



PULSED NEUTRON DECAY QUICK LOOK LOG

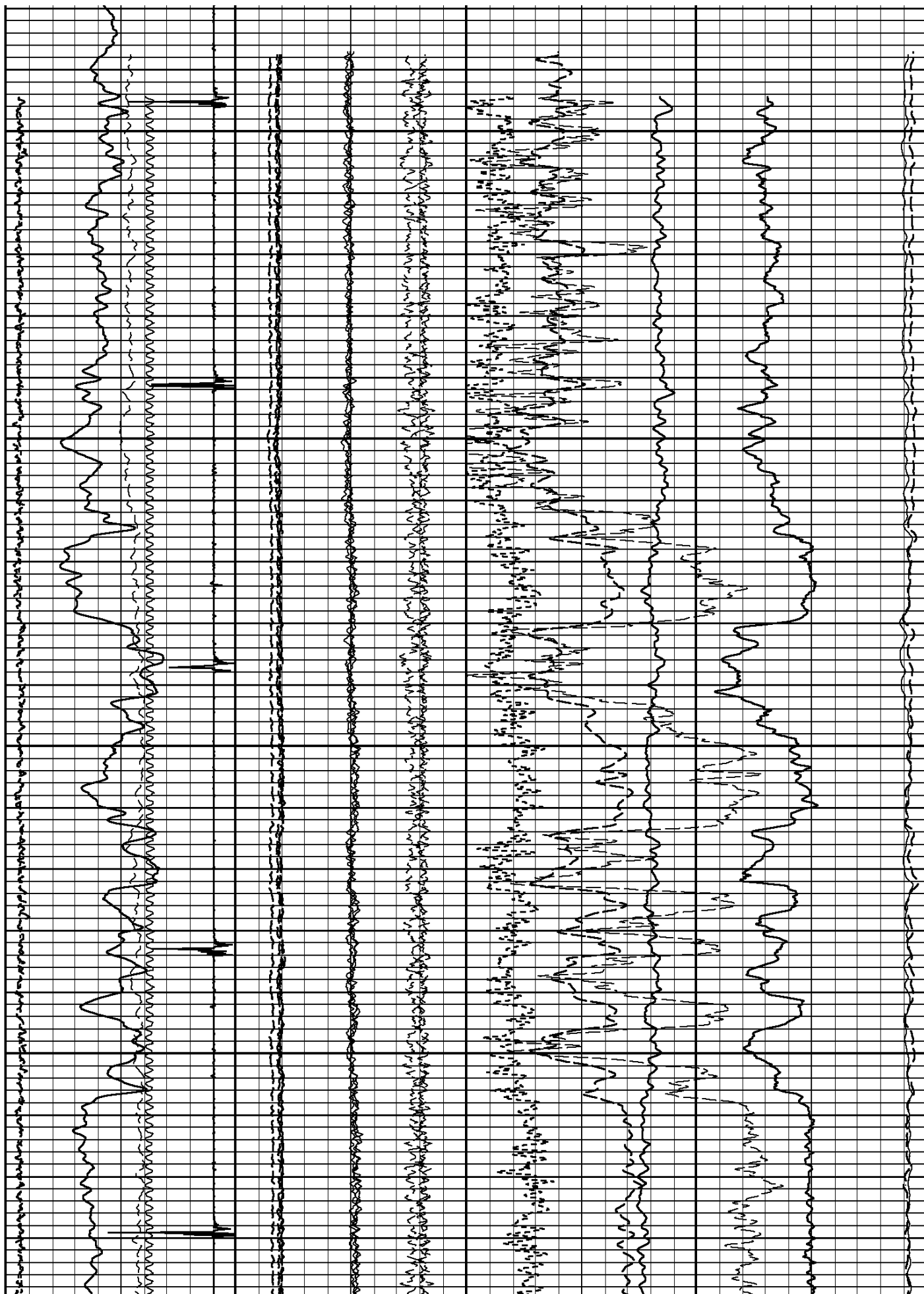
COMPANY URSA OPERATING RESOURCES						COMPANY URSA OPERATING COMPANY					
WELL McLIN B21						WELL McLIN B21					
FIELD SILT						FIELD SILT					
CNTY GARFIELD STATE CO						COUNTY GARFIELD STATE COLORADO					
PERM. DATUM GROUND LEVEL						ELEV. 5648'					
LOG MEASURED FROM K.B. 13 FT. ABOVE PERMANENT DATUM						ELEV.:K.B. 5661 D.F. 5661 G.L. 5648					
DRAINING MEASURED FROM K.B.											
DATE	13-NOV-2014										
RUN NO.	ONE										
DEPTH DRILLER	7214'										
DEPTH LOGGER	7012'										
BTM. LOG INTERVAL	7007'										
TOP LOG INTERVAL	1000'										
OPEN HOLE SIZE	7.875"										
TYPE FLUID	WATER										
DENS. VISC.	8.3 10.00										
MAX. REC. TEMP. F	182 DEG F.										
EST. CEMENT TOP	SEEL LOG										
TIME WELL READY	ROA										
TIME LOGGER ON BTM.	SEE LOG										
EQUIP. NO.	14247										
LOCATION	CASPER										
RECORDED BY	P. MAZUR										
WITNESSED BY	L. GREGER										
BOREHOLE RECORD						TUBING RECORD					
RUN NO.	BIT	FROM	TO	SIZE	WGT.	FROM	TO				
CASING RECORD	SIZE	WT/FT	GRADE	TYPE JOINT	TOP	BOTTOM					
SURFACE STRING	8.625"				SURF.	1000'					
PROD. STRING	4.5"	11.6			SURF.	7214'					
LINER											

All interpretations of log data are opinions based on inferences from electrical or other measurements. We do not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

REMARKS		Rig: WFT CRANE #15002		Service Order #	
THIS IS THRE PRIMARY LOG FOR THIS WELL				BHT 182 °F	
ALL LOGGED INTERVALS PER CUSTOMER REQUEST					
SQ# 103089654				Prints: 2	
THANK YOU FOR CHOOSING WEATHERFORD WIRELINE SERVICES CASPER, WY					
		EQUIPMENT DATA			
Bit Size	7.875	Run No.	Tool Type	Tool No.	Other
Well Status	NEW DRILL	ONE	CCPC	139	
Surface Pressure		ONE	PNEE	126	
Shut In	Flowing	ONE	PDTE	108	
		ONE	GENERATOR	1K089	

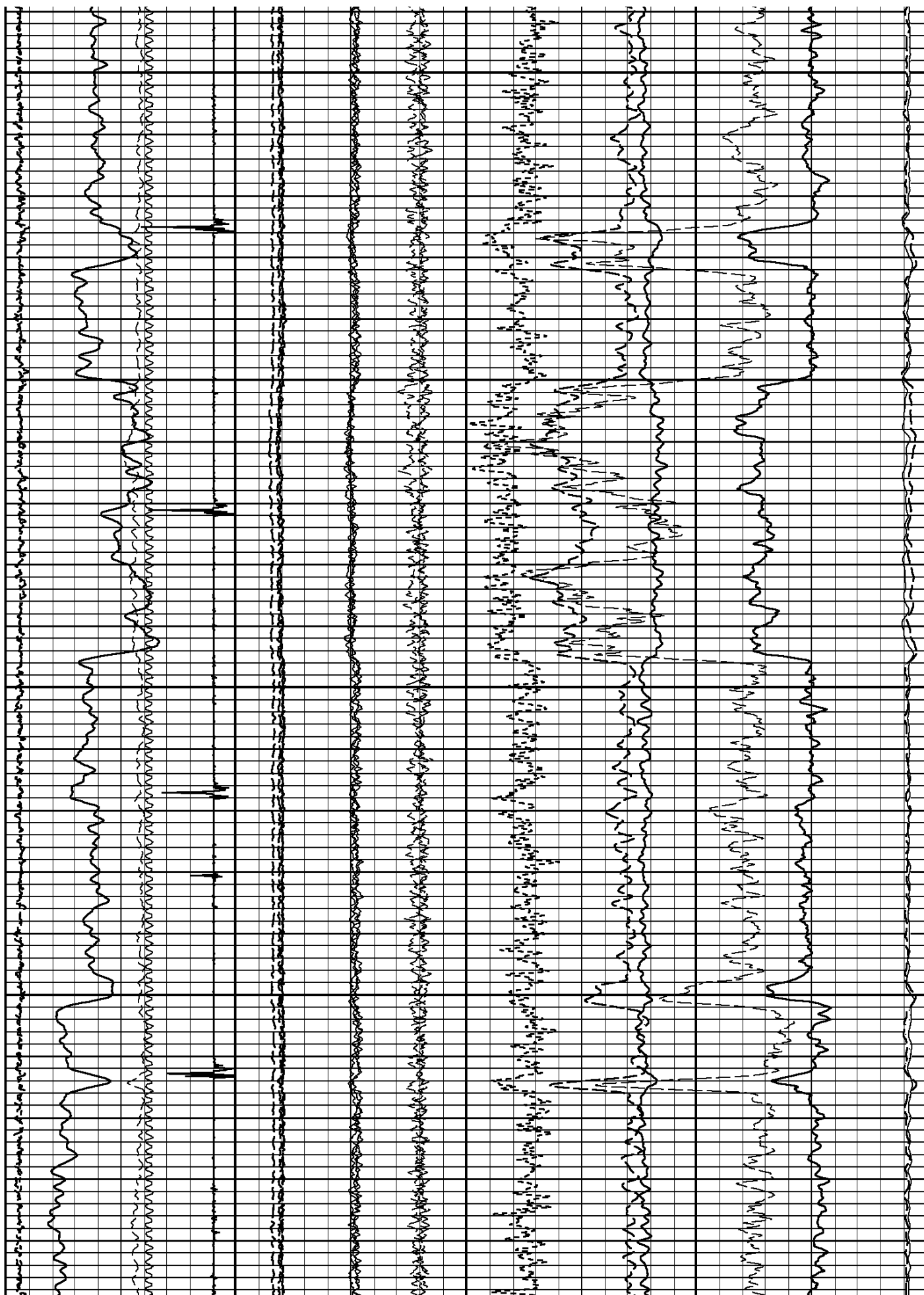
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3300



