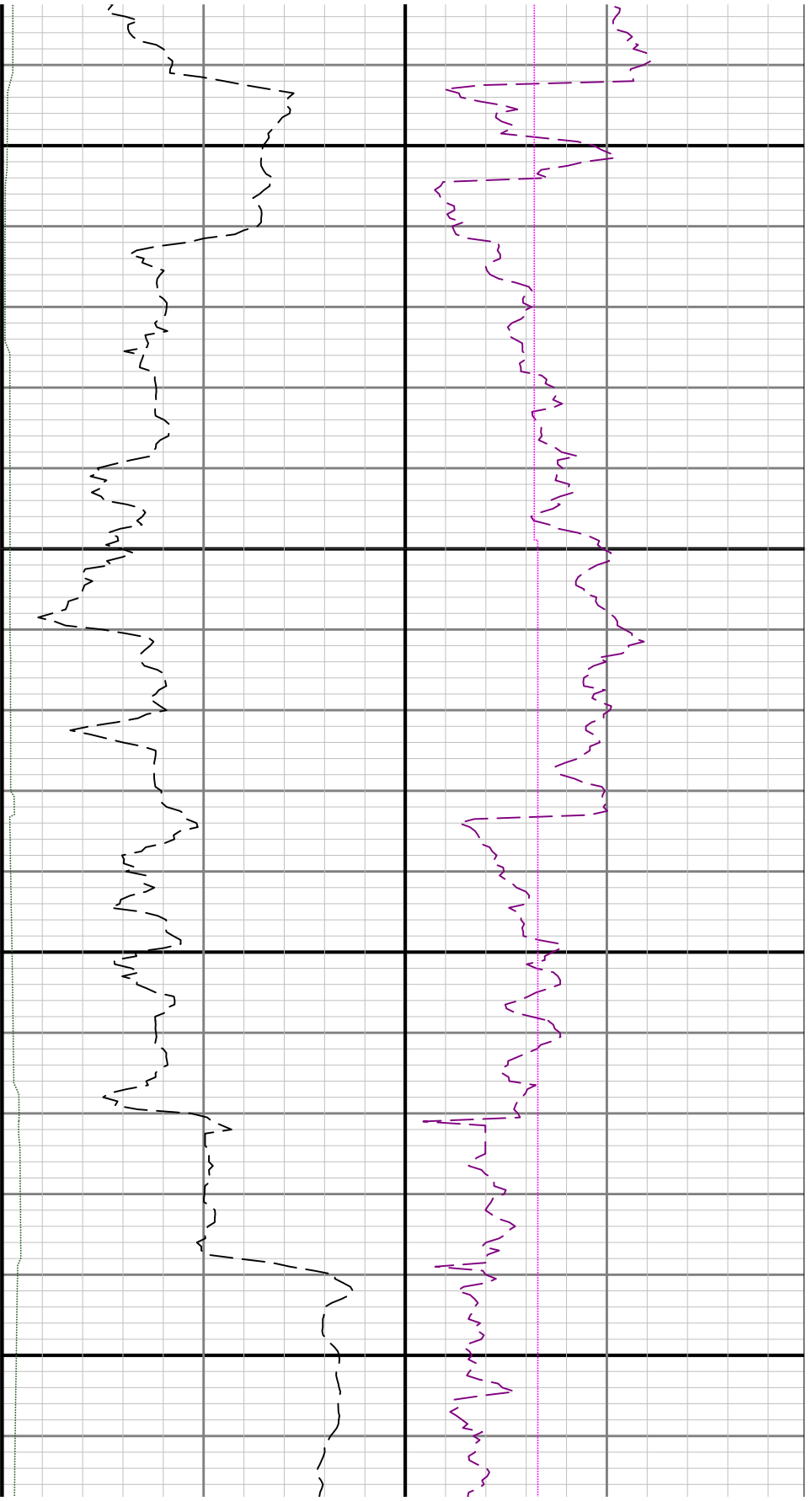


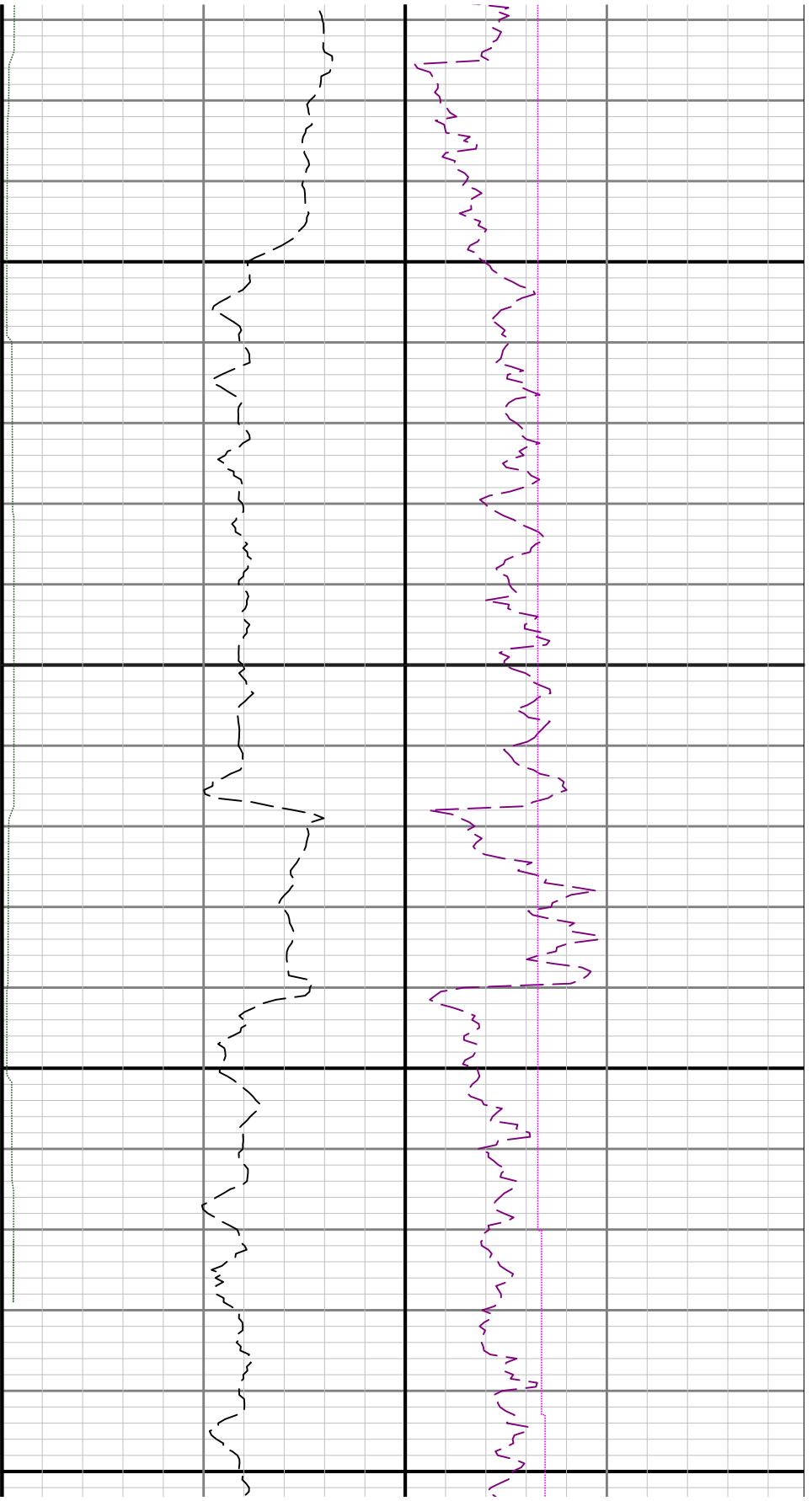


2200

2300

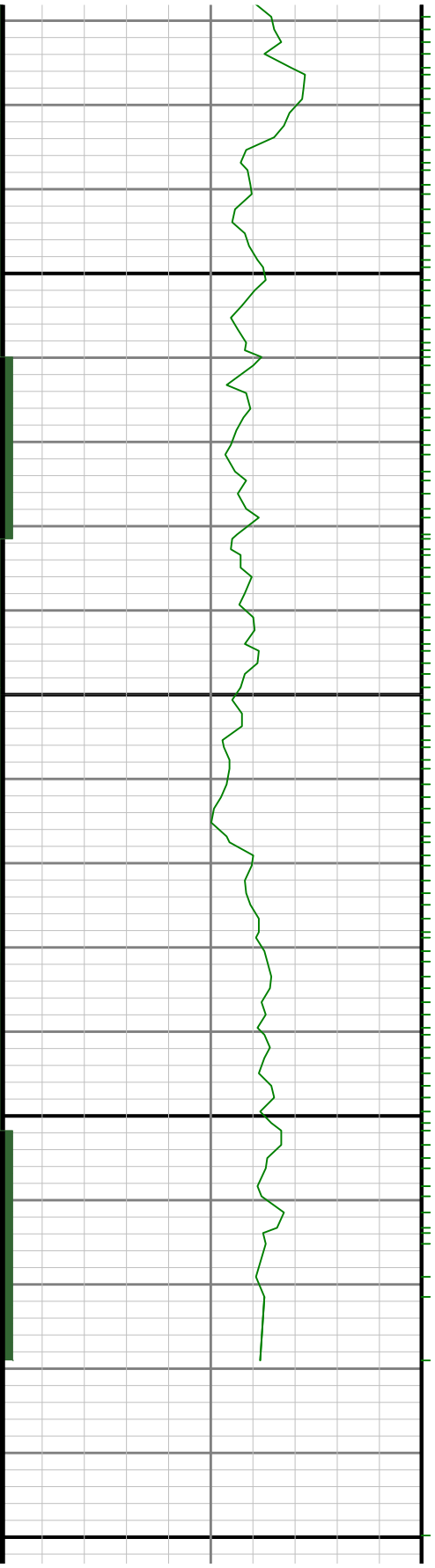


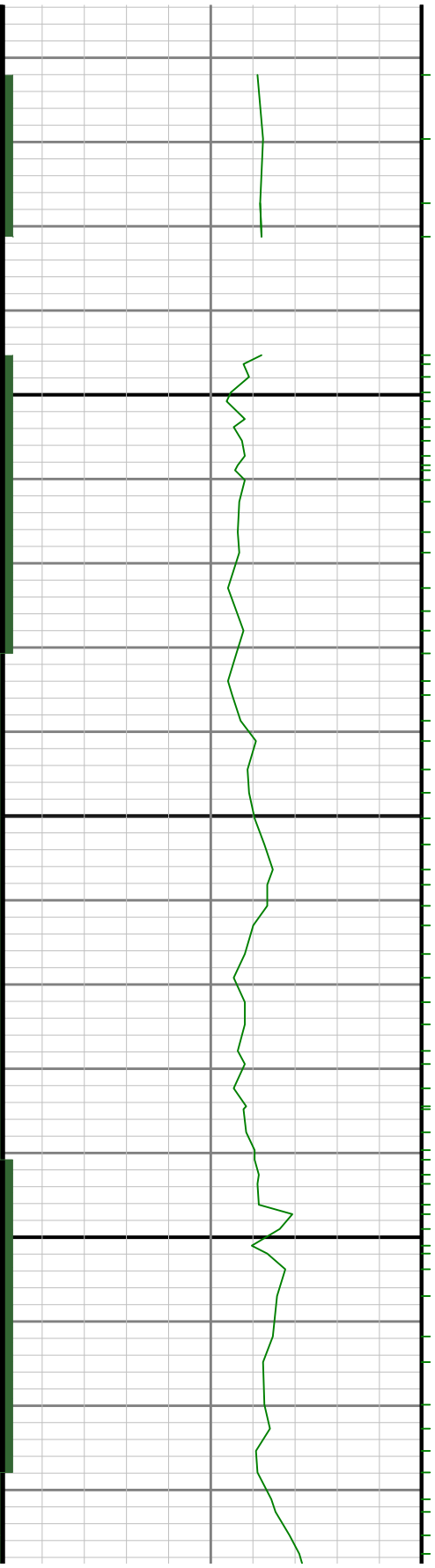
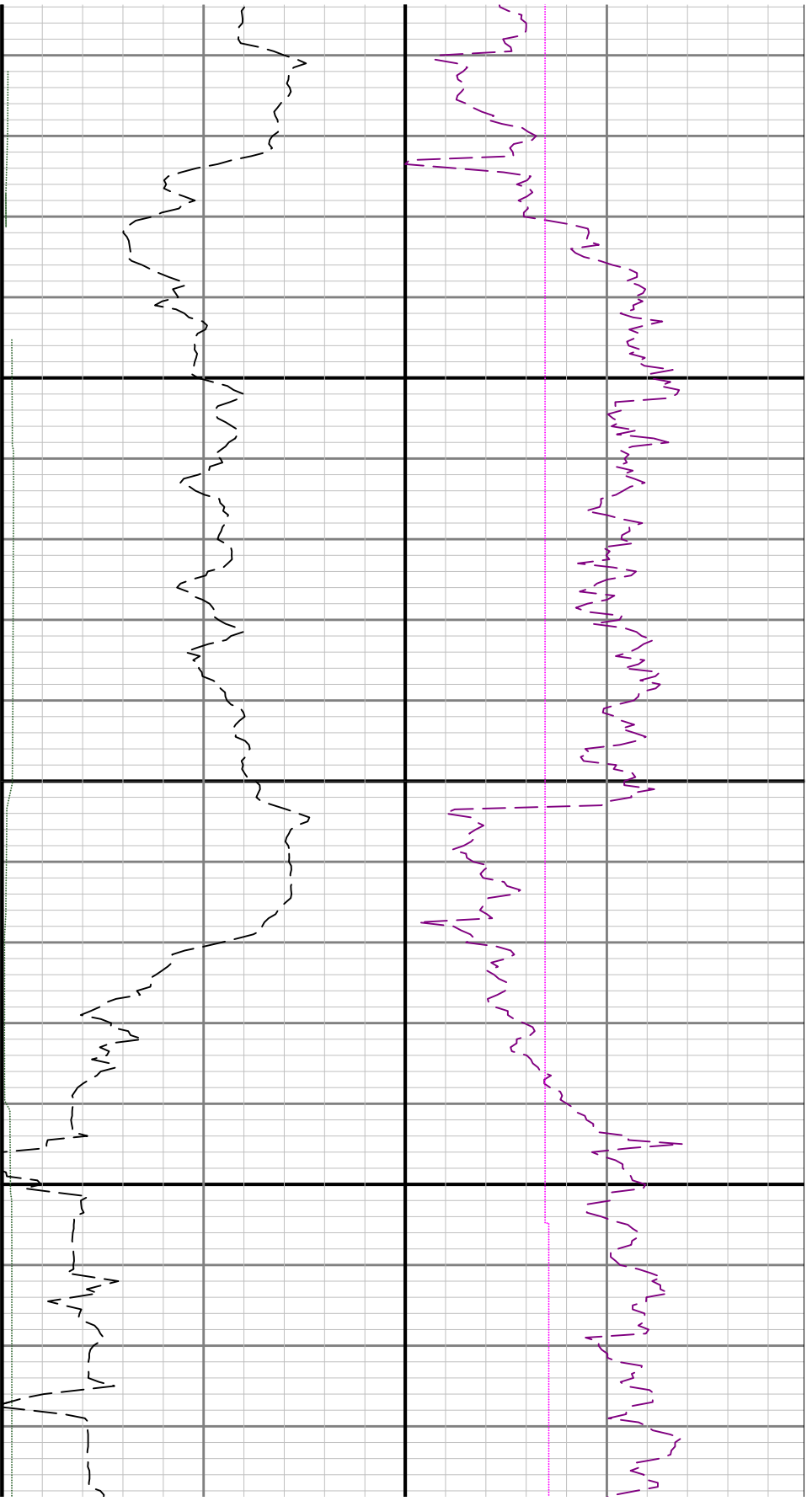




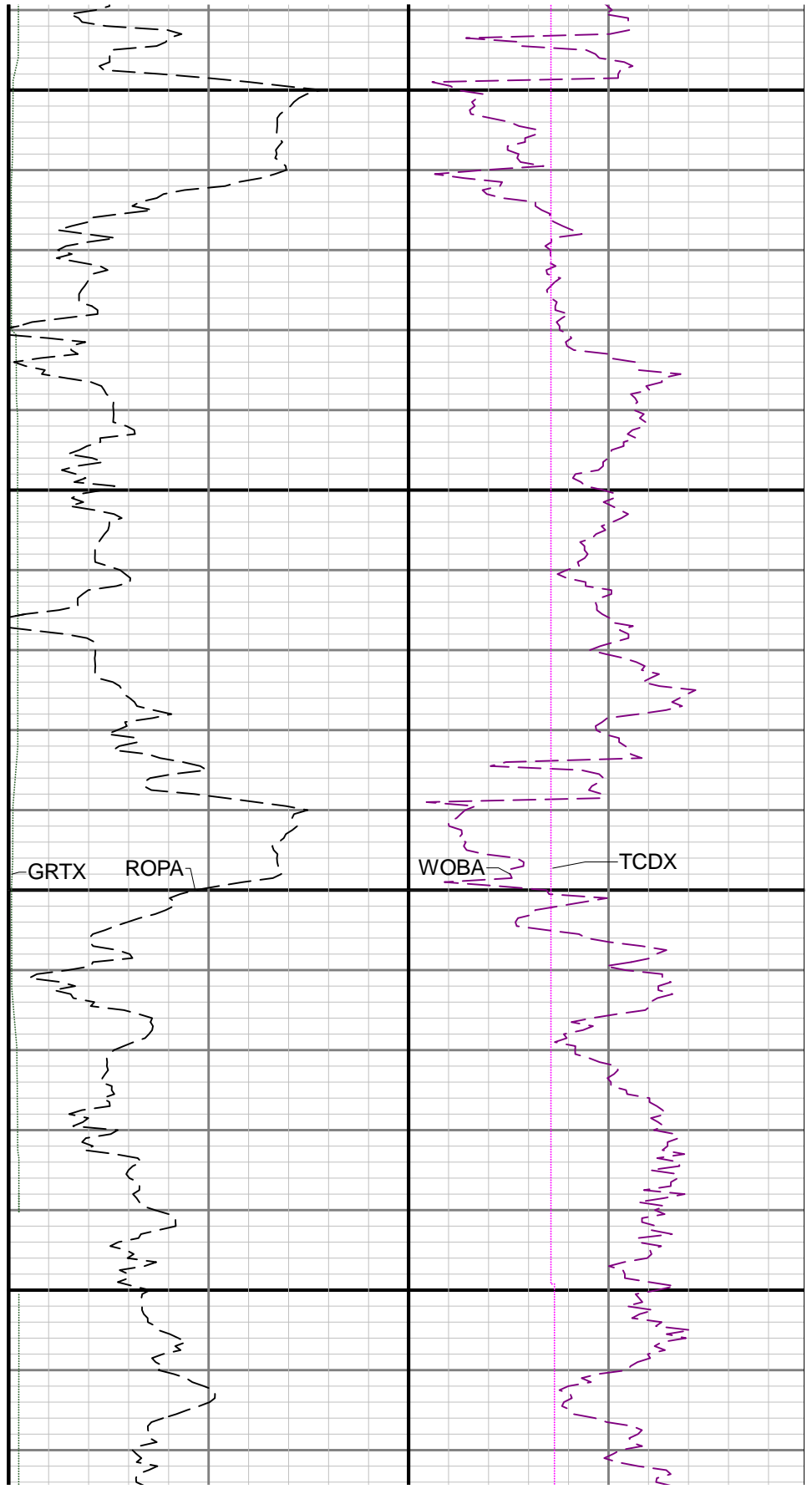
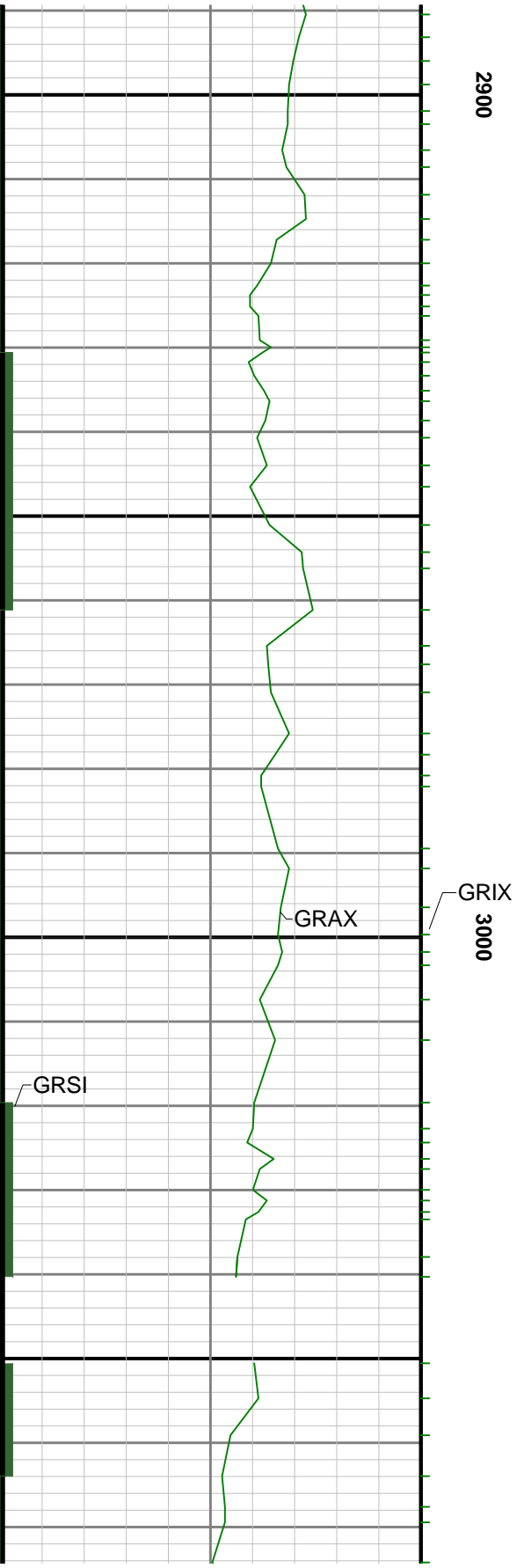
2600

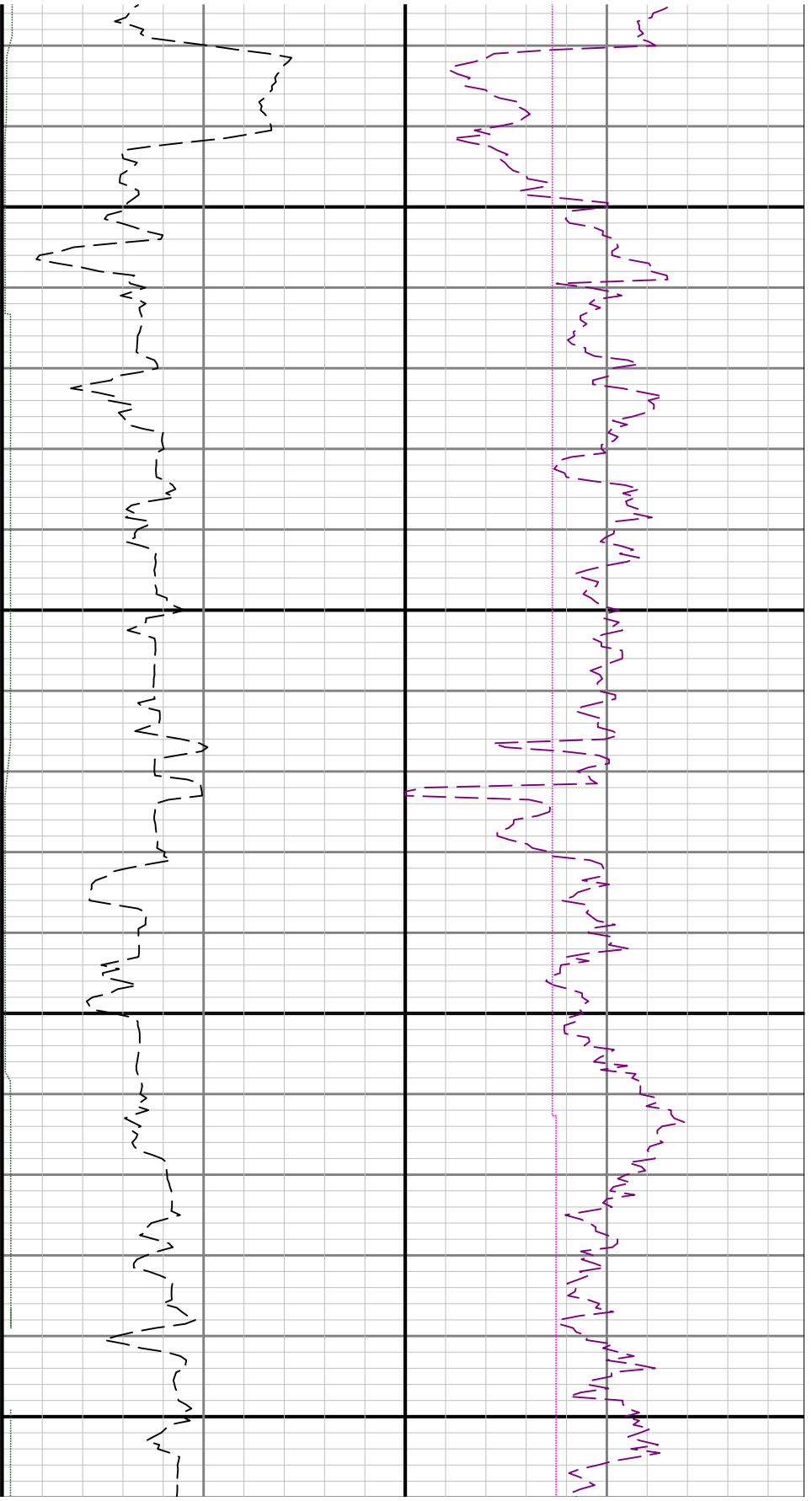
2700





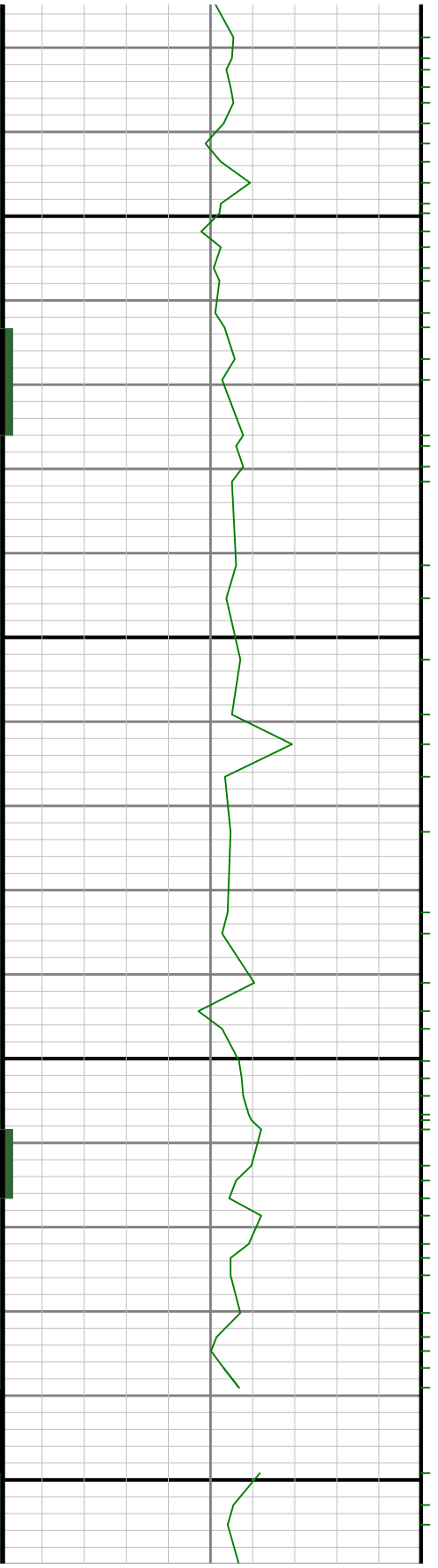


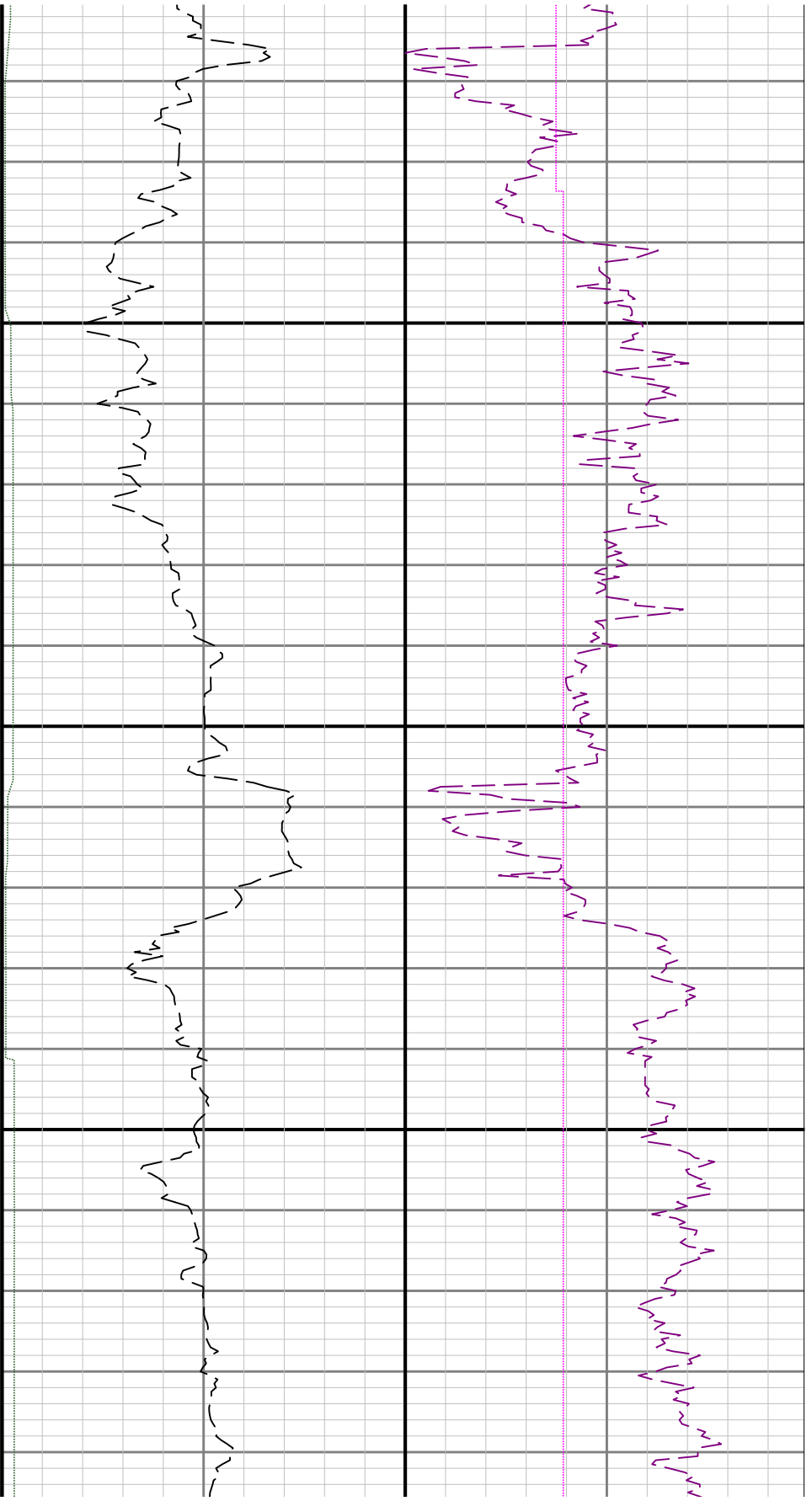




3100

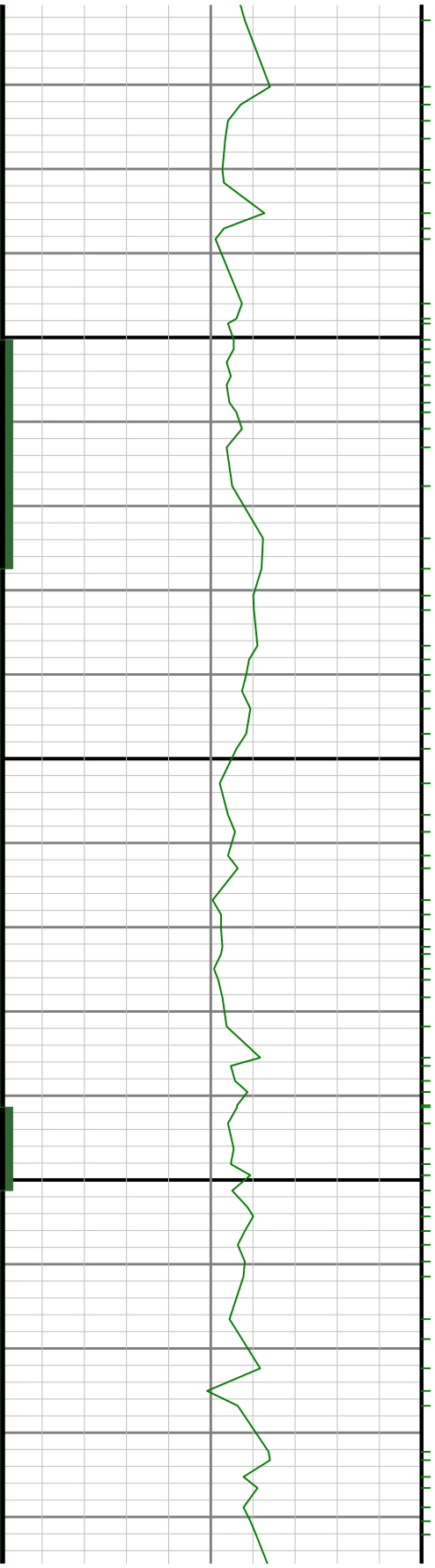
3200

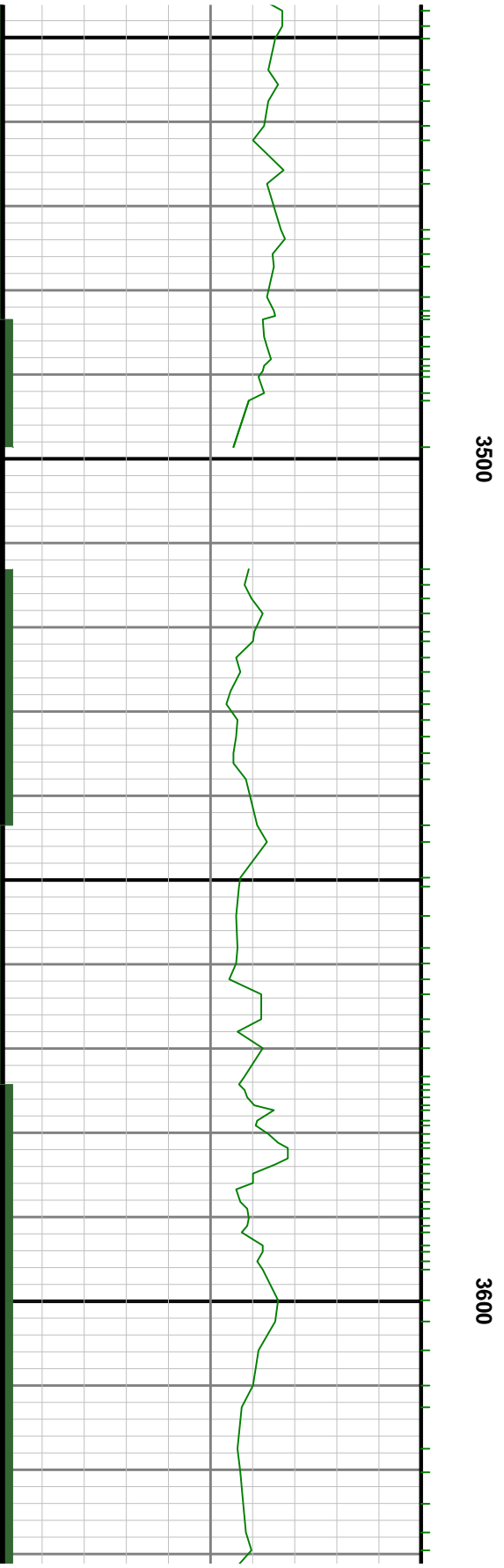
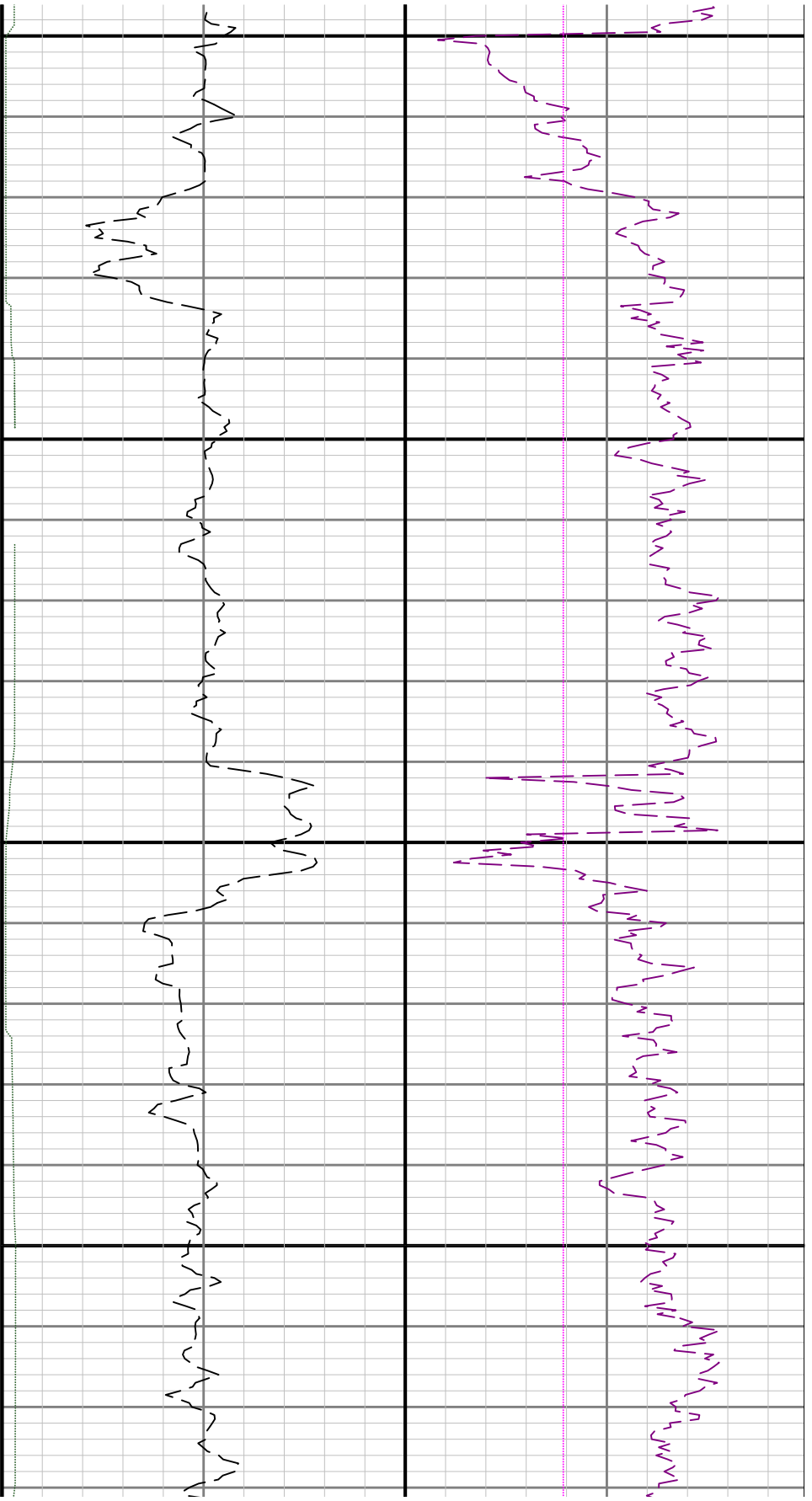


