

BAKER HUGHES				LWD COMPOSITE LOG									
				Multiple Propagation Resistivity Gamma Ray									
Scale:		Company: Noble Energy											
1:240 MD		Well: RILEY LD19-715											
Depth Reference:		Field: WELD COUNTY											
Driller's Depth		County: Weld County		State: Colorado									
Status:		Surface Location:				Other Services:							
Final Print		Latitude: 40° 45' 10" N				Wellbore Survey							
API No: 0512343478		Longitude: 105° 45' 00" W											
Job ID: 8132073		UTM: N/A		SEC: 19		TWN: 9N		RGE: 58W					
Permanent Datum (P.D.): Ground Level		Elevation: 4820.00 ft		KB: N/A									
Log Measured From: Rig Floor		Above P.D. 30.00 ft		DF: 4850.00 ft									
				GL: 4820.00 ft									
Dates				Interval Logged				Magnetic Field Reference					
Date From: 2016-10-15		Top: (ft) 1900.00		Azi Reference North: Grid		Dip Angle: (deg) 67.17							
Date To: 2016-10-17		Bottom: (ft) 11054.00		Total Magnetic Field Strength: (mT) 52647									
Spud Date: 2016-10-12				Mag to Reference North Correction: (deg) 6.59 E									
Borehole Record				Casing Record									
Hole Size (in)		From (ft)		To (ft)		Size (in)		Weight (lb/ft)		From (ft)		To (ft)	
13.500		30.00		1940.00		9.625		36.00		30.00		1930.00	
8.500		1940.00		10928.00									
Mud Record				Deviation Record									
Type		From (ft)		To (ft)		Hole Size (in)		Interval (ft)		Inc Az (Start)		Inc Az (End)	
Oil Based Mud		0.00		11053.64		8.500		11053.64		0.15 255.79		94.28 358.88	
Acquisition System				Software Version				Other					
Baker Hughes Cadence		RT4.0		Rig: H&P 524		Contractor: Helmerich & Payne Drilling Co							
PlotStudio		4.0.7570.8		District: HP 524		Unit: D&E							

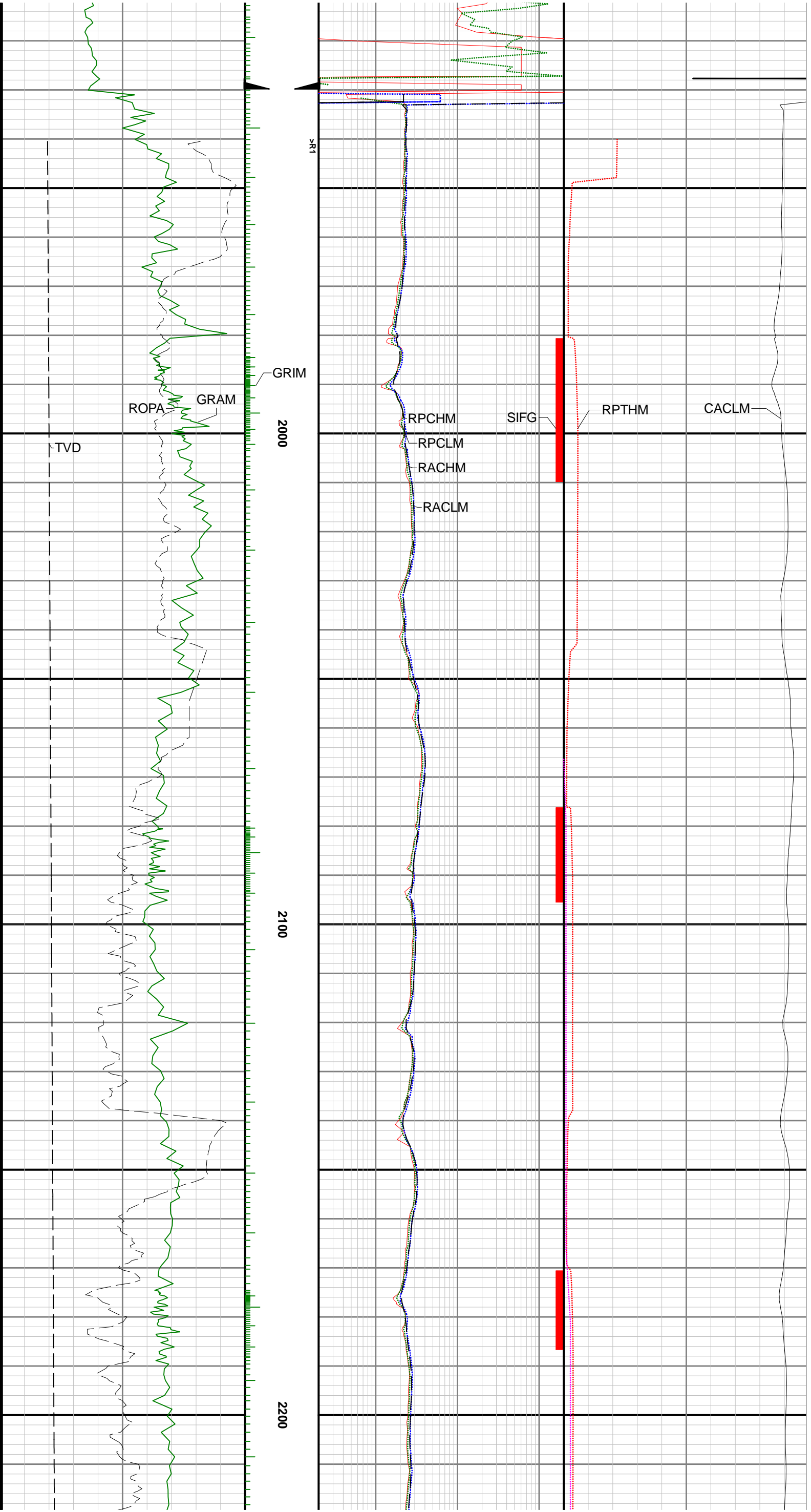
"These interpretations and analyses ("Interpretations") are opinions provided by Baker Hughes Oilfield Operations, Inc ("Baker Hughes"), based upon industry practice, empirical relationships, assumptions and measurements, (many of which may be provided by the customer). The Interpretations are not infallible and may be subject to different opinions. Vjwu."Dcmgt"JwiJgu"fqgu"pqv"ycttcpv"vjgkt"ceewtce{."eqttgevpguu."qt"eqorngvgpguu."qt"vjcv"vjg"ewuvqogtøu"cpflqt"cp{"vjktf"rctv{øu"tgnkcpeg"qp"uwej"Kpvgtrtgvcvkqpu"yknn"ceeqornkuj"cp{"rctvkewnct"tguwnvu0"Vjg"ewuvqogt"cuuwogu"hwnn"responsibility for the use of the Interpretations and for decisions based thereon and the customer agrees to release, defend and indemnify Baker Hughes, its parent, subsidiaries and affiliated or related entities, and subcontractors, together with its and their officers, directors, employees, agents and invitees against, any and all claims, losses, damages, or expenses sustained by the customer or any third party arising out of reliance upon or use of the Interpretations, without regard to the cause(s) thereof, including without limitation any form of negligence on the part of Baker Hughes. Unless other contract terms have been agreed to by the parties, each party's liabilities and qdnkicvkqpu"ujcnn"dg"iqxgtpgf"d{"Dcmgt"JwiJgu"Kpeqtrqtcvvgføu"Yqtnfykfg"Vgtou"cpf"Eqpfkvkqpu0\$""

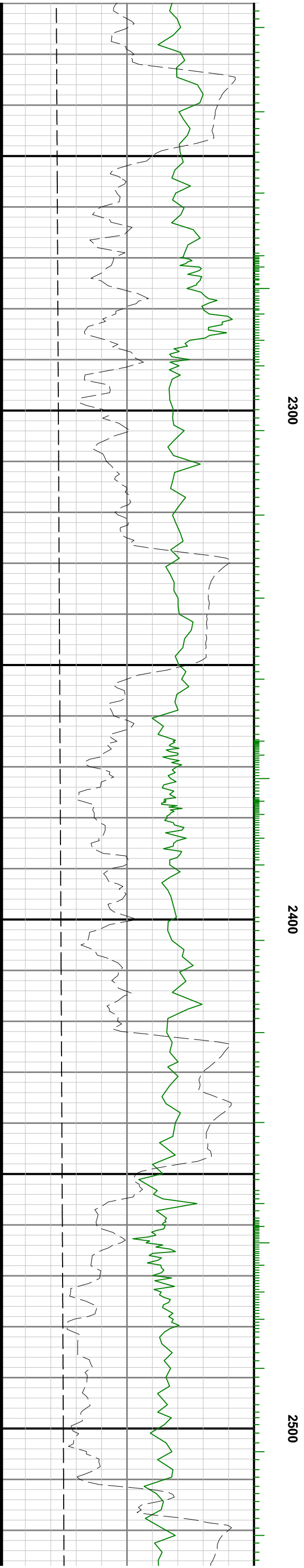
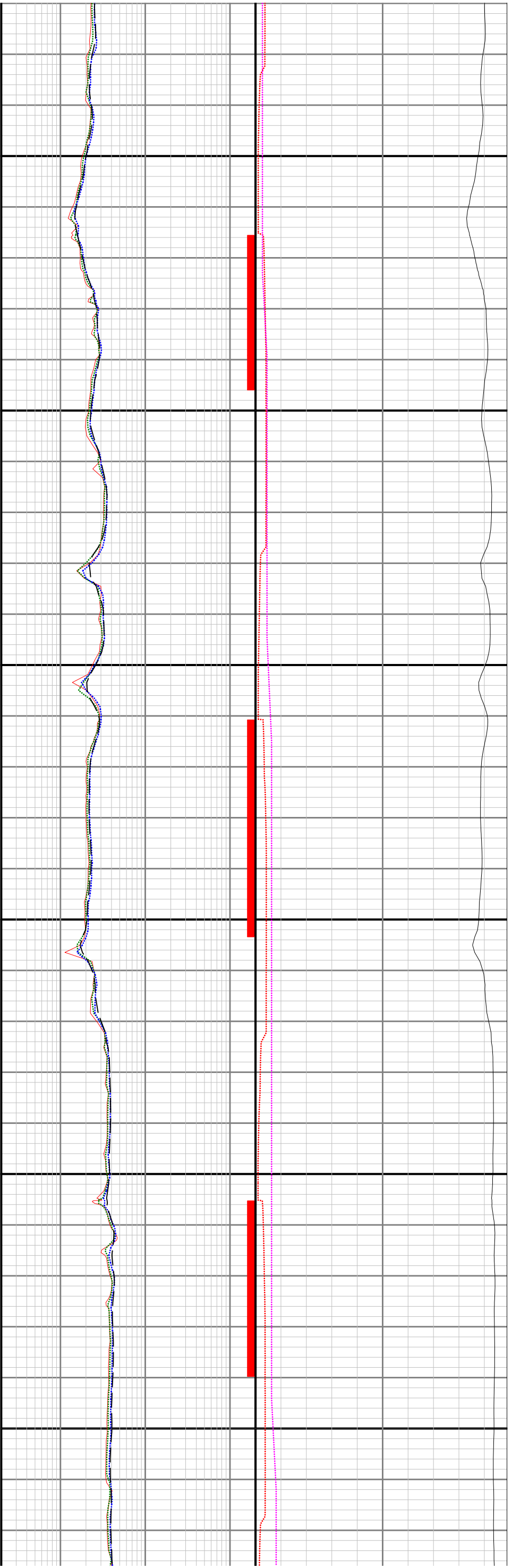
Log Run Summary												
Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top (ft)	Bottom (ft)	From (ft)	To (ft)	Start Logging	End Logging	
1	1	8.500	PDC	2.00	Motor	1877.62	7286.53	1940.00	7344.88	2016-10-13 22:46	2016-10-15 14:05	39.92
2	2	8.500	PDC	2.00	Motor	7288.74	10996.00	7344.88	11052.00	2016-10-15 21:42	2016-10-18 02:36	45.32

