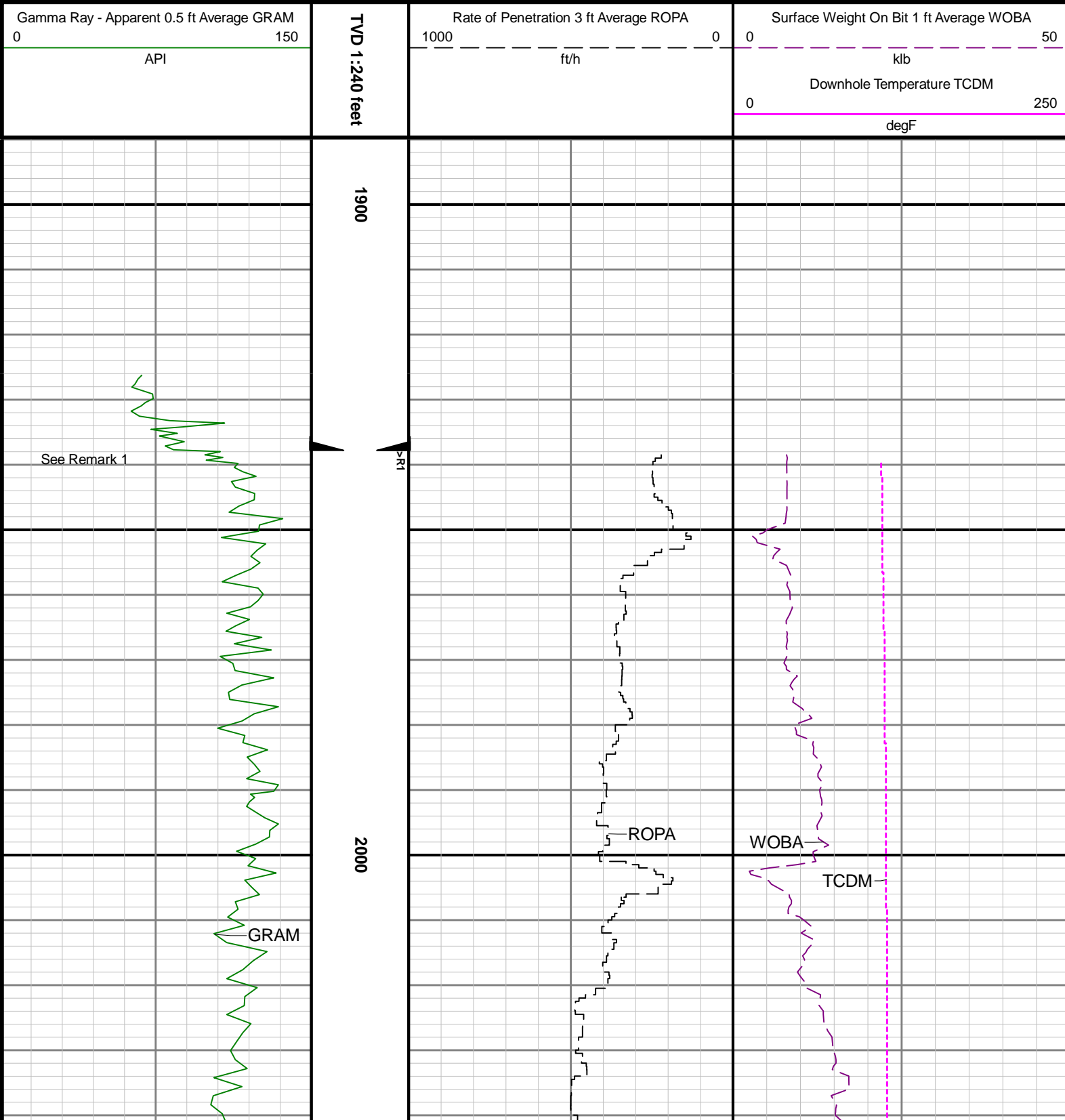
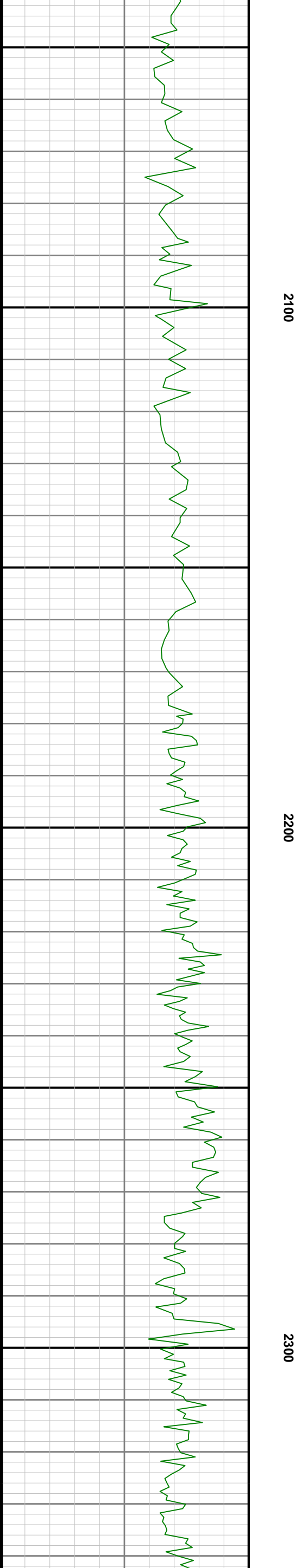
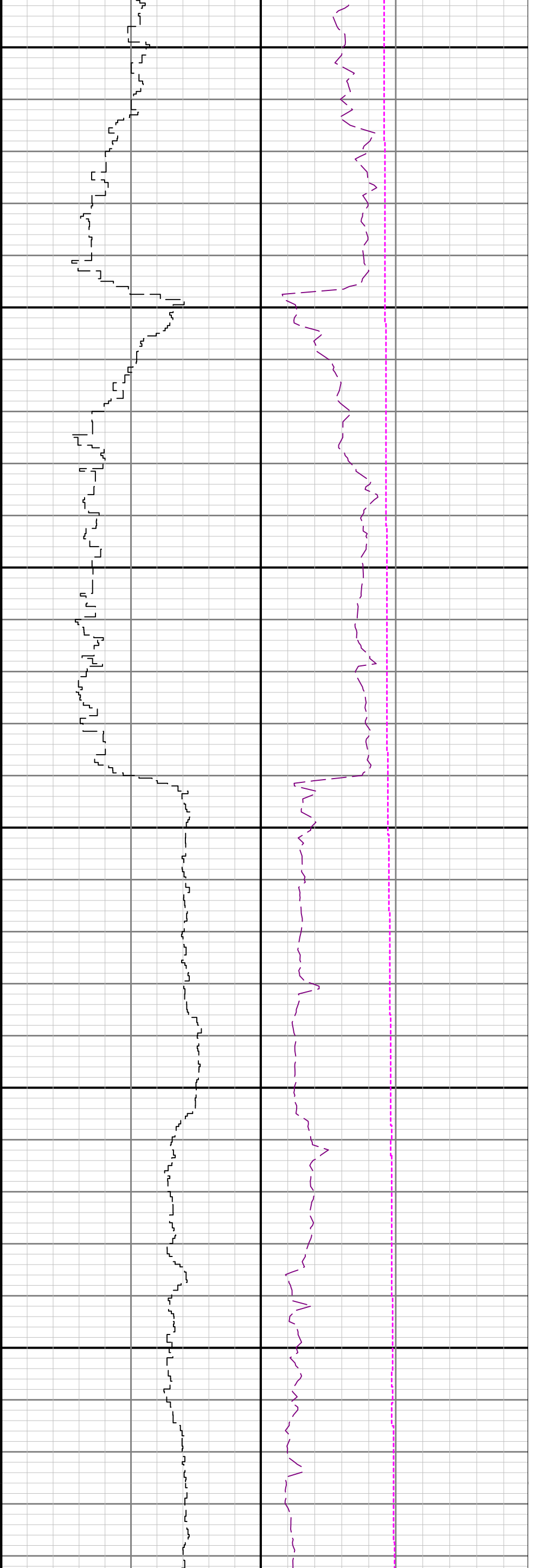
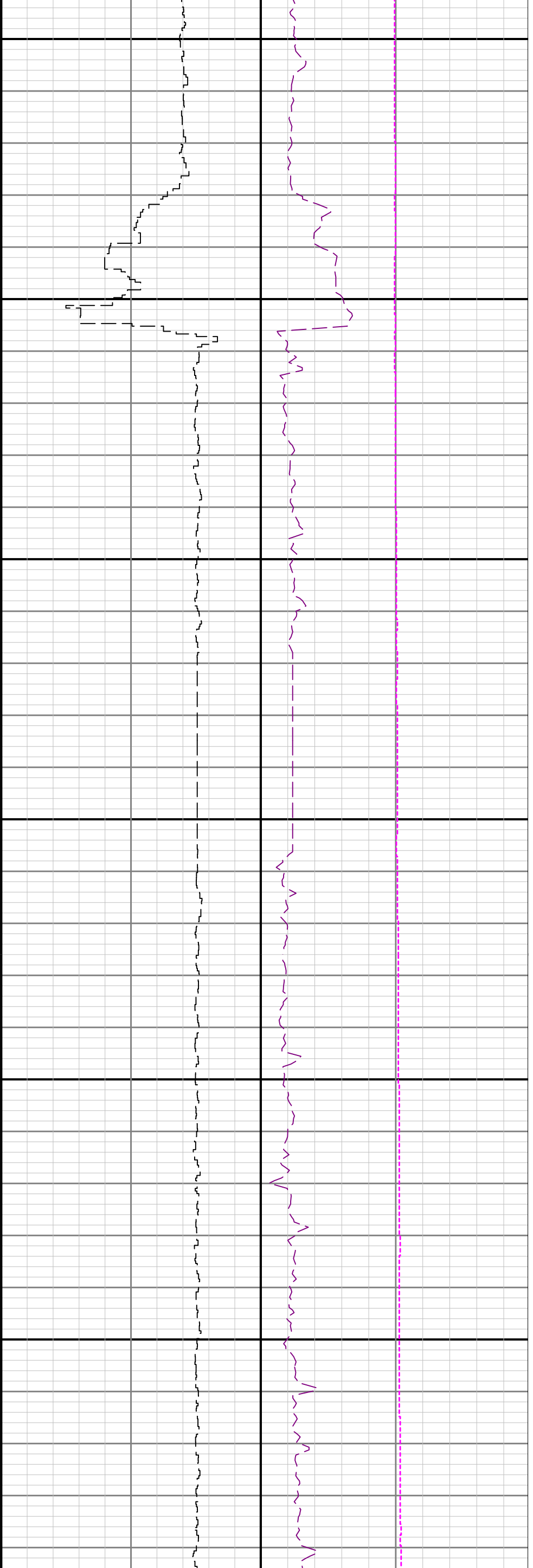