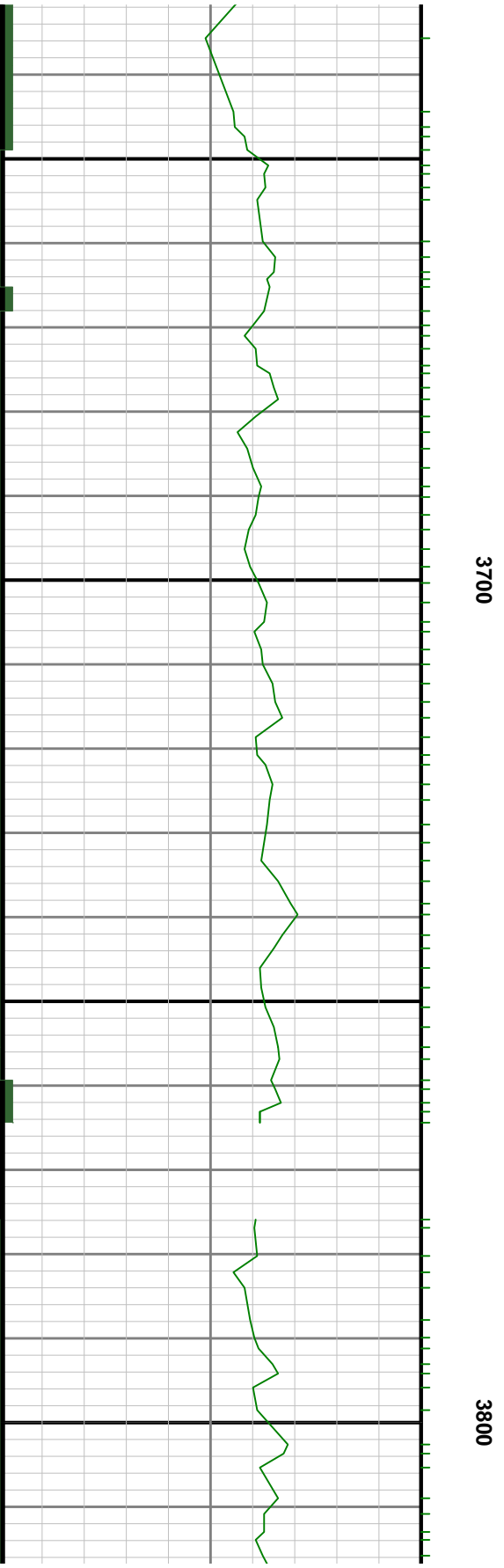
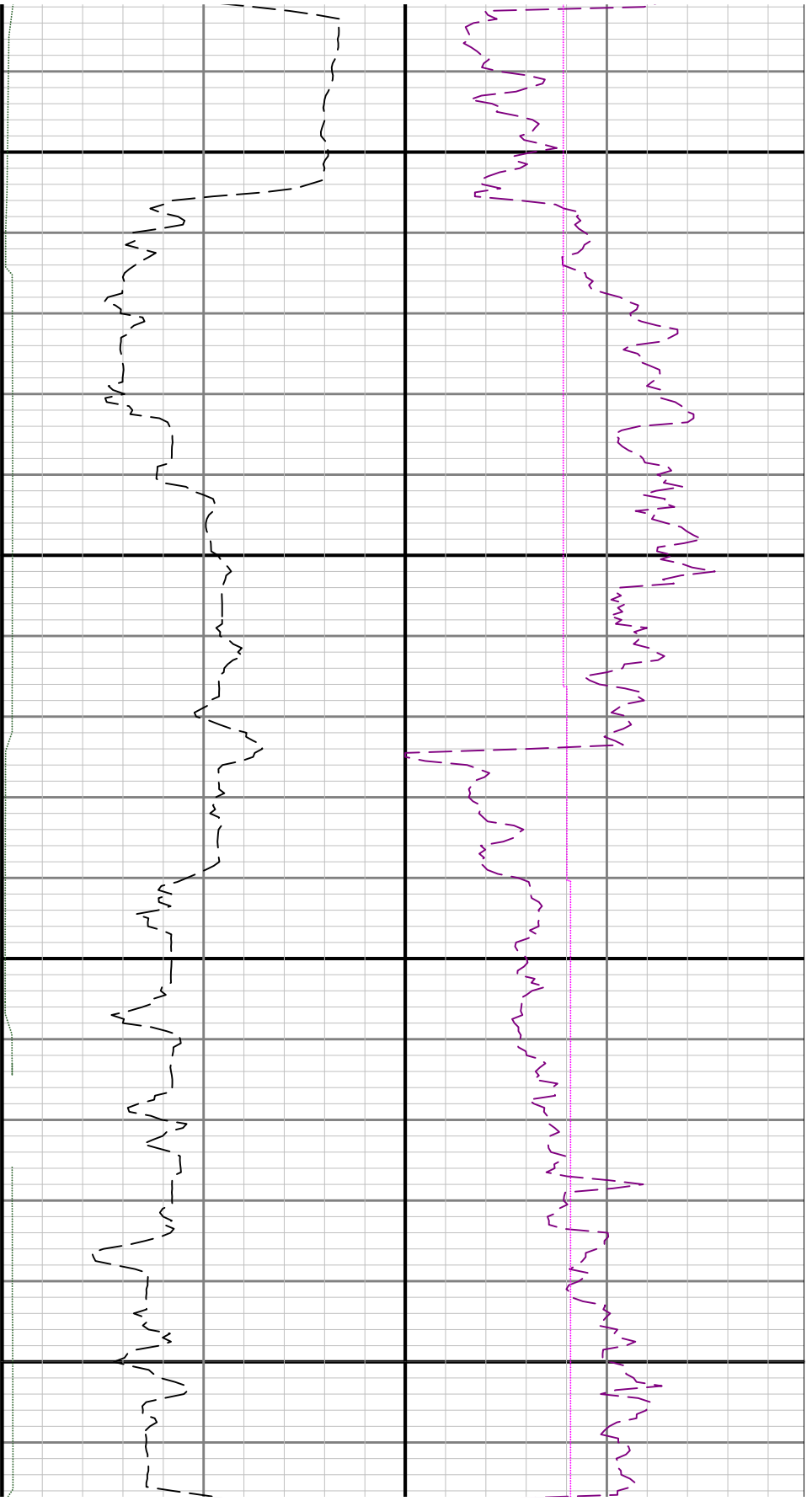


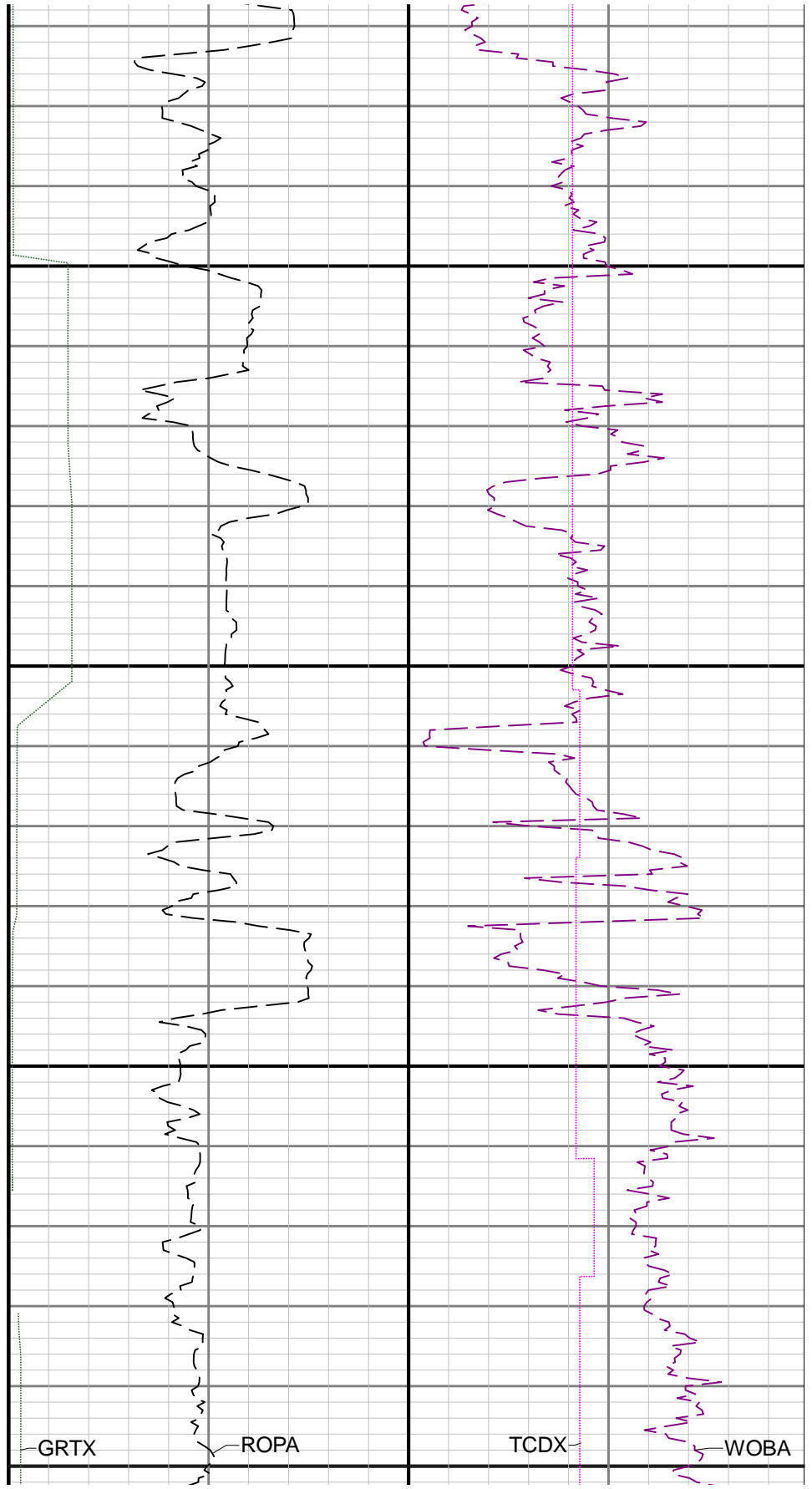
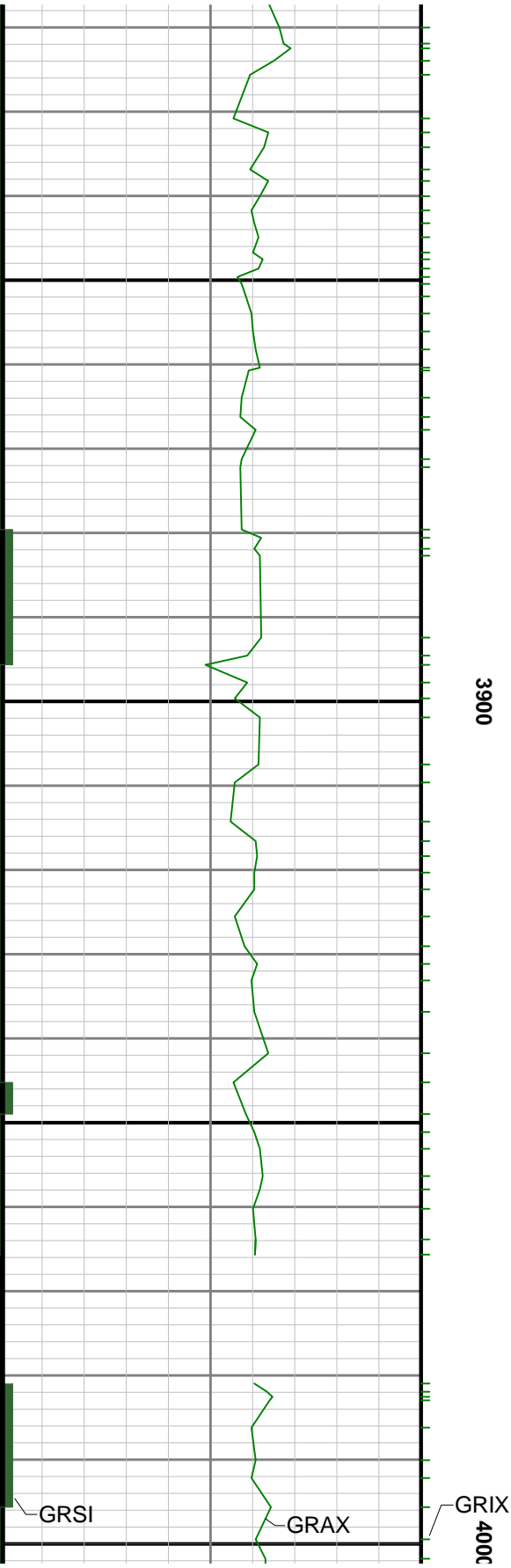
3300

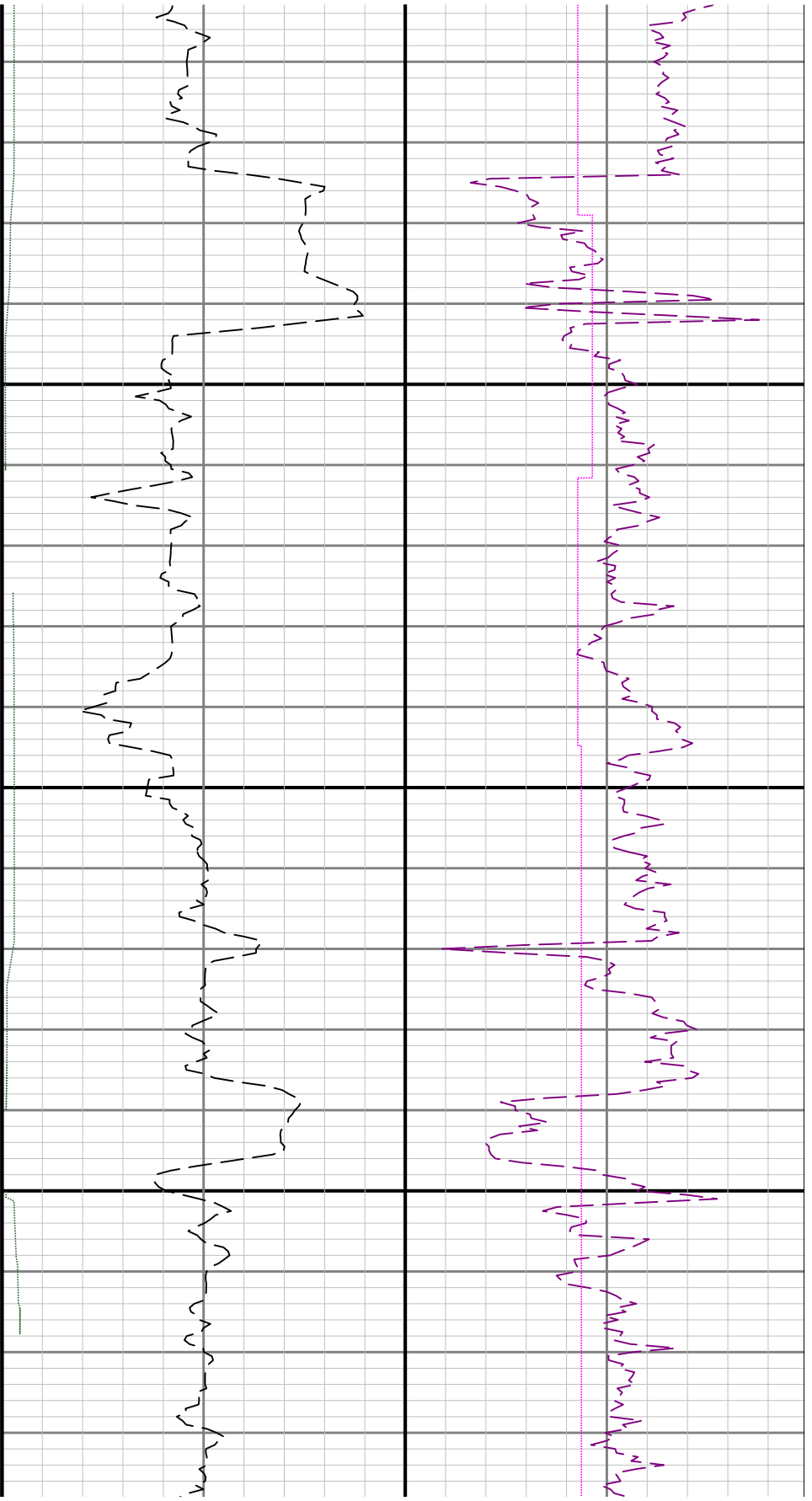
3400



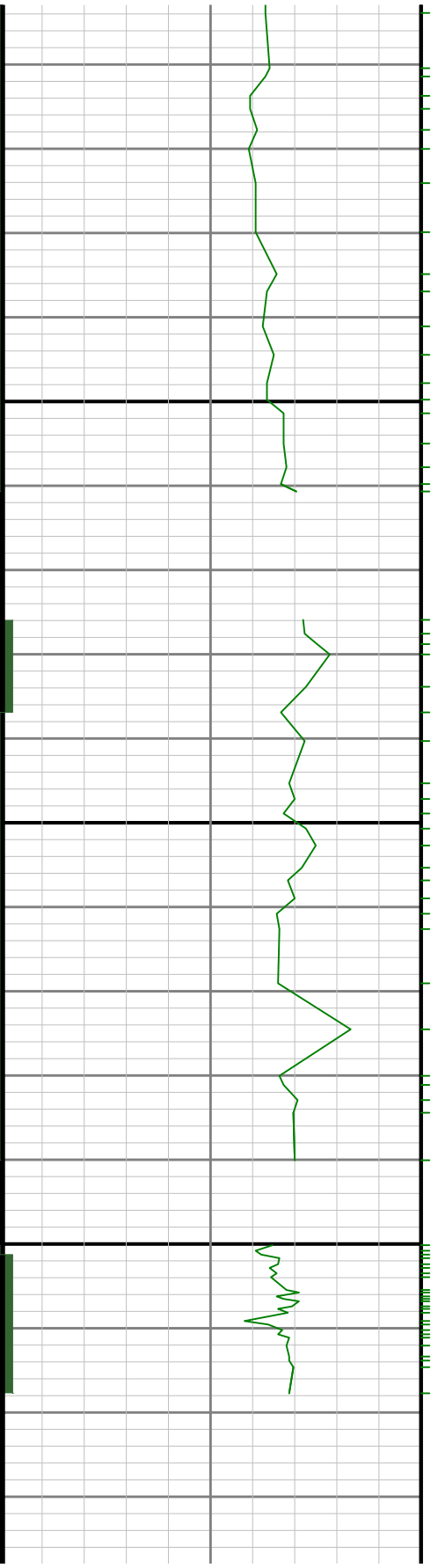


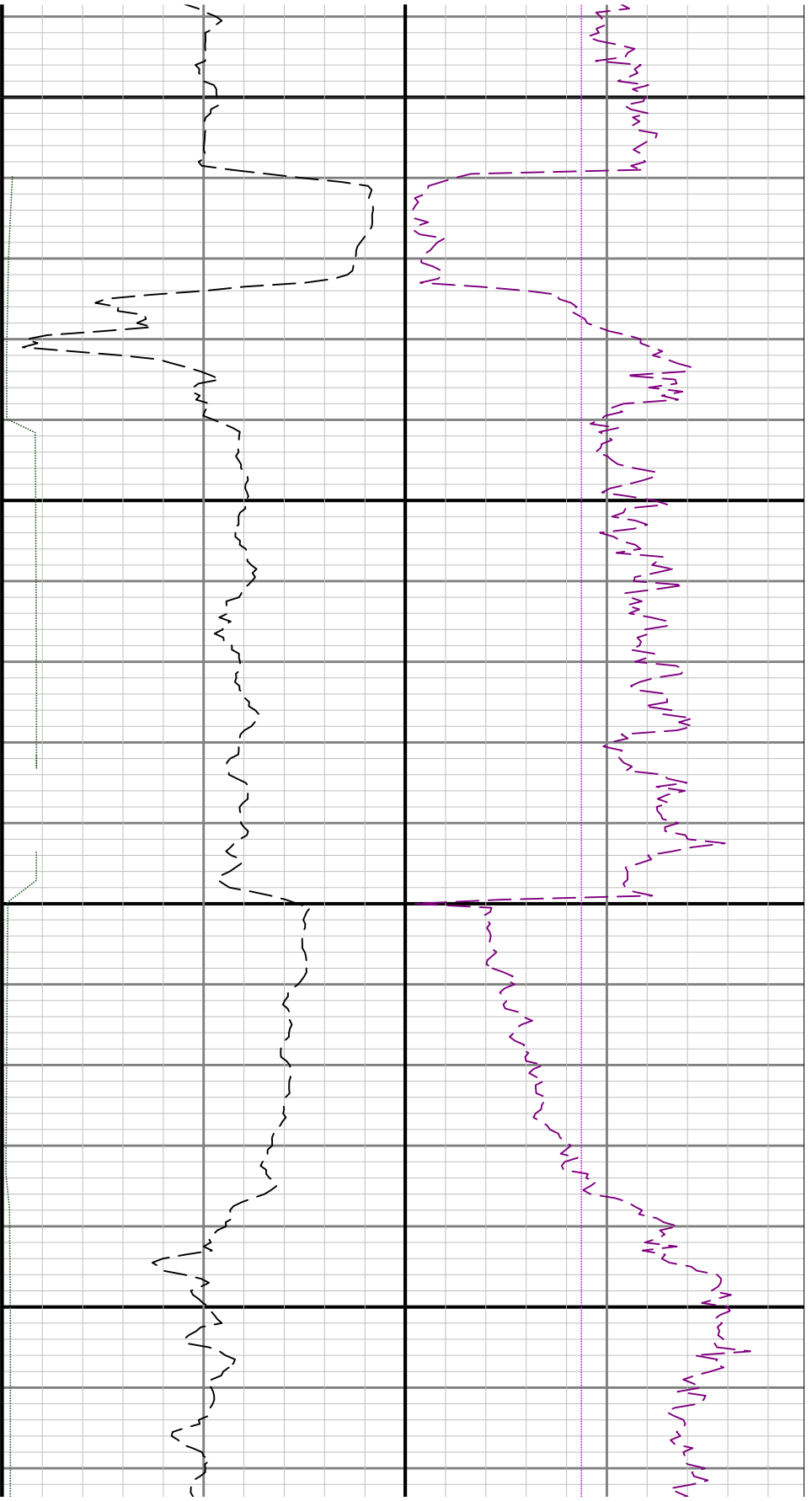






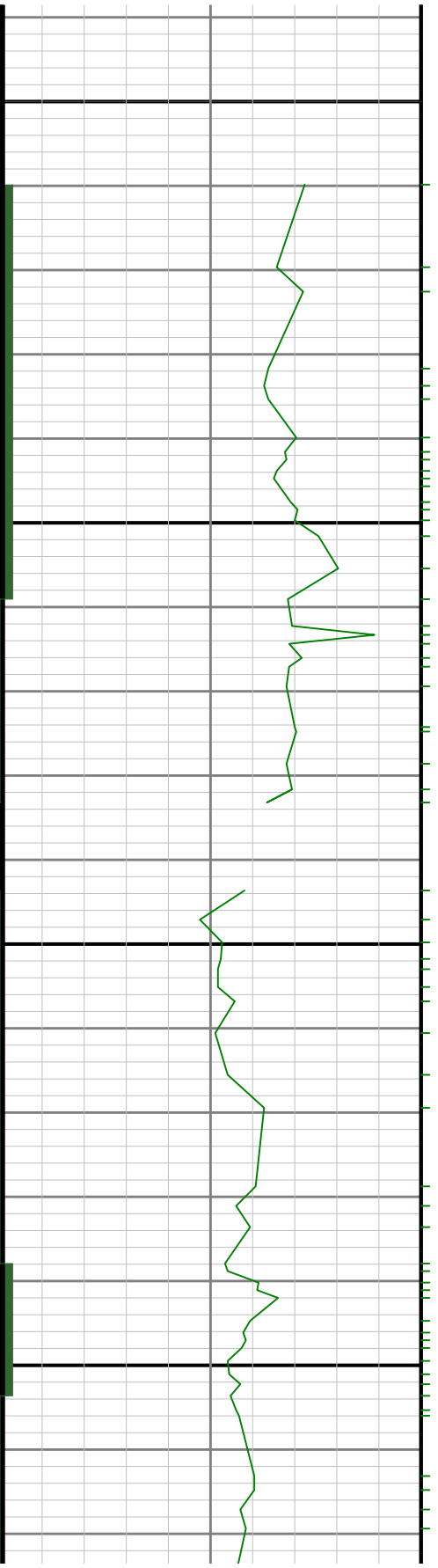
4100



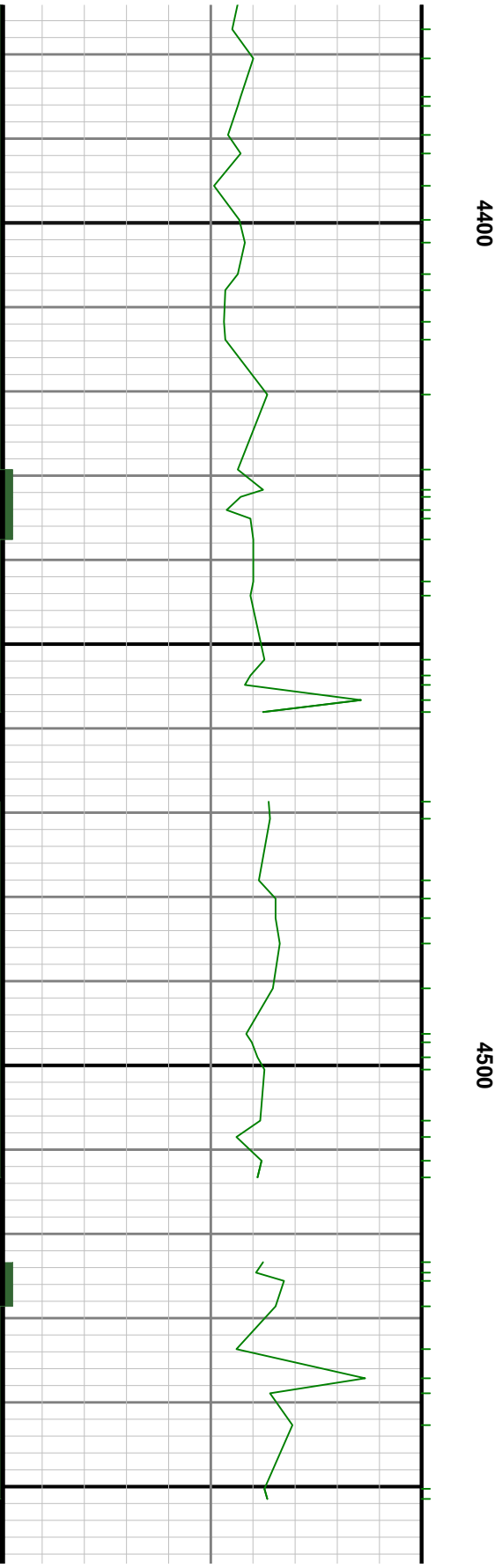
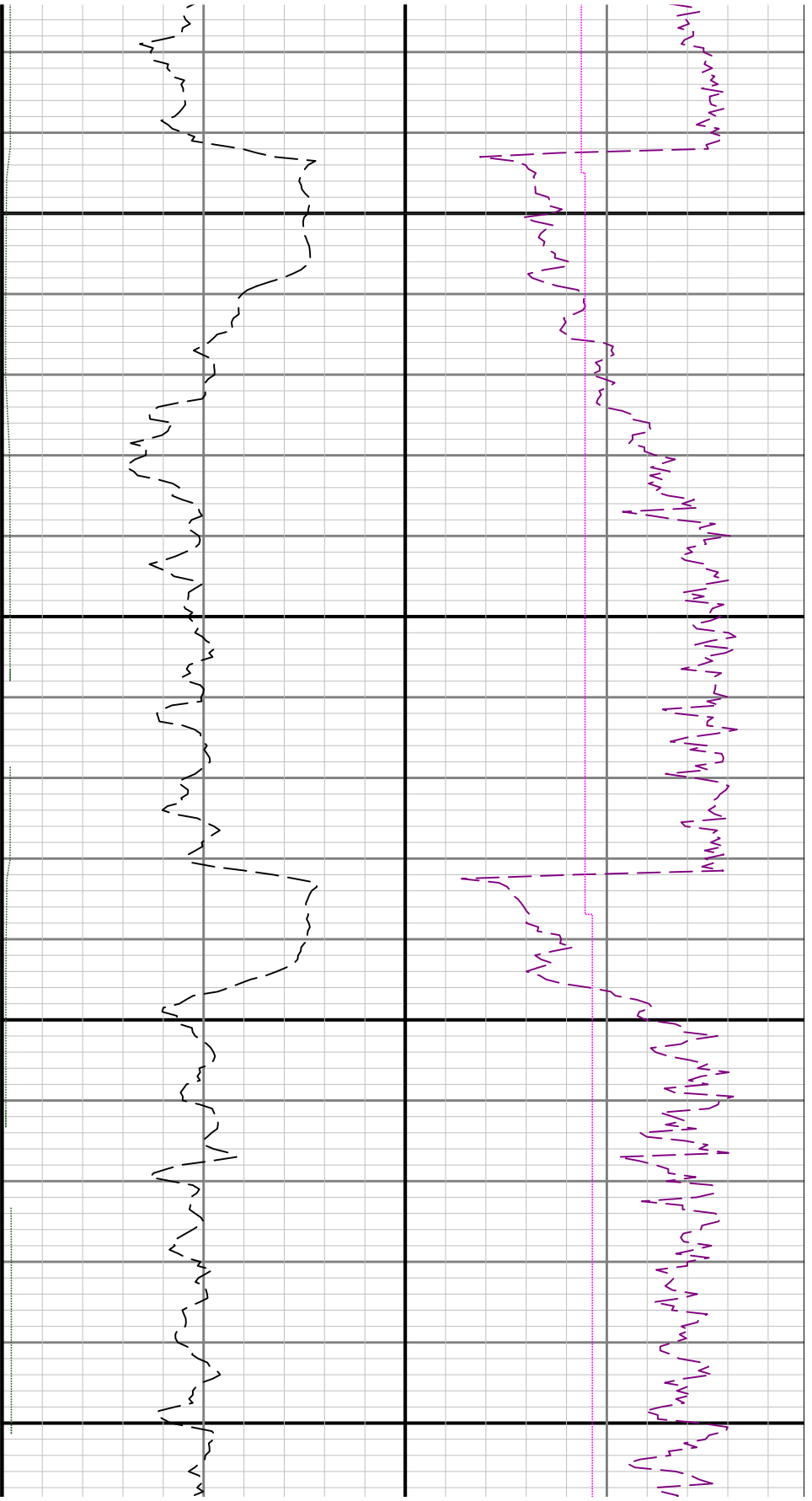


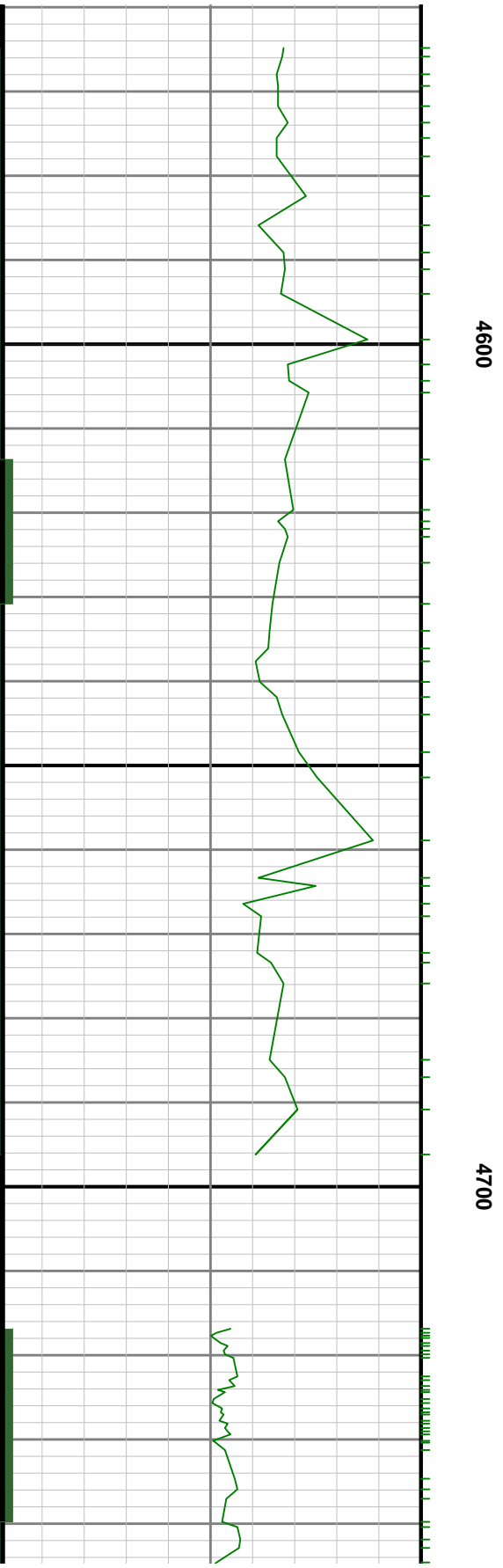
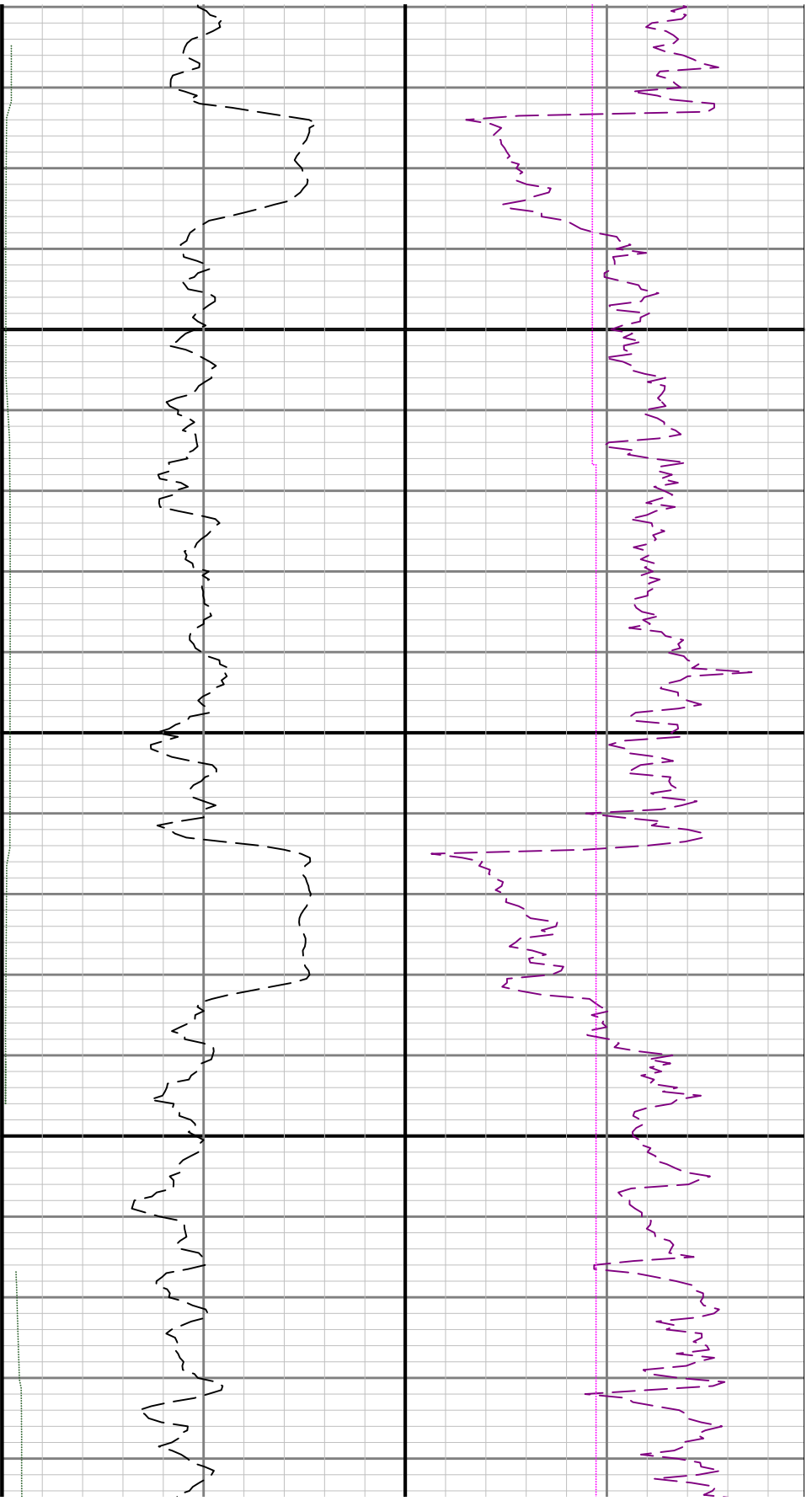
4200

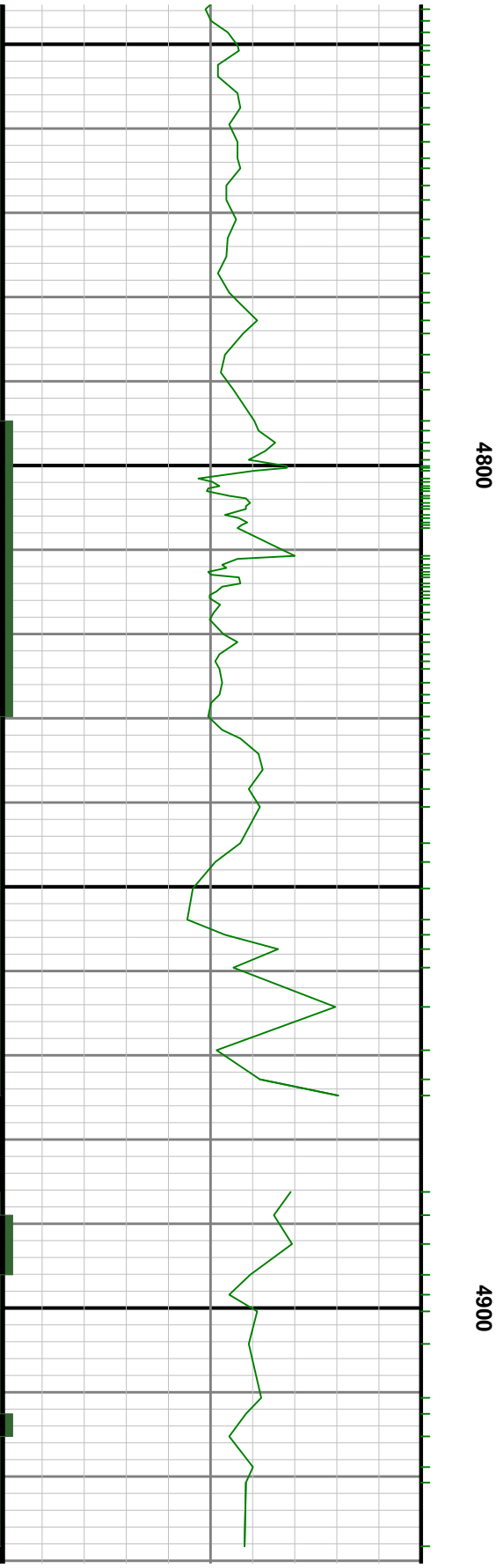
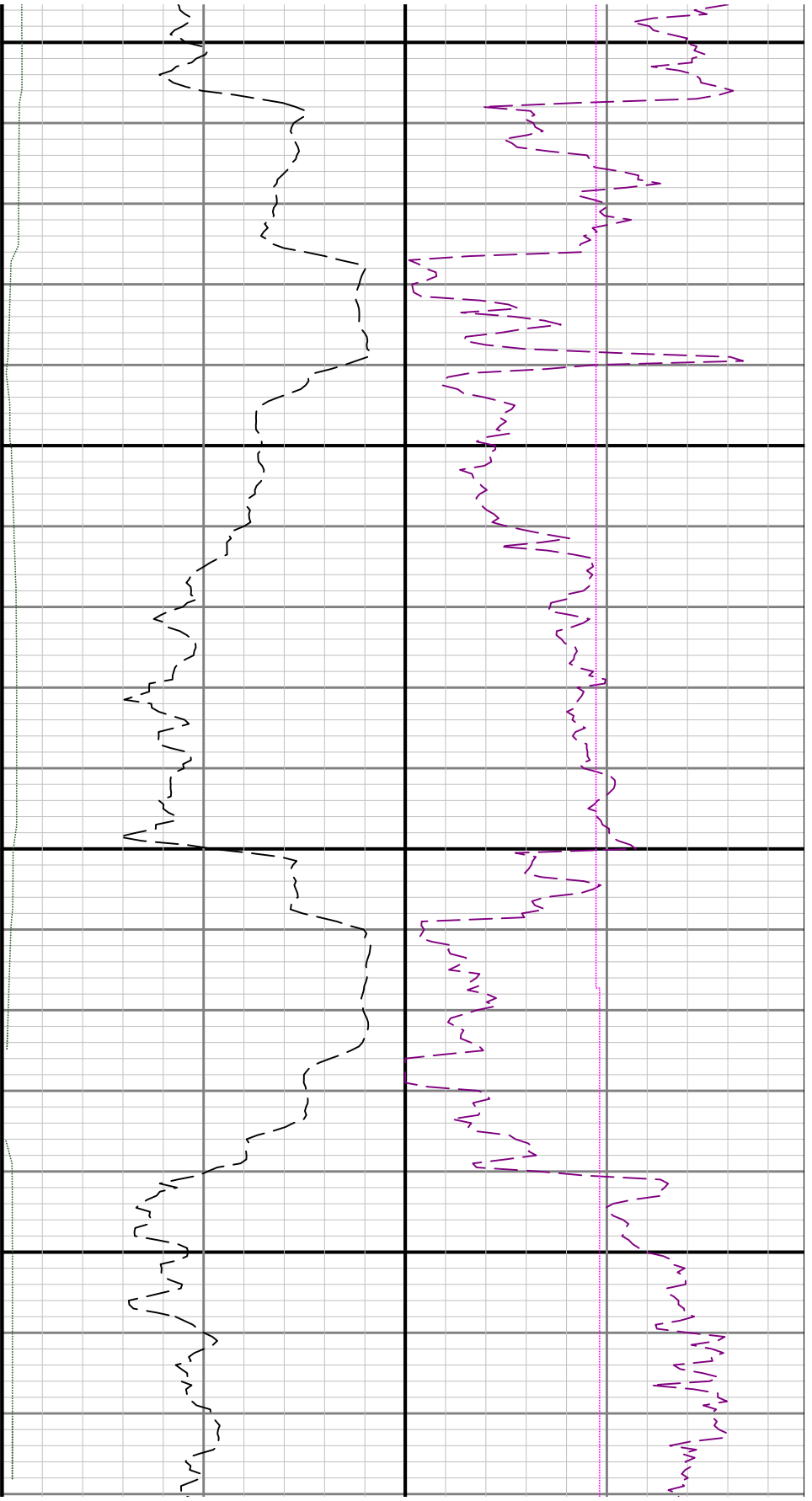
4300

