Michael Drilling, LLC
P.O. Box 402
Iola, KS 66749
620-365-2755

468

Company: Birk, Brian L. dba Birk Petroleum
Address: 874 12TH RD SW
Burlington KS 66839
Ordered By: Brian L. Birk

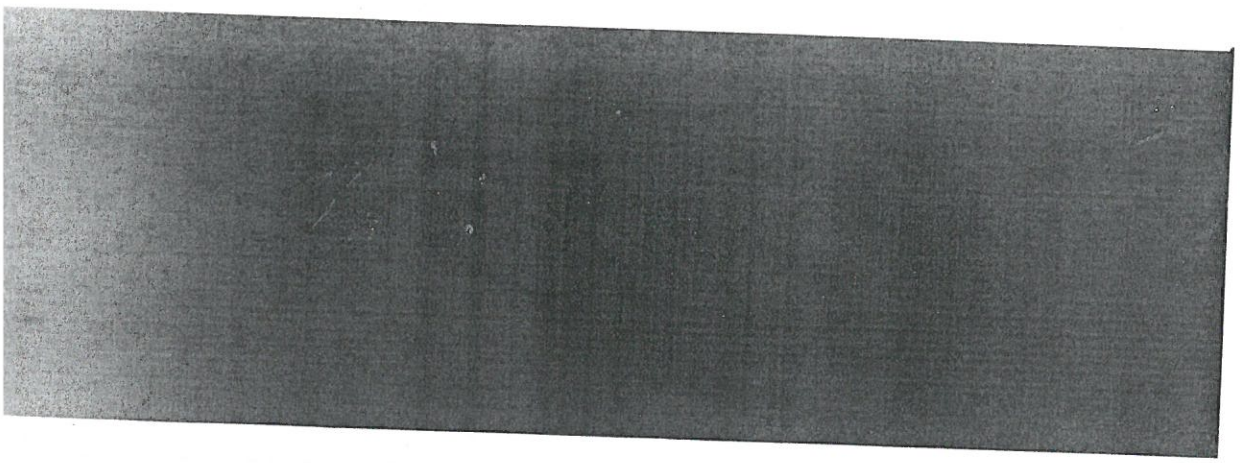
Date: 04/30/08
Lease: Lassman
County: Allen
Well#: 122
API#: 15-001-29738-00-00

OP.# 33783

Drilling Log

FEET	DESCRIPTION
0-20	Overburden
20-51	Lime
51-60	Shale
60-85	Lime
85-106	Shale
106-219	Lime
219-231	Sandy Shale
231-410	Shale
410-429	Shale With Lime Streaks
429-433	Lime
433-479	Shale With Lime Streaks
479-550	Sandy Shale
550-590	Shale
590-610	Lime
610-617	Black Shale
617-624	Lime
624-626	Black Shale
626-628	Coal
628-711	Sandy Shale
711-714	Coal
714-745	Shale
745-747	Coal
747-760	Sandy Shale
760-772	Sand Sandy Shale oil show

FEET	DESCRIPTION
772-960	Shale
960-979	Sand
979-1014	Shale
1014-1251	Mississippi Lime
1251-1273	Green Shale
1273-1324	Lime
1324-1337	Shale
1337-1356	Lime
1356	TD



MIDWEST SURVEYS
LOGGING - PERFORATING - CONSULTING SERVICES
P.O. Box 68, Osawatomie, KS 66064
913 / 755 - 2128

GAMMA RAY / NEUTRON / CCL

API # 15-001-29,738

File No.

Company Birk Petroleum

Well Lassman No.- 122

Field Humboldt - Chanute

County Allen State Kansas

Location

300' FSL & 400' FWL
SE-SW-SW-SW

Sec. 8 Twp. 26s Rge. 19e

Permanent Datum GL Elevation 1011'

Log Measured From GL

Drilling Measured From GL

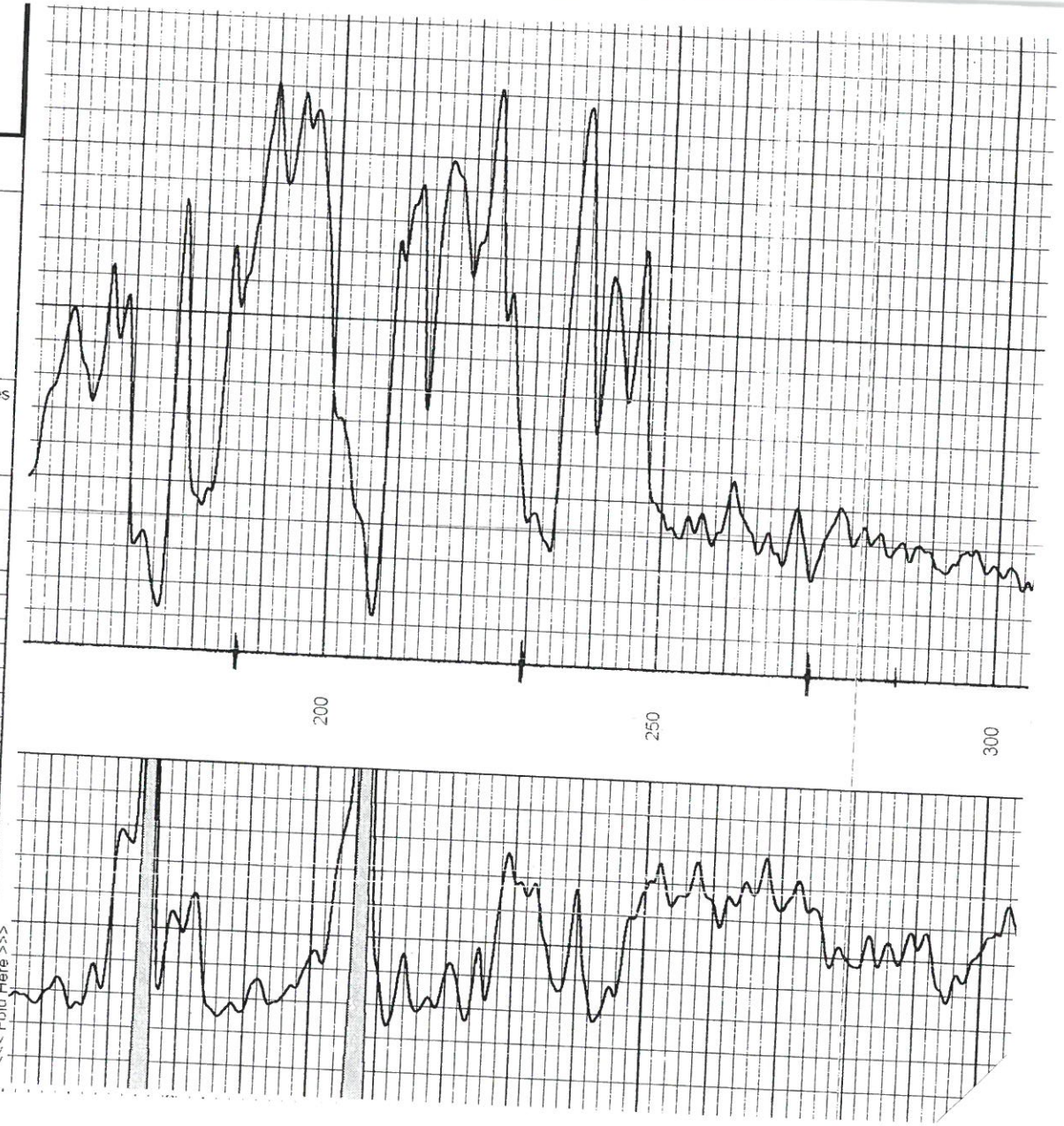
Other Services

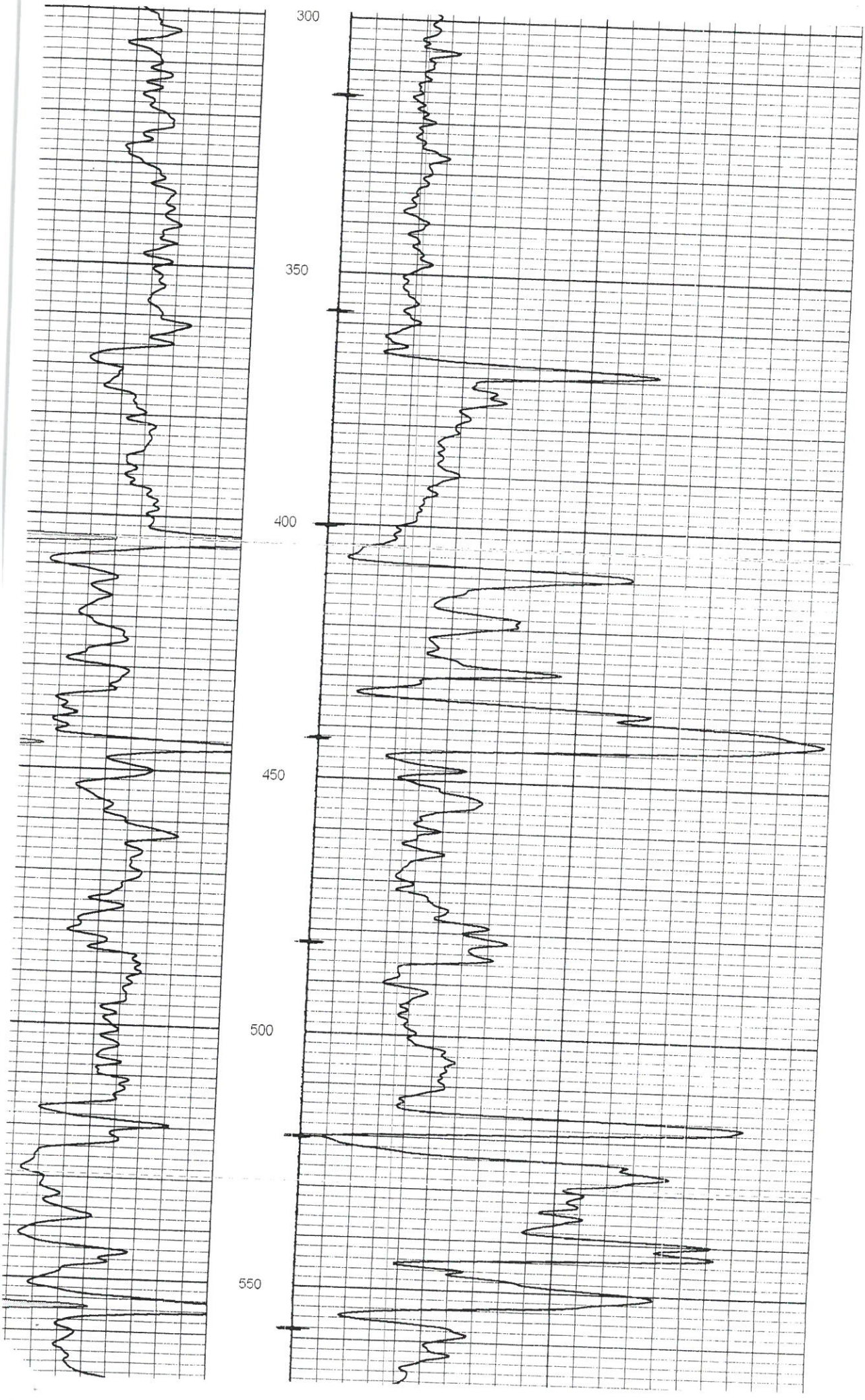
Elevation

K.B. NA
D.F. NA
G.L. 1011'

	5-05-2008
Number	One
Driller	1356.0
Logger	1351.5
m Logged Interval	1349.5
.og Interval	20.0
Level	Full
Fluid	Water
ity / Viscosity	NA
lty - PPM Cl	NA
Recorded Temp	NA
ated Cement Top	NA
ment No. Location	107 Osawatomie
rded By	Steve Windisch
essed By	Ed Birk

N	BORE-HOLE RECORD			CASING RECORD			
	BIT	FROM	TO	SIZE	WGT.	FROM	TO
e	12.25"	0.0	20.0	8.625"		0.0	20.0
o	6.75"	20.0	1356.0	4.50 "		0.0	1355.0

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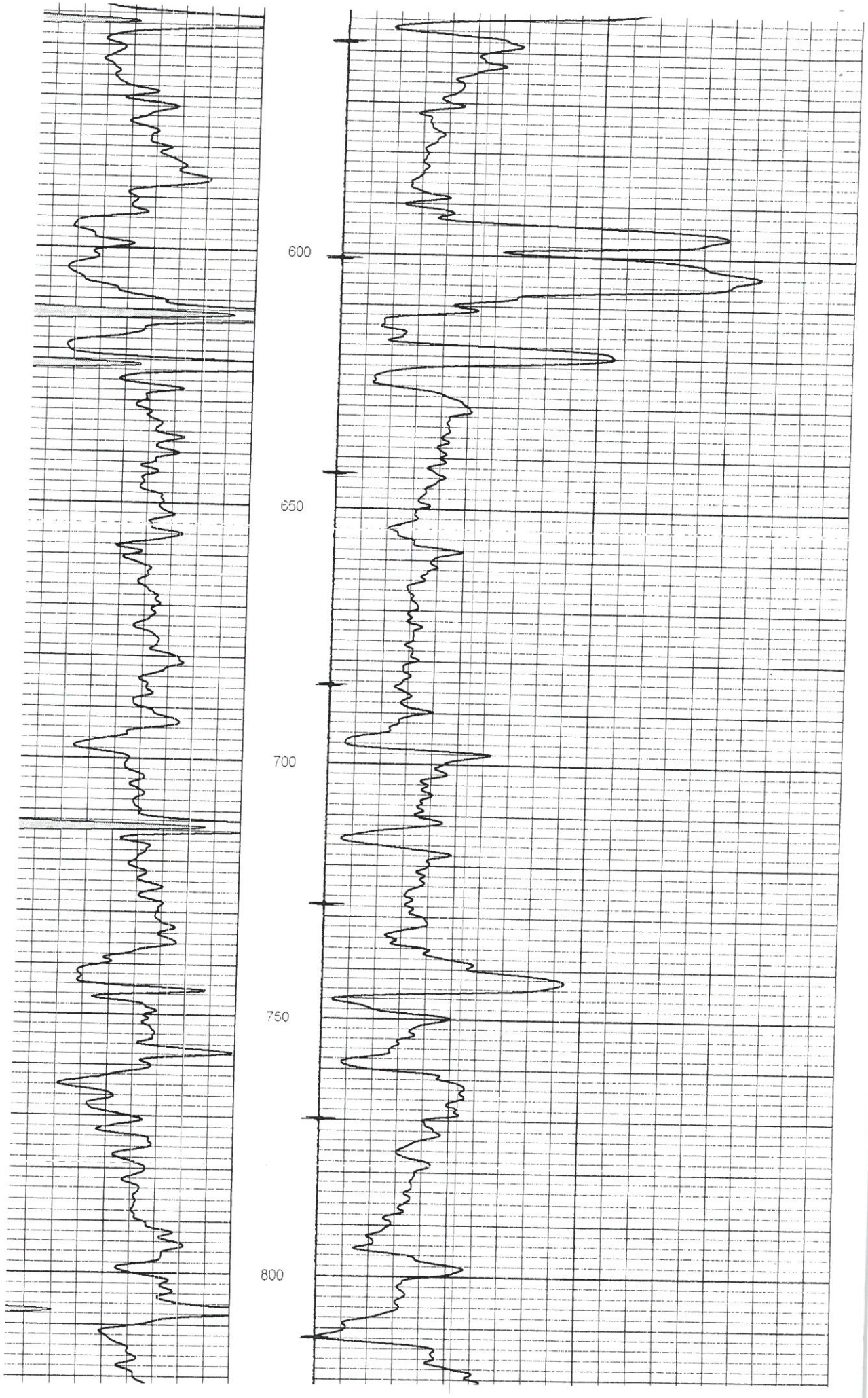
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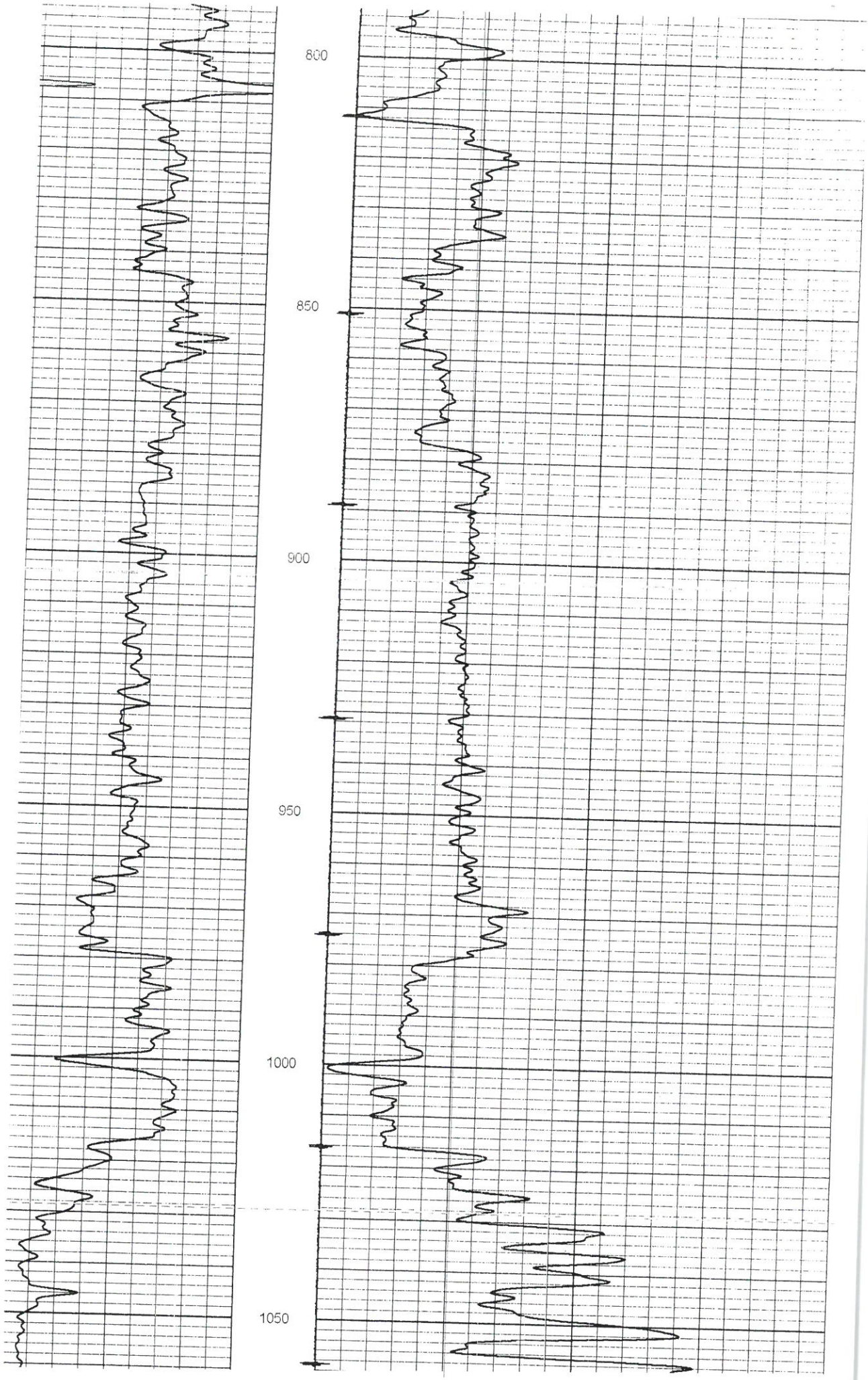
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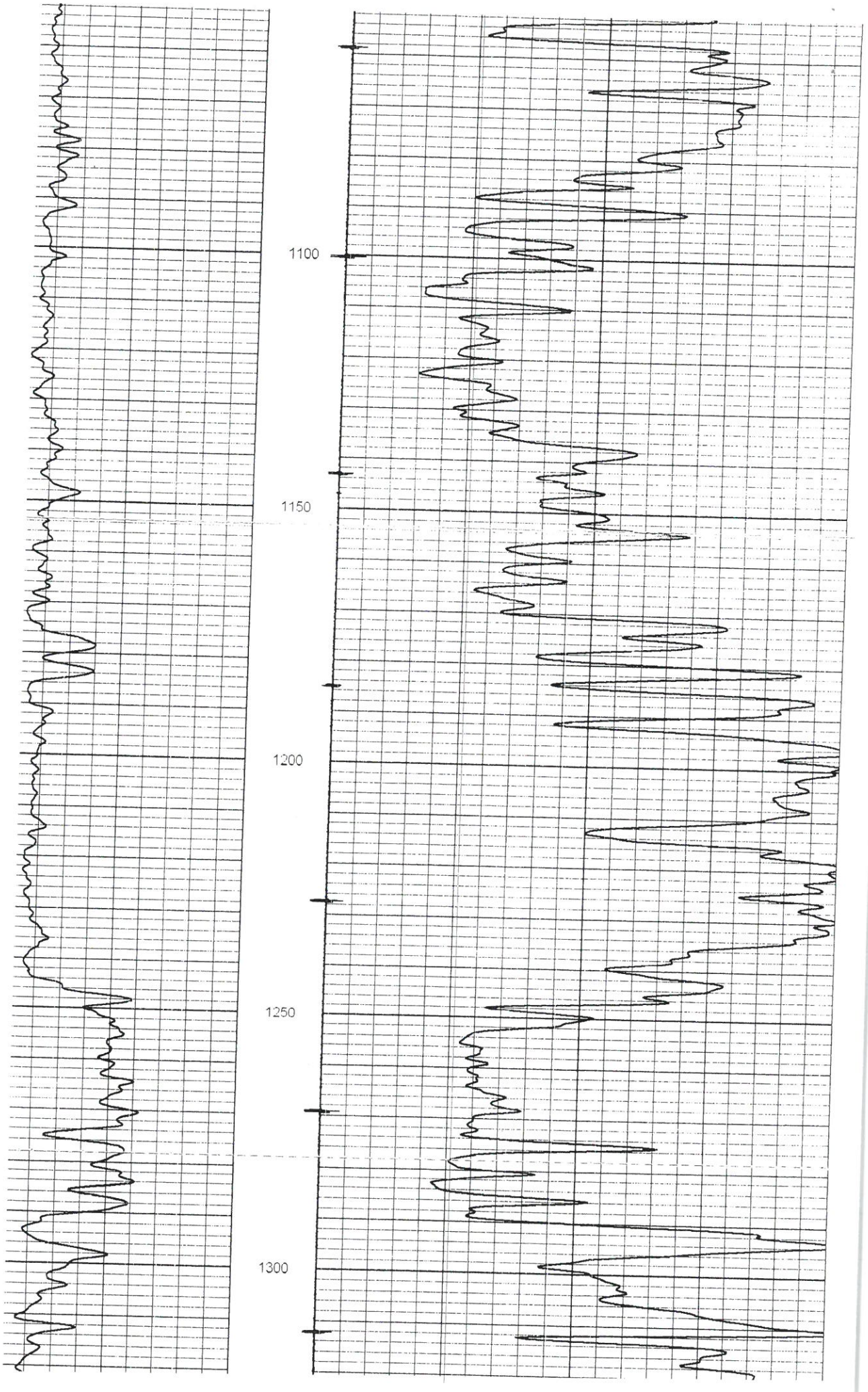
1000
1050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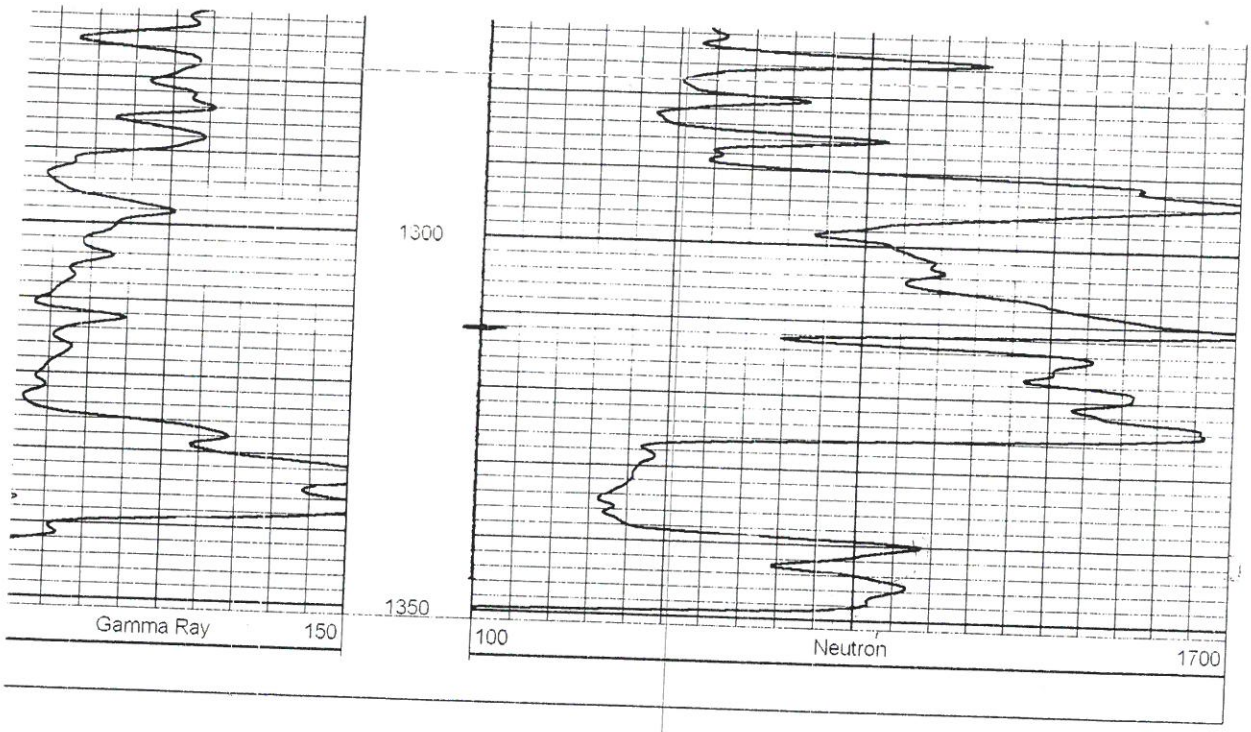
1150
1200
1250
1300


1300
1350
Gamma Ray
150
100
Neutron
1700

Lassman

(KANSAS) (Rev. 1981)
Form 88—(Producers)

B+

OIL AND GAS LEASE

Reorder No. 09-134

KANSAS BLUE PRINT CO. INC.

AGREEMENT, Made and entered into this Twenty-sixth day of April 2005
by and between Curtis M. Mueller and Alisha L. Mueller as Trustees of
Curtis M. Mueller Revocable Trust dated February 14, 2001 and
Alisha L. Mueller and Curtis M. Mueller as Trustees of Alisha L.
Mueller Revocable Trust dated February 14, 2001

Party of the first part, hereinafter called lessor (whether one or more) and
Edward E. Birk and Brian L. Birk Parties of the second part, hereinafter called lessee.

WITNESSETH, That the said lessor, for and in consideration of one dollar & other valuable consideration DOLLARS, cash in hand paid, receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter contained on the part of lessee to be paid, kept and performed, has granted, demised, leased and let and by these presents does grant, demise, lease and let unto said lessee, for the sole and only purpose of mining and operating for oil and gas, and laying pipe lines, and building tanks, power stations and structures thereon to produce, save and take care of said products, all that certain tract of land situated in the County of Allen State of Kansas, described as follows, to wit:

The Southeast Quarter (SE4) of Section Seven (7), and the Southwest Quarter (SW4) of Section Eight (8), all in Towship Twenty-six (26), Range Nineteen (19) East.

of Section 7 & 8 Township 26 Range 19E and containing 320 acres more or less.

It is agreed that this lease shall remain in full force for a term of one years from this date, and as long thereafter as oil or gas, or either of them, is produced from said land by the lessee.

In consideration of the premises the said lessee covenants and agrees:

1st. To deliver to the credit of lessor, free of cost, in the pipe line to which lessee may connect his wells, the equal one-eighth (⅛) part of all oil produced and saved from the leased premises.

2nd. To pay lessor for gas from each well where gas only is found the equal one-eighth (⅛) of the gross proceeds at the prevailing market rate, (but, as to gas sold by lessee, in no event more than one-eighth (⅛) of the proceeds received by lessee from such sales), for all gas used off the premises, said payments to be made per division order and lessor to have gas free of cost from any such well for all stoves and all inside lights in the principal dwelling house on said land during the same time by making his own connections with the well at his own risk and expense.

3rd. To pay lessor for gas produced from any oil well and used off the premises or in the manufacture of gasoline or any other product a royalty of one-eighth (⅛) of the market value, at the mouth of the well, (but, as to gas sold by lessee, in no event more than one-eighth (⅛) of the proceeds received by lessee from such sales), payable monthly at the prevailing market price.

If no well be commenced on said land on or before the n/a day of n/a, 19__, this lease shall terminate as to both parties, unless the lessee on or before that date shall pay or tender to the lessor, or to the lessor's credit in The n/a Bank at n/a or its successors, which shall continue as the depository regardless of changes in the ownership of said land, the sum of one thousand ($1000.00) DOLLARS, which shall operate as a rental and cover the privilege of deferring the commencement of a well for twelve months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods of the same number of months successively. All such payments or tenders of rentals may be made by check or draft of lessee or any assignee thereof, mailed or delivered on or before the rental paying date, either direct to lessor or assigns or to said depository bank. And it is understood and agreed that the consideration first recited herein, the down payment, covers not only the privileges granted to the date when said first rental is payable as aforesaid, but also the lessee's option of extending that period as aforesaid, and any and all other rights conferred.

Should the first well drilled on the above described land be a dry hole, then, and in that event, if a second well is not commenced on said land within twelve months from the expiration of the last rental period for which rental has been paid, this lease shall terminate as to both parties, unless the lessee on or before the expiration of said twelve months shall resume the payment of rentals in the same amount and in the same manner as hereinbefore provided. And it is agreed that upon the resumption of the payment of rentals, as above provided, that the last preceding paragraph hereof, governing the payment of rentals and the effect thereof, shall continue in force just as though there had been no interruption in the rental payments.

If said lessor owns a less interest in the above described land than the entire and undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the lessor only in the proportion which his interest bears to the whole and undivided fee.

Lessee shall have the right to use, free of cost, gas, oil, and water produced on said land for its operation thereon, except water from wells of lessor.

When requested by lessor, lessee shall bury his pipe lines below plow depth.