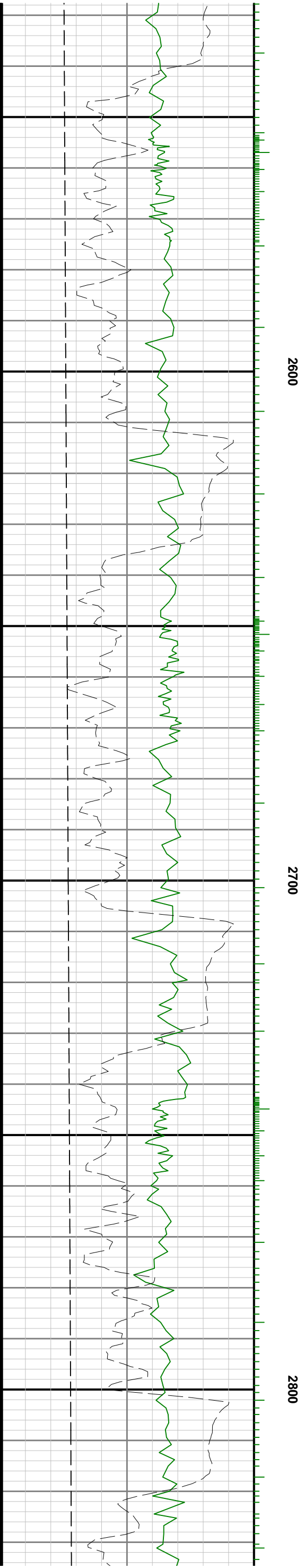
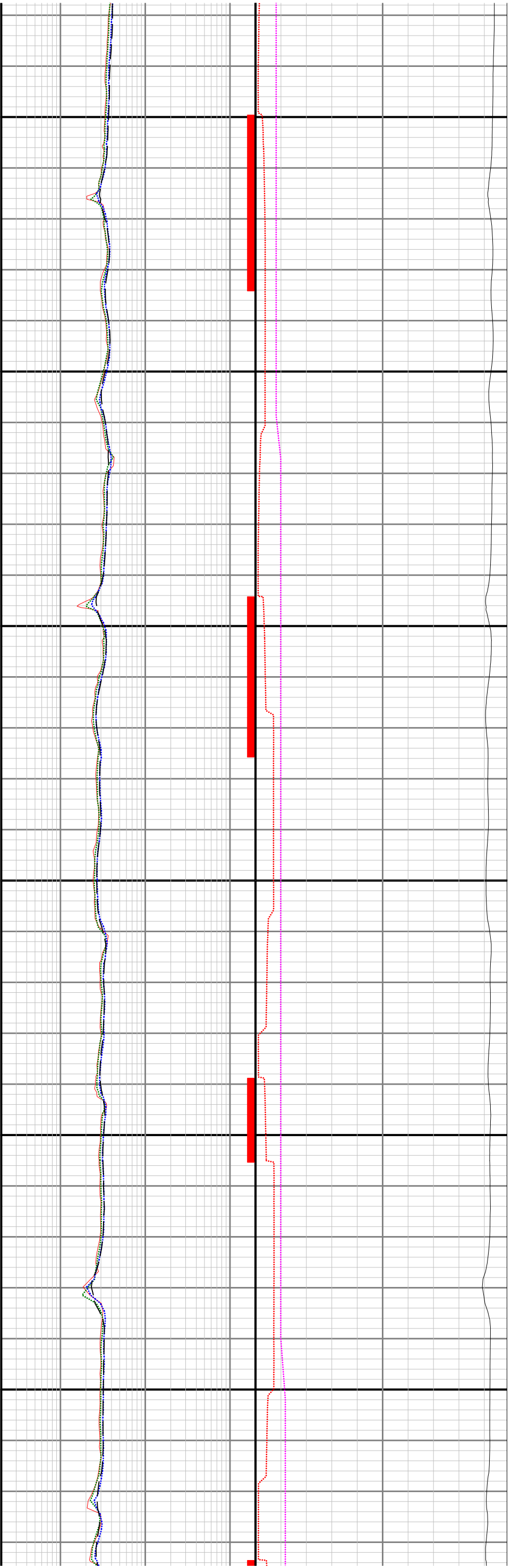
Crew											
Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Adam Slaght		2016-10-12	2016-10-18	Justin Leach		2016-10-12	2016-10-18	Matthew Leopold		2016-10-12	2016-10-18
Steven Cano		2016-10-12	2016-10-18								

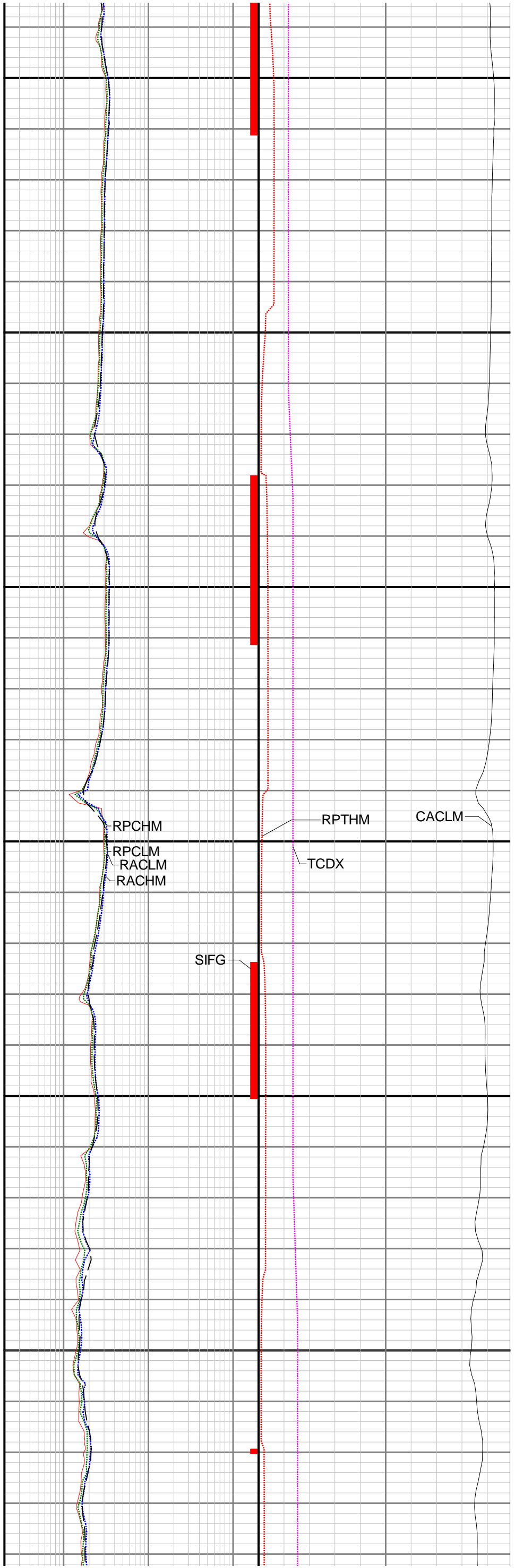
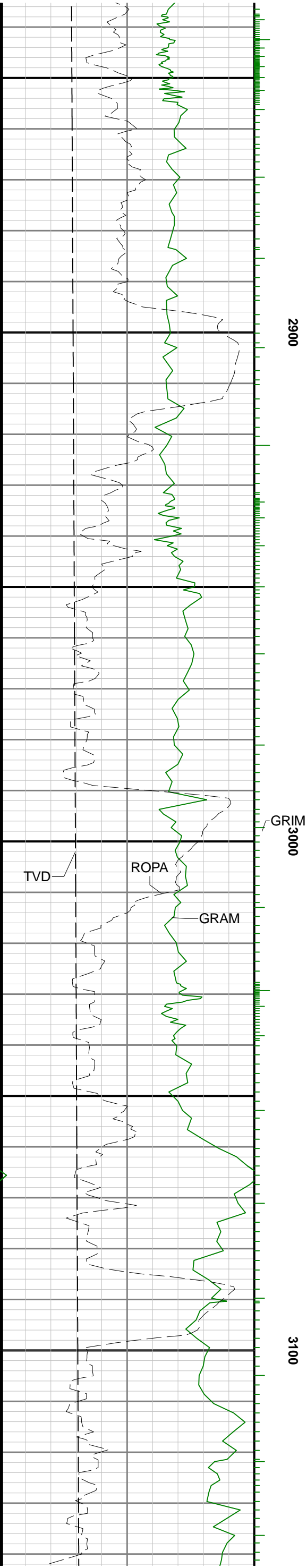
Mud Properties Record											
Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2016-10-13 01:35	1	1940.00	Oil Based Mud	9.8	11	N/A	22.0	81.4/18.6	Active Pit	21866	0.00
2016-10-14 10:54	1	4032.42	Oil Based Mud	9.3	9	N/A	24.0	80.9/19.1	Active Pit	23000	0.00
2016-10-14 18:15	1	5445.48	Oil Based Mud	9.3	8	N/A	22.0	83.3/16.7	Active Pit	22500	0.00
2016-10-15 08:00	1	6676.51	Oil Based Mud	9.2	8	N/A	18.0	83.2/16.8	Active Pit	25000	0.00
2016-10-15 18:35	2	7343.00	Oil Based Mud	9.2	8	N/A	18.0	83.2/16.8	Active Pit	25000	0.00
2016-10-16 06:00	2	7615.18	Oil Based Mud	9.2	8	N/A	17.6	84.4/15.6	Active Pit	24000	0.00
2016-10-17 06:05	2	9873.13	Oil Based Mud	9.3	9	N/A	18.0	84.3/15.7	Active Pit	23000	0.00