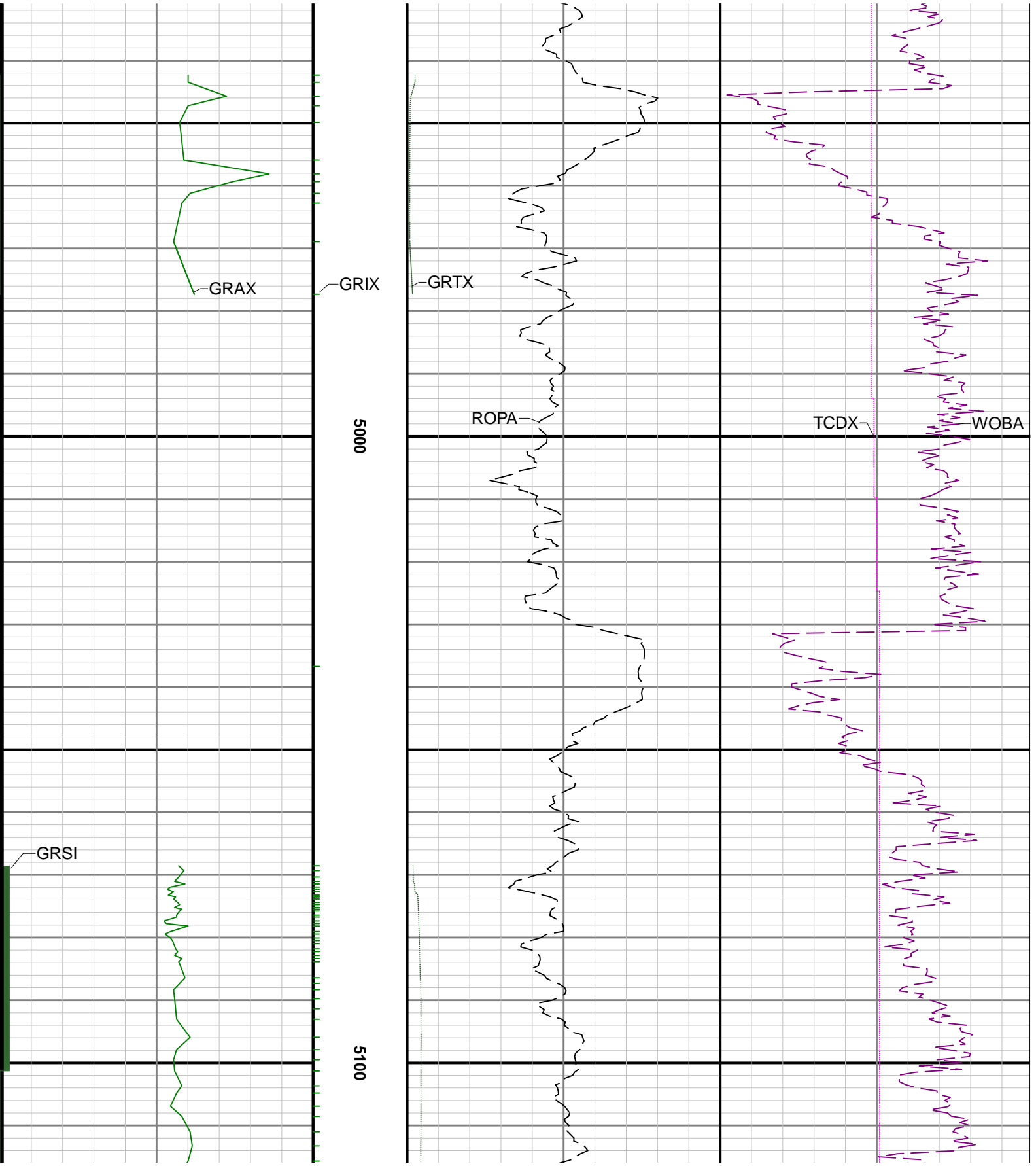


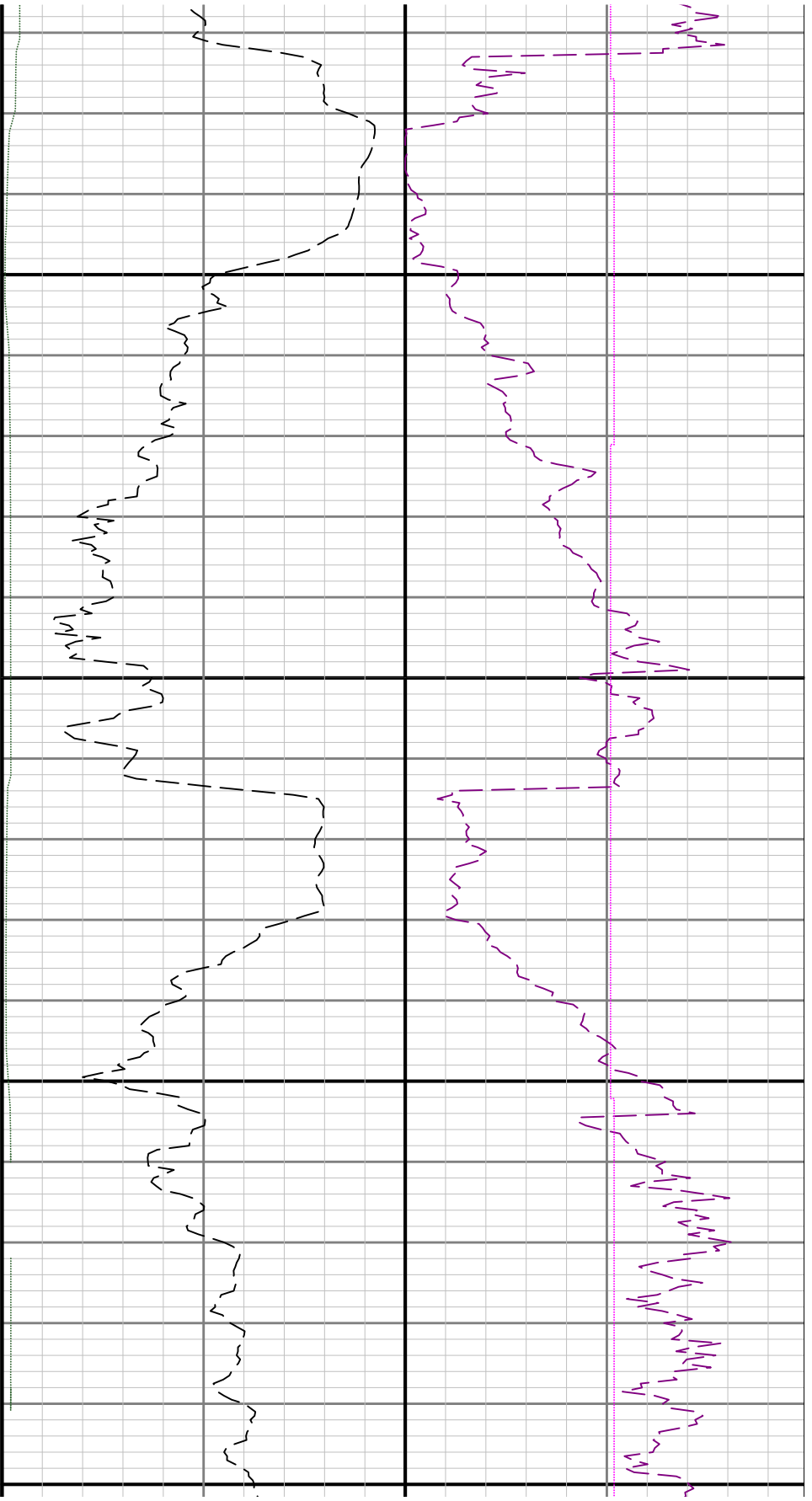






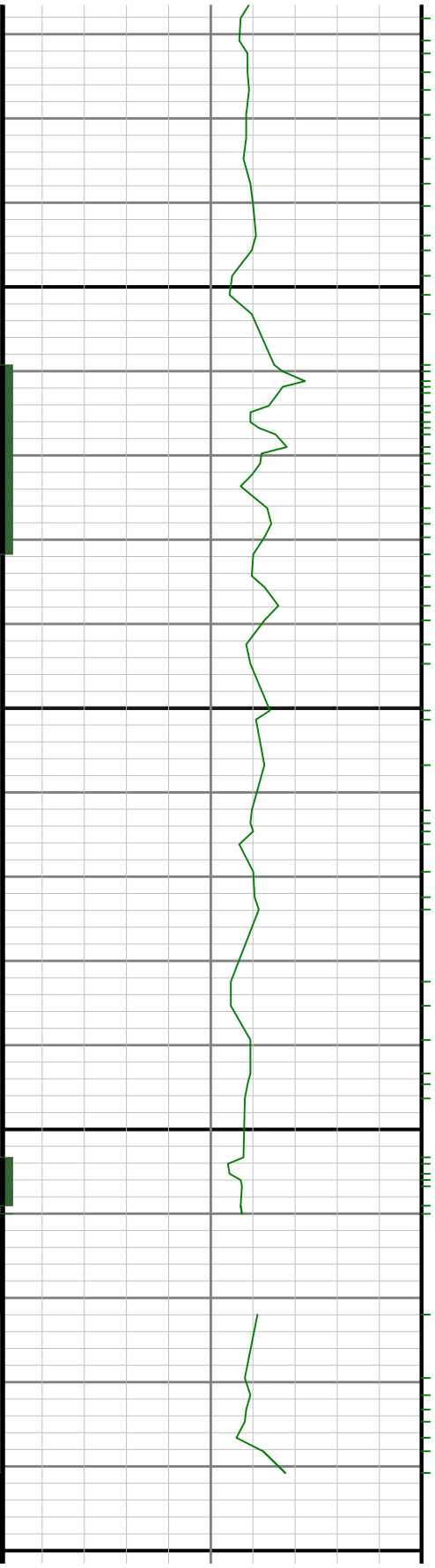


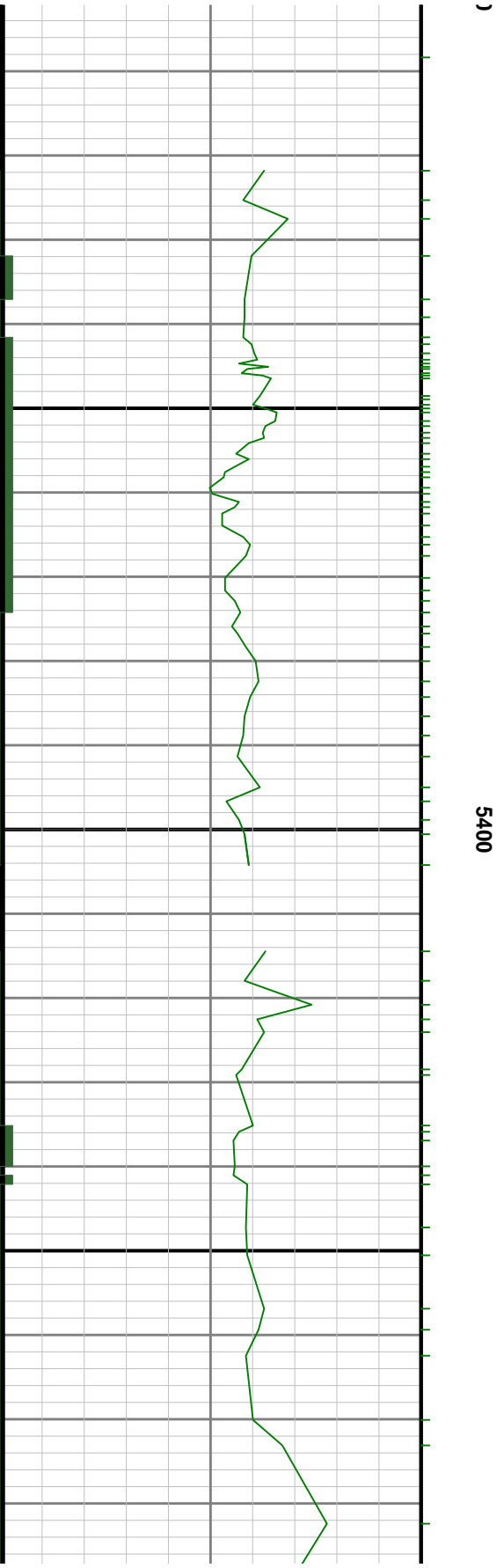
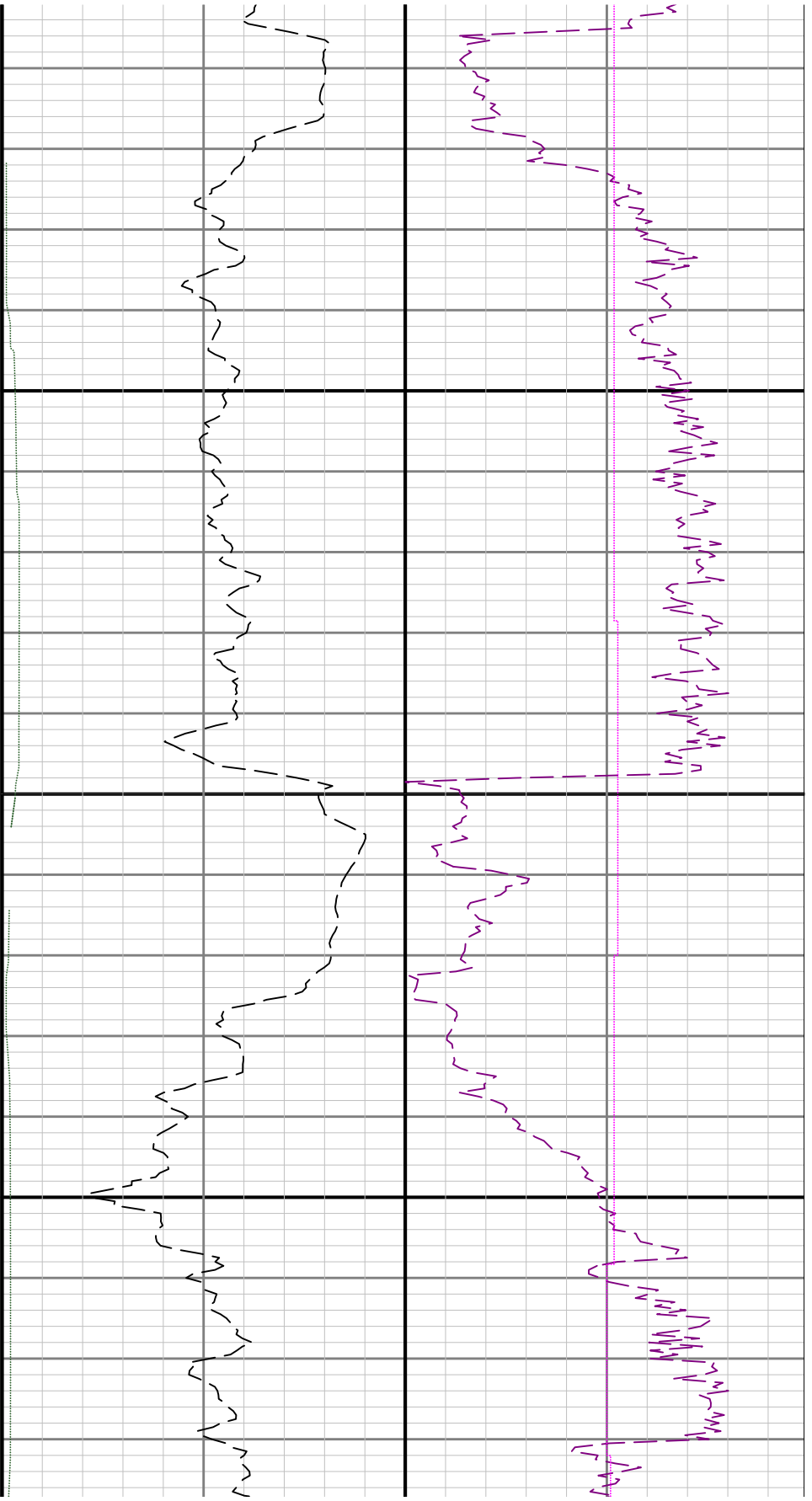


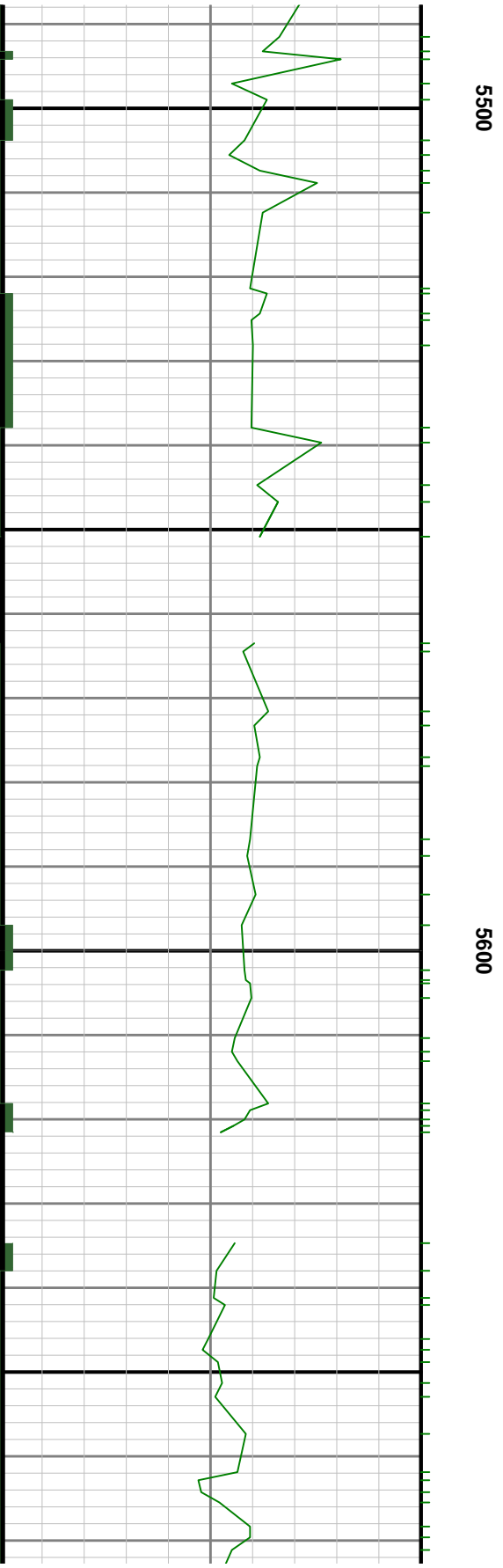
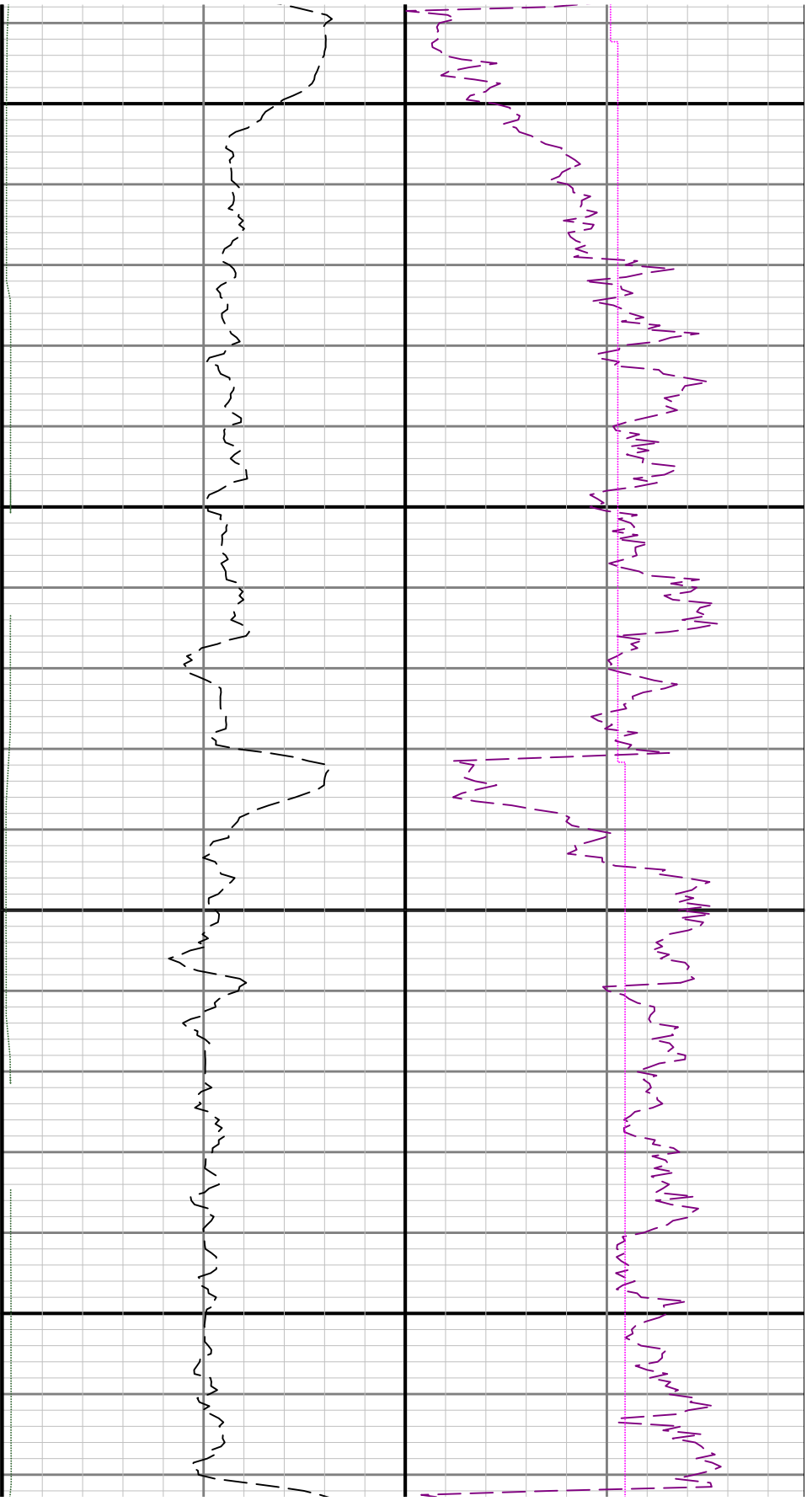


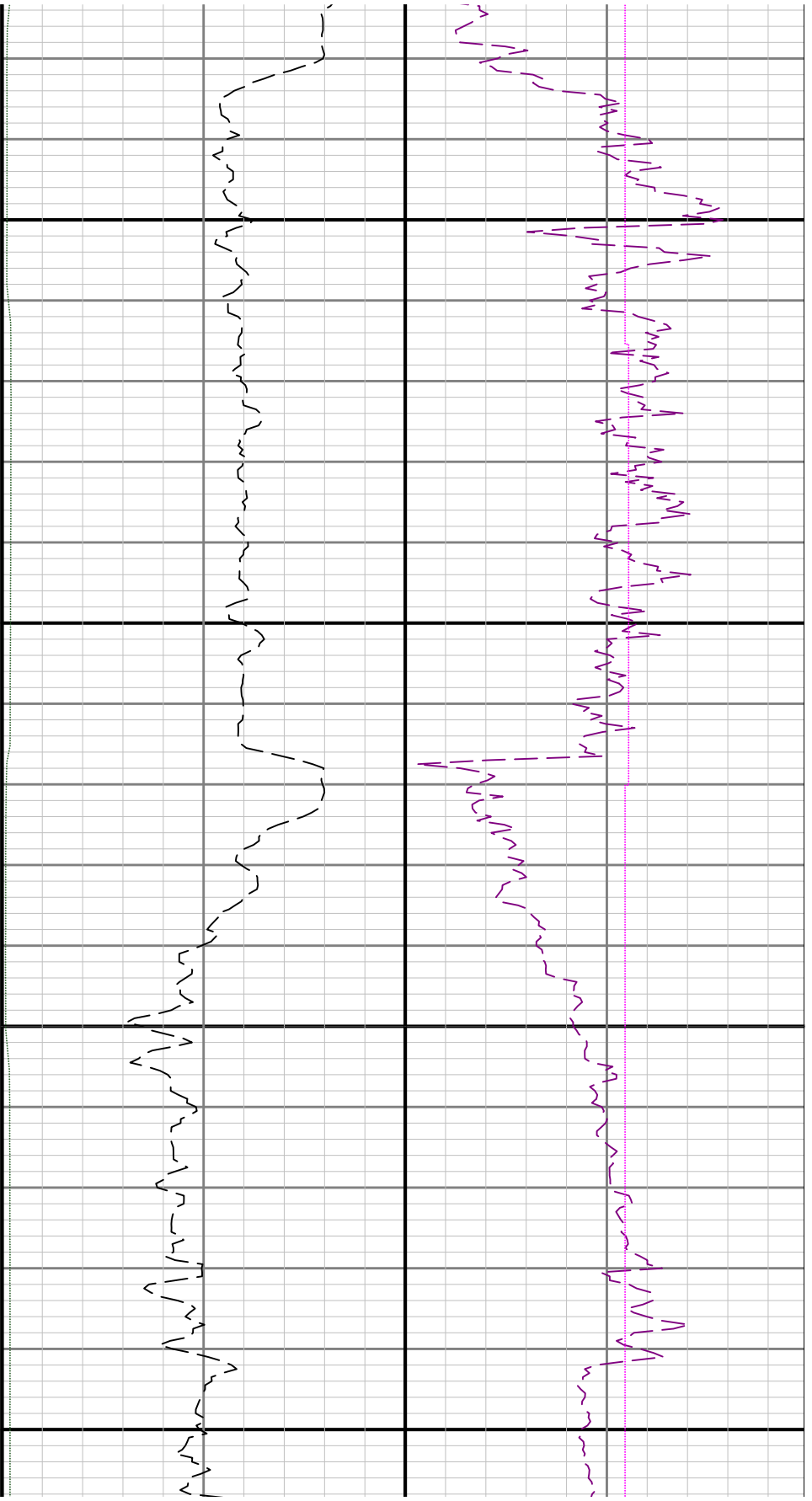
5200

530



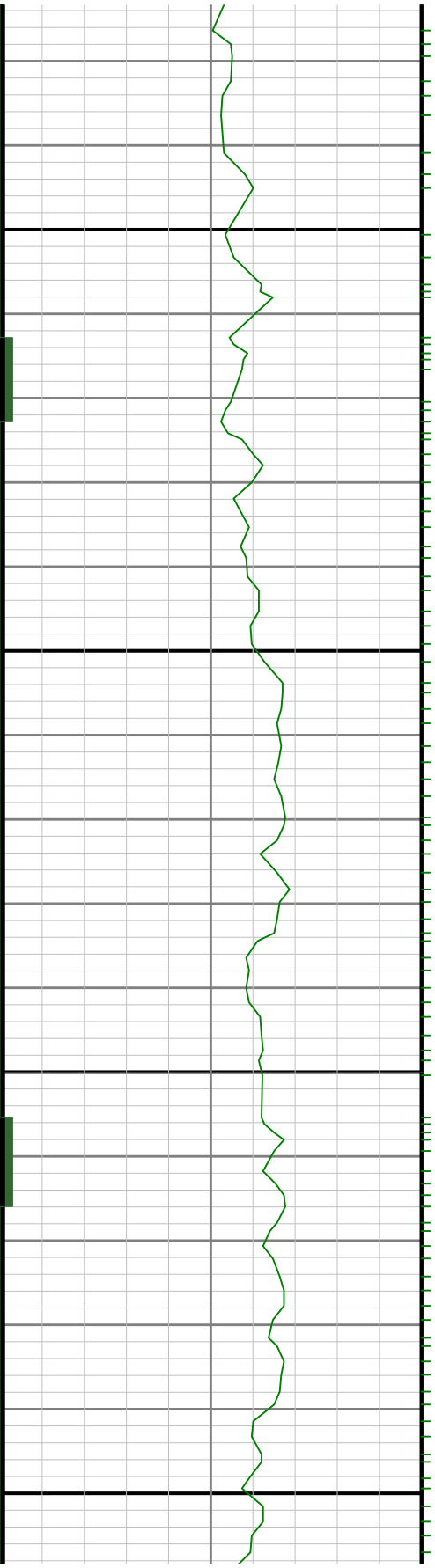




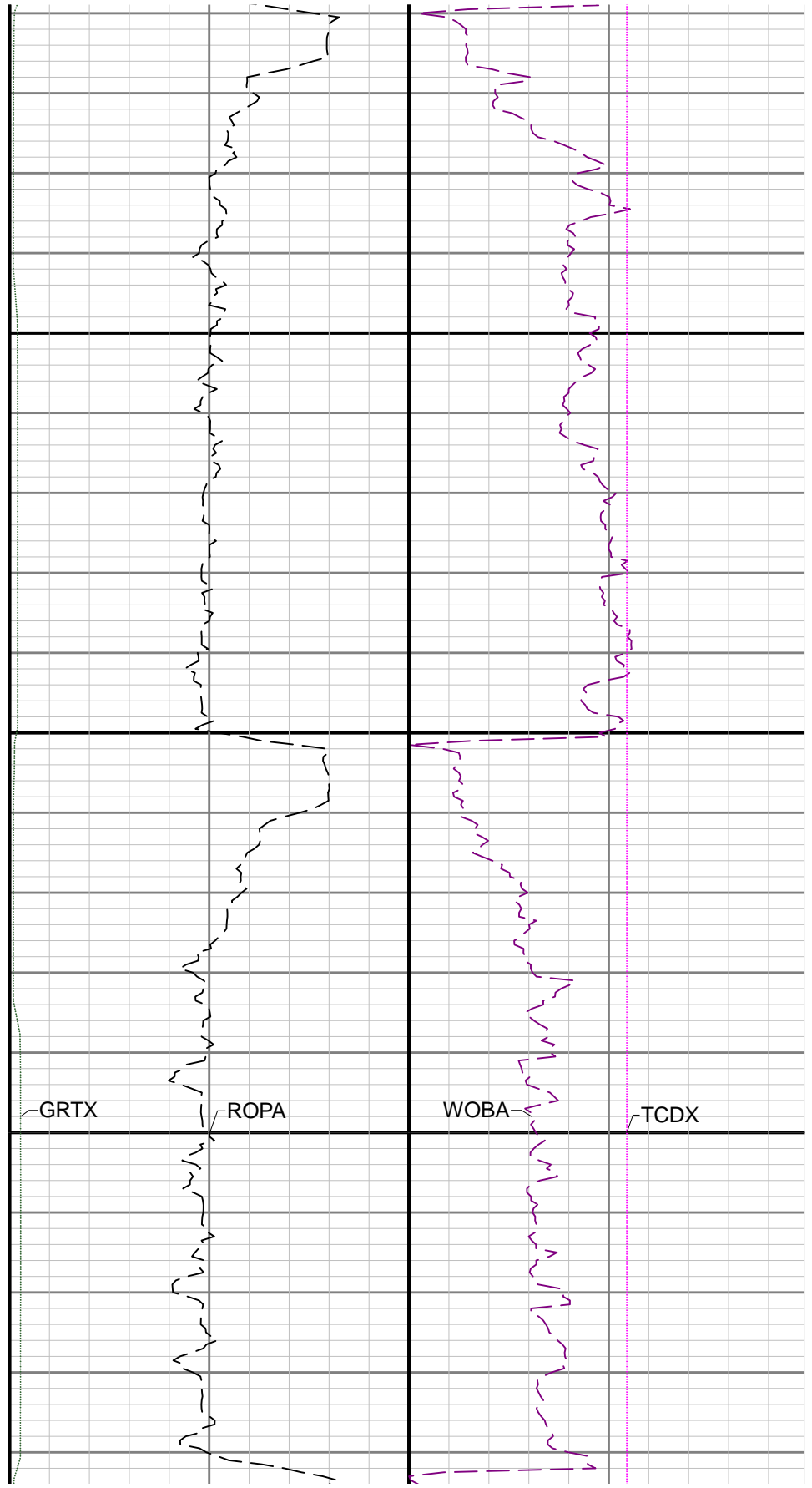
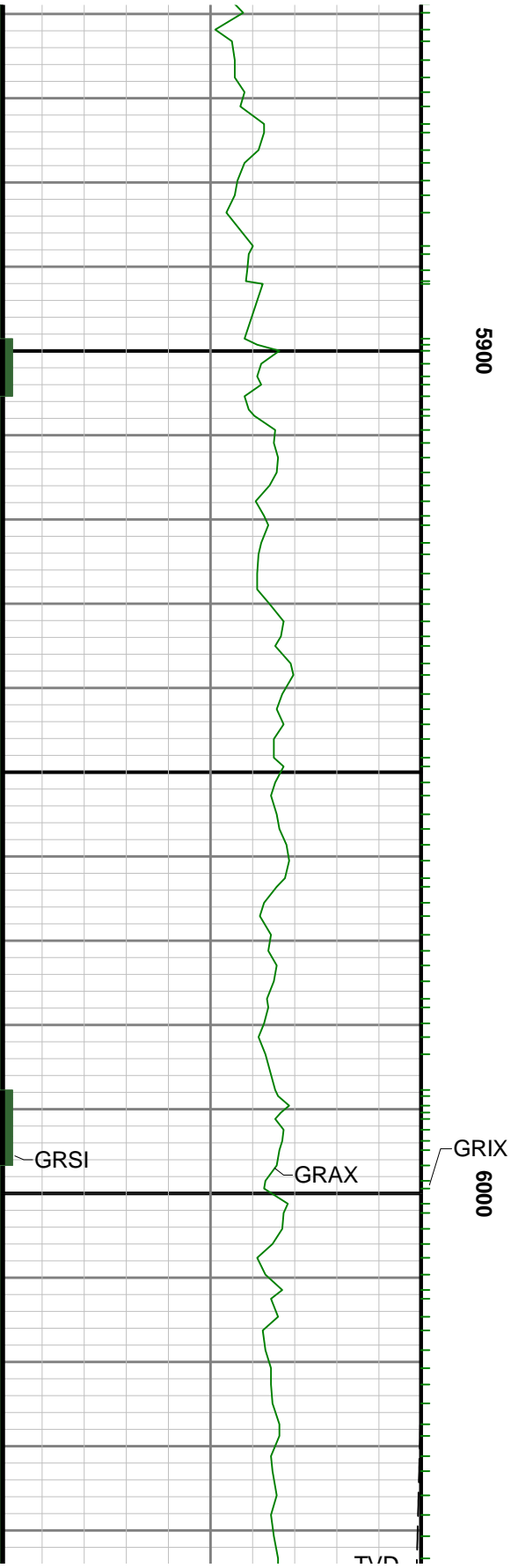


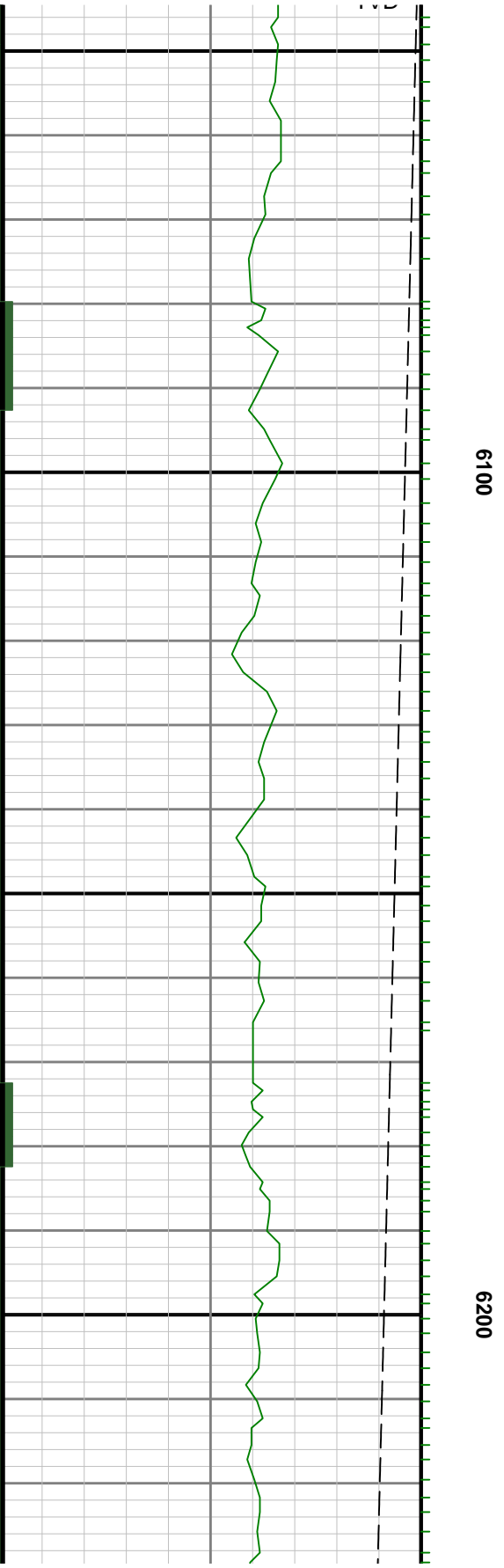
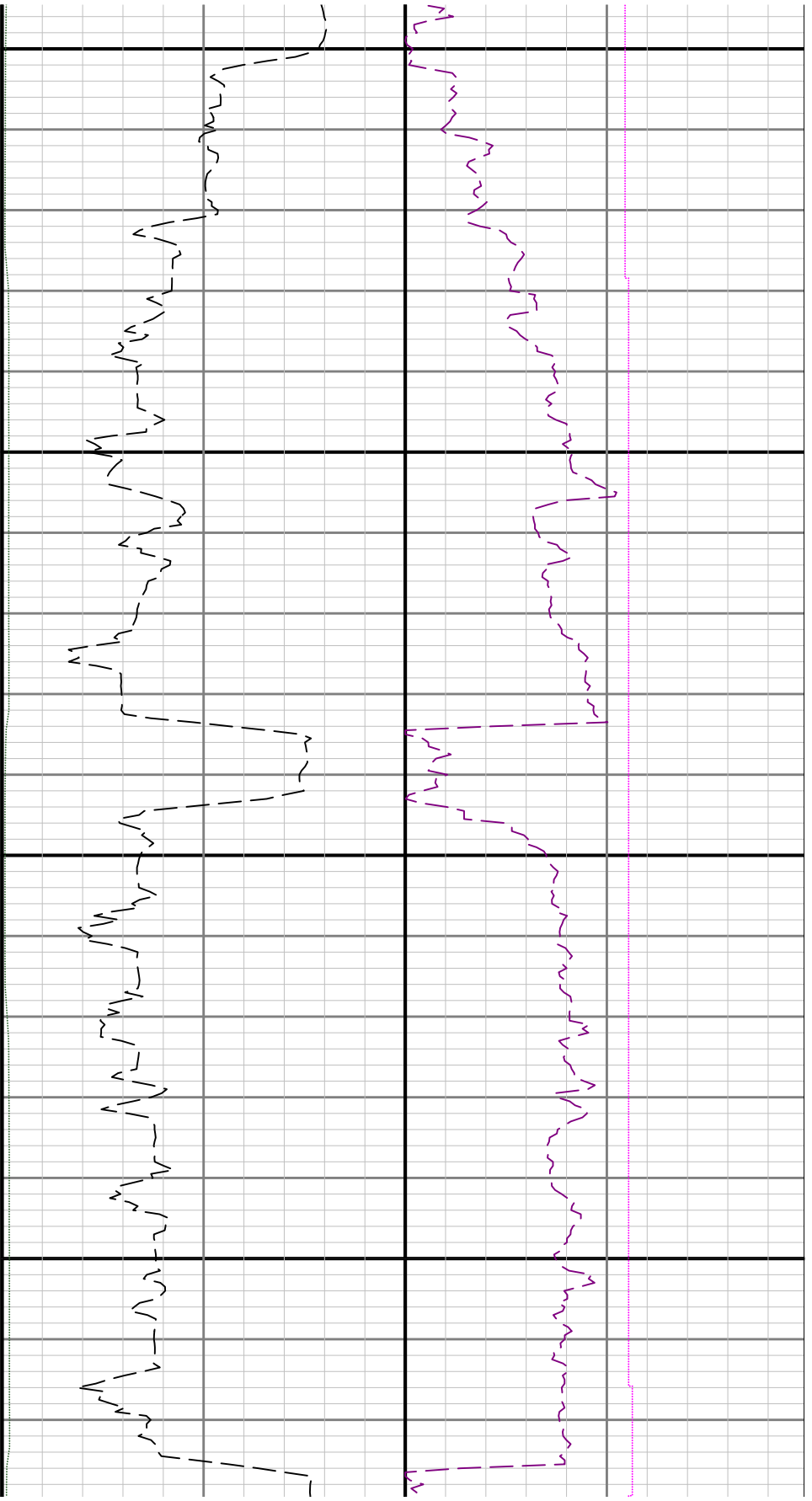
5700

