SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

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

Other Services
CDL/CNL/PE

Permanent Datum GROUND LEVEL Elevation 1389
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1399
D.F.
G.L. 1389

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

Date	1-17-11		
Run Number	ONE		
Depth Driller	5430		
Depth Logger	5428		
Bottom Logged Interval	5426		
Top Log Interval	00		
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		

<<< Fold Here >>>

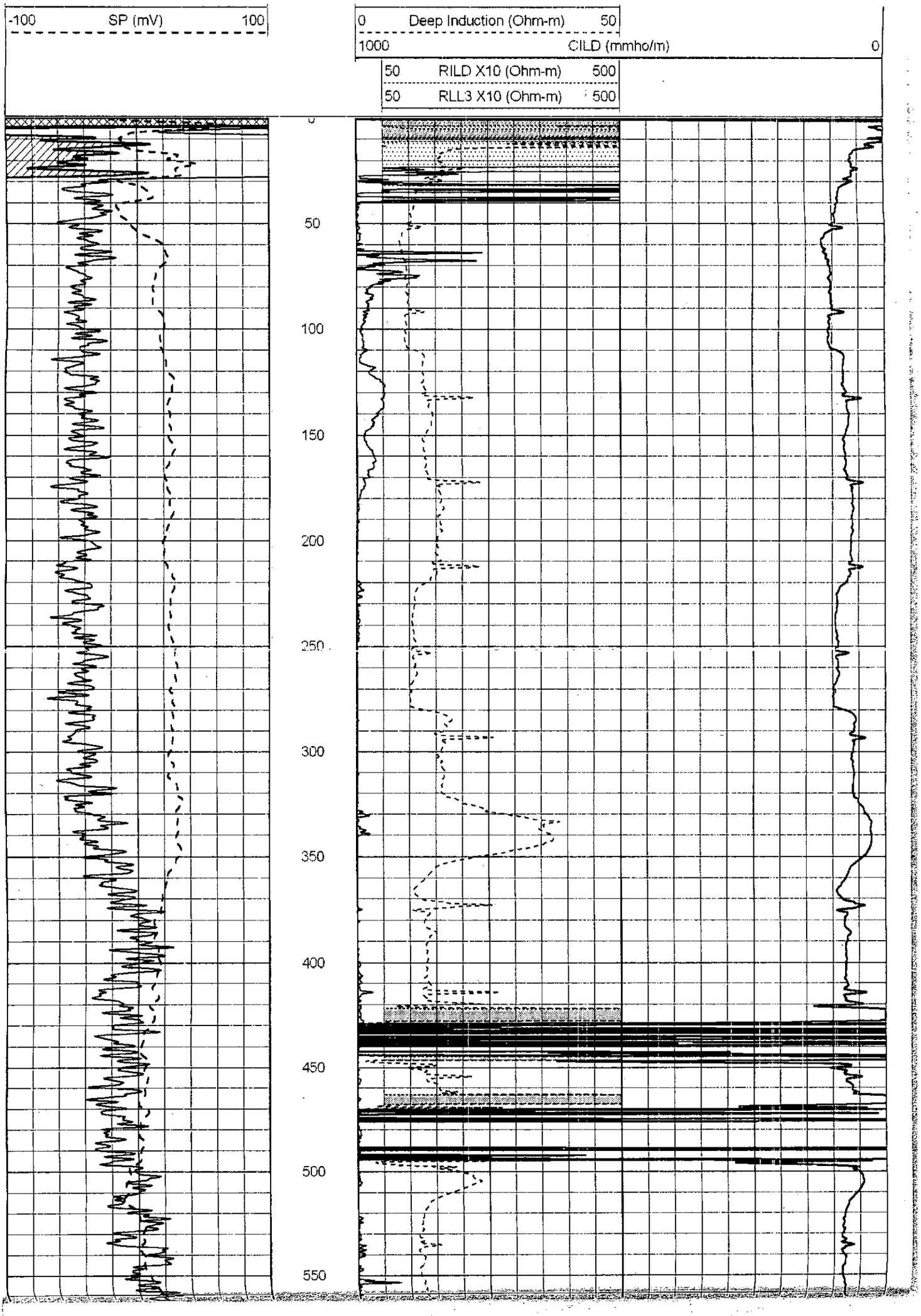
Comments

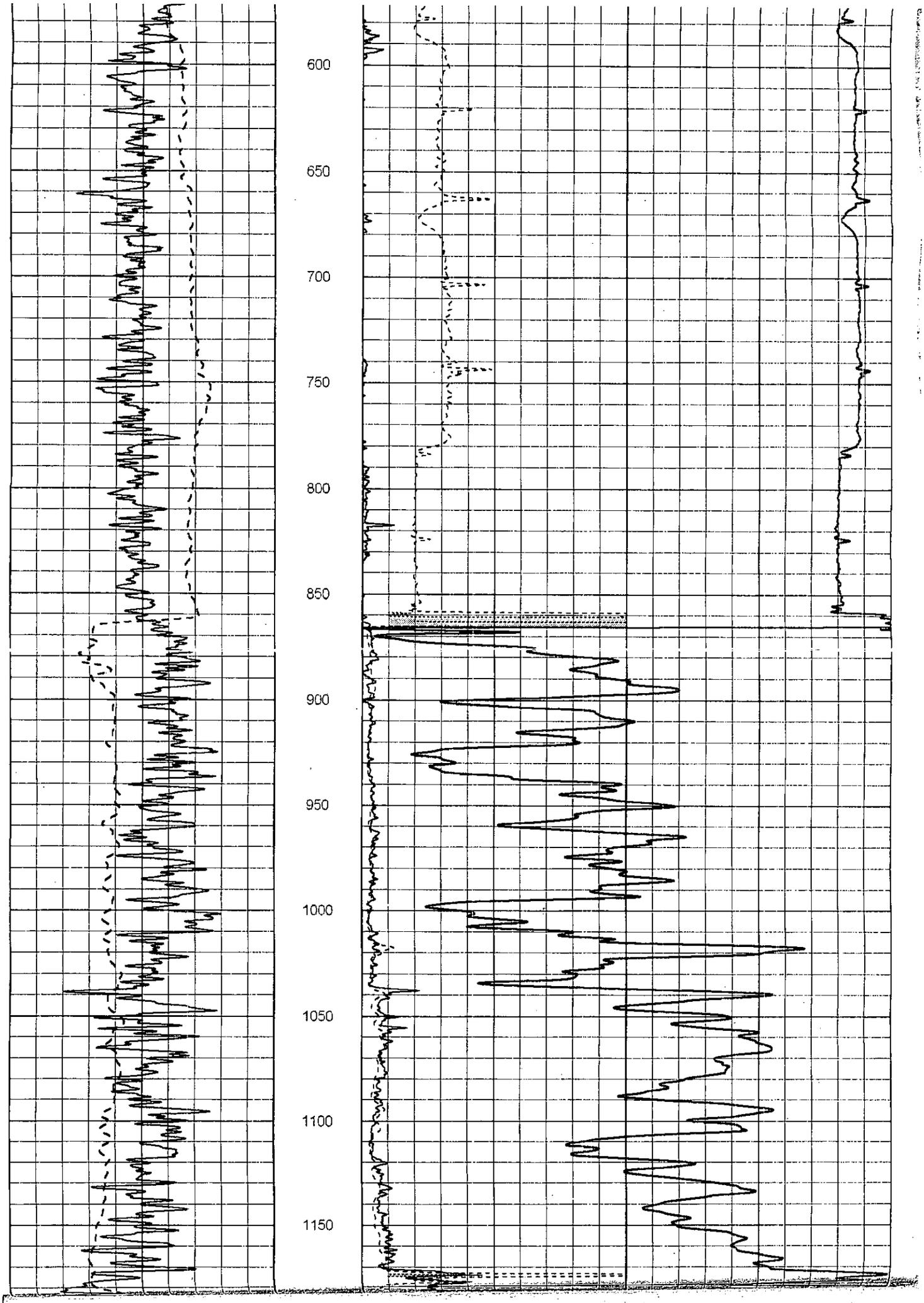
SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: MEDICINE LODGE, 17S TO RATTLESNAKE RD., 1/10W, S INTO.

SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 006323pdn.db
Dataset Pathname: pass3.A
Presentation Format: dil2
Dataset Creation: Mon Jan 17 05:11:29 2011
Charted by: Depth in Feet scaled 1:600


-100 SP (mV) 100
0 Deep Induction (Ohm-m) 50
1000 CILD (mmho/m) 0
50 RILD X10 (Ohm-m) 500
50 RLL3 X10 (Ohm-m) 500
0
50
100
150
200
250
300
350
400
450
500
550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1100
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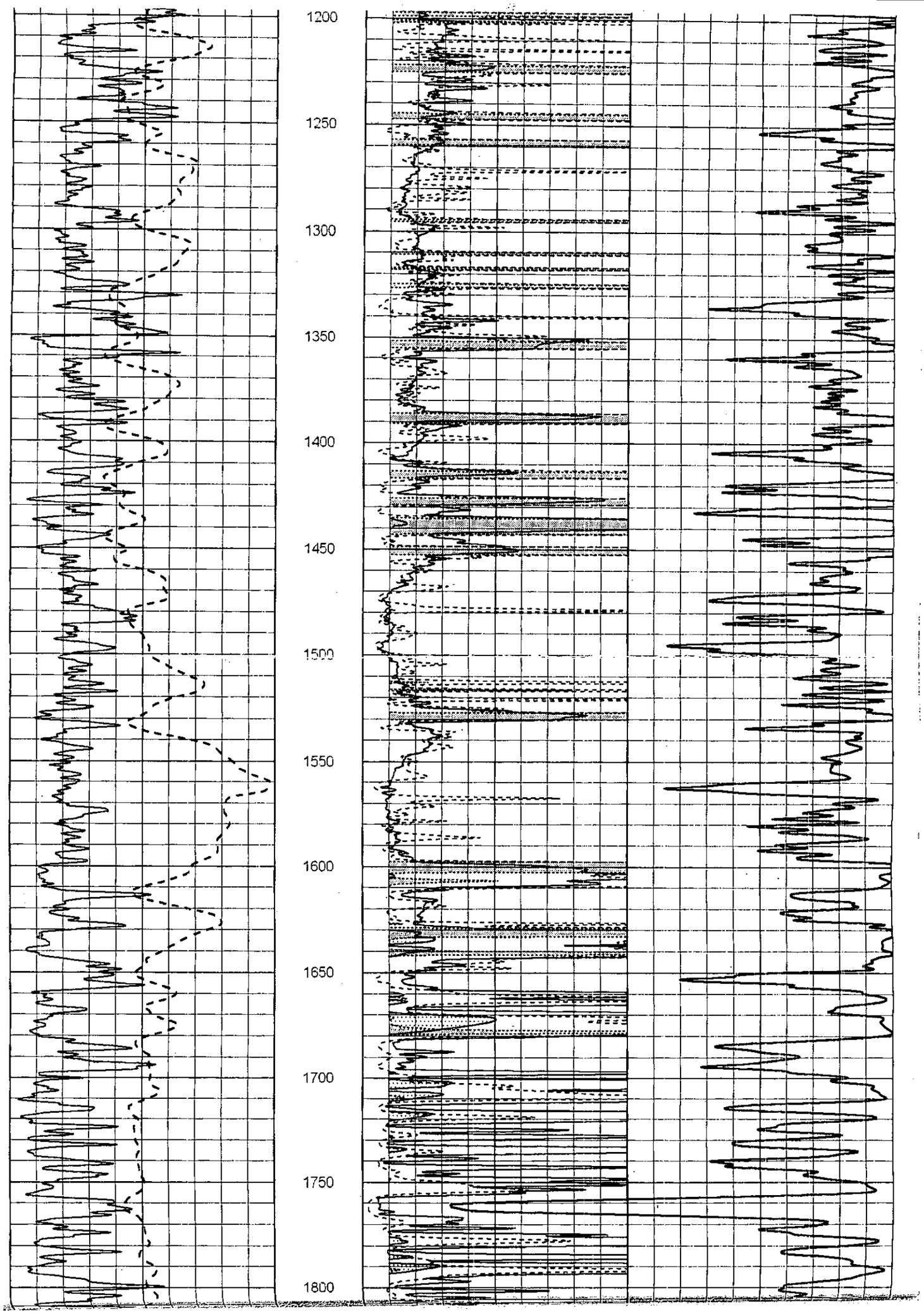
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1750
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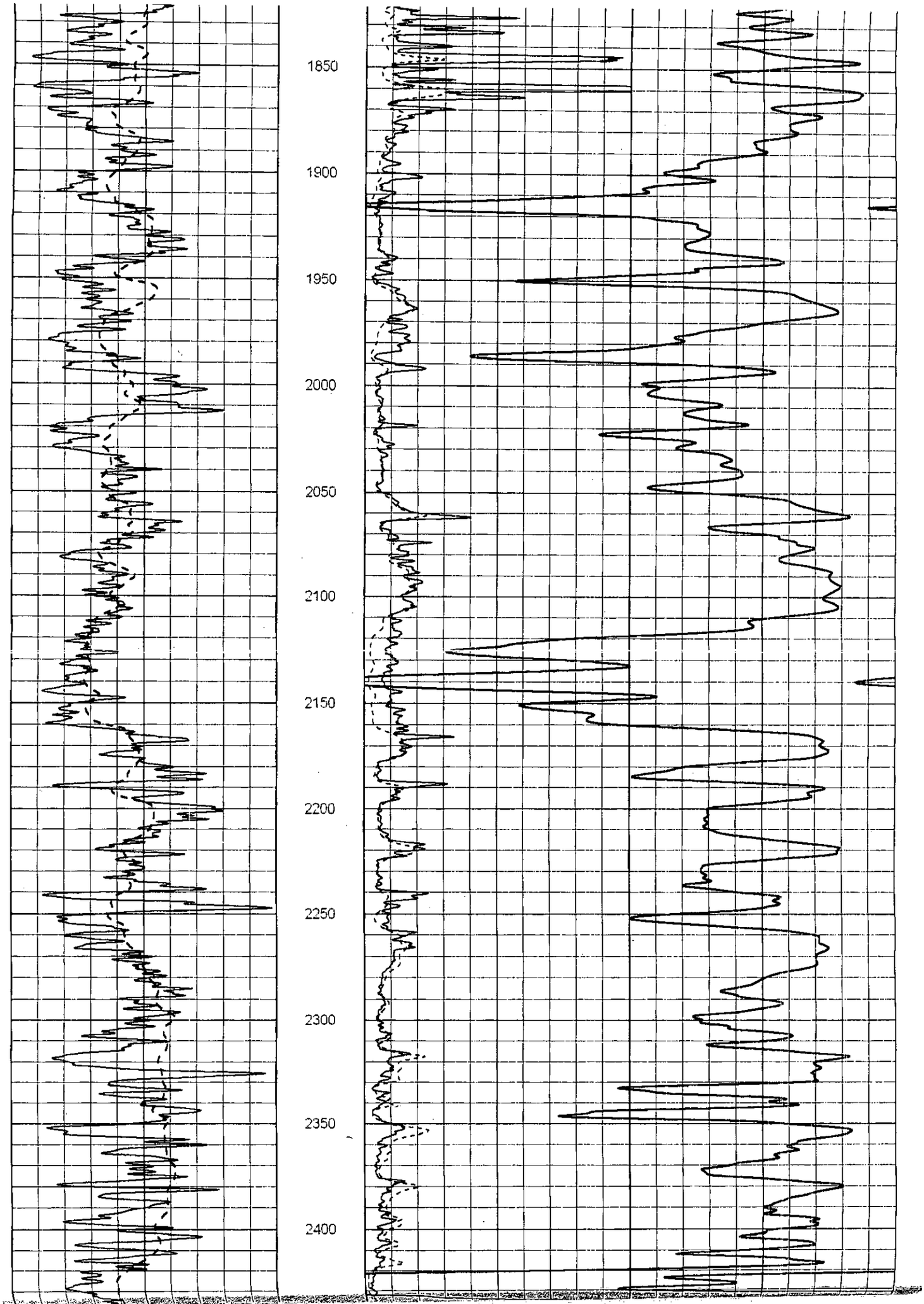
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2100
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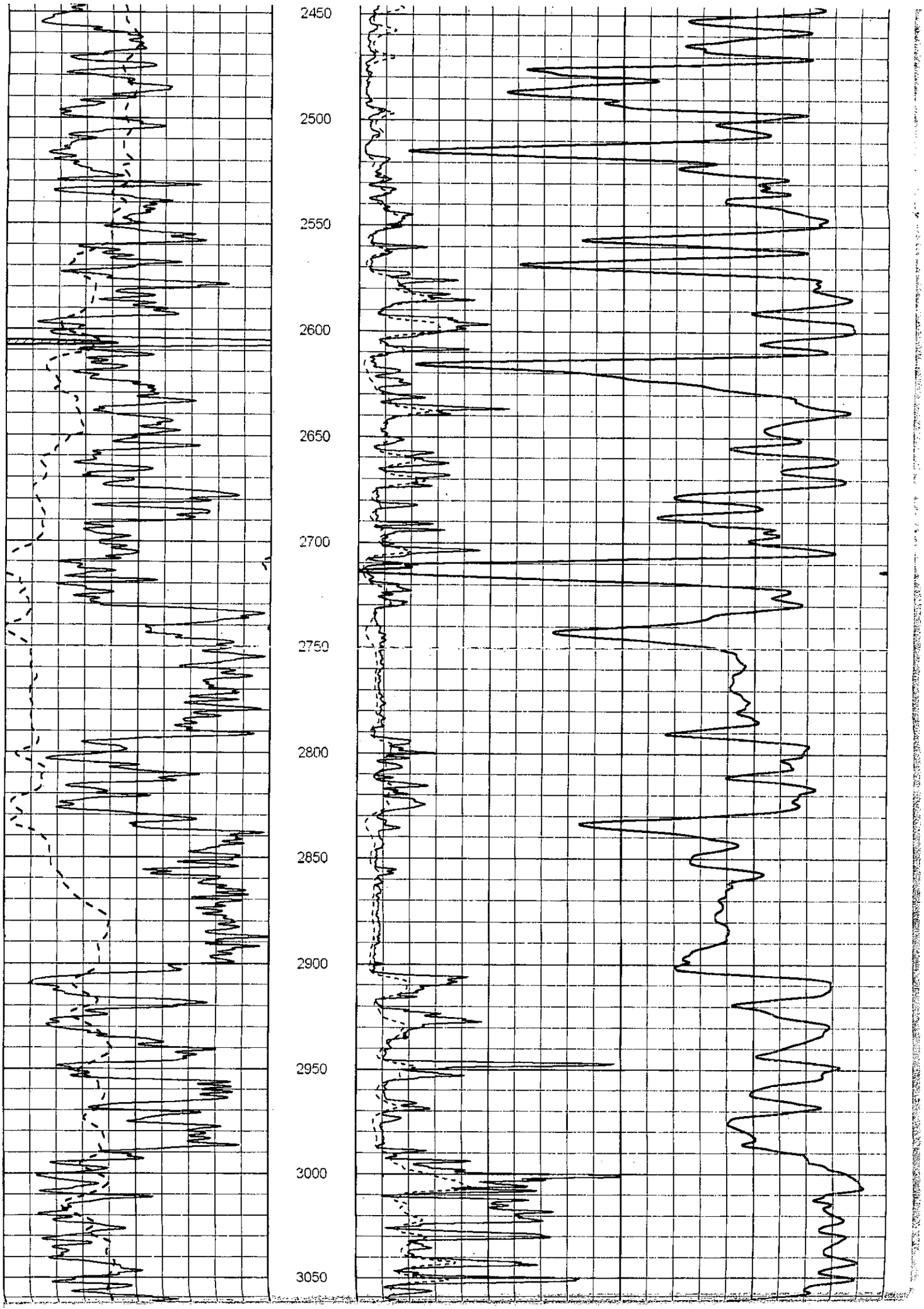