No well shall be drilled nearer than 200 feet to the house or barn now on said premises, without the written consent of the lessor.

Lessee shall pay for damages caused by its operations to growing crops on said land.

Lessee shall have the right at any time to remove all machinery and fixtures placed on said premises, including the right to draw and remove casing.

If the lessee shall commence to drill a well within the term of this lease or any extension thereof, the lessee shall have the right to drill such well to completion with reasonable diligence and dispatch, and if oil or gas, or either of them, be found in paying quantities, this lease shall continue and be in force with the like effect as if such well had been completed within the term of years herein first mentioned.

If the estate of either party hereto is assigned, and the privilege of assigning in whole or in part is expressly allowed, the covenants hereof shall extend to their heirs, executors, administrators, successors or assigns, but no change in the ownership of the land or assignment of rentals or royalties shall be binding on the lessee until after the lessee has been furnished with a written transfer or assignment or a true copy thereof; and it is hereby agreed in the event this lease shall be assigned as to a part or as to parts of the above described lands and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them on an acreage basis, such default shall not operate to defeat or affect this lease in so far as it covers a part or parts of said lands upon which the said lessee or any assignee thereof shall make due payments of said rentals. If the leased premises are now or hereafter owned in severalty or in separate tracts, the premises, nevertheless, may be developed and operated as an entirety, and the royalties shall be paid to each separate owner in the proportion that the acreage owned by him bears to the entire leased area. There shall be no obligation on the part of the lessee to offset wells on separate tracts into which the land covered by this lease may hereafter be divided by sale, devise, or otherwise, or to furnish separate measuring or receiving tanks for the oil produced from such separate tracts.

Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the lessee shall have the right at any time to redeem for lessor by payment, any mortgages, taxes or other liens on the above described lands, in the event of default of payment by lessor, and be subrogated to the rights of the holder thereof.

*or as long as the minimum royalty of $1000.00 per year is paid.

Whereof witness our hands as of the day and year first above written.

Witness to the mark:

Curtis M. Mueller (SEAL)
Curtis M. Mueller, Trustee (SEAL)
SSN# [redacted] (SEAL)
Alisha L. Mueller (SEAL)
Alisha L. Mueller, Trustee (SEAL)
SSN# [redacted] (SEAL)
(SEAL)
(SEAL)

STATE OF Kansas
COUNTY OF Allen
ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)
The foregoing instrument was acknowledged before me this 27th day of May, 2005
by Curtis M. Mueller, Trustee of Curtis M.Mueller Trust and Alisha L. Mueller Trustee of Alisha L. Mueller Trust
My commission expires January 22, 2008
Laura C. Birk
Notary Public
LAURA C. BIRK
Notary Public - State of Kansas
My Appt. Expires 01/22/2008

STATE OF ____________
COUNTY OF ____________
ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)
The foregoing instrument was acknowledged before me this ______ day of ____________, 19____
by ____________ and ____________
My commission expires ____________
Notary Public

STATE OF ____________
COUNTY OF ____________
ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)
The foregoing instrument was acknowledged before me this ______ day of ____________, 19____
by ____________ and ____________
My commission expires ____________
Notary Public

STATE OF ____________
COUNTY OF ____________
ACKNOWLEDGMENT FOR INDIVIDUAL (KsOkCoNe)
The foregoing instrument was acknowledged before me this ______ day of ____________, 19____
by ____________ and ____________
My commission expires ____________
Notary Public

No. ______

OIL AND GAS LEASE

FROM ____________
TO ____________
Date ____________, 19____
Section ______ Twp. ______ Rge. ______
No. of Acres ______ Term ______
County ____________
STATE OF KANSAS } ss.
County ALLEN
This instrument was filed for record on the 20TH day of JUNE, 2005,
at 9:40 o'clock A. M., and duly recorded
in Book 462 Page 181
the records of this office.
CARA BARKDOLL Register of Deeds
By MICHELLE M. SMITH
FEE:$12.00
When recorded, return to ____________

182

STATE OF ____________
COUNTY OF ____________
ACKNOWLEDGMENT FOR CORPORATION (KsOkCoNe)
The foregoing instrument was acknowledged before me this ______ day of ____________, 19____
by ____________
of ____________ a ____________
corporation, on behalf of the corporation.
My commission expires ____________
Notary Public

CORNISH

WIRELINE SERVICES, INC.
P.O. DRAWER H
CHANUTE, KANSAS
PHONE 431-9308

RADIOACTIVITY LOG

FILING NO.

COMPANY BIG SKY OIL & GAS

WELL LASSMAN NO. 104

FIELD

COUNTY ALLEN STATE KANSAS

LOCATION

SEC 8 TWP 26S RGE 19E

PERMANENT DATUM G.L. ELEV.

LOG MEASURED FROM G.L. FT. ABOVE PERM. DATUM

DRILLING MEASURED FROM G.L.

OTHER SERVICES

DATE	9-28-82	9-28-82	9-28-82
RUN NO.	1 NW	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON	PERFORATE
DEPTH DRILLER	827.2'	827.2'	
DEPTH LOGGER	827.2'	827.2'	
BTM. LOG INTERVAL	821.4'	826.2'	
TOP LOG INTERVAL	3'	32'	
TYPE FLUID IN HOLE	WATER	WATER	WATER
SALINITY PPM CL			
DENSITY			
LEVEL	33'	33'	33'
MAX. REC. TEMP. DEG. F			
OPERATING RIG TIME			
RECORDED BY	UDEN, D.	UDEN, D.	UDEN, D.
WITNESSED BY	MEYER, H.	MEYER, H.	MEYER, H.

BORE HOLE RECORD

RUN NO.	BIT FROM	BIT TO	SIZE	WGT.	FROM	TO
			2¼"		0	T.D.

CASING RECORD

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	1 NW	RUN NO.	1 NW
TOOL MODEL NO.	9205	LOG TYPE	NEU/NEU
DIAMETER	1-11/16"	TOOL MODEL NO.	9205
DETECTOR MODEL NO.	95SC	DIAMETER	1-11/16"
TYPE	SCINT.	DETECTOR MODEL NO.	95HE
LENGTH	1"x4"	TYPE	He^3
DISTANCE TO SOURCE	8.5'	LENGTH	1"x6"
		SOURCE MODEL NO.	AC
GENERAL		SERIAL NO.	MRC415
HOIST TRUCK NO.	104	SPACING	13"
INSTRUMENT TRUCK NO.	104	TYPE	Am/Be
LOG SERIAL NO.	10	STRENGTH	6.7×10^6

LOGGING DATA

GENERAL				GAMMA RAY			NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED FT./MIN.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API UNITS PER LOG DIV.
1	826.2'	3'	25	2.5	10-.0	2L	20	2.0	0-.35	4L	

REFERENCE LITERATURE

REMARKS

GAMMA RAY

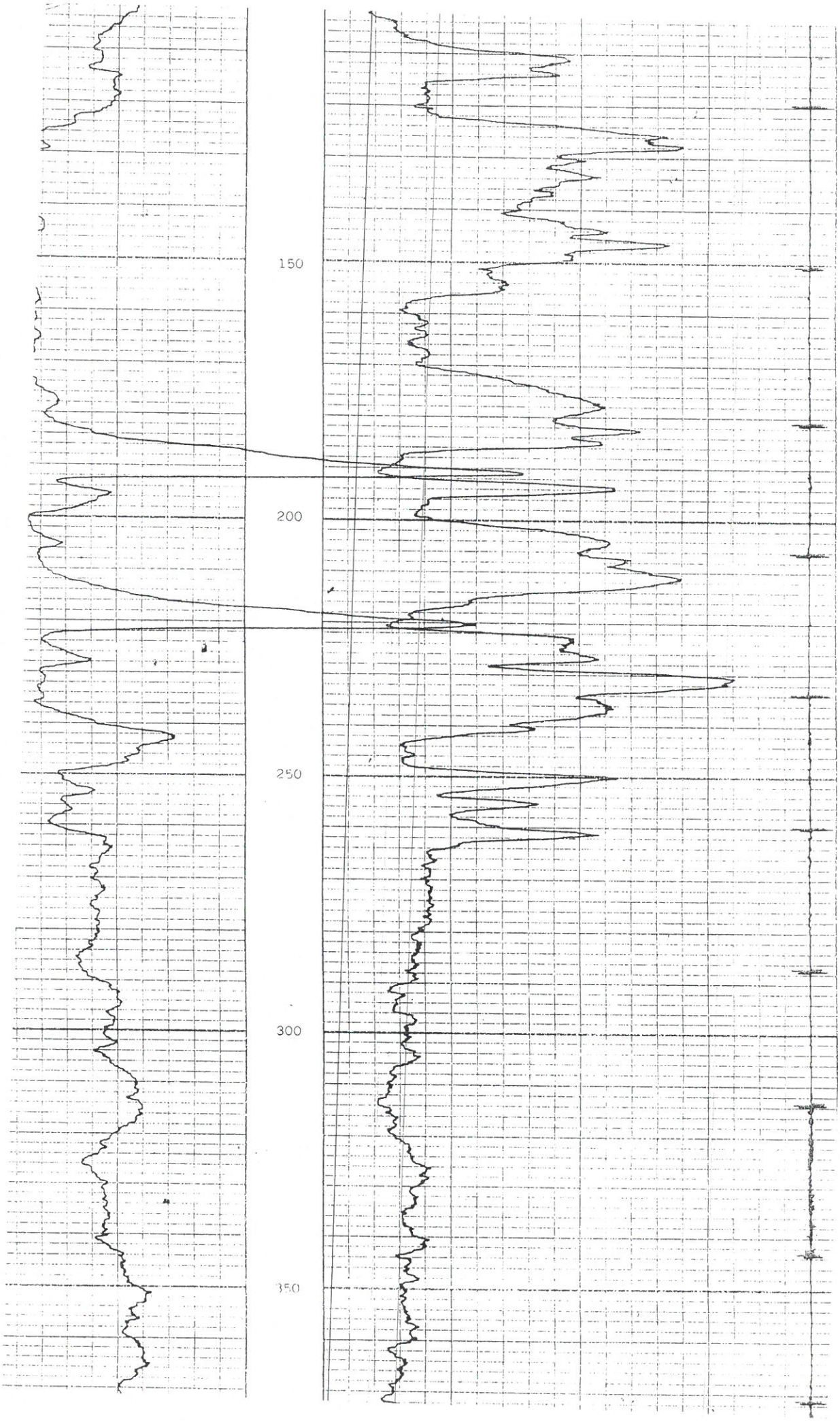
API UNITS

DEPTH AND CASING COLLARS

NEUTRON

API UNITS

0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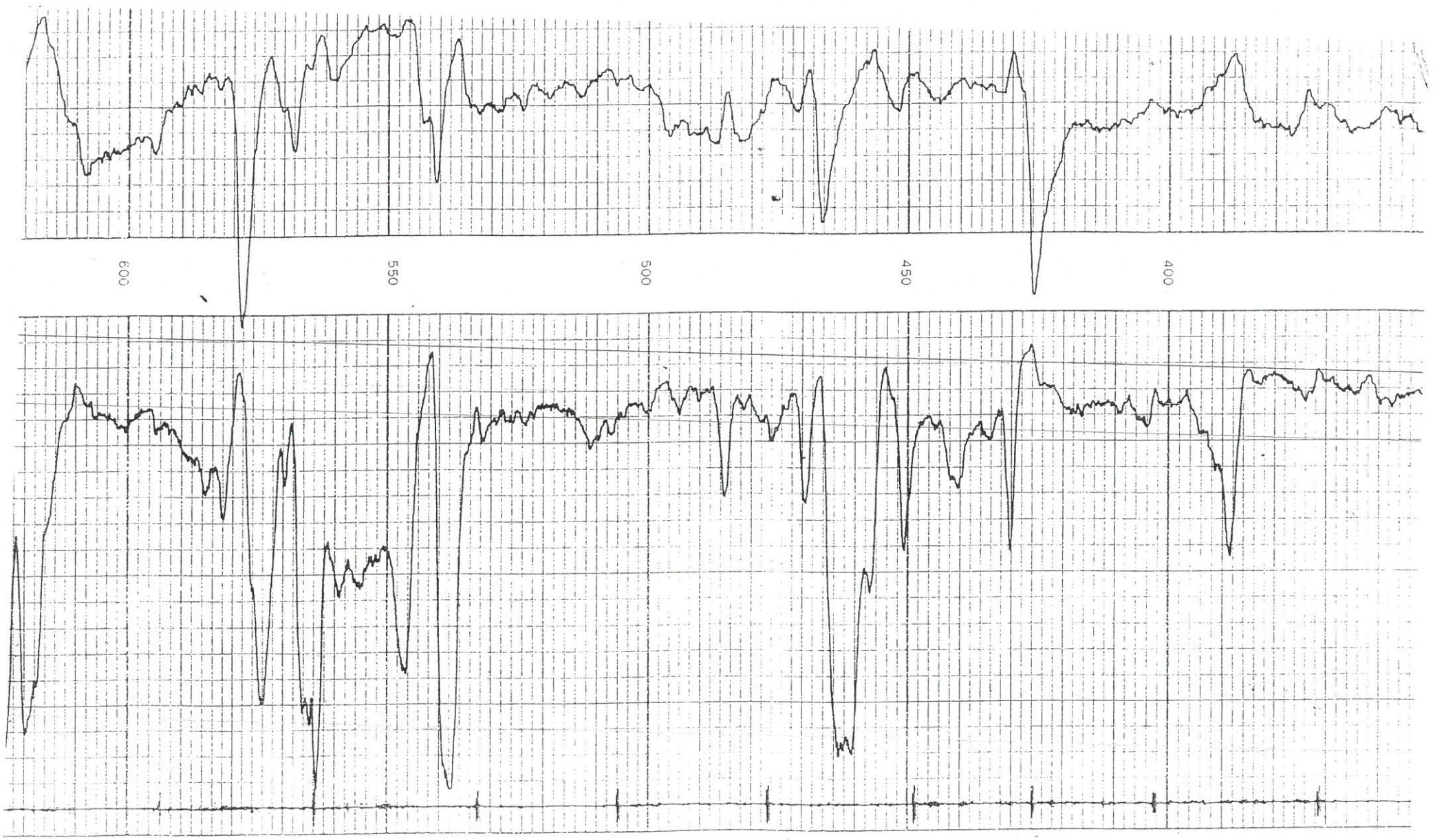
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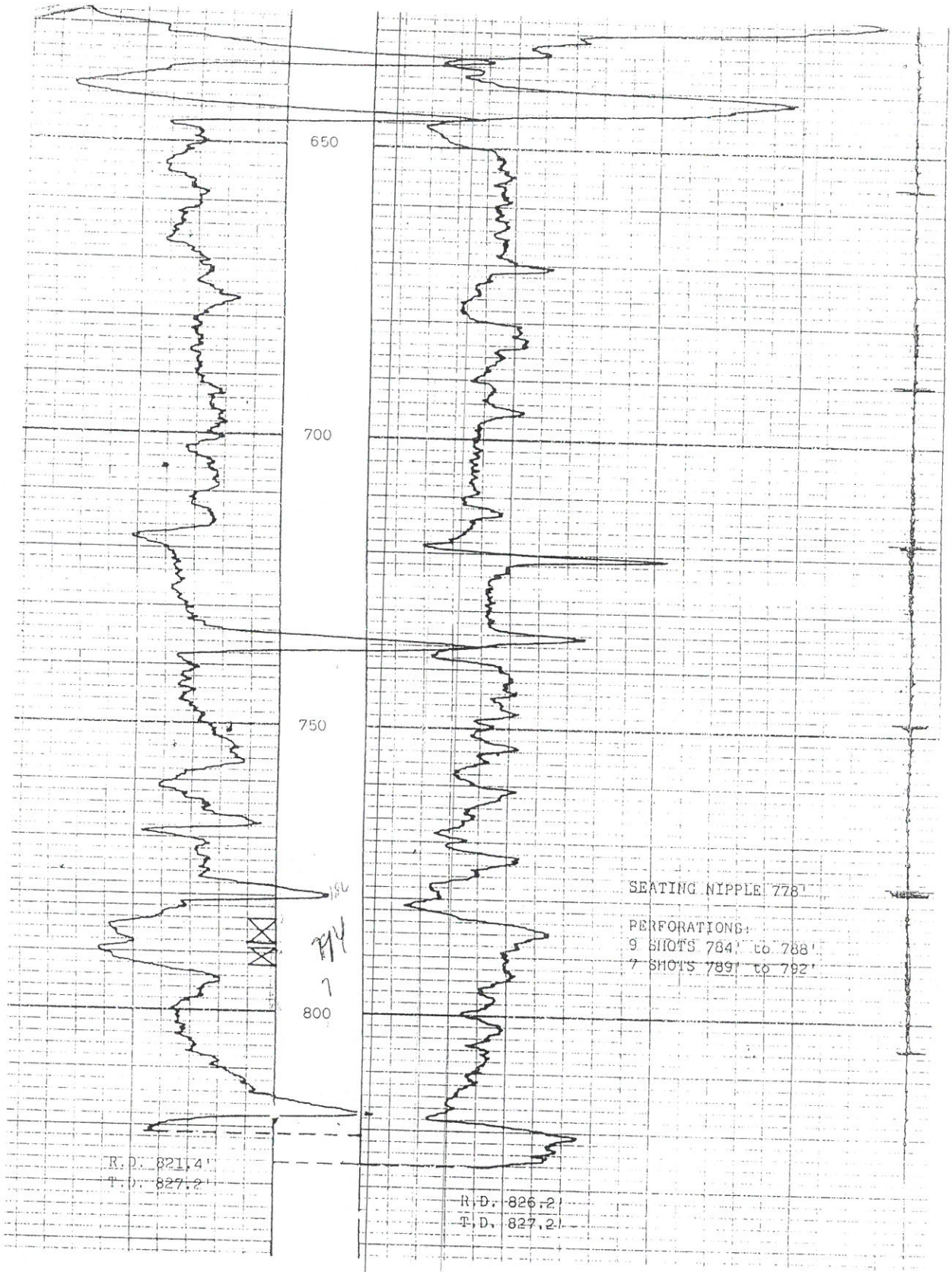


CASSMAN NO. 104

BIG SKY OIL & GAS

ALLEN COUNTY, KANSAS

SEPTEMBER 26, 1982

CORNISH

WIRELINE SERVICES, INC.

PHONE 431-9308 P.O. DRAWER H CHANUTE, KANSAS

RADIOACTIVITY LOG

FILING NO.

COMPANY BIG SKY OIL AND GAS

WELL LASSMAN NO. 106

FIELD

COUNTY ALLEN STATE KANSAS

LOCATION

SEC 8 TWP 26S RGE 19E

OTHER SERVICES

PERMANENT DATUM G.L. ELEV.

LOG MEASURED FROM G.L. FT. ABOVE PERM. DATUM

DRILLING MEASURED FROM G.L.

DATE	9-28-82	9-28-82	9-28-82
RUN NO	1 NW	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON	PERFORATE
DEPTH—DRILLER			
DEPTH—LOGGER	826.3'	826.3'	
BOTTOM LOGGED INTERVAL	820.5'	825.3'	
TOP LOGGED INTERVAL	2'	7'	
TYPE FLUID IN HOLE	WATER	WATER	WATER
SALINITY, PPM CL			
DENSITY			
LEVEL	FULL	FULL	FULL
MAX. REC. TEMP. DEG F			
OPERATING RIG TIME			
RECORDED BY	UDEN, D.	UDEN, D.	UDEN, D.
WITNESSED BY	MEYER, H.	MEYER, H.	MEYER, H.

RUN NO.	BIT	BORE-HOLE RECORD FROM	TO	CASING RECORD SIZE	WGT	FROM	TO
				2⅝"		0	T.D.

CASING RECORD

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

GAMMA RAY

NEUTRON

	GAMMA RAY	NEUTRON
RUN NO.	1 NW	1 NW
REC. NO.	9205	NEU/NEU
TOOL TYP	1-11/16"	9205
TOOL MODEL NO.	95SC	1-11/16"
DIAMETER	SCINT.	95HE
DETECTOR MODEL NO.	1"x4"	He³
TYPE	8.5'	1"x6"
LENGTH		AC
SOURCE MODEL NO.		NRC415
SERIAL NO.	104	13"
SPACING	104	Am/Be
TYPE	1C	6.7x10⁶
STRENGTH		

GENERAL

LOGGING DATA

	GAMMA RAY	NEUTRON
DEPTHS FROM	825.3'	2'
TO	2'	
SPEED FT./MIN	25	
T.C. SEC	2.5	
SENS SETTINGS	10-.0	
DIV. FROM R	2L	
API G R UNITS PER LOG DIV	20	
T.C. SEC		2.0
SENS SETTINGS		0-.35
ZERO DIV. FROM R		4L

TEMPERATURE LITERATURE

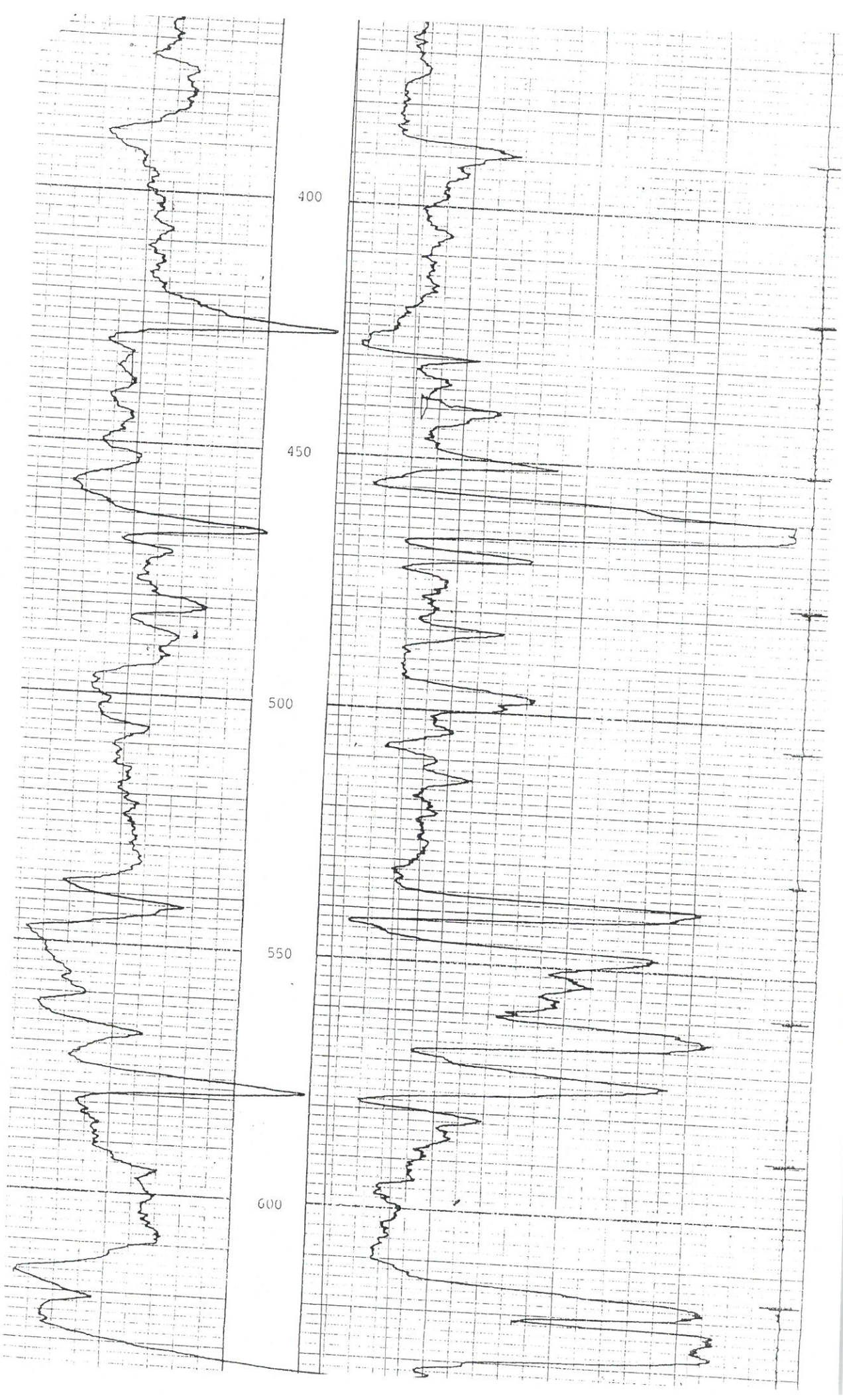
GAMMA RAY API UNITS

DEPTH AND CASING COLLARS

NEUTRON API UNITS

0


150
200
250
300
350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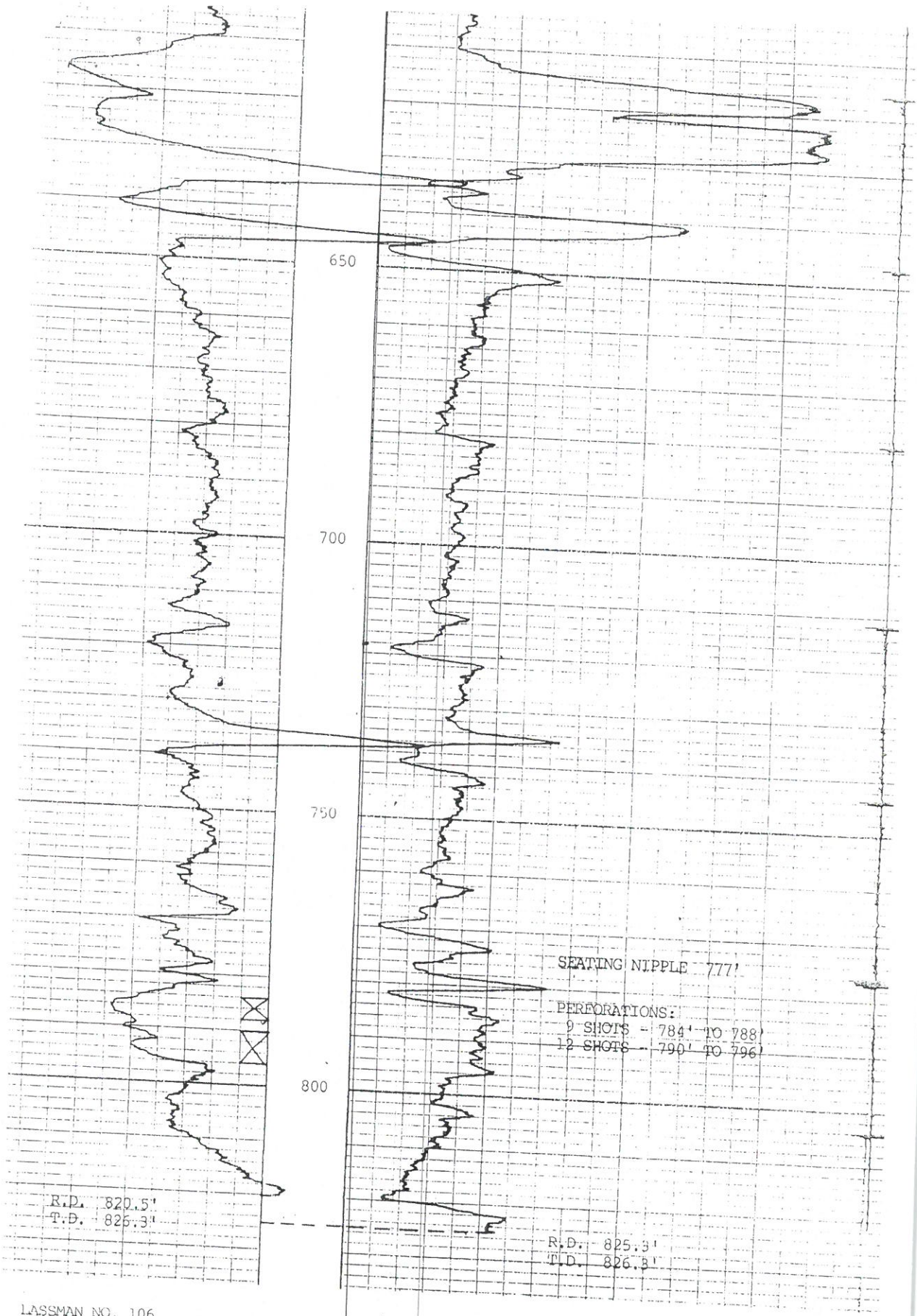


LASSMAN NO. 106

BIG SKY OIL AND GAS

CORNISH

WIRELINE SERVICES, INC.
P.O. DRAWER H
CHANUTE, KANSAS
PHONE 431-9308

RADIOACTIVITY LOG

COMPANY BIG SKY OIL AND GAS

WELL LASSMAN NO. 108

FIELD

COUNTY ALLEN STATE KANSAS

LOCATION SEC 8 TWP 26S RGE 19E

OTHER SERVICES

PERMANENT DATUM	G.L.	ELEV.
MEASURED FROM	G.L.	FT ABOVE PERM DATUM
LOG MEASURED FROM	G.L.	

RUN NO	1 NW	1 NW	1 NW
DATE	11-2-82	11-2-82	11-2-82
LOG	GAMMA RAY	NEUTRON	PERFORATE
DRILLER	845.6'	845.6'	
LOGGER	839.8'	844.6'	
TOP LOGGED INTERVAL	3'	8'	
BOTTOM LOGGED INTERVAL	WATER	WATER	WATER
FLUID IN HOLE	FULL	FULL	FULL
DENSITY			
PH			
REC. TEMP. DEG F			
TIME RIG TIME			
RECORDED BY	DUNLAP, G.	DUNLAP, G.	DUNLAP, G.
WITNESSED BY	COMCOWICH, P.	COMCOWICH, P.	COMCOWICH, P.

BORE HOLE RECORD

BIT	FROM	TO
2¼"	0	T.D.