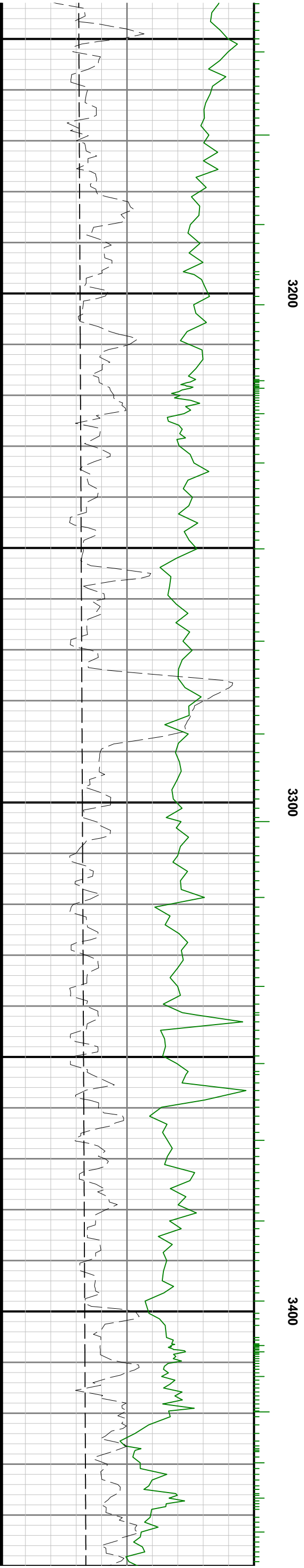
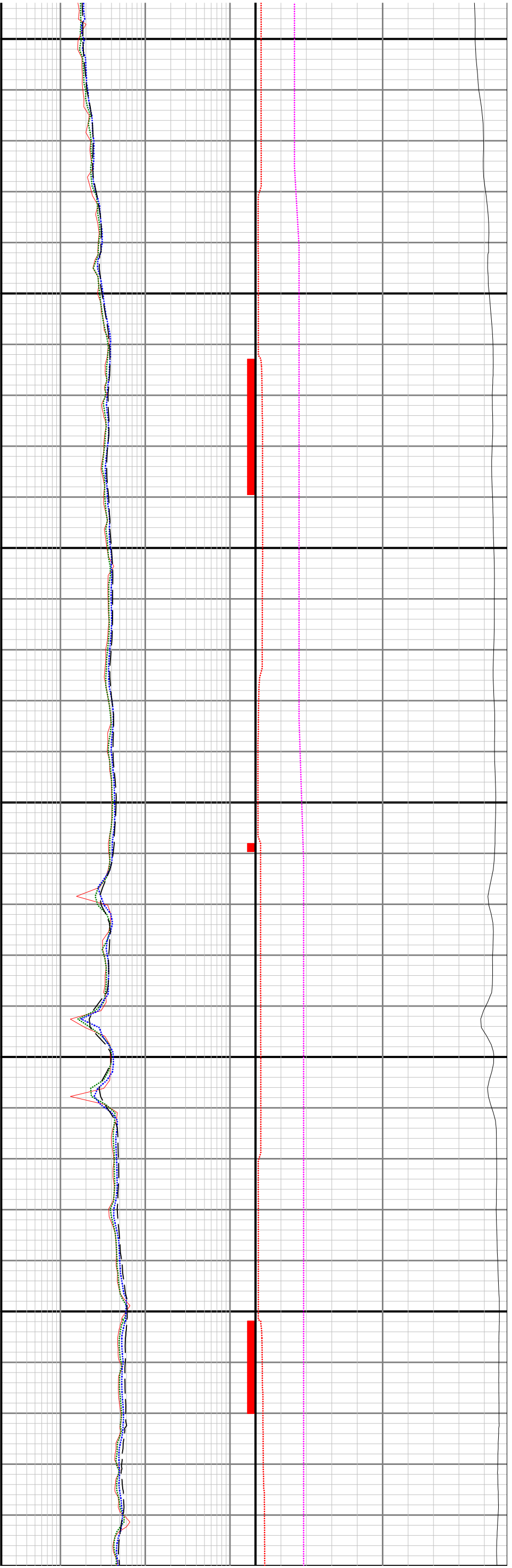
Mud Resistivity Record				Surface				Downhole			
Date / Time	Run No.	Measured Depth (ft)	Surface Temp (degF)	Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)	BHCT (degF)	Rm @ BHCT (ohm.m)	Rmf @ BHCT (ohm.m)	Rmc @ BHCT (ohm.m)	
2016-10-13 06:13	1	1940.00	79.0	100.000	100.000	100.000	96.0	100.000	100.000	100.000	

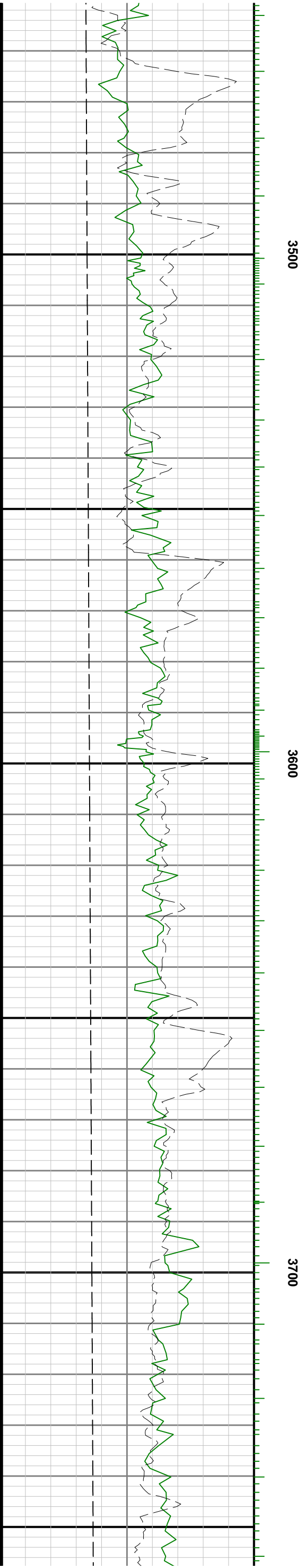
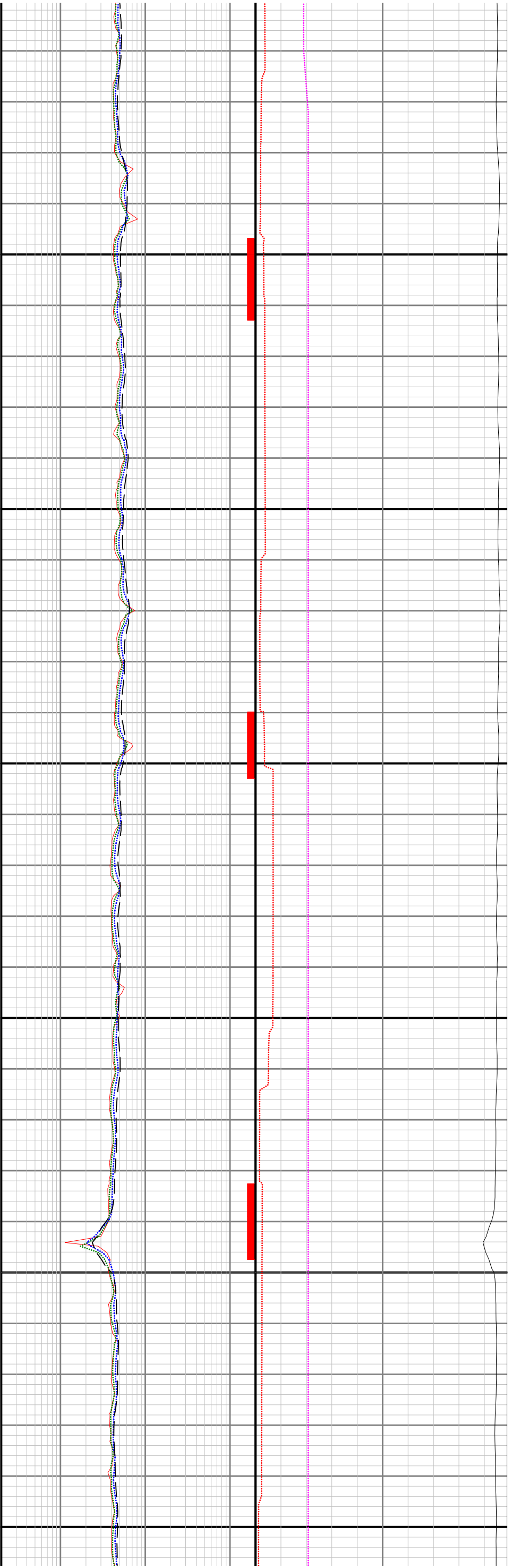


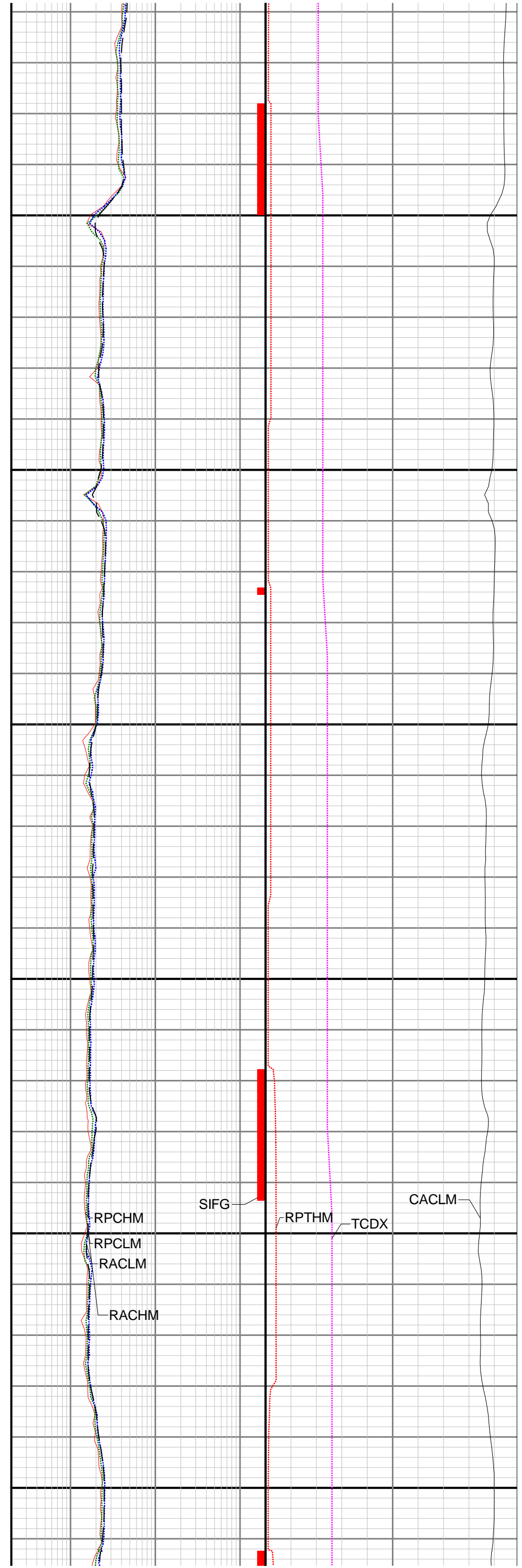
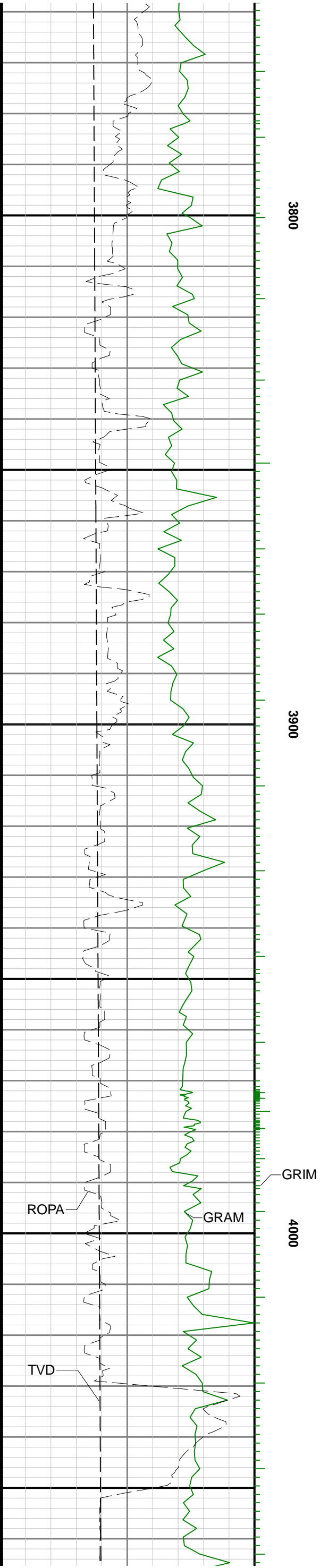