2300
2350
2400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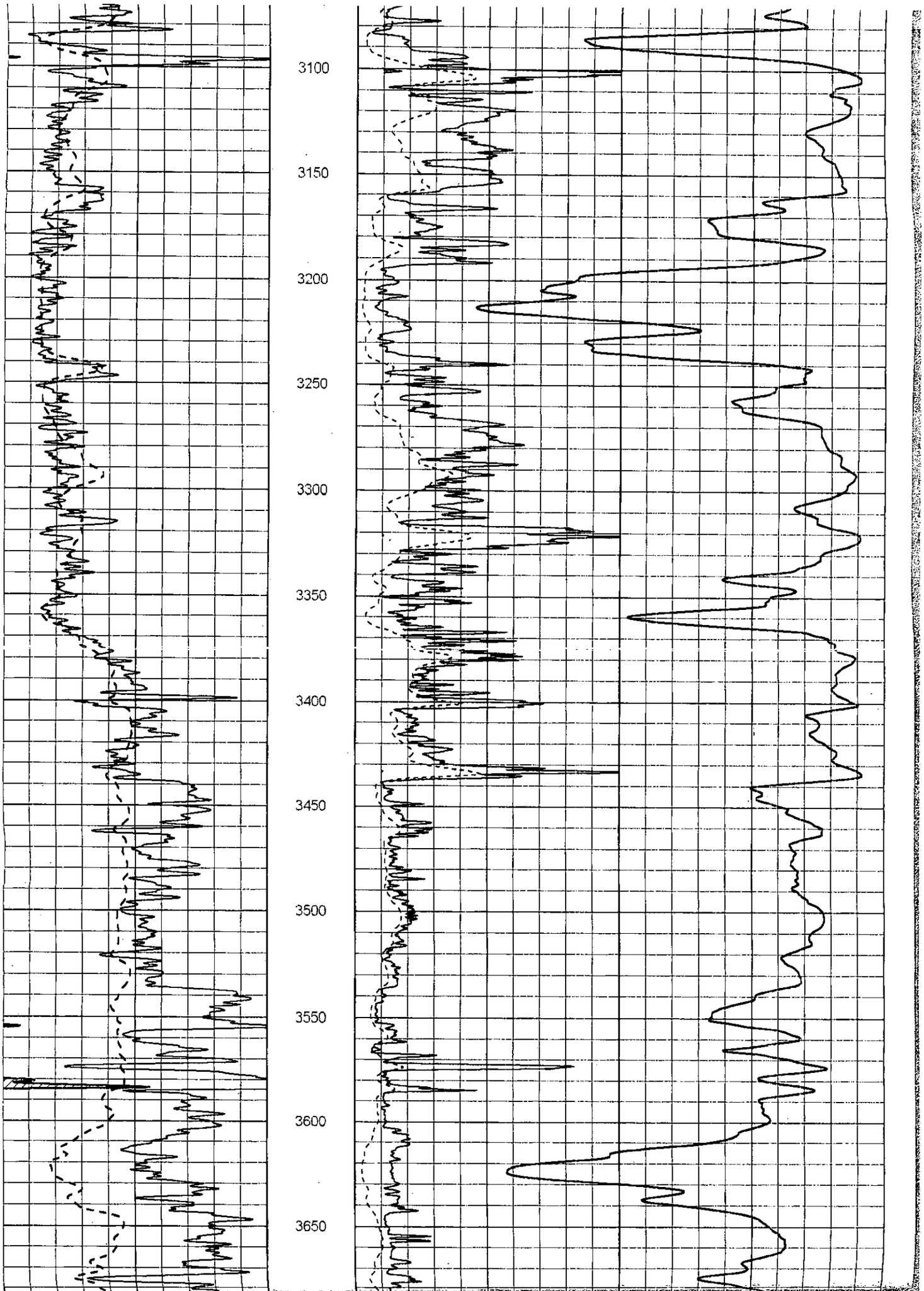
2900
2950
3000
3050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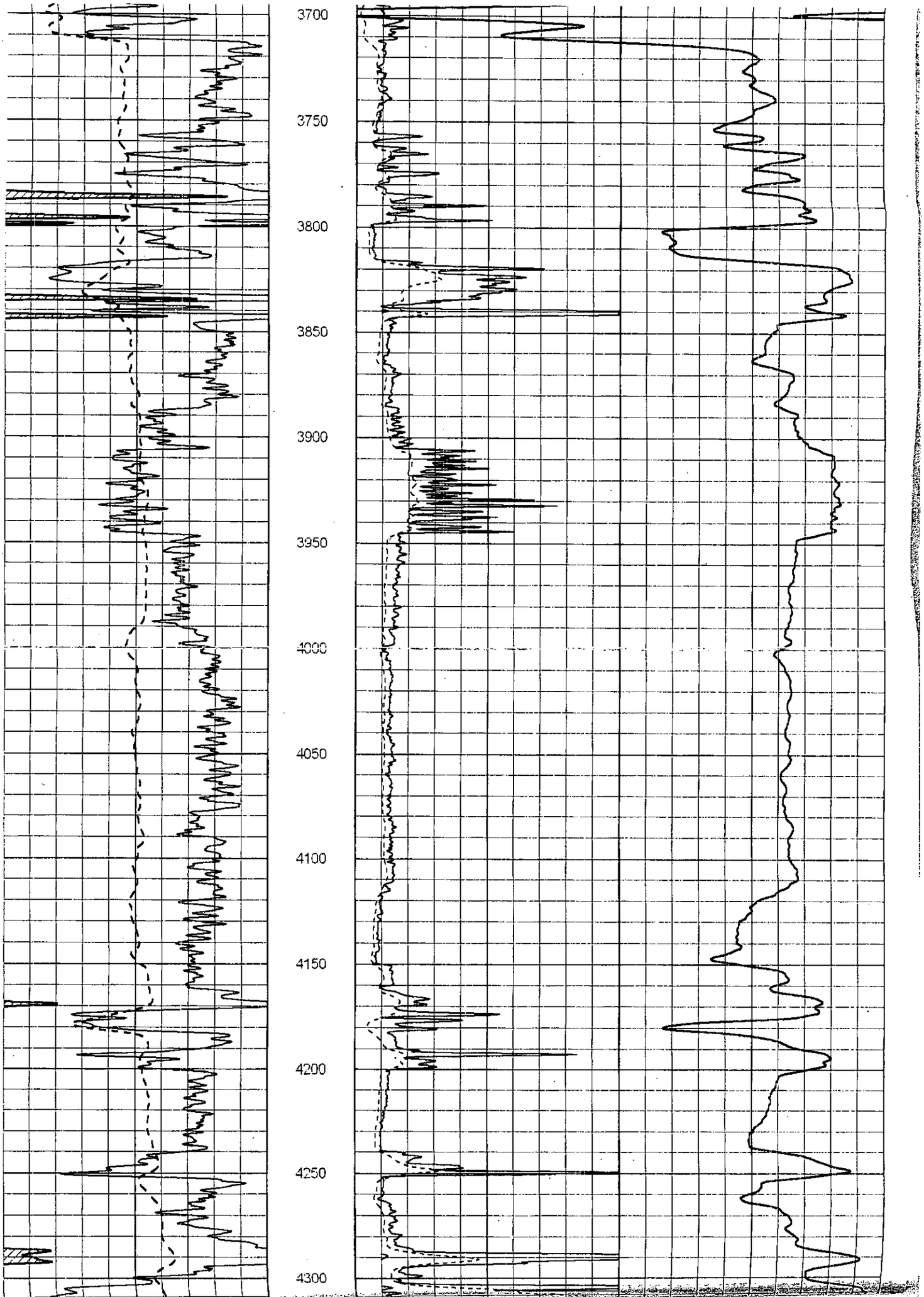
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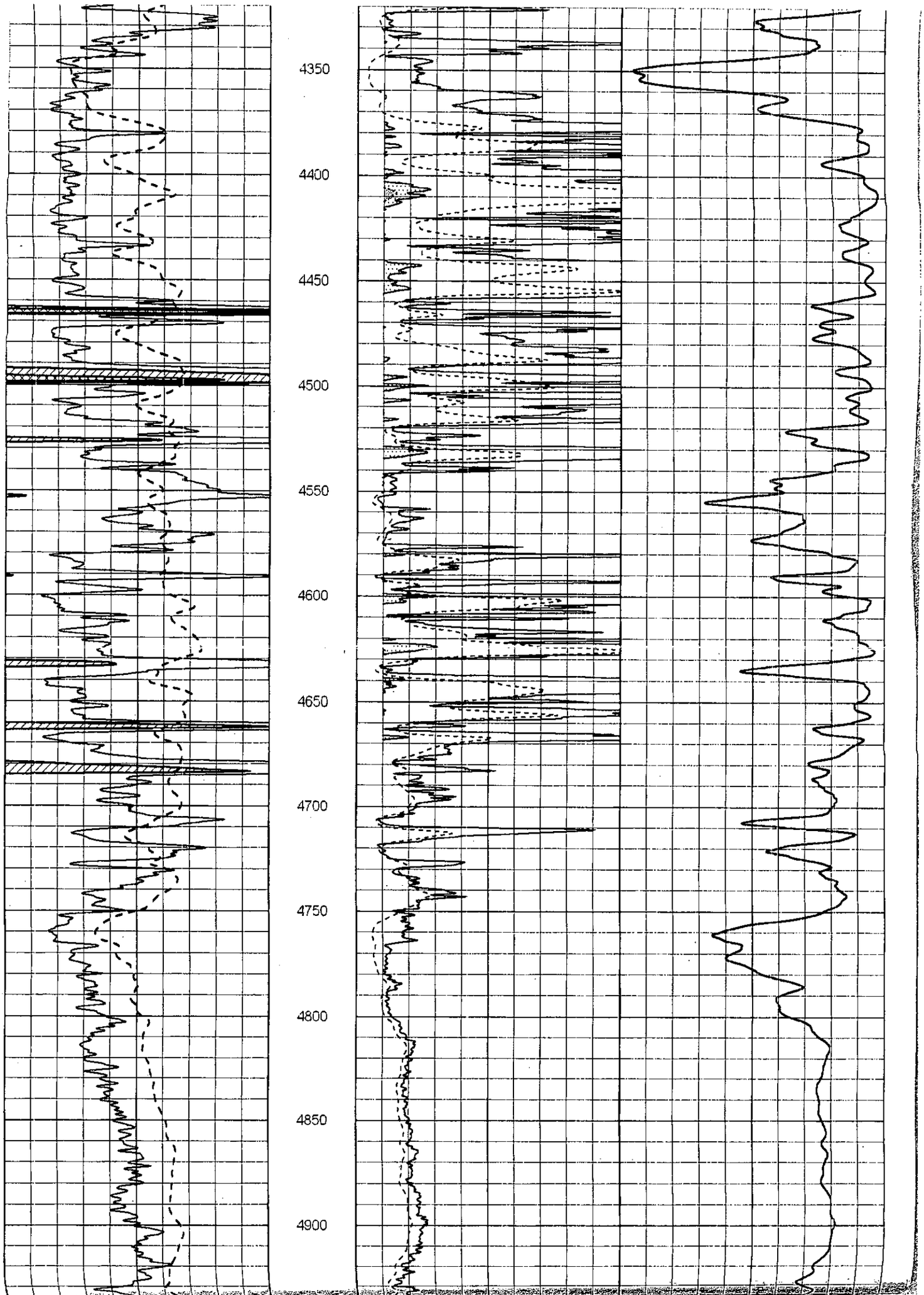
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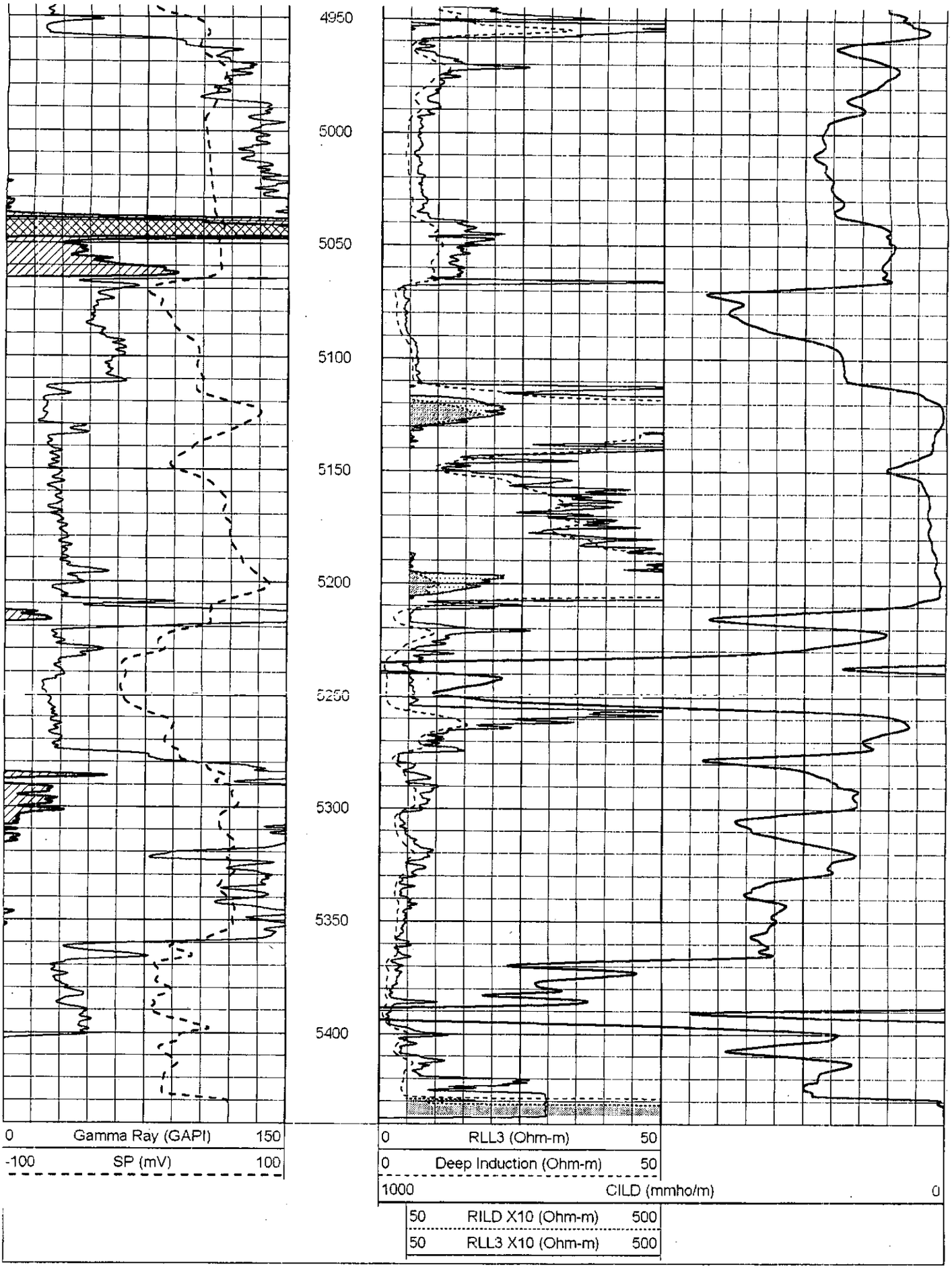


