



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company CHIEFTAIN OIL COMPANY, INC.
Well YATES "A" #8
Field STRANATHAN
County BARBER
State KANSAS

Company CHIEFTAIN OIL COMPANY, INC.
Well YATES "A" #8
Field STRANATHAN
County BARBER State KANSAS

Location: API #: 15-007-23625
340' FNL & 340' FEL
SEC 36 TWP 34S RGE 12W
Permanent Datum GROUND LEVEL Elevation 1389
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 1399
D.F.
G.L. 1389

Date	1-17-11	
Run Number	ONE	
Depth Driller	5430	
Depth Logger	5428	
Bottom Logged Interval	5404	
Top Log Interval	3400	
Casing Driller	866	
Casing Logger	866	
Bit Size	7.875	
Type Fluid in Hole	CHEMICAL MUD	
Density / Viscosity	9.4 / 58	
pH / Fluid Loss	9.5 / 8.8	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	0.70 @ 80F	
Rmf @ Meas. Temp	0.53 @ 80F	
Rmc @ Meas. Temp	0.84 @ 80F	
Source of Rmf / Rmc	MEASURED	
Rm @ BHT	.430 @ 129F	
Time Circulation Stopped	3 HOURS	
Time Logger on Bottom	2:30 A.M.	
Maximum Recorded Temperature	129F	
Equipment Number	860	
Location	HAYS, KS.	
Recorded By	RUPP	
Witnessed By	ARDEN RATZLAFF	

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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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: MEDICINE LODGE, 17S TO RATTLESNAKE RD., 1/10W, S INTO.

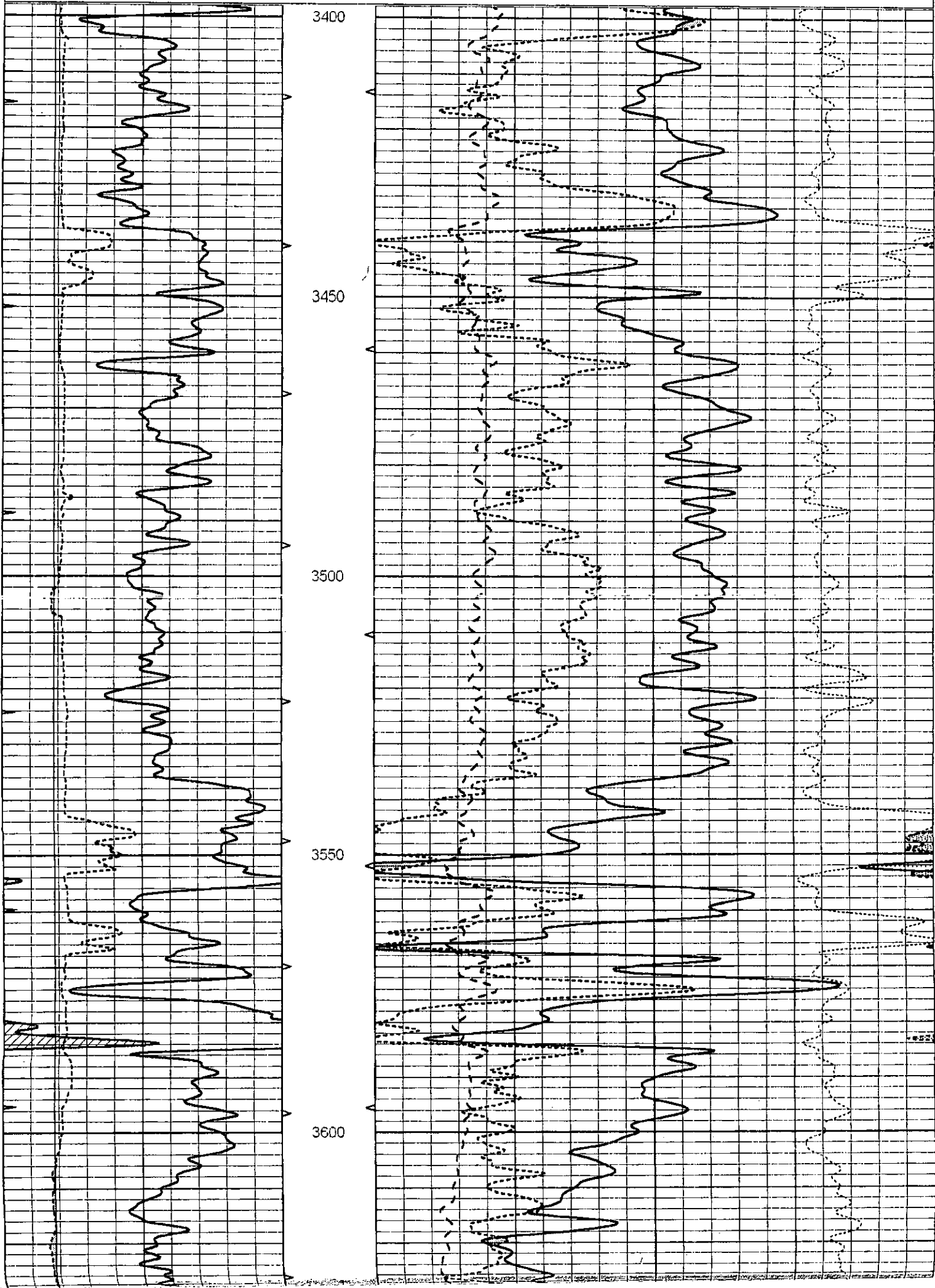


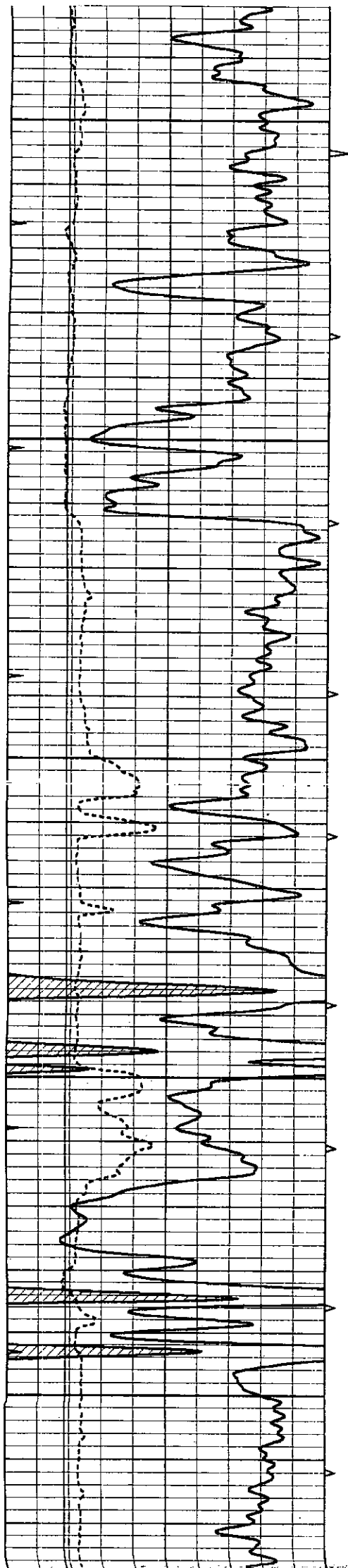
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MAIN SECTION