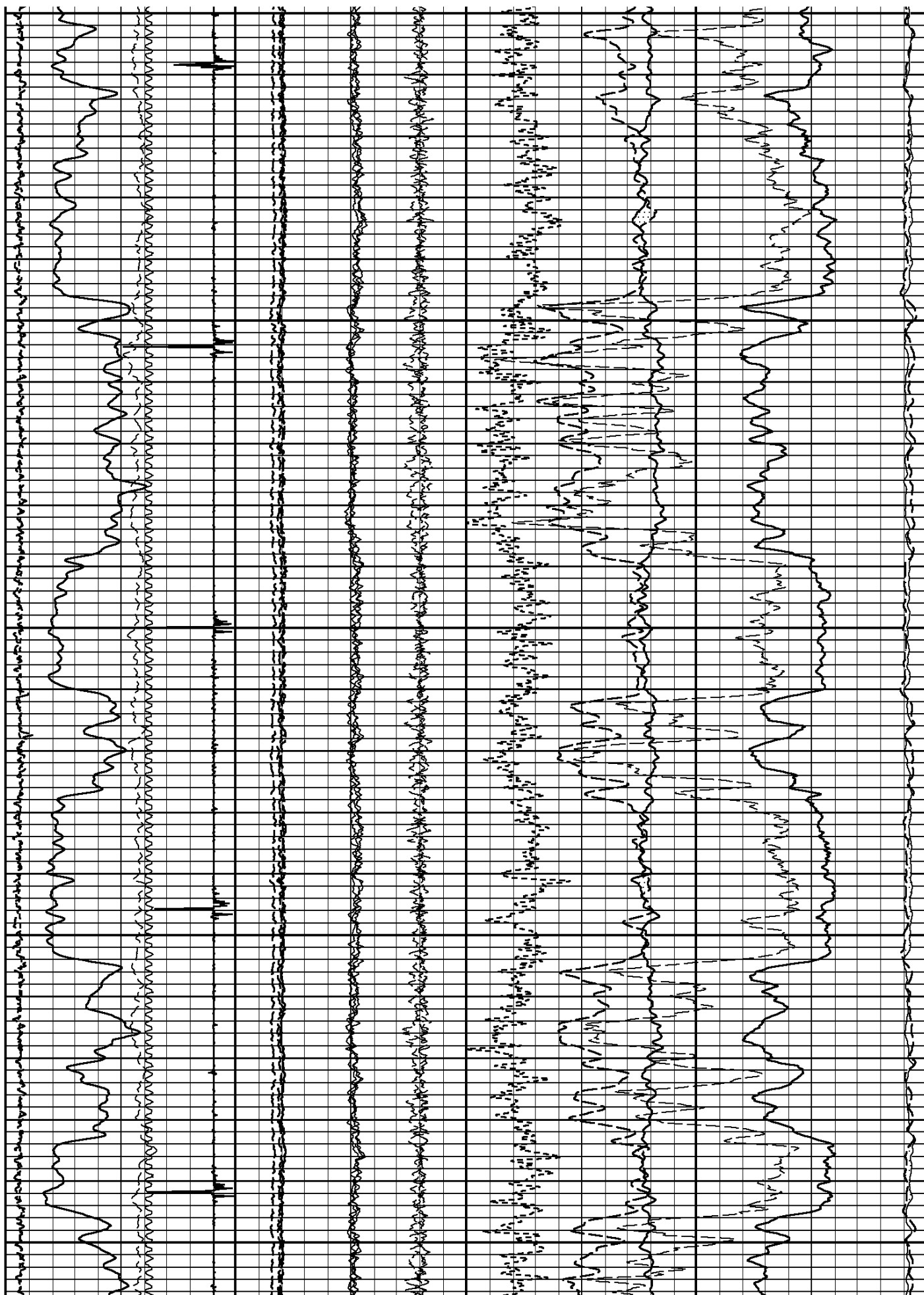
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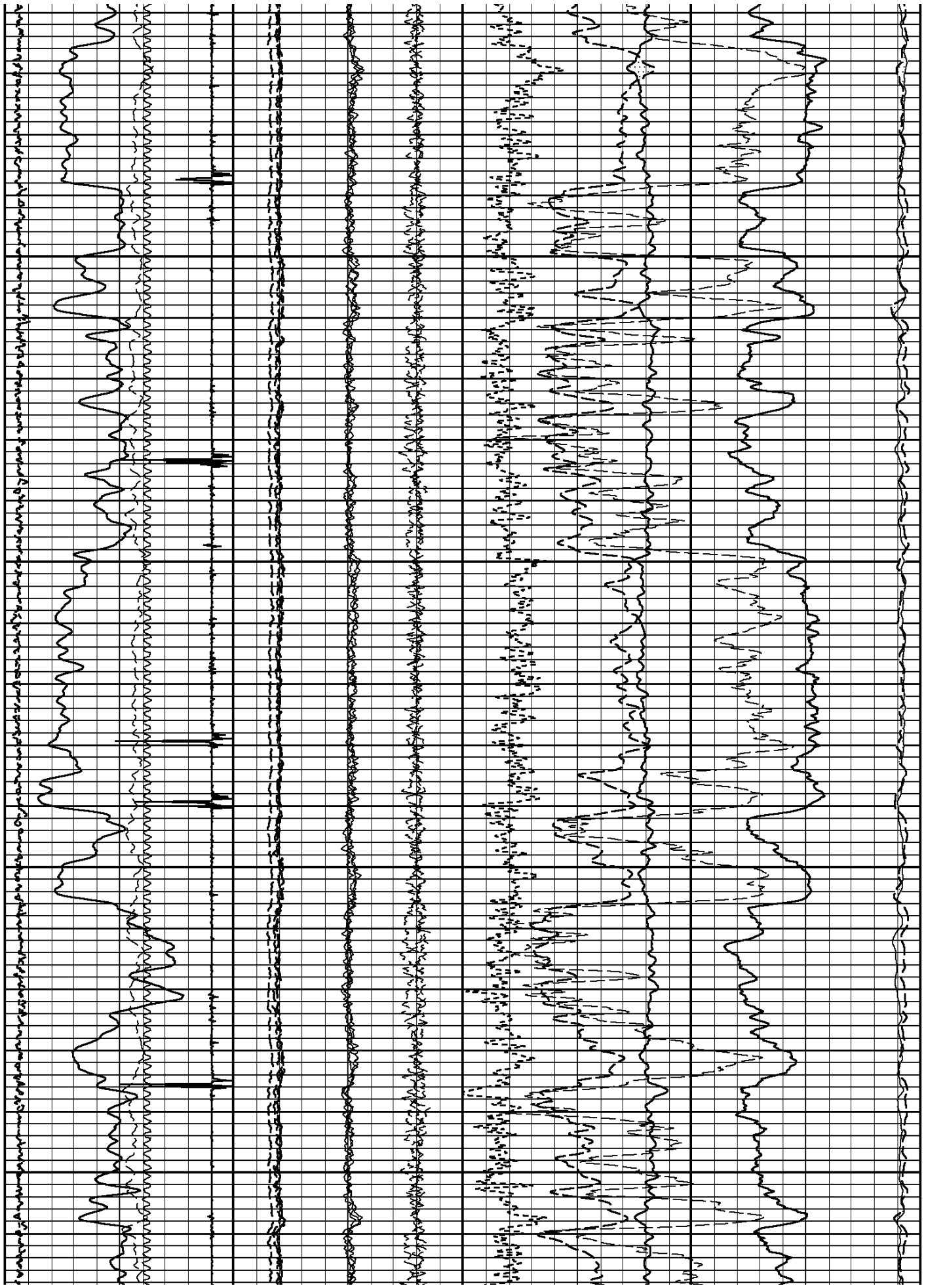
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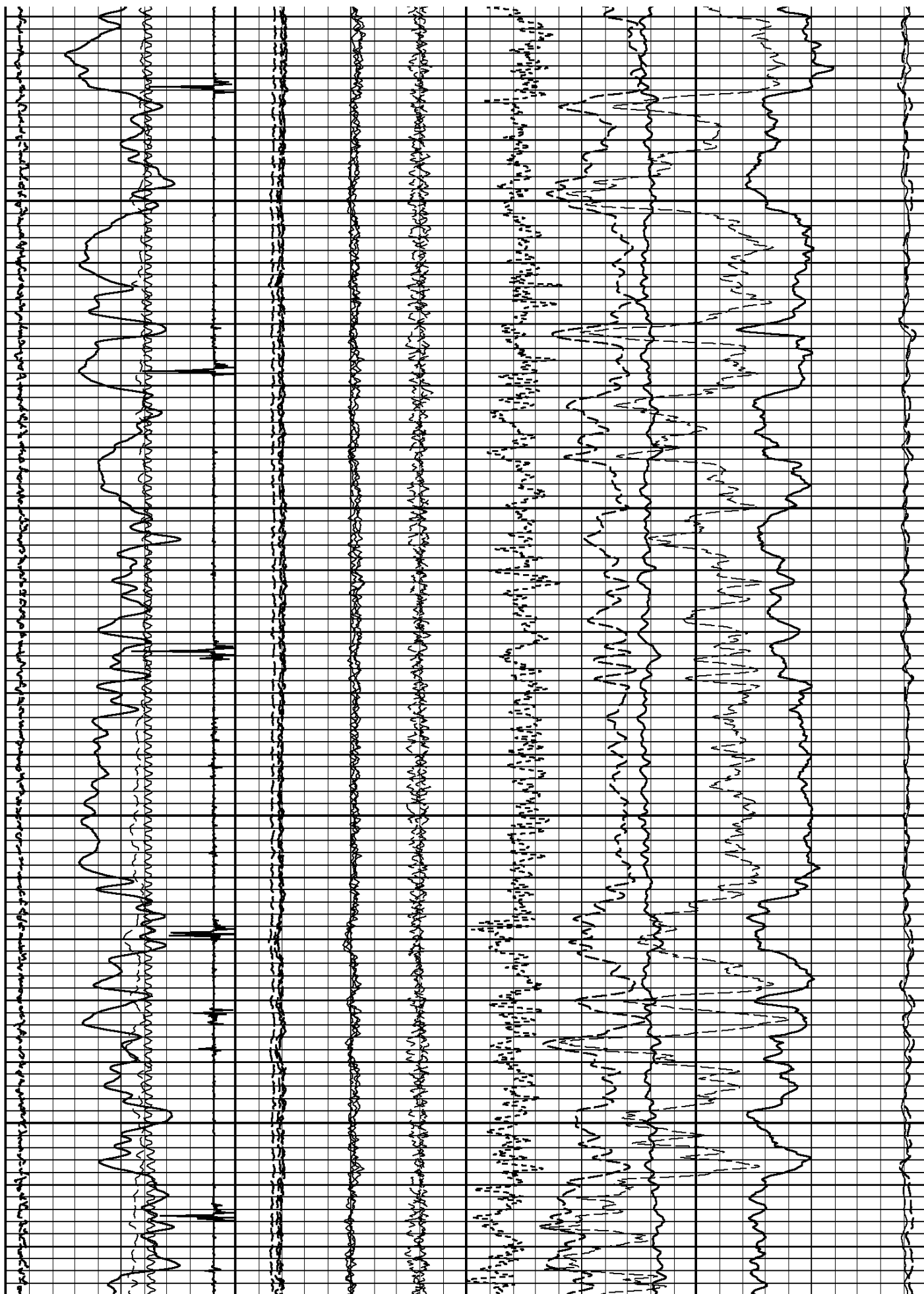