CASING RECORD

WGT	FROM	TO

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO	1 NW	RUN NO	1 NW
TOOL MODEL NO	9205	LOG TYPE	NEU/NEU
DIAMETER	1-11/16"	TOOL MODEL NO	9205
DETECTOR MODEL NO	95SC	DIAMETER	1-11/16"
TYPE	SCINT.	DETECTOR MODEL NO	95HE
LENGTH	1"x4"	TYPE	He^3
DISTANCE TO N SOURCE	8.5'	LENGTH	1"x6"
		SOURCE MODEL NO	AC
		SERIAL NO	MRC415
		SPACING	13"
		TYPE	Am/Be
		STRENGTH	6.7×10^6

GENERAL	
HOIST TRUCK NO	108
INSTRUMENT TRUCK NO	108
SONDE SERIAL NO	10

LOGGING DATA

RUN NO	DEPTH FROM	DEPTH TO	SPEED FT/MIN	GAMMA RAY T C SEC	GAMMA RAY SENS SETTINGS	GAMMA RAY ZERO DIV L OR R	GAMMA RAY API G R UNITS PER LOG DIV	NEUTRON T C SEC	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV L OR R	NEUTRON API N UNITS PER LOG DIV
1	844.6'	3'	25	2.5	10-.0	2L	20	2.0	0-.35	4L	

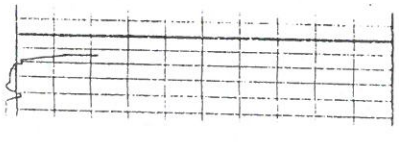
REFERENCE LITERATURE

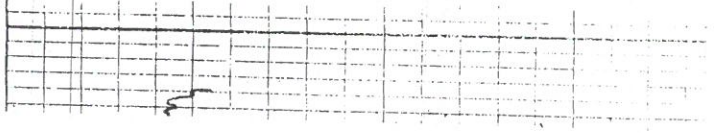
REMARKS

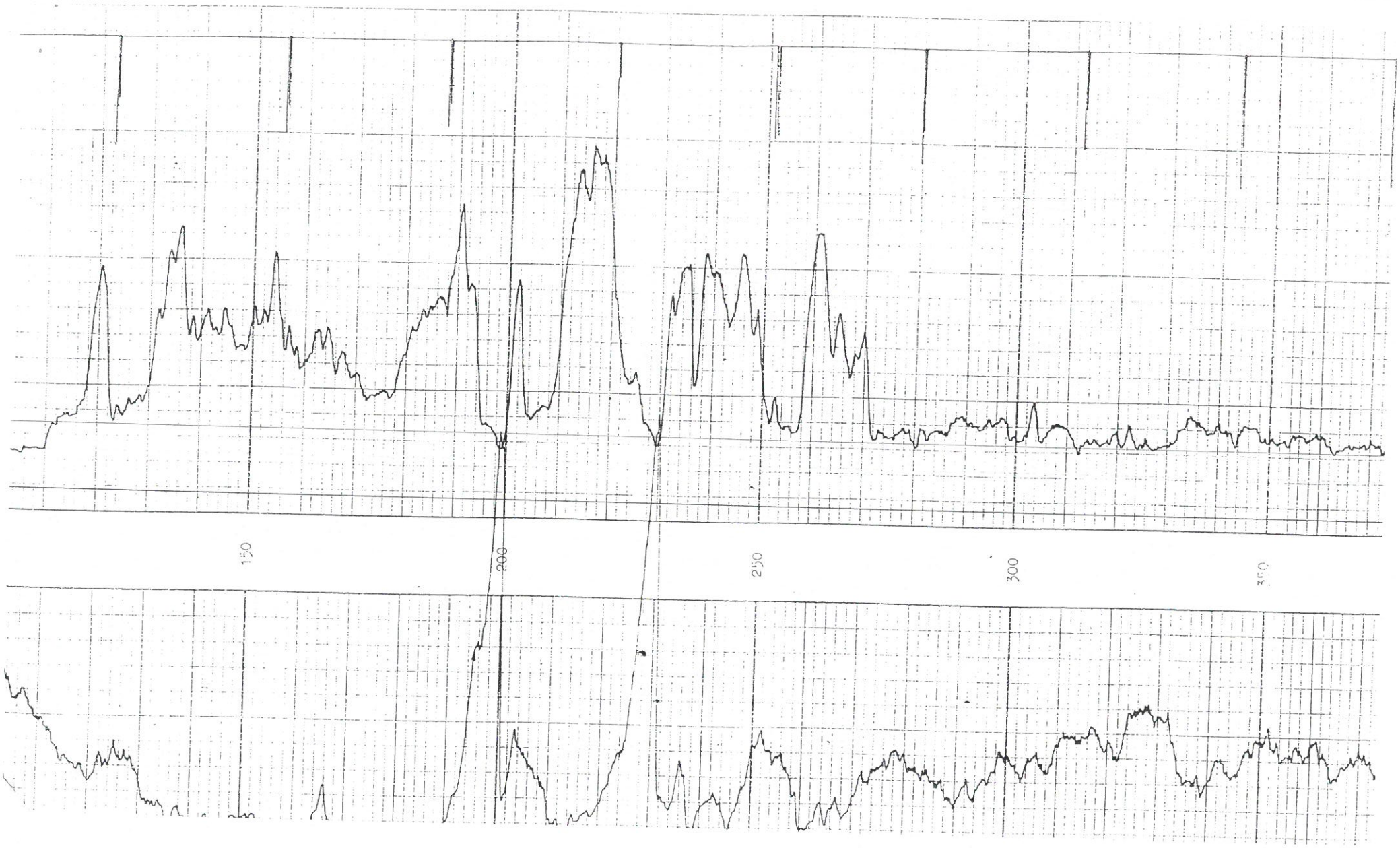
GAMMA RAY
API UNITS

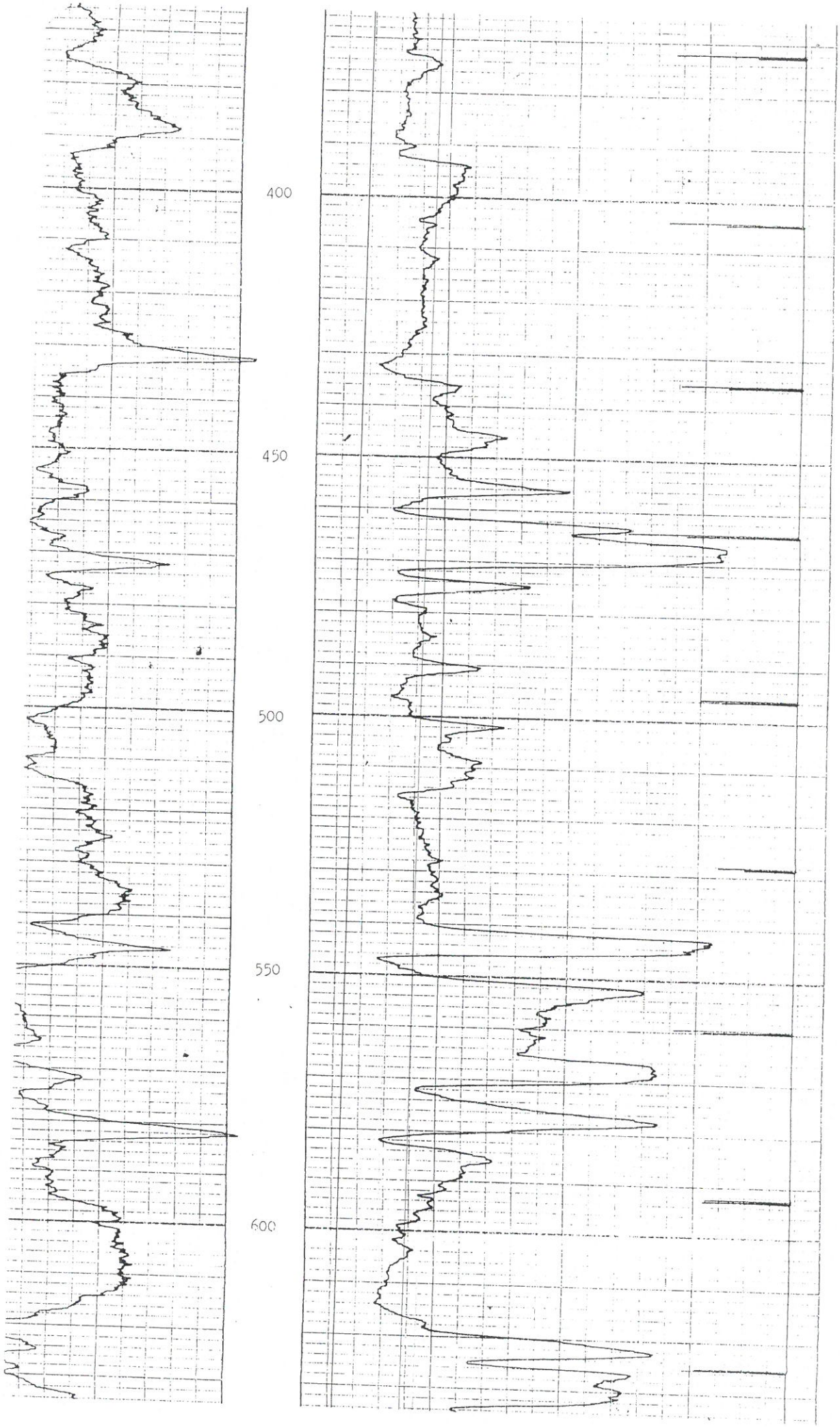
DEPTH AND CASING COLLARS

NEUTRON
API UNITS






150
200
250
300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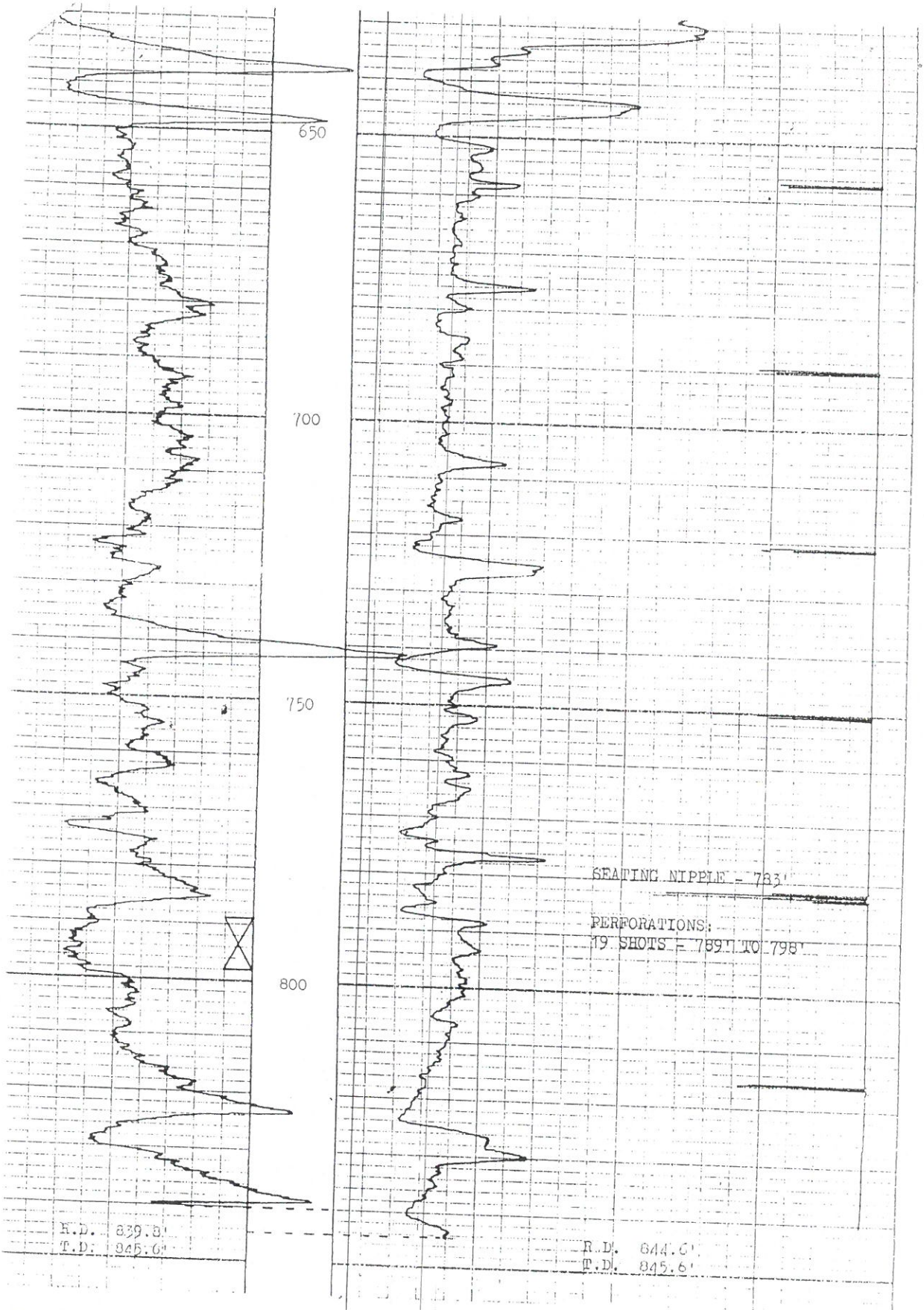


SSMAN NO. 108

G SKY OIL AND GAS

LEN COUNTY, KANSAS

VEMBER 2, 1982

CORNISH

WIRELINE SERVICES, INC.

PHONE 431-9308 | P.O. DRAWER H | CHANUTE, KANSAS

RADIOACTIVITY LOG

COMPANY	BIG SKY OIL AND GAS
WELL	LASSMAN NO. 2
FIELD	
COUNTY	ALLEN
STATE	KANSAS
LOCATION	SEC 8 TWP 26S RGE 19E
OTHER SERVICES	
PERMANENT DATUM	G.L.
LOG MEASURED FROM	G.L.
DRILLING MEASURED FROM	G.L.

DATE	11-15-82	11-15-82	11-15-82
RUN NO.	1 NW	1 NW	1 NW
TYPE LOG	GAMMA RAY	NEUTRON	PERFORATE
DEPTH-DRILLER			
DEPTH-LOGGER	835.8'	835.8'	
BOTTOM LOGGED INTERVAL	830.0'	834.8'	
TOP LOGGED INTERVAL	190.0'	195.0'	
TYPE FLUID IN HOLE	WATER	WATER	WATER
SALINITY PPM CL			
DENSITY			
LEVEL	FULL	FULL	FULL
MAX. REC. TEMP., DEG F			
OPERATING RIG TIME			
RECORDED BY	UDEN, DIRK	UDEN, DIRK	UDEN, DIRK
WITNESSED BY	COMCOWICH, P.	COMCOWICH, P.	COMCOWICH, P.

BORE HOLE RECORD			CASING RECORD			
BIT	FROM	TO	SIZE	WGT	FROM	TO
			2⅞"		0	T.D.

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO	1 NW	RUN NO	1 NW
TOOL MODEL NO	9205	LOG TYPE	NEU/NEU
DIAMETER	1-11/16"	TOOL MODEL NO	9205
DETECTOR MODEL NO	95SC	DIAMETER	1-11/16"
TYPE	SCINT.	DETECTOR MODEL NO	95HE
LENGTH	1"X4"	TYPE	He_3
DISTANCE TO N. SOURCE	8.5'	LENGTH	1"X6"
		SOURCE MODEL NO	AC
GENERAL		SERIAL NO	MRC415
HOIST TRUCK NO	104	SPACING	13"
INSTRUMENT TRUCK NO	104	TYPE	Am/Be
TOOL SERIAL NO	10	STRENGTH	$6.7X10^6$

LOGGING DATA

RUN NO	DEPTHS FROM	DEPTHS TO	SPEED FT/MIN	GR T.C. SEC	GR SENS SETTINGS	GR ZERO DIV L OR R	API G.R. UNITS PER LOG DIV	NEUTRON T.C. SEC	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV L OR R	NEUTRON API UNITS PER LOG DIV
1	834.8'	190.0'	25	2.5	10-.0	2L	20	2.0	0-.35	4L	

REFERENCE LITERATURE

REMARKS

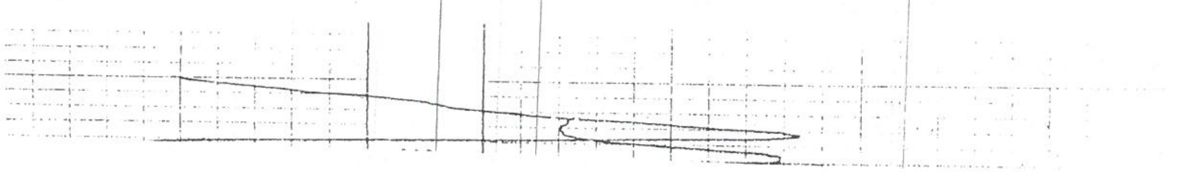
GAMMA RAY

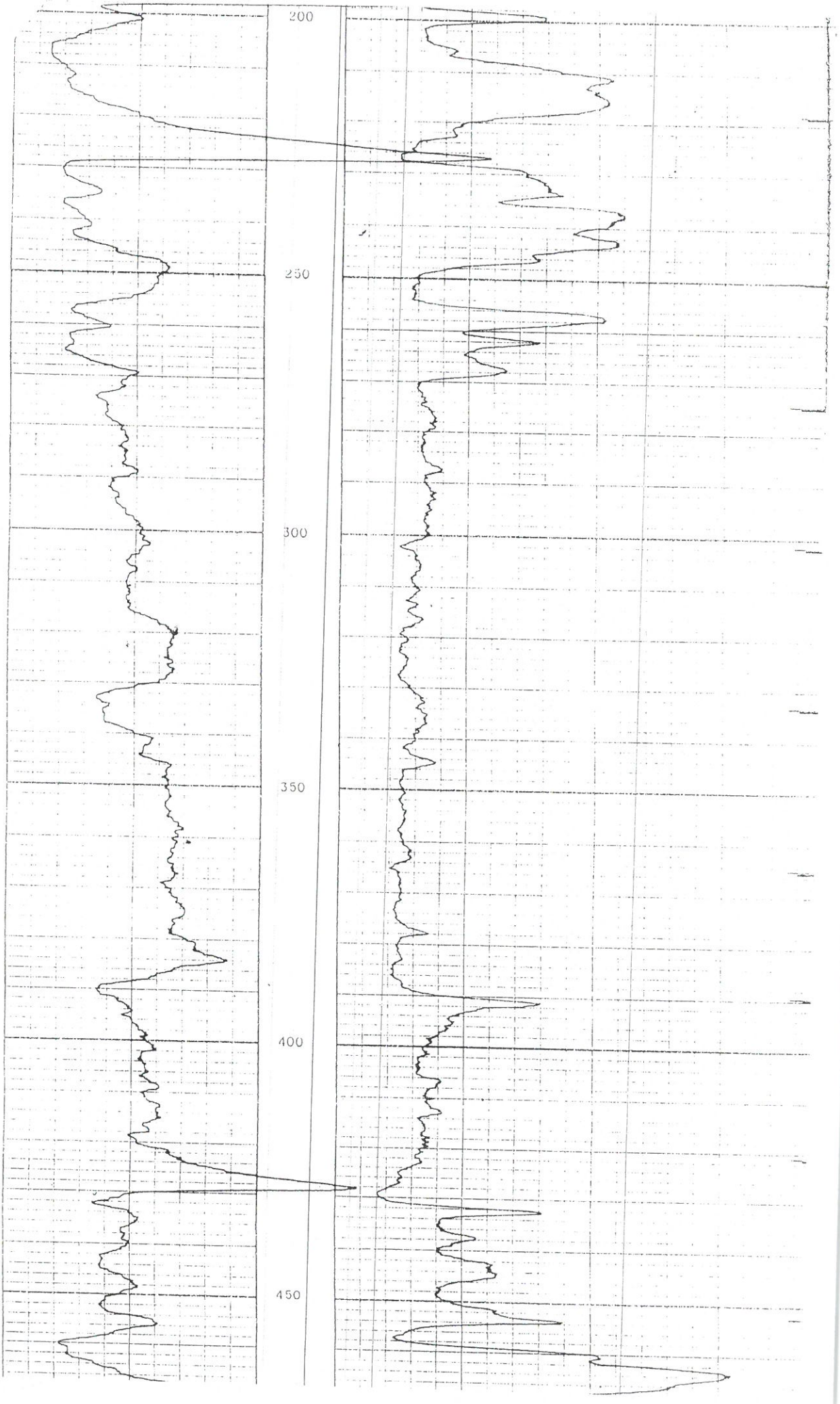
API UNITS

DEPTH AND CASING COLLARS

NEUTRON

API UNITS

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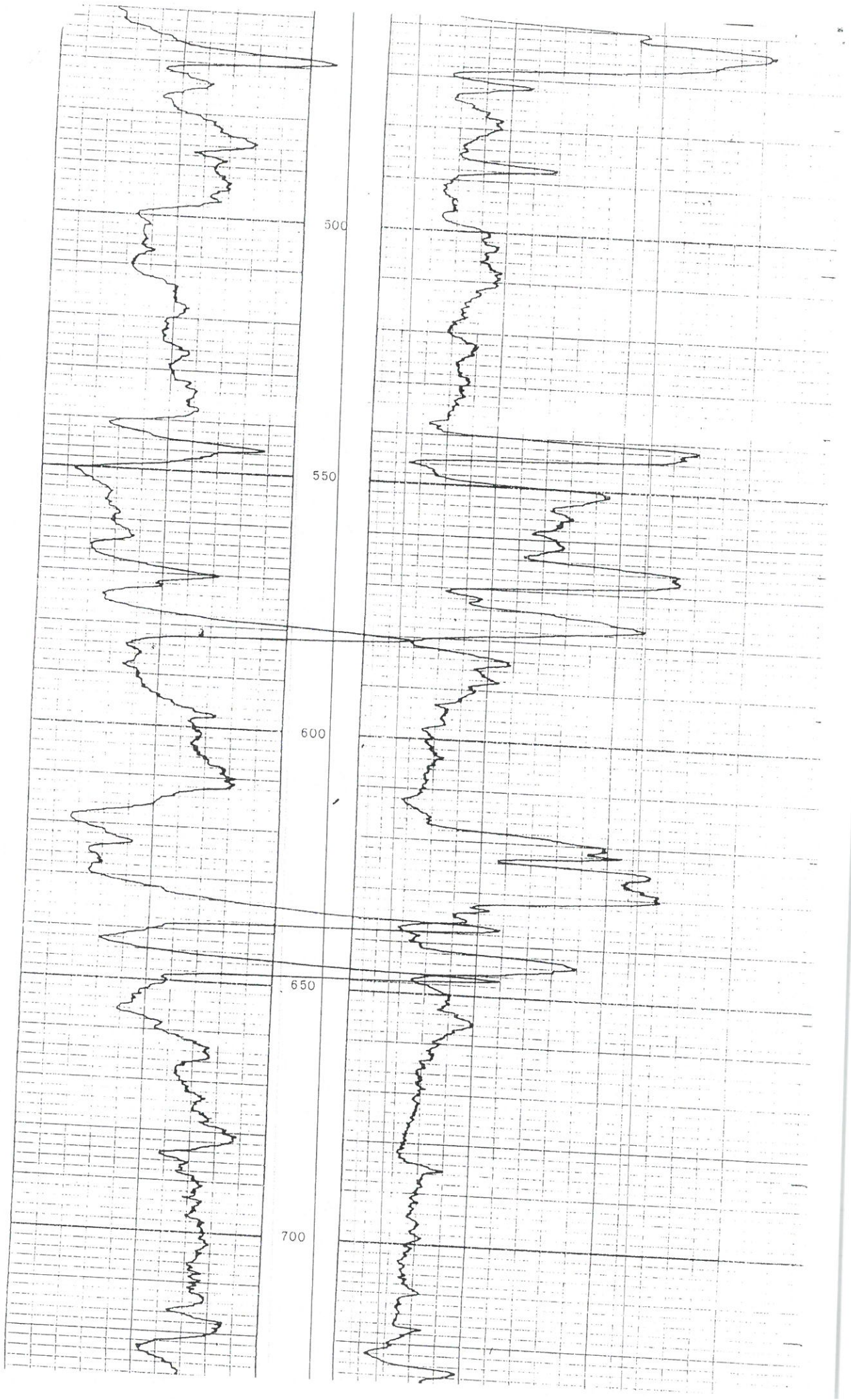
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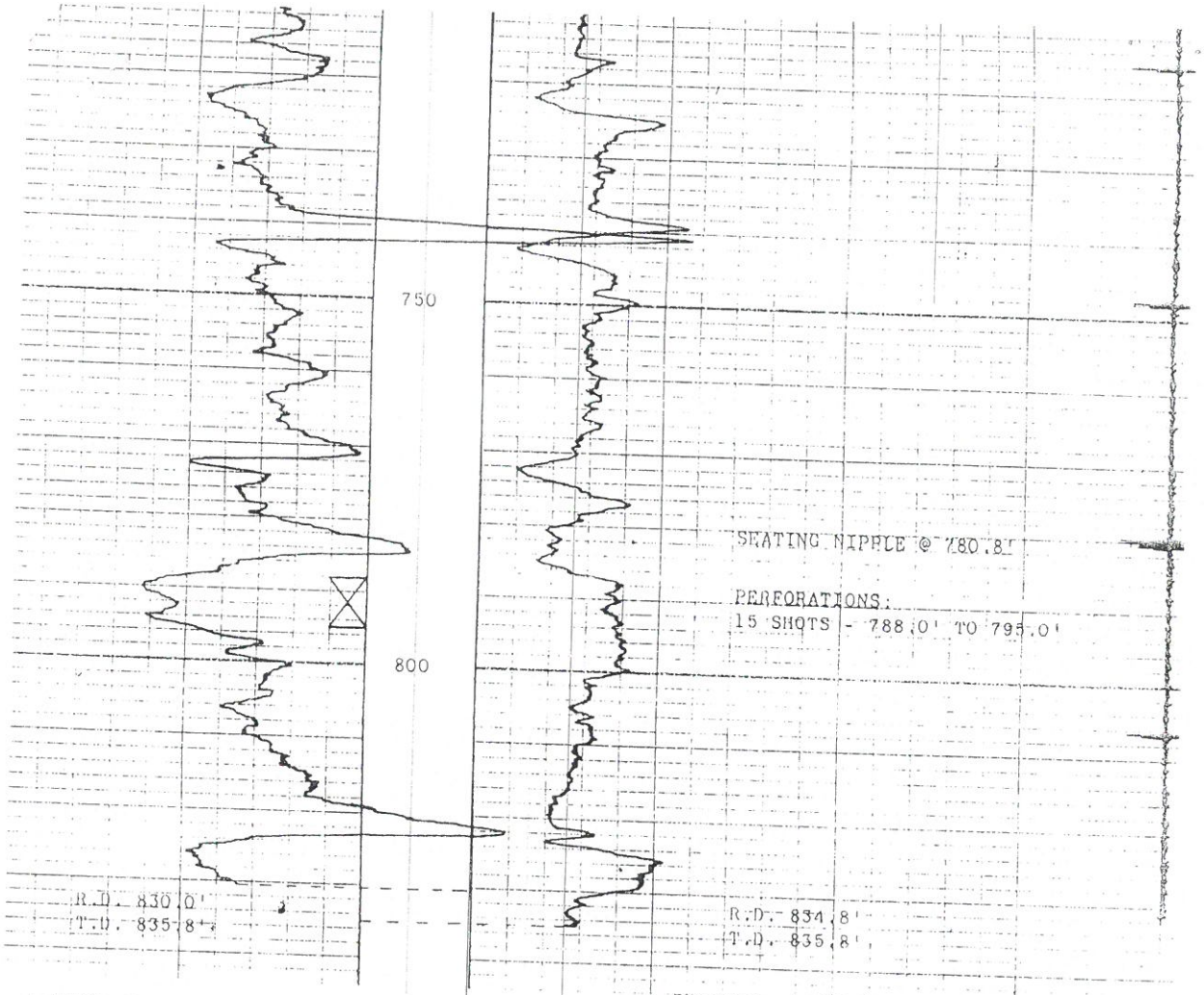