SUPERIOR WELL SERVICES

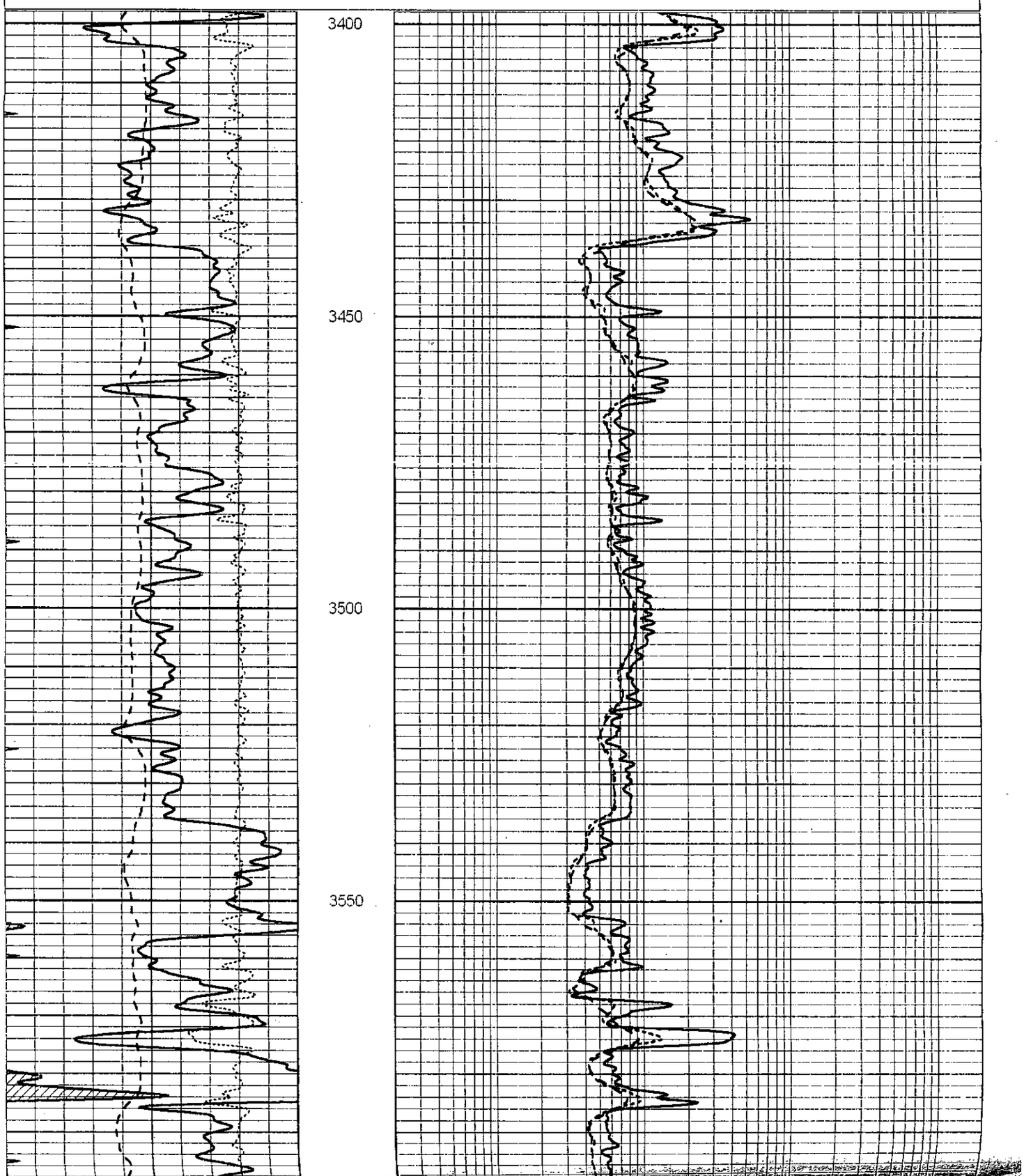
SUPERIOR
Hays,
Kansas

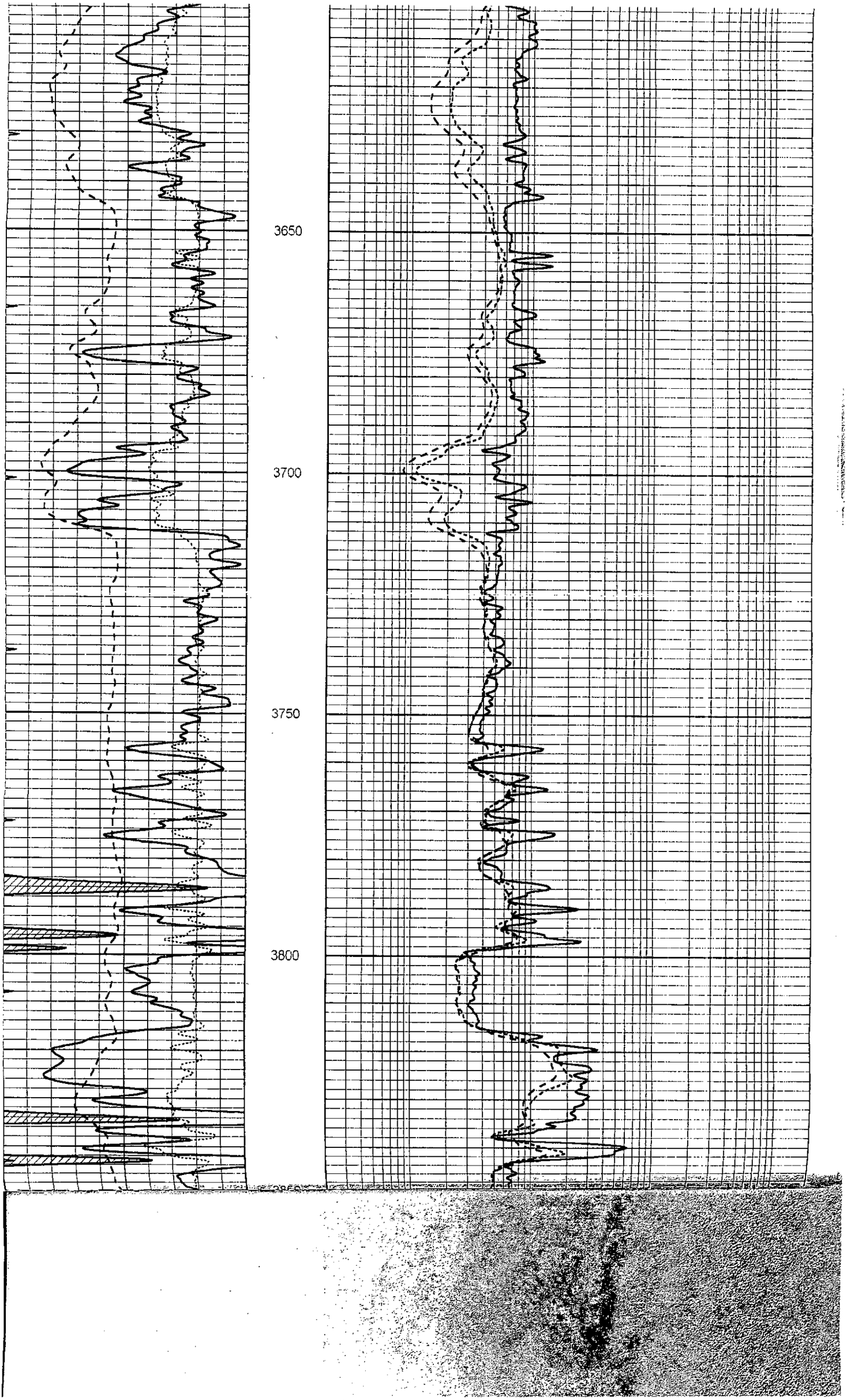
MAIN SECTION

Database File:	006323pdn.db
Dataset Pathname:	pass3.A
Presentation Format:	dil
Dataset Creation:	Mon Jan 17 05:11:29 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