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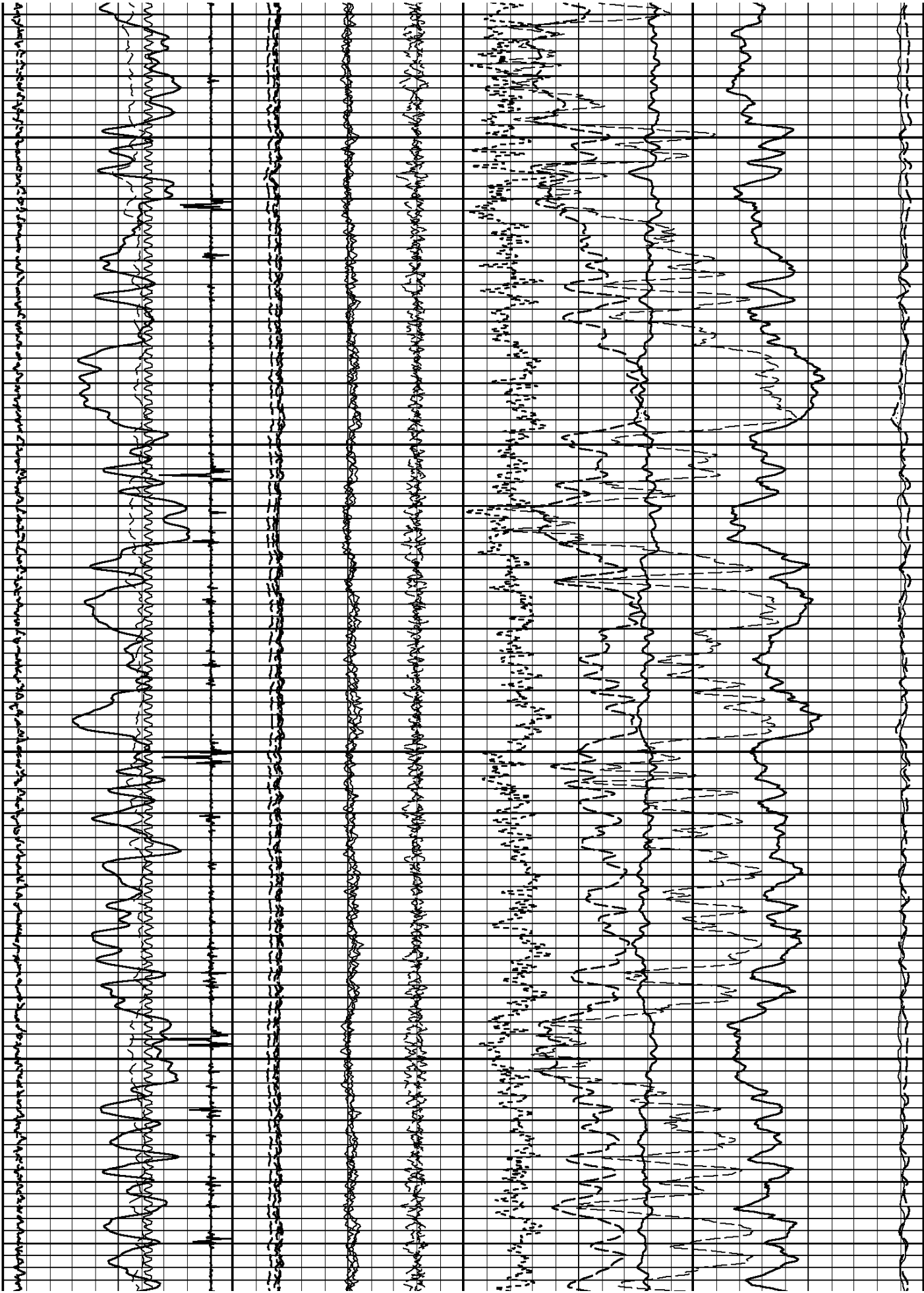
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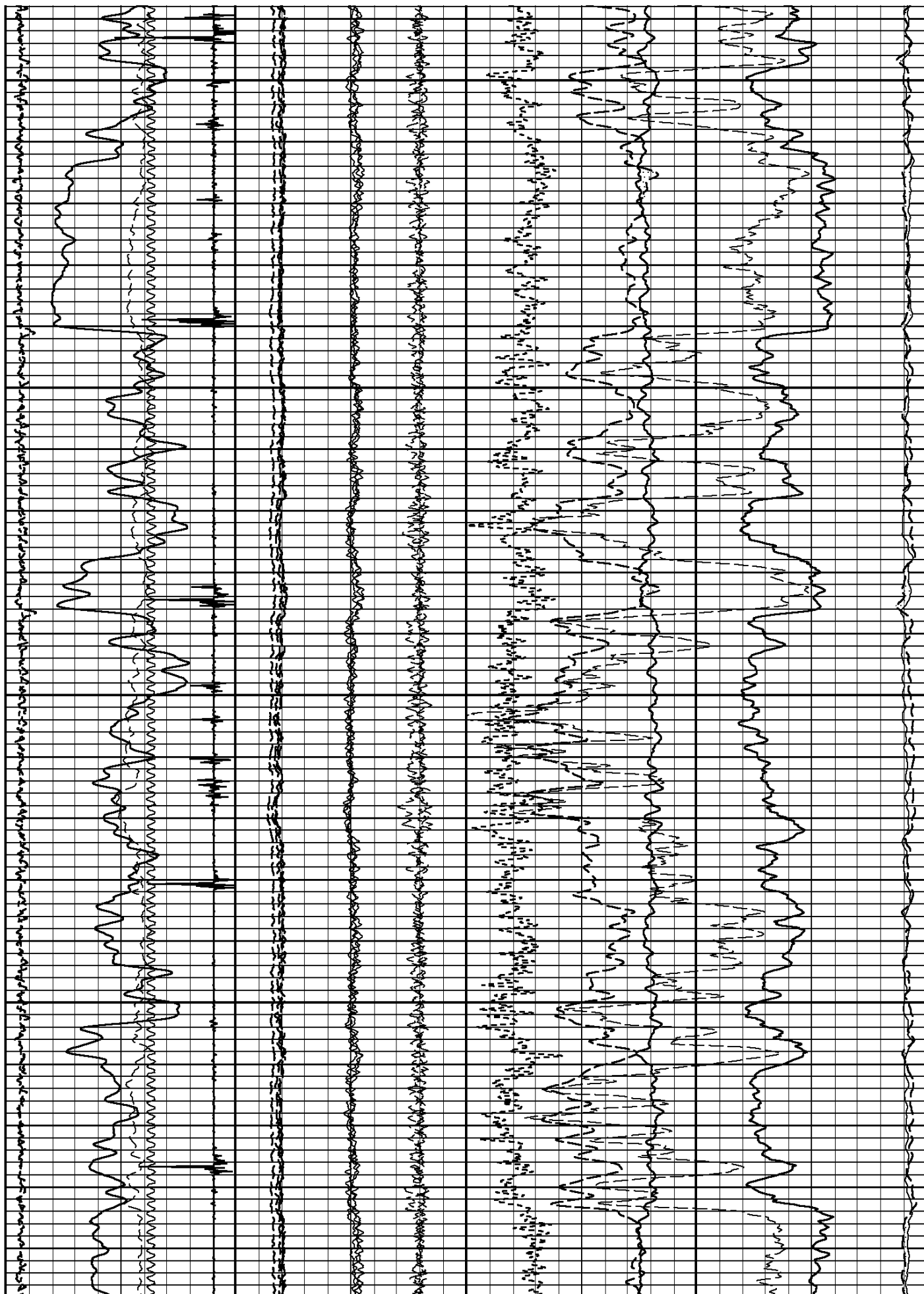
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4300