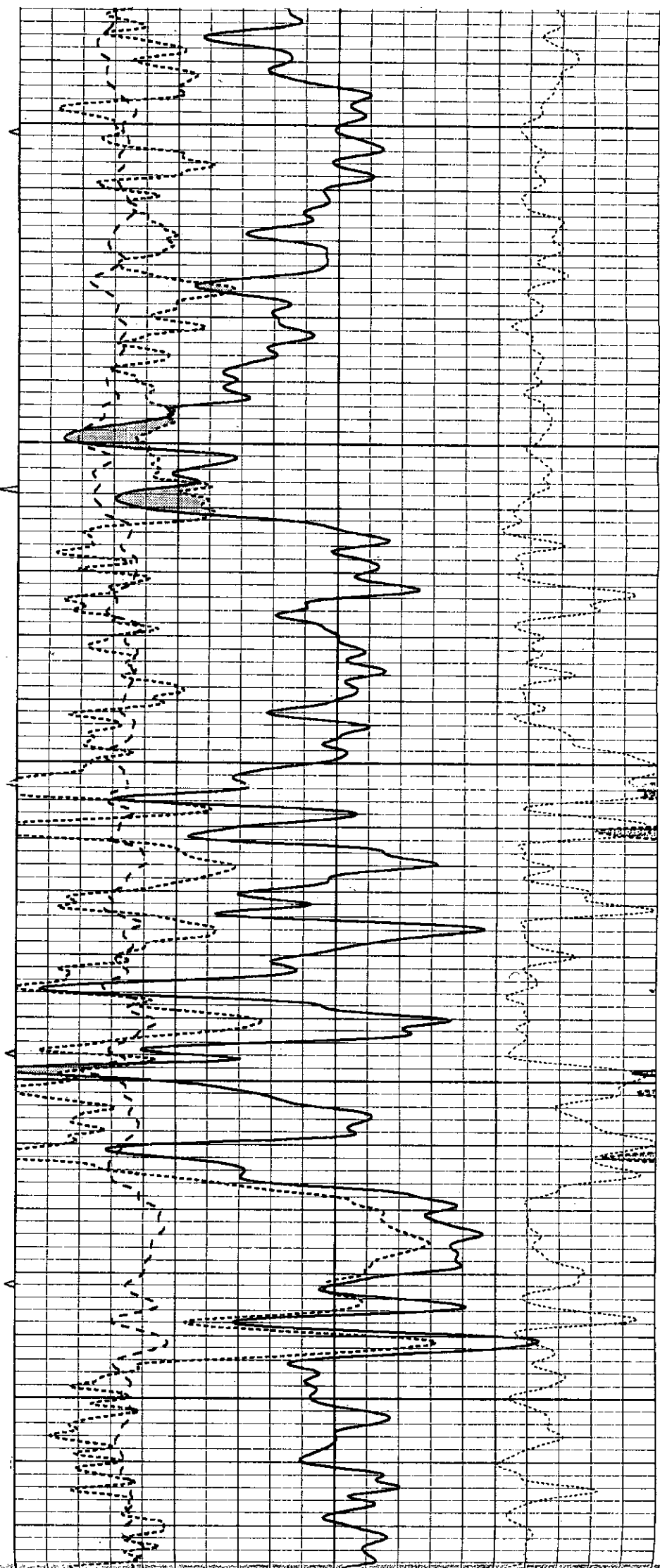
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Dataset Pathname: pass3.A
Presentation Format: ldt_neu
Dataset Creation: Mon Jan 17 05:11:29 2011
Charted by: Depth in Feet scaled 1:240

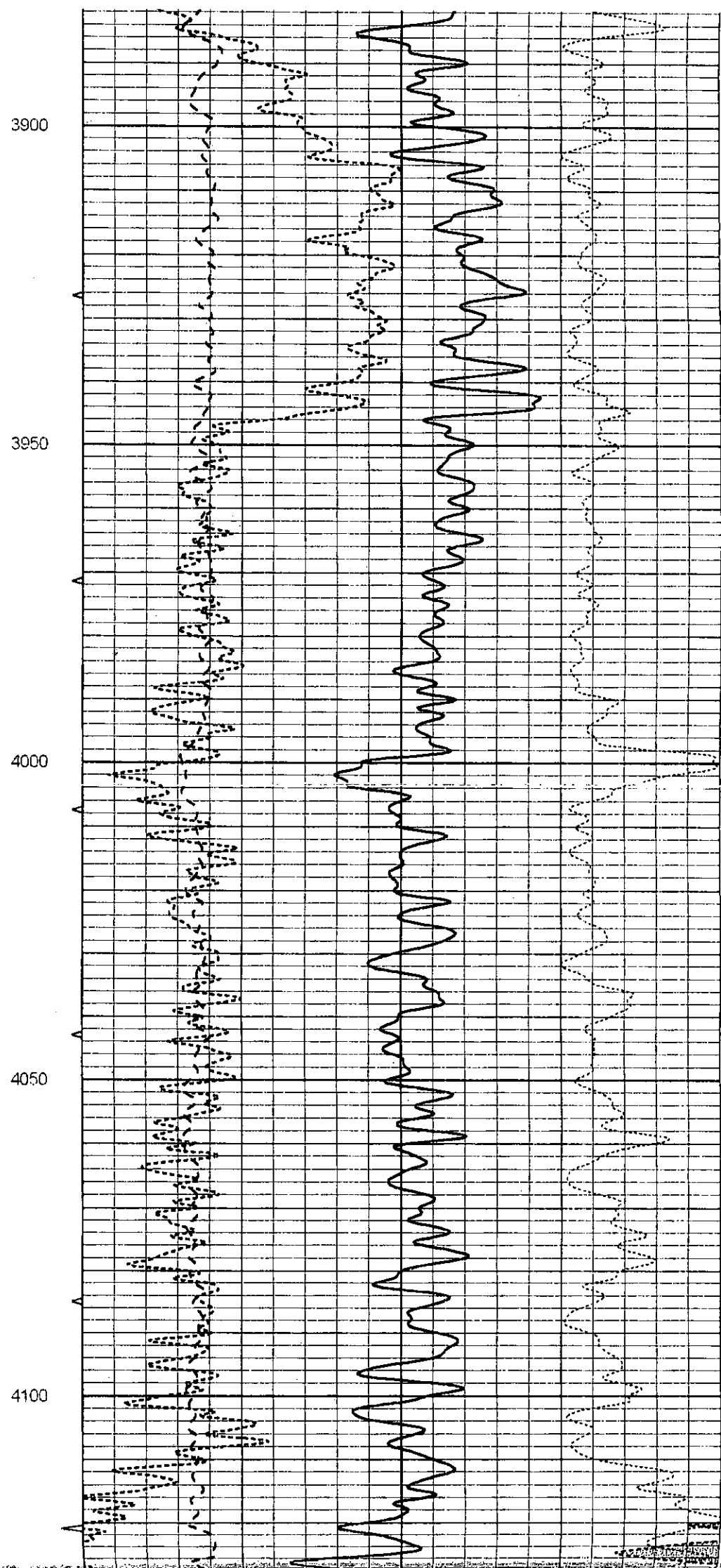
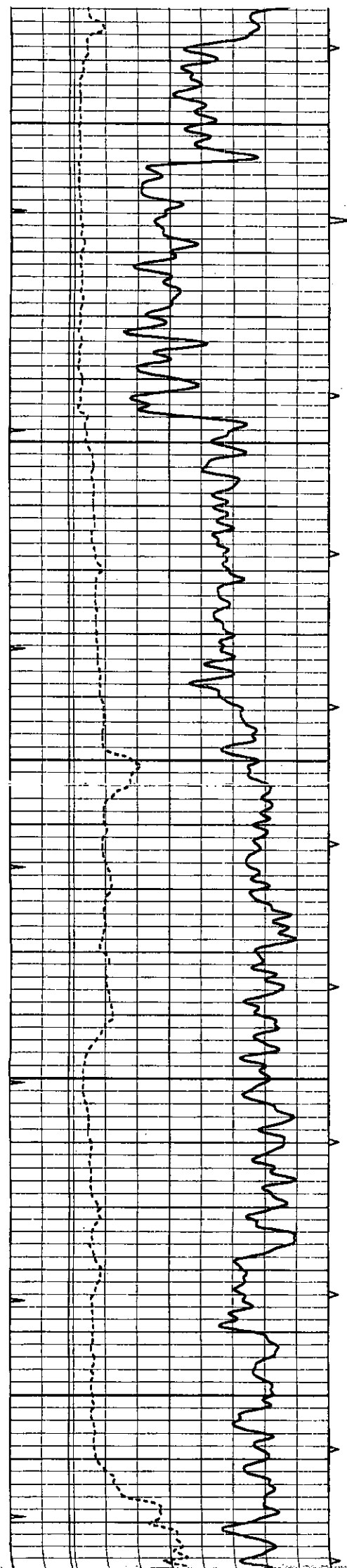
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	0	PE	10	-0.25
			0 (ft3)	10			CORRECTION (g/cc)
							0.25

