



part of Baker Hughes. Unless other contract terms have been agreed to by the parties, each party's liabilities and obligations shall be governed by Baker Hughes Incorporated's Worldwide Terms and Conditions."

Log Run Summary

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	8.500	PDC	2.00	AutoTrak Curve	1862.00	4949.00	1875.00	4949.00	2015-12-06 05:58	2015-12-06 21:51	14.51
2	2	8.500	PDC	2.00	AutoTrak Curve	4936.00	12430.00	4949.00	12430.00	2015-12-07 04:36	2015-12-08 19:03	35.30

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
David Browning		2015-12-05	2015-12-09	Dusty Zink		2015-12-05	2015-12-09	Matthew Delmore		2015-12-05	2015-12-09
Mike Gurnsey		2015-12-05	2015-12-09	Chad Hough		2015-12-08	2015-12-08				

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+ (%)
2015-12-06 13:20		1	3491.00	Diesel-Oil Based Mud	9.8	27	N/A	11.4	57.8/30.8	Active Pit	45000	0.00
2015-12-07 01:45		2	4949.00	Diesel-Oil Based Mud	9.7	22	N/A	10.8	59.0/29.5	Active Pit	42000	0.00
2015-12-07 13:20		2	6742.00	Diesel-Oil Based Mud	9.8	23	N/A	9.2	59.2/28.6	Active Pit	43000	0.00
2015-12-08 02:00		2	9428.00	Diesel-Oil Based Mud	10.1	23	N/A	9.6	60.0/26.4	Active Pit	44000	0.00
2015-12-08 13:15		2	11450.00	Diesel-Oil Based Mud	10.4	28	N/A	10.4	59.1/25.7	Active Pit	45000	0.00

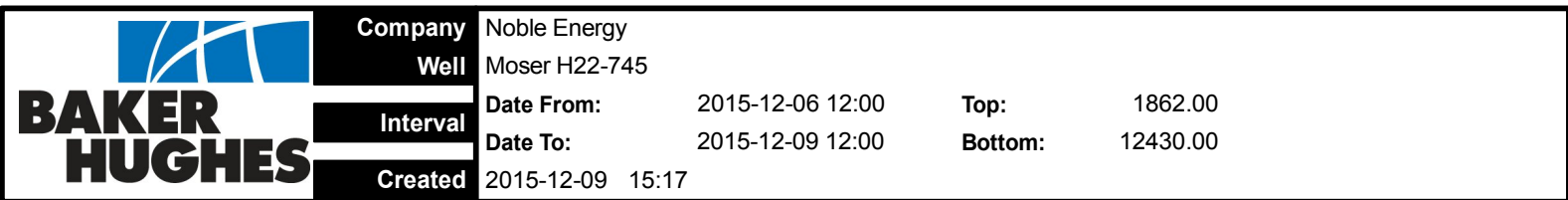
Equipment and Service Data

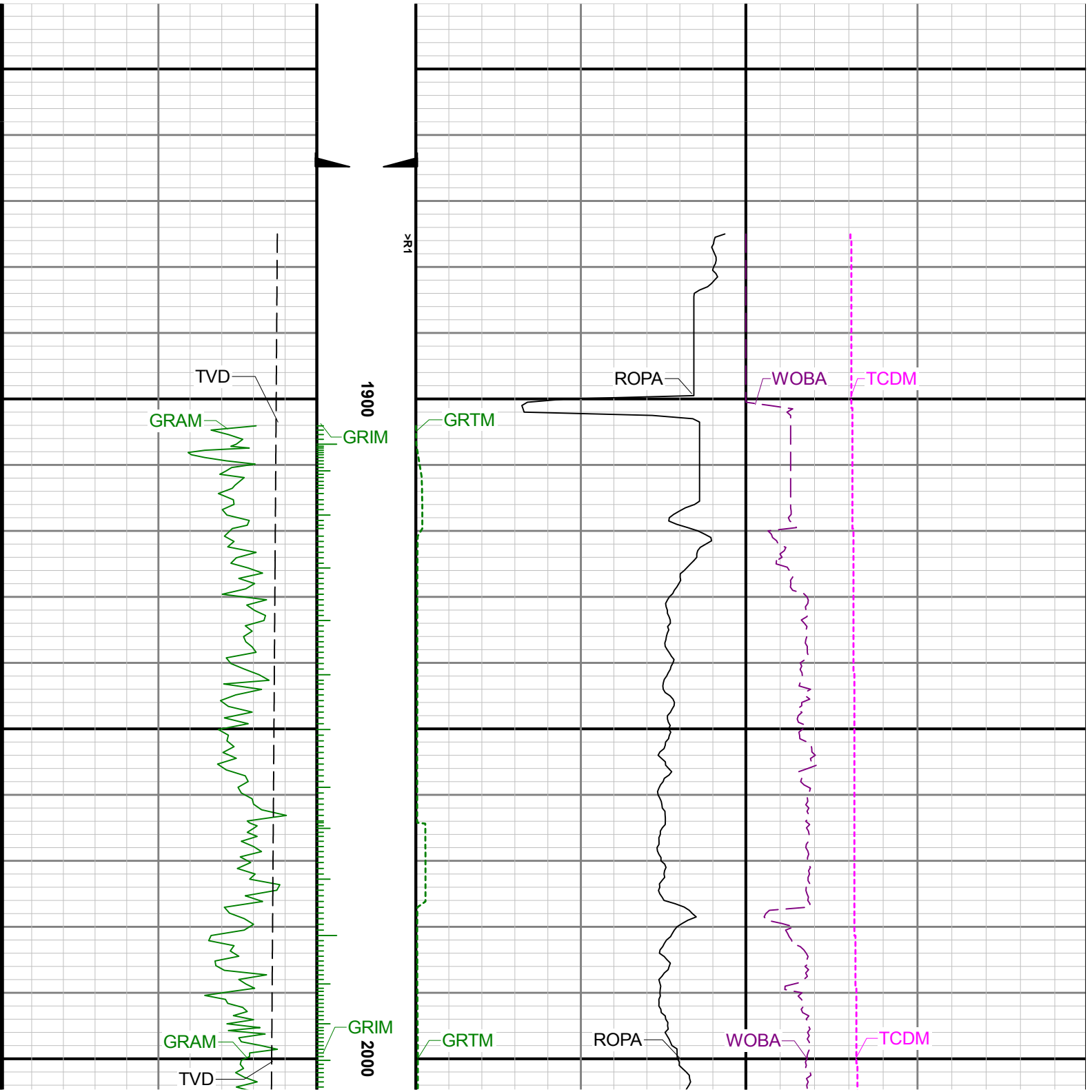
Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	ATC_SU	102053886	Near Bit Inclination	5.93	6.56	7.000	4.330
1	ATC_MWD	12141354	Gamma (single)	2.75	12.73	7.000	3.250
1	ATC_MWD	12141354	Directional (mag)	12.27	22.25	7.000	3.250
2	ATC_SU	12653420	Near Bit Inclination	5.93	6.56	7.000	4.330
2	ATC_MWD	12252765	Gamma (single)	2.25	12.18	7.000	3.250
2	ATC_MWD	12252765	Directional (mag)	12.32	22.25	7.000	3.250

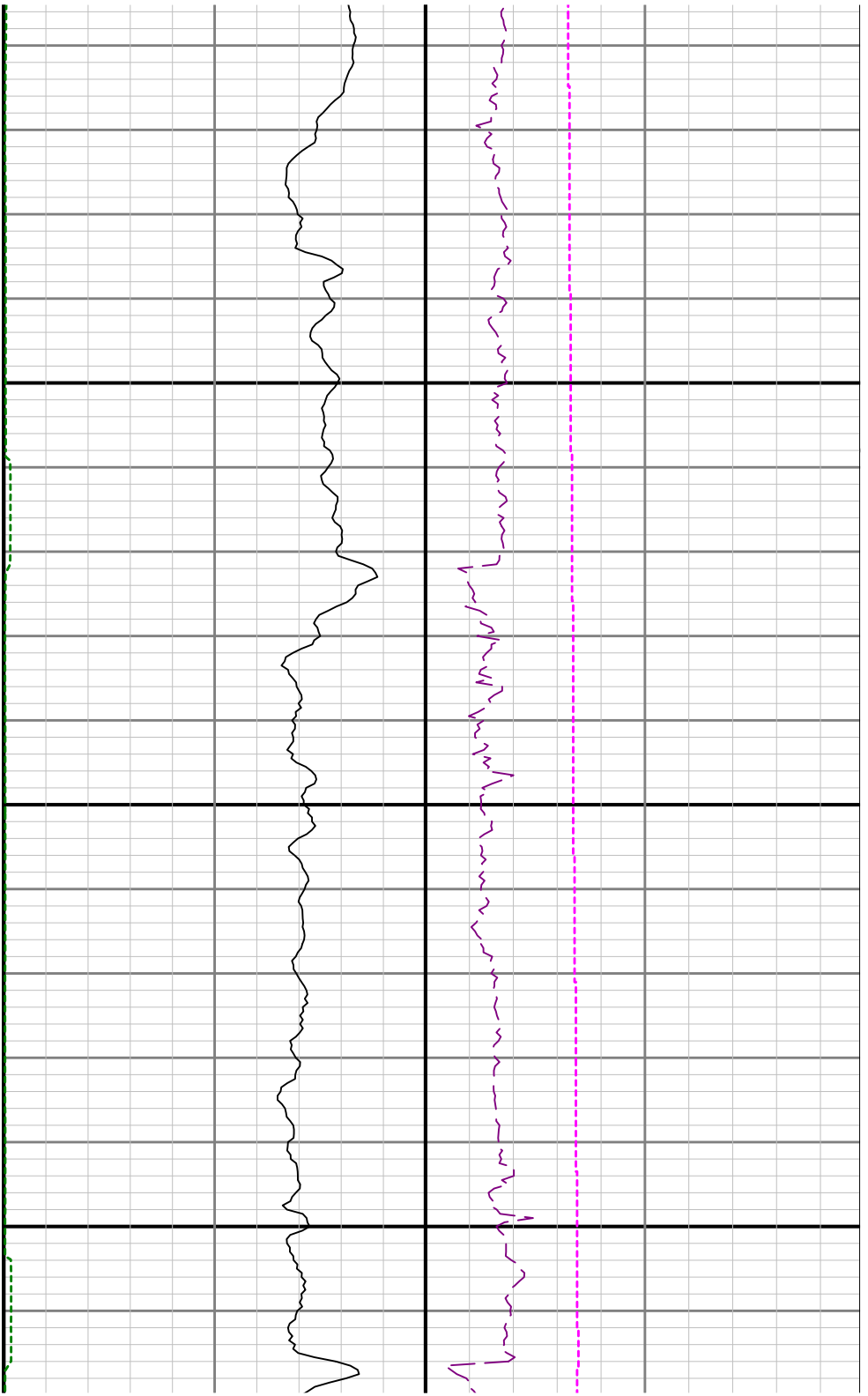
Comments

1 Baker Hughes Runs 1 and 2 utilized a 6 3/4 inch AutoTrak Curve (Directional and Gamma Ray) tool behind an 8 1/2 inch bit and rotary steerable assembly from 1875 feet MD (1872.58 feet TVD) to 12430 feet MD (7038.88 feet TVD).

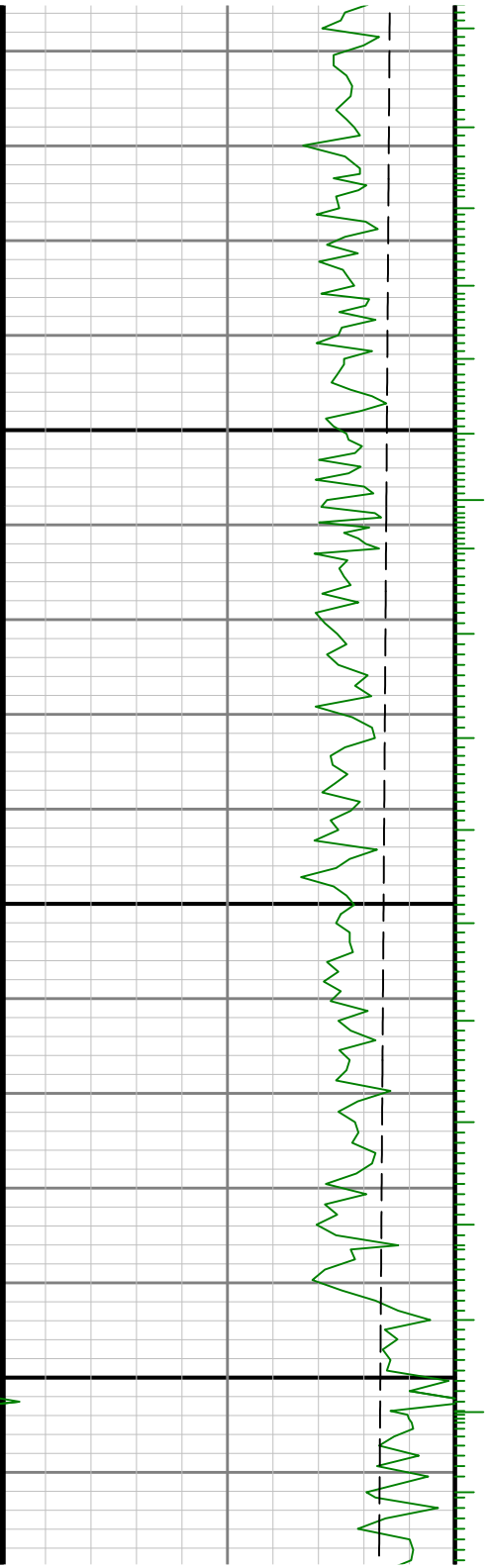
2 Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to represent logging data.

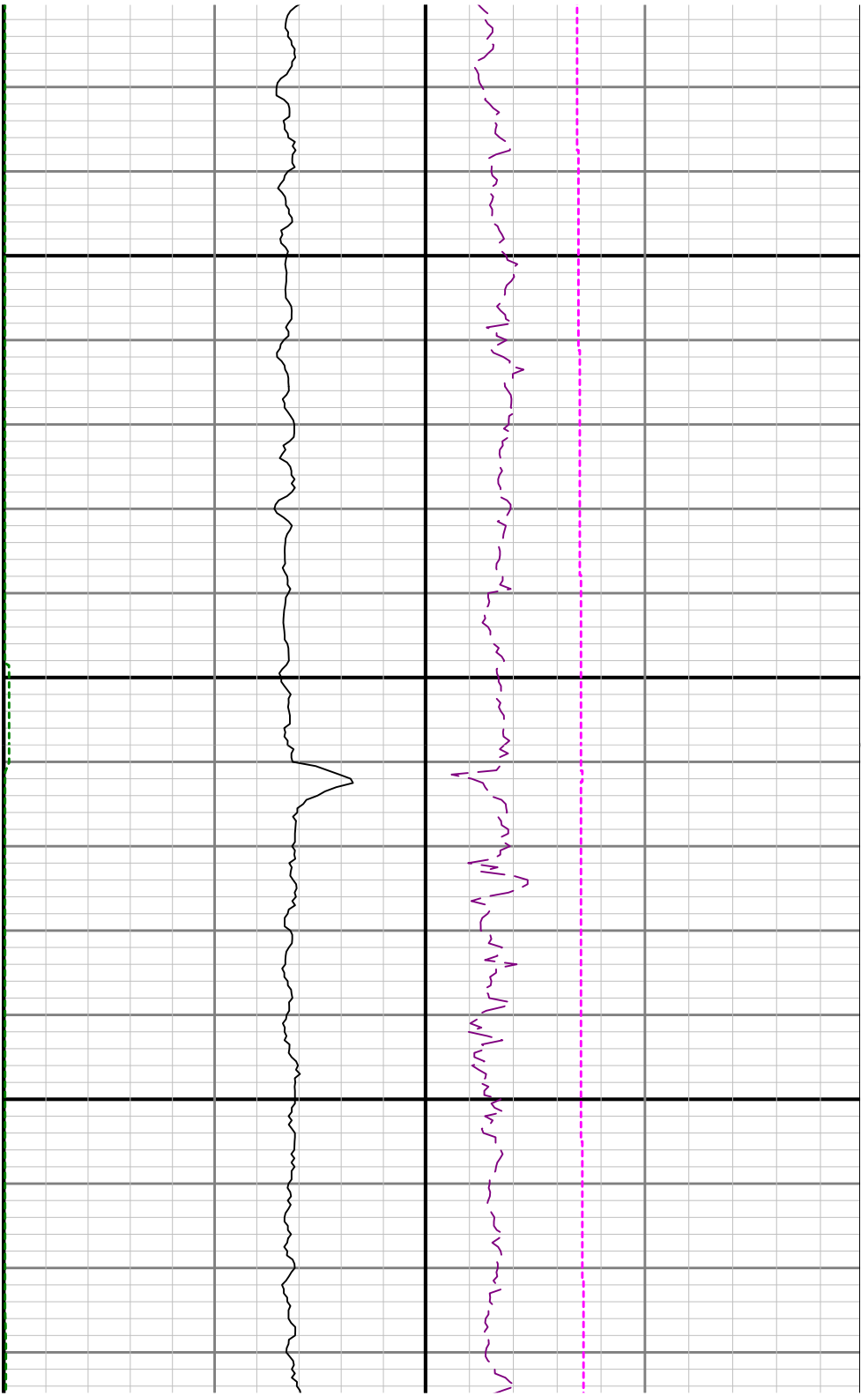






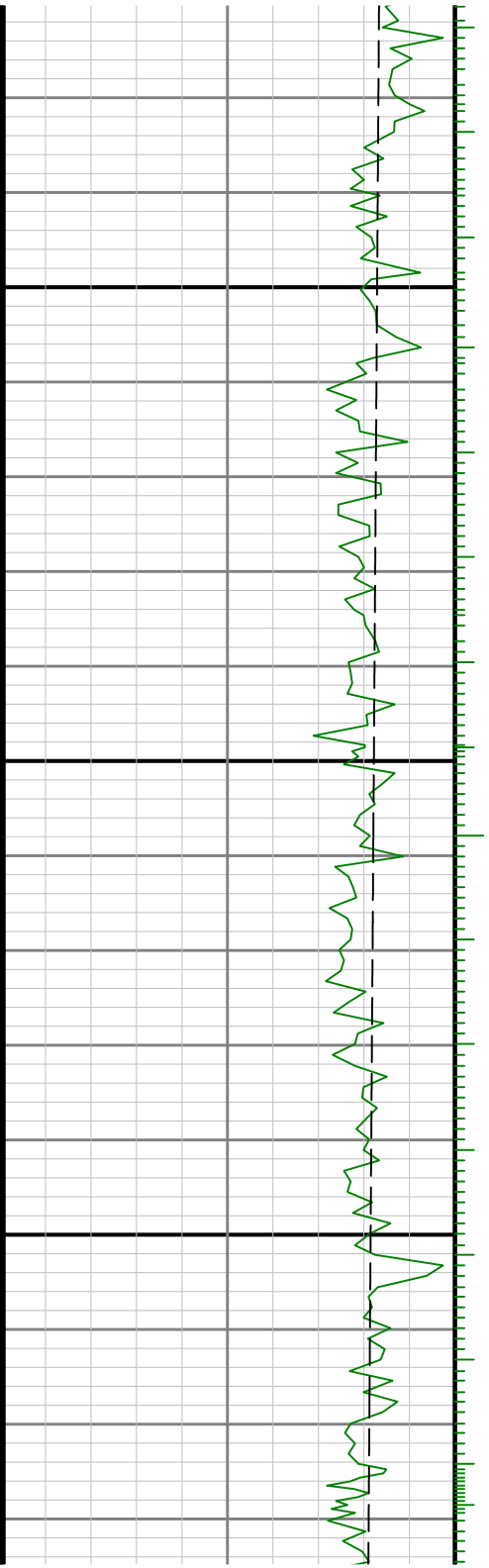
2100

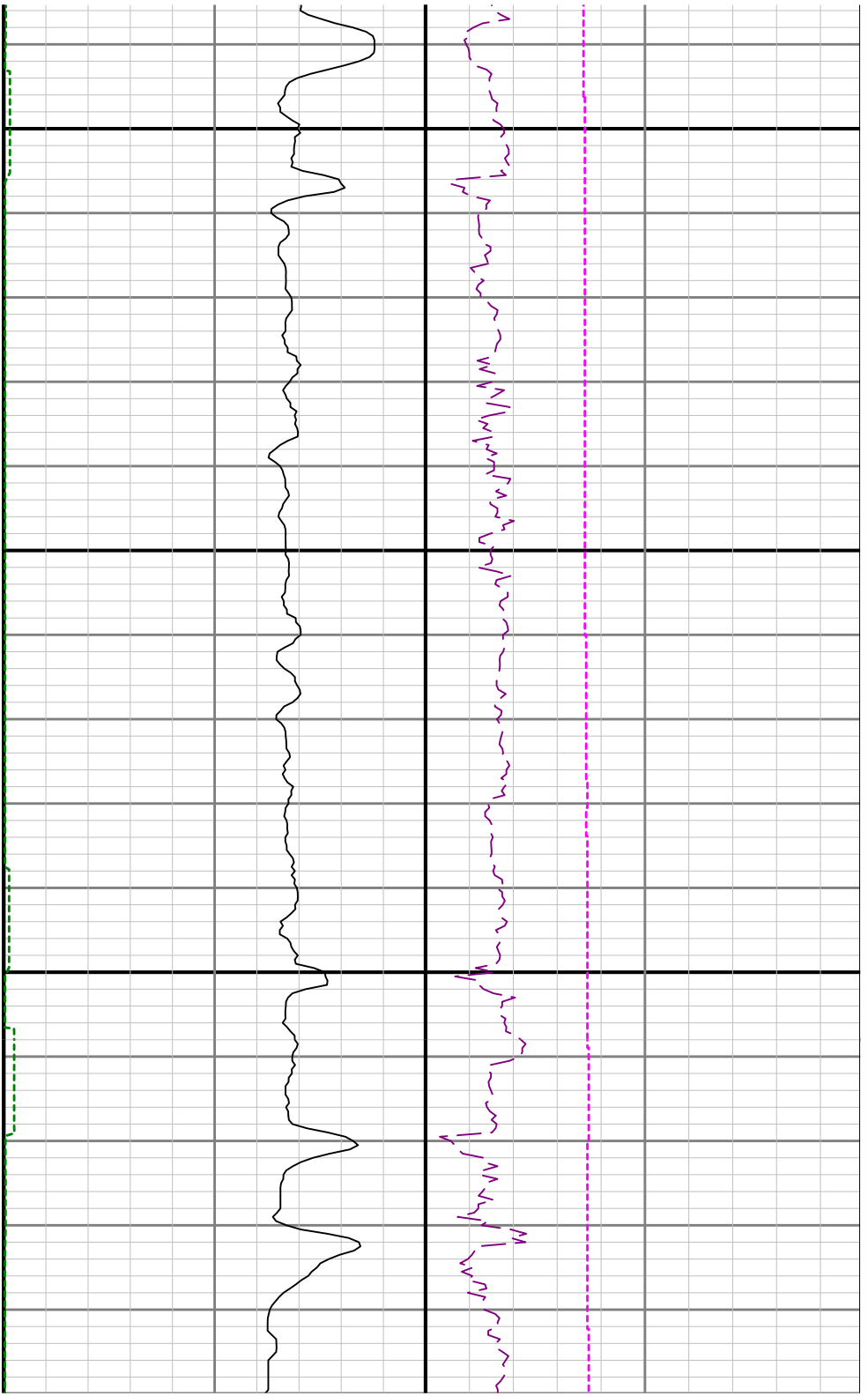




2200

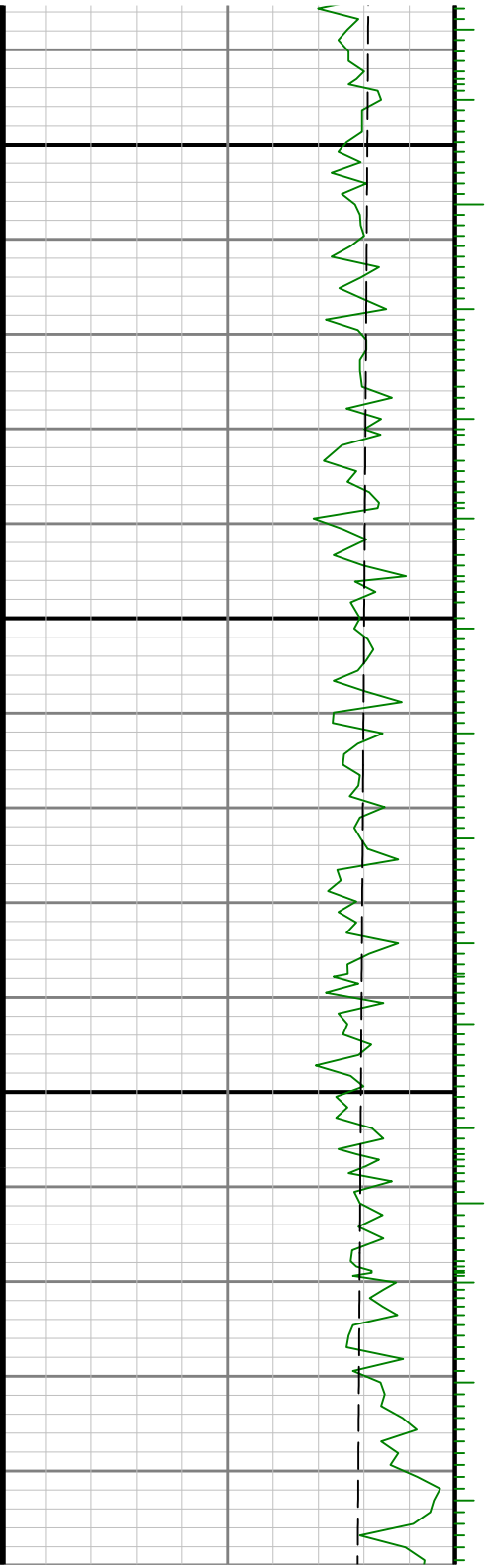
2300

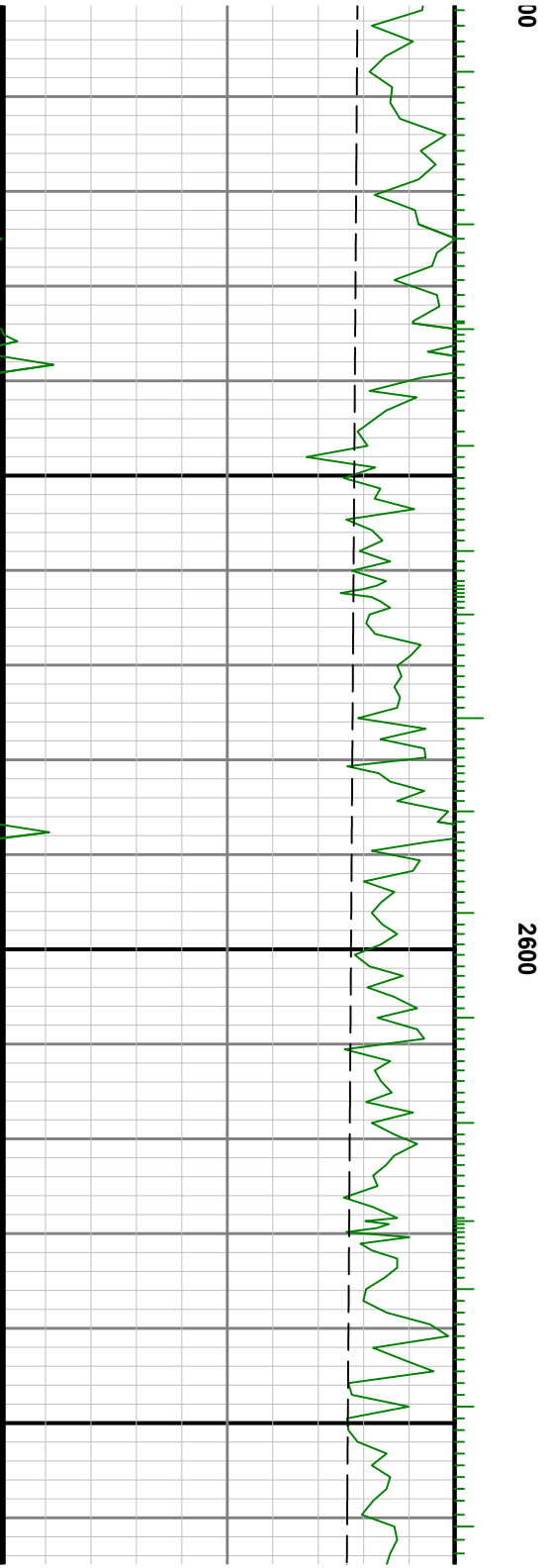
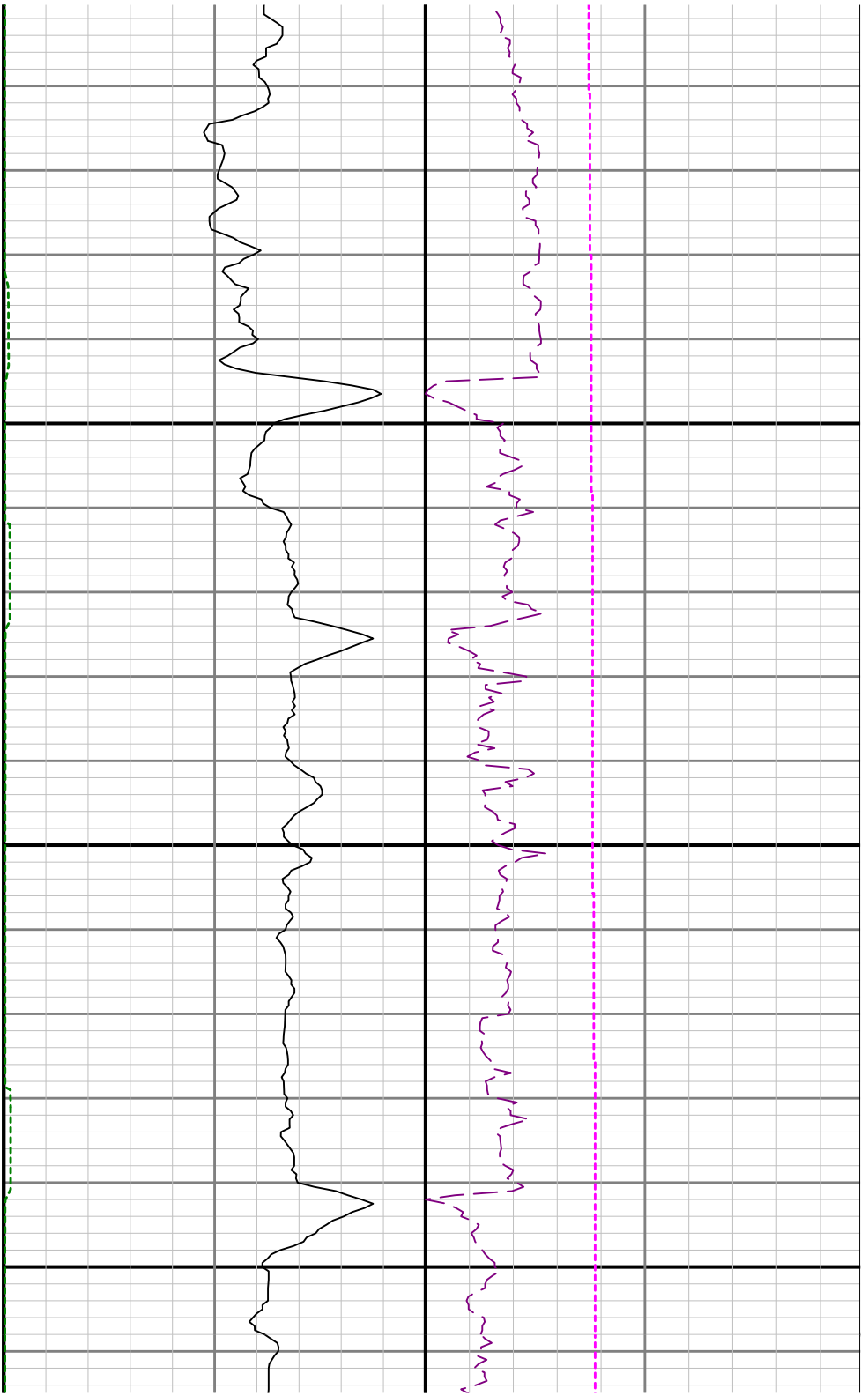




