

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to recomplete an
abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMNM85940

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
URRACCA 11 SB FED COM 4H9. API Well No.
30-025-41968-00-X110. Field and Pool or Exploratory Area
DIAMONDTAIL-BONE SPRING11. County or Parish, State
LEA COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on page 28 2018

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

MARATHON OIL PERMIAN LLC

Contact: JENNIFER VAN CUREN

E-Mail: jvancuren@marathonoil.com

3a. Address

5555 SAN FELIPE STREET
HOUSTON, TX 77056

3b. Phone No. (include area code)

Ph: 713.296.2500

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 11 T23S R32E NWNW 0362FNL 0459FWL
32.193192 N Lat, 103.390919 W Lon

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Hydraulic Fracturing☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other
Workover Operations

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Marathon Oil Permian LLC. respectfully requests permission to perform a remedial cement job in the style of a braiden head squeeze. A cement bond log was ran on the 5-1/2" 20# P-110 production casing showing the TOC at 6,500'. The proposed squeeze slurry is 402 sacks of 12.2 PPG class C cement with 2% CaCL with 50% excess. The volume calculations are in 8-3/4" hole with 5-1/2" casing from 6,500' to 3,800' allowing for 1,062' of overlap into the next casing string. The 9-5/8" 40# J-55 intermediate shoe is set at 4,862'.

Carlsbad Field Office
OCD Hobbs

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #441021 verified by the BLM Well Information System

For MARATHON OIL PERMIAN LLC, sent to the Hobbs

Committed to AFMS for processing by PRISCILLA PEREZ on 11/15/2018 (19PP0422SE)

Name (Printed/Typed) JENNIFER VAN CUREN

Title SR. REGULATORY COMPLIANCE REP

Signature (Electronic Submission)

Date 10/24/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE

Title PETROLEUM ENGINEER

Date 11/20/2018

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

MUS/OCD
11/29/2018

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	MARATHON OIL PERMIAN LLC.
LEASE NO.:	NMNM85940
WELL NAME & NO.:	URRACCA 11 SB FED COM 4H
SURFACE HOLE FOOTAGE:	362'/N & 459'/W
BOTTOM HOLE FOOTAGE	286'/S & 631'/W
LOCATION:	Section. 11.,T23S.,R.32E., NMP
COUNTY:	Lea County, New Mexico

All previous COAs still apply.

-A cement bond log shall be run from 7400' to 3000' to verify TOC.



Radial Bond
Gamma Ray / CCL

Company Marathon Oil Well Urraca Federal Com 23 32 11 SB 4H Field Second Bone Springs County Lea State New Mexico	Company Marathon Oil						
	Well Urraca Federal Com 23 32 11 SB 4H						
	Field Second Bone Springs						
	County Lea State New Mexico						
Location:		API # : 30-025-41968		Other Services			
		362' FNL & 459' FWL		None			
SEC 11 TWP 23S RGE 32E				Elevation			
Permanent Datum		Ground Level		Elevation 3713'			
Log Measured From		Kelly Bushing		26.5' A.P.D.			
Drilling Measured From		Kelly Bushing		K.B. 3739.5' D.F. 3738.5' G.L. 3713'			
Date		30-Sep-2018					
Run Number		One					
Depth Driller		15613'					
Depth Logger		10615'					
Bottom Logged Interval		10615'					
Top Log Interval		Surface					
Open Hole Size		8.75"					
Type Fluid		Water					
Density / Viscosity		N/A					
Max. Recorded Temp.		166.1 degF					
Estimated Cement Top		4930'					
Time Well Ready		7:00					
Time Logger on Bottom		9:30					
Equipment Number		63					
Location		Hobbs NM					
Recorded By		E. Williams					
Witnessed By		Jake Menard					
Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
One	17.5"	Surface	1288'				
Two	12.25"	1288'	4900'				
Three	8.75"	4900'	15613'				
Casing Record		Size	Wgt/Ft	Top	Bottom		
Surface String		13.375"	54.5#	Surface	1288'		
Prot. String		9.625"	40#	Surface	4900'		
Production String		5.5"	20#	Surface	15613'		
Liner							

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

No Correction Made Wireline Depth Only

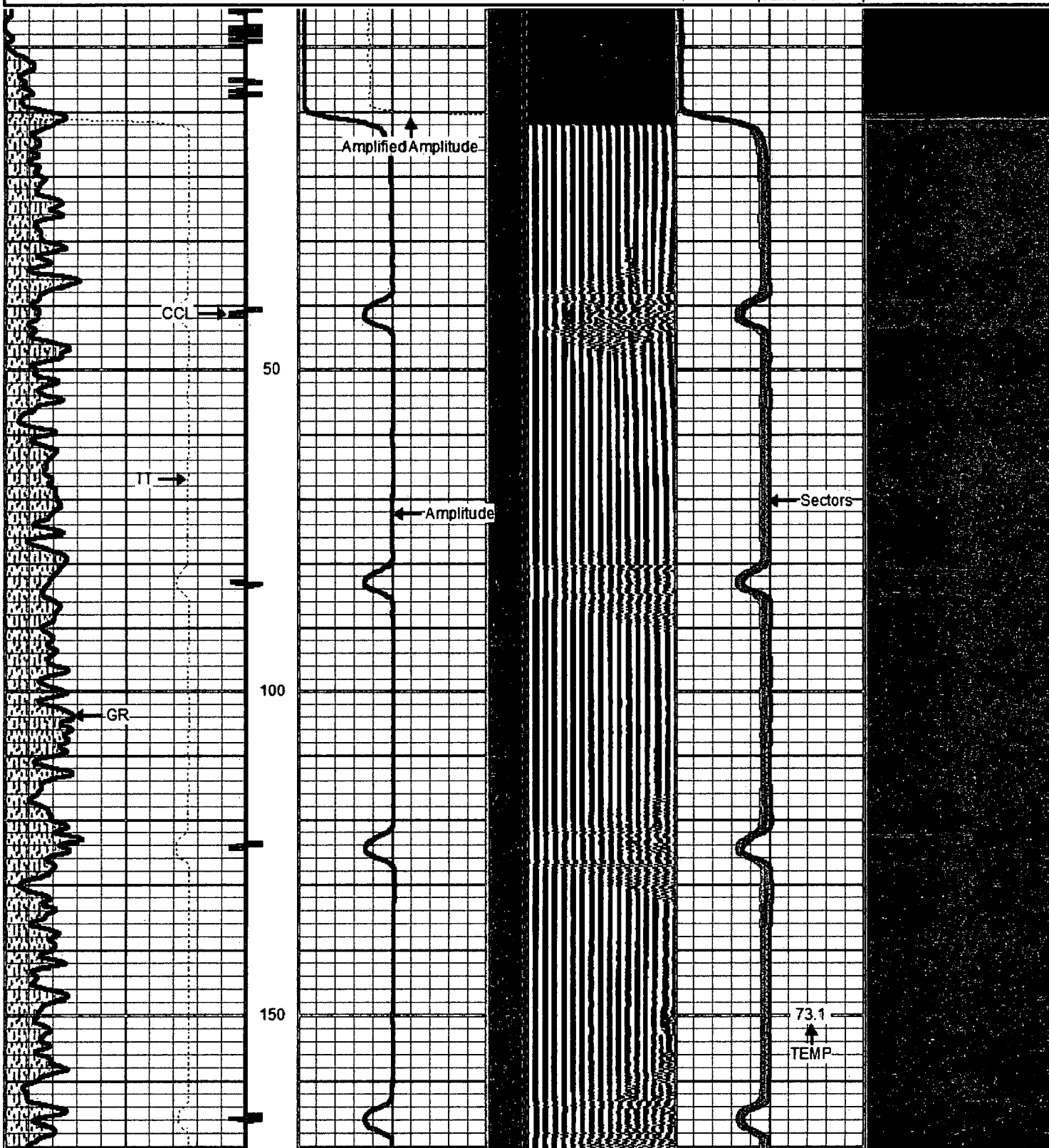


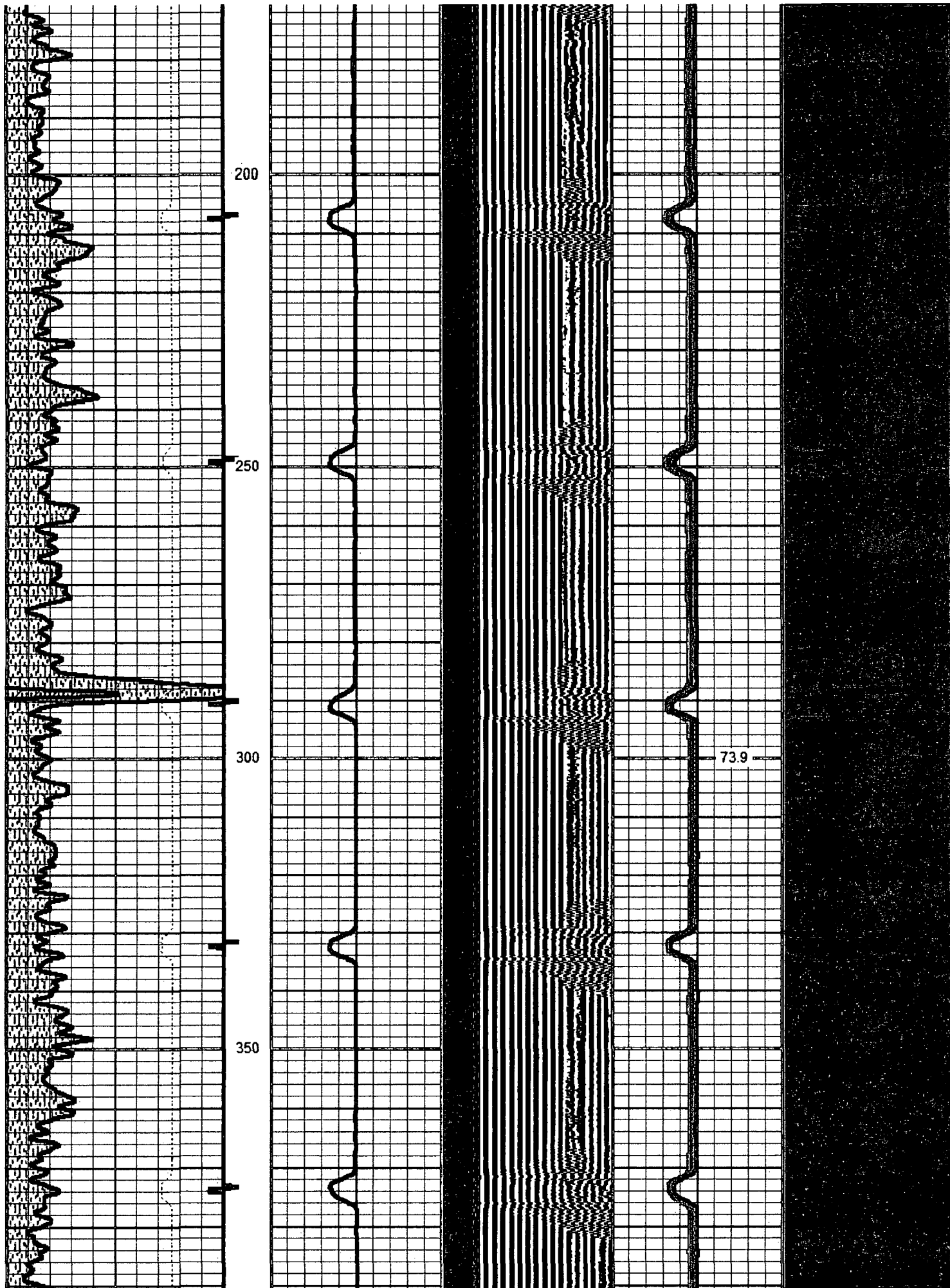
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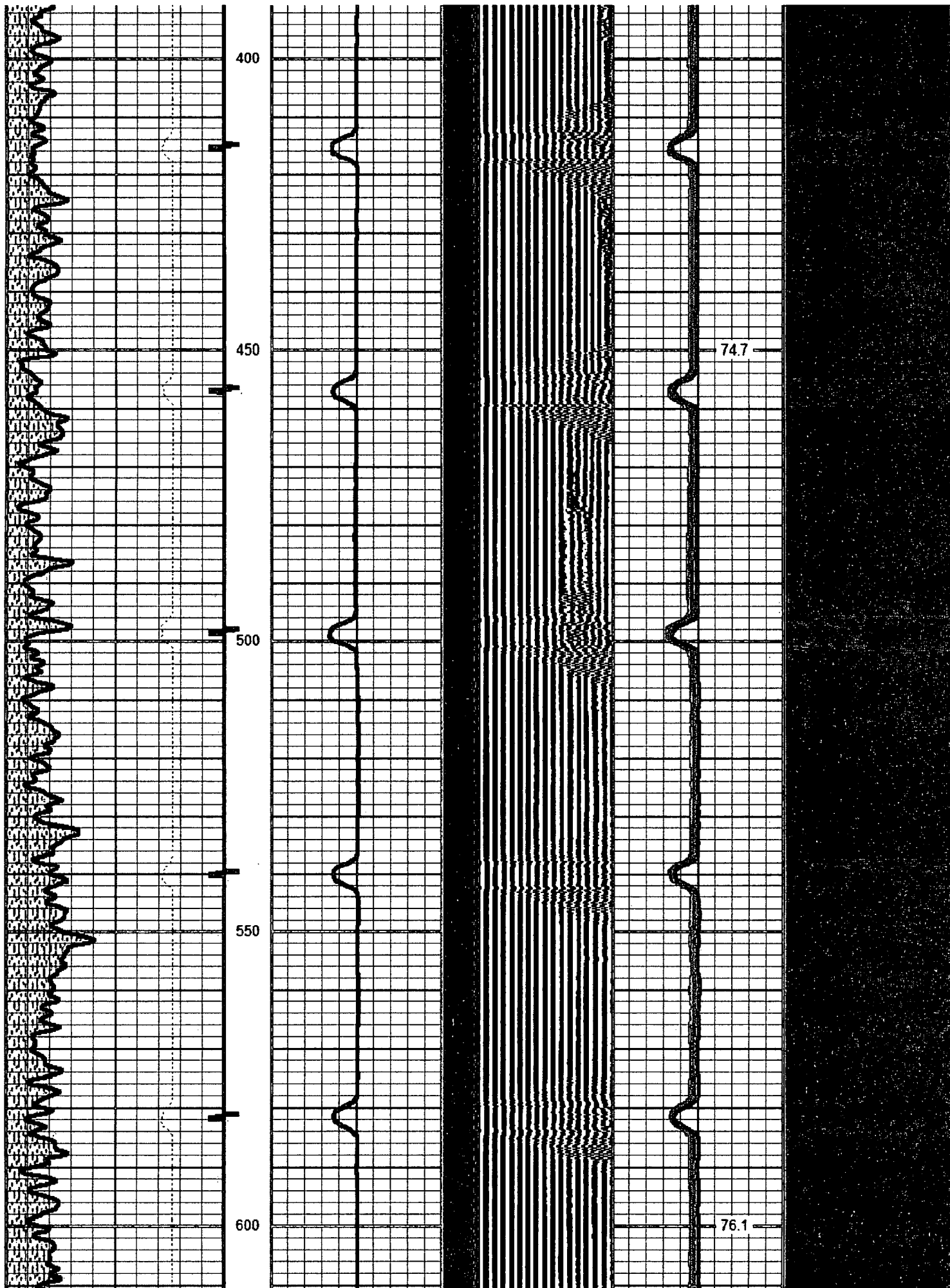
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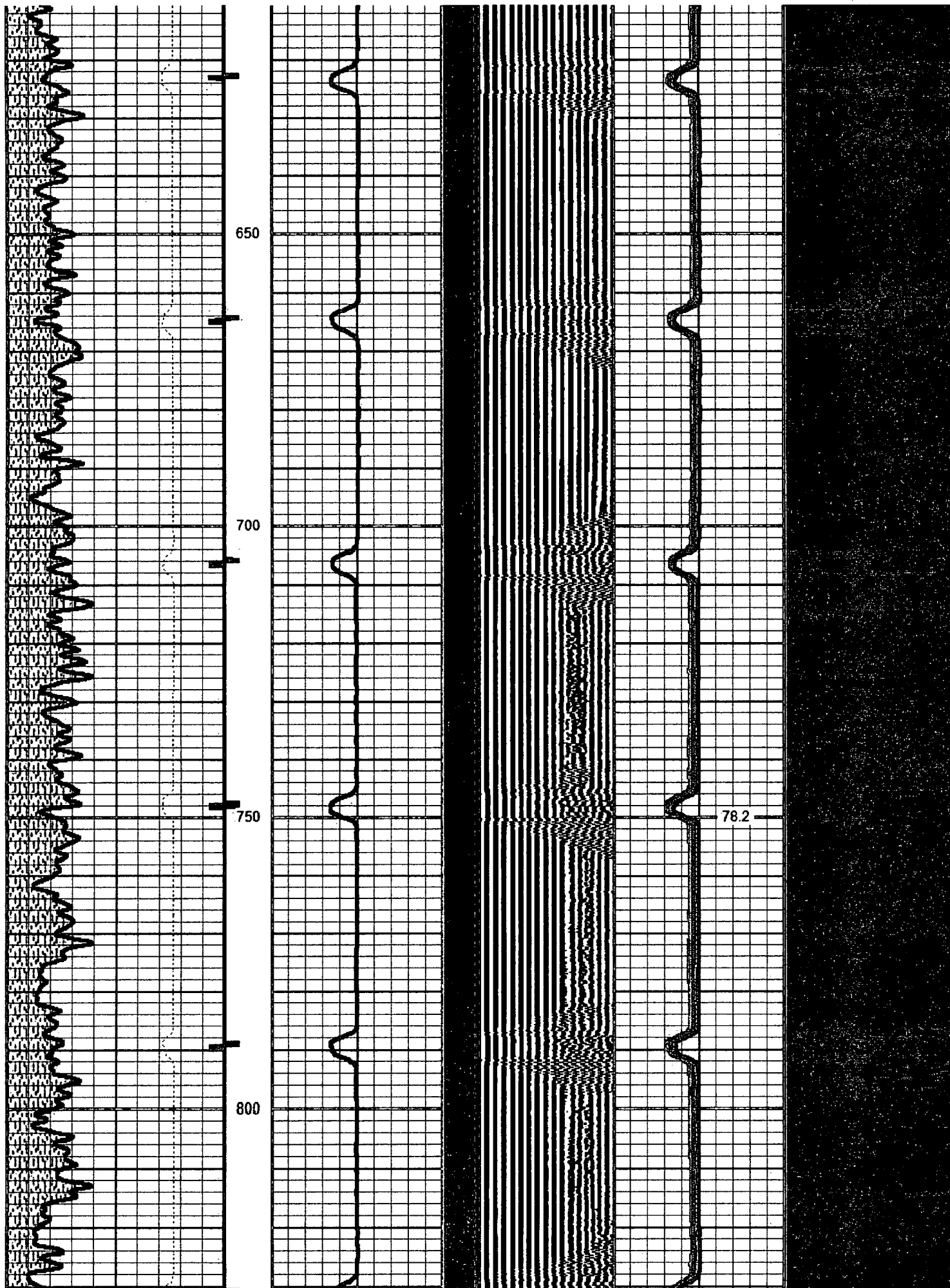
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 Dataset Pathname pass8
 Presentation Format rrcbl_rmx
 Dataset Creation Sun Sep 30 10:03:11 2018
 Charted by Depth in Feet scaled 1:240

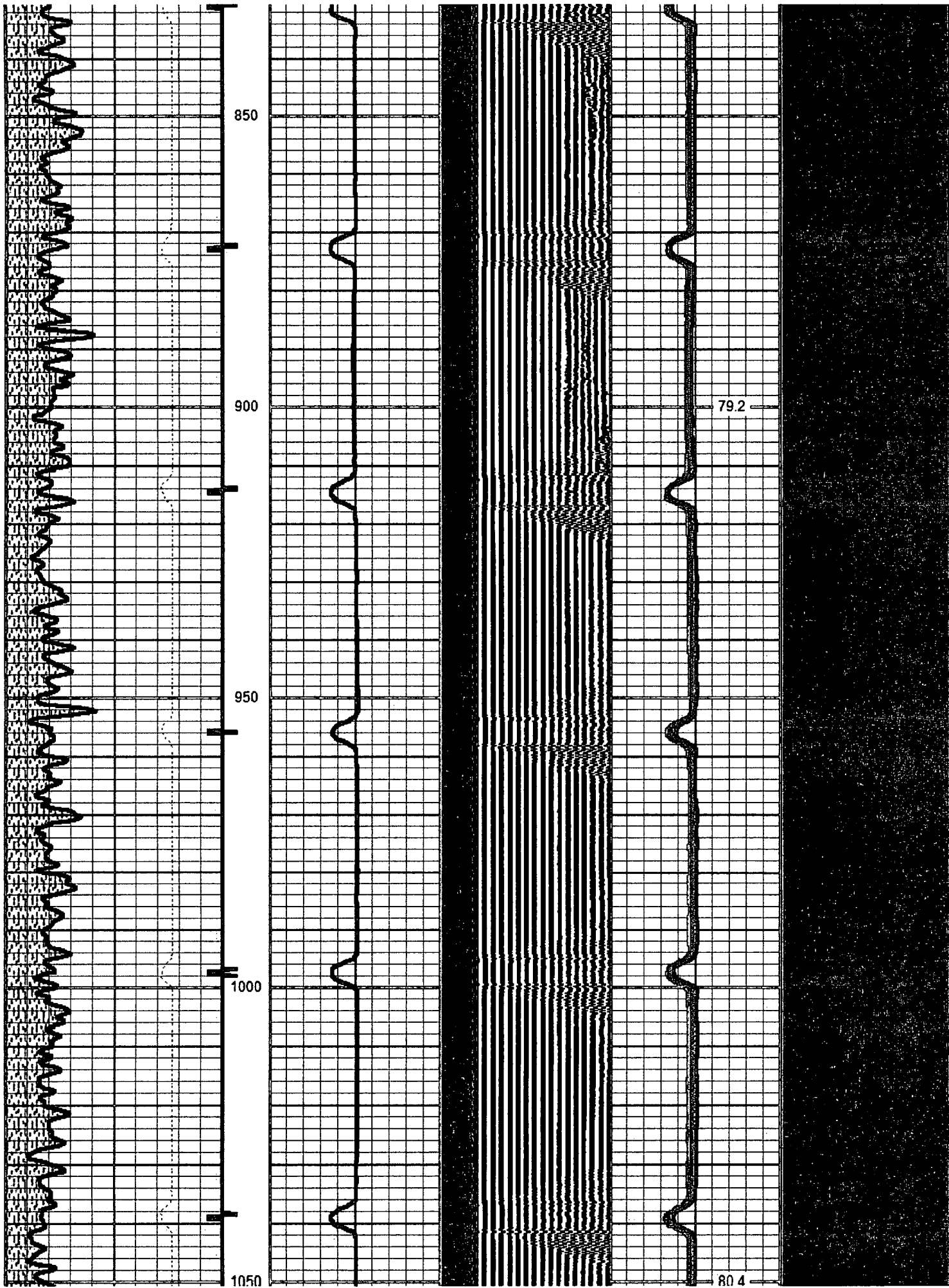
352	TT (usec)	252	0	Amplitude (mV)	100	200	VDL	1200	-5	AMPMIN	150	Cement Map
0	GR (GAPI)	150		Amplified Amplitude					-5	AMPAVG	150	80
		CCL	0	(mV)	10		Free Pipe Gate		-5	AMPMAX	150	
										TEMP		