4400

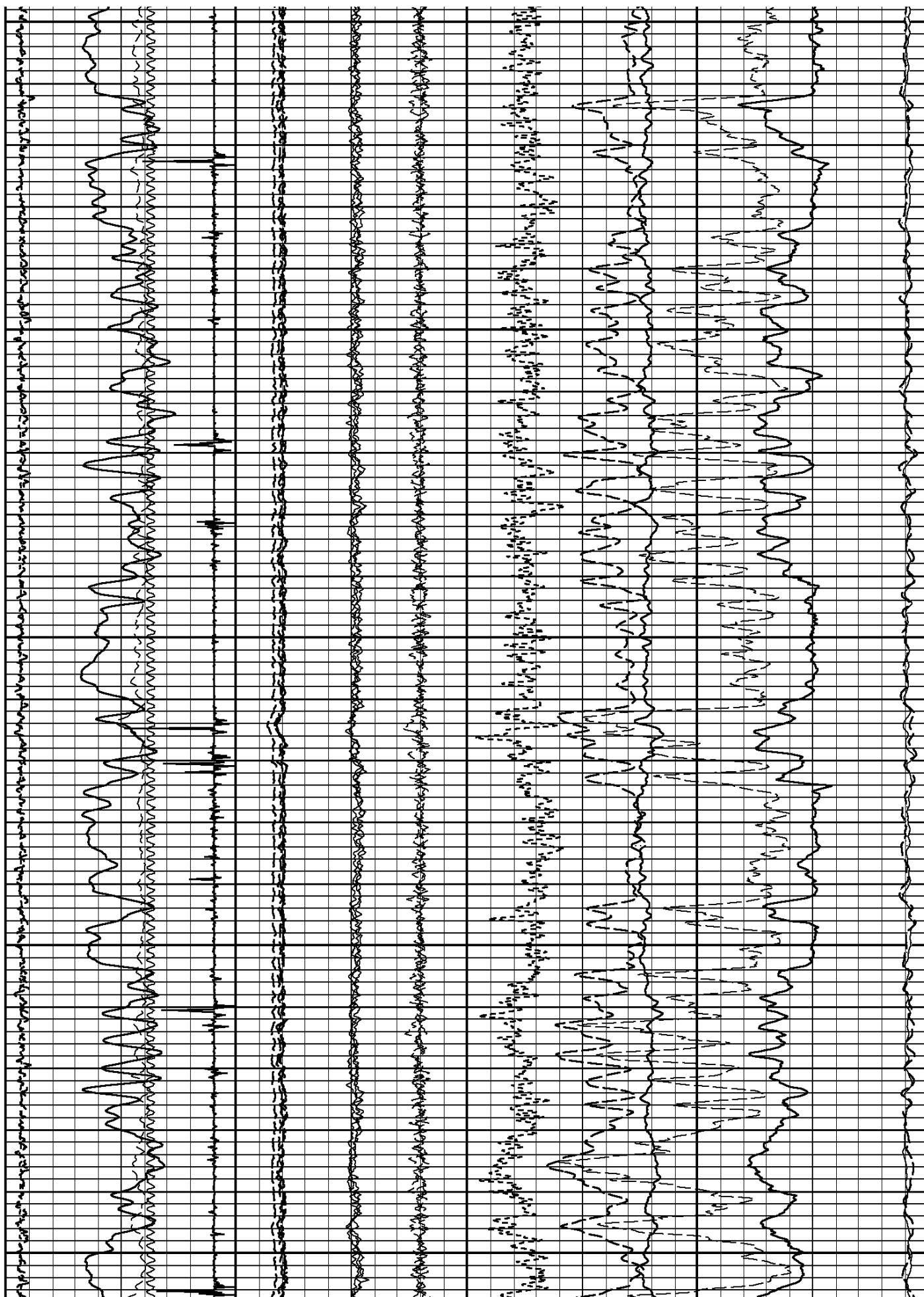
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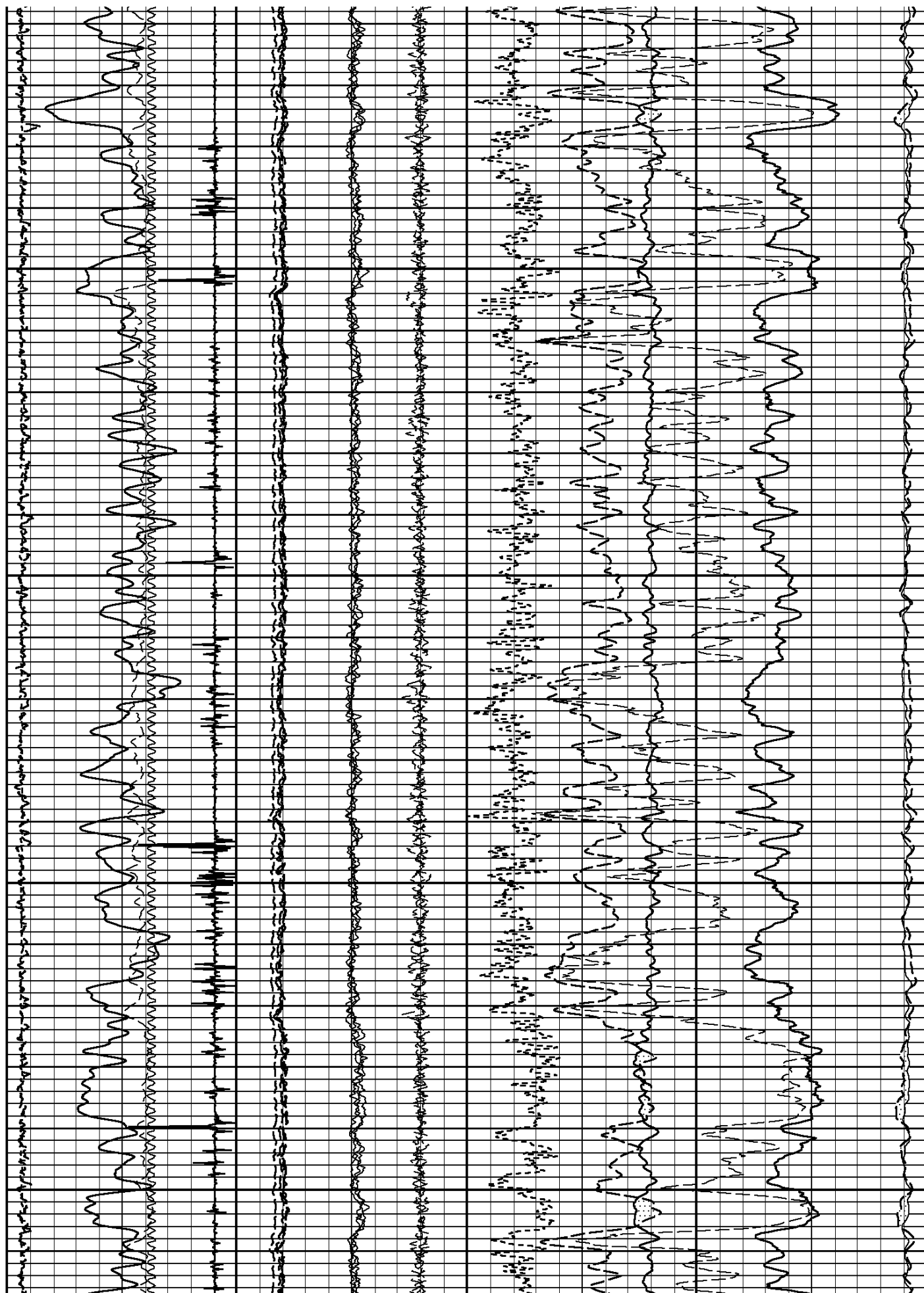
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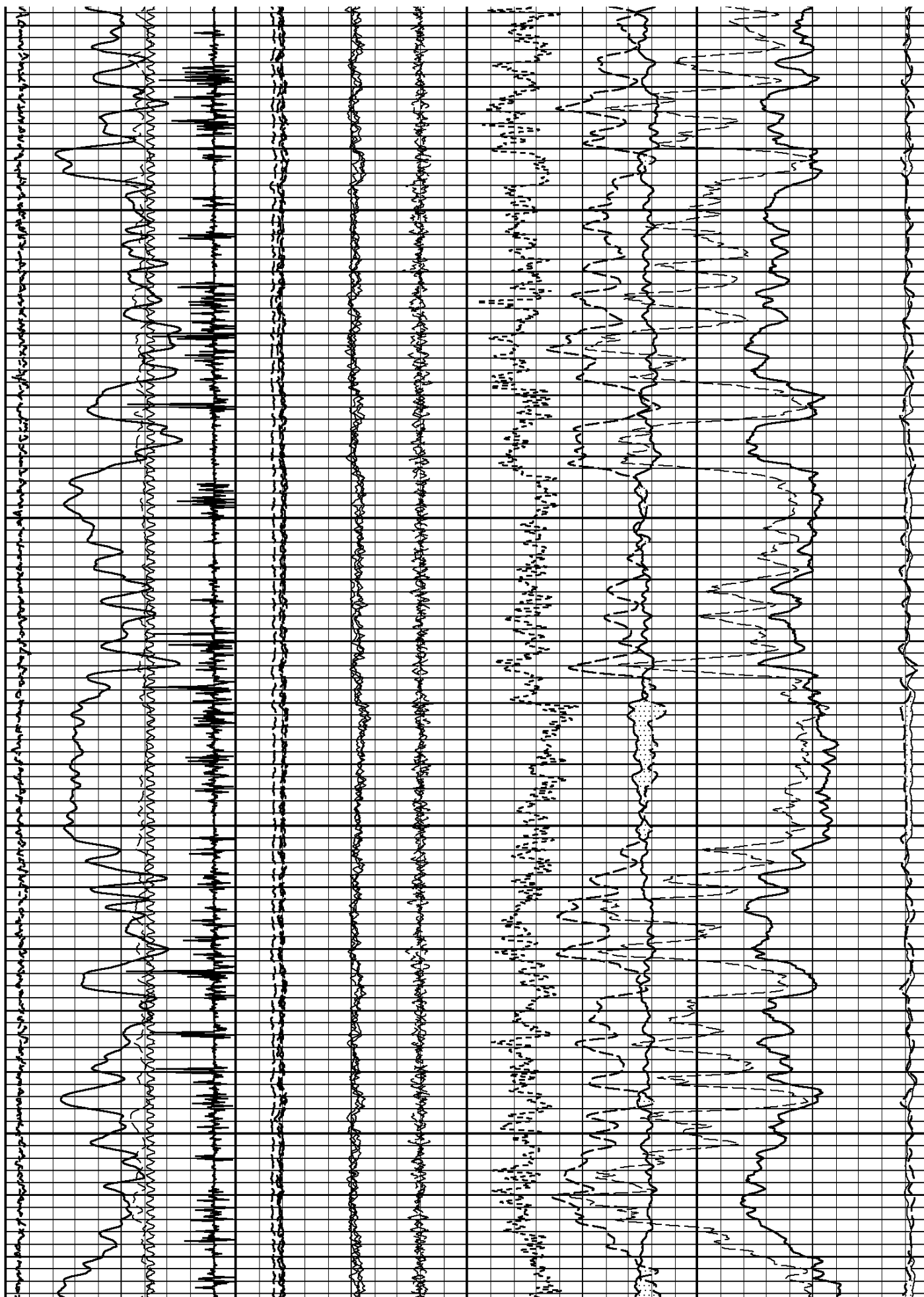
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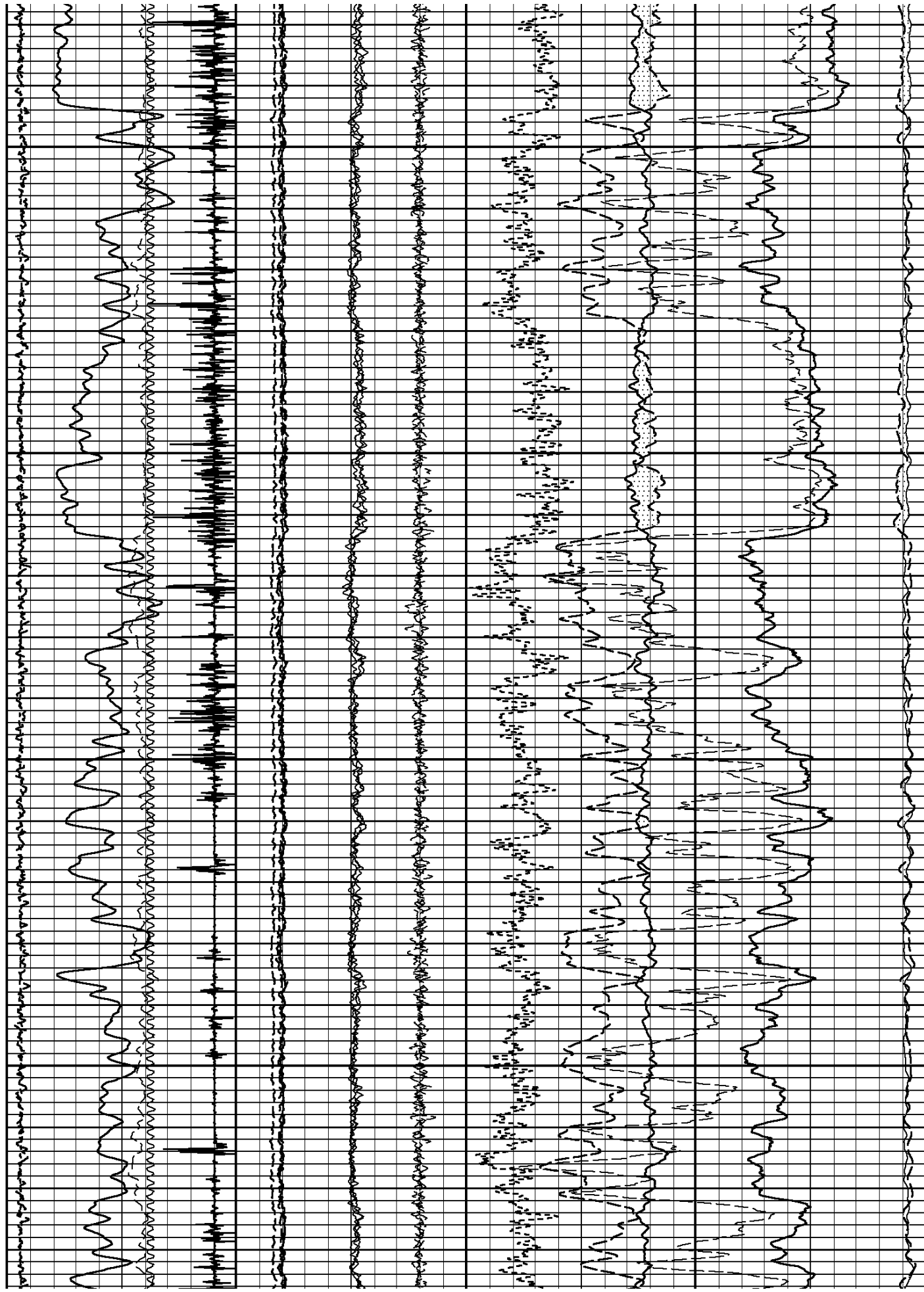
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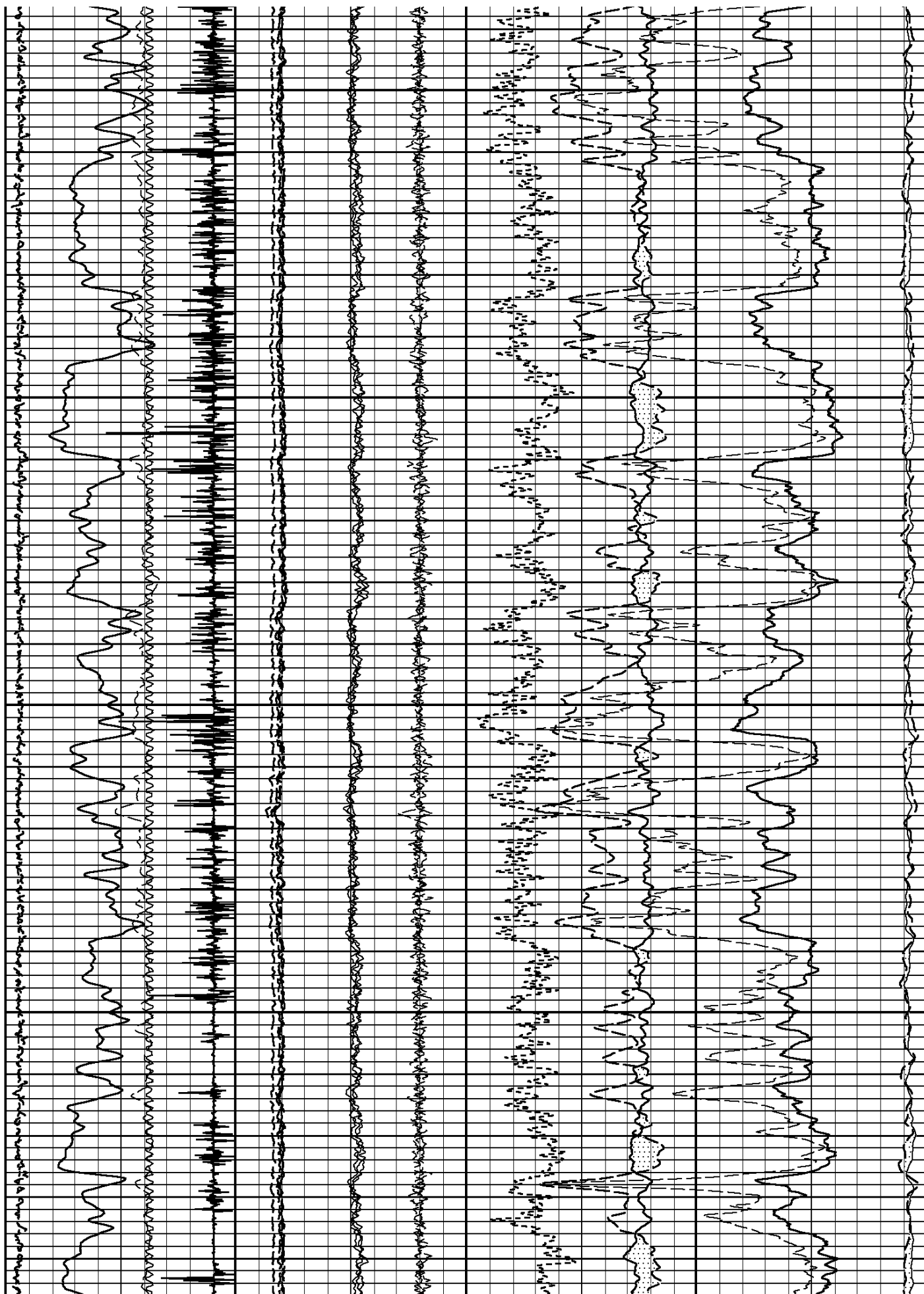