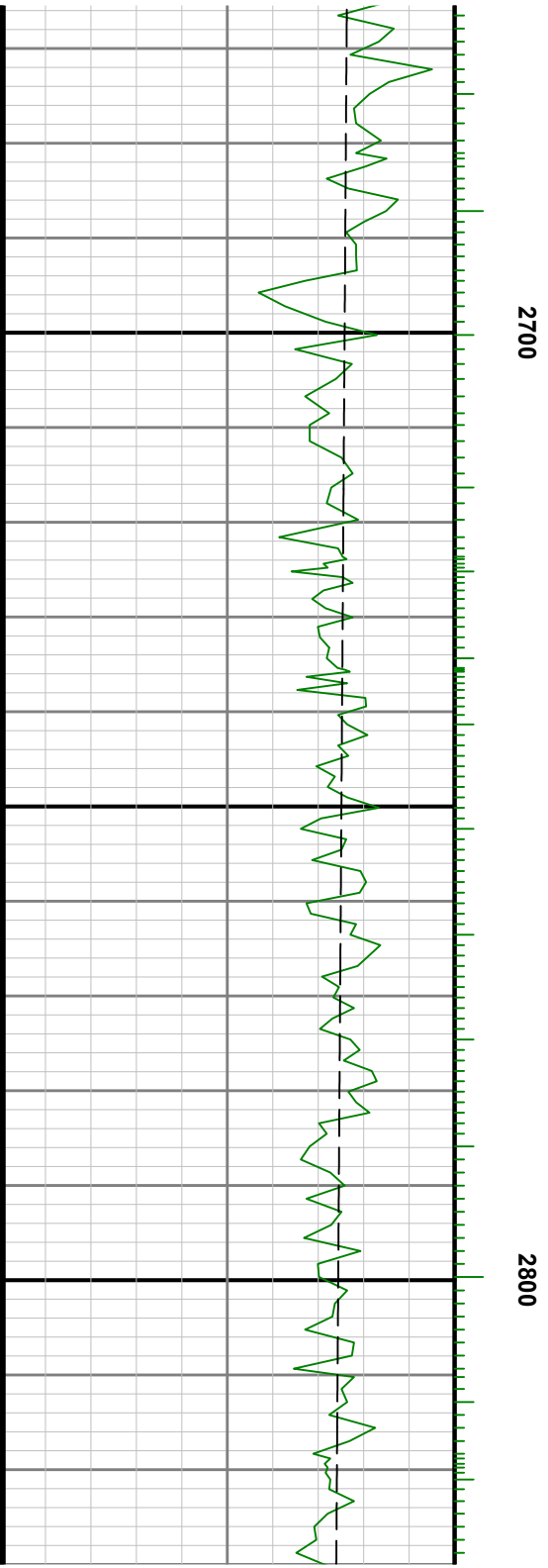
2400

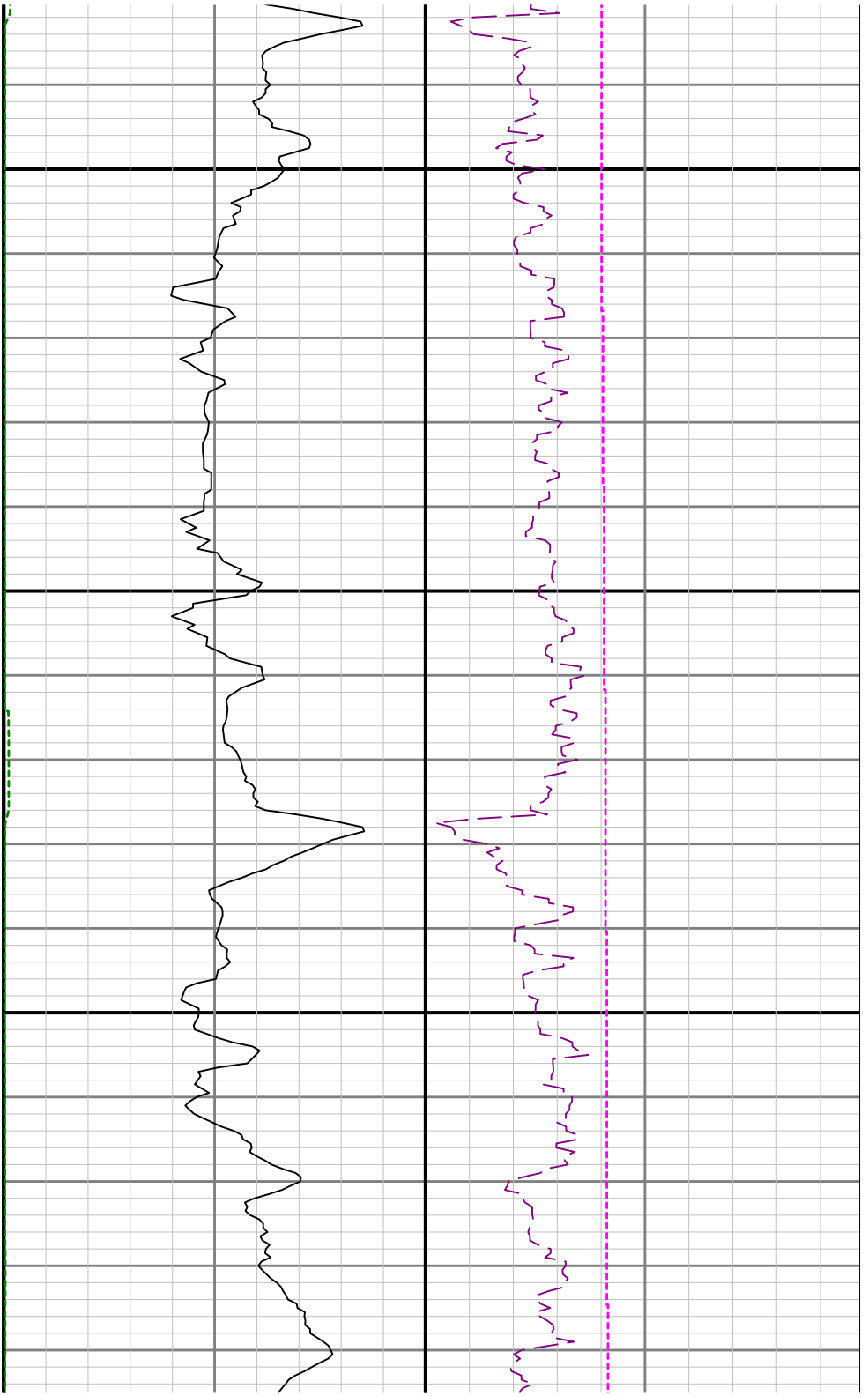
25



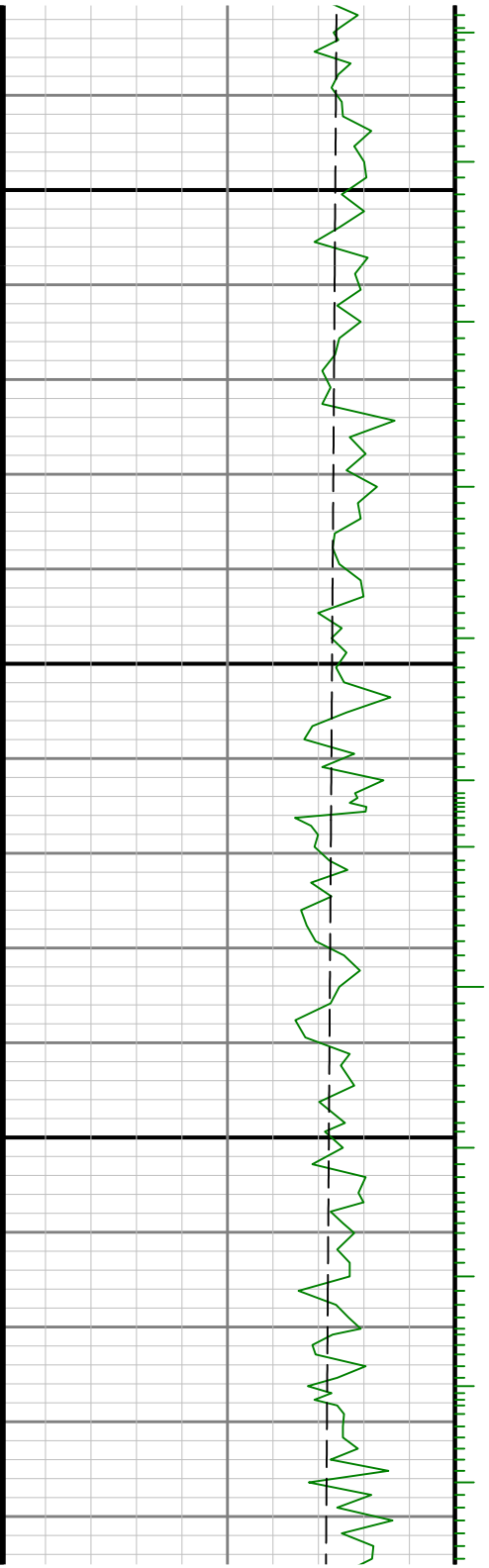


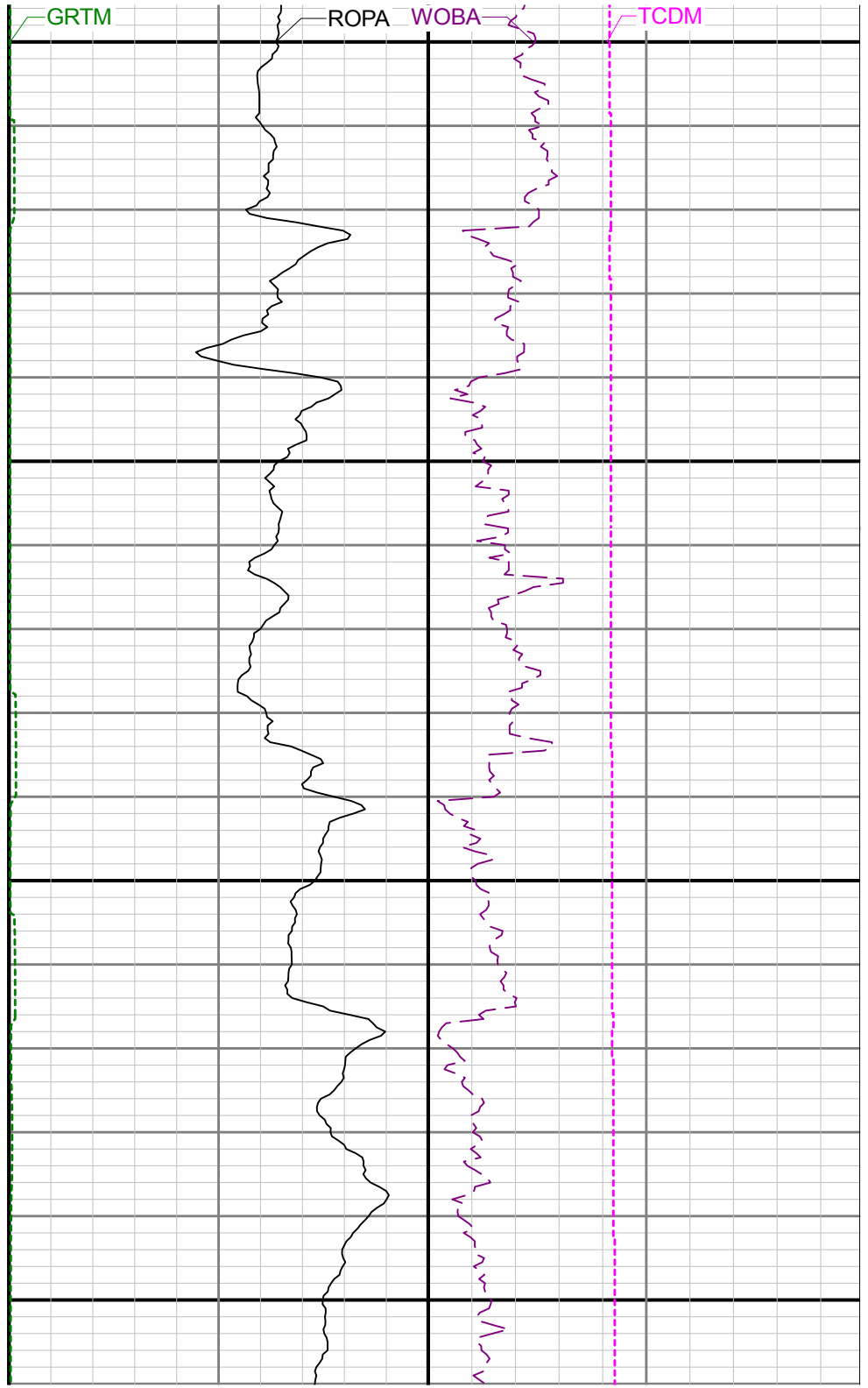
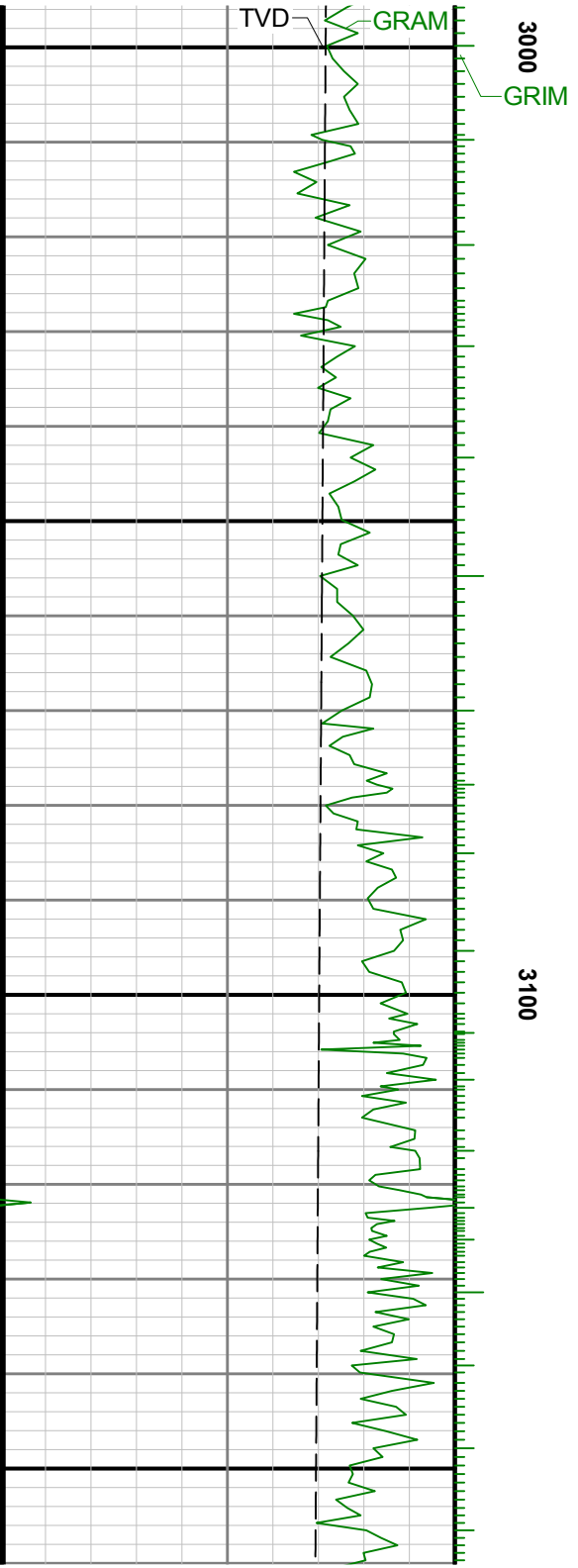


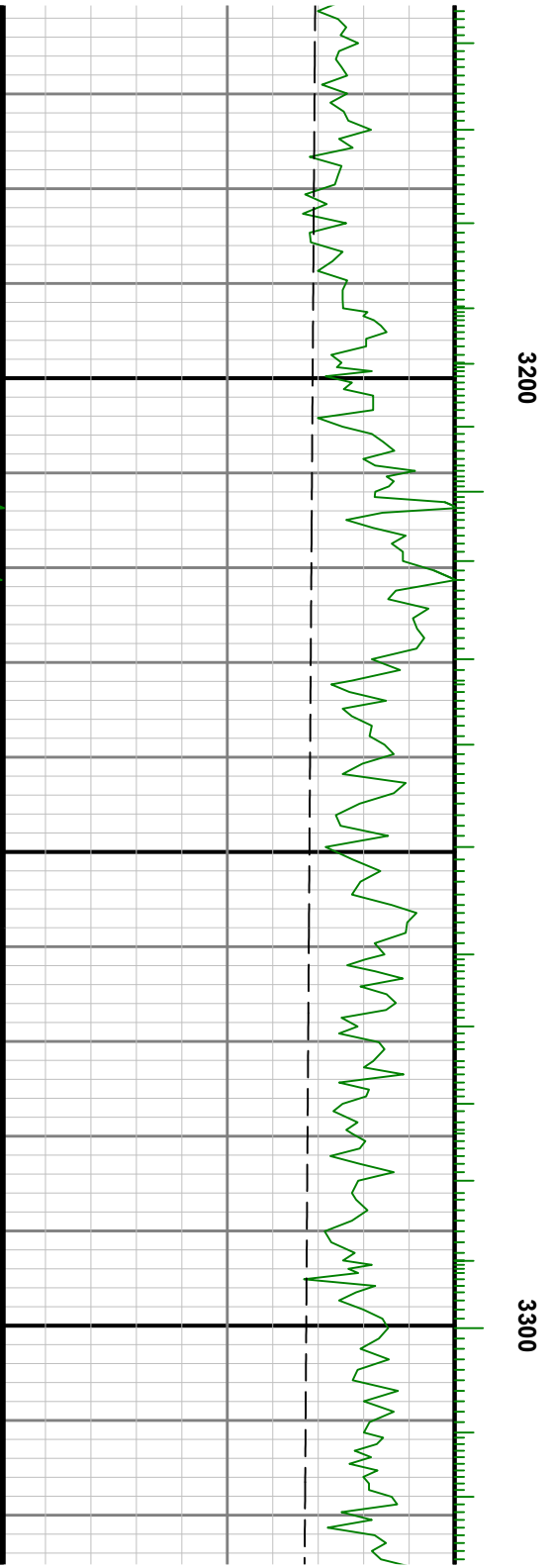


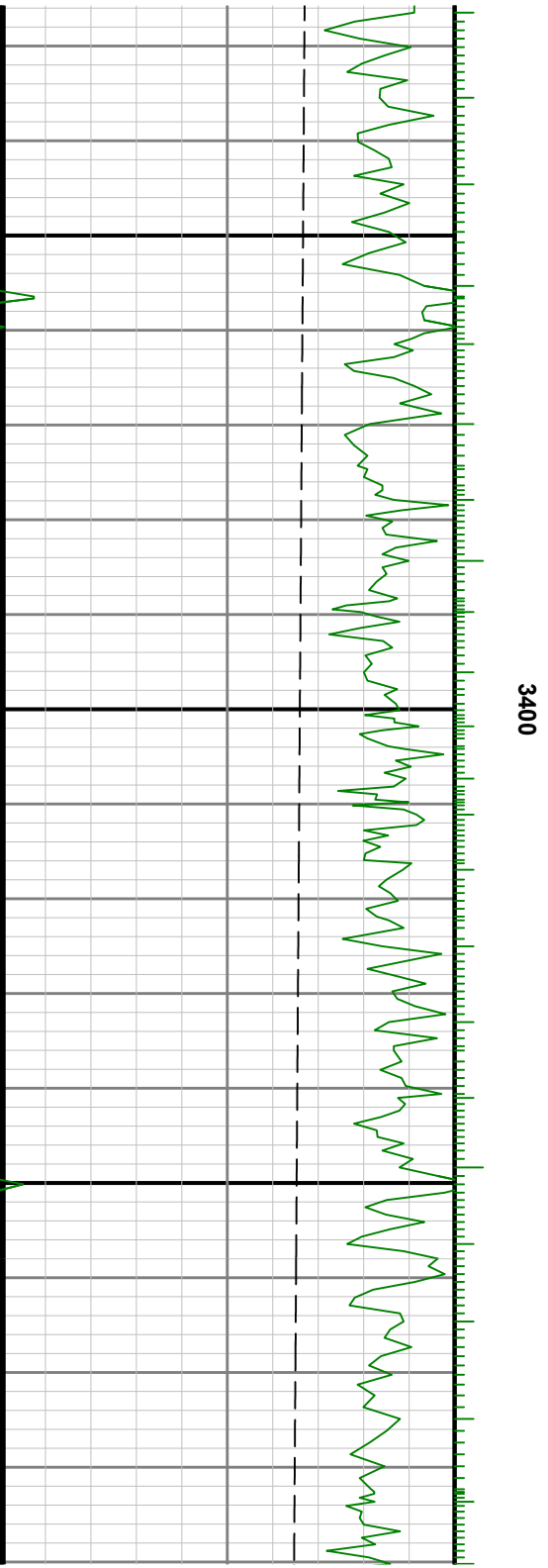
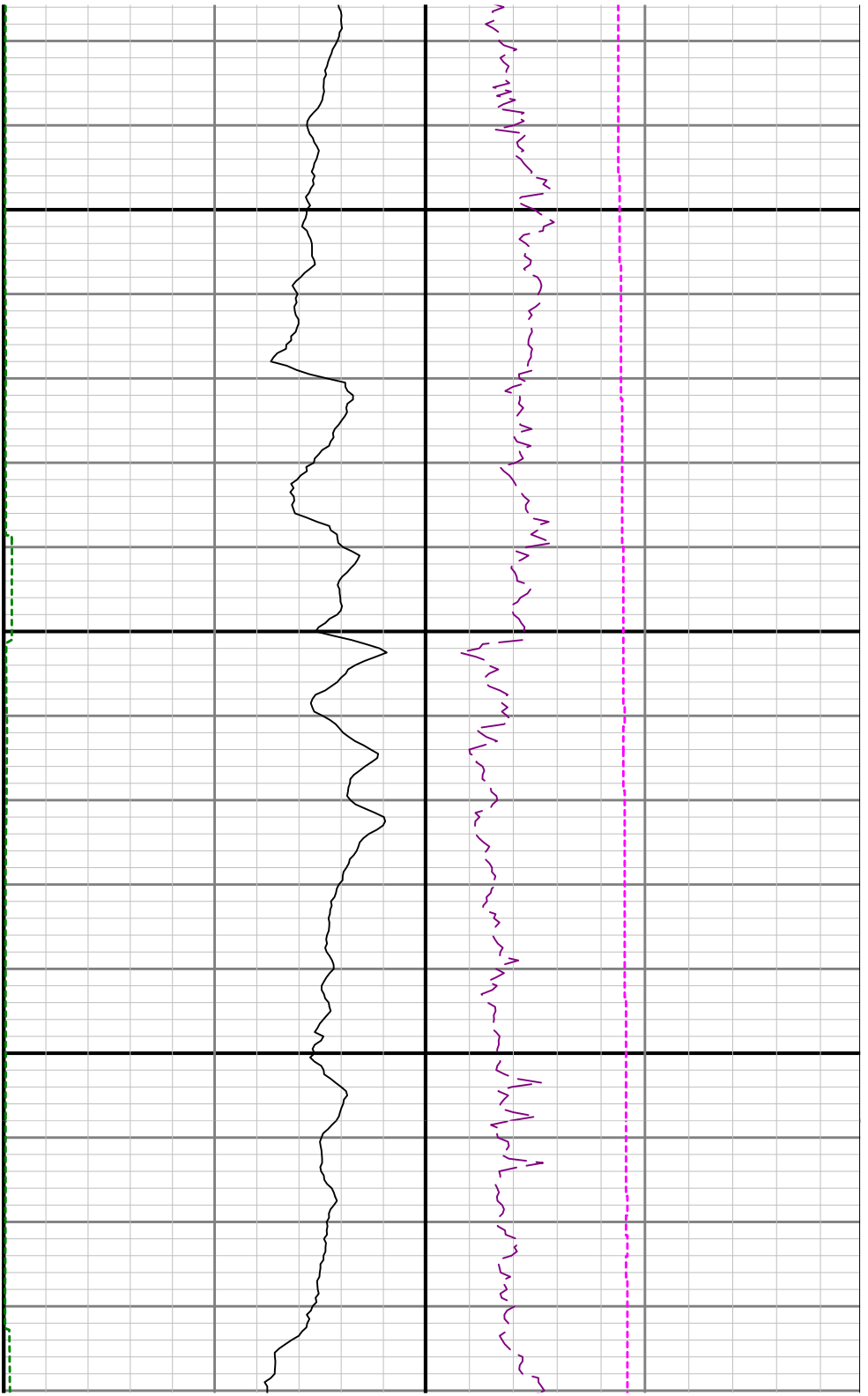


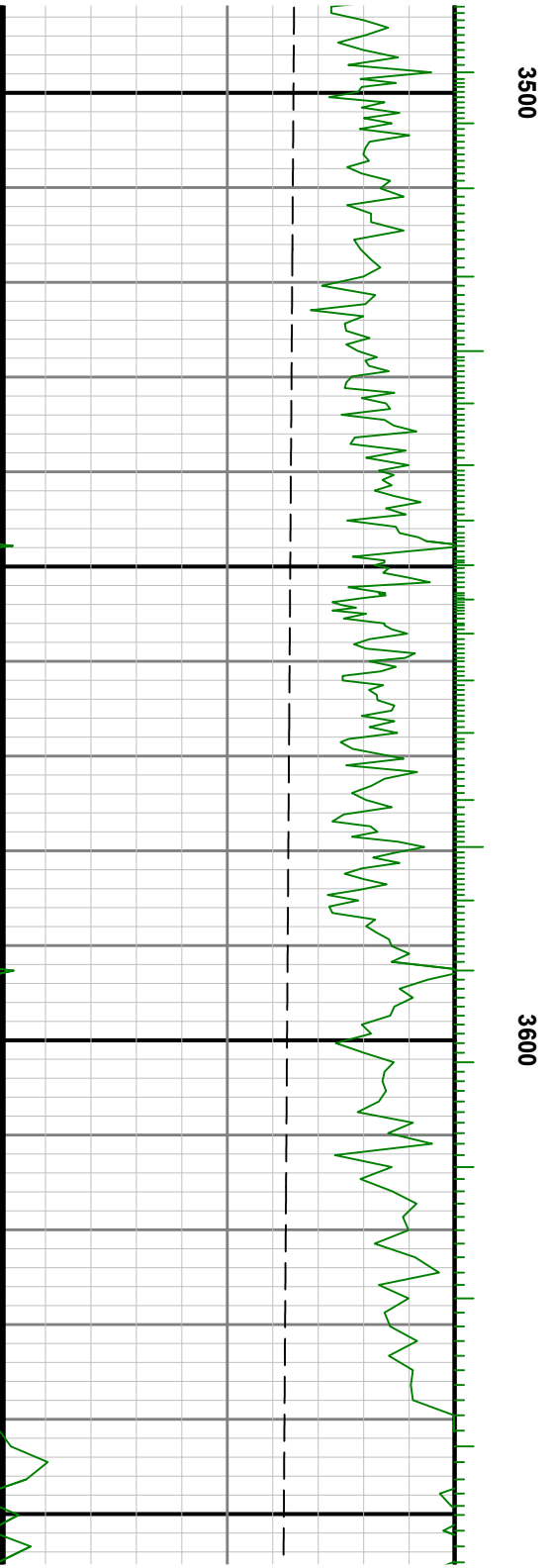
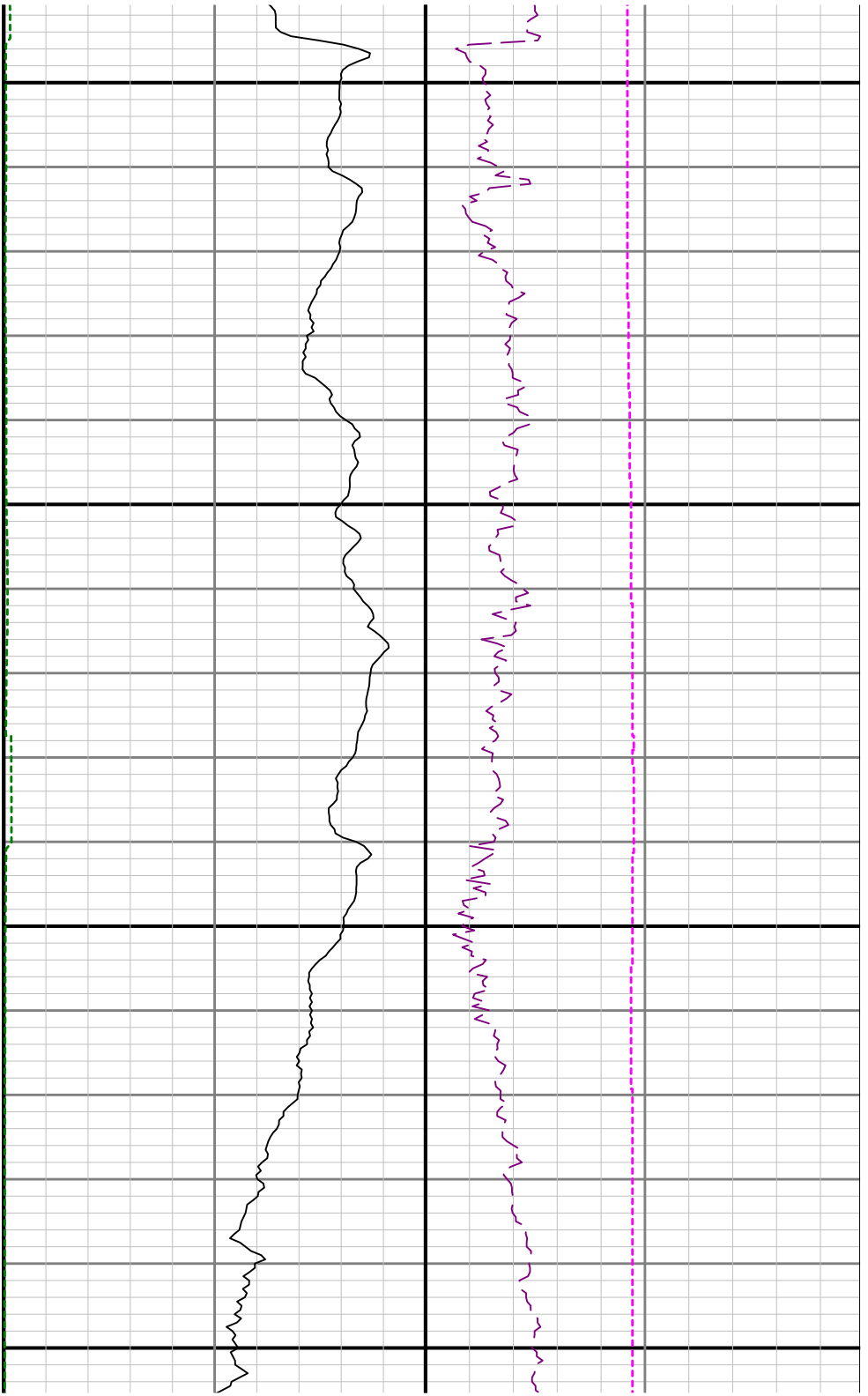
2900

