



Gamma Ray

©"4239"Dcmgt"Jwijgu."c"IG"eqorcp{"NNE"ó"Cnn"tkijvu"tgugtxgf0"Dcmgt"Jwijgu."c"IG"eqorcp{"NNE"cpf"kvu"chhknkcvgu"*óDJIGö+rtqxfgu"vjku"kphqtocvkqp"qp"cp"ócu"kuö"dcuku"hqt"igpgtcn"kphqtocvkqp" purposes and believes it to be accurate as of the date of publication. BHGE does not make any representation as to the accuracy or completeness of the information and makes no warranties of any kind, specific, implied or oral, to the fullest extent permissible by law, including those of merchantability and fitness for a particular purpose or use. BHGE hereby disclaims any and all liability for any direct, indirect, consequential or special damages, claims for lost profits, or third party claims arising from the use of the information, whether a claim is asserted in contract, tort, or otherwise. The BHGE logo is a trademark of Baker Hughes, a GE company, LLC. GE and the GE monogram are trademarks of General Electric Company used under trademark license.

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	7.875	PDC	2.00	Steerable	1899.00	10364.00	1899.00	10406.00	2018-04-24 02:58	2018-04-25 19:30	35.58

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Mohammad Odetallah	2018-04-23	N/A	Wayne Burge	2018-04-23	N/A			

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+ (%)
2018-04-23 15:00	1	1899.00	Oil Based Mud	8.9	19	N/A	3.0	78/22	Active Pit	27211	0.00
2018-04-24 15:00	1	5331.00	Oil Based Mud	8.9	18	N/A	3.0	78/22	Active Pit	27992	0.00
2018-04-25 15:00	1	9429.00	Oil Based Mud	9.2	22	N/A	3.0	78/22	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	10341483	Gamma (single)	10.96	41.39	6.500	3.250
1	NaviGamma	10341483	VSS	14.38	44.81	6.500	3.250
1	NaviGamma	10341483	Directional (mag)	14.38	44.81	6.500	3.250

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 NaviGamma services (Gamma Ray and Directional) behind a 7 7/8 inch bit and steerable assembly from 1899 to 12950 feet MD (1856 to 7311 feet TVD).
4	Gamma Ray (GRAX) scale is presented 0 to 200 API per customer request.
5	There are numerous gaps throughout the log due to surveying while on bottom drilling ahead.


Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
				Depth measurements obtained at 1899 feet MD (1856 feet TVD) were reported by the client.

1	1899.00	7.875	1	Baker Hughes began logging at 1899 feet MD (1856 feet TVD) as requested by the client.
2	12917.58	7.875	1	The interval from 12908 to 12950 feet MD (7311 to 7311 feet TVD) was not logged due to sensor offset from the bit.

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



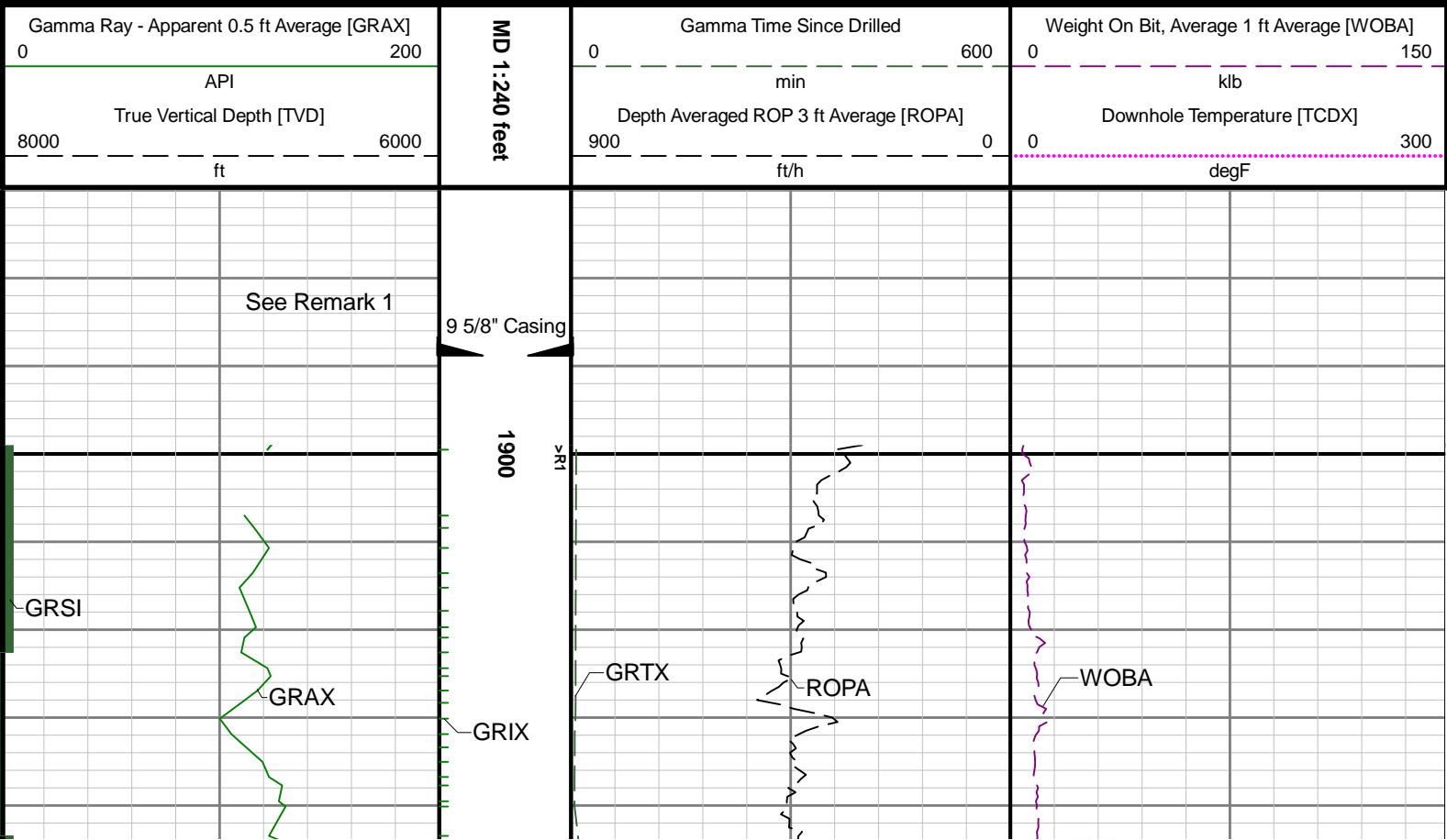
Company

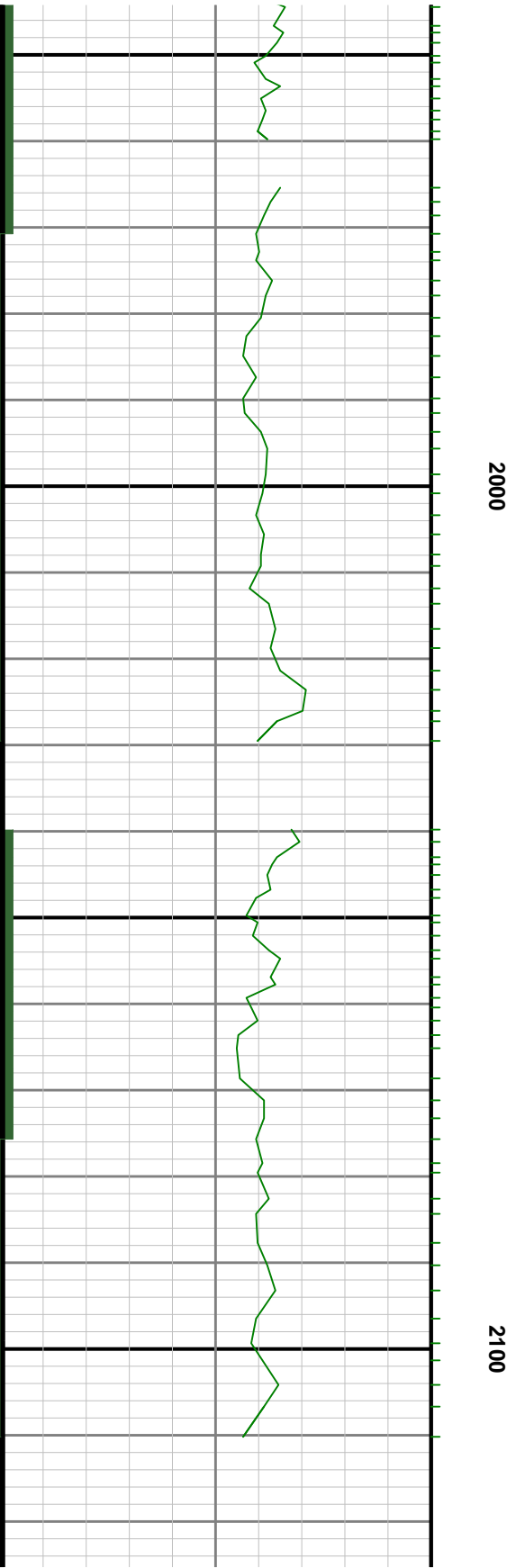
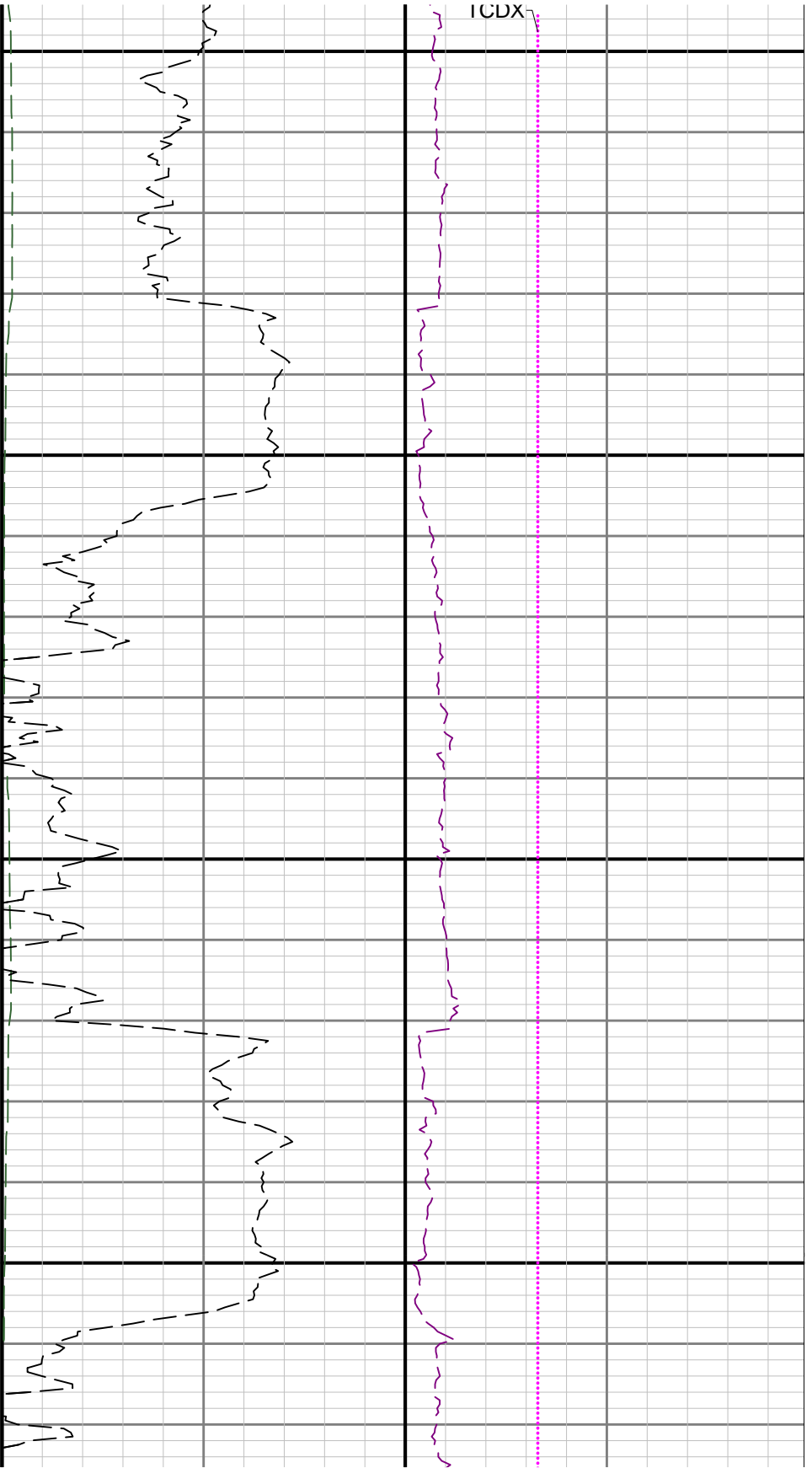
Well

Interval

Created

Anadarko
AZUL 13-13HZ
Date From: 2018-04-24 02:58:37
Date To: 2018-04-26 13:23:07
2018-04-26 17:13:59
Top: 1899.00
Bottom: 12950.00



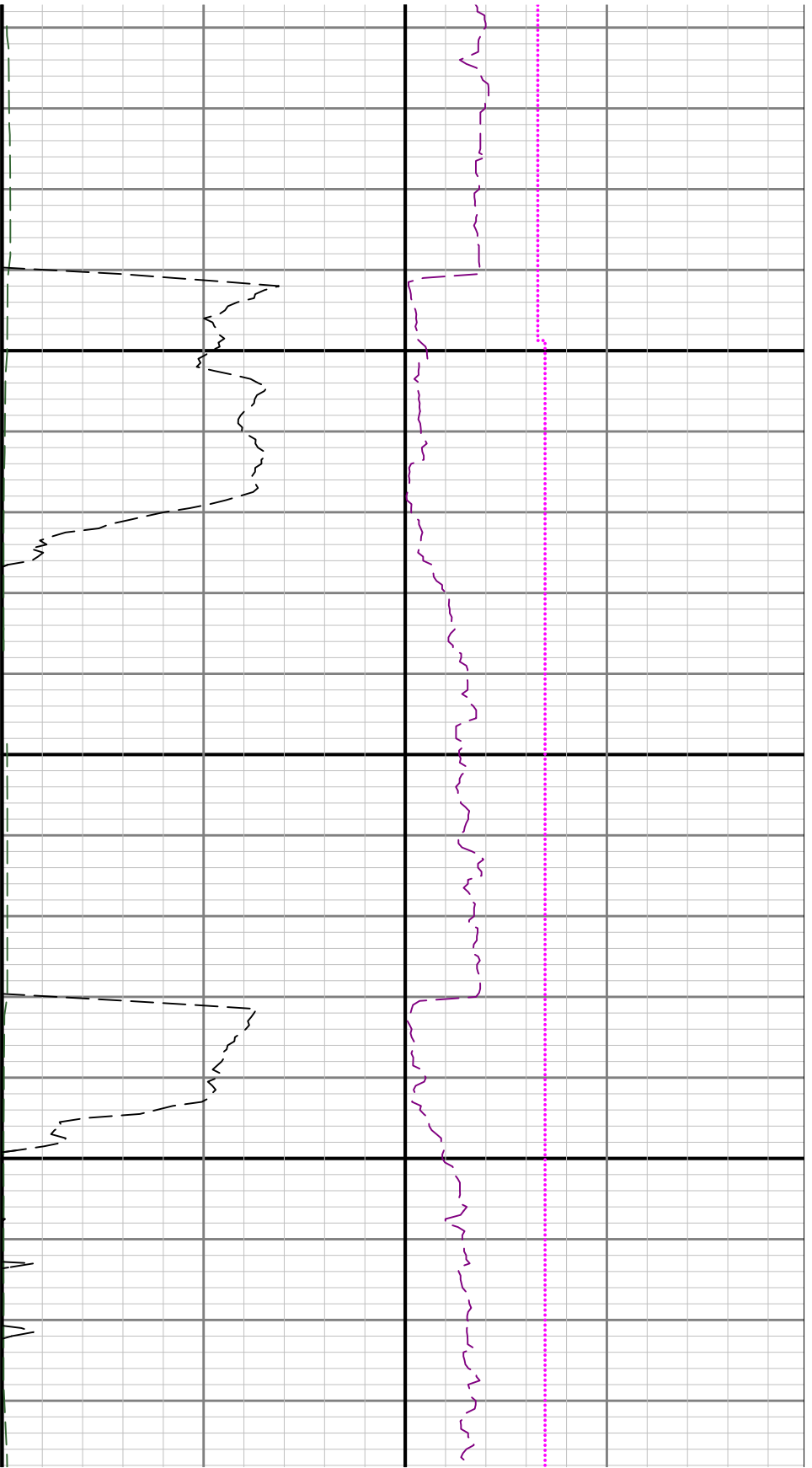




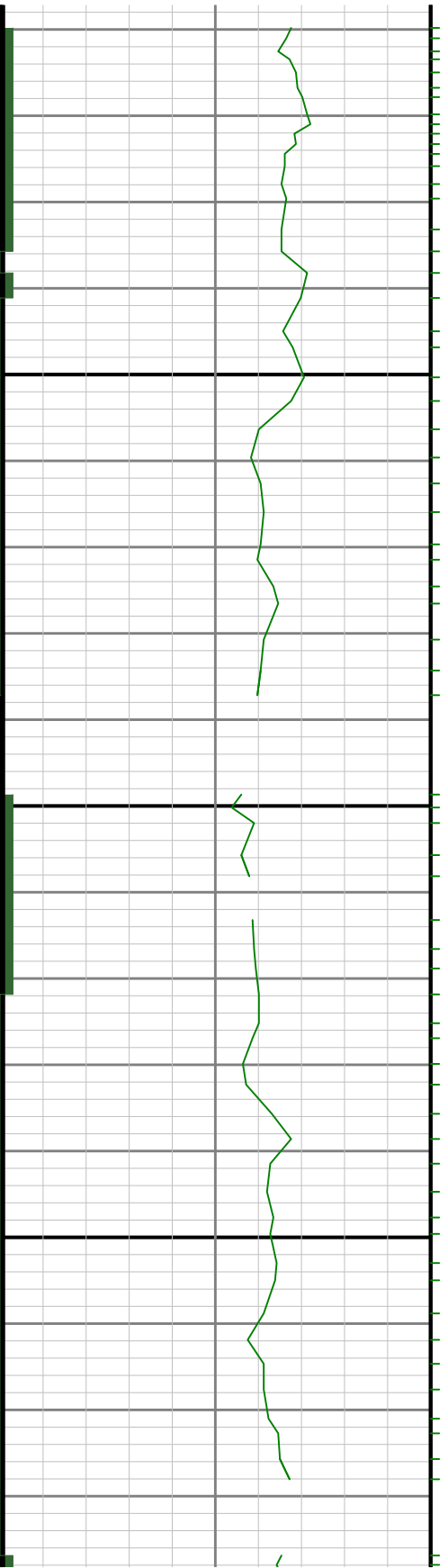
2200

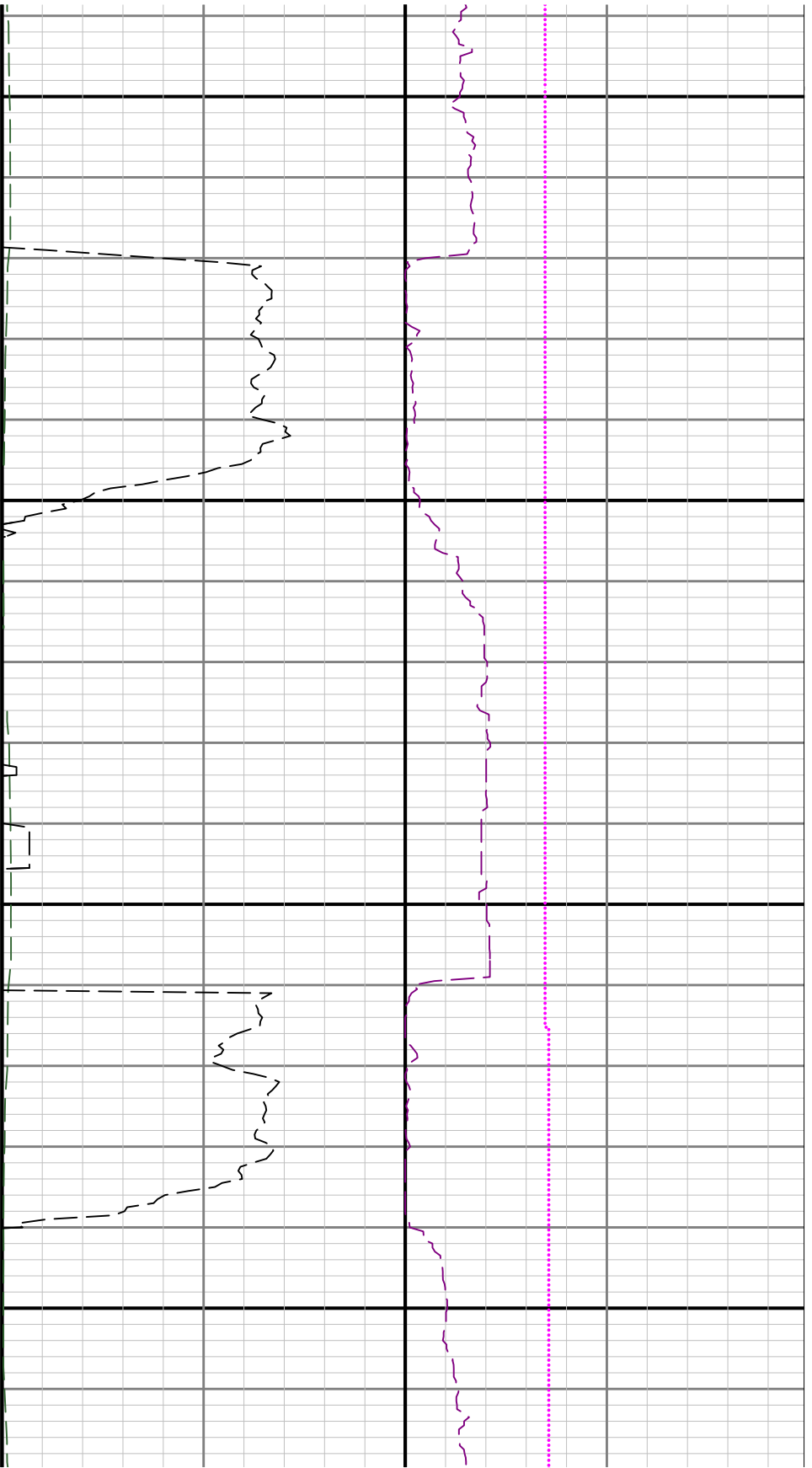
2300





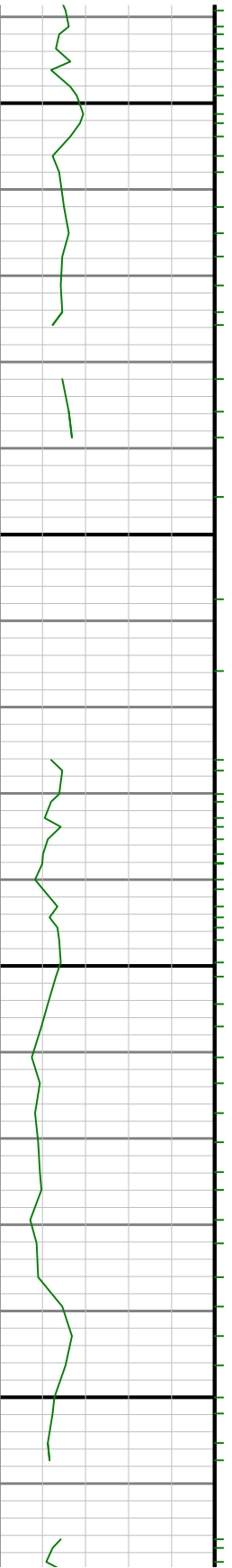
2400

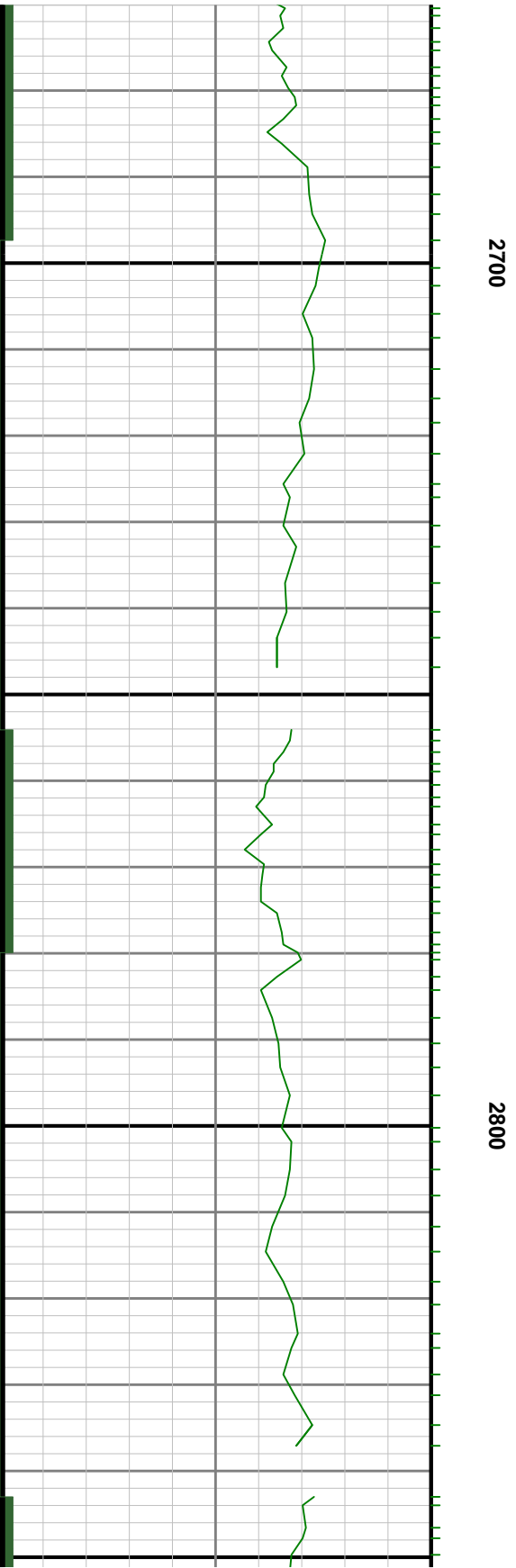
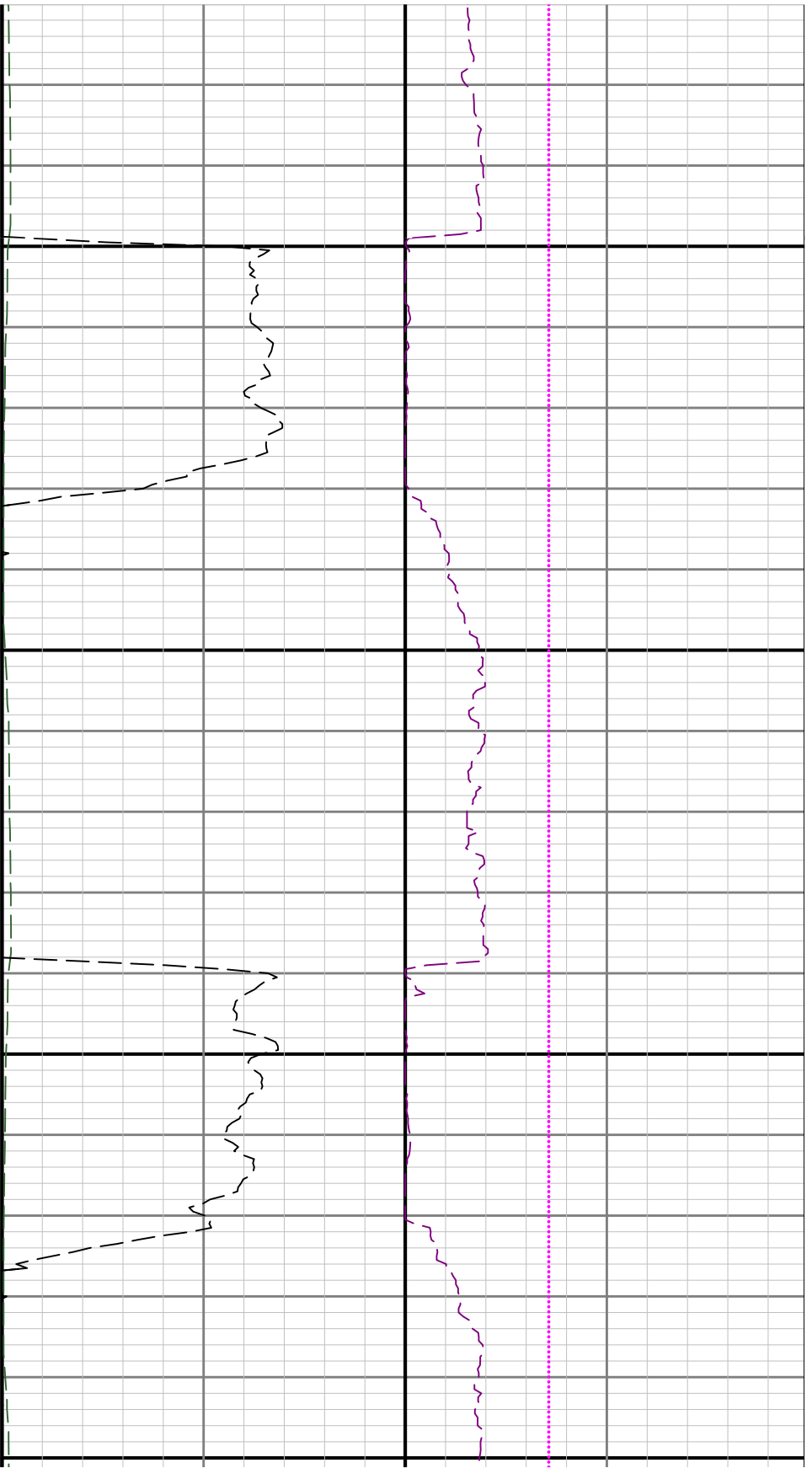


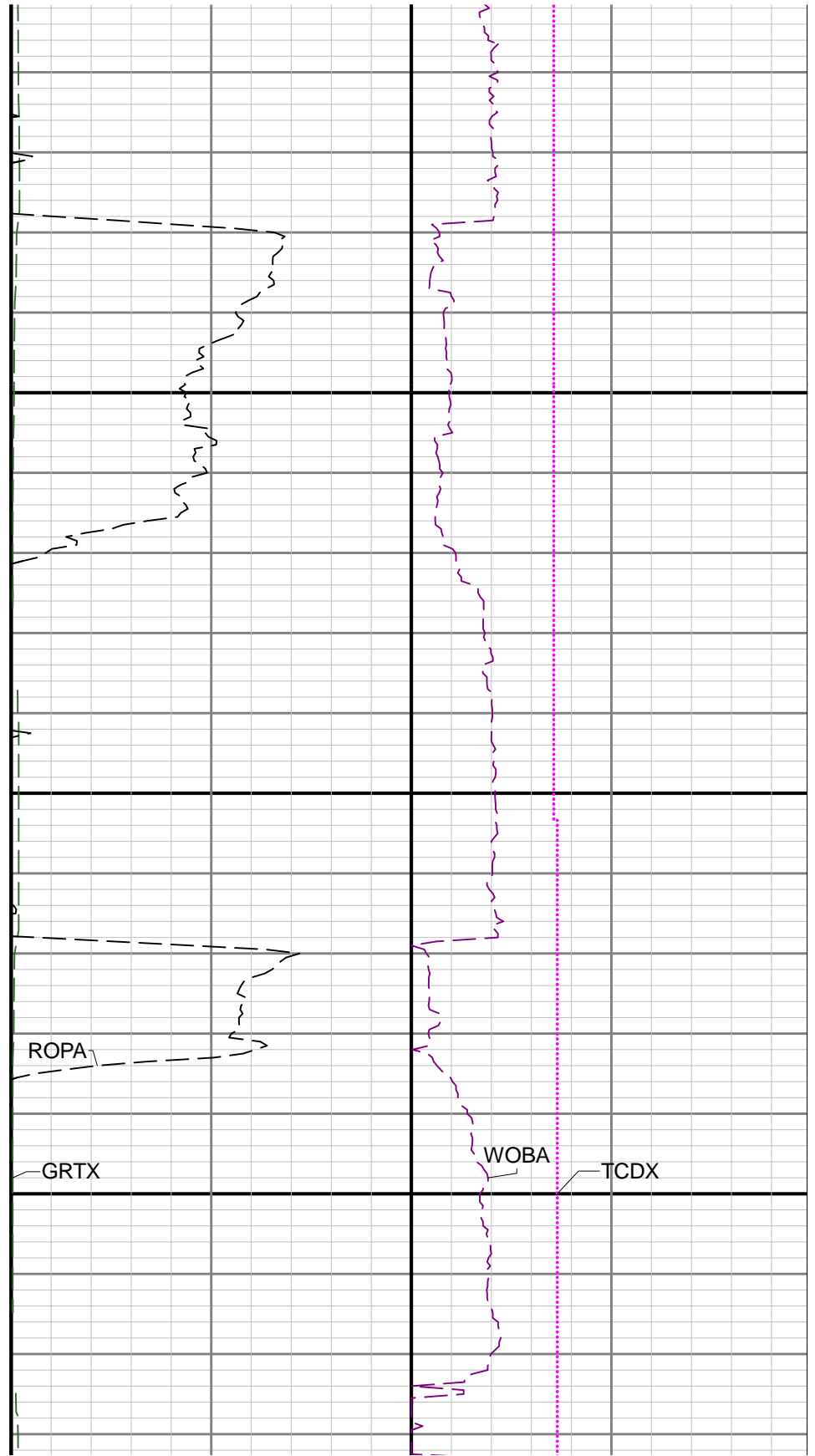
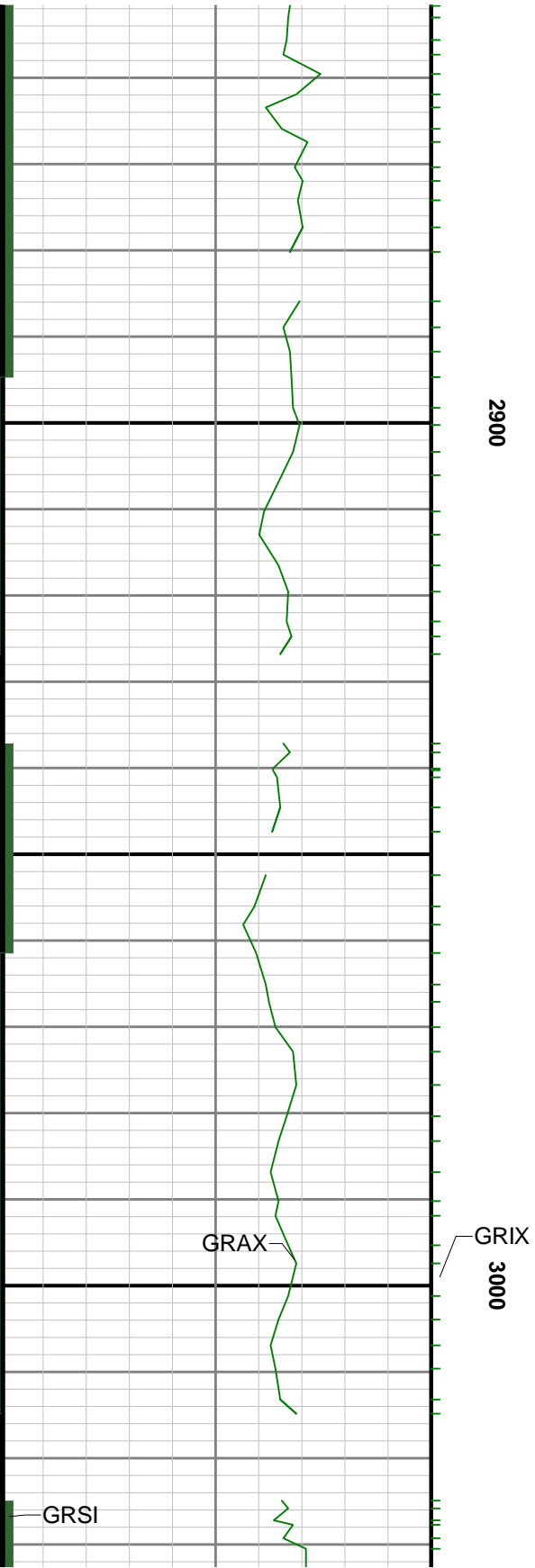


