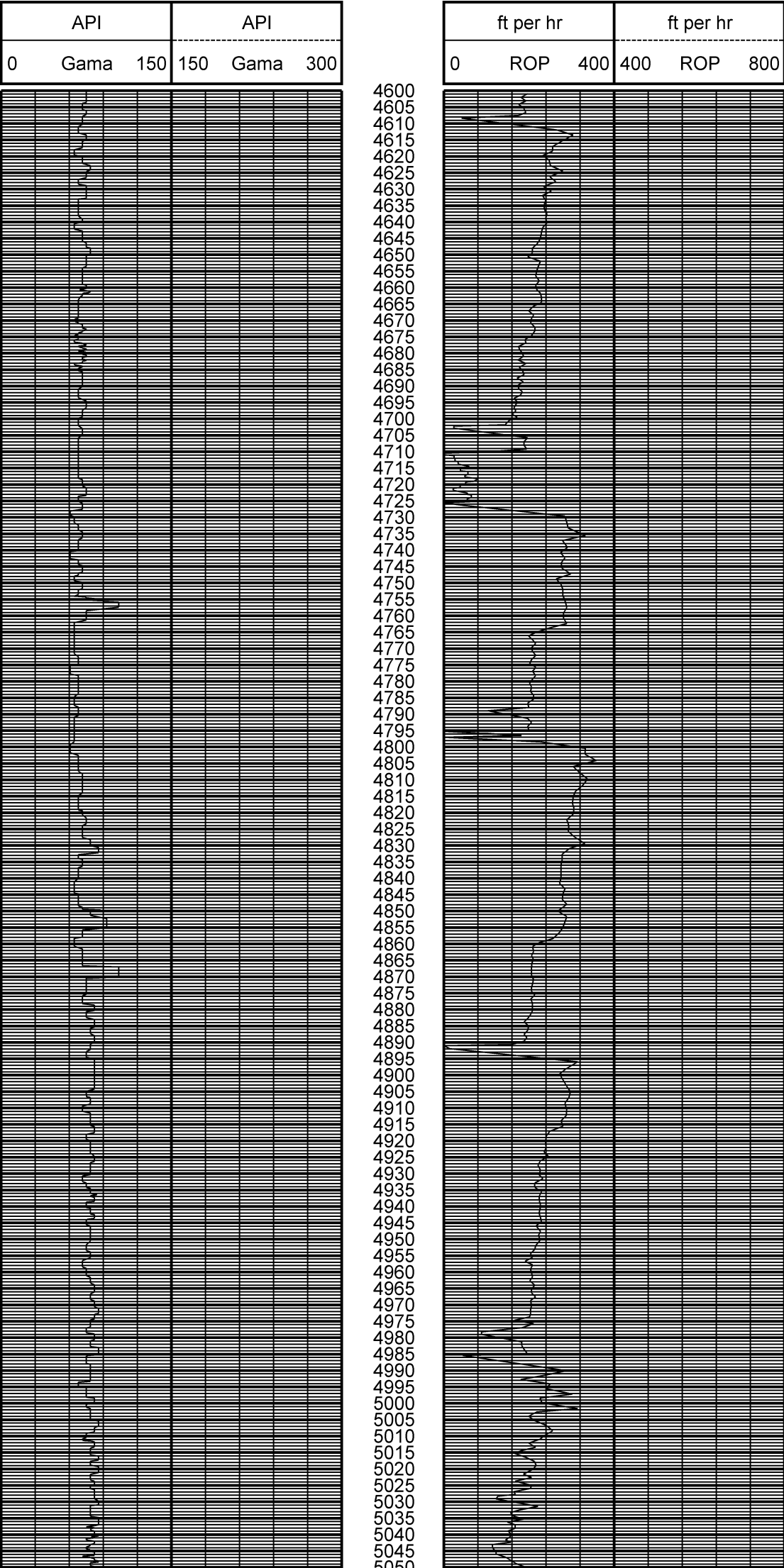


		MD 1:500 Feet	
Client: Total Directional			
Well Name: Anschutz State 5-62-27-0857BH			
Field: DJ Basin			
Location: Weld County, Colorado	Company Representative		
Country: United States	Cecil Crow		
Prov/State: Colorado			
County: Weld County			
Drilling Rig #: SST 17	Geologist		
Latitude: 40.379067	Vandy Blue Spikes		
Longitude: 104.301886			
UWI/API: 05-123-38036			
License/Permit#: 18524D	Directional Drillers		
Job No: 13-136	Paul Lochr		
Vertical Section Direction: 0	Casey Berger		
KB: 4683			
DF: 18			
GL: 4665			
Permanent Datum: 0	MWD Operator		
Drilling Measurement From: 0	David Keele		
Magnetic Declination: 8.28	Paul Perhonis		
Meg Field: 0.530			
Dip Angle: 67.02			
Spud Date:			
Print Date: 1/10/2014	Leg Name		
Log Start Depth: 4600			
Log End Depth: 10800	Main Leg		
Comments:			
- ZONE DIRECT MWD SERVICES LTD ("ZONE DIRECT") DOES NOT MAKE AND EXPRESSLY DISCLAIMS ALL WARRANTIES, REPRESENTATIONS AND CONDITIONS, WITH RESPECT TO THE INFORMATION CONTAINED IN THIS DOCUMENT, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED OR ARISING FROM CONTRACT OR STATUTE INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, ACCURACY AND FITNESS FOR A PARTICULAR PURPOSE. ANYONE USING THIS INFORMATION DOES SO AT THEIR OWN RISK AND ACKNOWLEDGES AND AGREES THAT ZONE DIRECT SHALL NOT BE LIABLE FOR ANY ERROR, OMISSION, DEFECT, DEFICIENCY OR NONCONFORMITY IN THE INFORMATION AND WITHOUT LIMITING THE