BAKER HUGHES				MEMORY LOG			
				Gamma Ray Natural Formation Evaluation Rotary Steerable			
Scale:		Company: Noble Energy					
1:240 TVD		Well: HARPER LD21-668					
Depth Reference:		Field: Weld County					
Driller's Depth		County: Weld		State: Colorado			
Status:		Surface Location:		Other Services:			
Final Print		Latitude:		Directional VSS			
API No: 05-123-43291		Longitude:					
Job ID: 8096757		SEC: 22		TWN: 9N		RGE: 58W	
Permanent Datum (P.D.): Ground Level		Elevation:		4806.00 ft		KB: N/A	
Log Measured From: Rig Floor		Above P.D.		30.00 ft		DF: 4836.00 ft	
						GL: 4806.00 ft	
Dates				Interval Logged			
Date From: 2016-09-07		Top: (ft) 1926.00		Azi Reference North:		Grid	
Date To: 2016-09-08		Bottom: (ft) 5791.00		Total Magnetic Field Strength: (nT)		Dip Angle: (deg)	
Spud Date: 2016-09-07				Mag to Reference North Correction: (deg)		6.49 E	
Borehole Record				Casing Record			
Hole Size (in)		From (ft)		To (ft)		Size (in)	
8.500		1950.00		10798.00		9.625	
						36.00	
						0.00	
						1927.00	