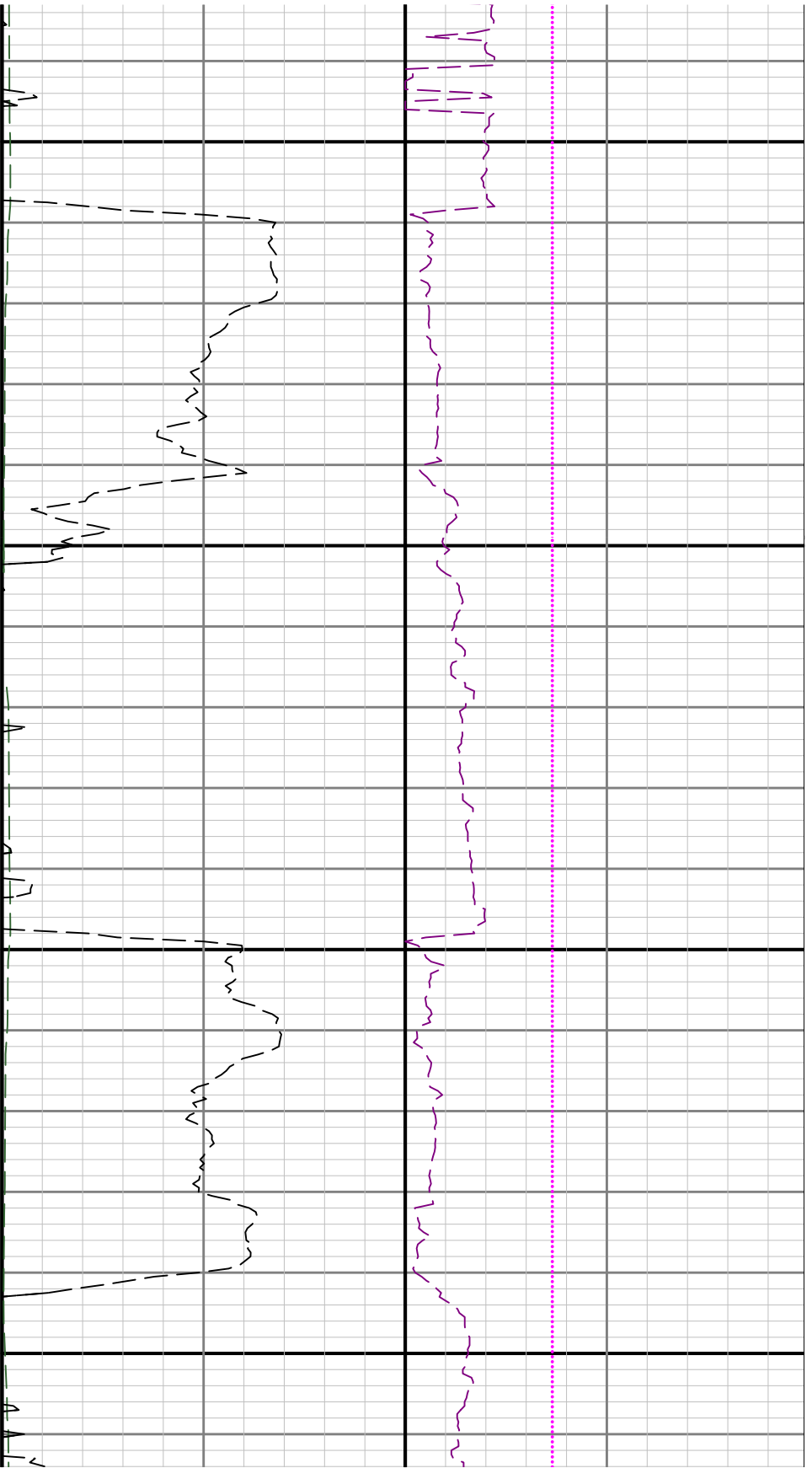
2500

2600



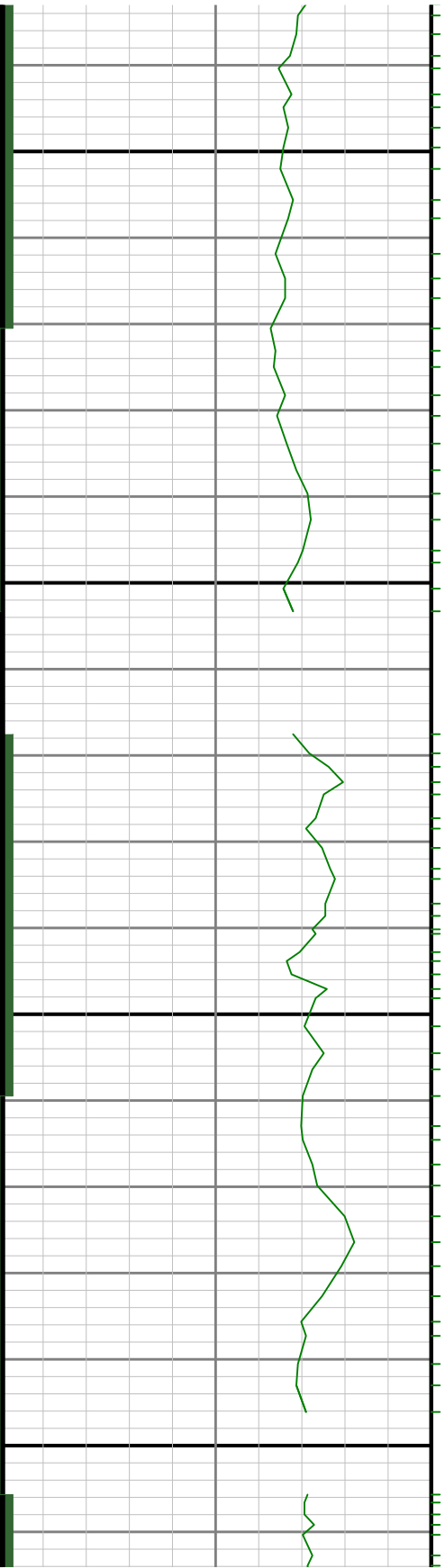


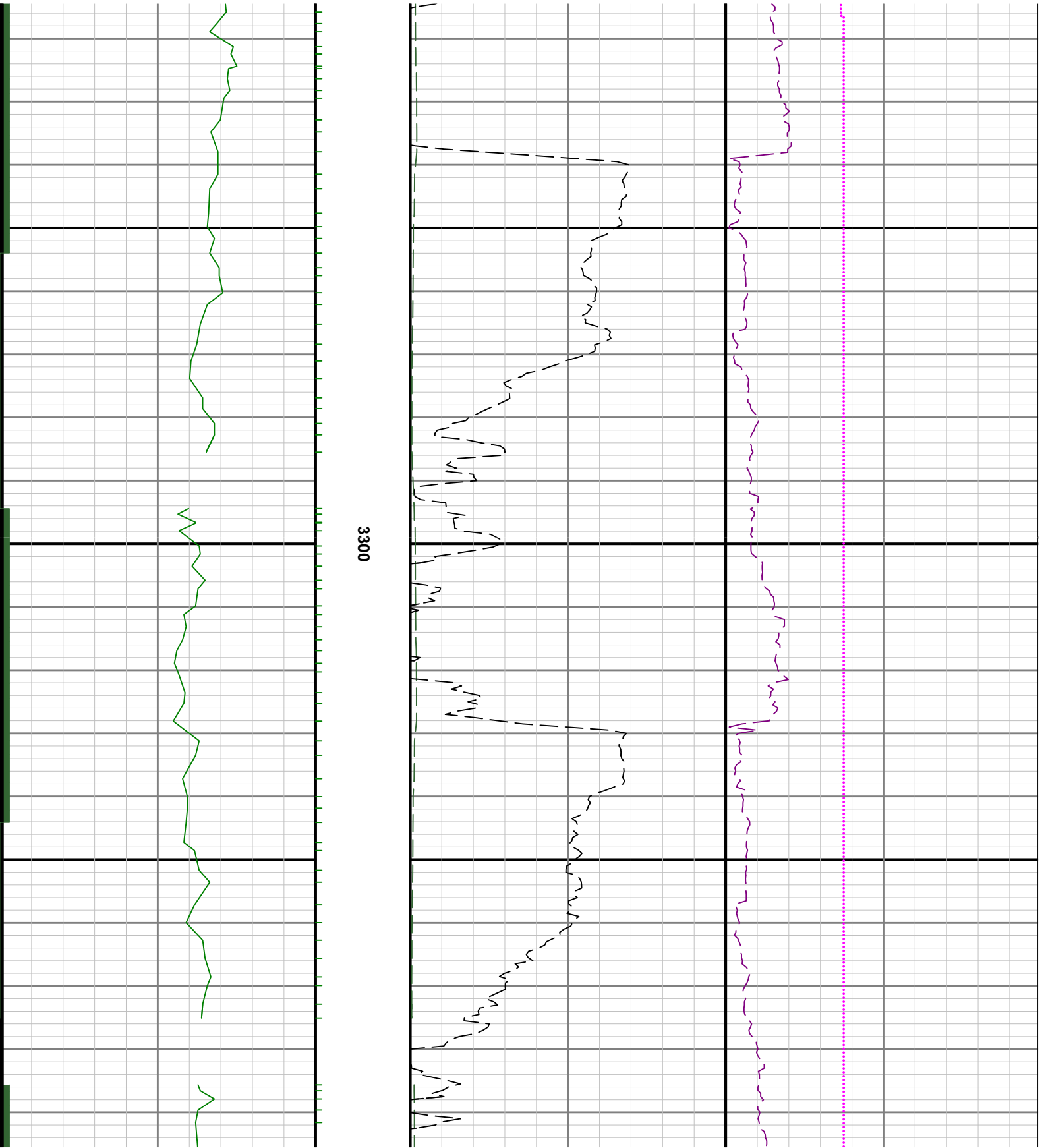


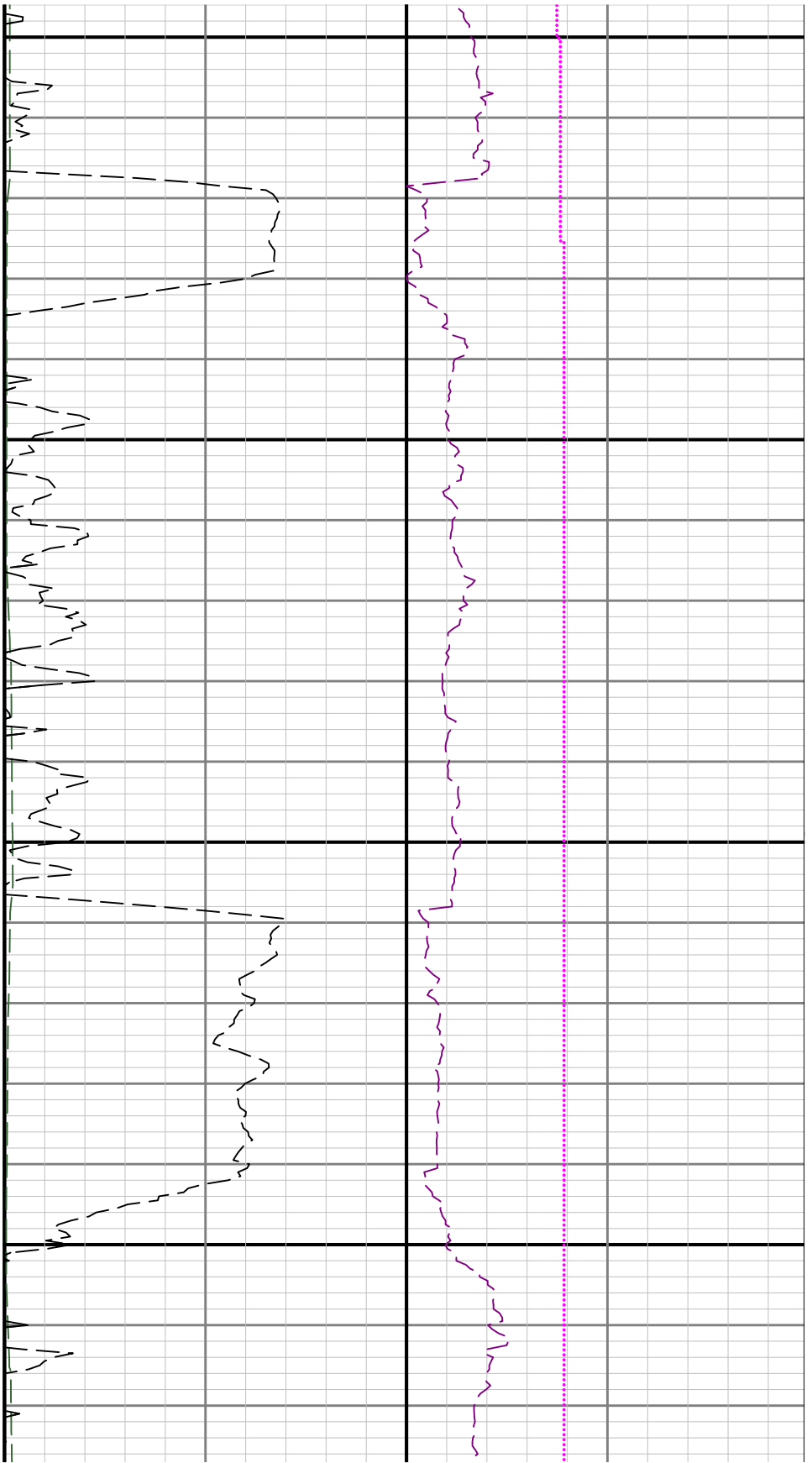


3100

3200

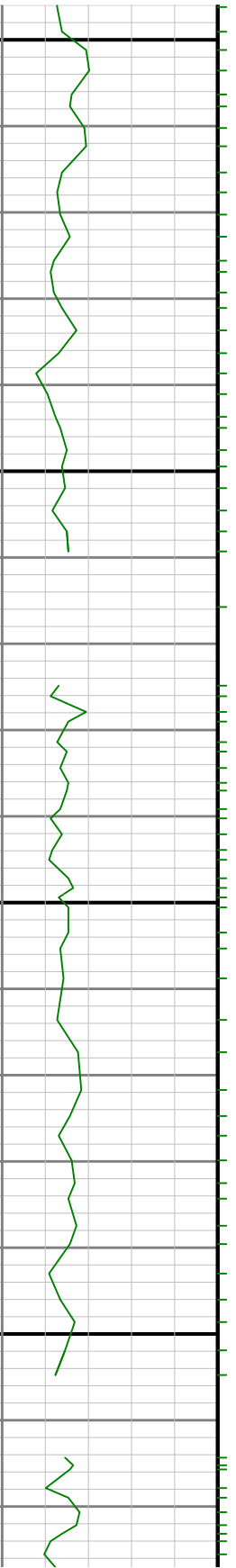


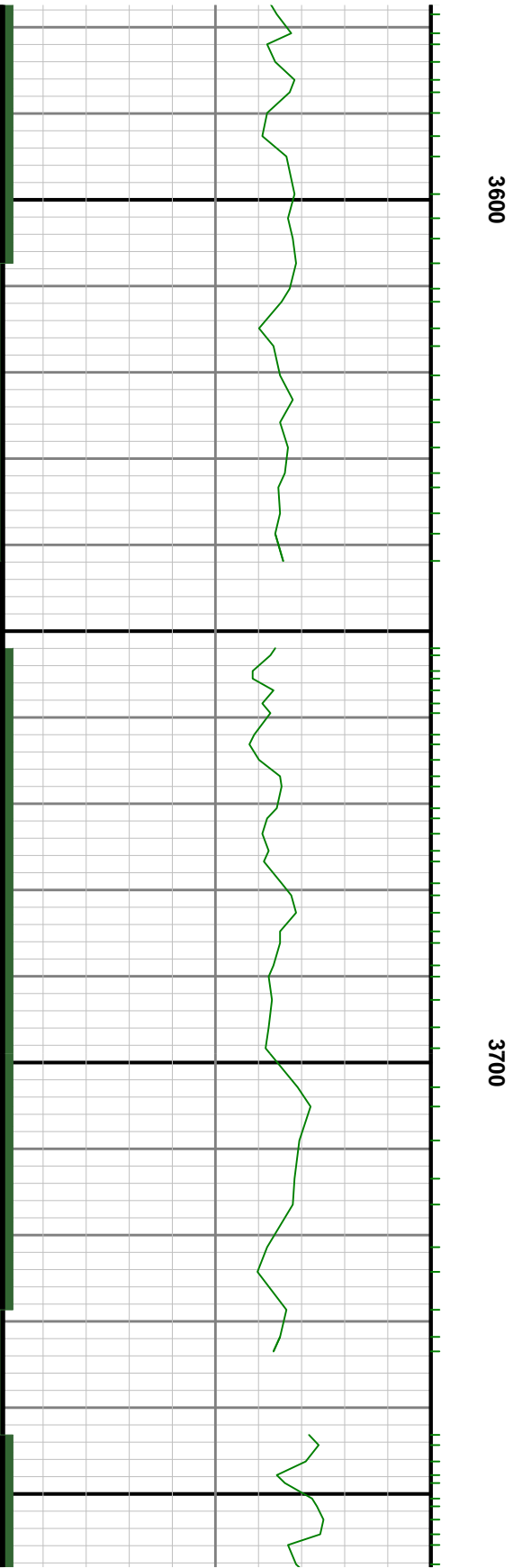
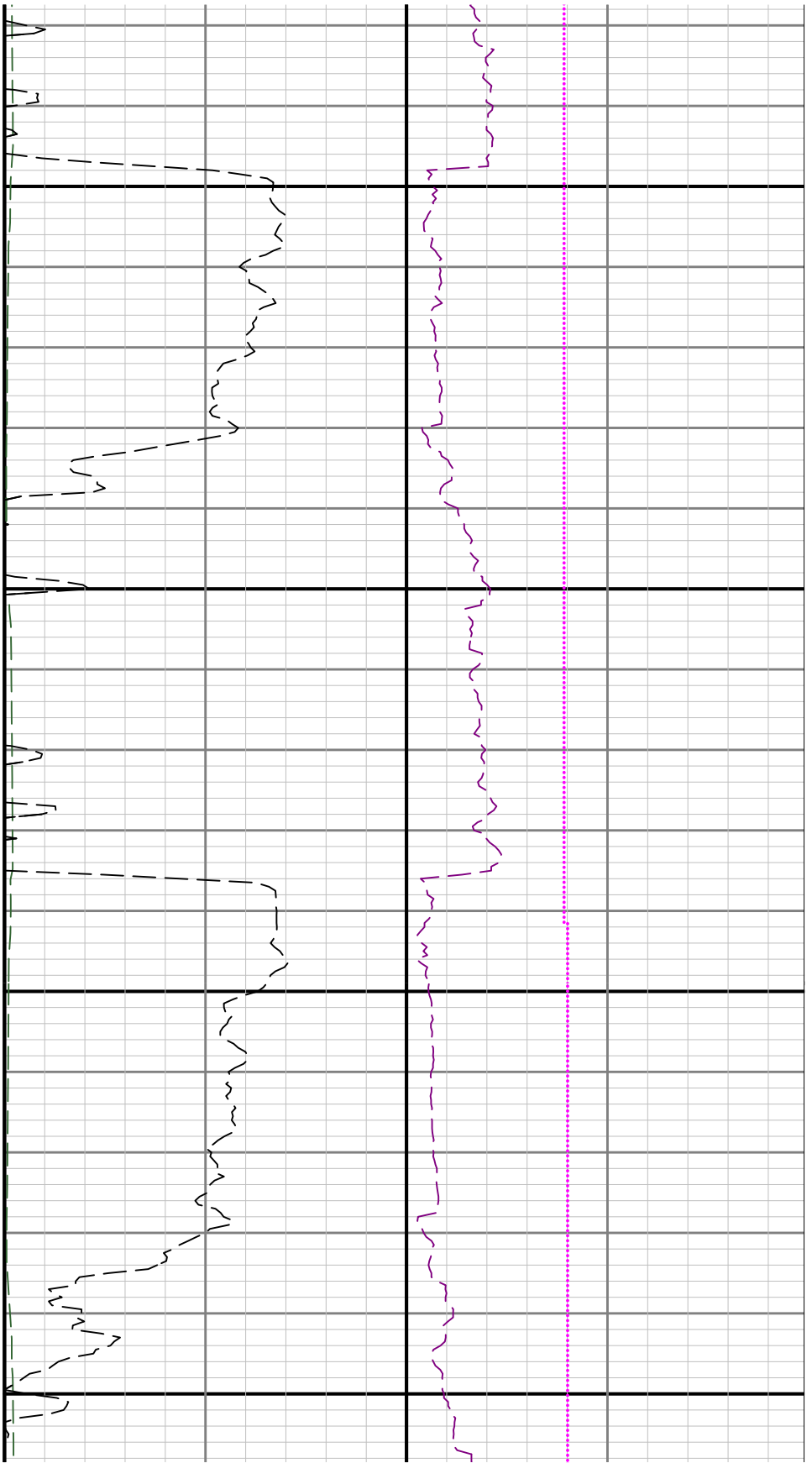


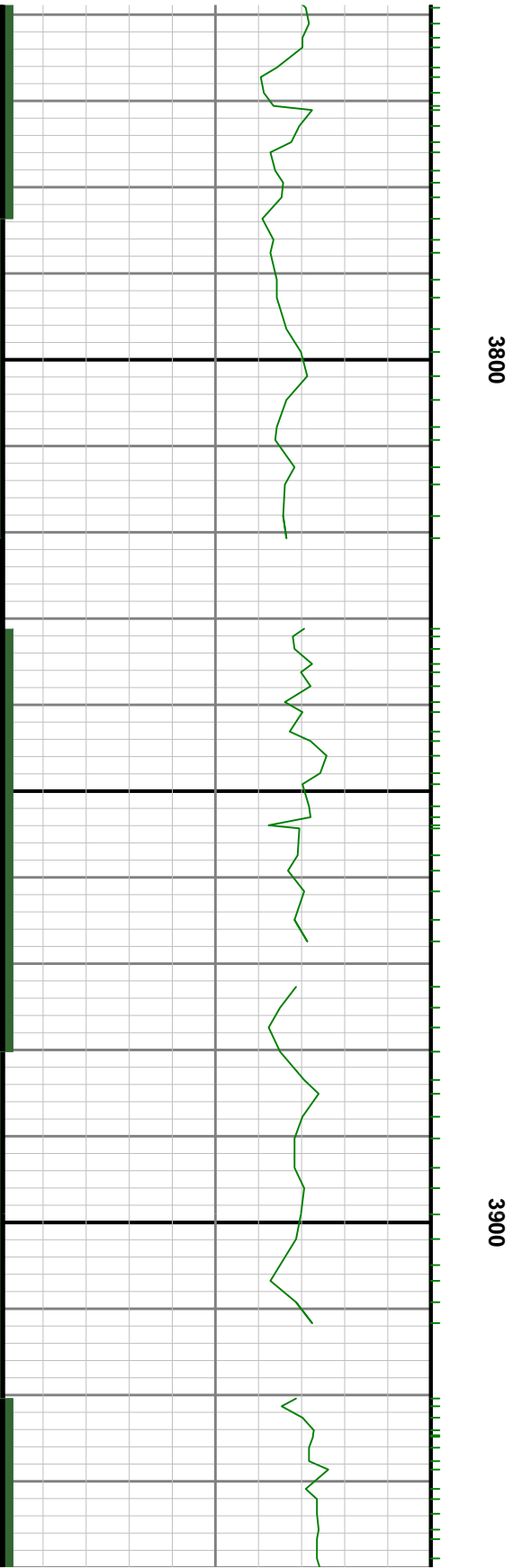
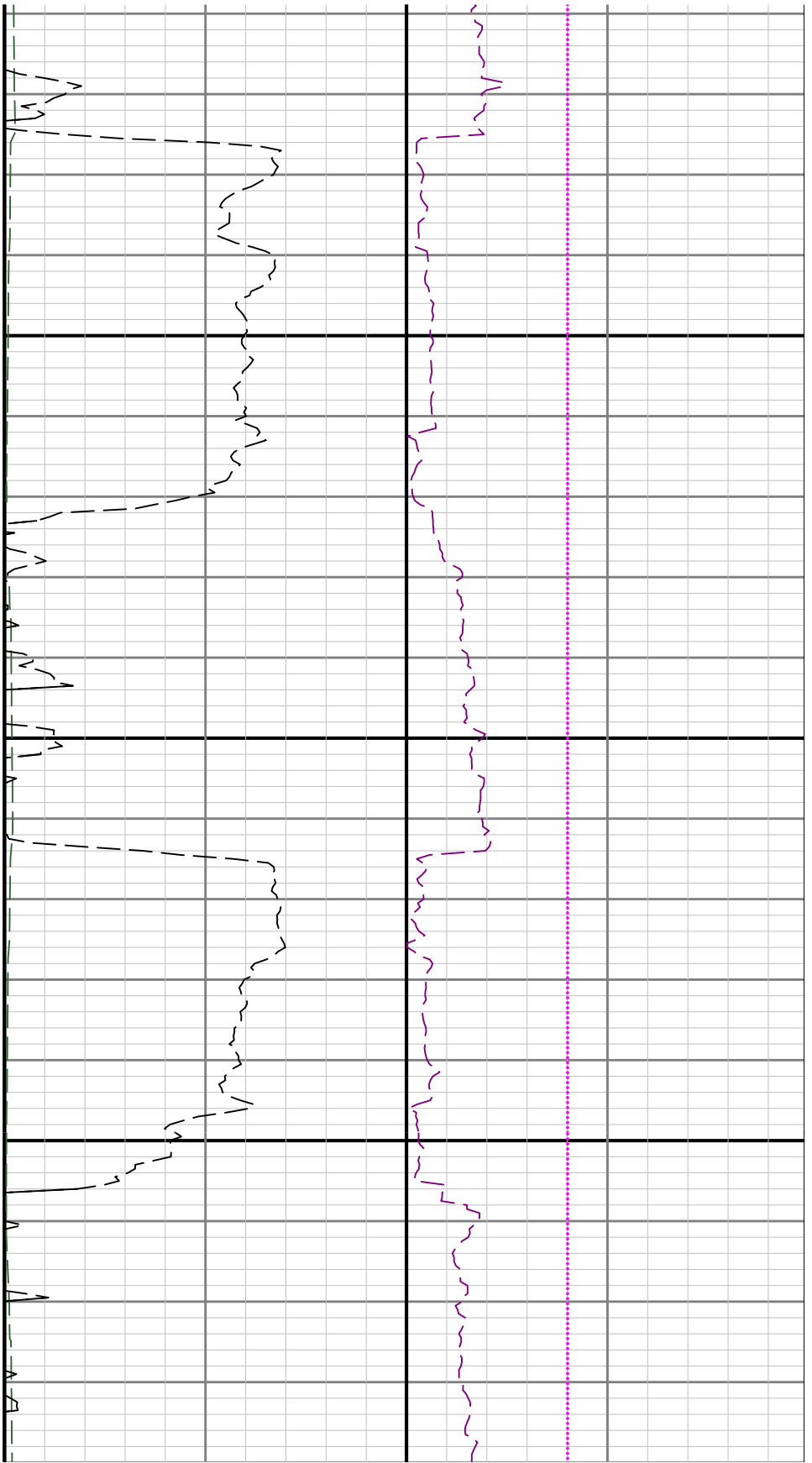


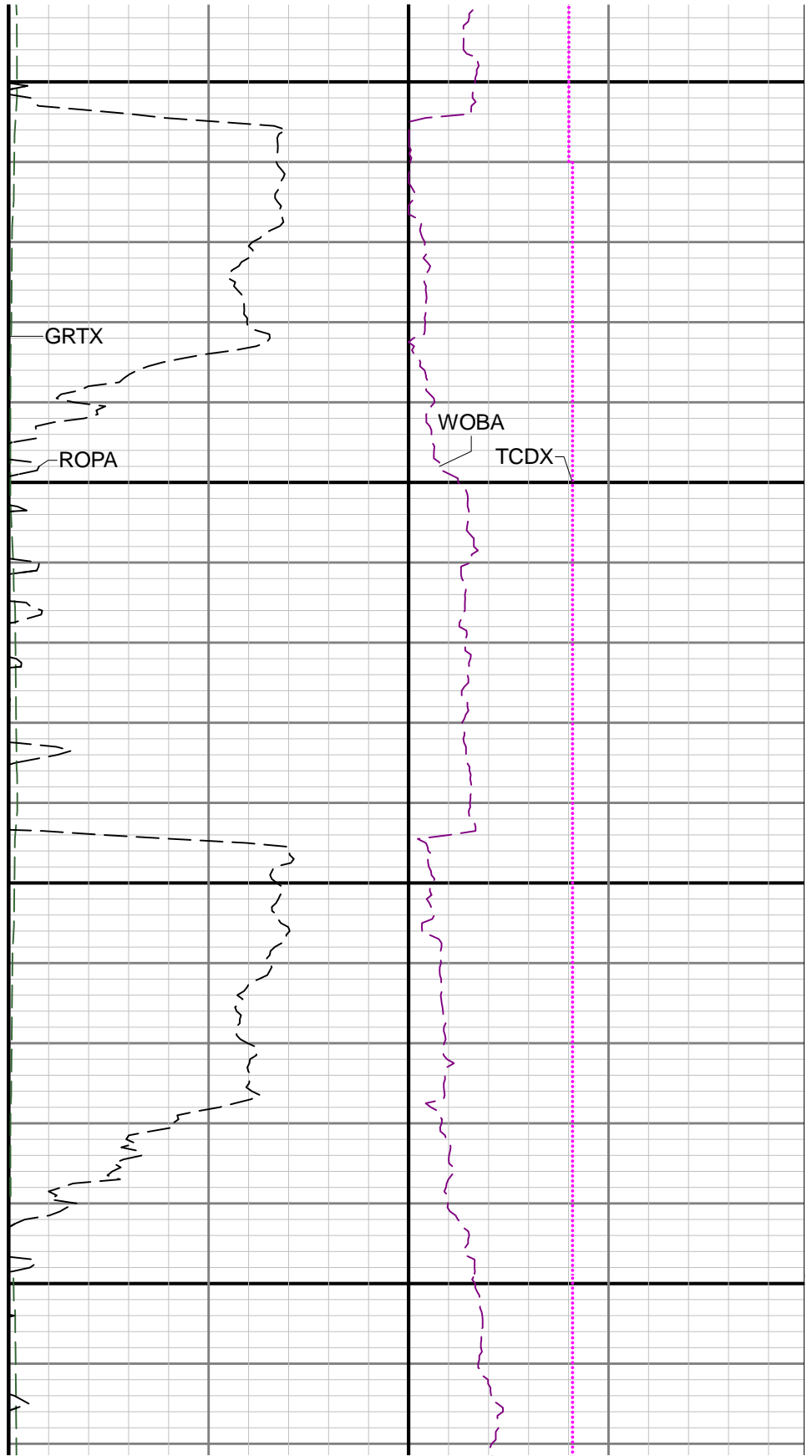
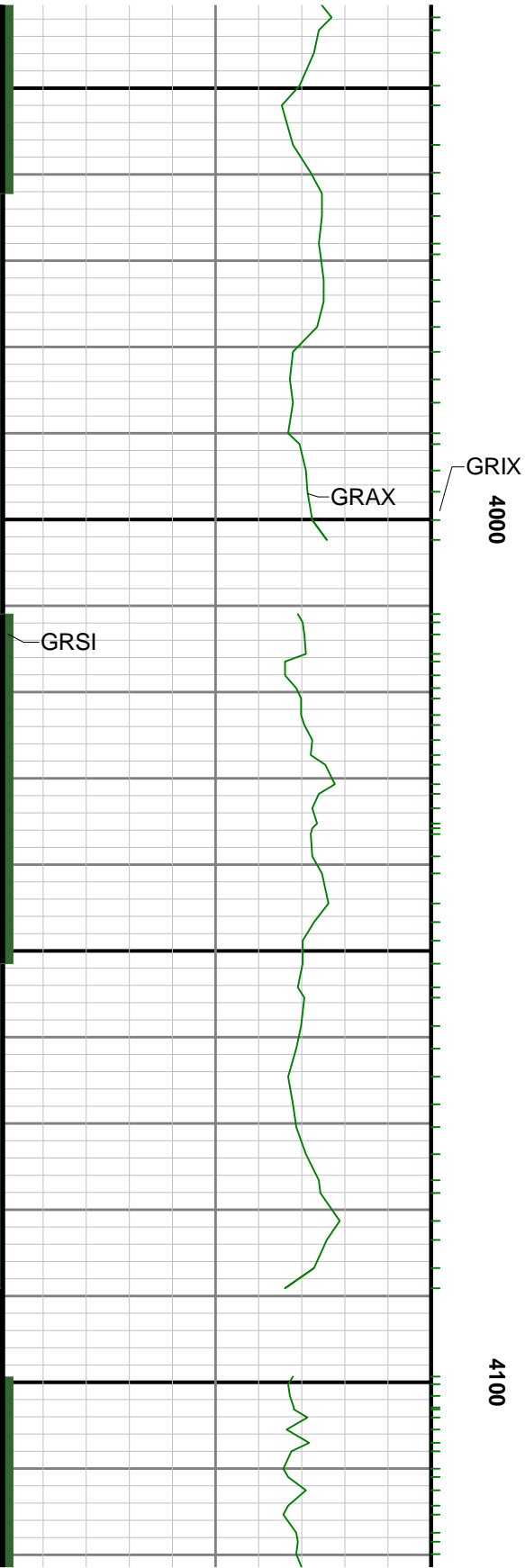
3400