FOREGOING, ZONE DIRECT DOES NOT WARRANT THAT THE INFORMATION (OR THE USE THEREOF) WILL BE FREE OF ALL ERRORS OR THAT IT DOES NOT INFRINGE ANY THIRD PARTY RIGHTS. ANYONE USING THE INFORMATION AGREES TO INDEMNIFY AND HOLD ZONE DIRECT HARMLESS FROM ALL CLAIMS, ACTIONS, COSTS (INCLUDING LEGAL COSTS ON A SOLICITOR AND HIS OWN CLIENT BASIS) AND LIABILITIES ARISING FROM OR IN CONNECTION WITH THE USE OF THE INFORMATION.			

BitRun:	1	2	3	4
Start Depth:	0	5700	6630	7730
End Depth:	5700	6630	7730	10746.88
Start Date:	2014/01/01	2014/01/04	2014/01/07	2014/01/09
End Date:	2014/01/04	2014/01/06	2014/01/08	2014/01/10
Gamma Scale Factor:	3.6	1.9	2.2	2.2
Survey-to-Bit (PTB):	50	48	59	62
Gamma-to-Bit (GTB):	41	34	48	50
Drill Collar ID/OD:	3.125	2.8125 / 6.625	4.75/2.75	4.75 / 2.75
Hole Size:	8.75	8.75	6.125	6.125
Casing Size:	9.625	9.625	6.276	6.276
Casing Start Depth:	0	0	0	0
Casing End Depth:	790	790	6630	6630
Mud Type 1:	WBM	WBM	Water	WBM
Mud Weight 1:	5.5	9.5	9.35	9.4
Mud Viscosity 1:	36	41	38	42
Mud Type 2:	-	-	-	-
Mud Weight 2:	-	-	-	-
Mud Viscosity 2:	-	-	-	-
Comment:	-	Curve Assembly	Lateral	POOH / MWD

BitRun:			
Start Depth:			
End Depth:			
Start Date:			
End Date:			
Gamma Scale Factor:			
Survey-to-Bit (PTB):			
Gamma-to-Bit (GTB):			
Drill Collar ID/OD:			
Hole Size:			
Casing Size:			
Casing Start Depth:			
Casing End Depth:			
Mud Type 1:			
Mud Weight 1:			
Mud Viscosity 1:			
Mud Type 2:			
Mud Weight 2:			
Mud Viscosity 2:			
Comment:			