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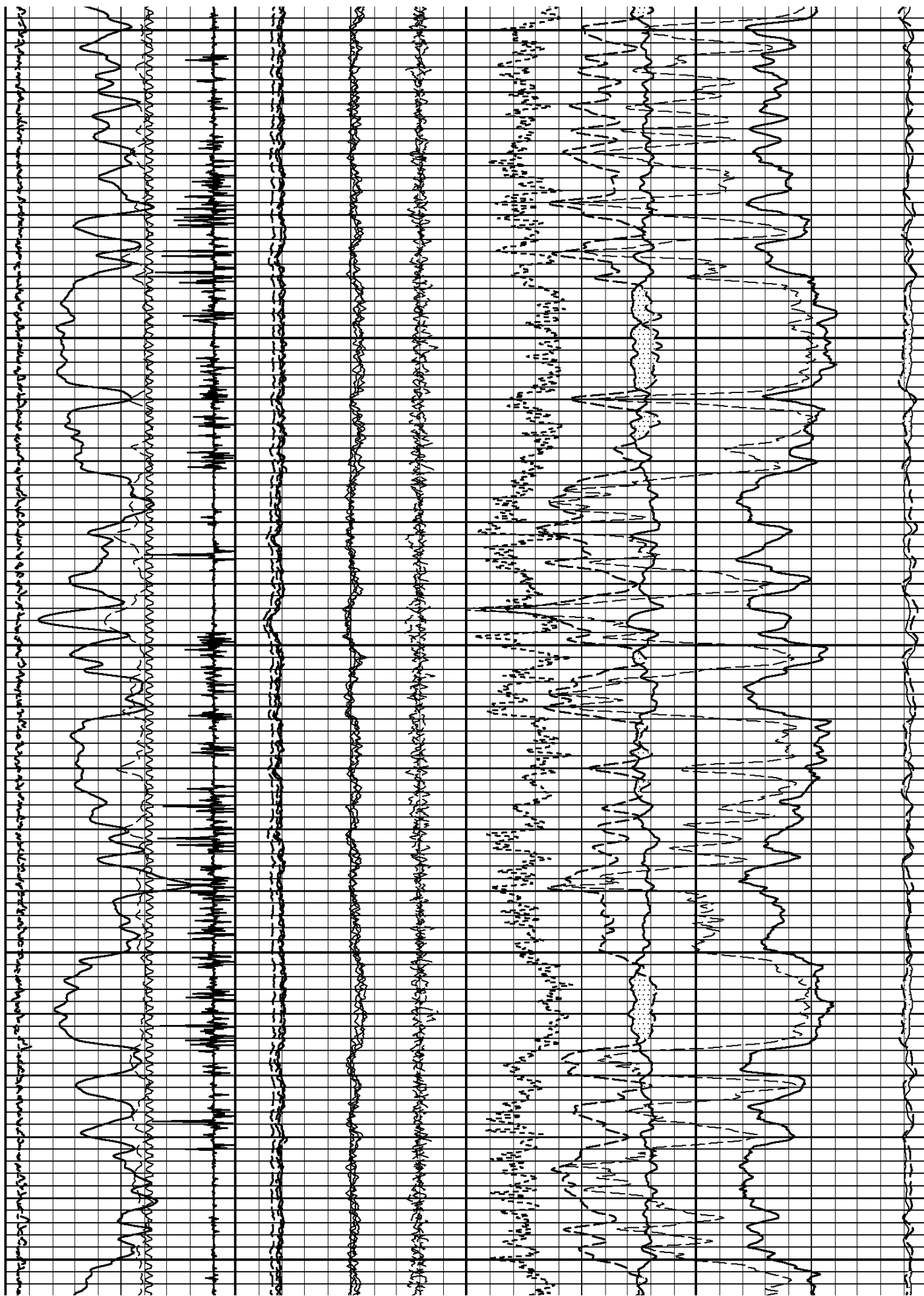
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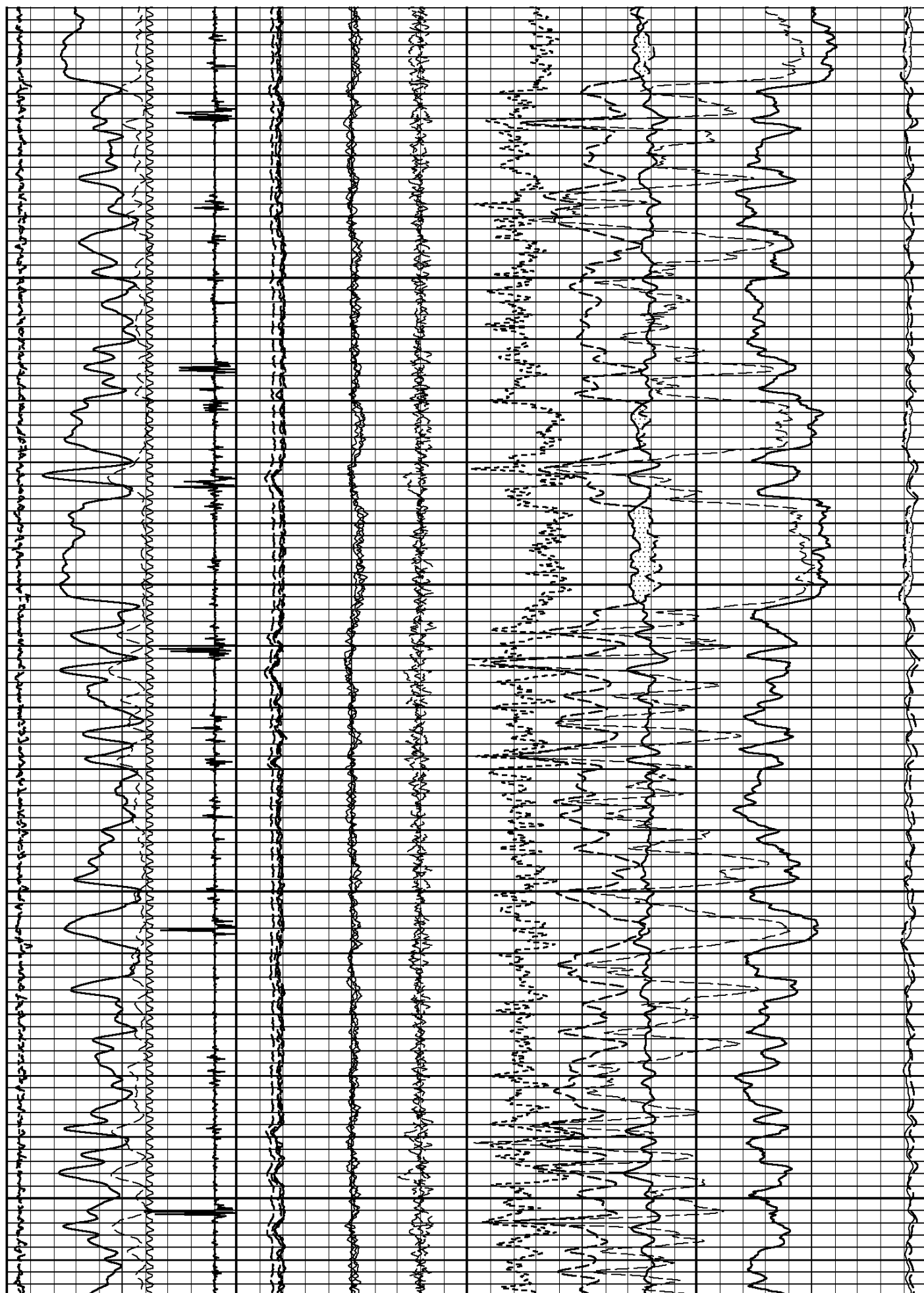
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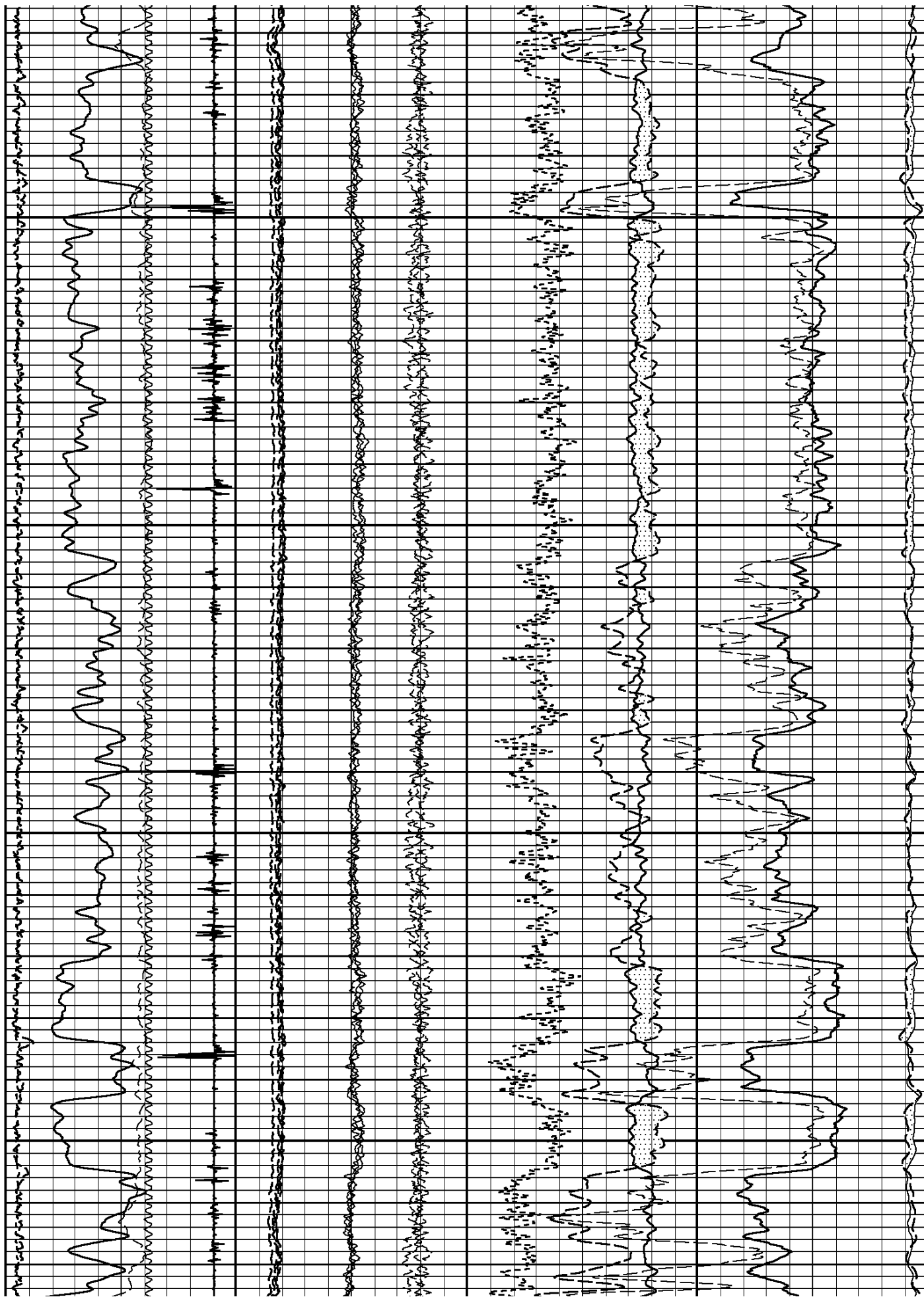
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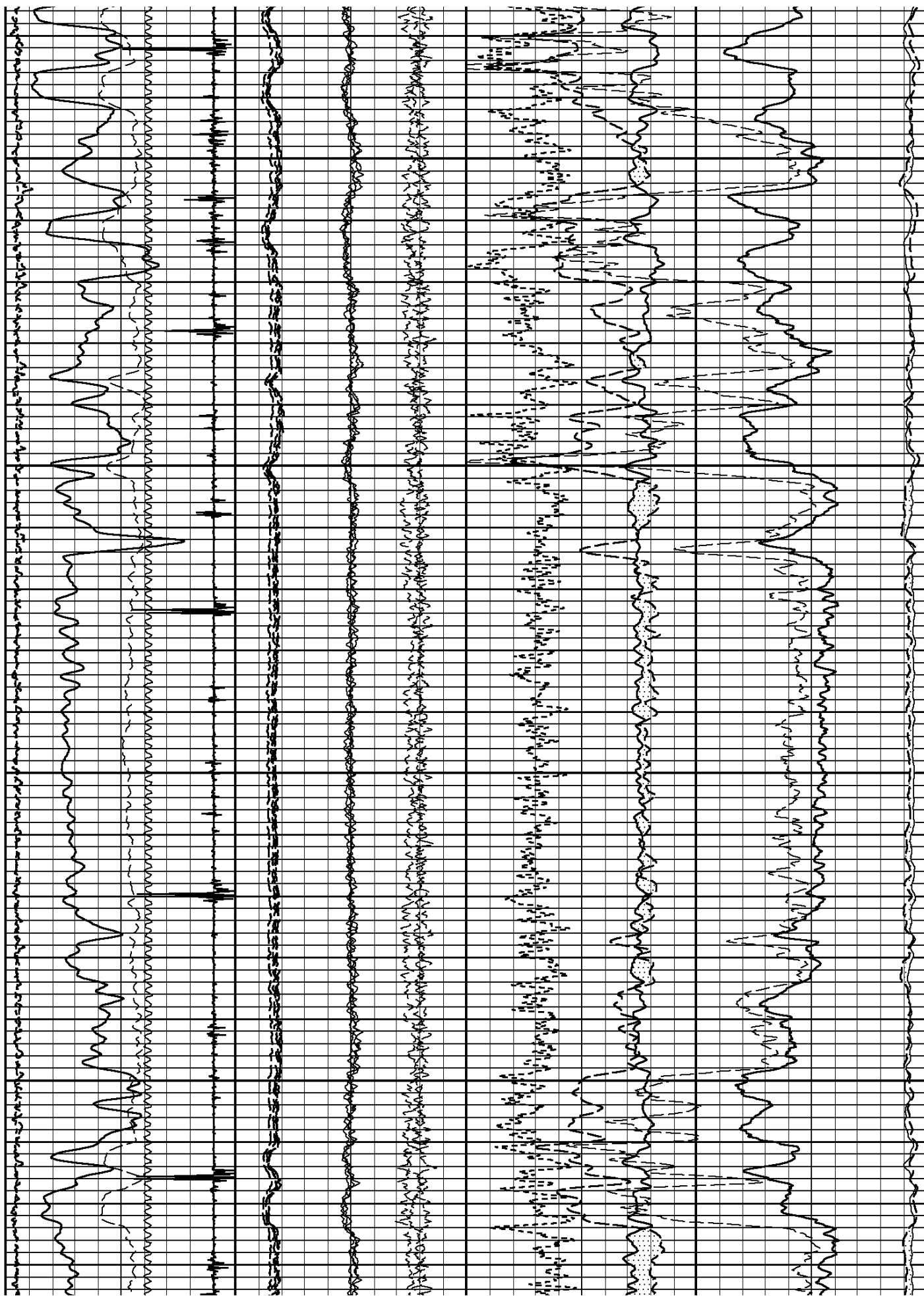
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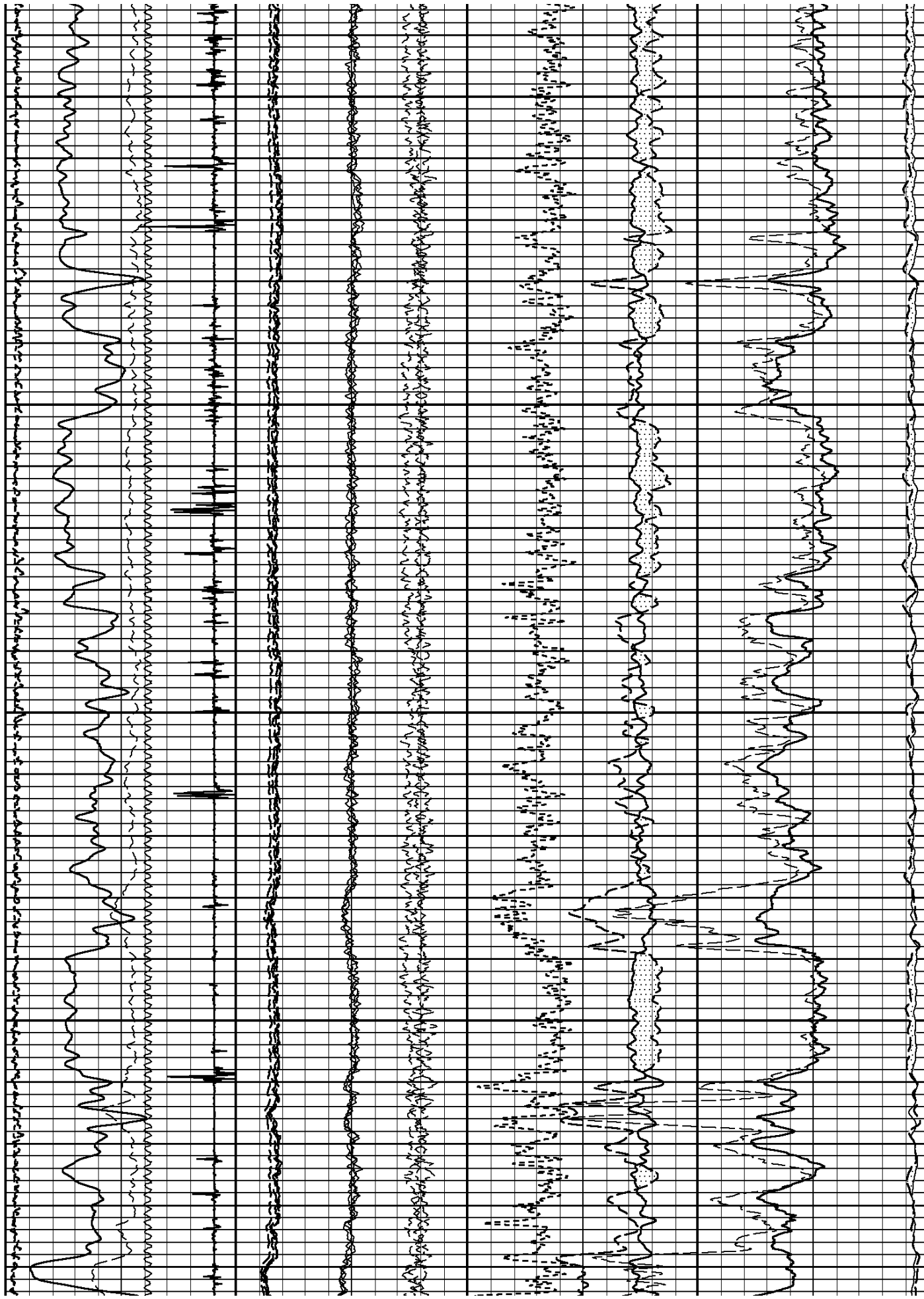