3500





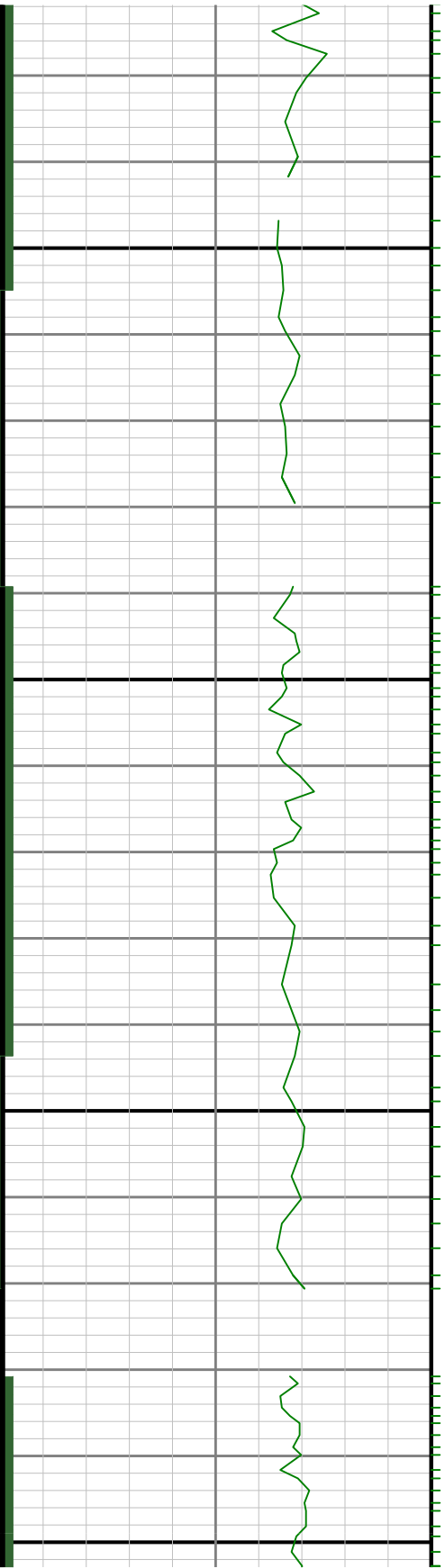


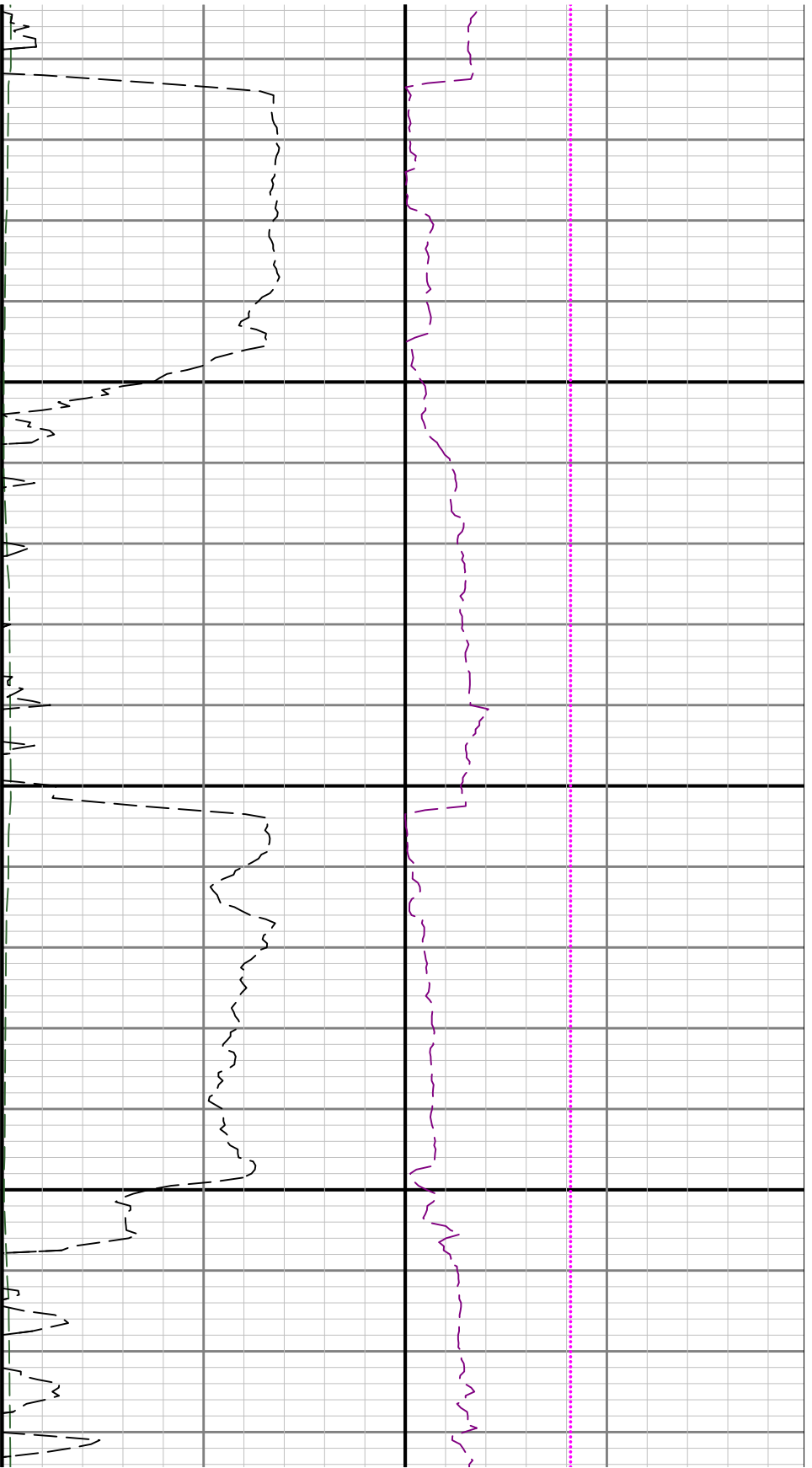




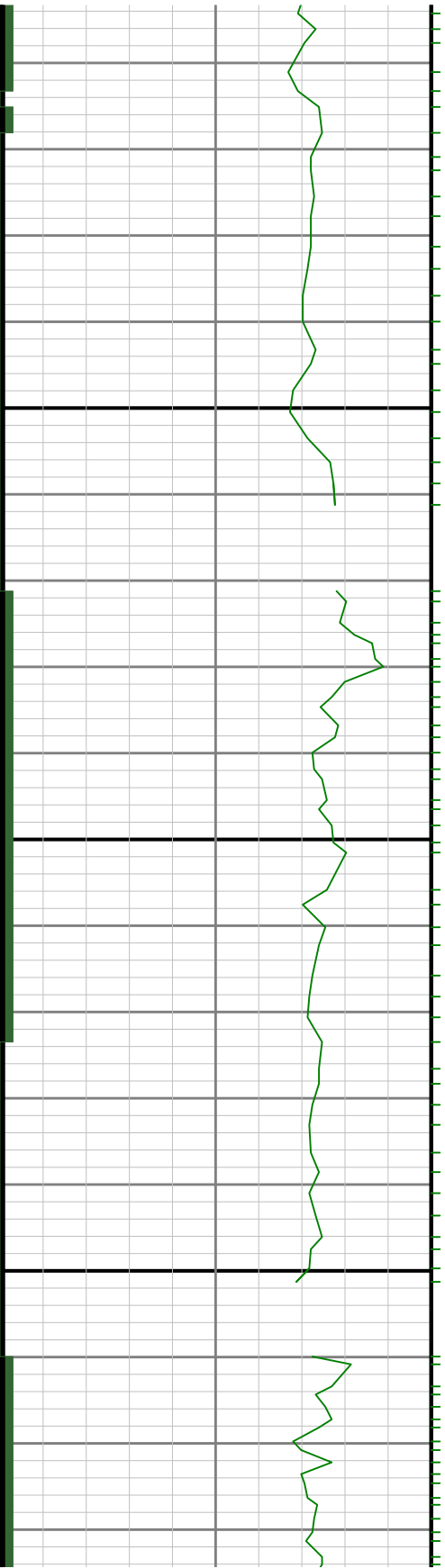
4200

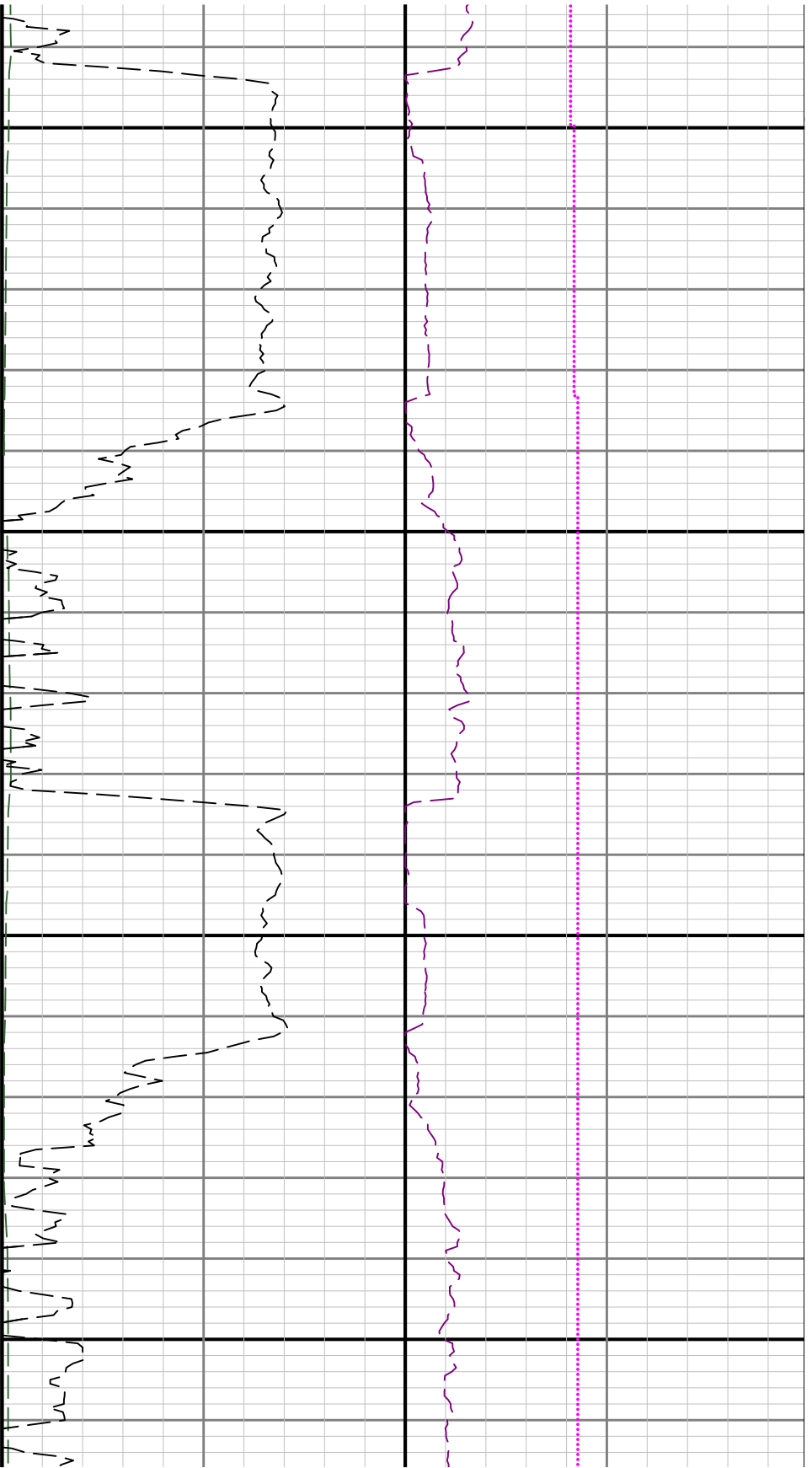
4300





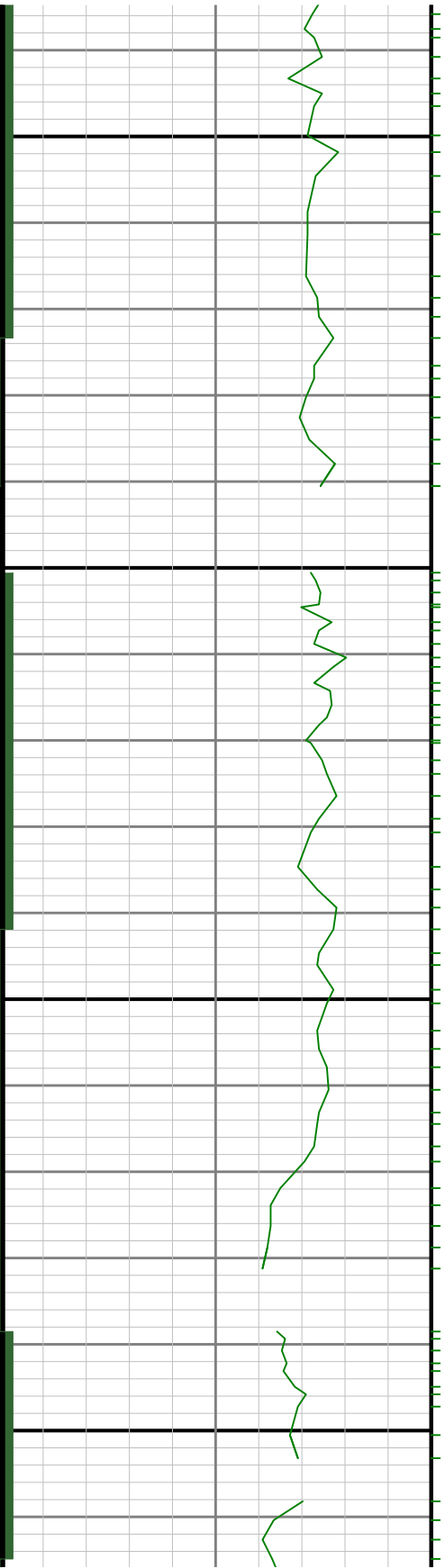
4400

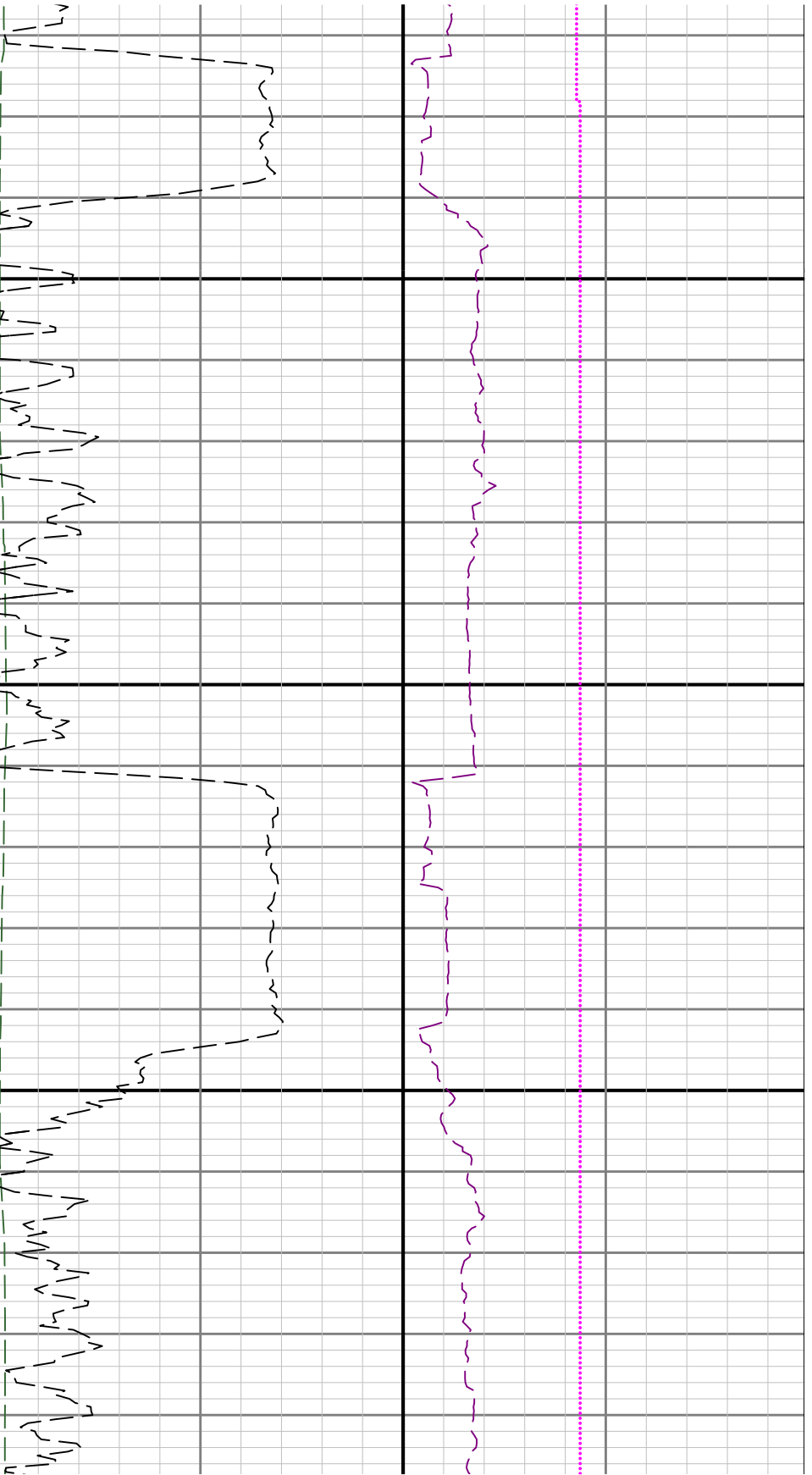




4500

4600

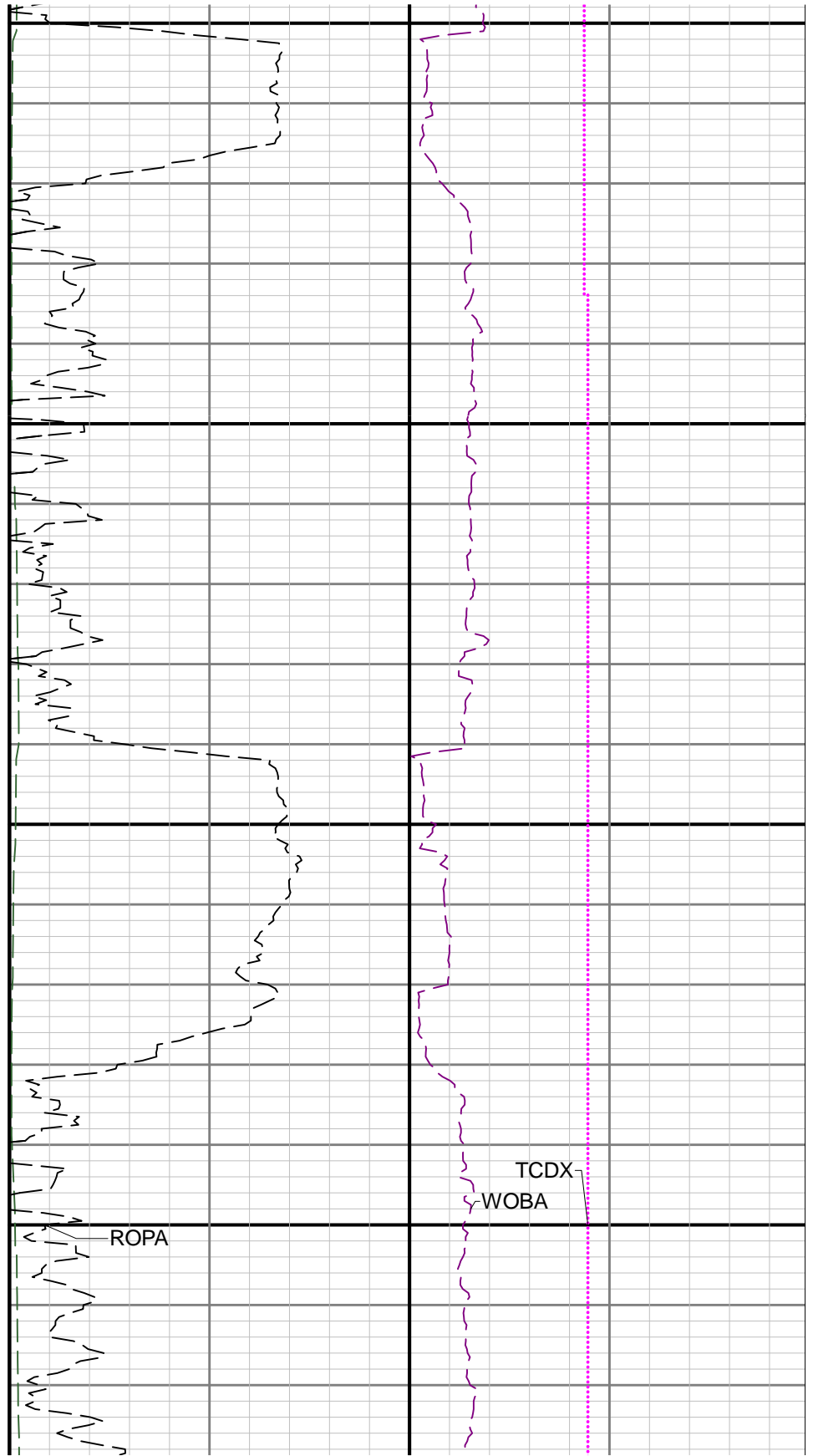
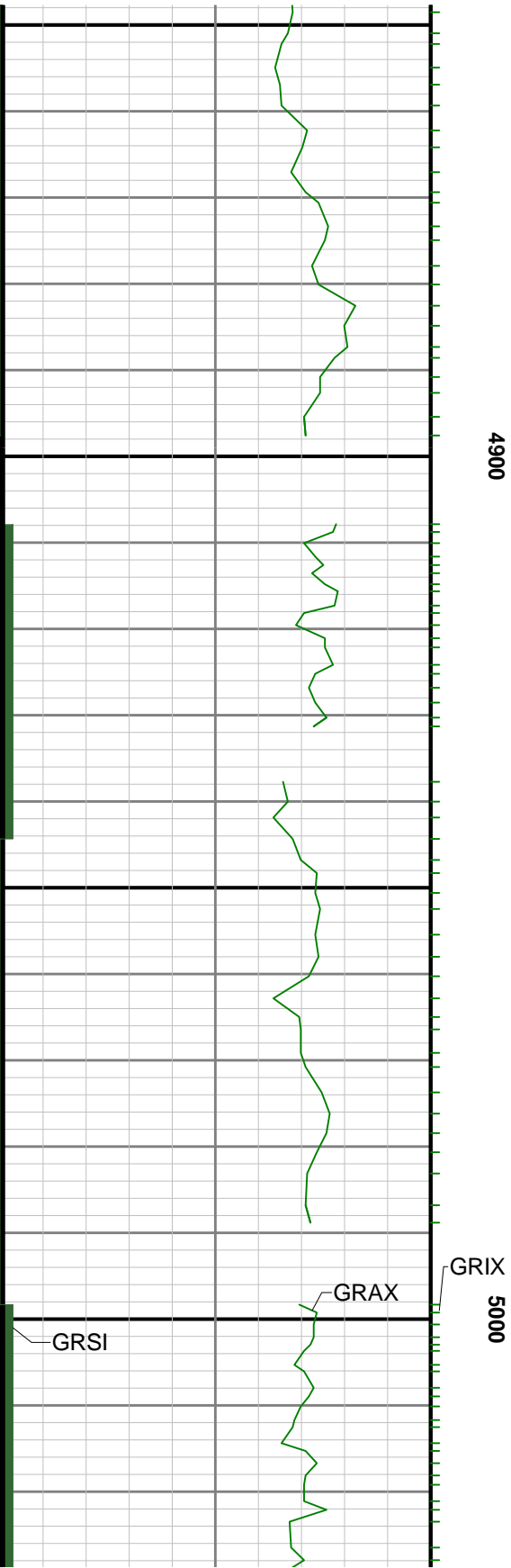


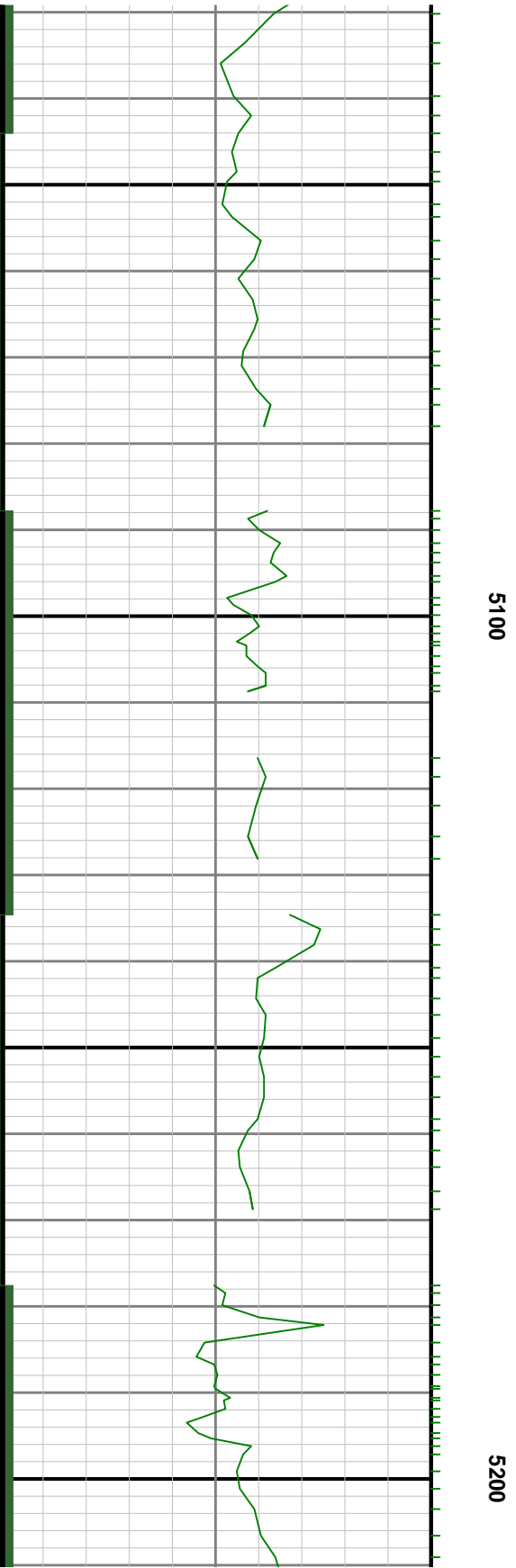
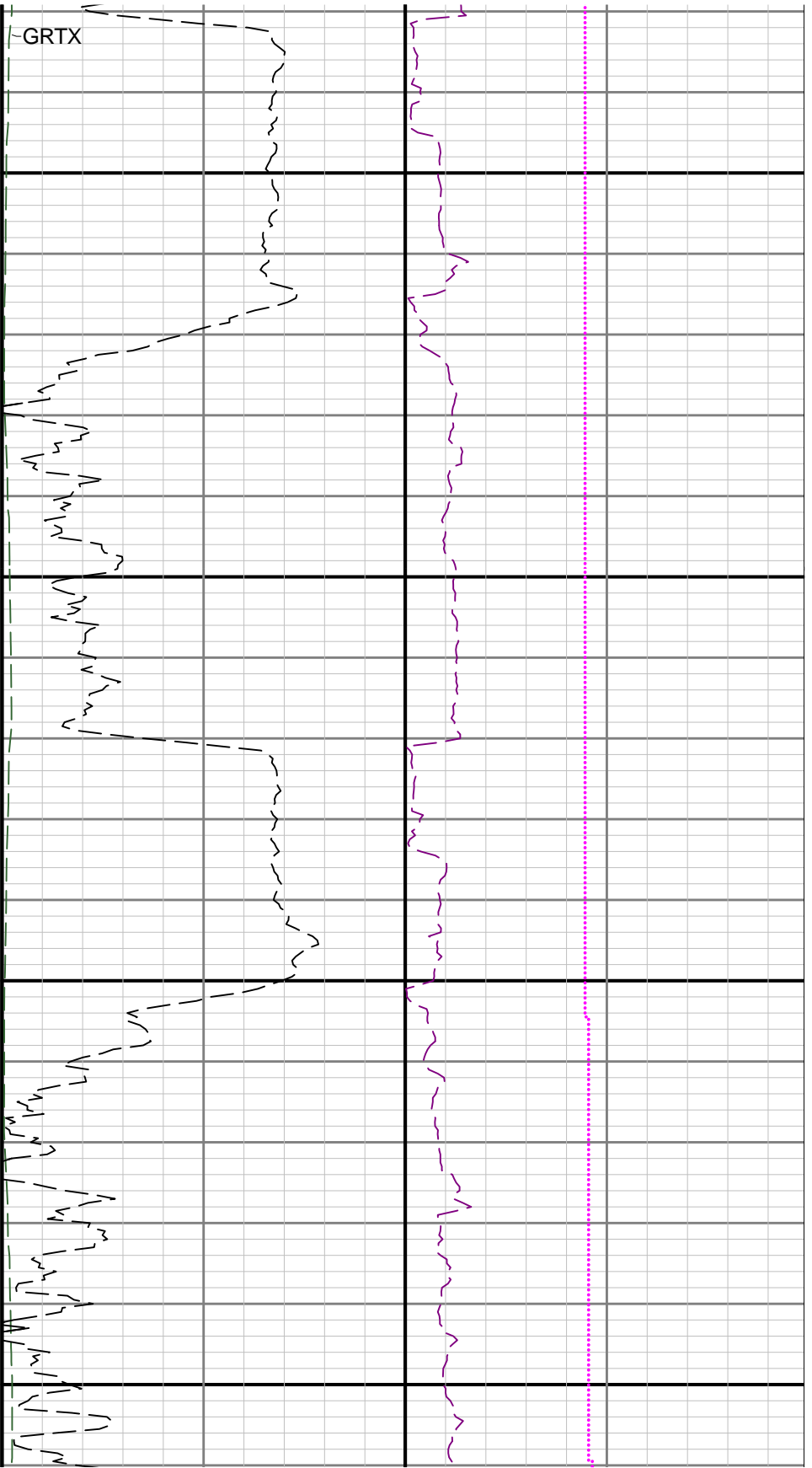


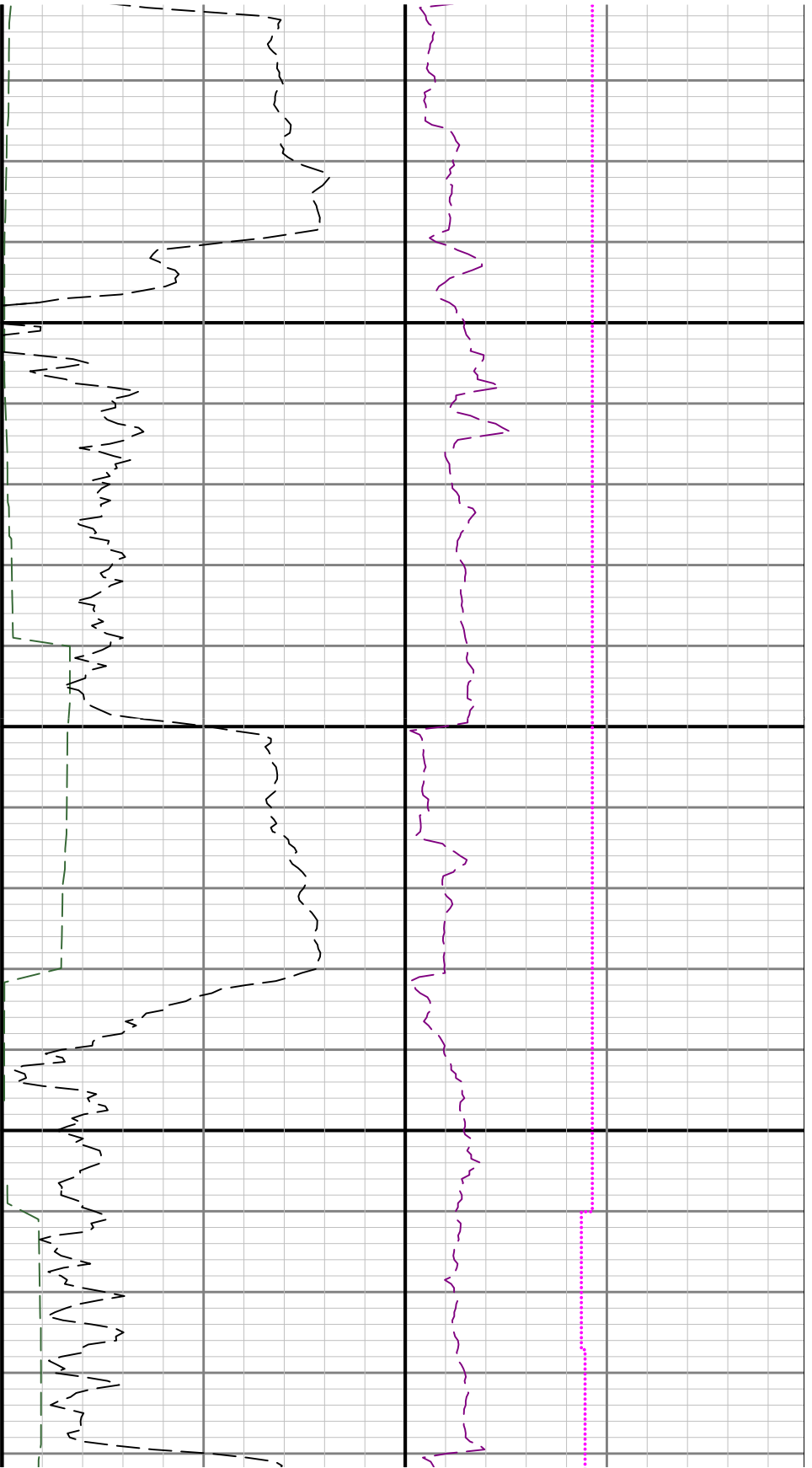
4700

4800

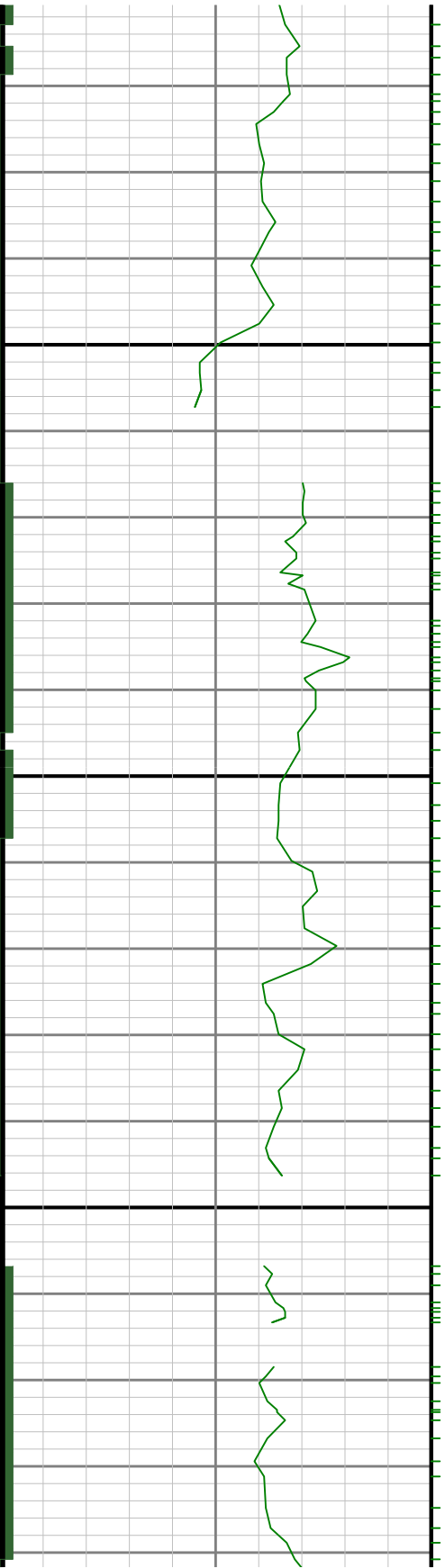


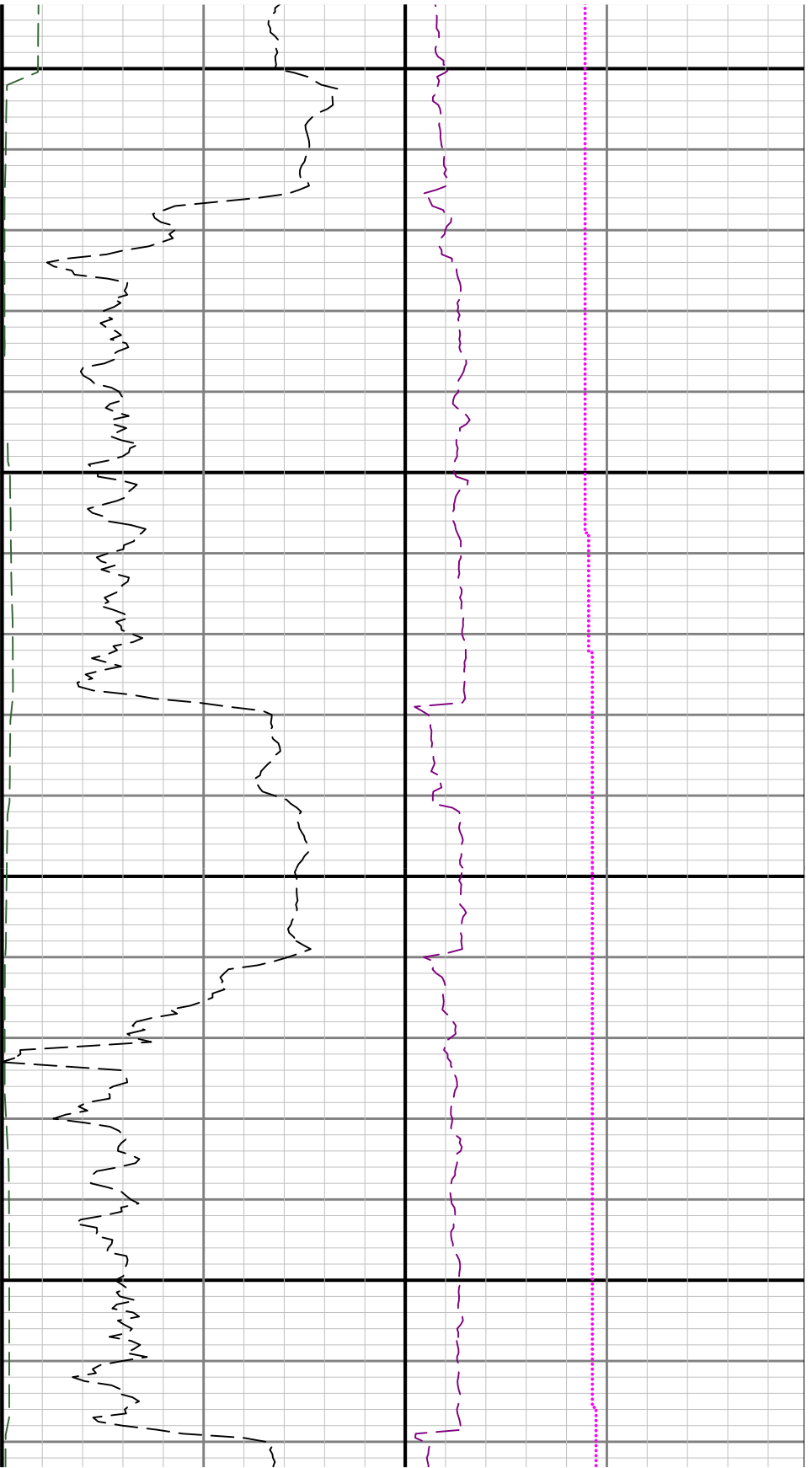






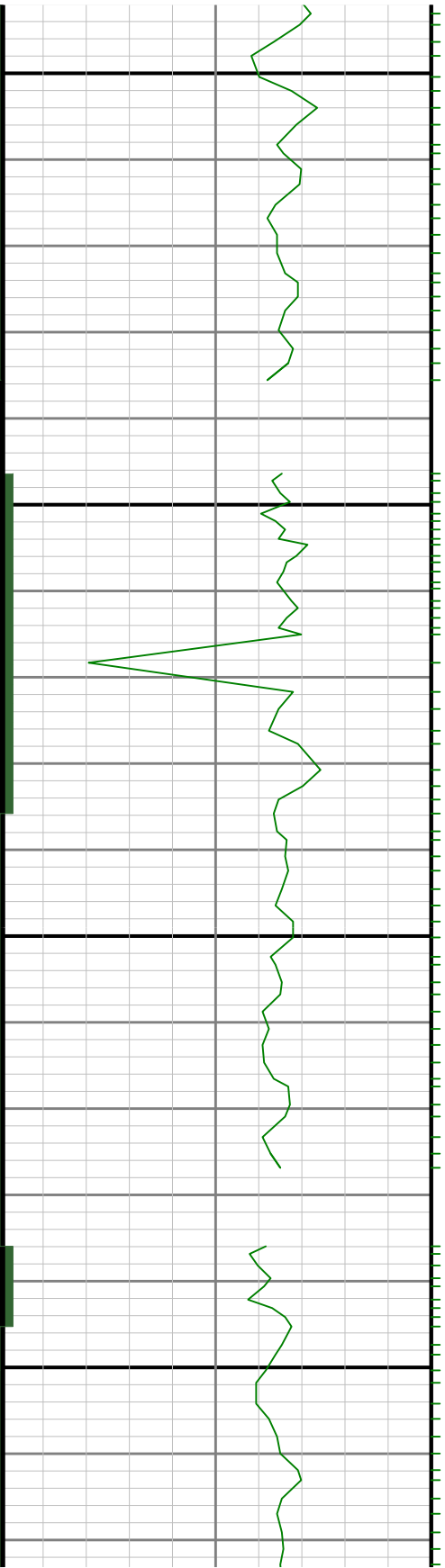
5300

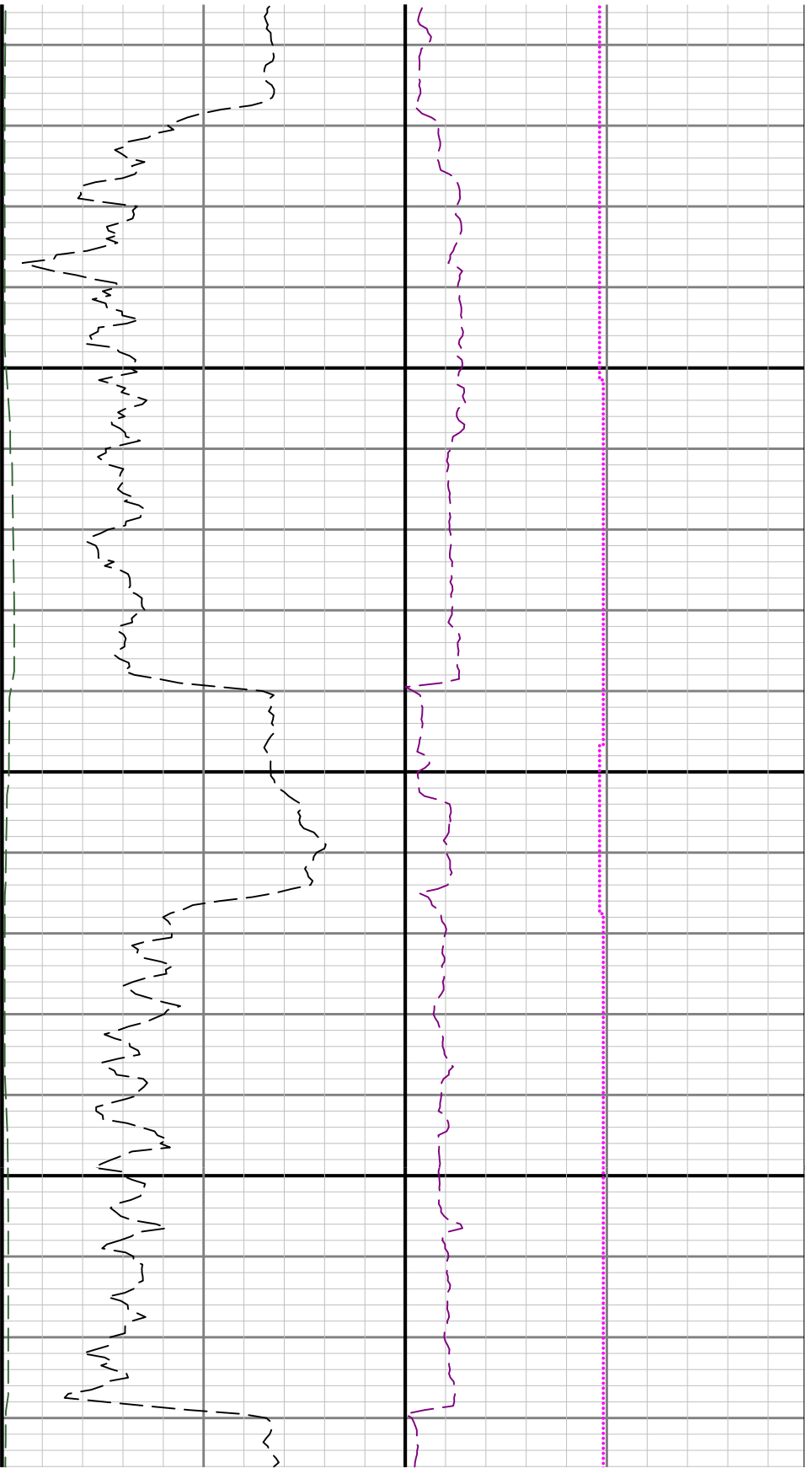




5400

5500

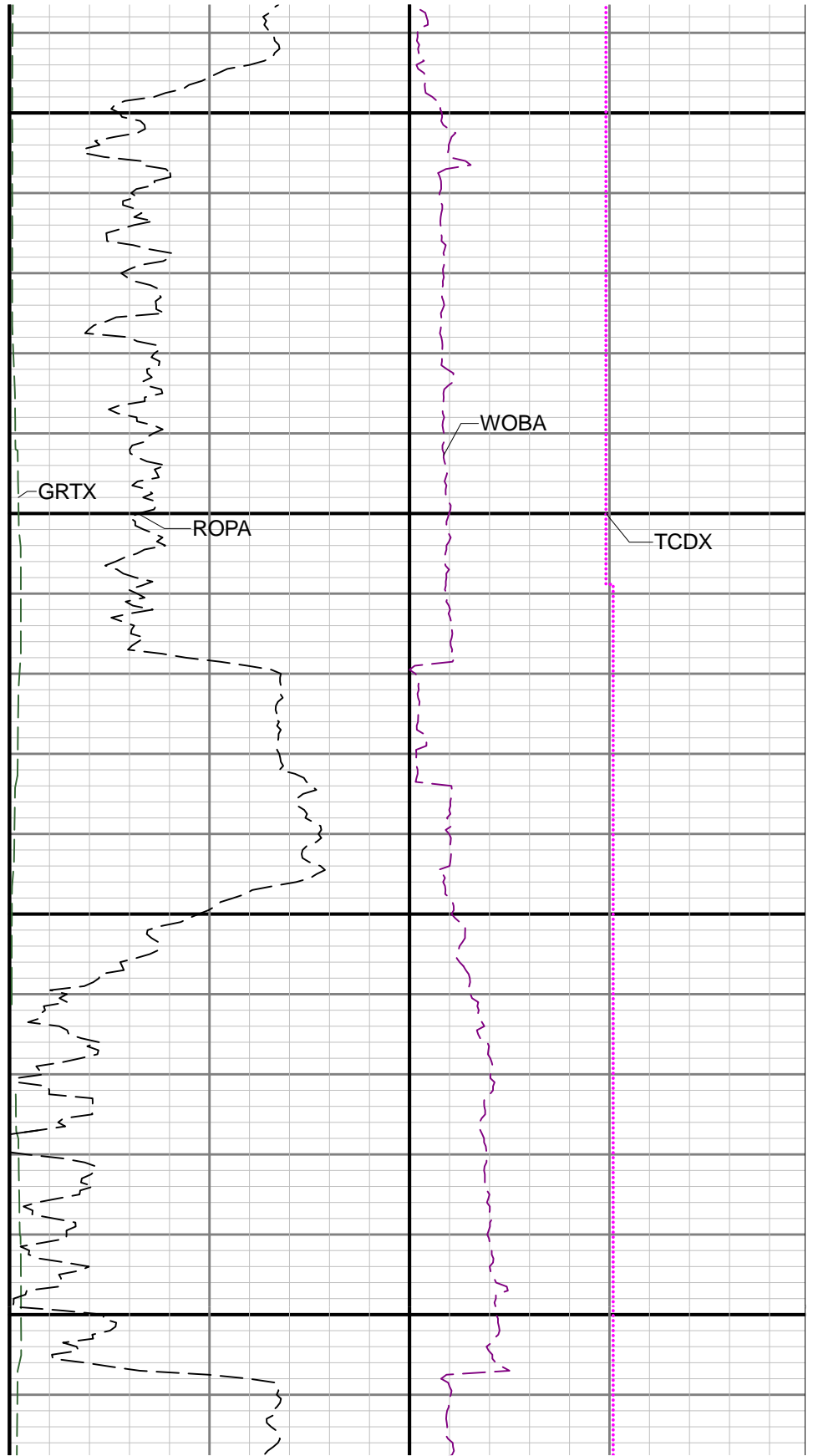
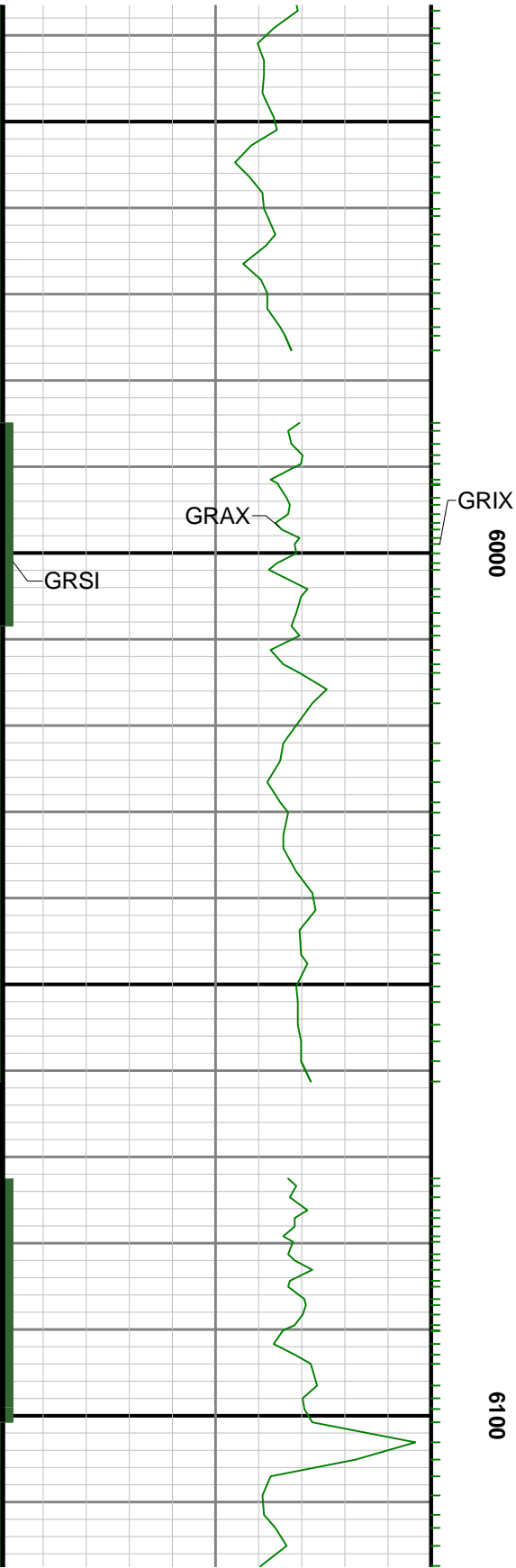