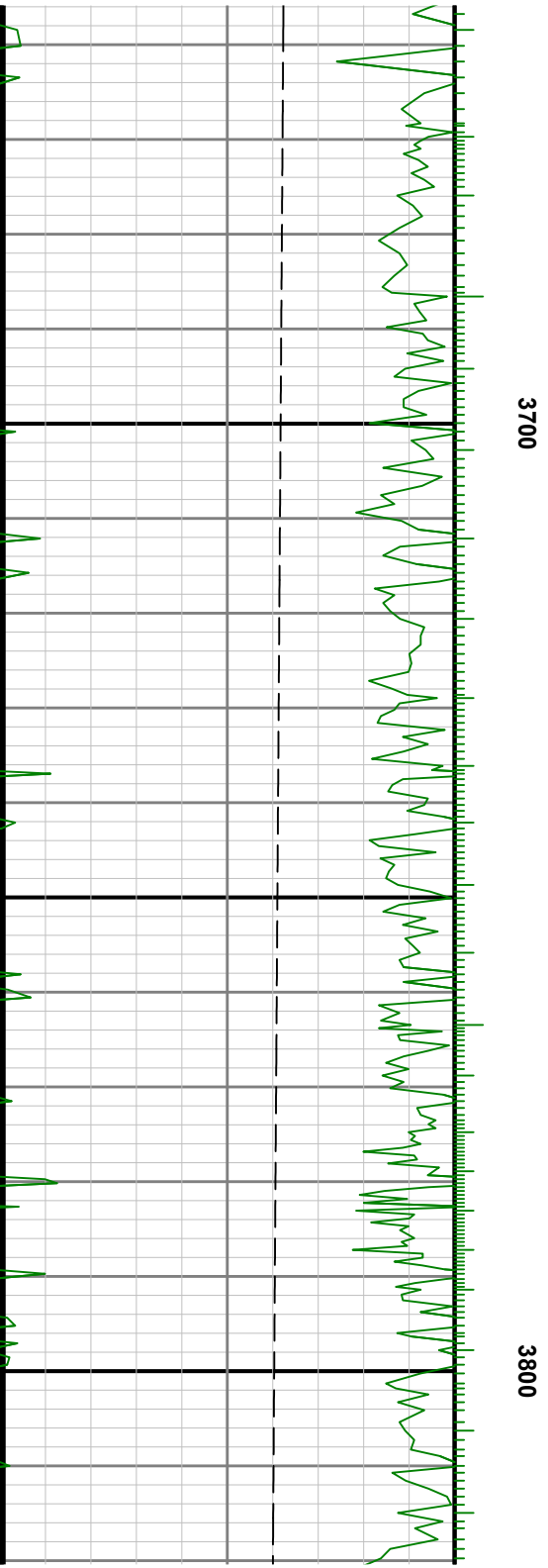
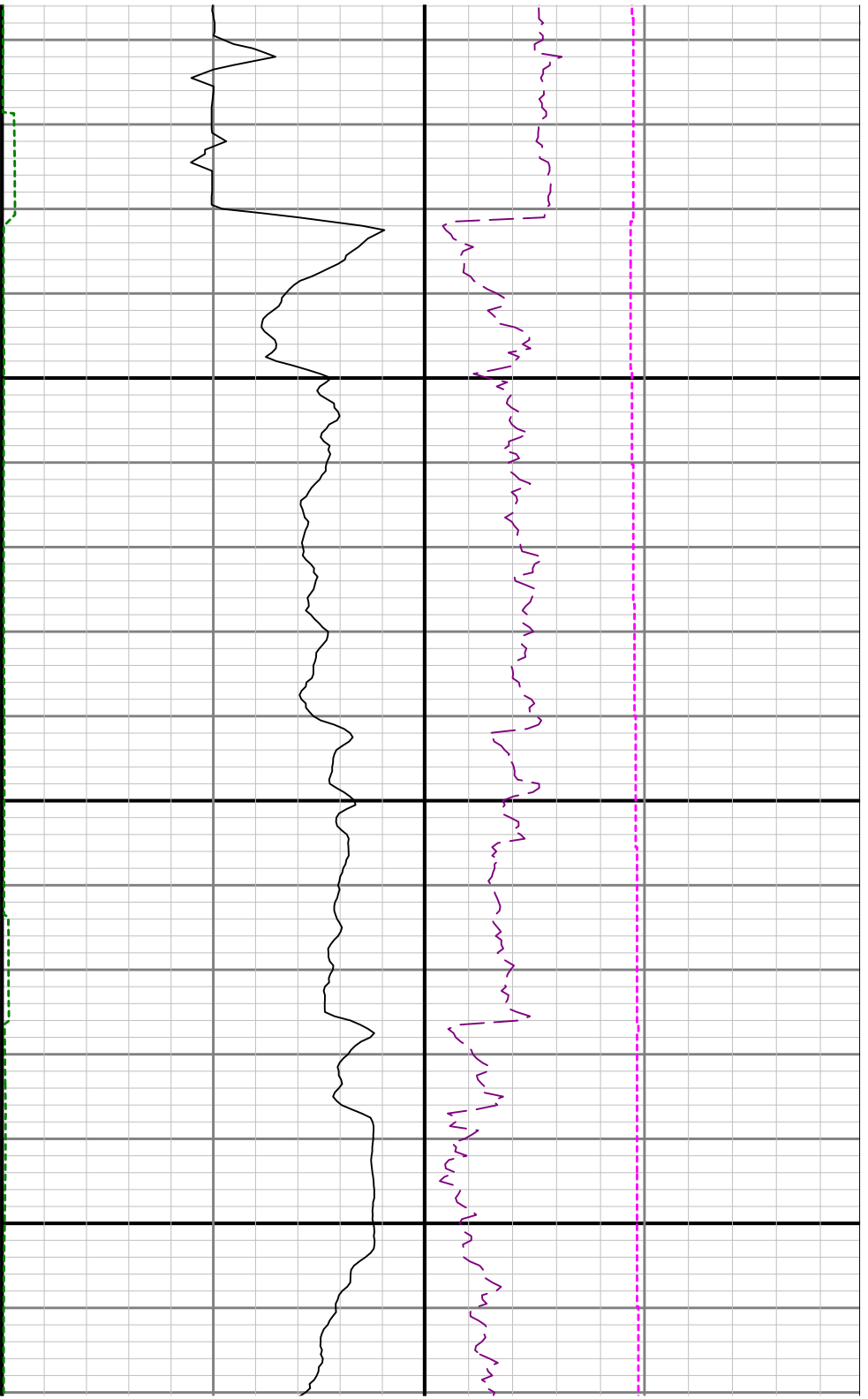


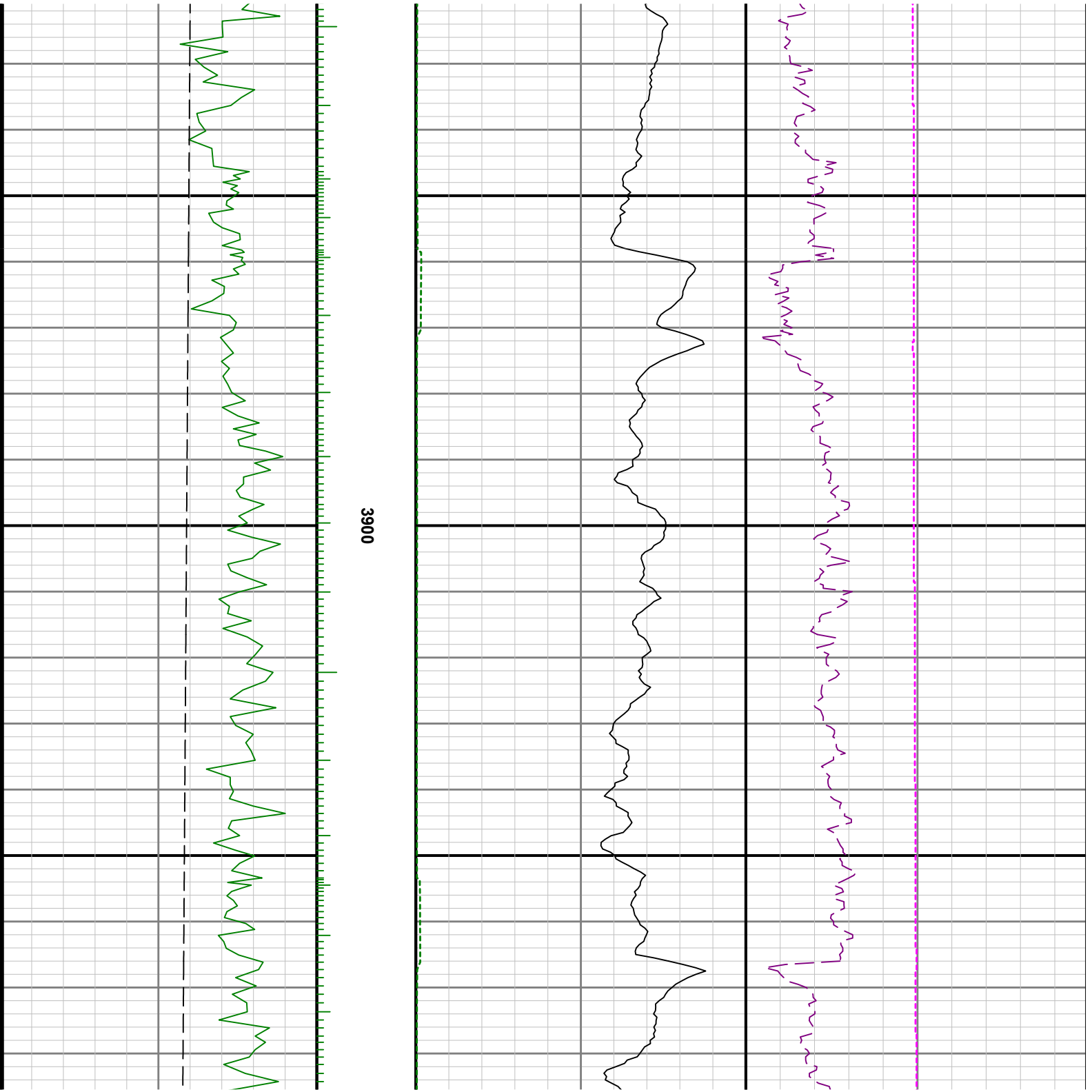




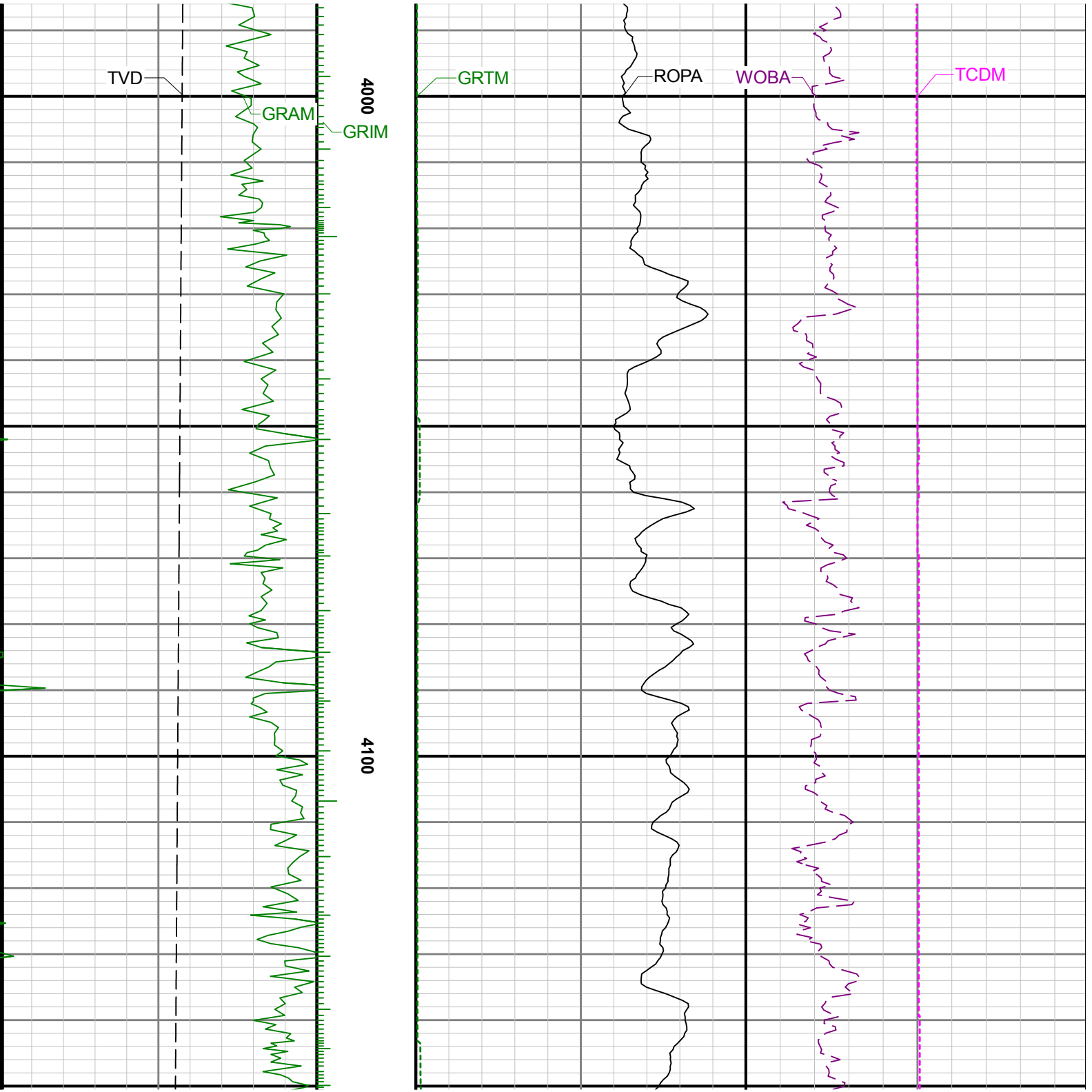


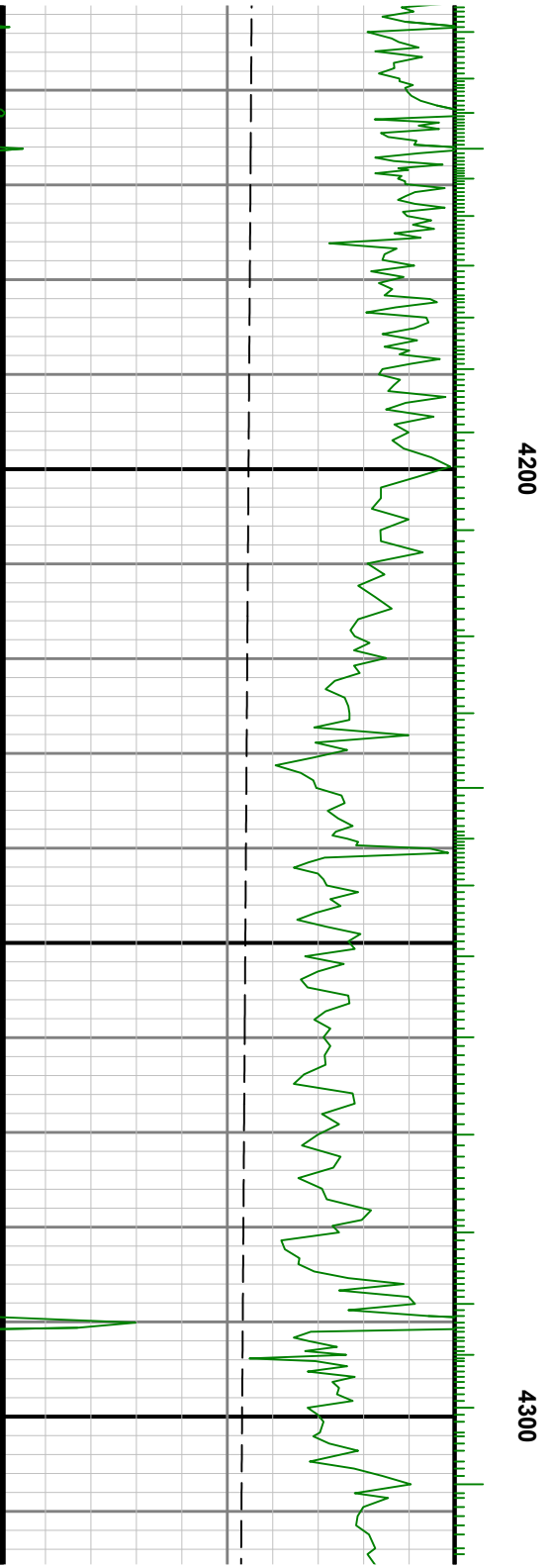
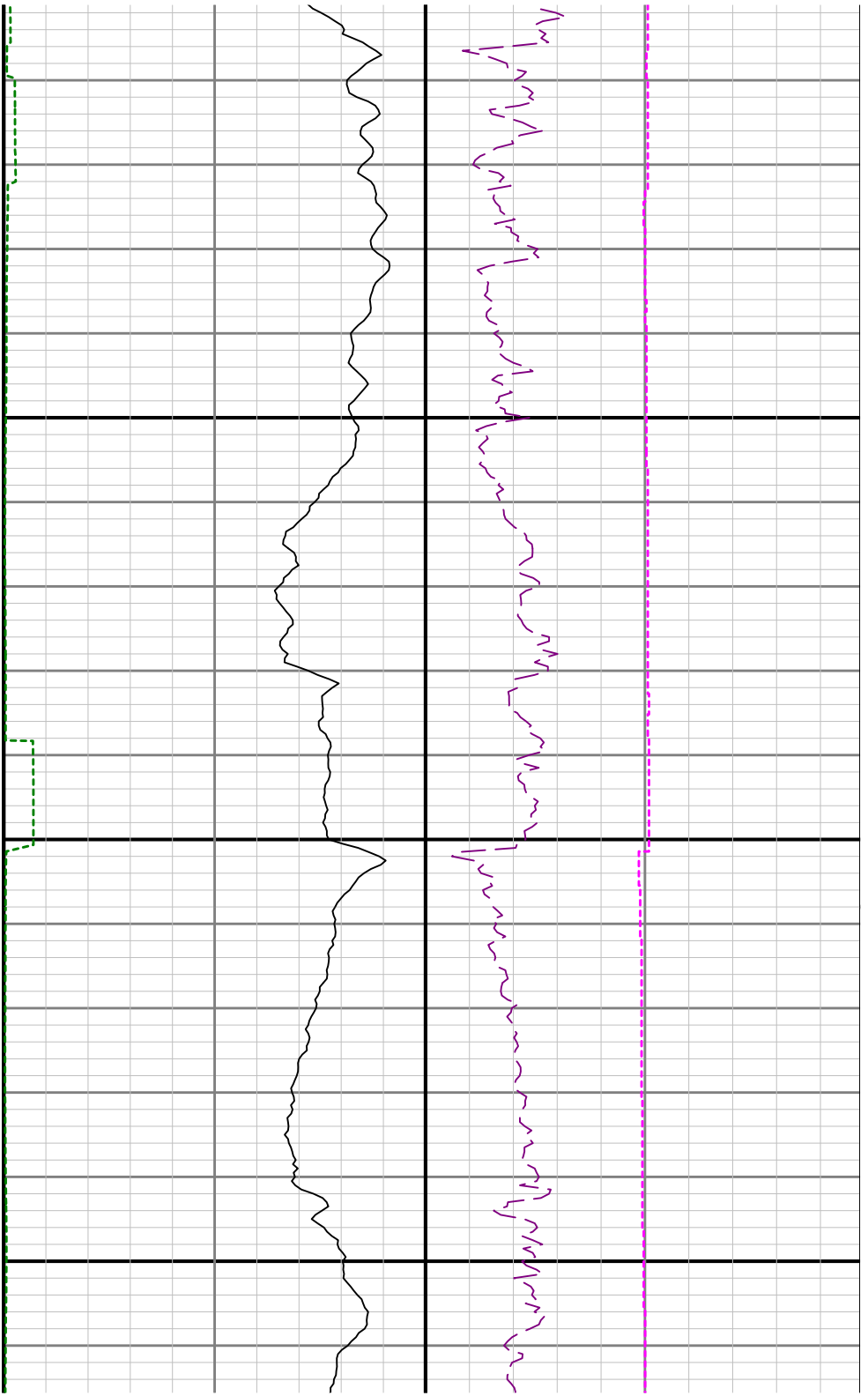


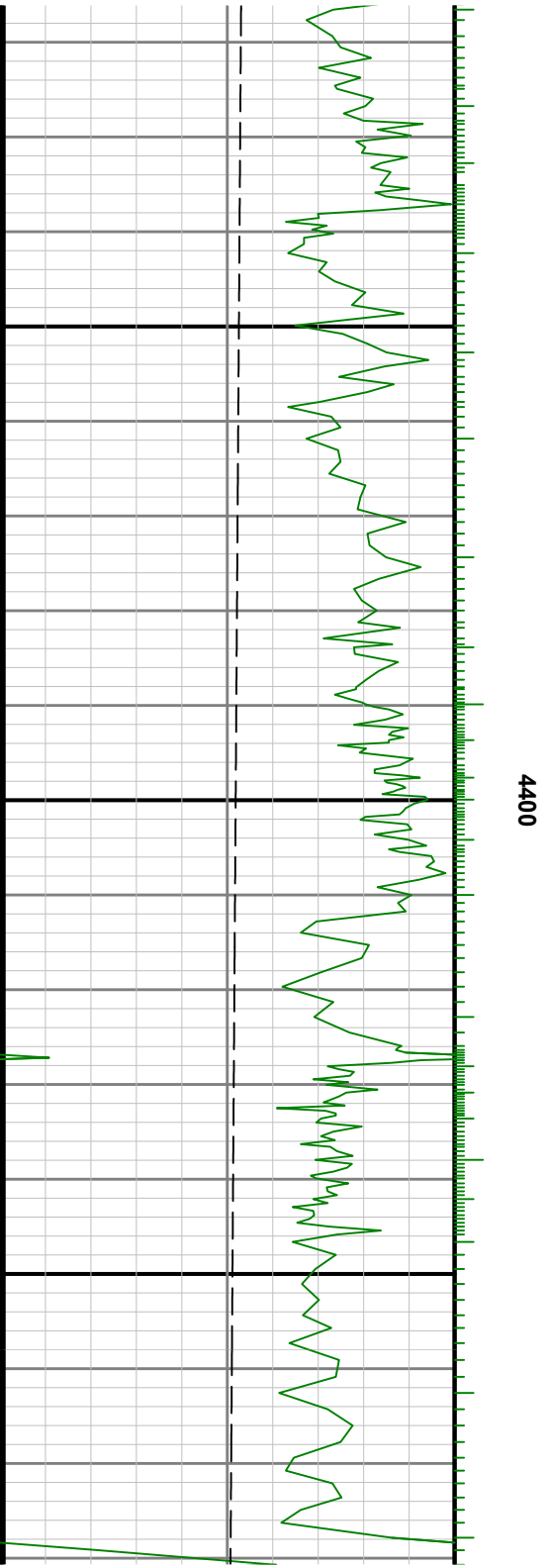


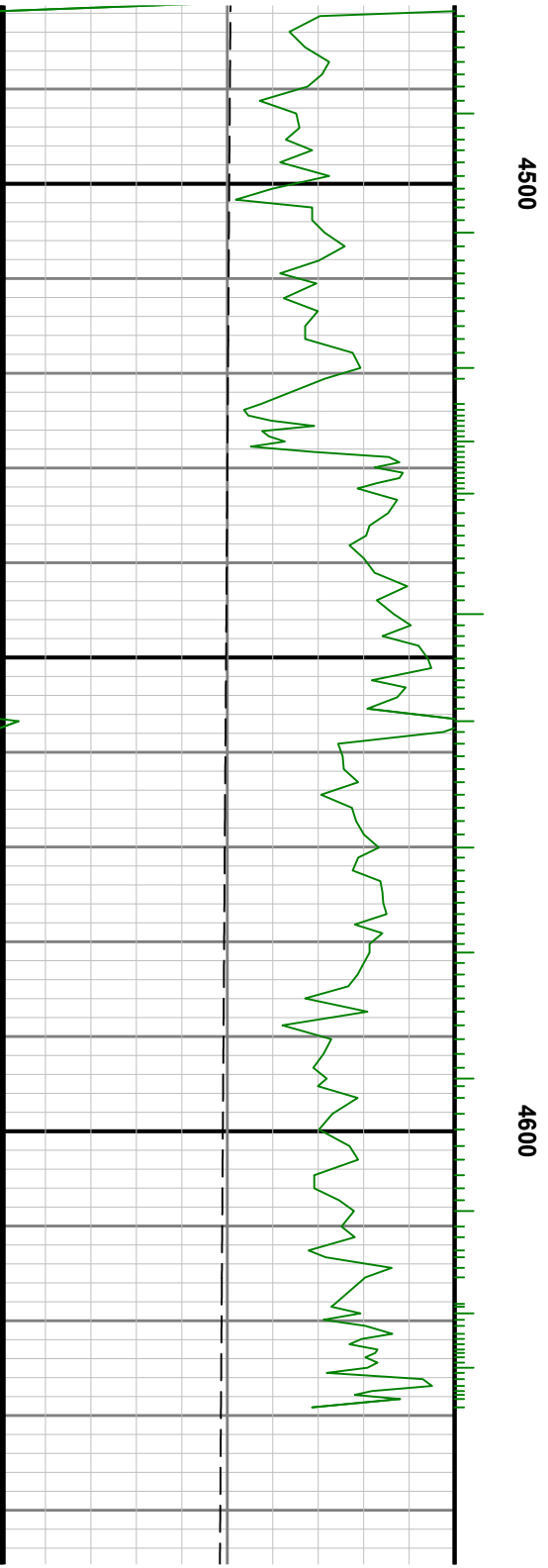
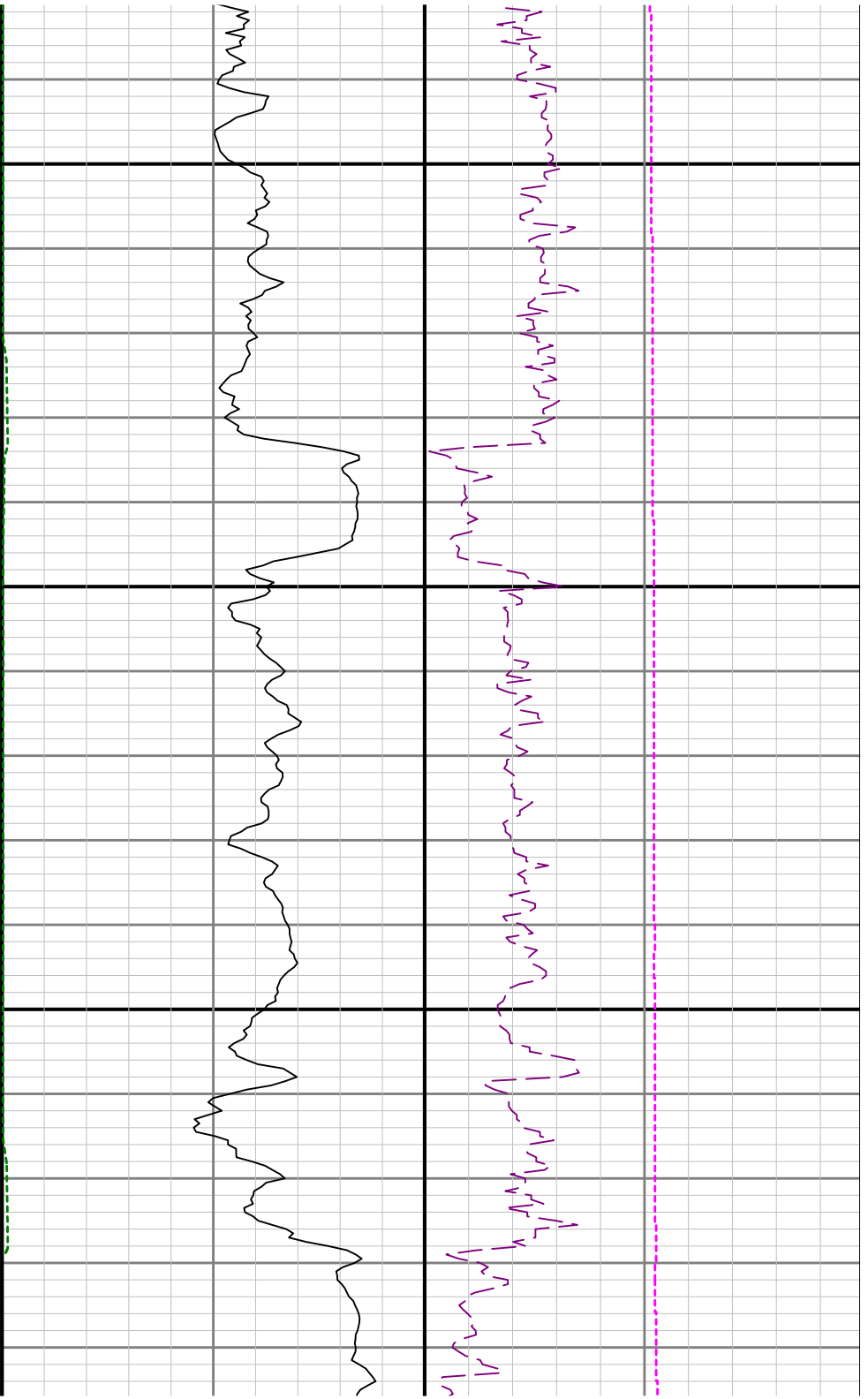










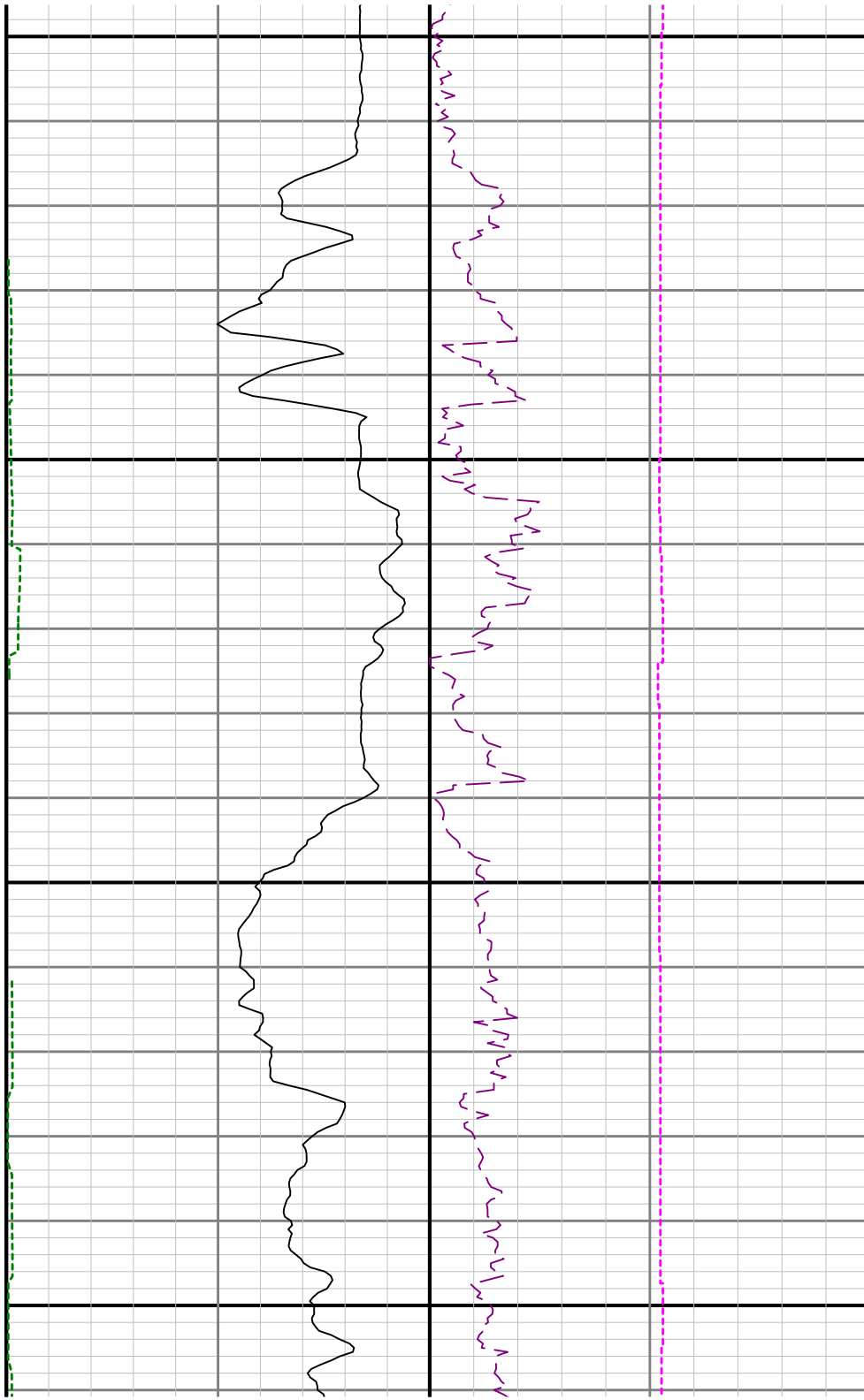
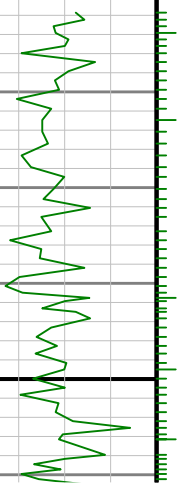
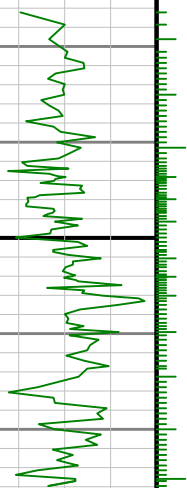