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INC: 3.9  
AZM: 195.2

MD: 4745  
INC: 5  
AZM: 192.7

MD: 4840  
INC: 4.9  
AZM: 189.9

MD: 4934  
INC: 4.4  
AZM: 191

MD: 5028  
INC: 3.7  
AZM: 191.8

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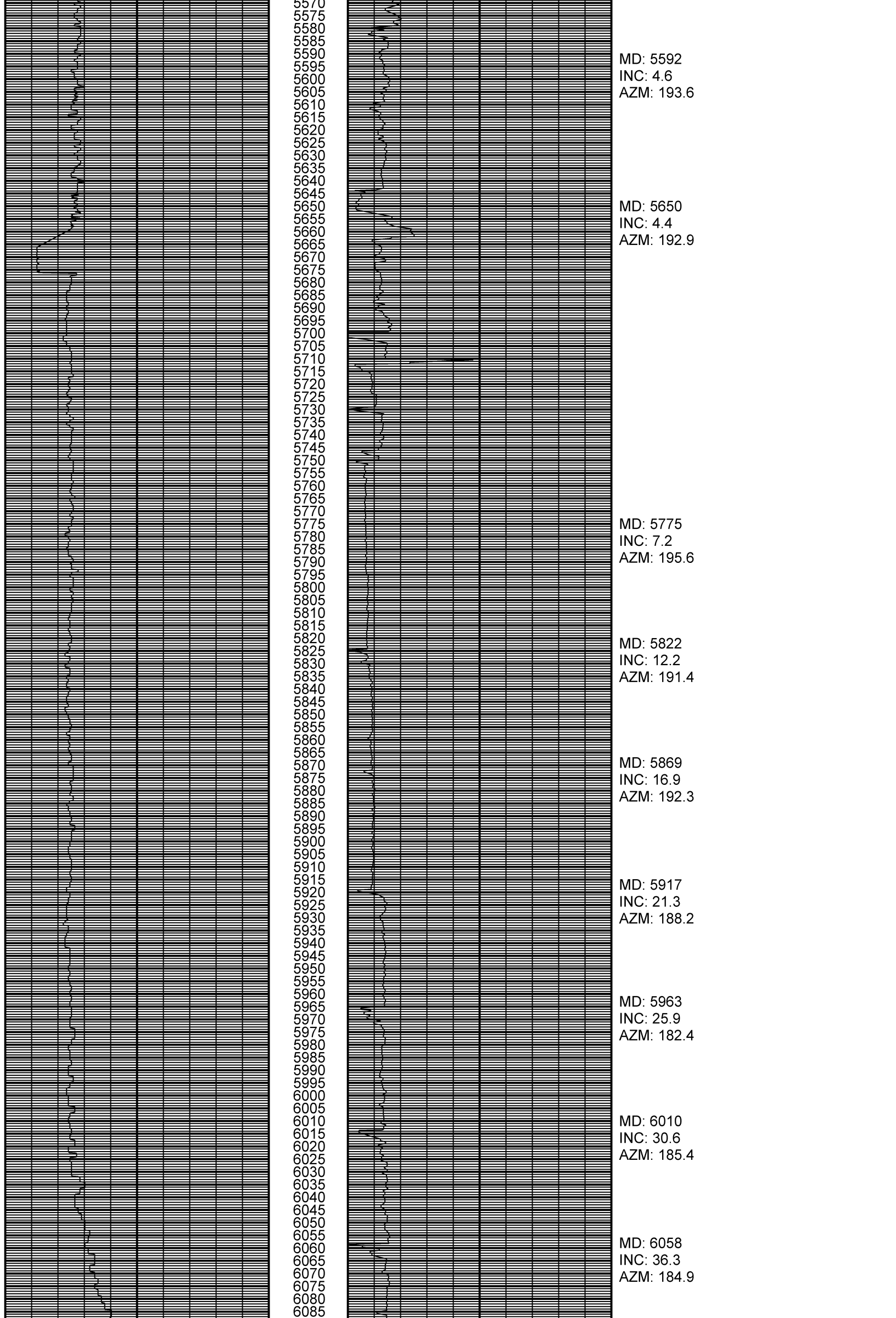