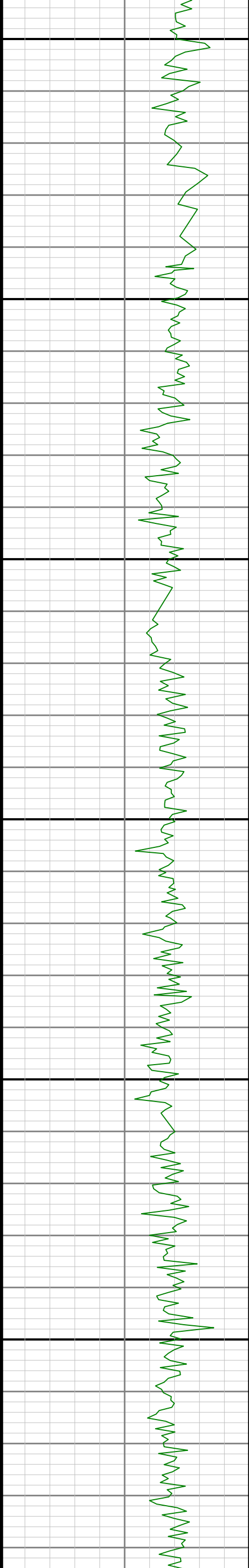


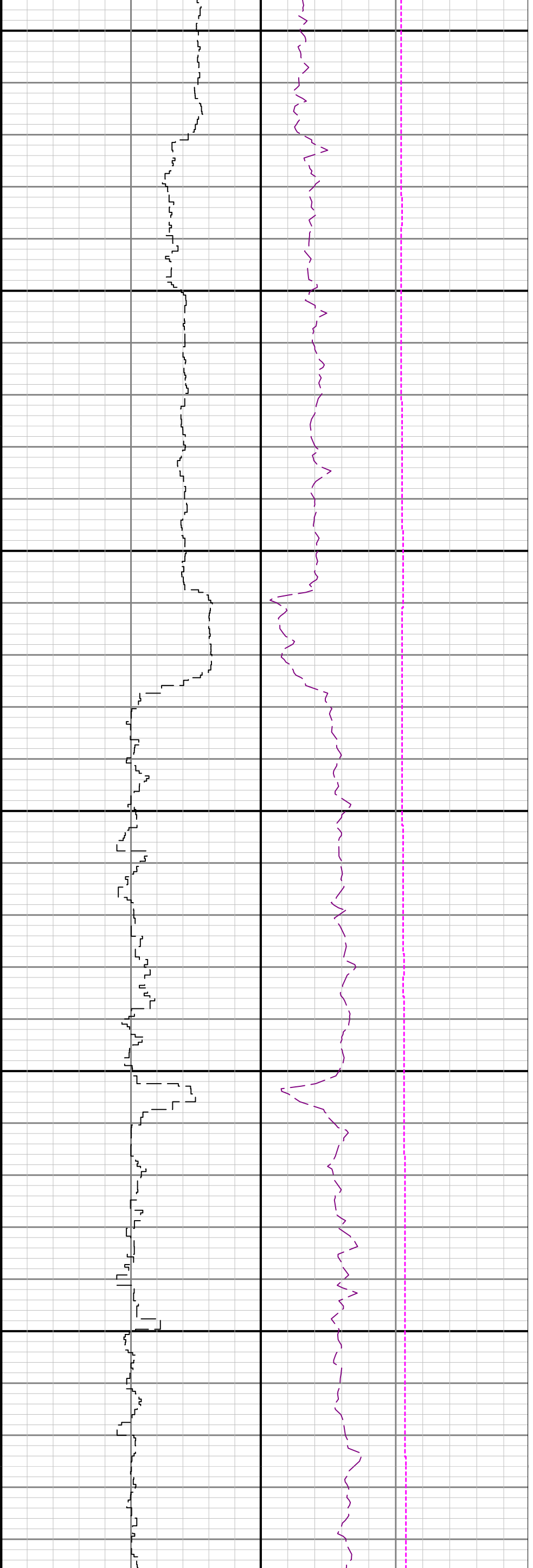


2400

2500

2600

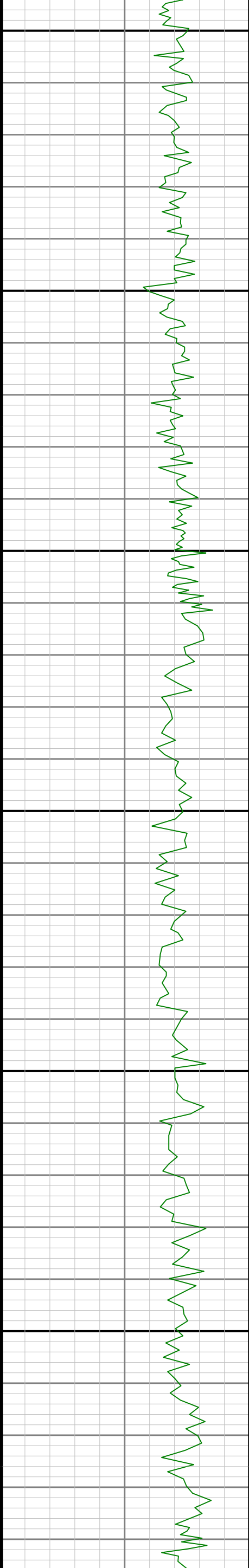


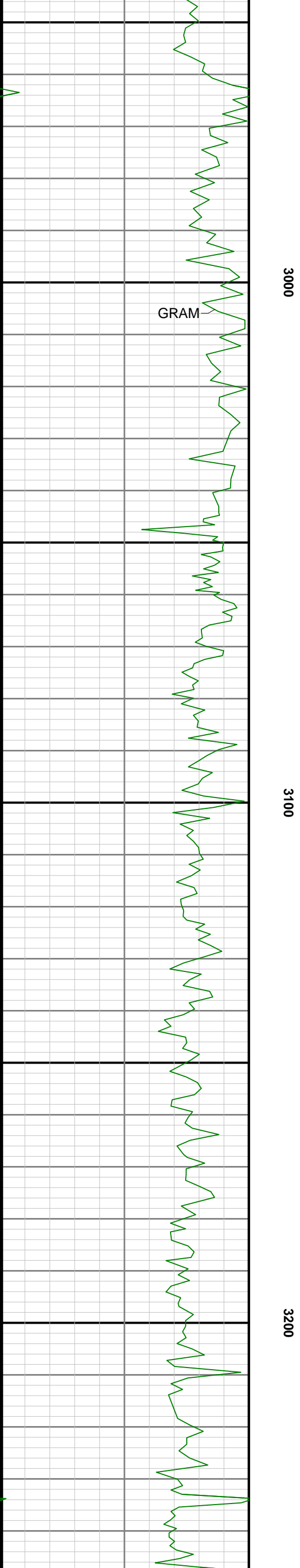
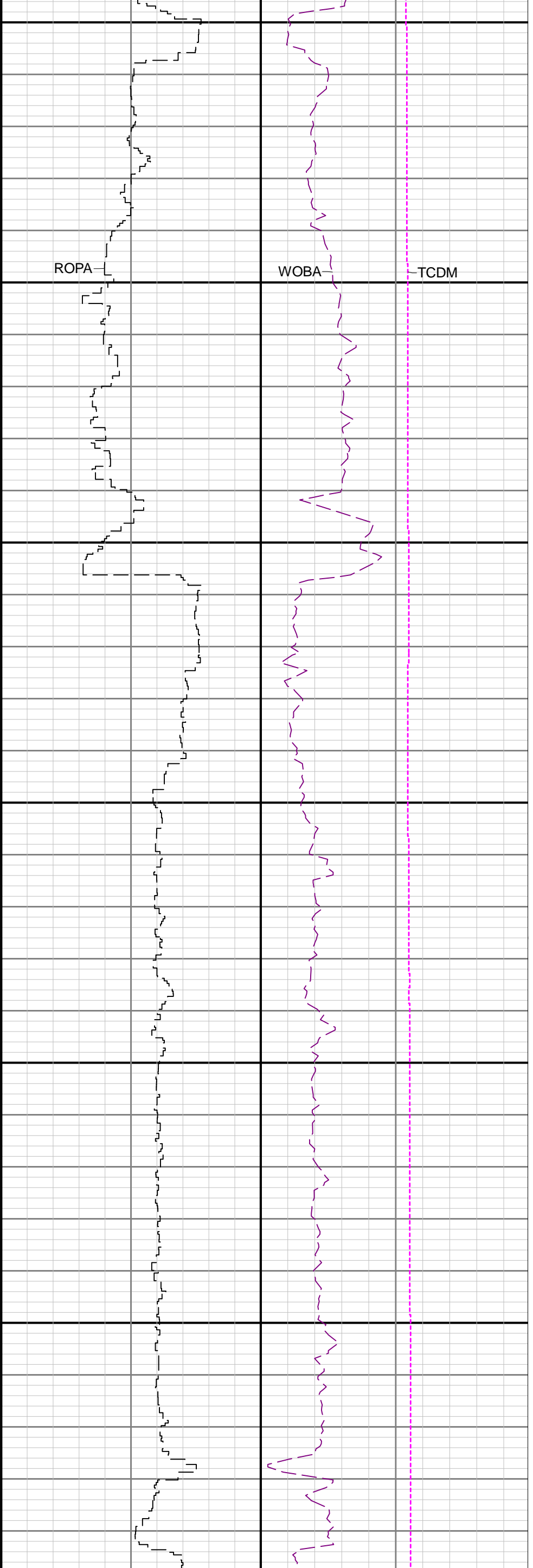