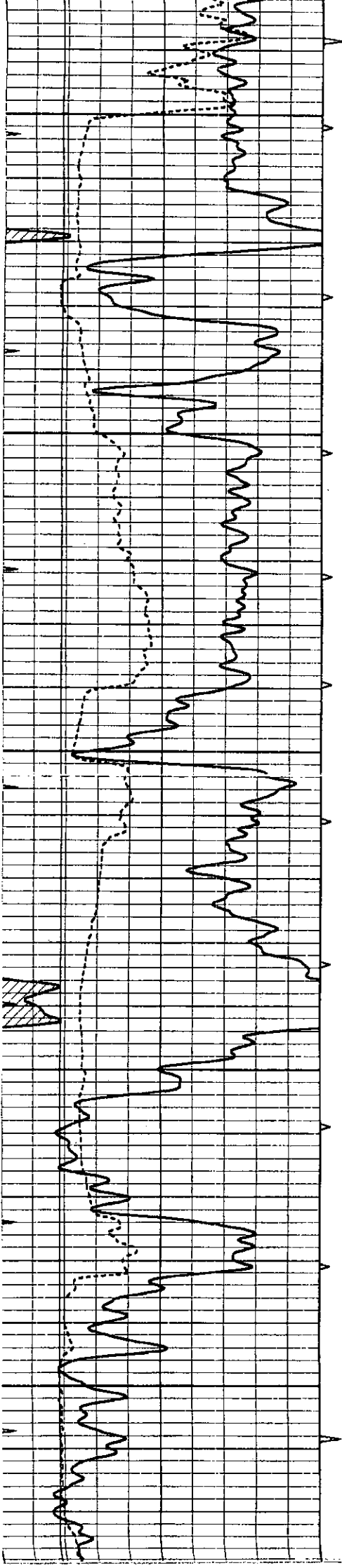




3650
3700
3750
3800
3850







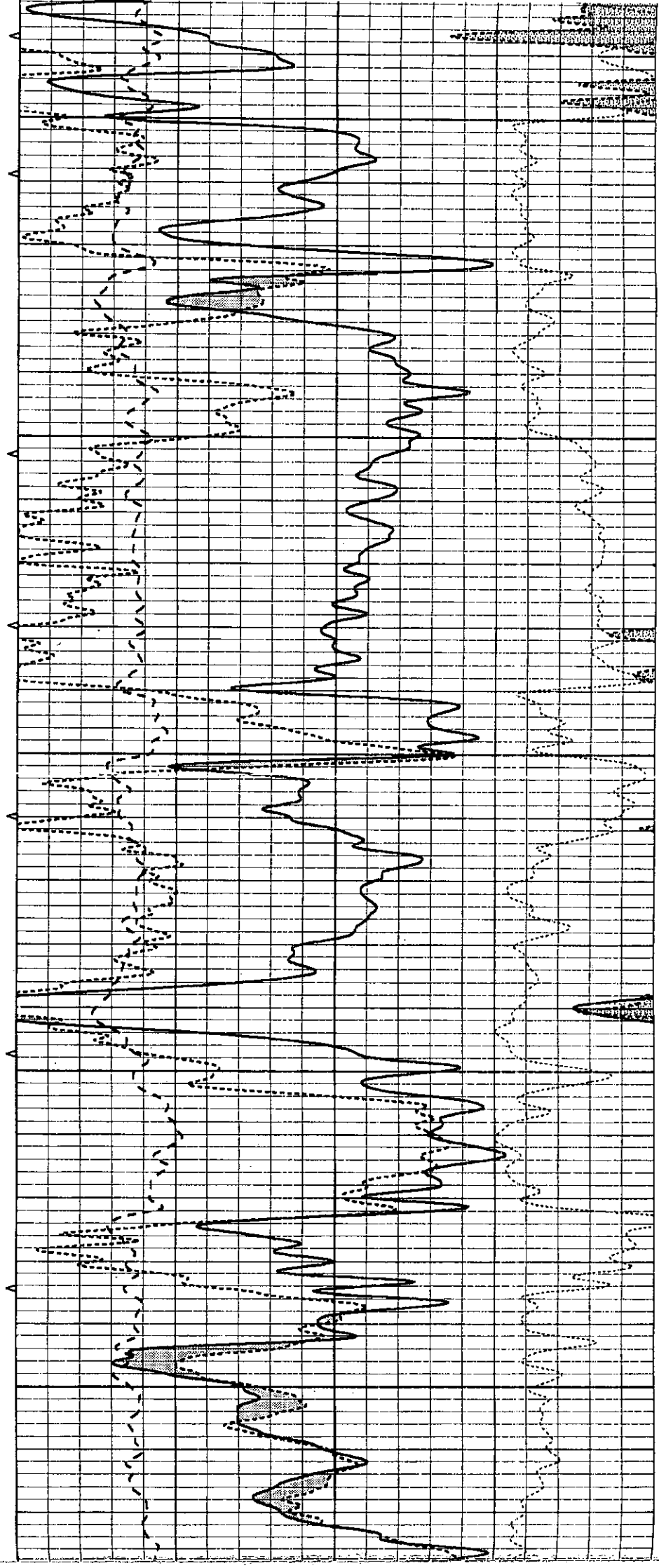
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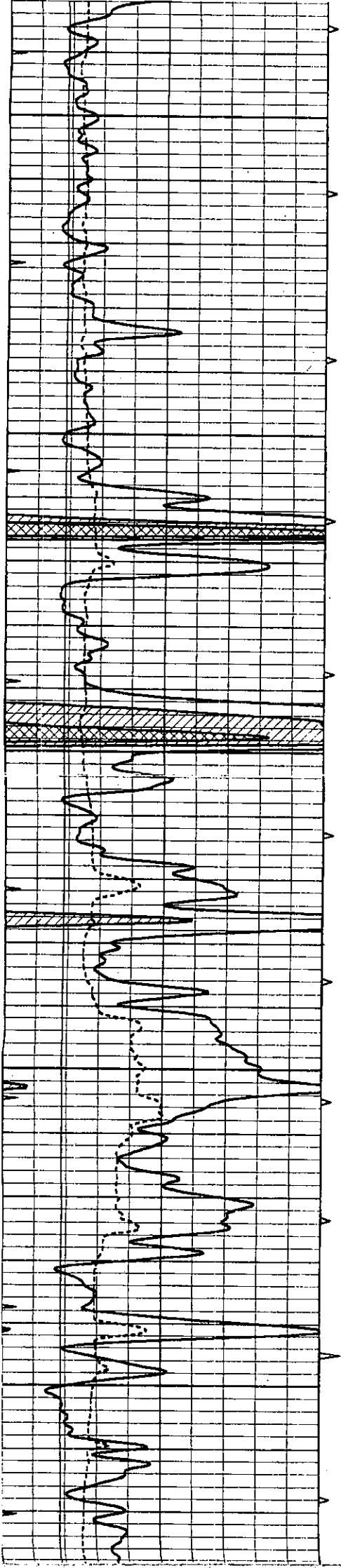
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4250