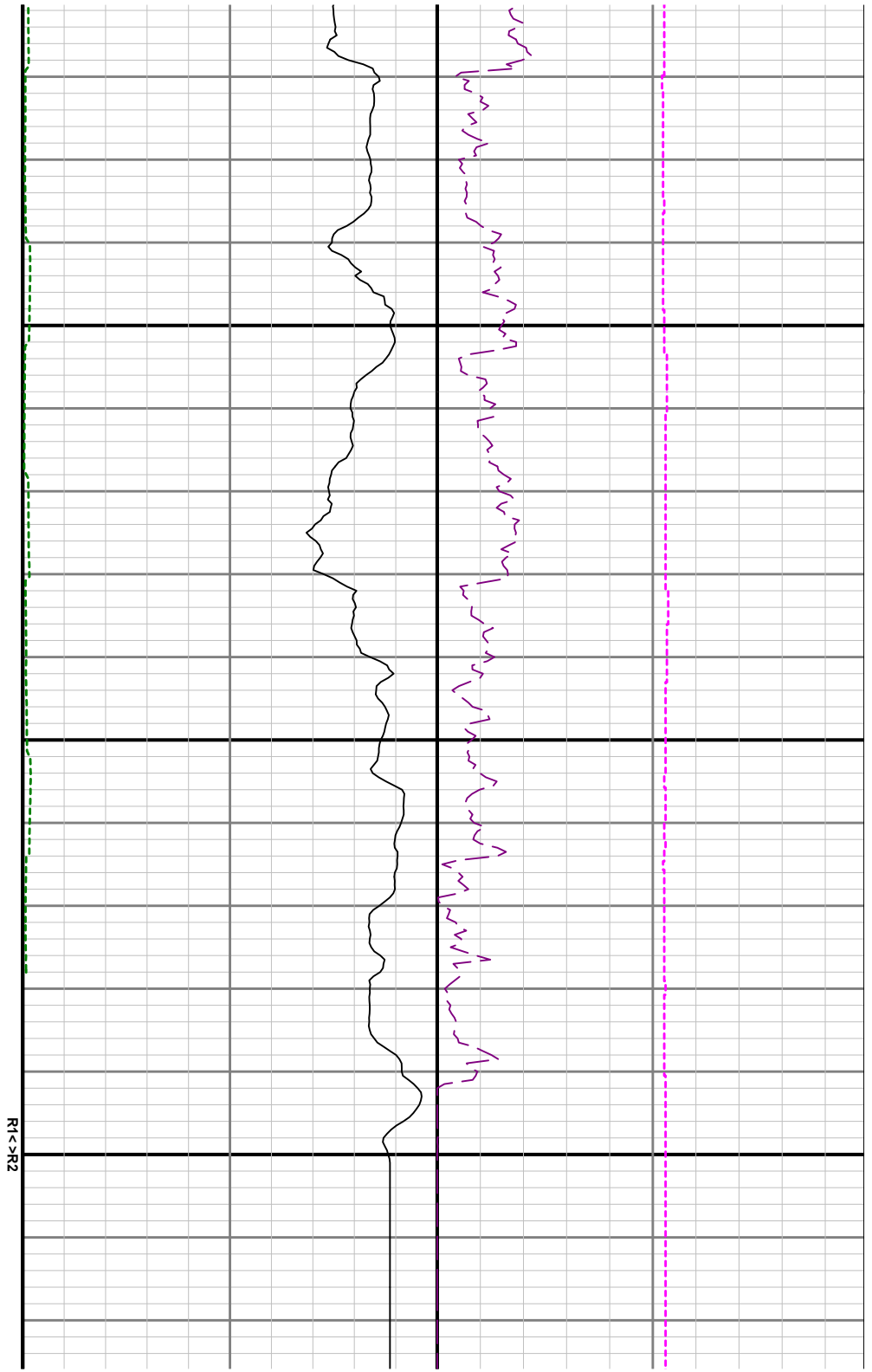
See Remark 1

See Remark 2

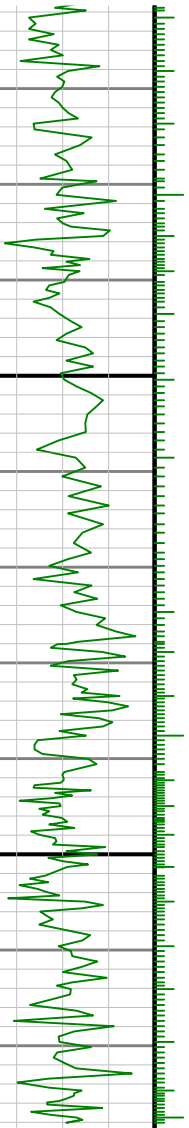
4700

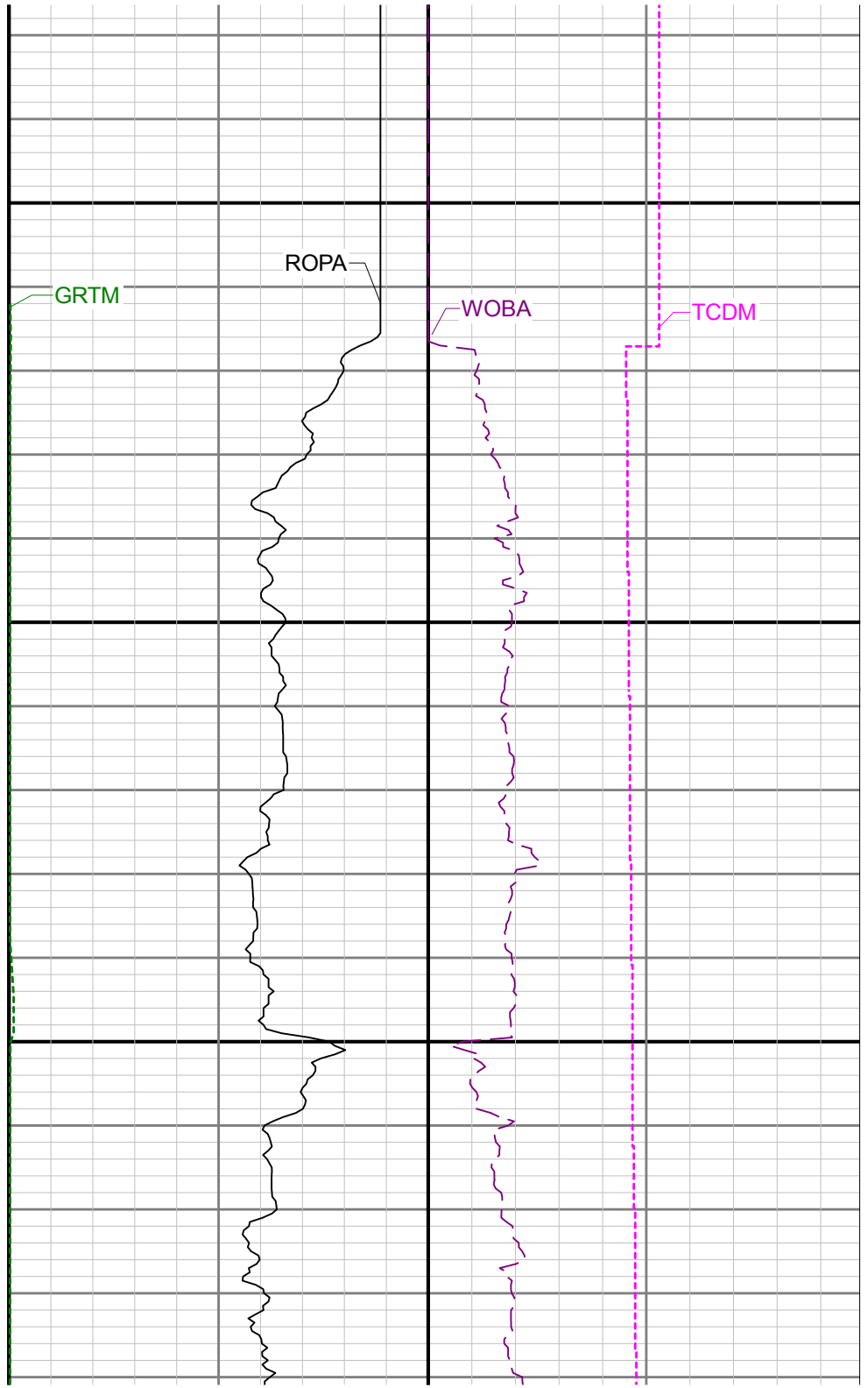
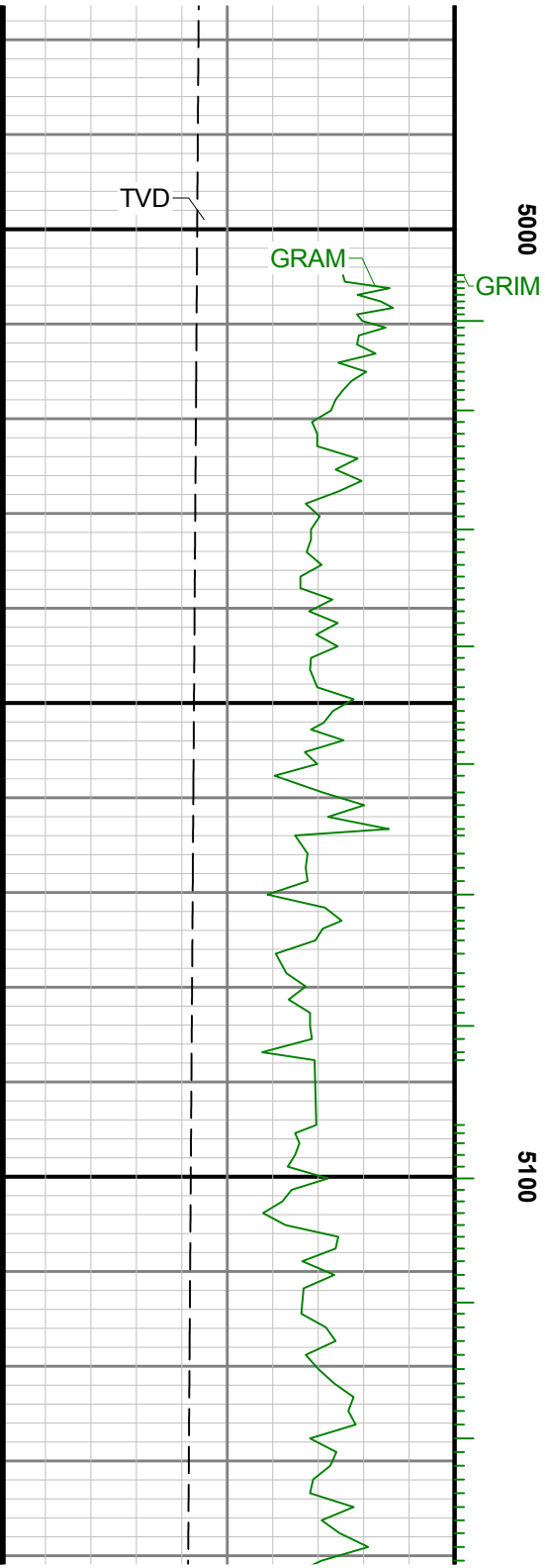
4800

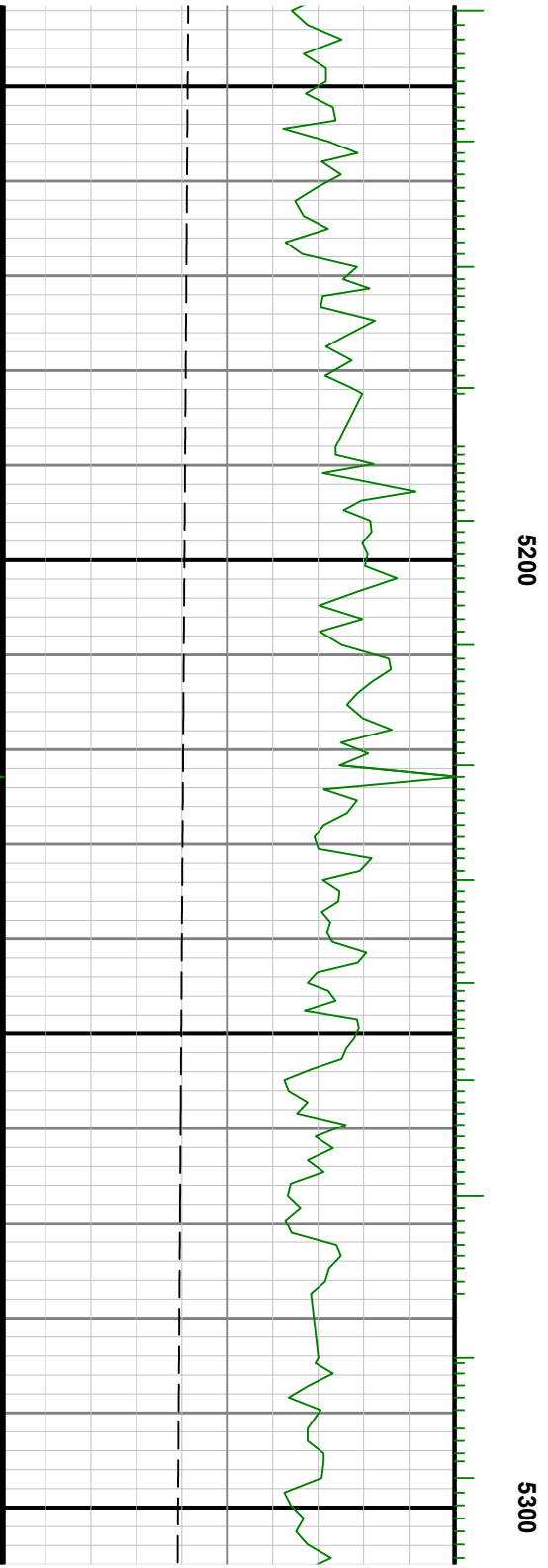
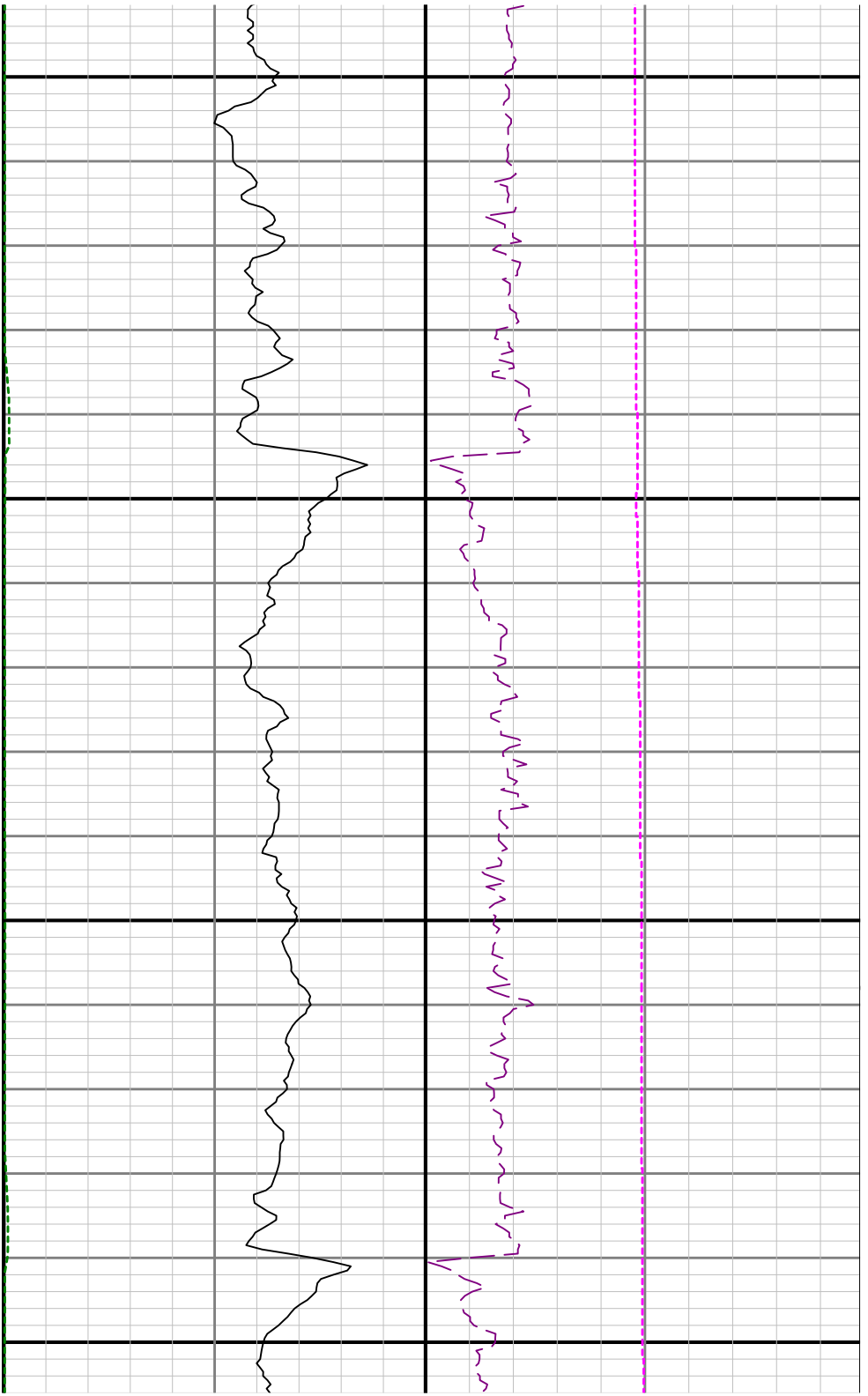




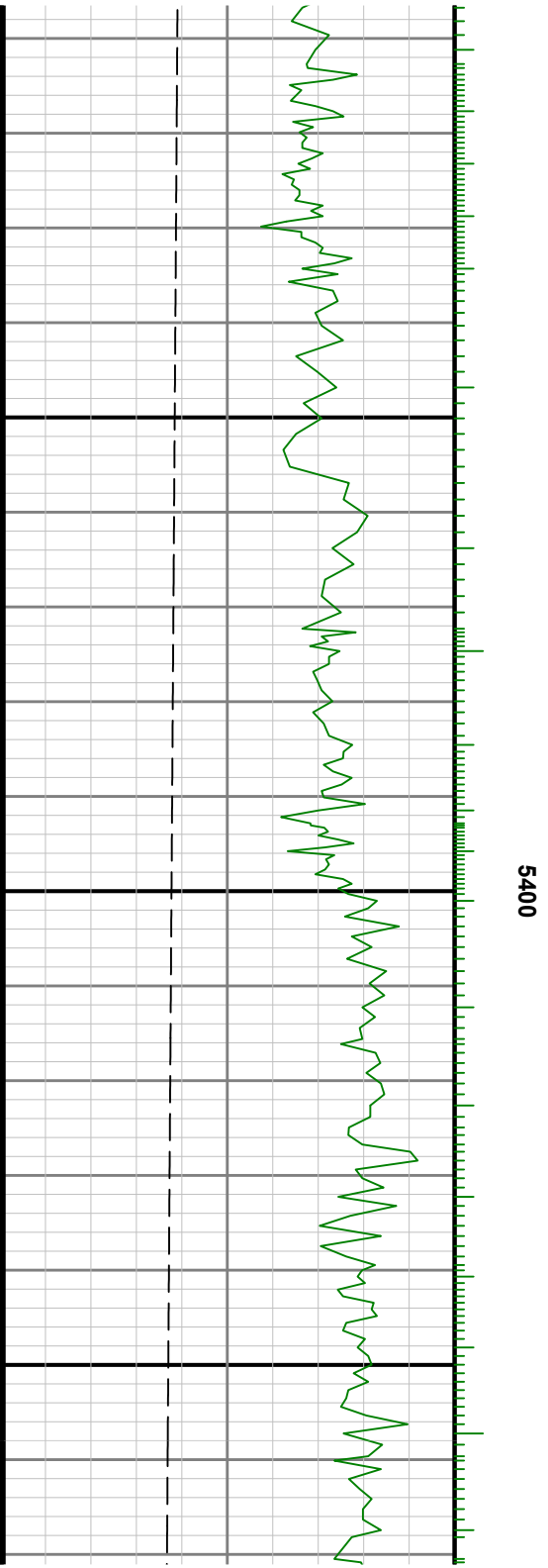
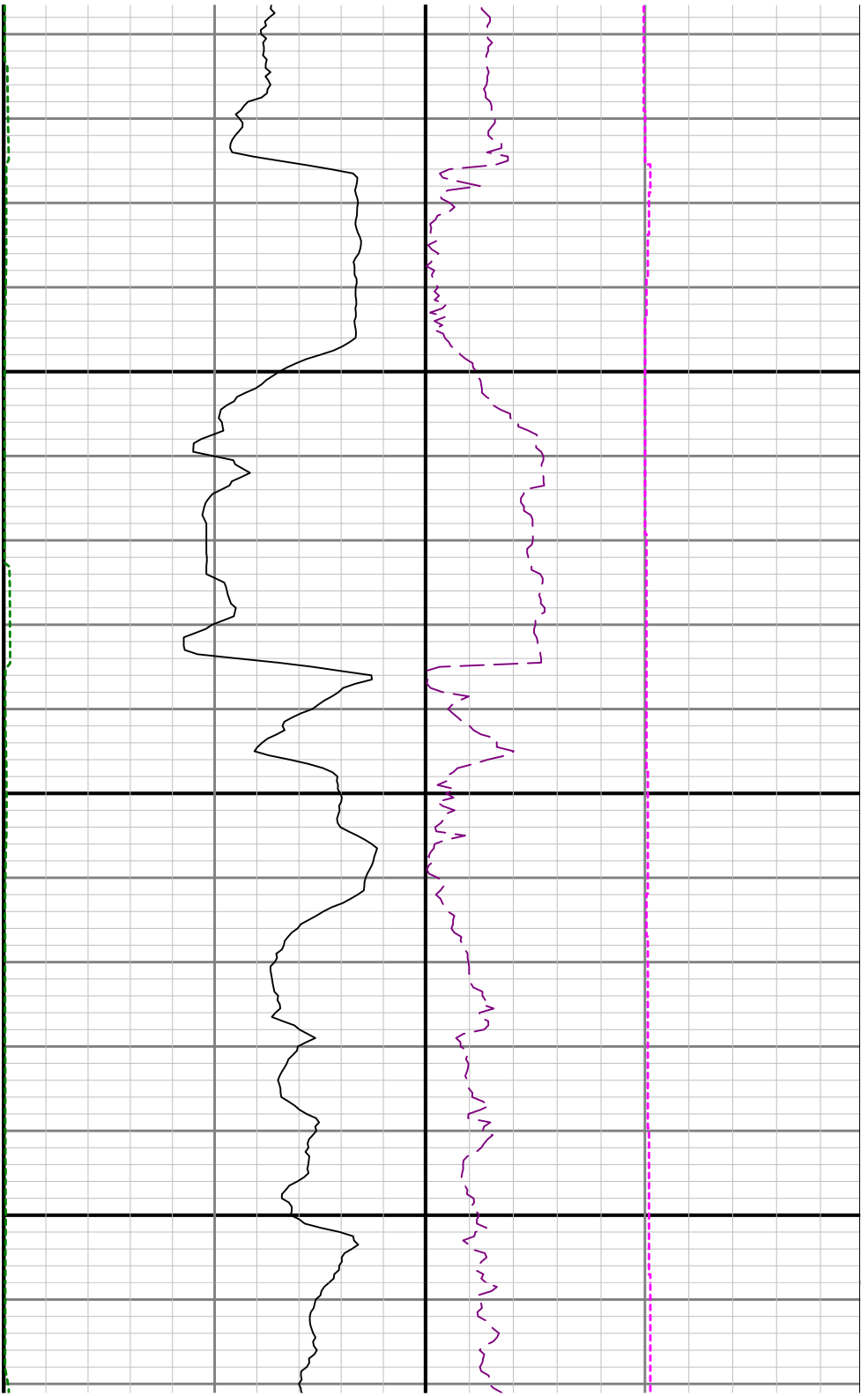
4900

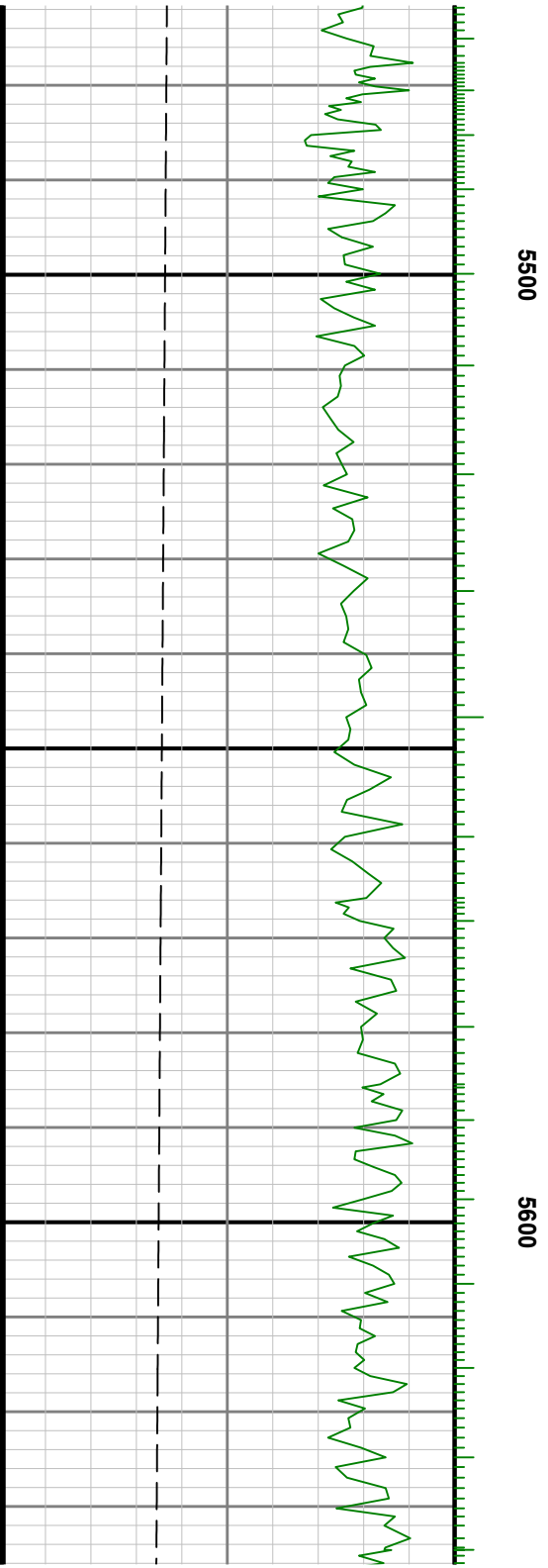


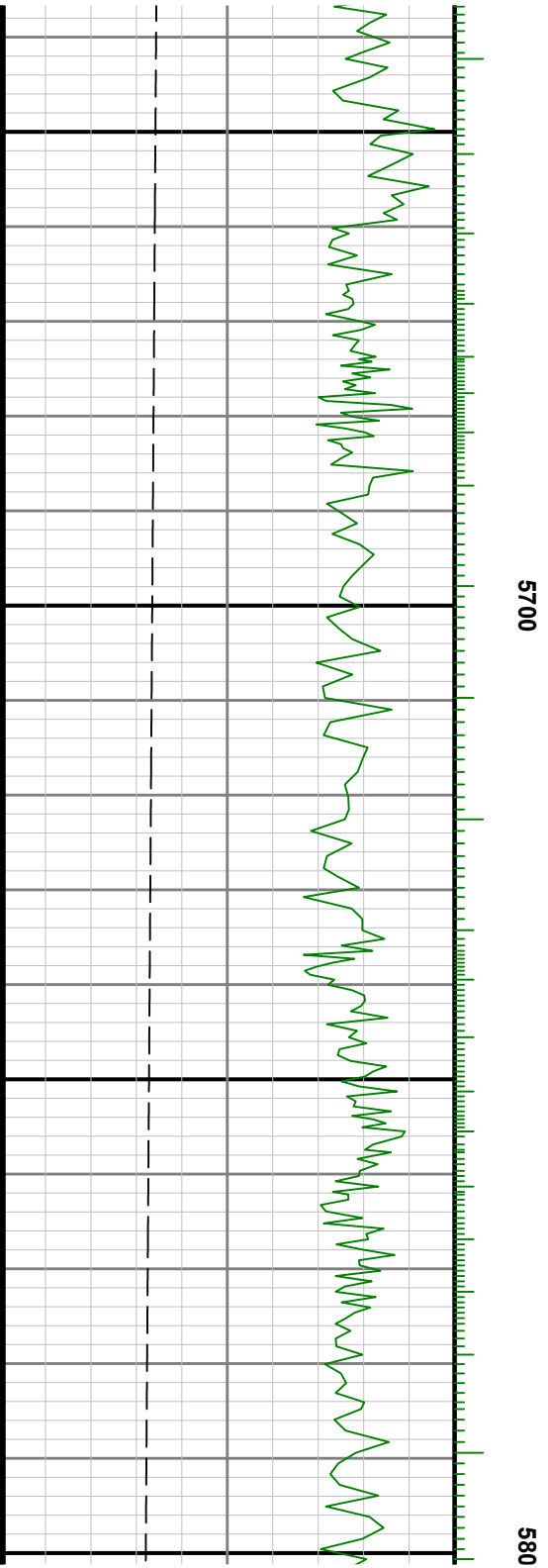
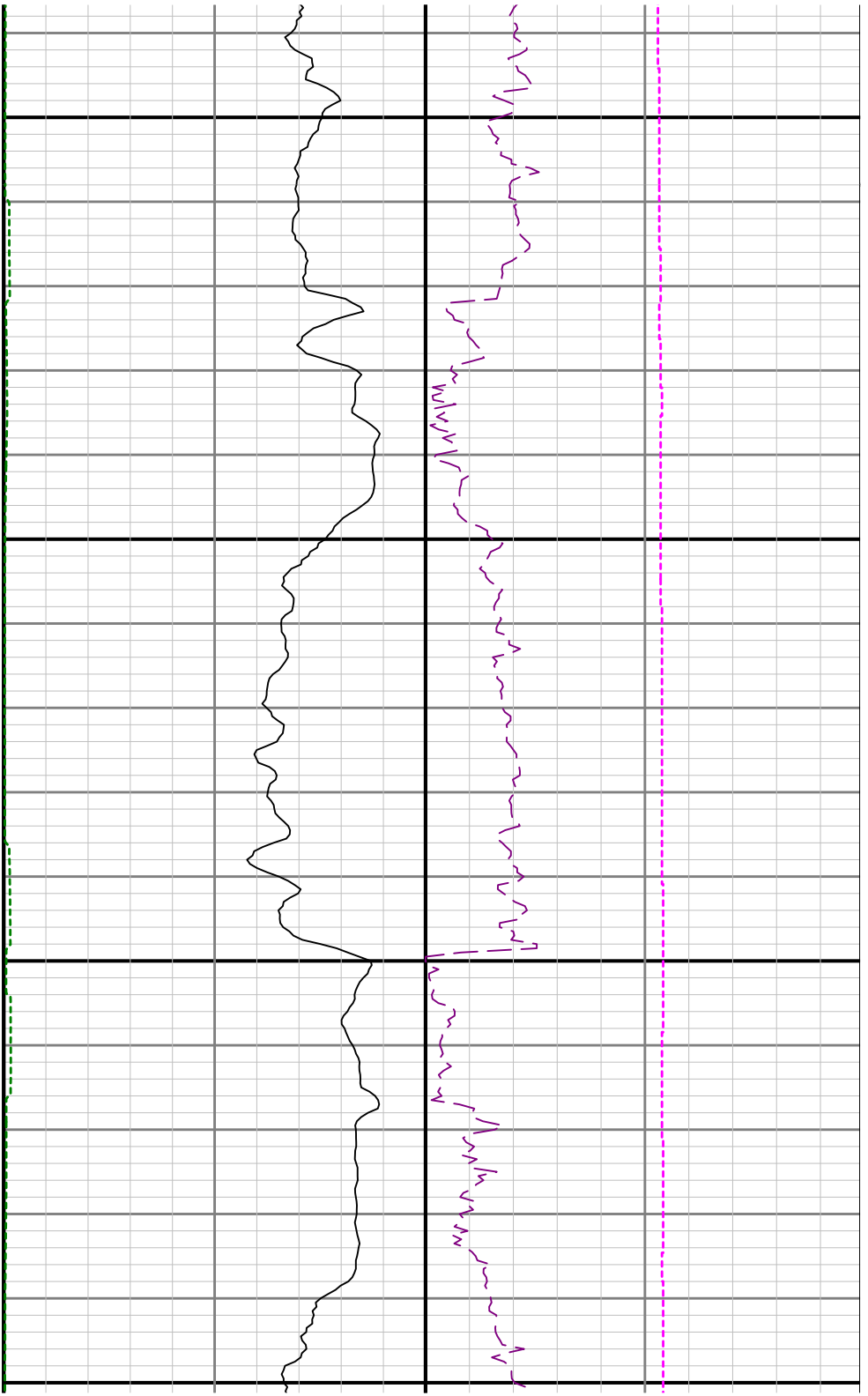