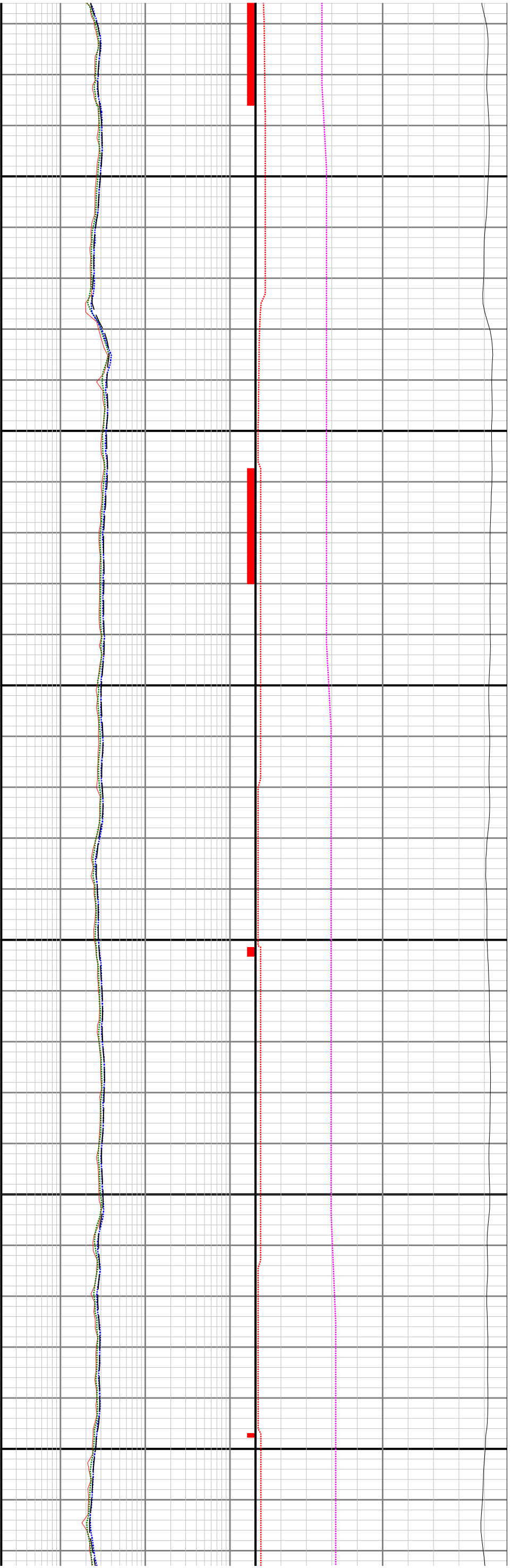


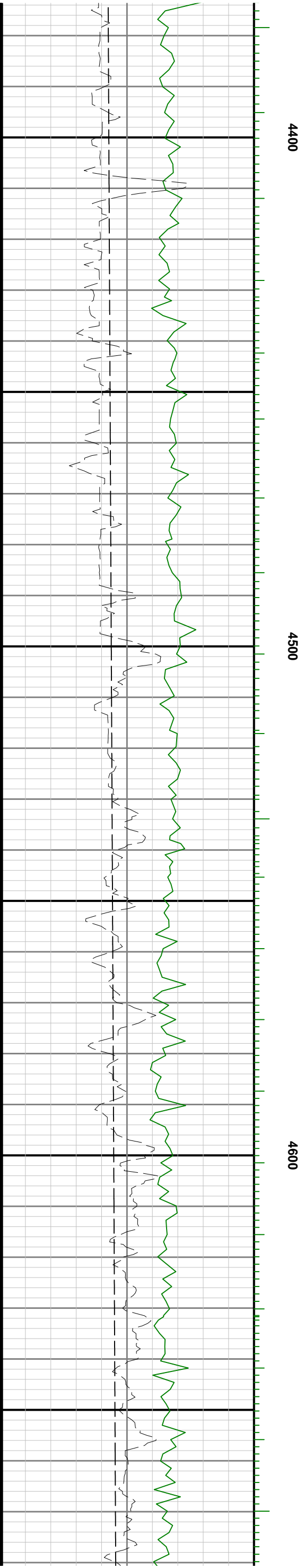


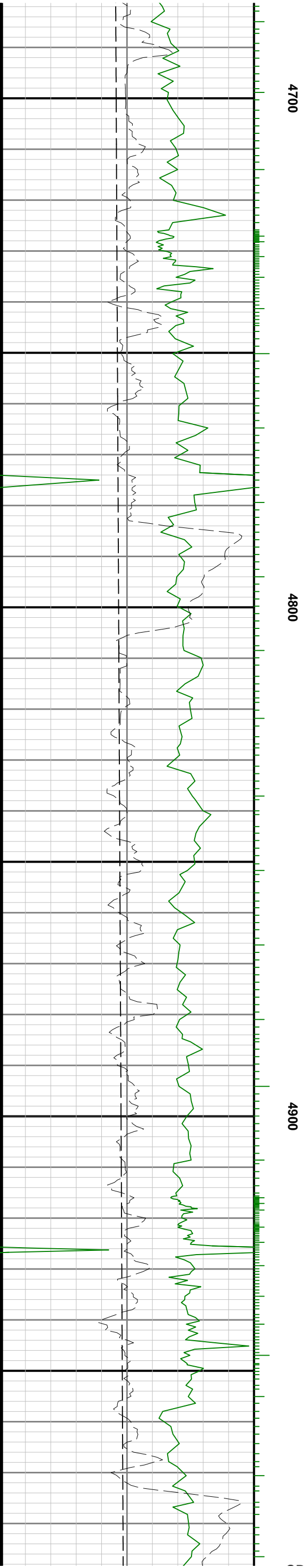
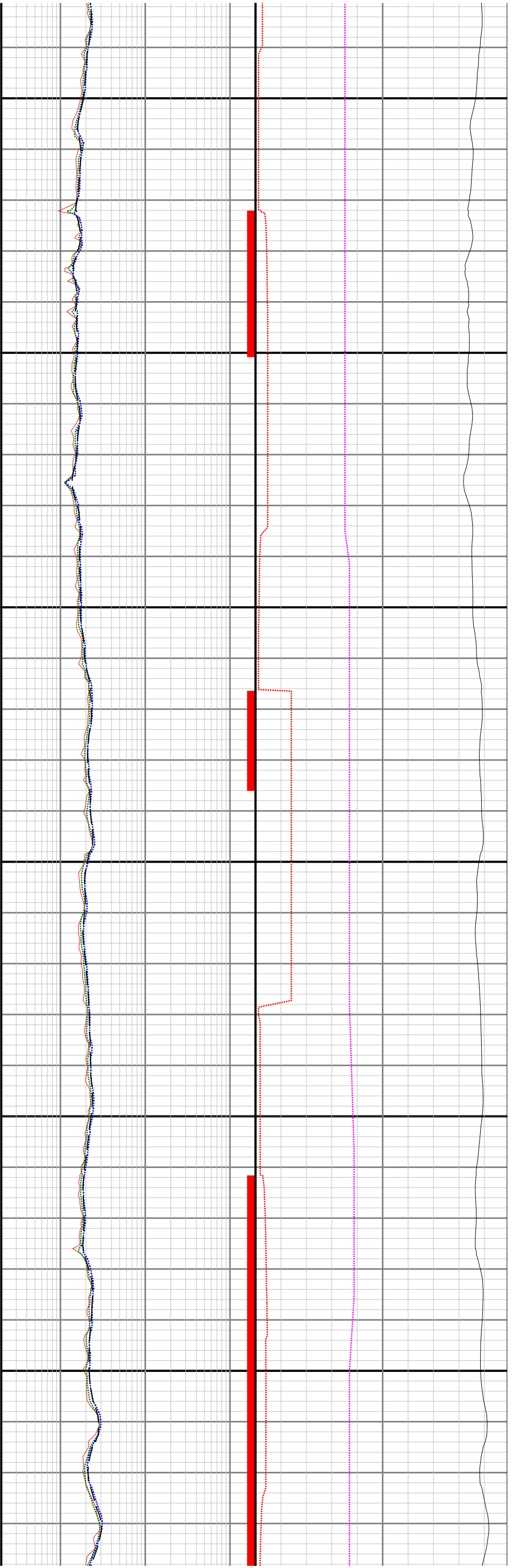