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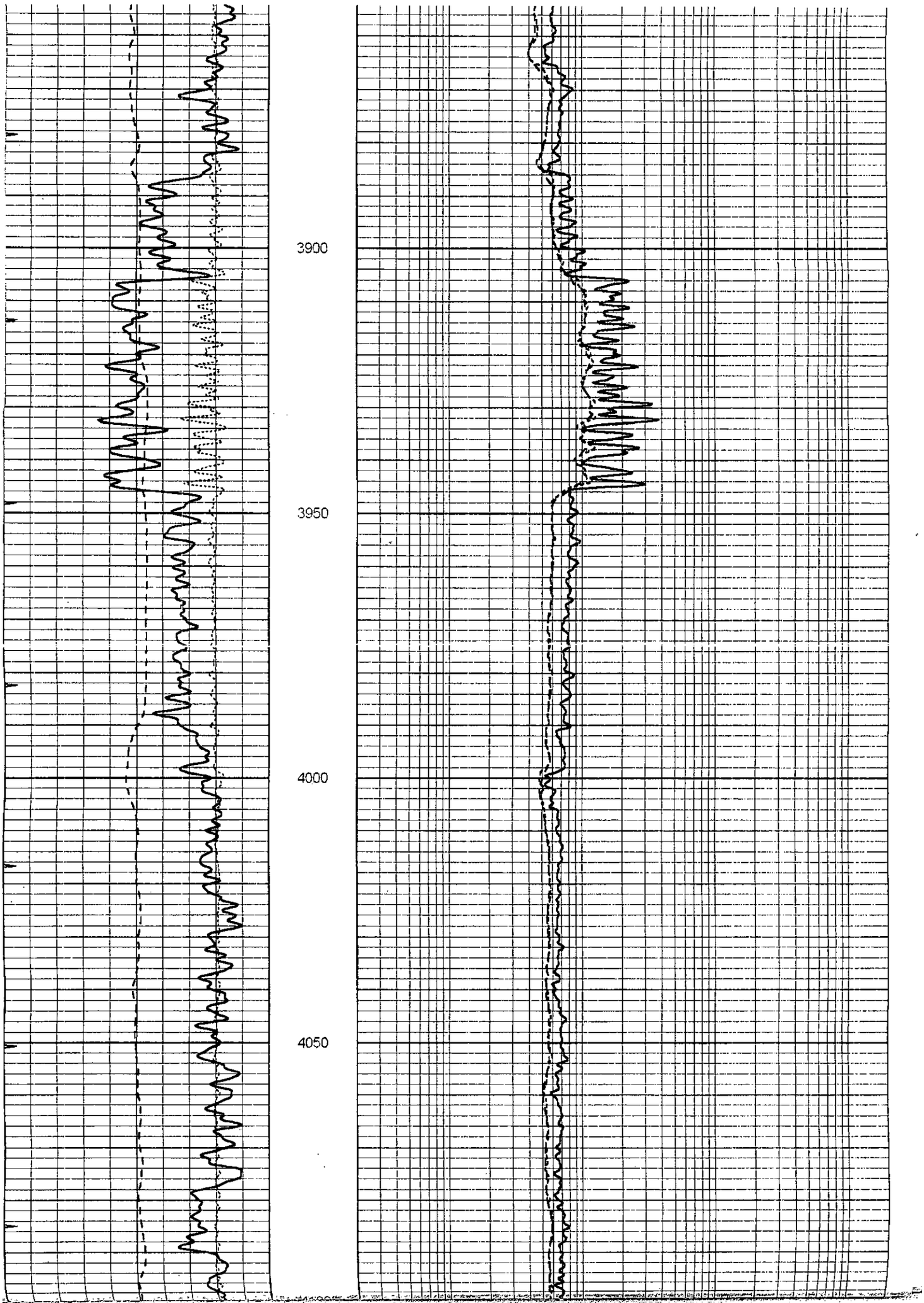
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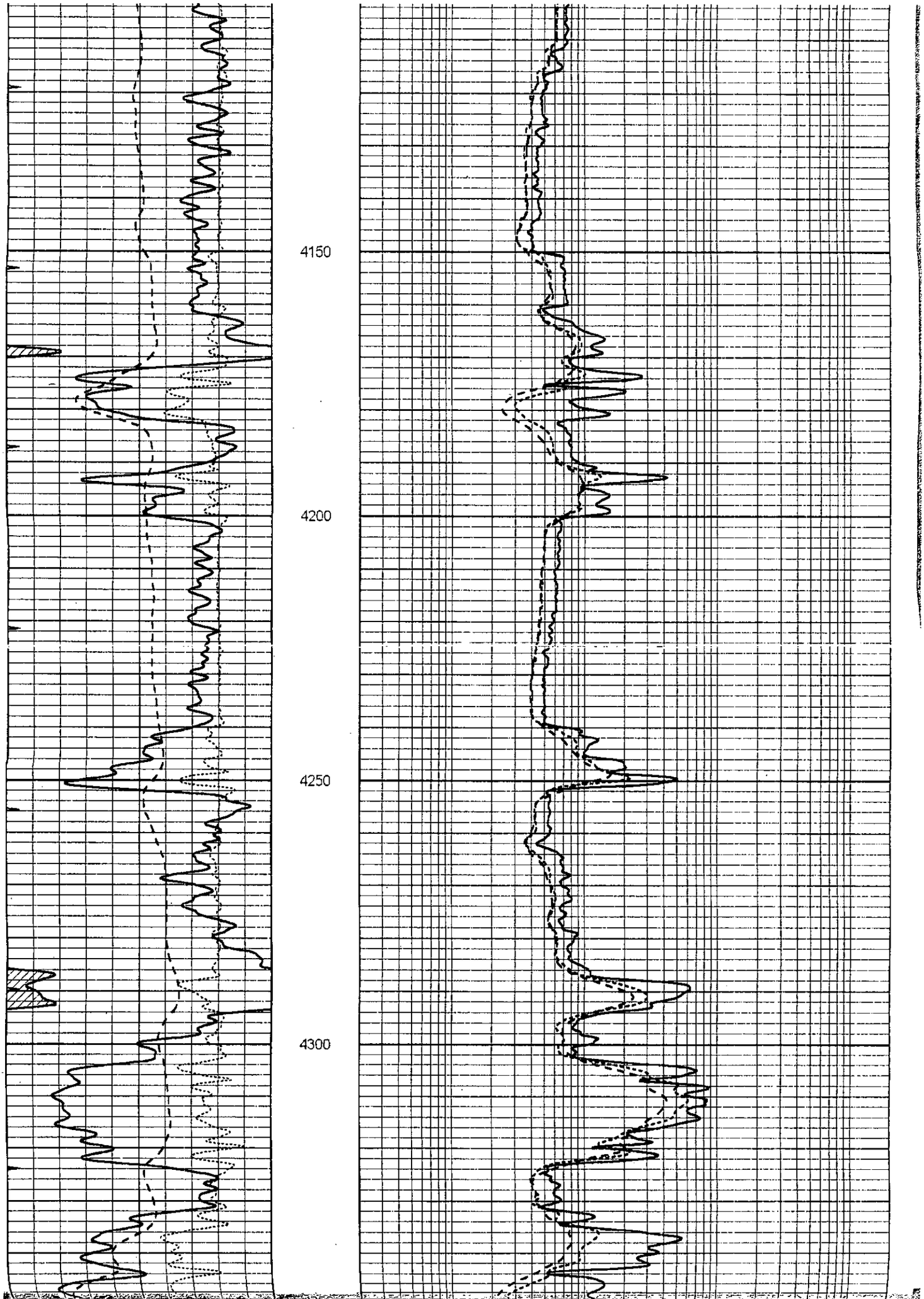
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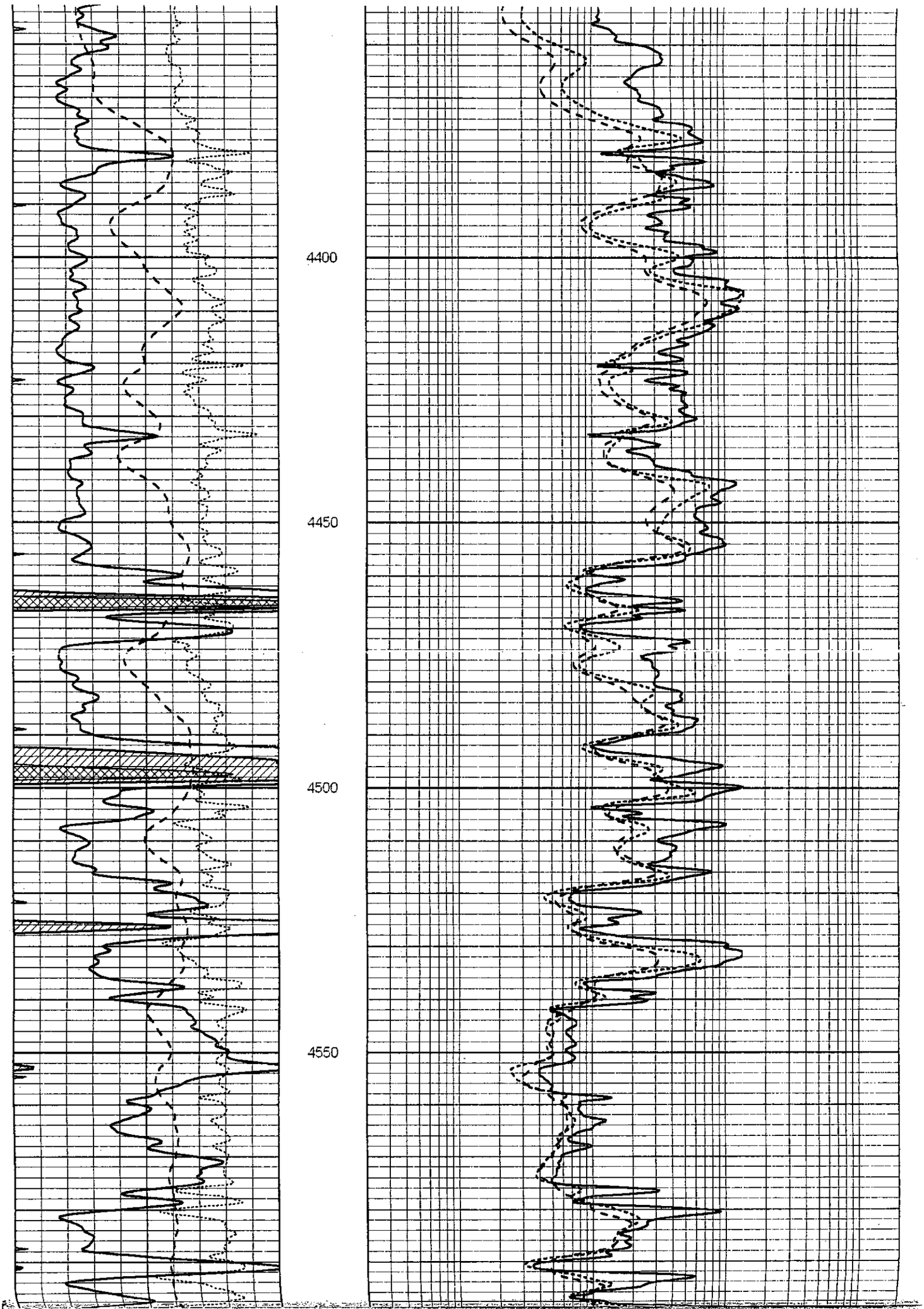