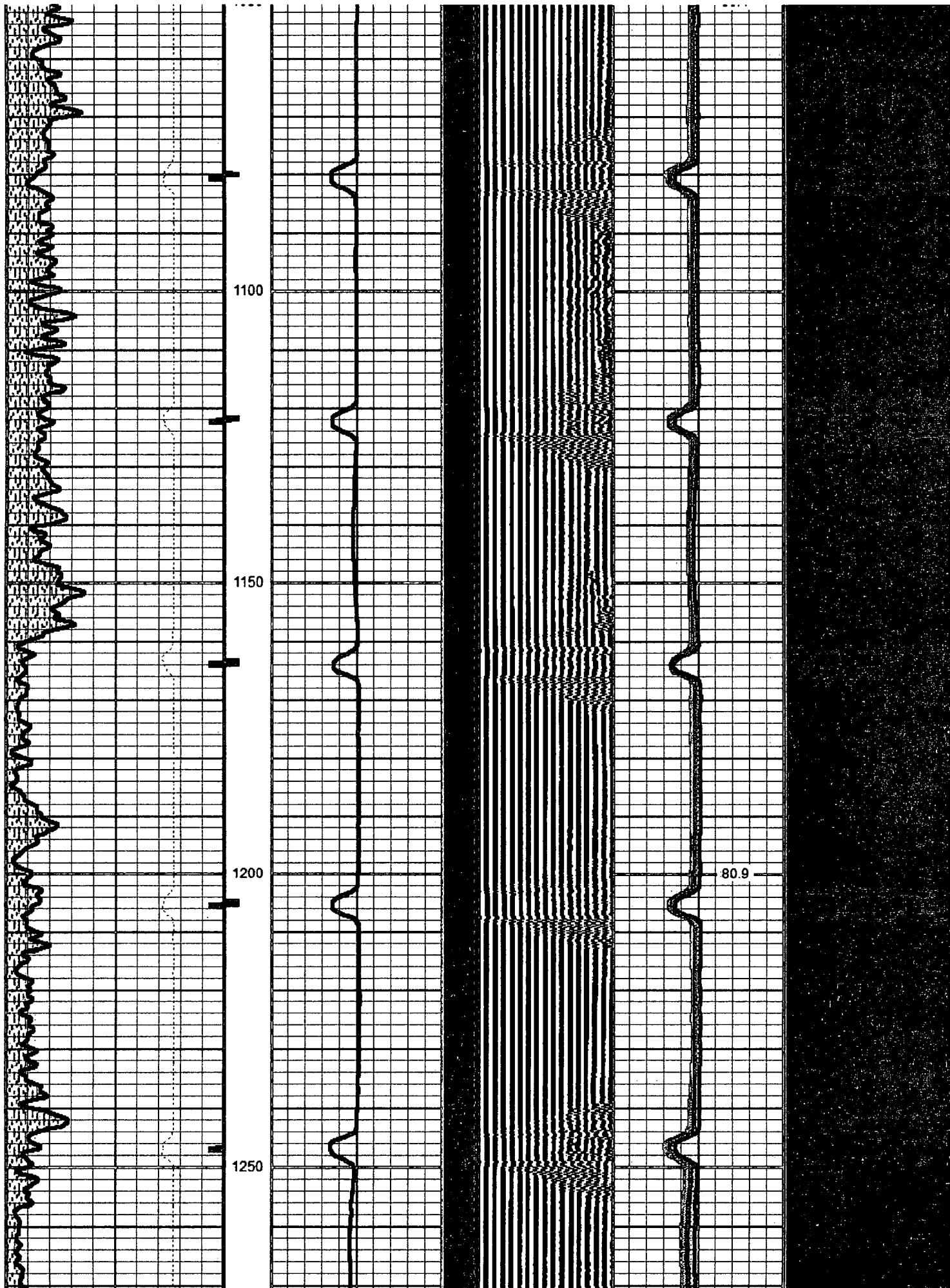


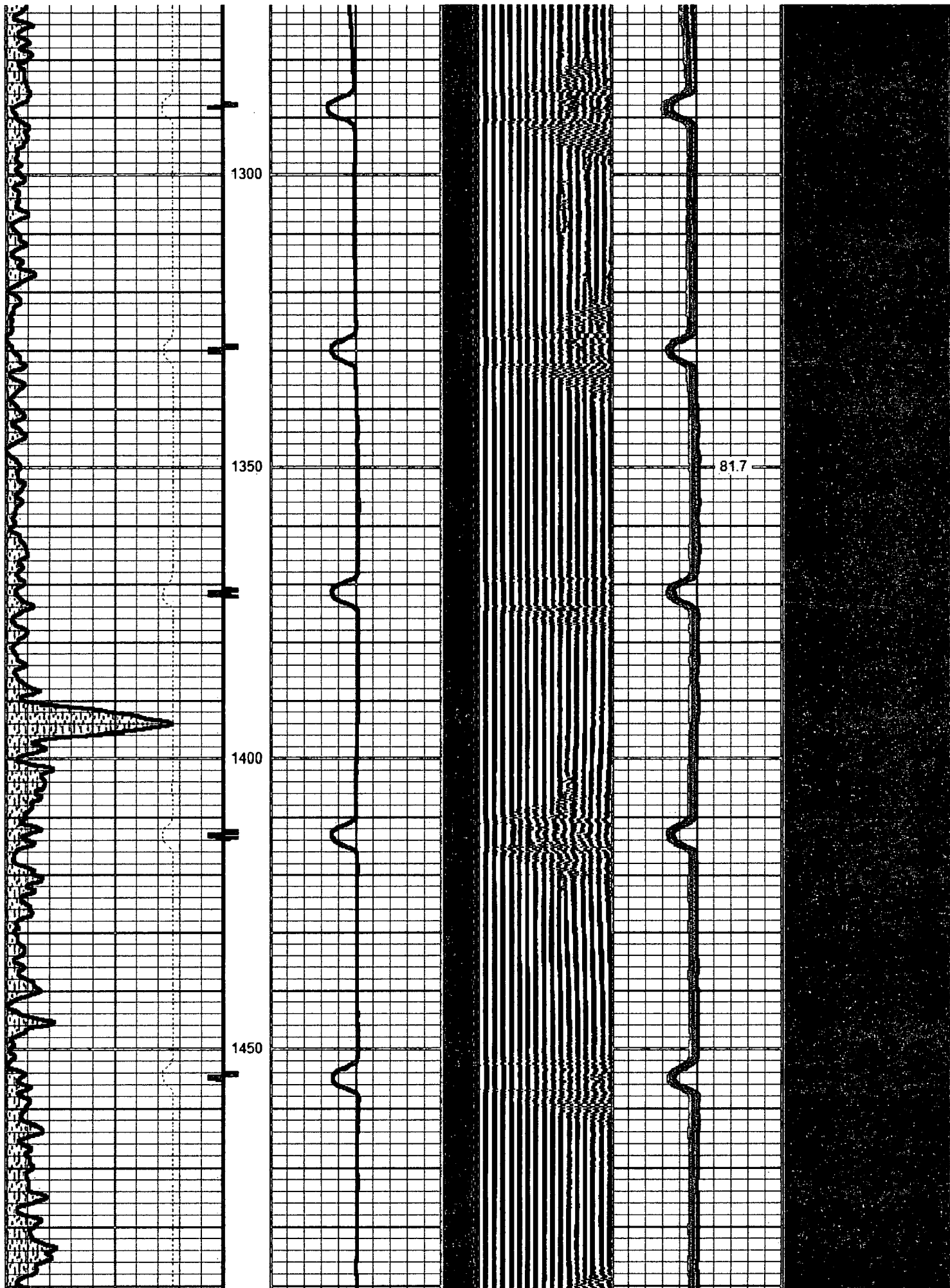


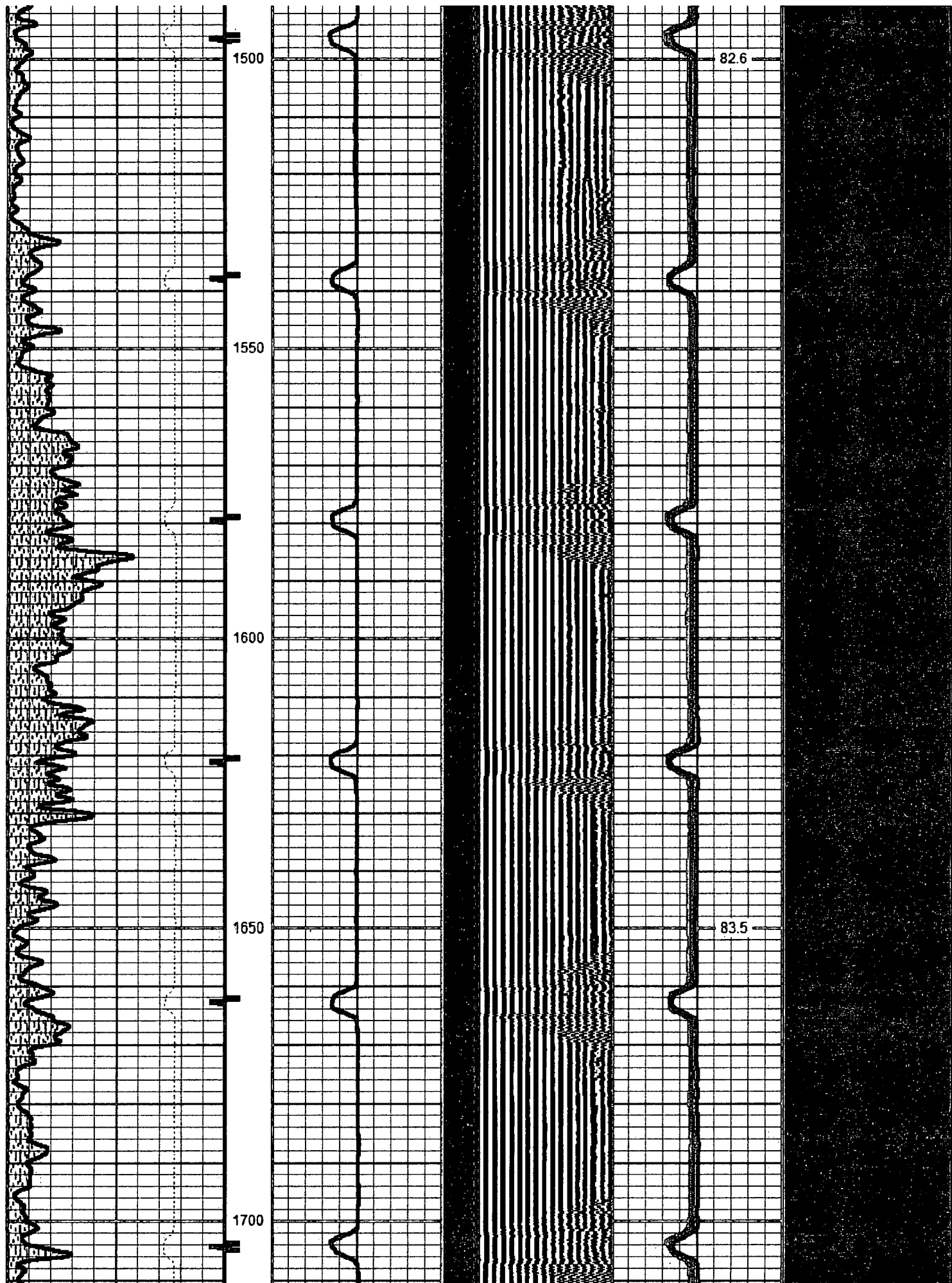


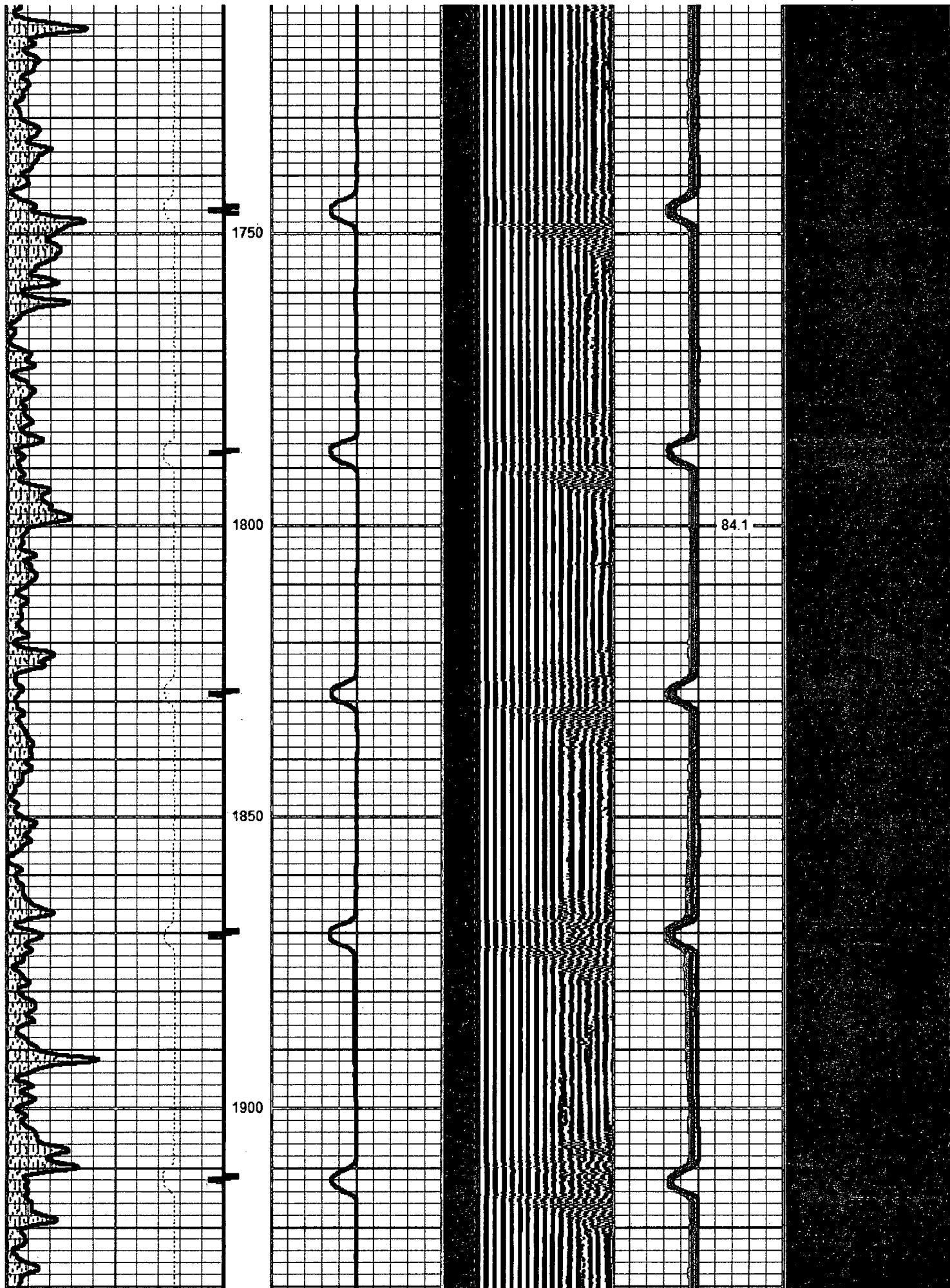


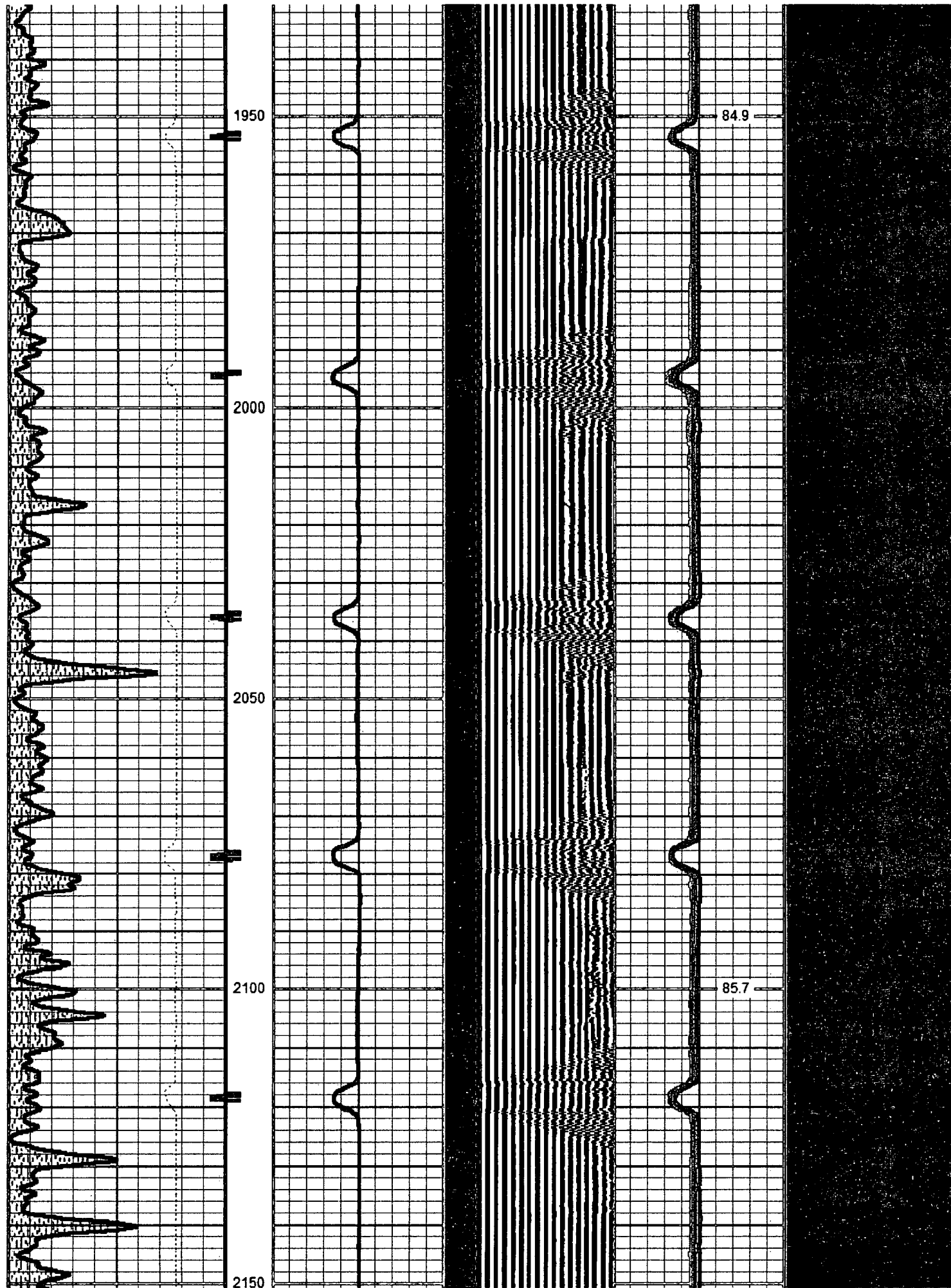


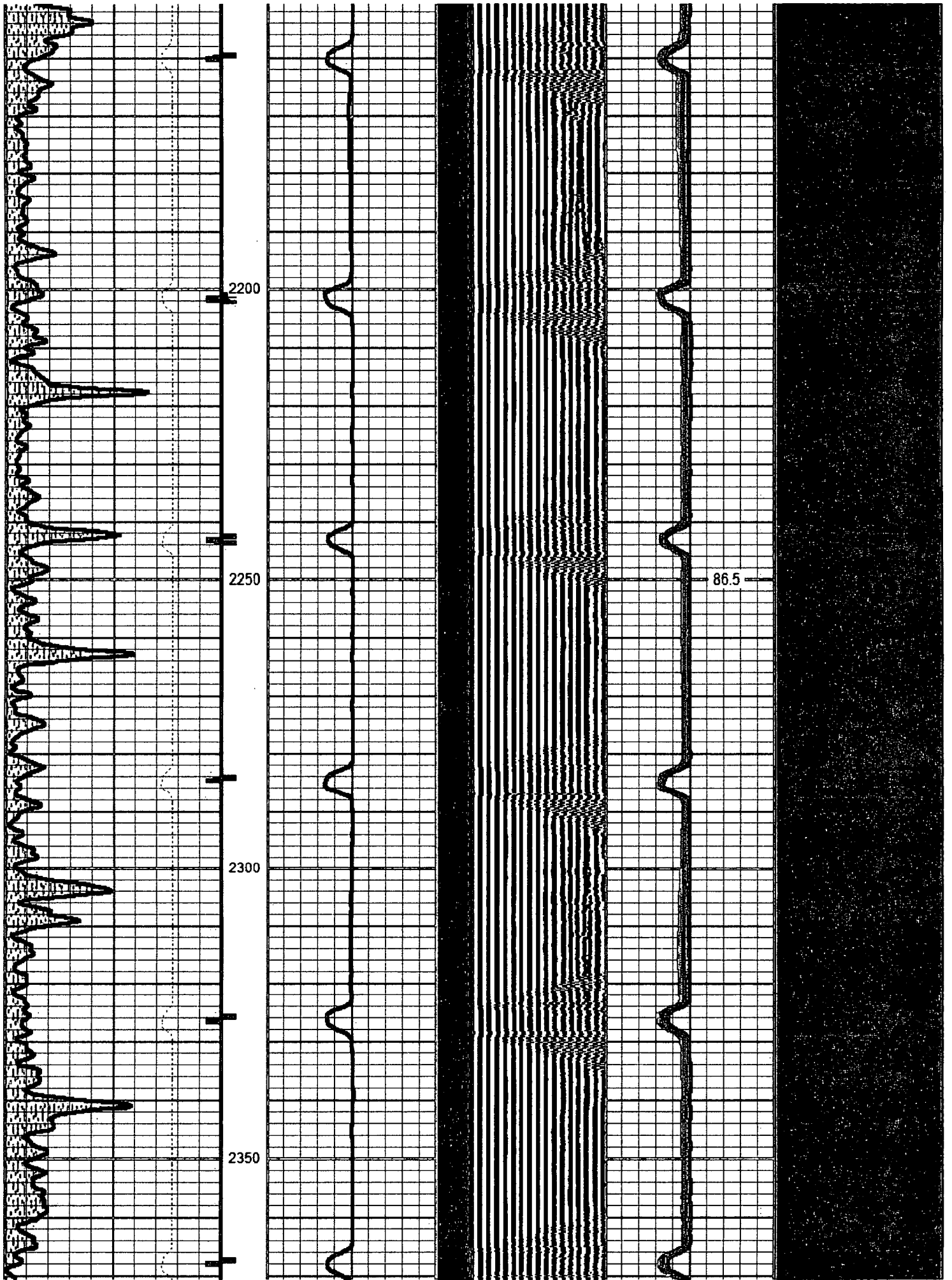


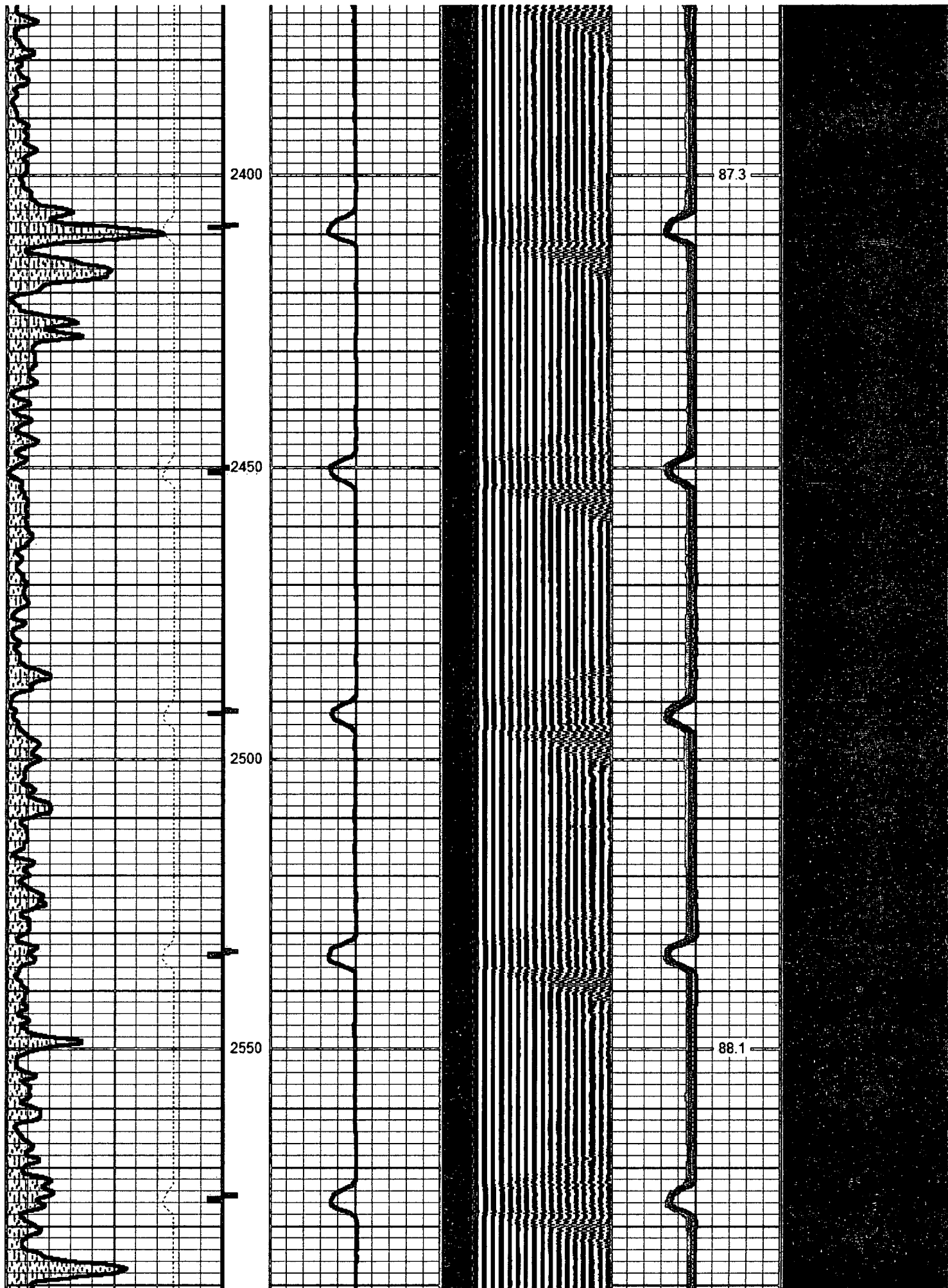


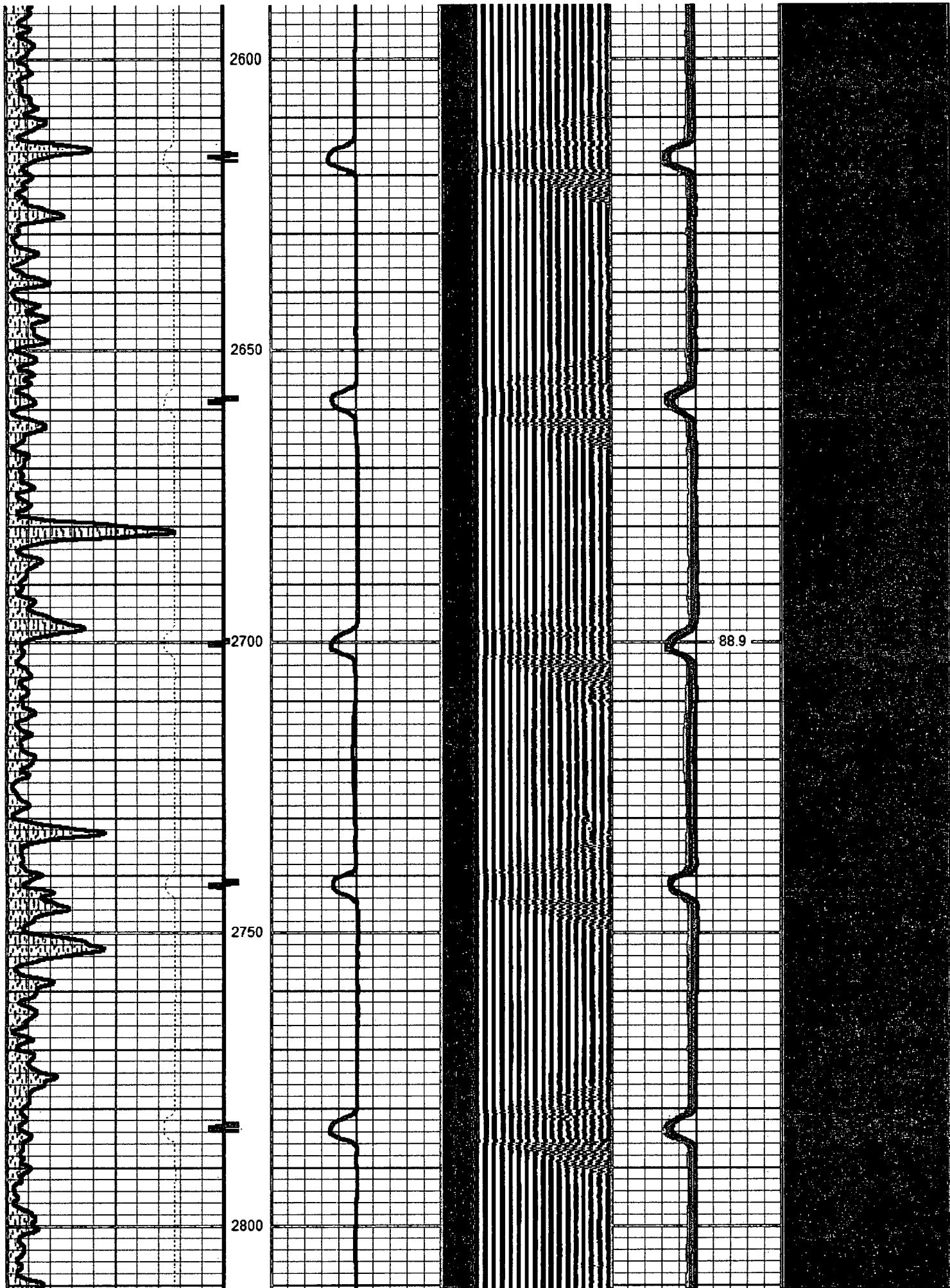


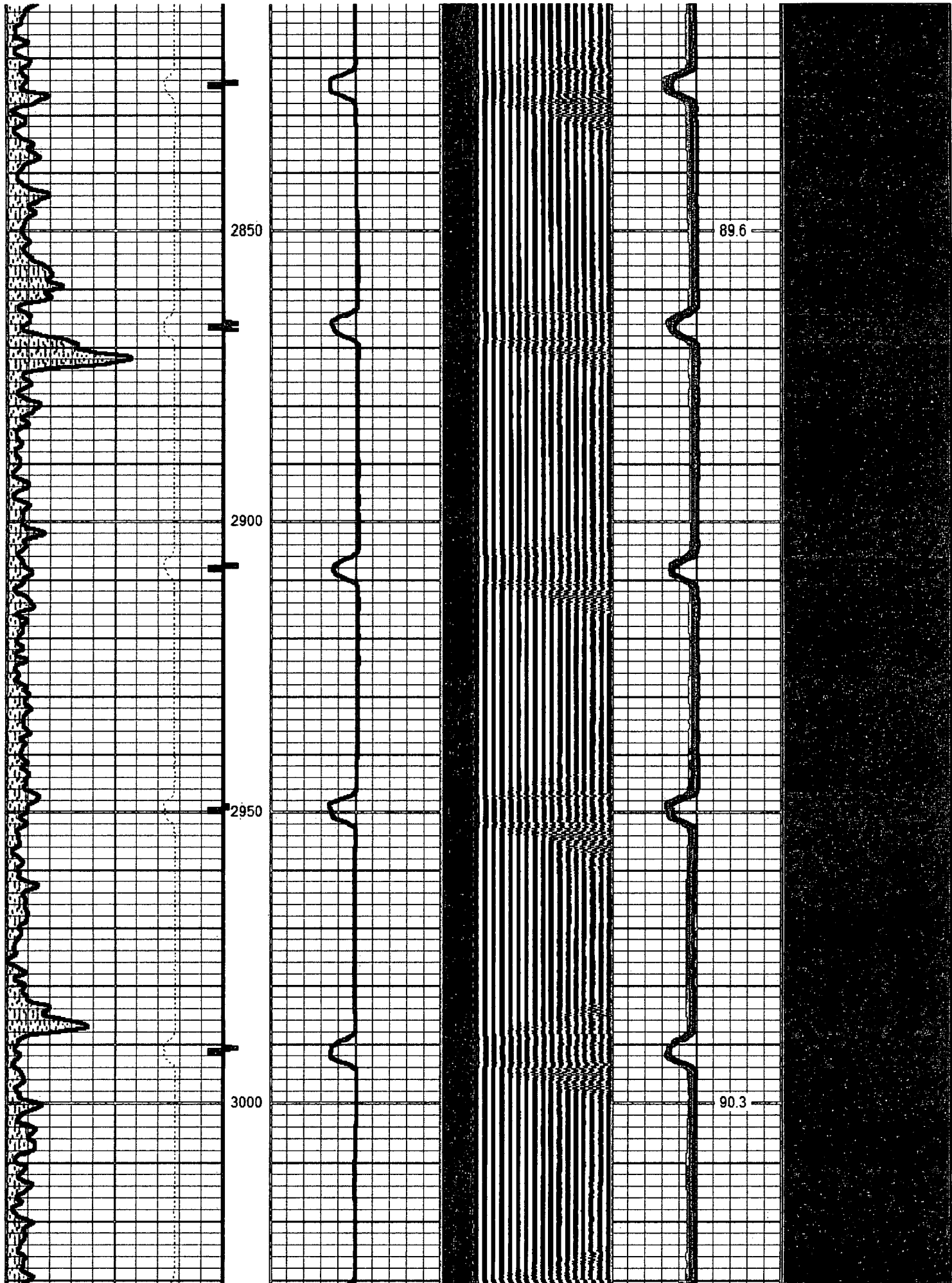