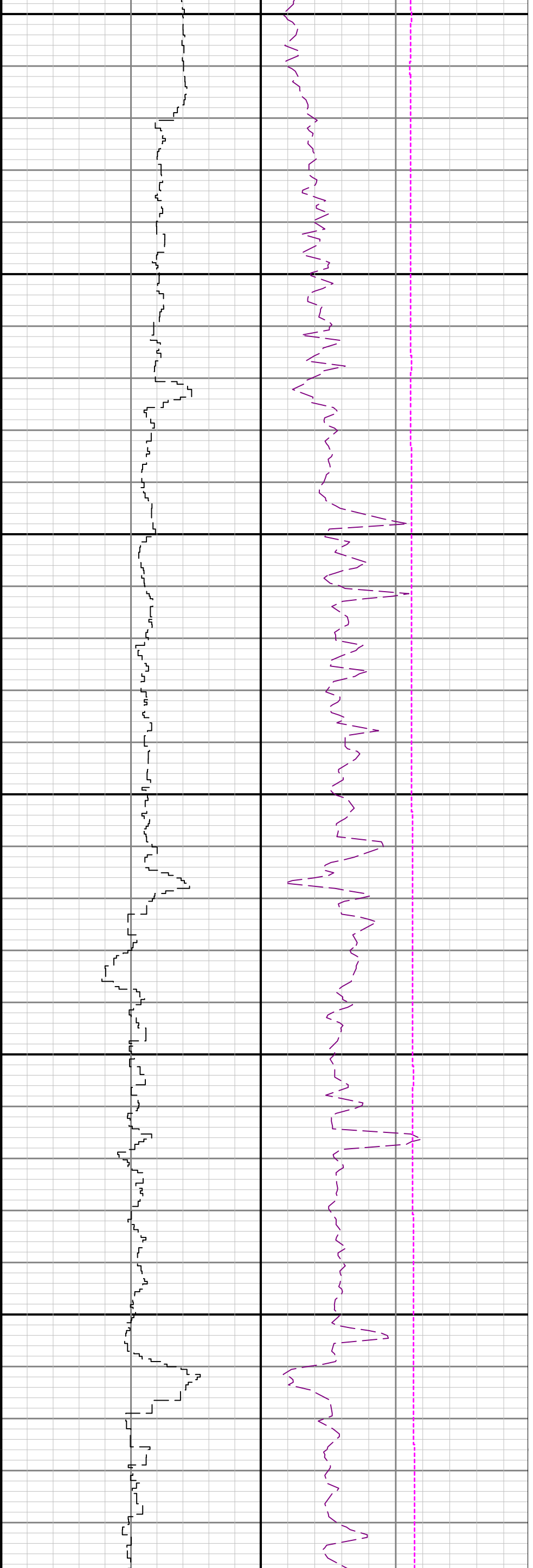
2700

2800

2900



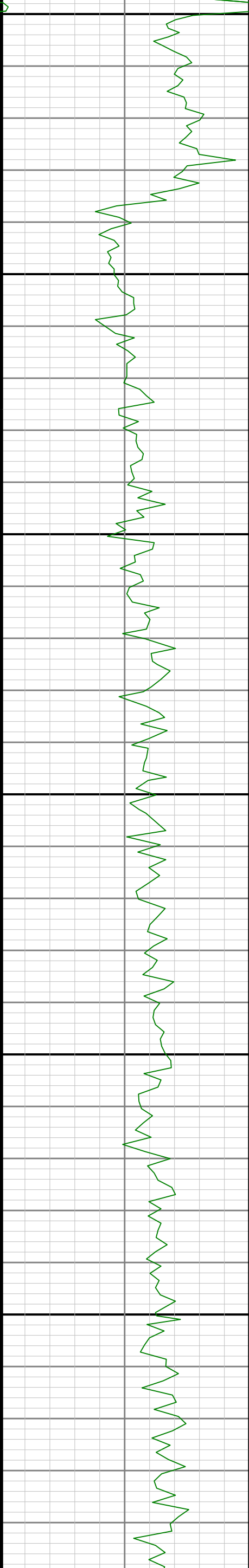


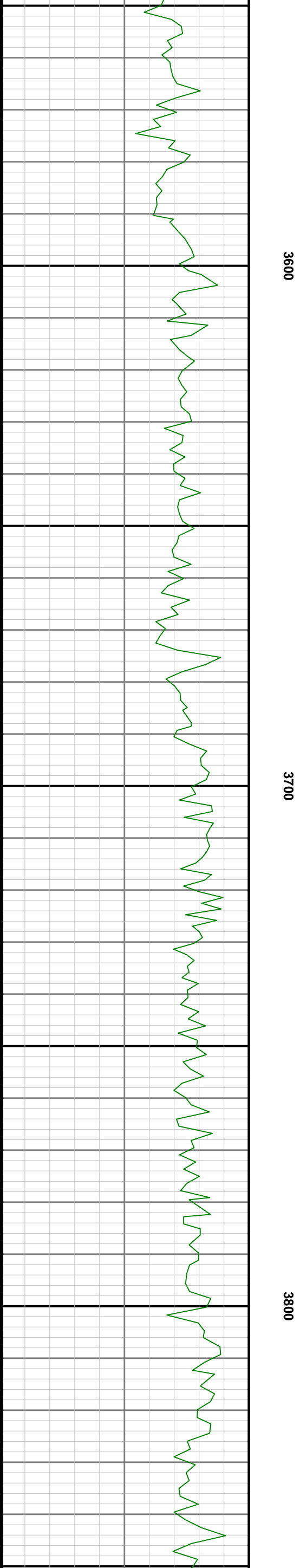