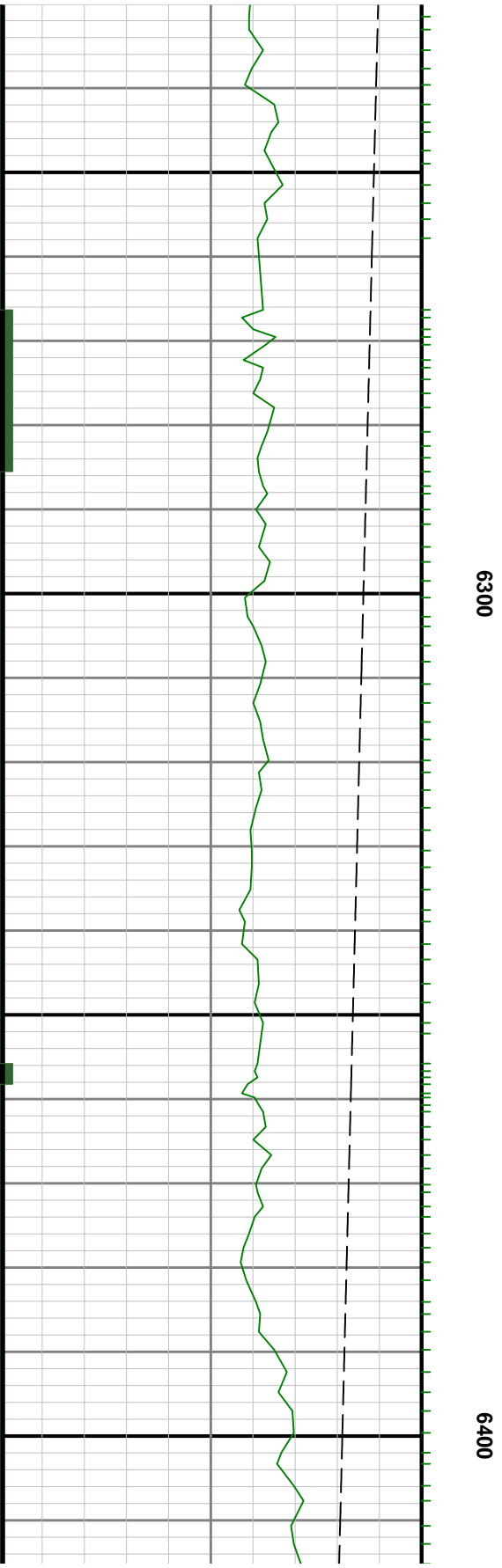
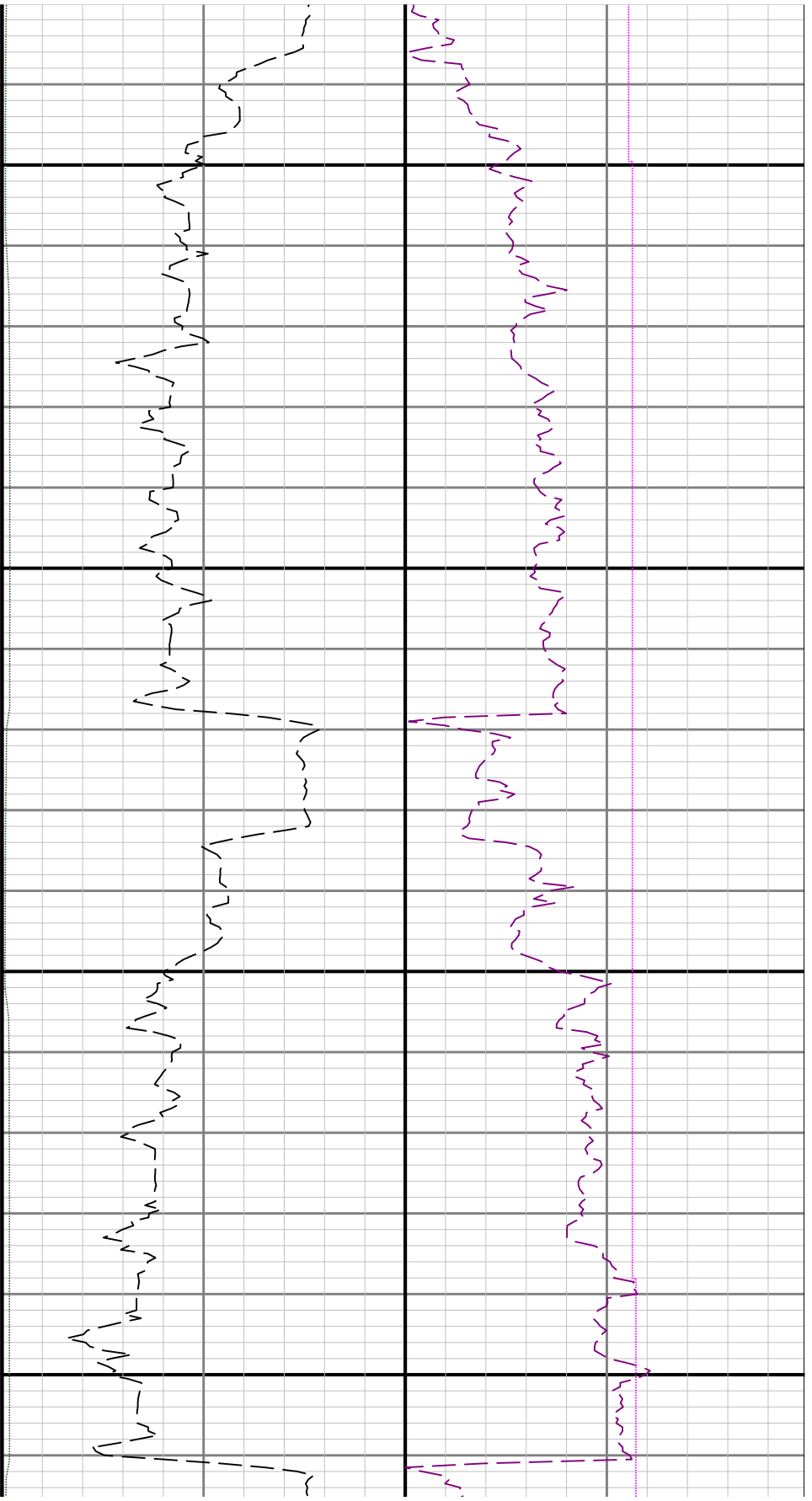
5800







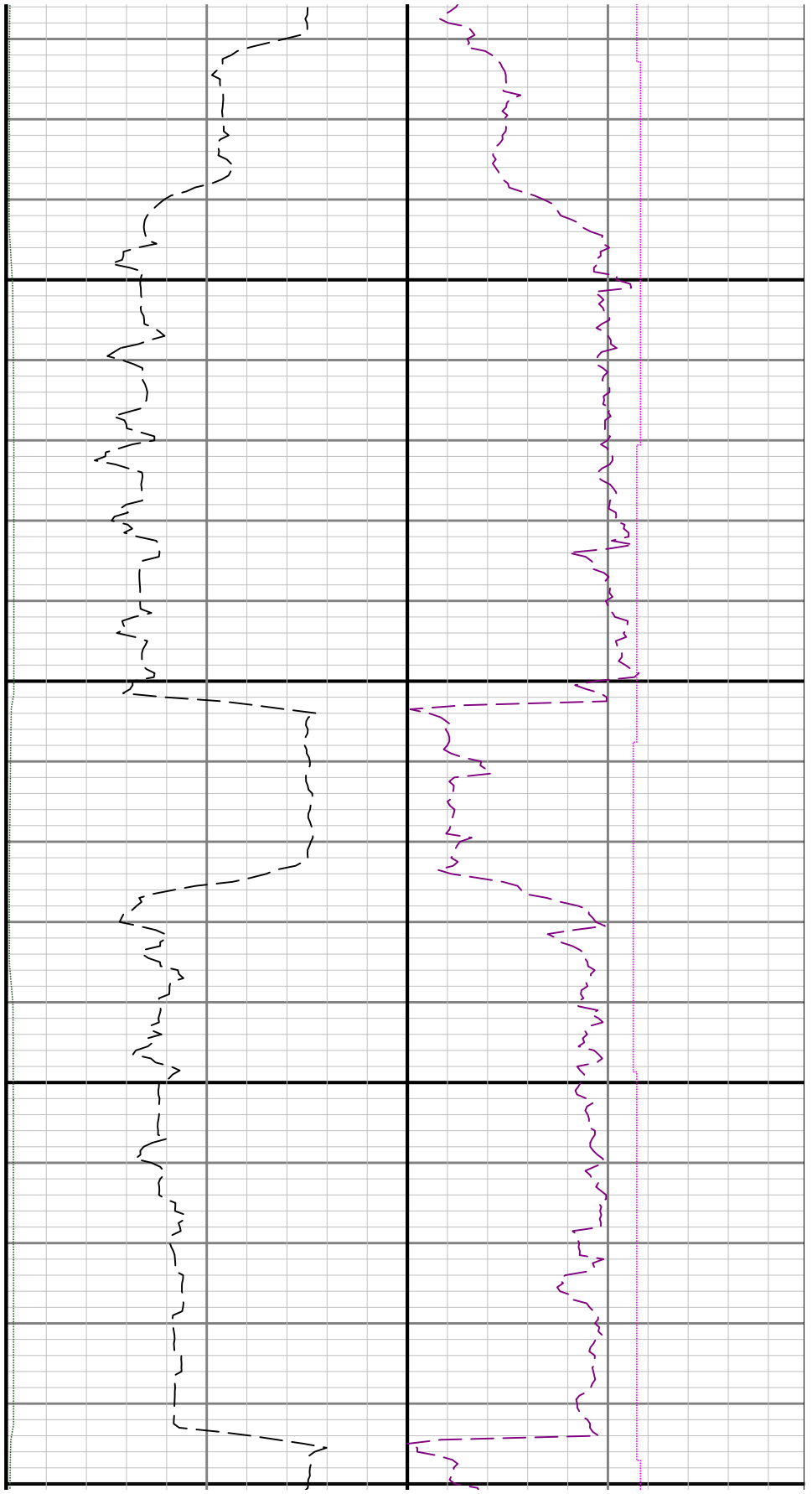


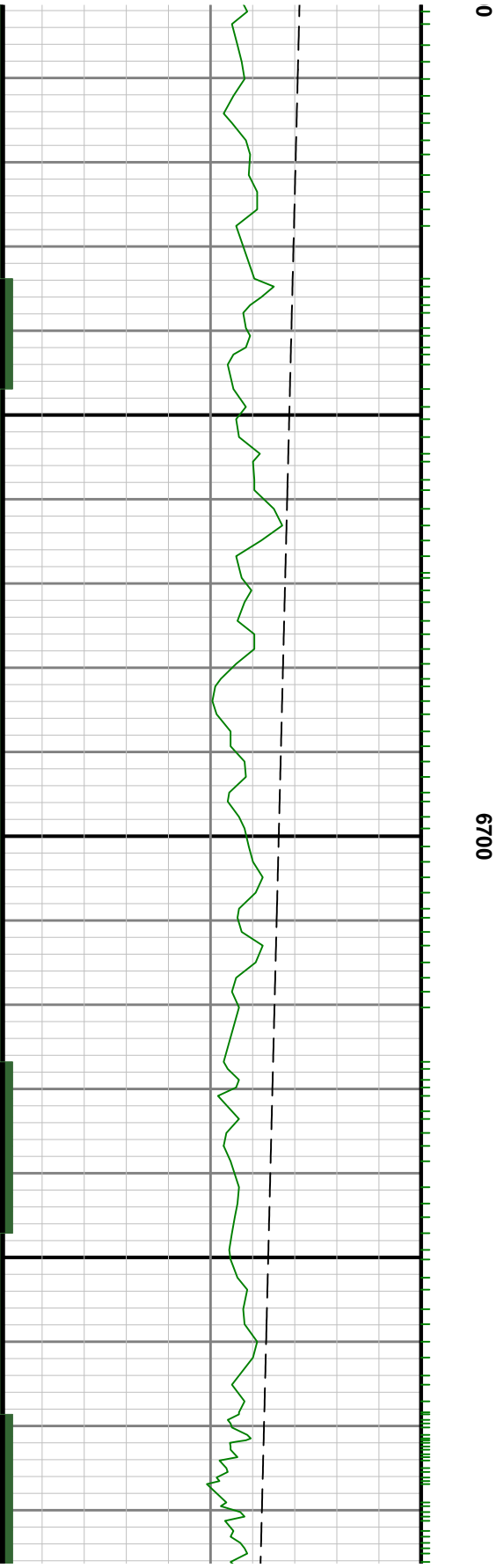
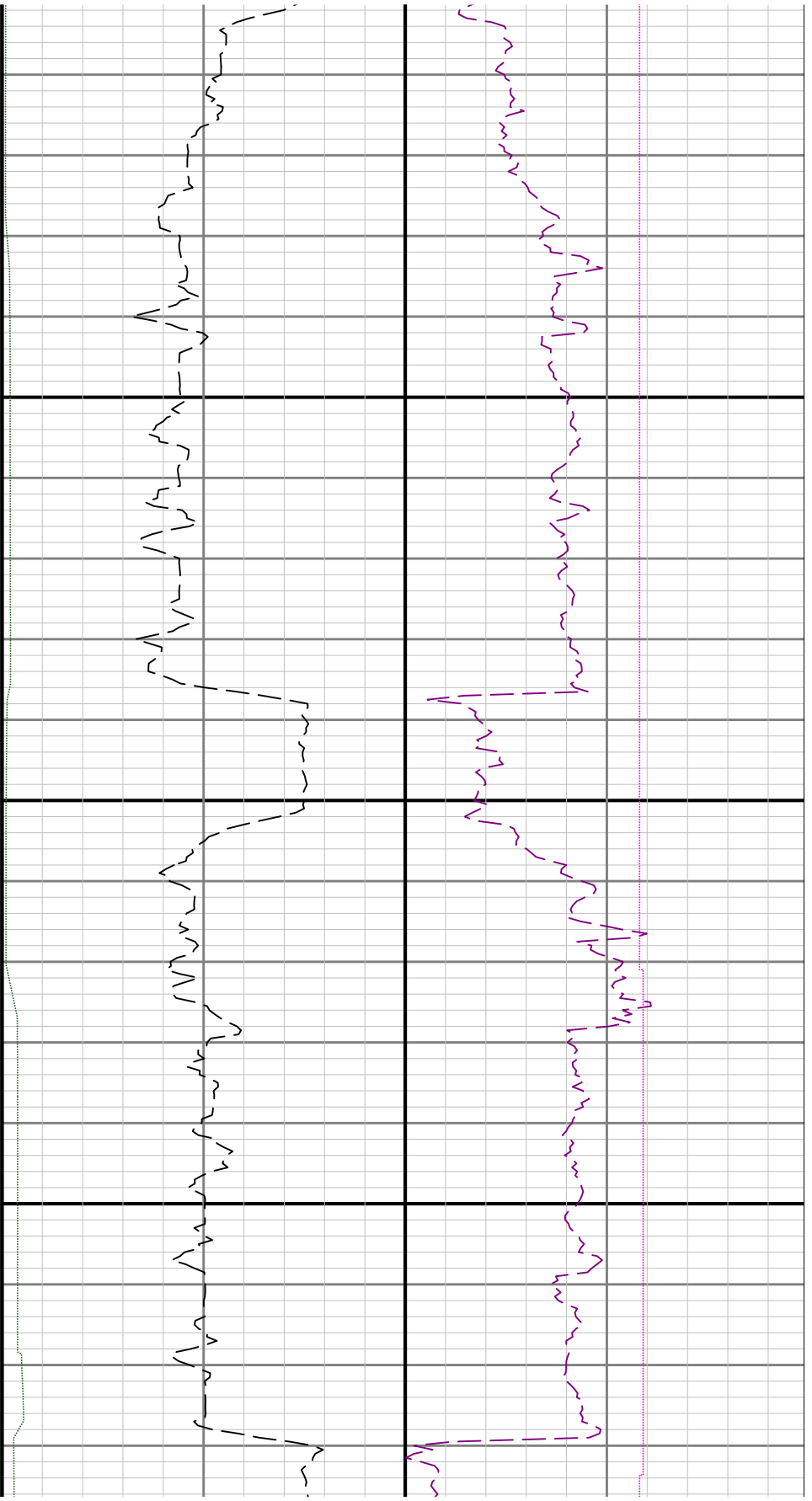


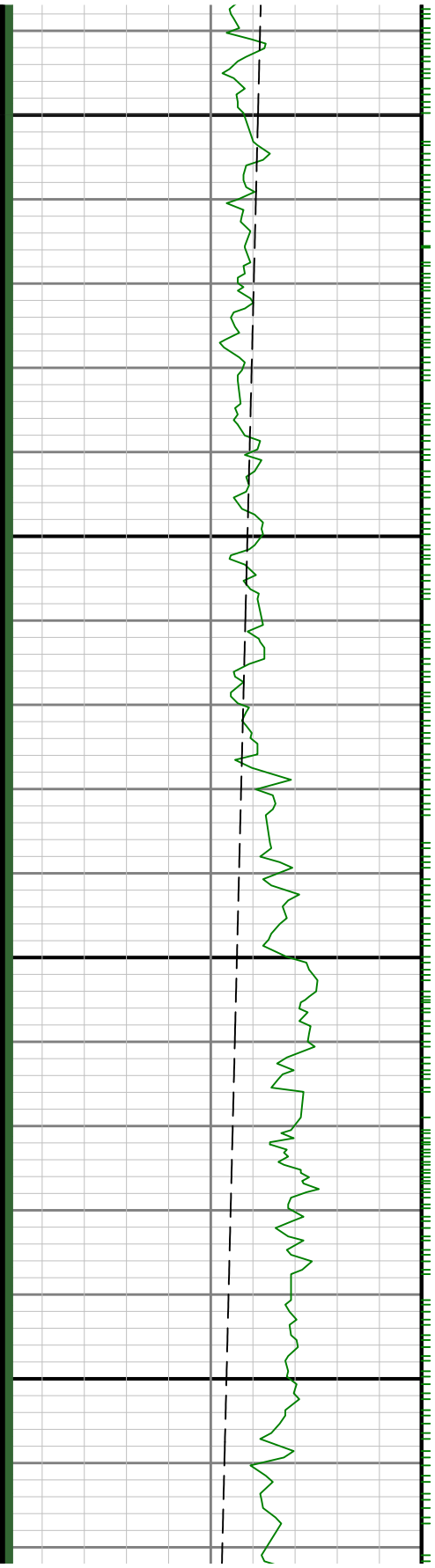


99

6500

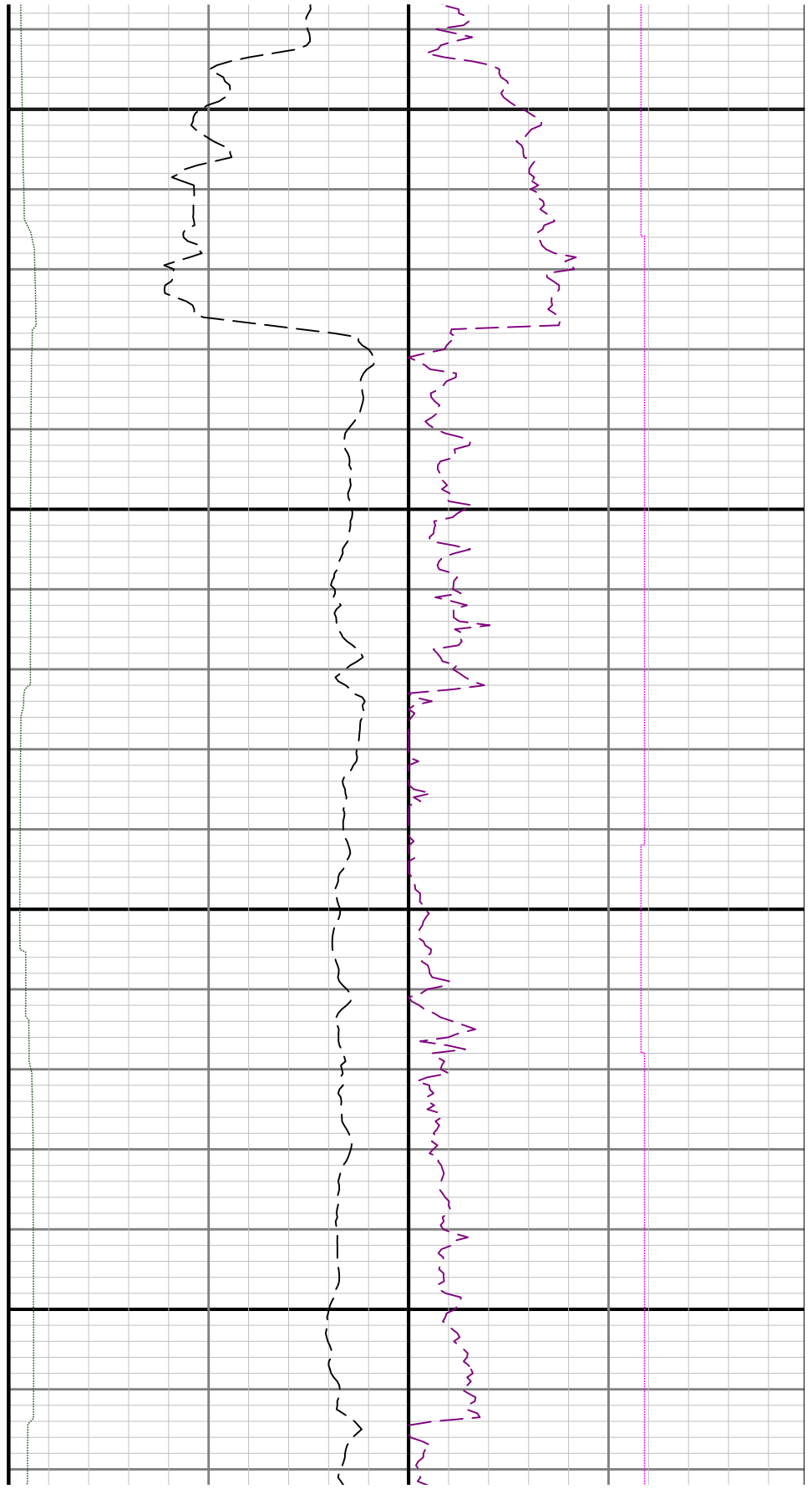


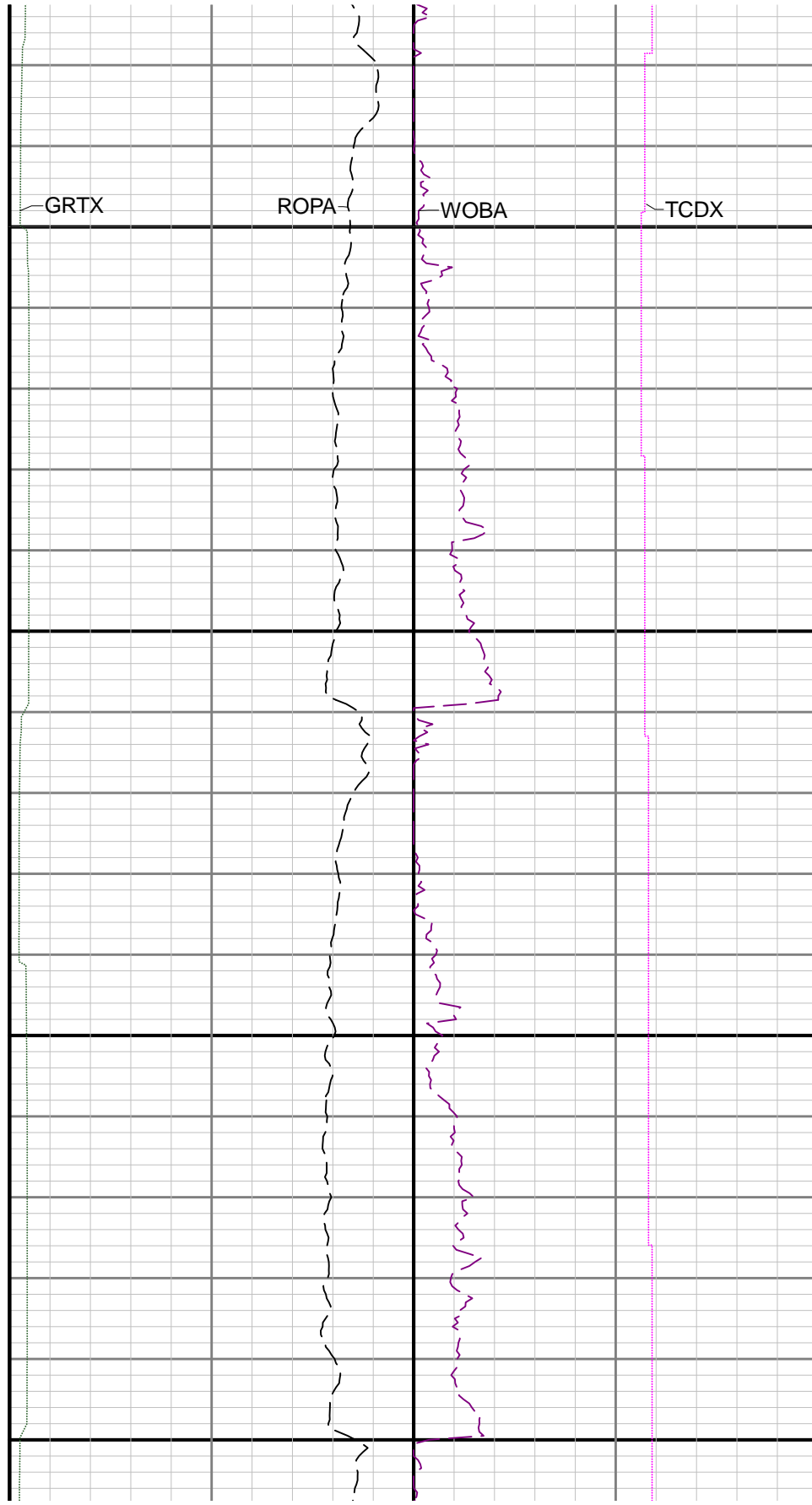
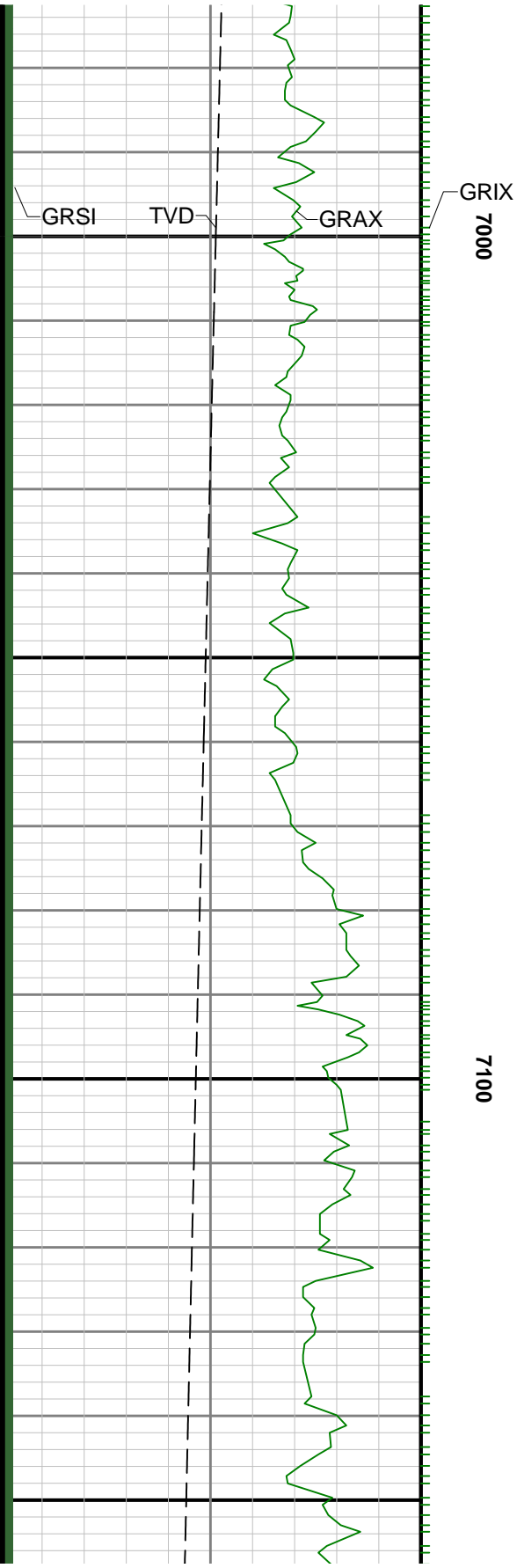


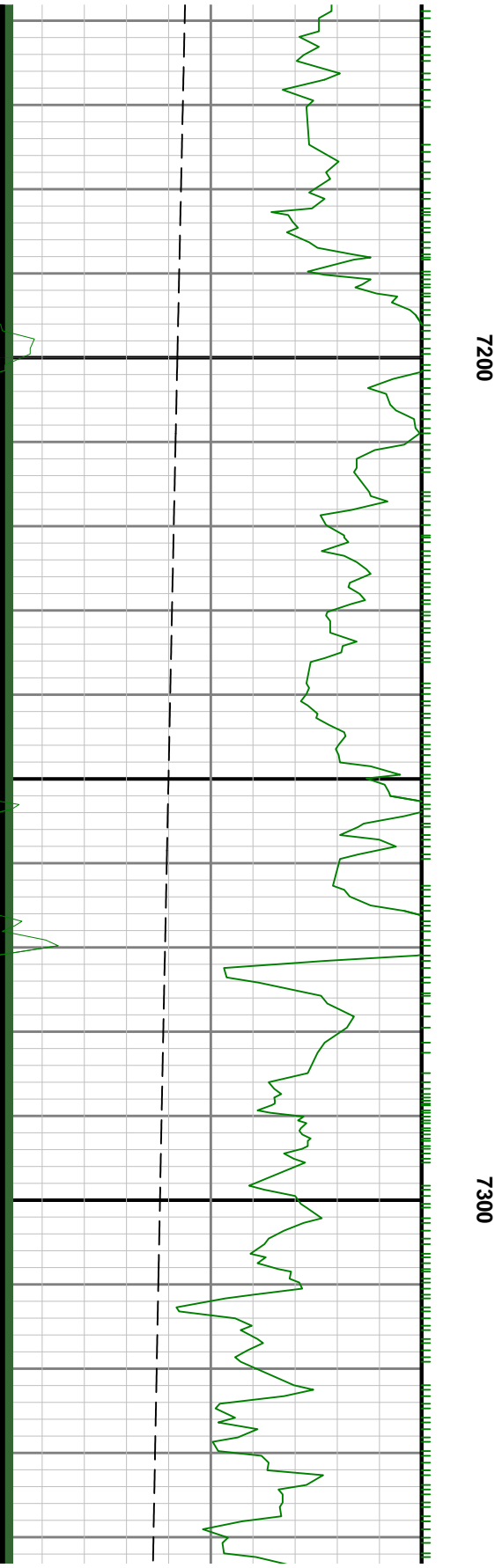
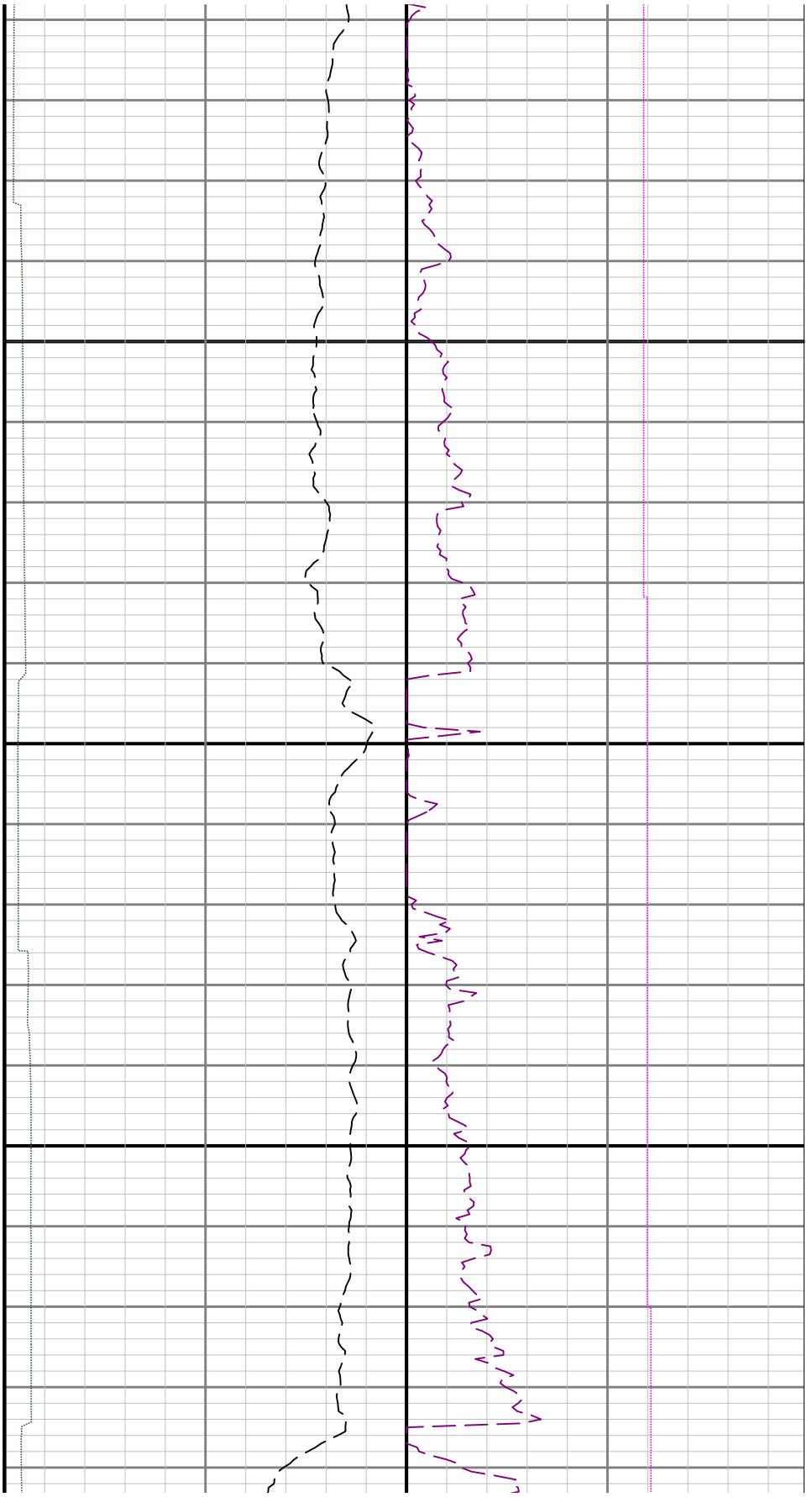