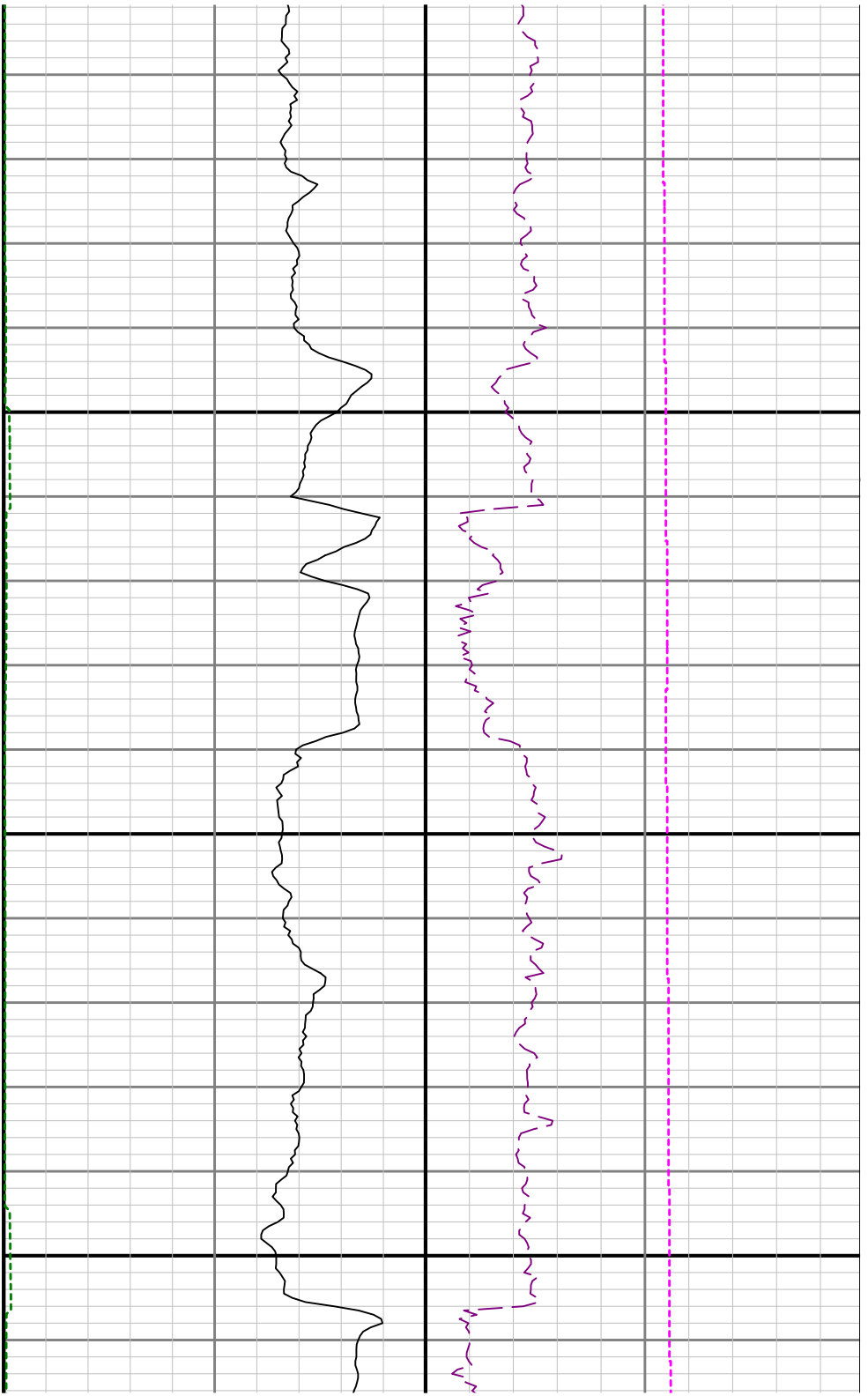




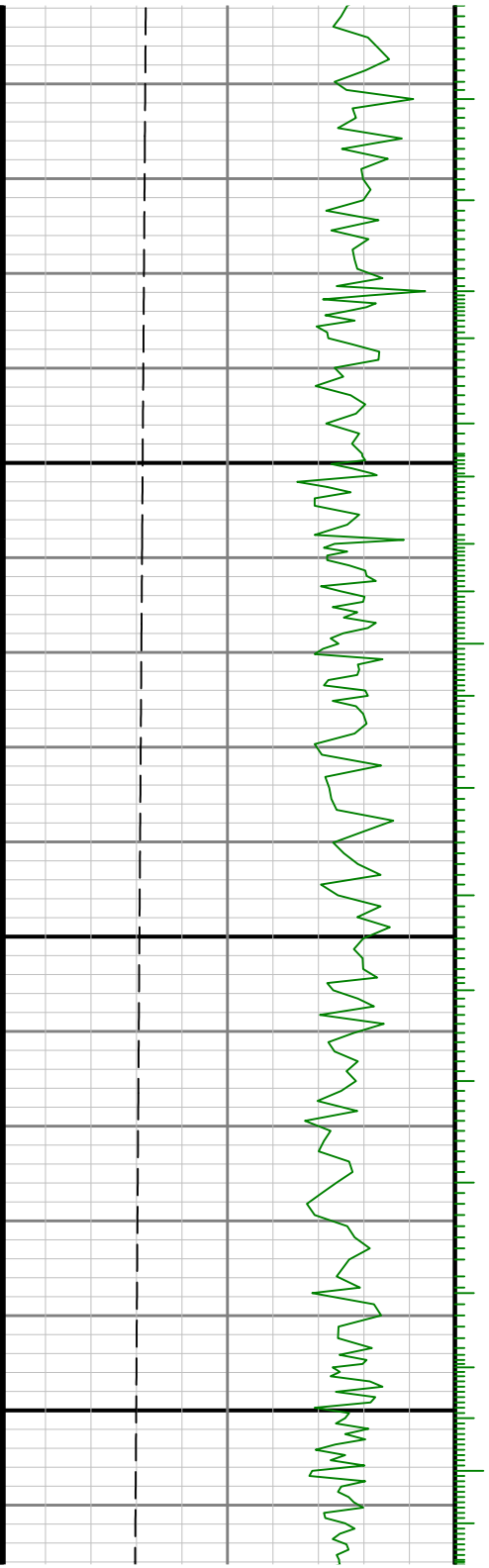


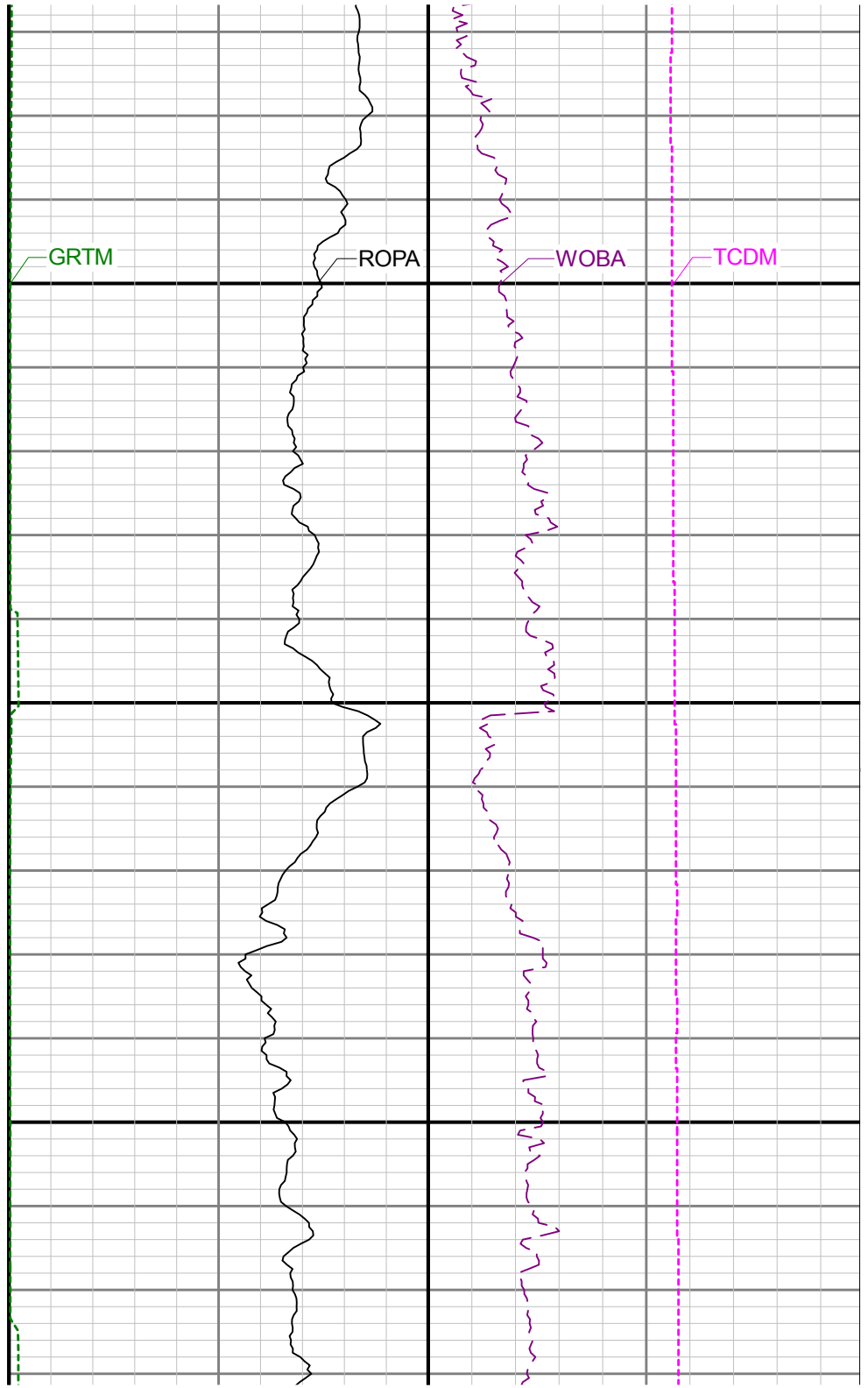
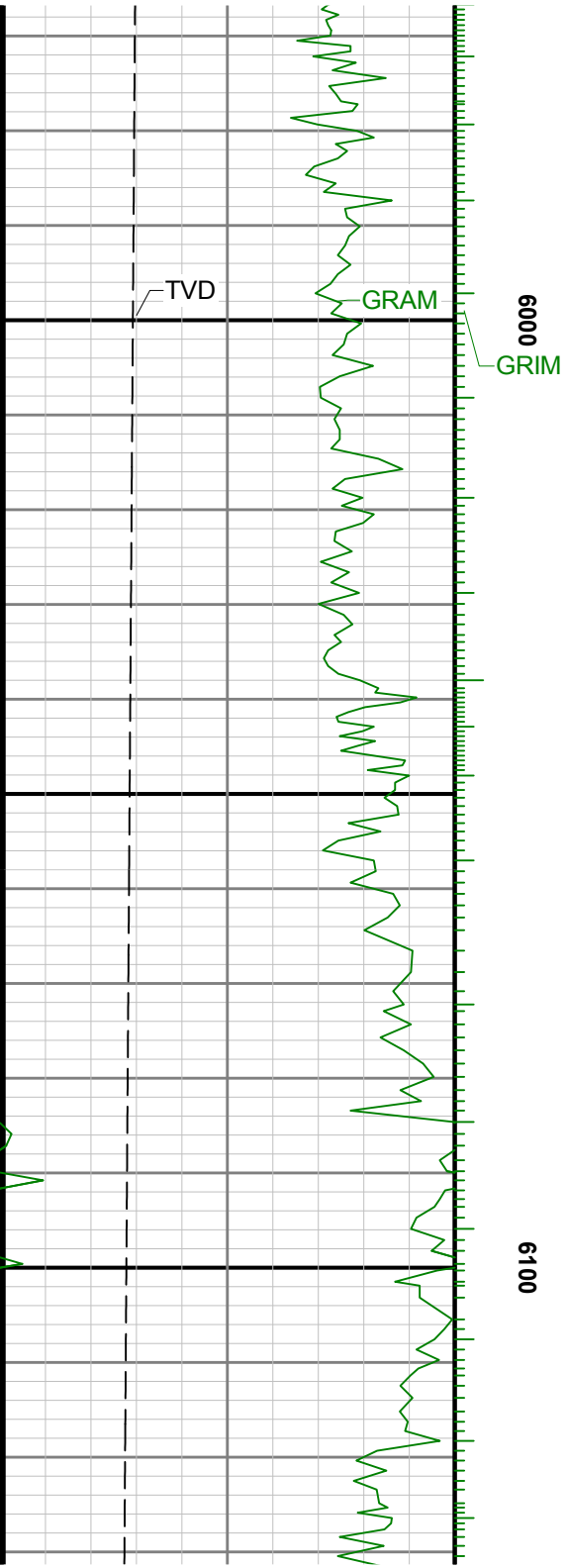


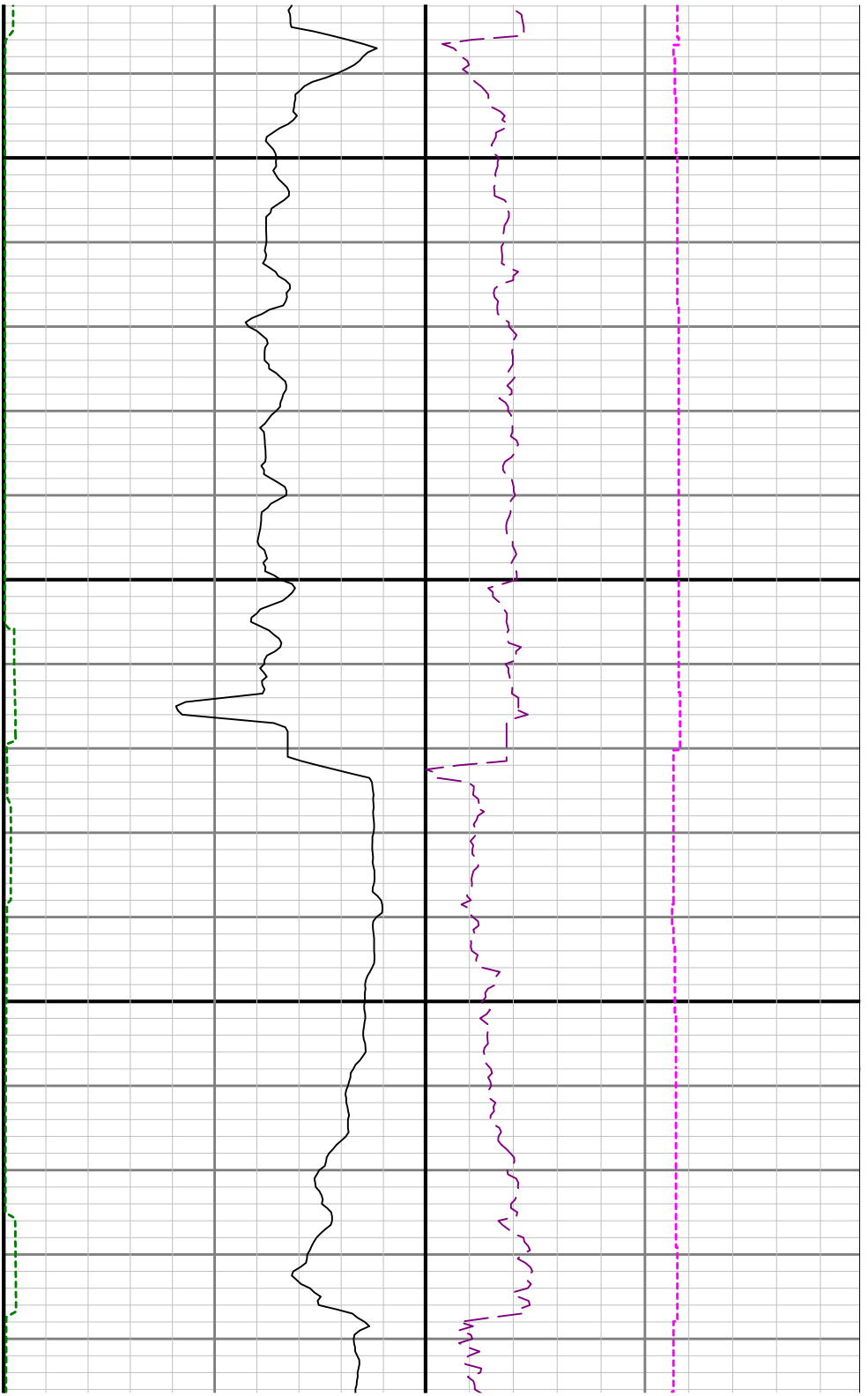




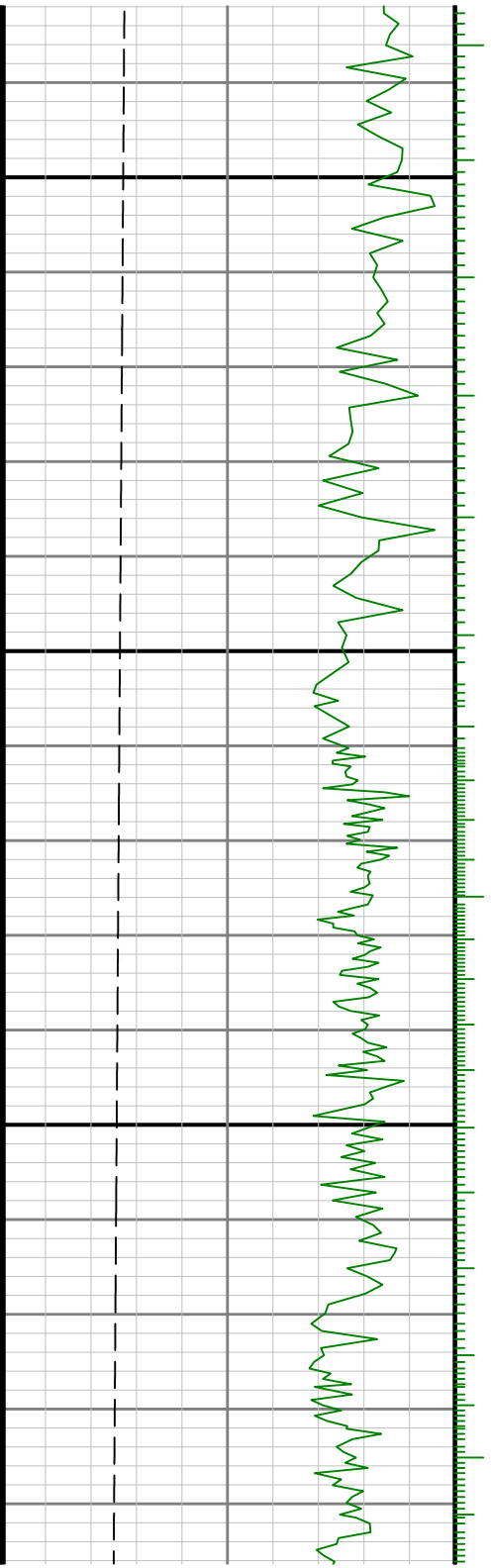
0 5900

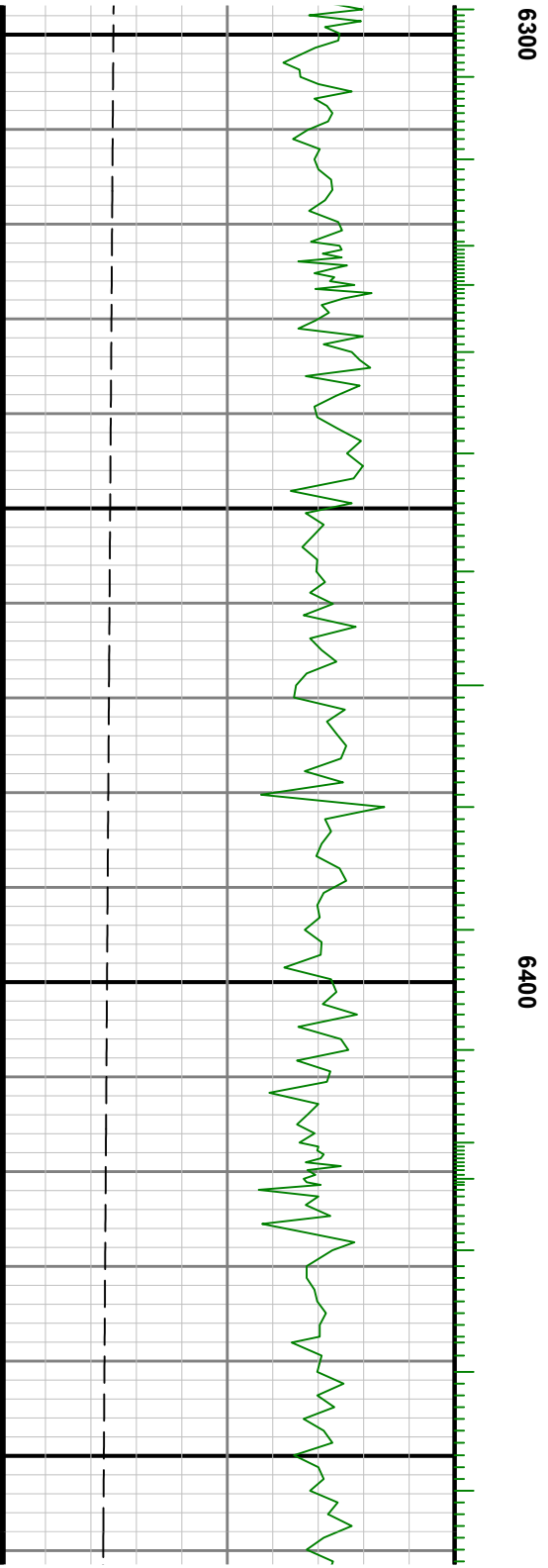
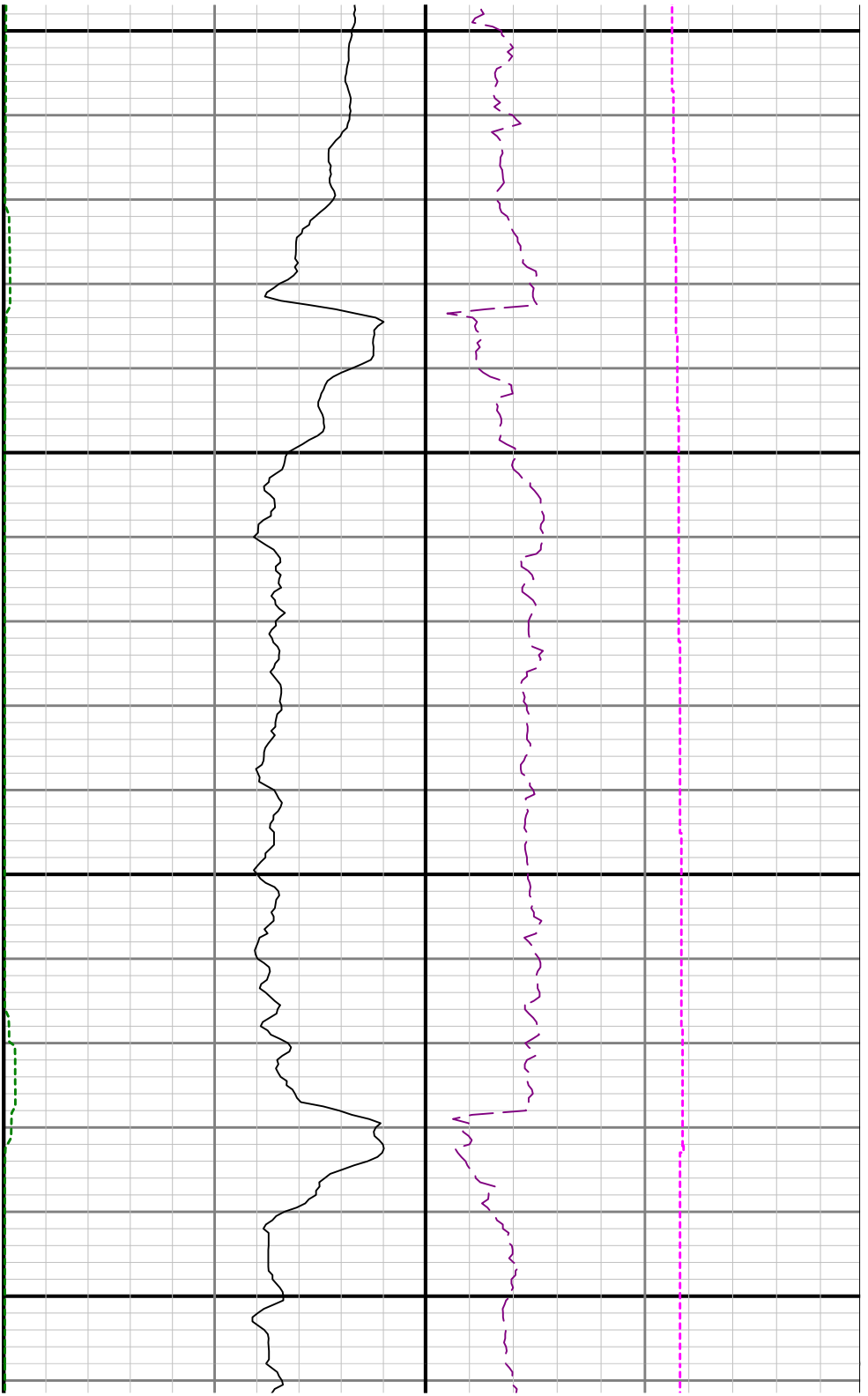


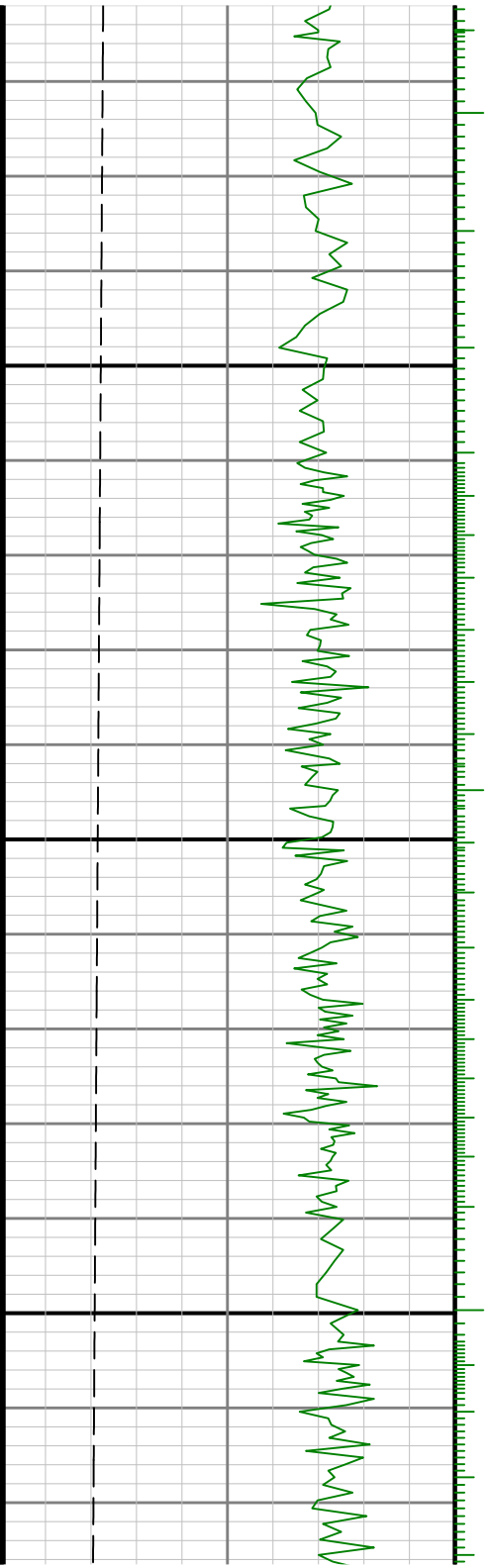




6200

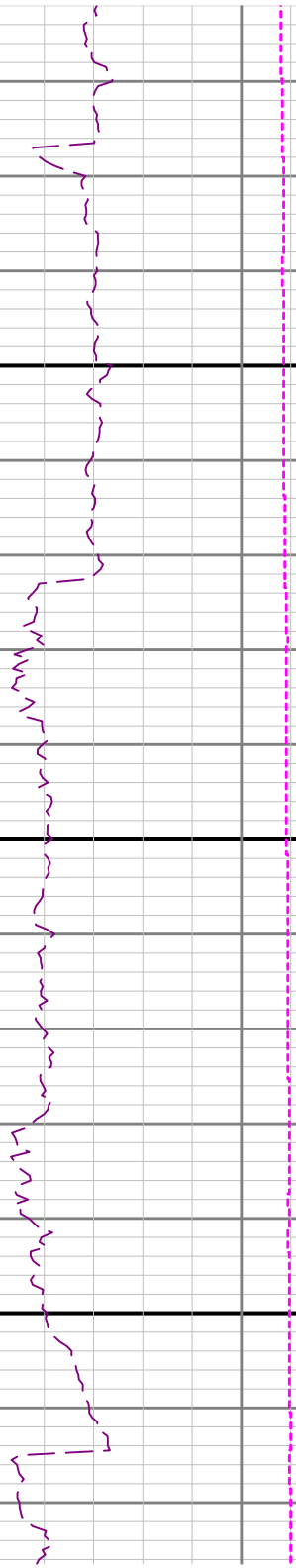
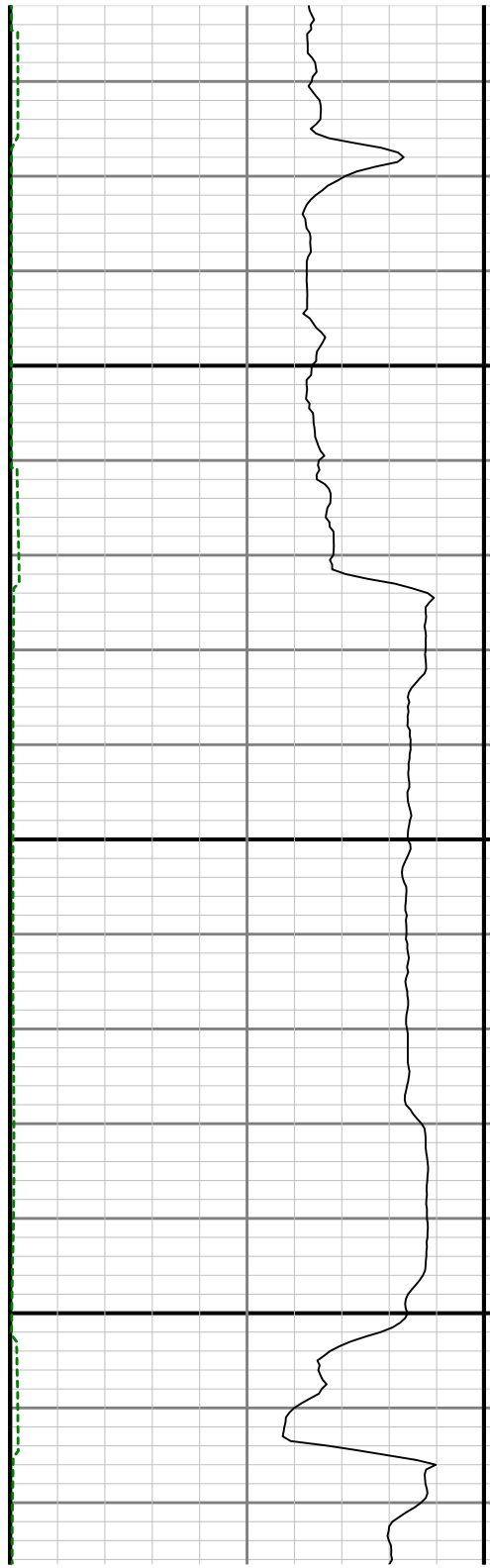