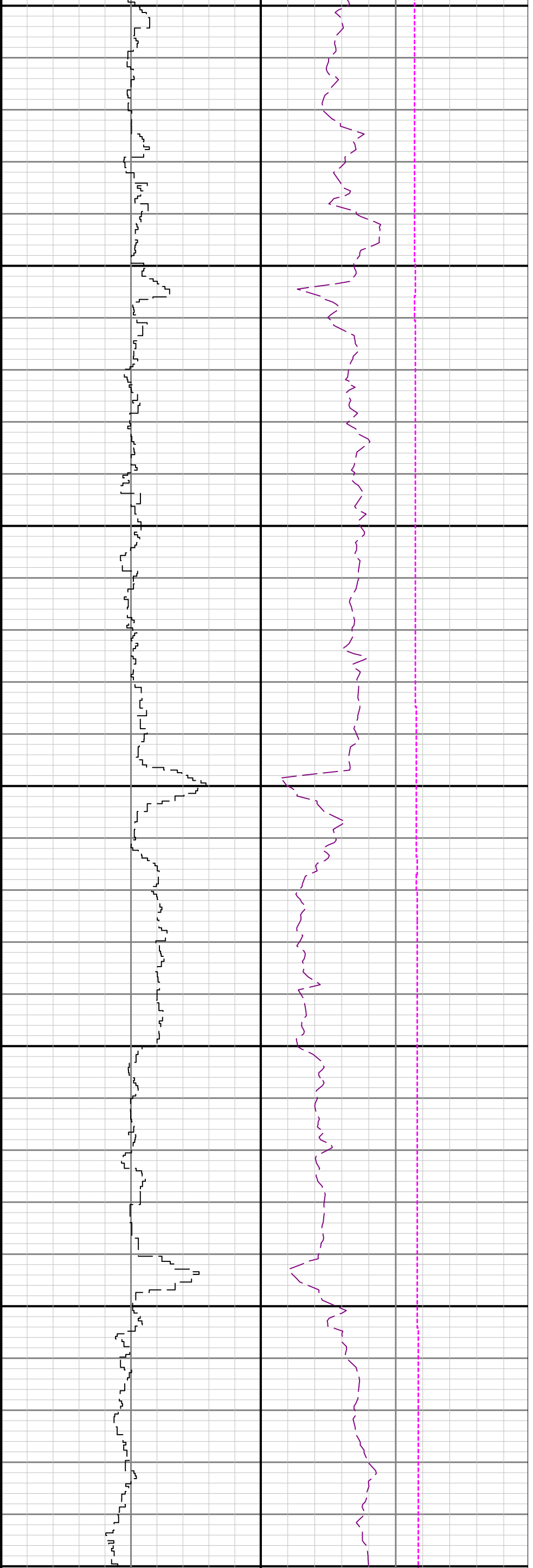


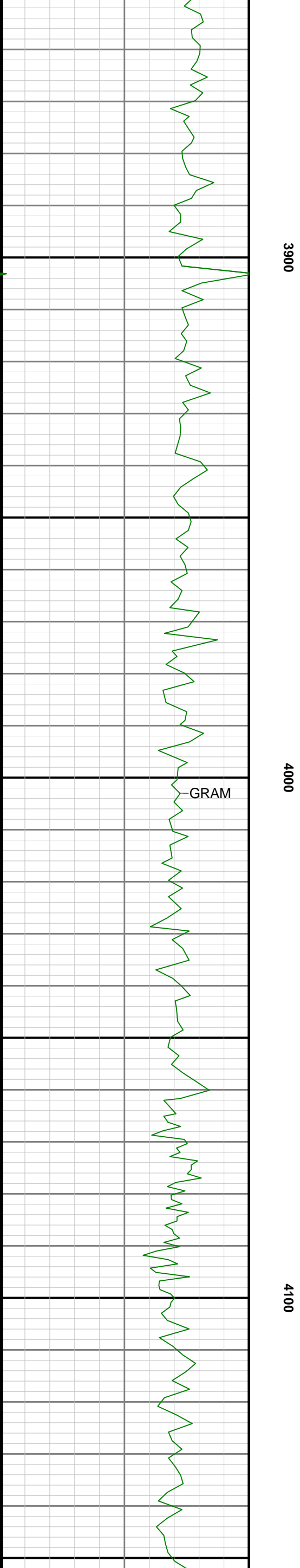
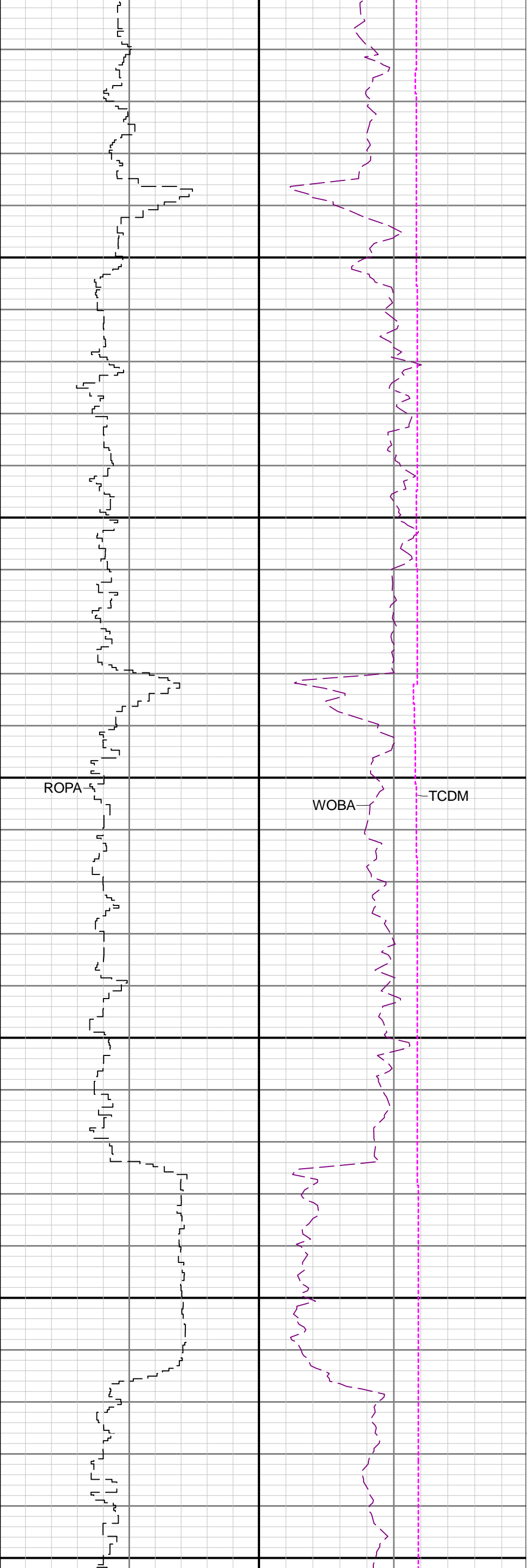
3300