0069

0089

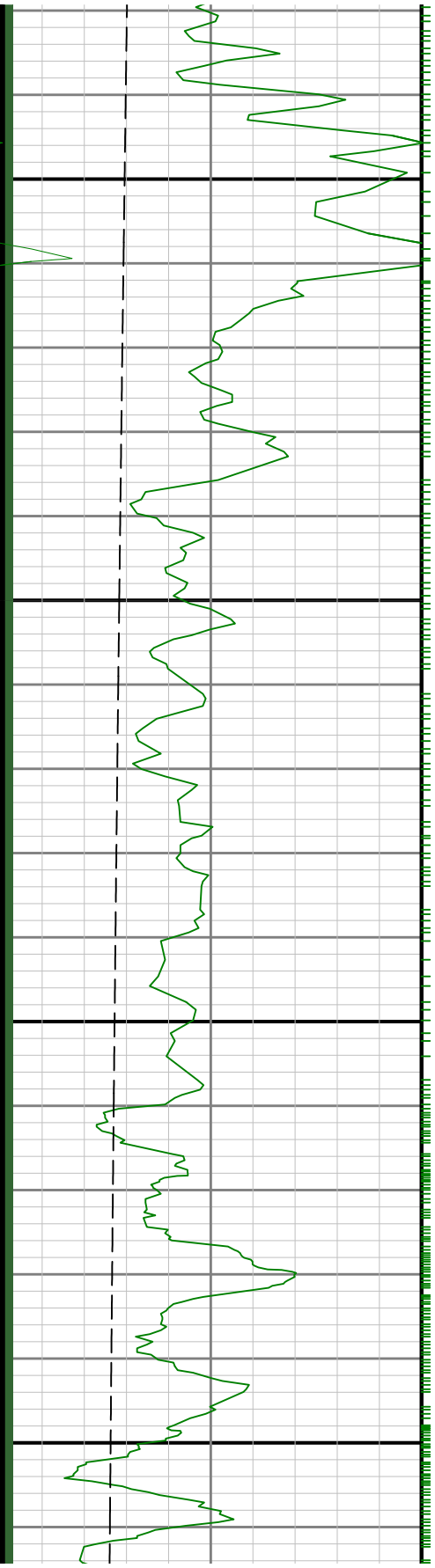






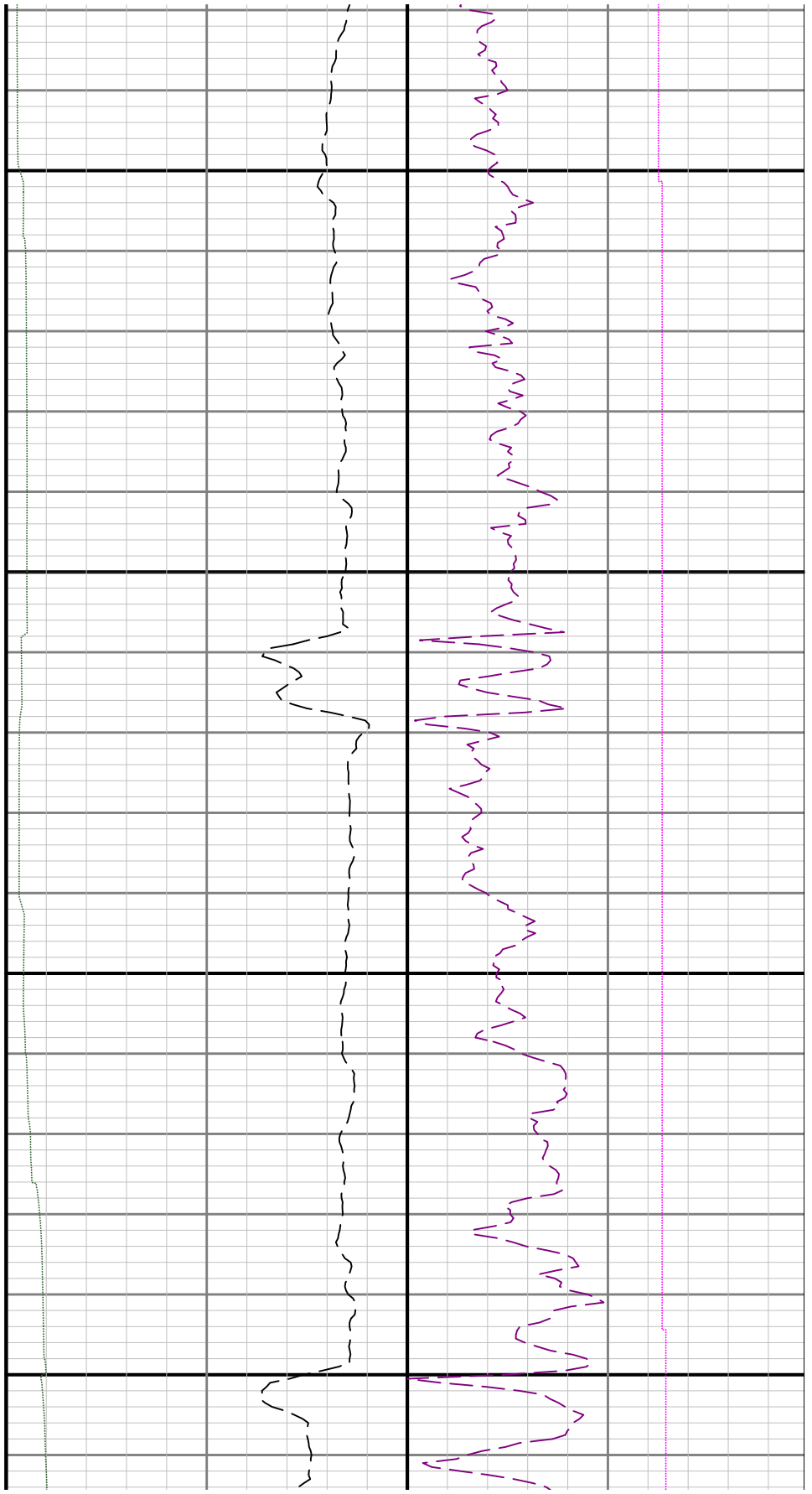


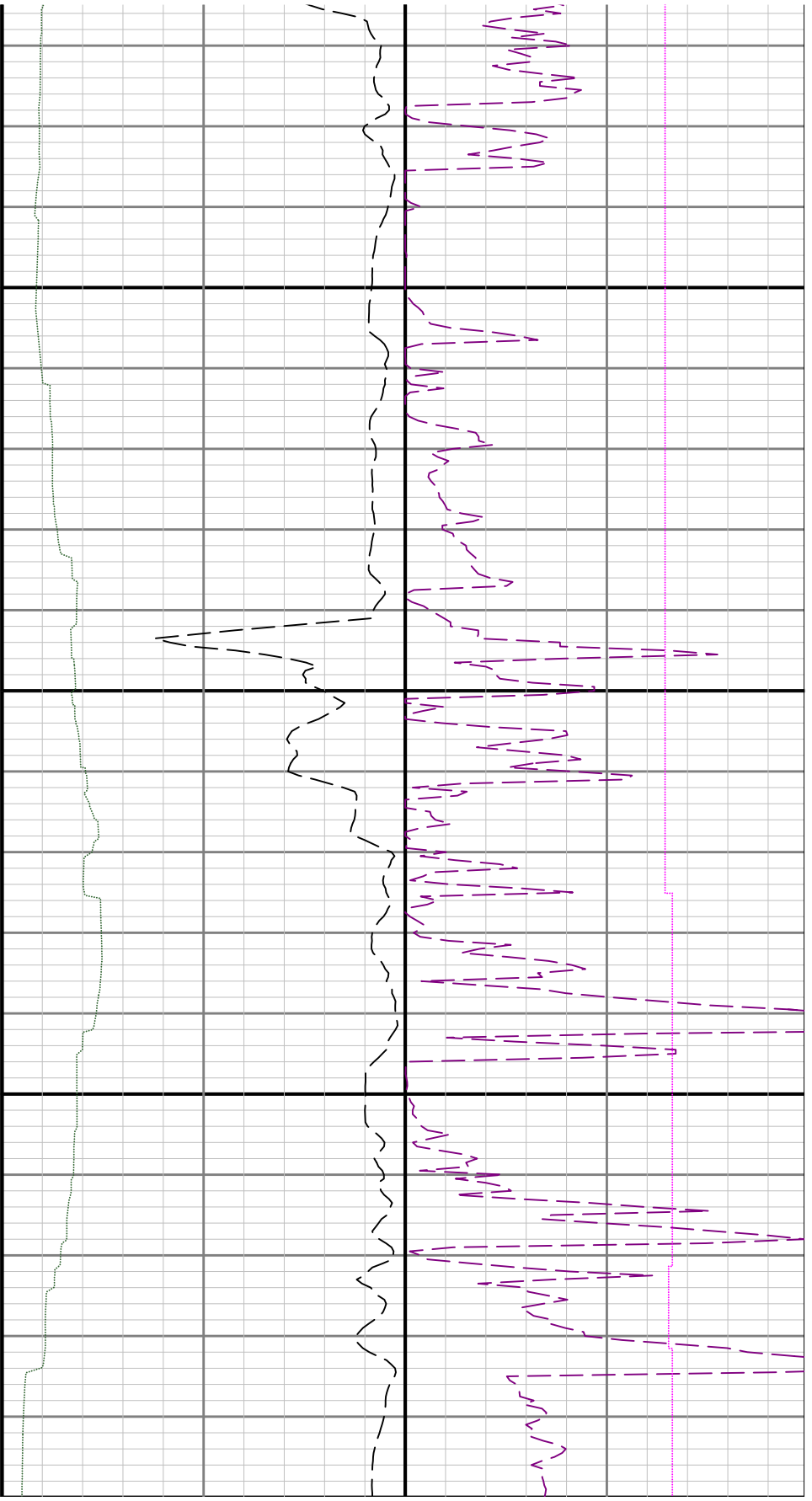




7600

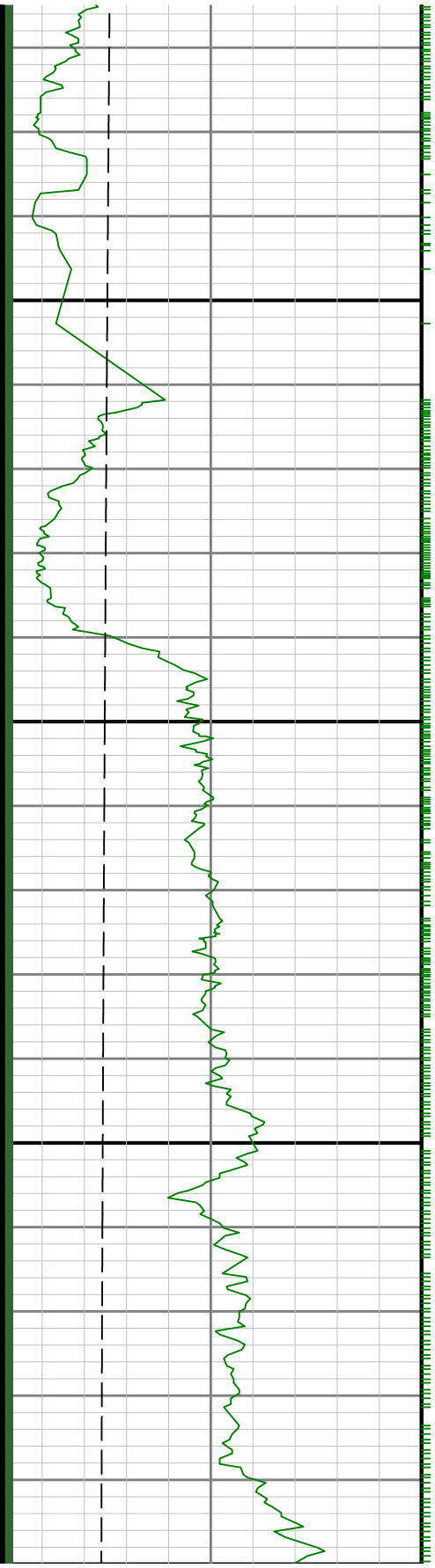
7700

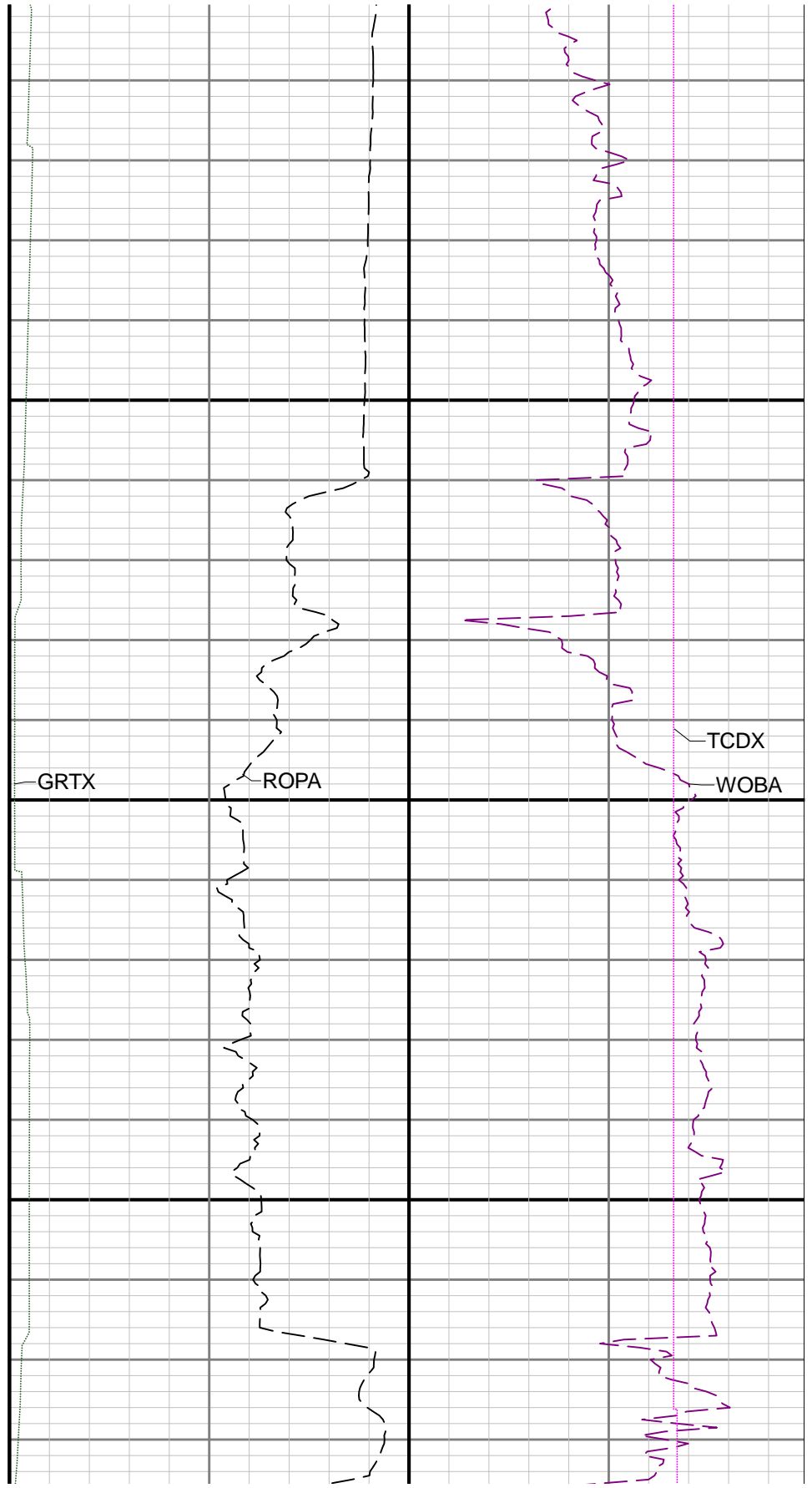
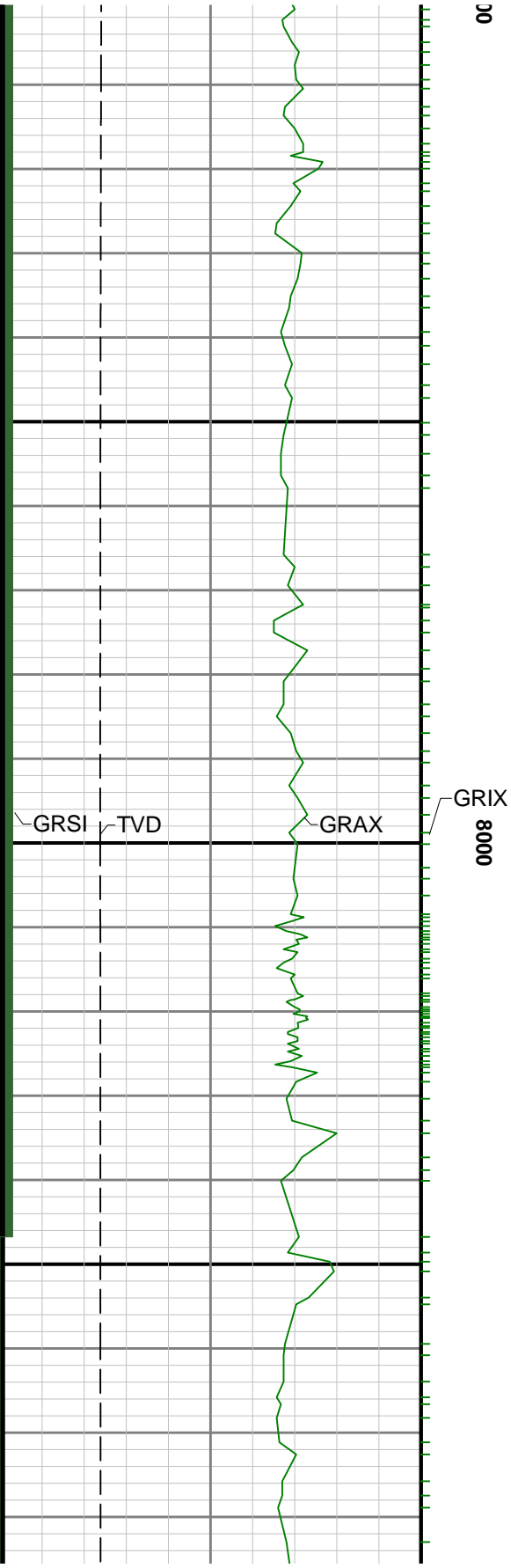


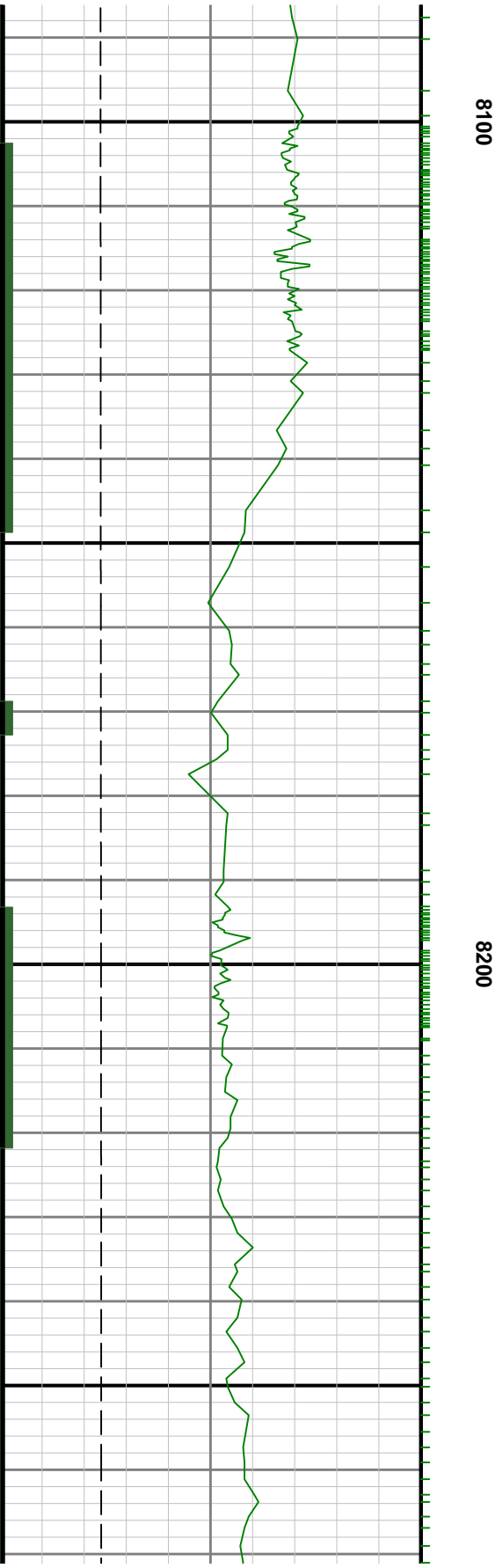
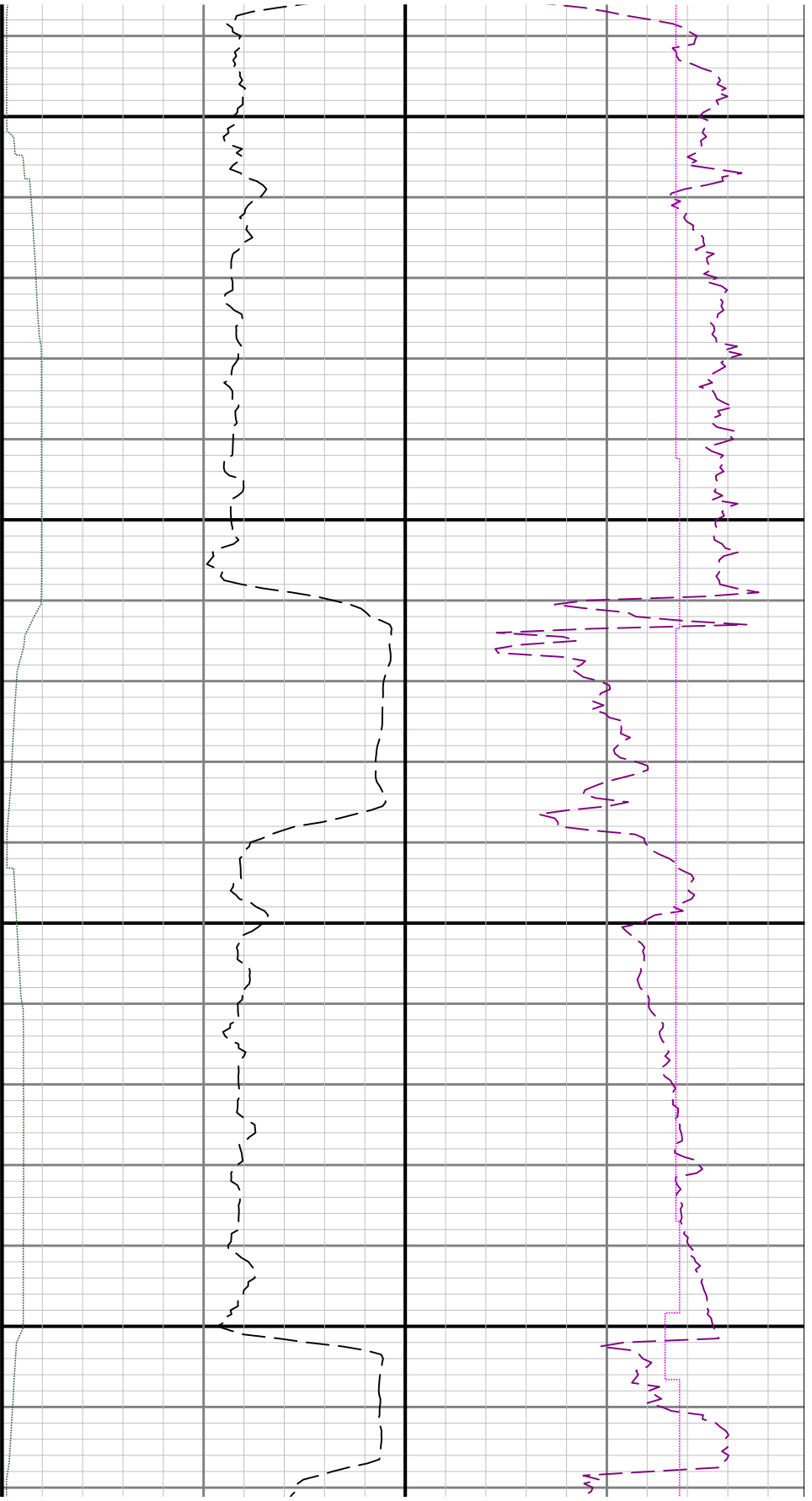


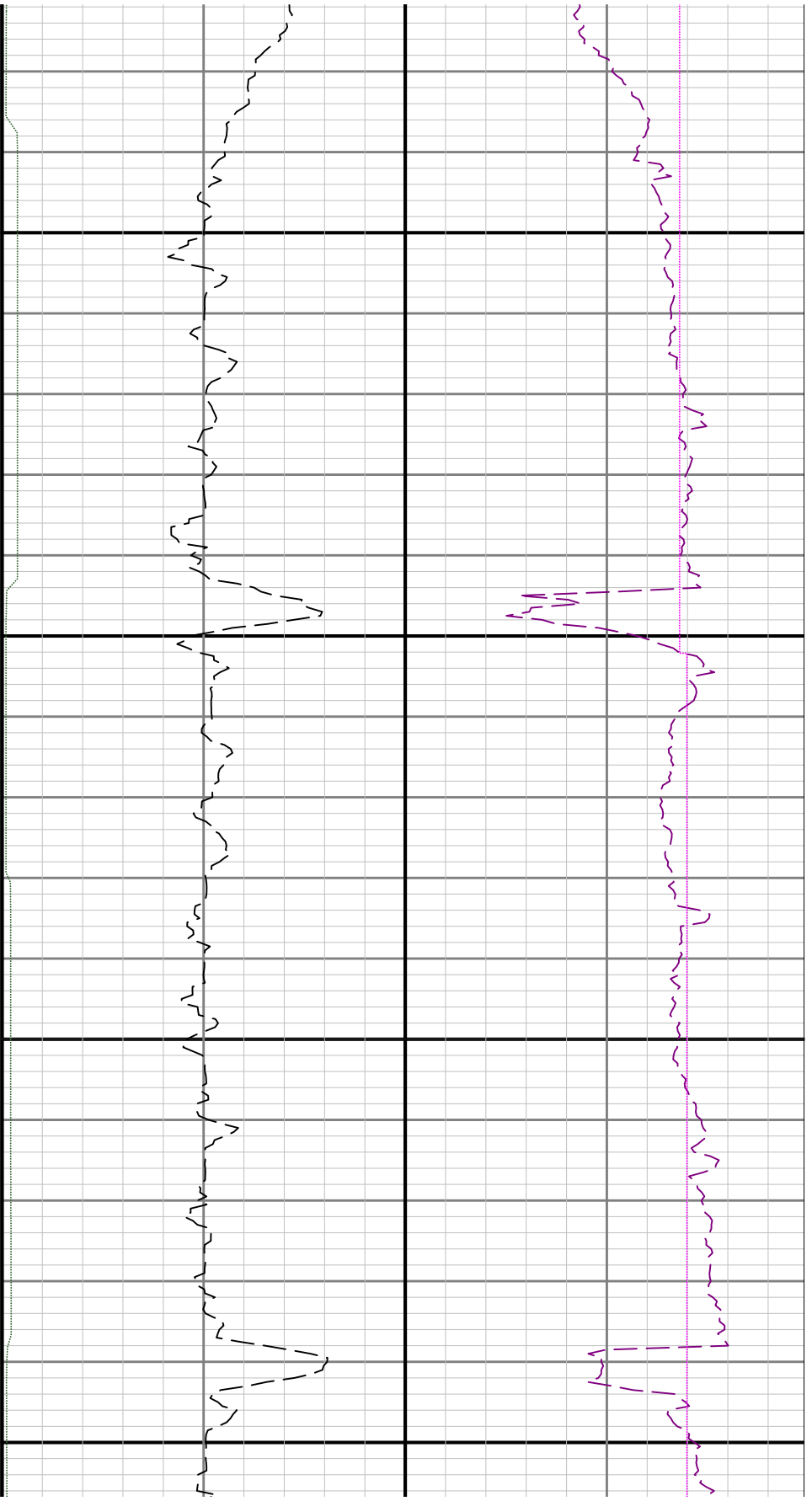
7800

79



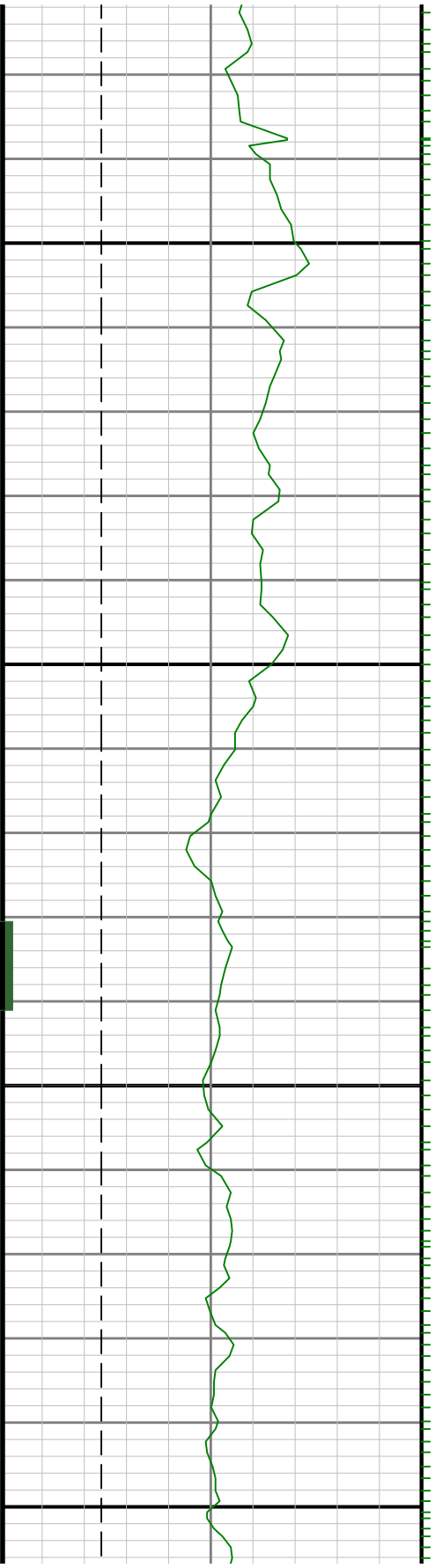


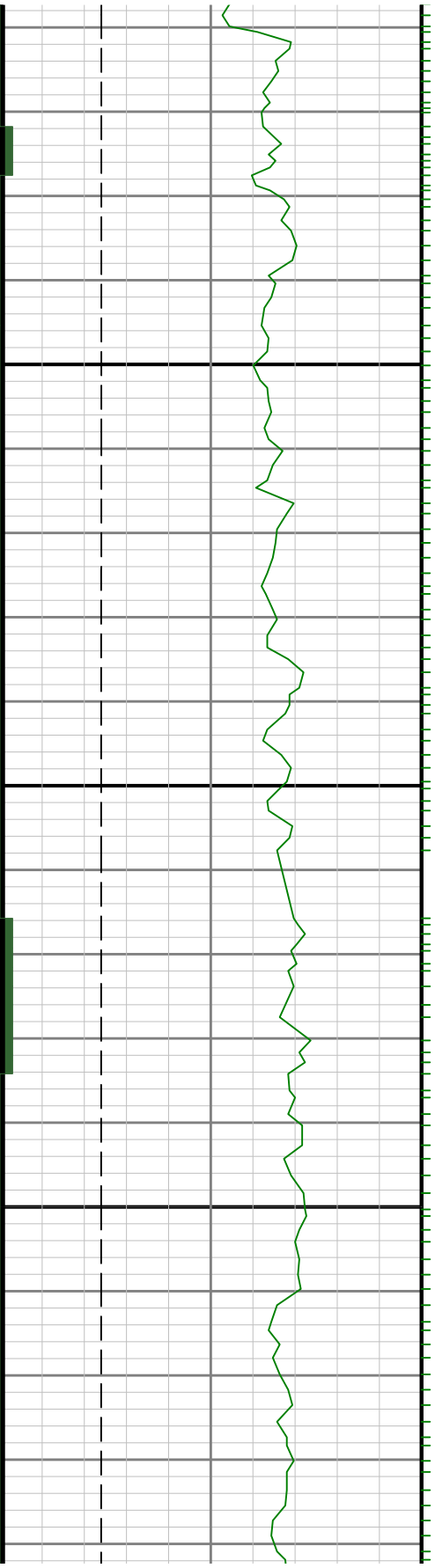




8300

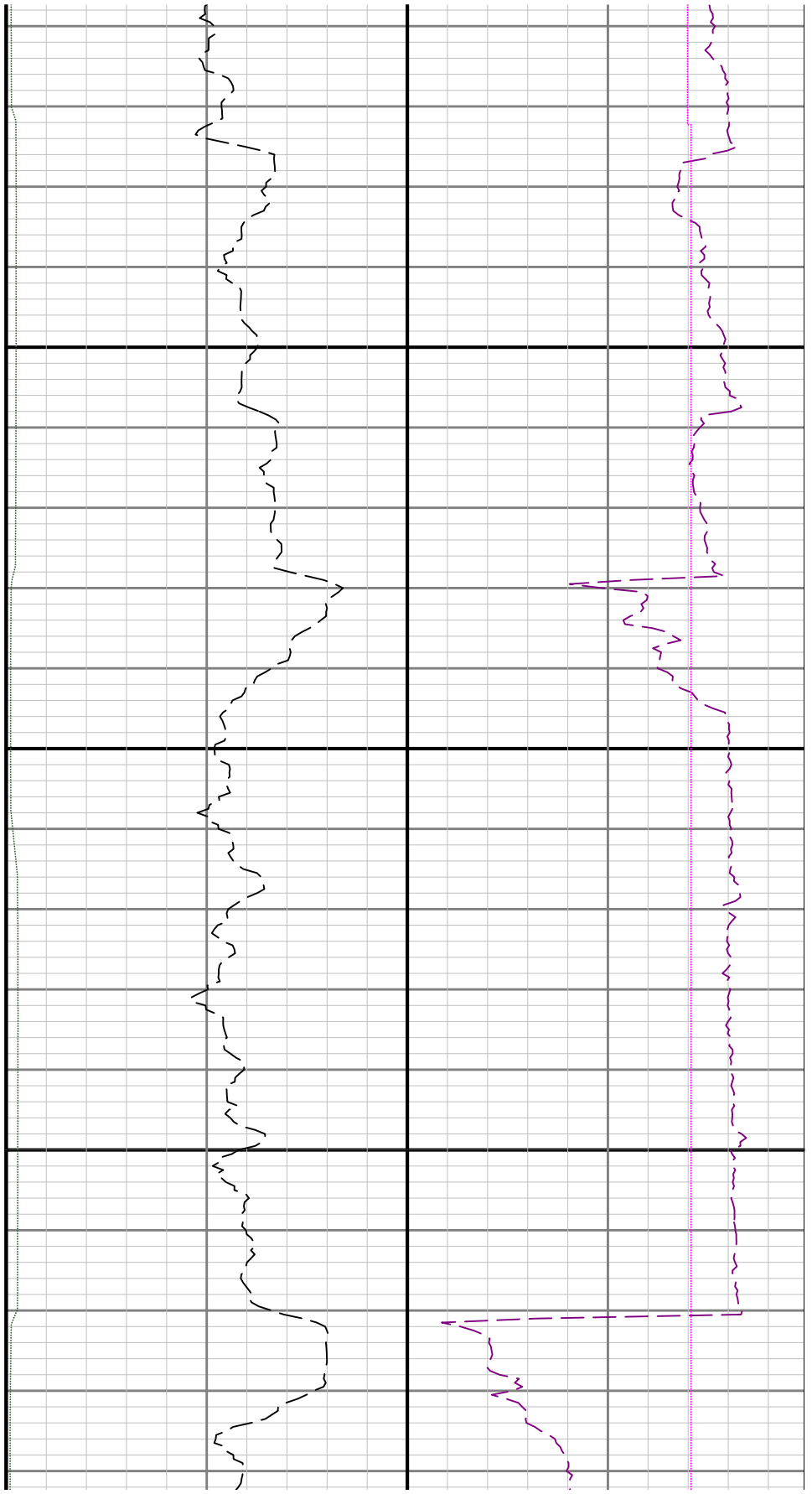
8400

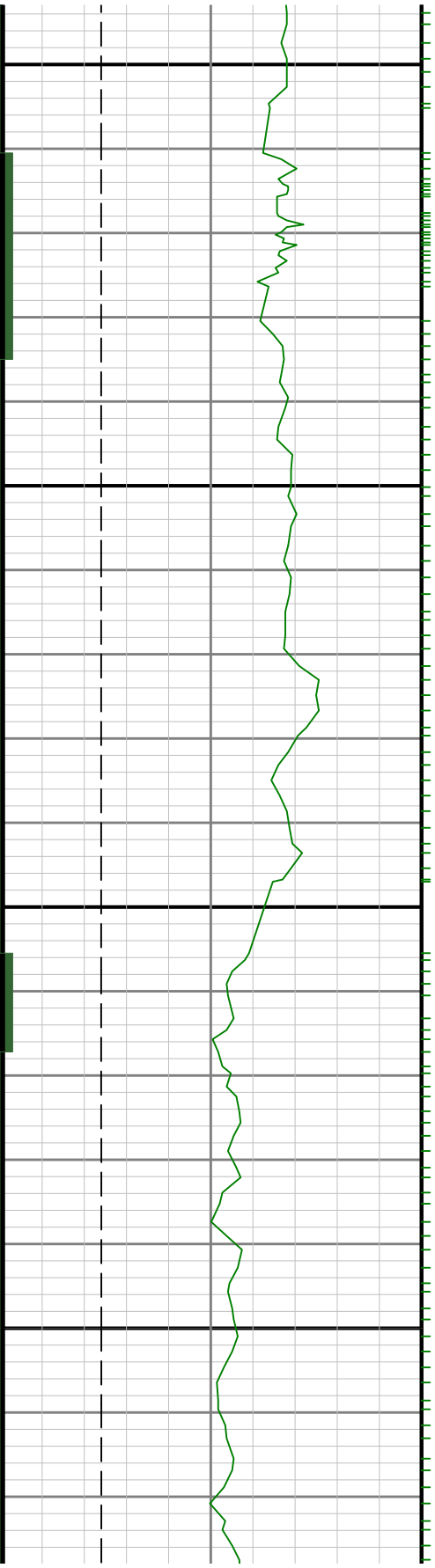




8500

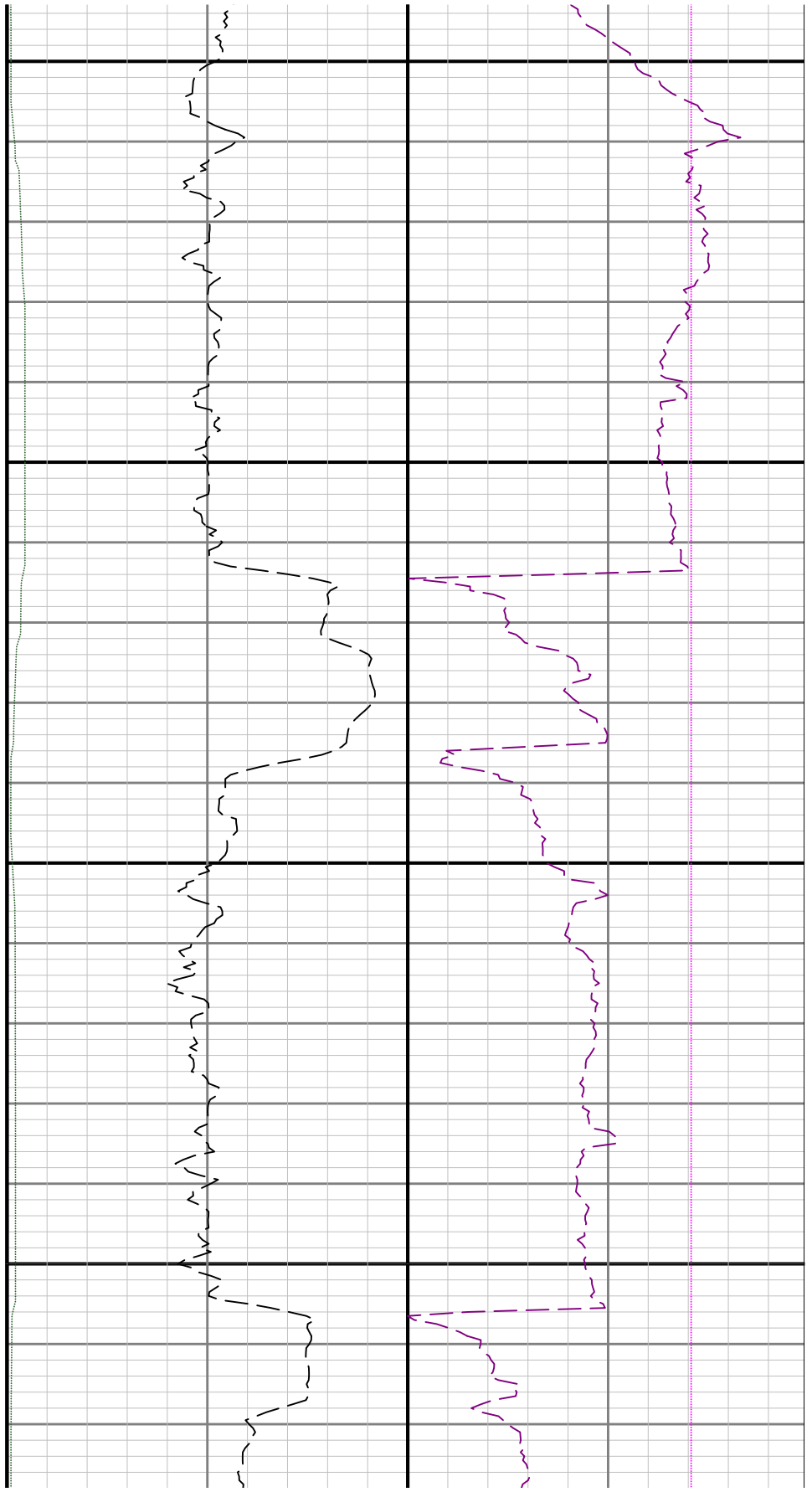
0098



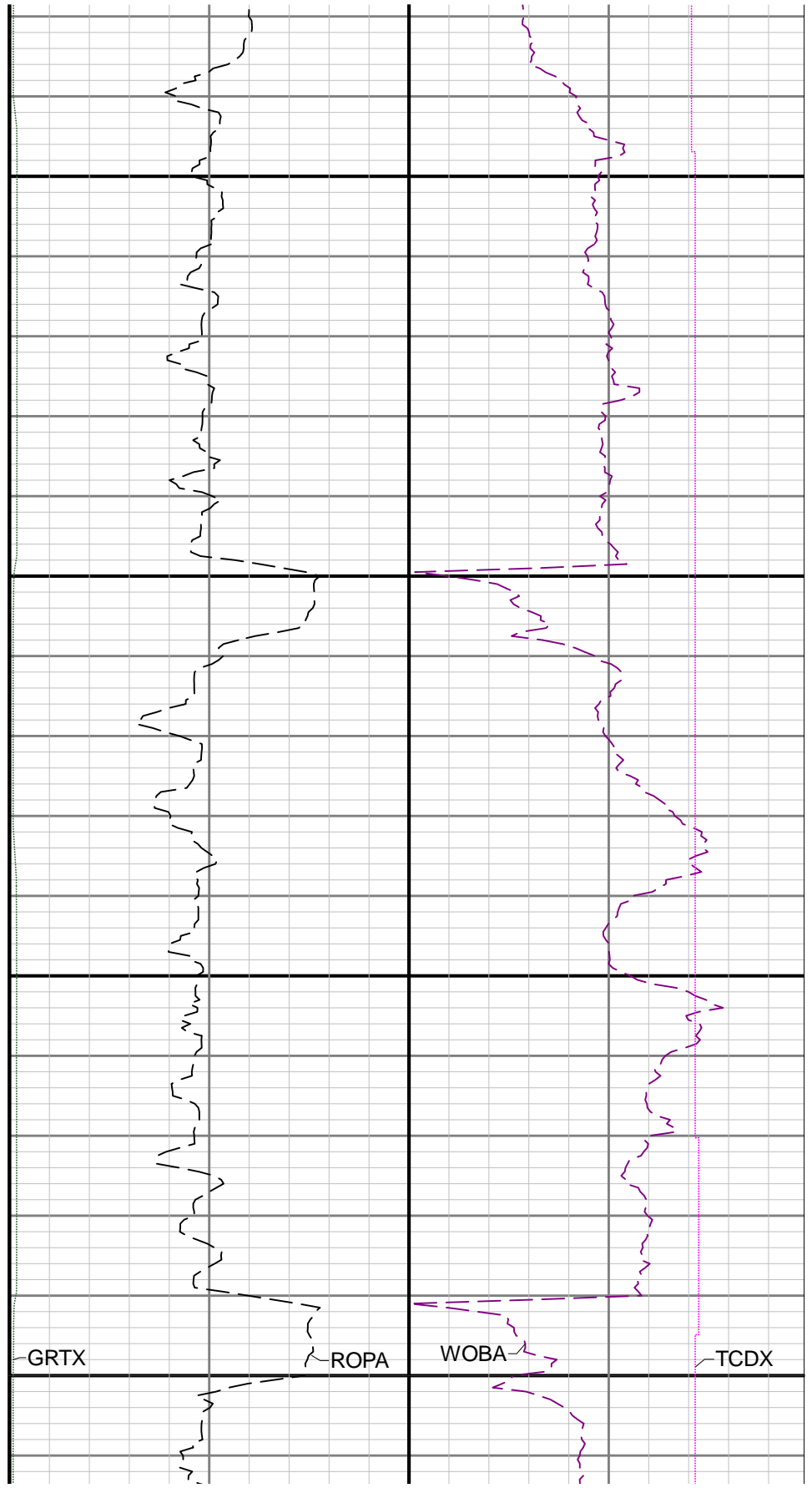
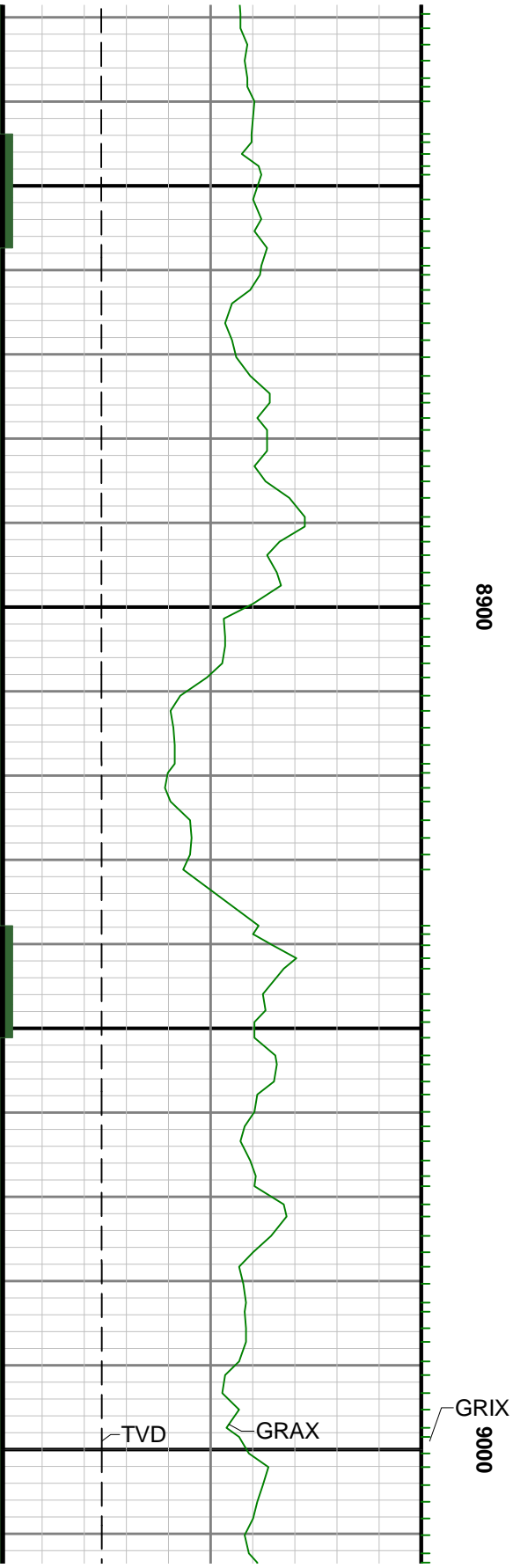