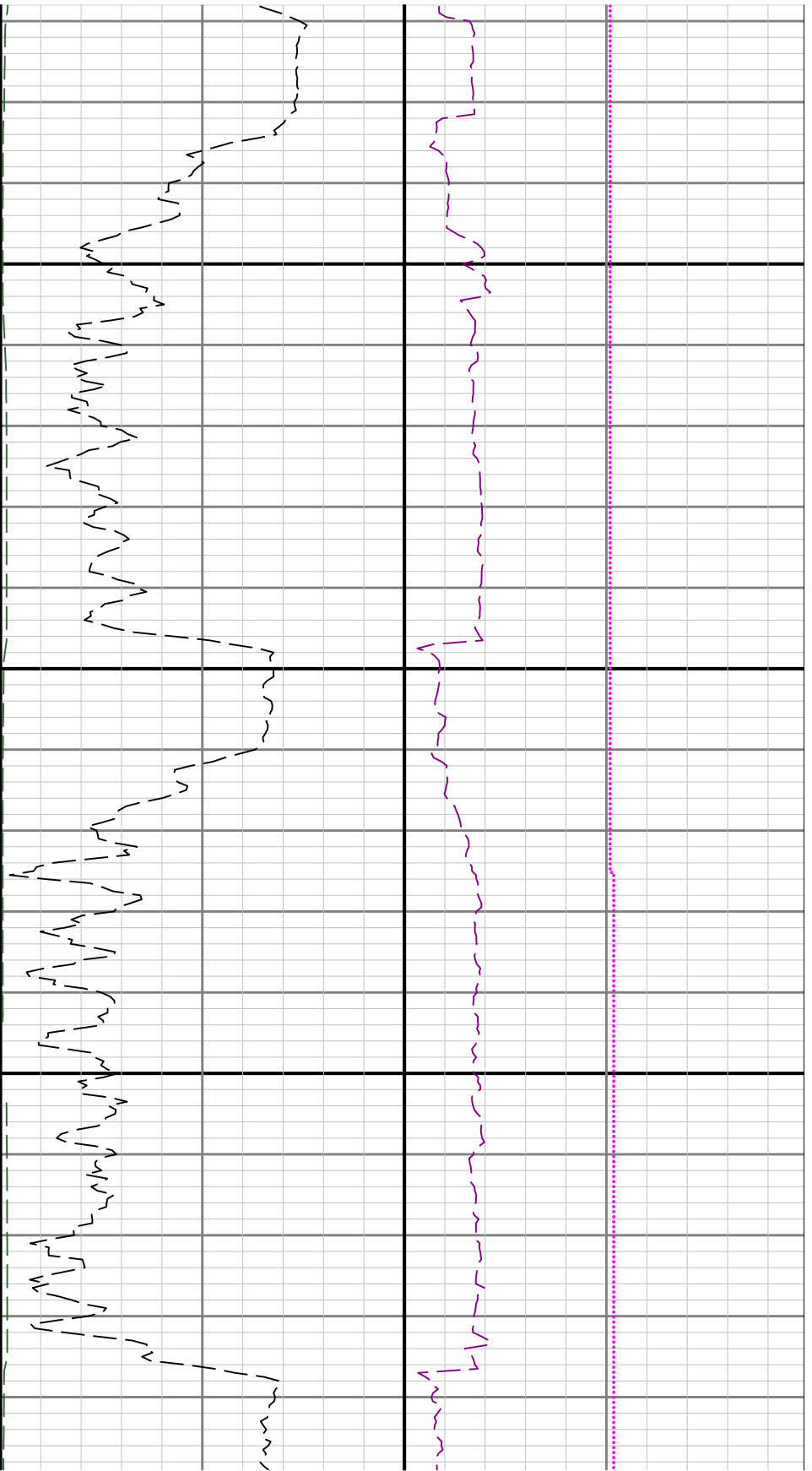


5800

5900

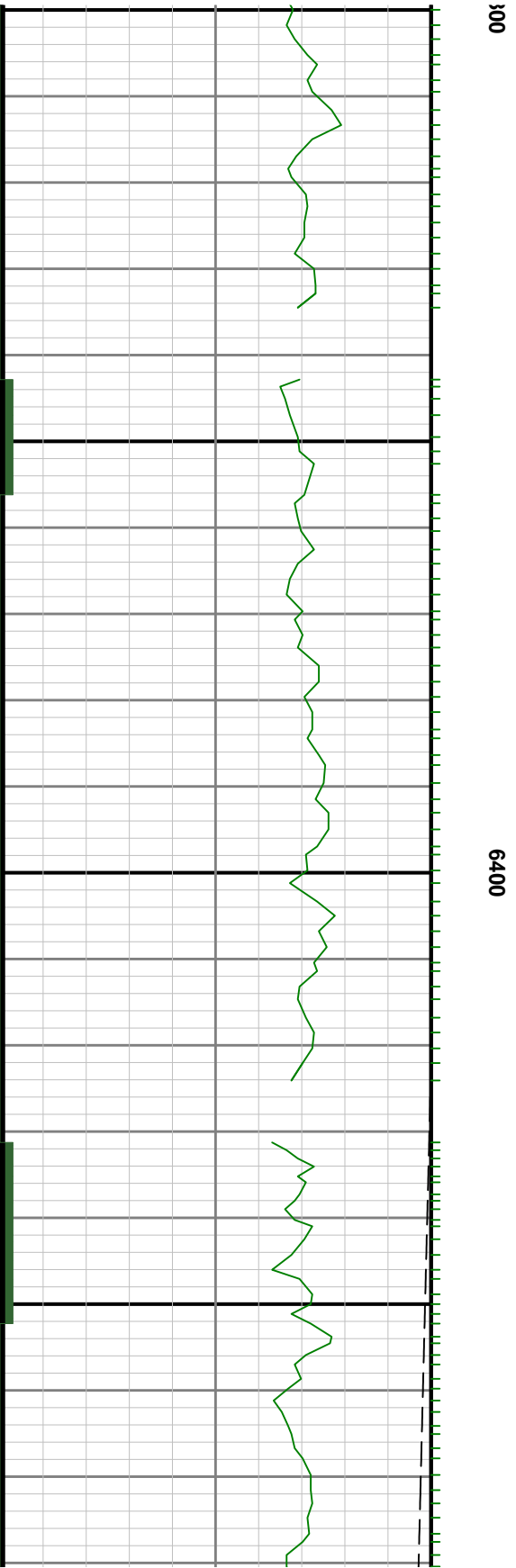
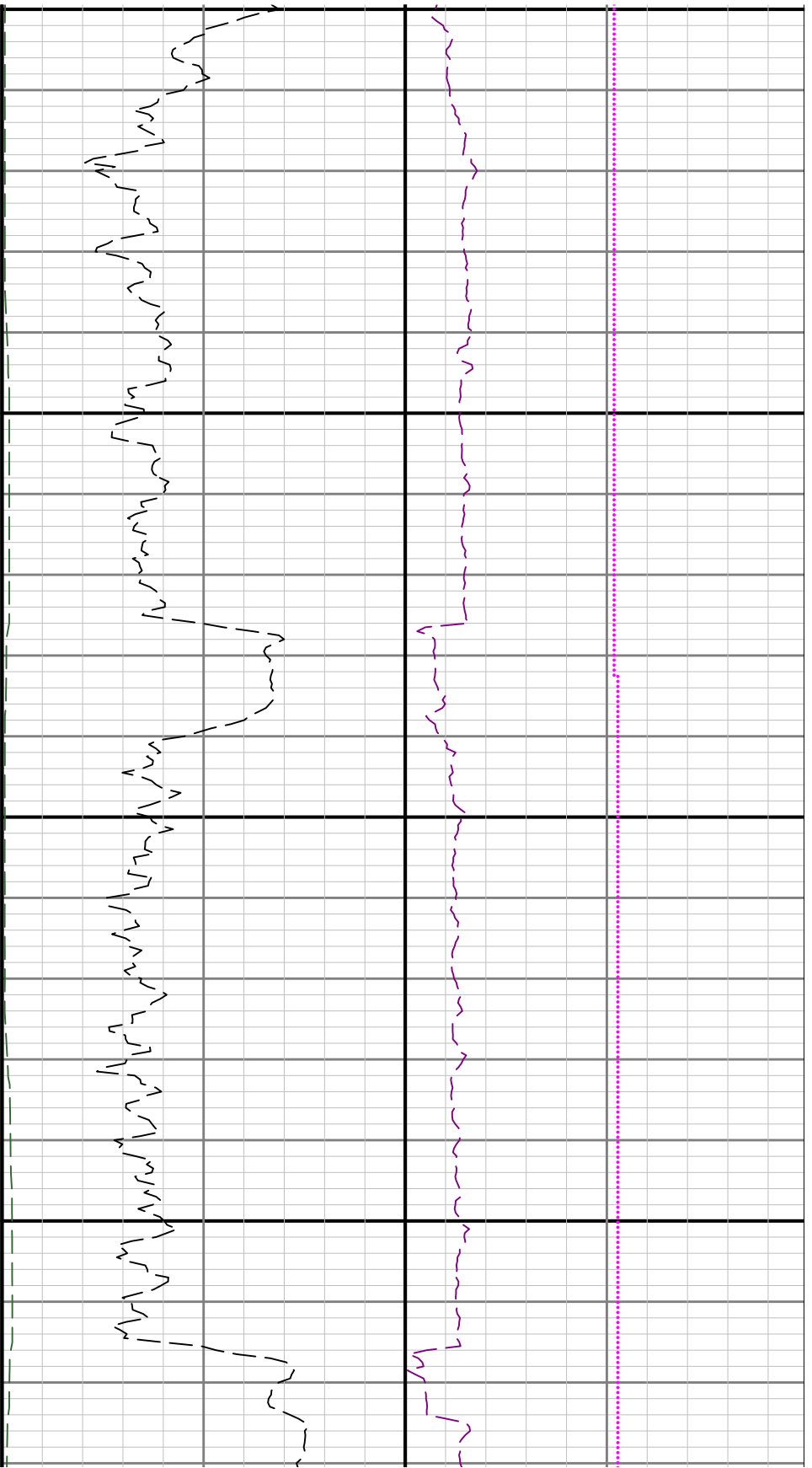


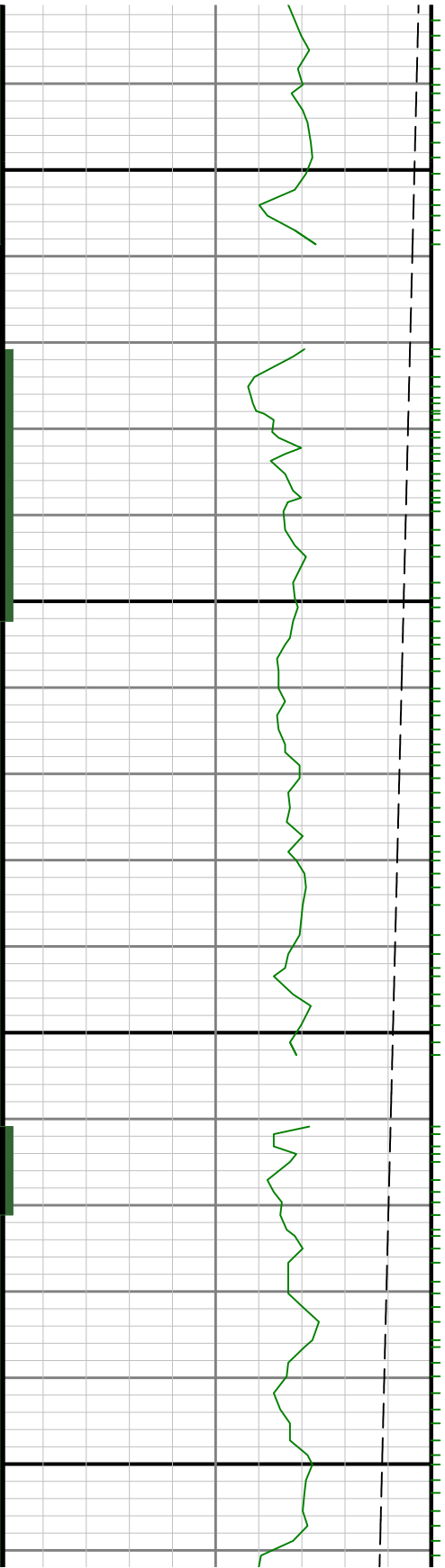




6200

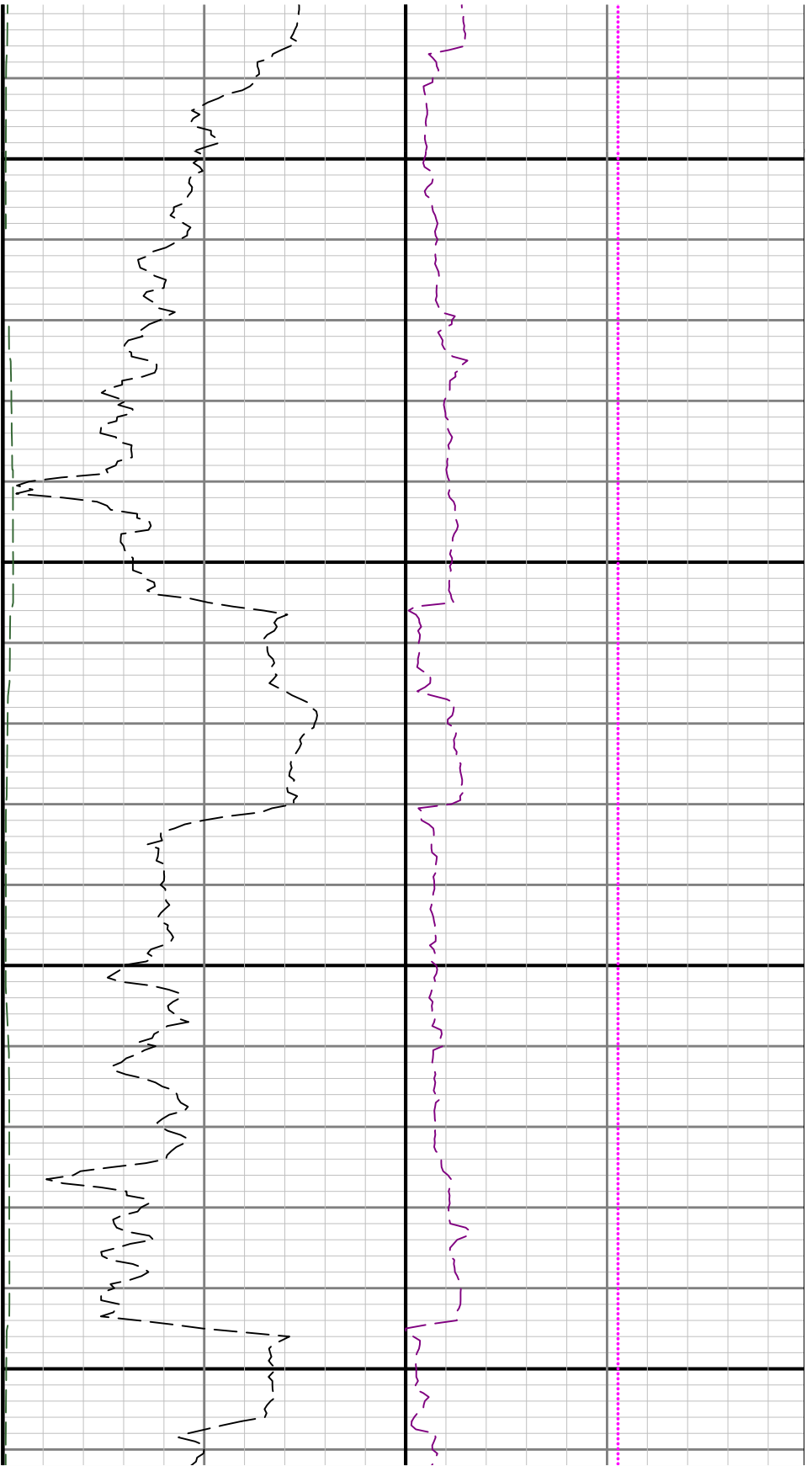
6.

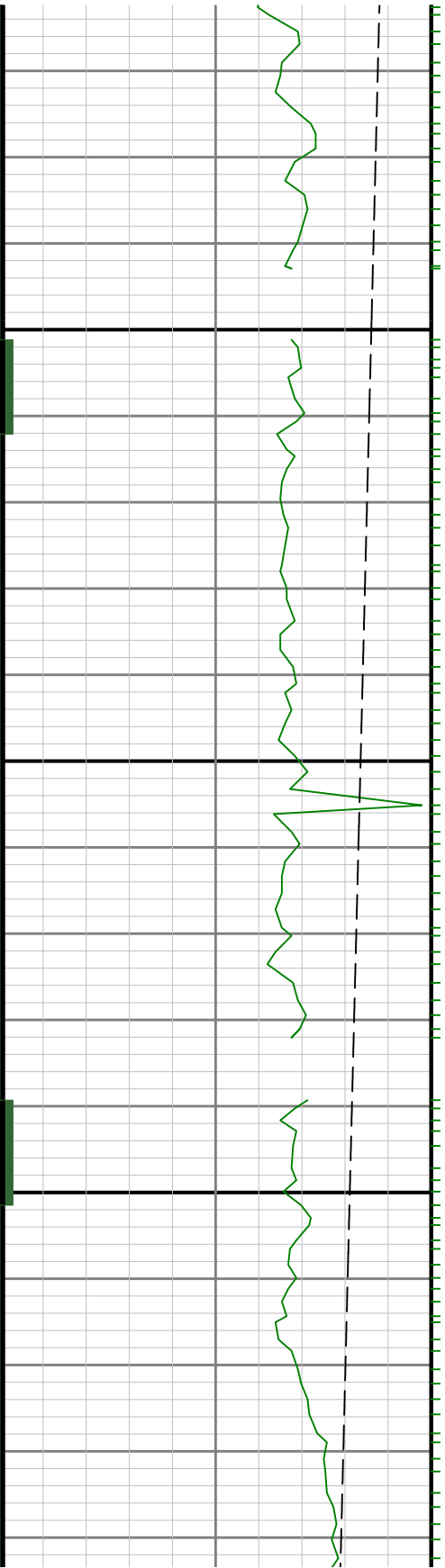




6500

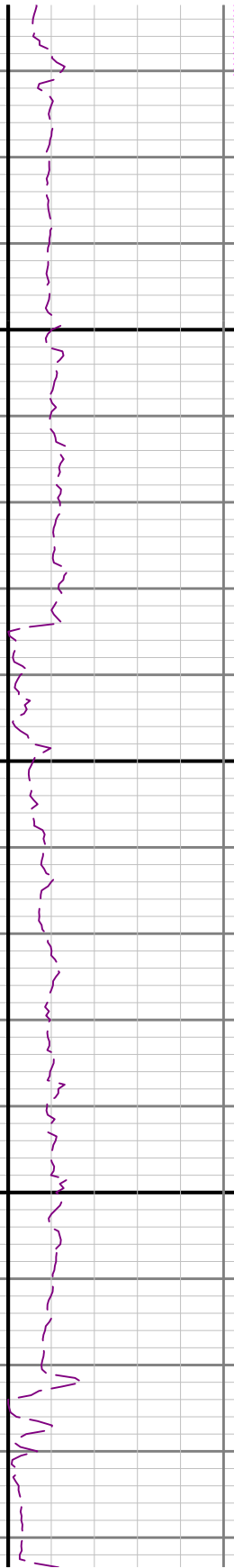
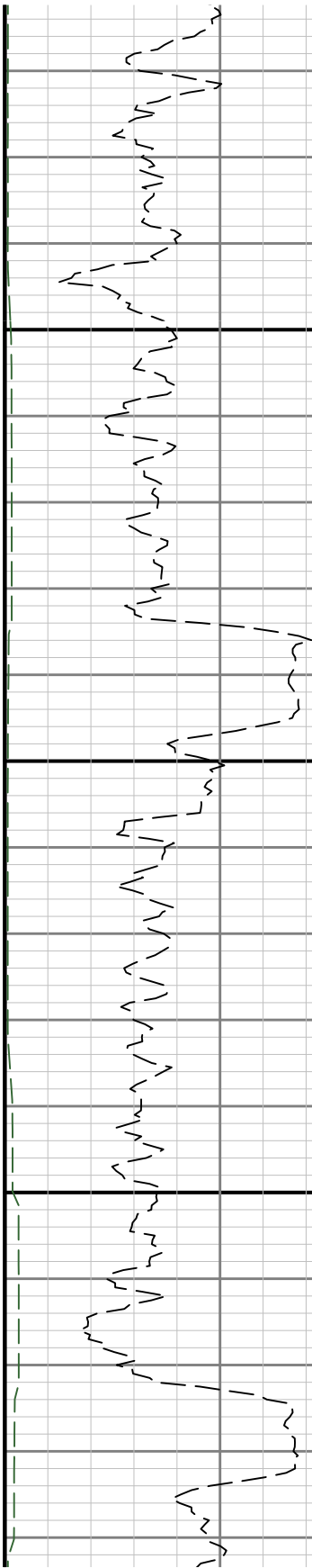
0099

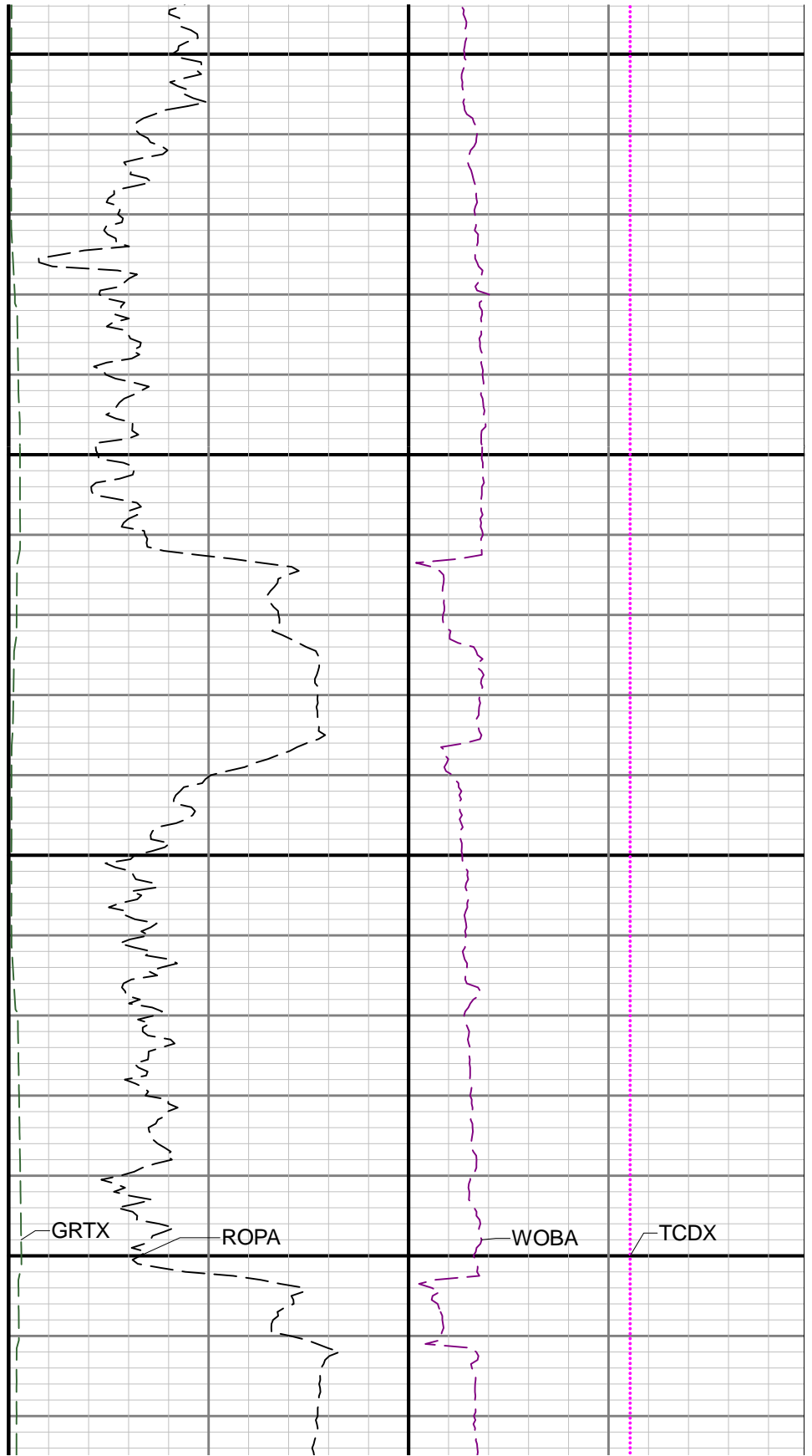
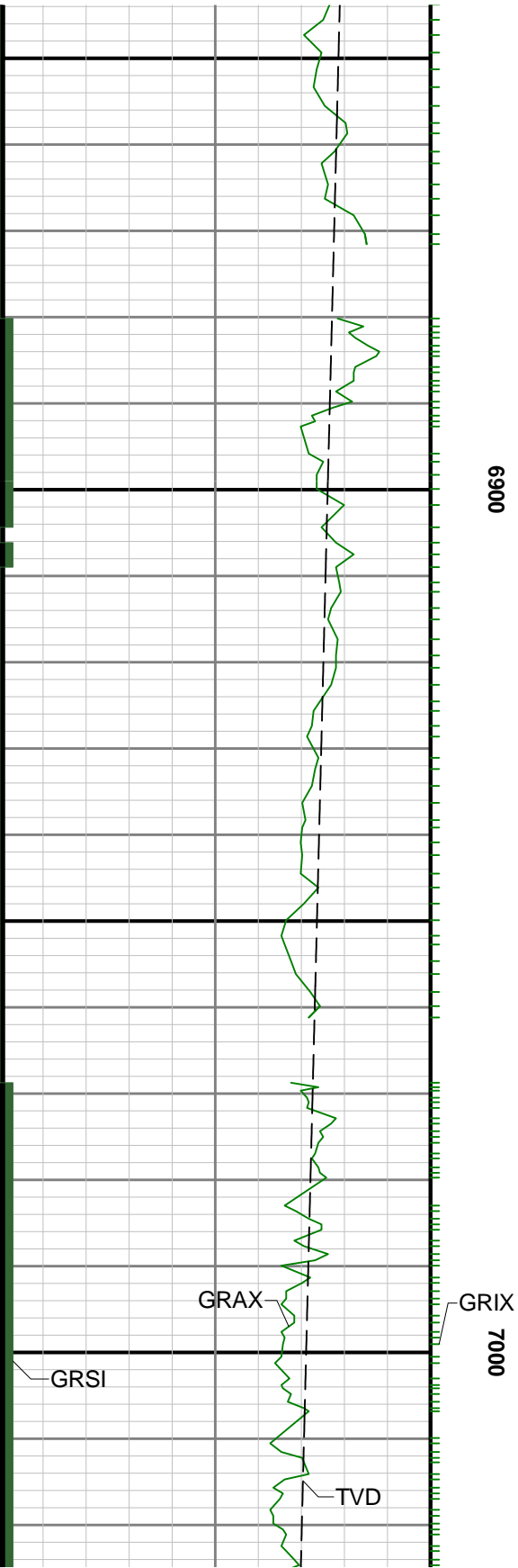