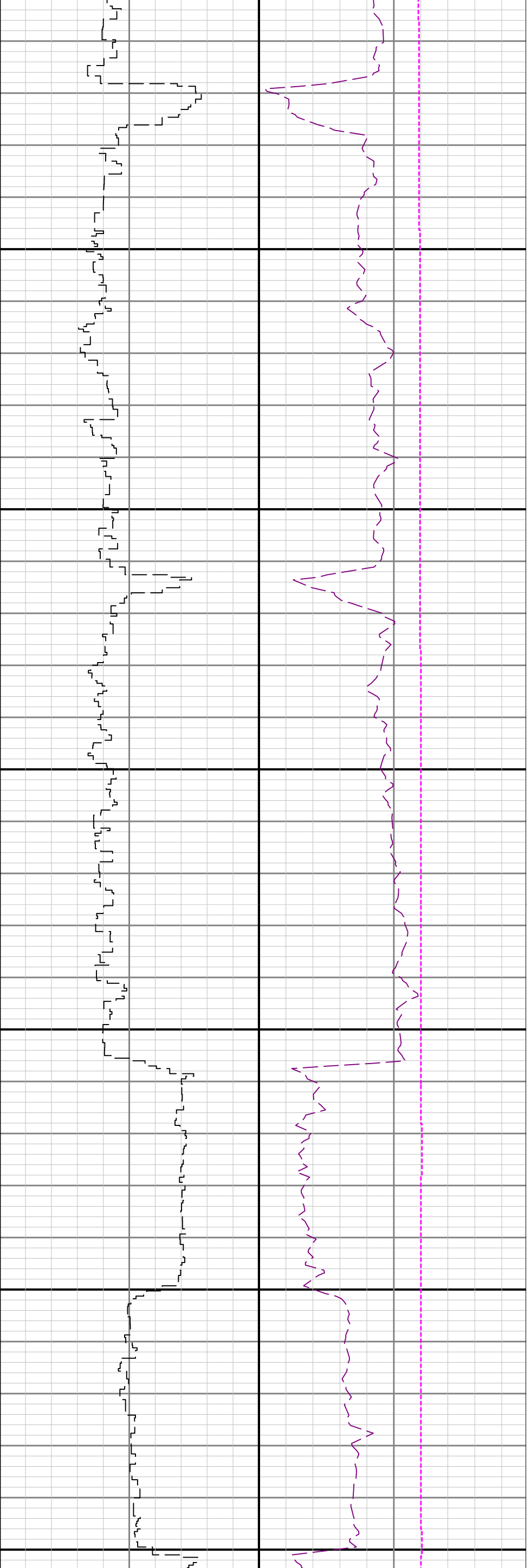
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3500