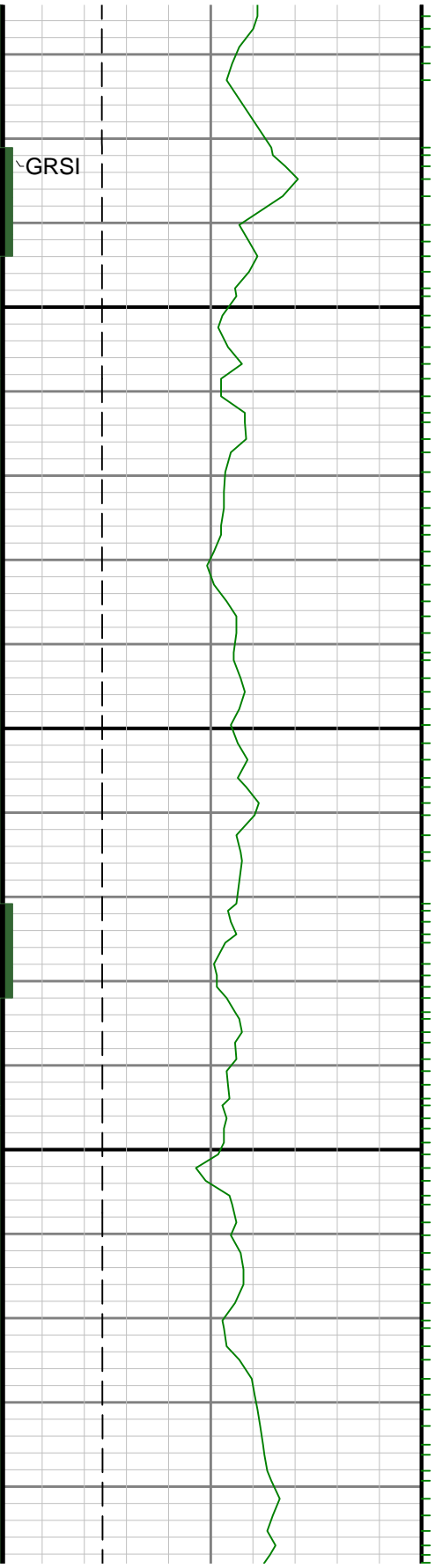
8700

8800



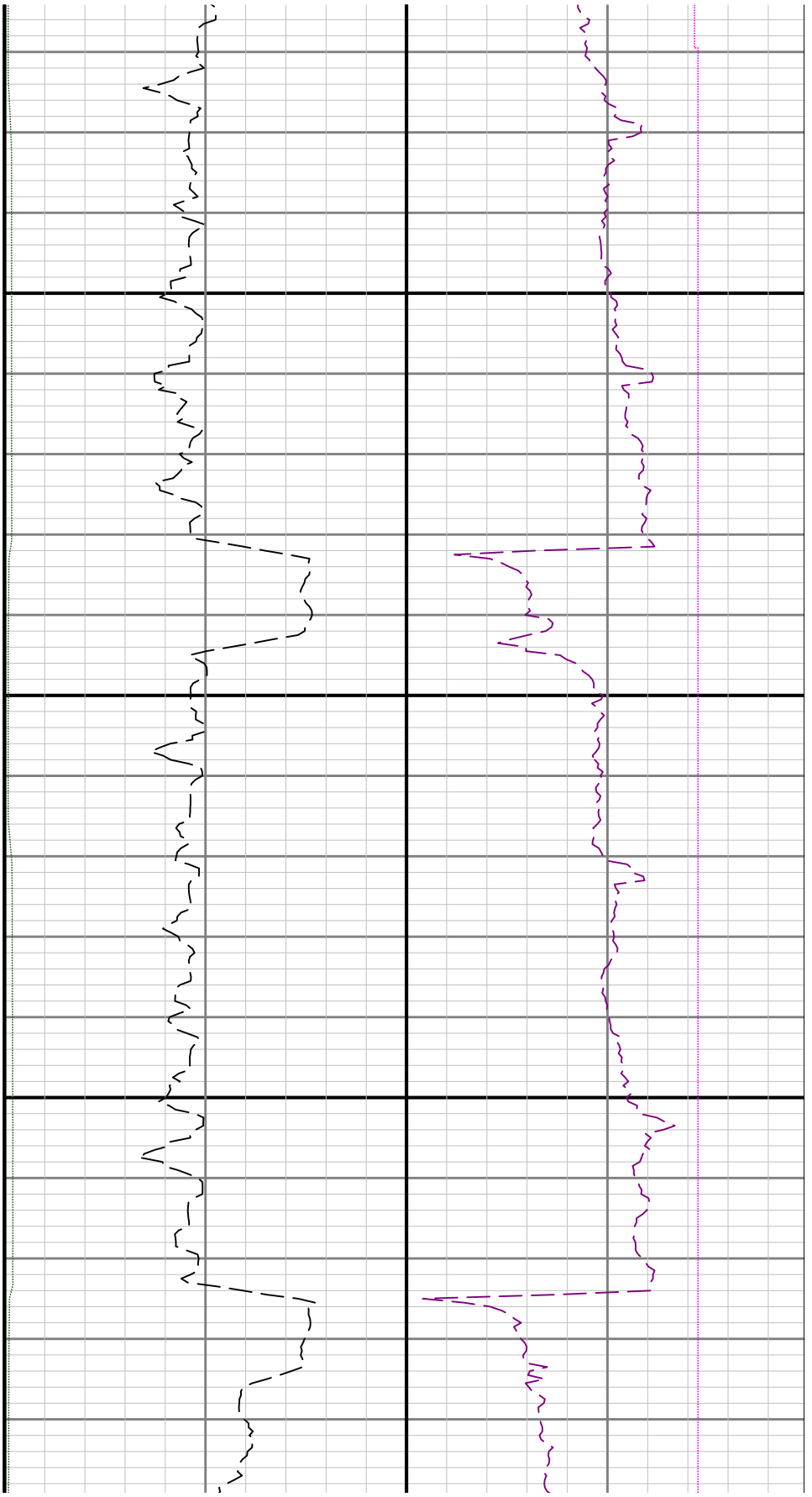


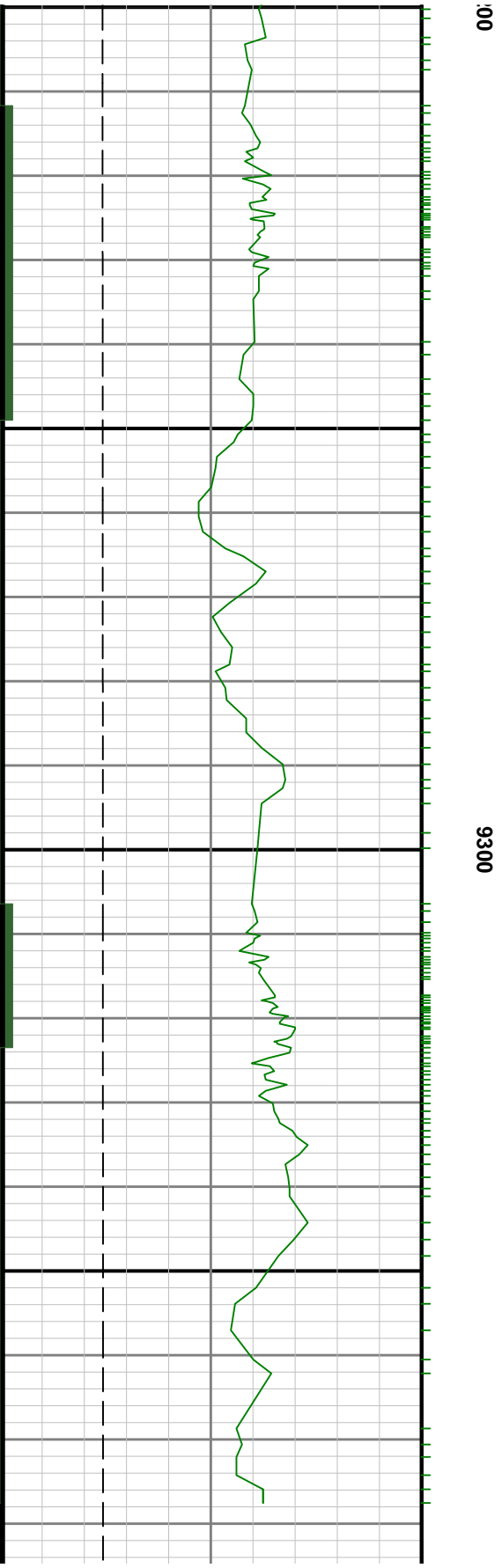
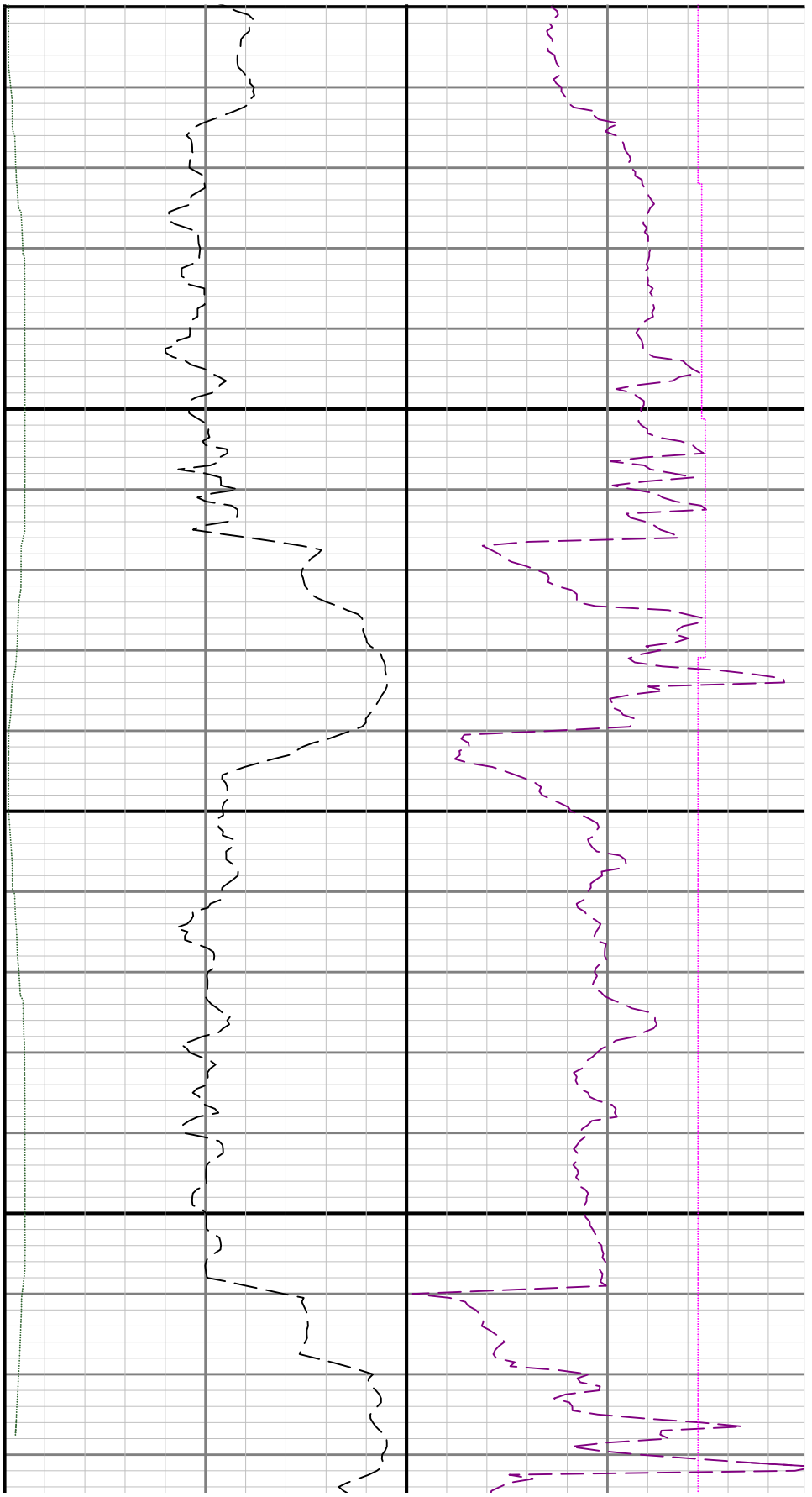


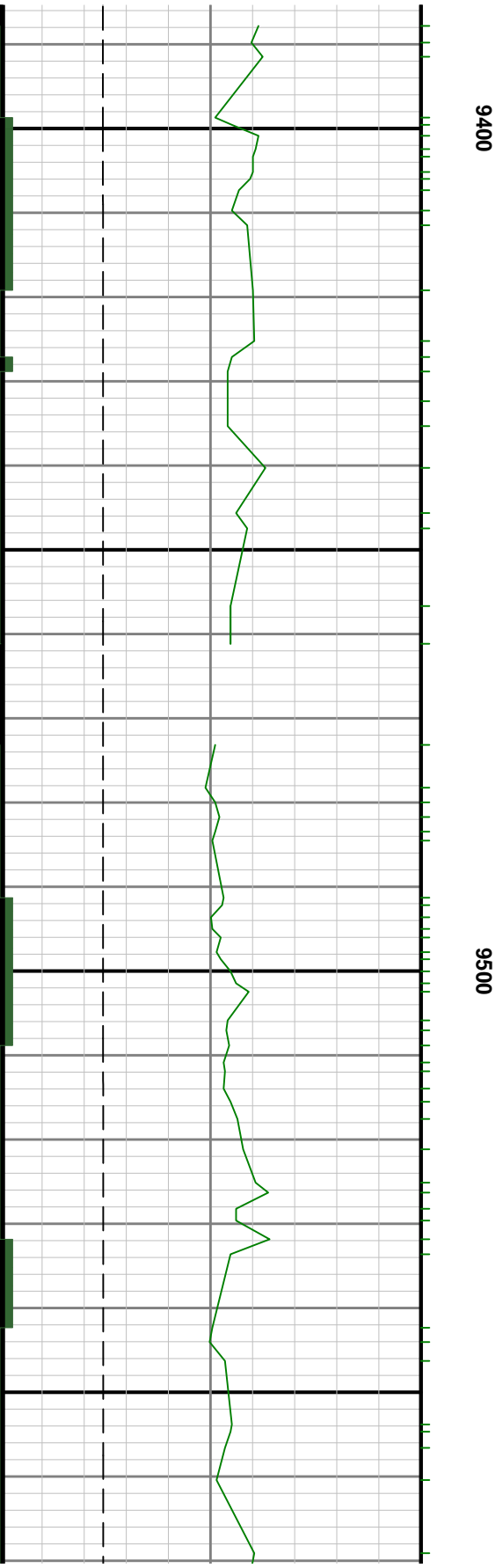
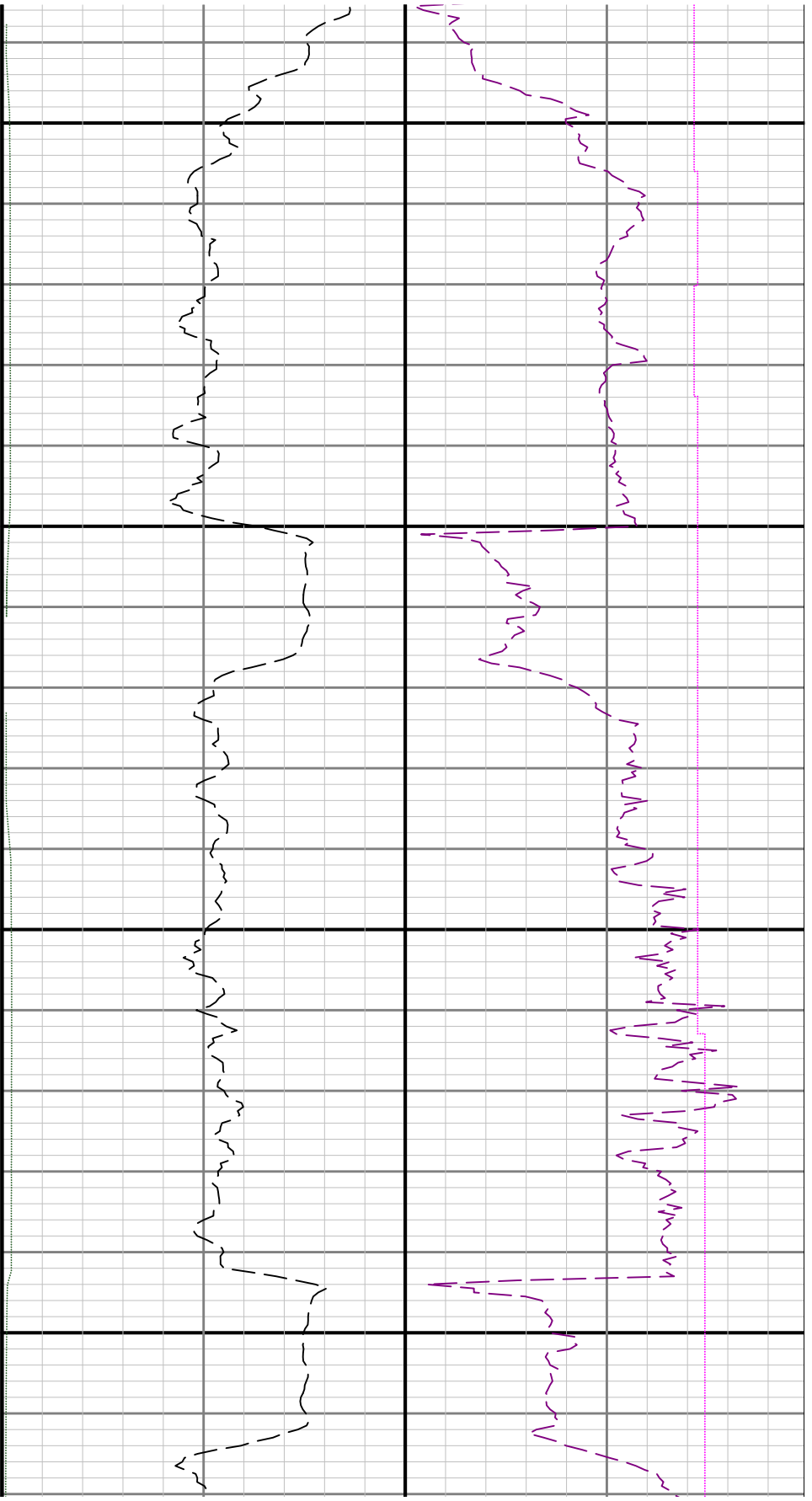


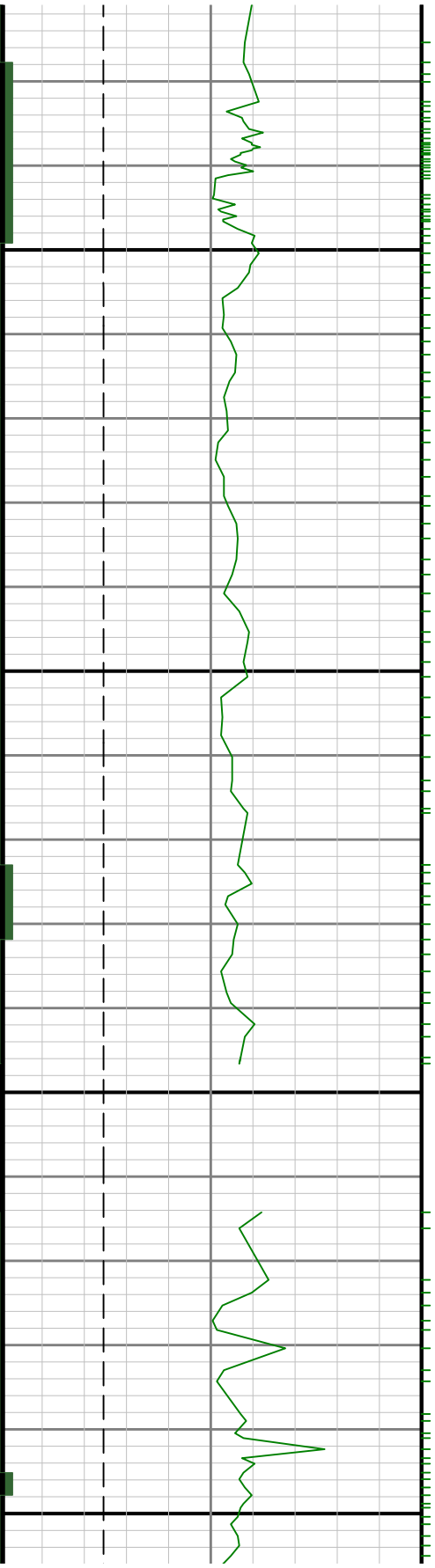
9100

91



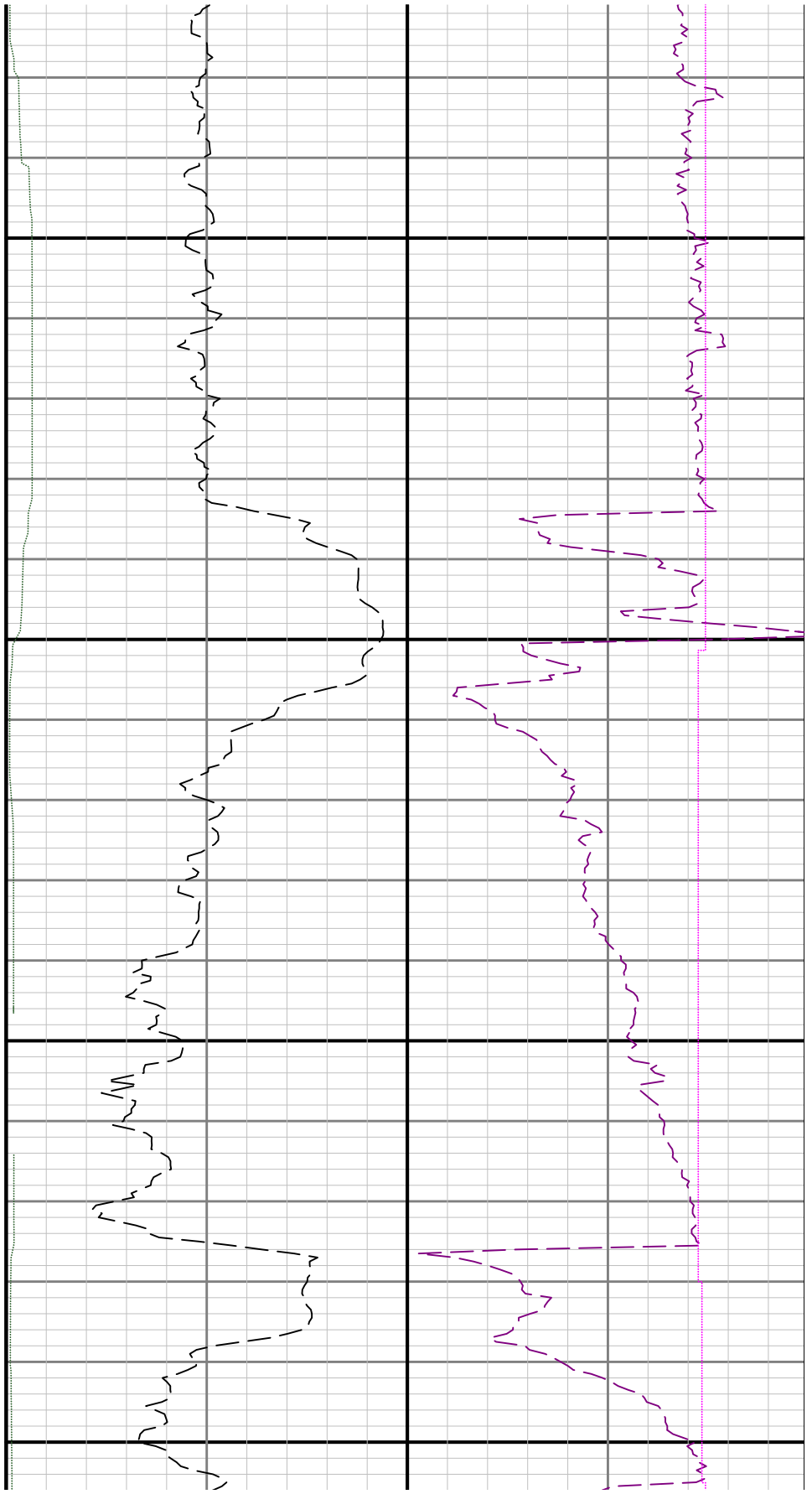


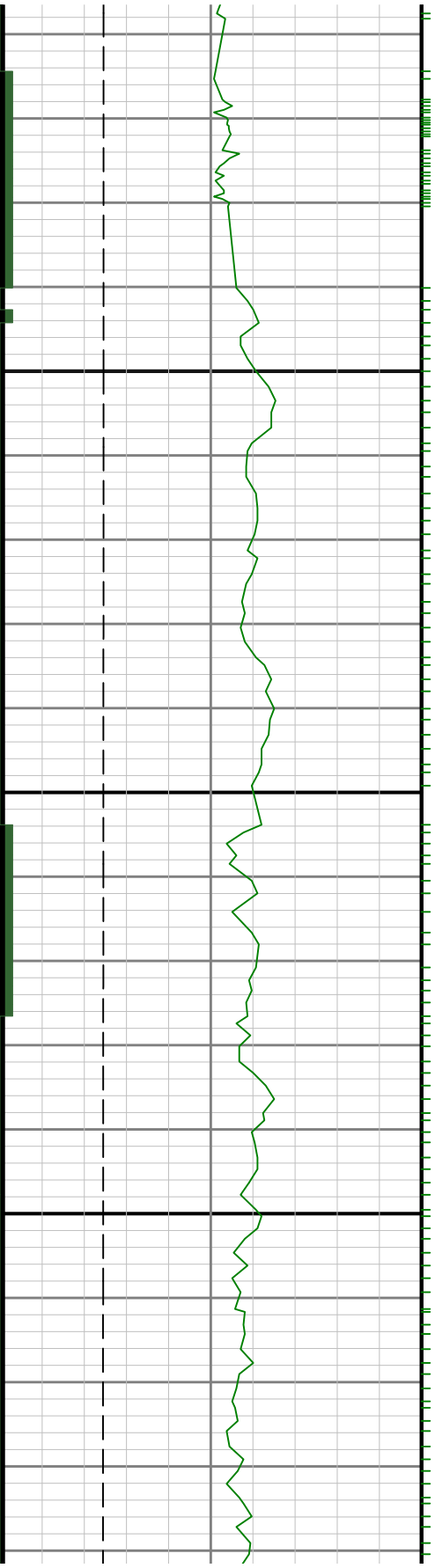




0096

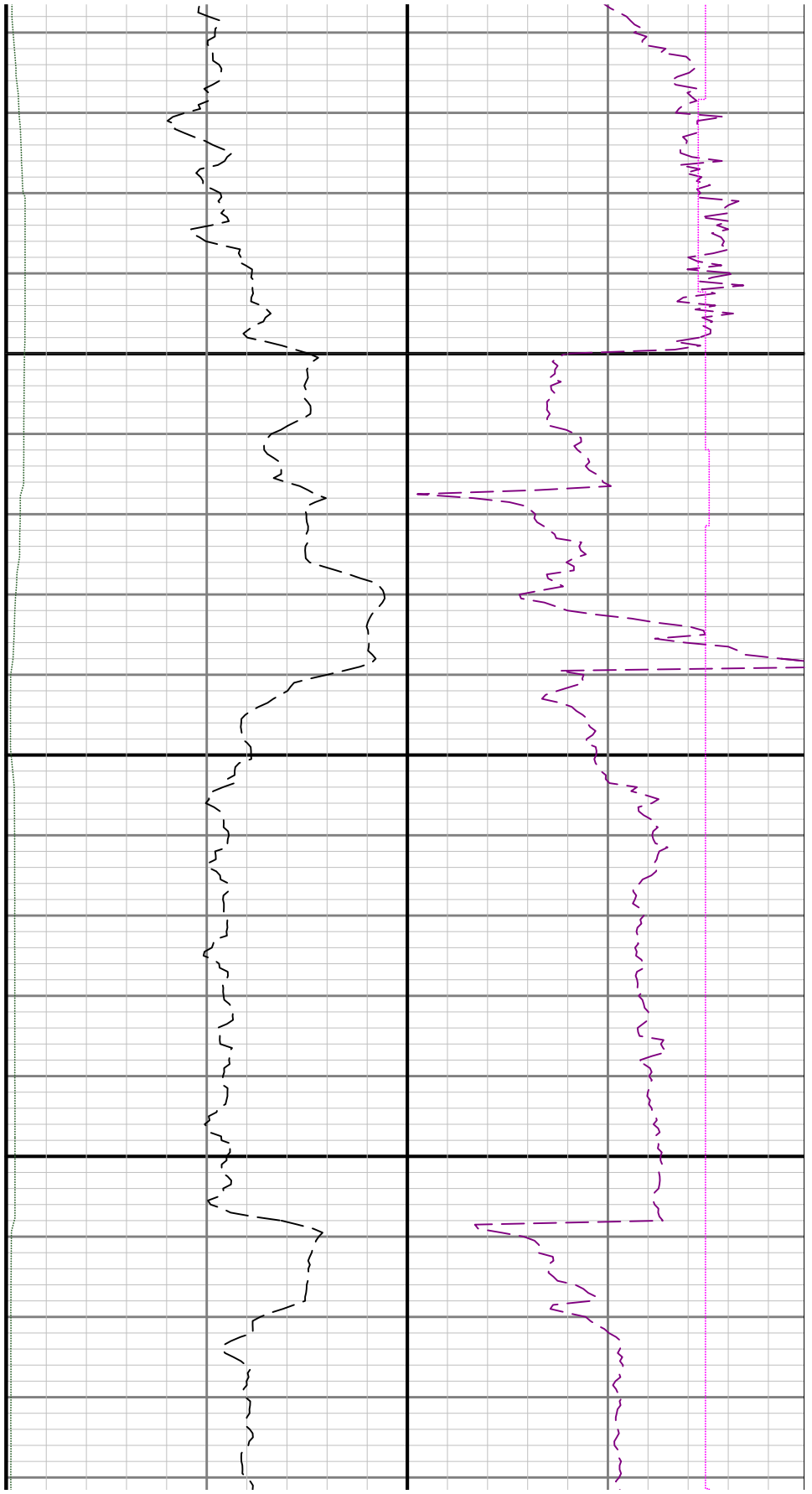
9700

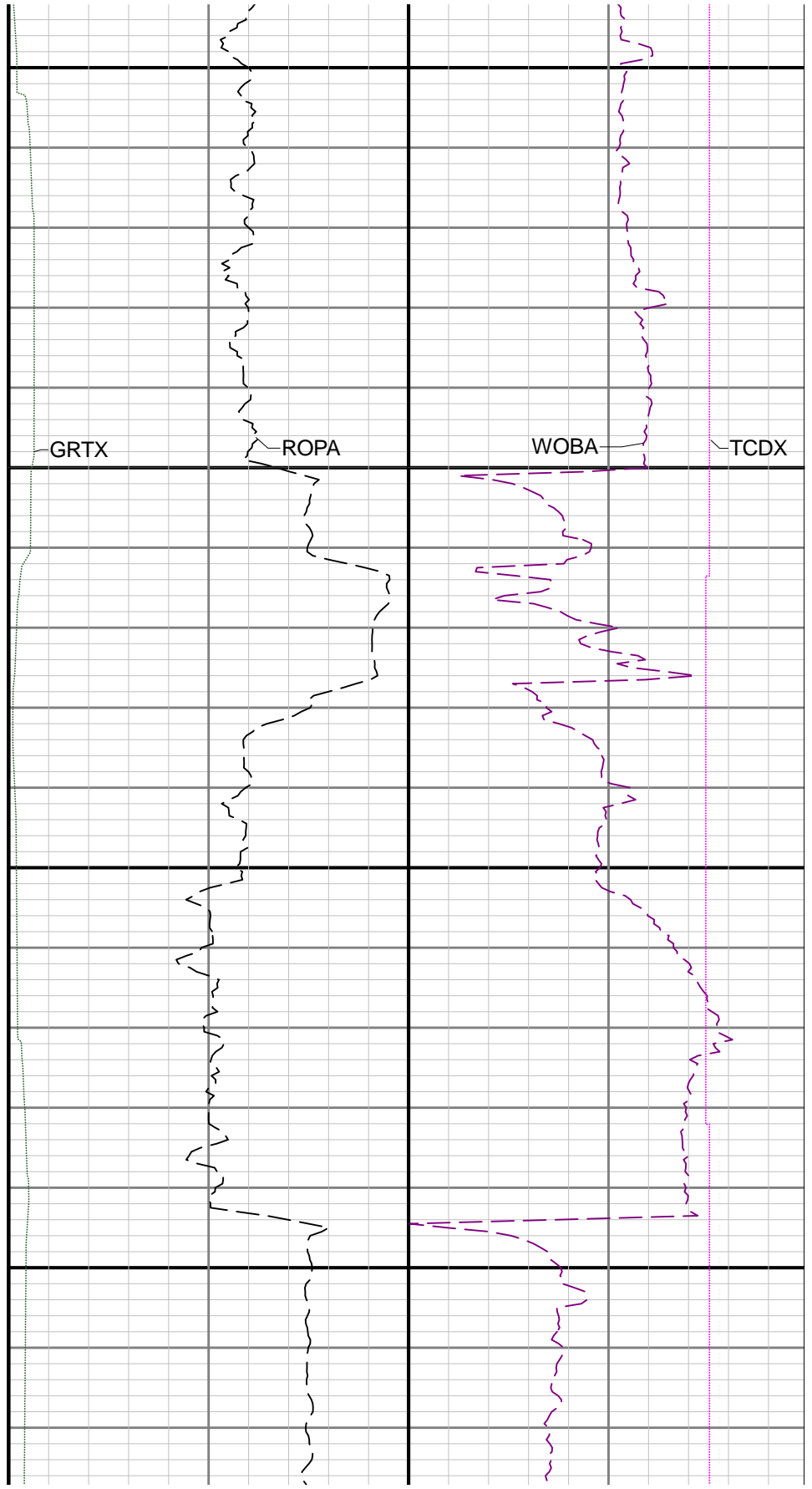
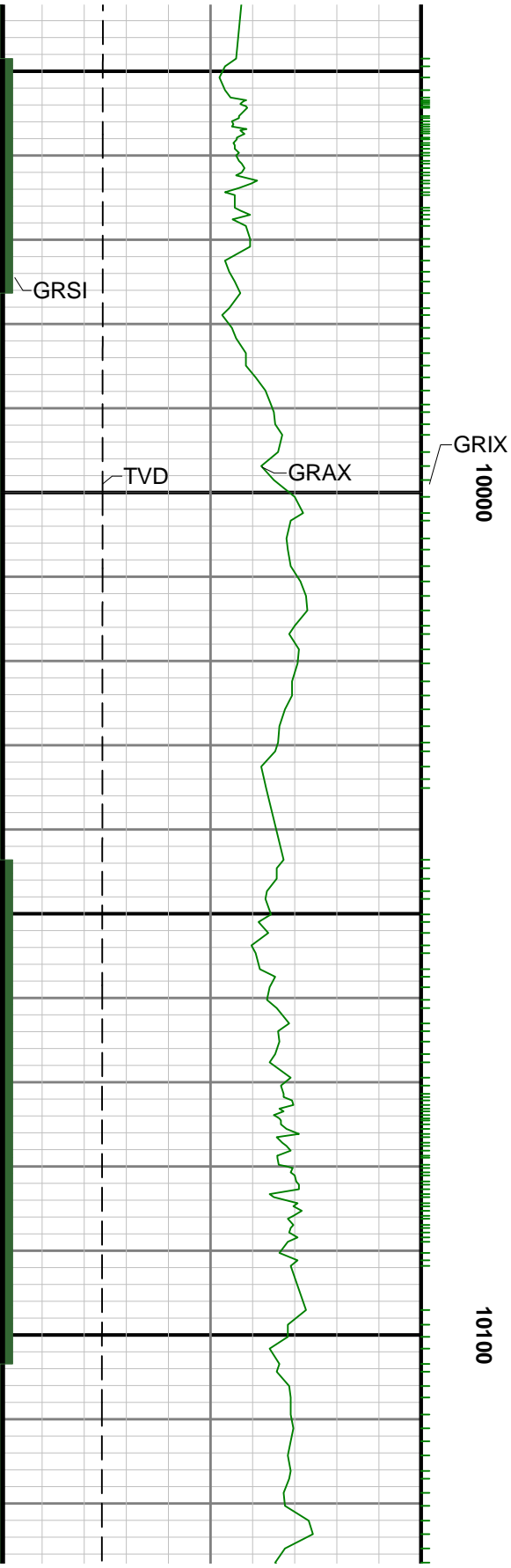