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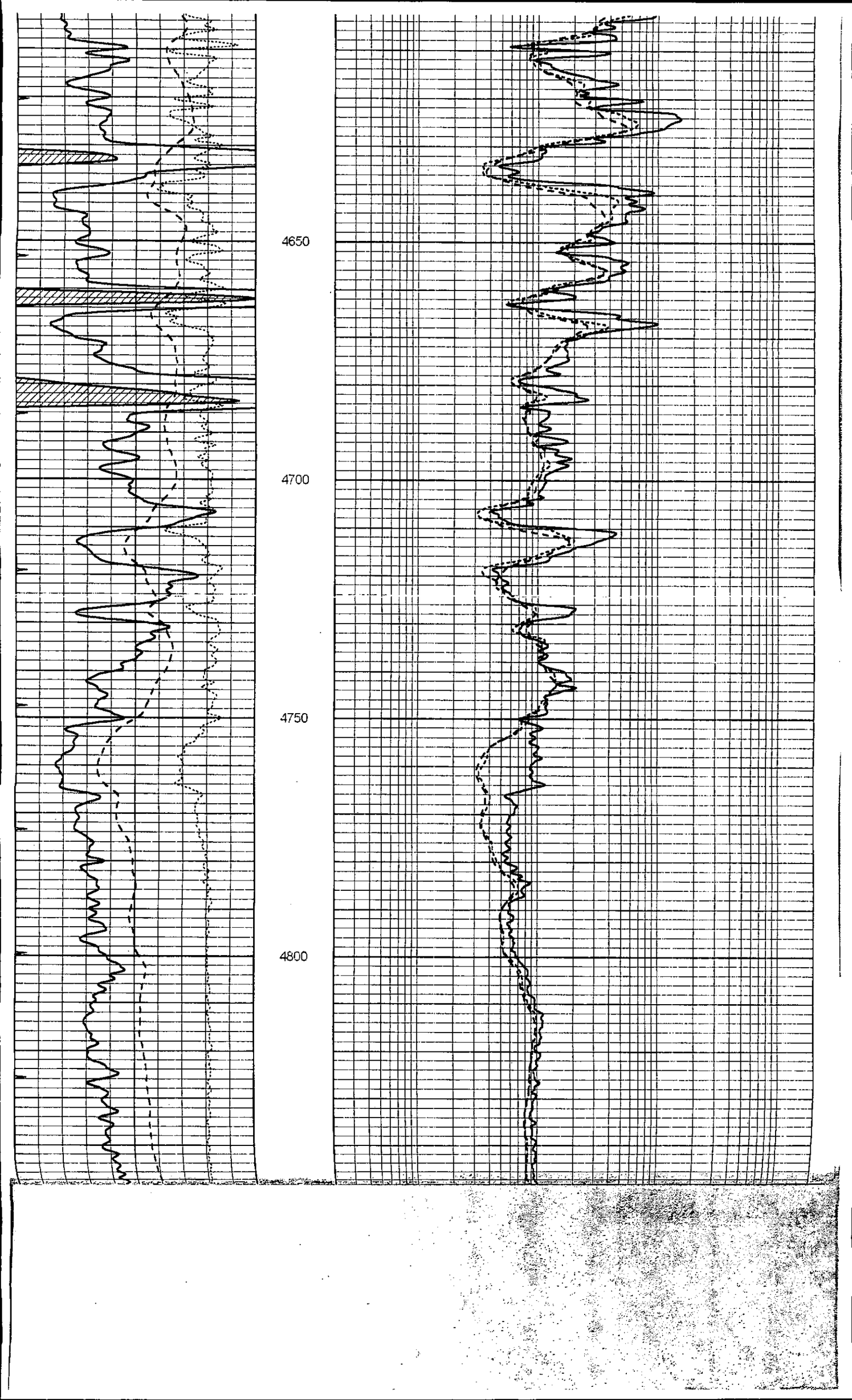
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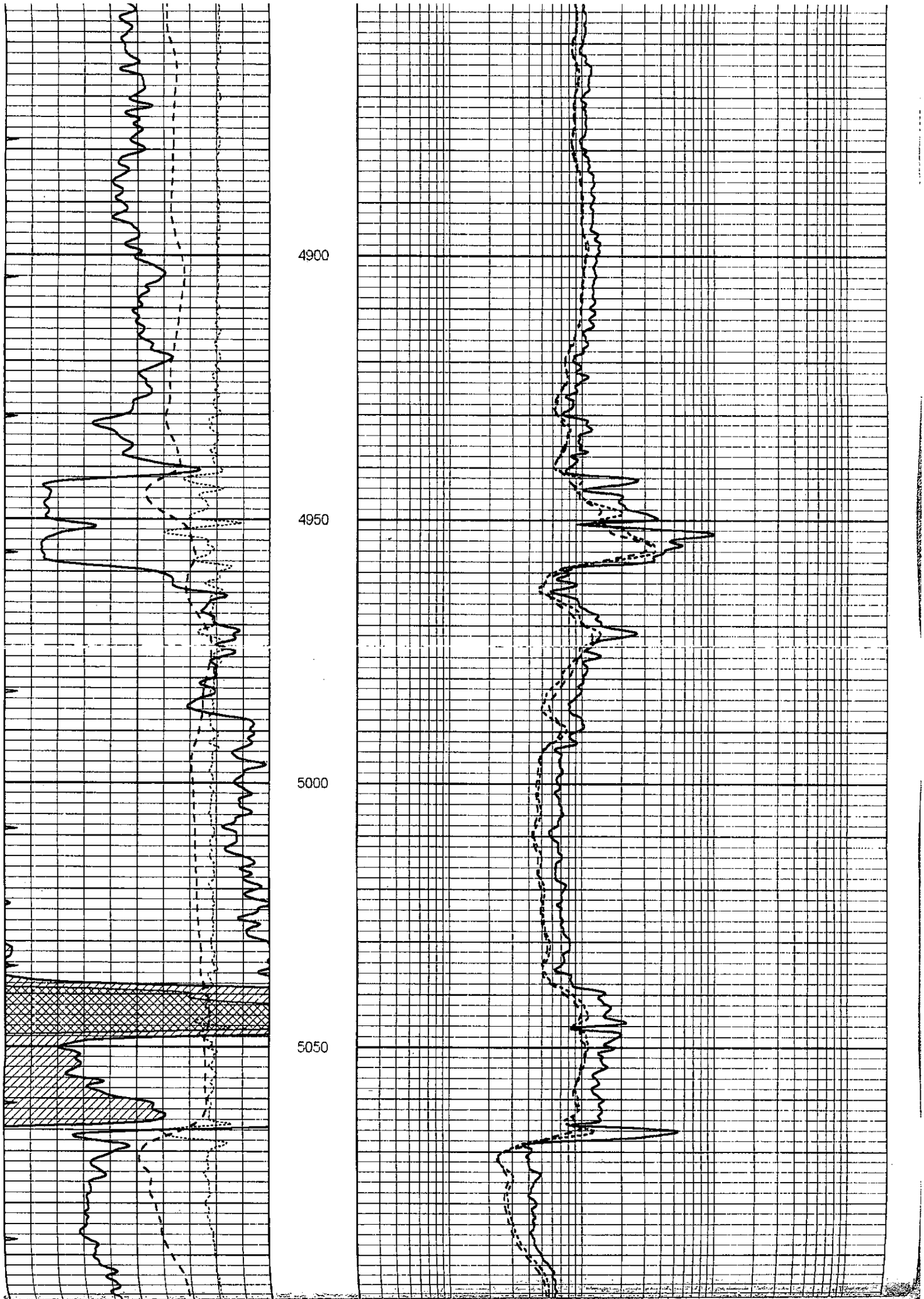
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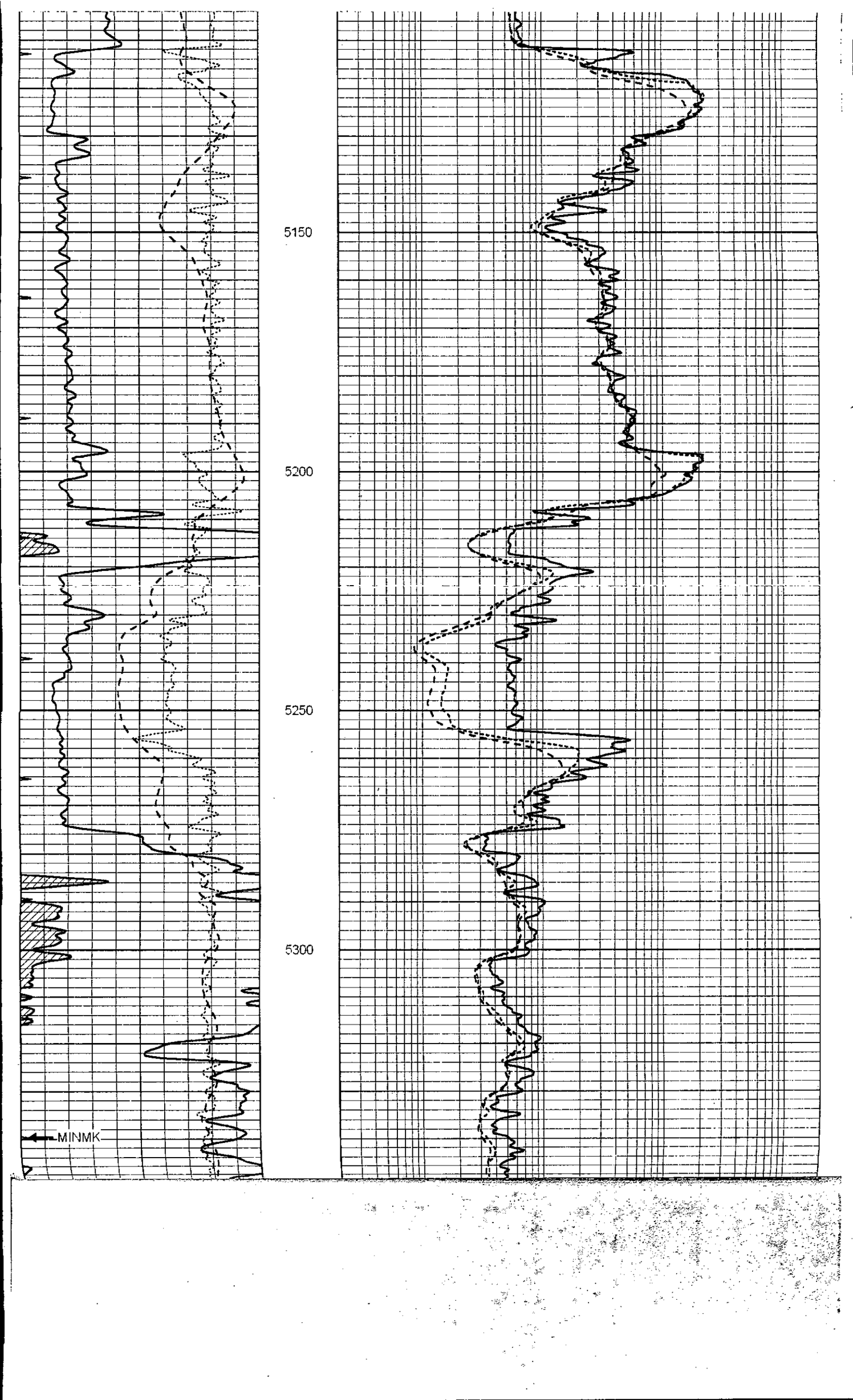
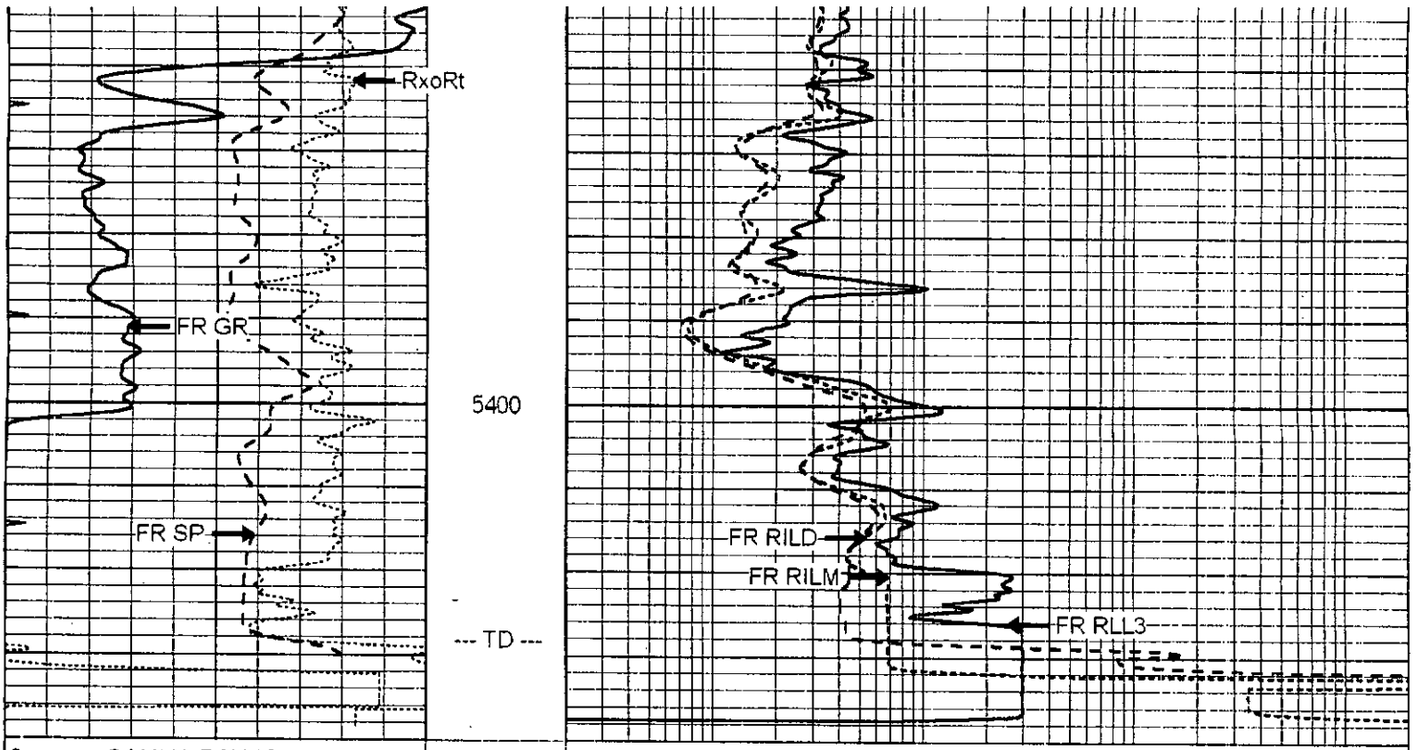