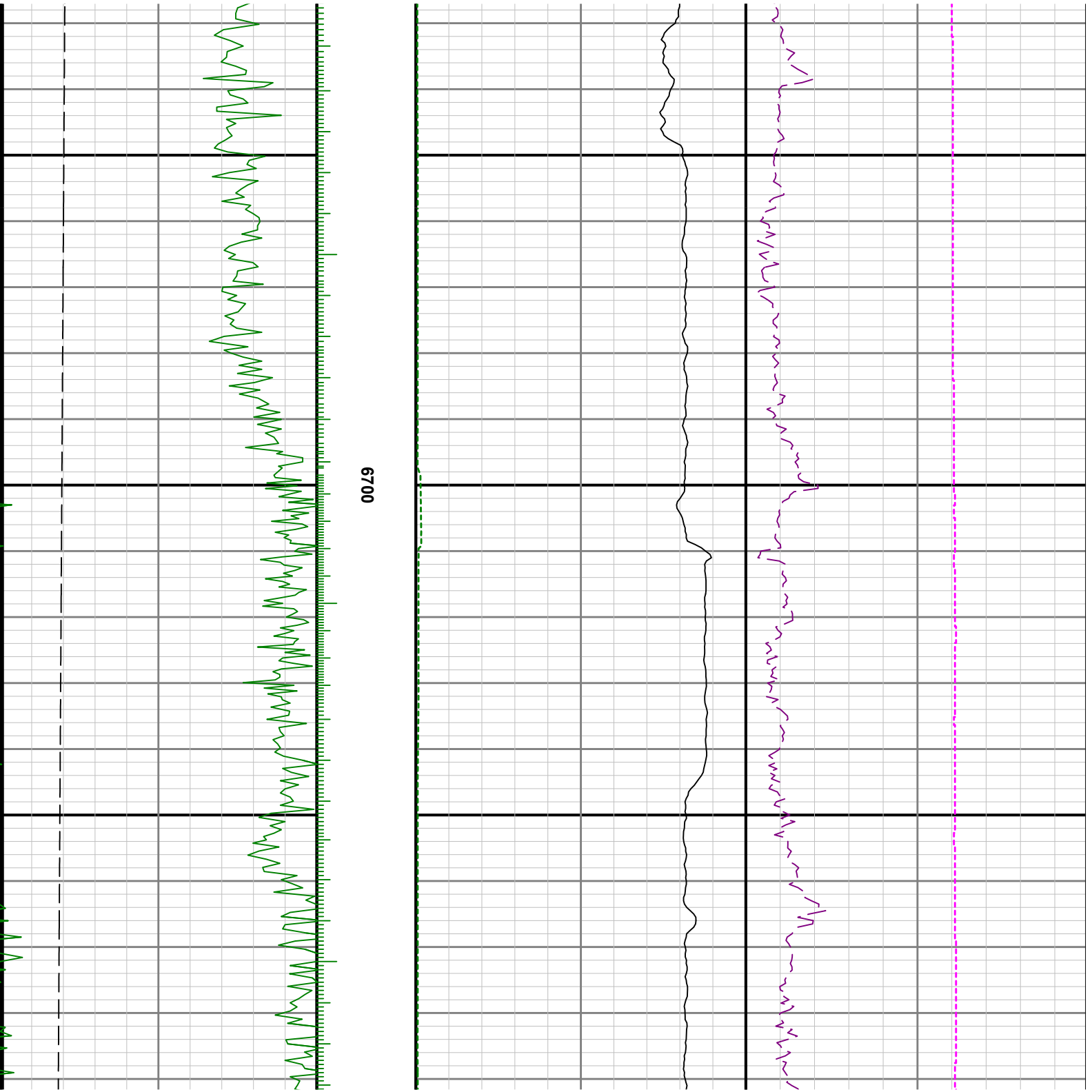


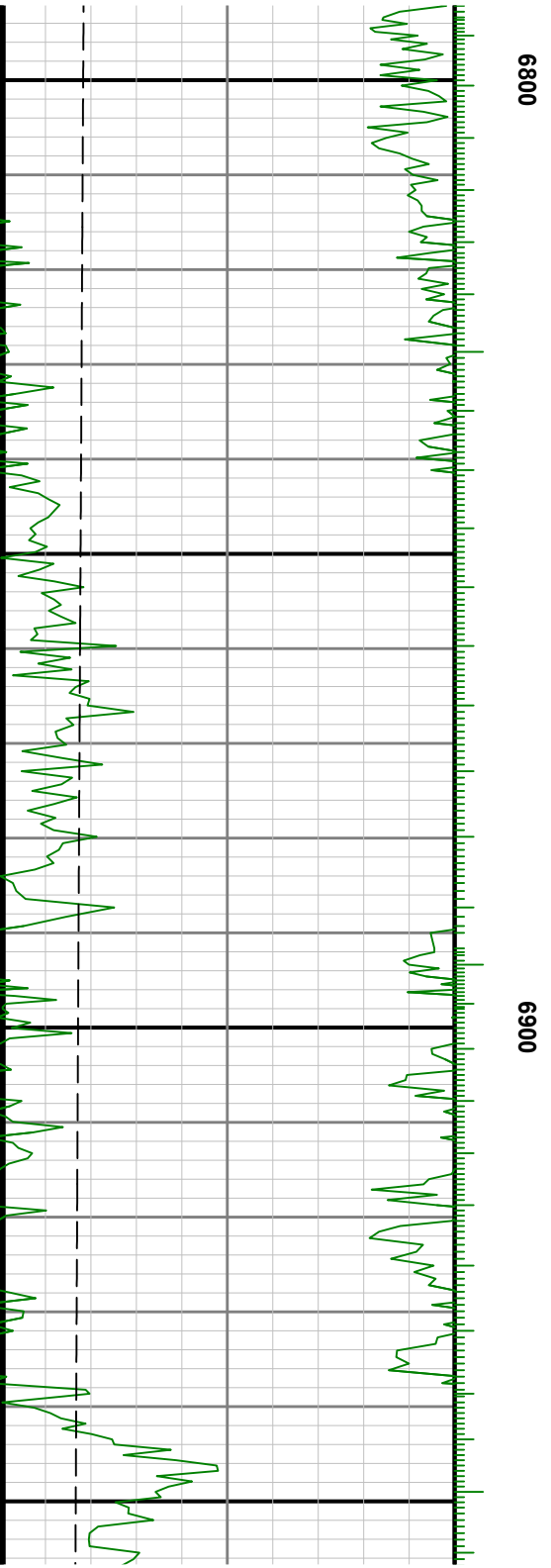
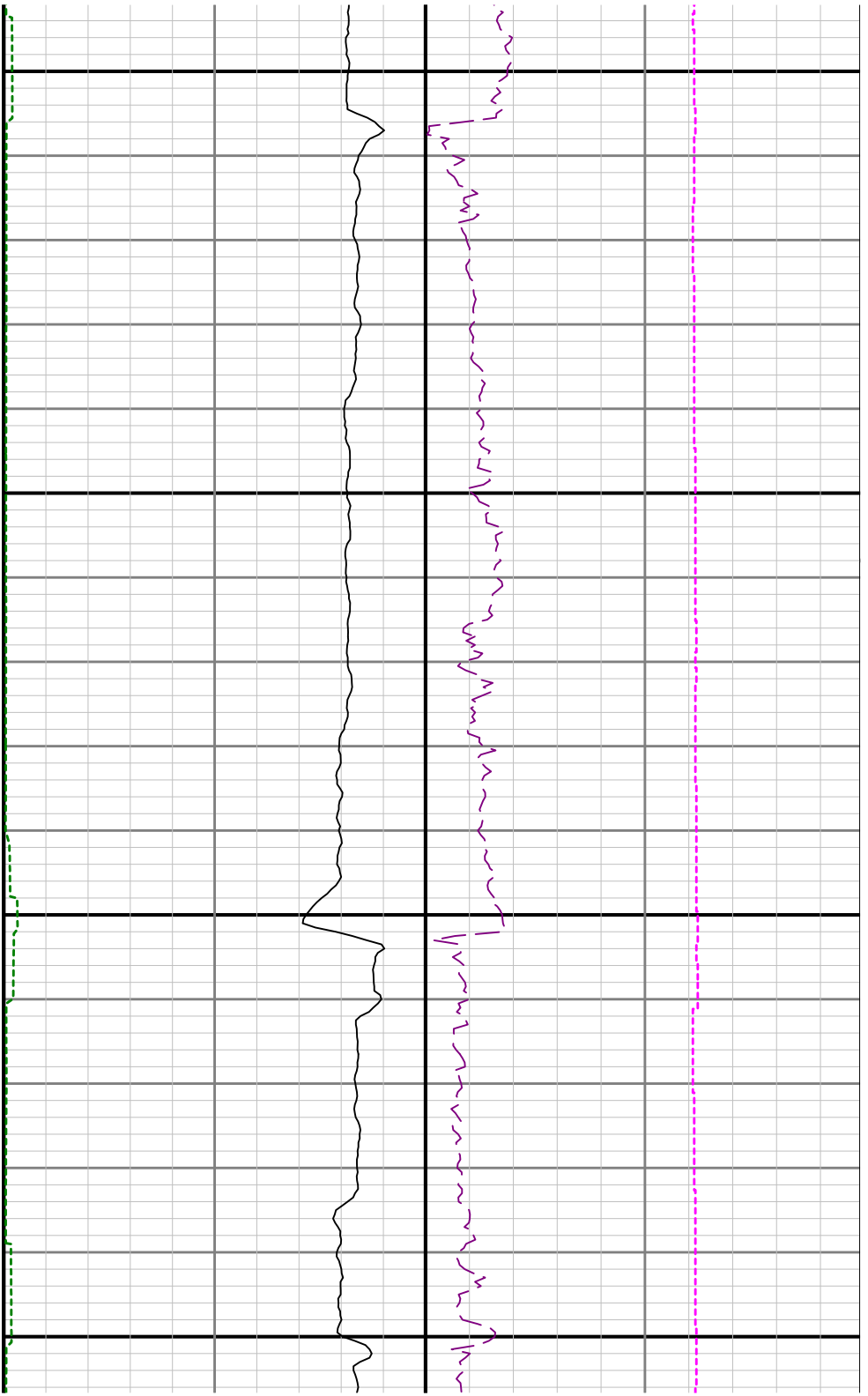
6600