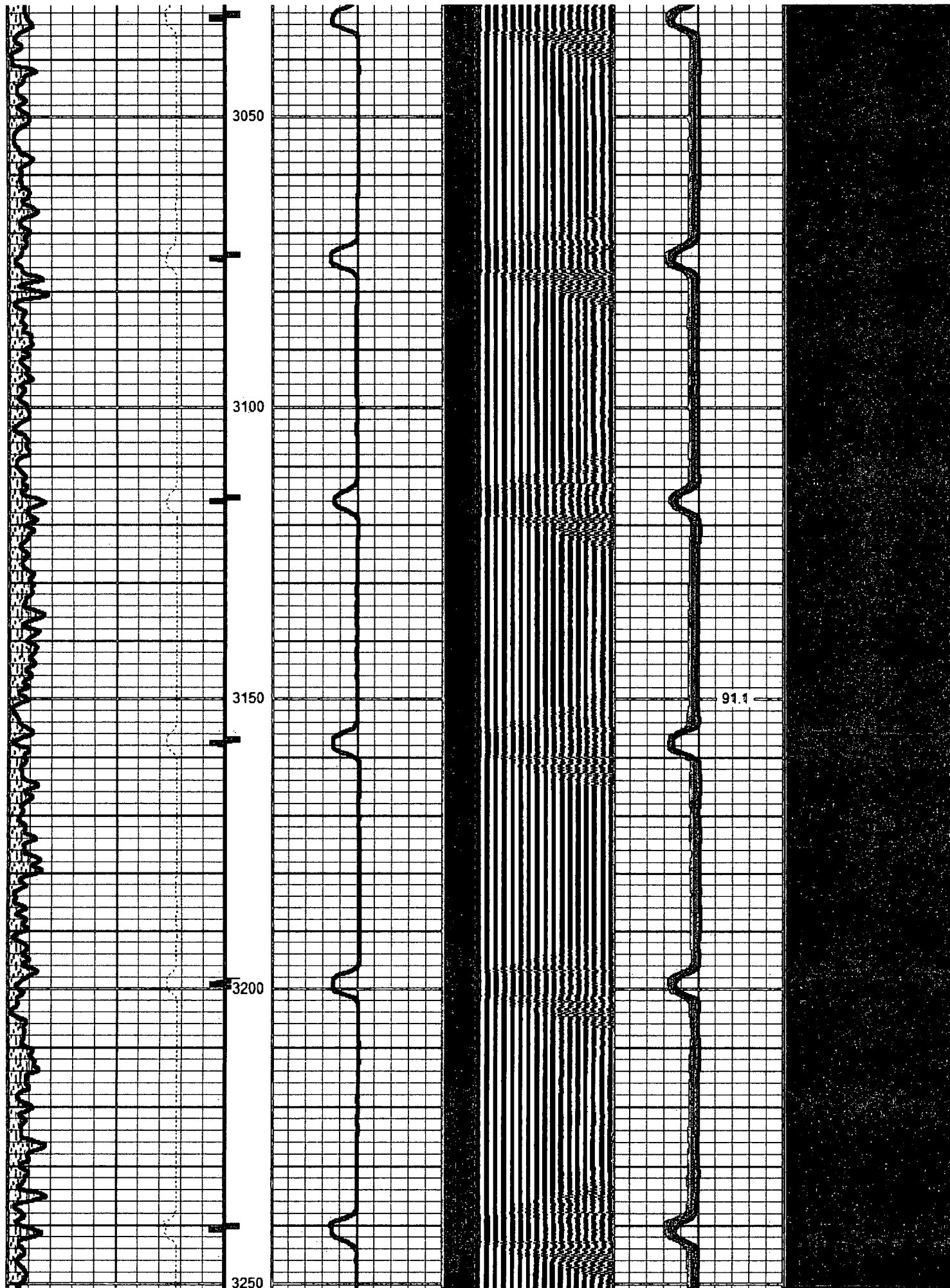


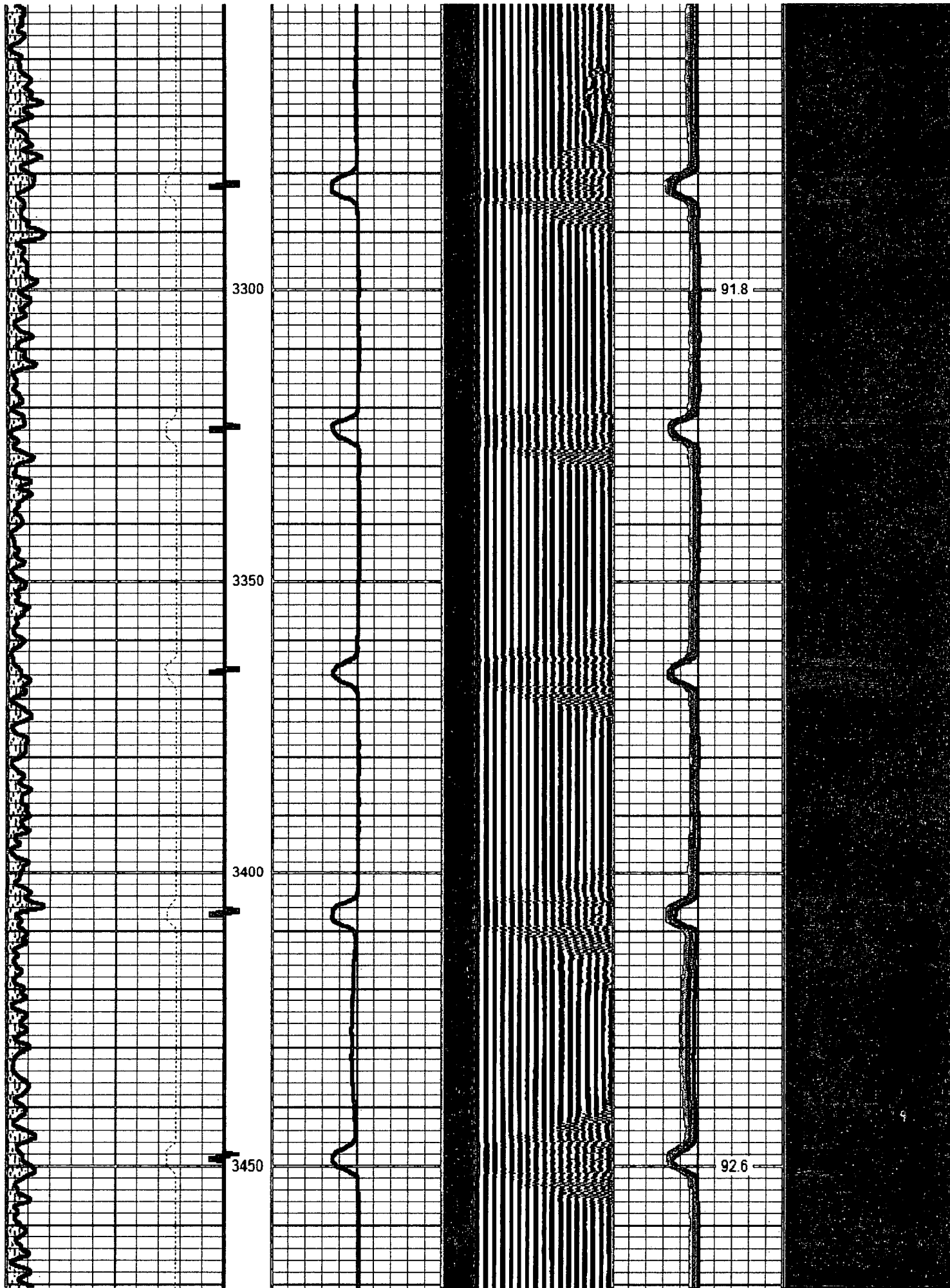


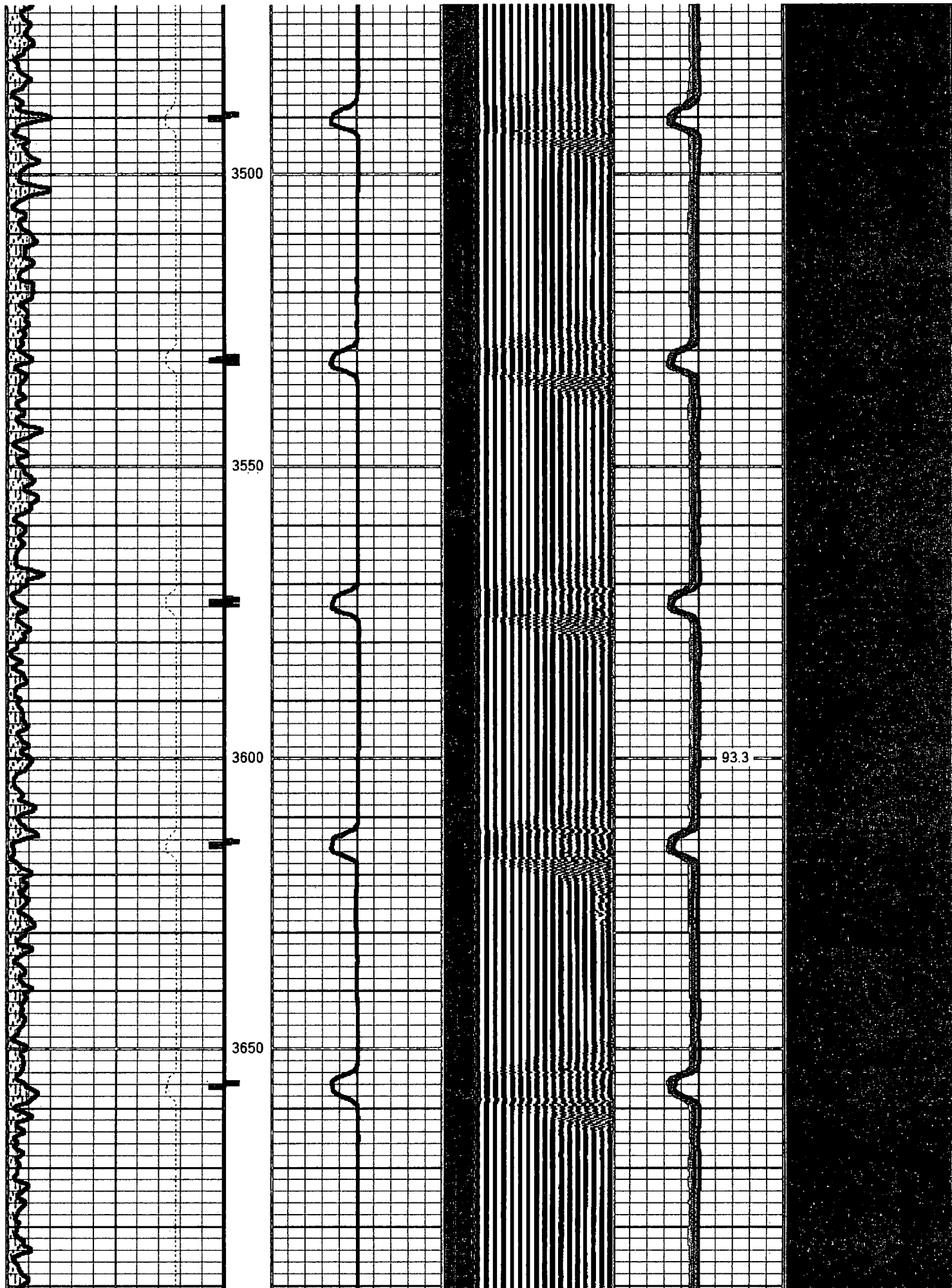


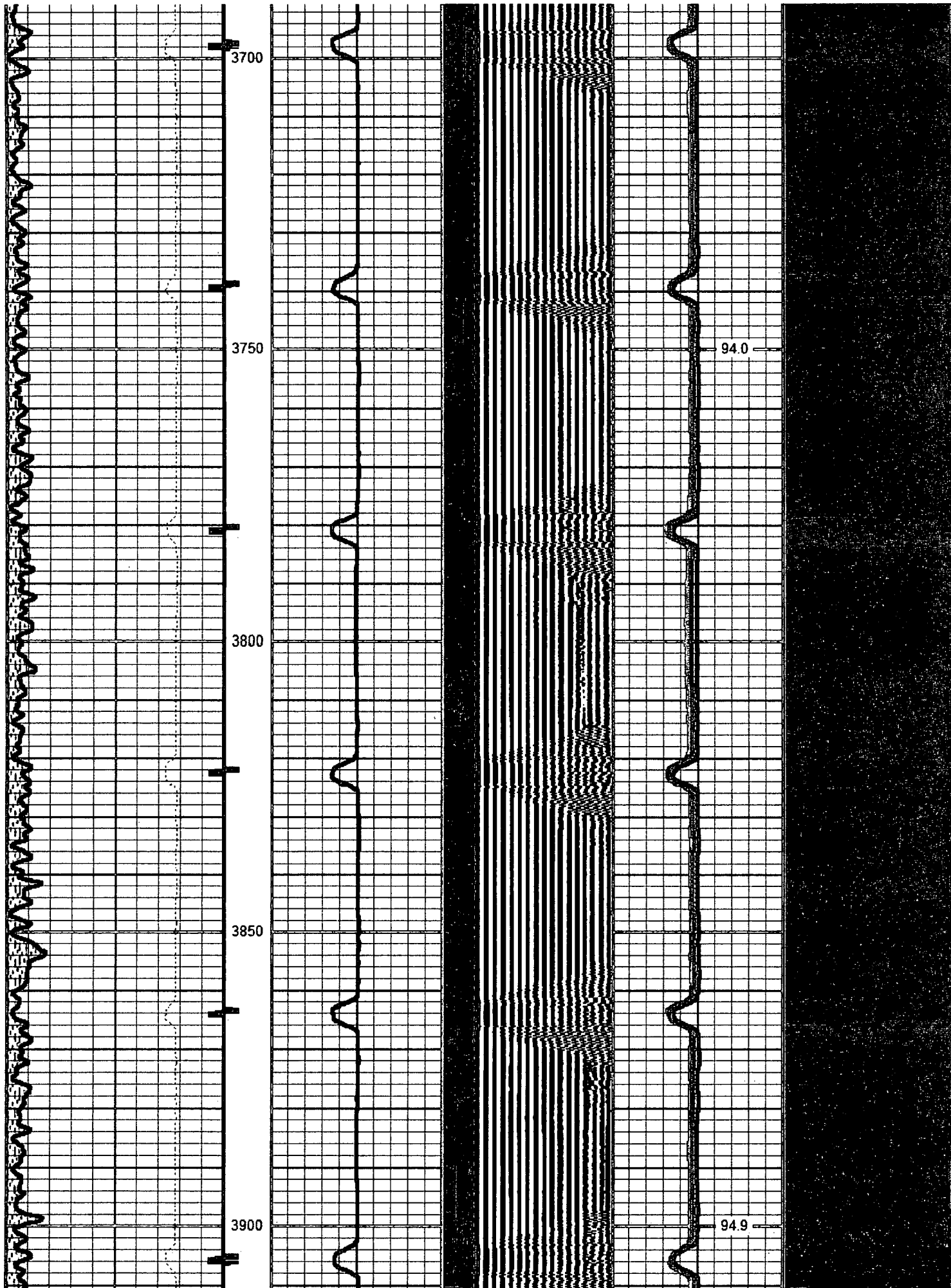


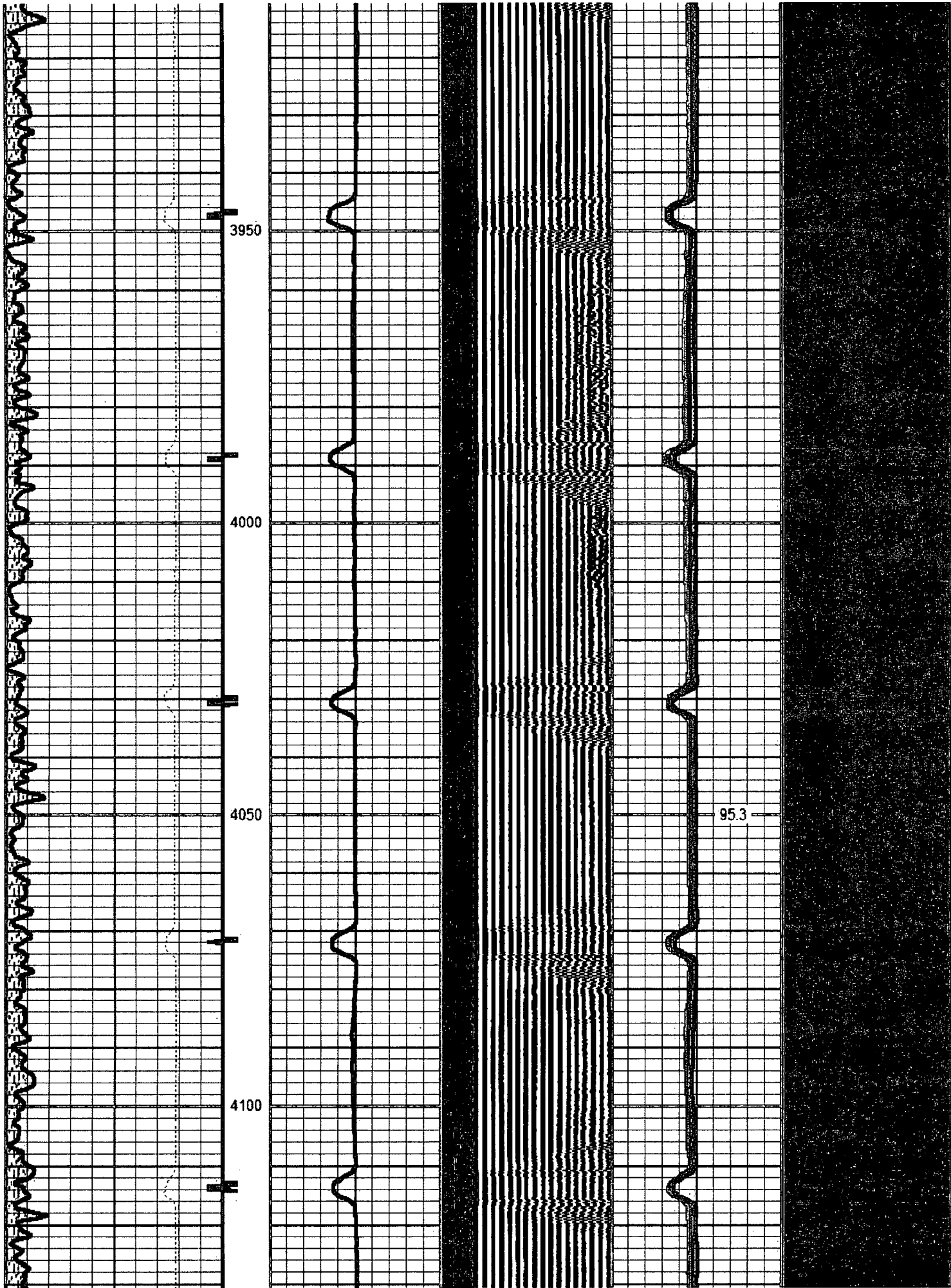


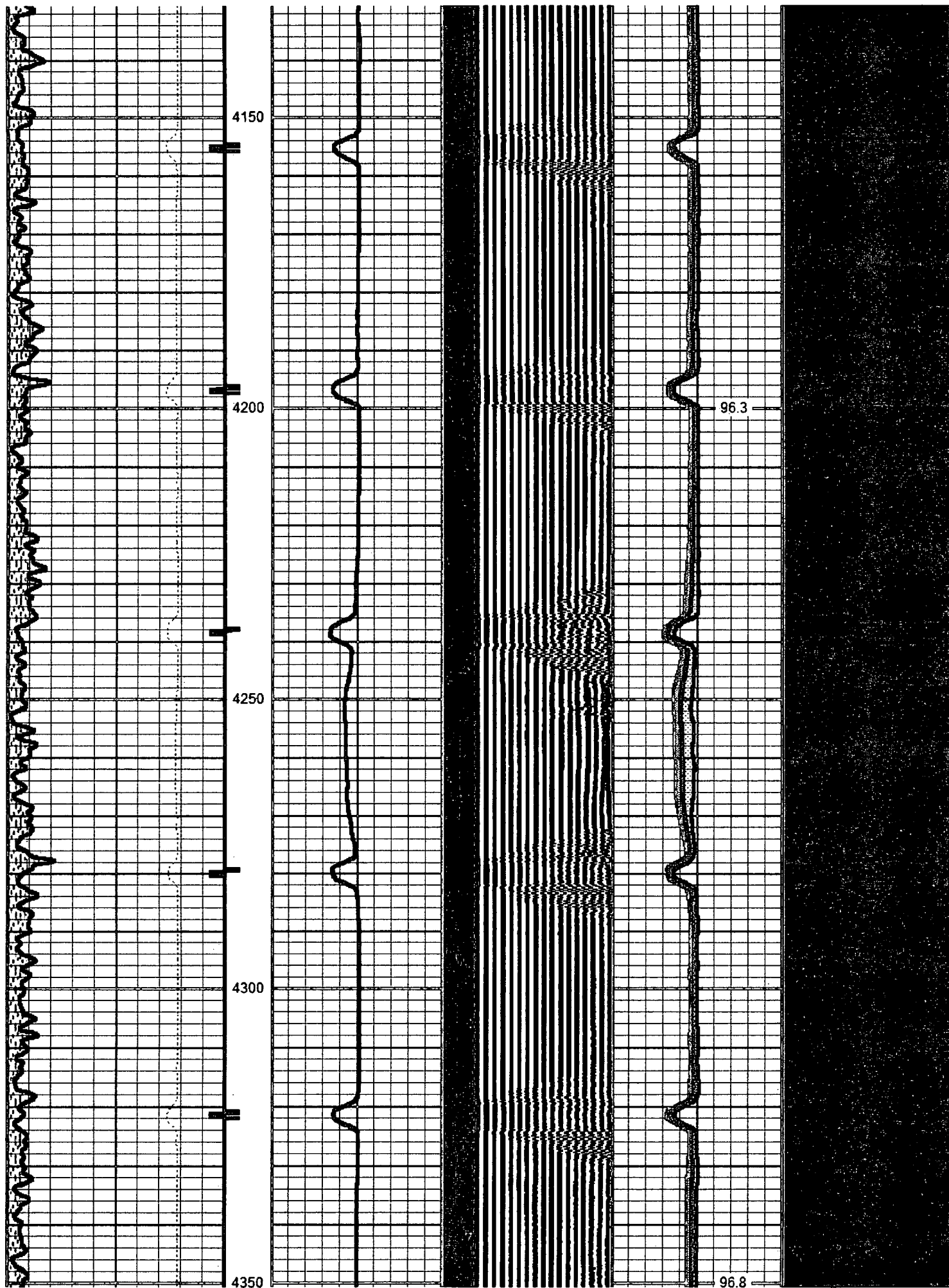


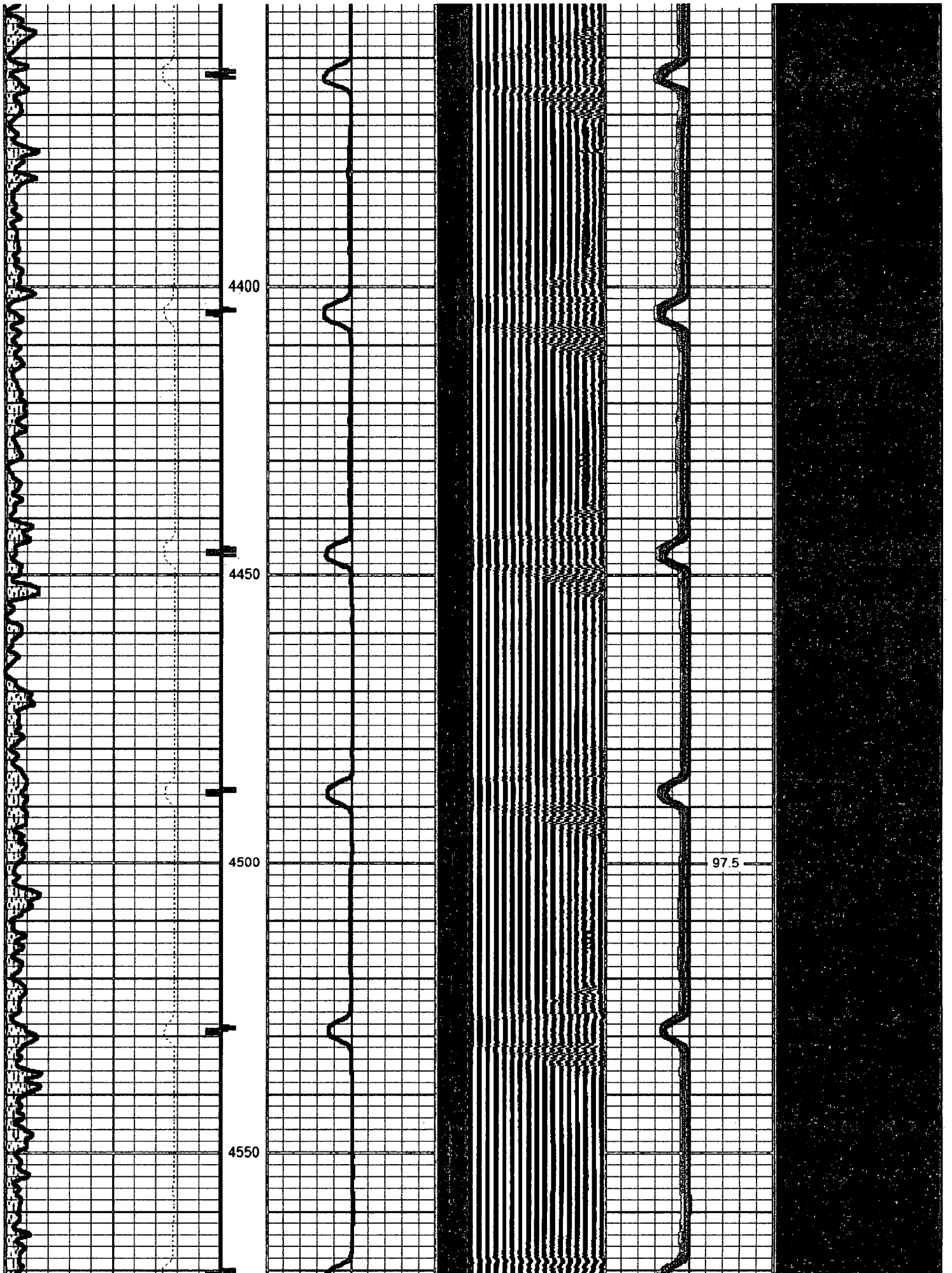


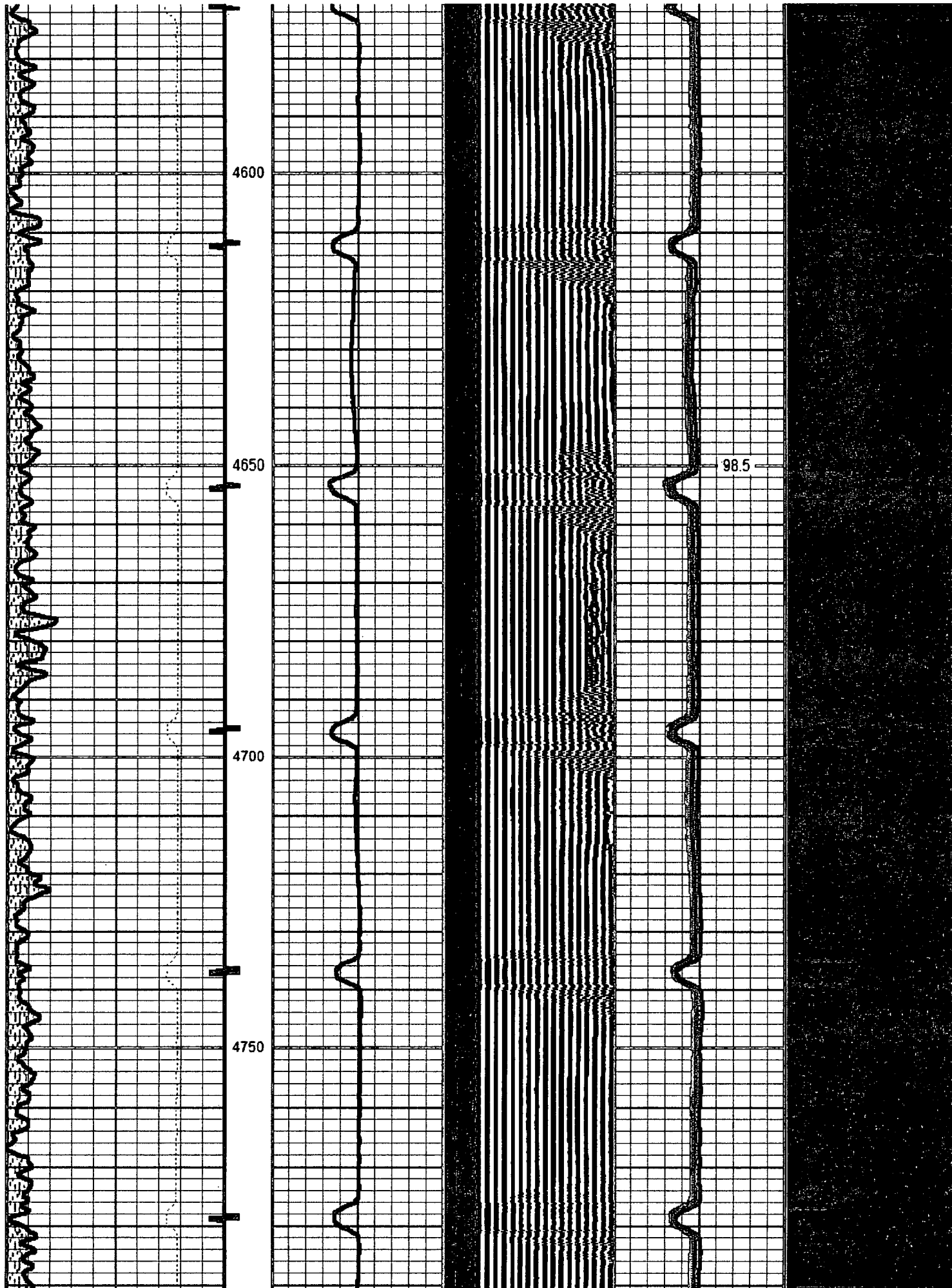


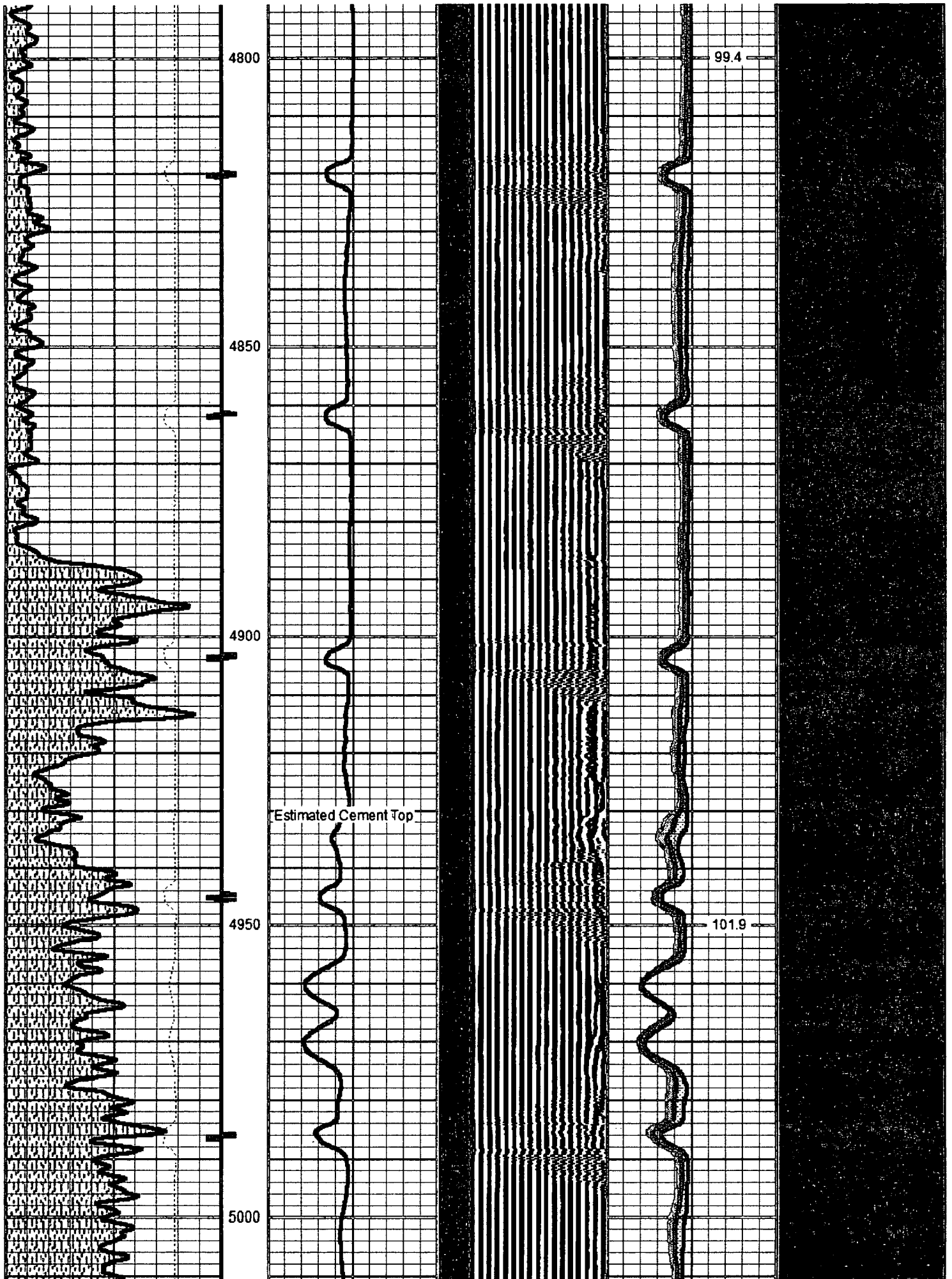


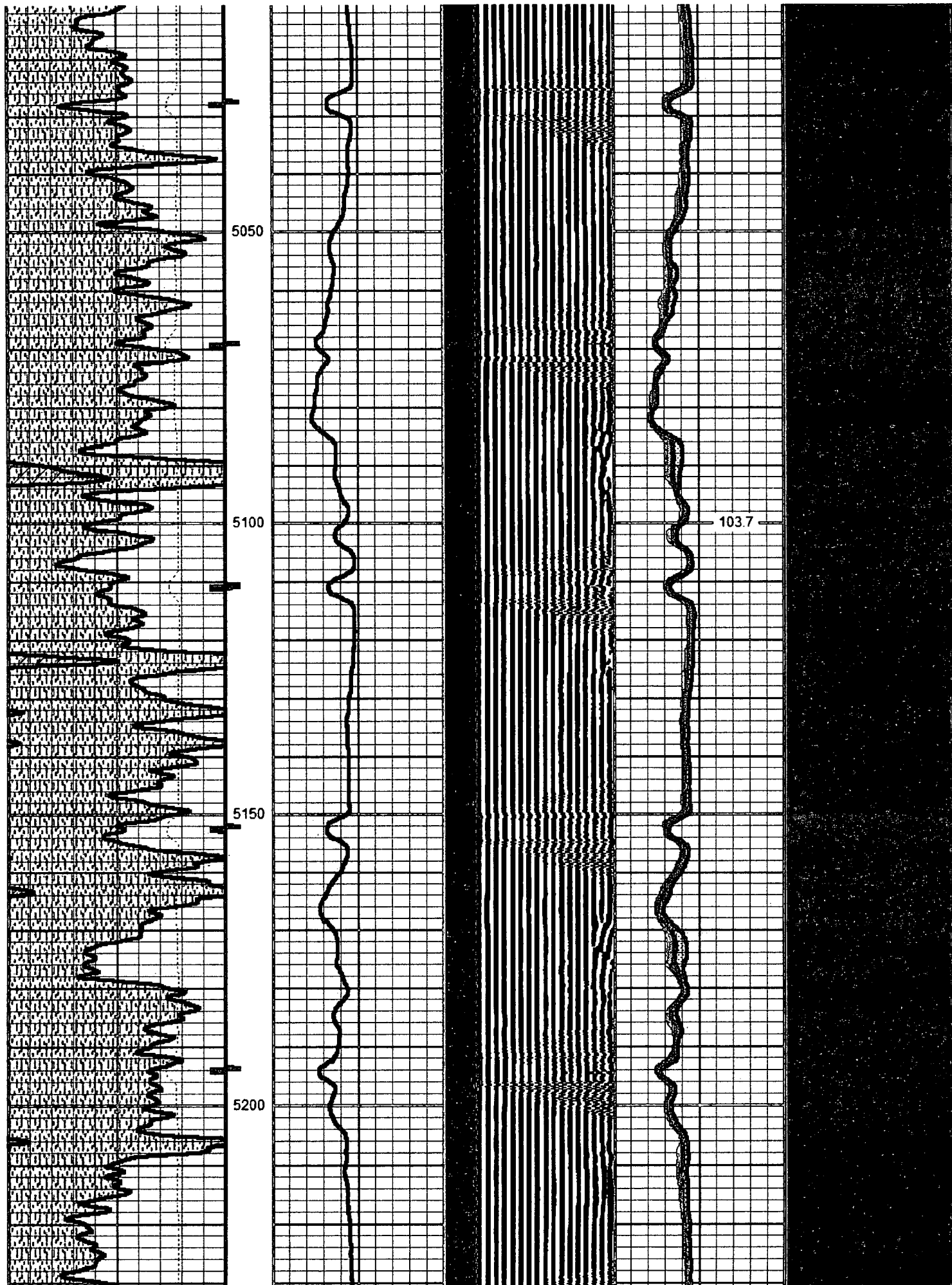