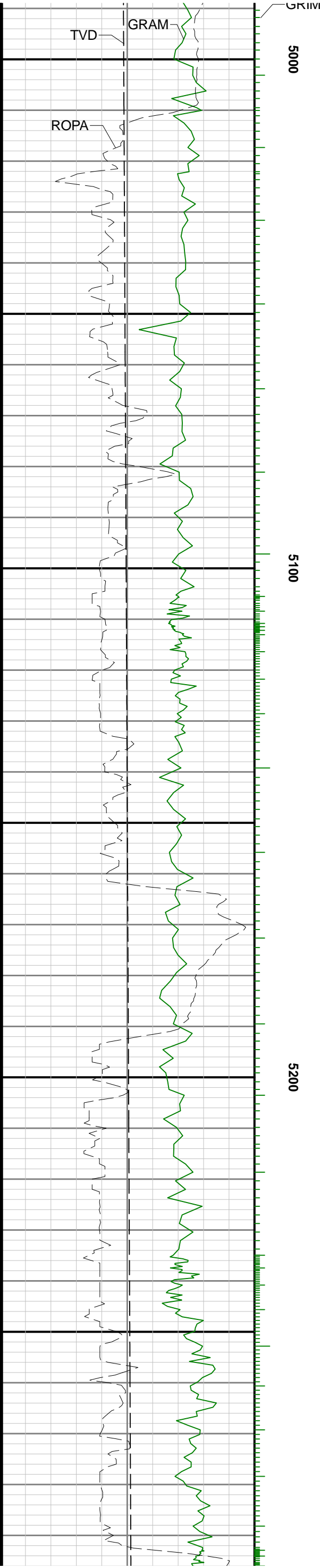


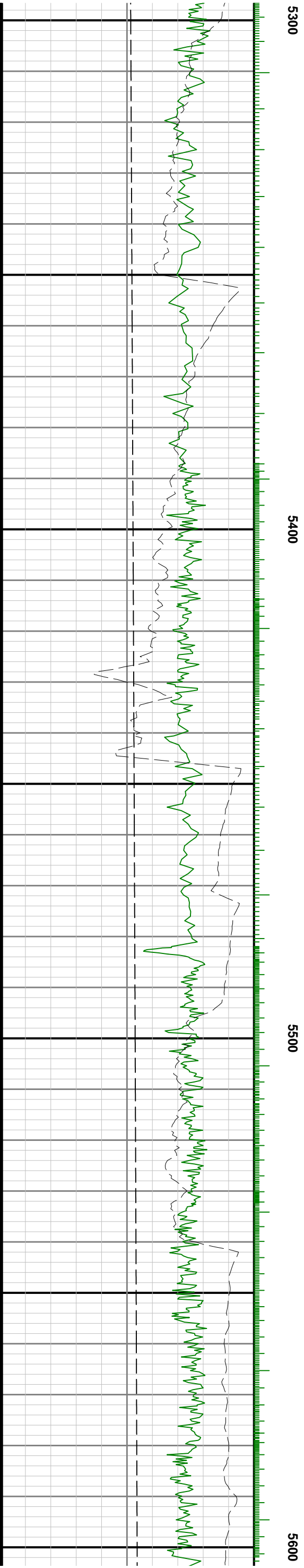


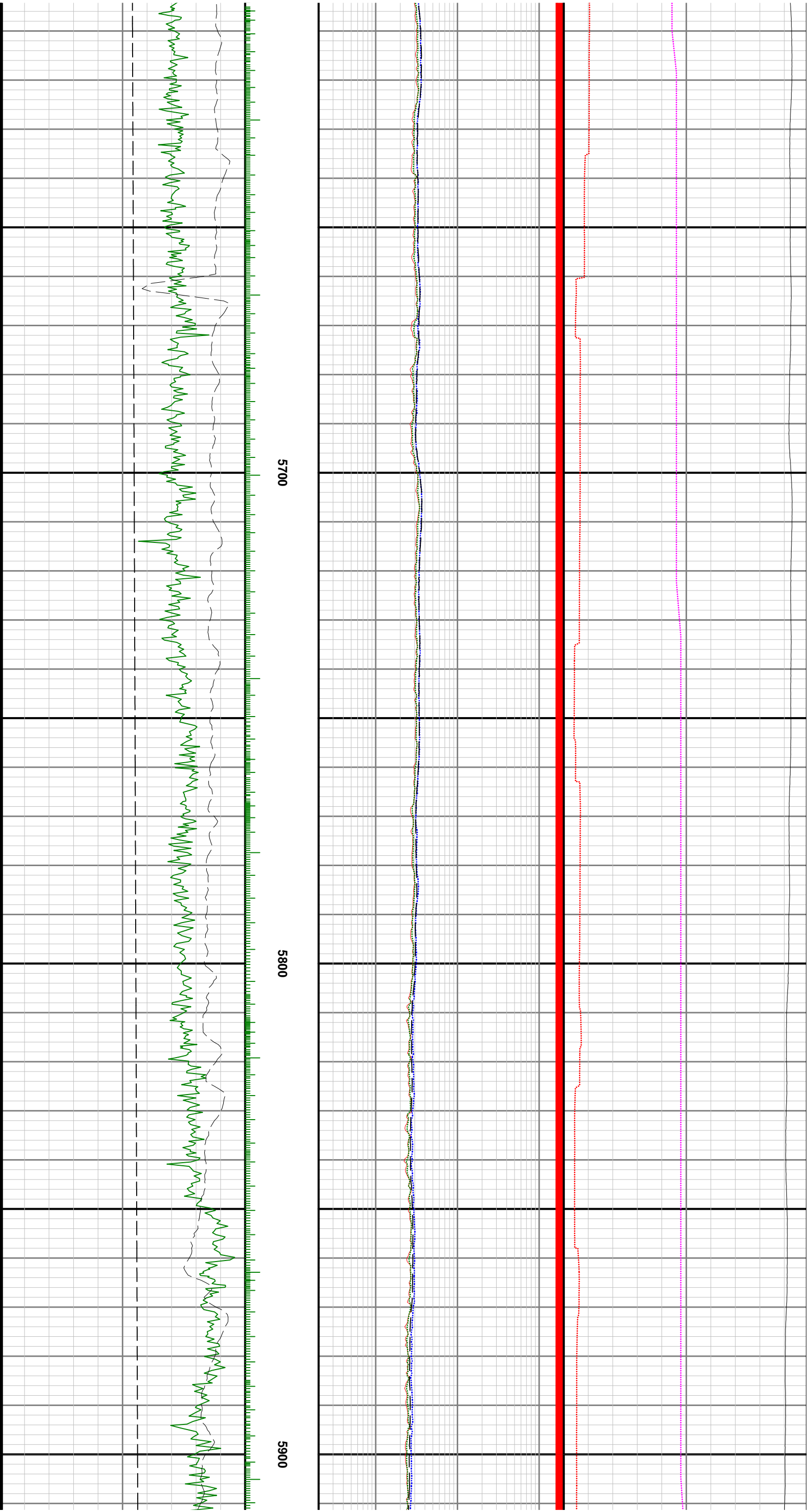


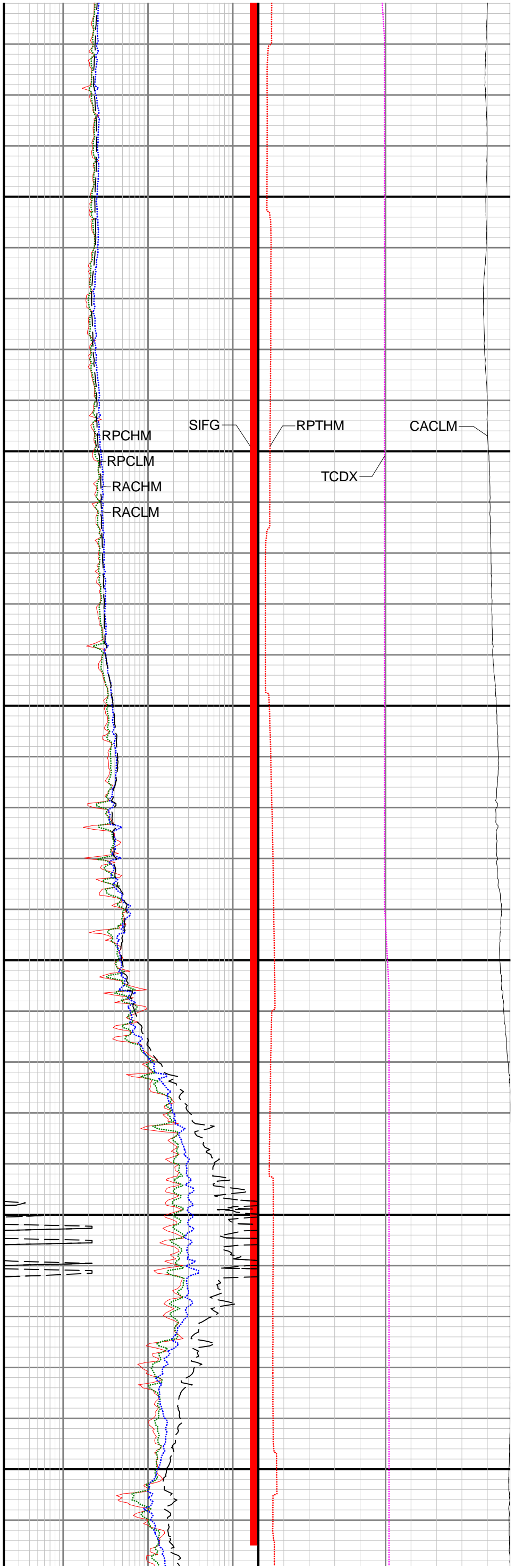
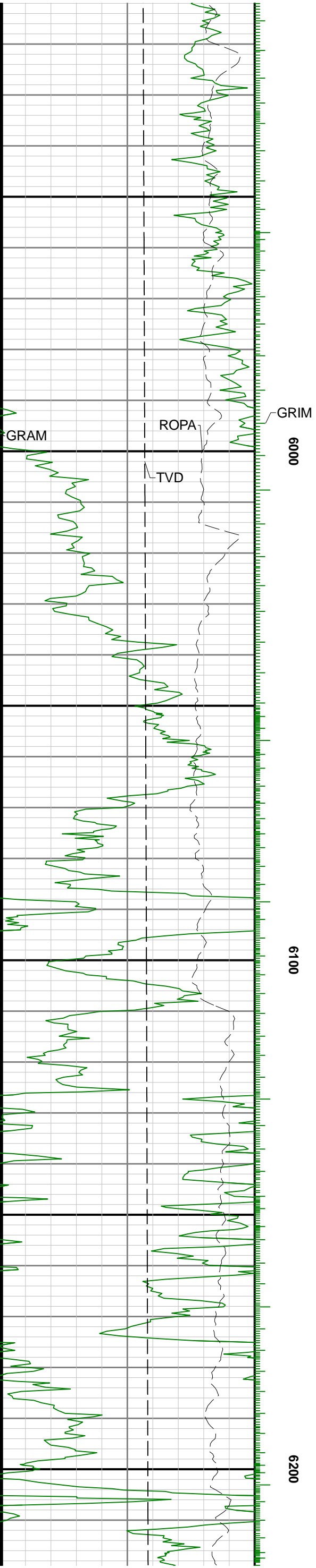