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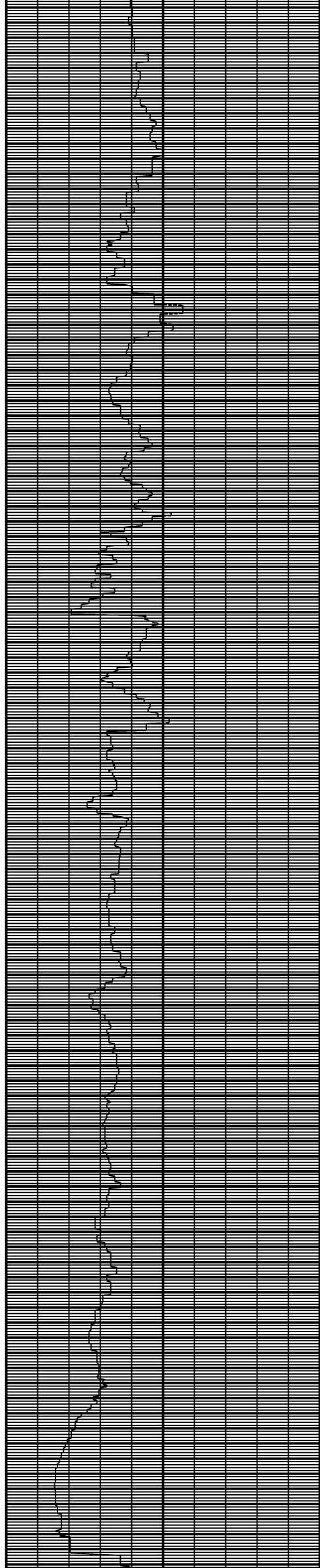
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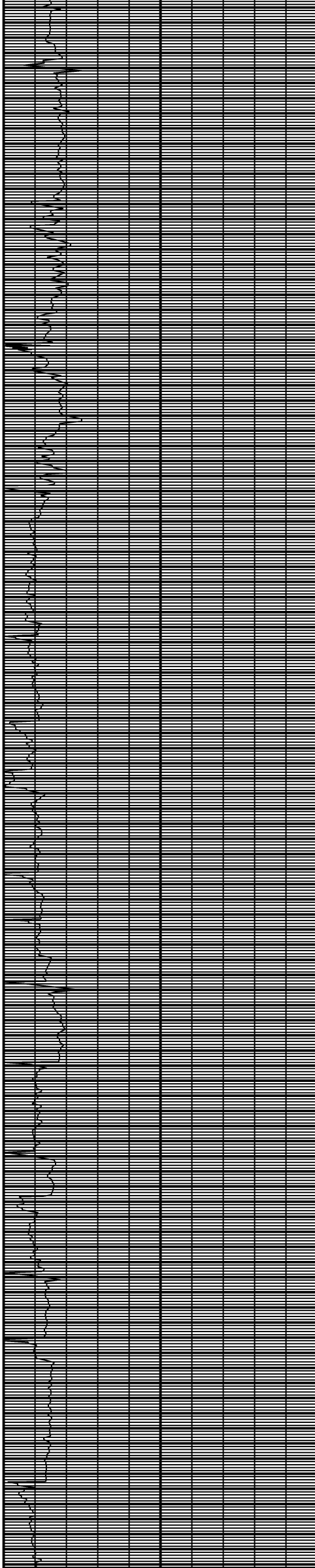
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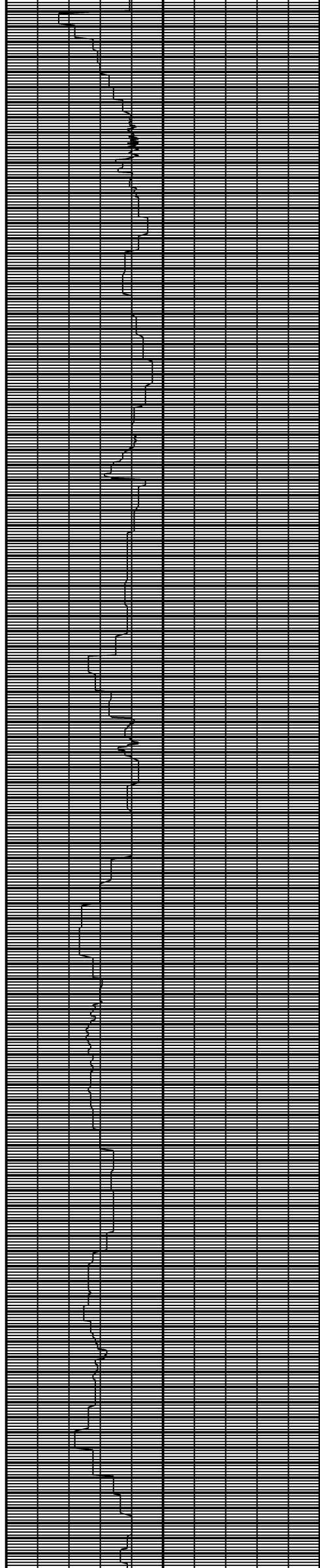