5150
5200
5250
5300
MINMK



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

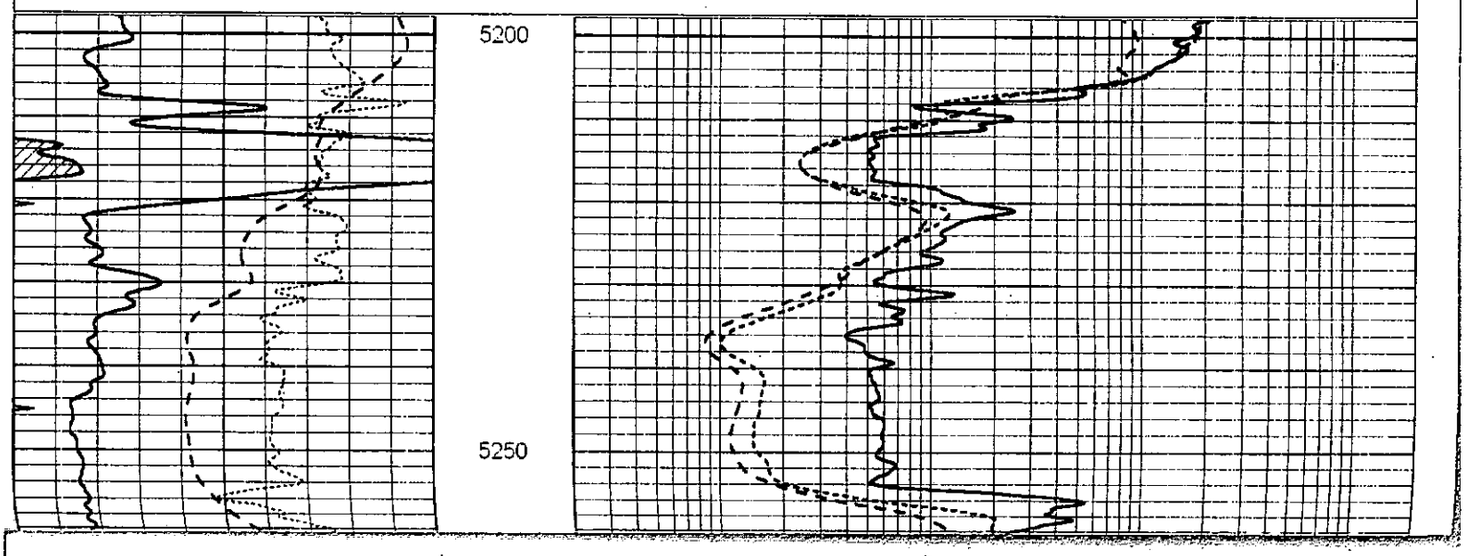
SUPERIOR
Hays,
Kansas

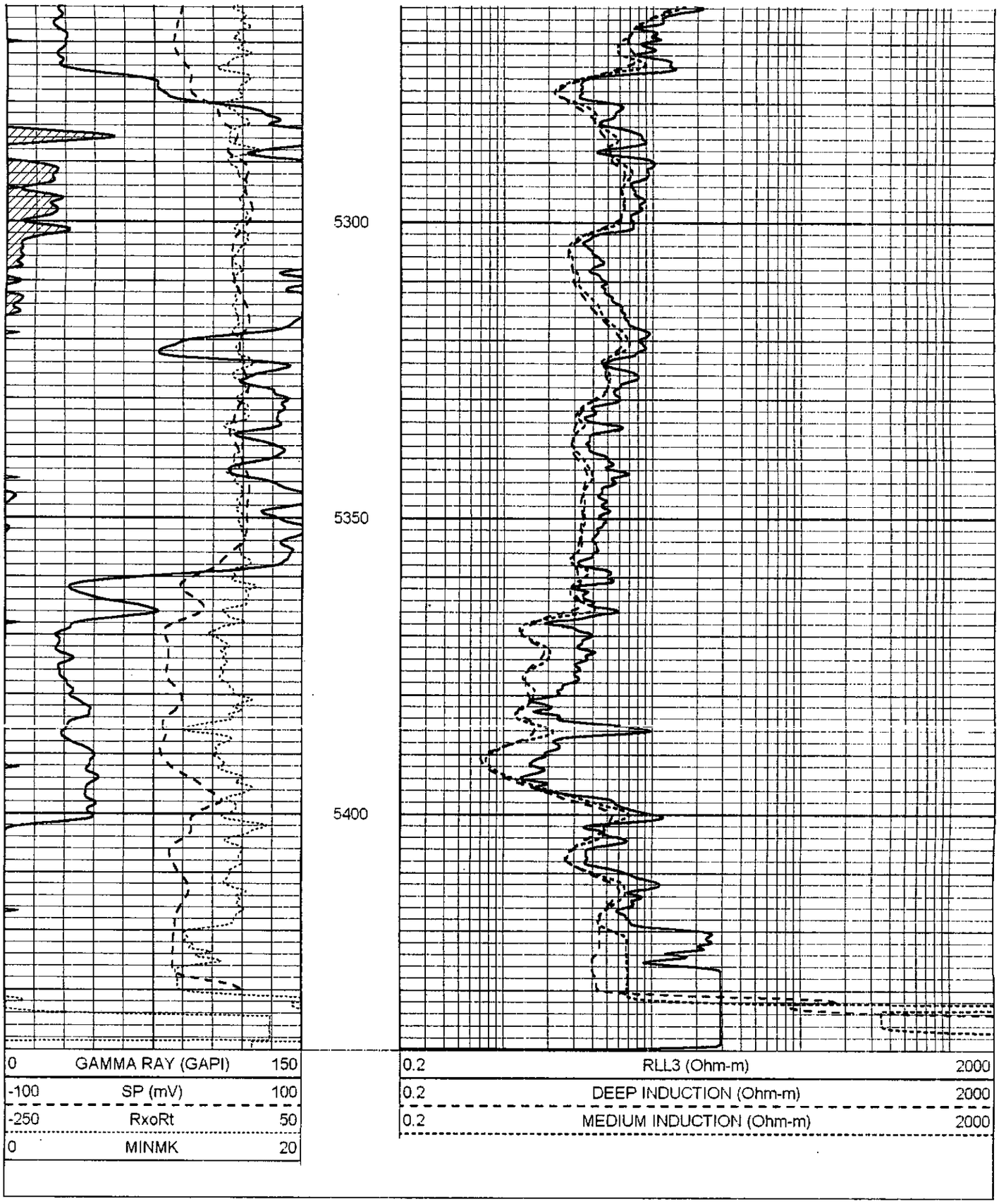
REPEAT SECTION

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

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





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

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_2i
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

[redacted]