LASSMAN NO. 2

BIG SKY OIL AND GAS

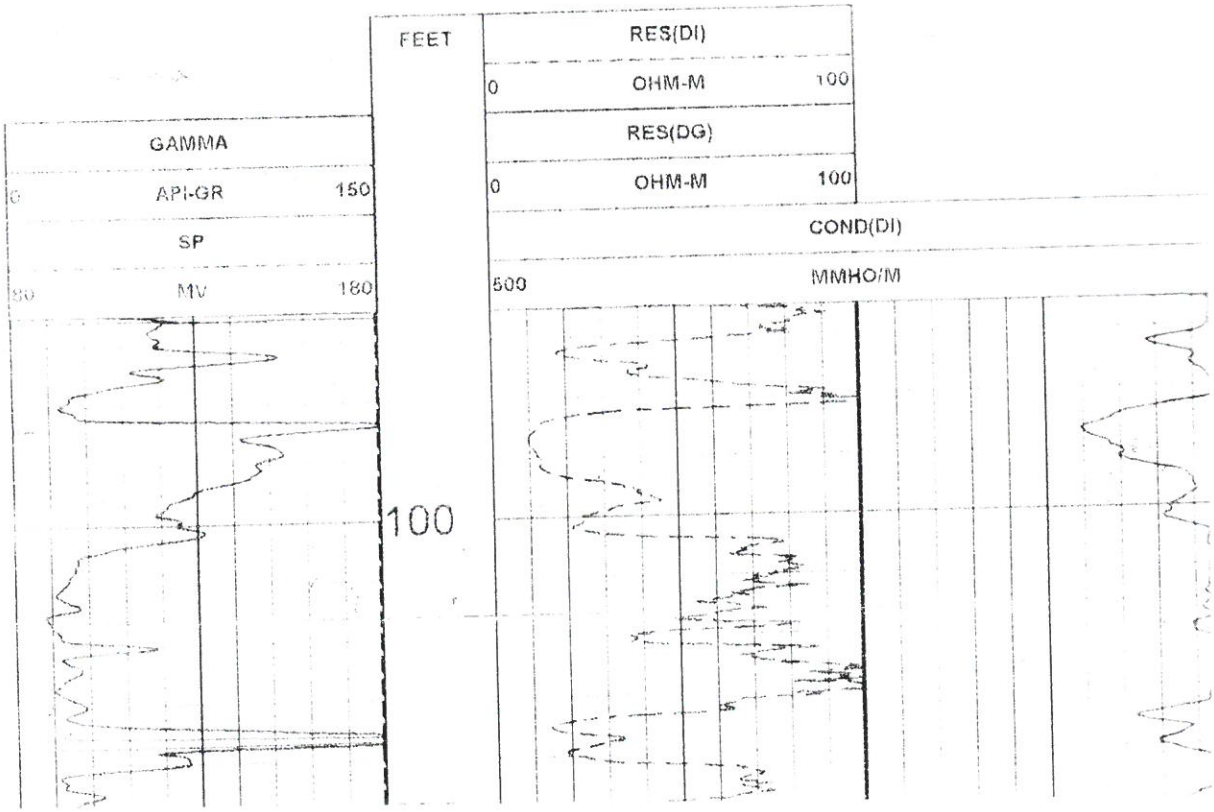
[illegible] KANSAS

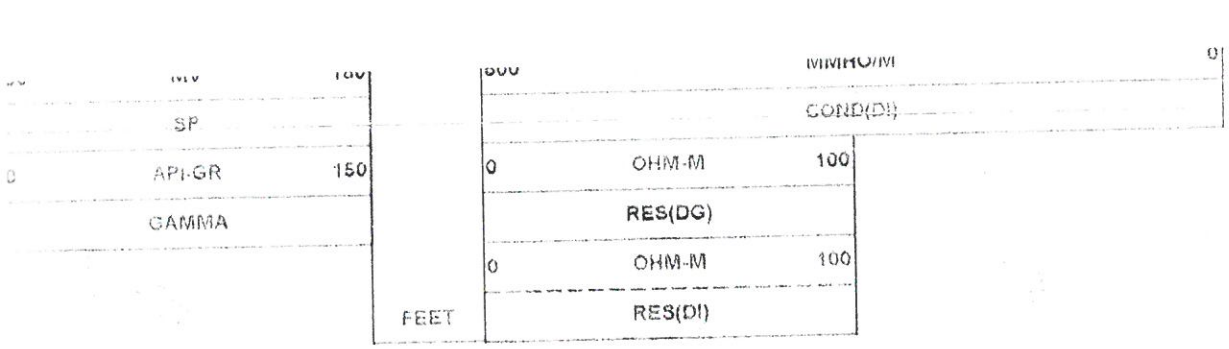
ORNISH

DUAL INDUCTION
LOG
LASSMAN #122

2 INCH LOG, CONDUCTIVITY LASSMAN #122 04/30/08

LOG PARAMETERS





2 INCH LOG, CONDUCTIVITY LASSMAN #122 04/30/08

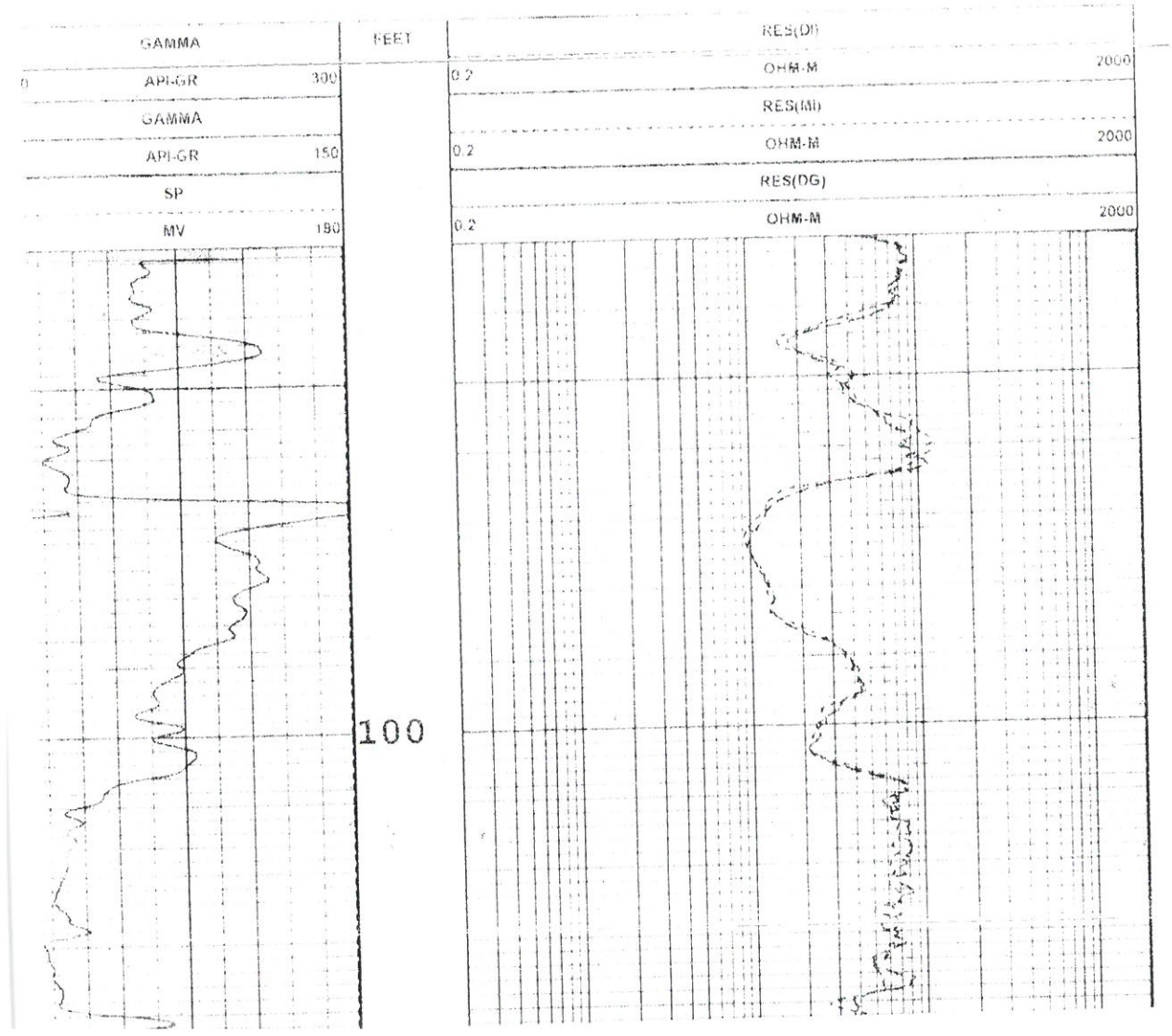
LOG PARAMETERS

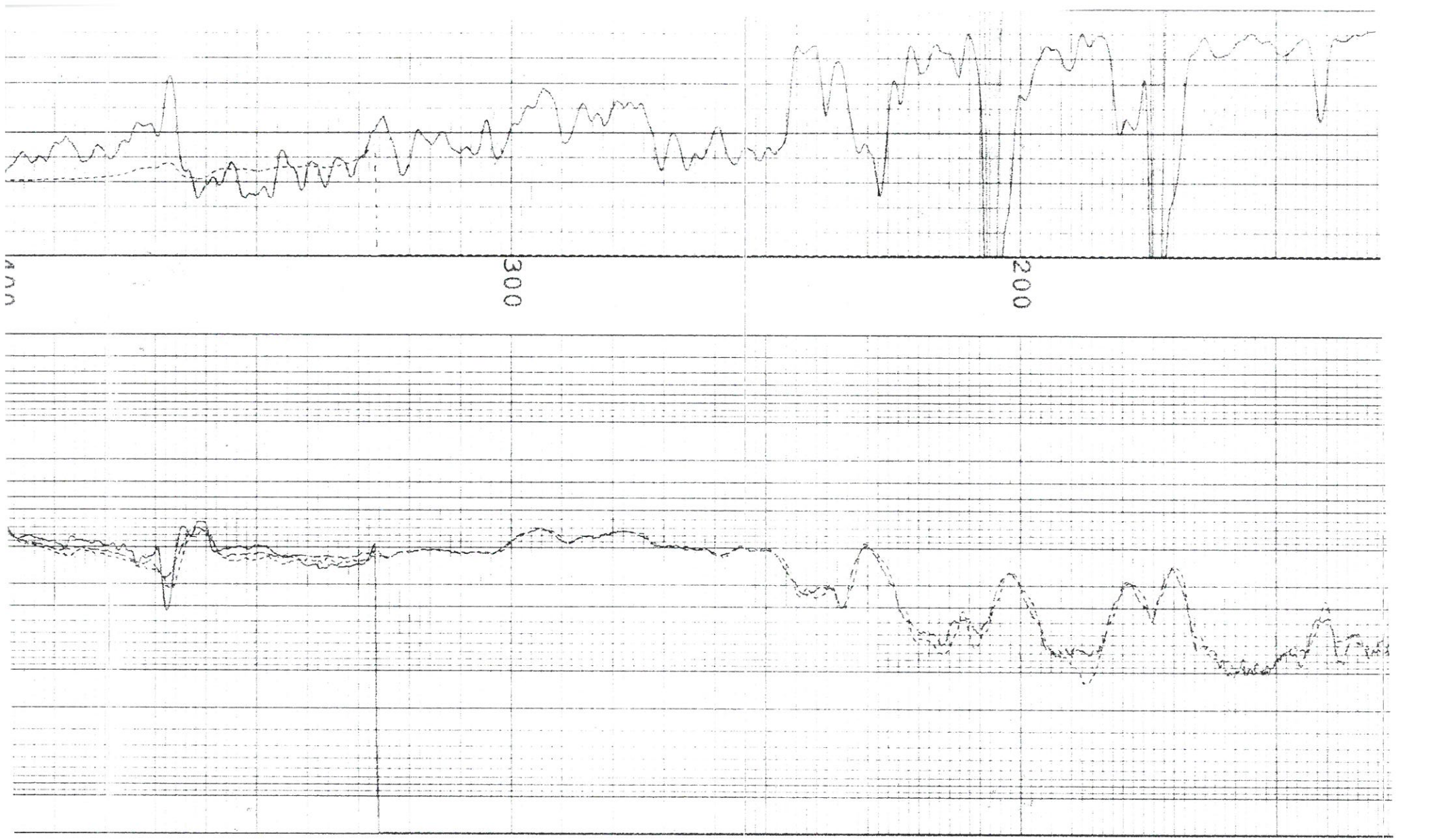
MATRIX DENSITY 2.71 NEUTRON MATRIX LIMESTONE MATRIX DELTA T 49
MAGNETIC DECL 0 ELECT CUTOFF 3777 BIT SIZE 6.75
PRESENTATION NAME/DATE CWS CHANUTE DIL COND 2.0 07/20/2007 VERSION 3.64F1

5 INCH LOG, DUAL INDUCTION LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY 2.71 NEUTRON MATRIX LIMESTONE MATRIX DELTA T 49
MAGNETIC DECL 0 ELECT CUTOFF 3777 BIT SIZE 6.75
PRESENTATION NAME/DATE CWS CHANUTE DIL 5.0 08/28/2006 VERSION 3.64F1

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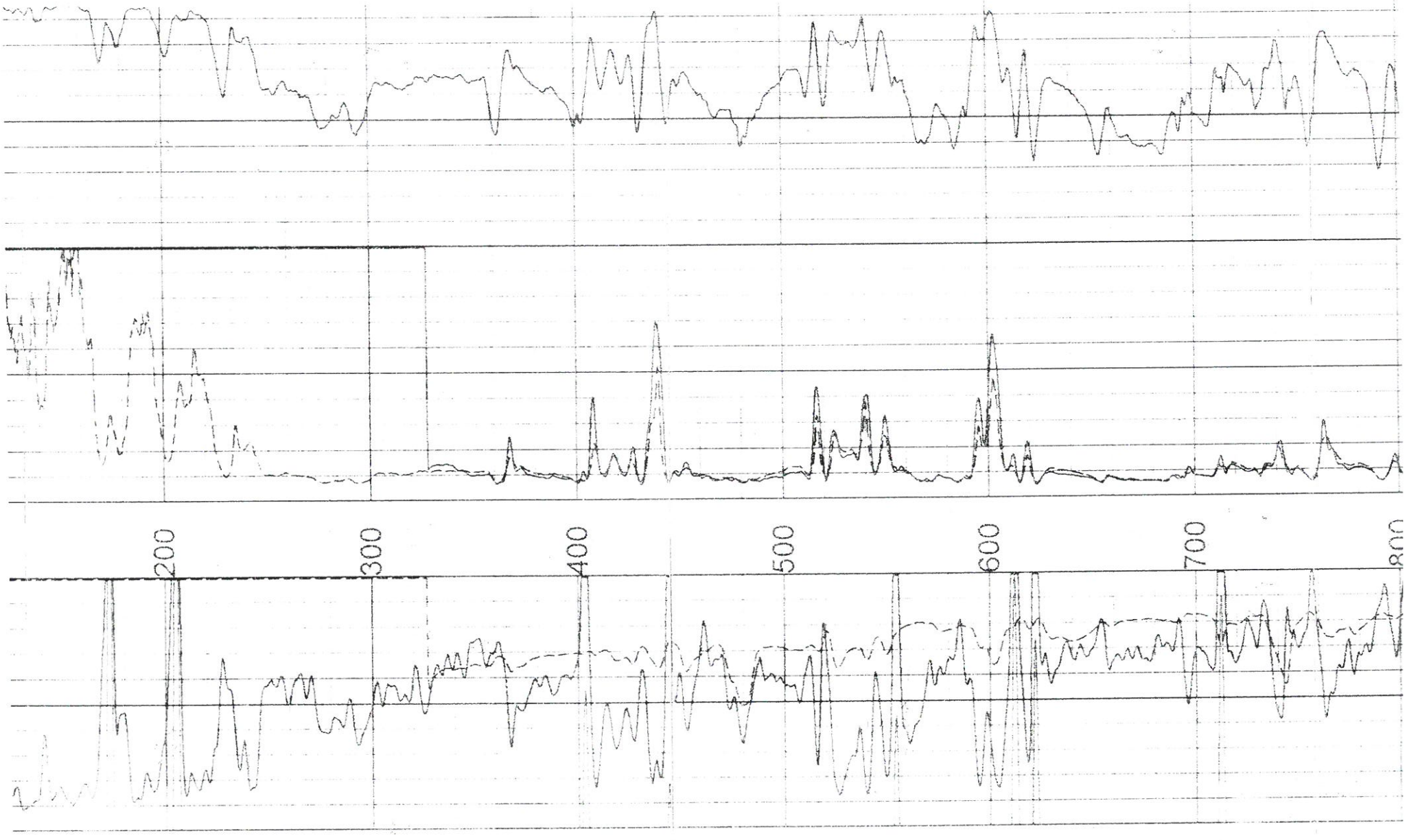
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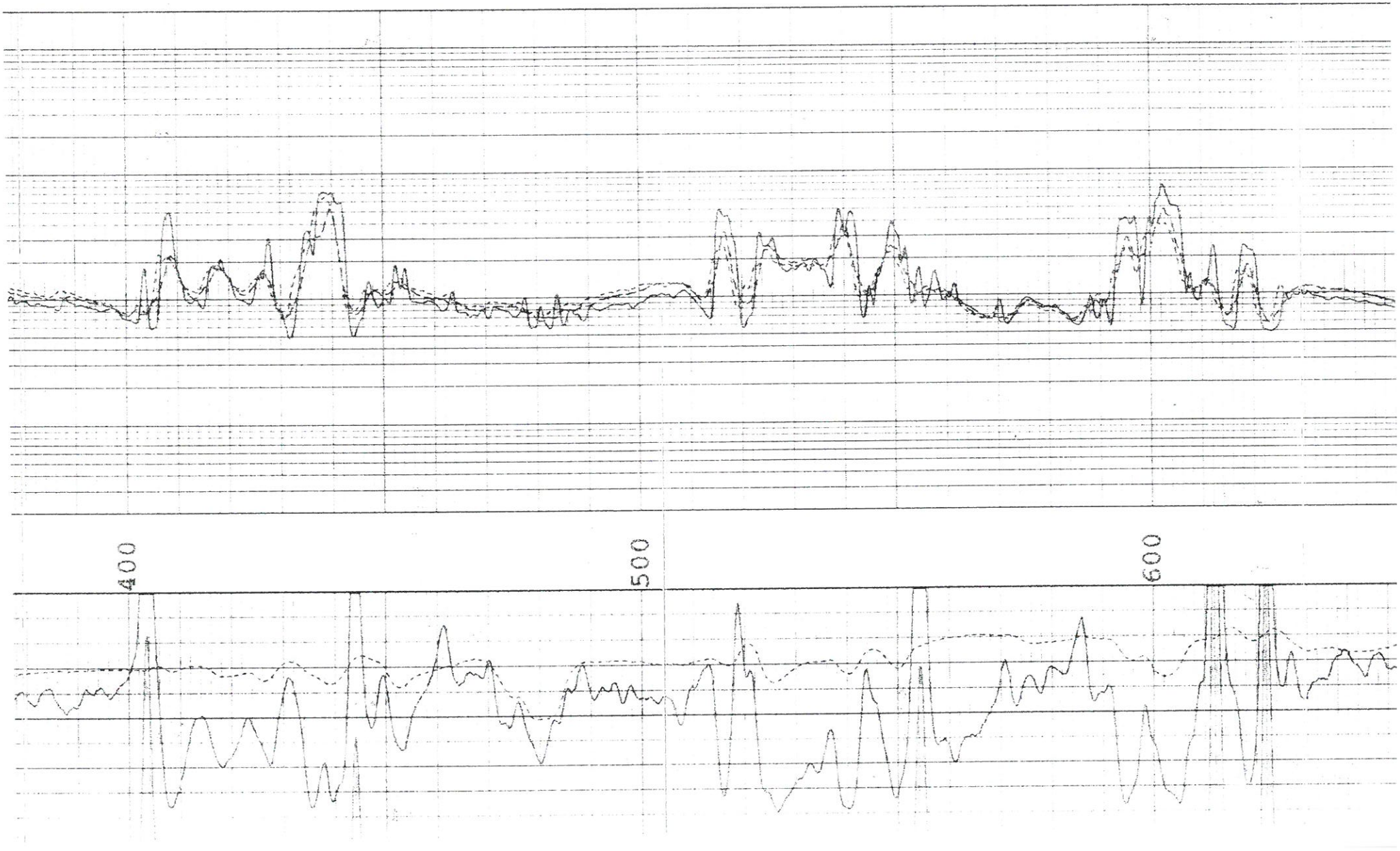
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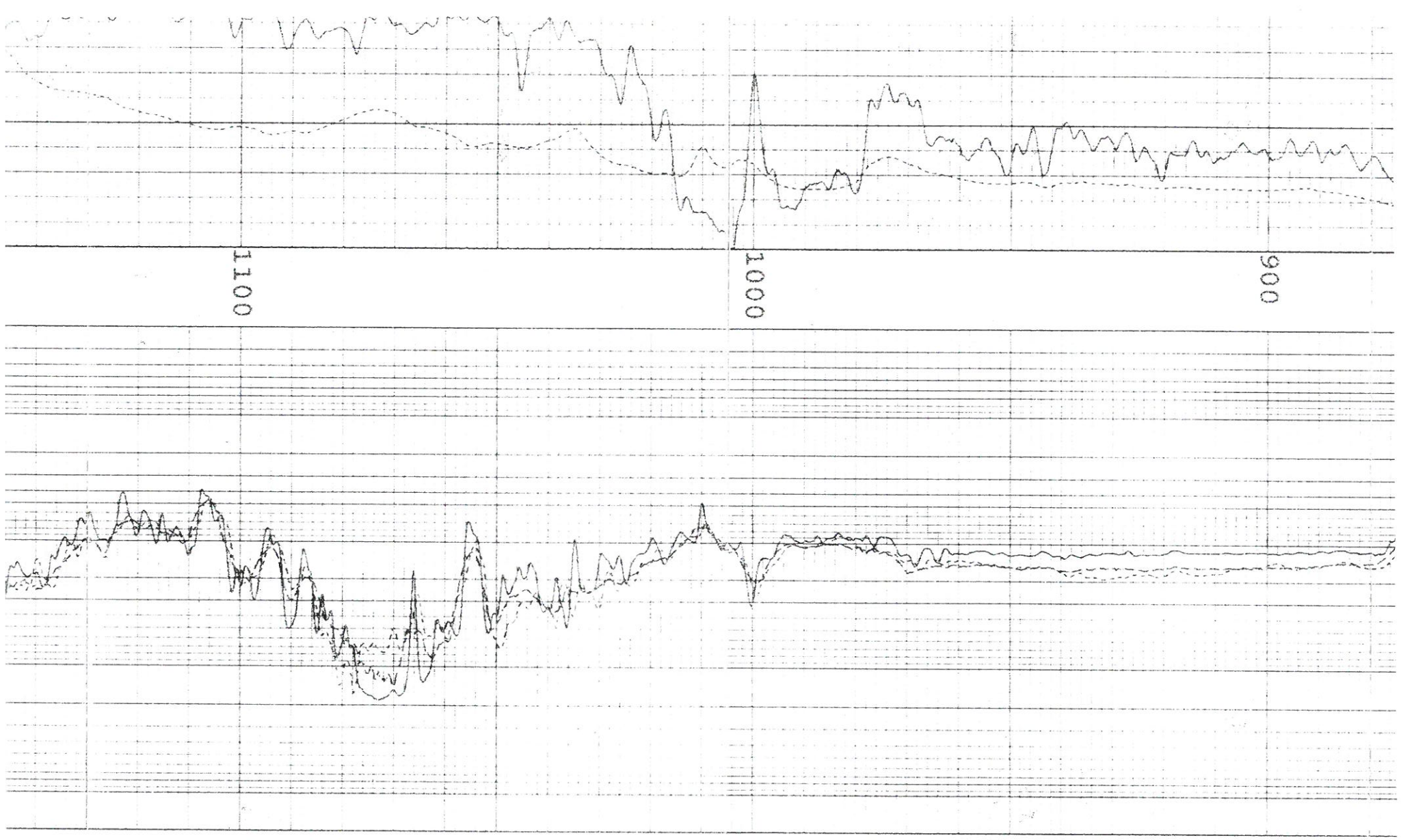
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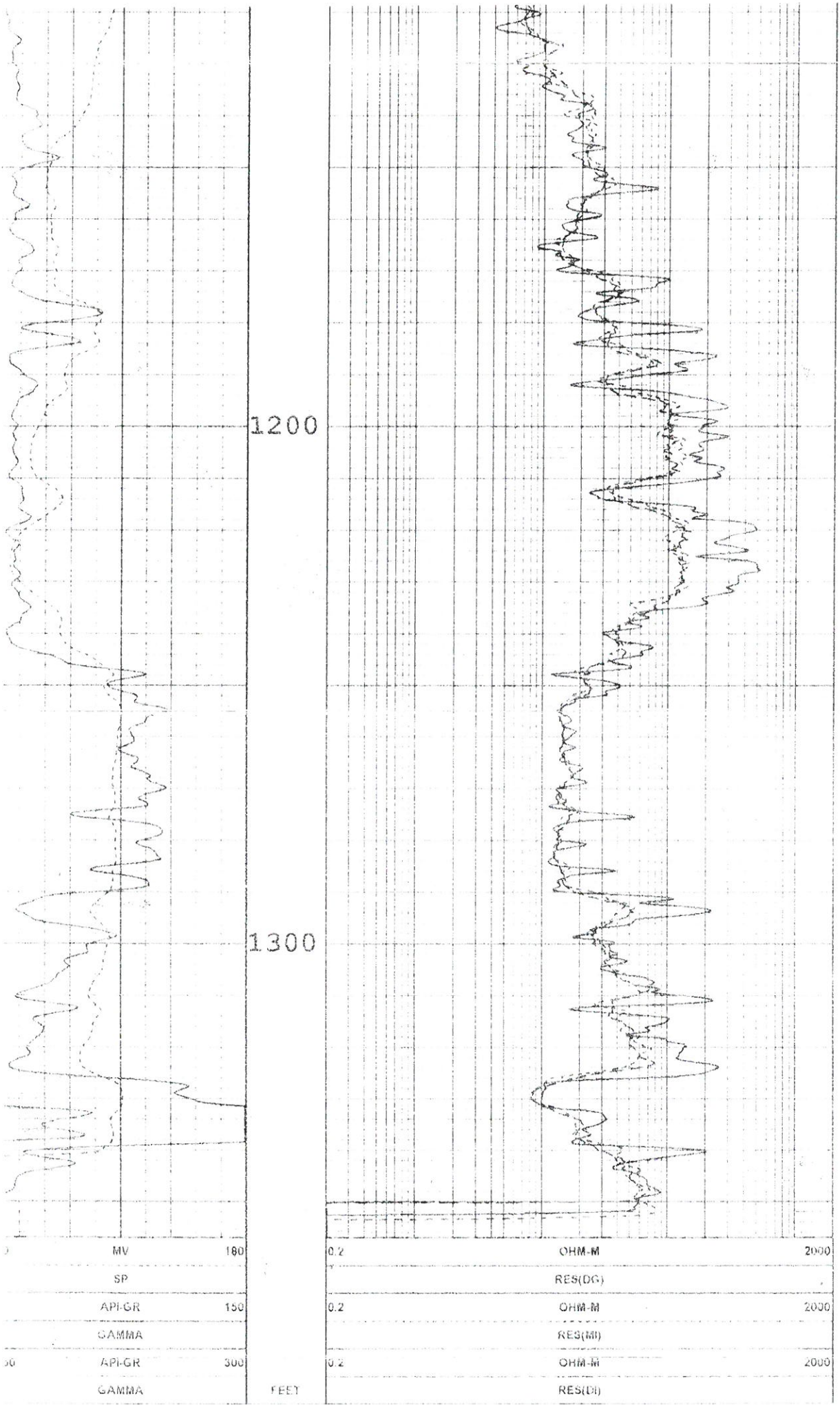
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1300
MV
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SP
API-GR
150
GAMMA
API-GR
300
GAMMA
FEET
0.2
OHM-M
2000
RES(DG)
0.2
OHM-M
2000
RES(MI)
0.2
OHM-M
2000
RES(DI)

SP			RES(DG)		
API-GR	150	0.2	OHM-M	2000	
GAMMA			RES(MI)		
API-GR	300	0.2	OHM-M	2000	
GAMMA		FEET	RES(DI)		

5 INCH LOG, DUAL INDUCTION LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY 2.71	NEUTRON MATRIX LIMESTONE	MATRIX DELTA T 49
MAGNETIC DECL 0	ELECT CUTOFF 3277	BIT SIZE 6.75
PRESENTATION NAME/DATE: CWS GRANITE DIL 5.0 06/28/2006		VERSION 3.64E1

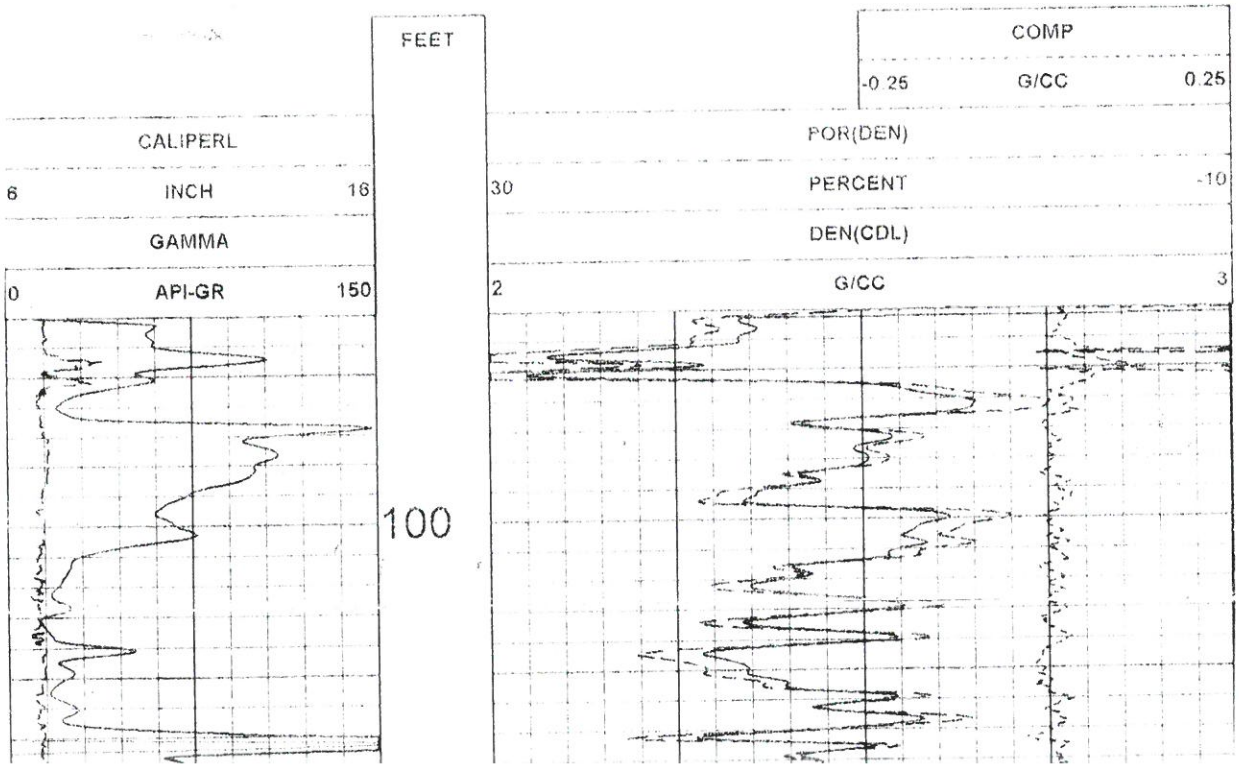
ORVISH

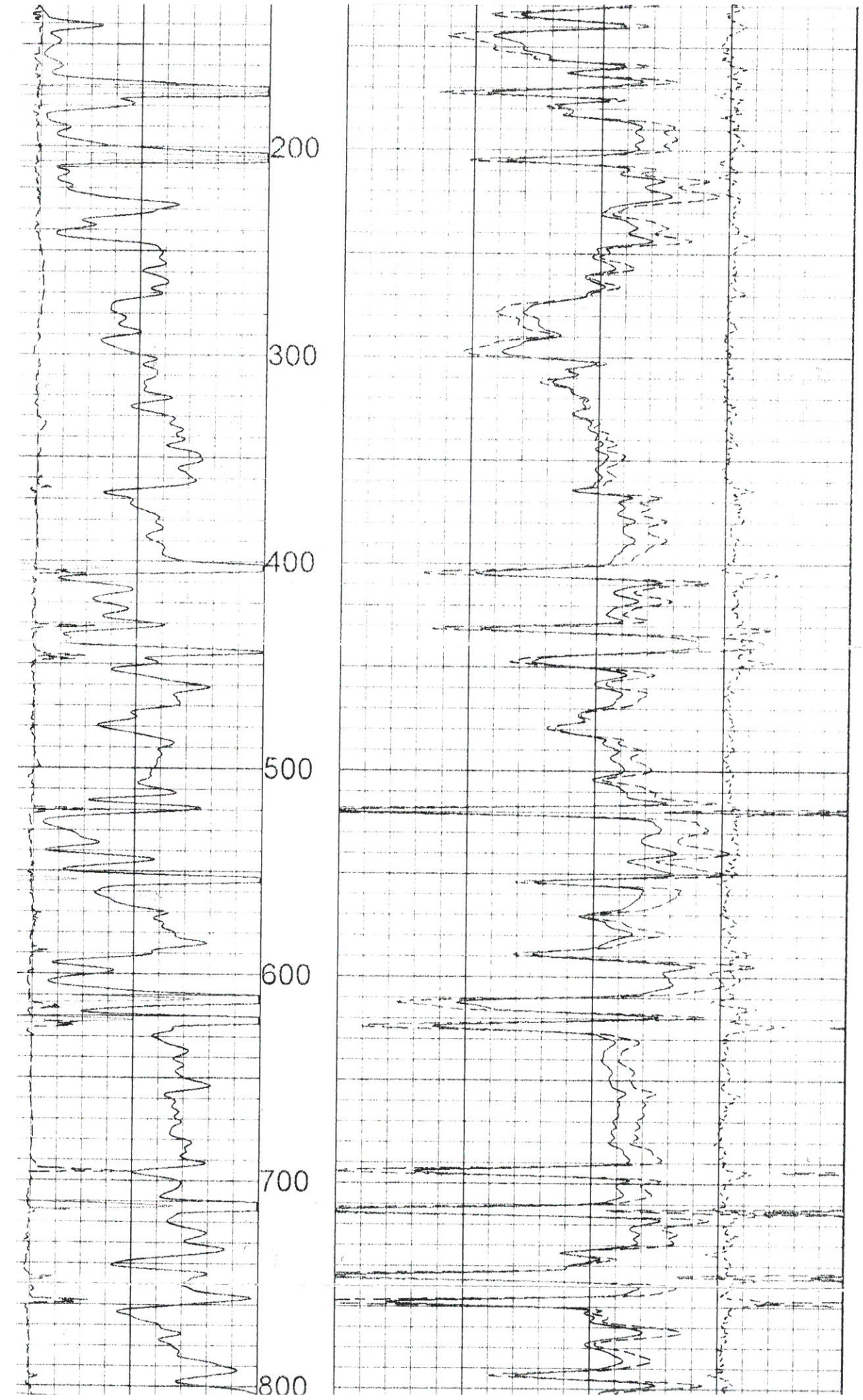
DENSITY NEUTRON LOGS
HIGH SOLUTION DENSITY
LASSMAN #122

2 INCH LOG, DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY 2.71 | NEUTRON MATRIX LIMESTONE | MATRIX DELTA T 49
MAGNETIC DECL 0 | ELEC F CUTOFF .3777 | BIT SIZE 6.75
PRESENTATION NAME/DATE CWS CHANUTE NDL INTRO 2 0 03/08/2005 | VERSION 5.04F1