4300

4350





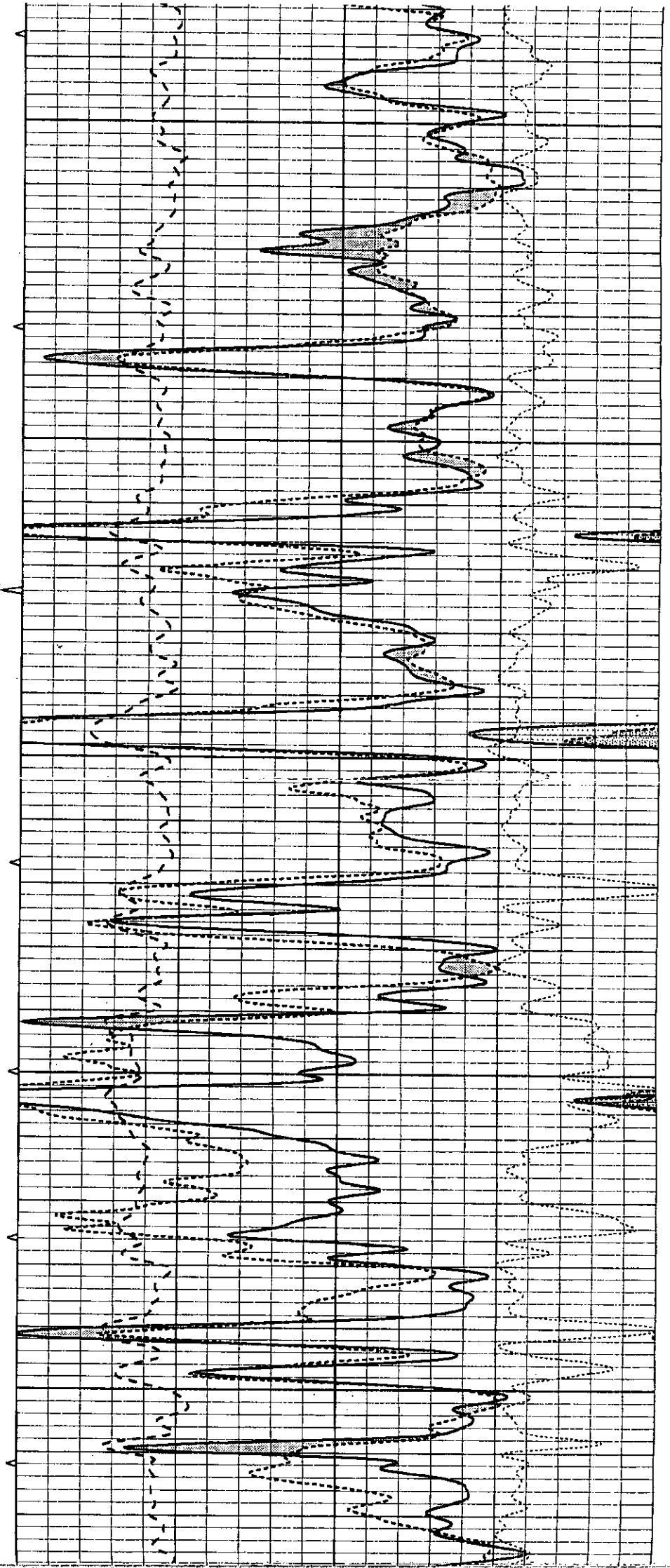
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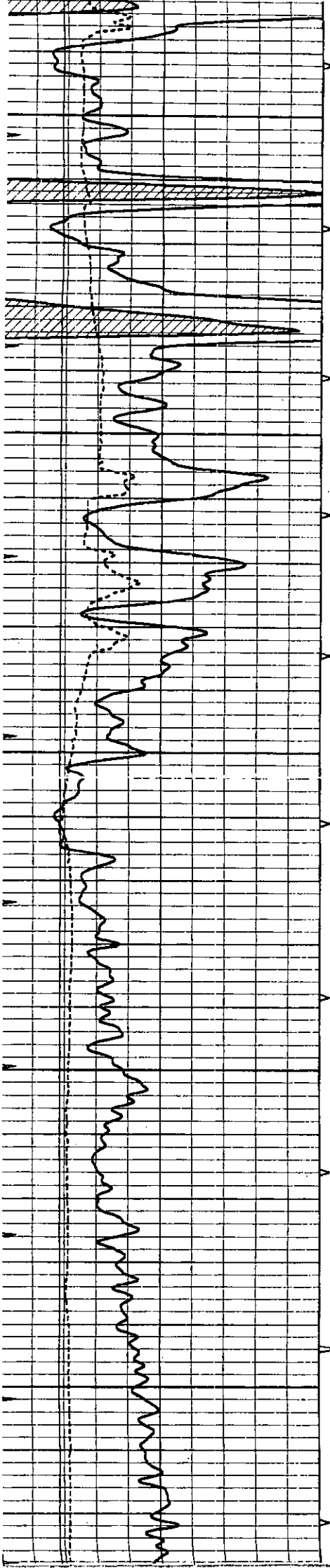
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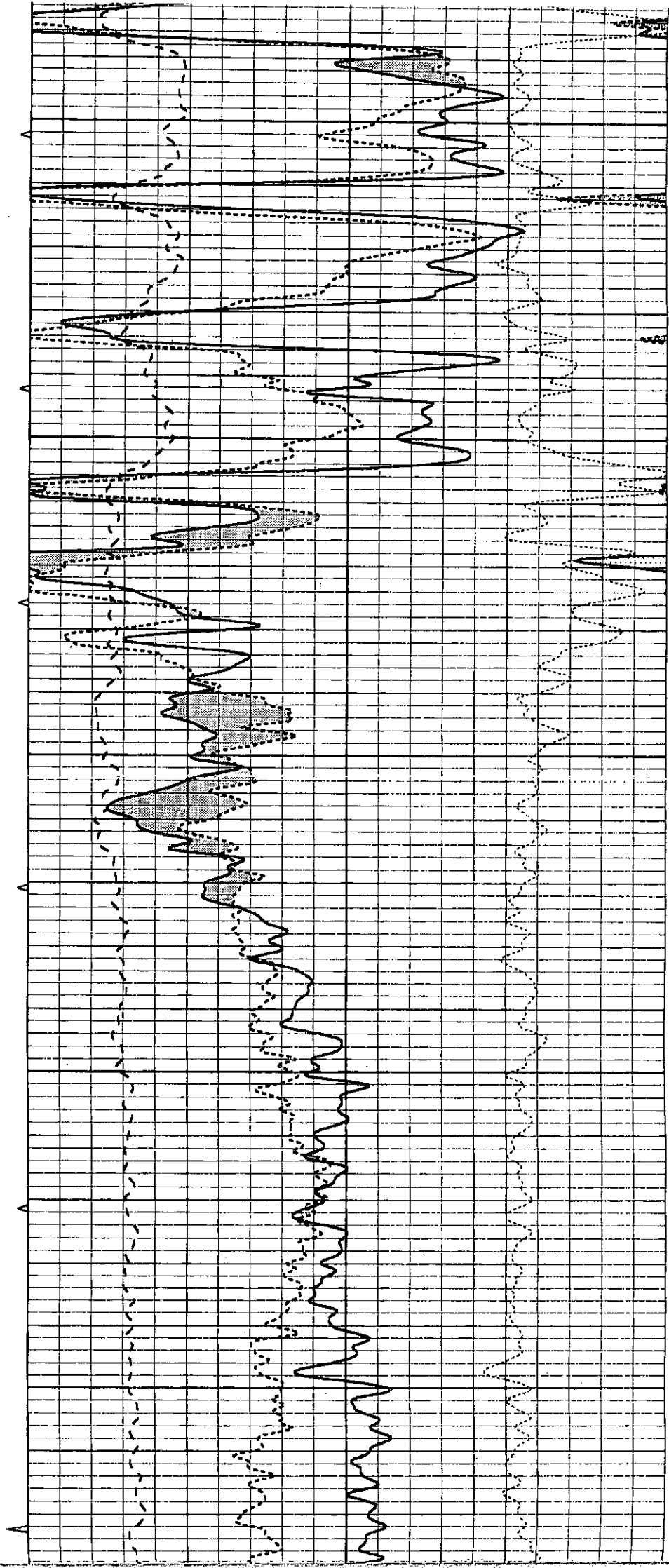