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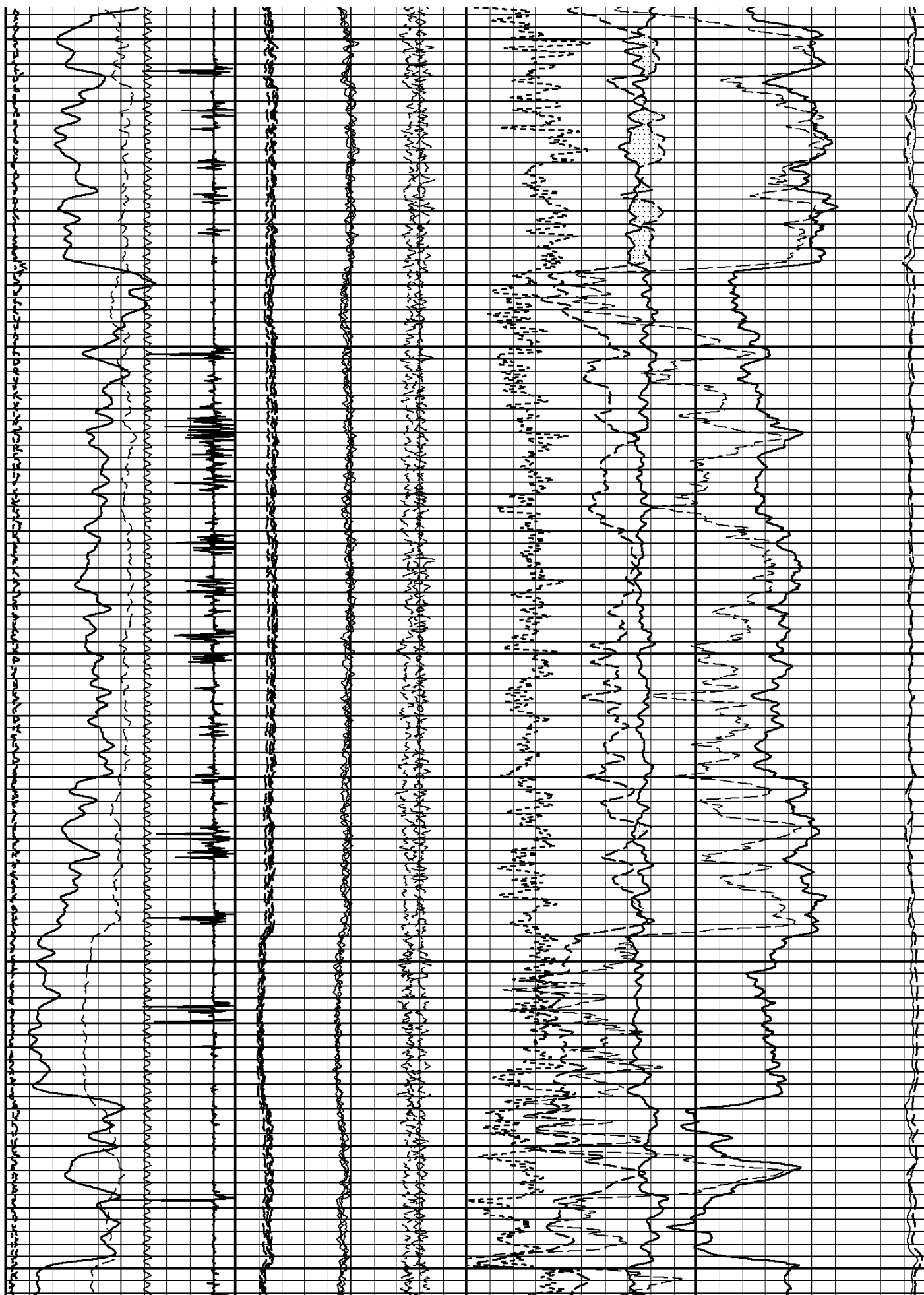