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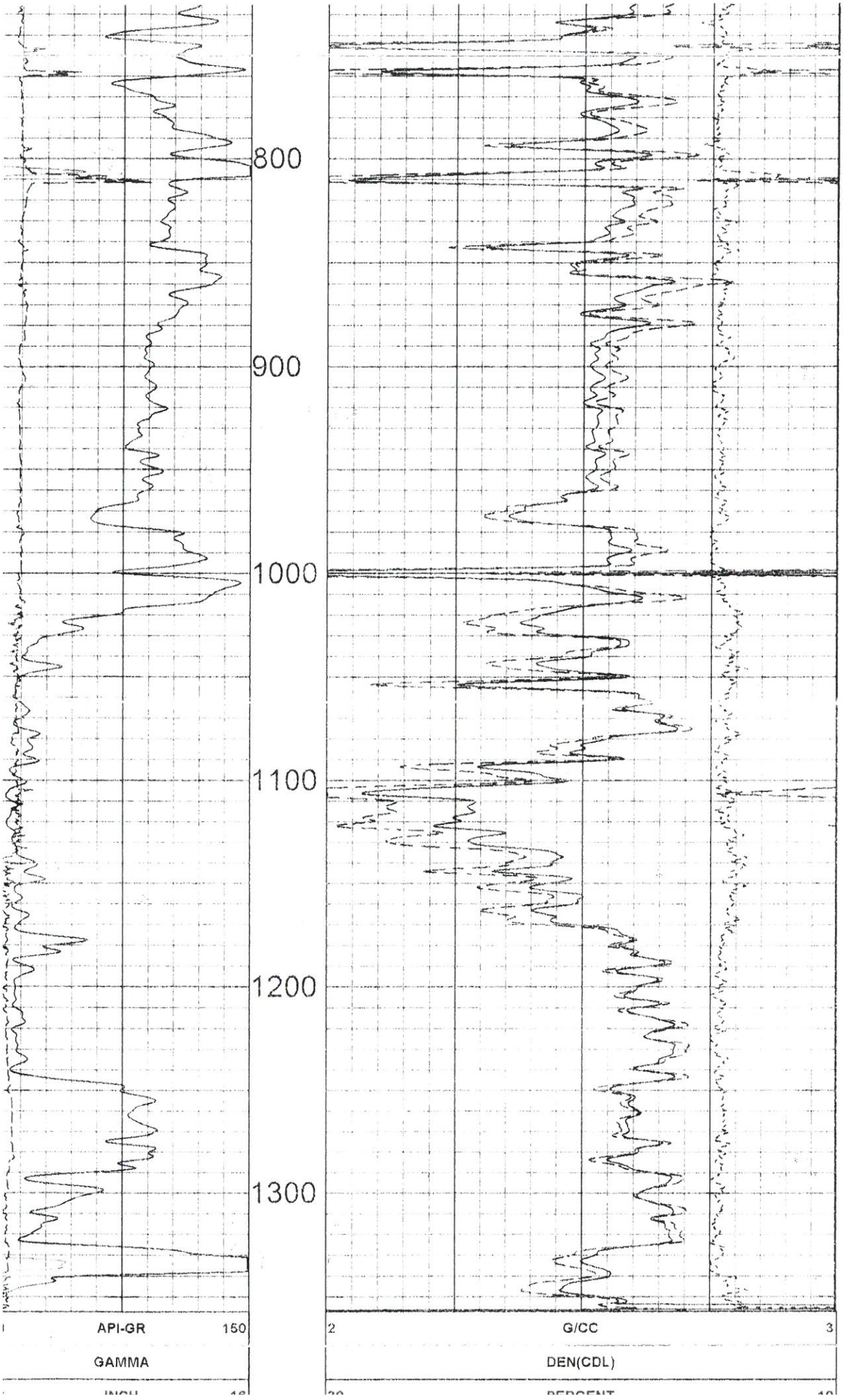

800
900
1000
1100
1200
1300
API-GR
150
GAMMA
2
G/CC
3
DEN(CDL)

API-GR	150		2	G/CC	3
GAMMA				DEN(CDL)	
INCH	16		30	PERCENT	-10
CALIPERL				POR(DEN)	
			-0.25	G/CC	0.25
		FEET		COMP	

2 INCH LOG, DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

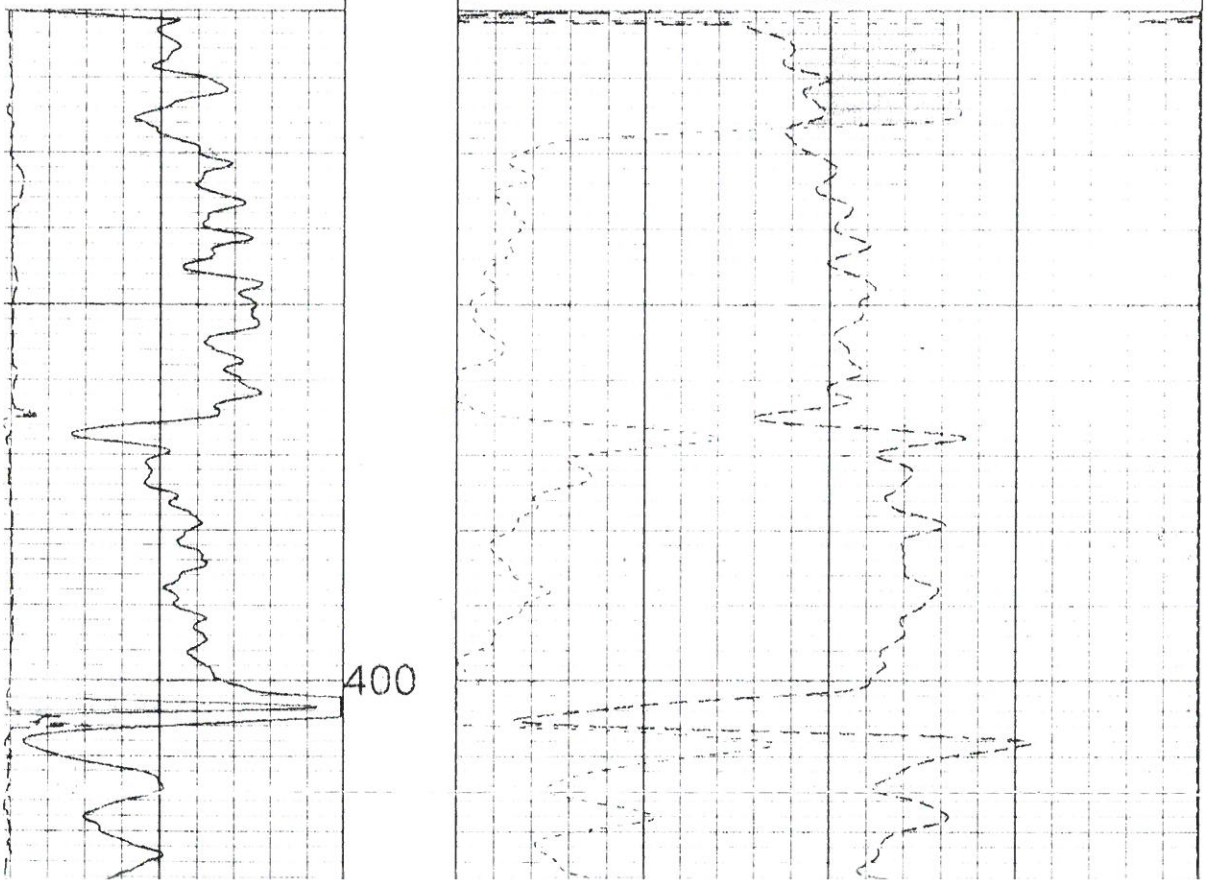
MATRIX DENSITY : 2.71	NEUTRON MATRIX : LIMESTONE	MATRIX DELTA T : 49
MAGNETIC DECL : 0	ELECT. CUTOFF : 3777	BIT SIZE : 6.75
PRESENTATION NAME/DATE =	CWS CHANUTE NDL INTRO 2.0 02/09/2006	VERSION = 3.64F1

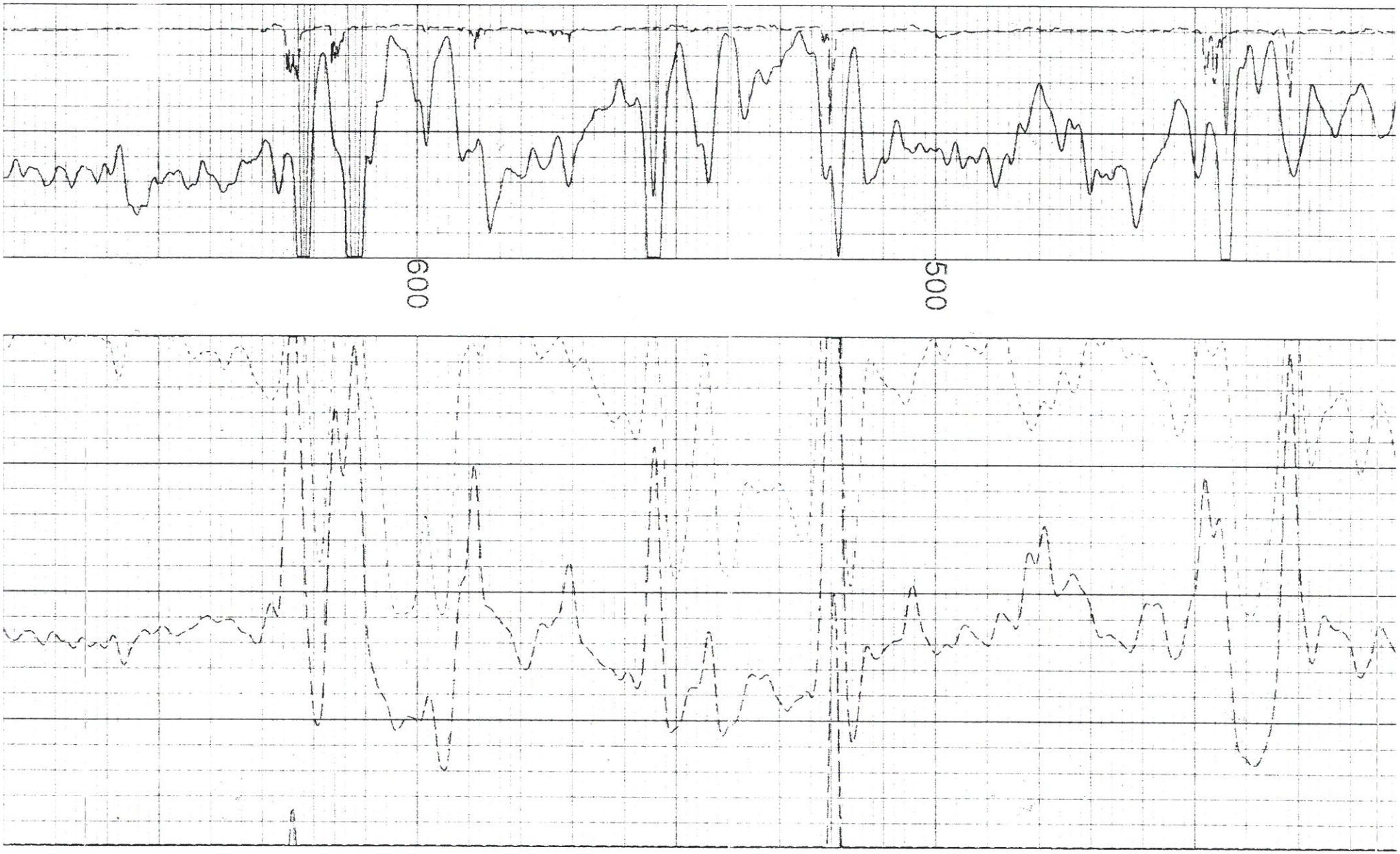
5 INCH LOG, POROSITIES LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY : 2.71	NEUTRON MATRIX : LIMESTONE	MATRIX DELTA T : 49
MAGNETIC DECL : 0	ELECT. CUTOFF : 3777	BIT SIZE : 6.75
PRESENTATION NAME/DATE =	CWS CHANUTE NDL POR 5.0 04/04/2008	VERSION = 3.64F1

CALIPERL		FEET		POR(NEU)	
INCH	16		30	PERCENT	-10
GAMMA				POR(DEN)	
API-GR	150		30	PERCENT	-10

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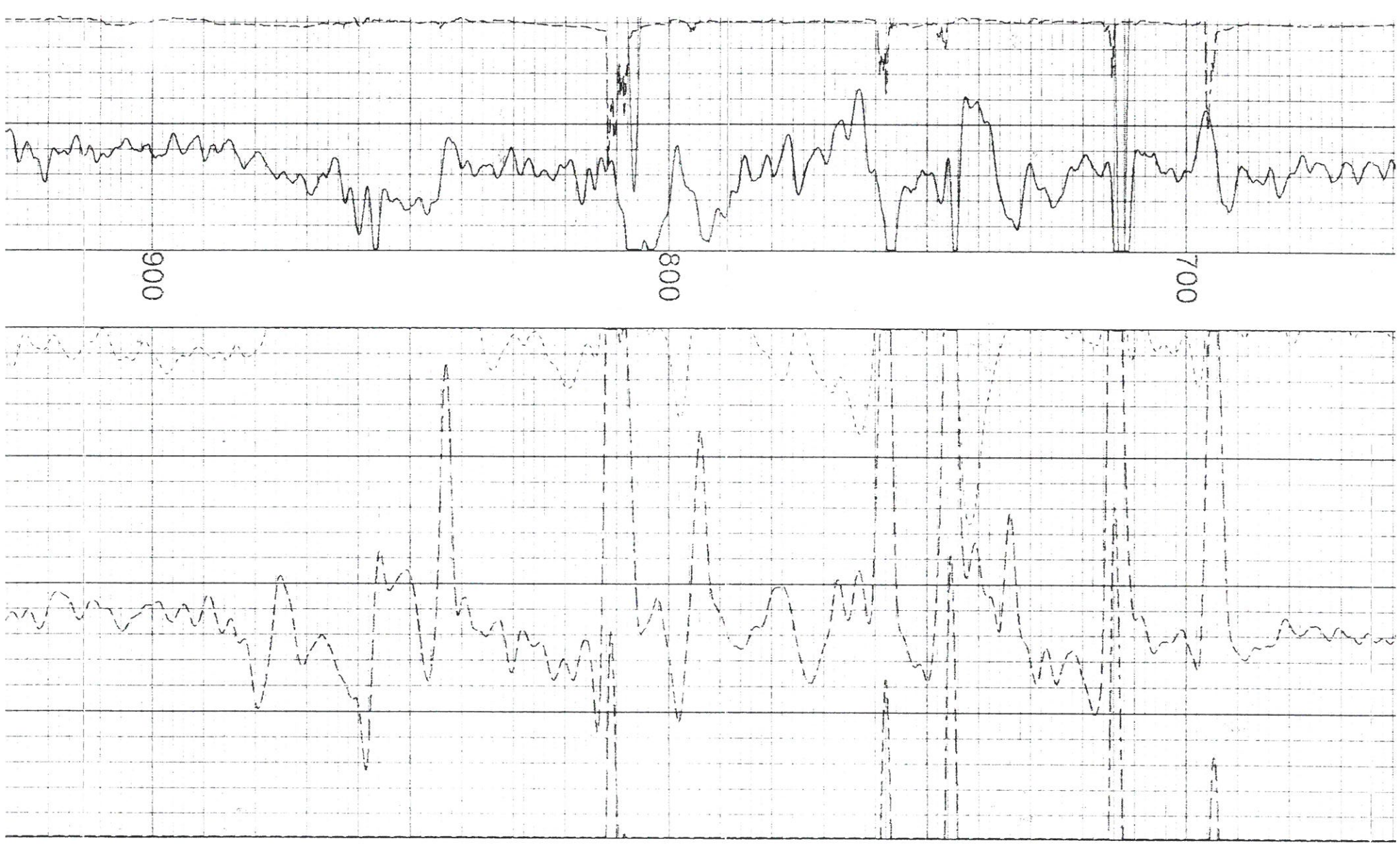
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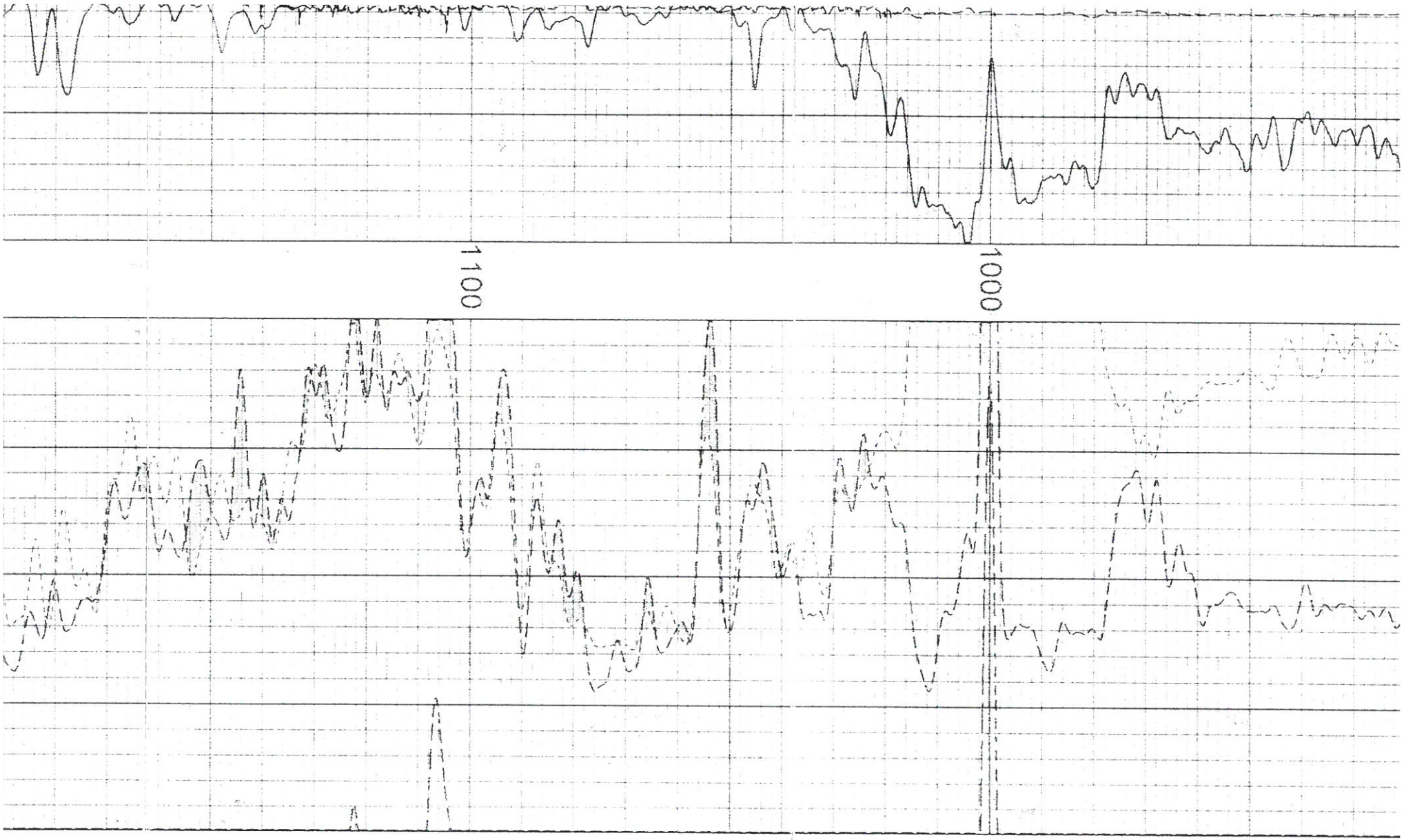
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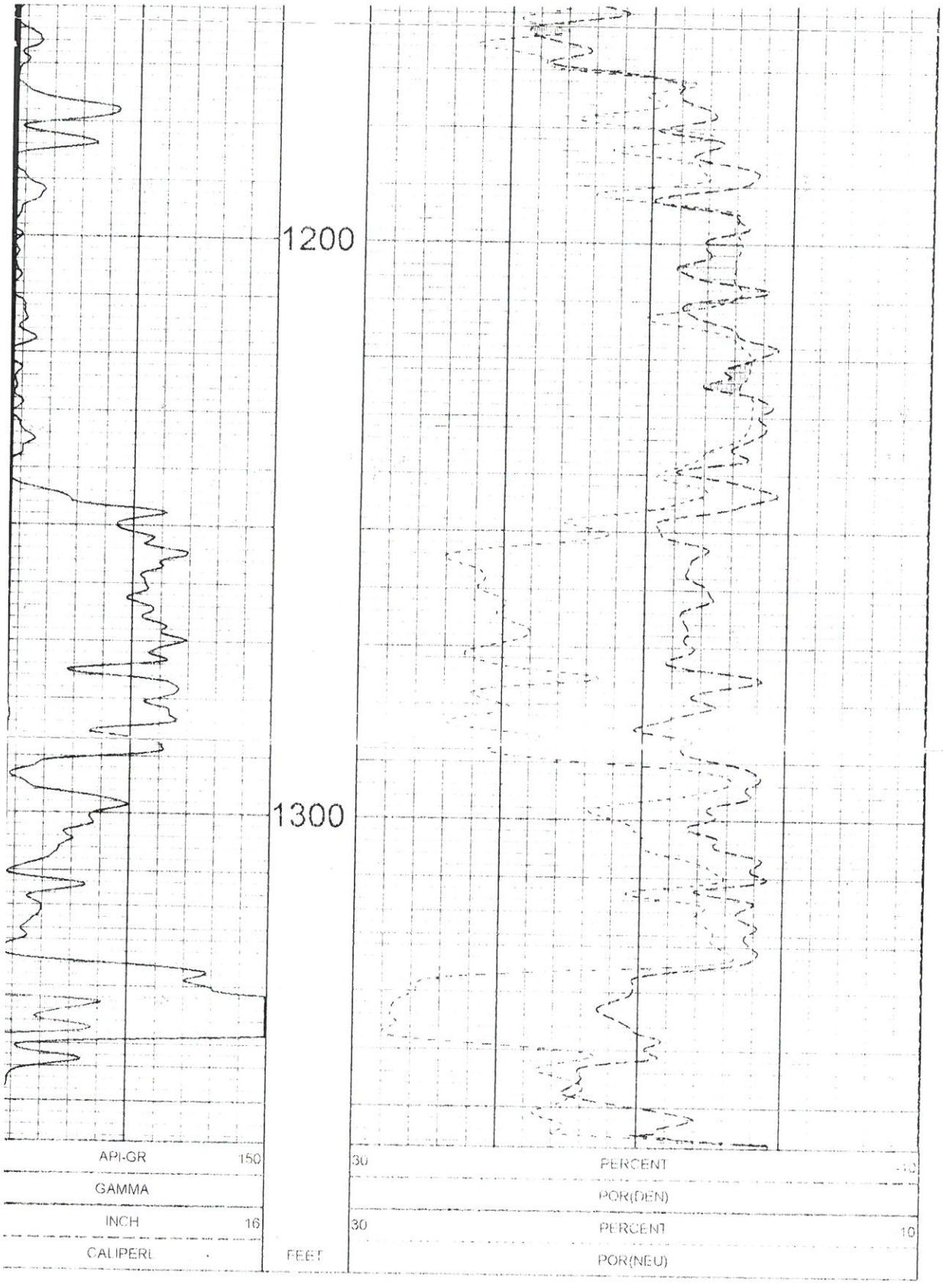

5 INCH LOG, POROSITIES LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY 2.71	NEUTRON MATRIX LIMESTONE	MATRIX DELTA T 49
MAGNETIC DECL 0	EFFECT CUTOFF .3777	BIT SIZE 6.75
PRESENTATION NAME/DATE = CWS CHANUTE NDL POR 5.0 04/04/2008		VERSION = 3.64F1

MATRIX DENSITY = 2.71 | NEUTRON MATRIX = LIMESTONE | MATRIX DELTA T = 49
MAGNETIC DECL = 0 | ELECT CUTOFF = 3777 | BIT SIZE = 6.75
PRESENTATION NAME/DATE = CWS CHANUTE NDL POR 5.0 04/04/2008 | VERSION = 3.64F1