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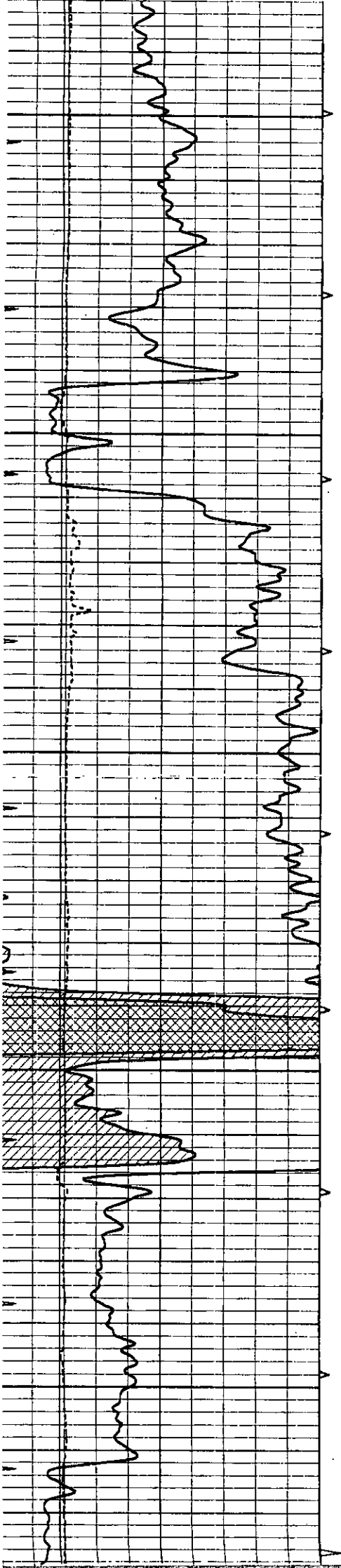
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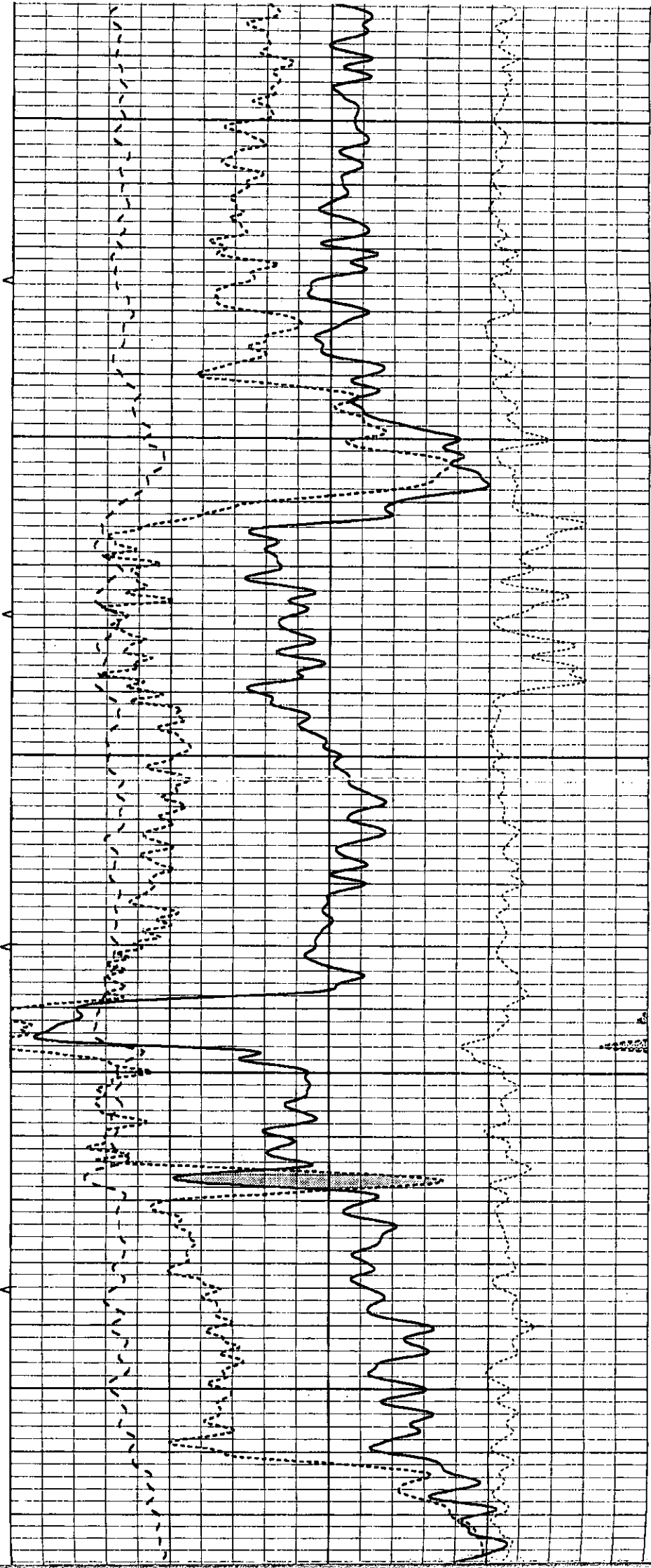