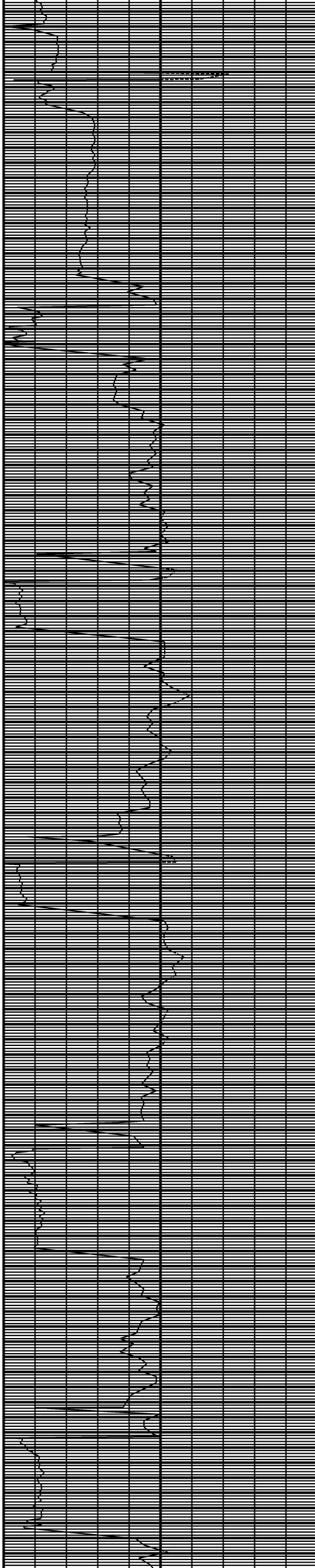
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INC: 65.6  
AZM: 183.8  
  
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INC: 80.2  
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INC: 83.6  
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AZM: 178.9