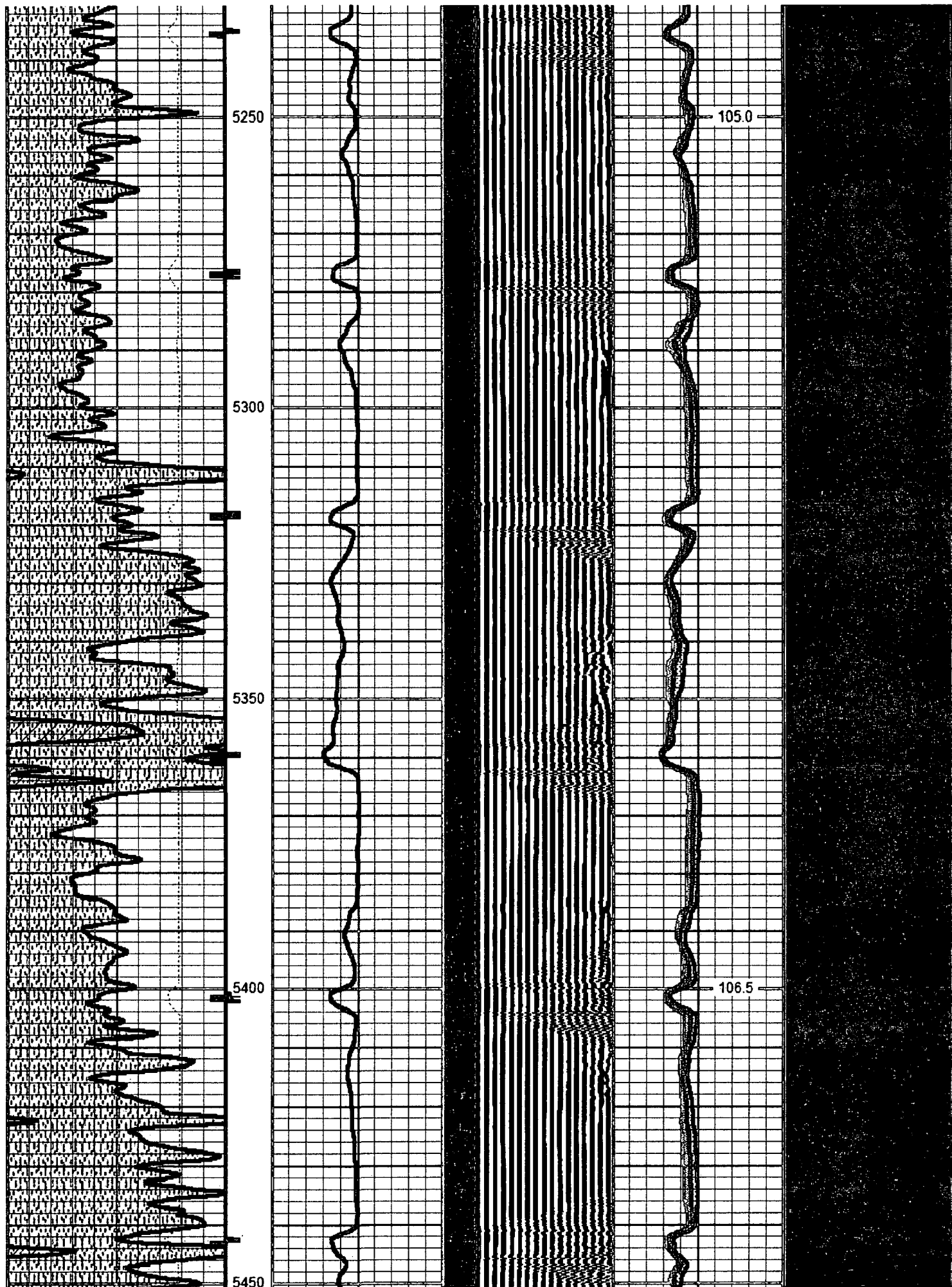


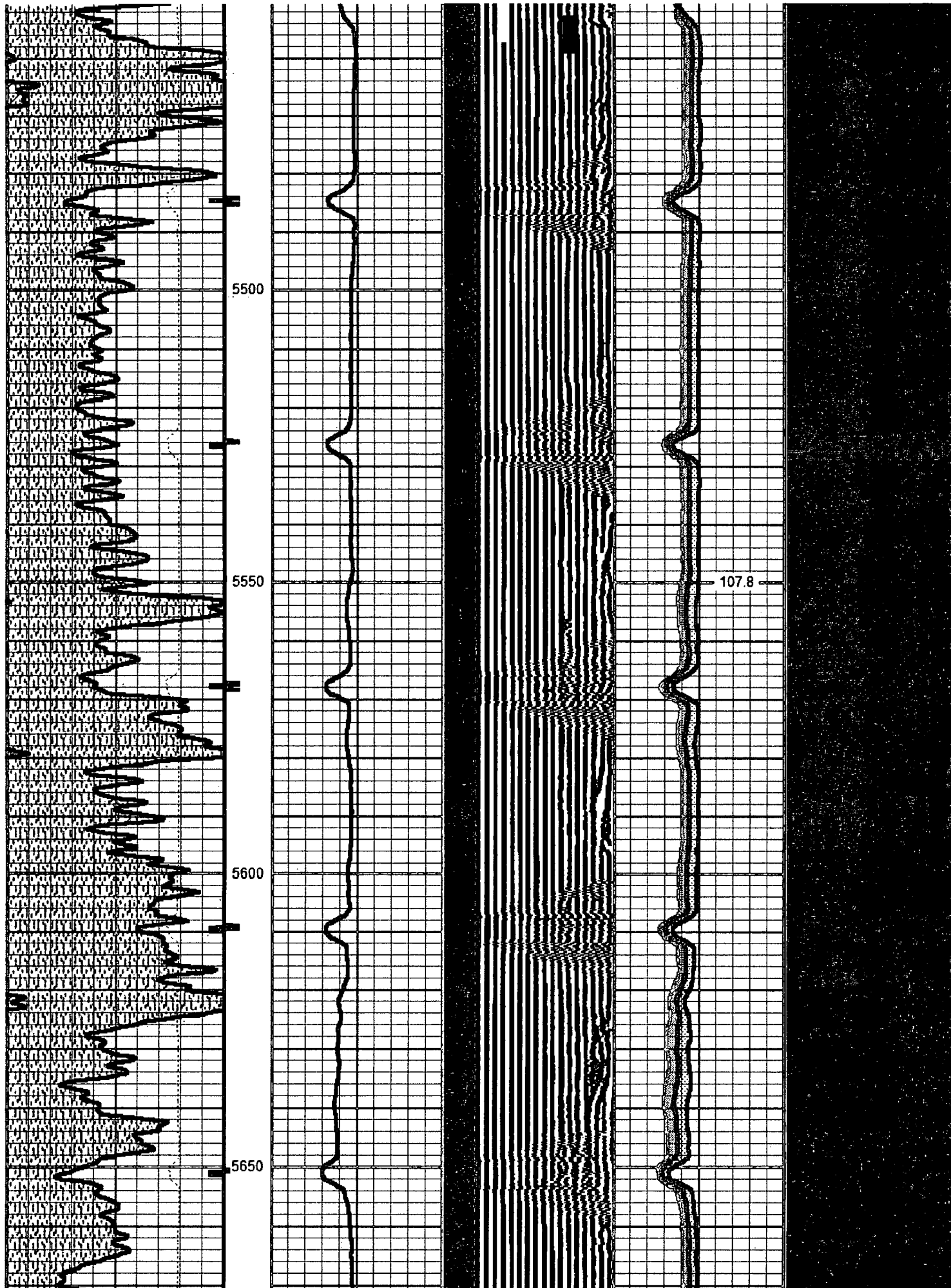


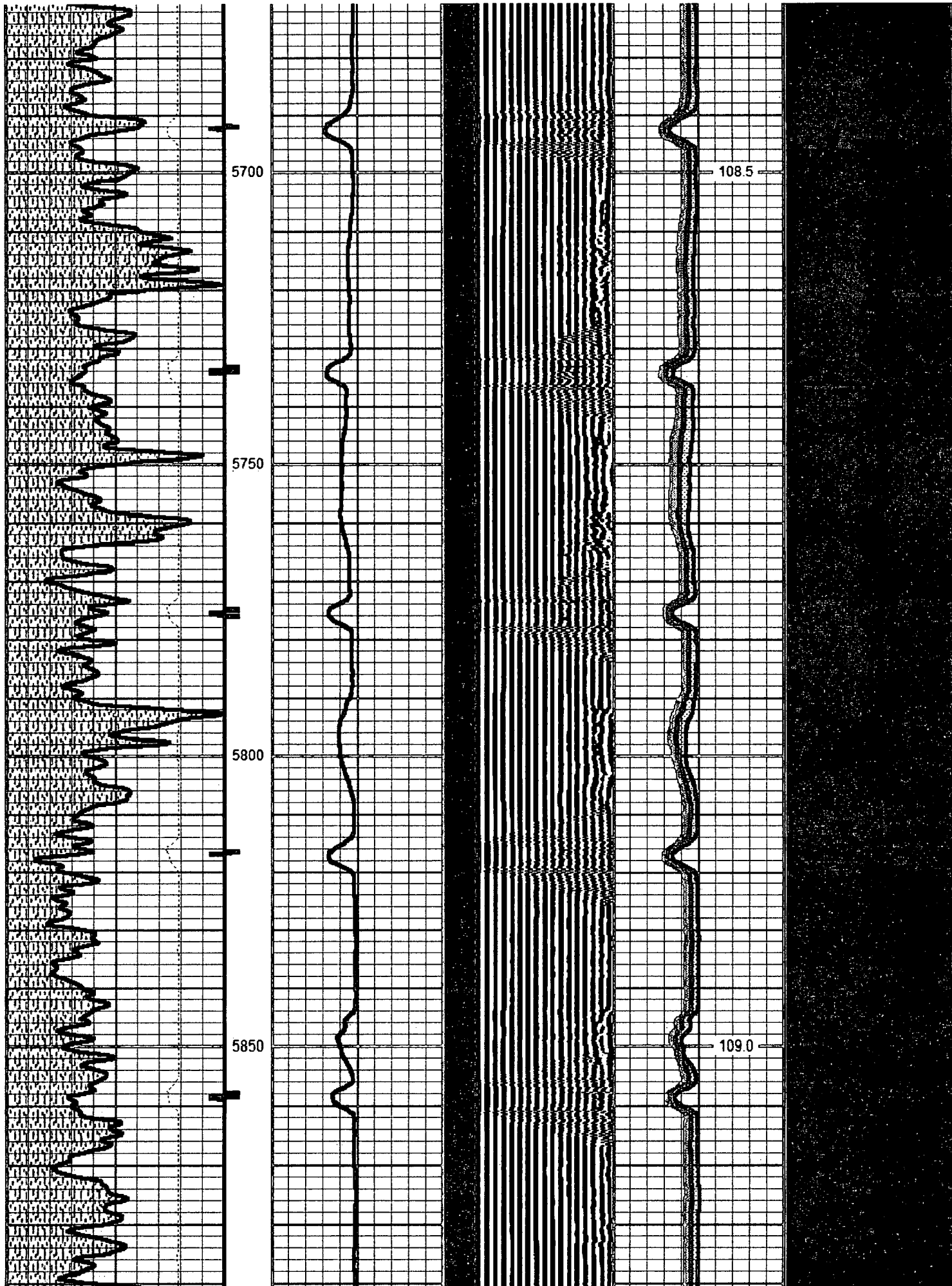


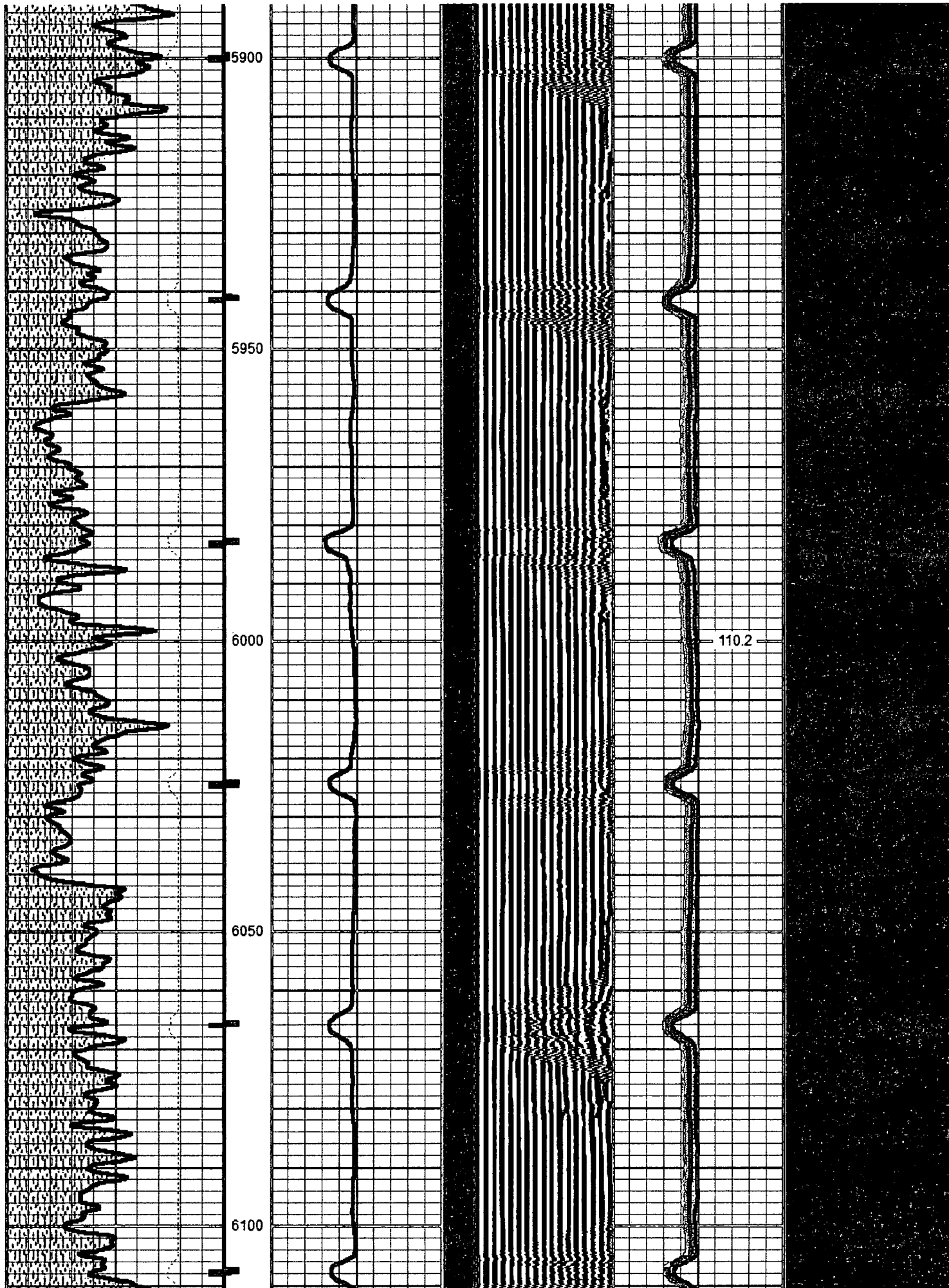


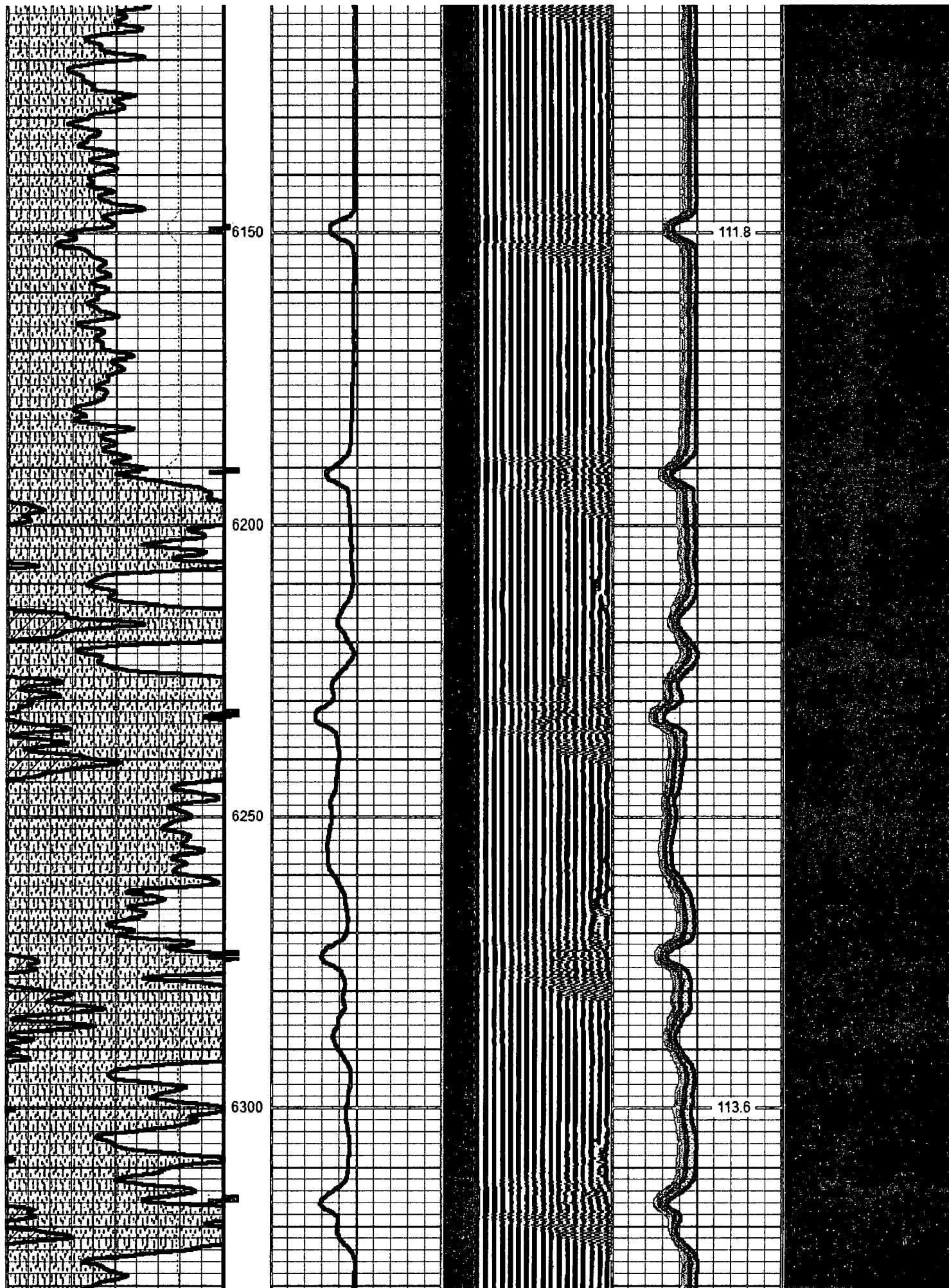


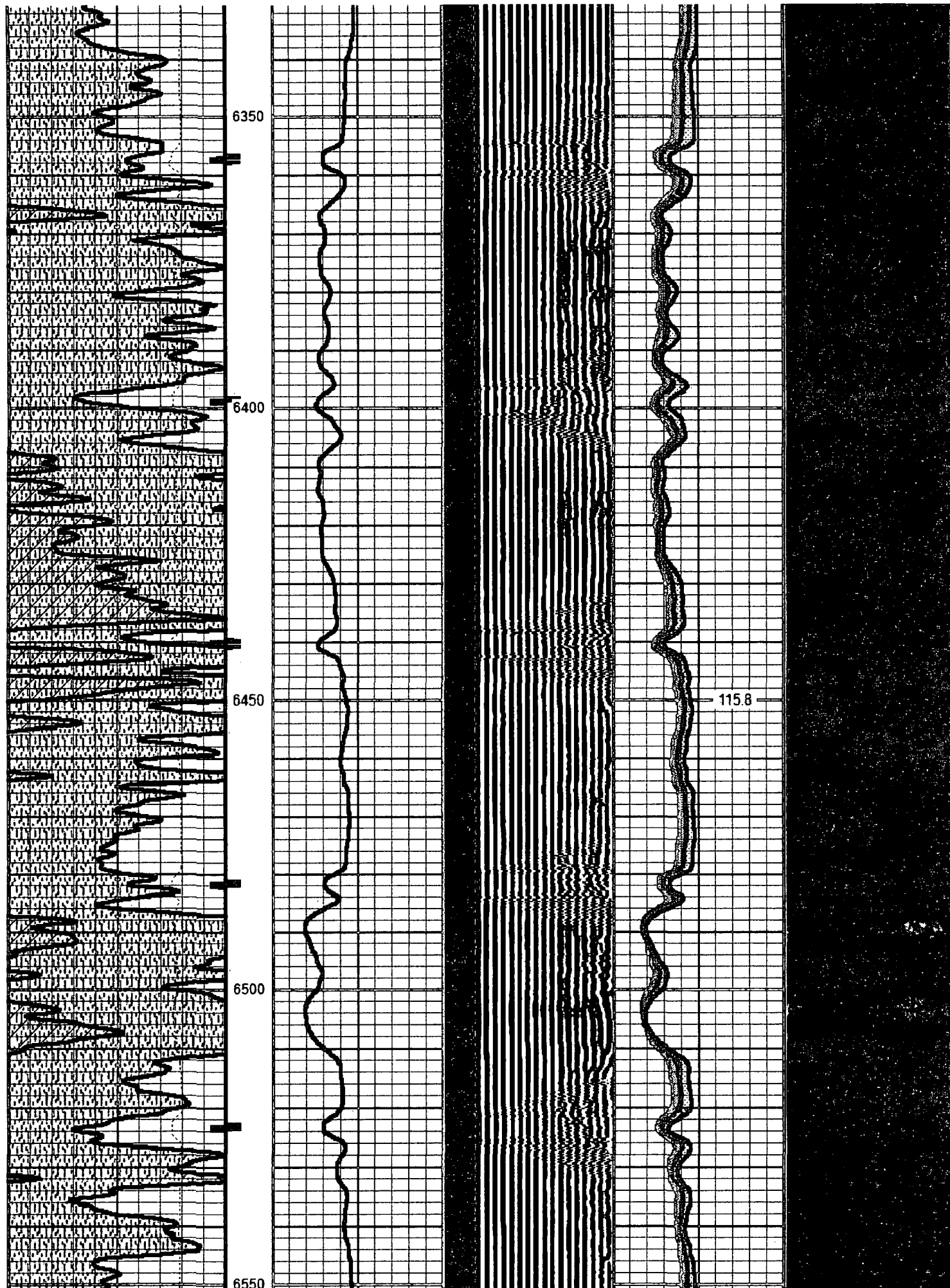


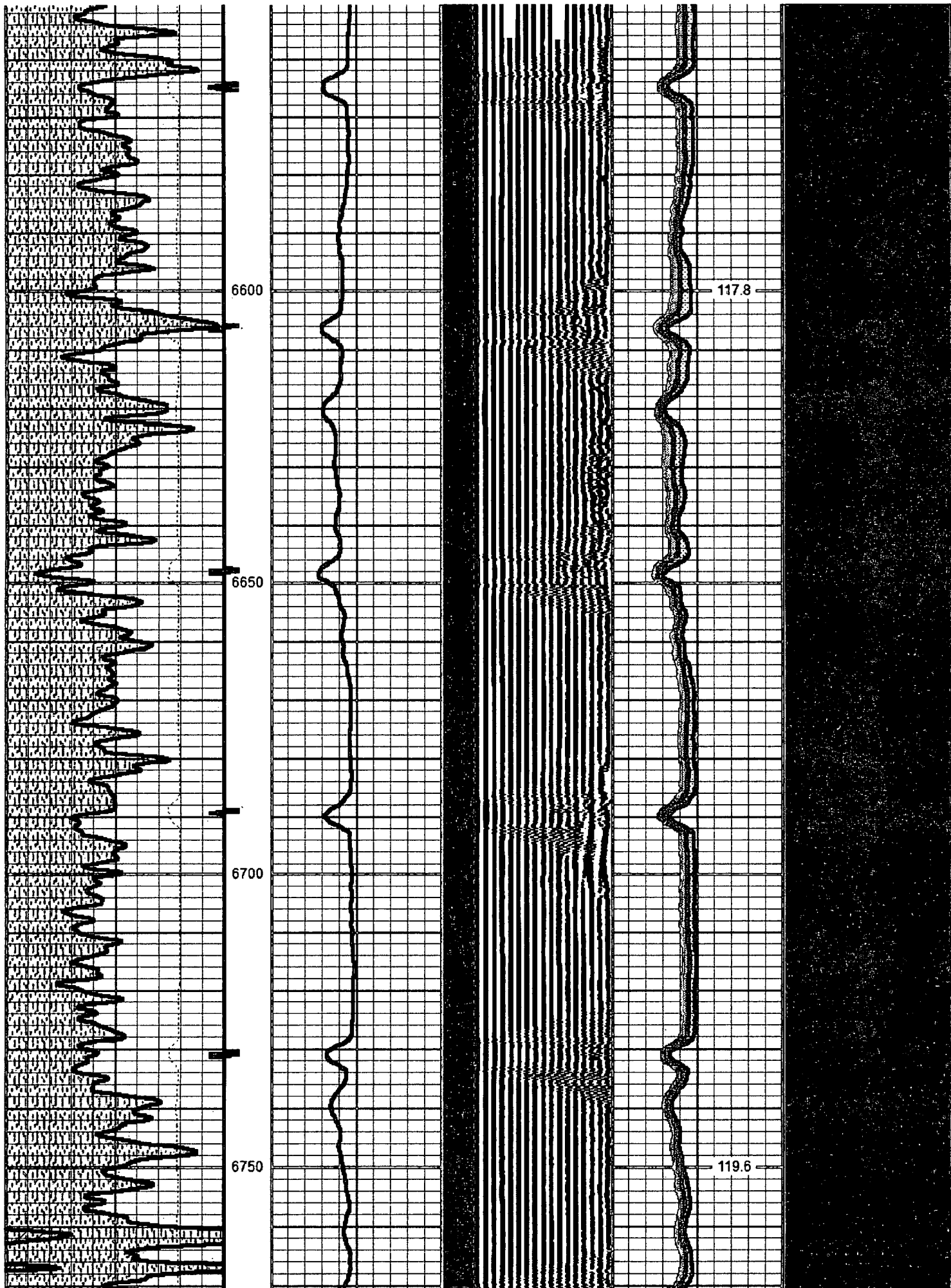


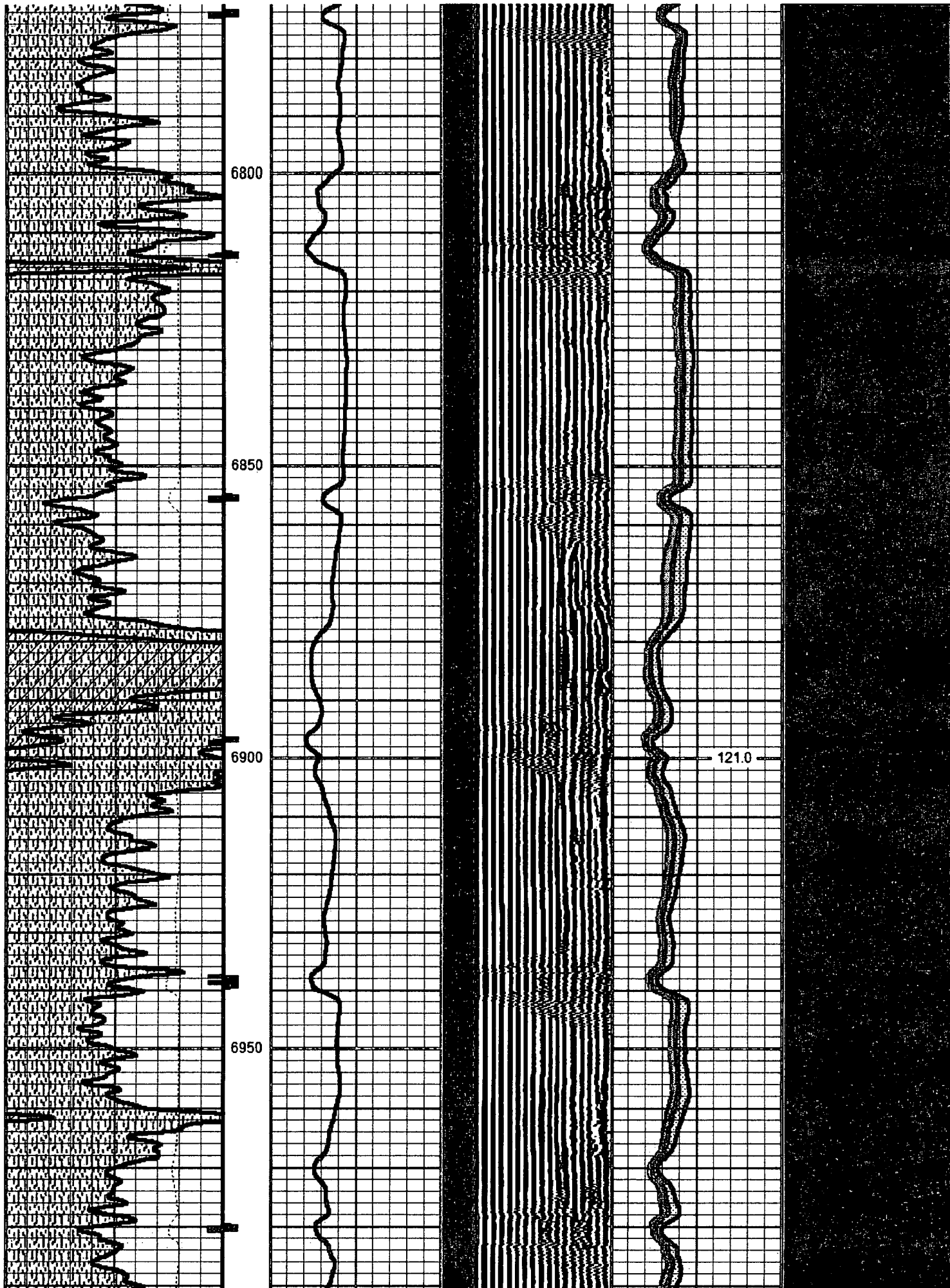


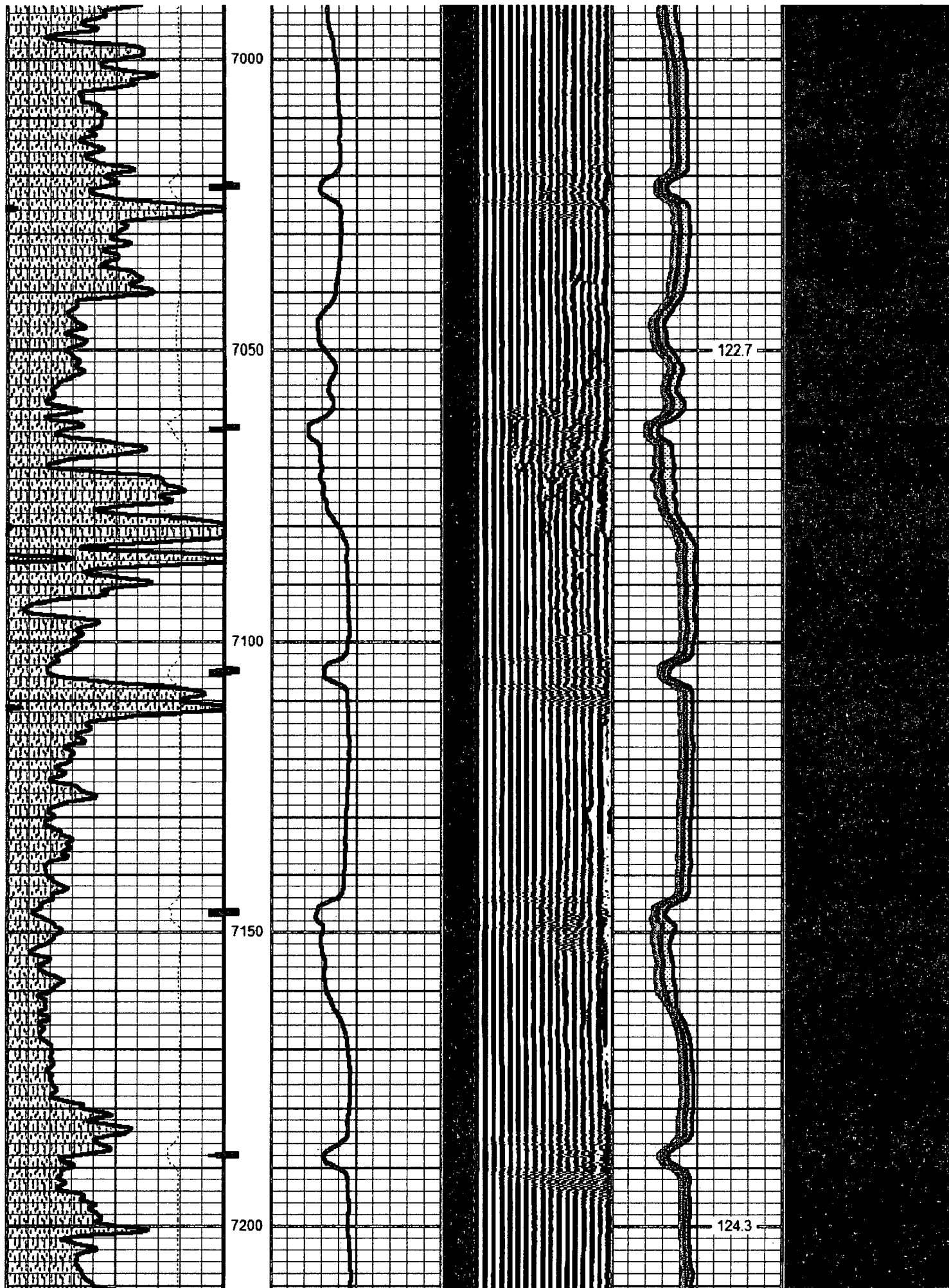