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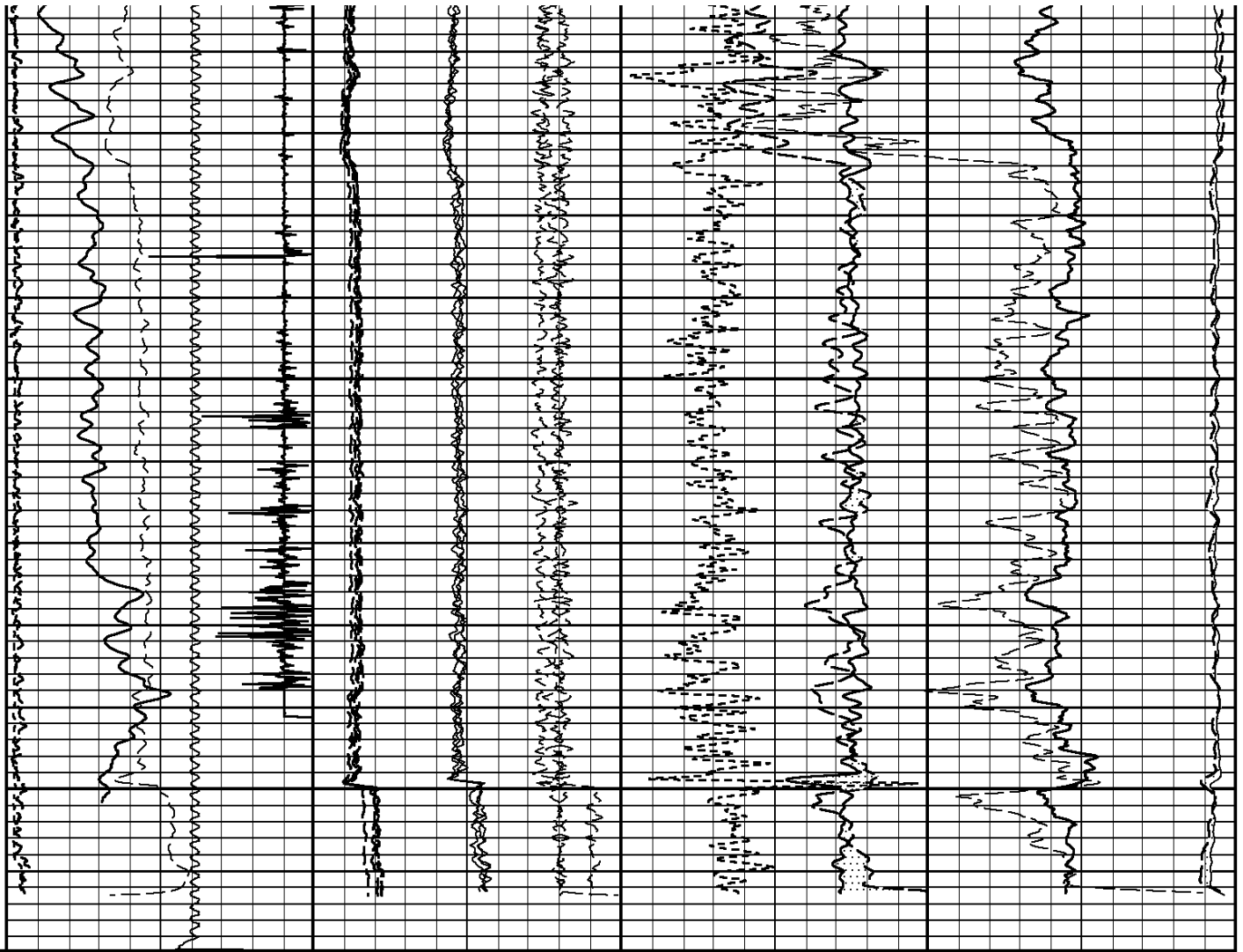
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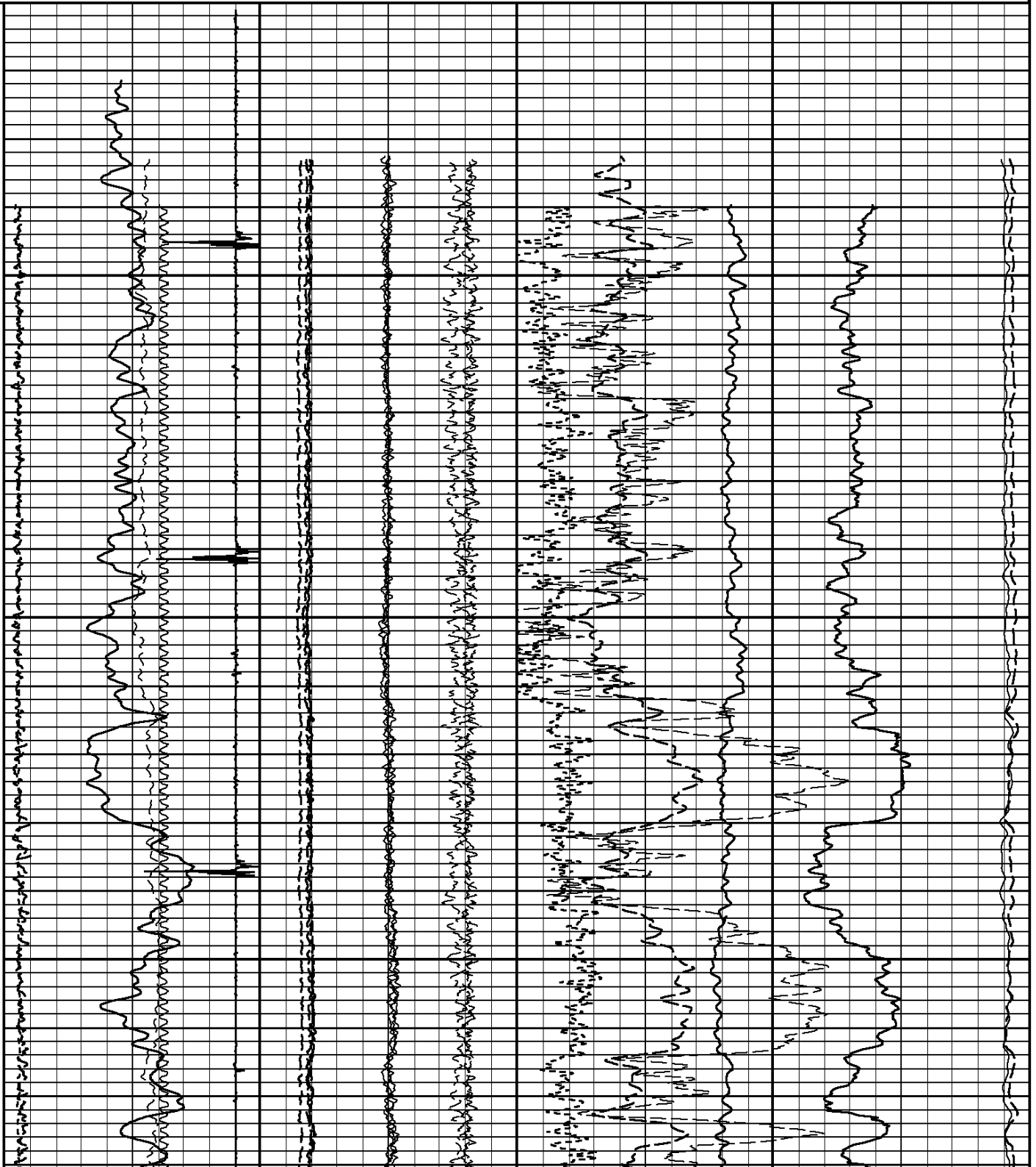
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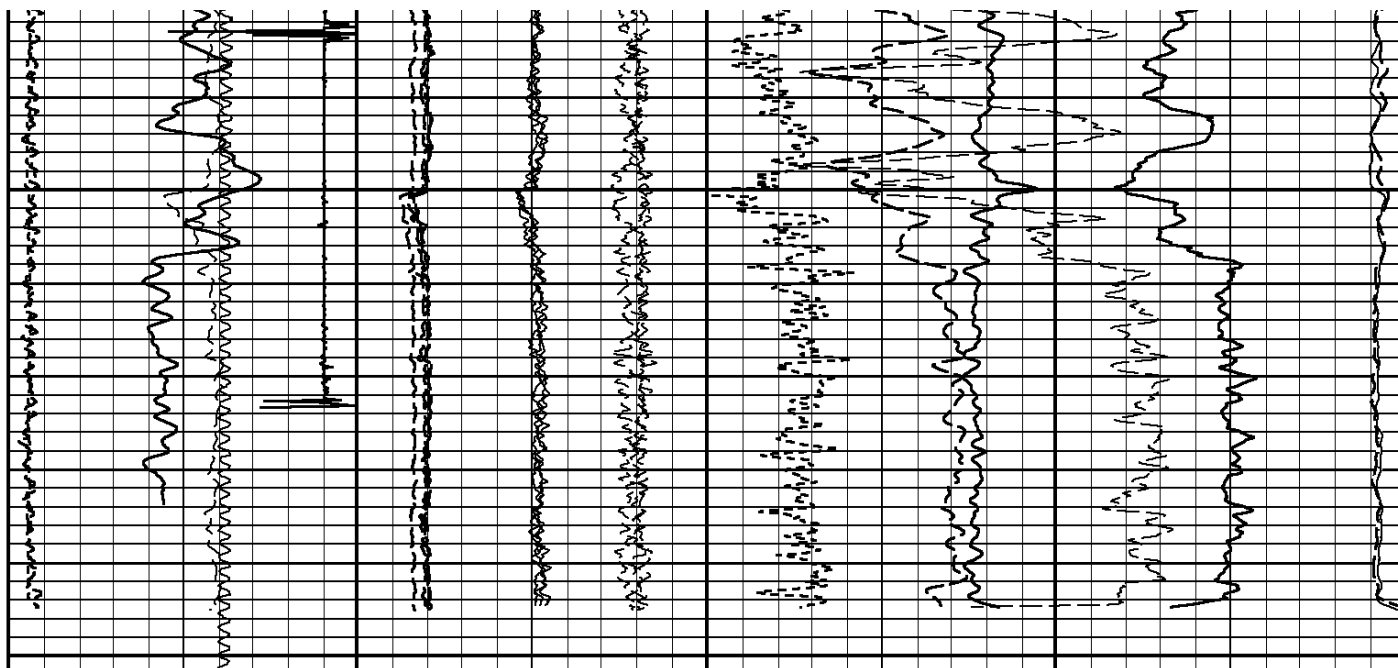
Tension	OUTPUT QUALITY	NB91	Borehole Ratio	
0 2000	0.0 200000.0	0 2400000	12.5	-2.5
	GAMMA RAY			
0 API 200	0 2400000	NB92	60.0	0.0
	CCL			
-10000 Millivolts 1000	0 2400000	NB93	40.0	0.0
	Near Background			
0.0 40000.0	0 2400000	NB94	6.0 1.0	240.0 CPS 0.0
	Far Background			
0.0 4000.0	-80000 160000	FB92	Ratio Bore n to f	FAR 1
			-1.0 14.0	40.0 Counts/Second 0.0
	Line Speed			
-50.0 Feet/Min 50.0	-80000 160000	FB93		
		FB94		
	-80000 160000			
		NBPS		