6700

0089

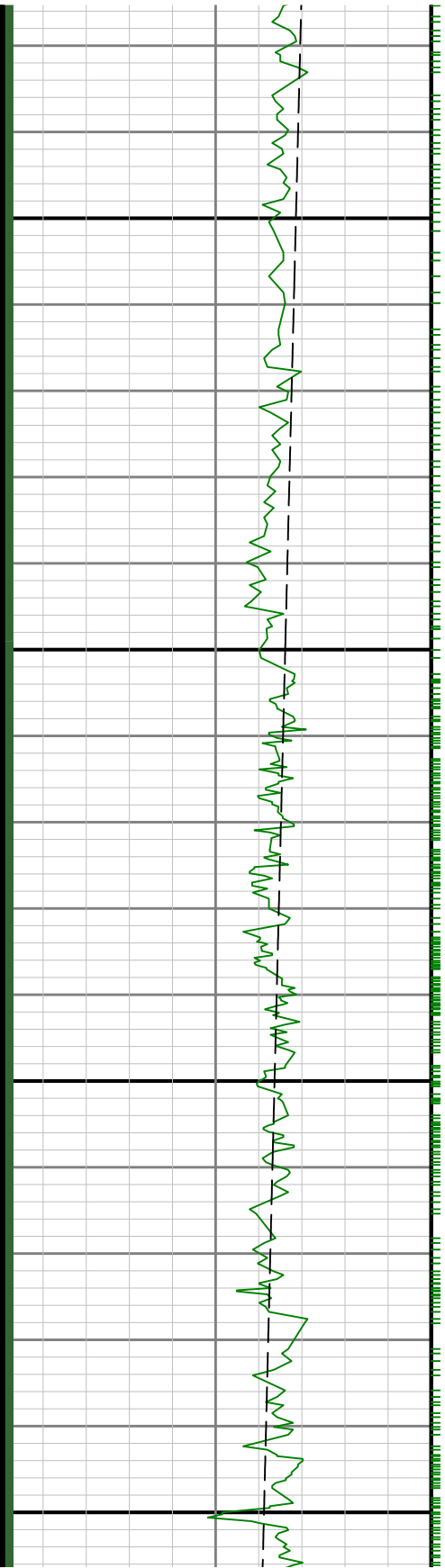






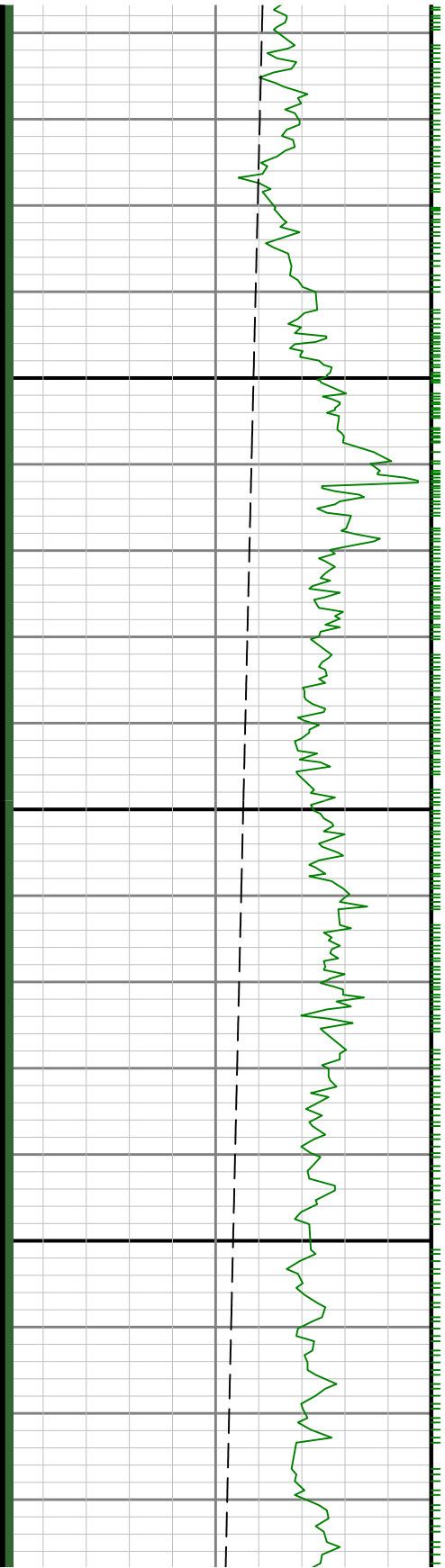
7100

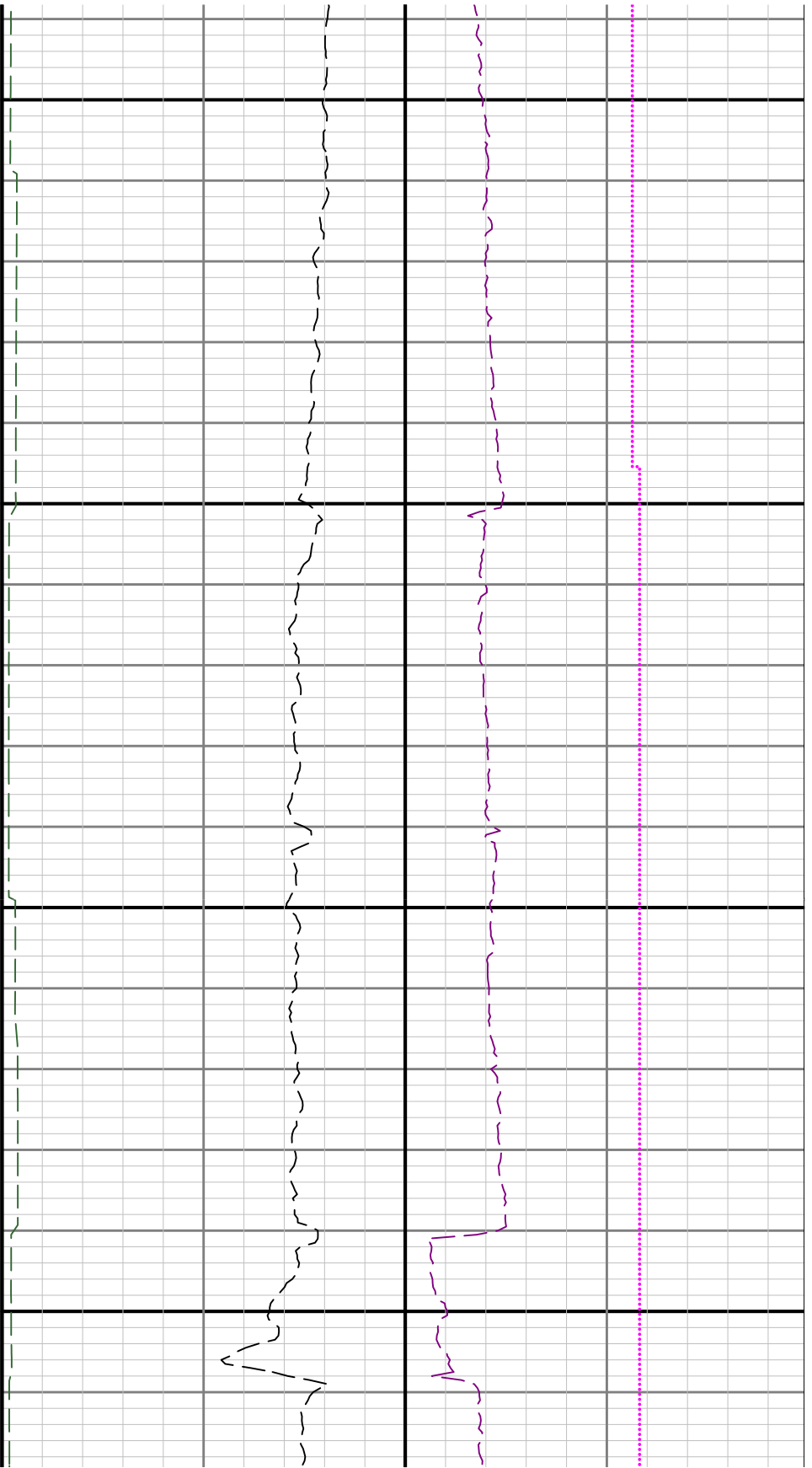
7200





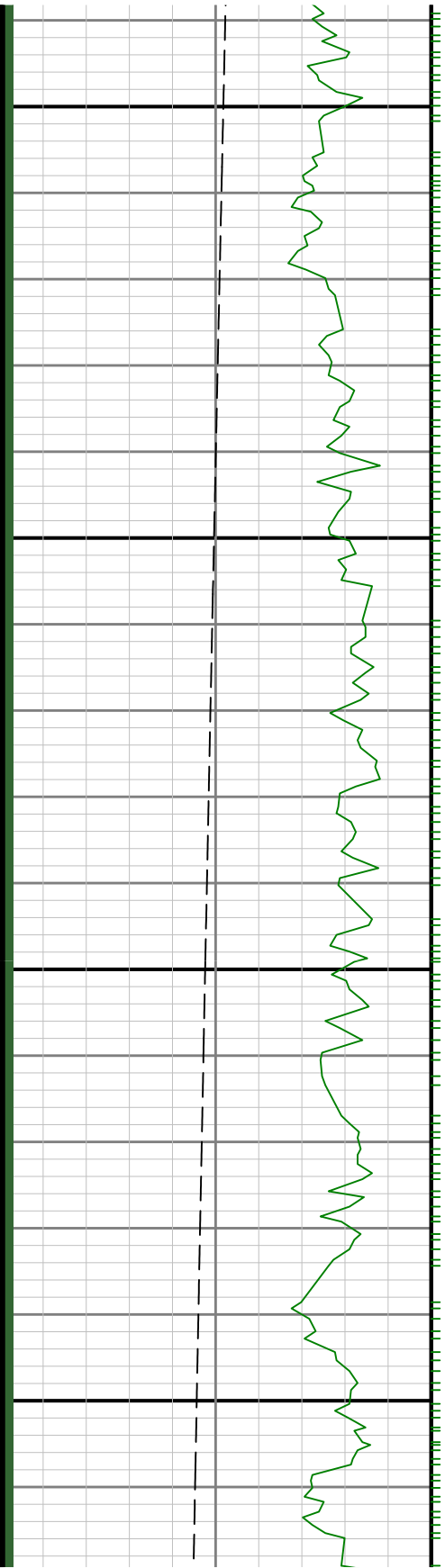
7300

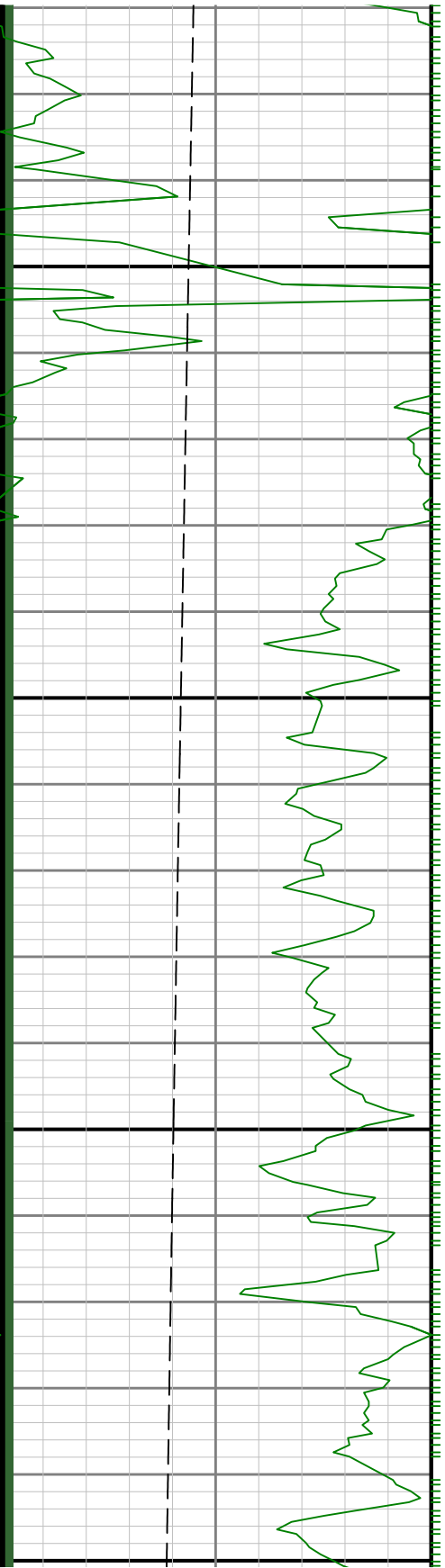




7400

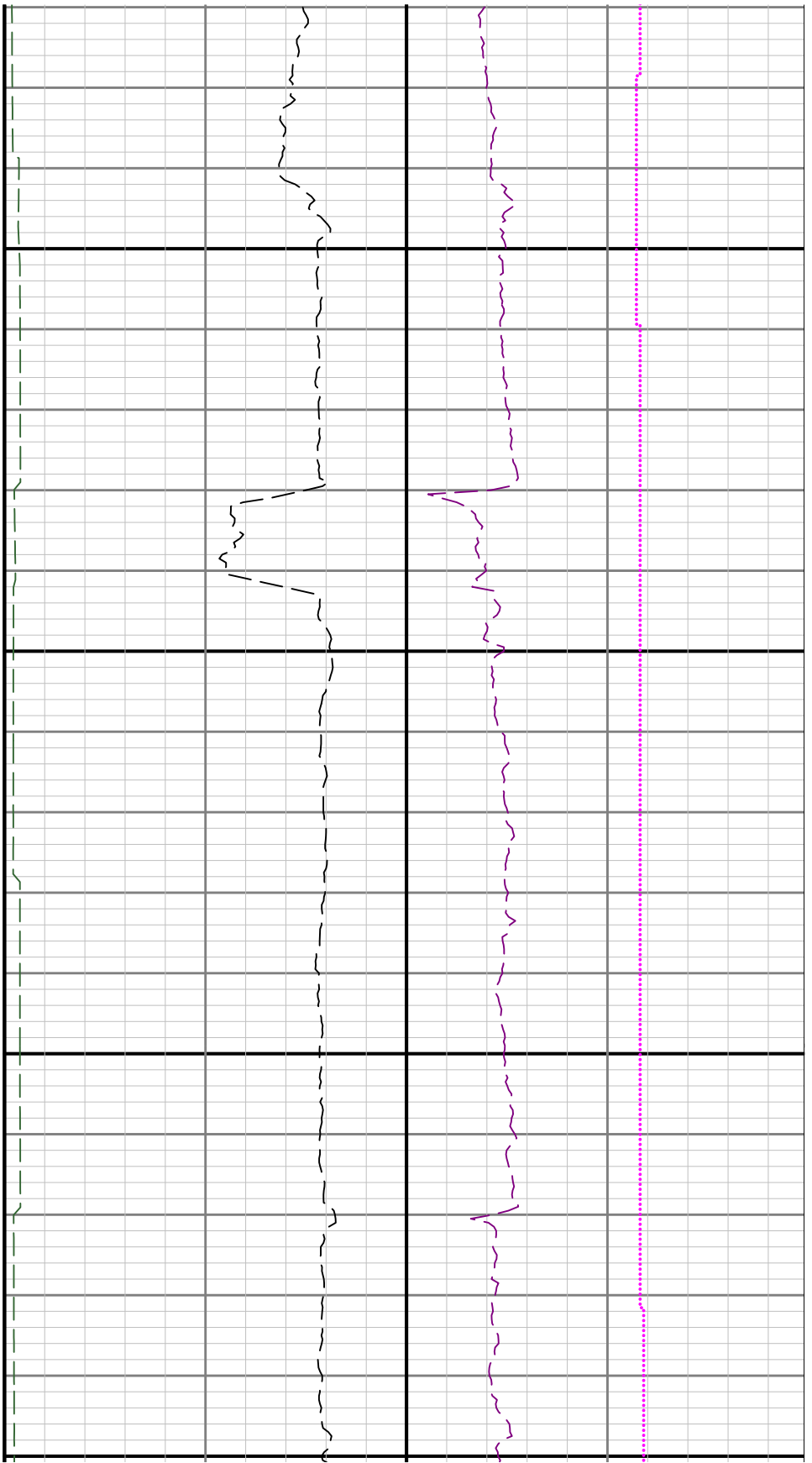
7500

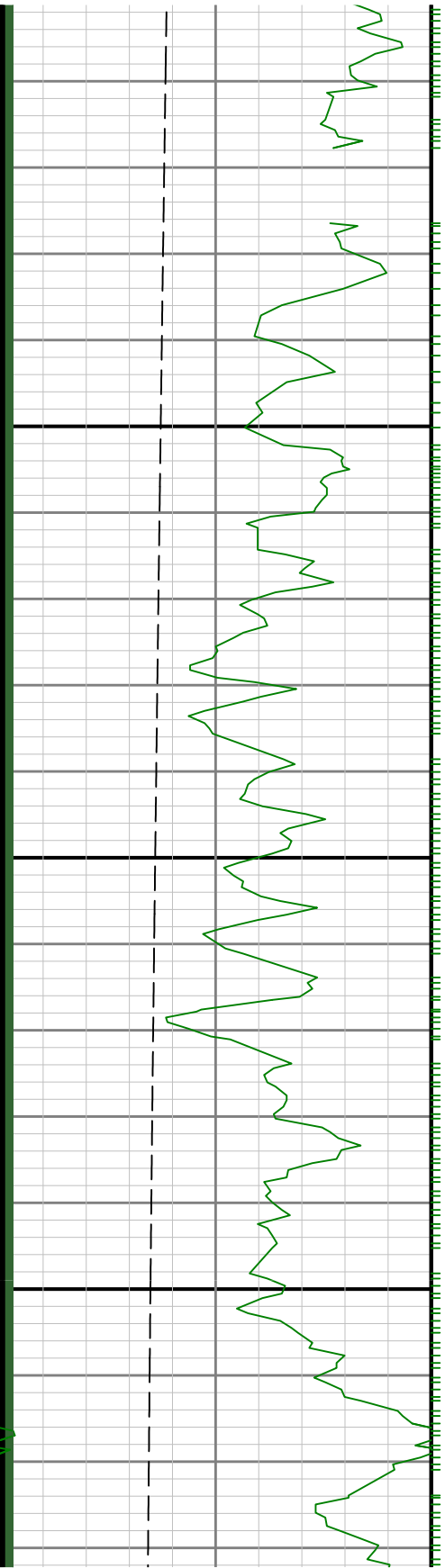




7600

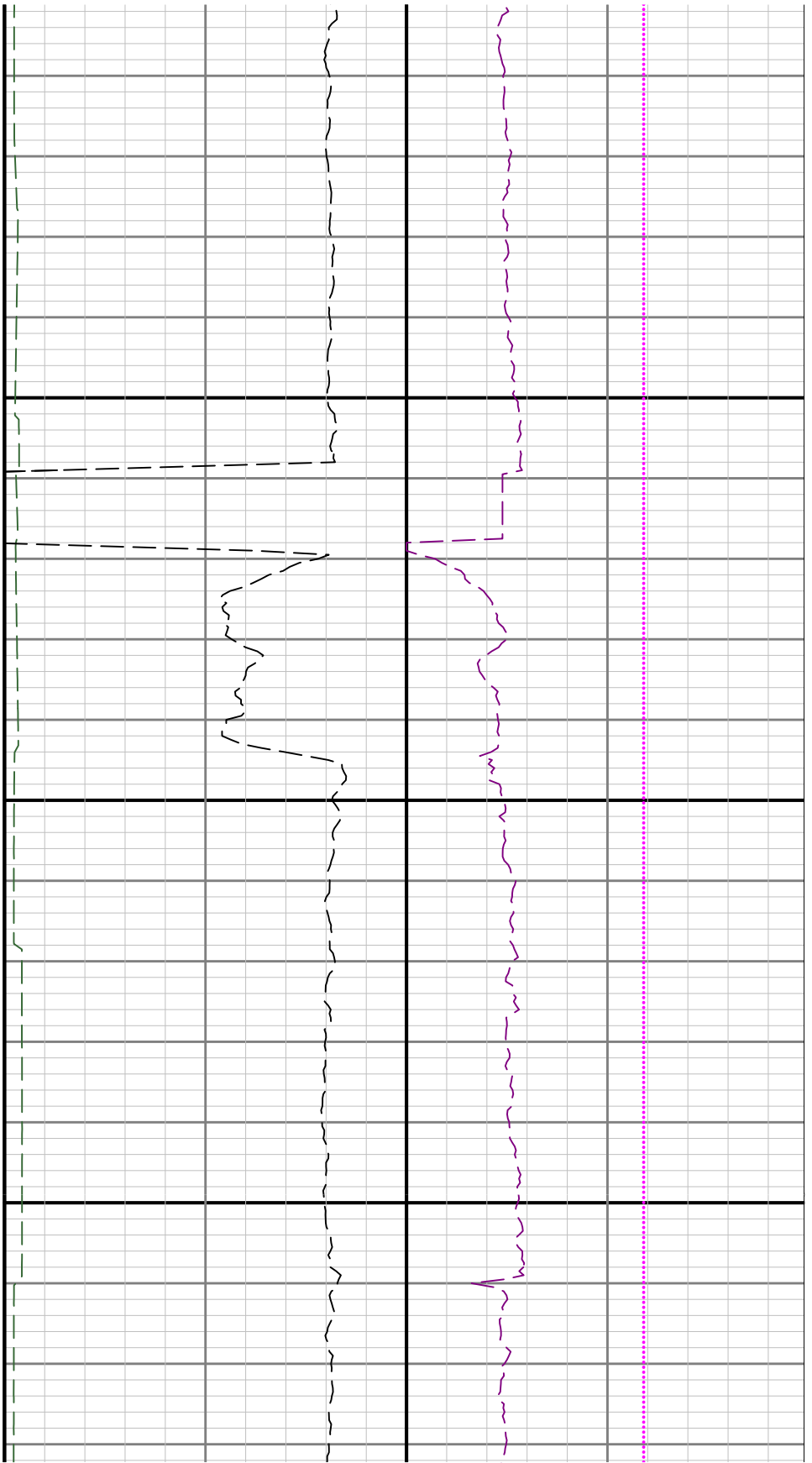
7700

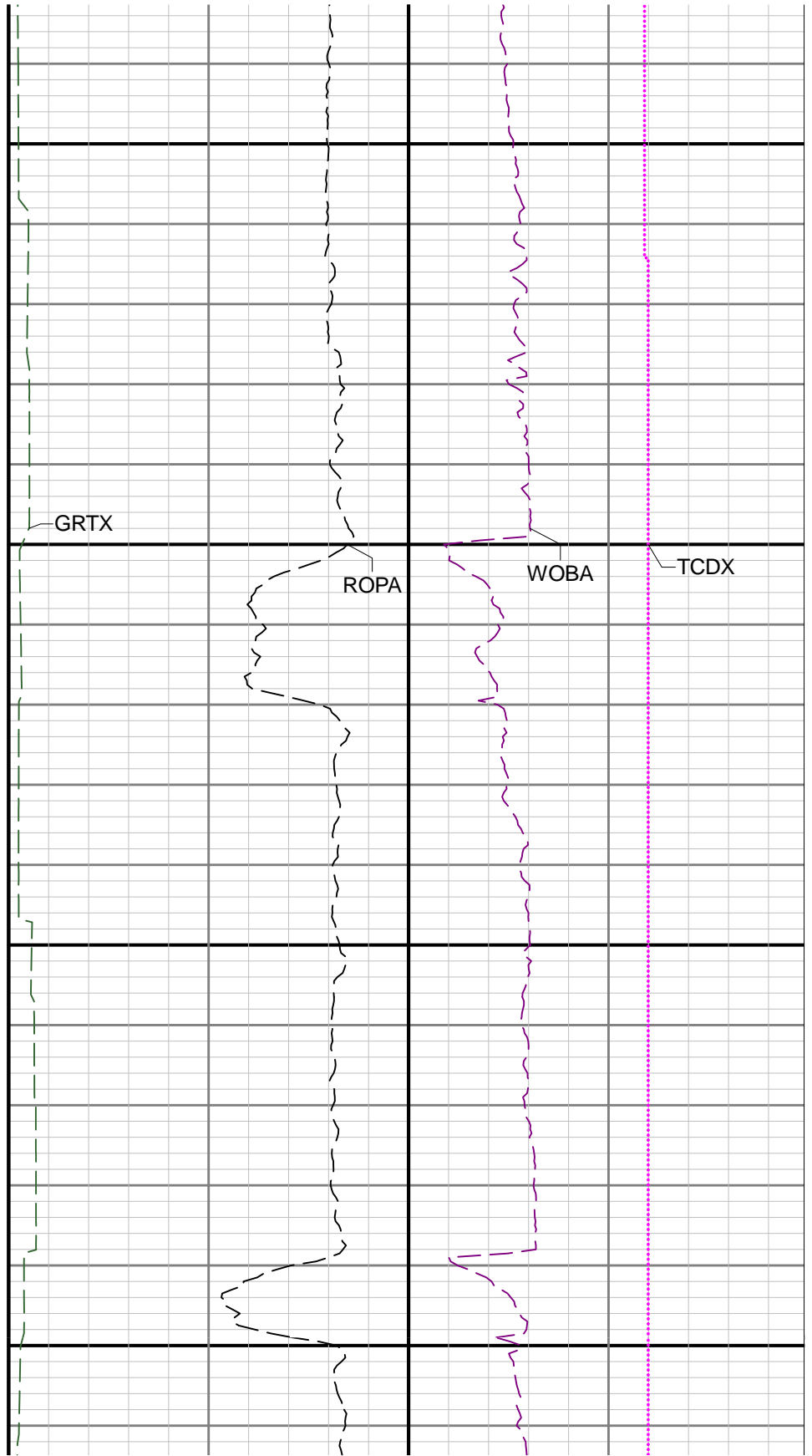
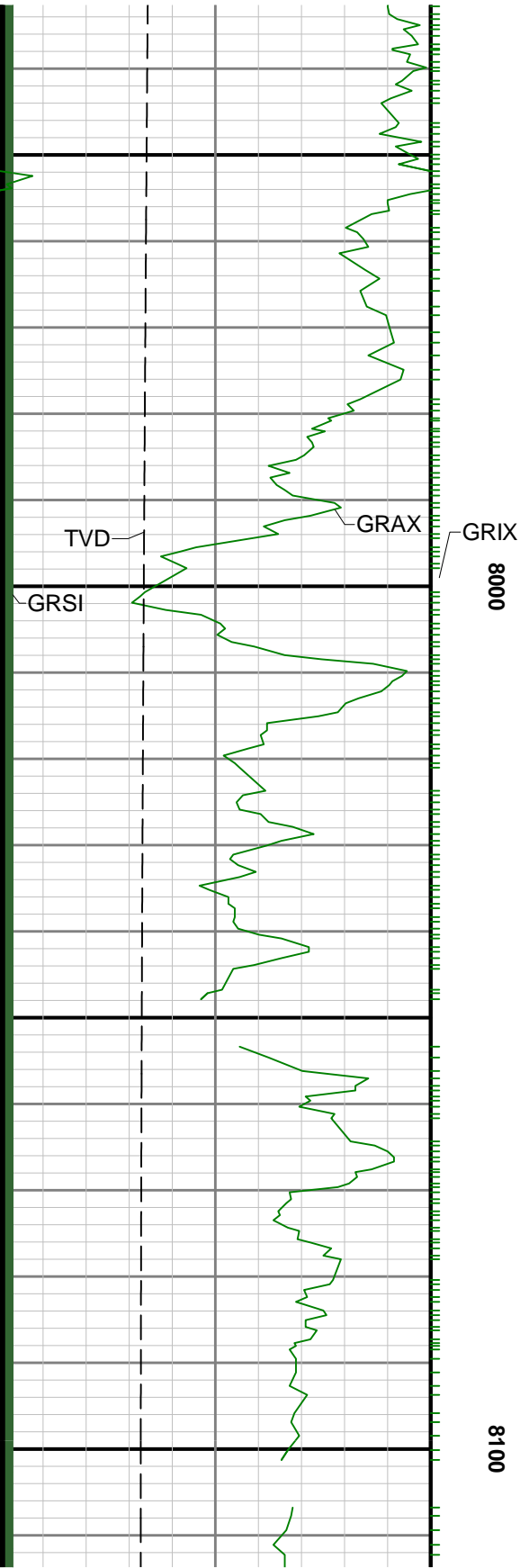


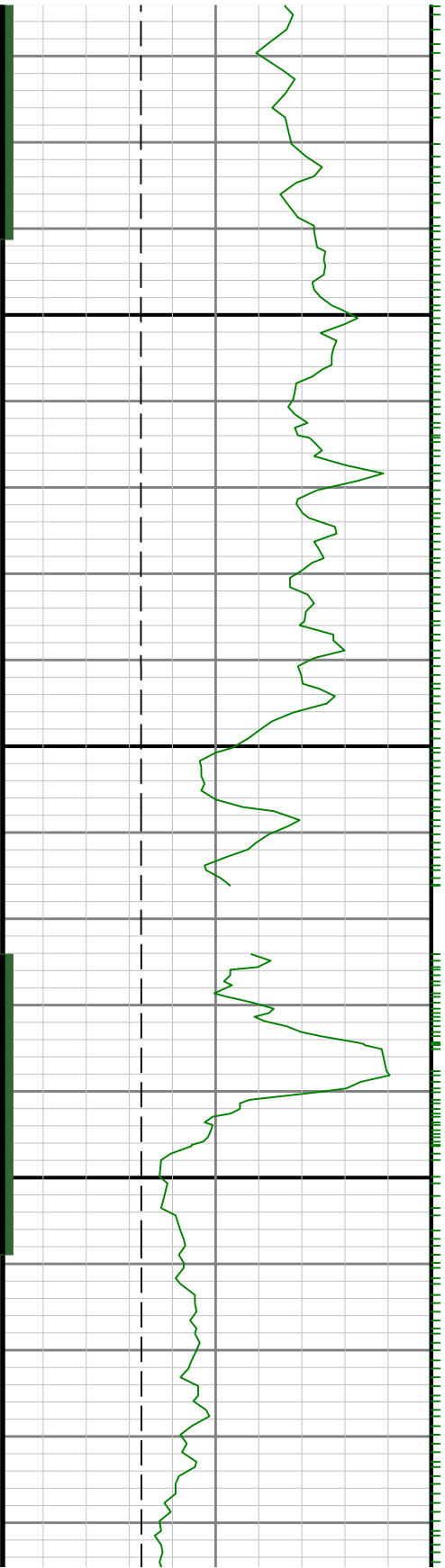


7800

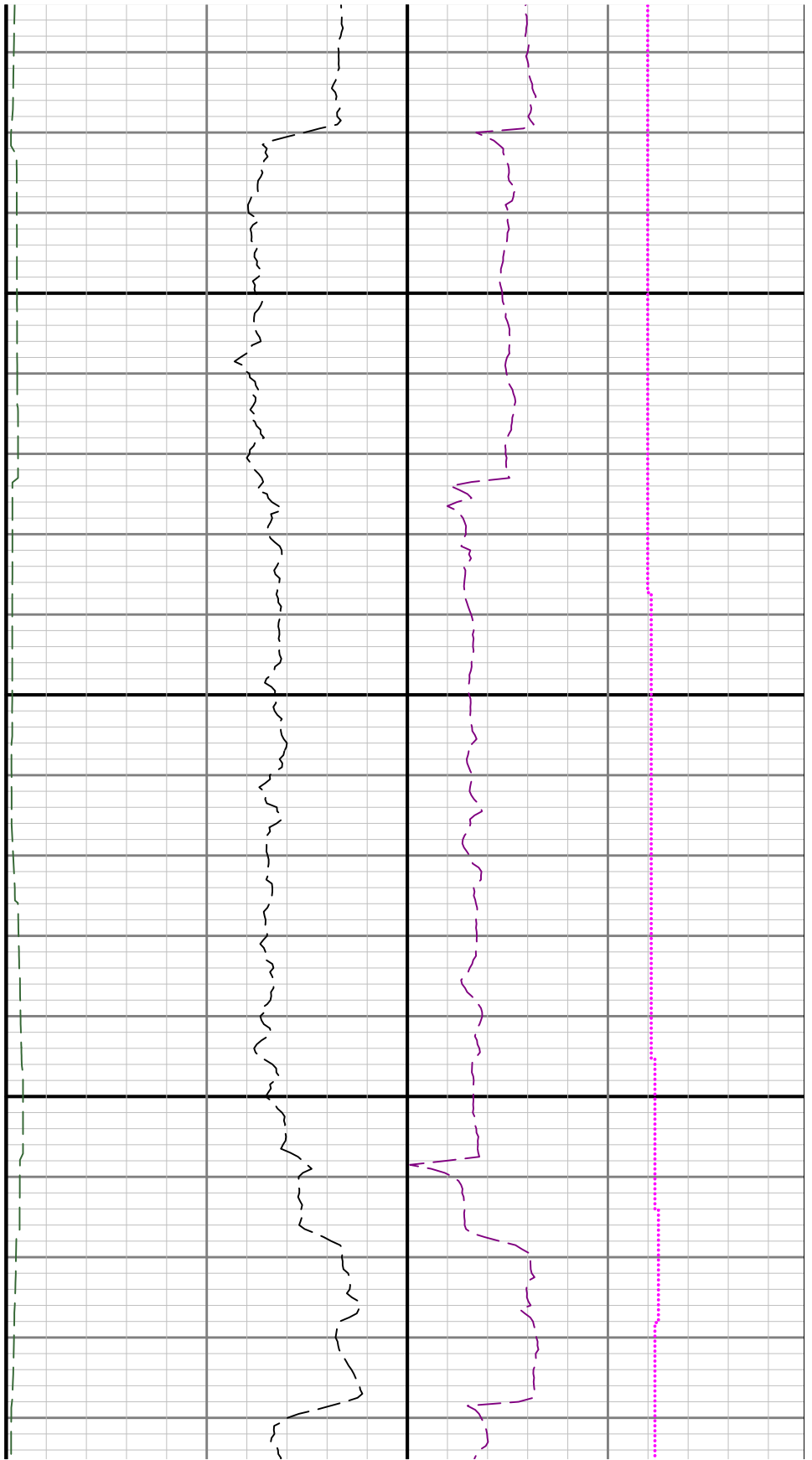
7900

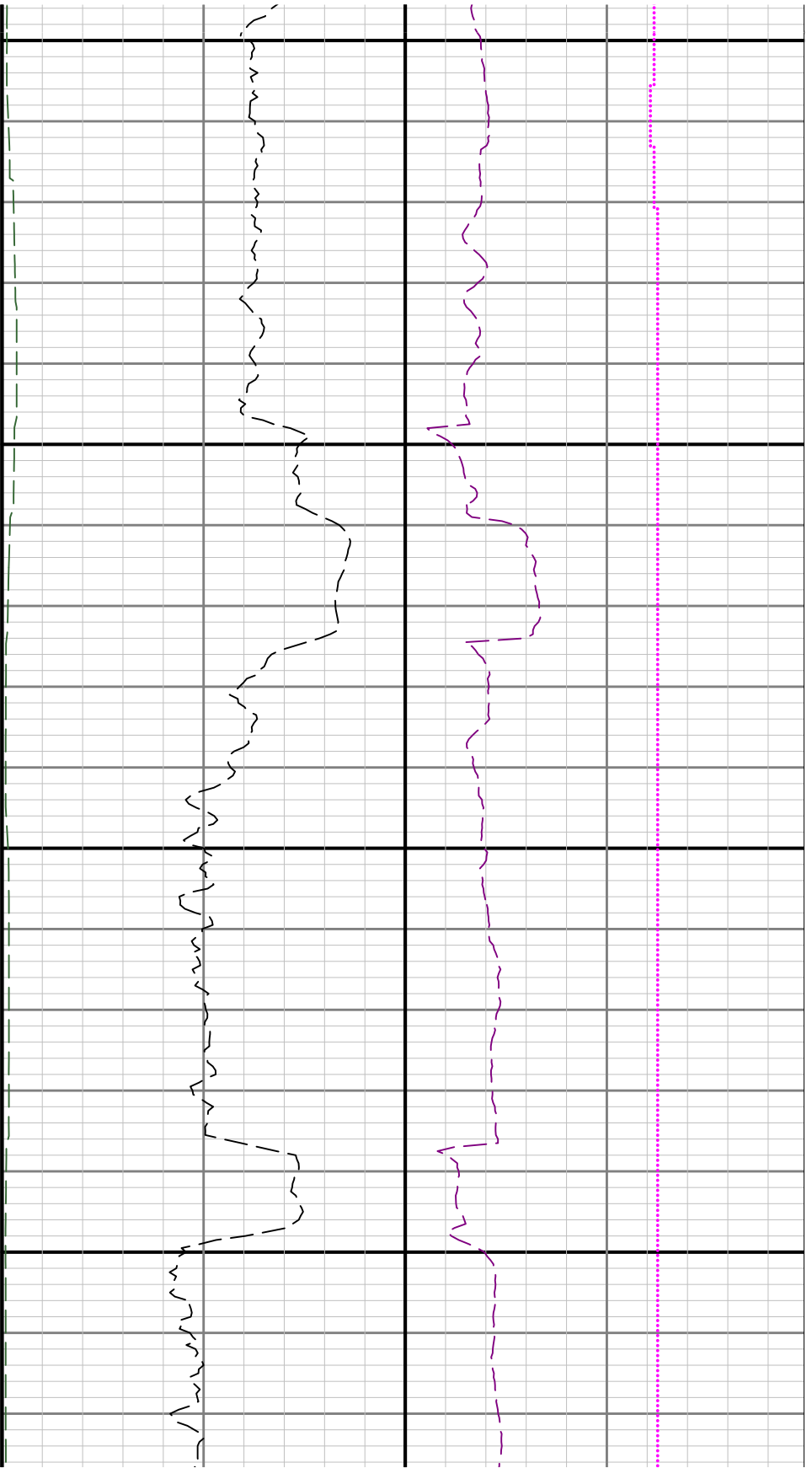






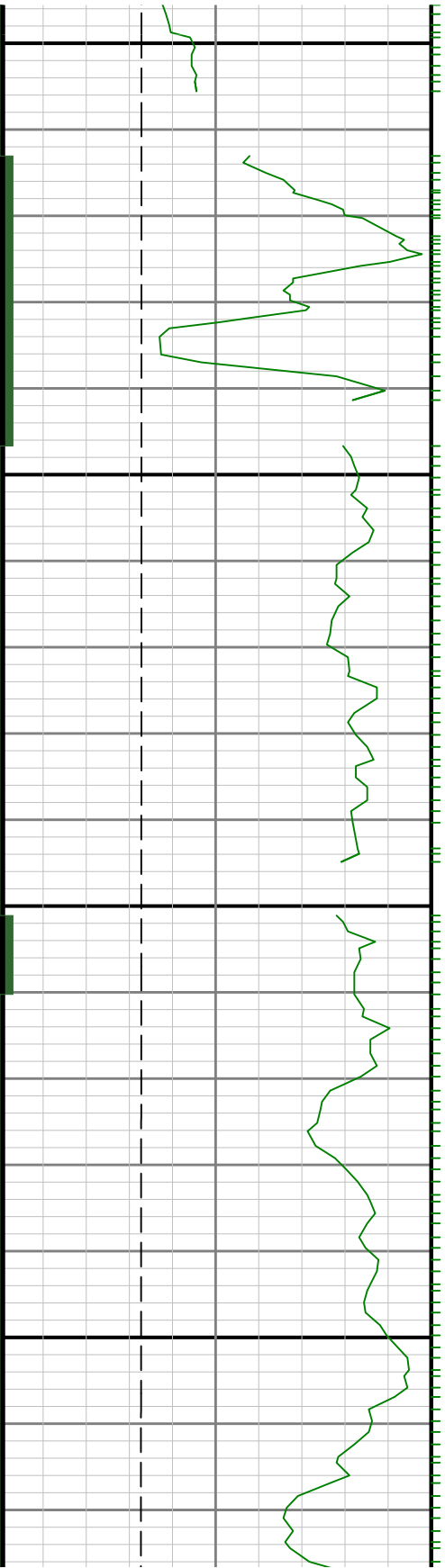
8200

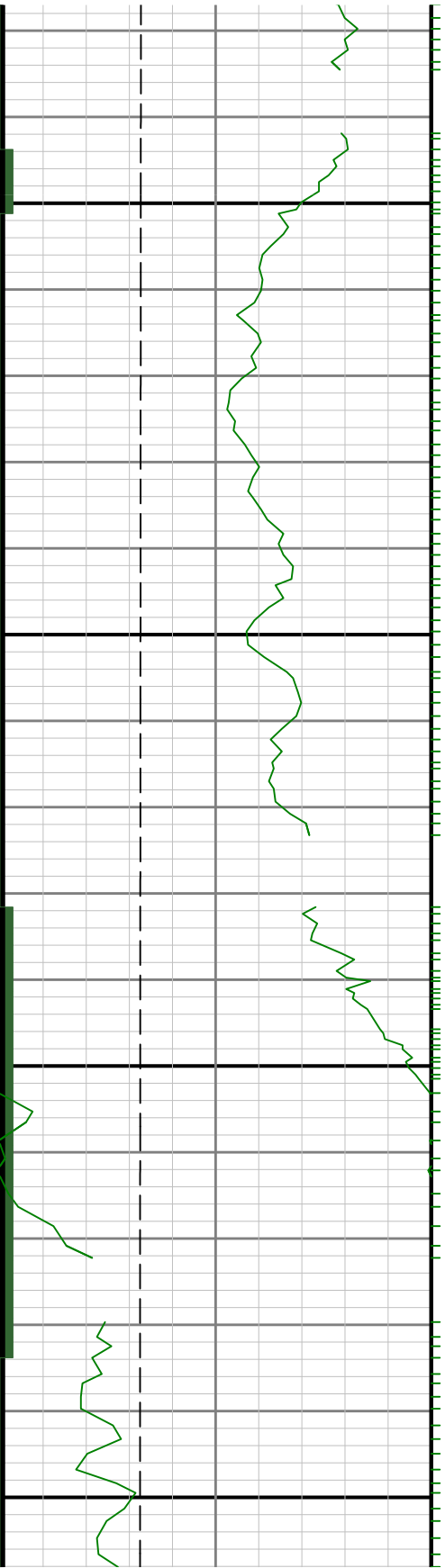




8300

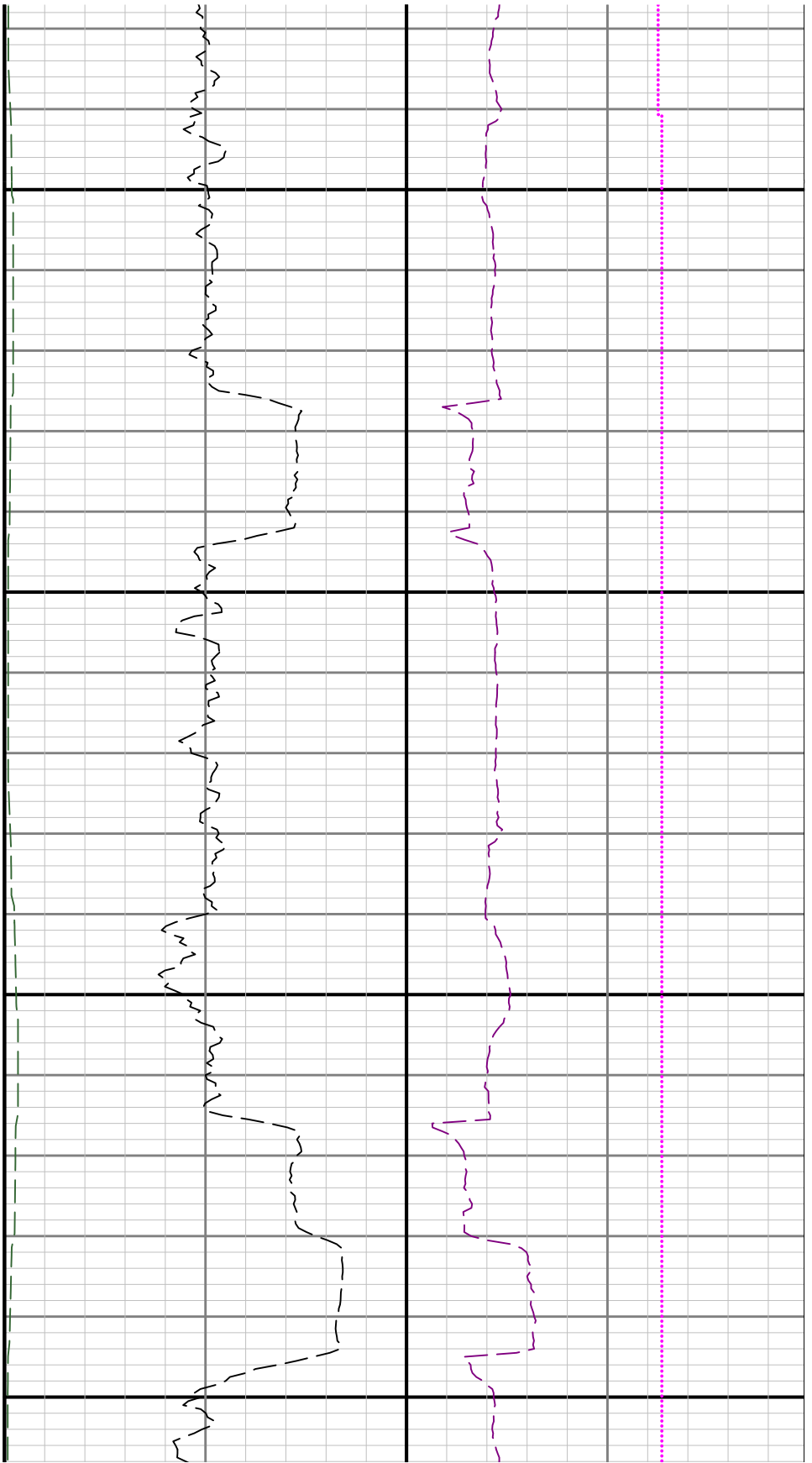
8400

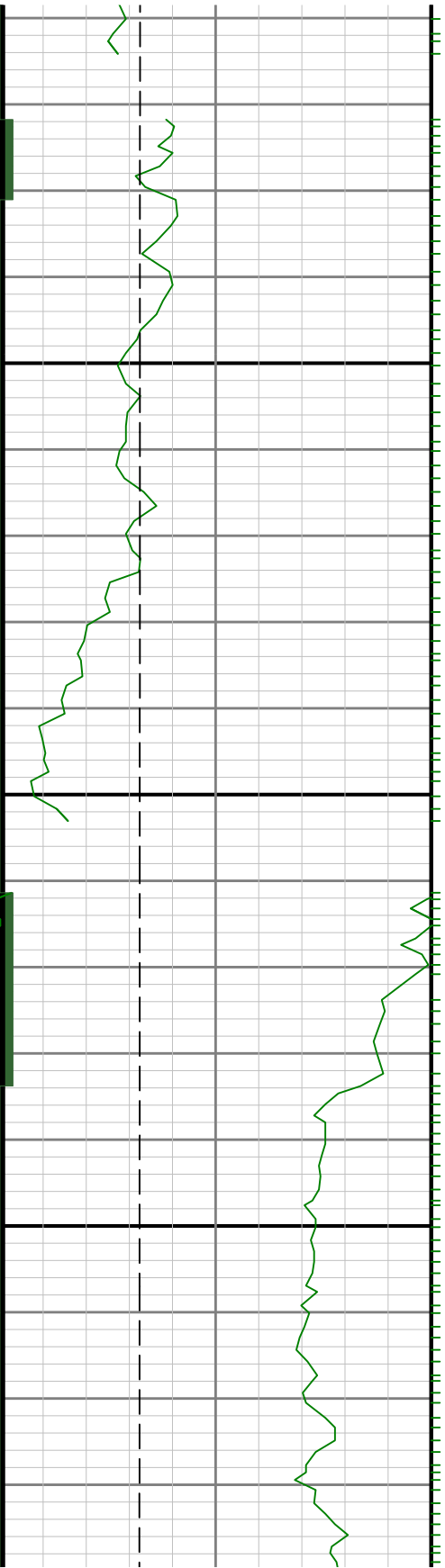




8500

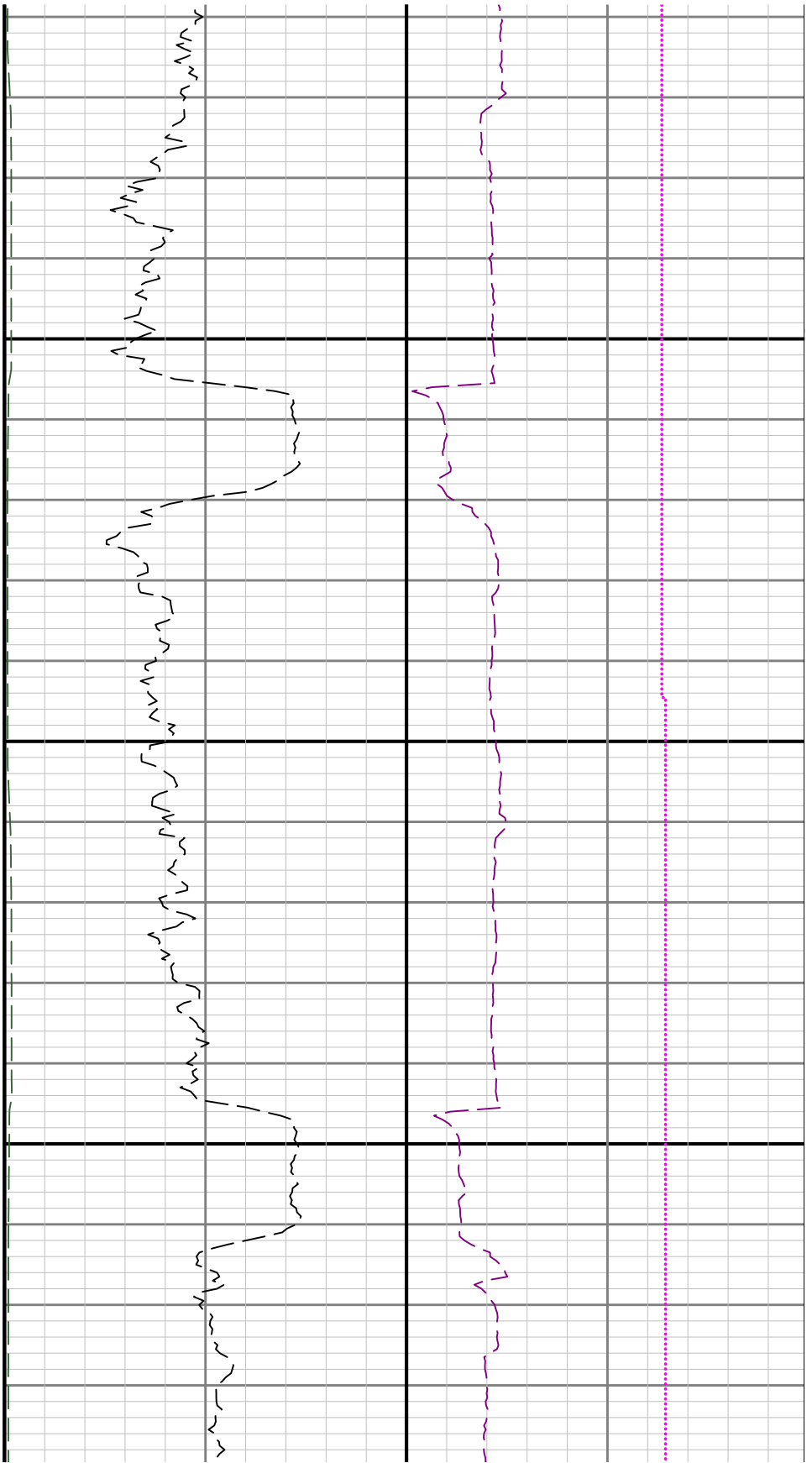
8600

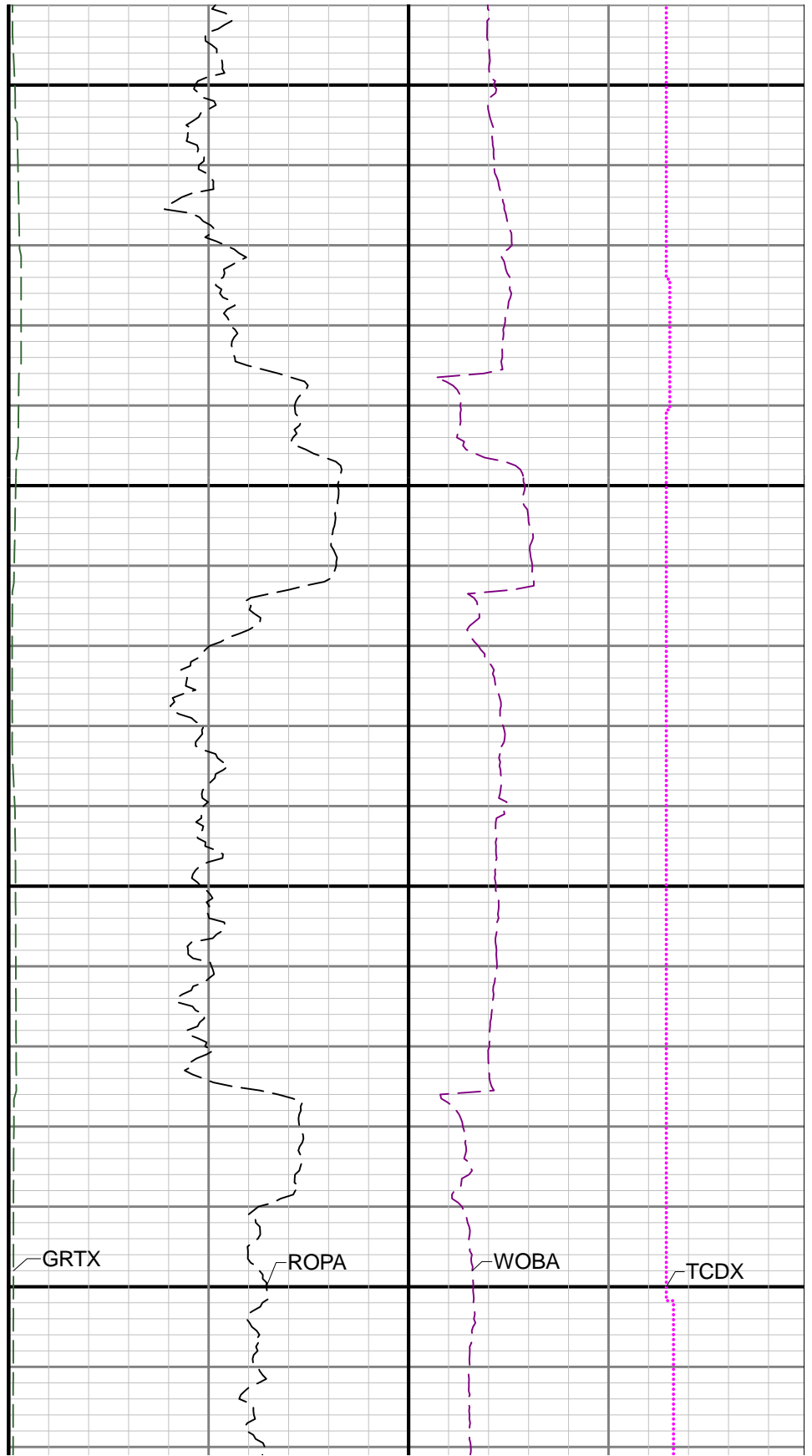
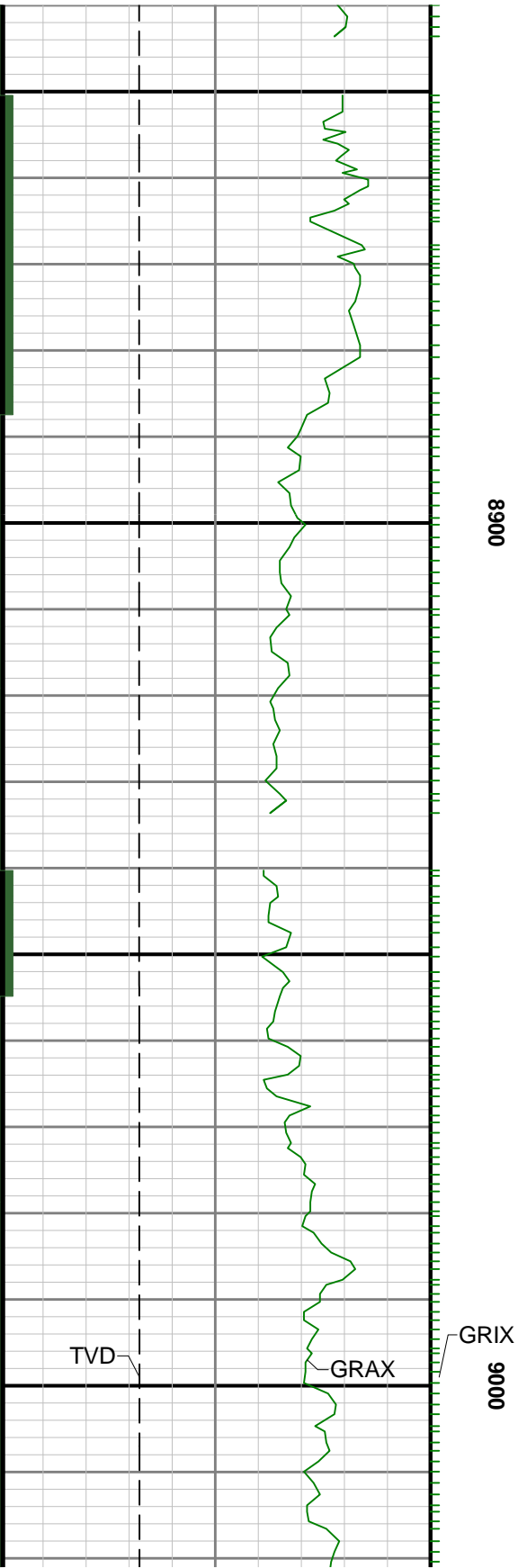