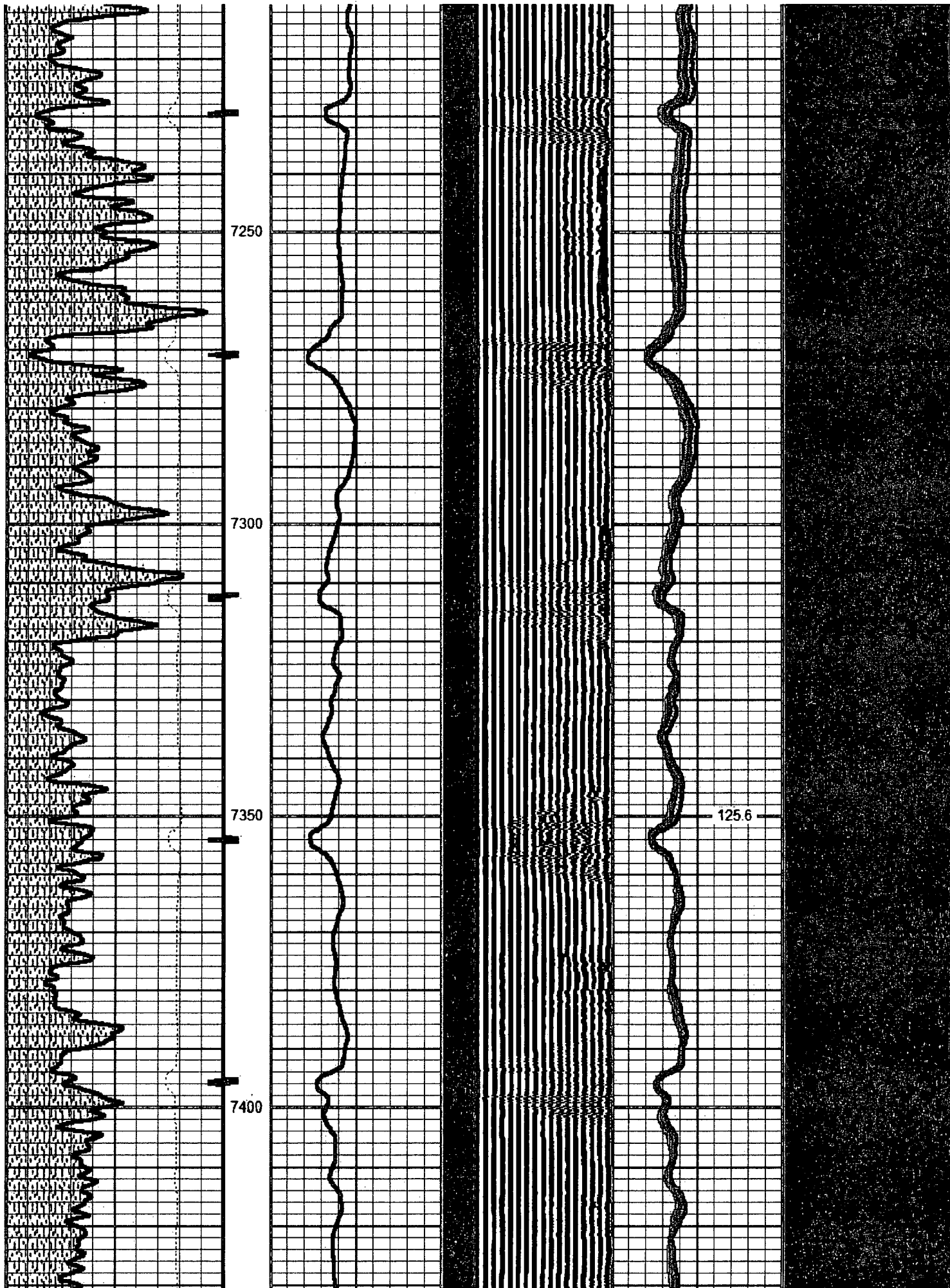


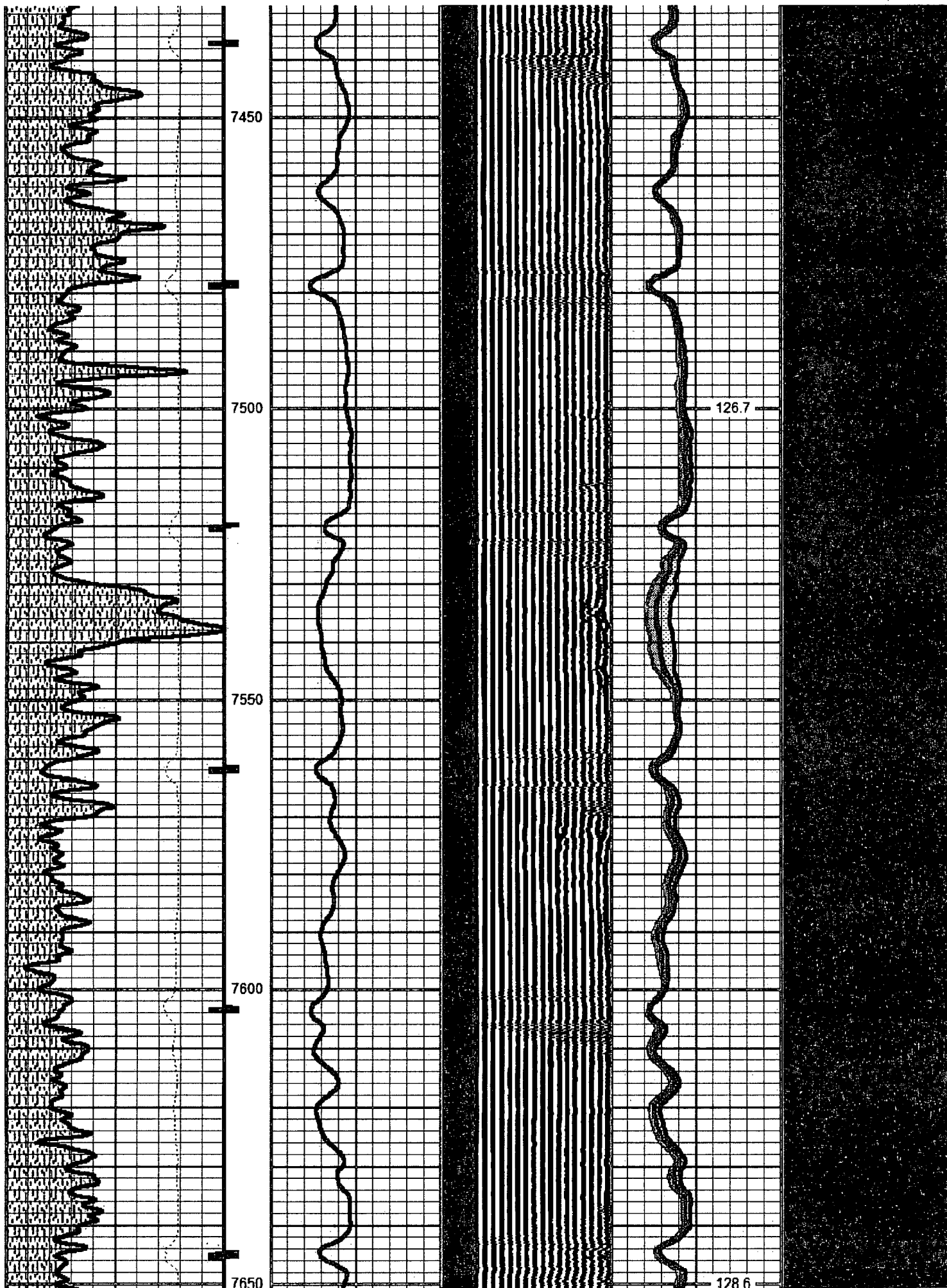


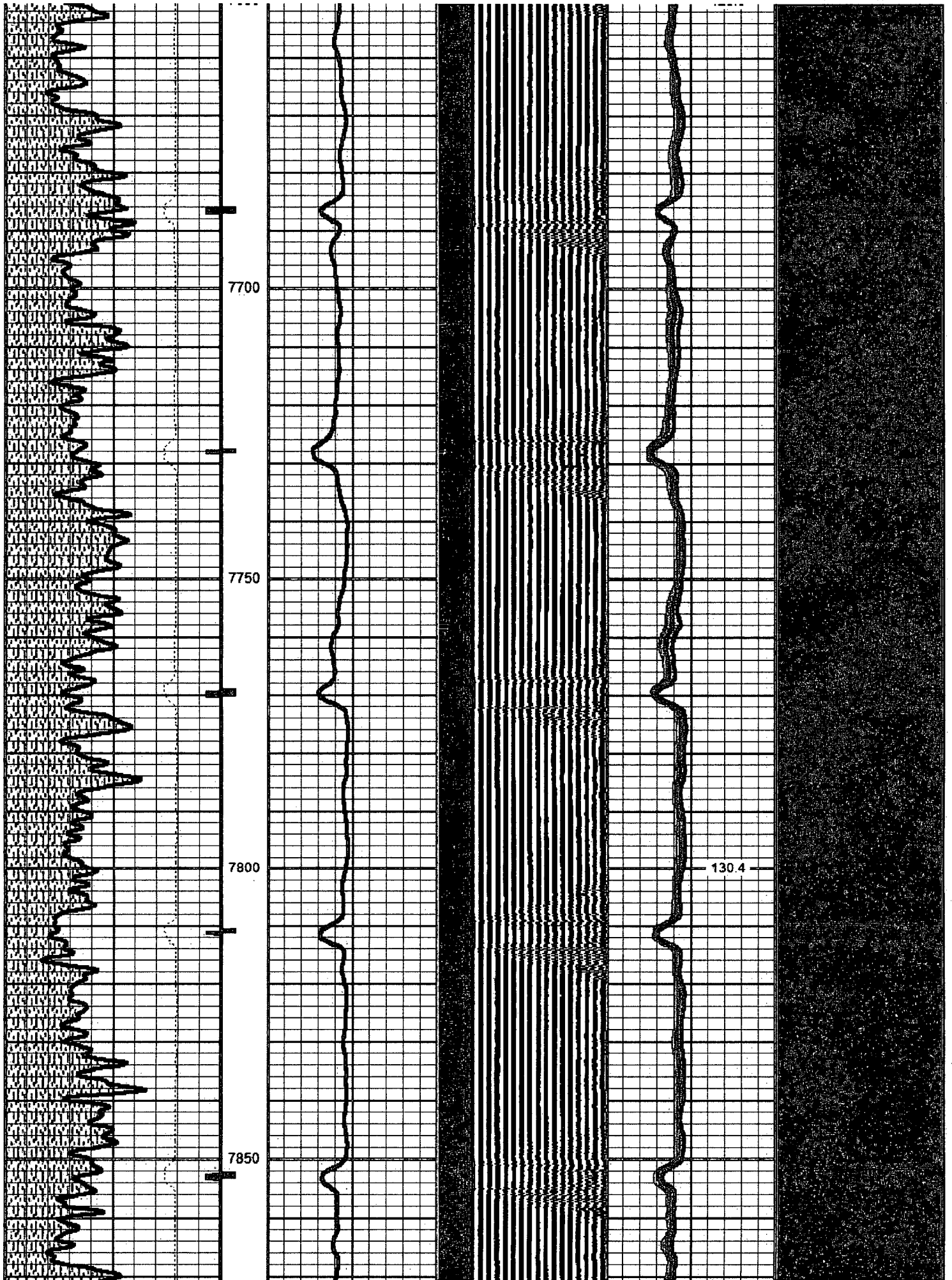


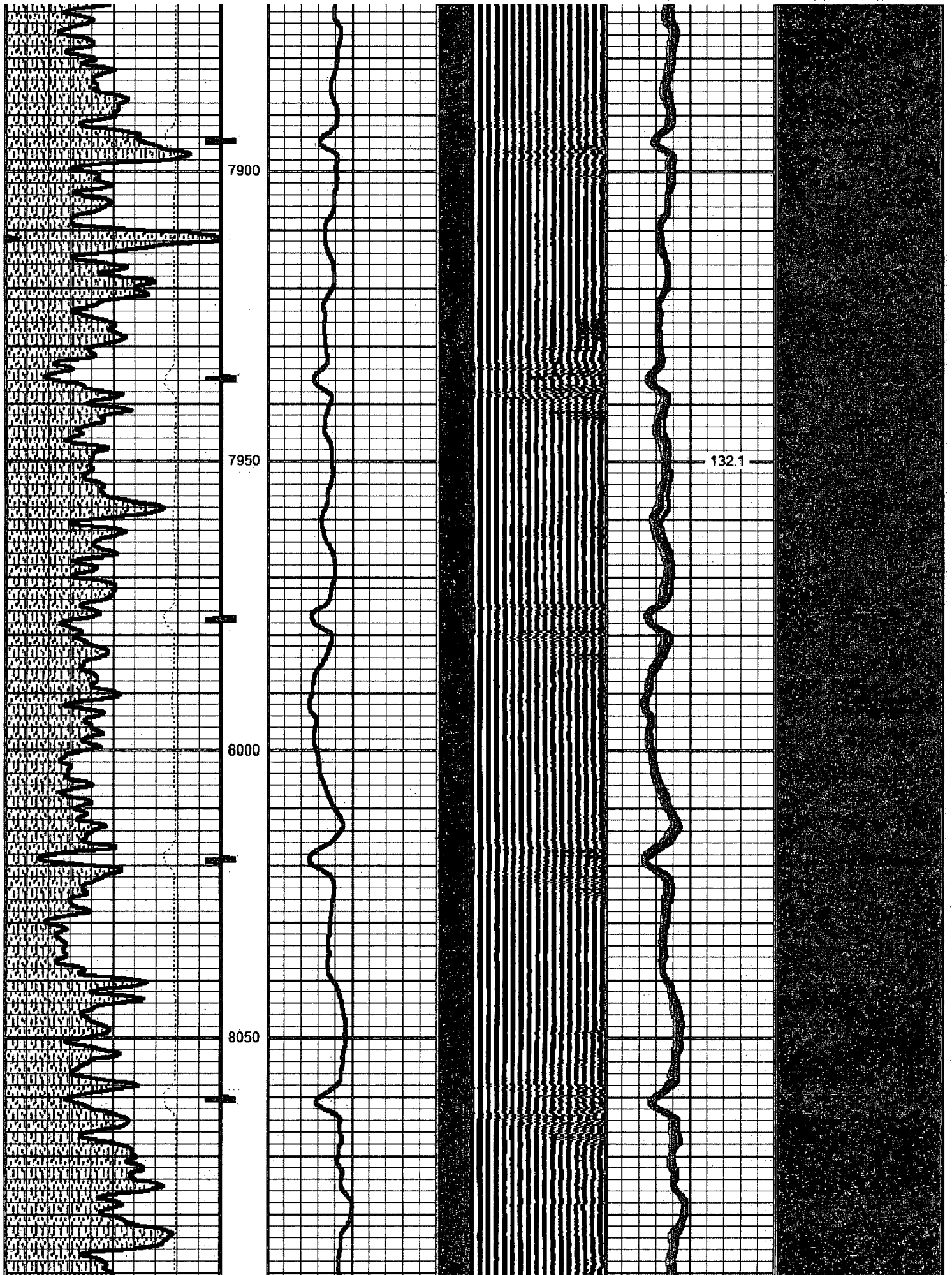


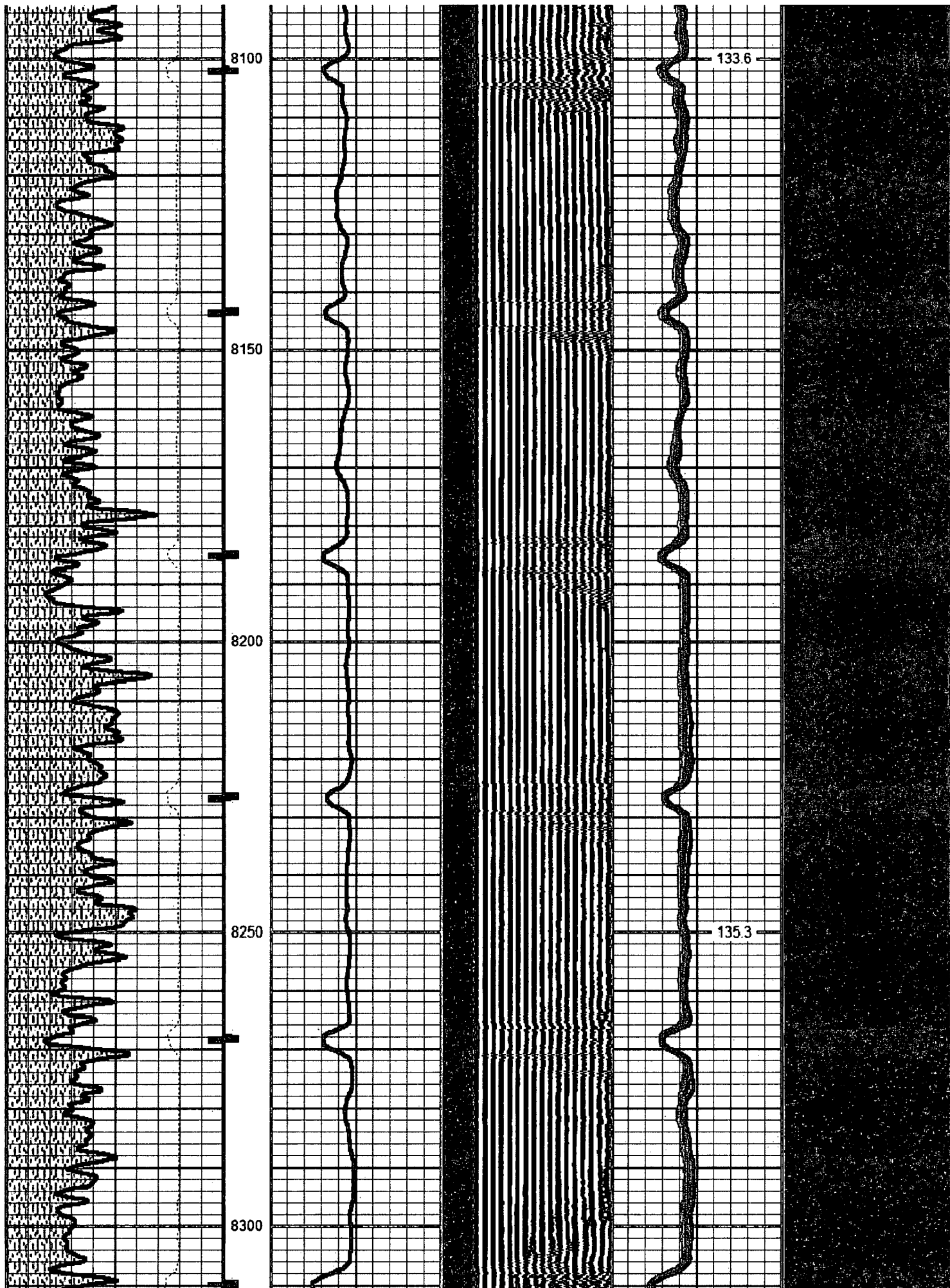


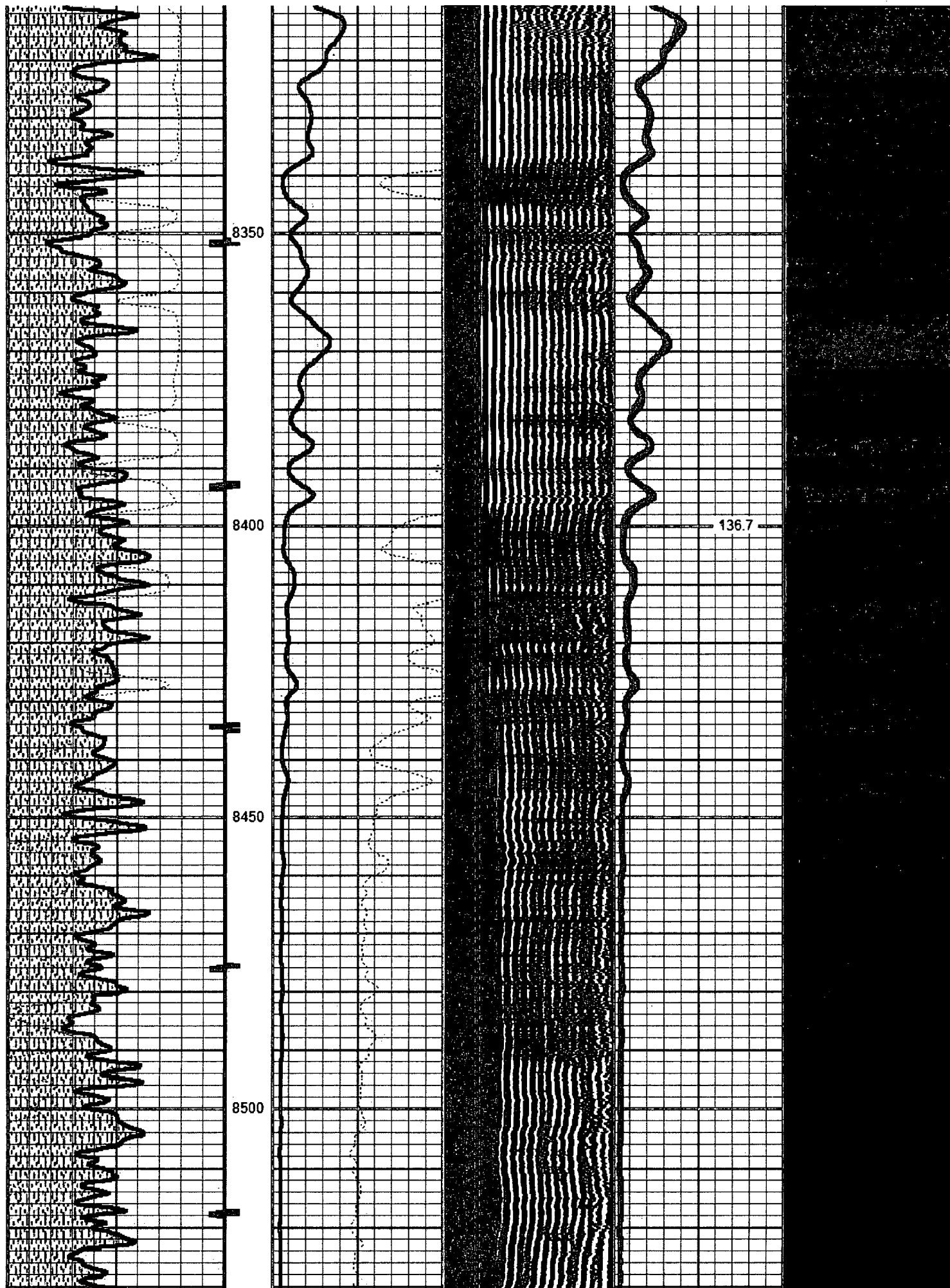


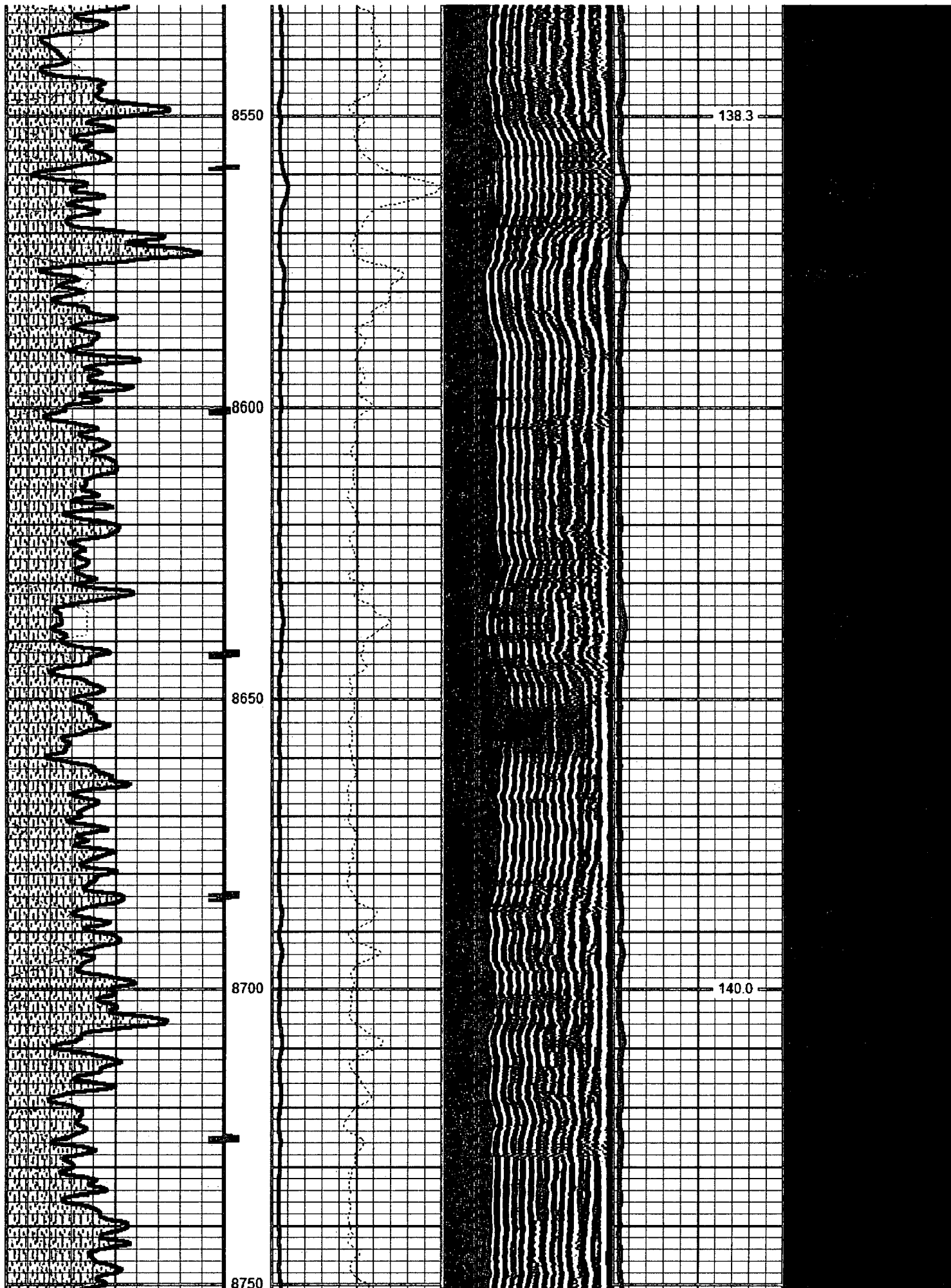


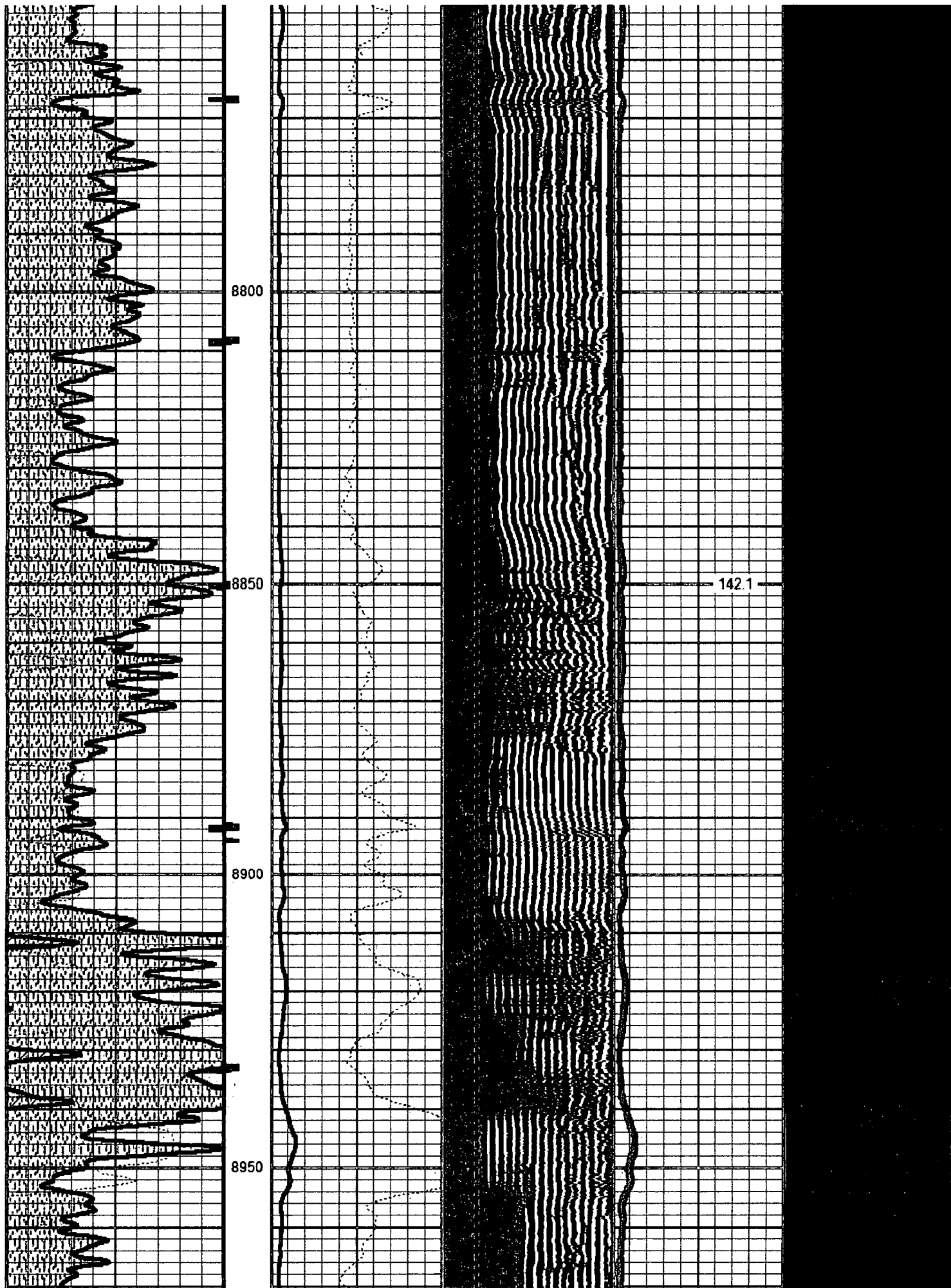


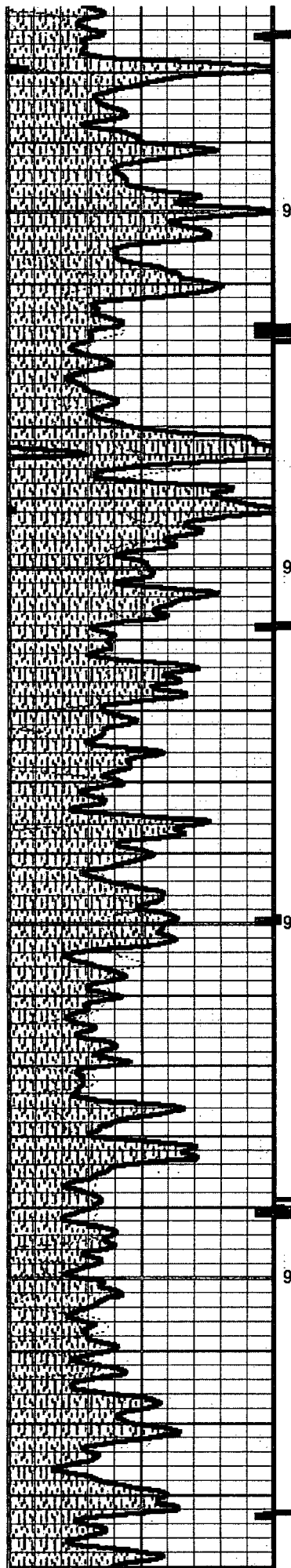