Tension	CCL		NB93		NphiS	
	-10000	Millivolts 1000	0	2400000	40.0	0.0
	GAMMA RAY		NB92		Formation Sigma	
	0	API 200	0	2400000	60.0	0.0
0	OUTPUT QUALITY		NB91		Borehole Ratio	
	2000	0.0 200000.0	0	2400000	12.5	-2.5

3200



3300



Tension	OUTPUT QUALITY	NB91	Borehole Ratio	
0 2000	0.0 200000.0	0 2400000	12.5	-2.5
	GAMMA RAY	NB92	Formation Sigma	
0 API 200		0 2400000	60.0	0.0
	CCL	NB93	NphiS	
-10000 Millivolts 1000		0 2400000	40.0	0.0
	Near Background	NB94	RATIO	NEAR 1
0.0 40000.0		0 2400000	6.0 1.0	240.0 CPS 0.0
	Far Background	FB92	Ratio Bore n to f	FAR 1
0.0 4000.0		-80000 160000	-1.0 14.0	40.0 Counts/Second 0.0
	Line Speed	FB93		
-50.0 Feet/Min 50.0		-80000 160000		
		FB94		
		-80000 160000		
		NBPS		
		-1.5 1.5		
		SB4Q		
		-8.0 7.0		
		HESC		
		-7.0 8.0		

START DEPTH: 3351.9 DIRECTION: UP DATE: 11/14/2014 TIME: 09:48 MODE: ORIGINAL

REPEAT PASS

DEPTH SCALE: 5":100'

LOGGED VERSION: 2012.07.18.162"

1 7/16 Adapter Head

Weight 2.2 LBS.
 Length 12 IN.
 Max. Diameter

Total Stack Weight in air
 Total Stack Length 32.0 FT.

Pulsed Neutron Processor

Weight 49 LBS.
 Length 12.9 FT.
 Max. Diameter 1.69 IN.

Pulsed Neutron Detectors

Weight 29.9 LBS
 Length 19.0 FT.
 Max. Diameter 1.69 IN.

Pulsed Neutron Generator

Weight 26 LBS.
 Length 8.7 FT.
 Max. Diameter 1.69 IN.

CCL 28.51 FT.

GR 19.15 FT.

FAR DETECTOR 7.66 FT

From Target ()

NEAR DETECTOR 7.02 FT

From Target ()

TARGET 7.10 FT.

1.00 in. dia.
 (cm)

1.44 in. dia.
 (cm)

1.69 in. dia.

1.69 in. dia.

1.69 in. dia.

COMPANY URSA OPERATING COMPANY

WELL McLIN B21



FIELD SILT
COUNTY GARFIELD

STATE COLORADO