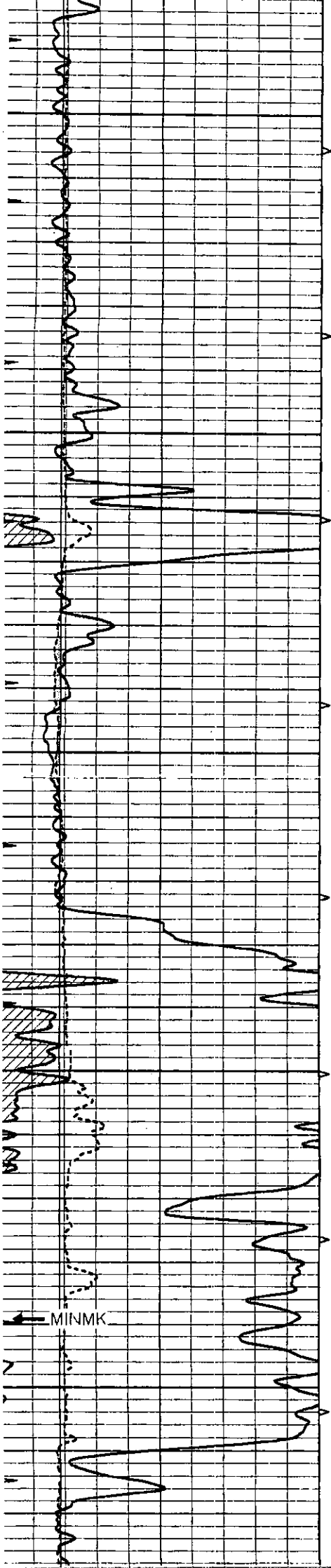
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4700
4750
4800
4850