5 INCH LOG, DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY = 2.71 | NEUTRON MATRIX = LIMESTONE | MATRIX DELTA T = 49
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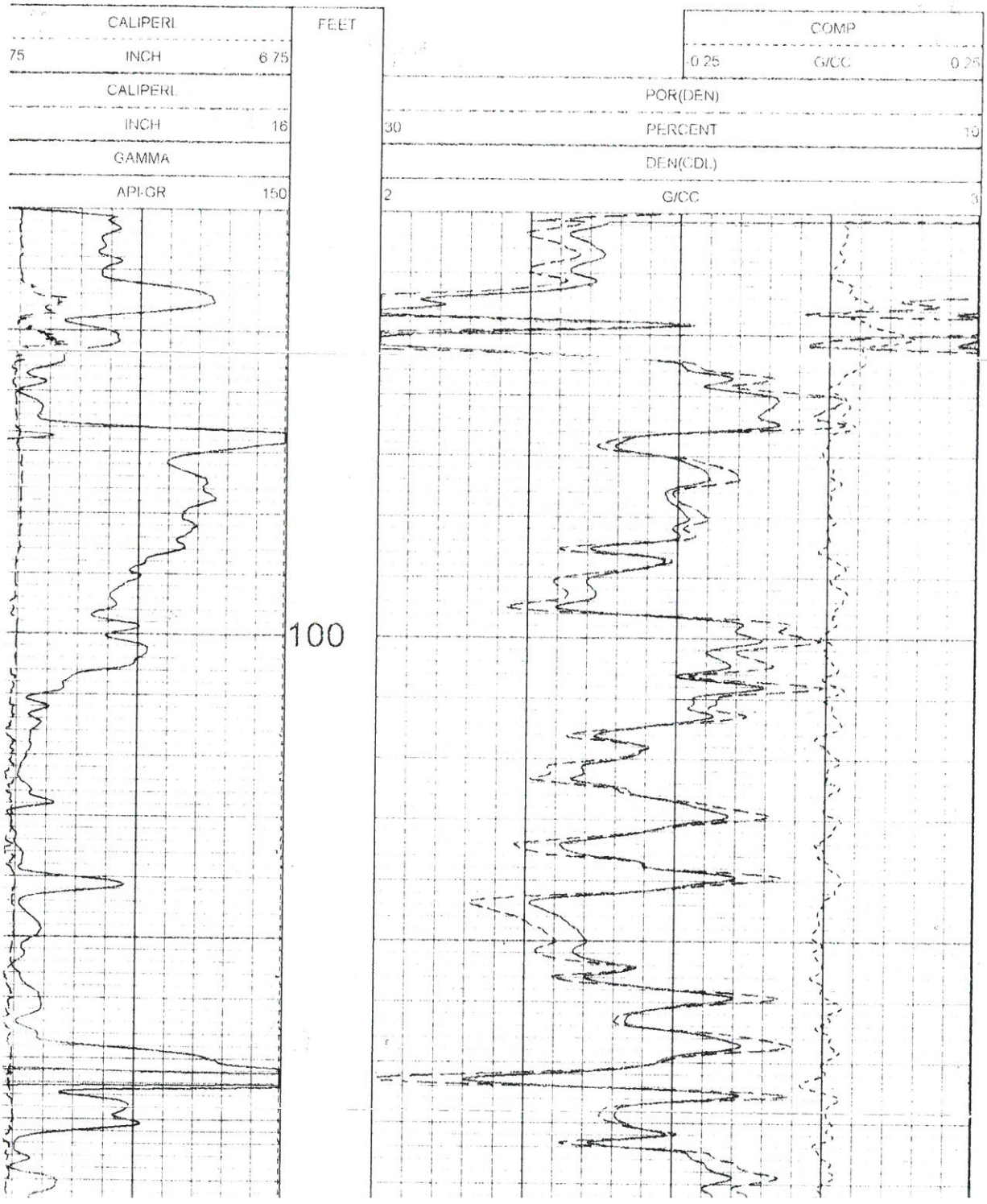
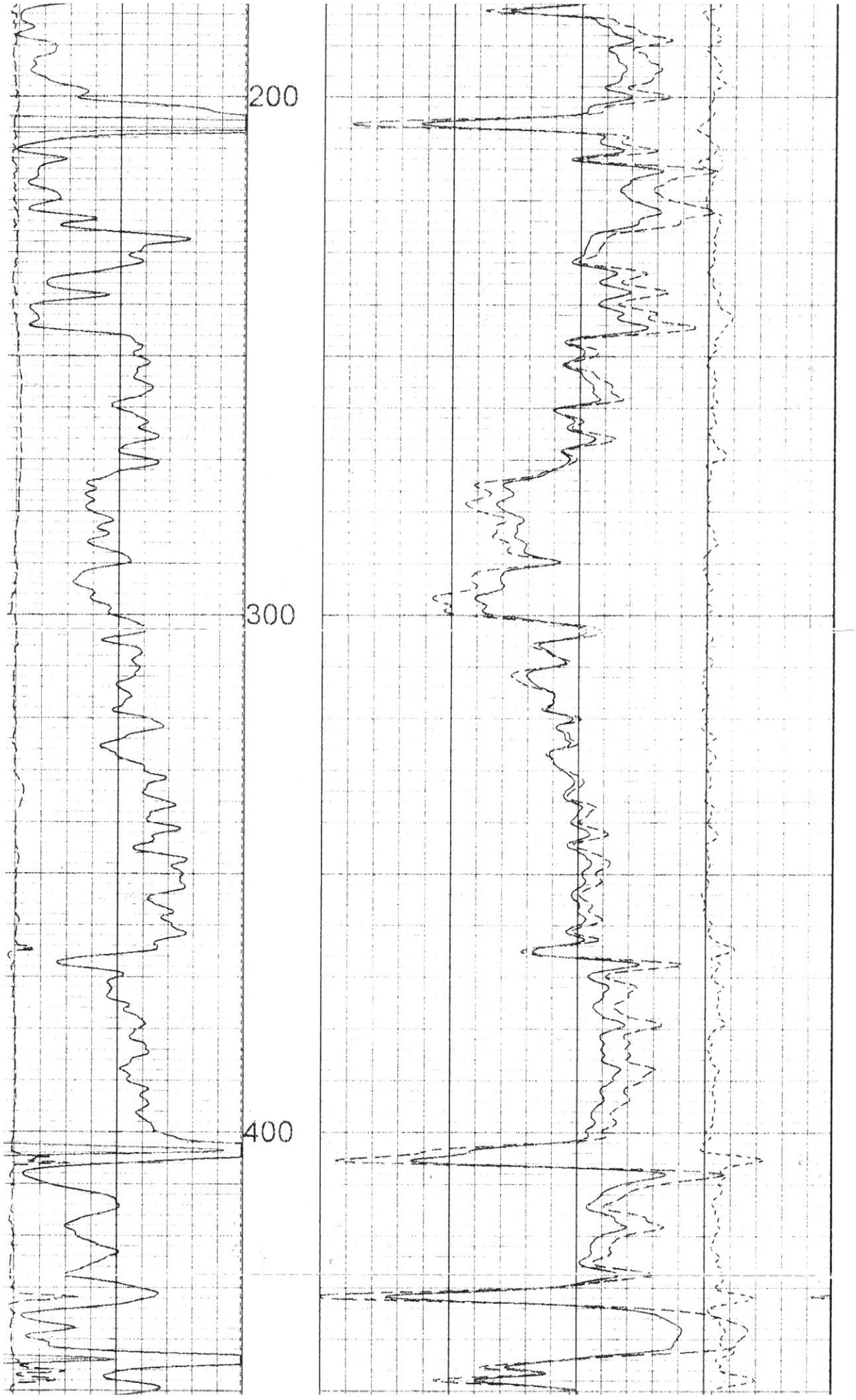
PRESENTATION NAME/DATE = 9139A1.0 04/30/2008 | VERSION = 3.64F1

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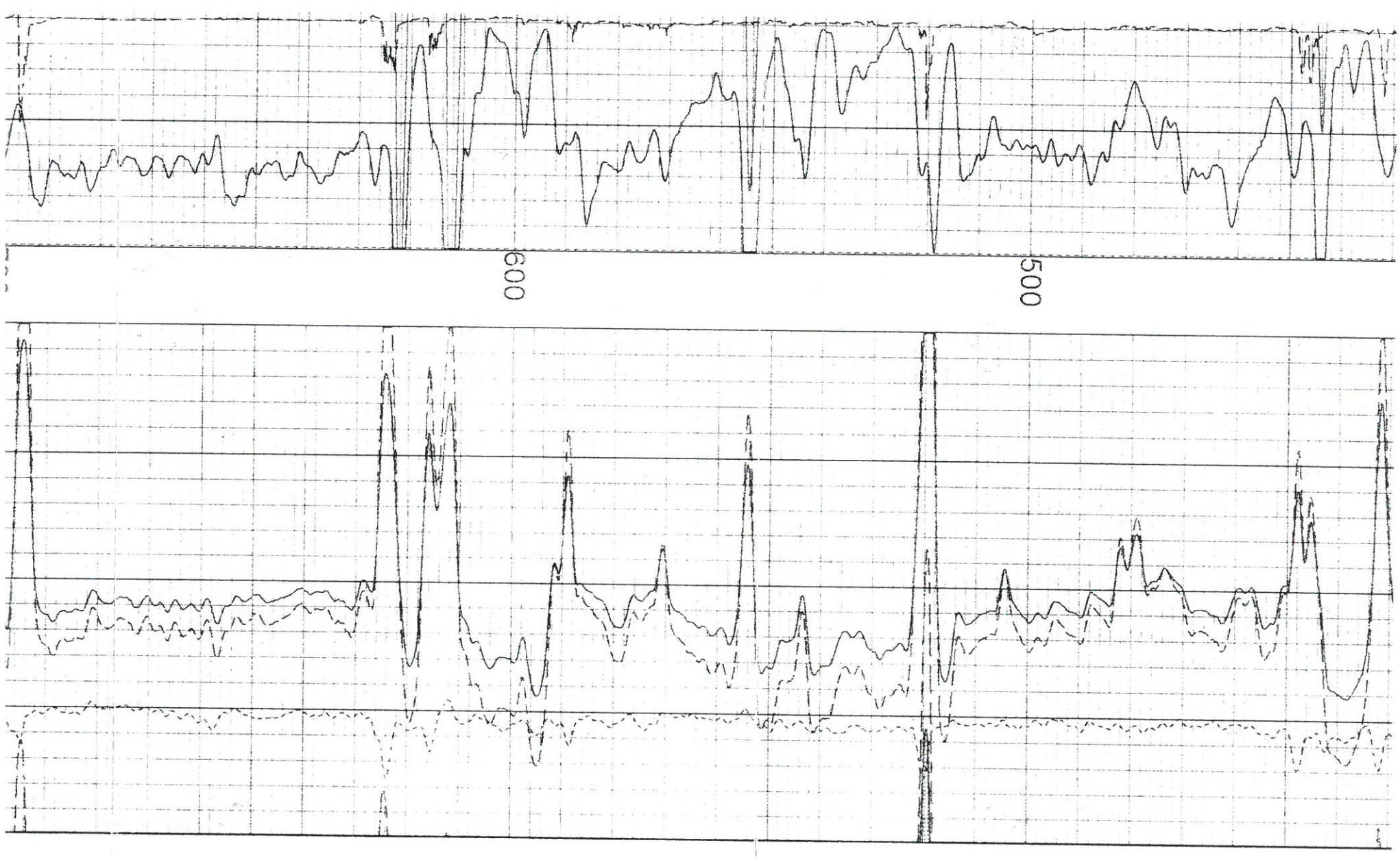
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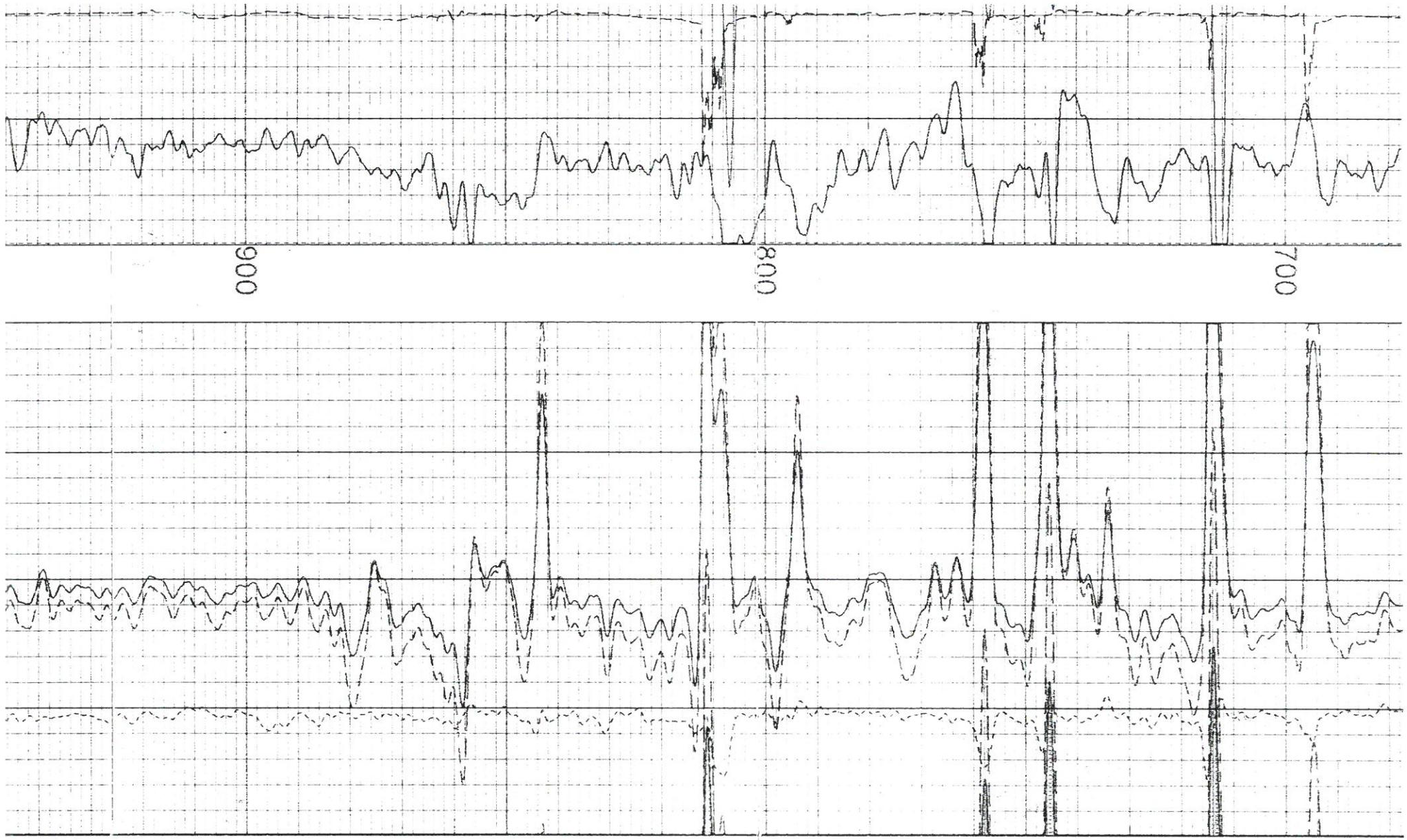
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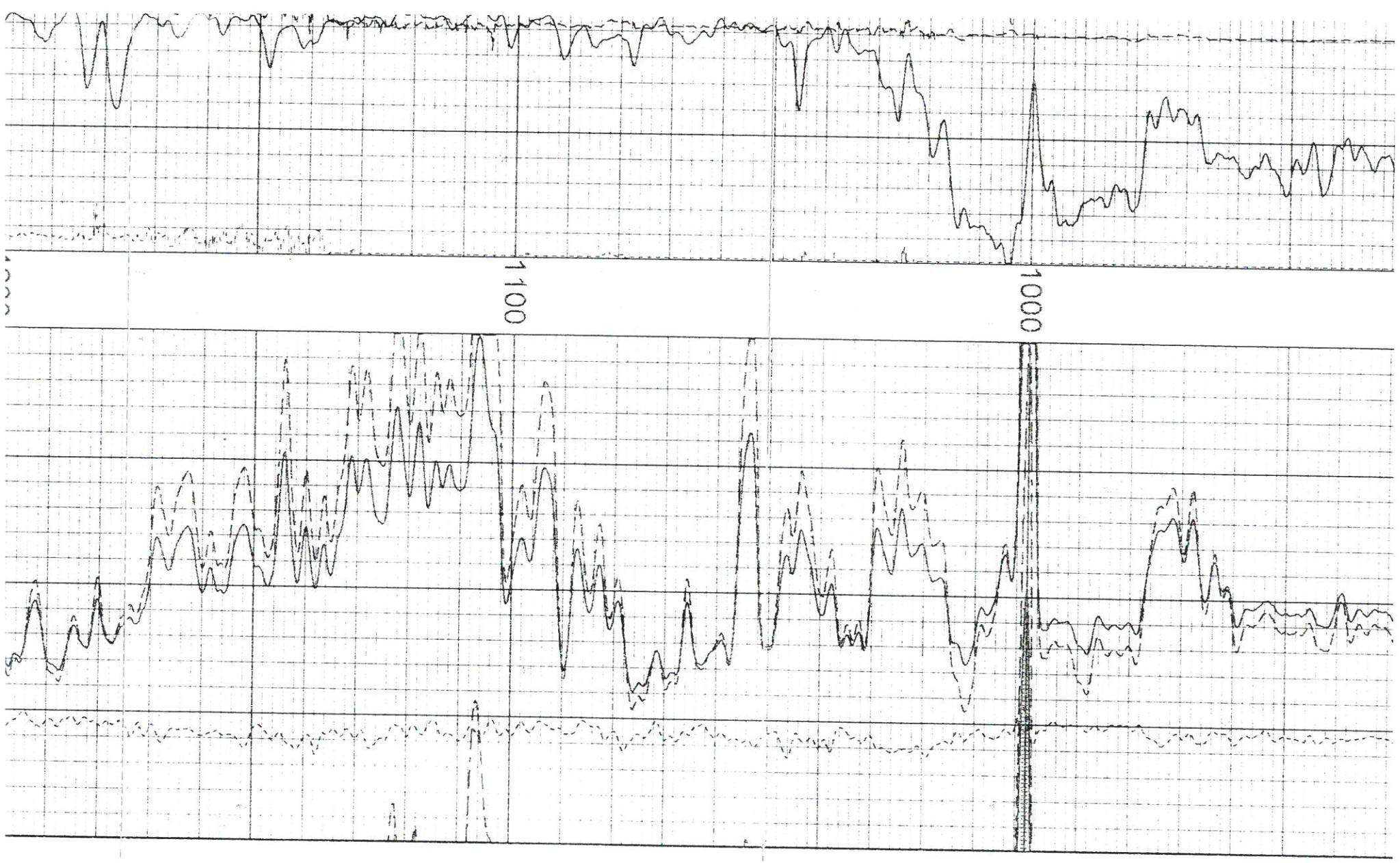
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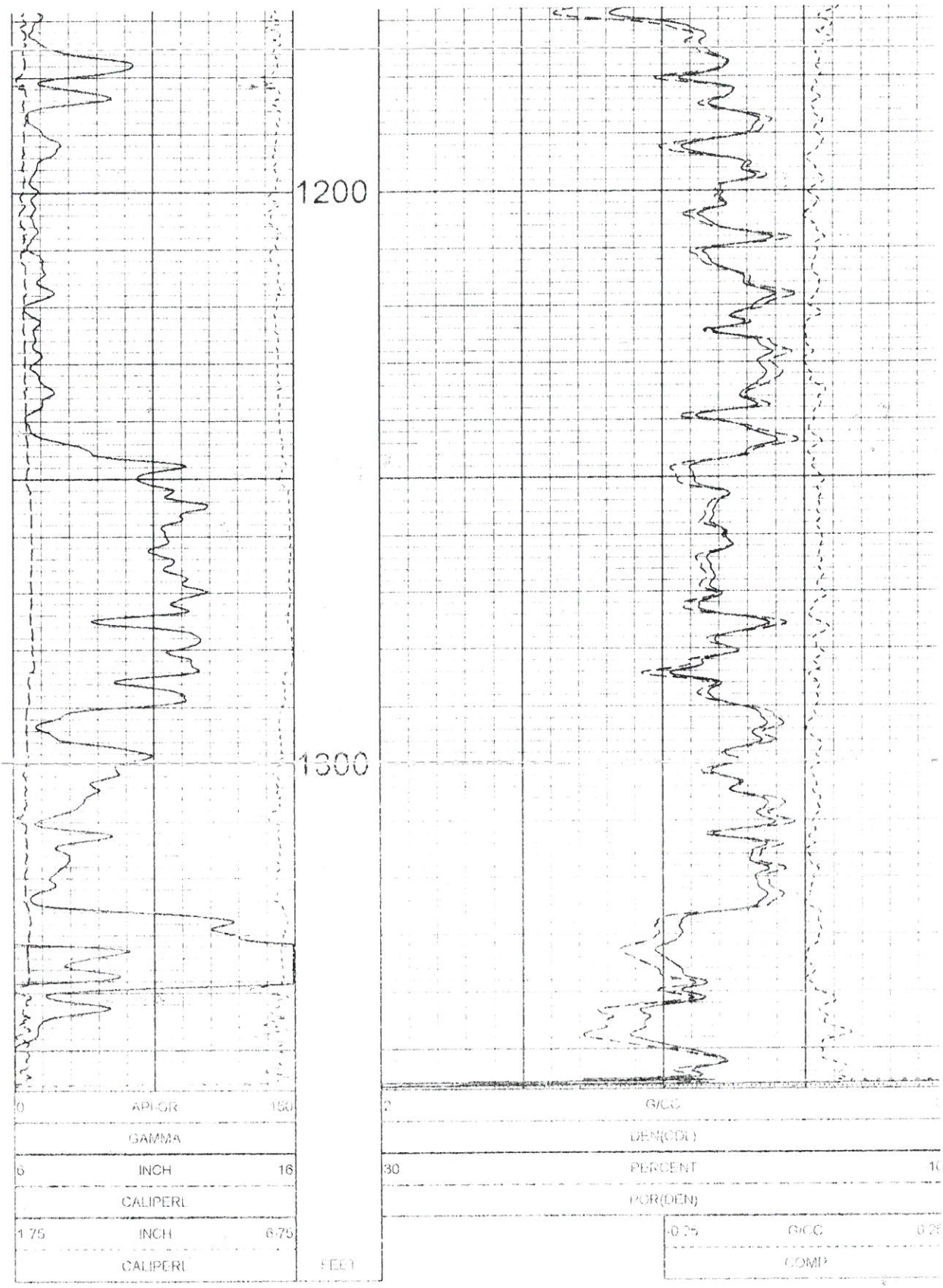

5 INCH LOG, DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY 2.71	NEUTRON MATRIX = LIMESTONE	MATRIX DELTA T 49
MAGNETIC DECL 0	ELEC. CUTOFF 3.75	BIT SIZE 6.75
PRESENTATION NAME/DATE 9139A1.0 04/30/2008		VERSION = 3.64F1

MATRIX DENSITY = 2.71	NEUTRON MATRIX = LIMESTONE	MATRIX DELTA T = 49
MAGNETIC DECL = 0	ELECT. CUTOFF = 3777	BIT SIZE = 6.75
PRESENTATION NAME/DATE = 9139A1.0 04/30/2008		VERSION = 3.64F1

25 INCH LOG, HIGH RES. DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY = 2.71	NEUTRON MATRIX = LIMESTONE	MATRIX DELTA T = 49
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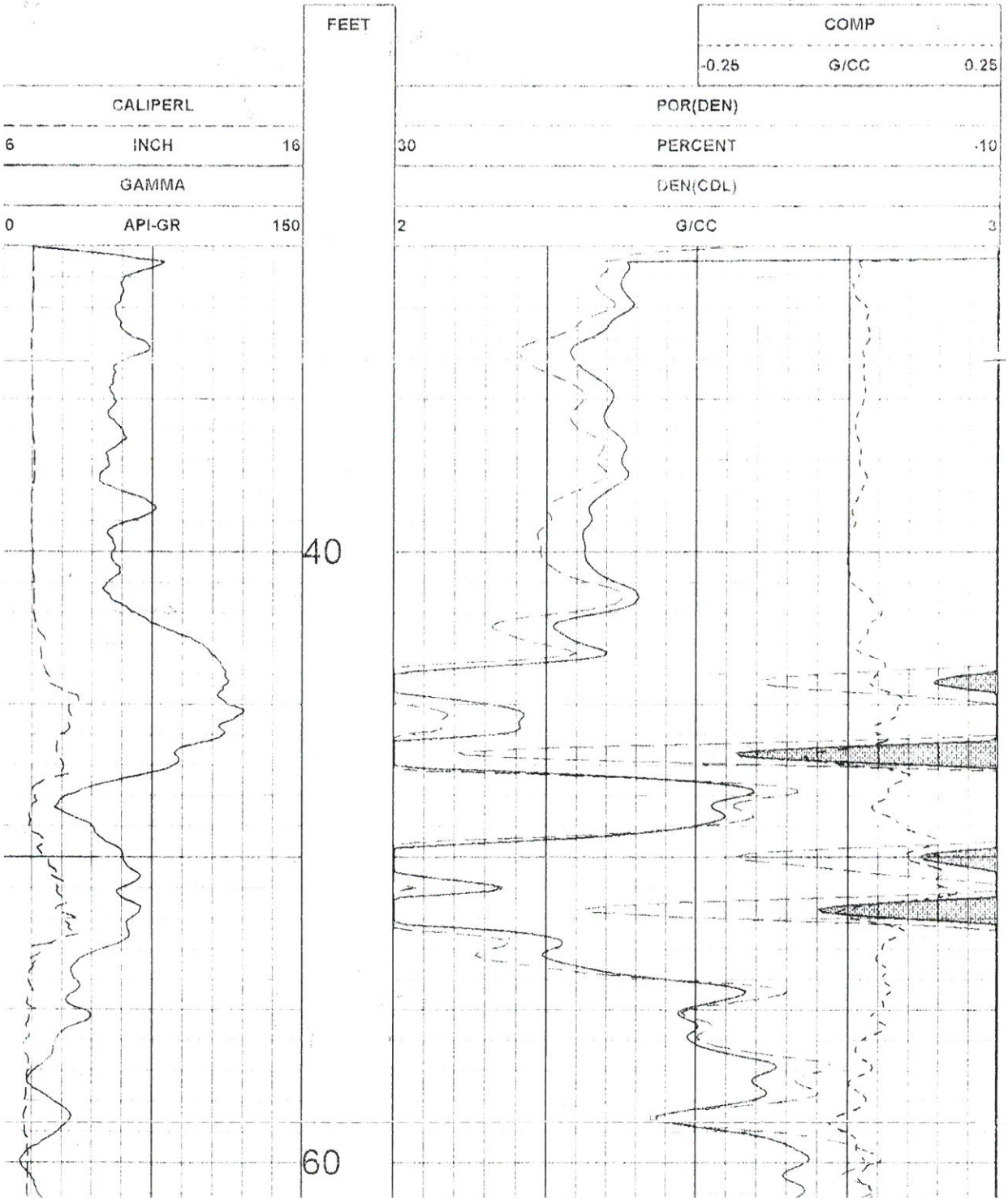