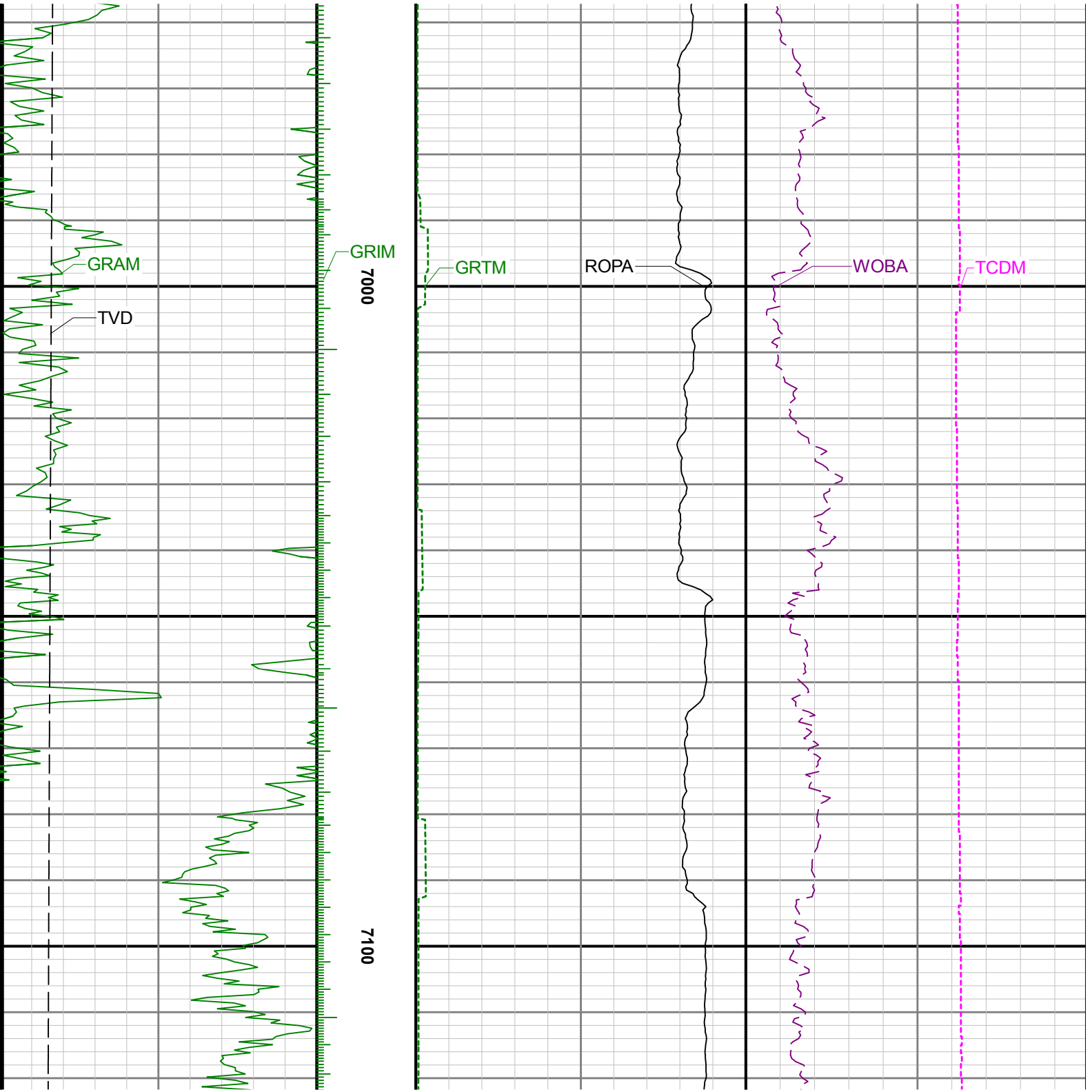
6500

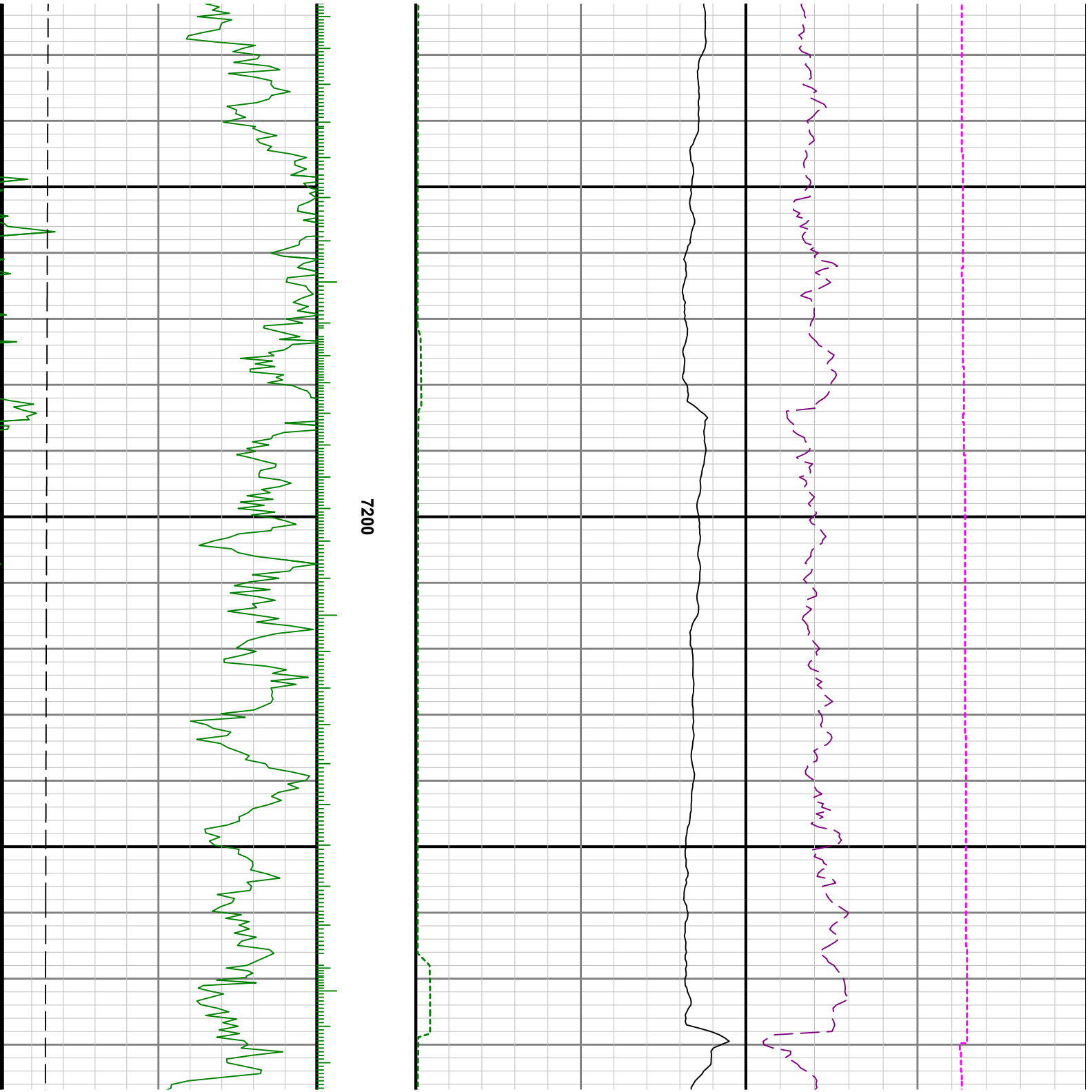


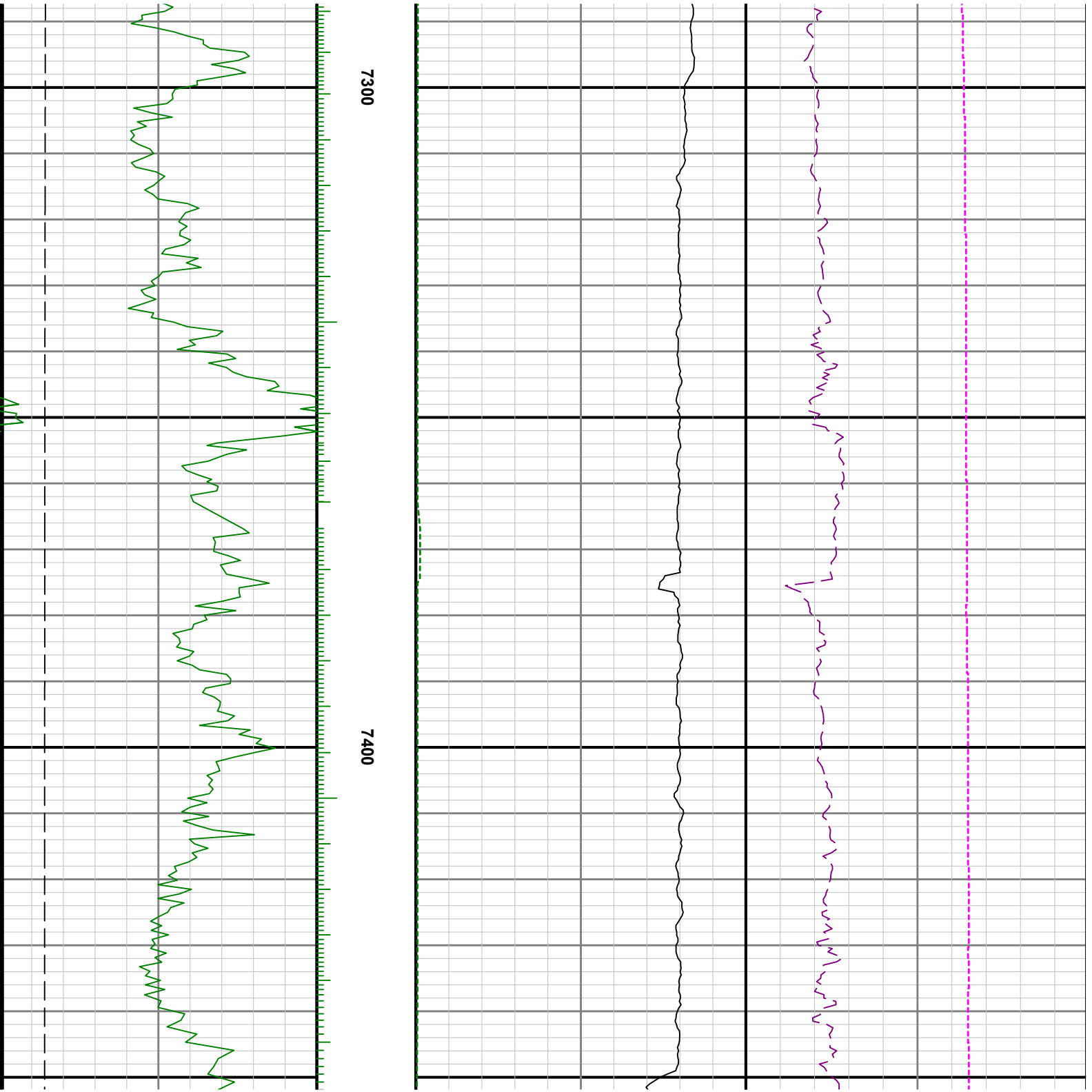


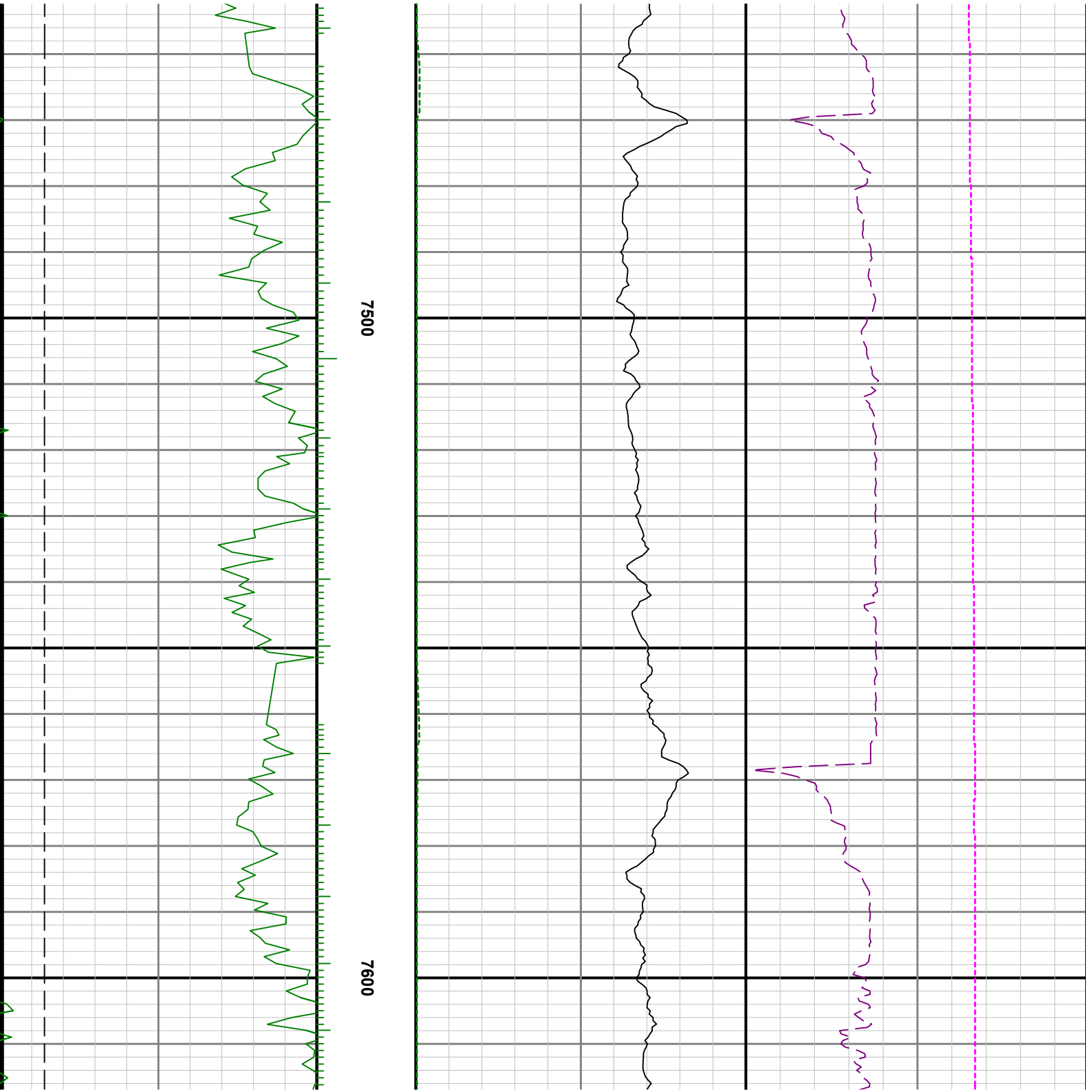


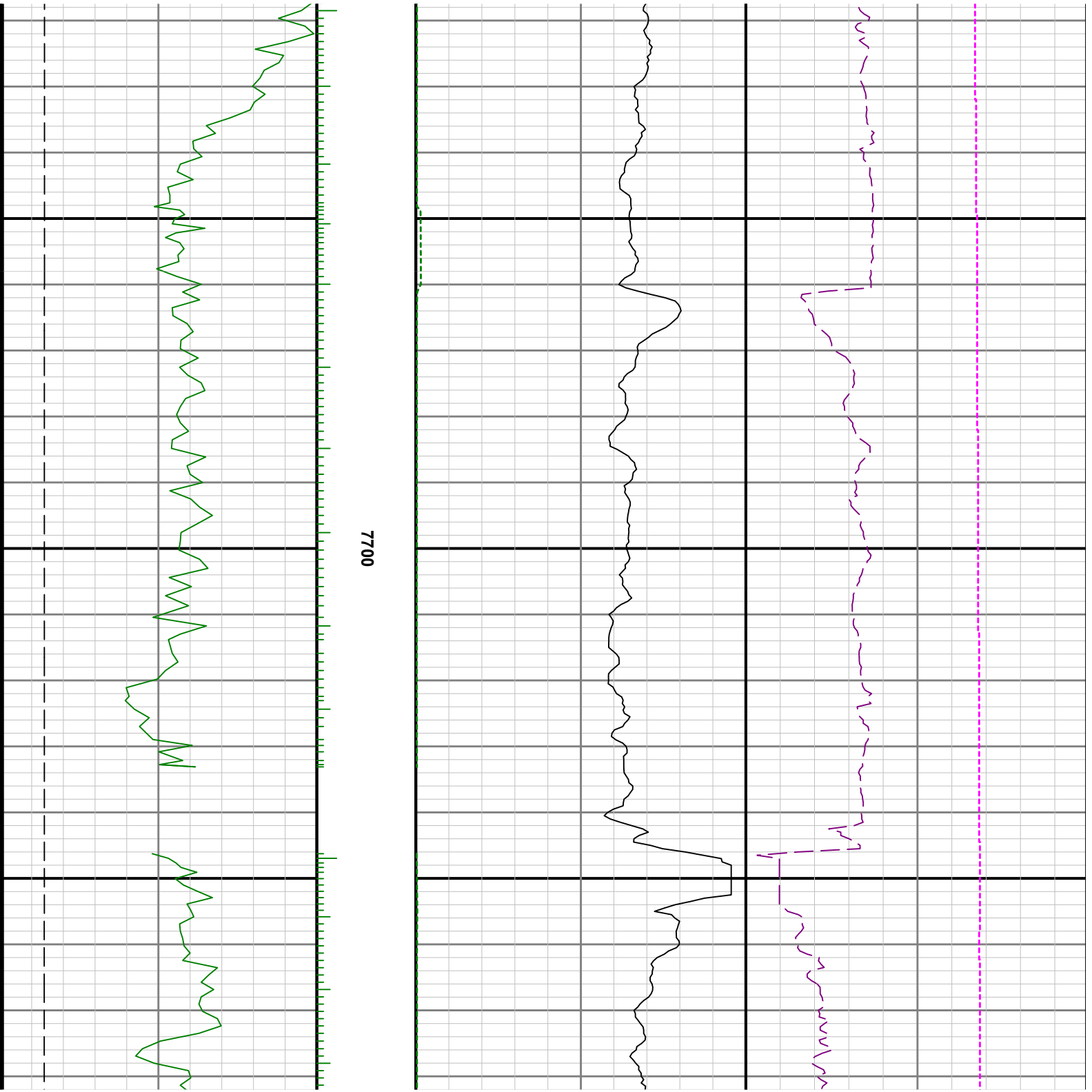


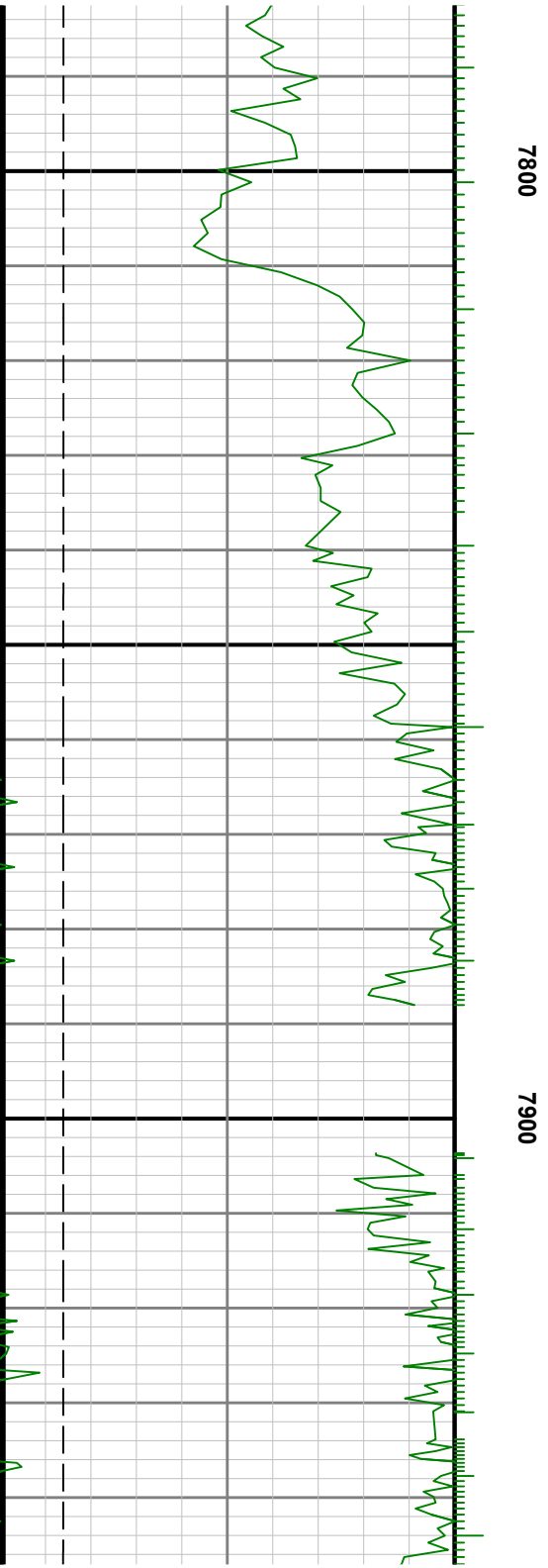




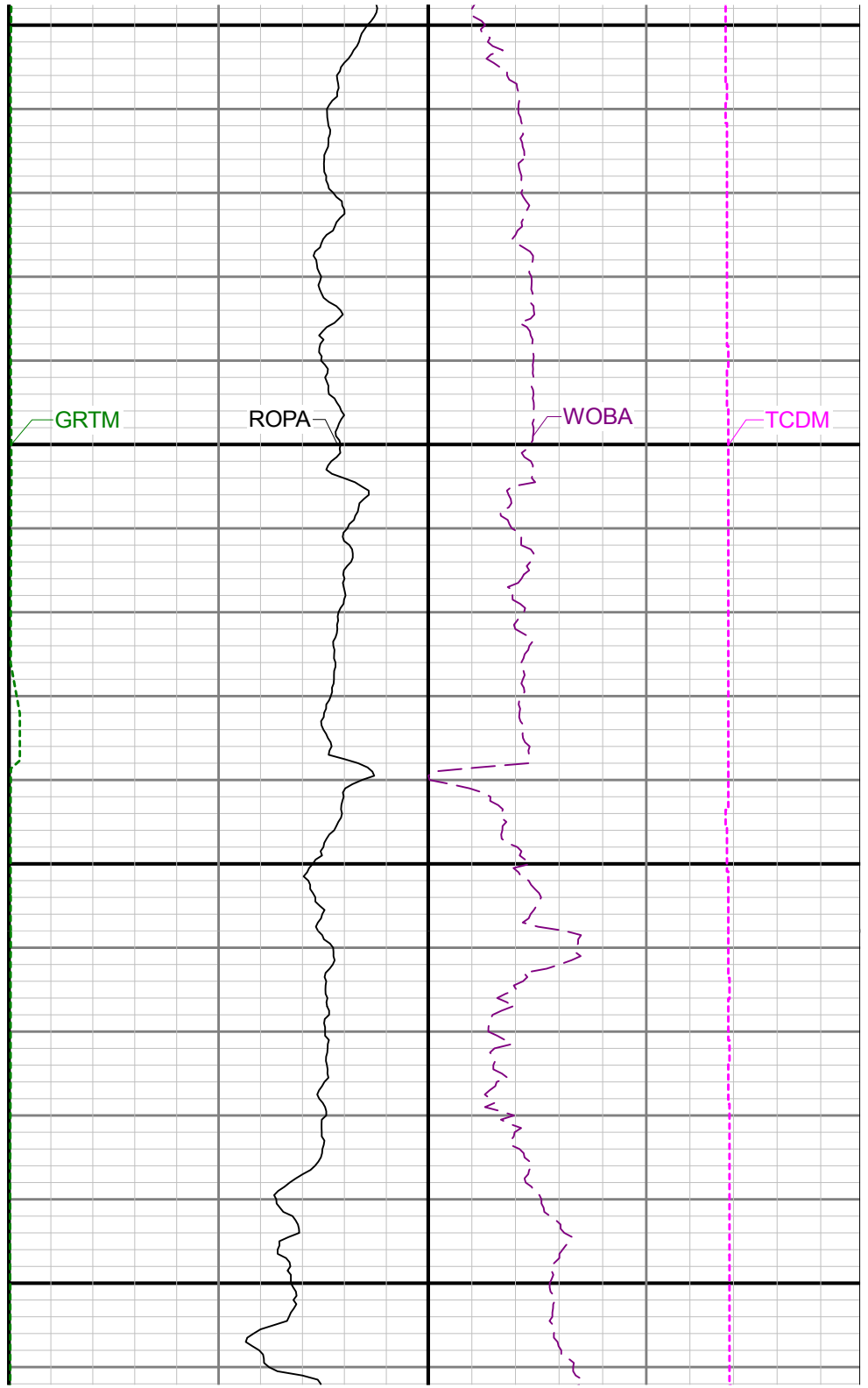
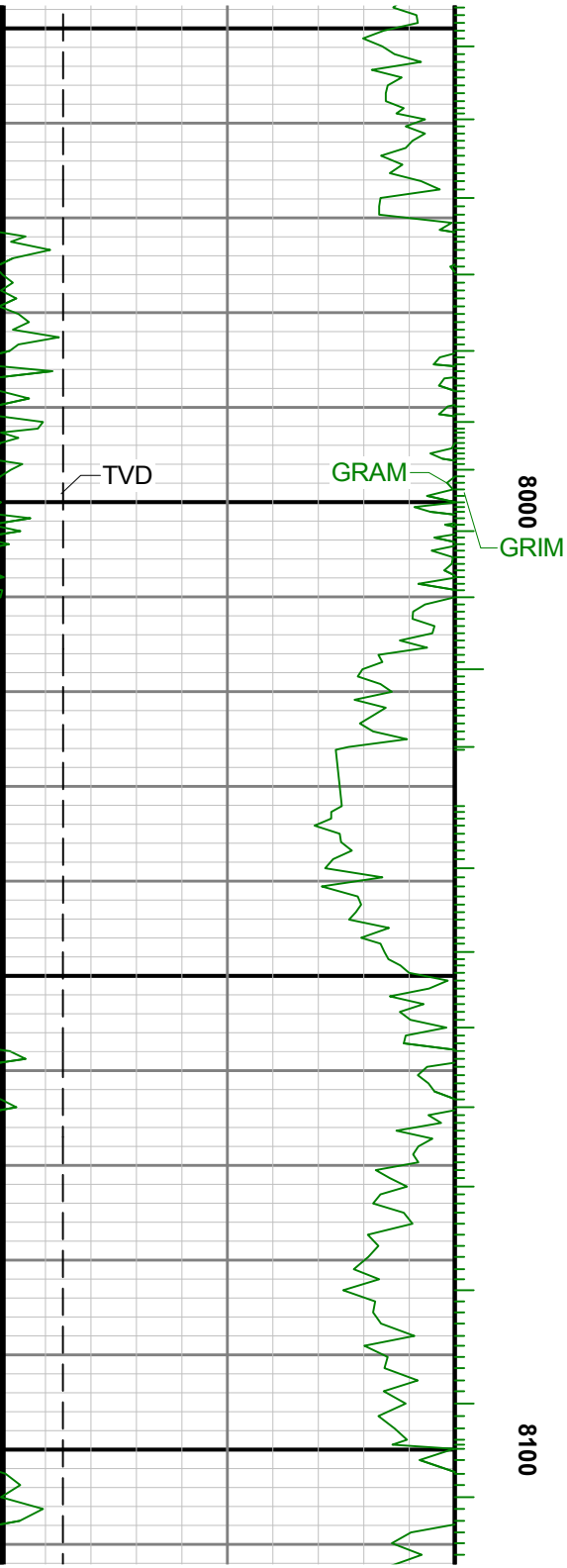


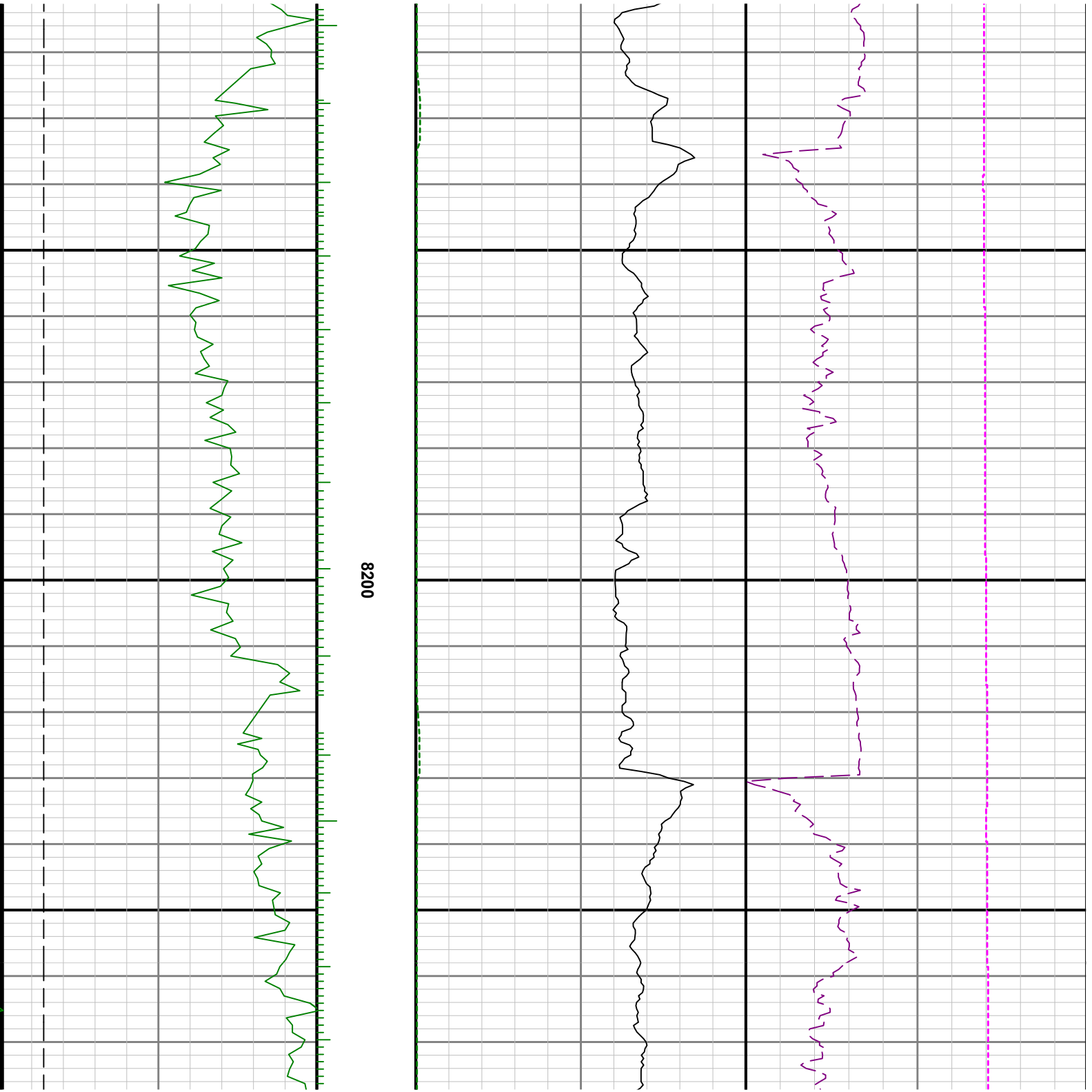


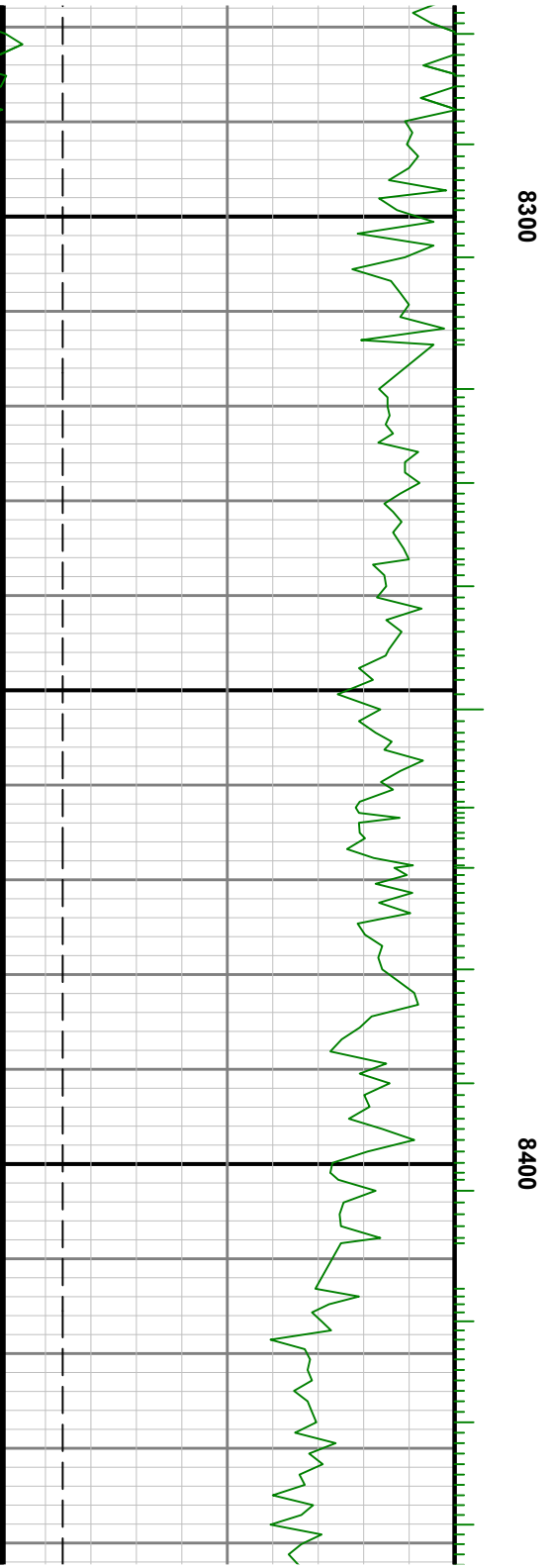
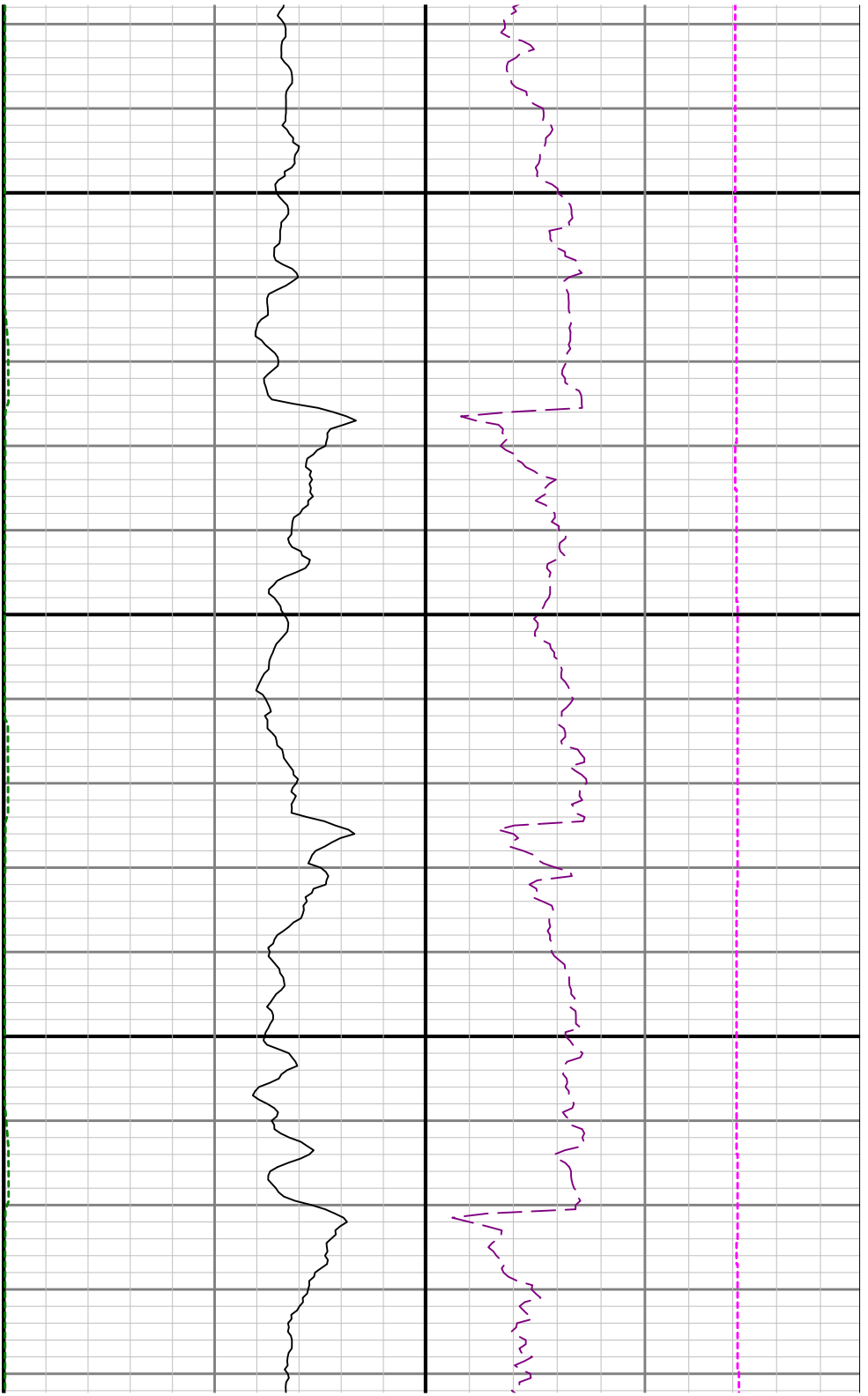


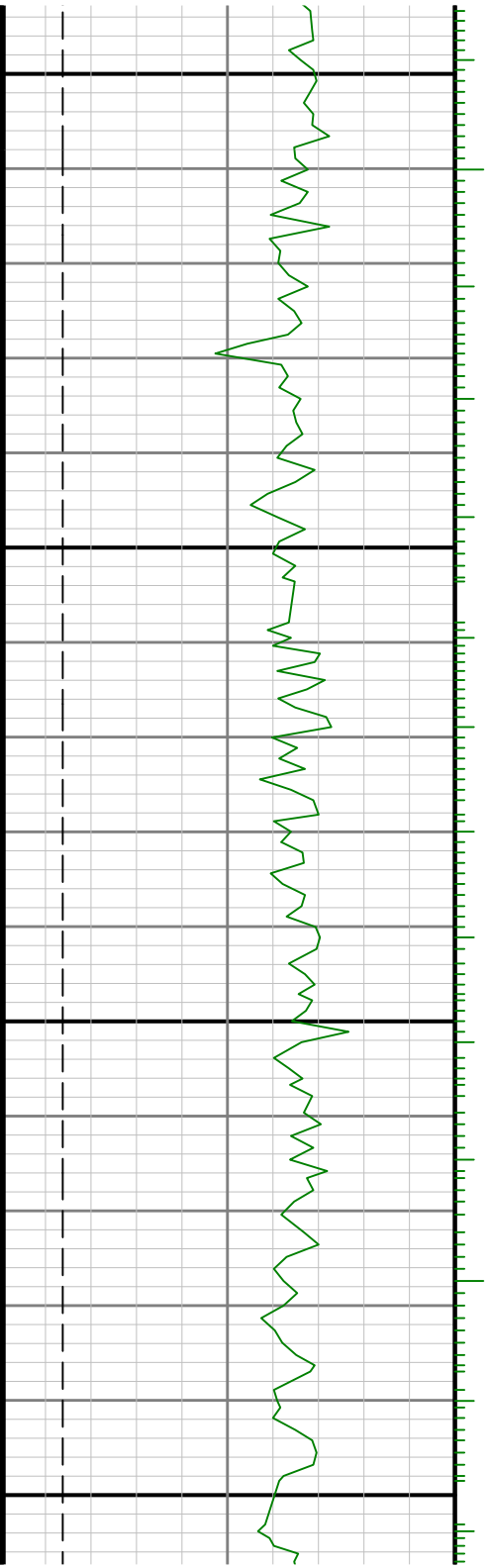






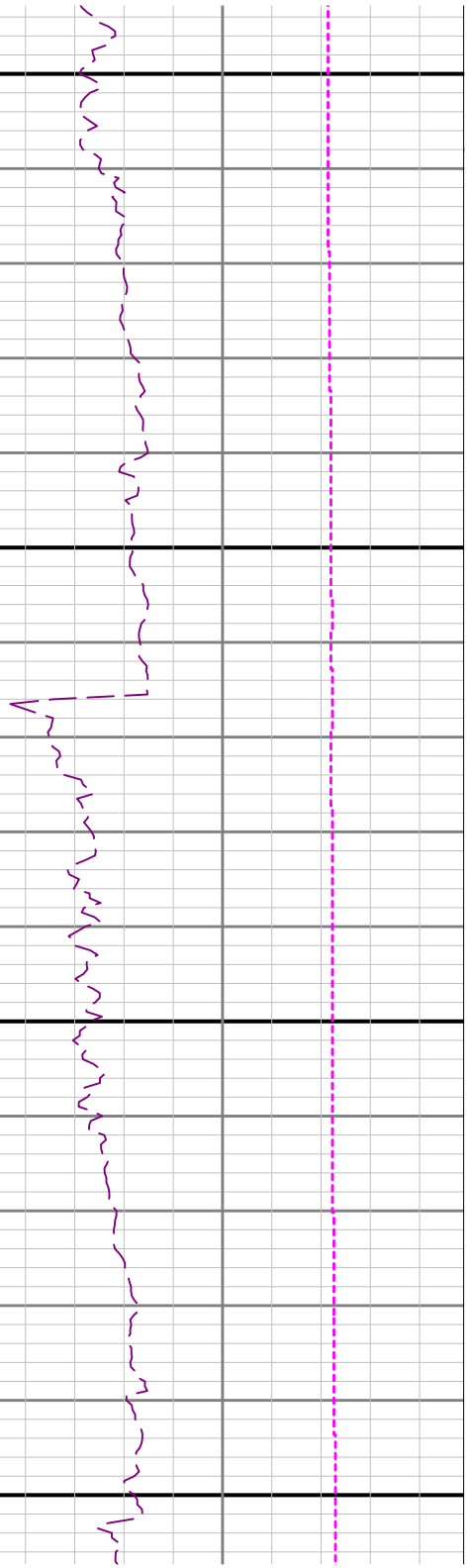
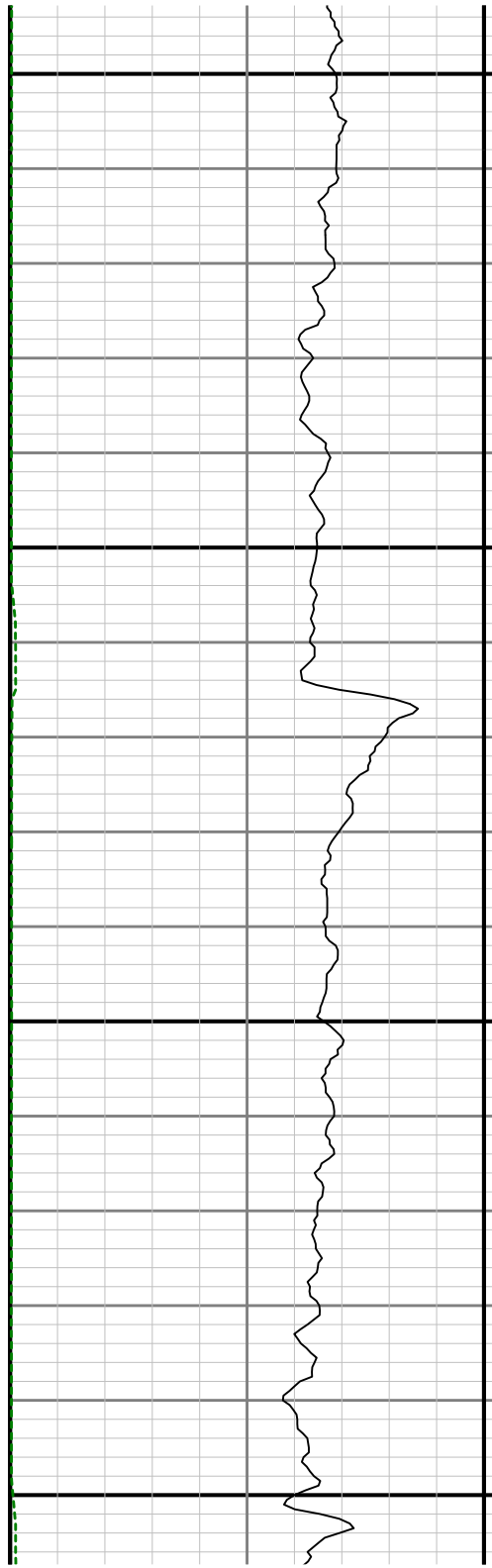