4900
4950
5000
5050
5100





5150

5200

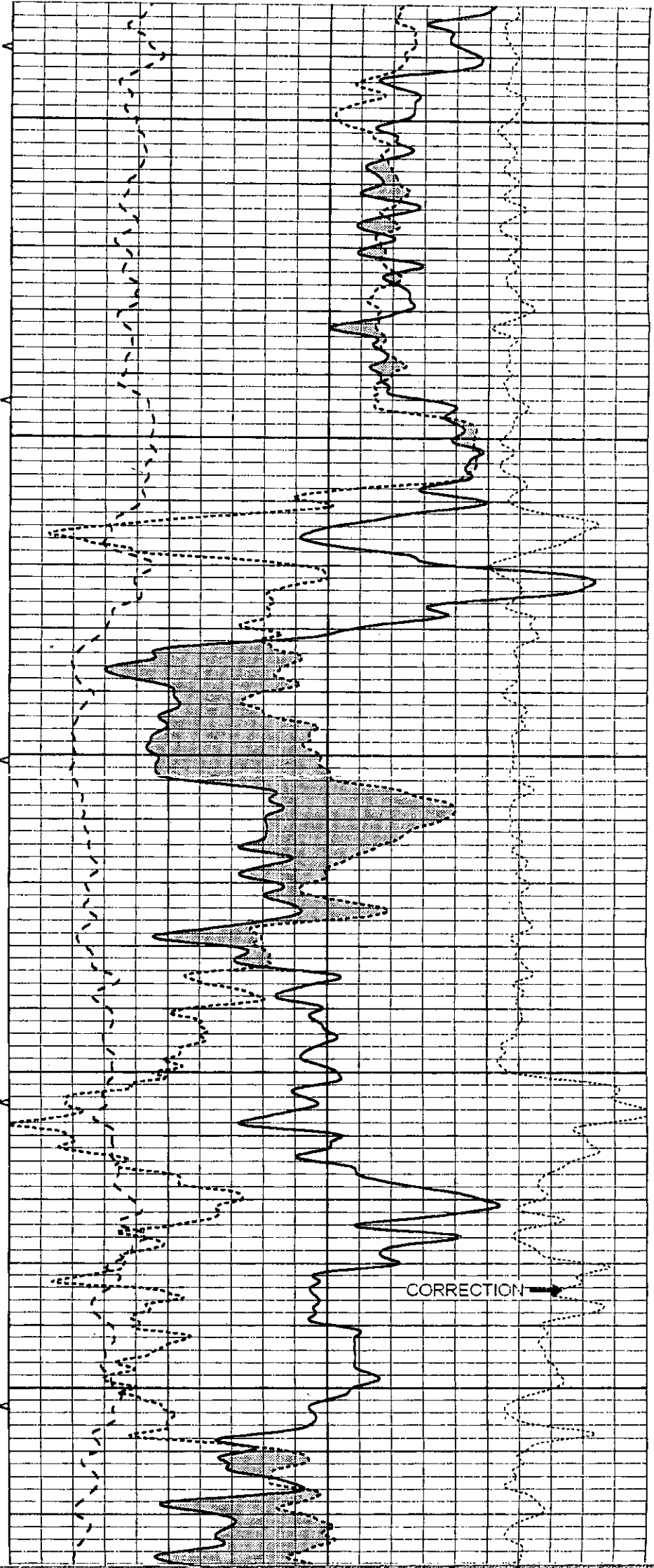
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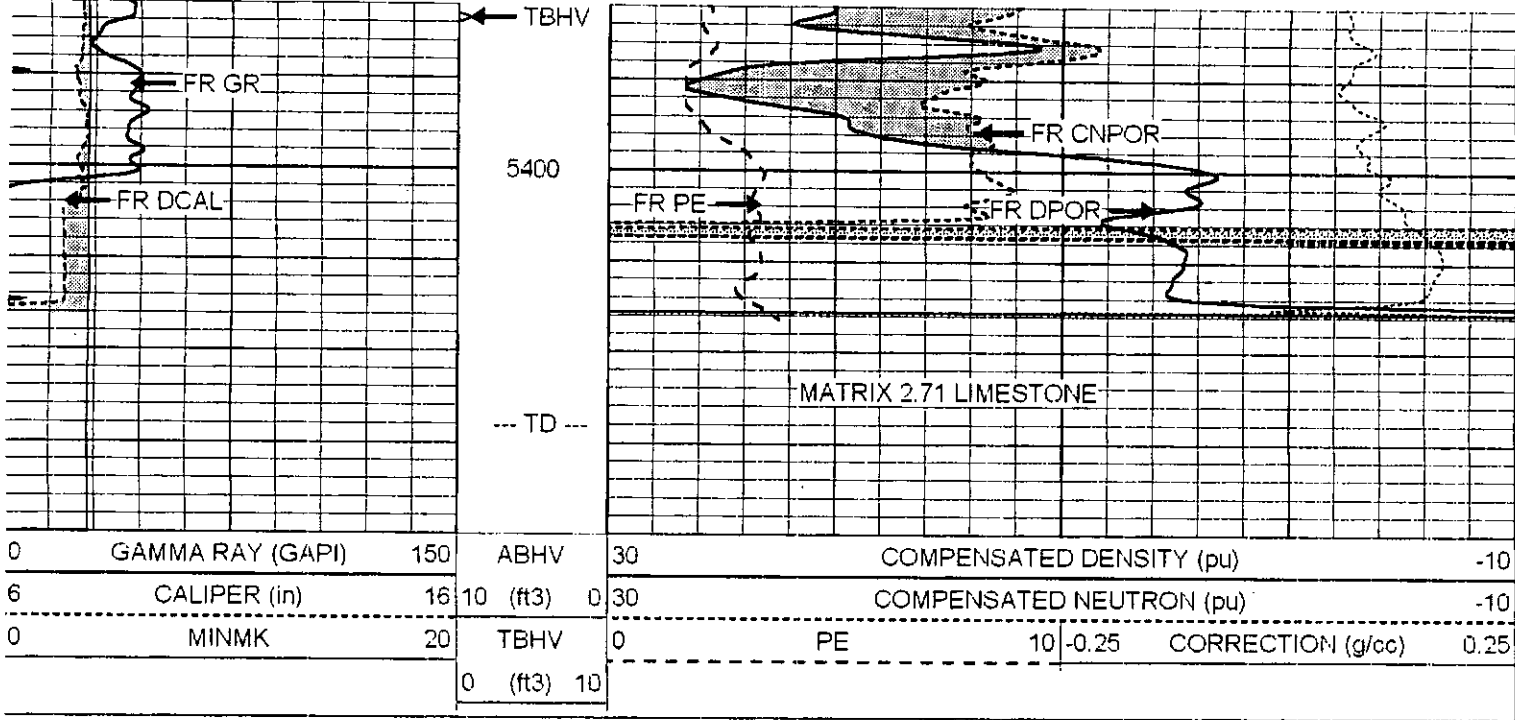
5300