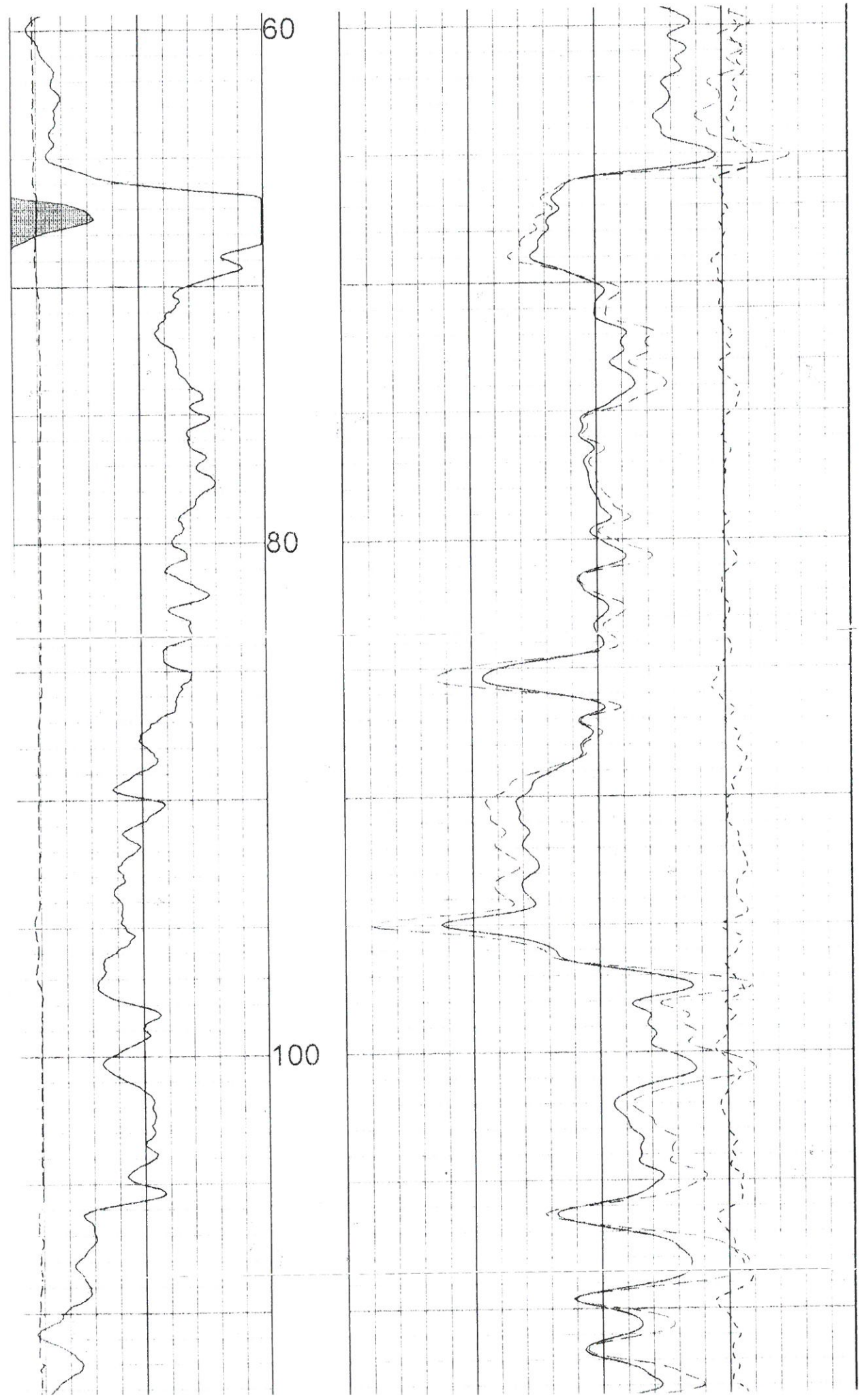
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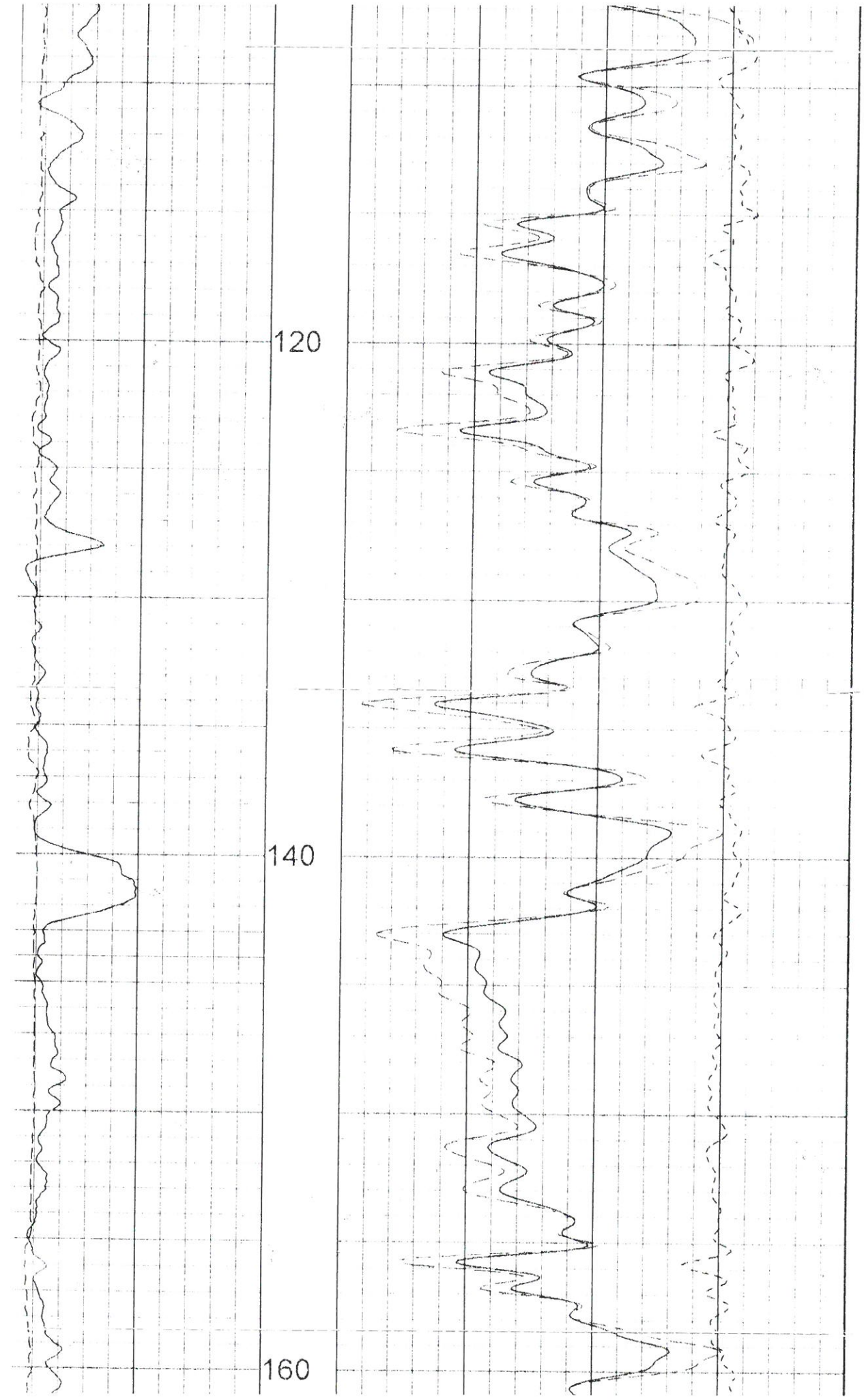
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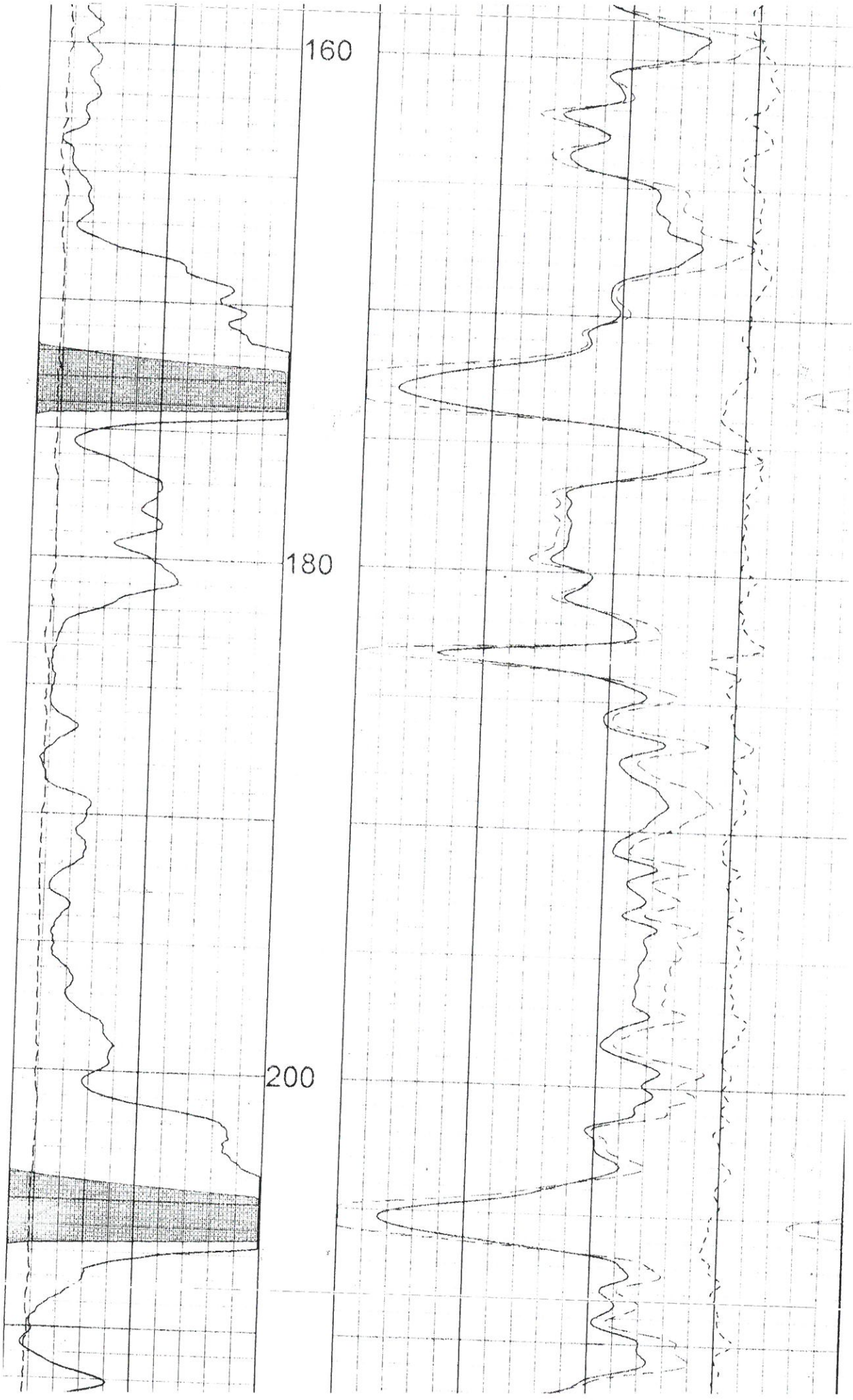
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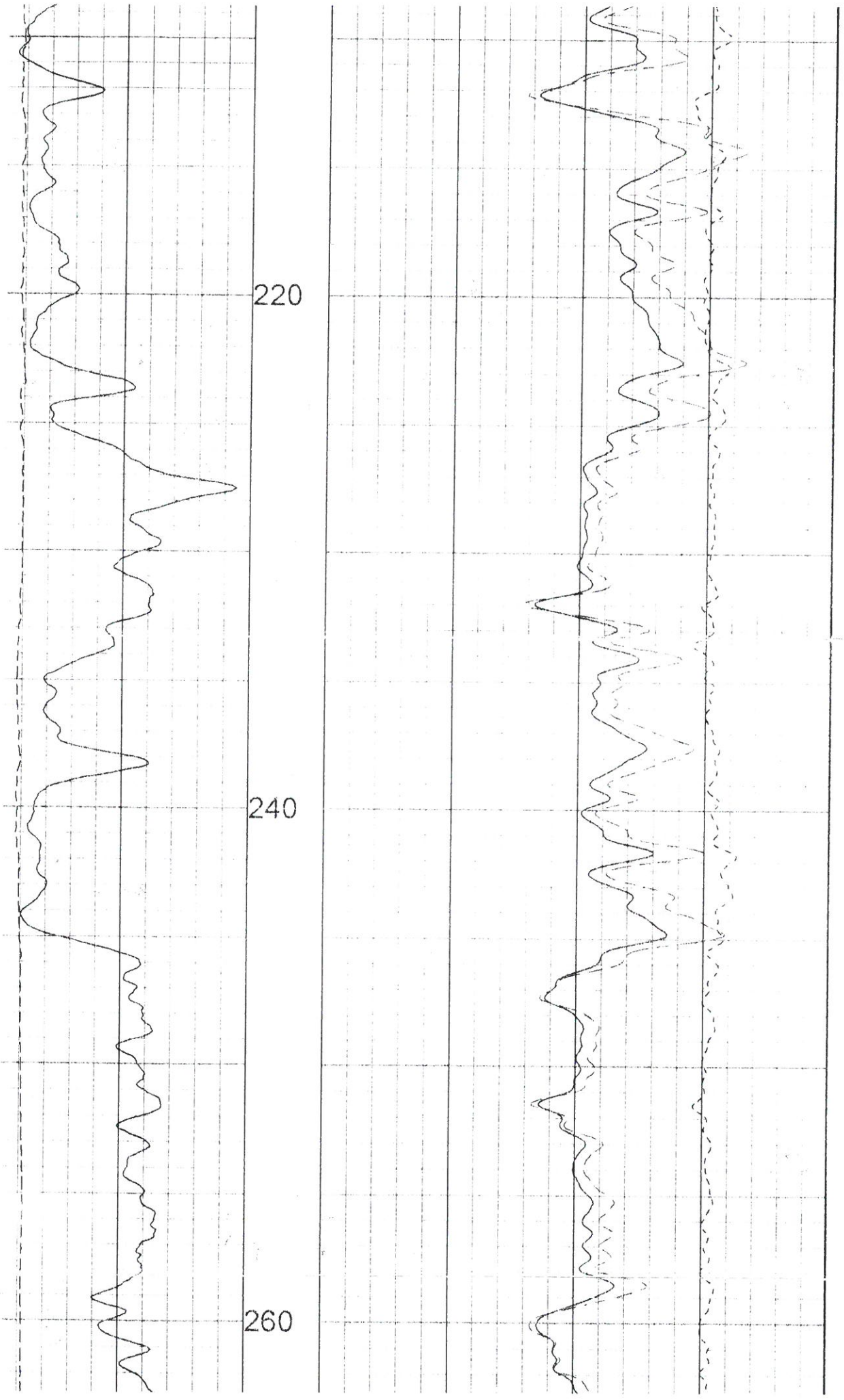
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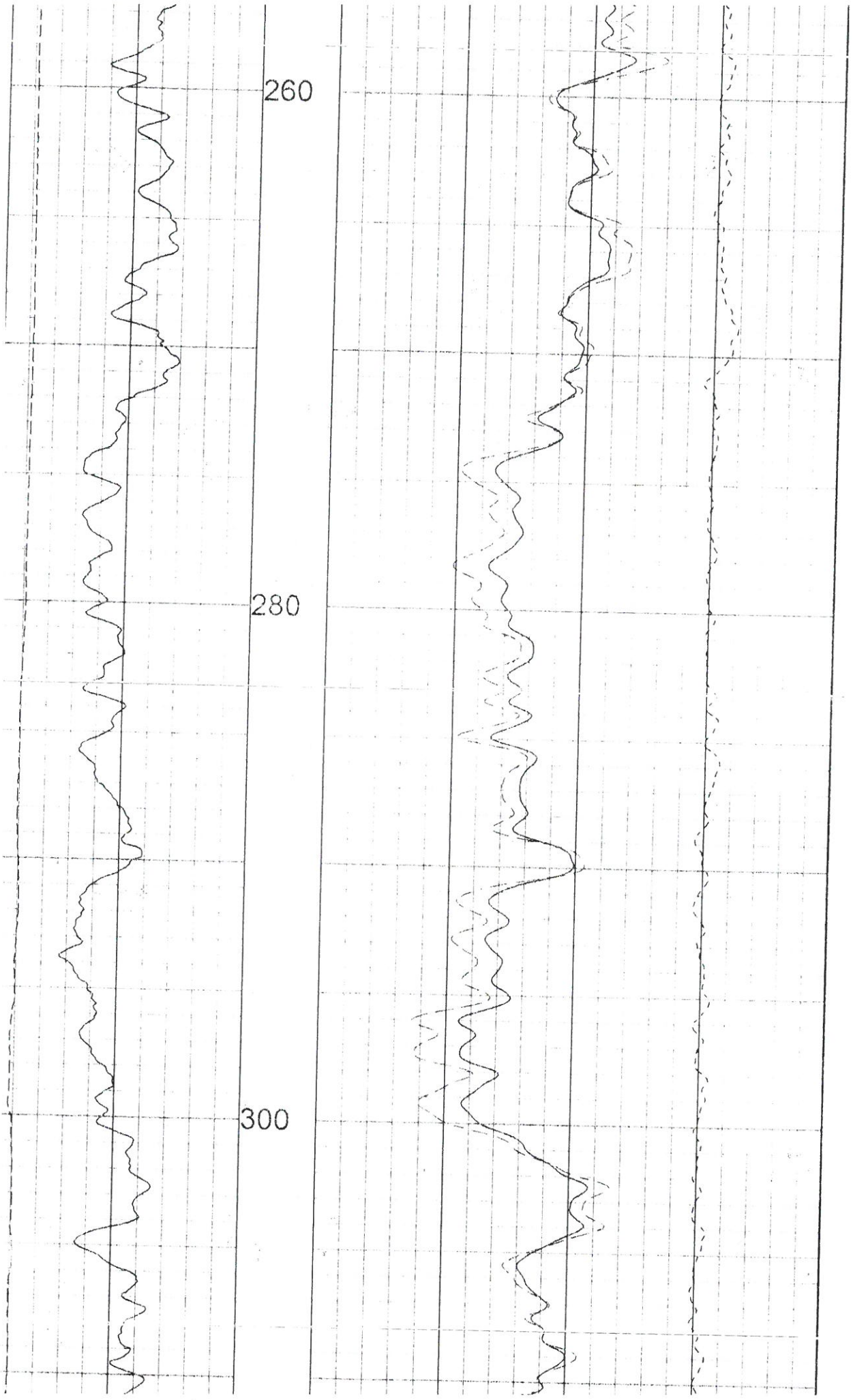
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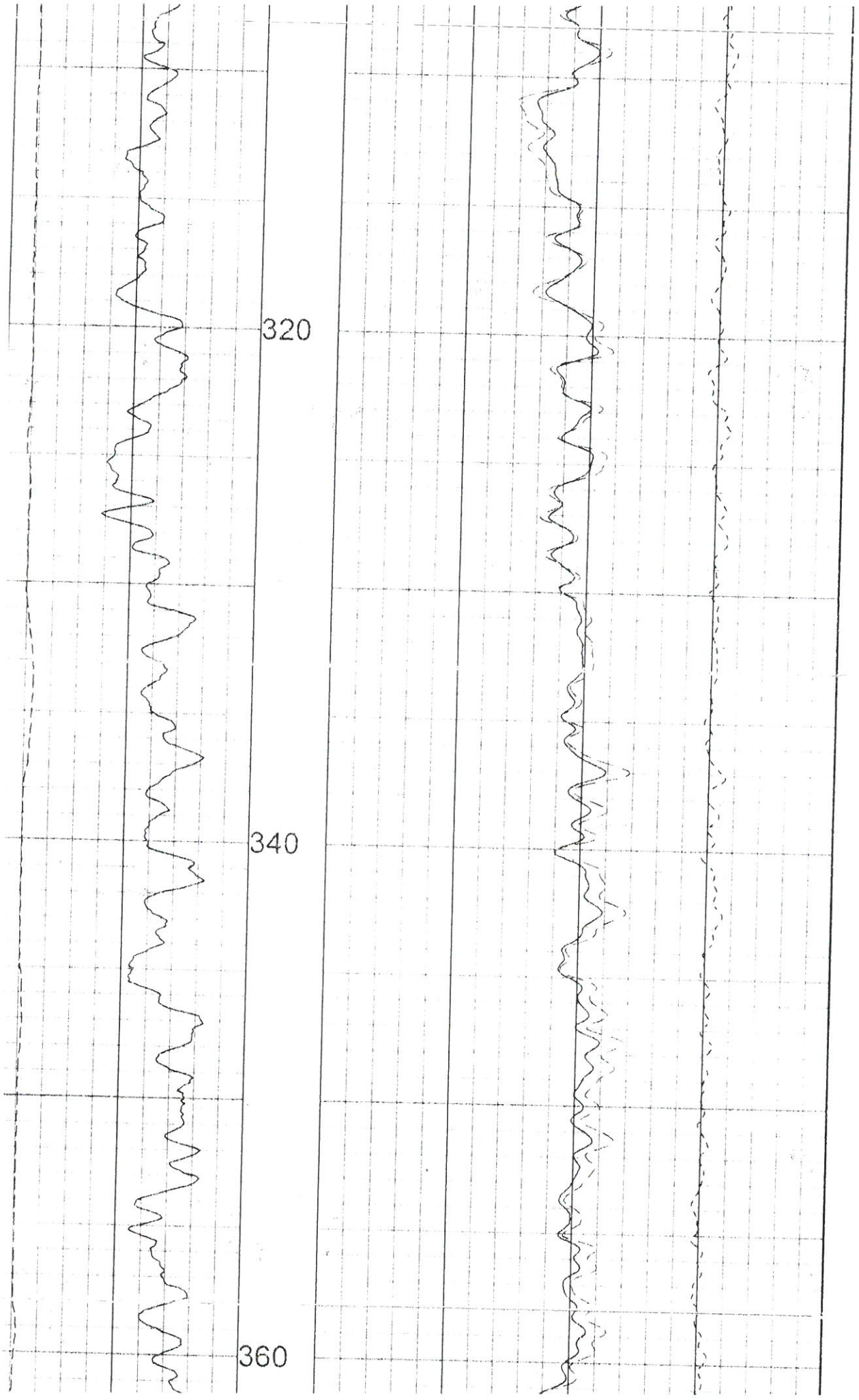
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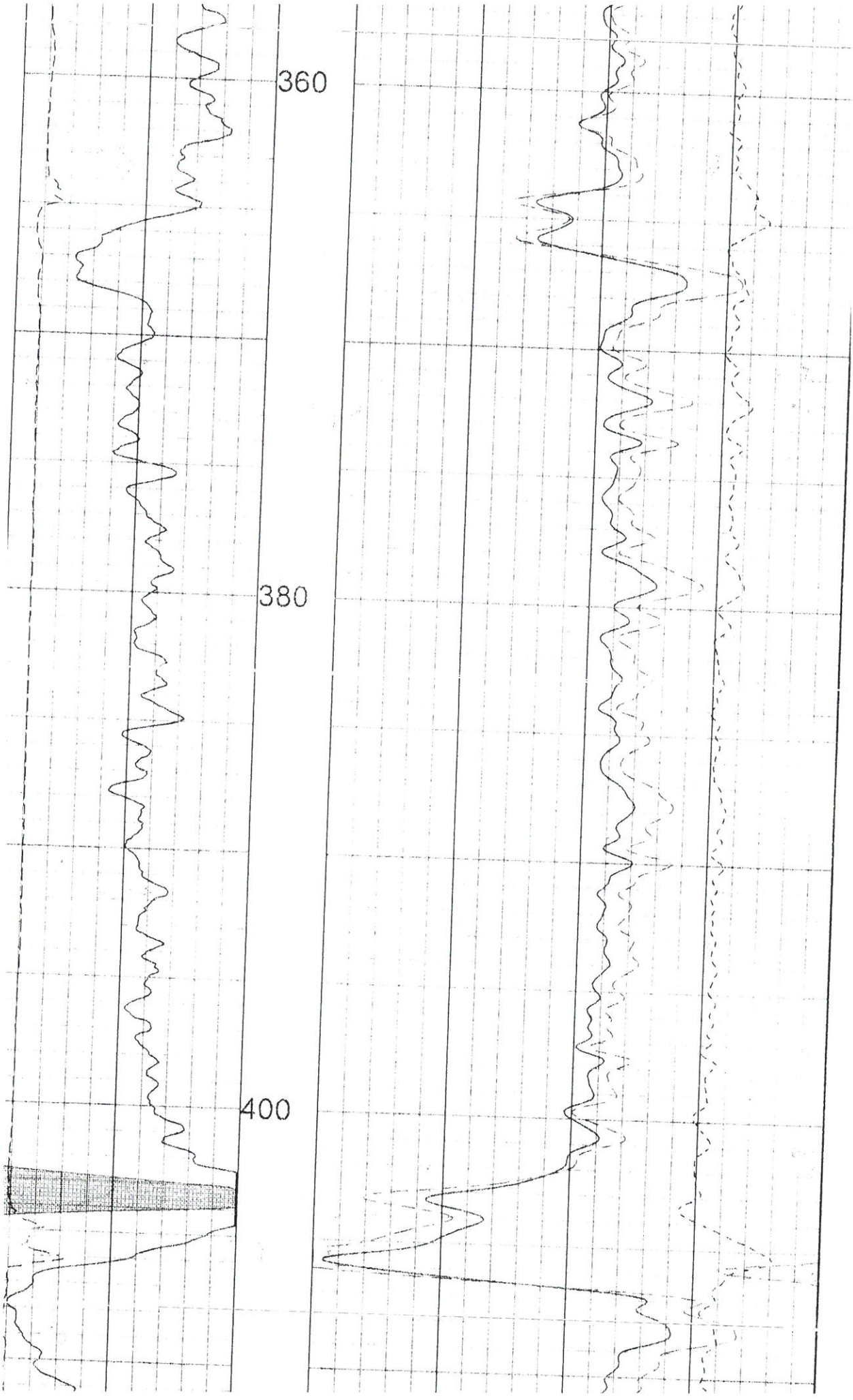
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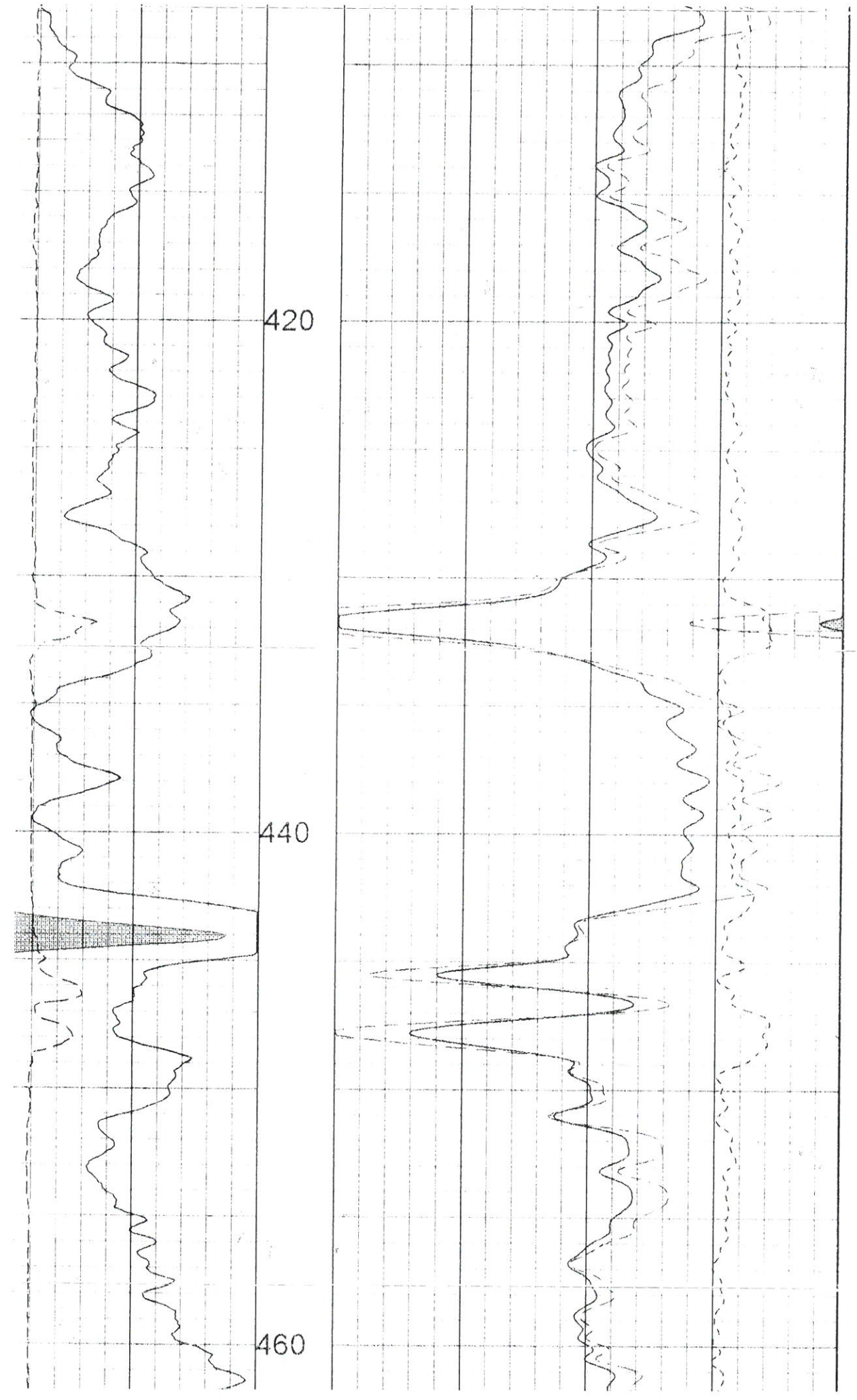
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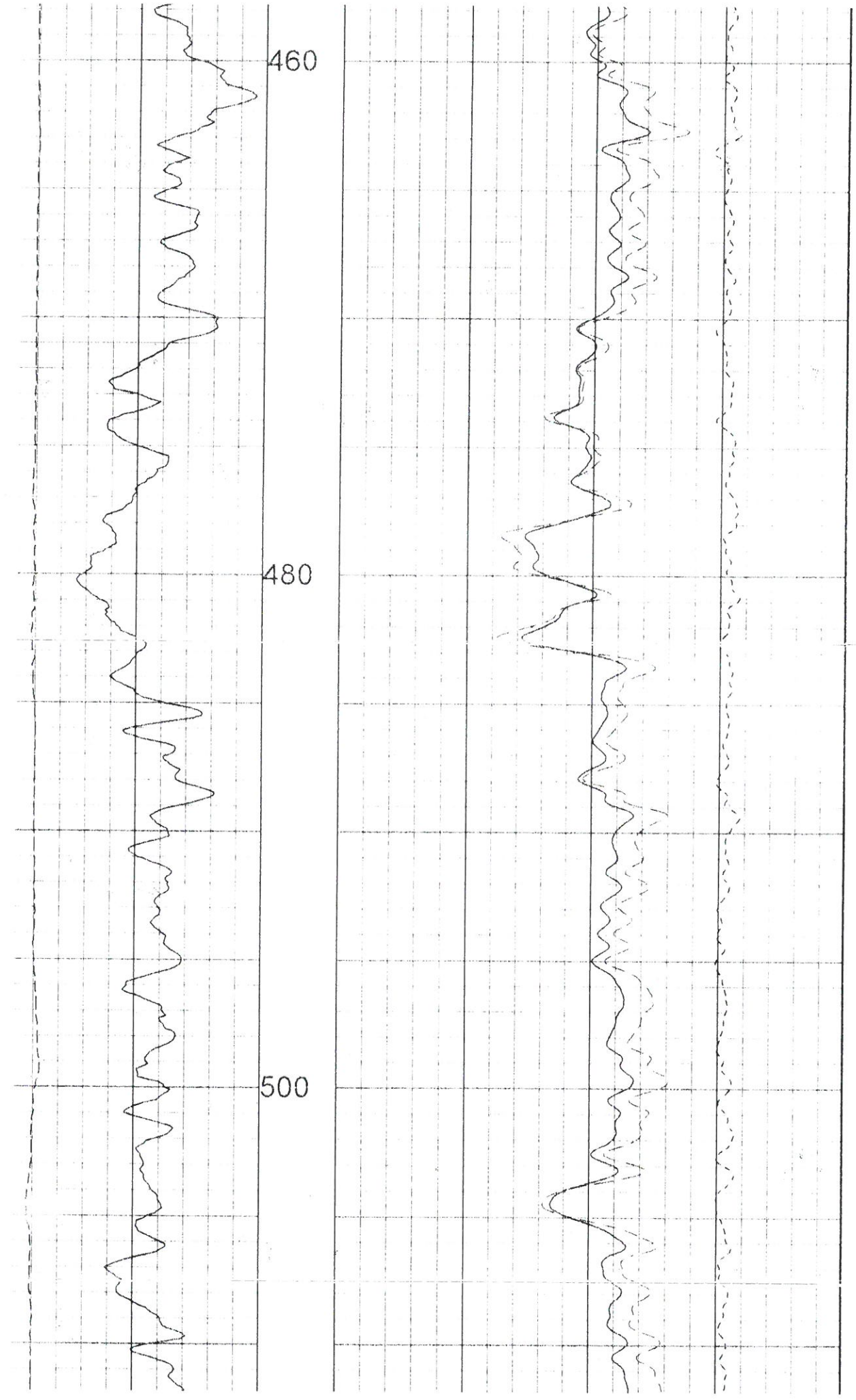
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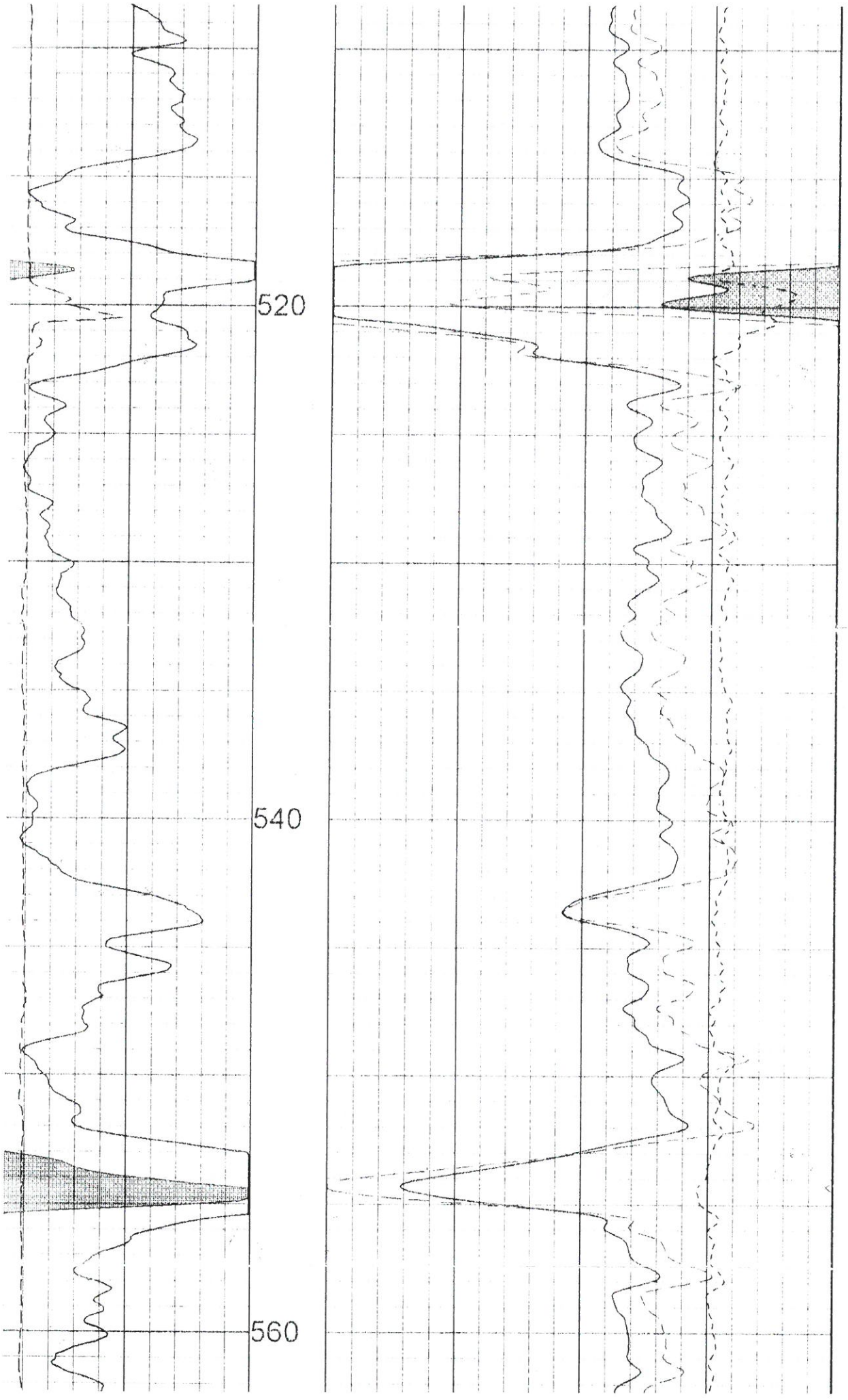
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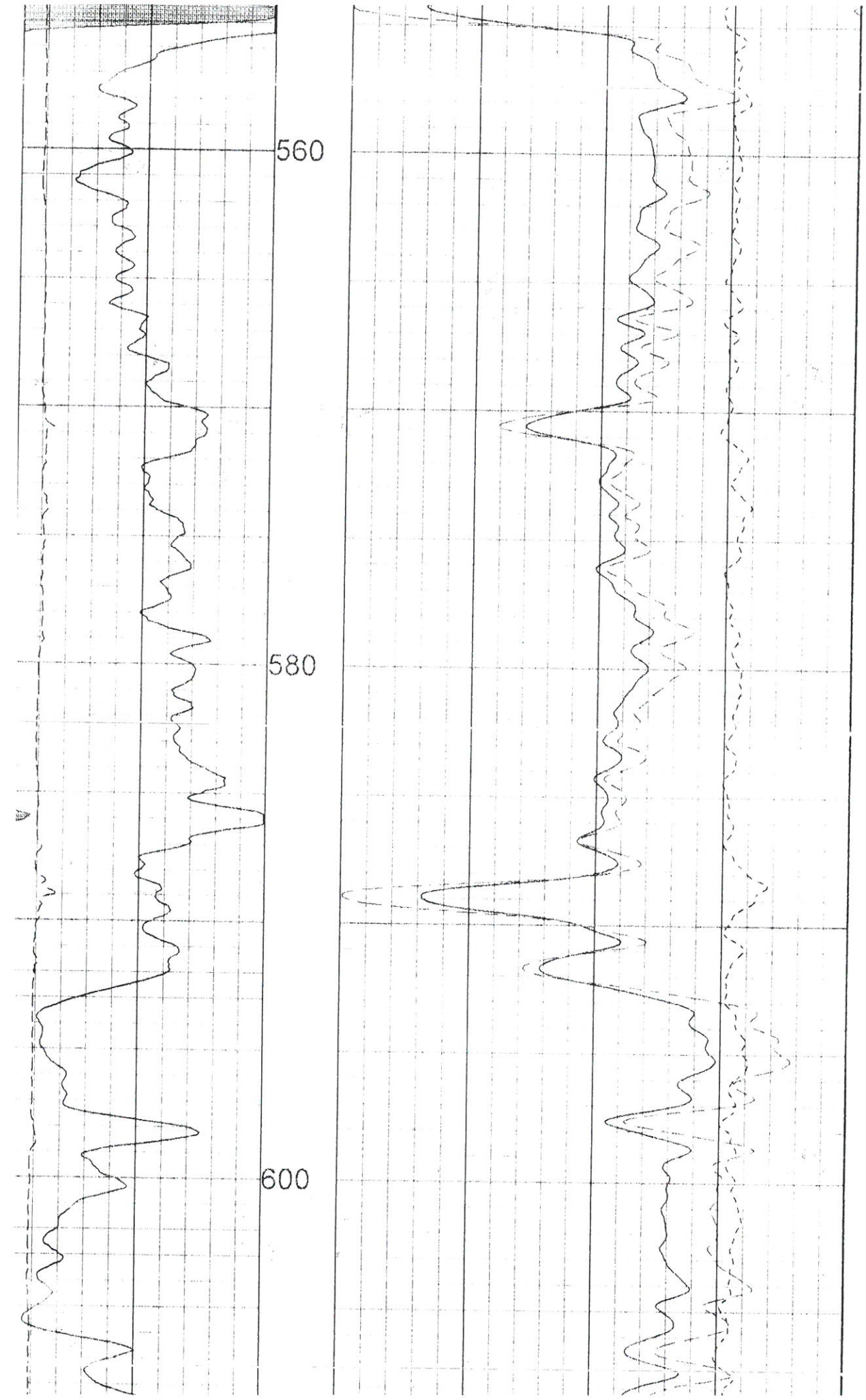
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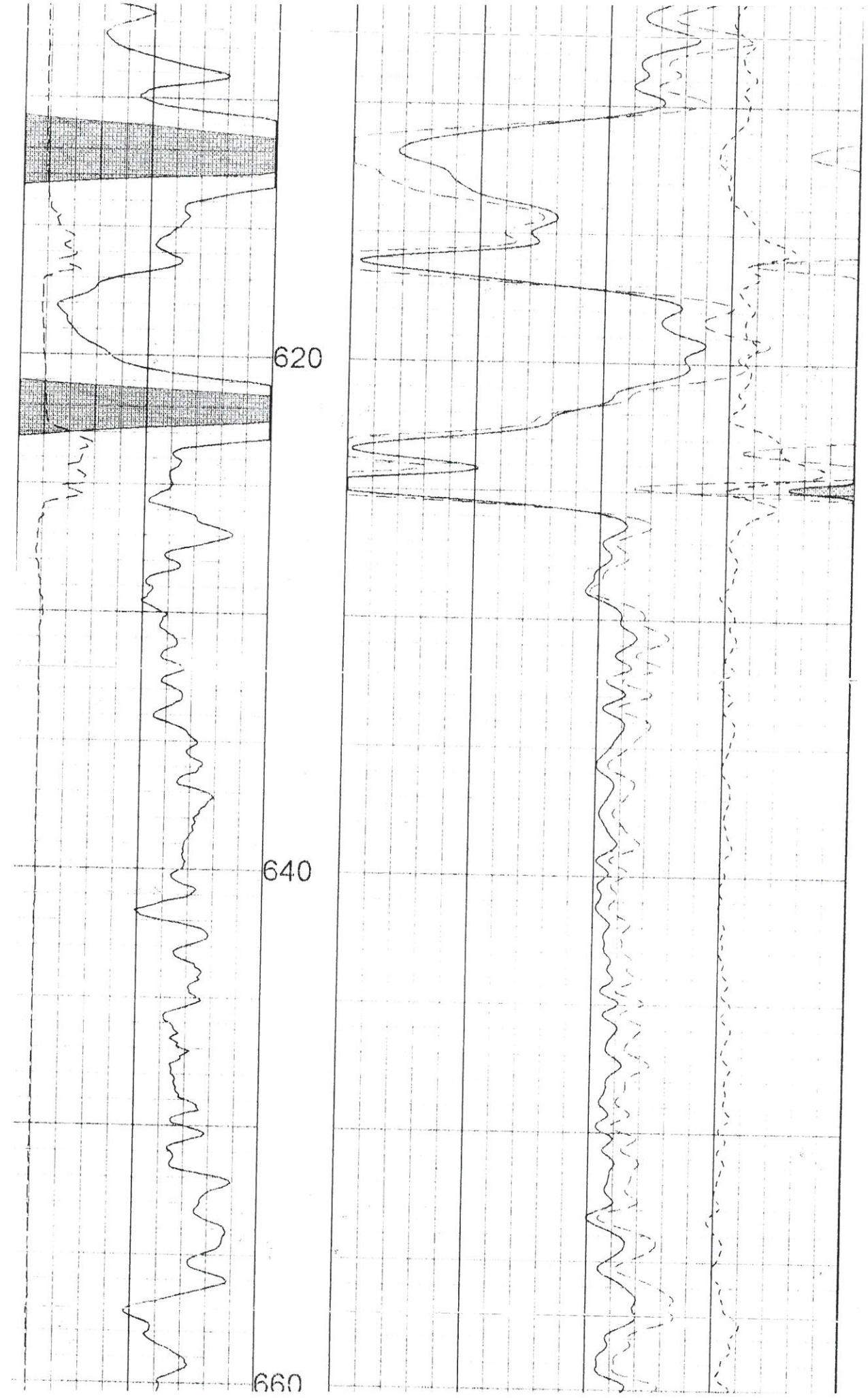
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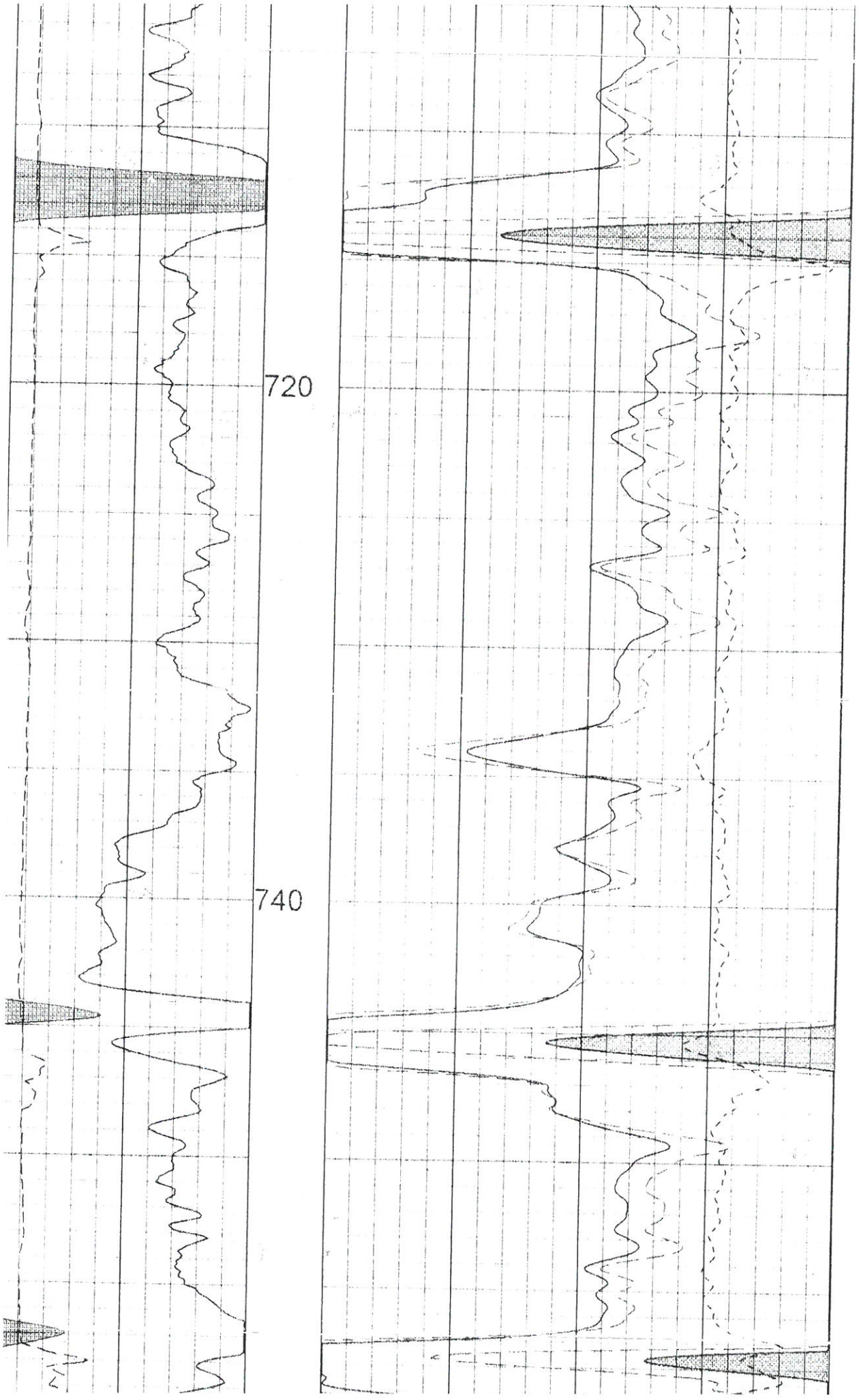
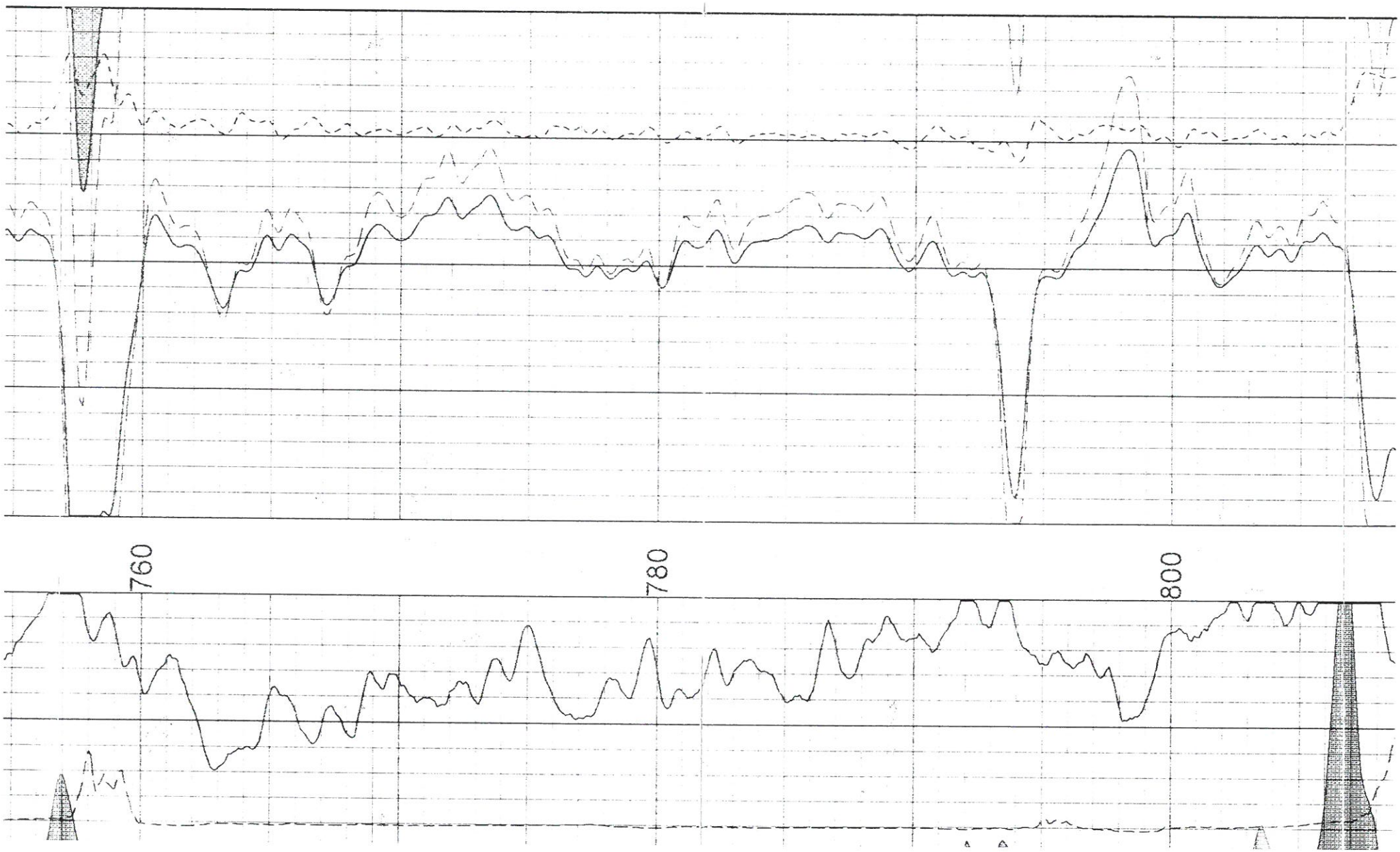
660