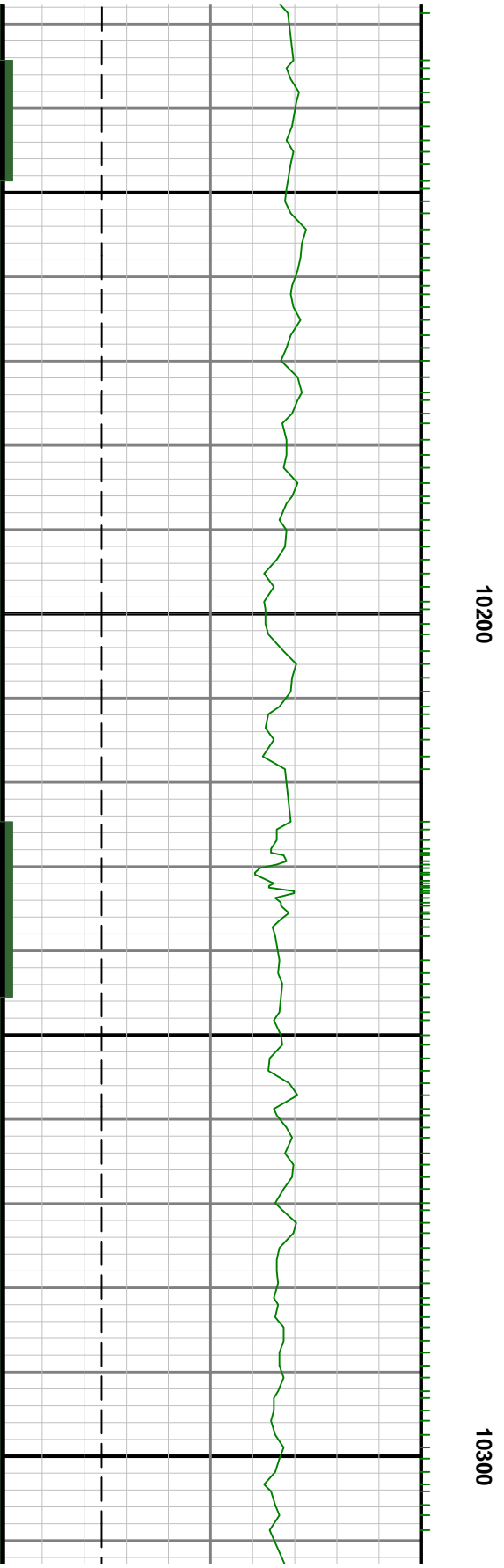


00800

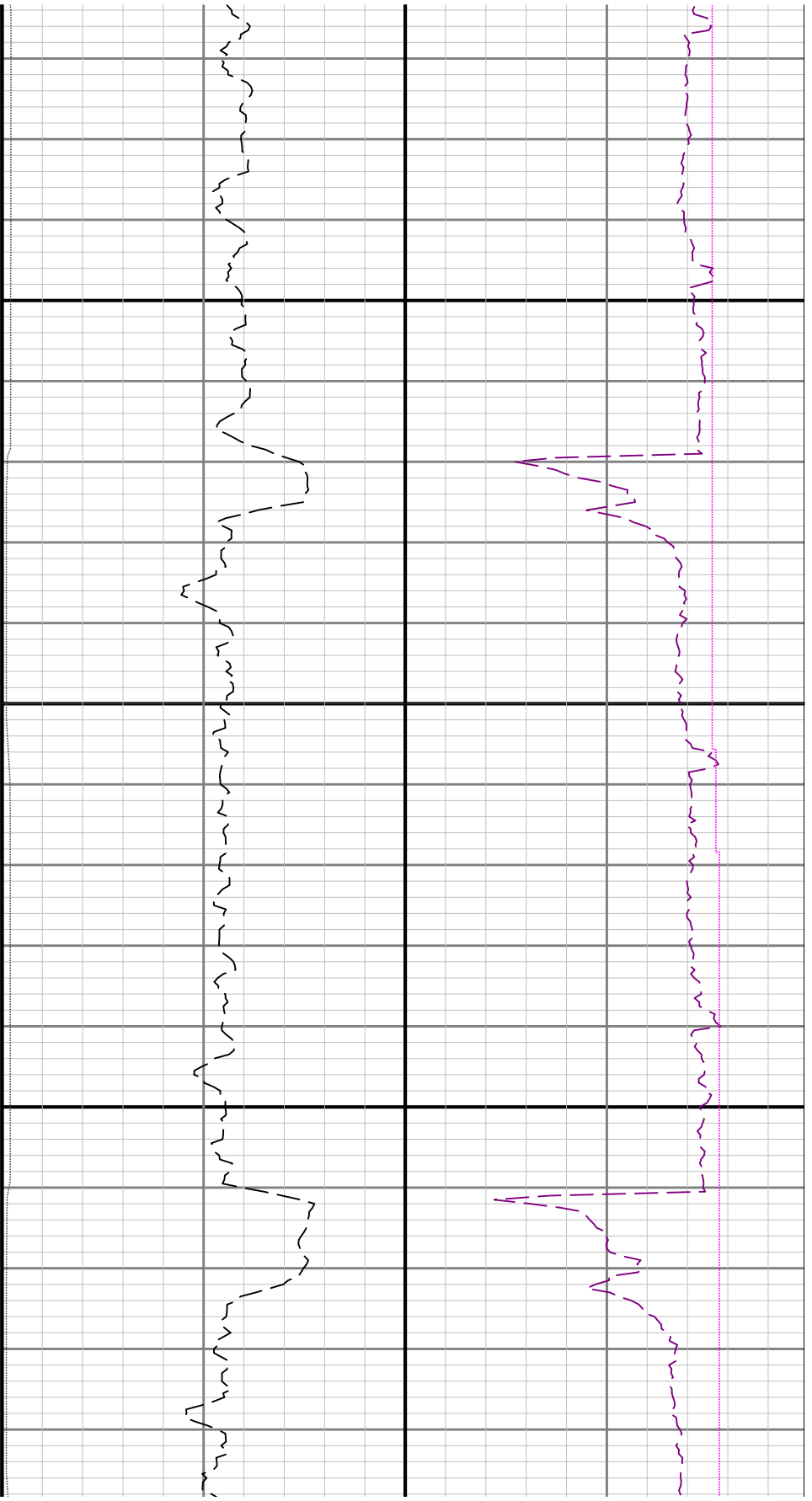
9990





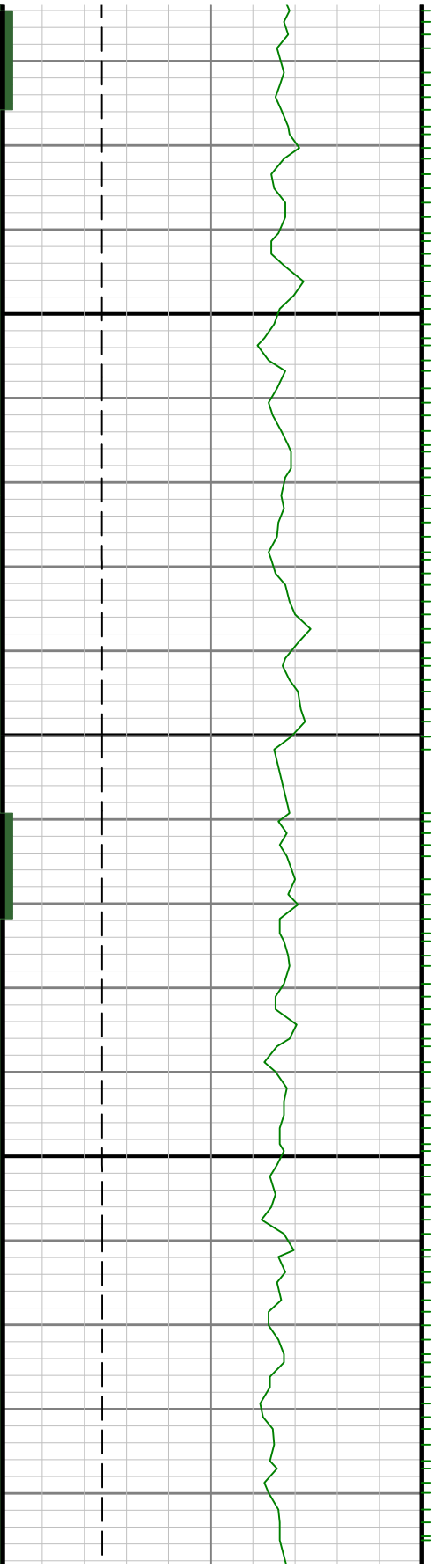




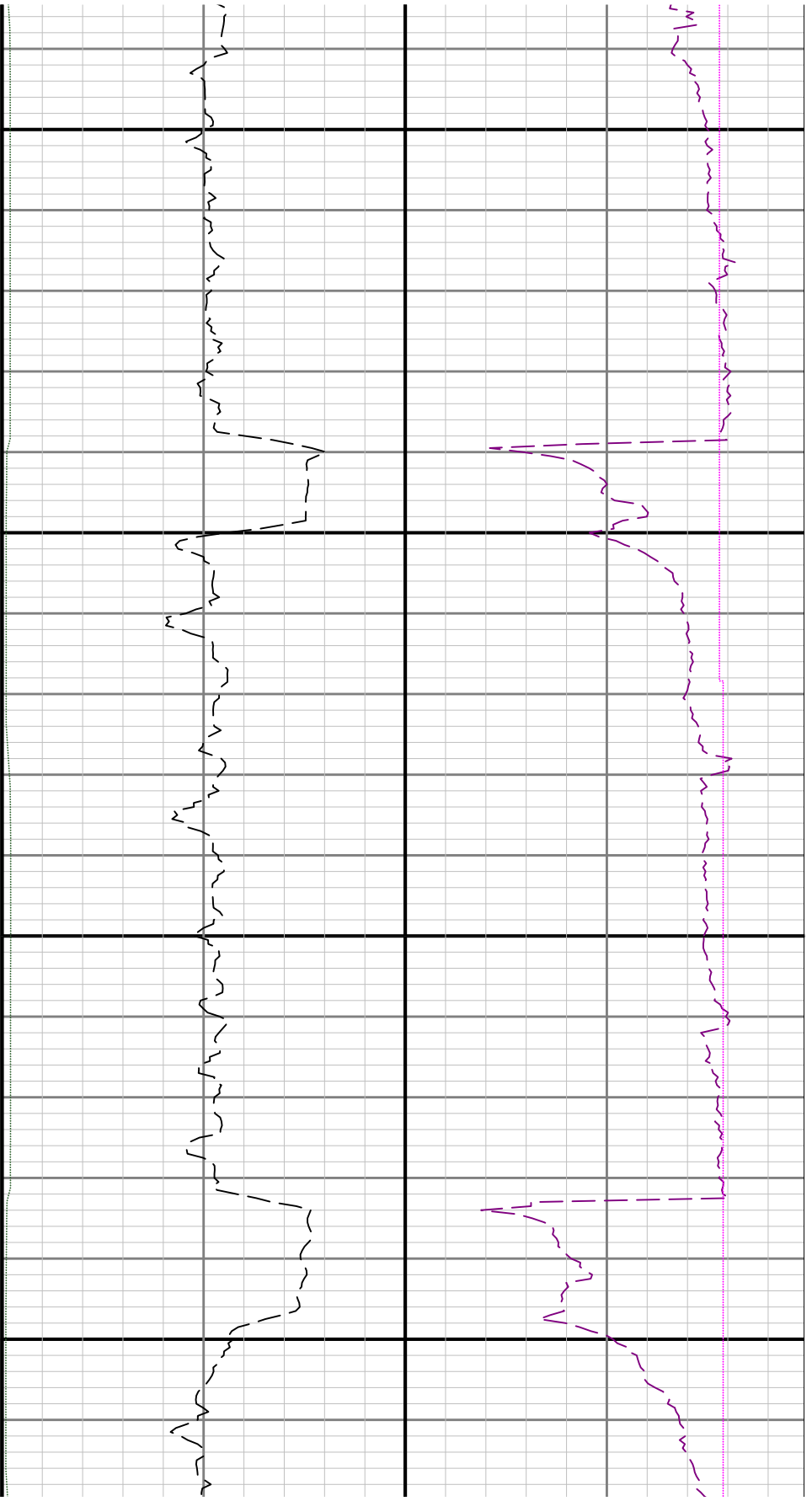


10400

10

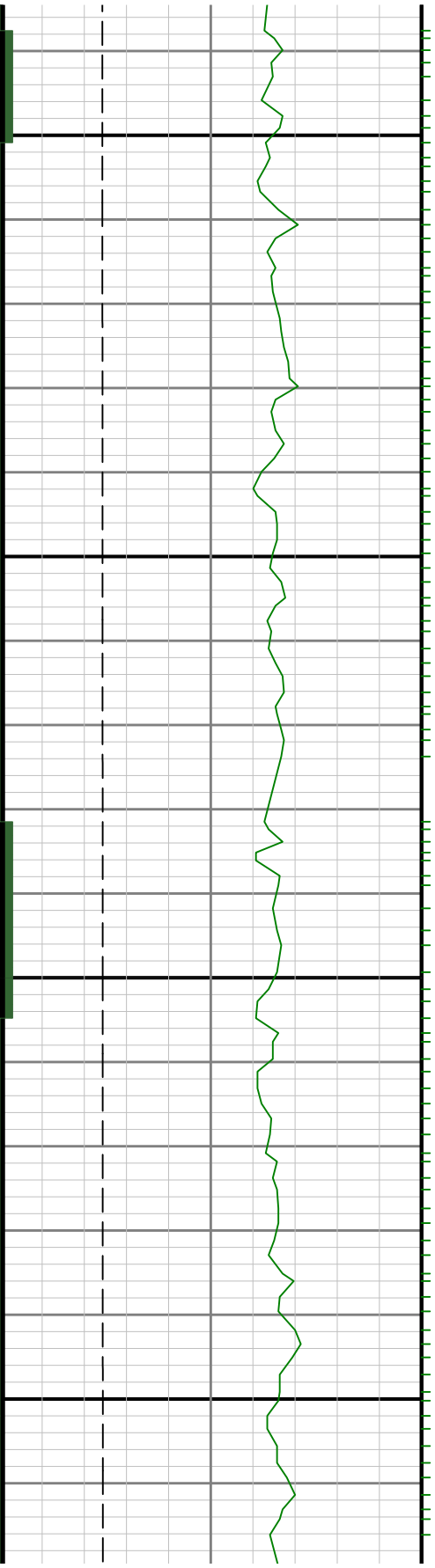


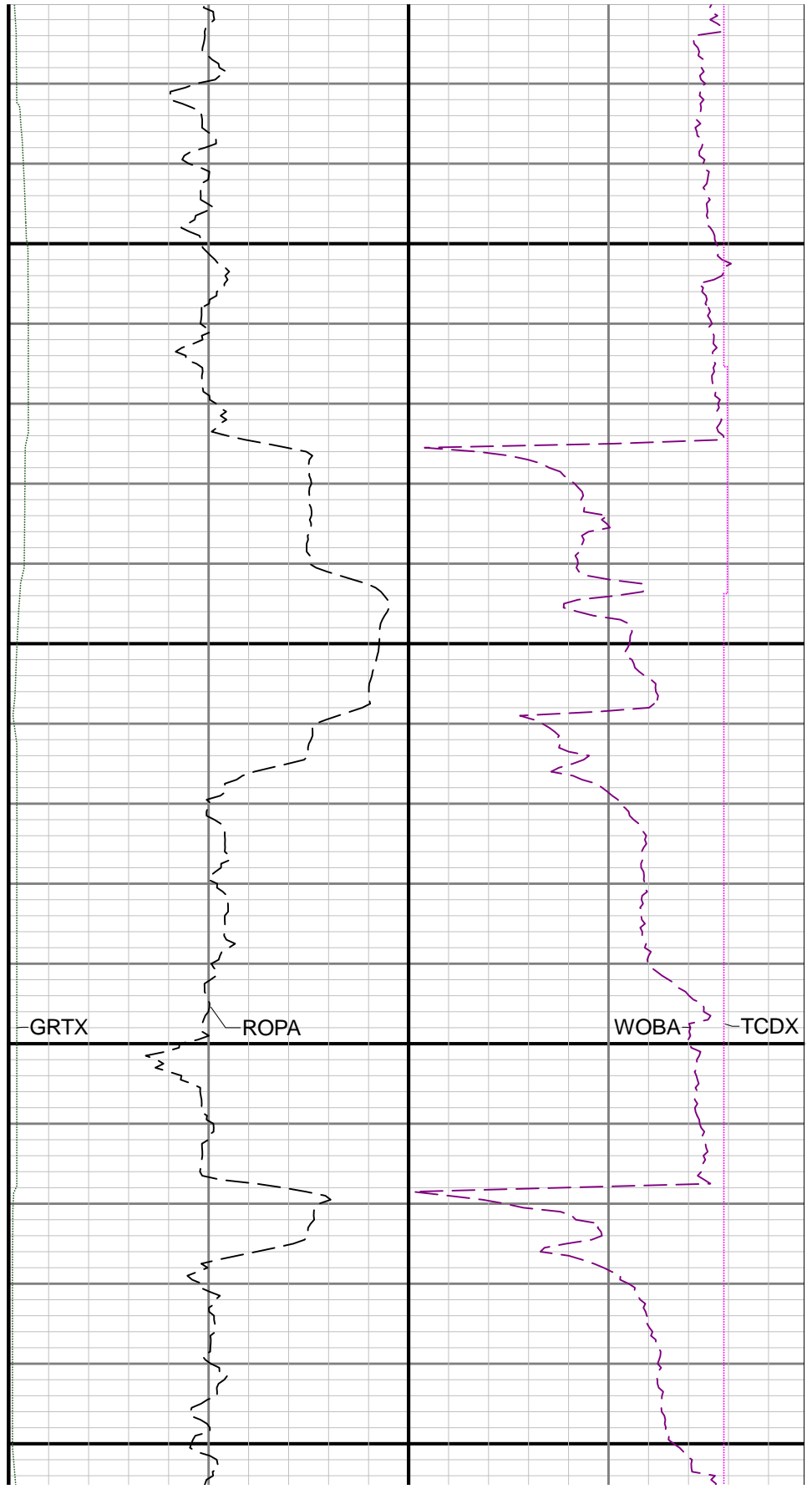
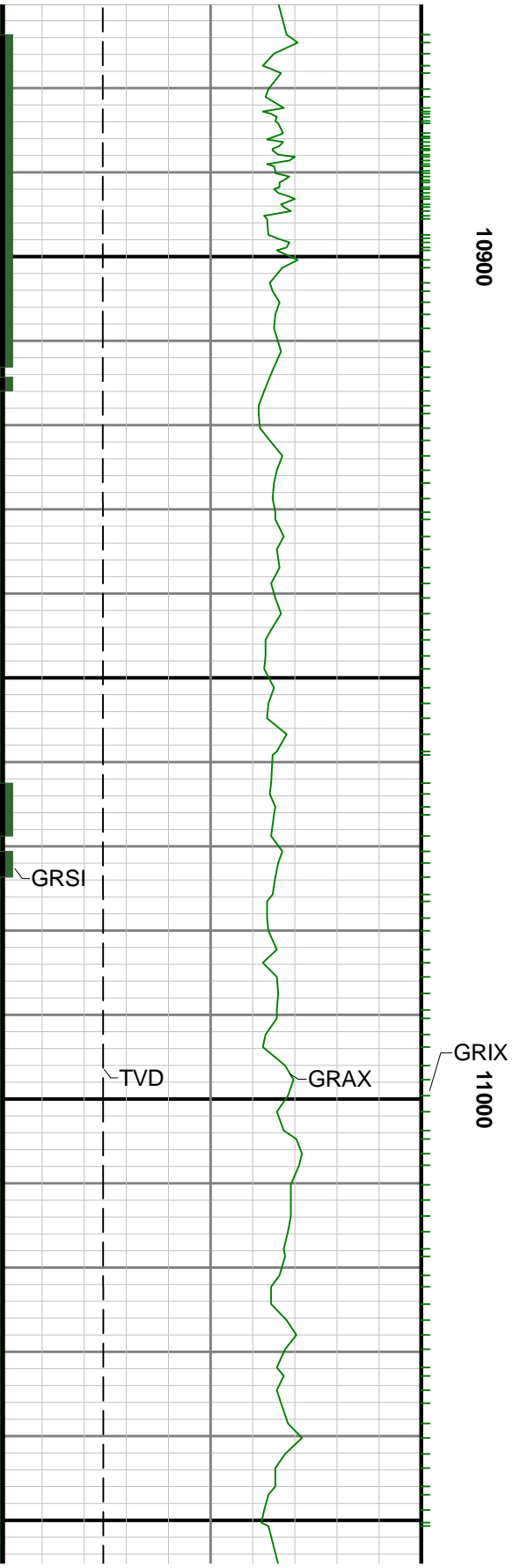




10700

10800

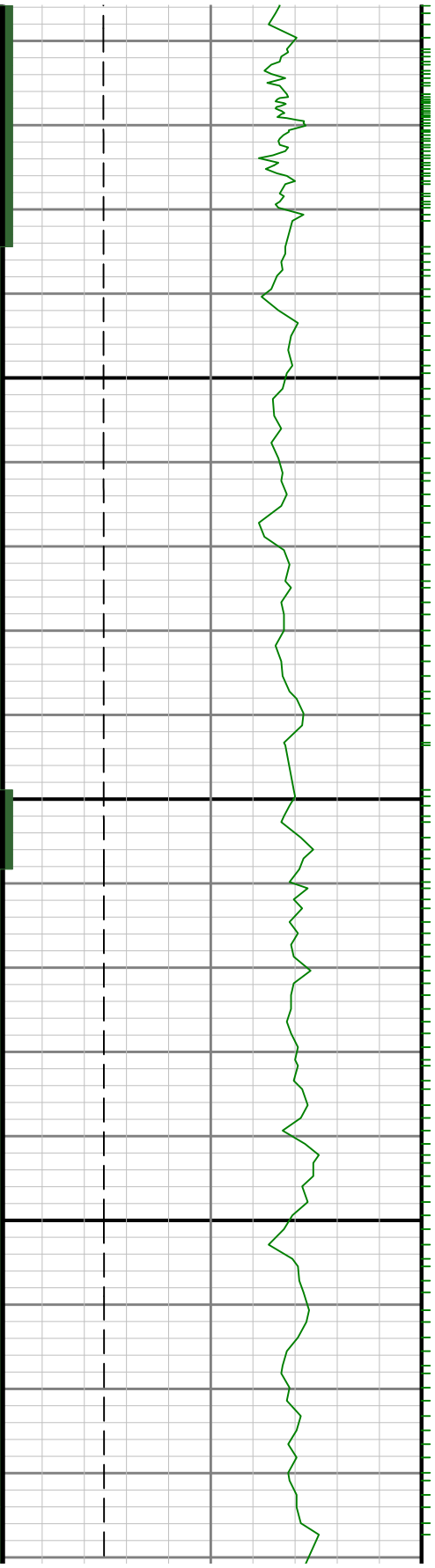


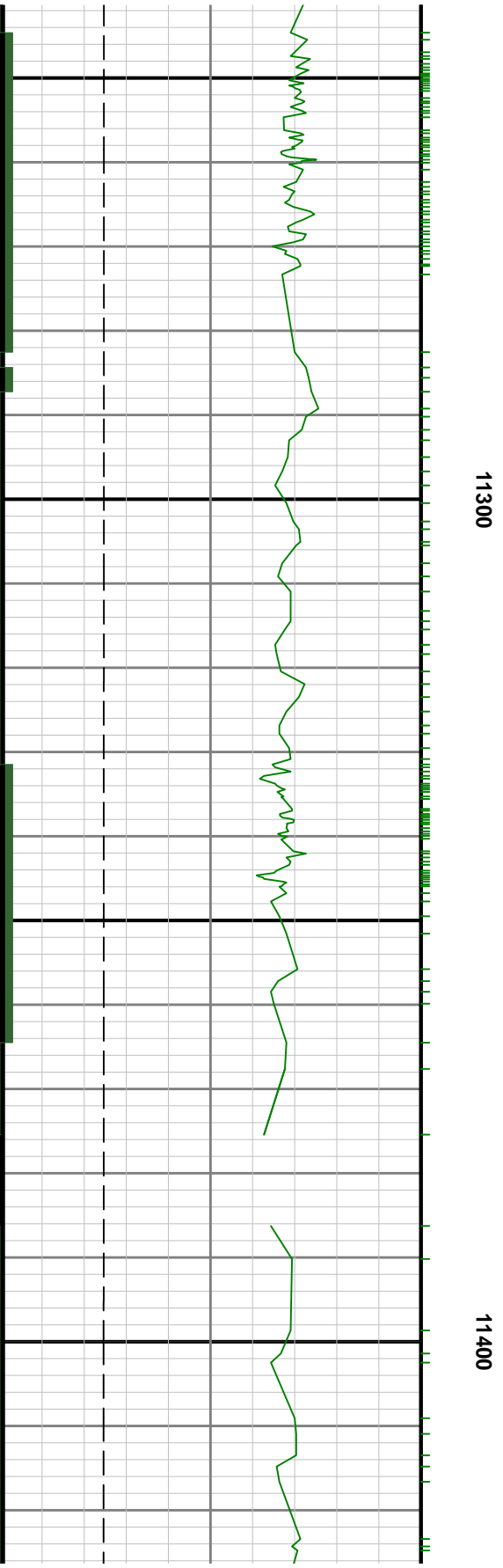
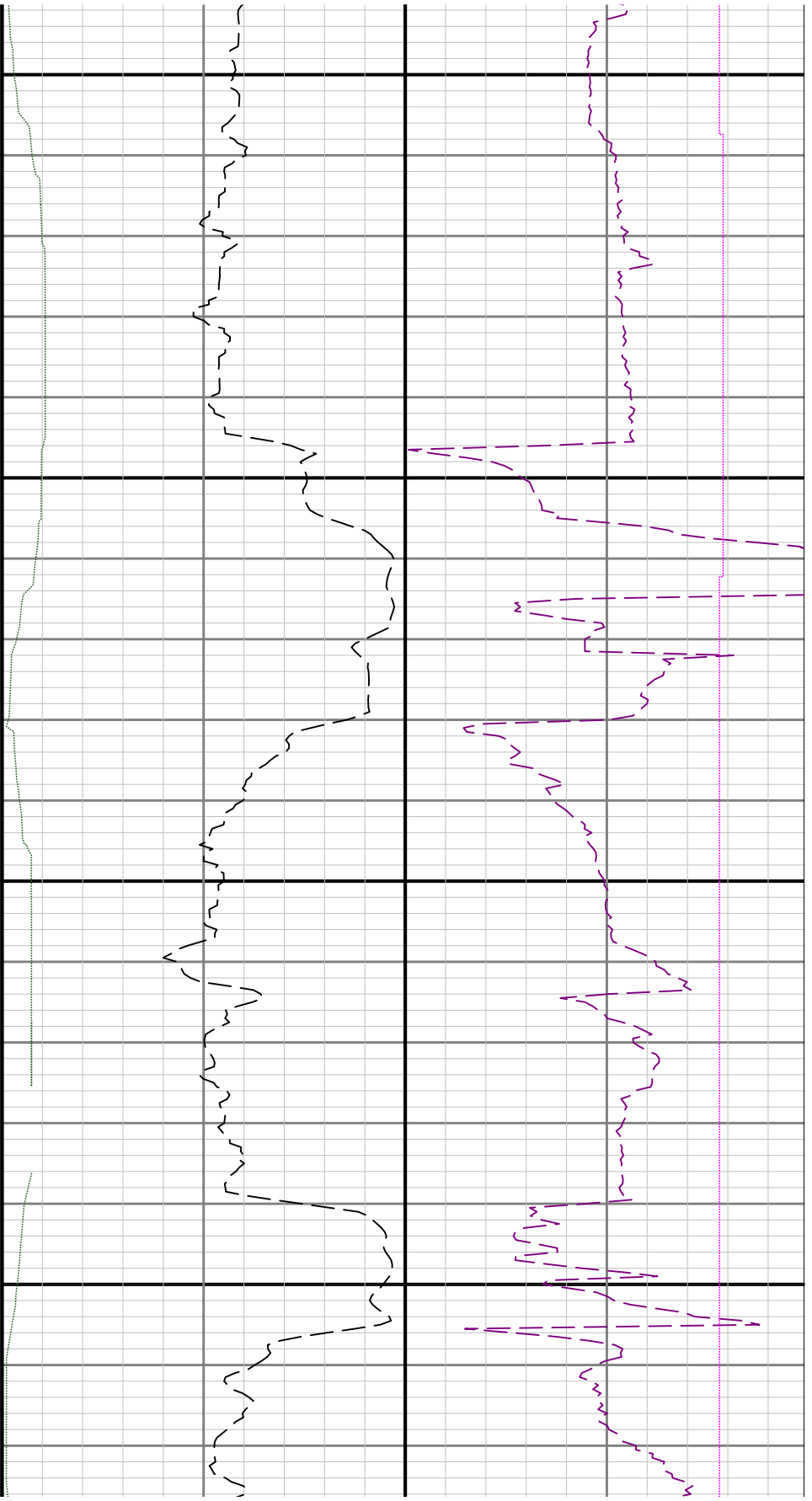


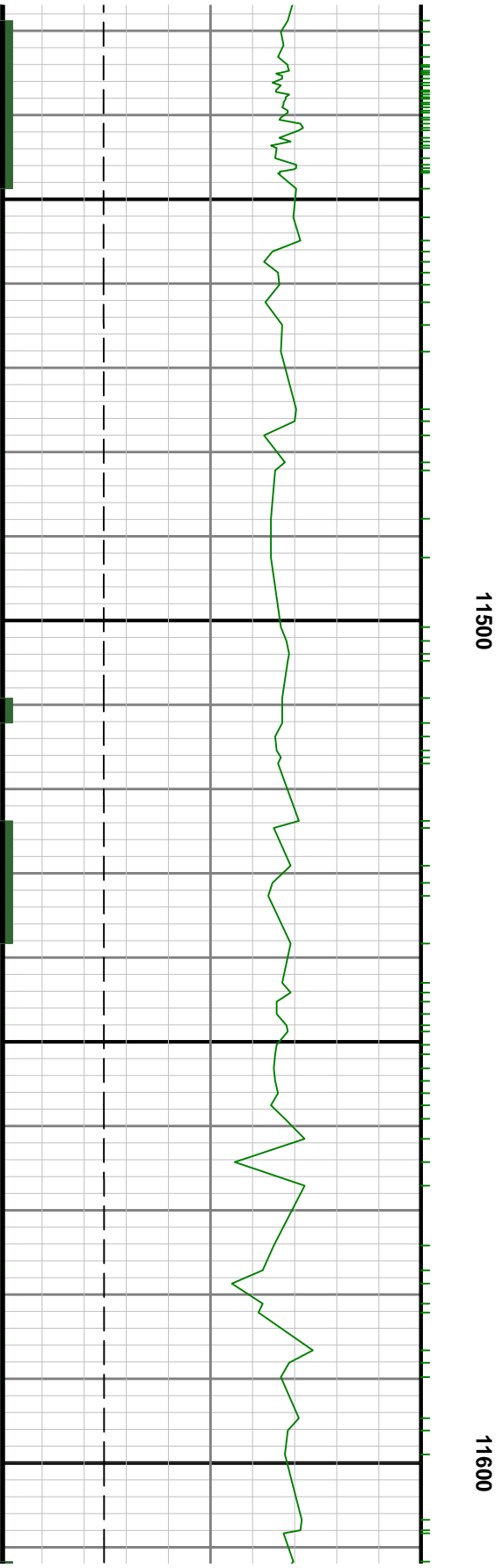
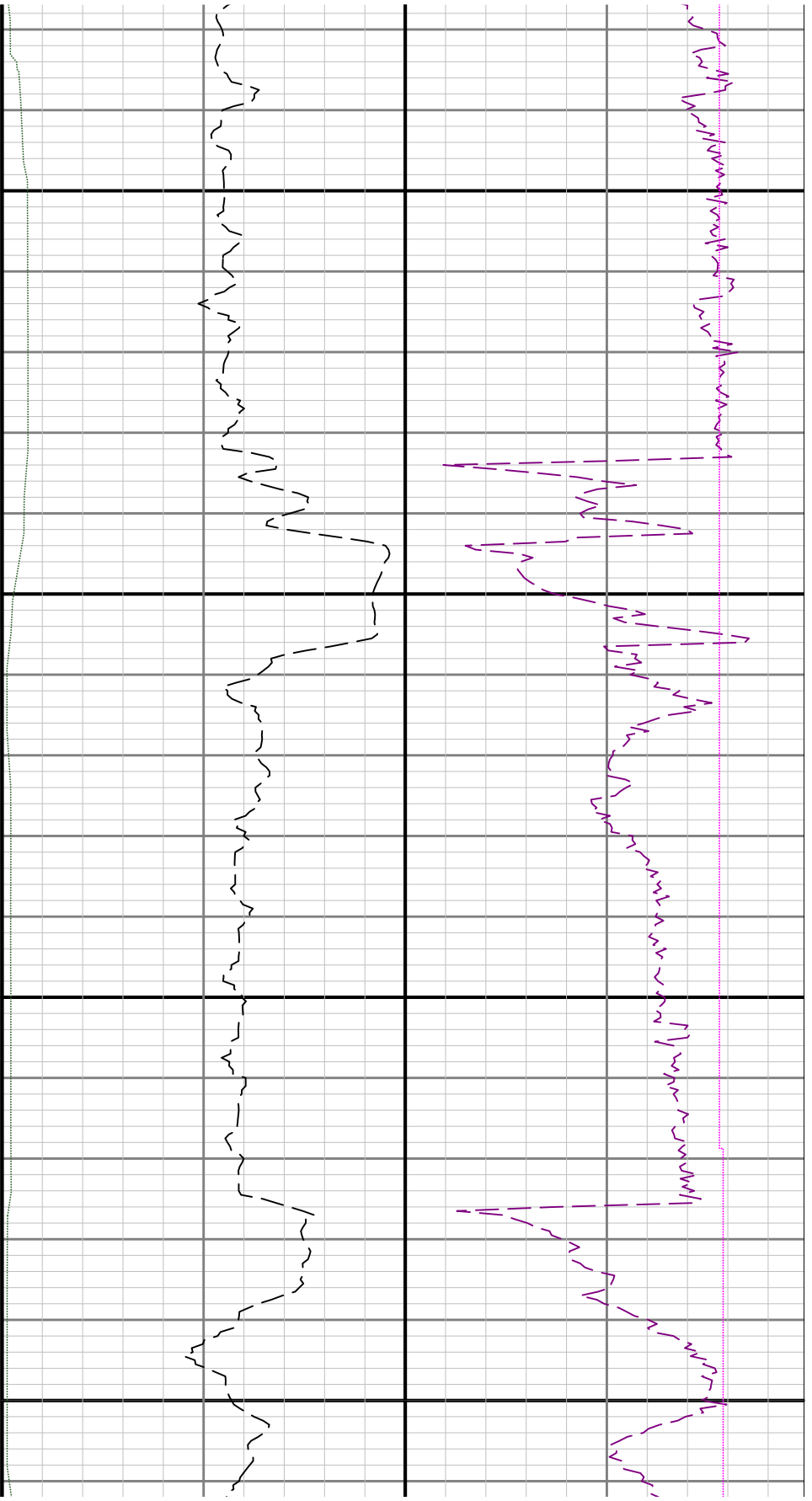