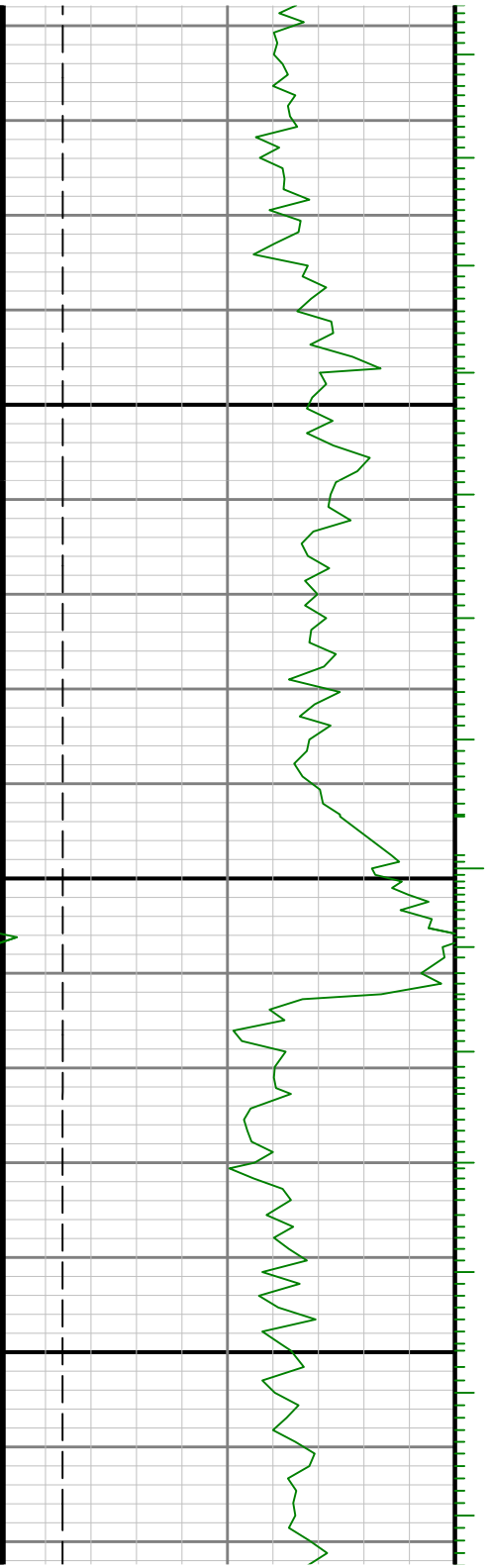




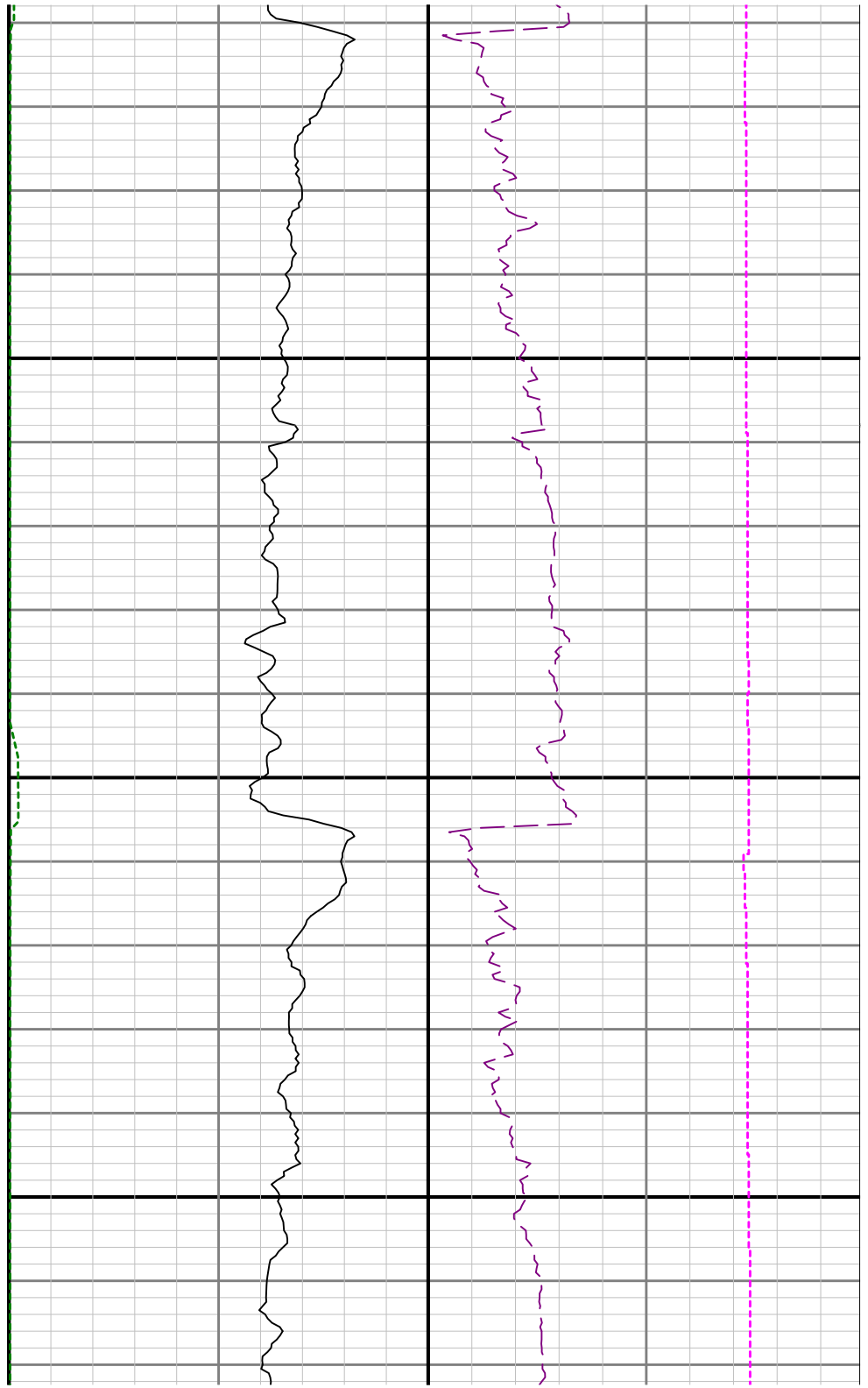
8500

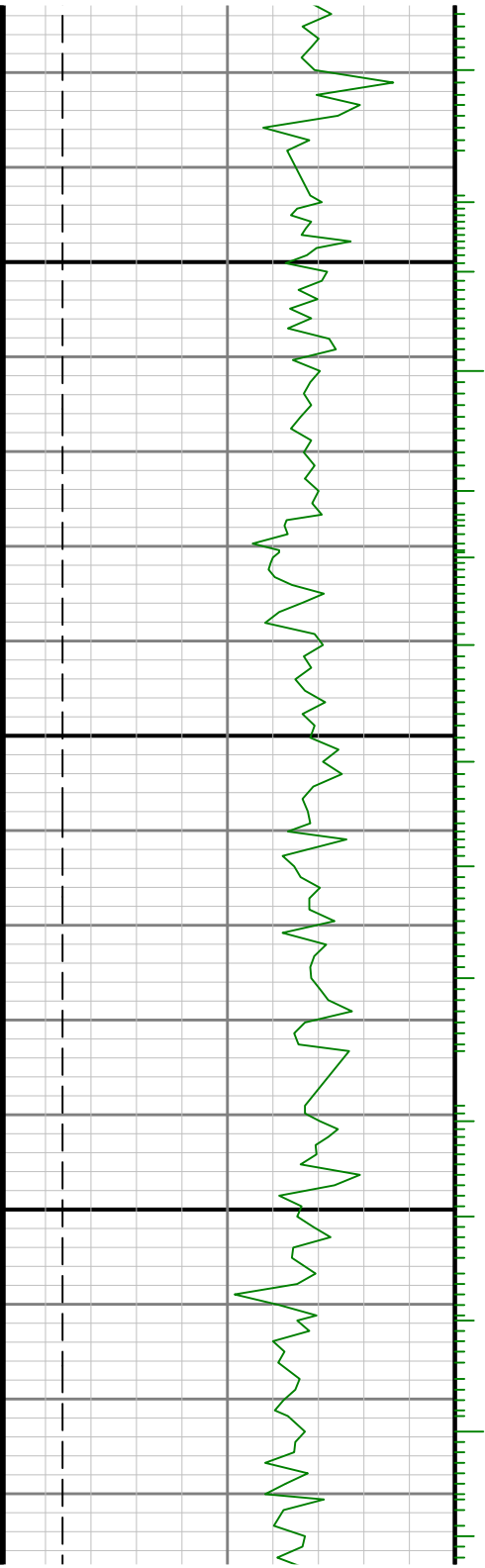
8600





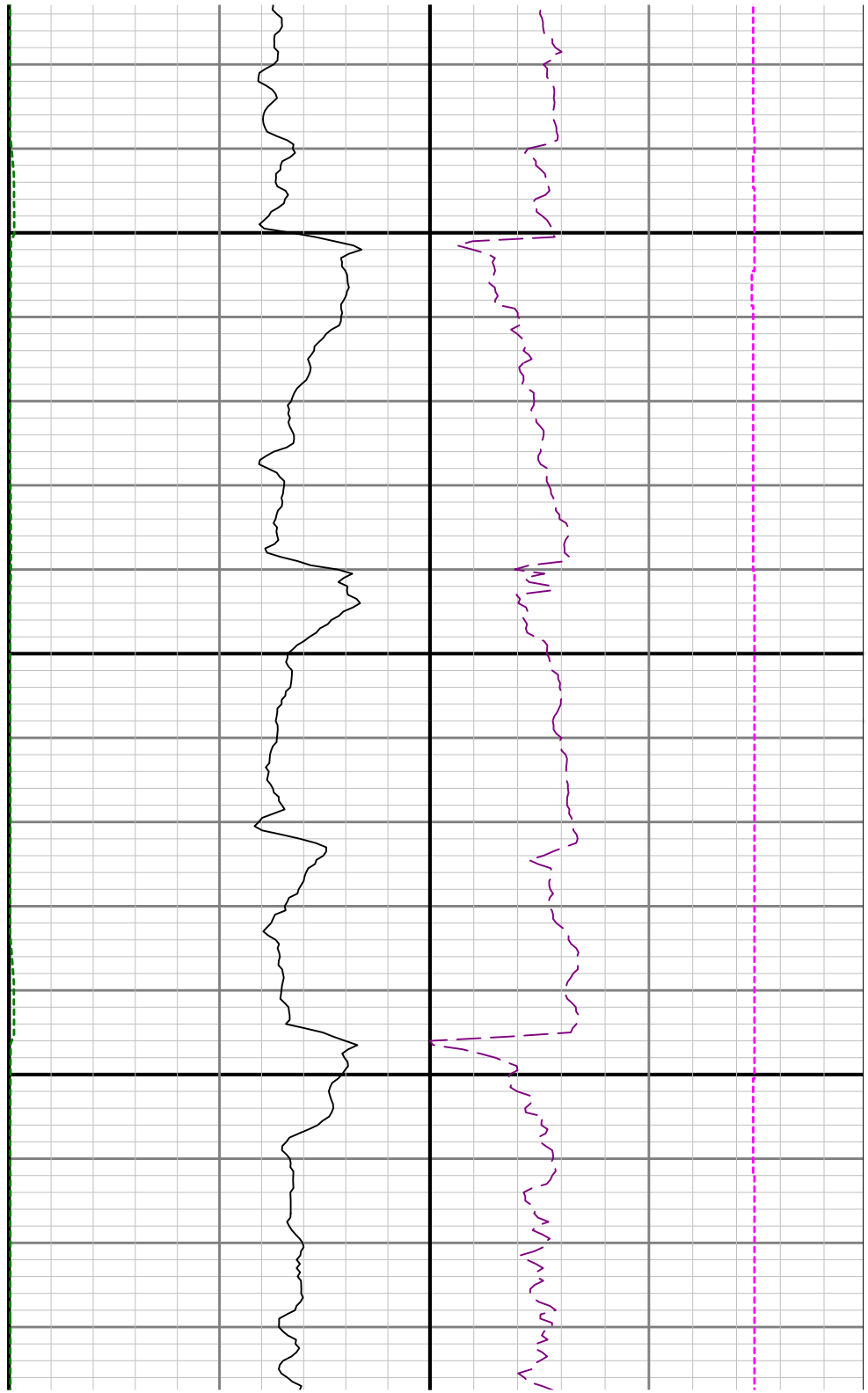
8700

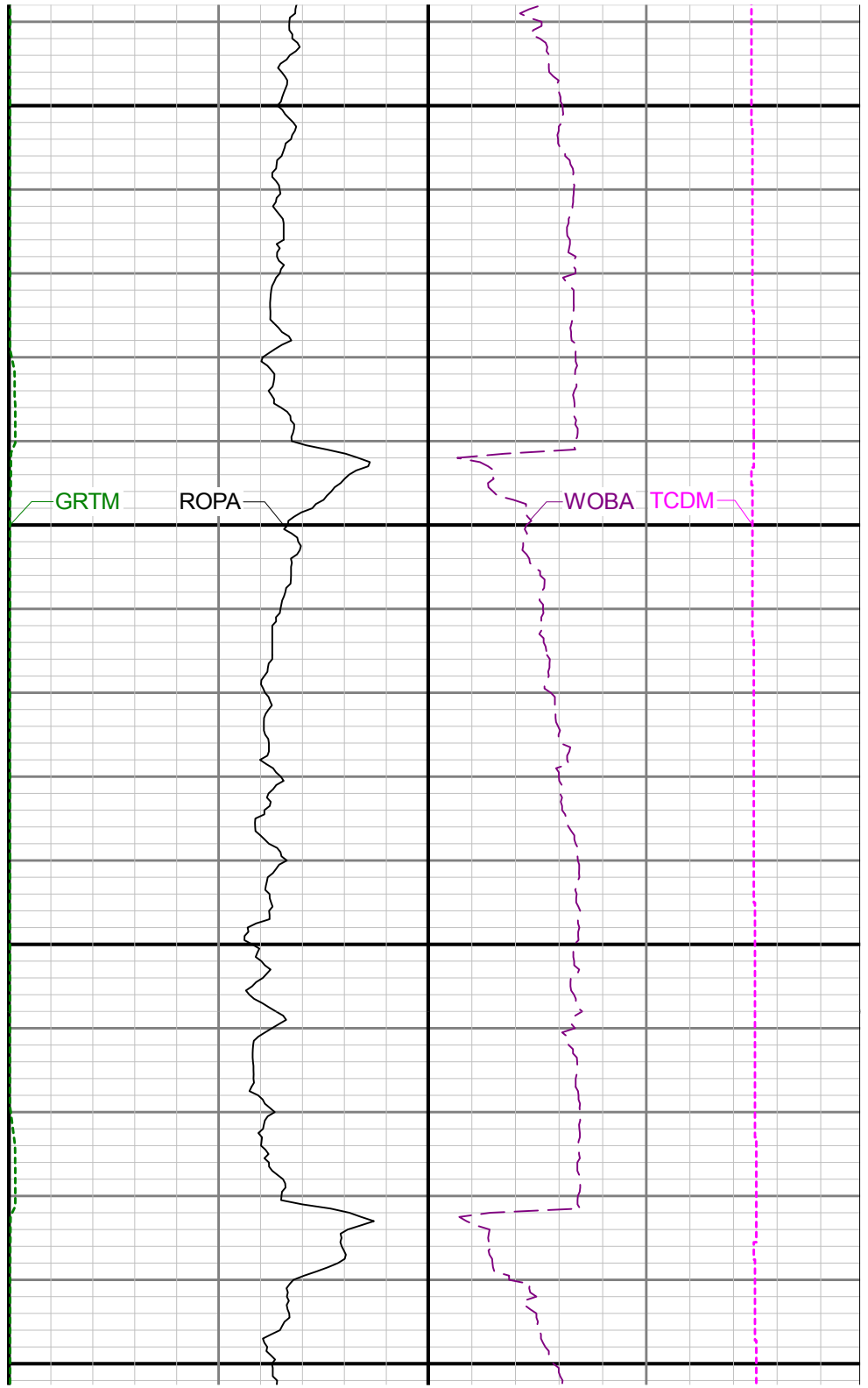
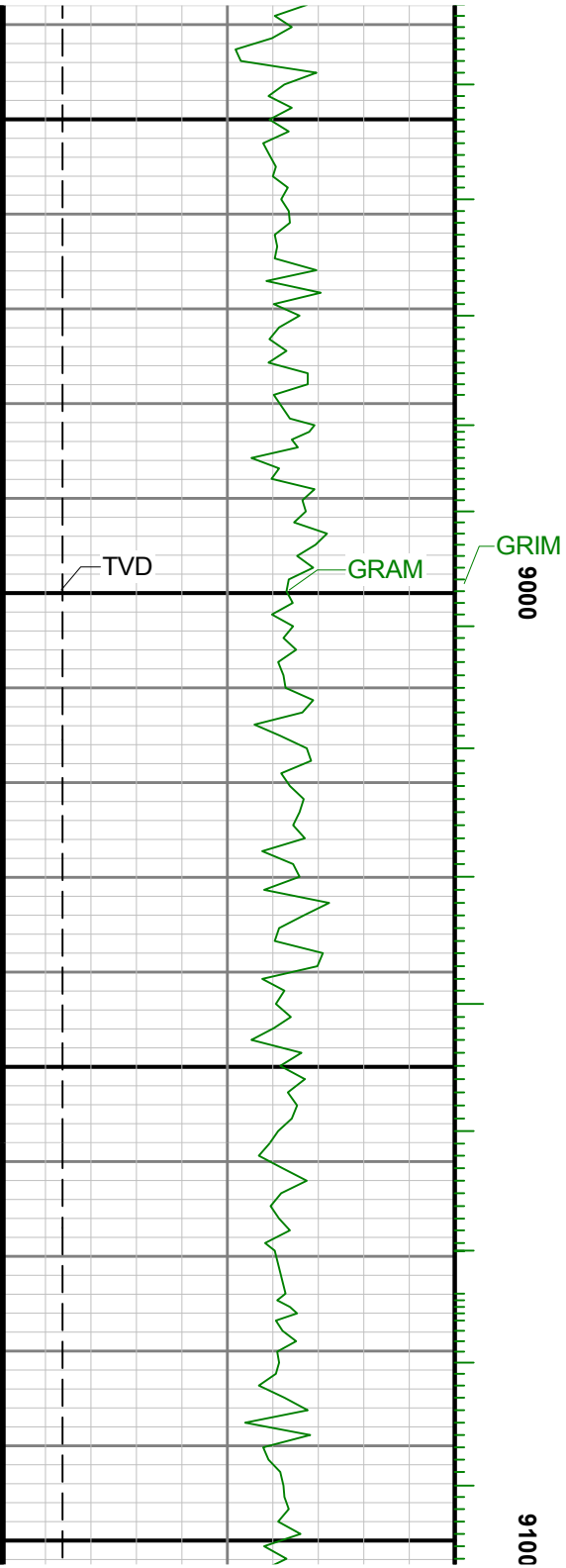


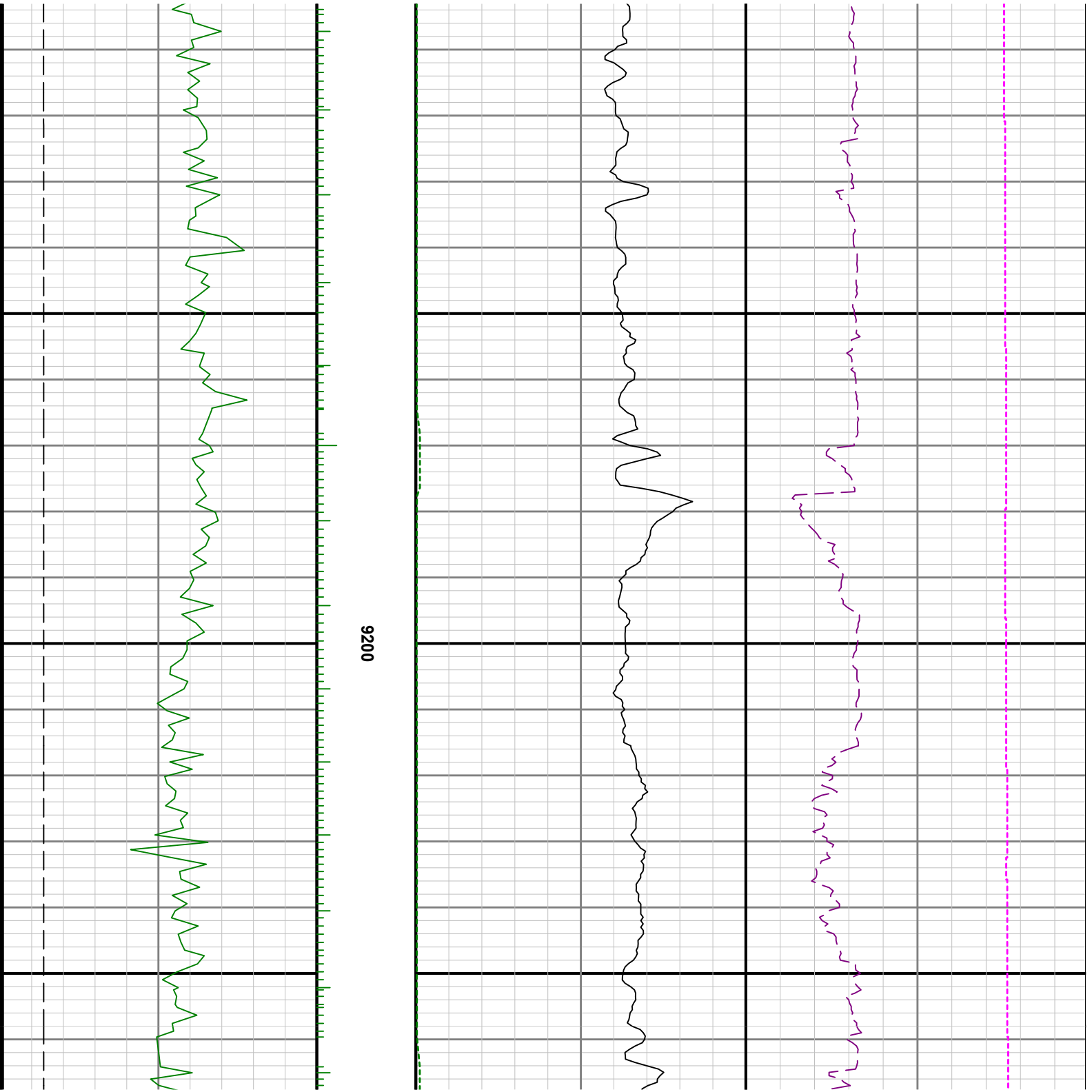


0088

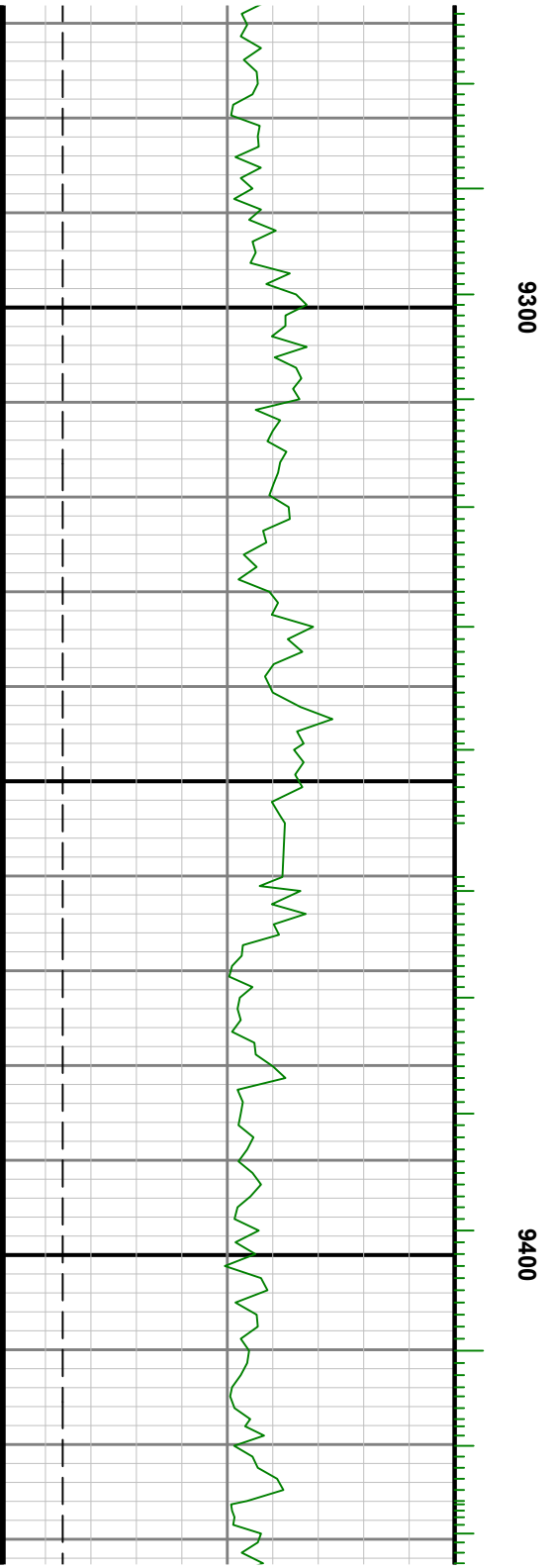
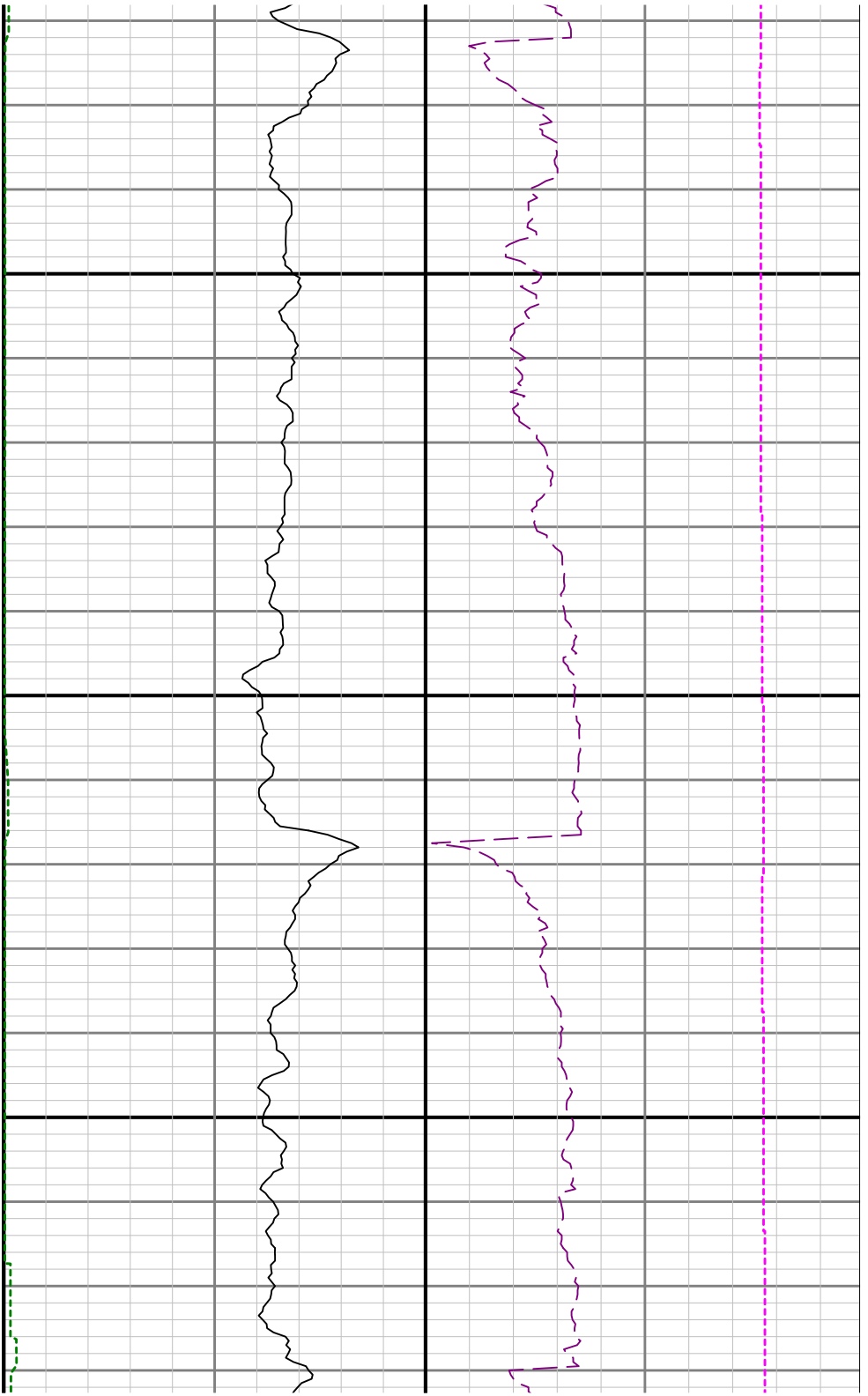
0068

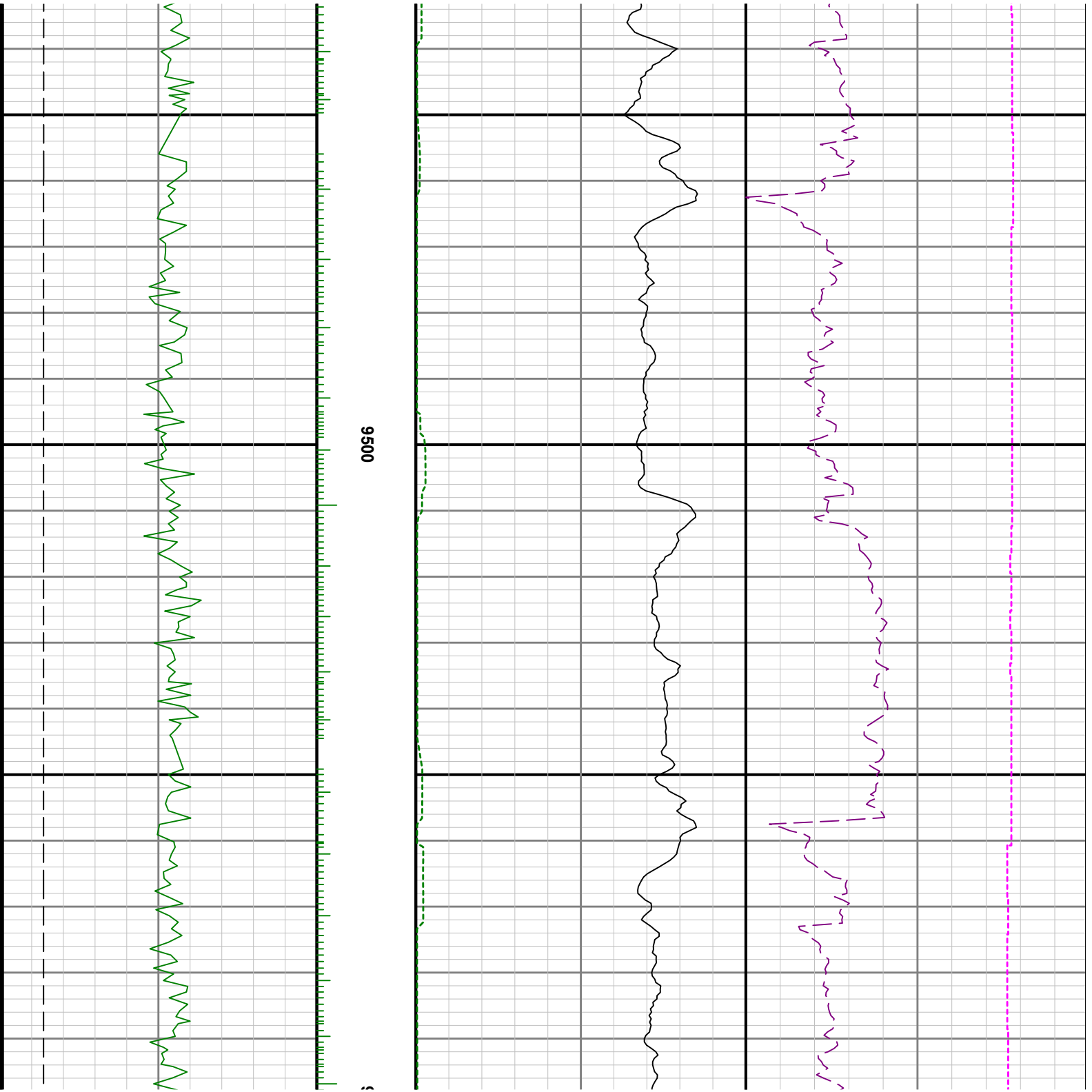


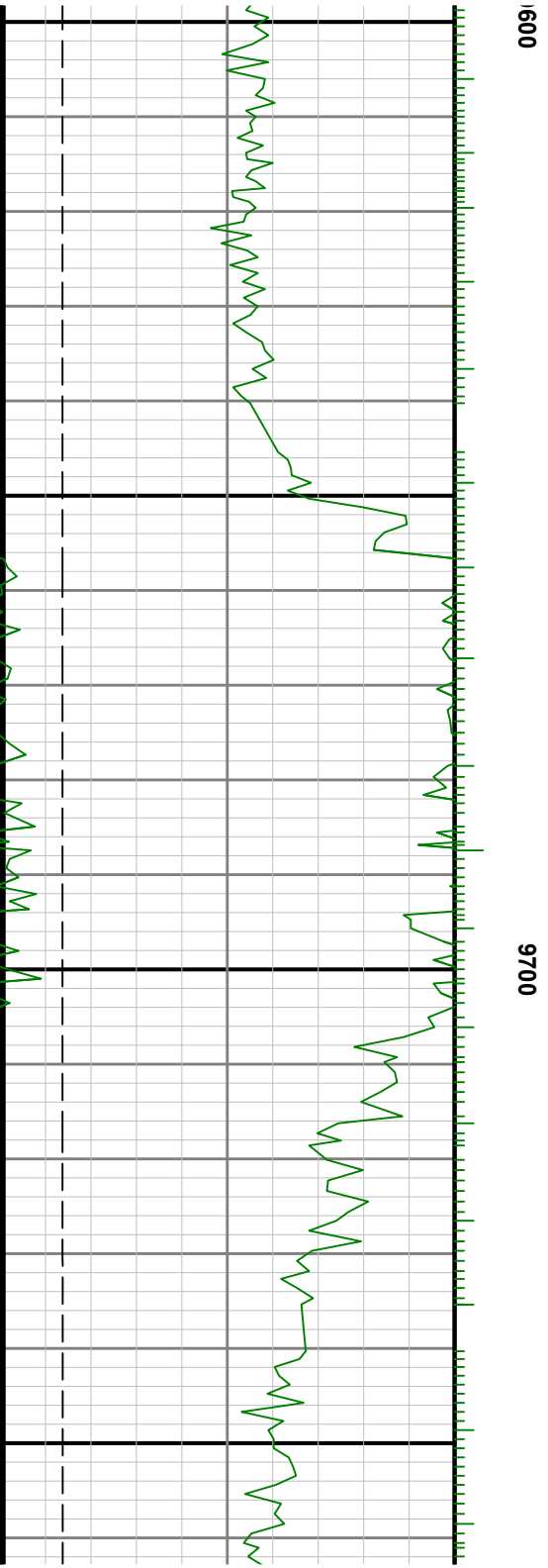
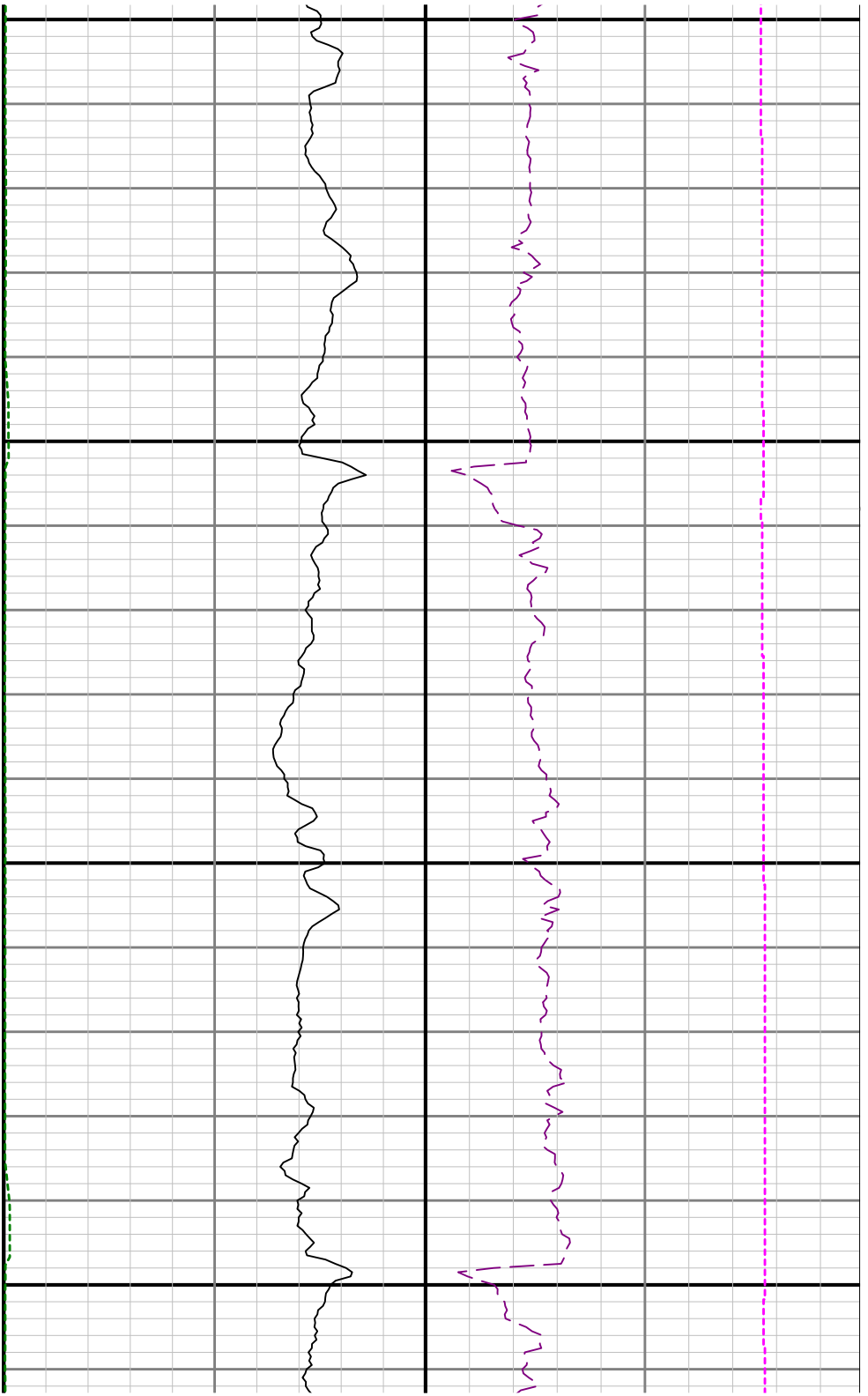


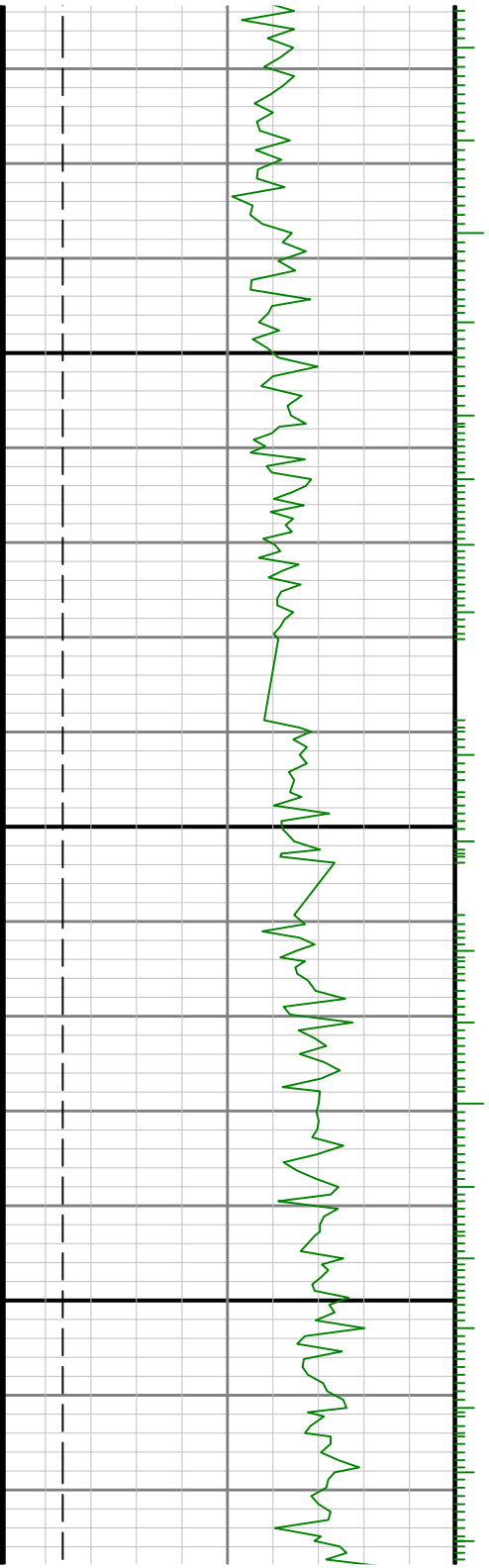












0066

0086