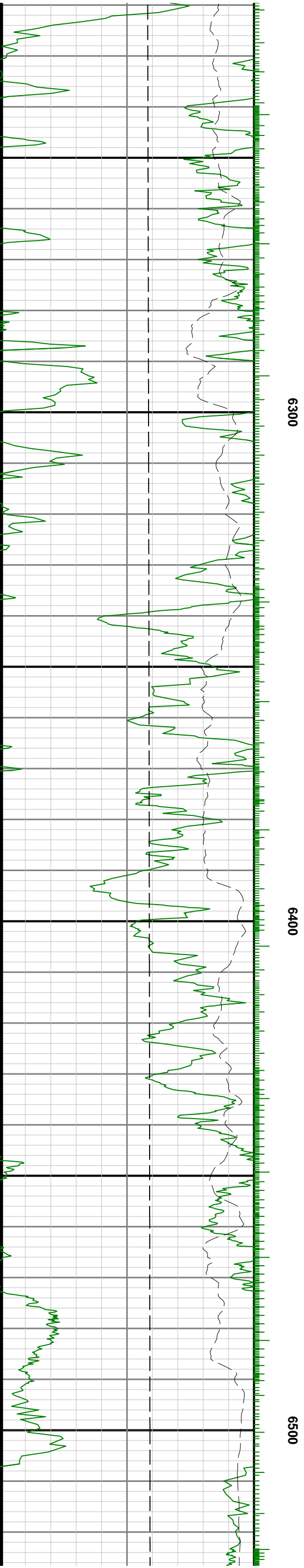


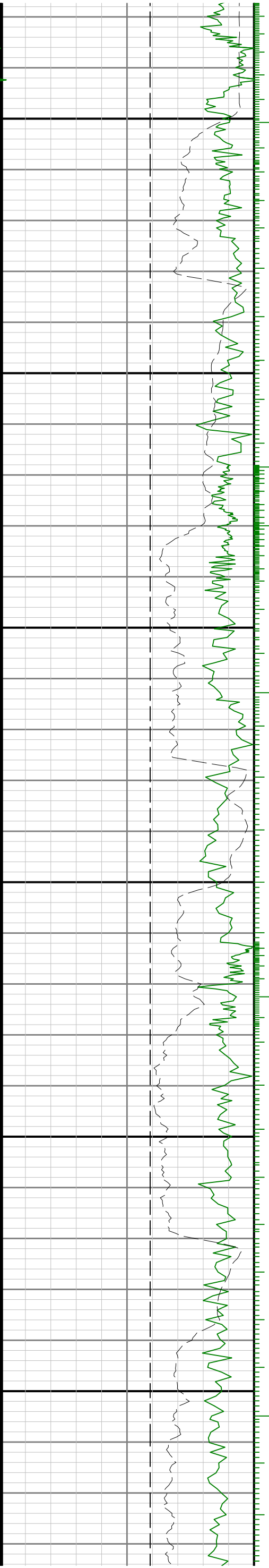








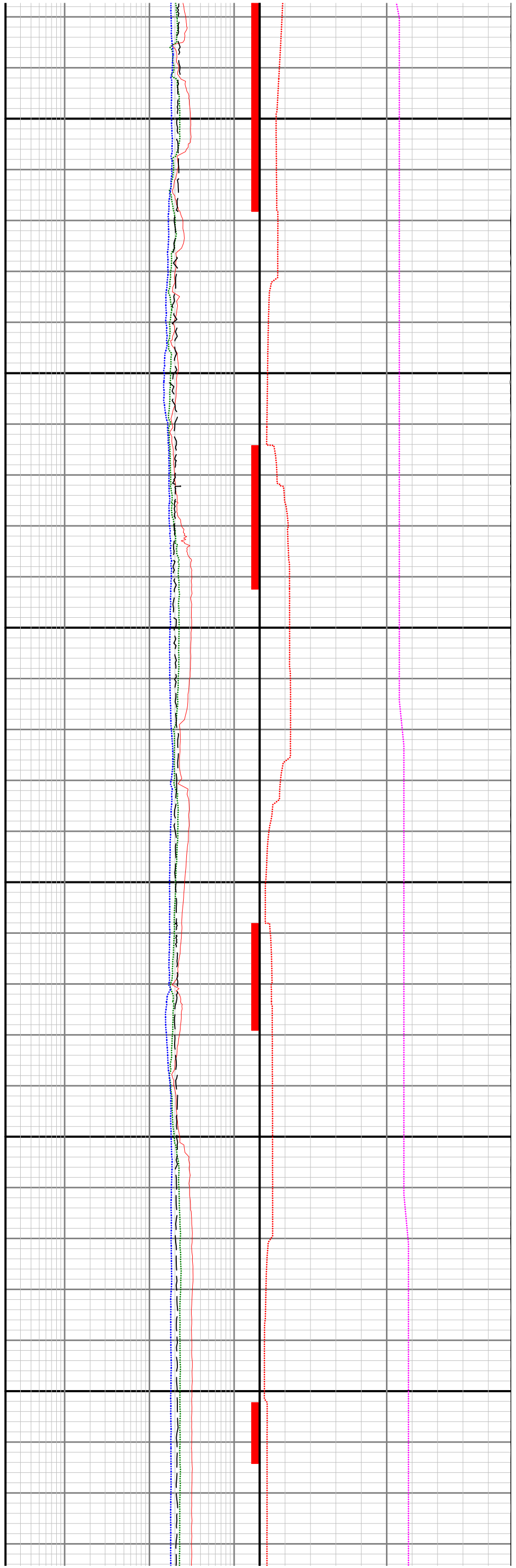


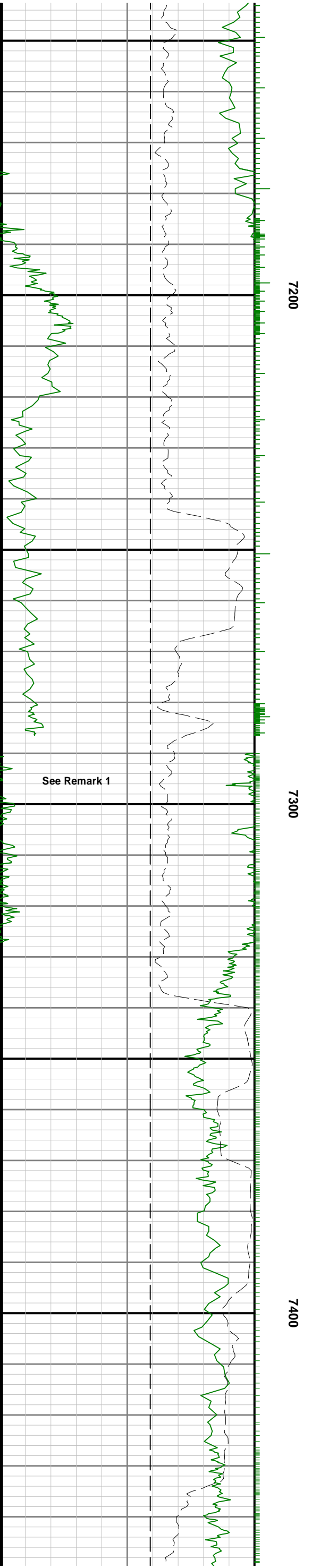
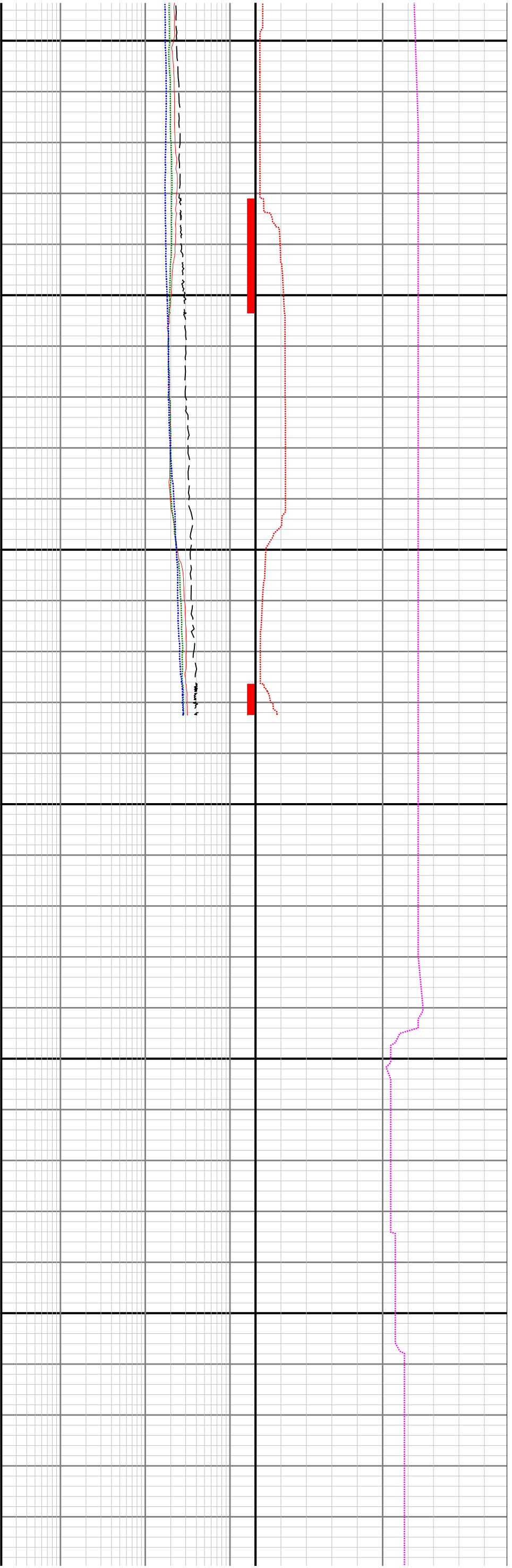