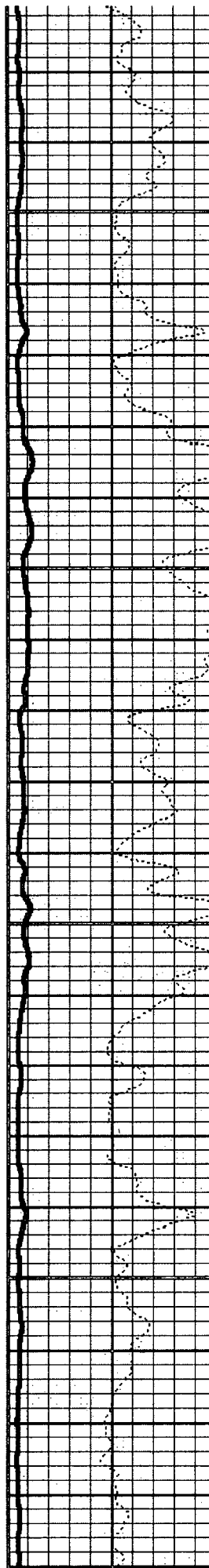


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9050

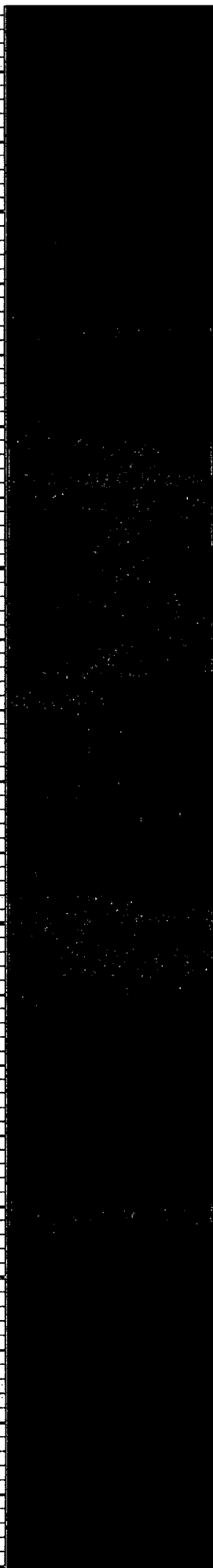
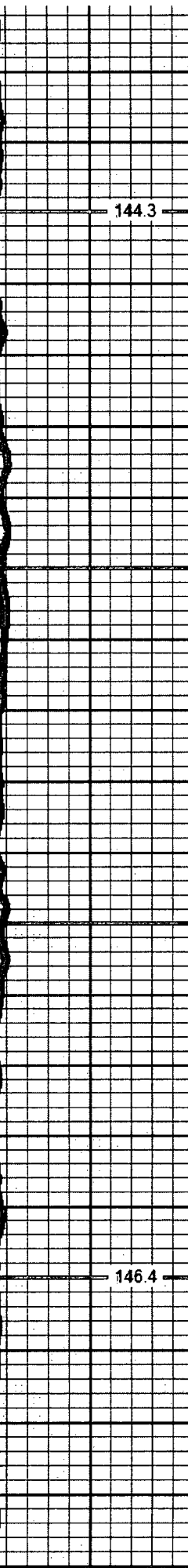
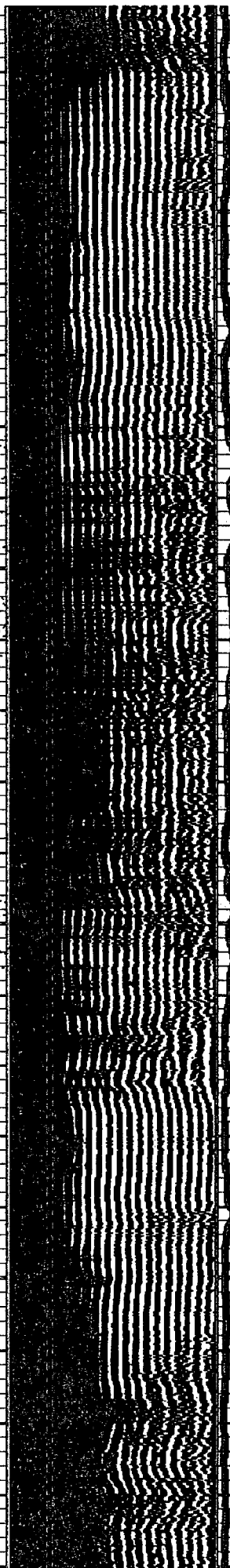
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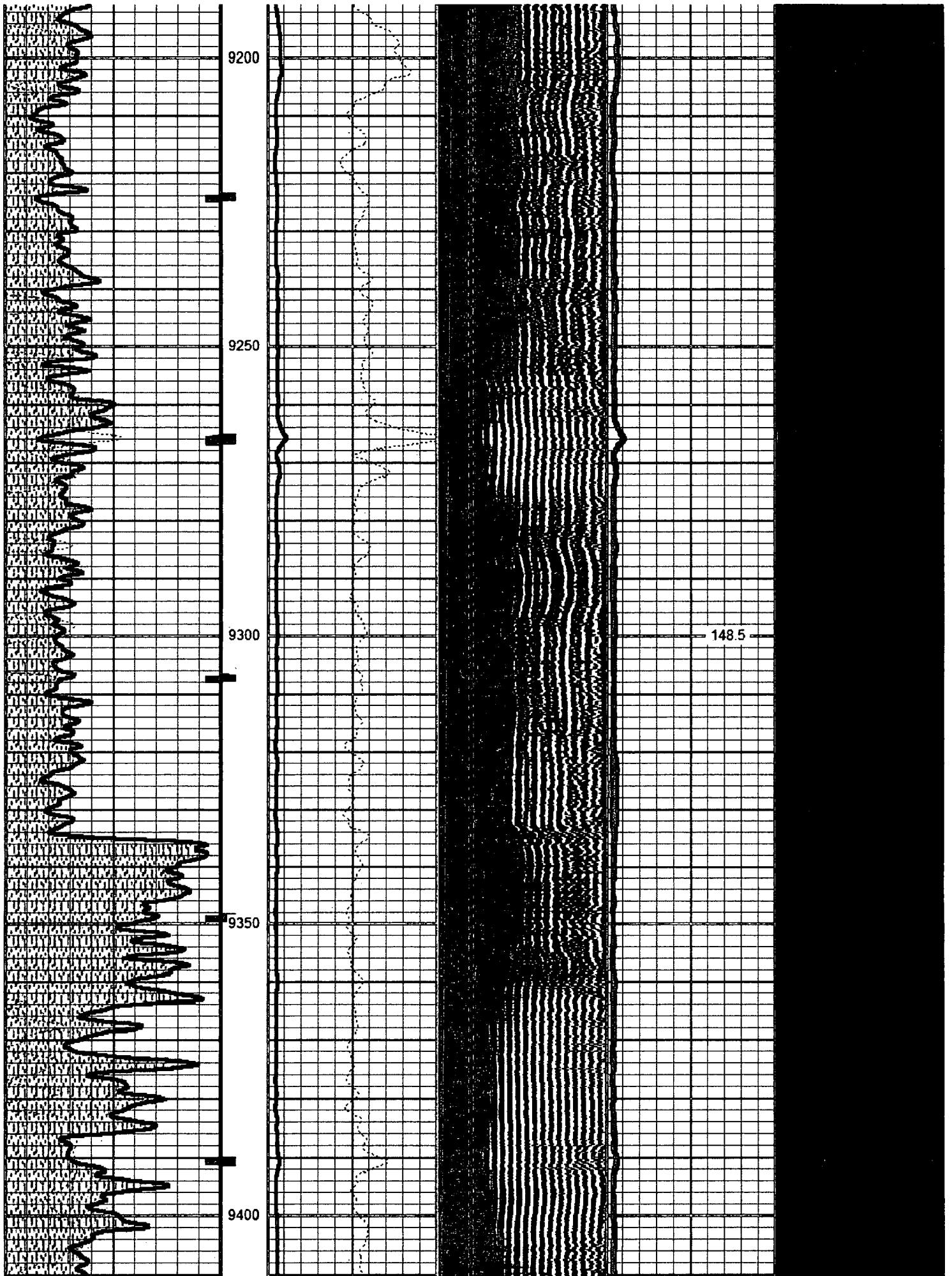
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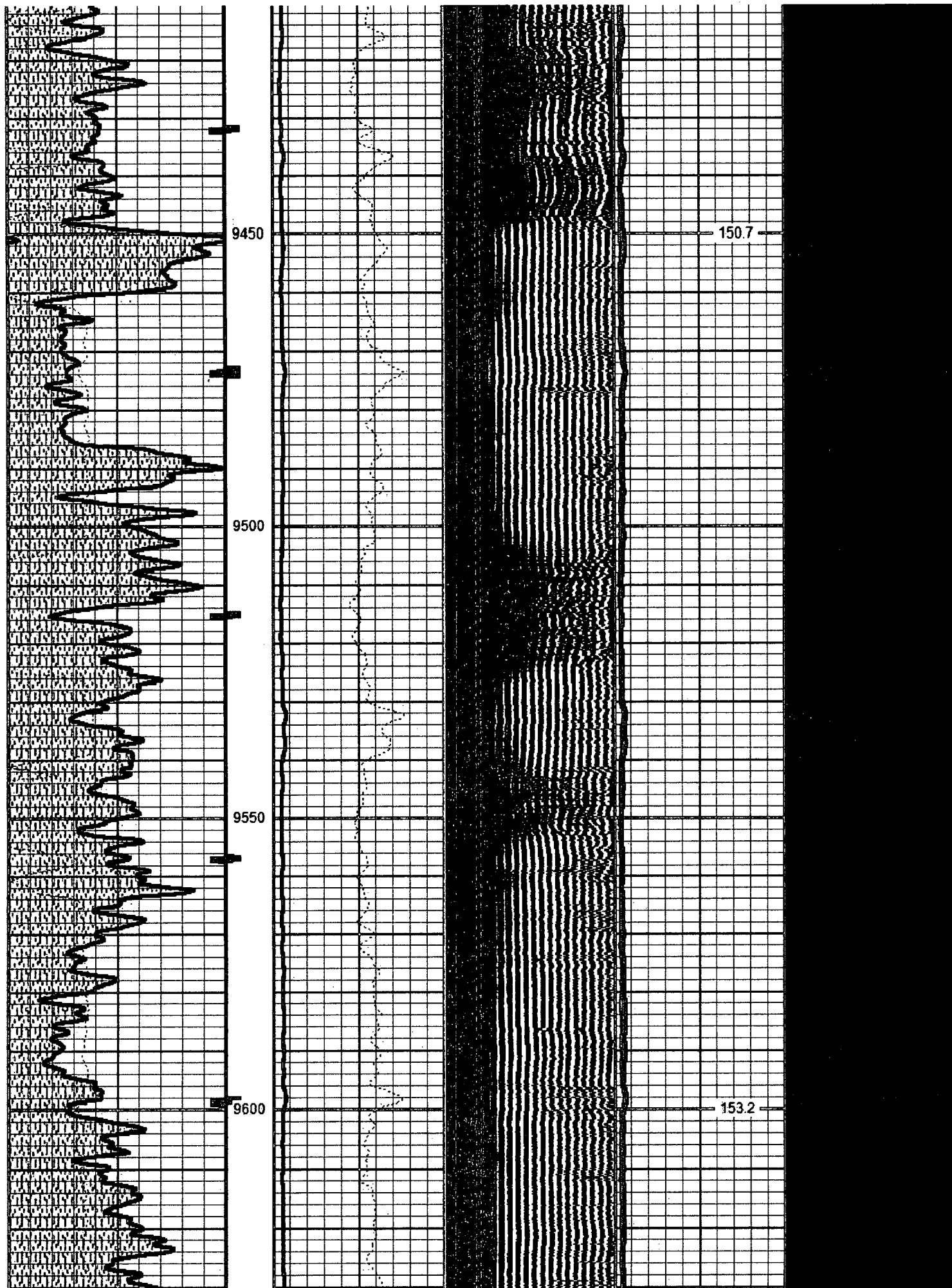