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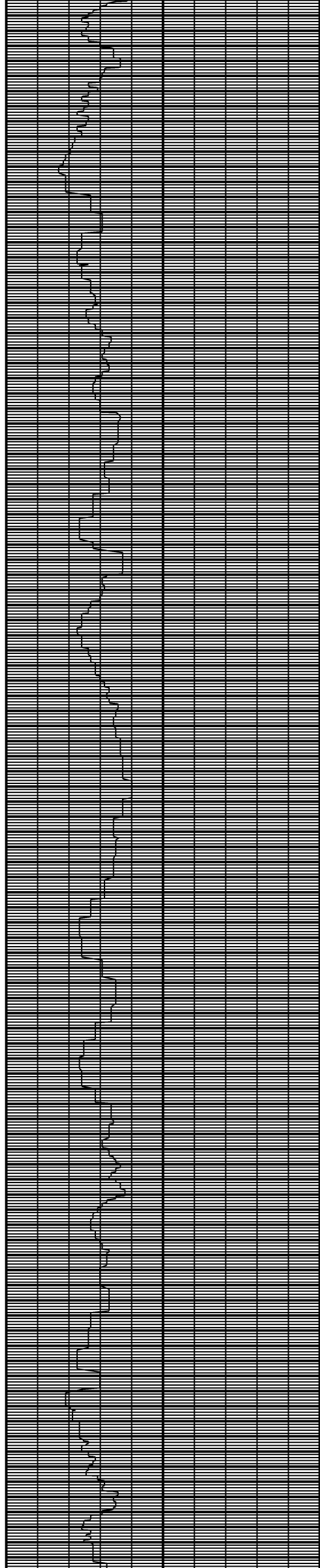
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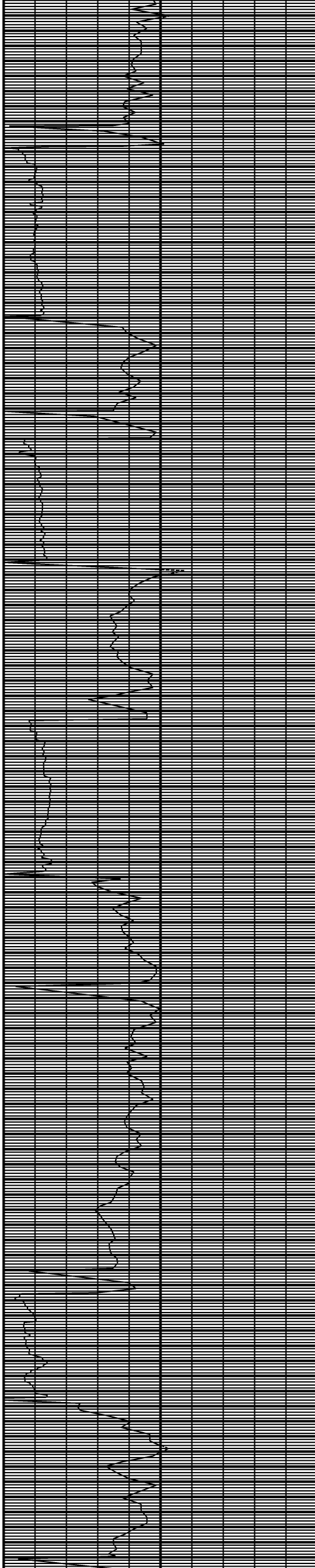
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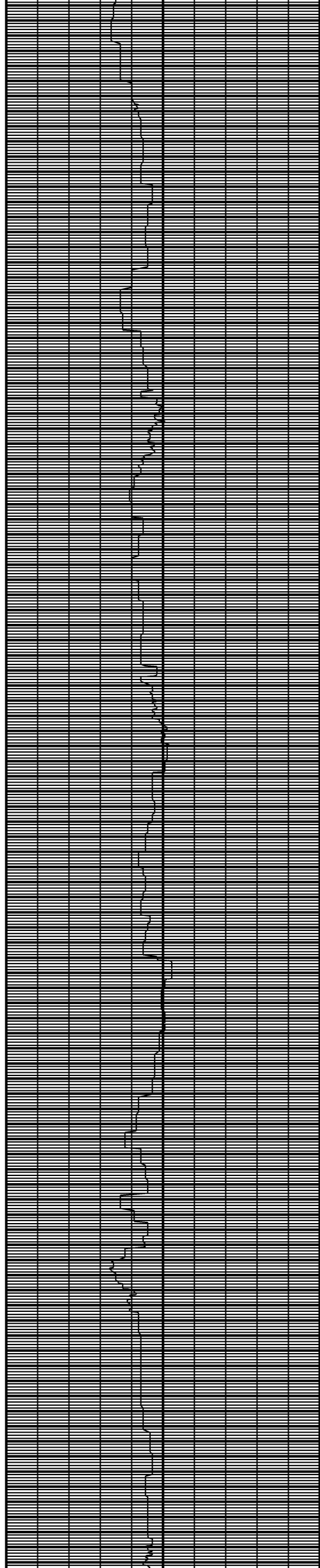
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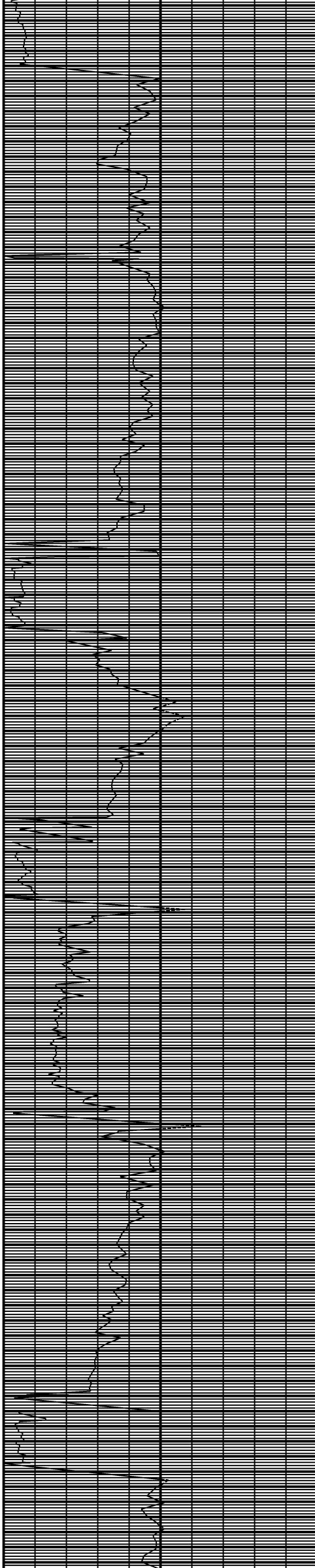