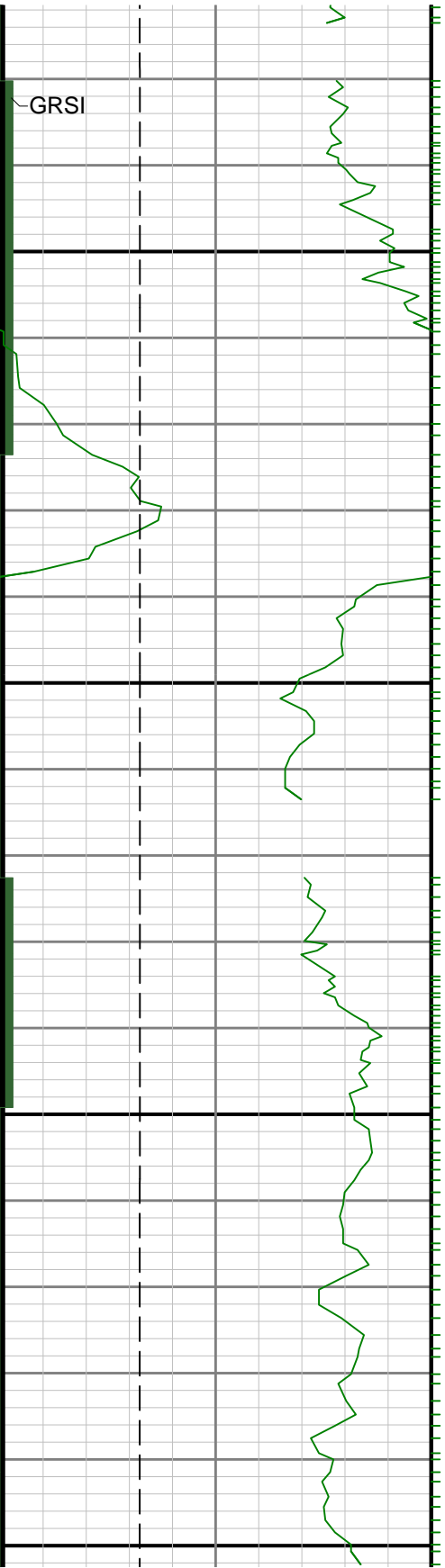


8700

8800

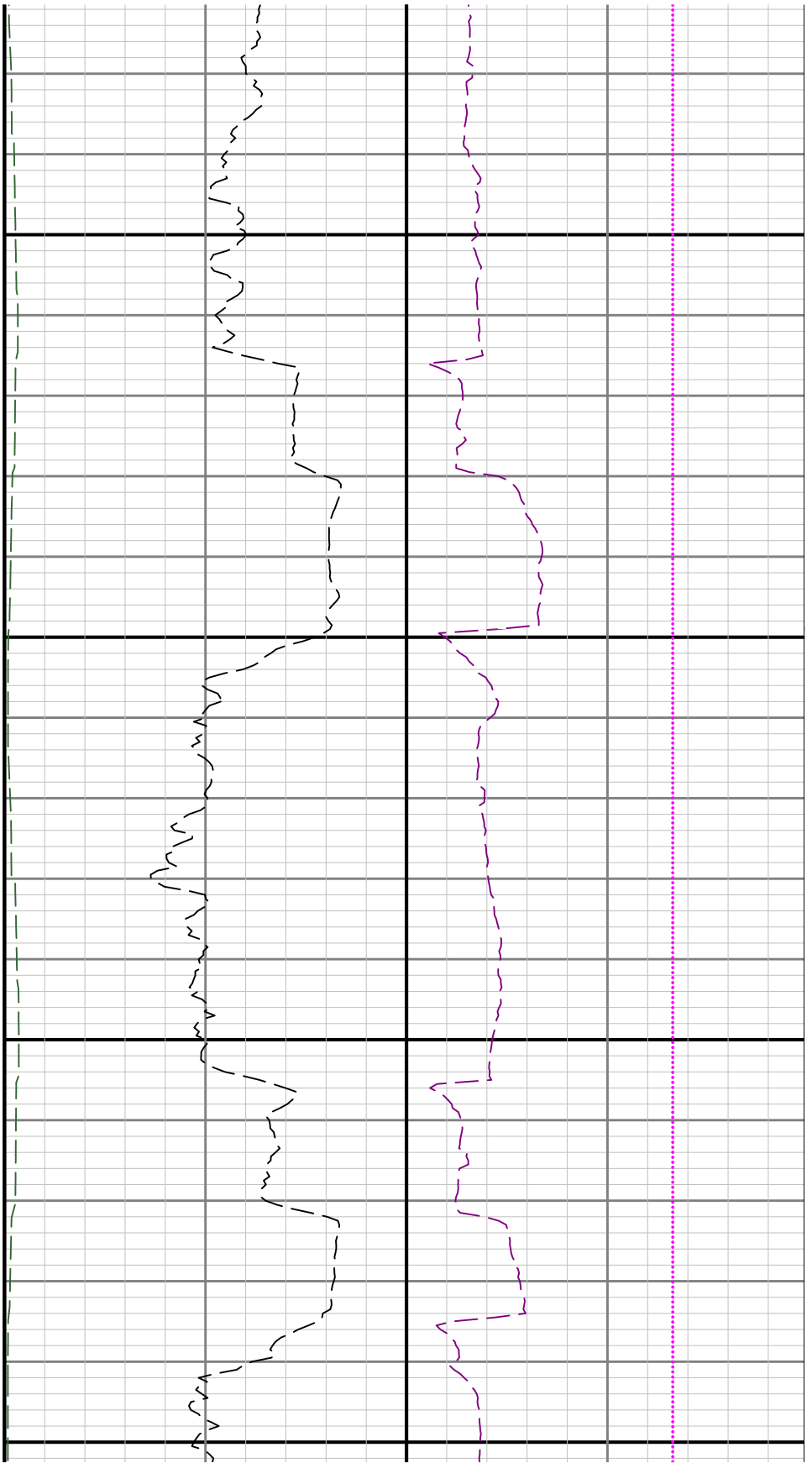


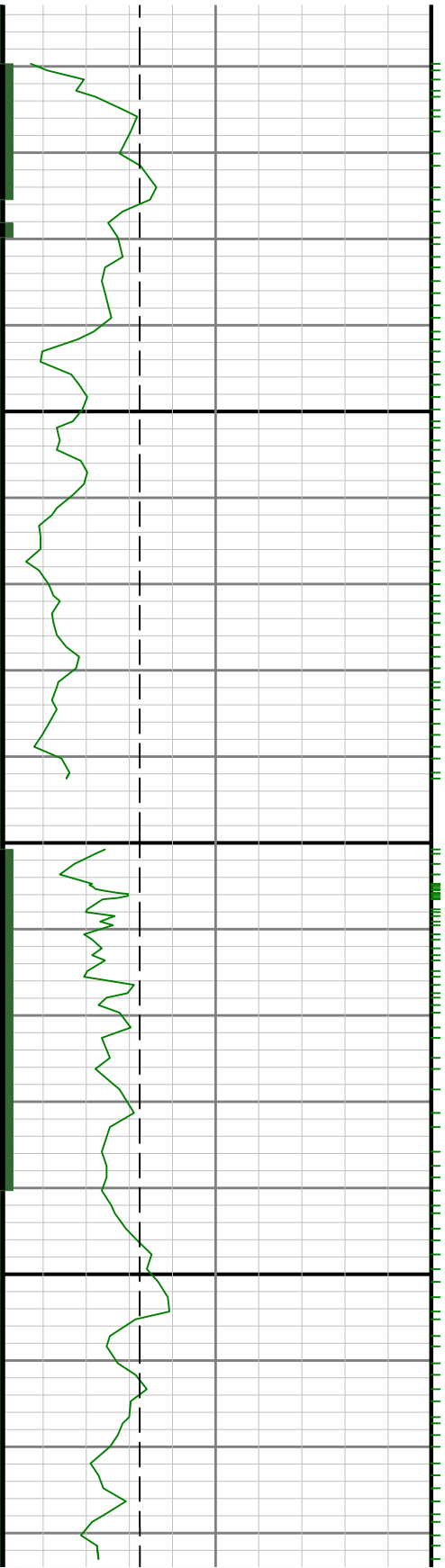




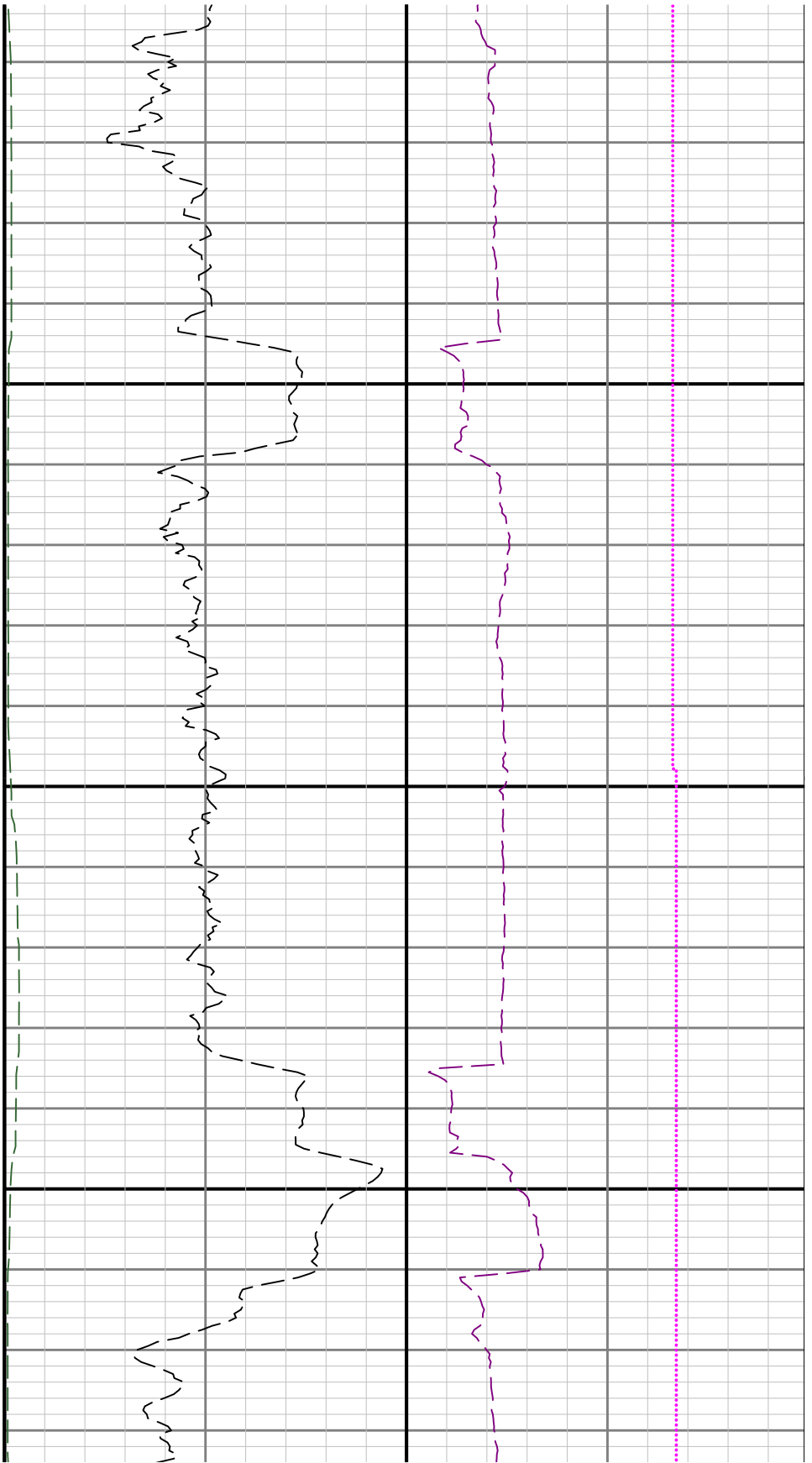
9100

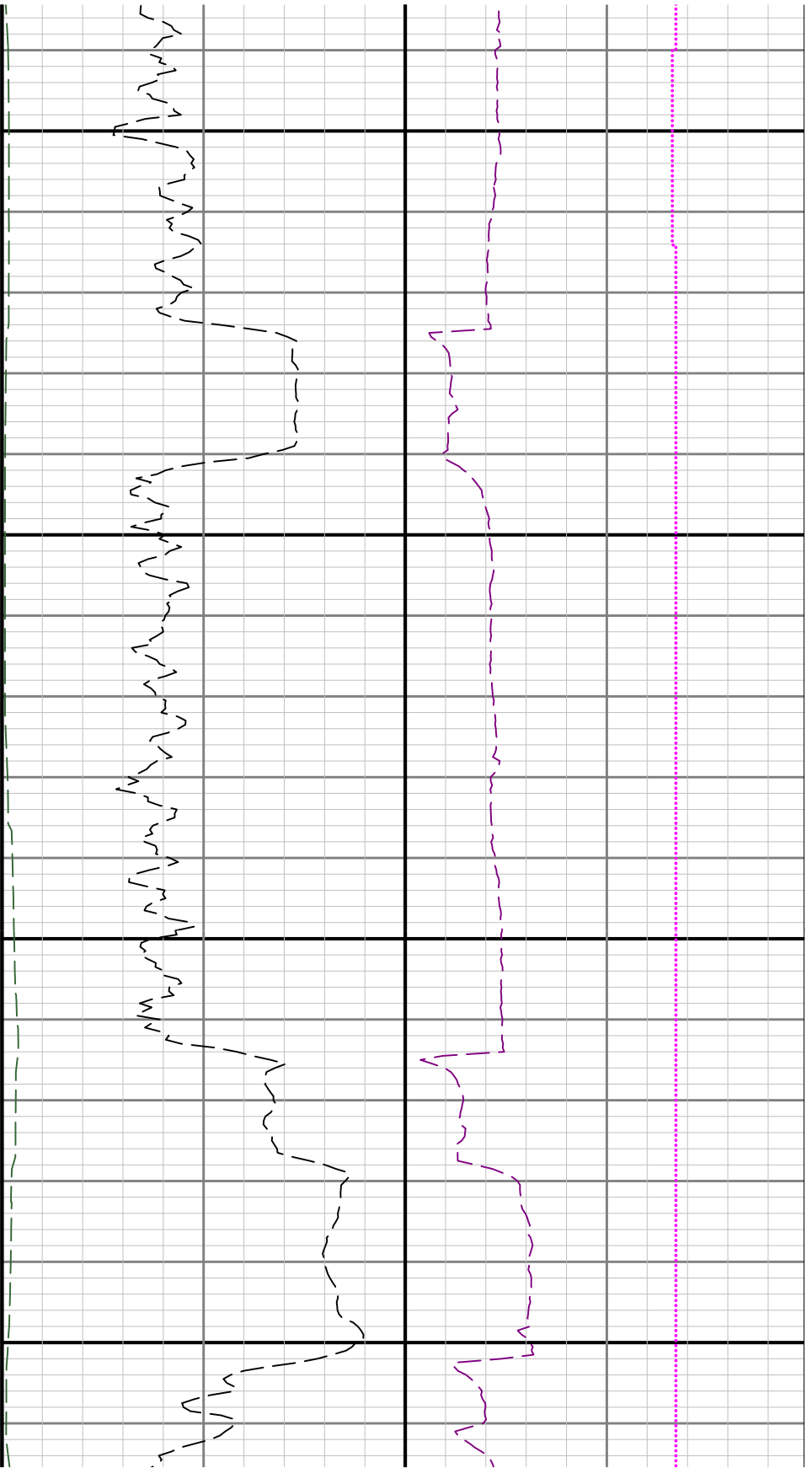
9200





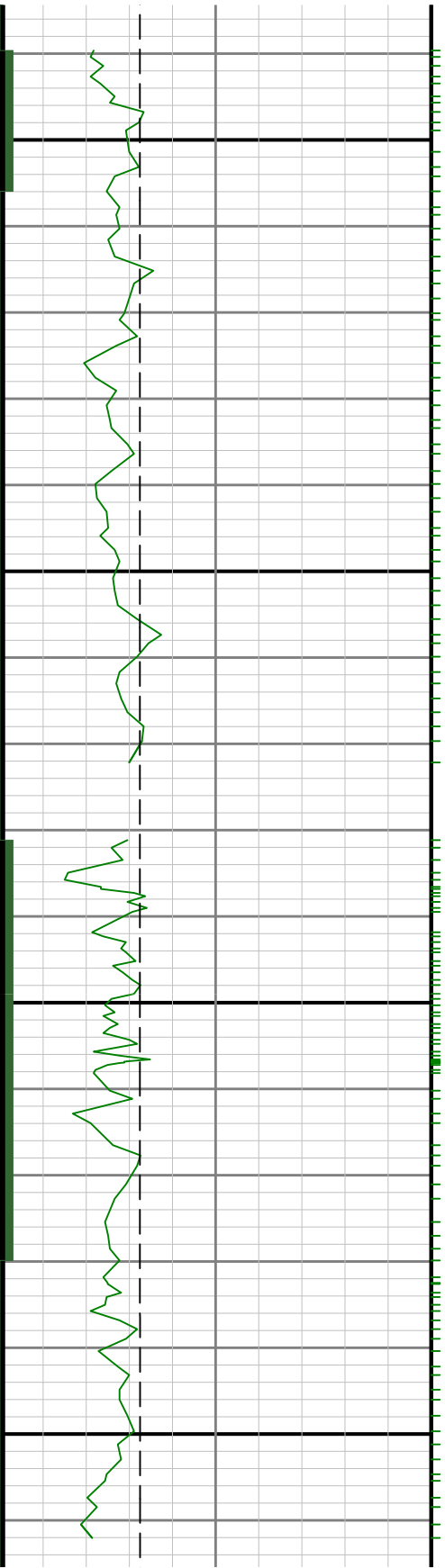
9300

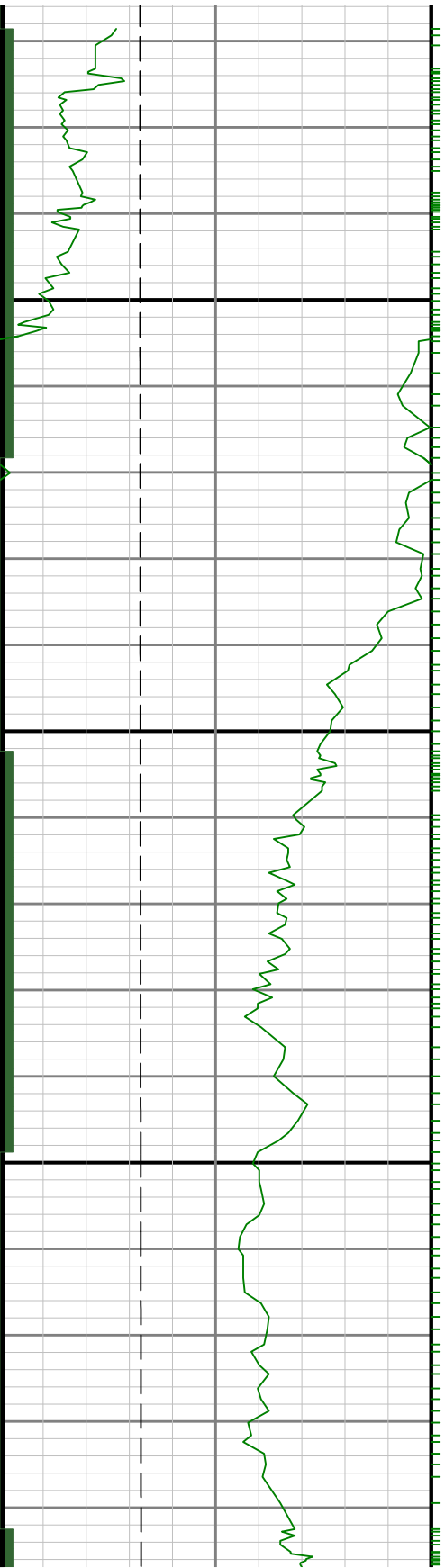




9400

9500

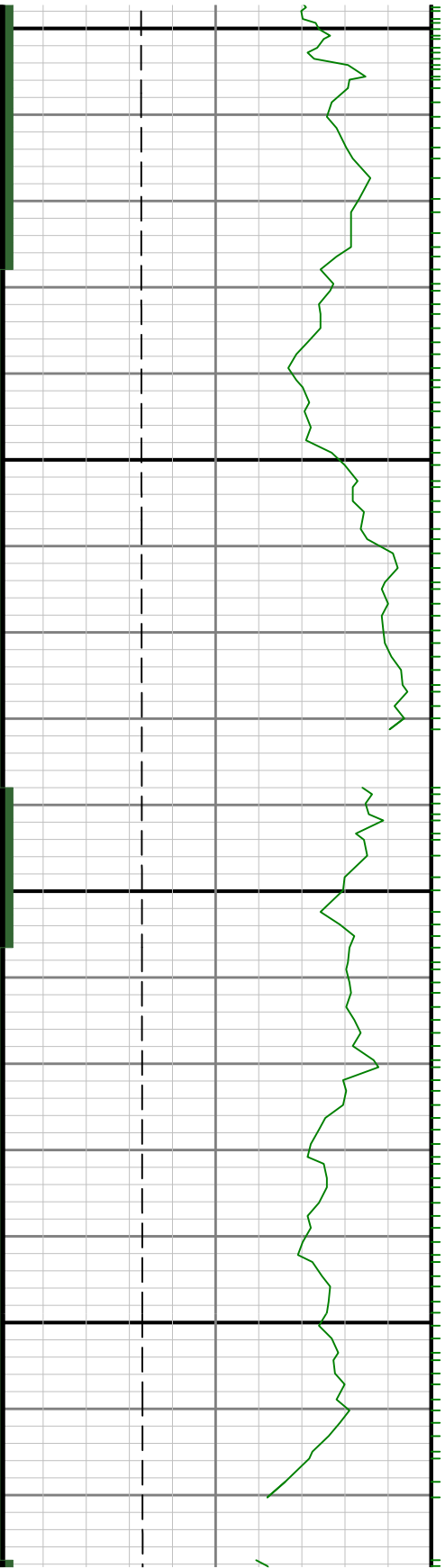




0096

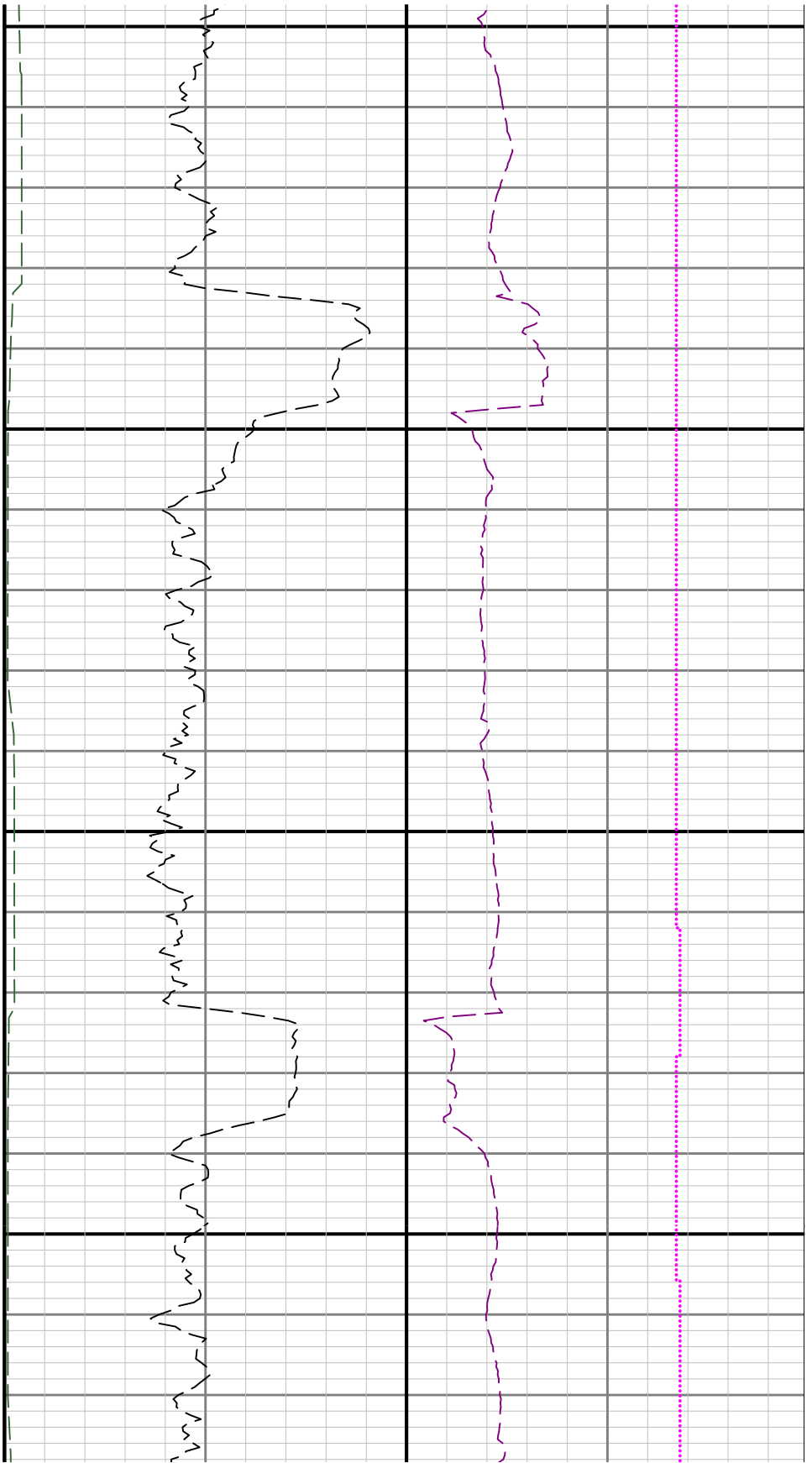
9700

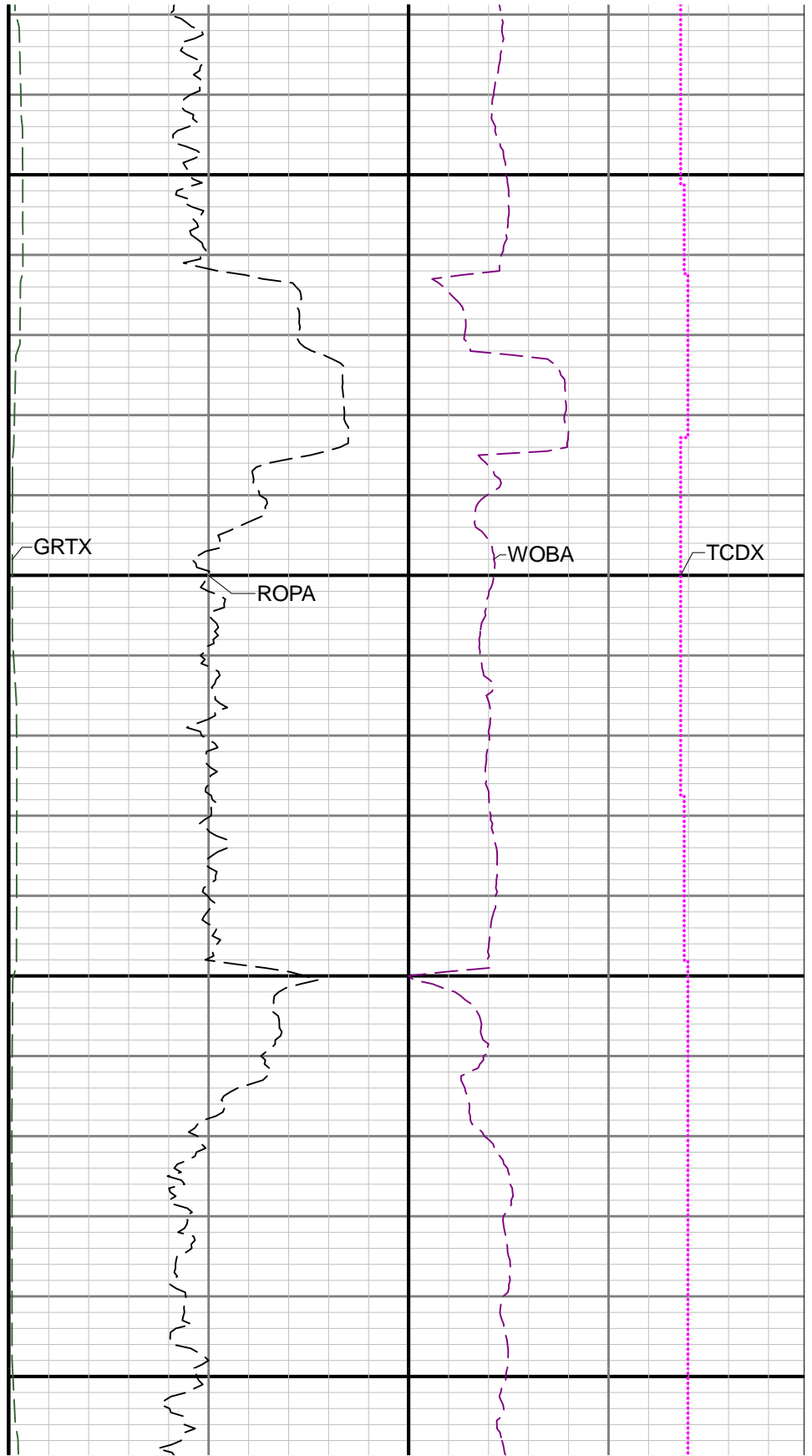
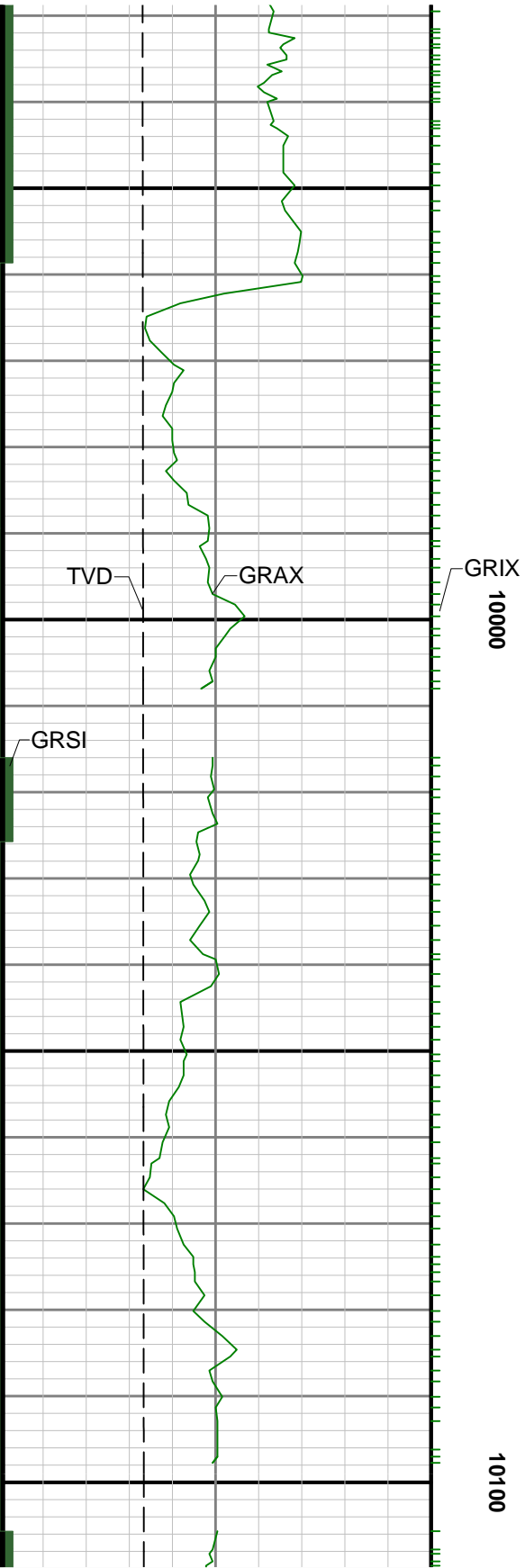