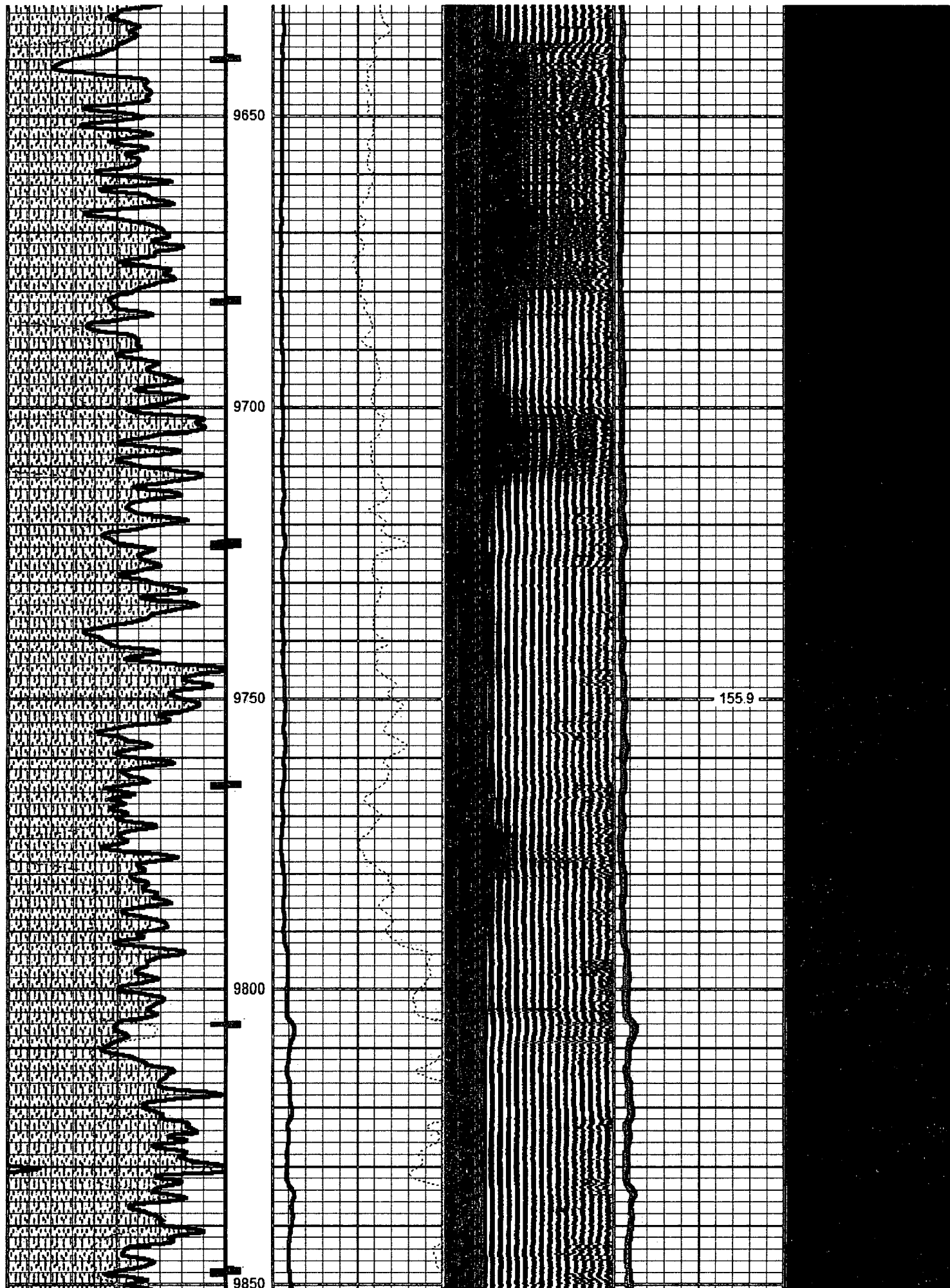
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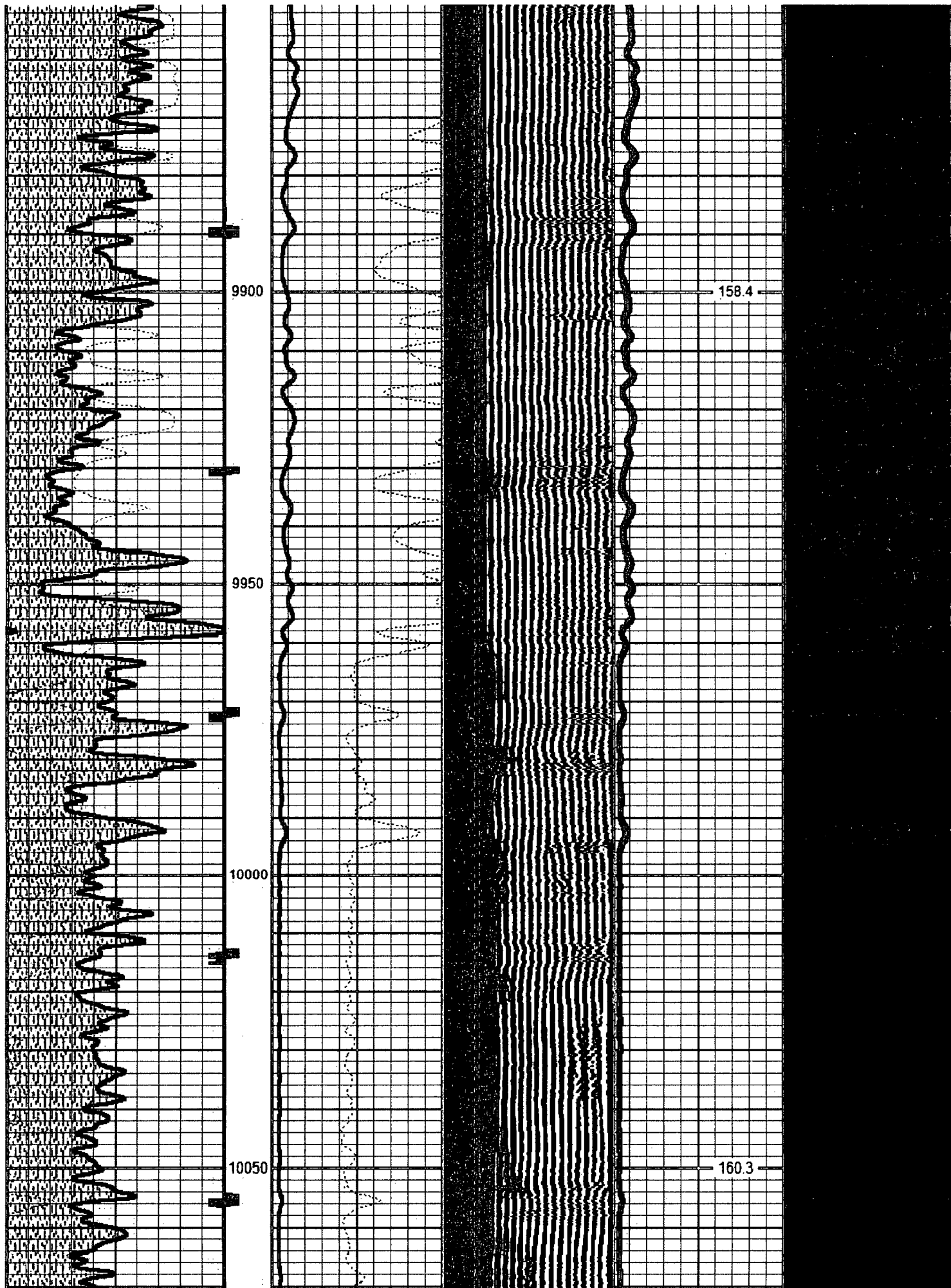
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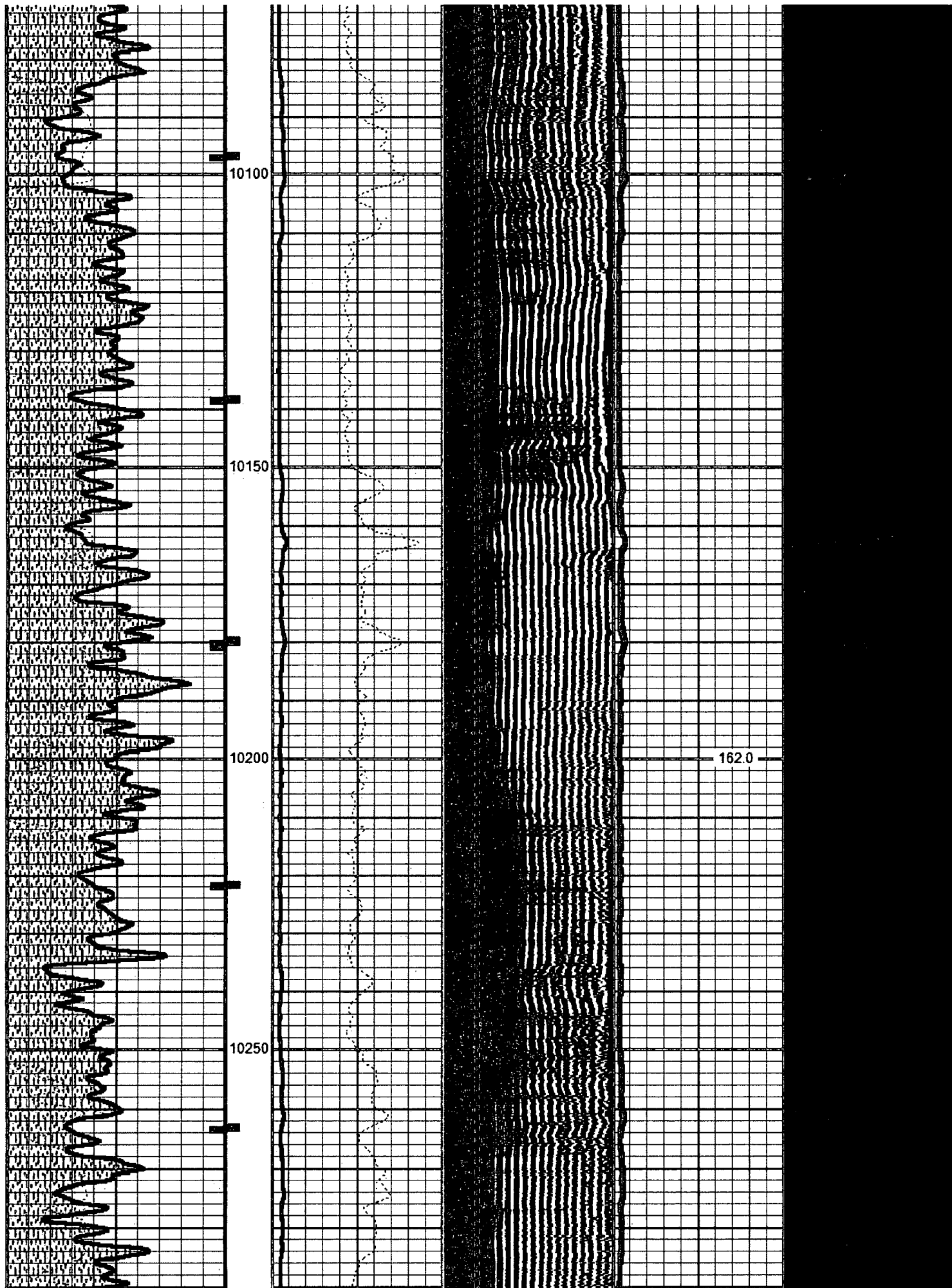


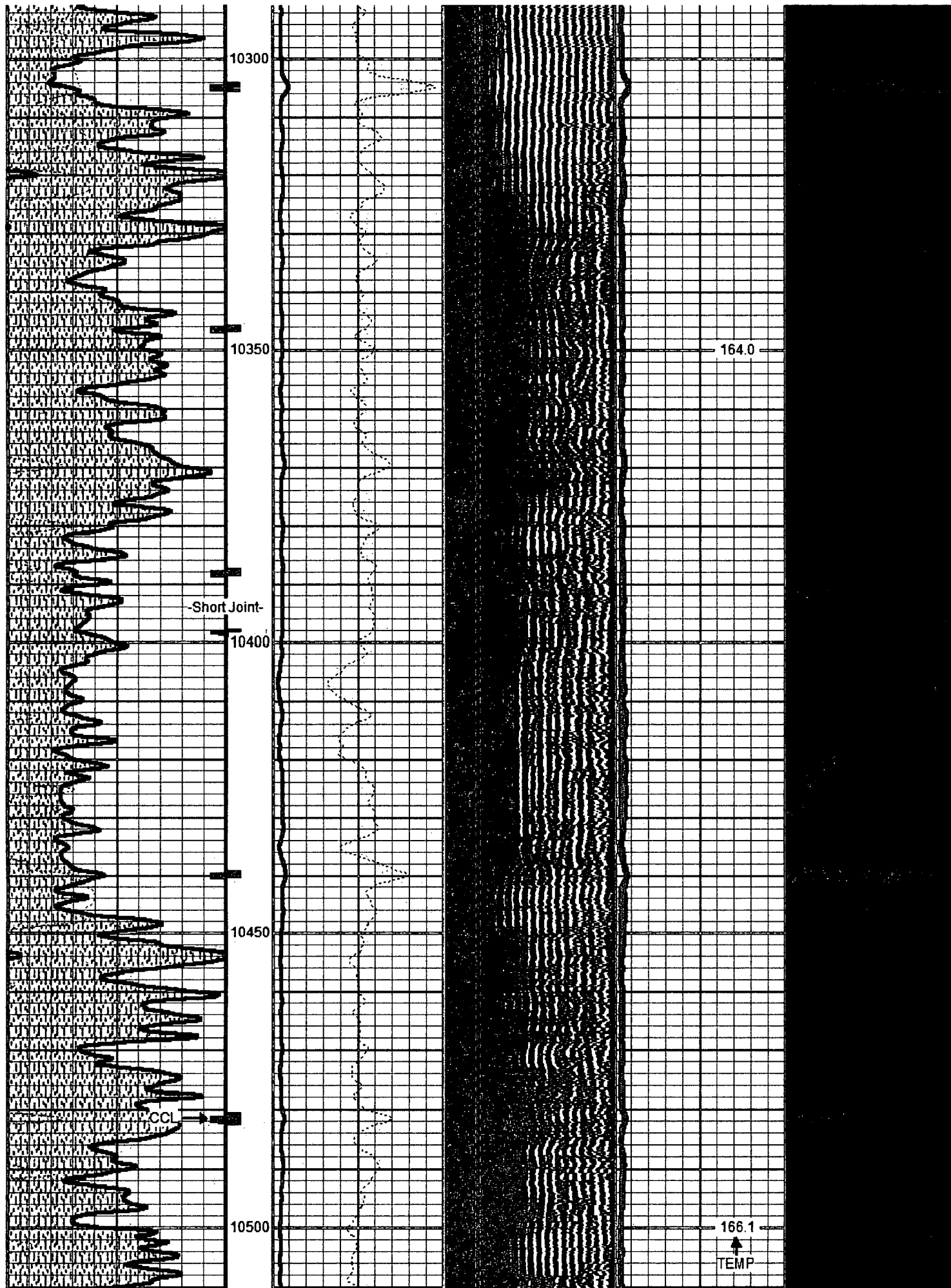


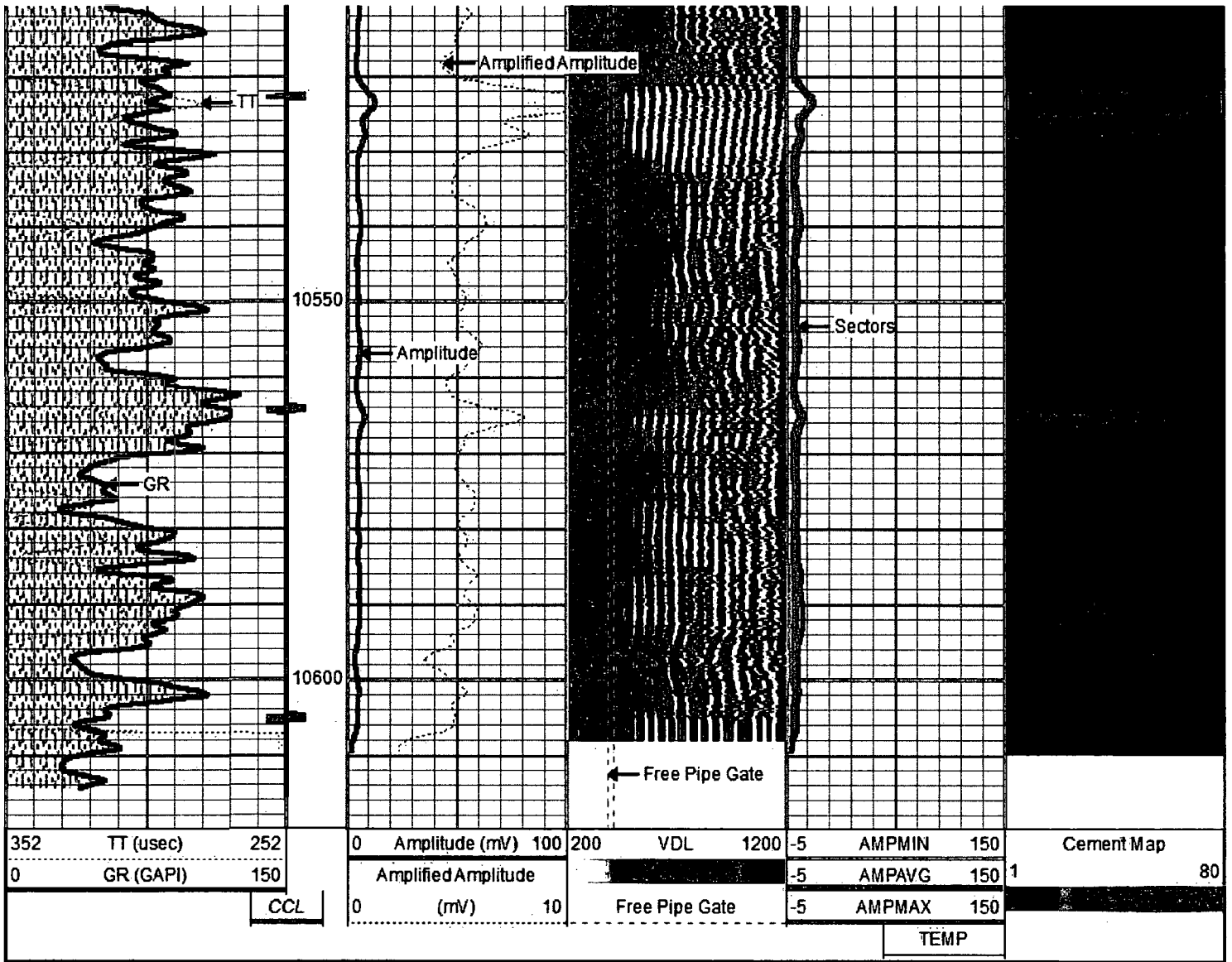








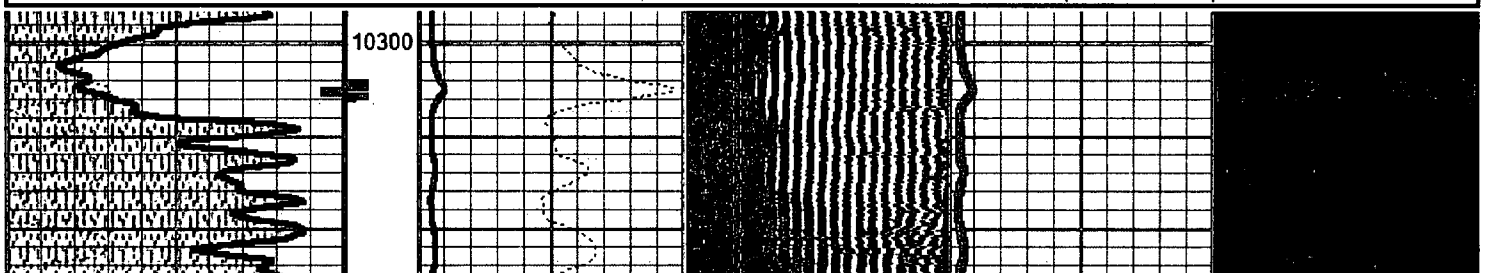
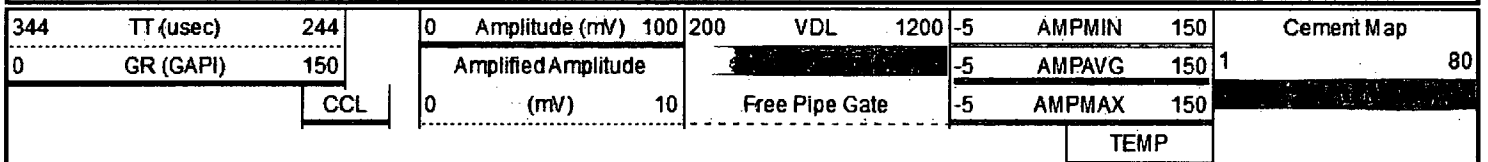