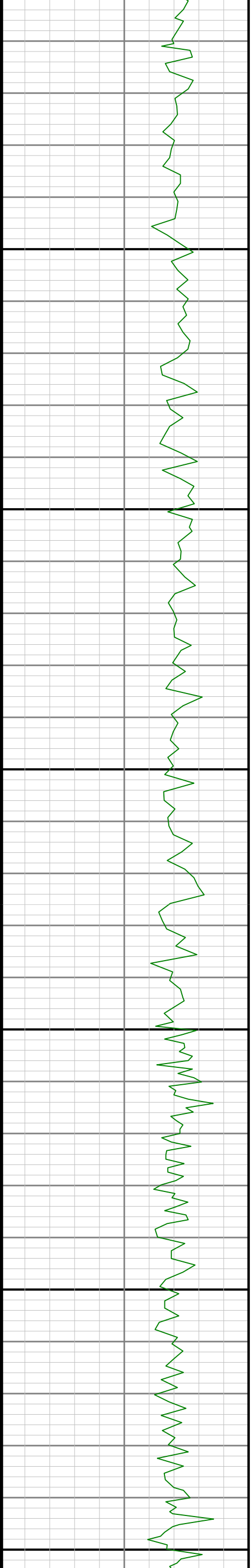


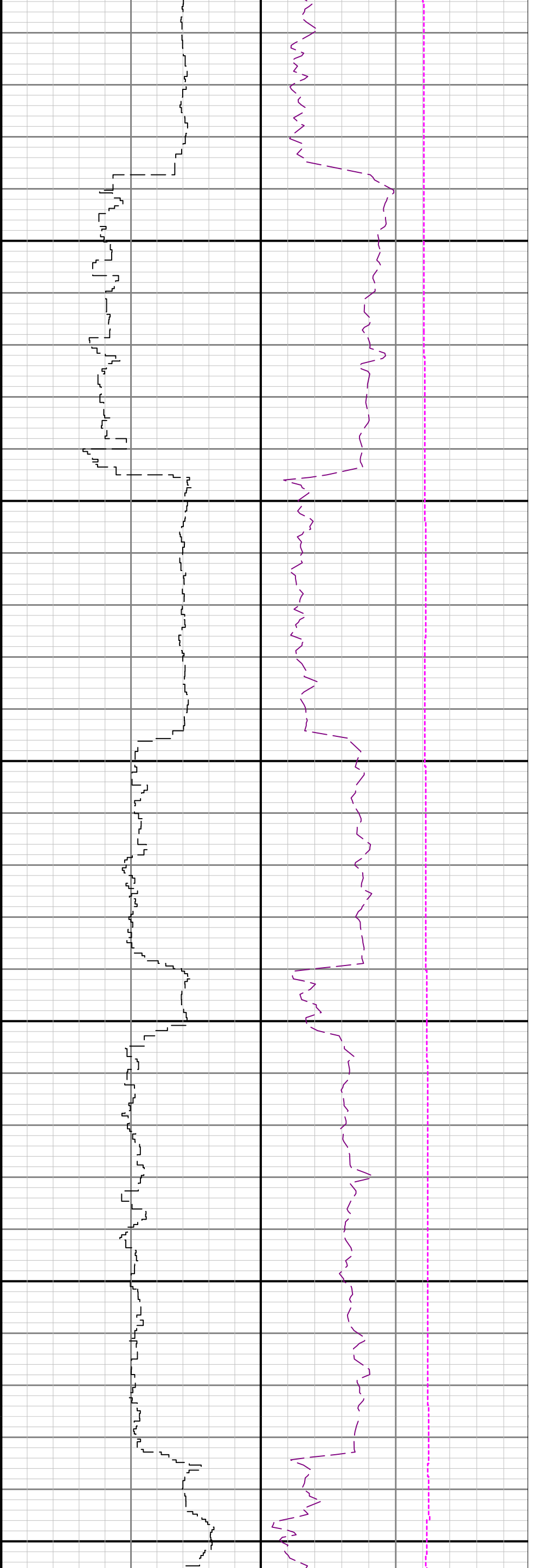


4200

4300

4400

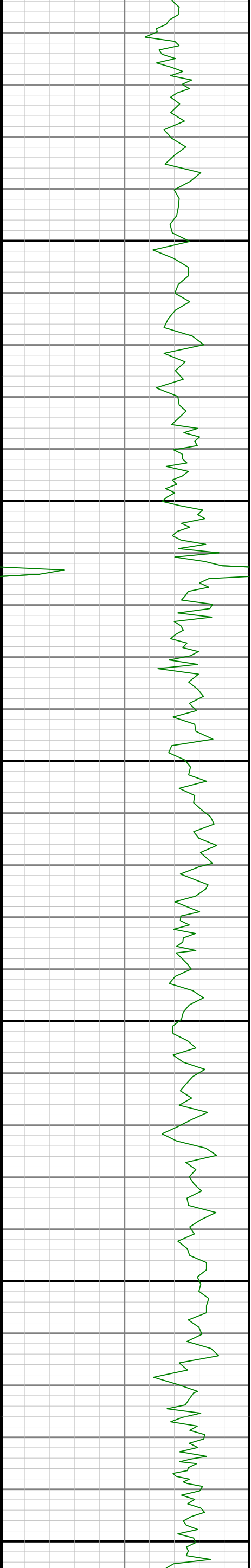


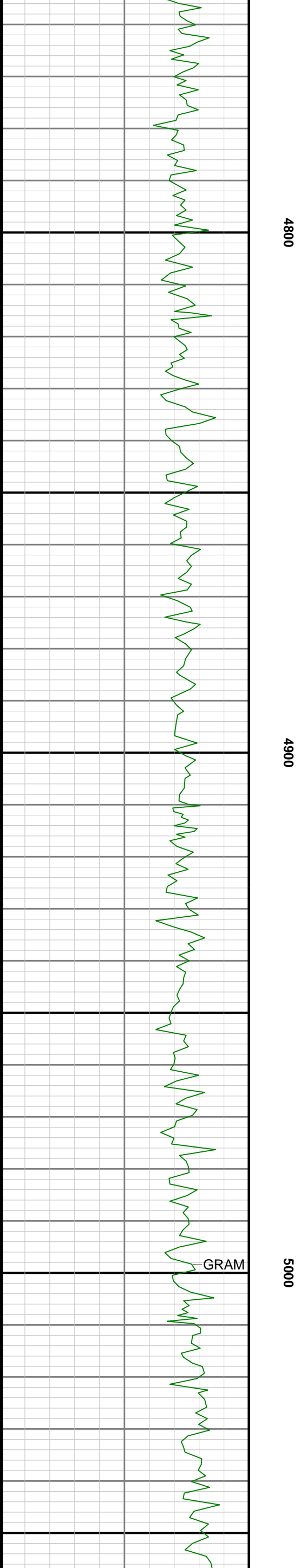
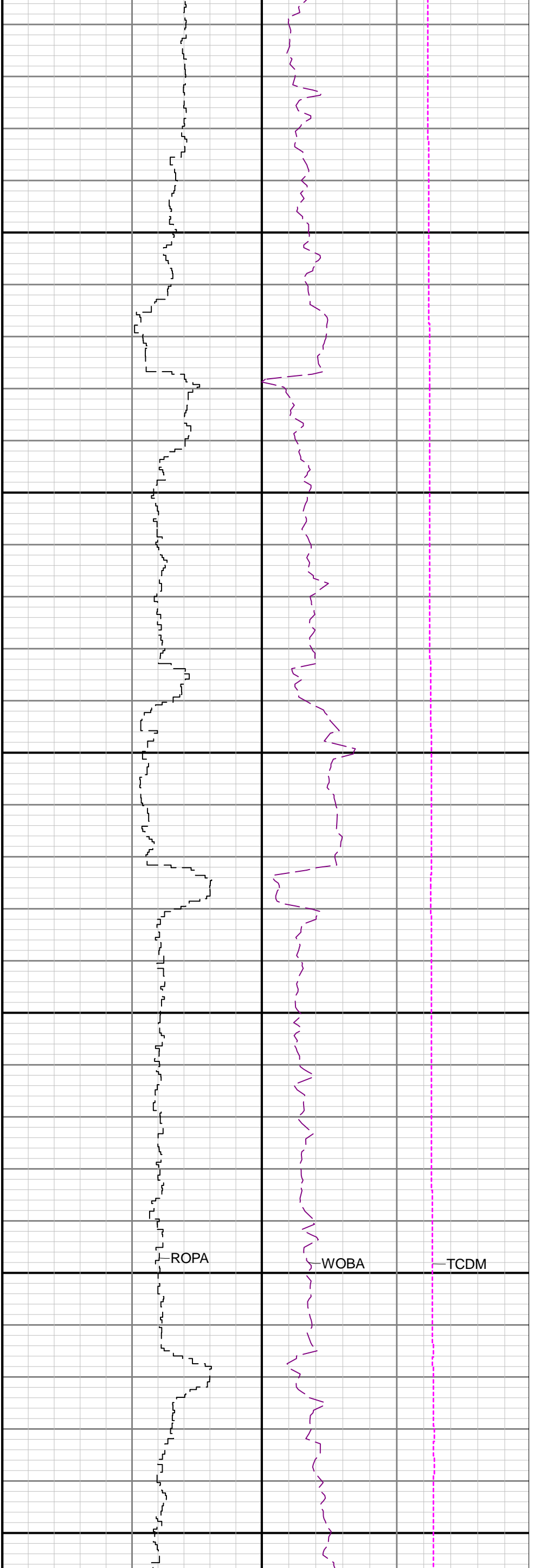