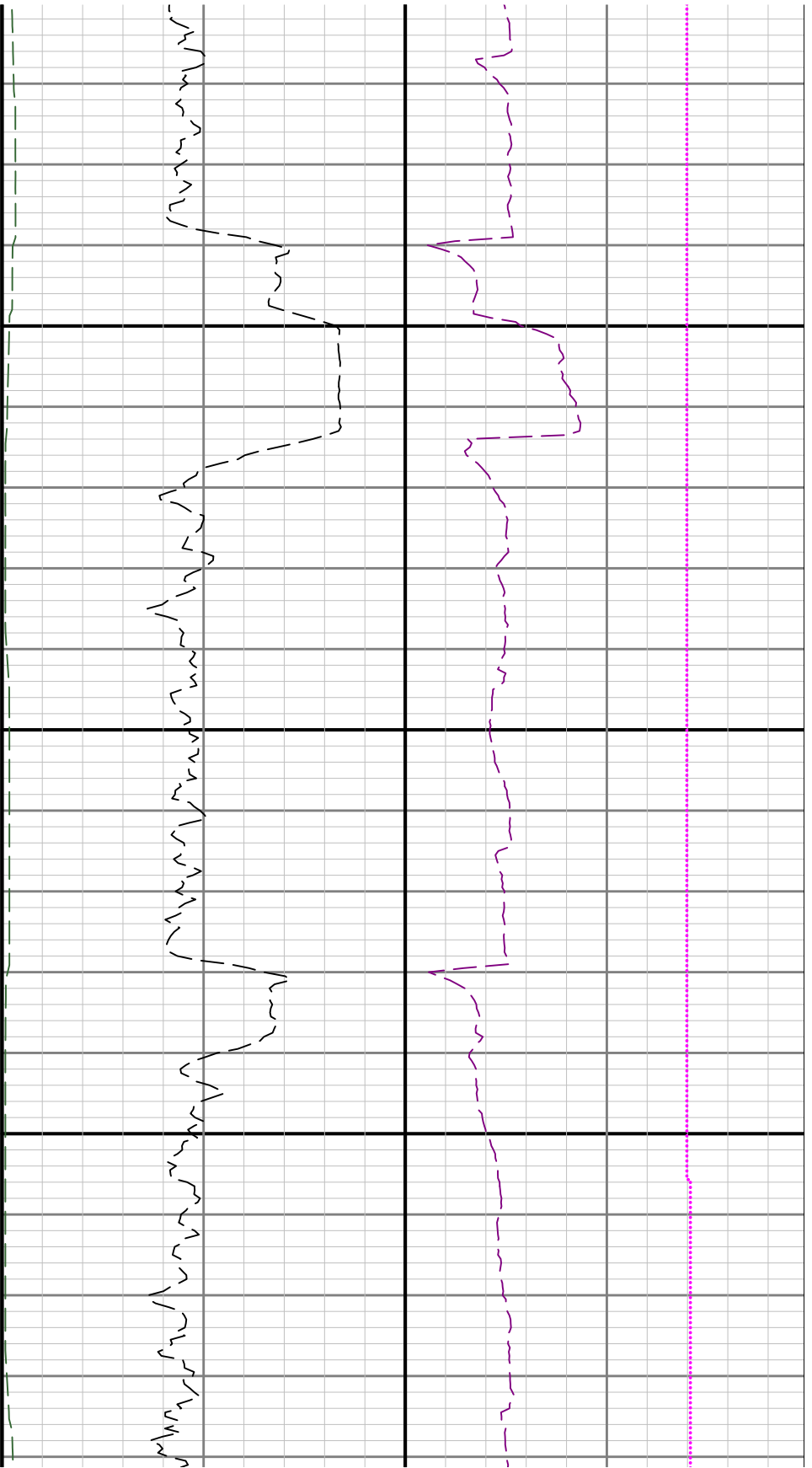


0066

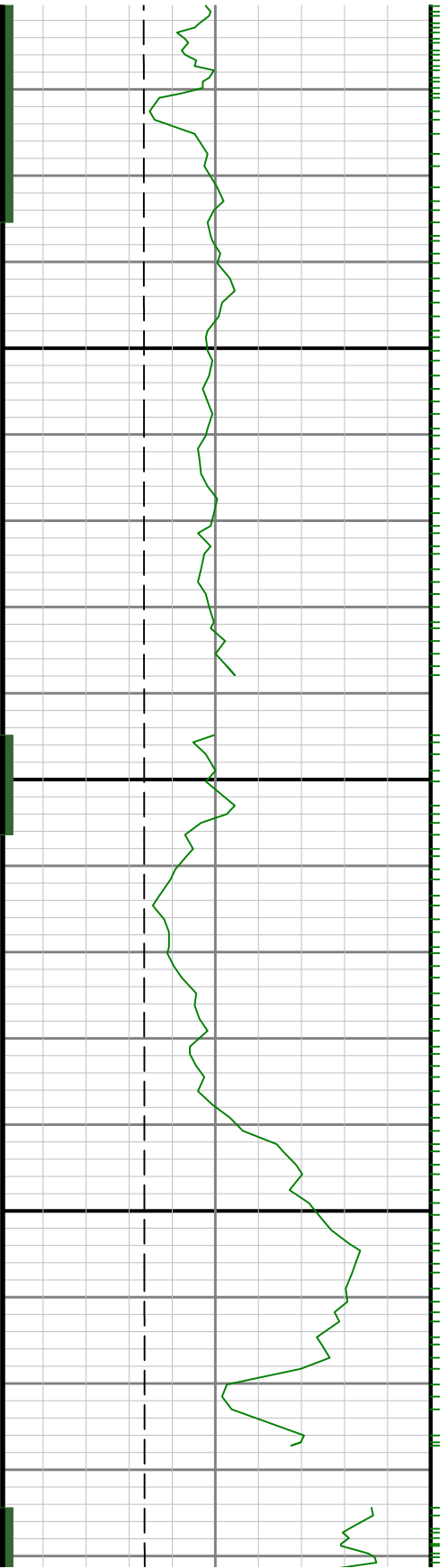
0086

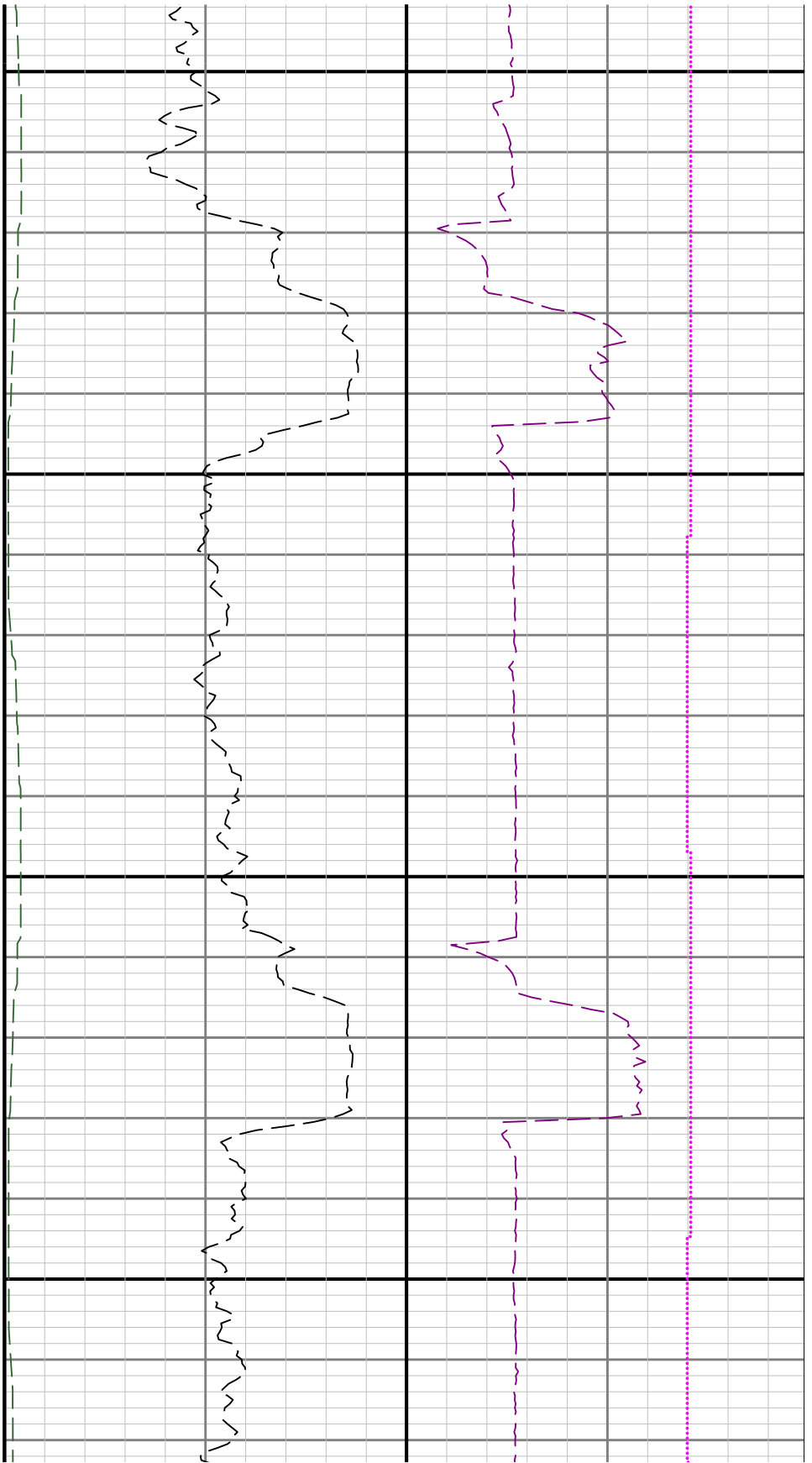






10200

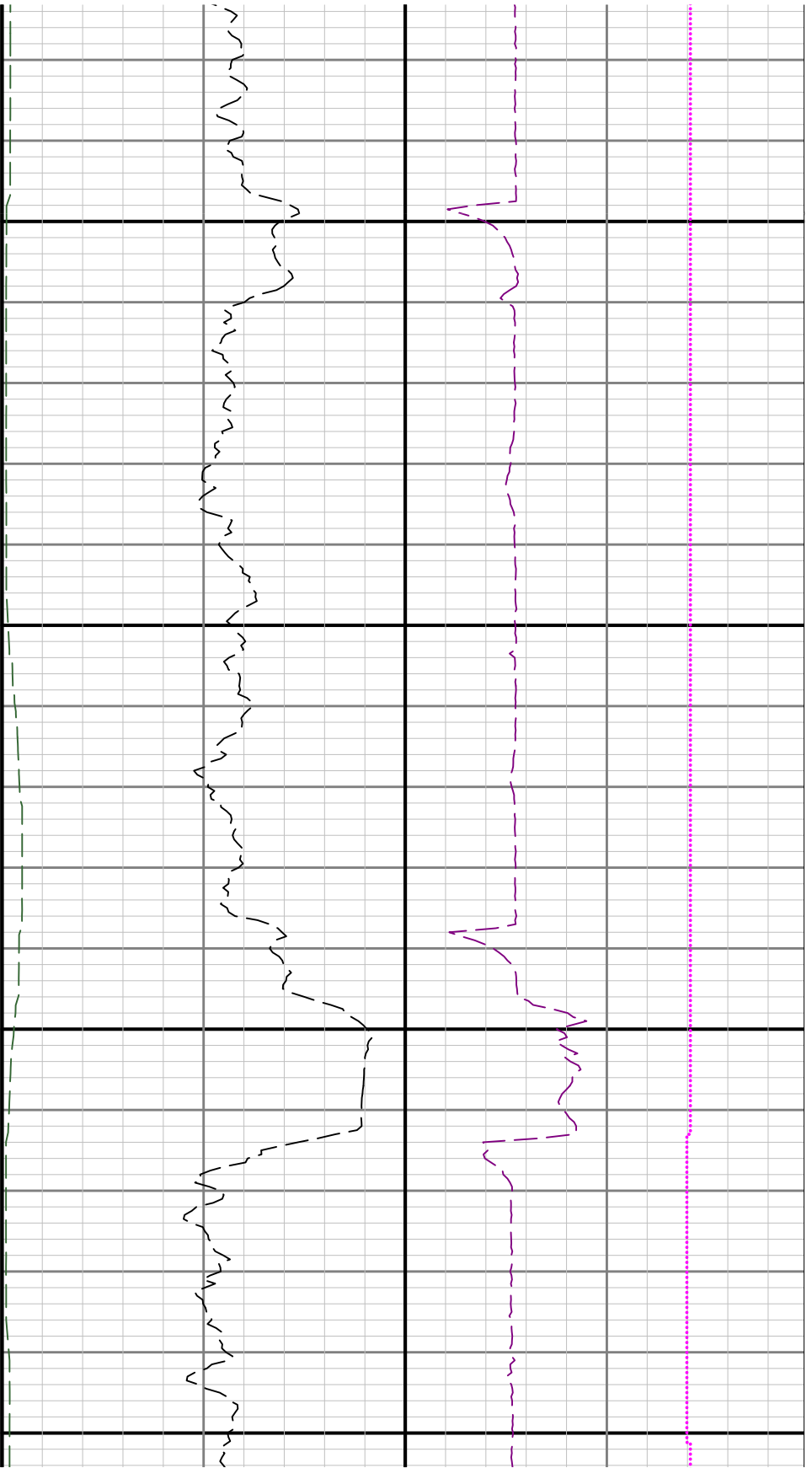




10300

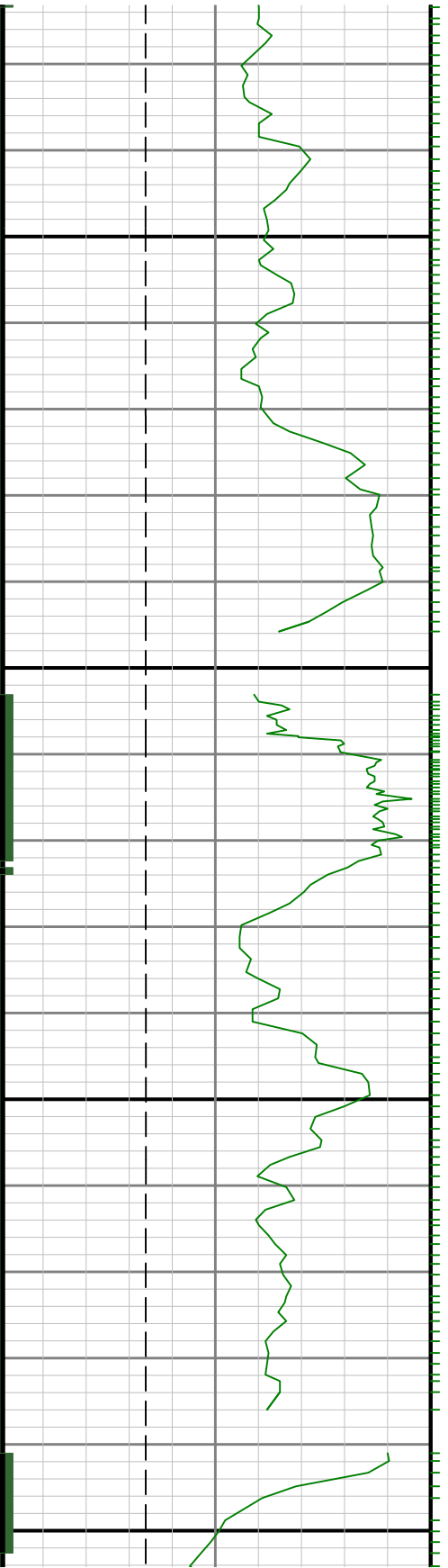
10400

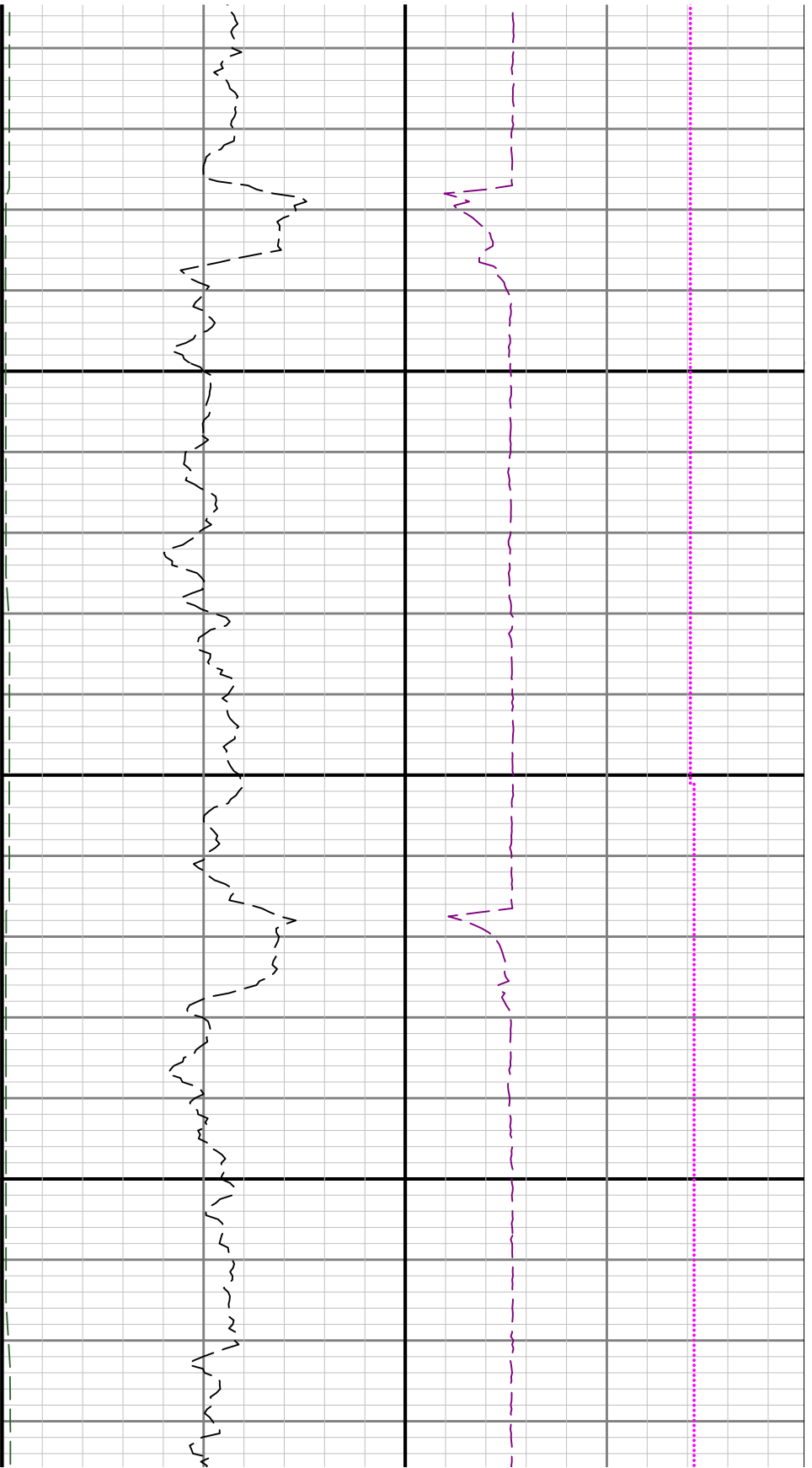
$R1<$

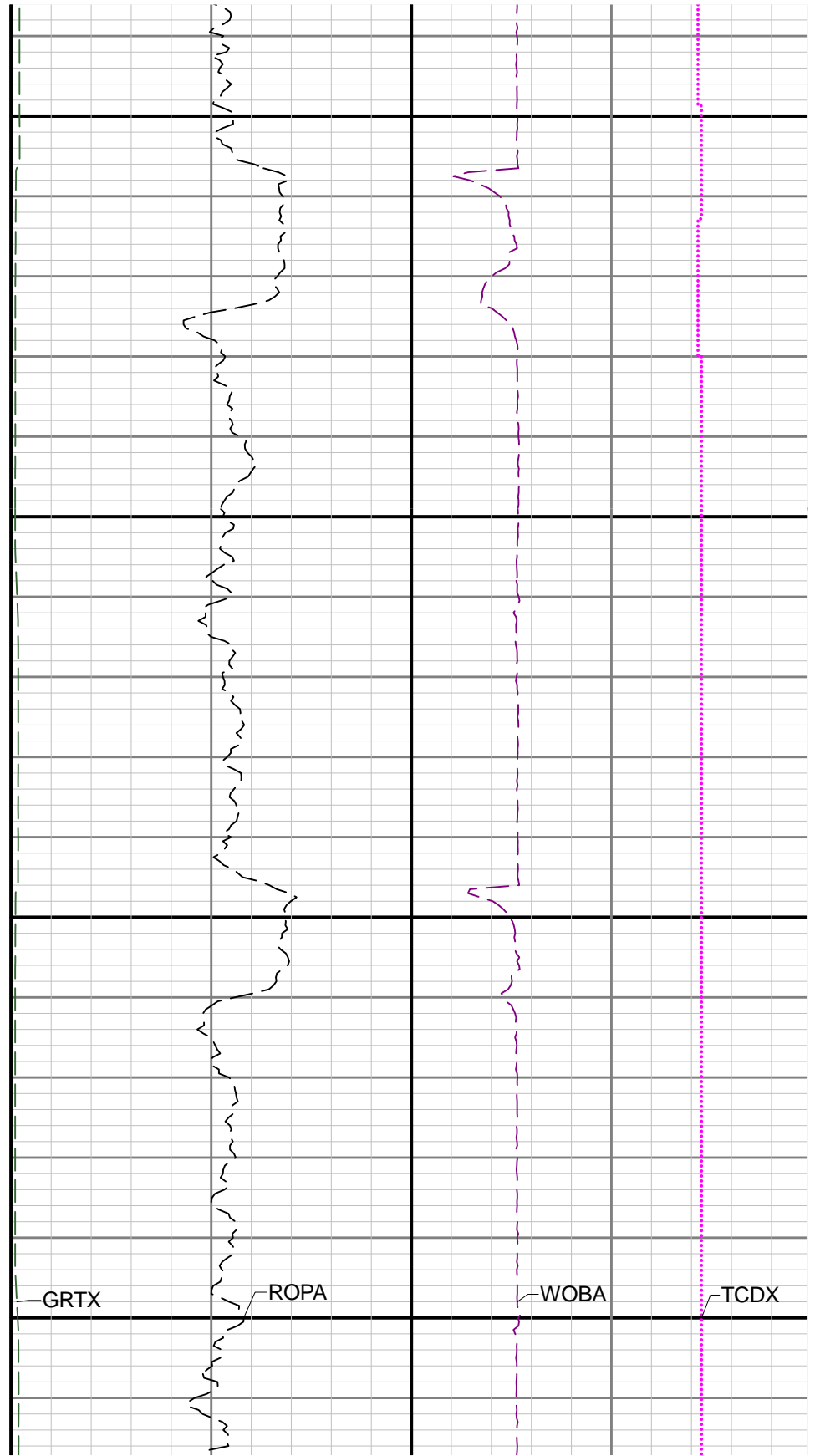
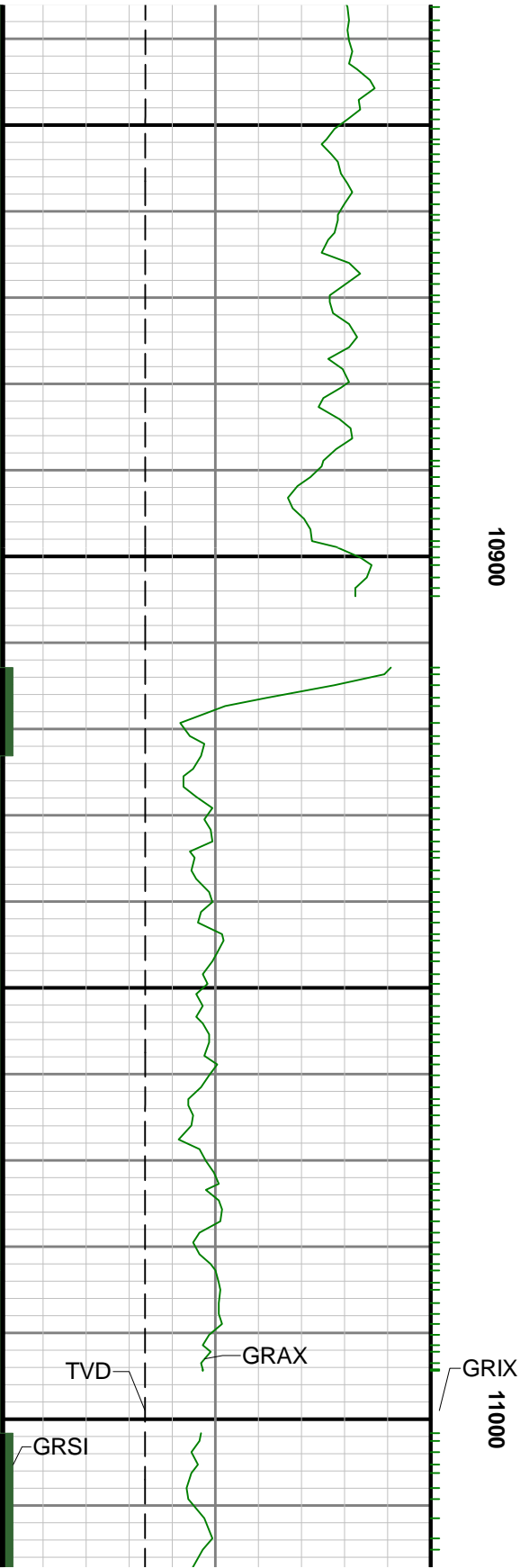


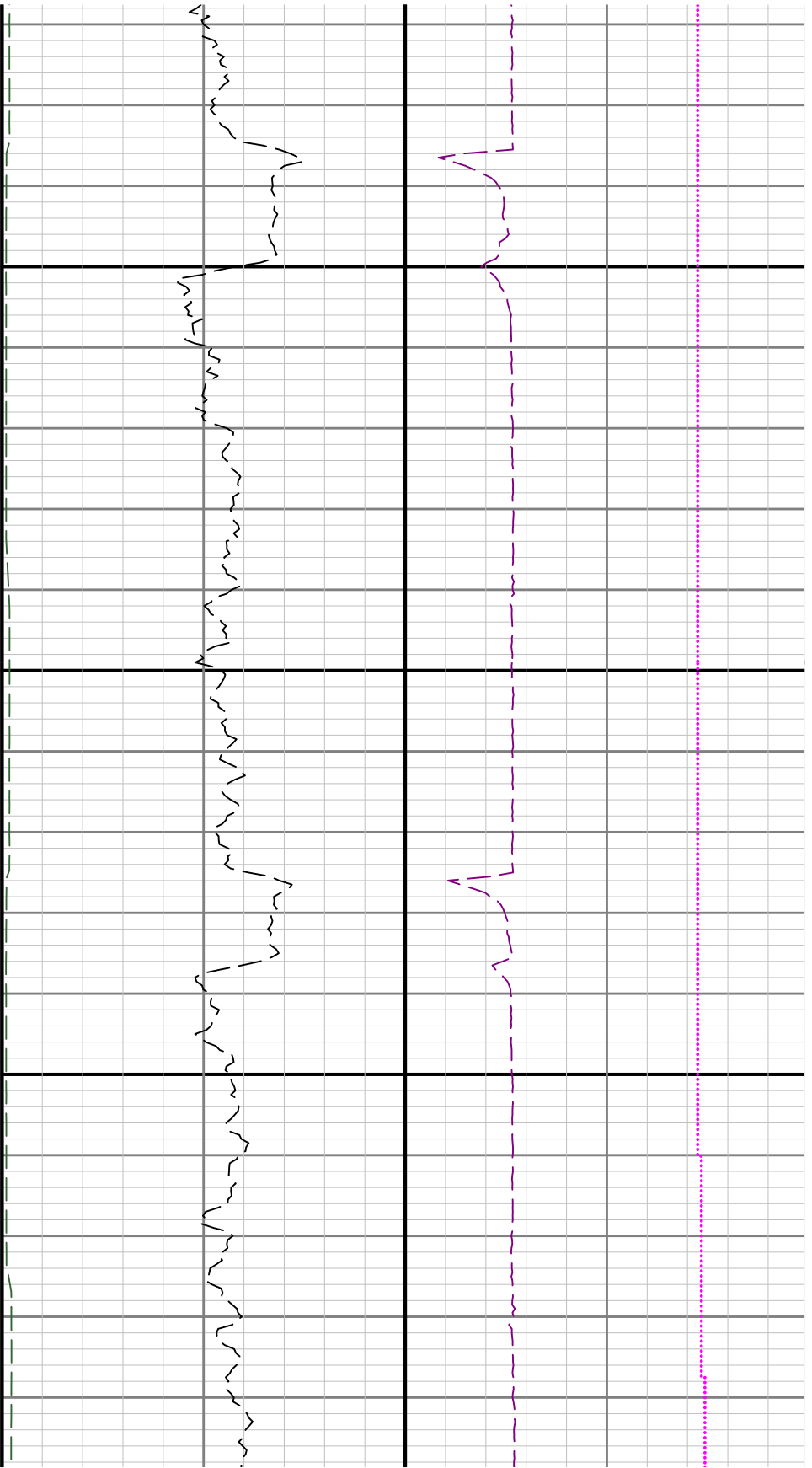
10500

10600



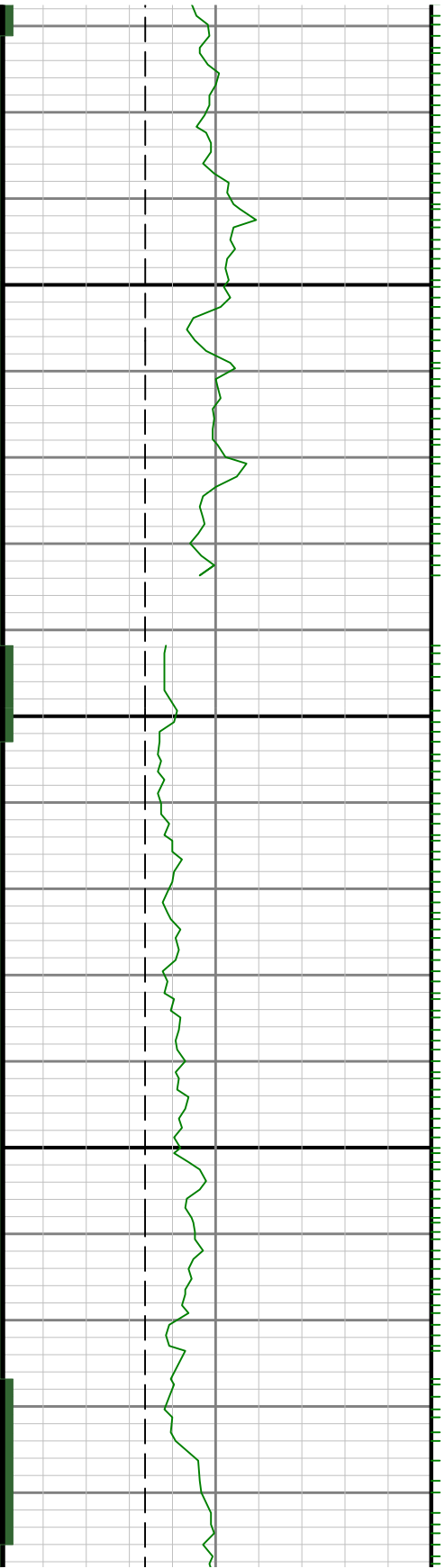


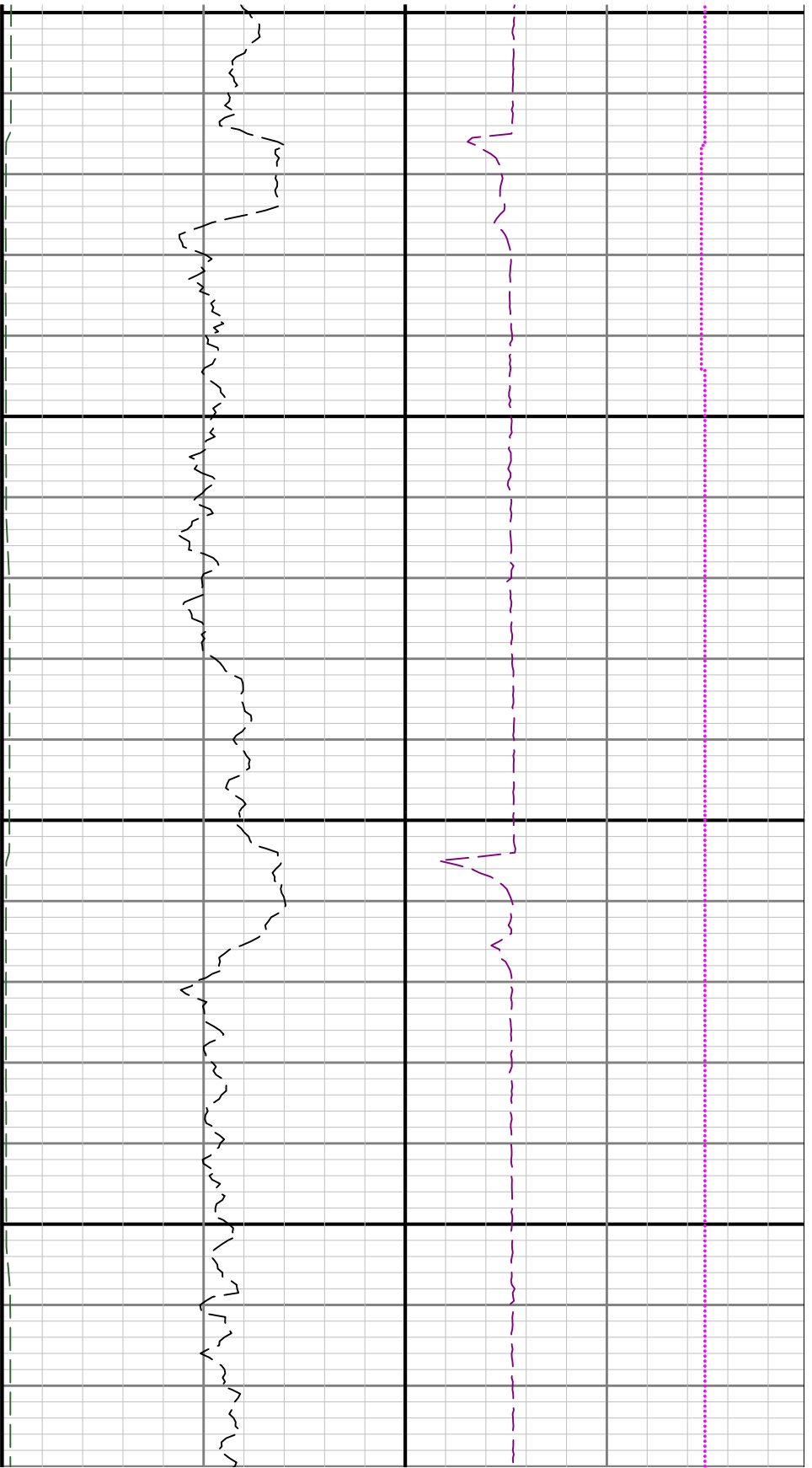




11100

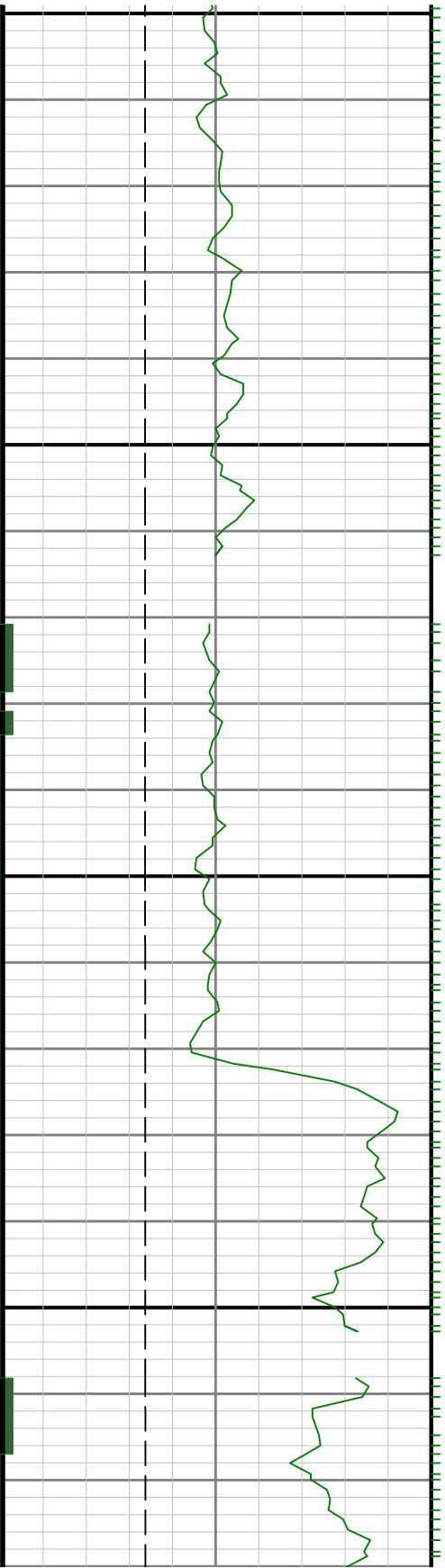
11

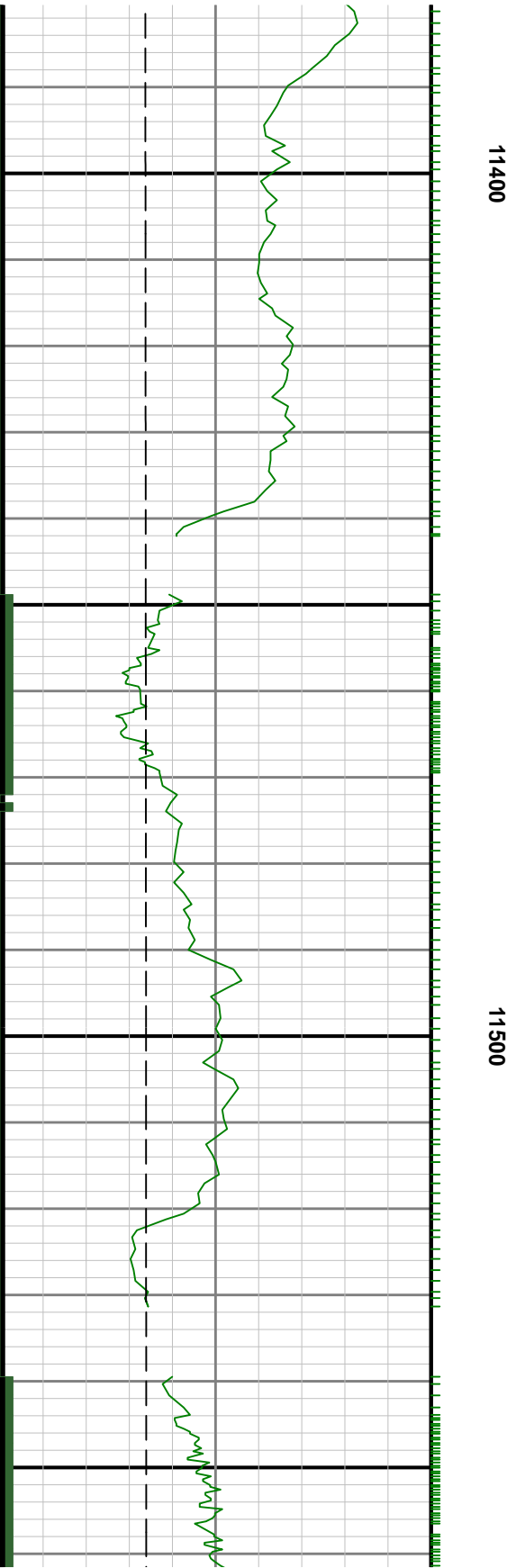


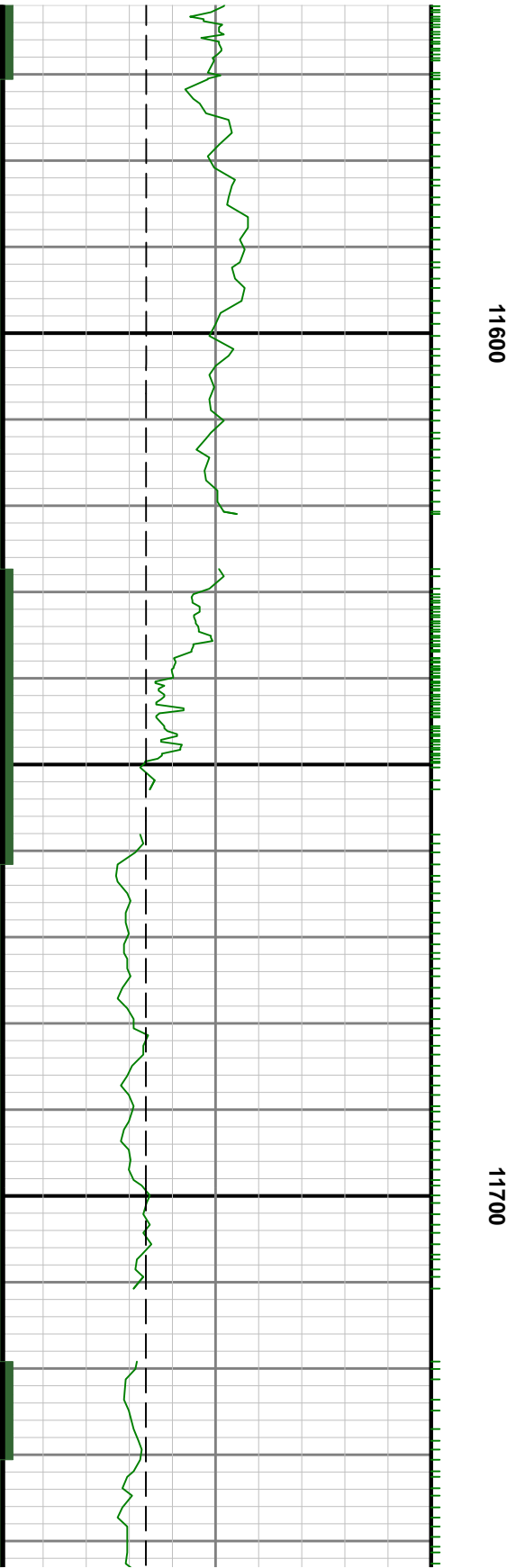
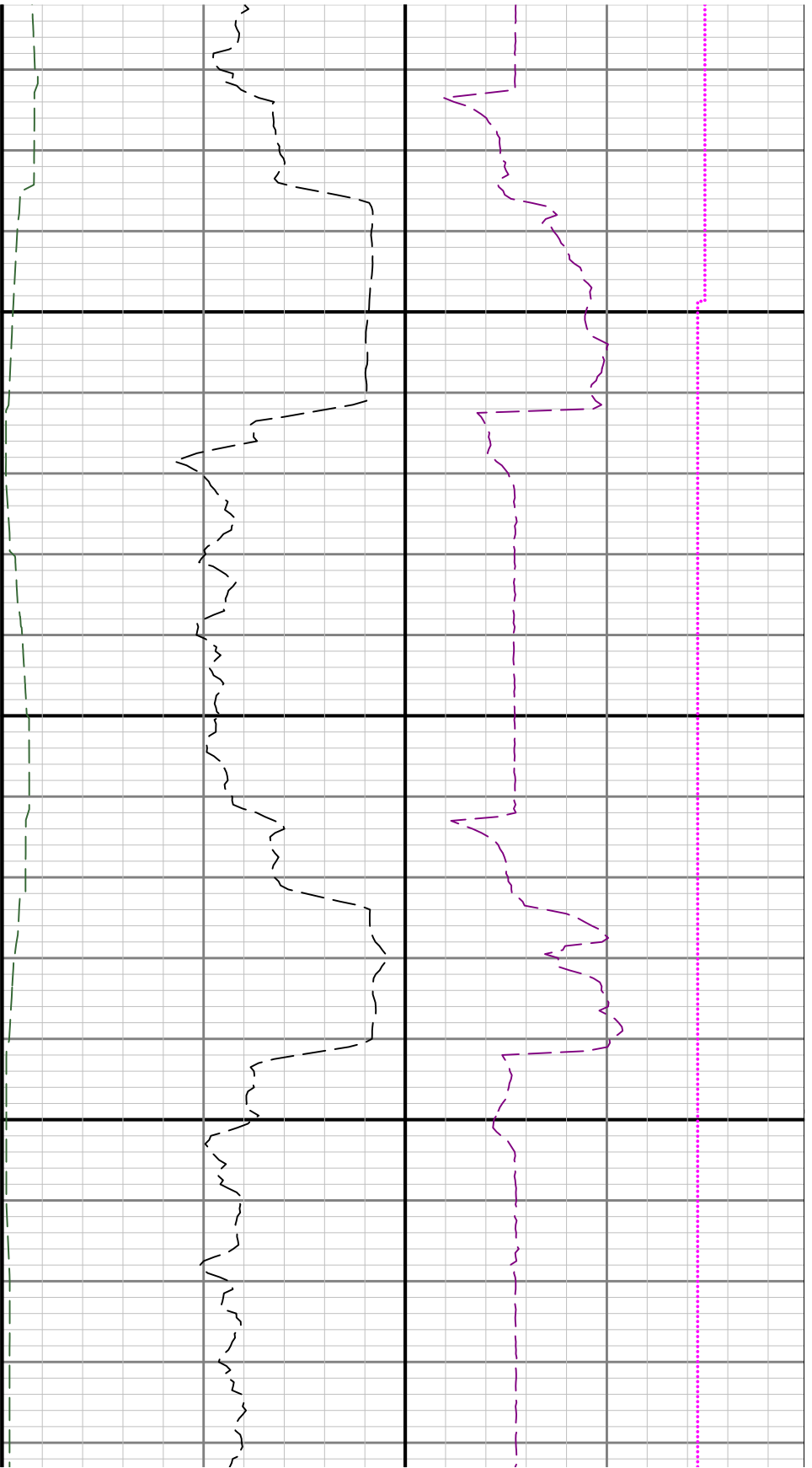