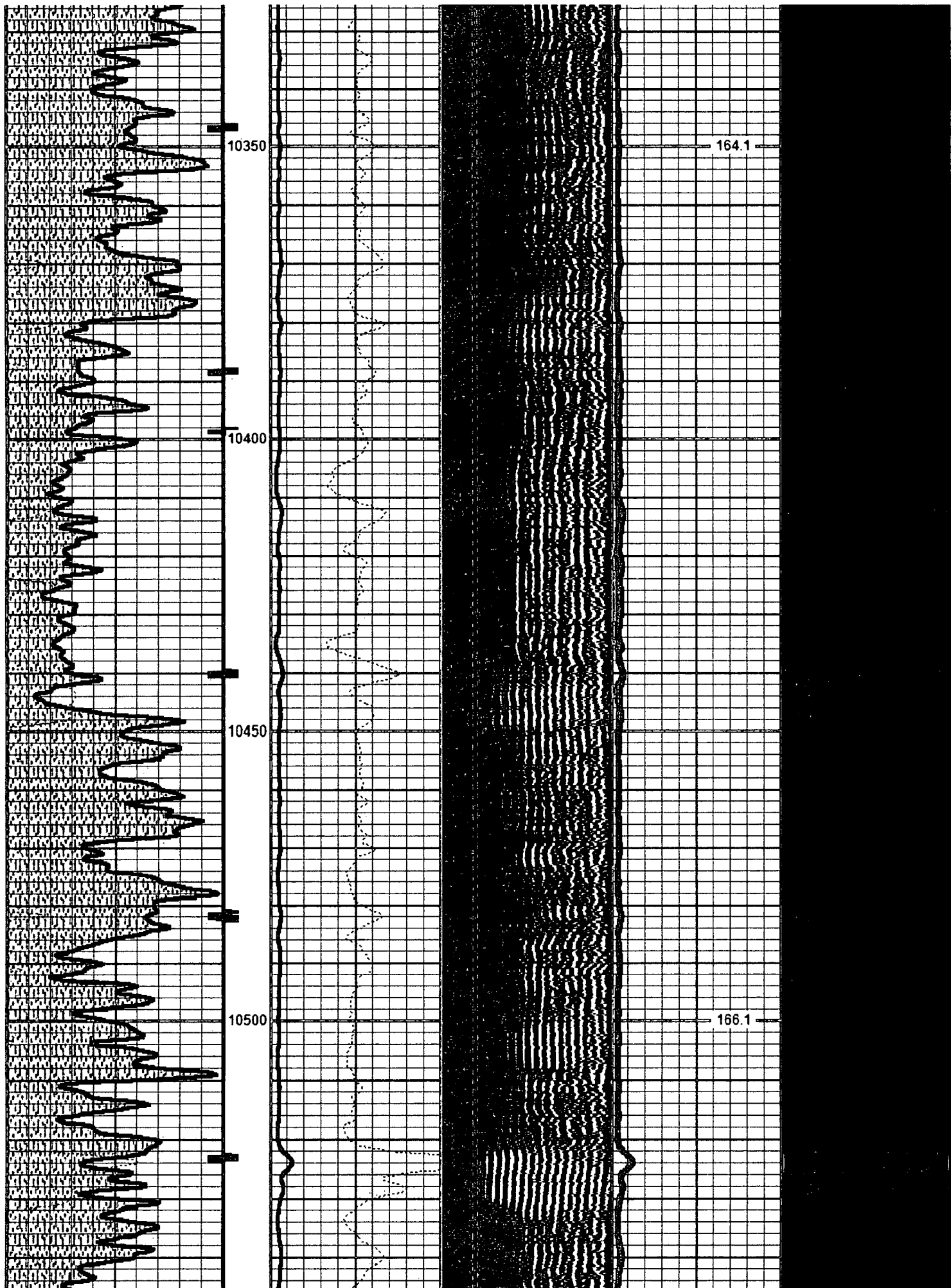


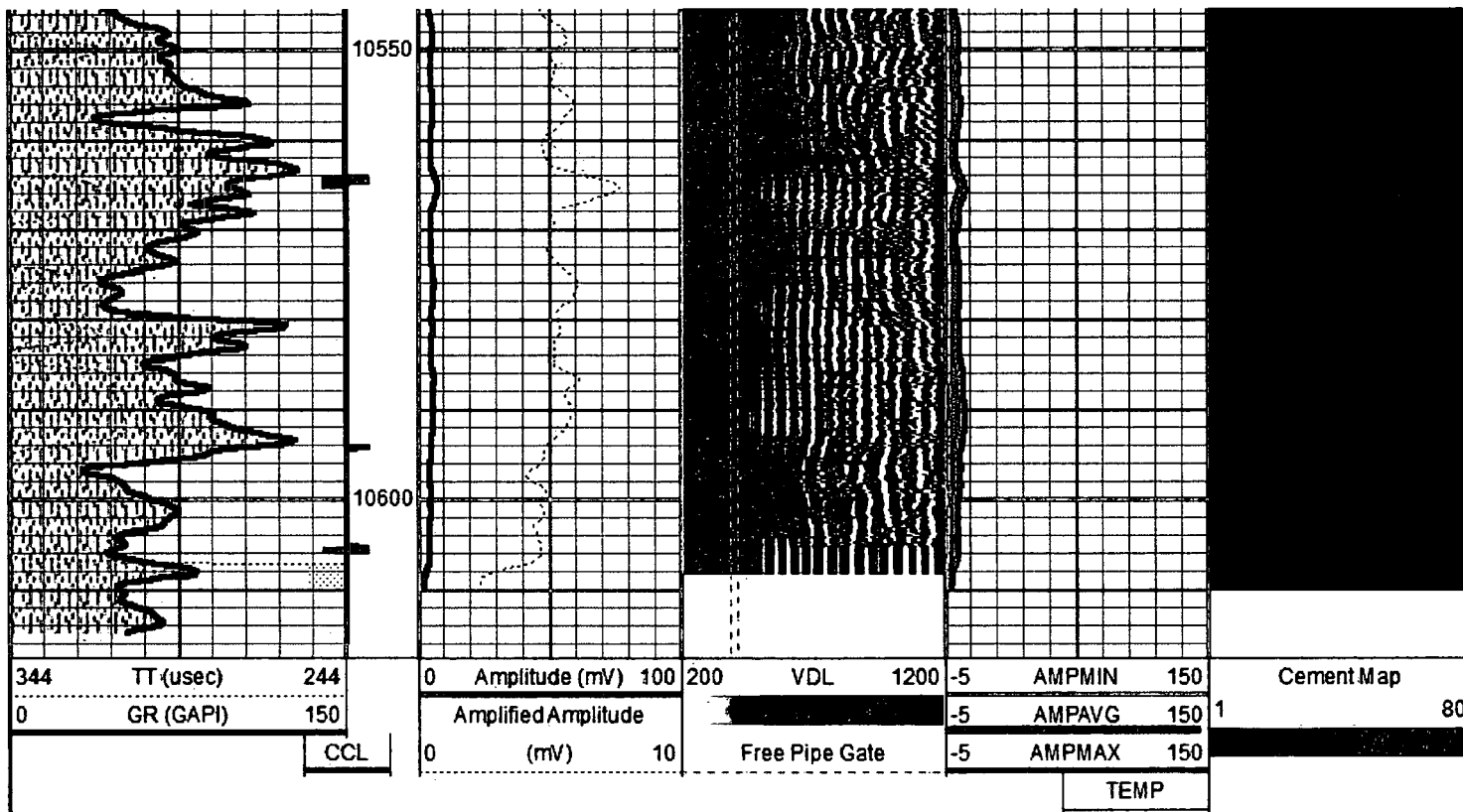
Repeat Pass

Zero Psi

Database File: marathon_urraca_fed_23-32-11-sb-4h.db
 Dataset Pathname: pass7
 Presentation Format: rrcbl_mx
 Dataset Creation: Sun Sep 30 09:58:34 2018
 Charted by: Depth in Feet scaled 1:240







Log Variables

Database C:\ProgramData\WarriorData\marathon_urraca_fed_23-32-11-sb-4h.db
Dataset field/well/run1/pass8

Top - Bottom

PPT u sec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	20	72	1	0.8	5.5	0	0	166.1	8.75

Calibration Report

Database File marathon_urraca_fed_23-32-11-sb-4h.db
Dataset Pathname pass8
Dataset Creation Sun Sep 30 10:03:11 2018

Gamma Ray Calibration Report

Serial Number: FW1708-041
Tool Model: Probe275dig
Performed: Fri Aug 31 08:38:56 2018

Calibrator Value: 287.0 GAPI

Background Reading: 31.1 cps
Calibrator Reading: 345.7 cps

Sensitivity: 0.9122 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1708-043
Tool Model: Probe

Calibration Casing Diameter: 5.500 in
Calibration Depth: 187.433 ft

Master Calibration, performed Sun Sep 30 07:54:40 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.009	0.987	3.000	71.921	70.451	2.395
CAL	0.009	0.966				
5'	0.008	0.962	3.000	71.921	72.274	2.410
SUM						
S1	0.011	0.967	0.000	100.000	104.638	-1.136
S2	0.009	0.994	0.000	100.000	101.606	-0.955
S3	0.009	1.007	0.000	100.000	100.154	-0.853
S4	0.009	1.007	0.000	100.000	100.199	-0.856
S5	0.009	1.006	0.000	100.000	100.257	-0.876
S6	0.009	0.990	0.000	100.000	101.866	-0.882
S7	0.009	0.988	0.000	100.000	102.132	-0.914
S8	0.009	0.992	0.000	100.000	101.730	-0.900

Internal Reference Calibration, performed Sun Sep 30 07:54:12 2018:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.009	0.966	1.000	0.000

Air Zero Calibration, performed Sun Sep 30 07:52:45 2018:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	

Temperature Calibration Report

Serial Number: FW1708-043
 Tool Model: Probe
 Performed: Sun Jun 13 13:33:21 1993

	Reference		Reading	
Low Reference:	0.00	degF	0.00	degF
High Reference:	1.00	degF	1.00	degF
Gain:	1.00			
Offset:	0.00			
Delta Spacing	1			

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			1.4375CHD Titan Cable Head 1 7/16	1.00	1.44	10.00

			Probe1_69 Probe 1 11/16 Centralizer	3.37	1.69	20.00
TEMP	14.64					
WVFS8	12.32		Probe (FW1708-043) Probe Radii Bond Tool with Digital Telemetry	8.33	2.75	90.00
WVFS7	12.32					
WVFS6	12.32					
WVFS5	12.32					
WVFS4	12.32					
WVFS3	12.32					
WVFS2	12.32					
WVFS1	12.32					
WVFCAL	12.32					
WVF3FT	12.32					
WVF5FT	11.32					
			Probe1_69 Probe 1 11/16 Centralizer	3.37	1.69	20.00
CCL	3.88					
GR	2.54		Probe275dig (FW1708-041) Probe Digital Gamma CCL	4.77	2.75	57.00
Dataset: marathon_urraca_fed_23-32-11-sb-4h.db: field/well/run1/pass8 Total length: 20.83 ft Total weight: 197.00 lb O.D.: 2.75 in						

Company	Marathon Oil
Well	Urraca Federal Com 23 32 11 SB 4H
Field	Second Bone Springs

County

Lea

State

New Mexico



Radial Bond
Gamma Ray / CCL



Uracca Federal 23 32 11 SB 4H
Braidenhead Squeeze

Surface Coordinates

Lat: 32.325214 N
Long: -103.648711 W
(NAD 27' Lat/Long)
RKB: 3739.5'

General Information

Lea County, NM
API # 30-025-41968
WBS # DD.17.00260.D1
N-11-23S-32E 330 FNL 440 FWL

Prepared by: Chris Montan

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Marathon Oil Personnel

Name	Title	Location	Cell	Email
Brent Evans	Drilling Manager	Houston	(832) 967-8474	bevans@marathonoil.com
Matt Rugaard	Drilling Supervisor	Houston	(281)-513-5163	mprugaard@marathonoil.com
Mark Bly	Drilling Superintendent	Carlsbad	(281) 840 0467	
Chris Montan	Drilling Engineer	Houston	(281) 386 2170	cmontan@marathonoil.com
Nick Rogers	Permian HES Advisor	Carlsbad	(281) 659-3734	
Jim Auld	Completion Superintendent	Carlsbad	(432) 202-0194	jauld@marathonoil.com

Emergency Telephone Contacts

Name	Title	Location	Office
Fire Department		Hobbs, NM	575-397-9308
Ambulance			911
Sheriff office	Lea County Sheriff	Lovington, NM	575-396-3611
BLM (Jim McCormick)	Superisory Petroleum Eng. Tech.	Hobbs, NM	575-942-5801

Vendors List

Service	Vendor	Contact	Office	Cell
Cementers	Nine Energy	Winston Kyser		832-612-0496

Driving Directions:

From the intersection of NM Hwy 31 & NM Hwy 128, head south on NM Hwy 128 for 19 miles to an existing lease road

Turn left on the existing lease road heading north for 5.6 miles

Turn left on lease road for 1.4 miles

Turn right on lease road for 1.6 miles

Turn left on lease road for 0.3 miles the Urraca 23-32-11 AV #24H well location will be on the right.

Continue for 0.2 miles entering the southeast corner of the Urraca Federal 23-32-11 SB #4H well location.

Objective

Perform braidenhead squeeze cement job placing cement behind the 5.5" production string from 6500' to 3,800' (1000' into 9-5/8" casing).

Well Information

The Uracca Federal 23 32 11 SB 4H is a Bone Springs horizontal well drilled by H&P 480. A radial CBL was ran in the 5.5" production casing string revealing that the TOC was @ 6,500' which does not overlap into the 9 5/8" intermediate casing string. The 5.5" casing was ran in 8-3/4" hole.

Casing details:

Surface: 13-5/8" 54.50# set @ 1,288' KB	Burst – 2,730 psi	
Intermediate 1: 9-5/8" 40# set @ 4,888' KB	Burst – 5,750 psi	Collapse – 3,870 psi
Production: 5.5" 20# set @ 15,575' KB	Burst – 12,640 psi	Collapse – 12,100 psi

Formation tops:

Salado: 1,679' RKB

Base of Salt: 4,827' RKB

Lamar: 4,900' RKB

Bell Canyon: 5,010' RKB

Brushy Canyon: 7,172' RKB

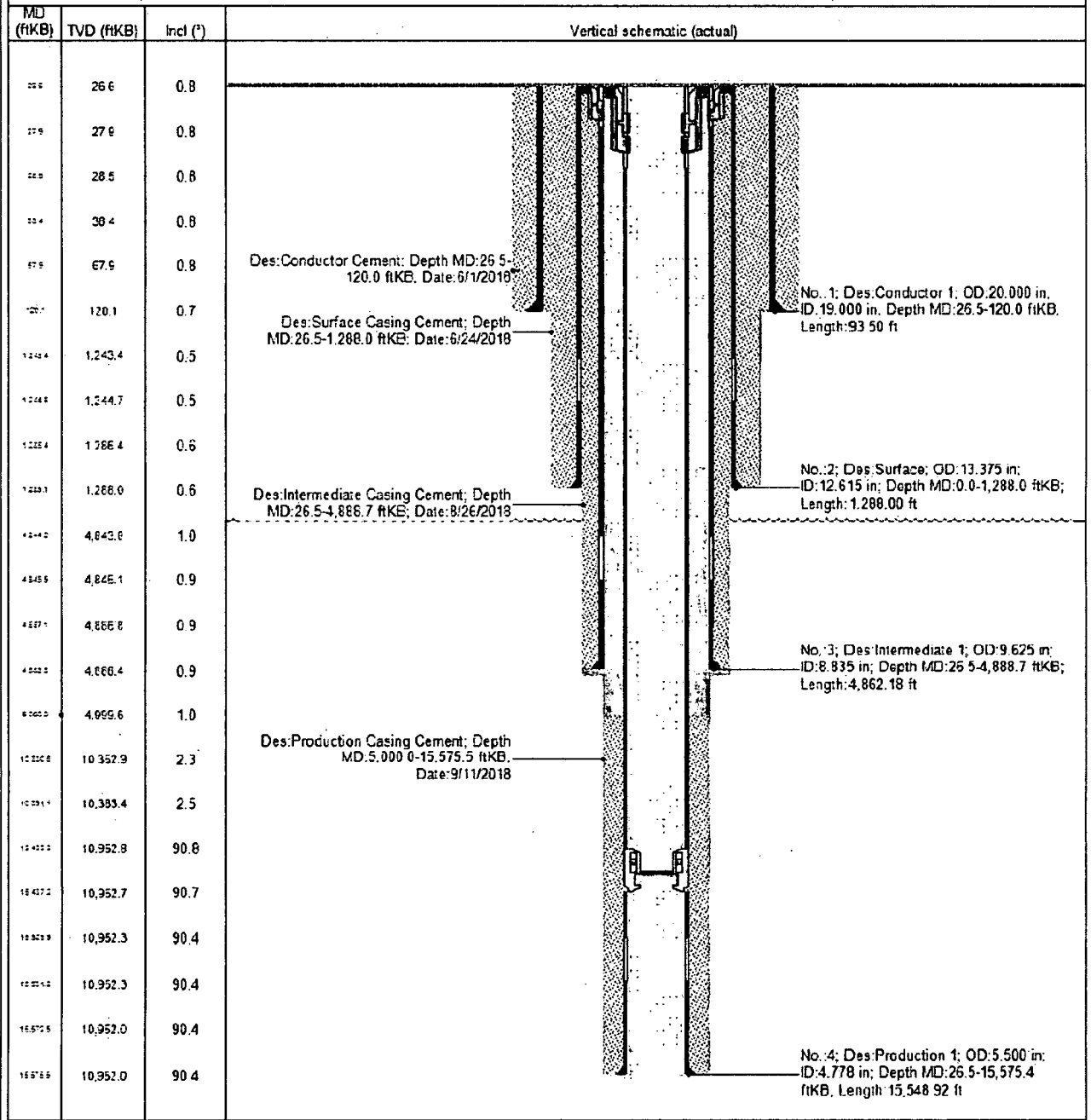
Wellbore Schematic



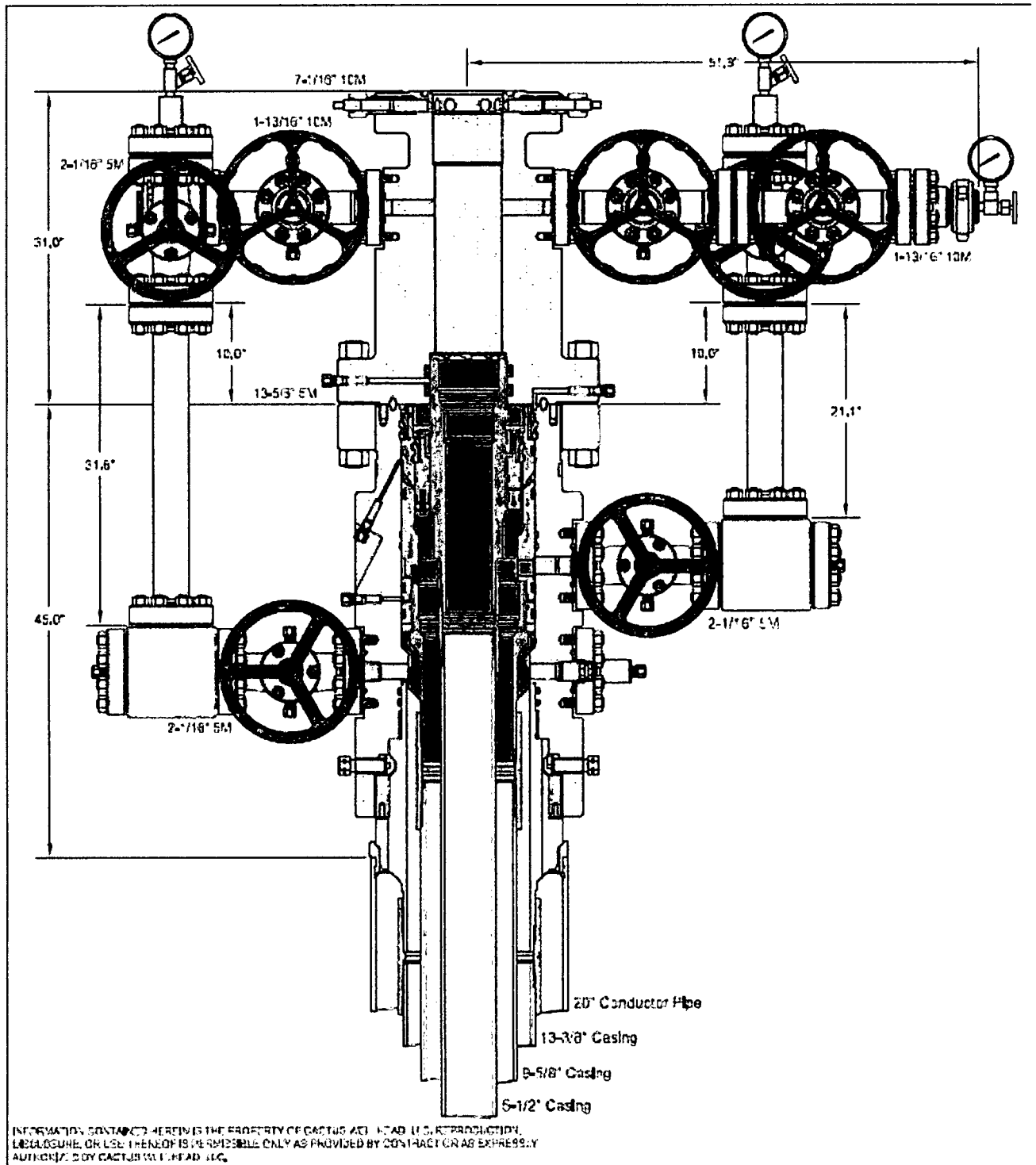
Wellbore Schematic
Well Name: URRACA FEDERAL COM 23 32 11 SB 4H

State/Province NEW MEXICO	Prospect Area RED HILLS	Field Name 	Well Subtype NAD27	Latitude (°) 32.325376	Longitude (°) -103.651978
Well Configuration Type HORIZONTAL	Well Objective EXPLOITATION	Well Status DRILLING	Ground Elevation (ft) 3,713.00	KB-Ground Distance (ft) 26.50	

HORIZONTAL - URRACA FEDERAL COM 23 32 11 SB 4H, 9/13/2018 3:17:26 PM



Surface Schematic



Procedure

*Procedure is subject to change prior to, or during operations

- 1. Prior to Mobilizing Cement Truck. Establish injection rate with pump truck.**
- 2. Hold PJSM with cementing crew and MOC rep.**
- 3. Ensure casing valve is shut and rig up cement iron to 2" 1502 hammer union on casing valve to 9 5/8" casing (top valve on casing head).**
- 4. Rig up manifold and pump into tubing head to hold pressure on inside of pipe (if available) and pressure up to 500 PSI.**
- 5. Pressure test pumping unit to 2,000 PSI**
- 6. Open casing valve**
- 7. Fill lines @ 1 BPM**
- 8. Initialize rate at 0.5 BPM bringing up to a max of 4 BPM if pressure is less than 1000 PSI.**
- 9. Record pump rate and pressure.**
- 10. Pump 10 total bbls of fresh water spacer (double check injection rate)**
- 11. Pump 190 bbls (402 sacks) (50% Excess) of 12.2 Class C cement with 2% CaCl**
- 12. Chase with 20 bbls of fresh water.**
- 13. Shut down pumps and monitor pressure for 10 min.**
- 14. Bleed off pressure at pump truck and close casing valve.**
- 15. Bleed off pressure at manifold to relieve pressure off tubing head.**
- 16. Break cement lines and wash up to cellar.**
- 17. Rig down and mob cement unit and manifold (if using).**