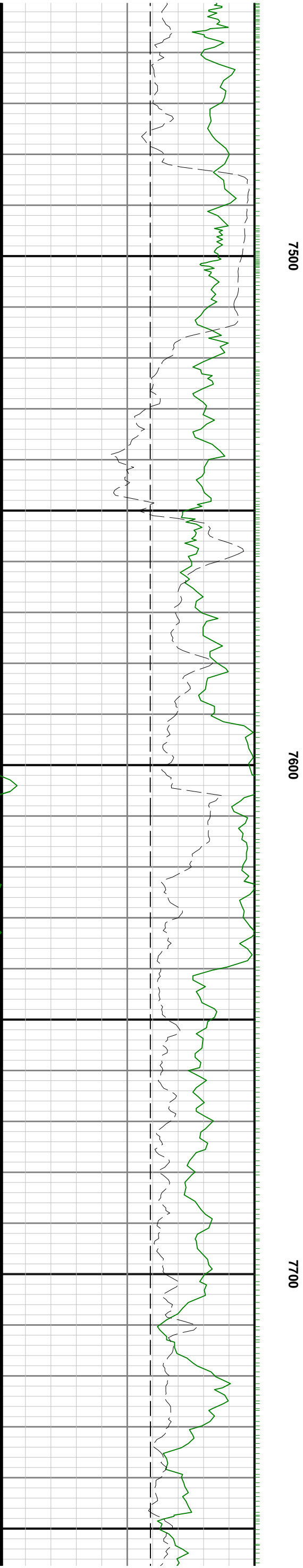
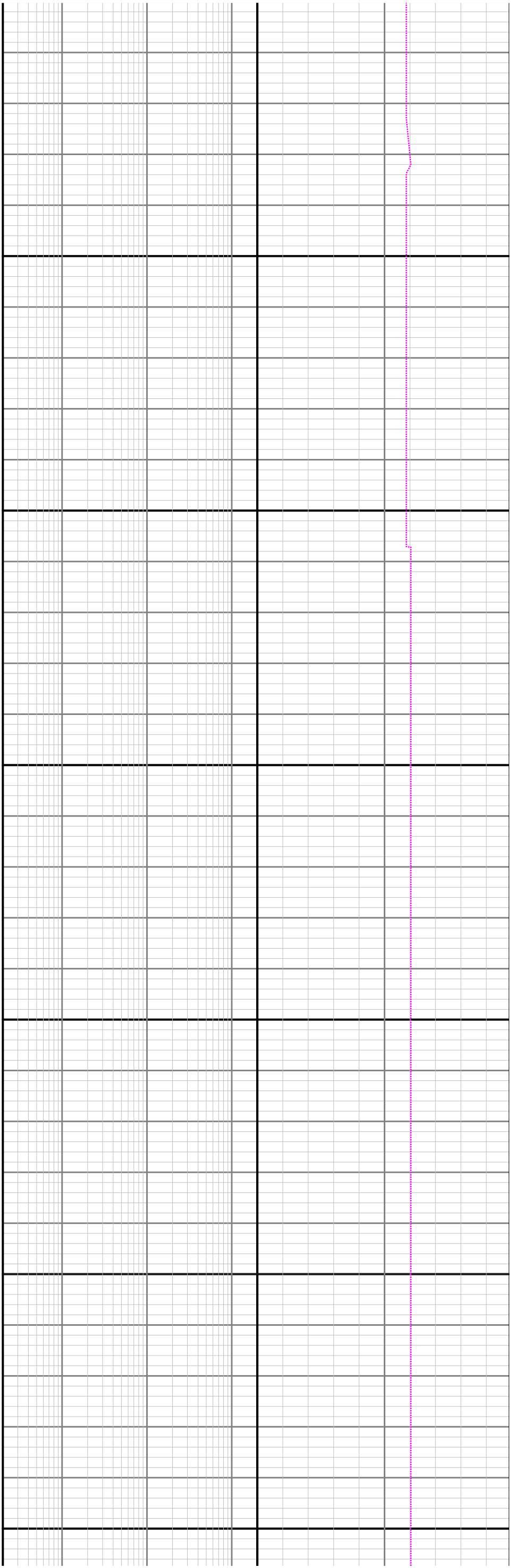
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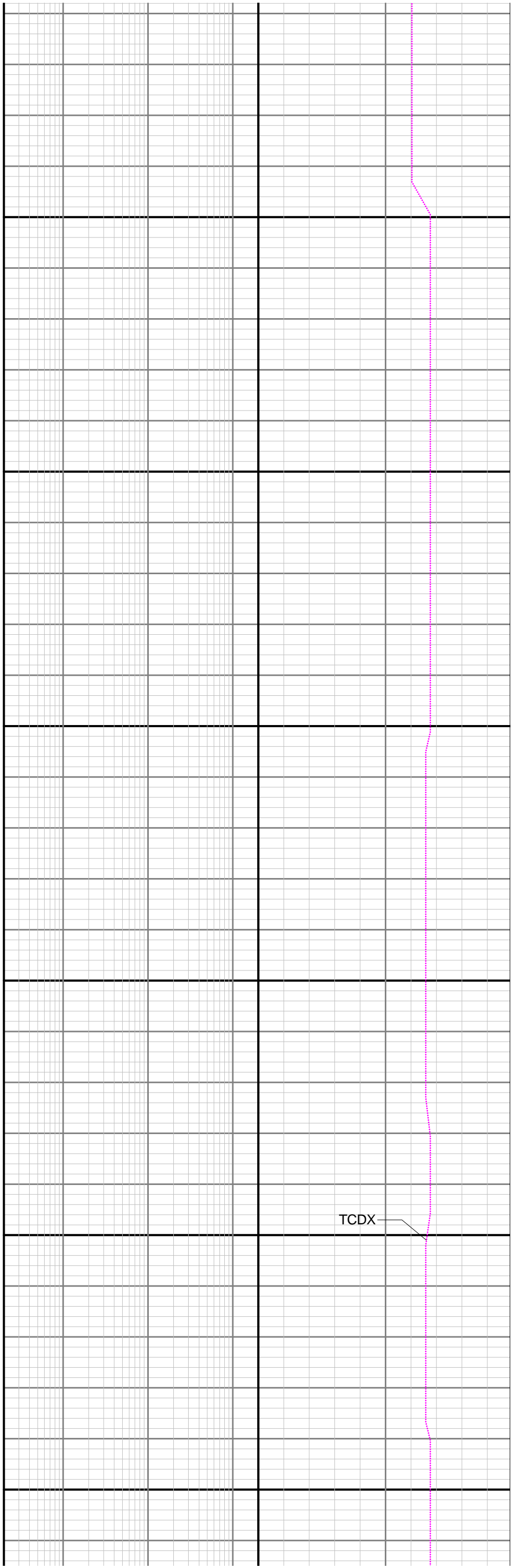
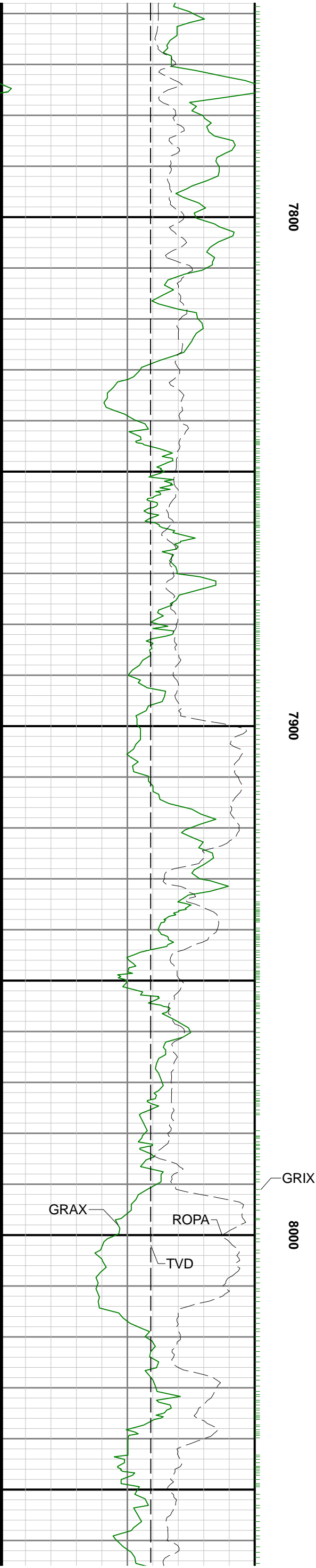
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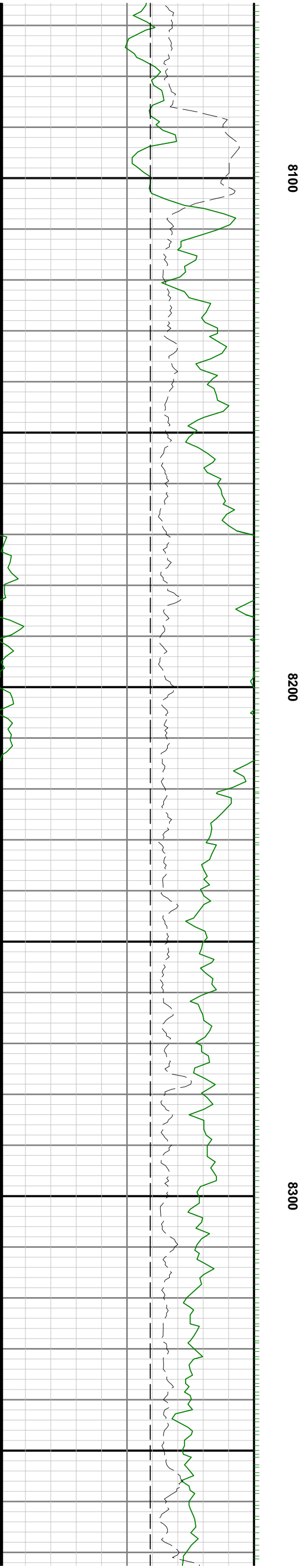
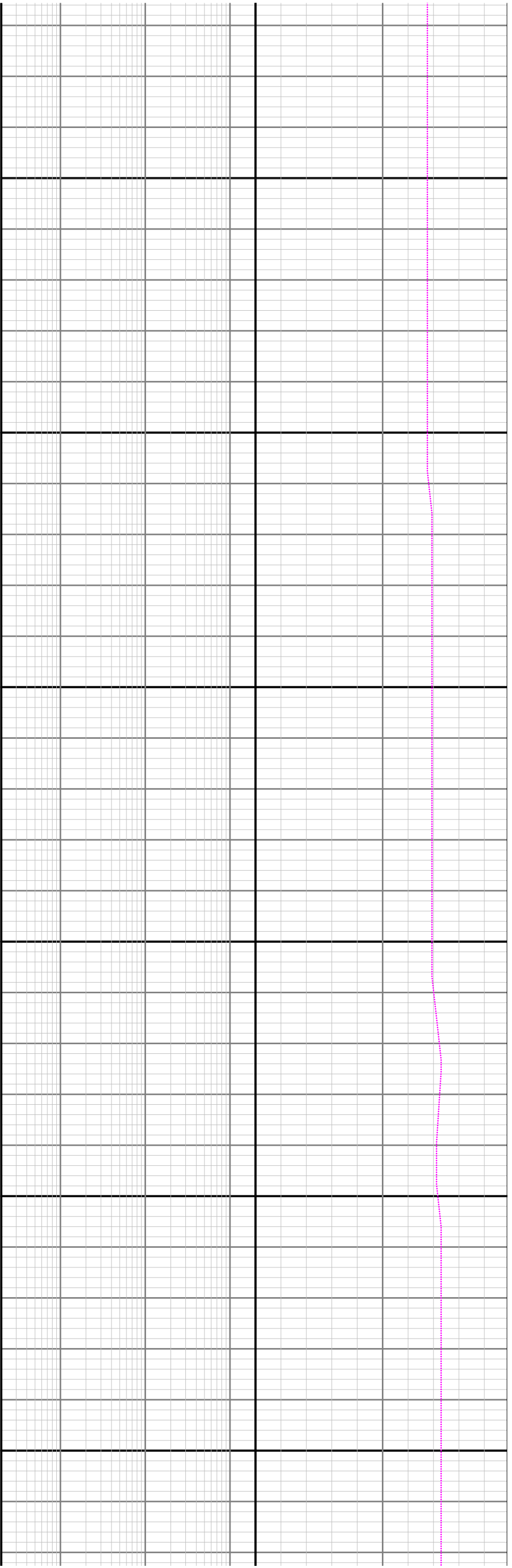
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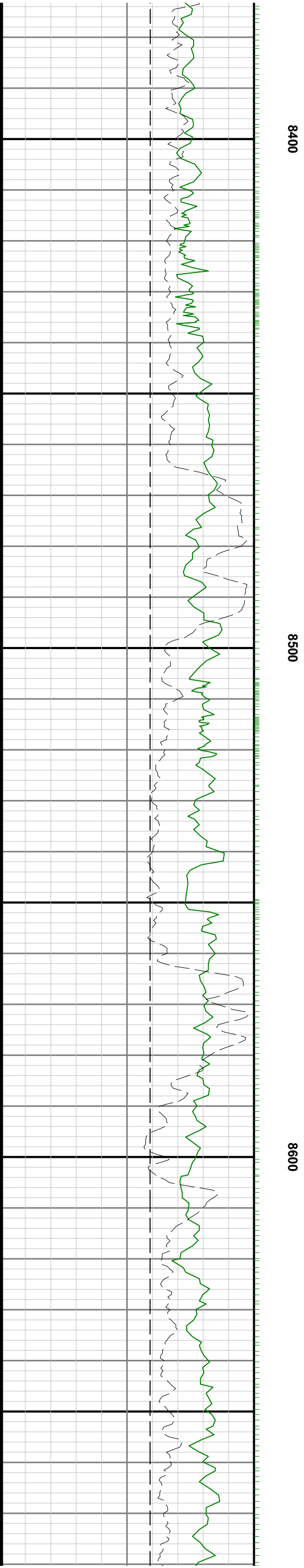
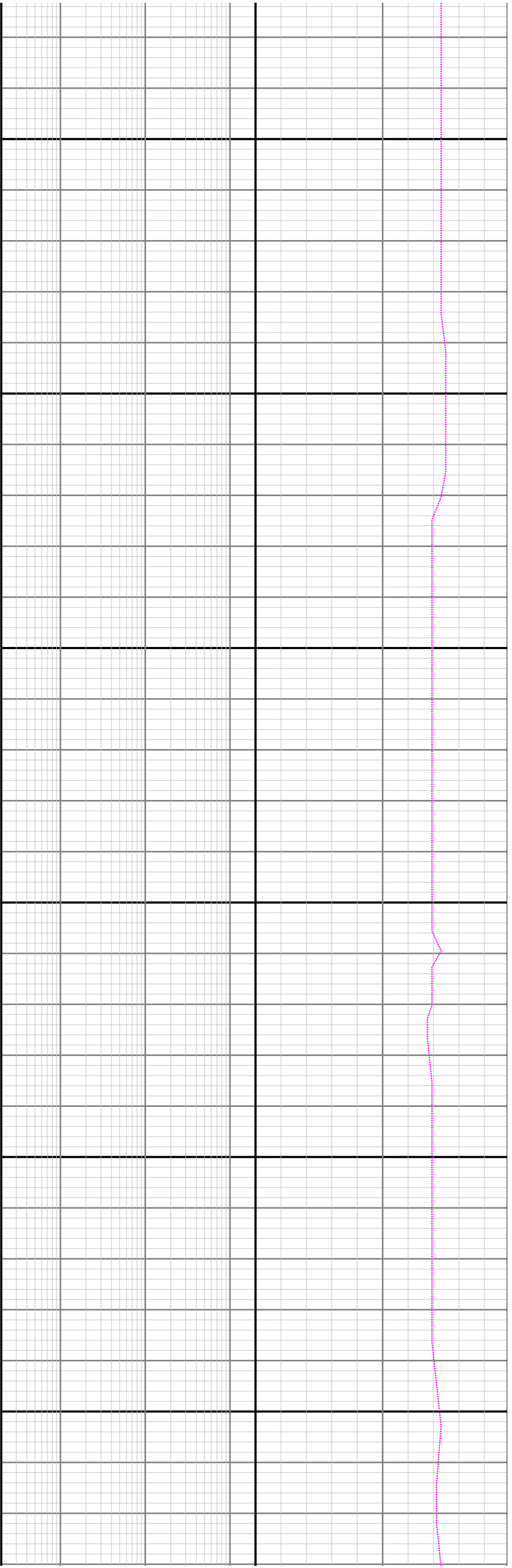