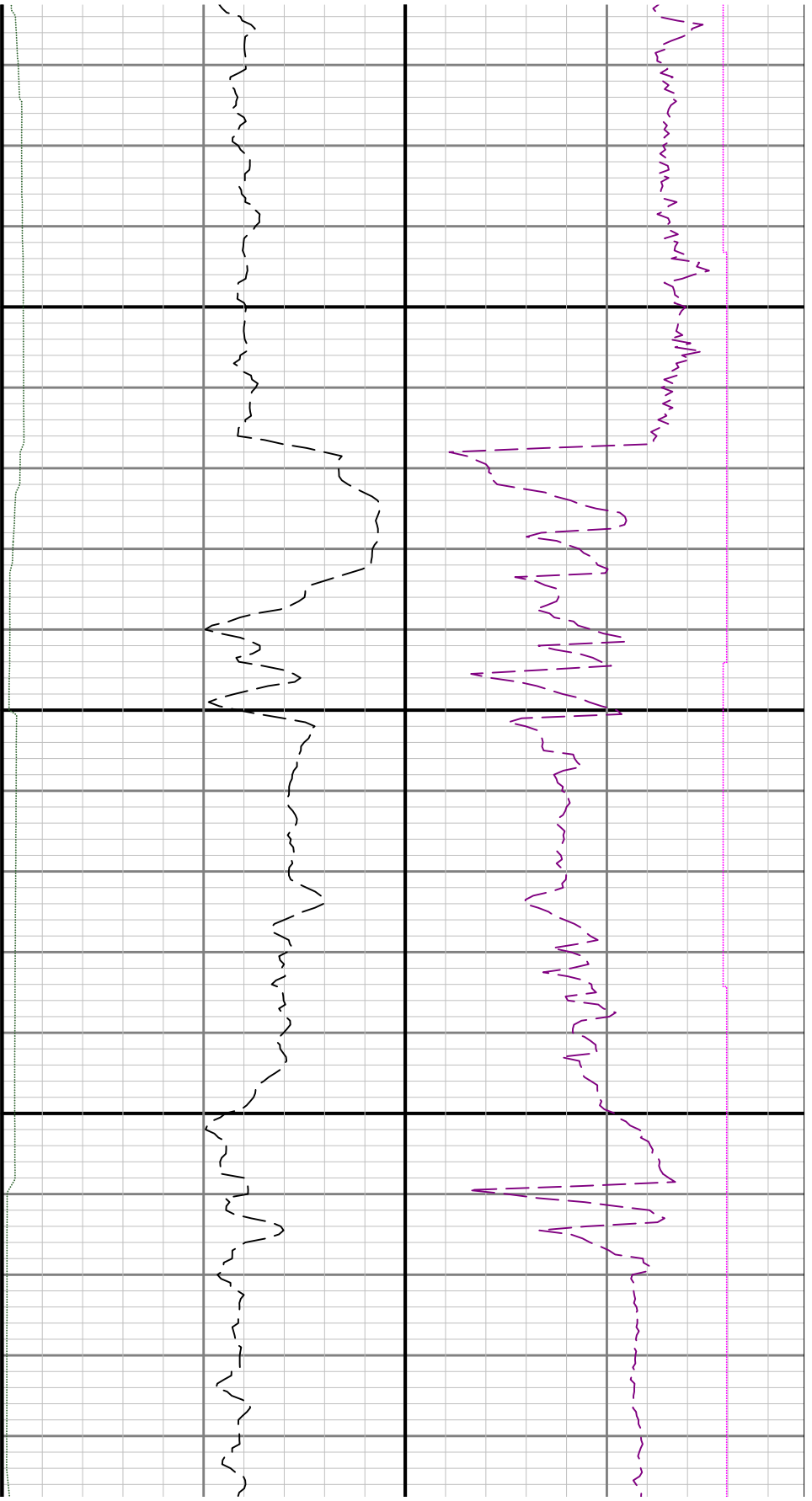
11100

11200



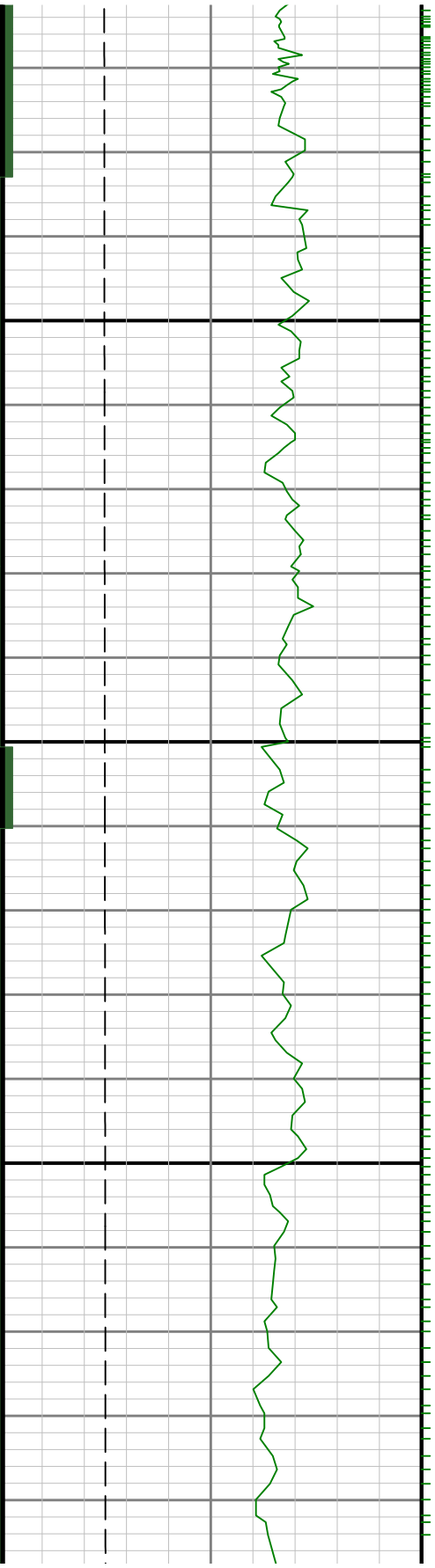




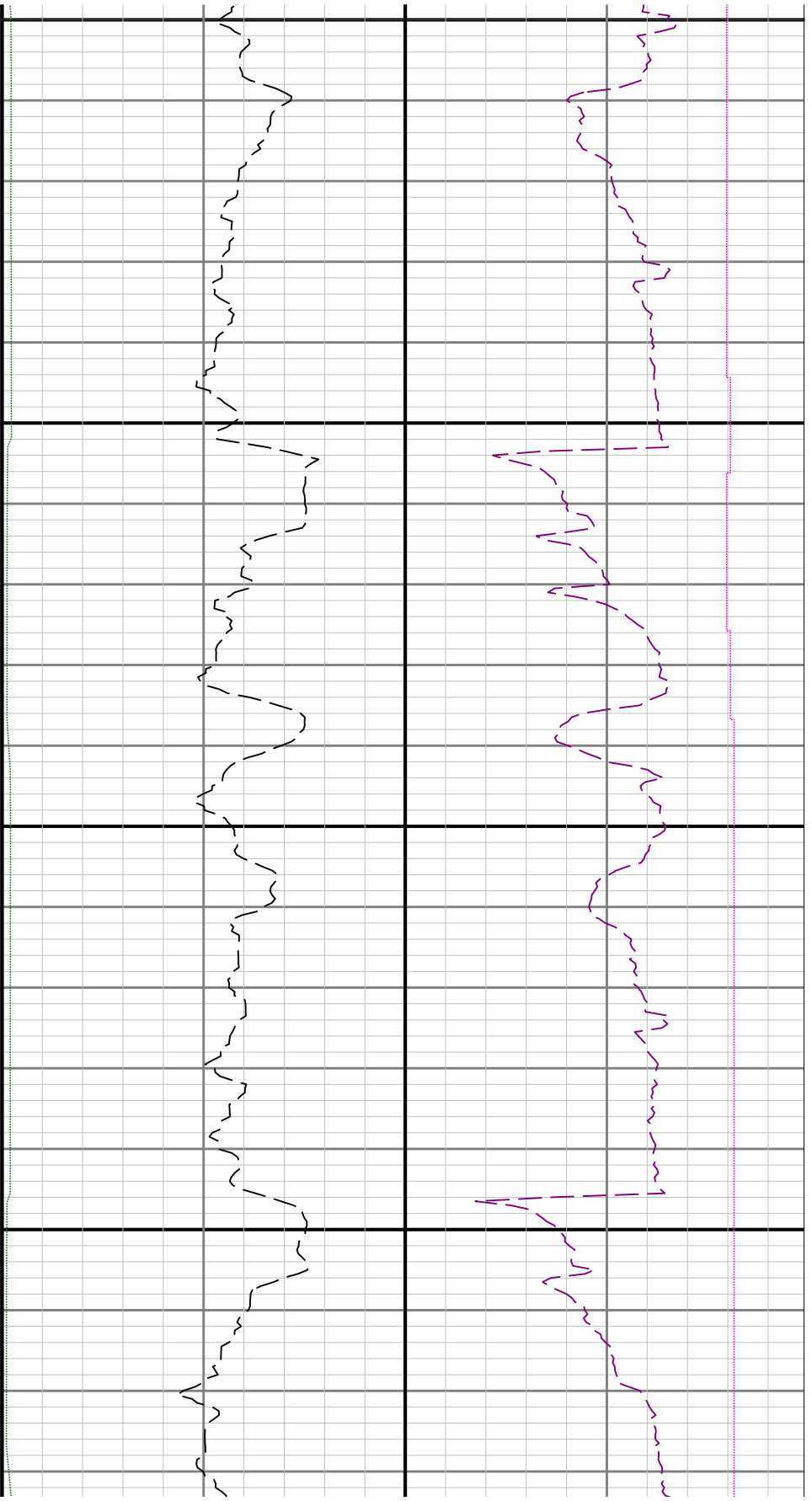


11700

1

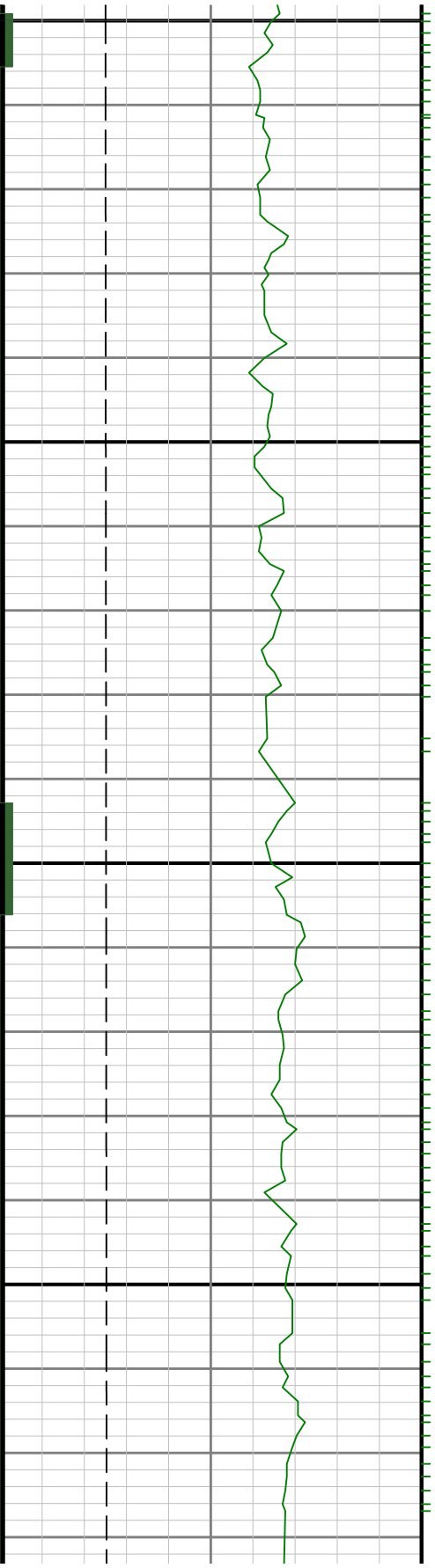


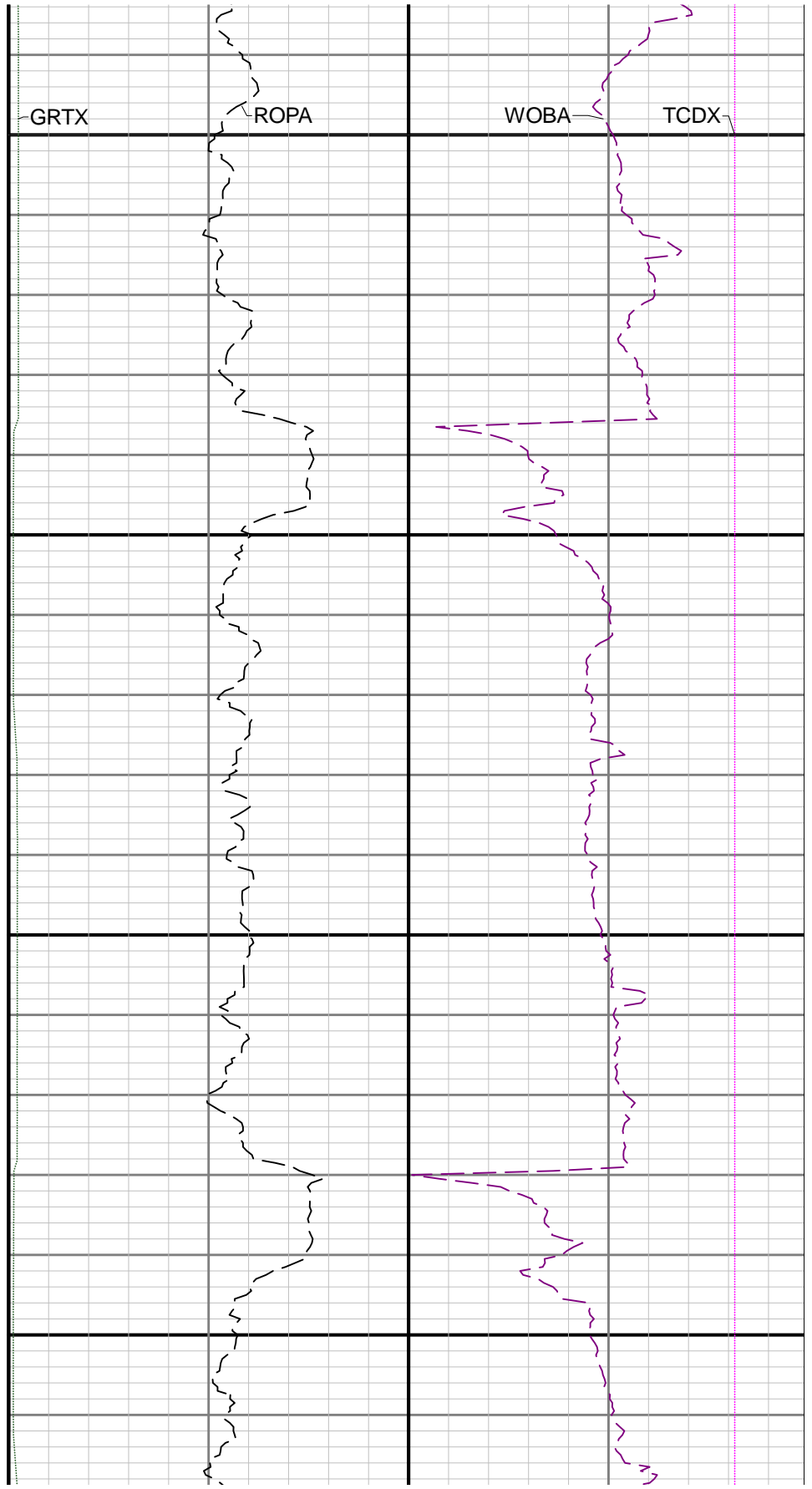
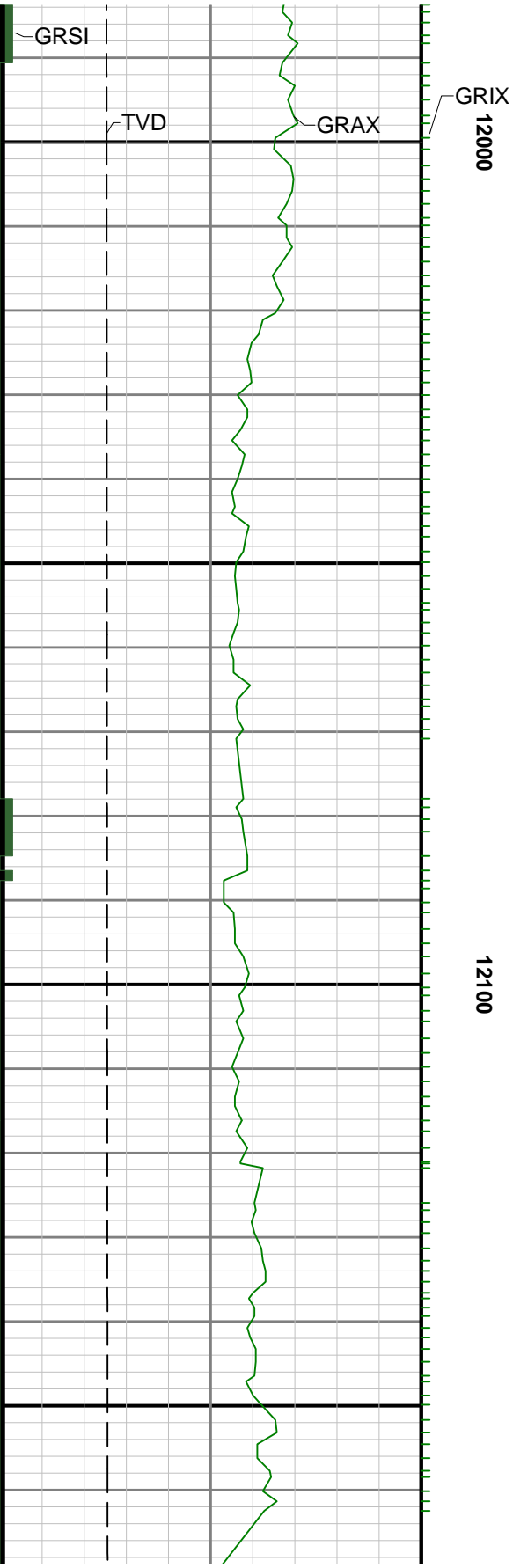


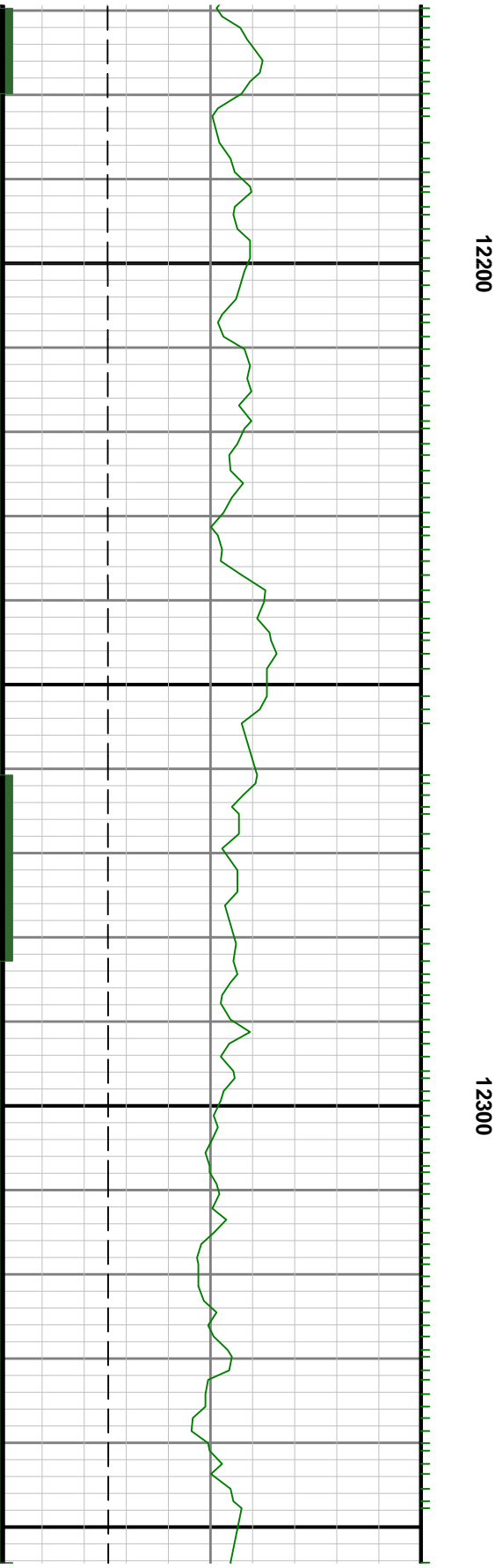
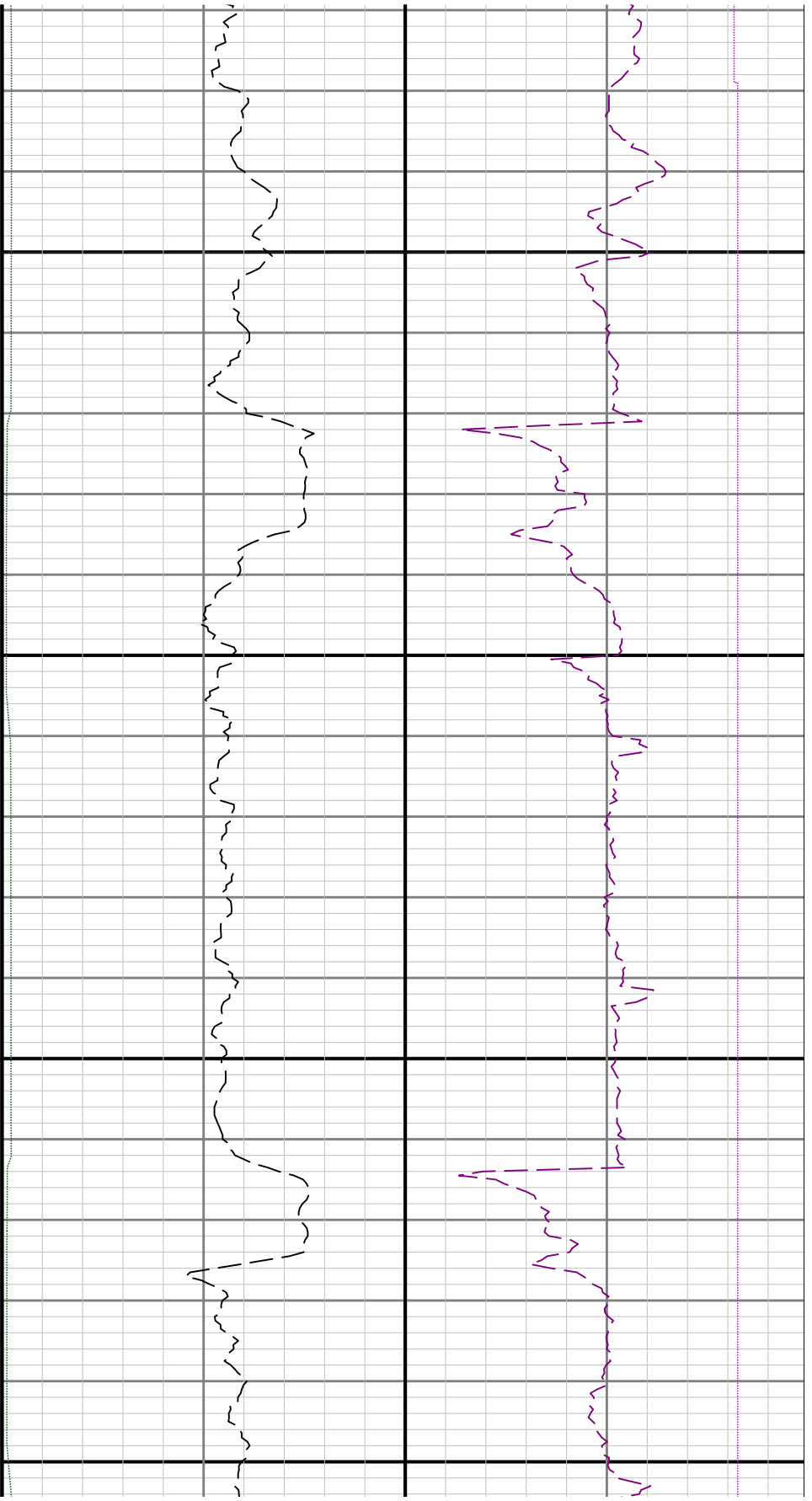


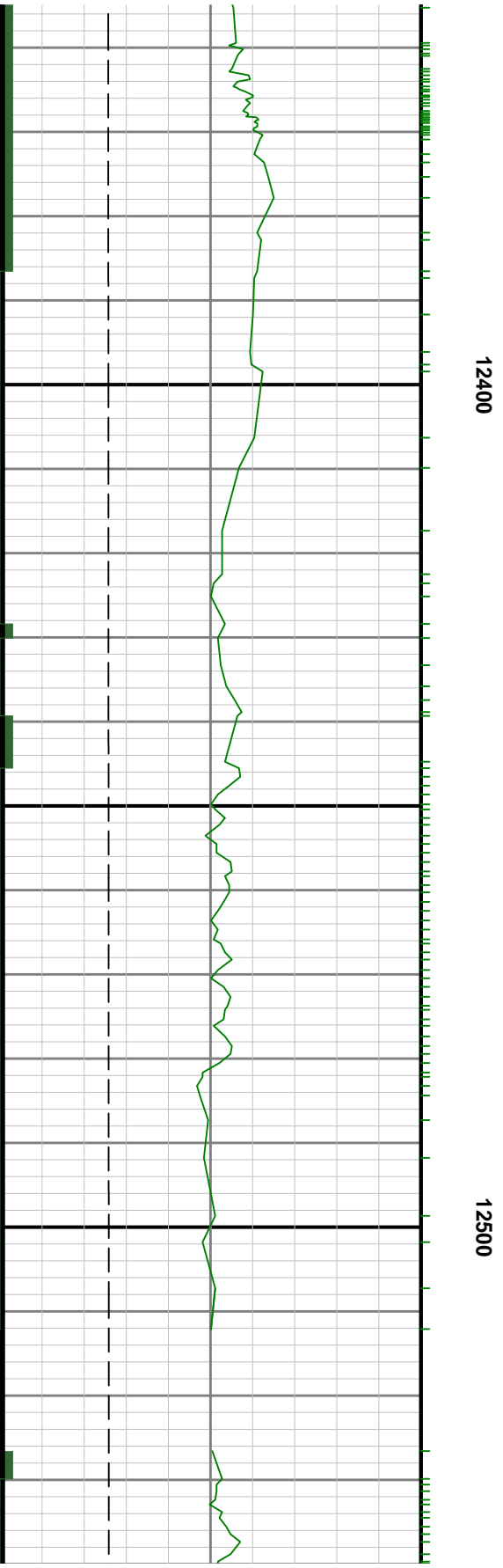
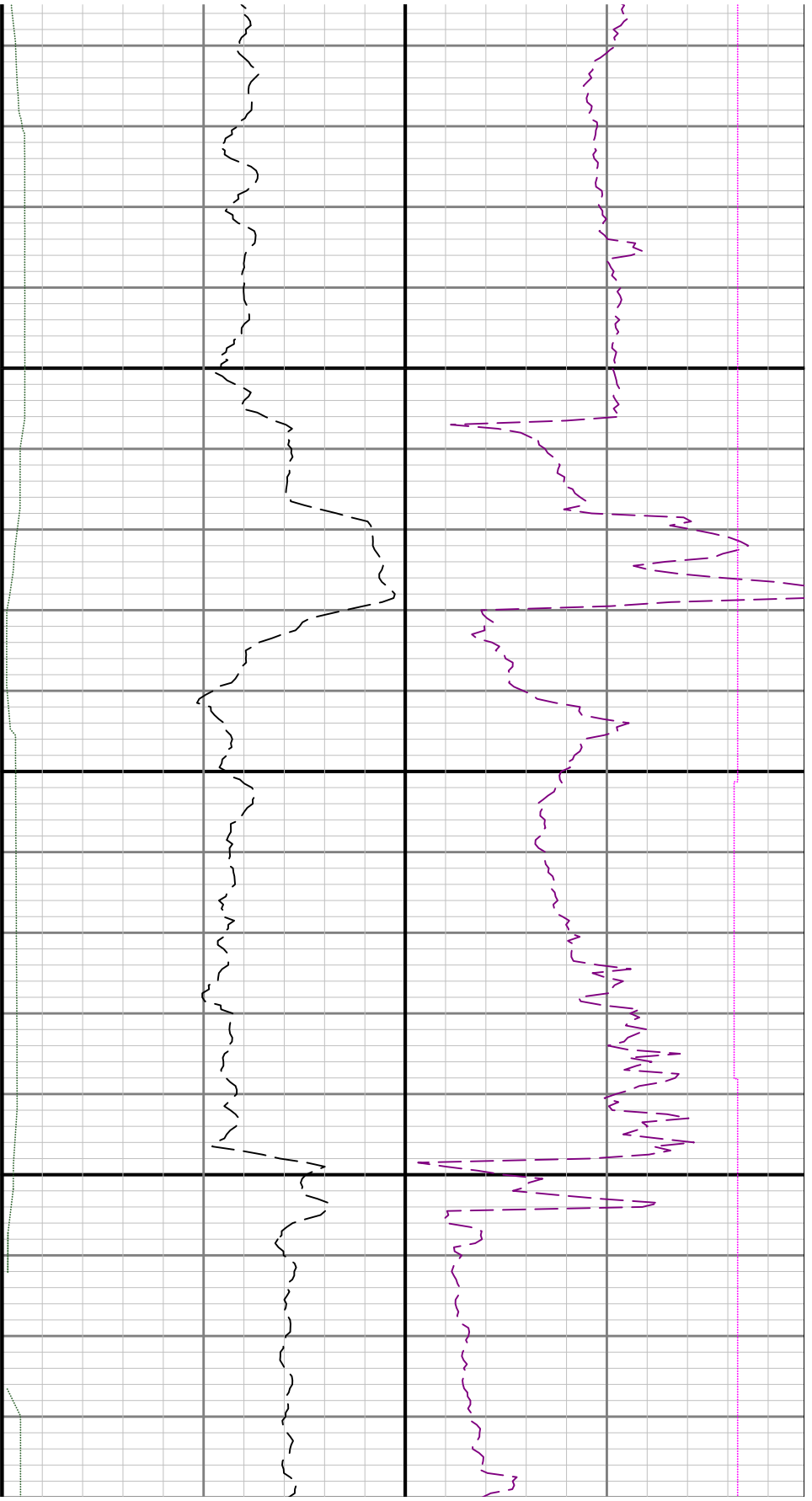
1800

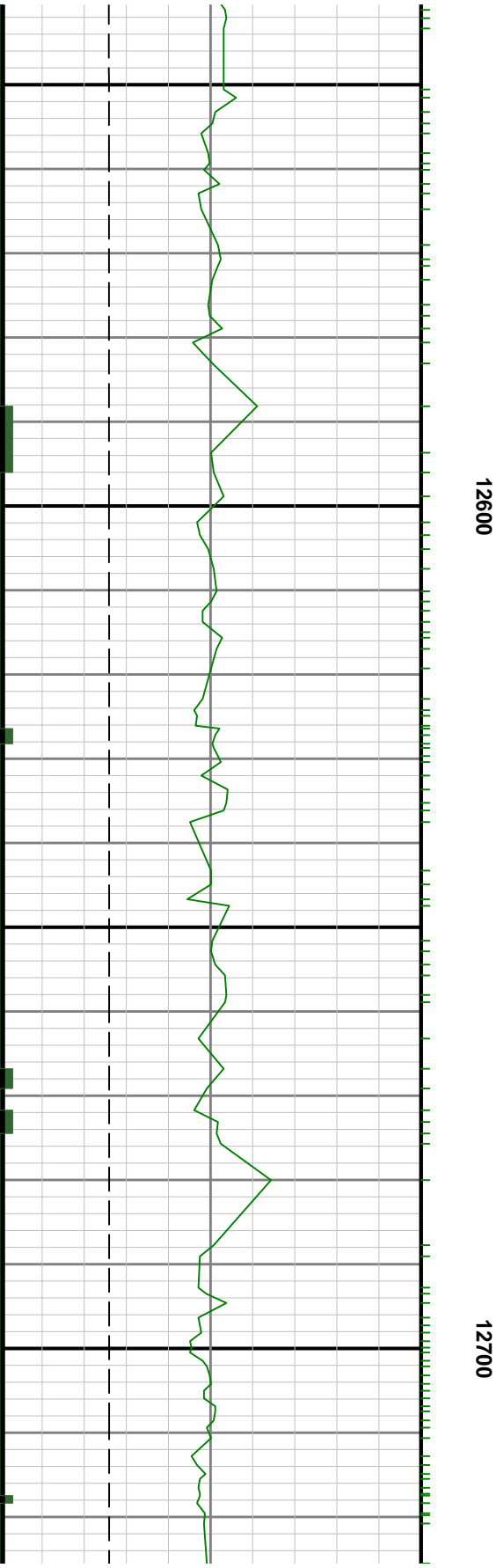
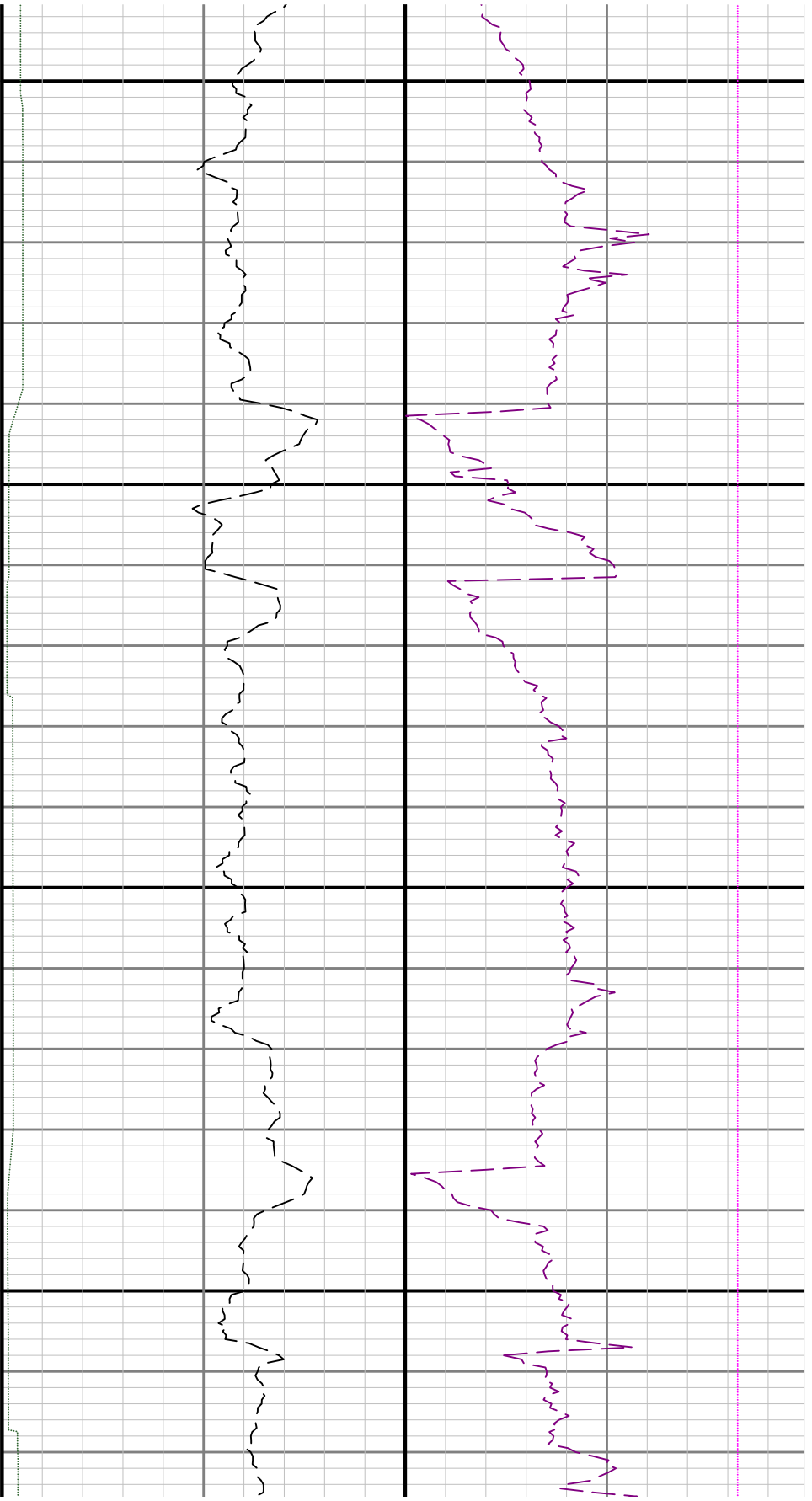
11900

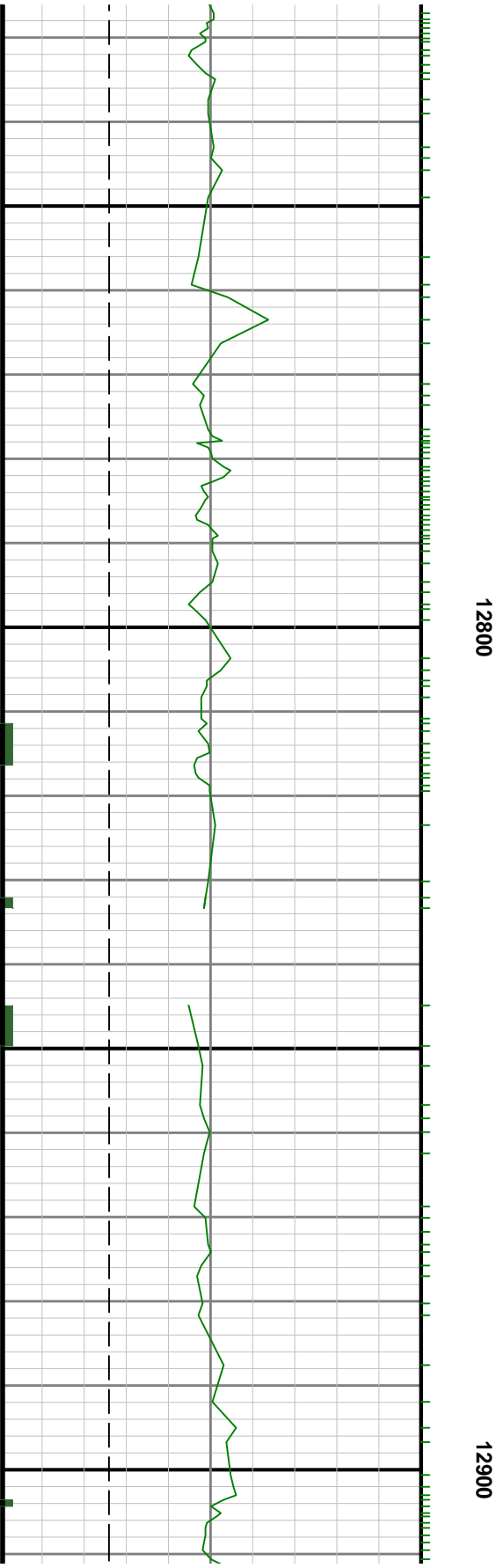
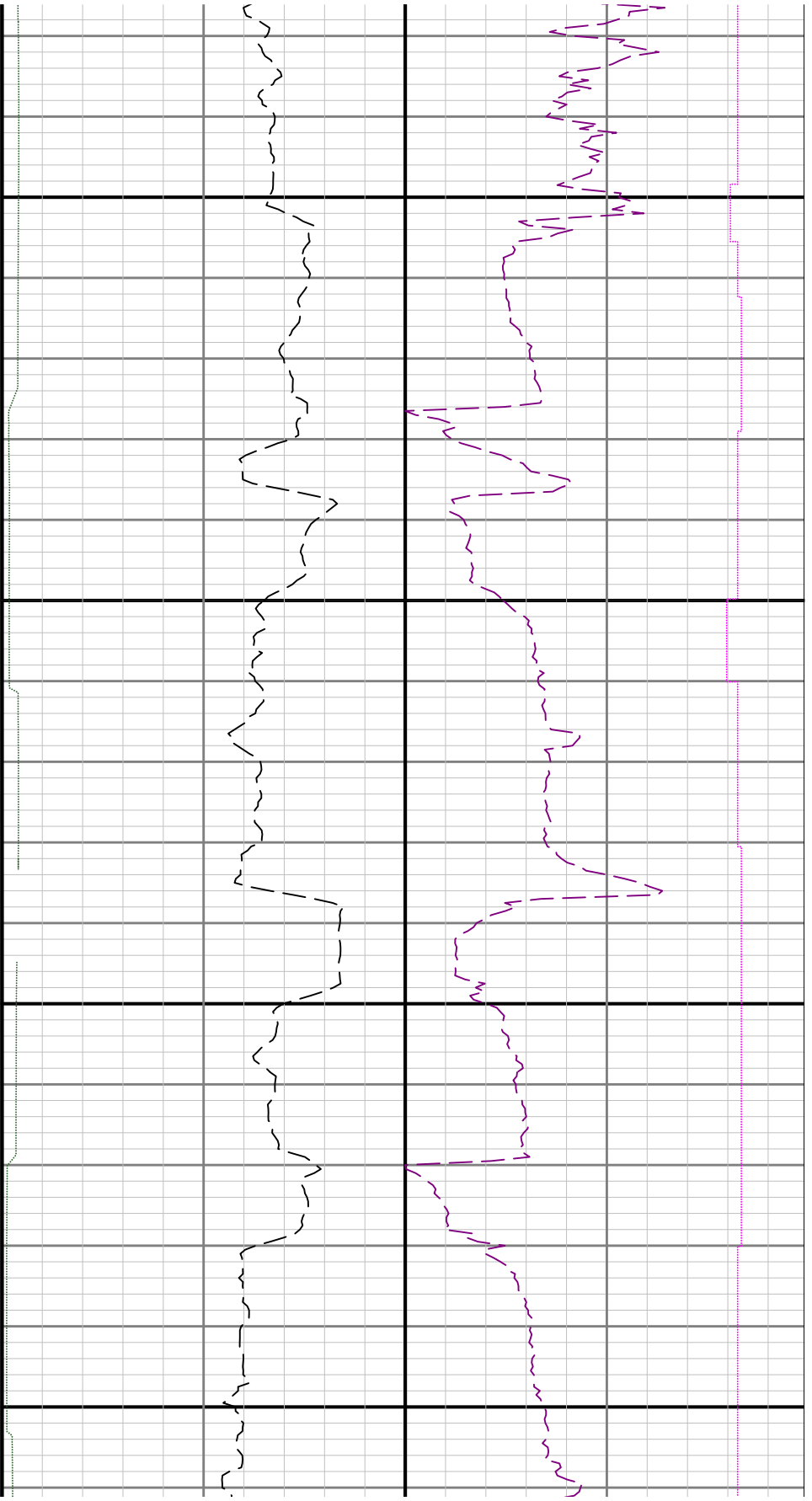


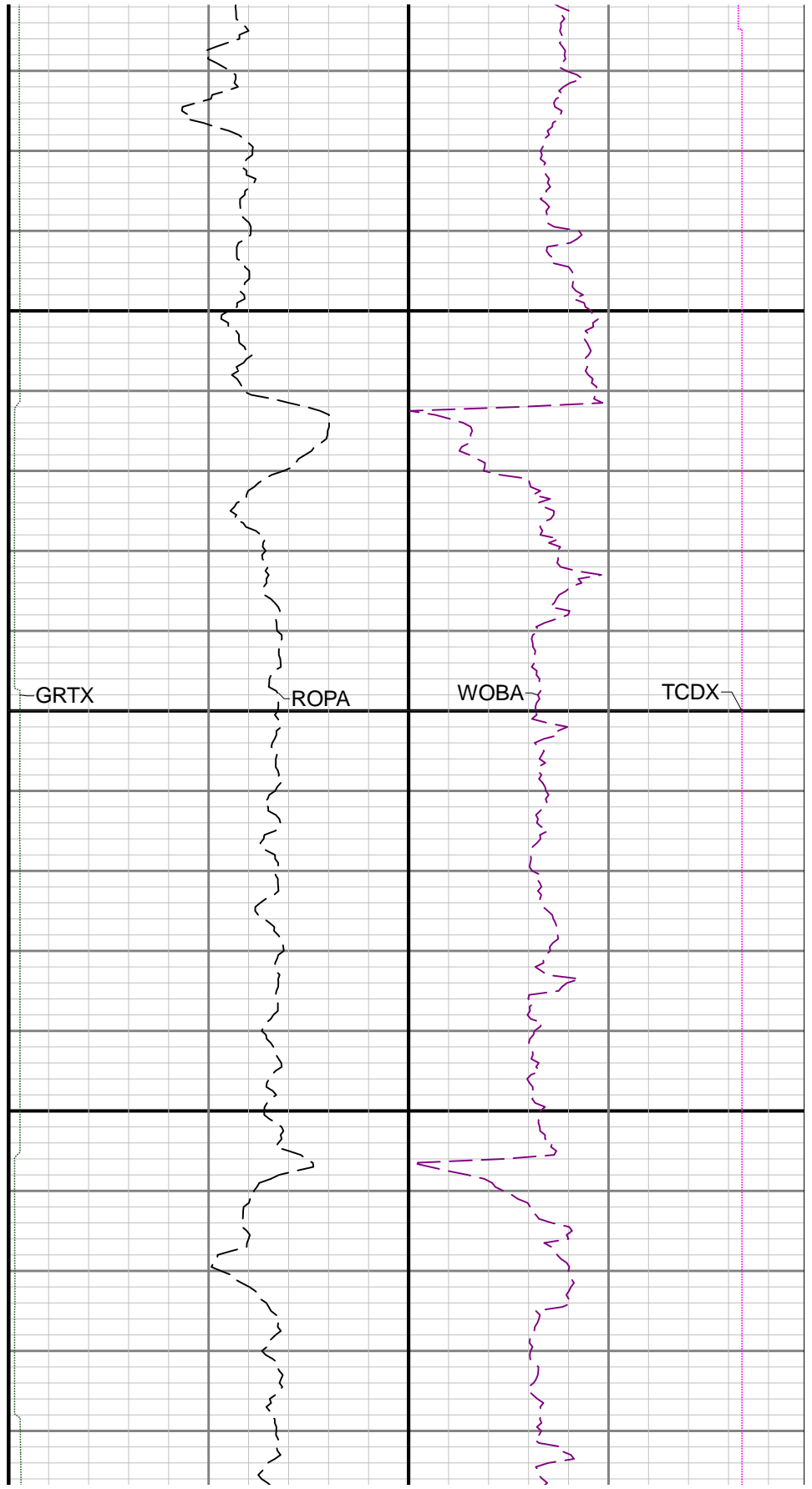
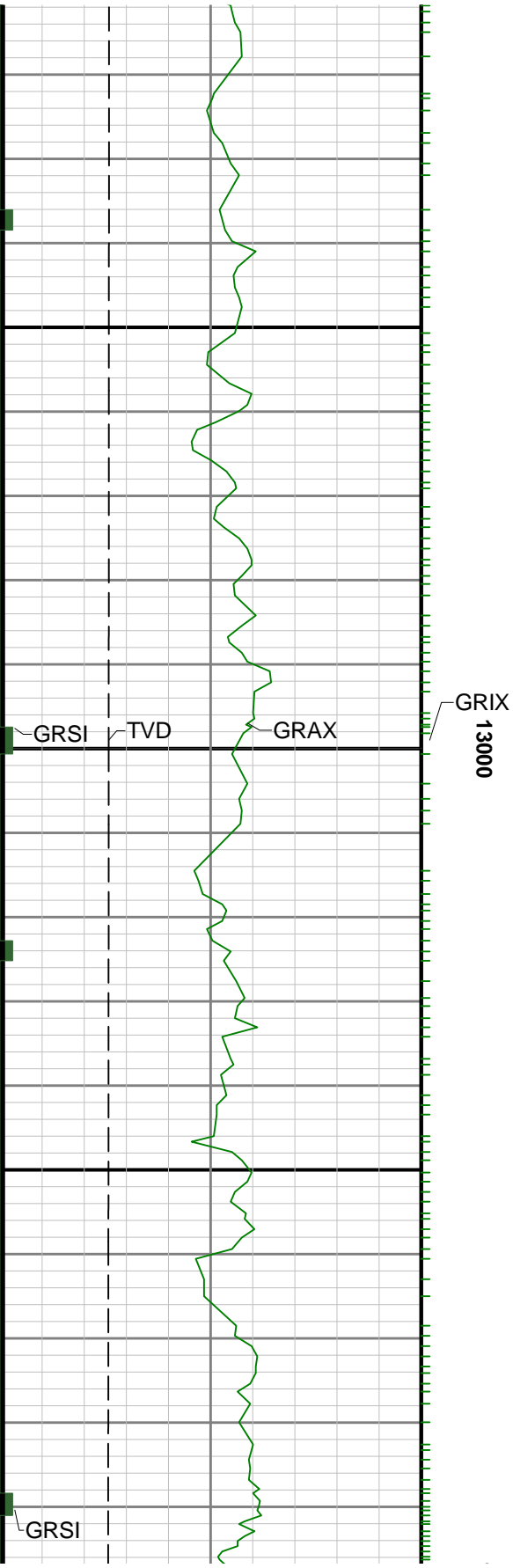


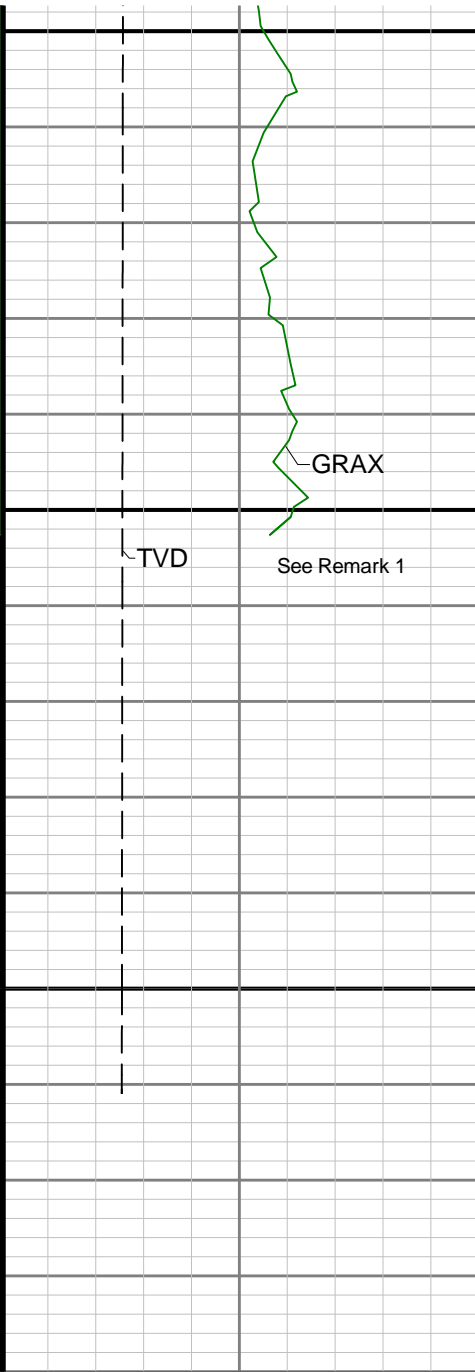












3100

GRIX

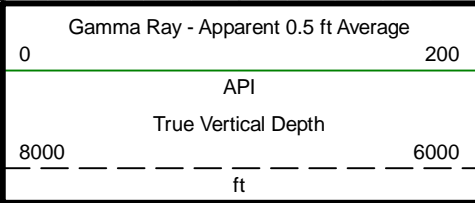
GRAX

TVD

See Remark 1

13200

TD



MD 1:240 feet