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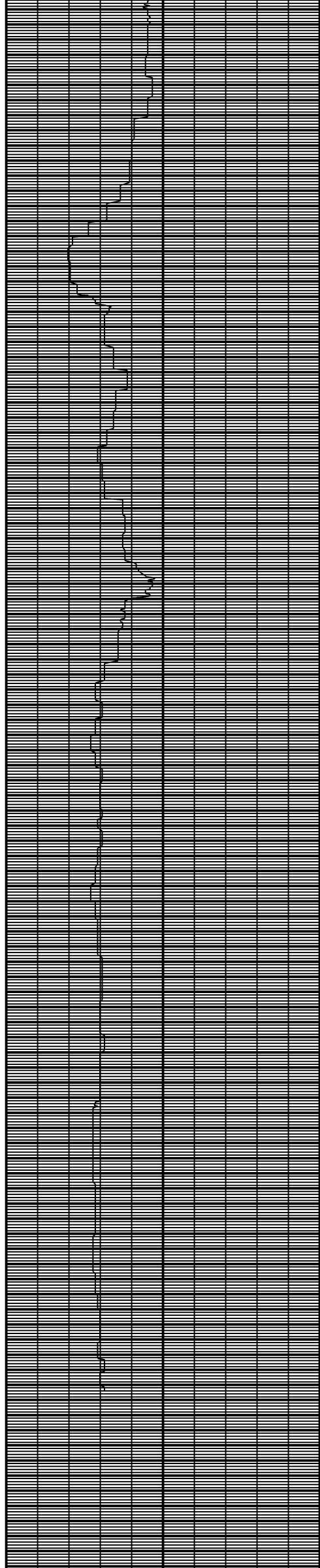
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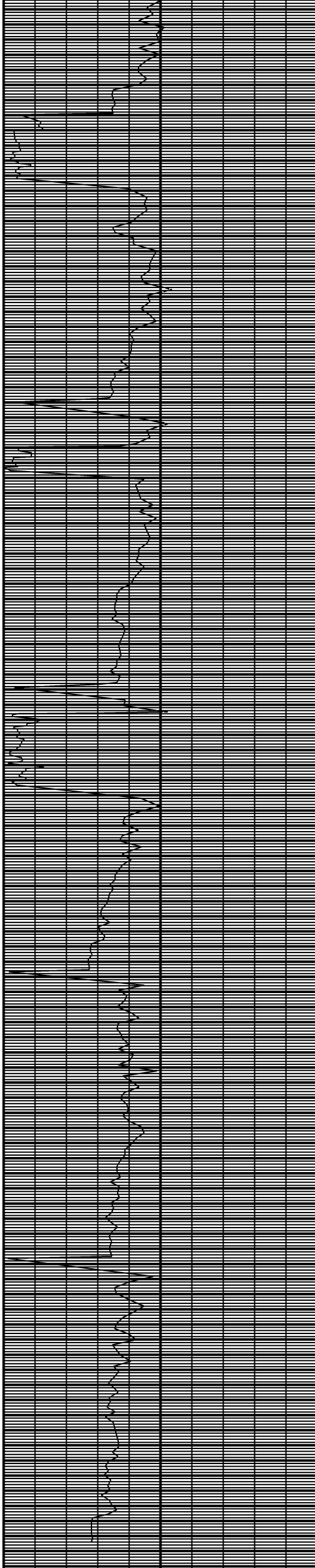
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MD: 10305  
INC: 87.7  
AZM: 182.1

MD: 10400  
INC: 87.3  
AZM: 180.4

MD: 10495  
INC: 89.3  
AZM: 178.8

MD: 10589  
INC: 89.6  
AZM: 177.7

MD: 10683  
INC: 89.9  
AZM: 176.1