5350

ABHV →

5.5" ABHV



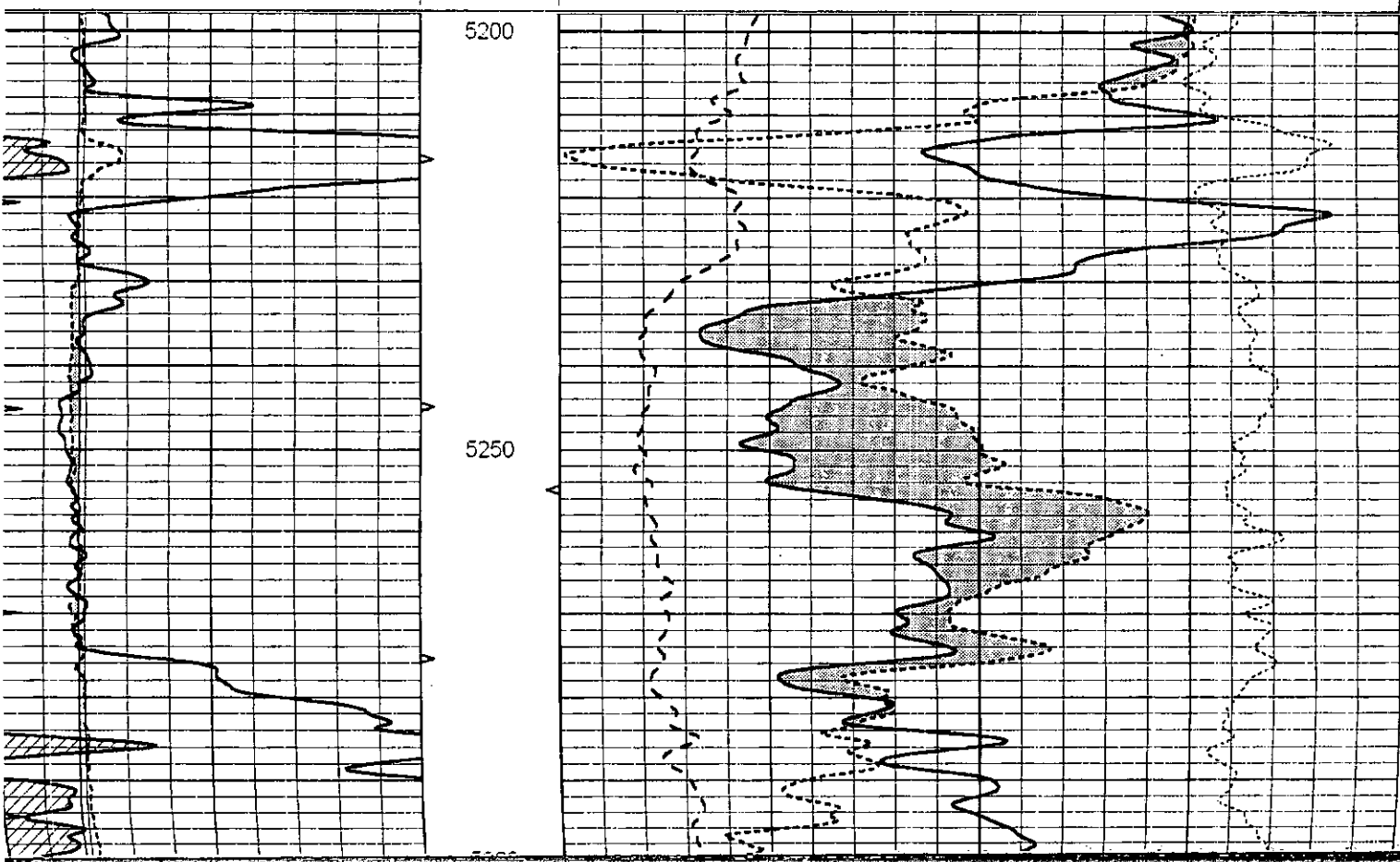


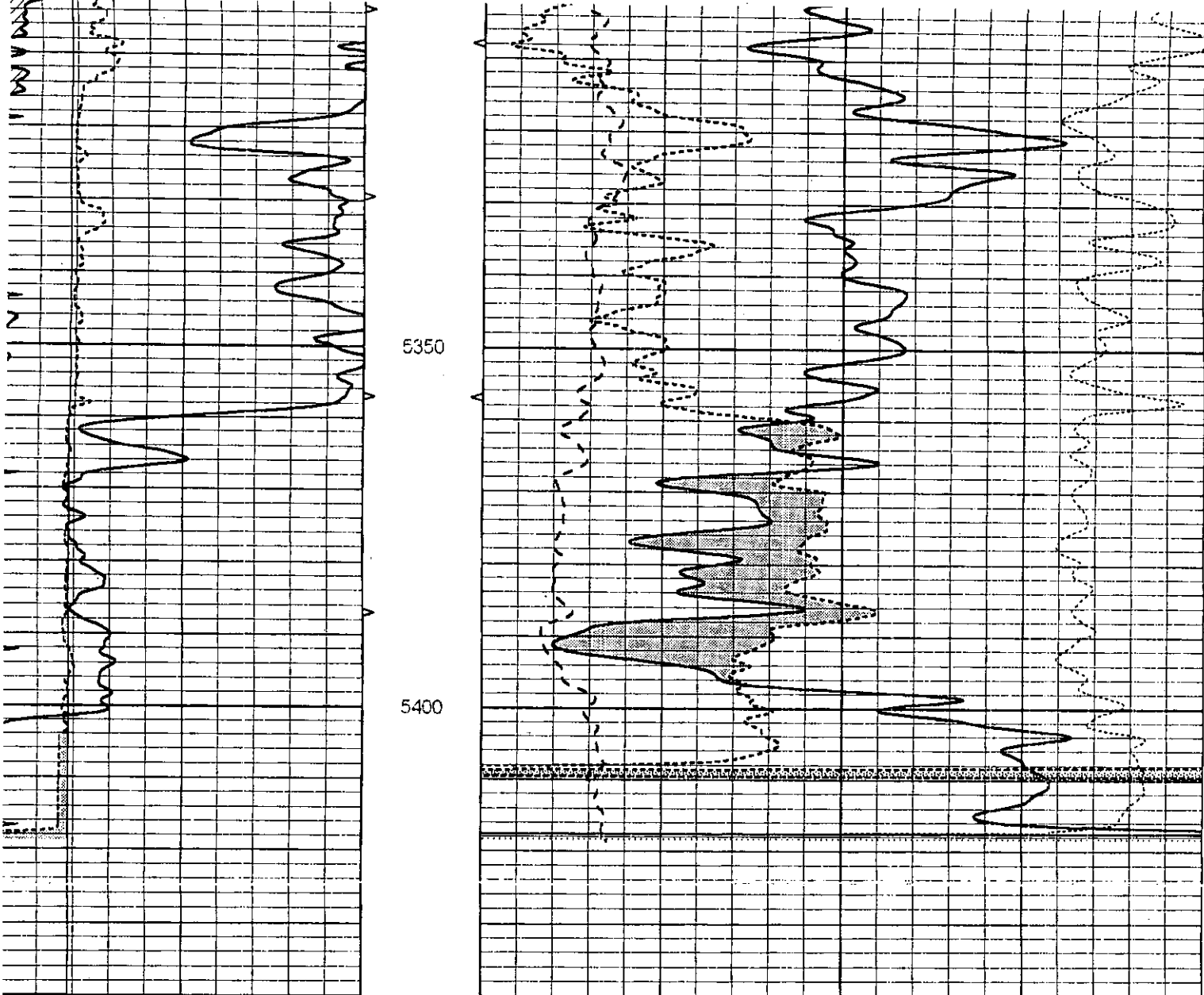
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REPEAT SECTION

Database File: 006323pdn.db
Dataset Pathname: pass2A
Presentation Format: ldt_neu
Dataset Creation: Mon Jan 17 05:18:48 2011
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10		
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)		-10	
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					





0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						

Calibration Report

Database File: 006323pdn.db
Dataset Pathname: pass3.A
Dataset Creation: Mon Jan 17 05:11:29 2011

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Mon Jan 17 04:11:40 2011

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	560.000	-6.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	530.000	-10.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Litho Density Calibration Report
Serial: 002 Model: PRB
Performed Tue Jul 03 11:12:28 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1059.5	9172.0	2859.6	10210.6	cps
Window 2	976.0	7793.2	2486.1	8515.6	cps
Window 3	689.8	2930.5	1159.0	3096.2	cps
Window 4	231.9	237.2	231.1	234.0	cps
Long Space	0.0	6817.1	1510.1	7539.6	cps
Short Space	1.6	1758.1	1188.6	1898.8	cps
Rho		1.7100	2.5960	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.4	Rib Slope	: 1.015	Density/Spine Ratio	: 0.569
Spine Angle	: 75.4	Spine Slope	: 3.850	Spine Intercept	: -19.9

Caliper	Readings	Reference	
Low Ref	2.8	7.6	
High Ref	4.8	14.0	
	Gain: 3.2		Offset: -1.2

Compensated Neutron Calibration Report

Serial Number: NUE_21
Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR5
Tool Model: OPEN
Performed: Mon Jan 17 04:23:19 2011

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6100 GAPI/cps