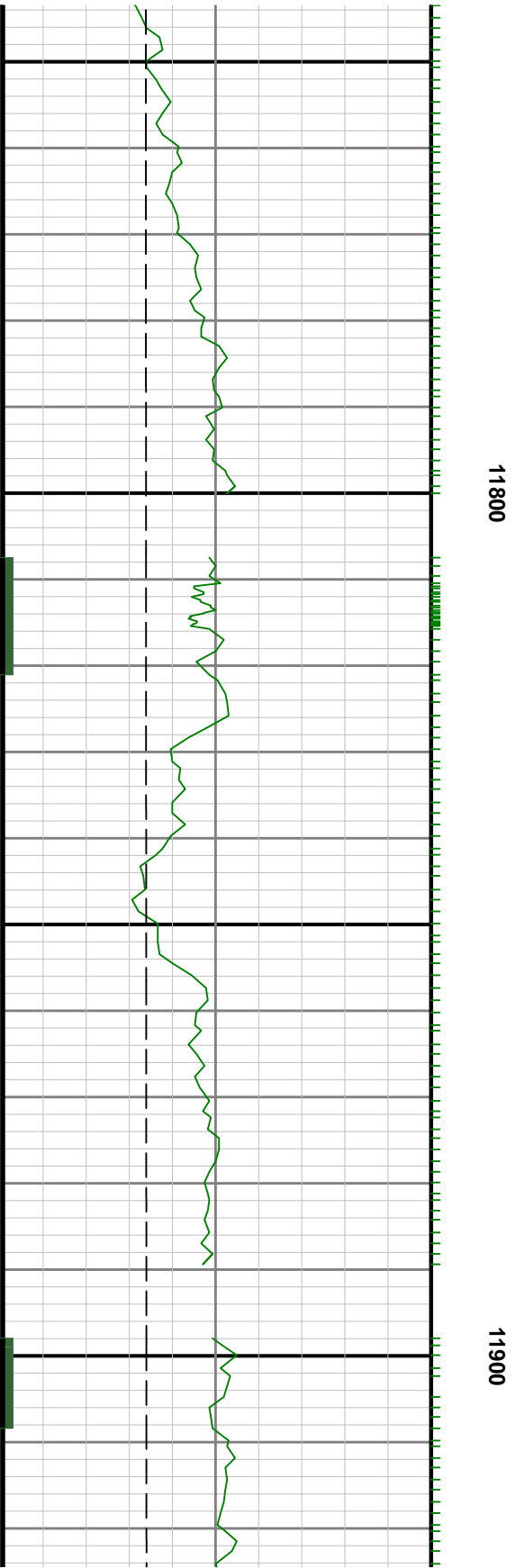
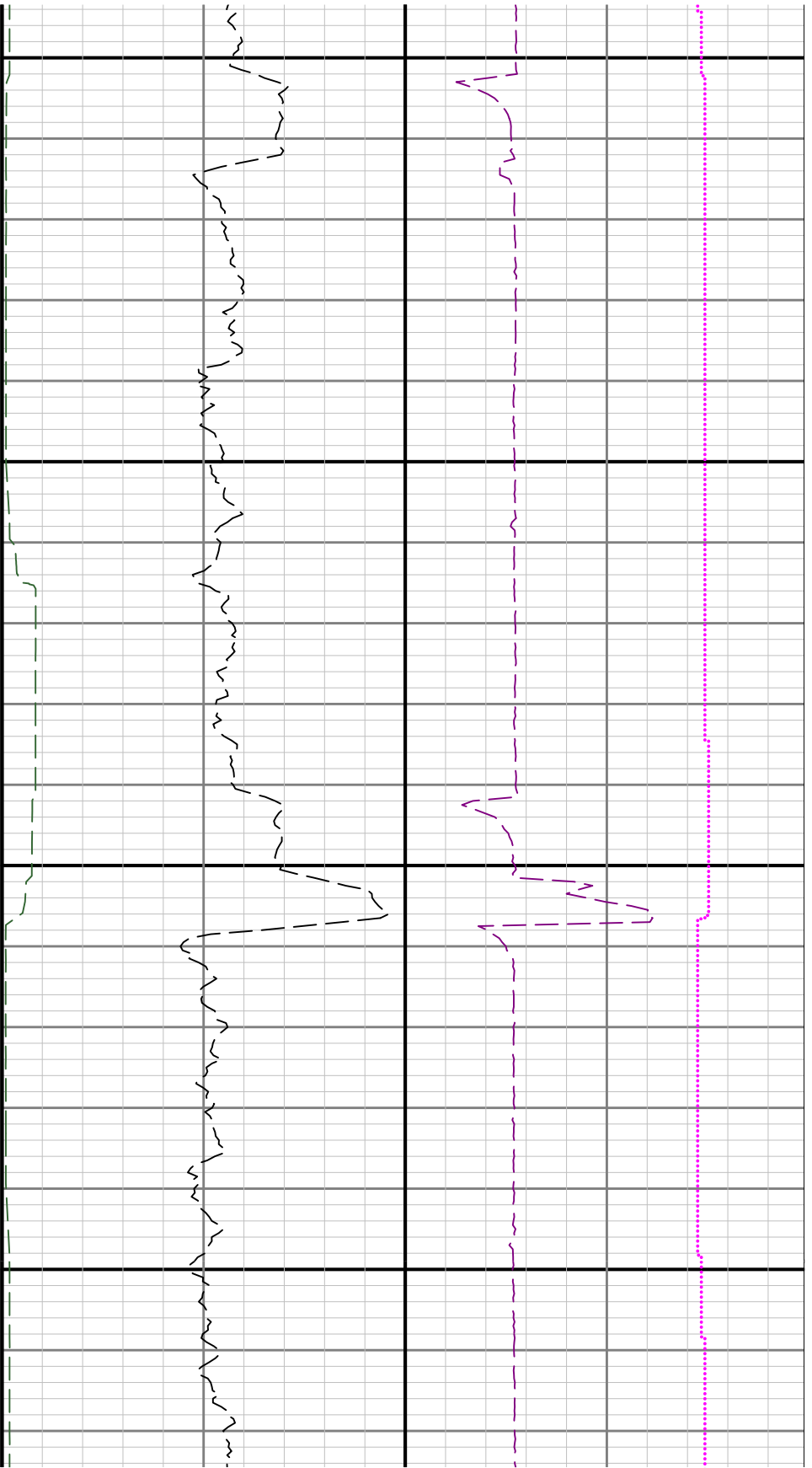
200

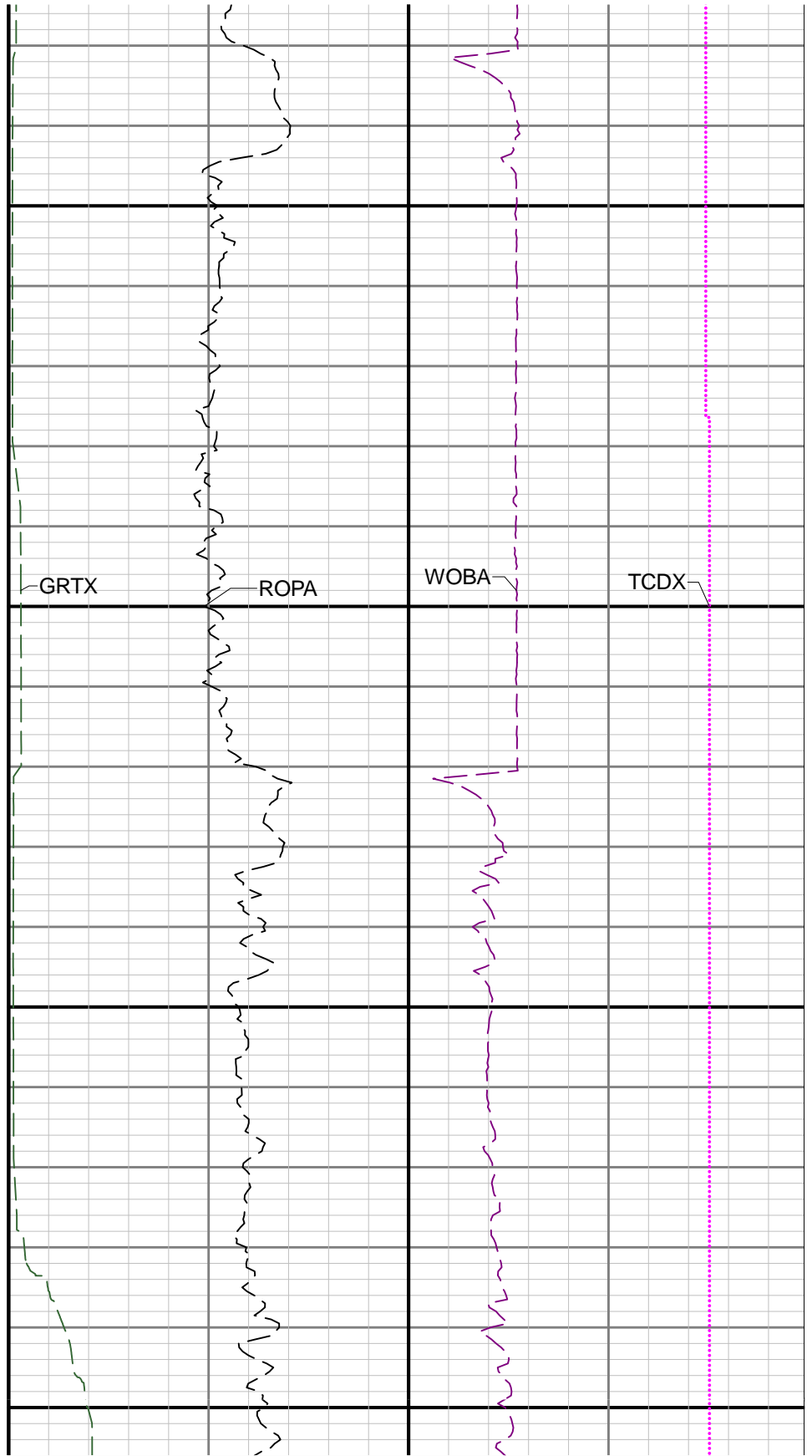
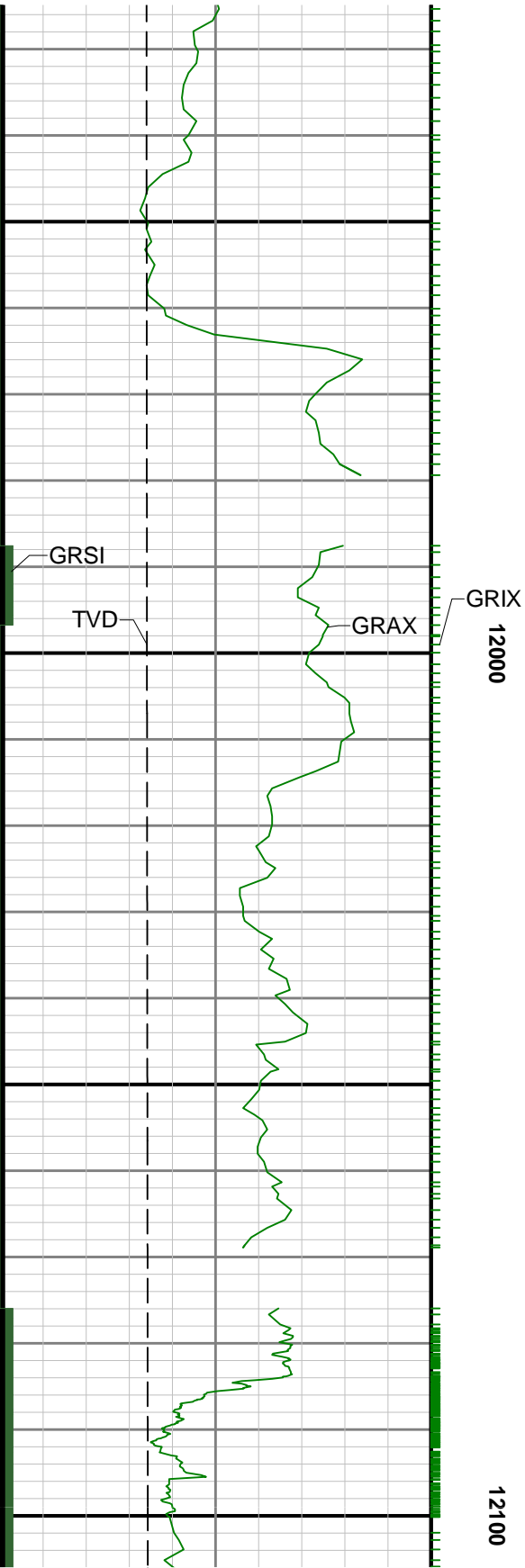
11300

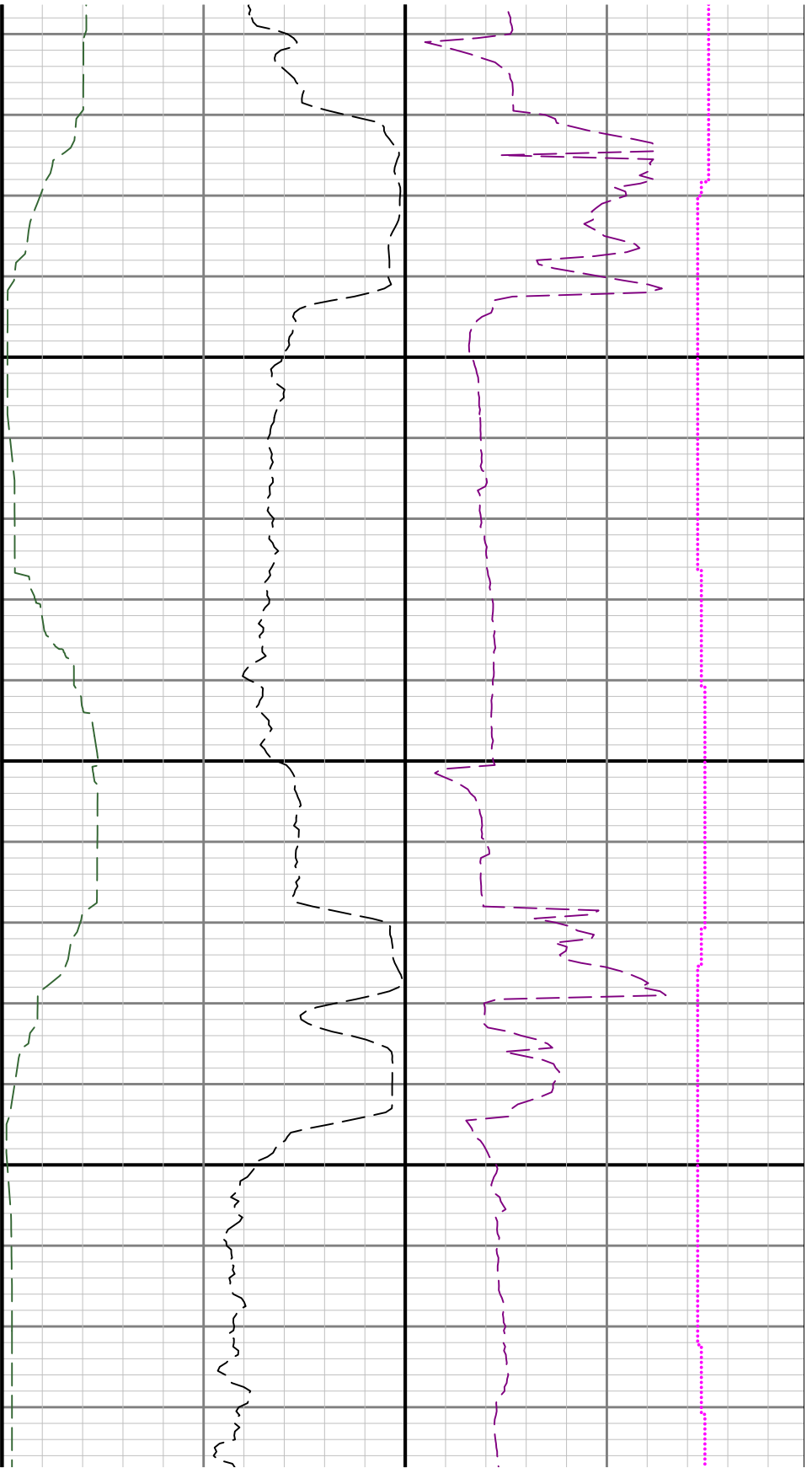




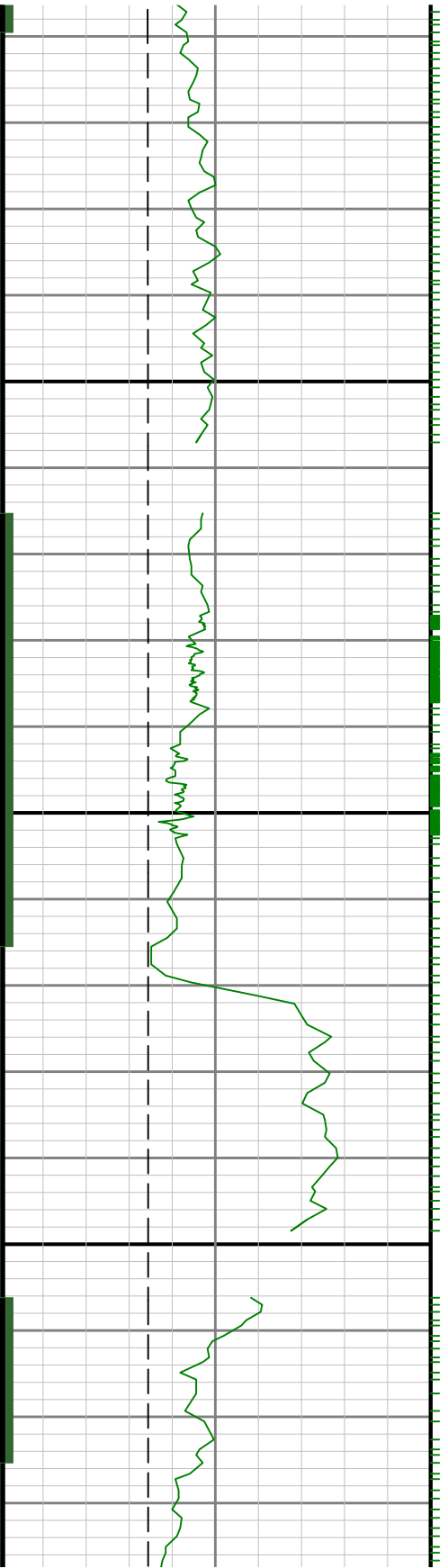


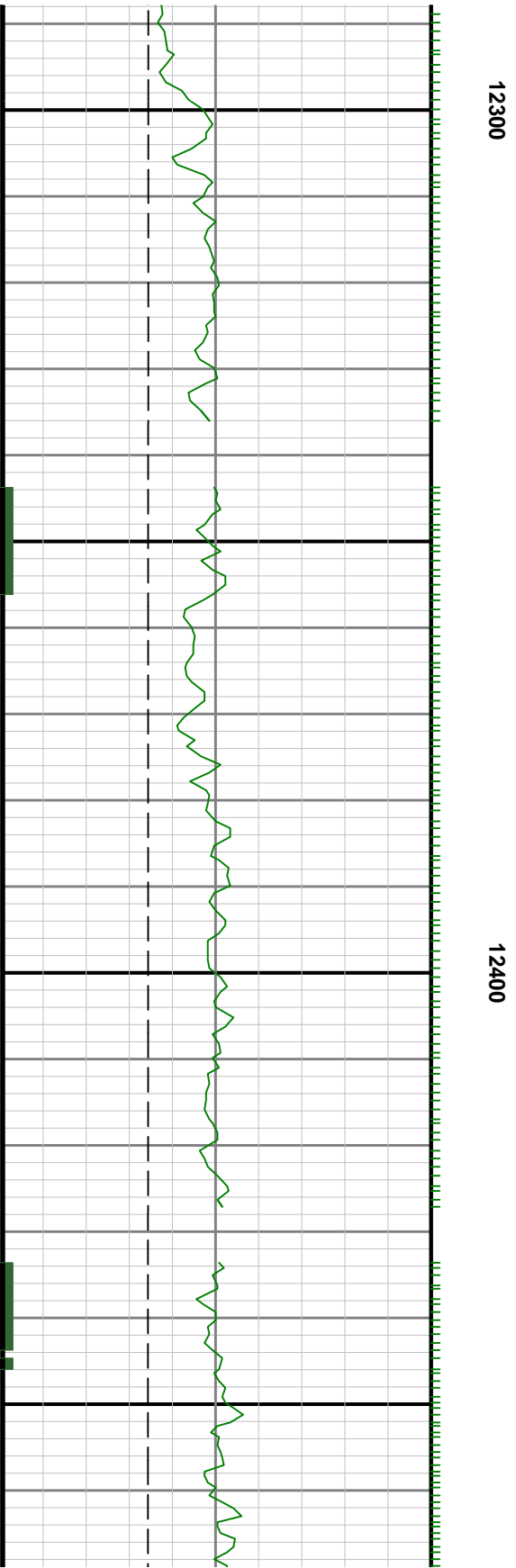
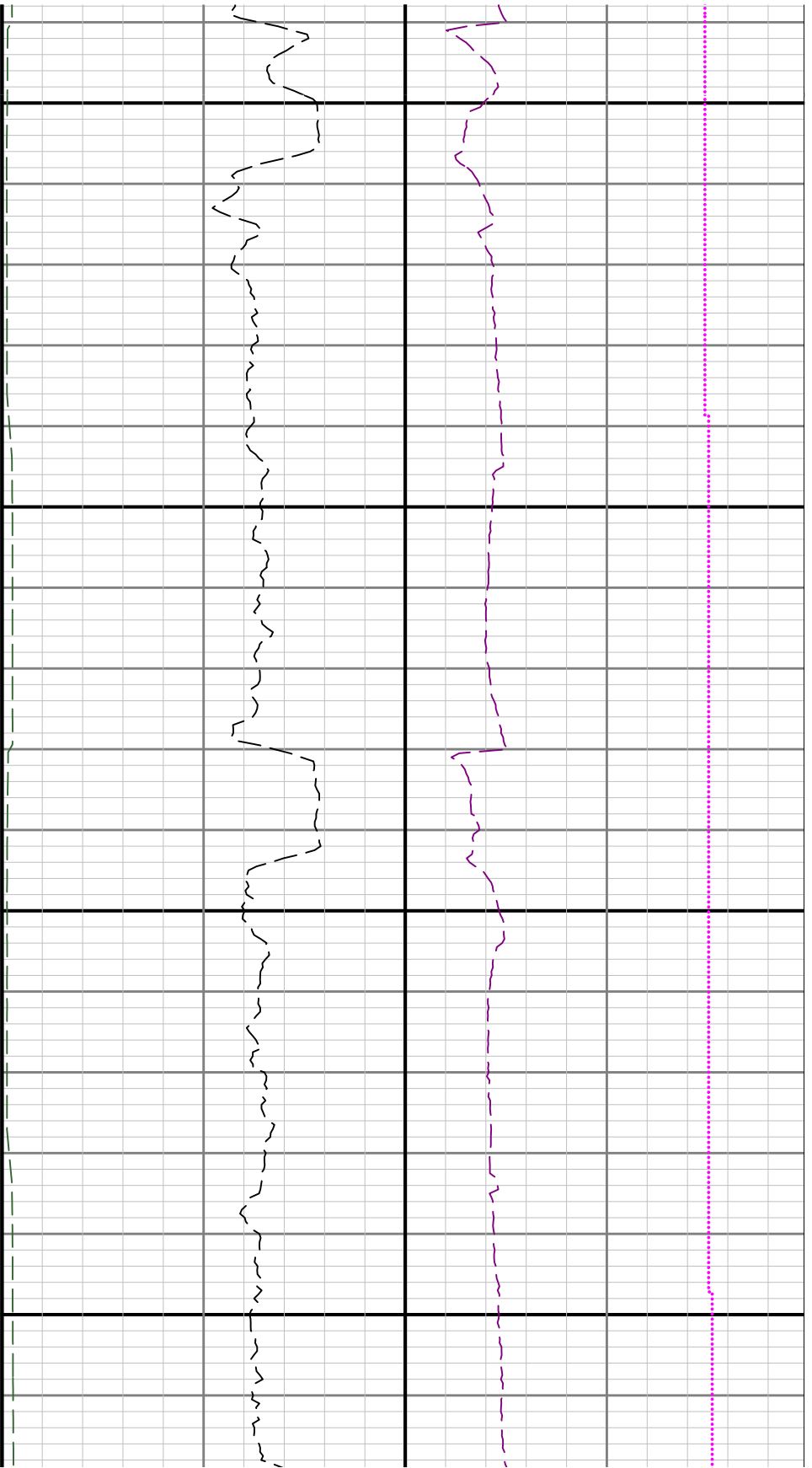


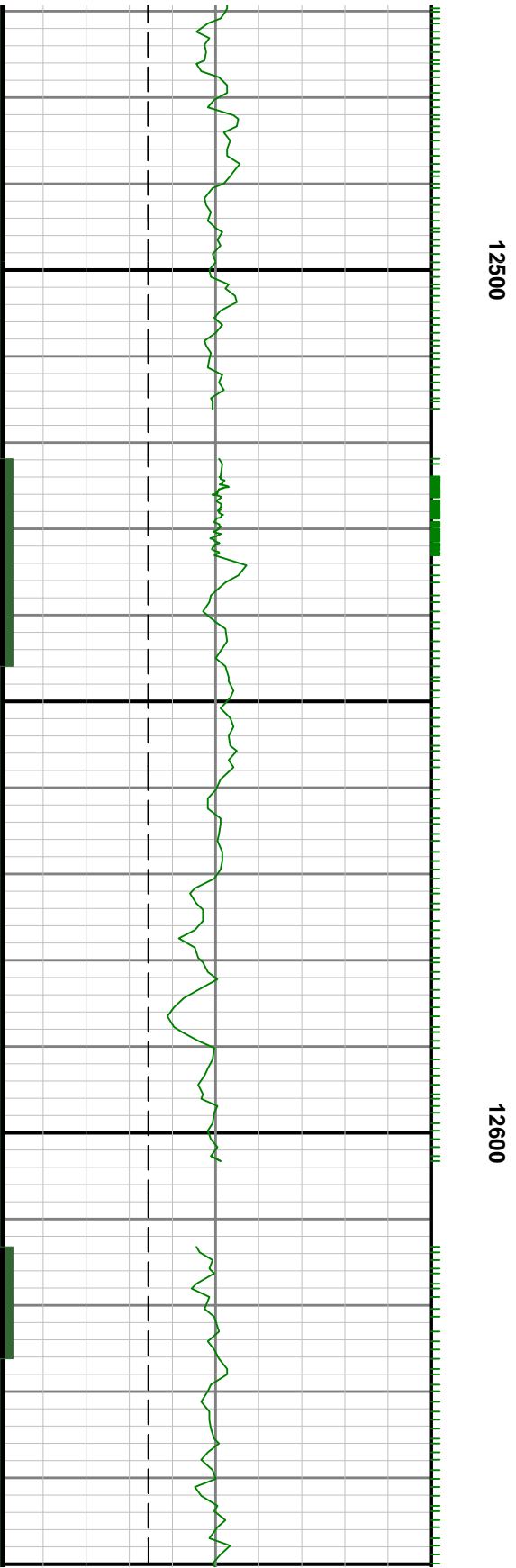
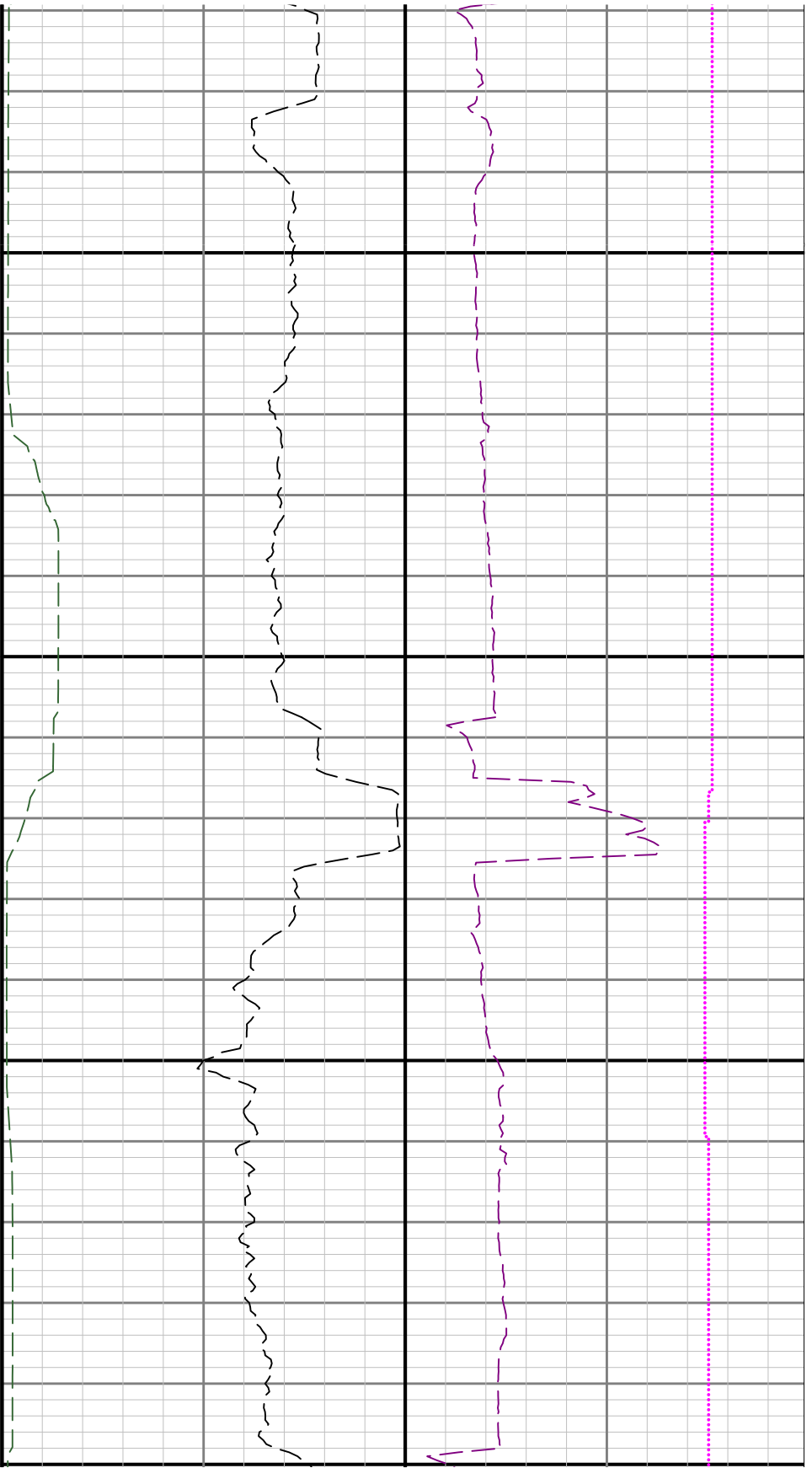


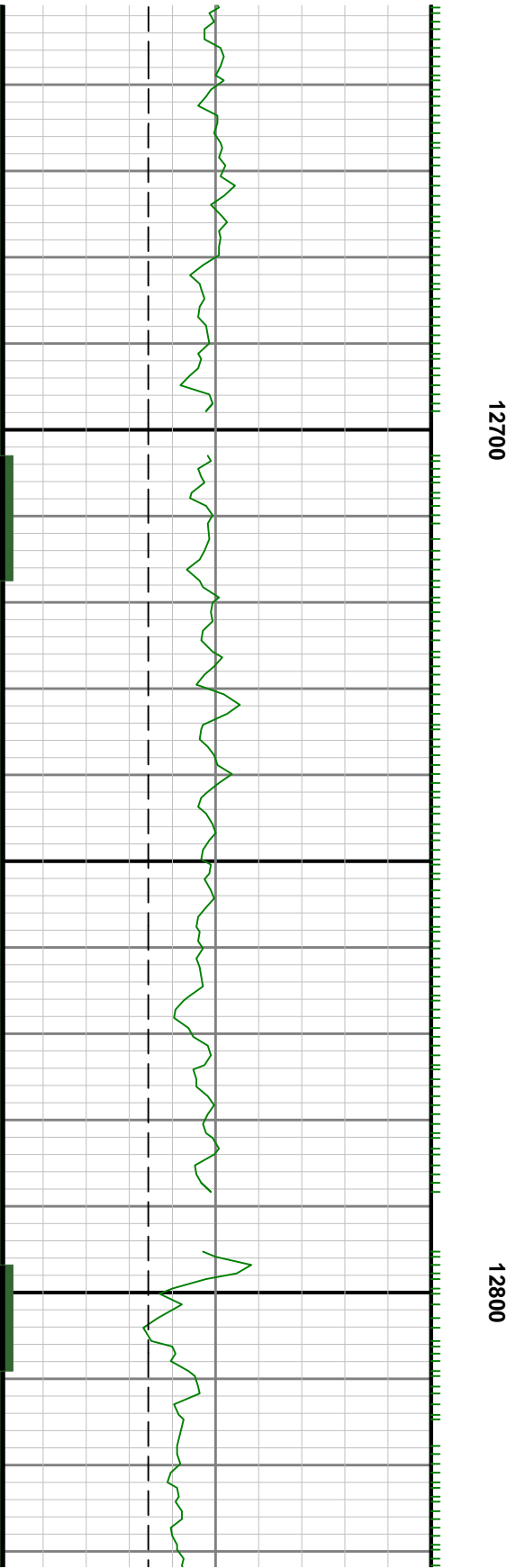
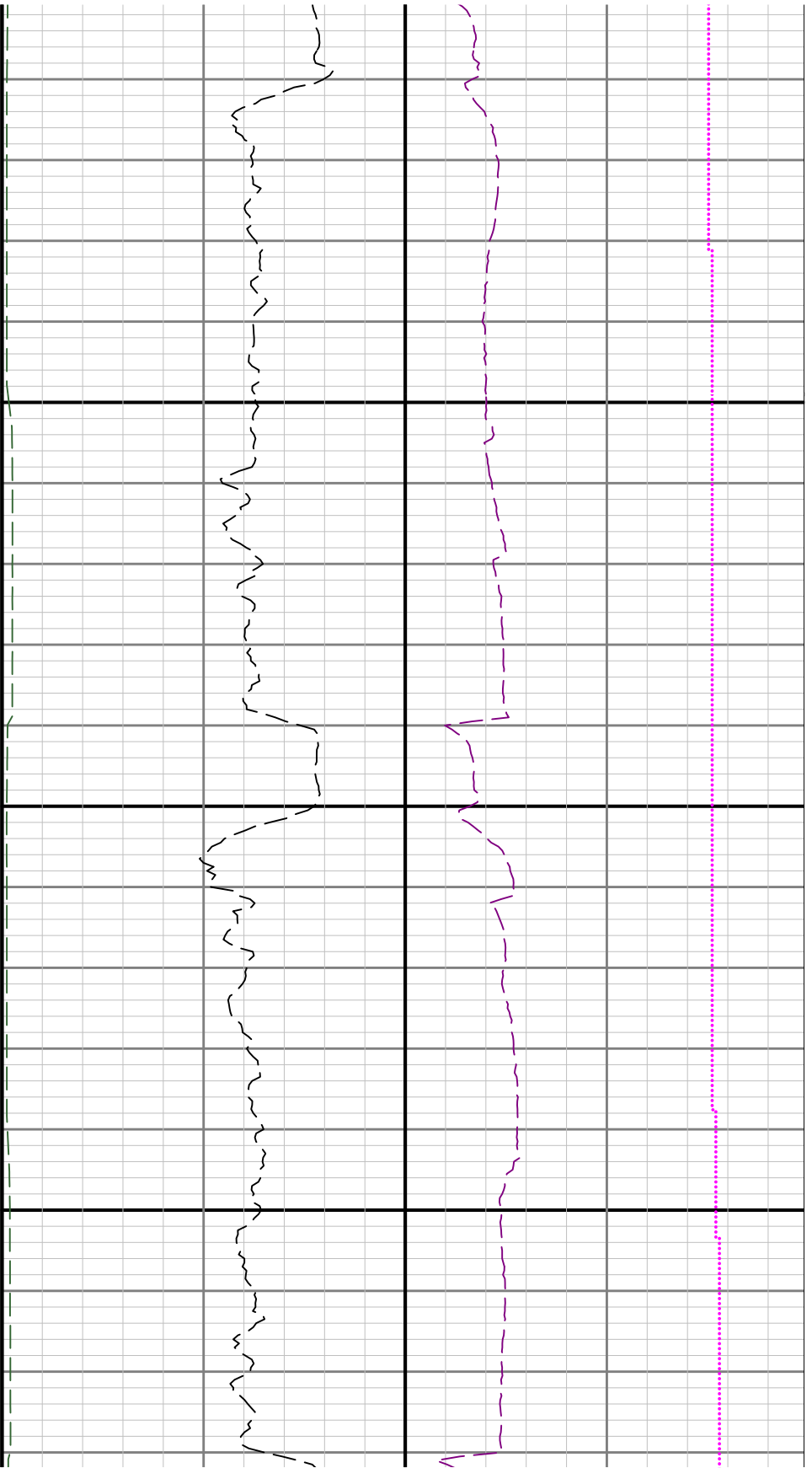


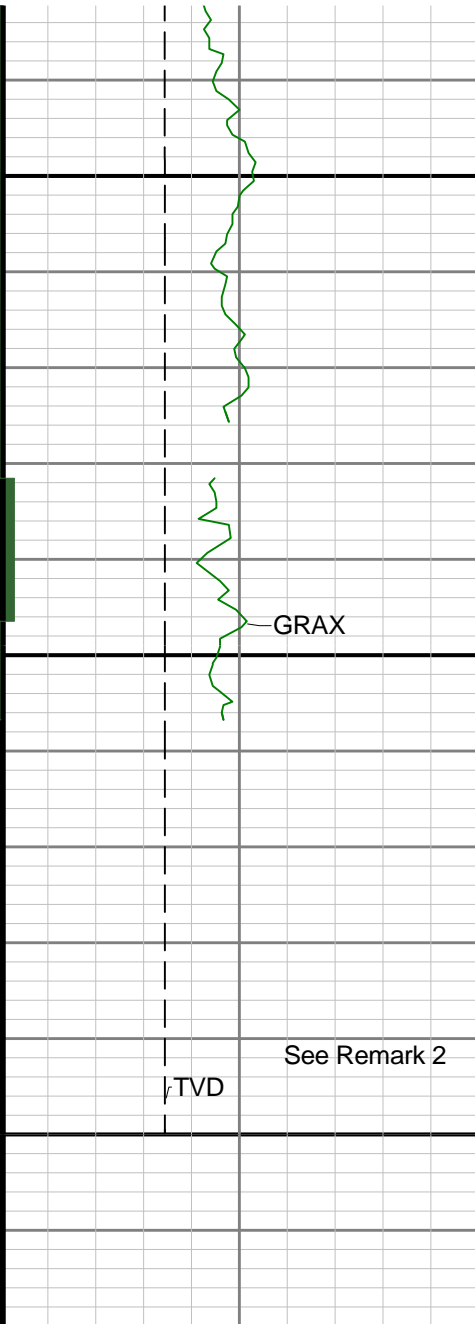
12200











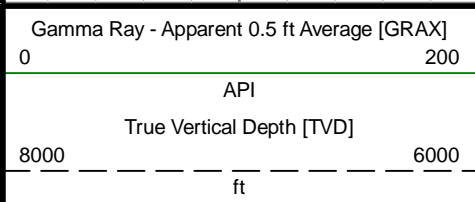
12900

GRAX

TVD

See Remark 2

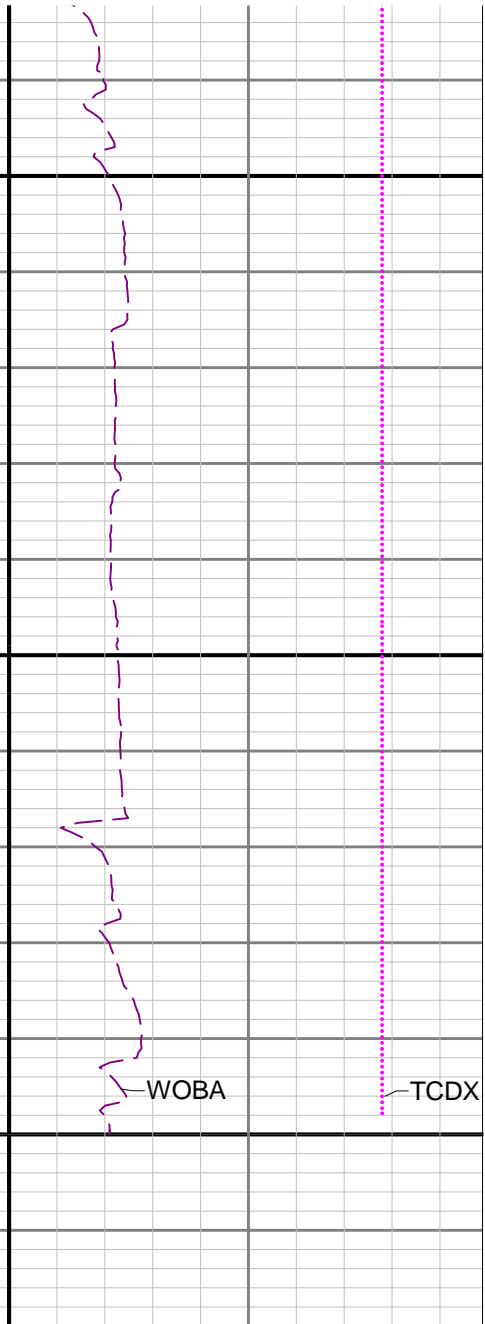
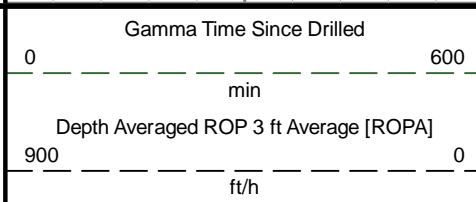
TD



MD 1:240 feet



ROPA



WOBA

TCDX