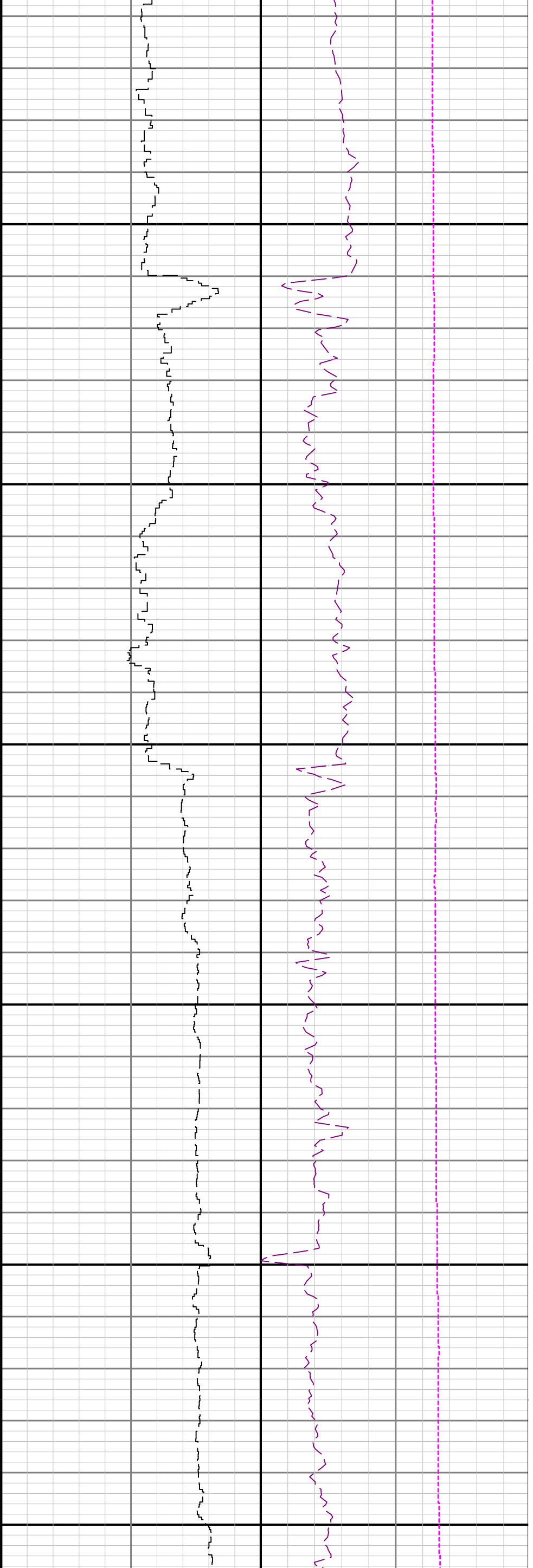
4500

4600

4700



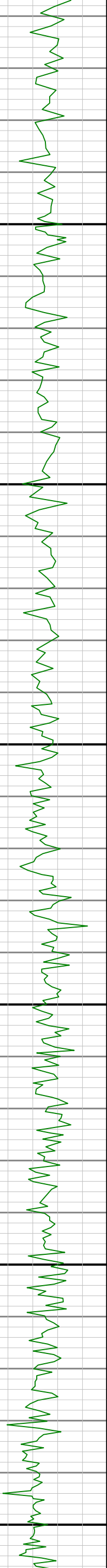


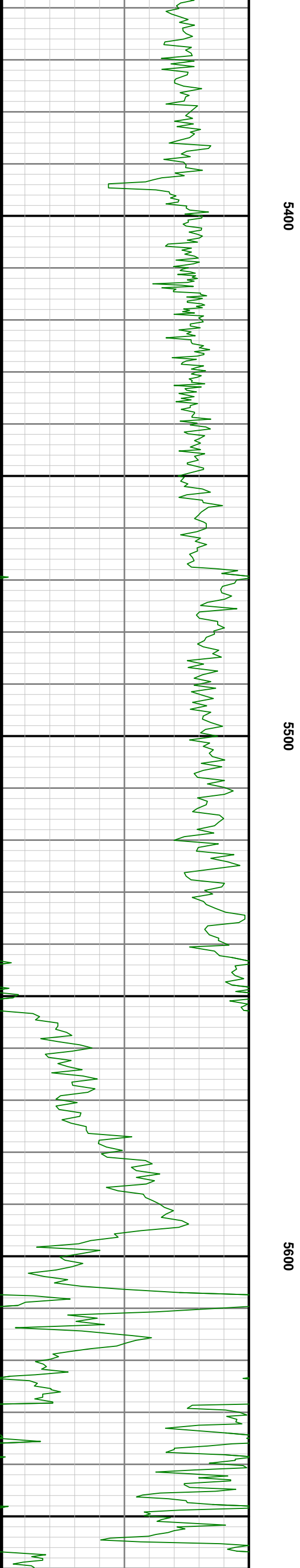
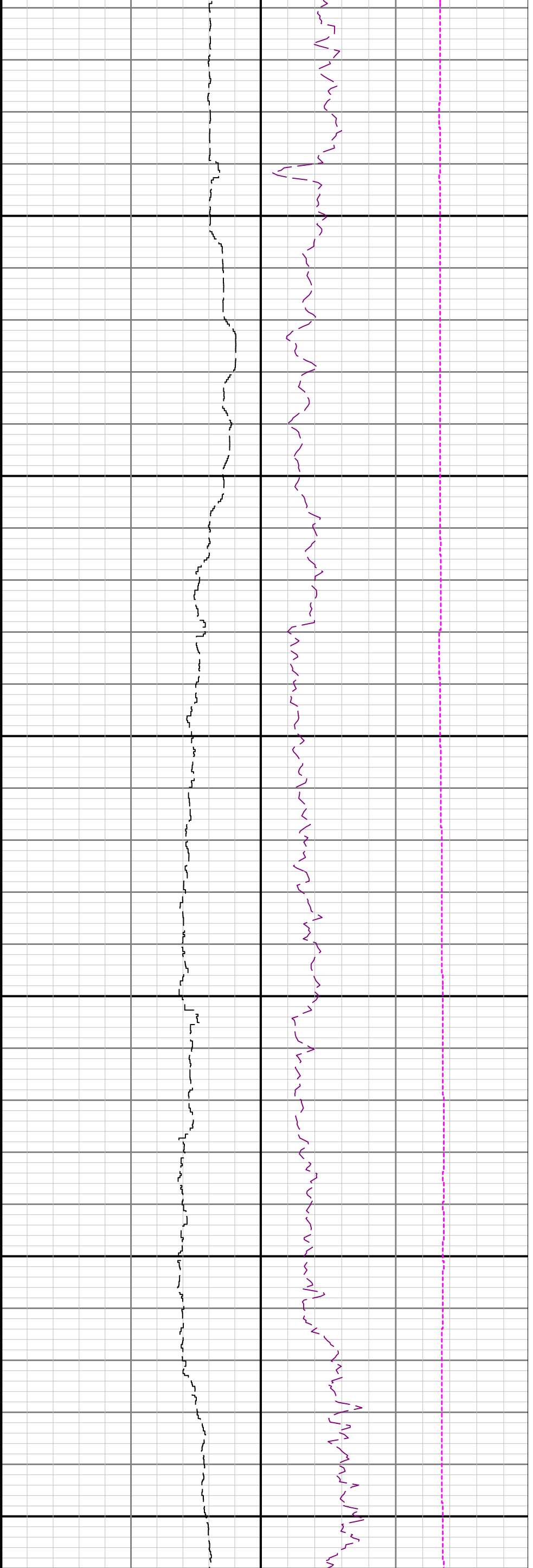


5100

5200

5300





Projection	10798.00	90.43	271.61	N/A	169.40	-5285.31	5755.55	5287.98	24.00	0.00	0.00	0.00
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