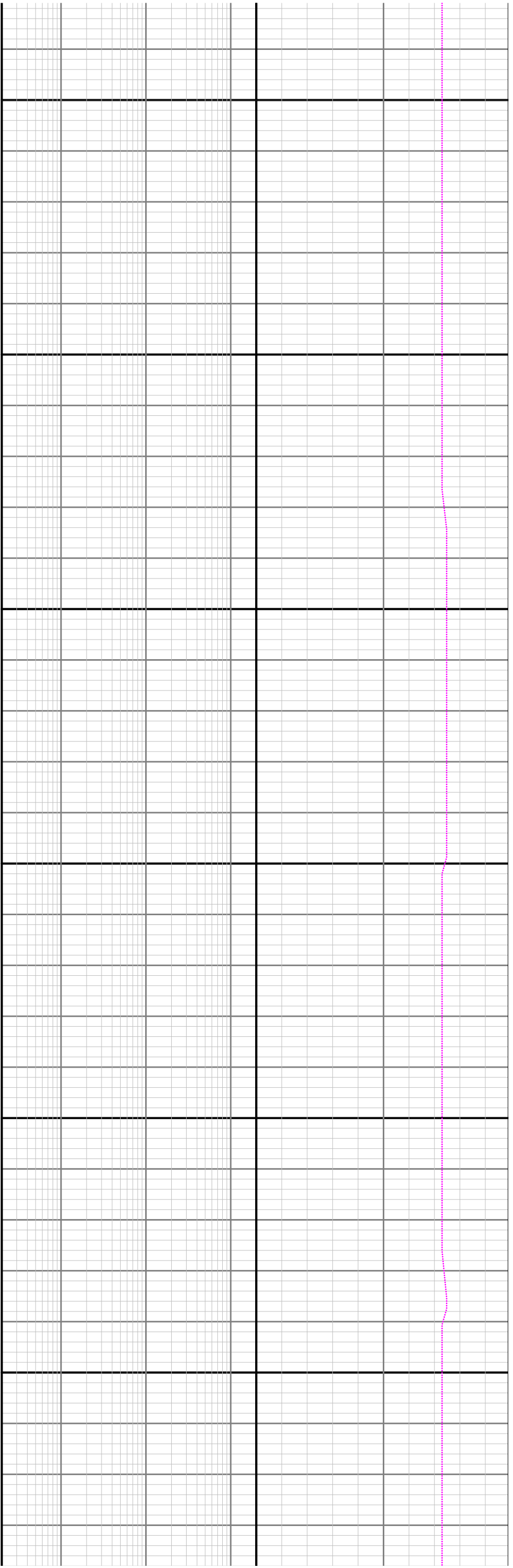
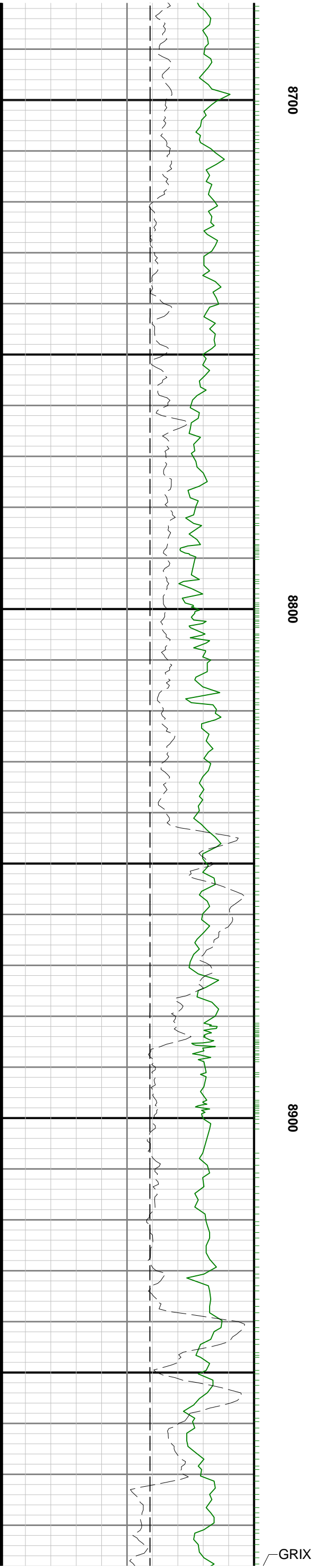


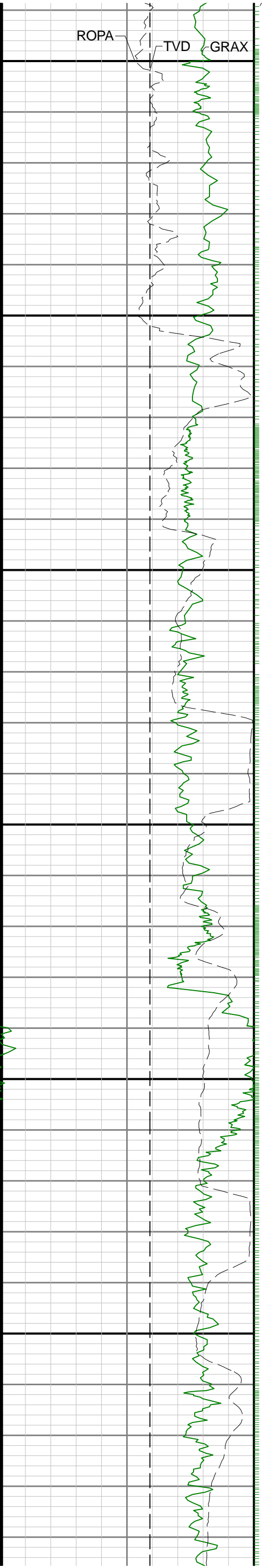








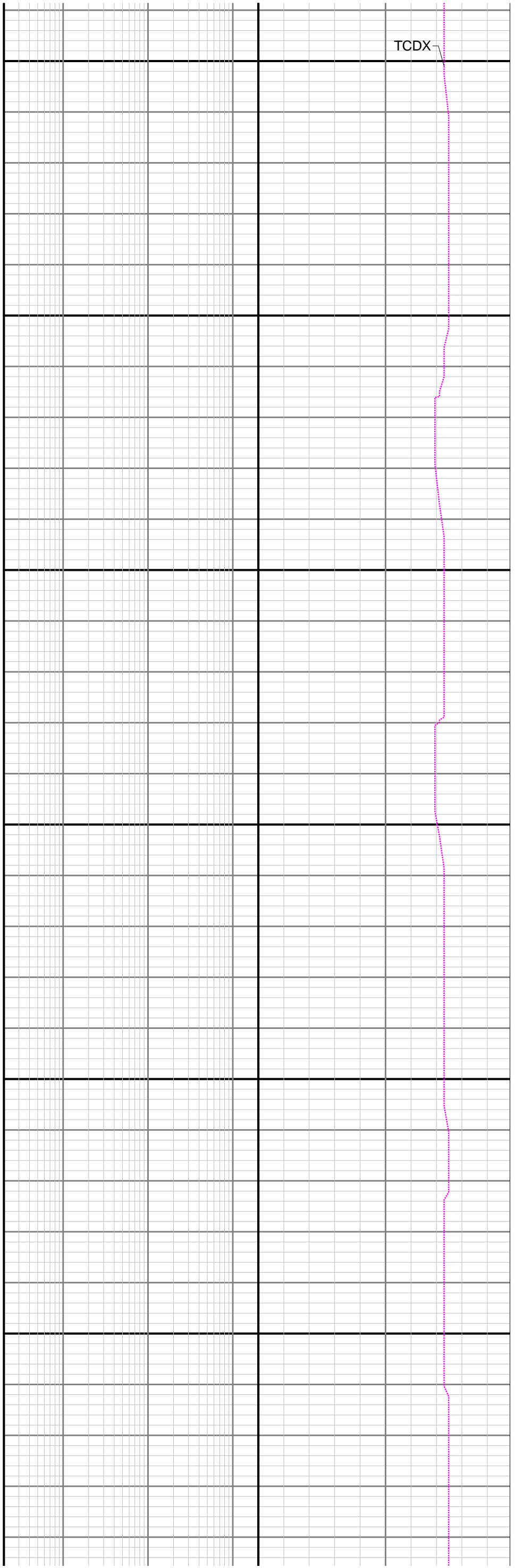




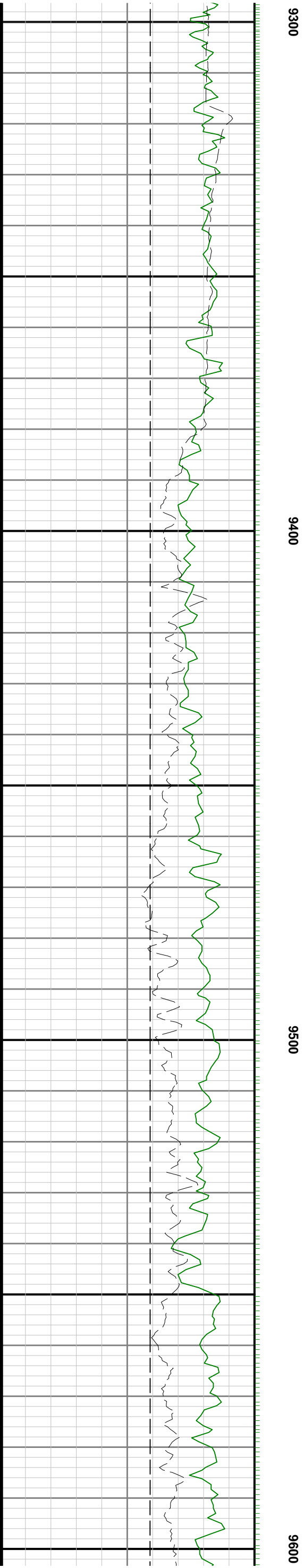
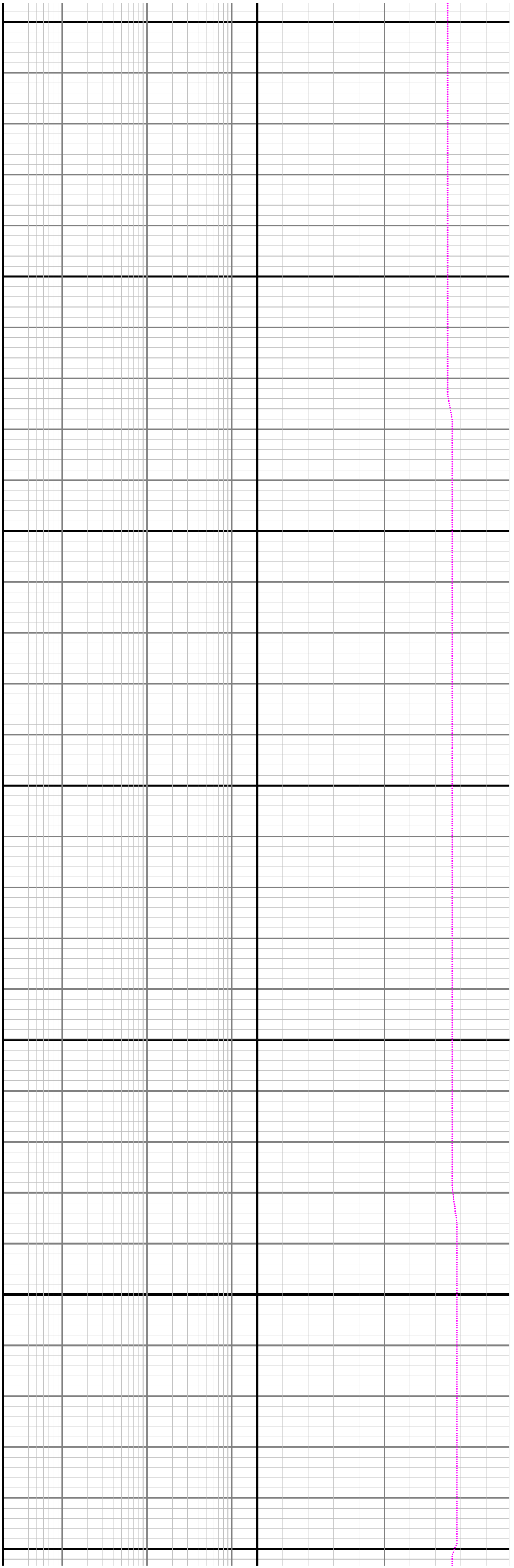
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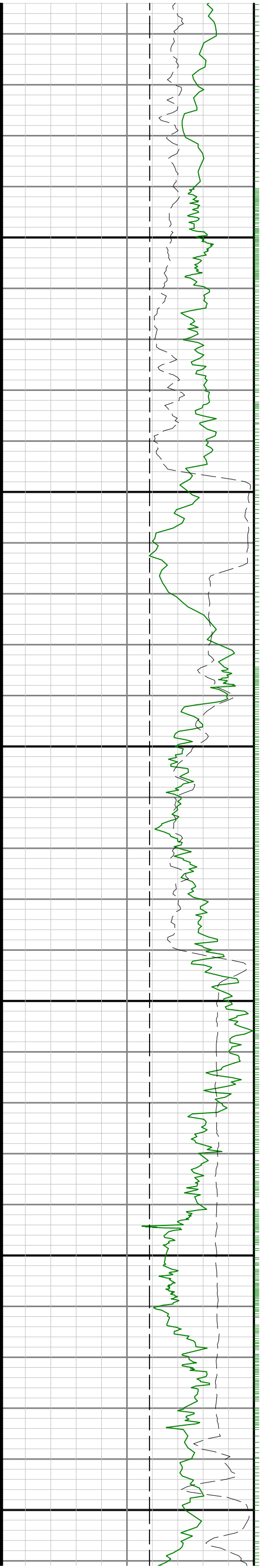
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