660
680
700


720
740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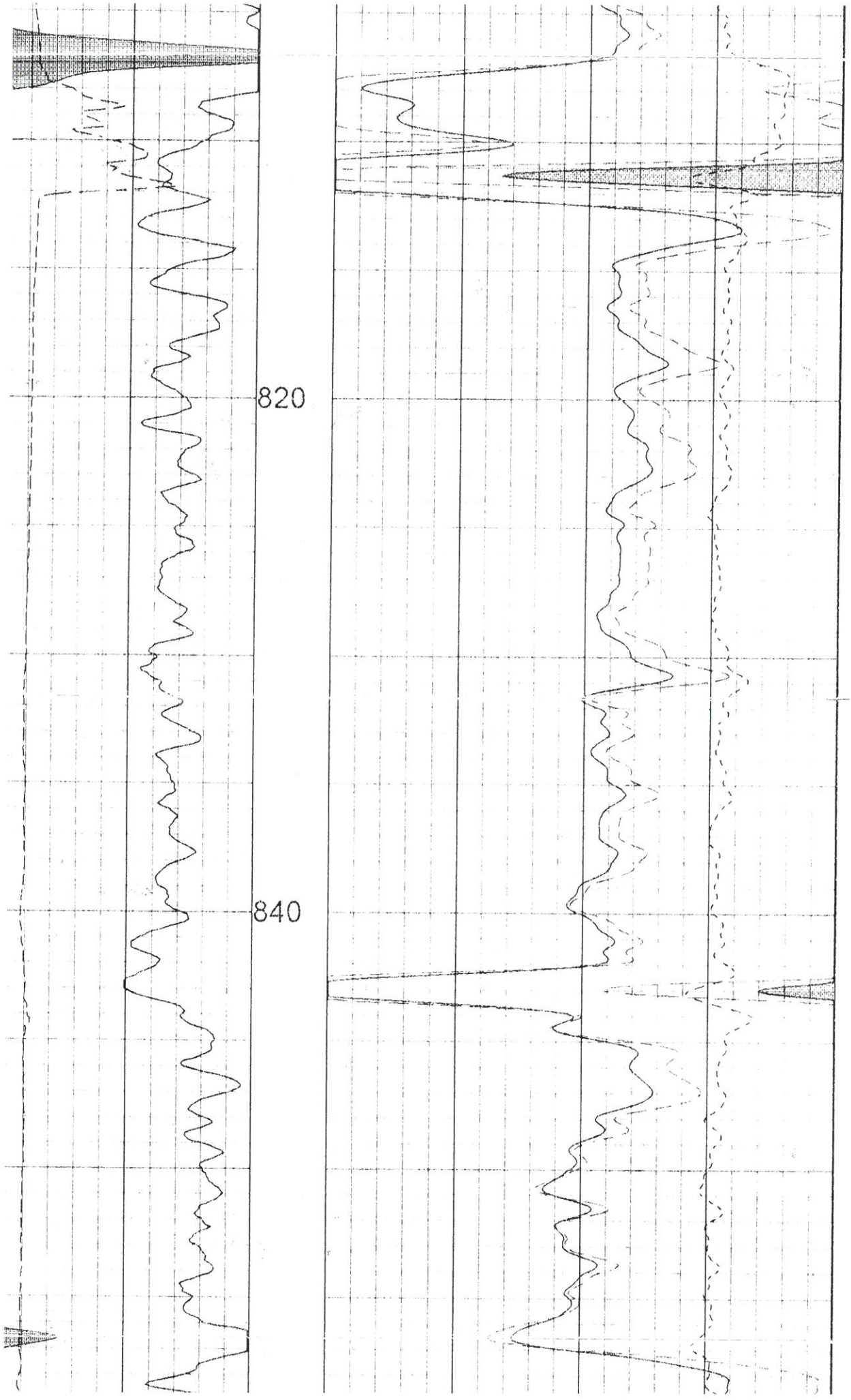
780
800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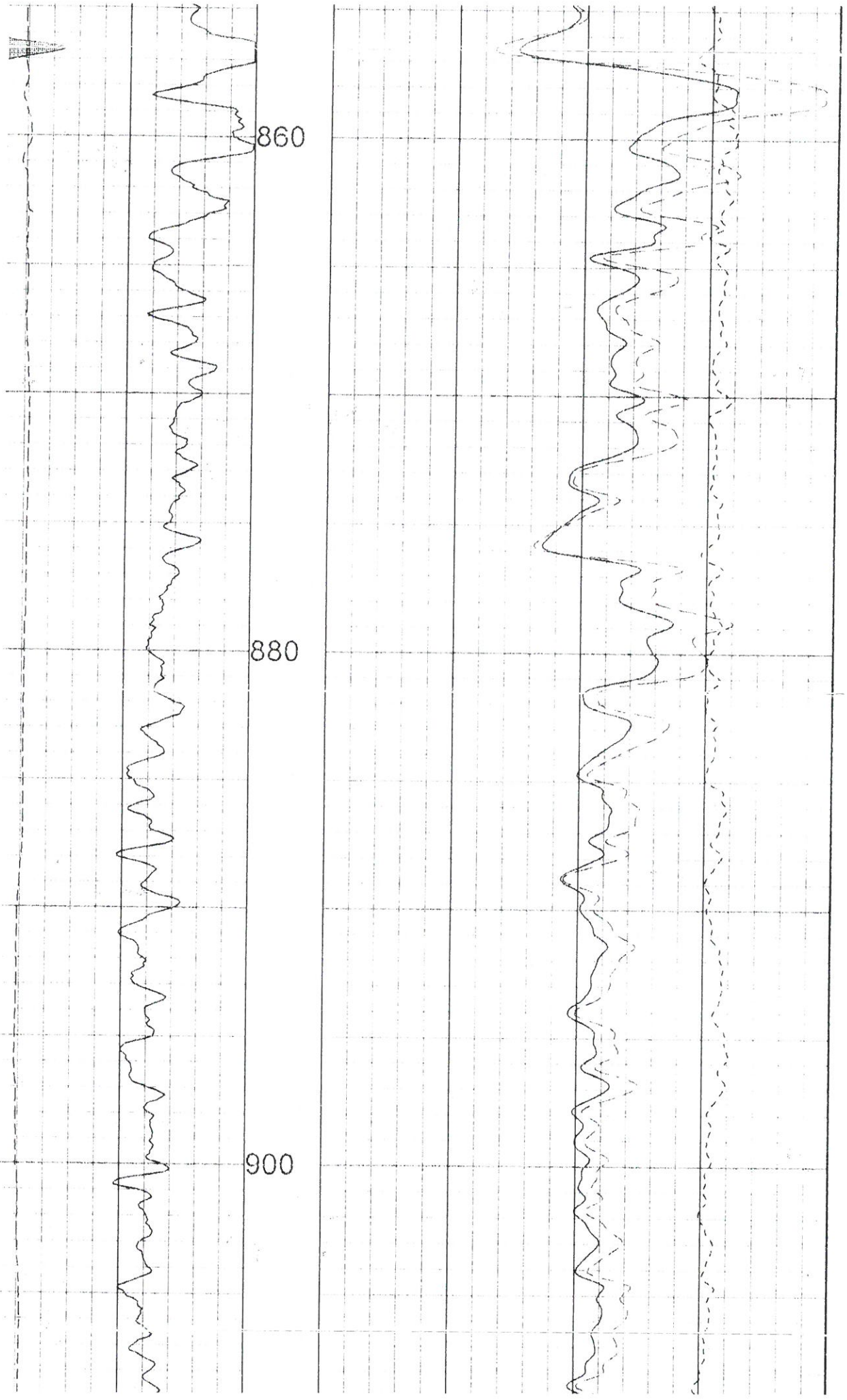
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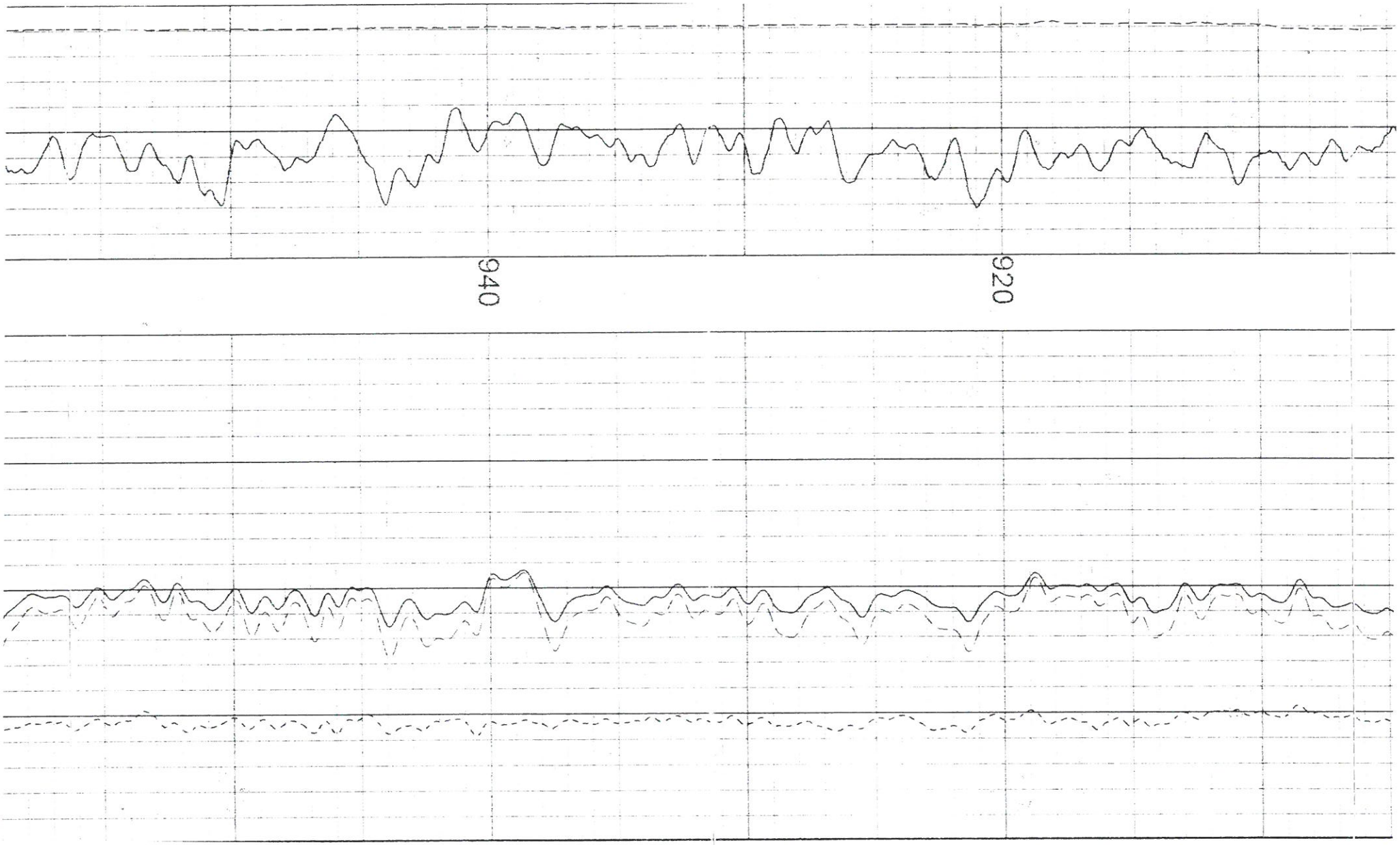
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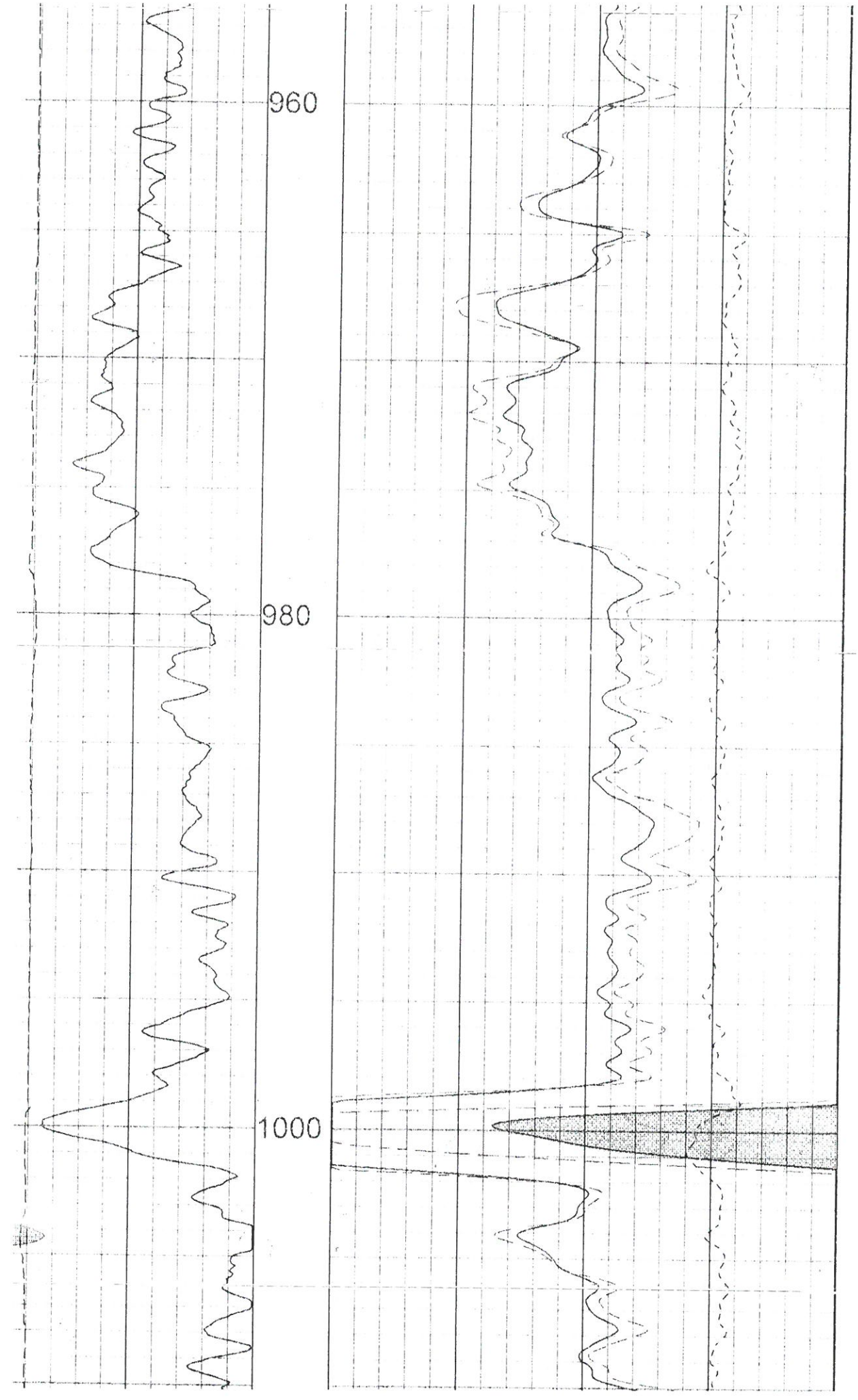
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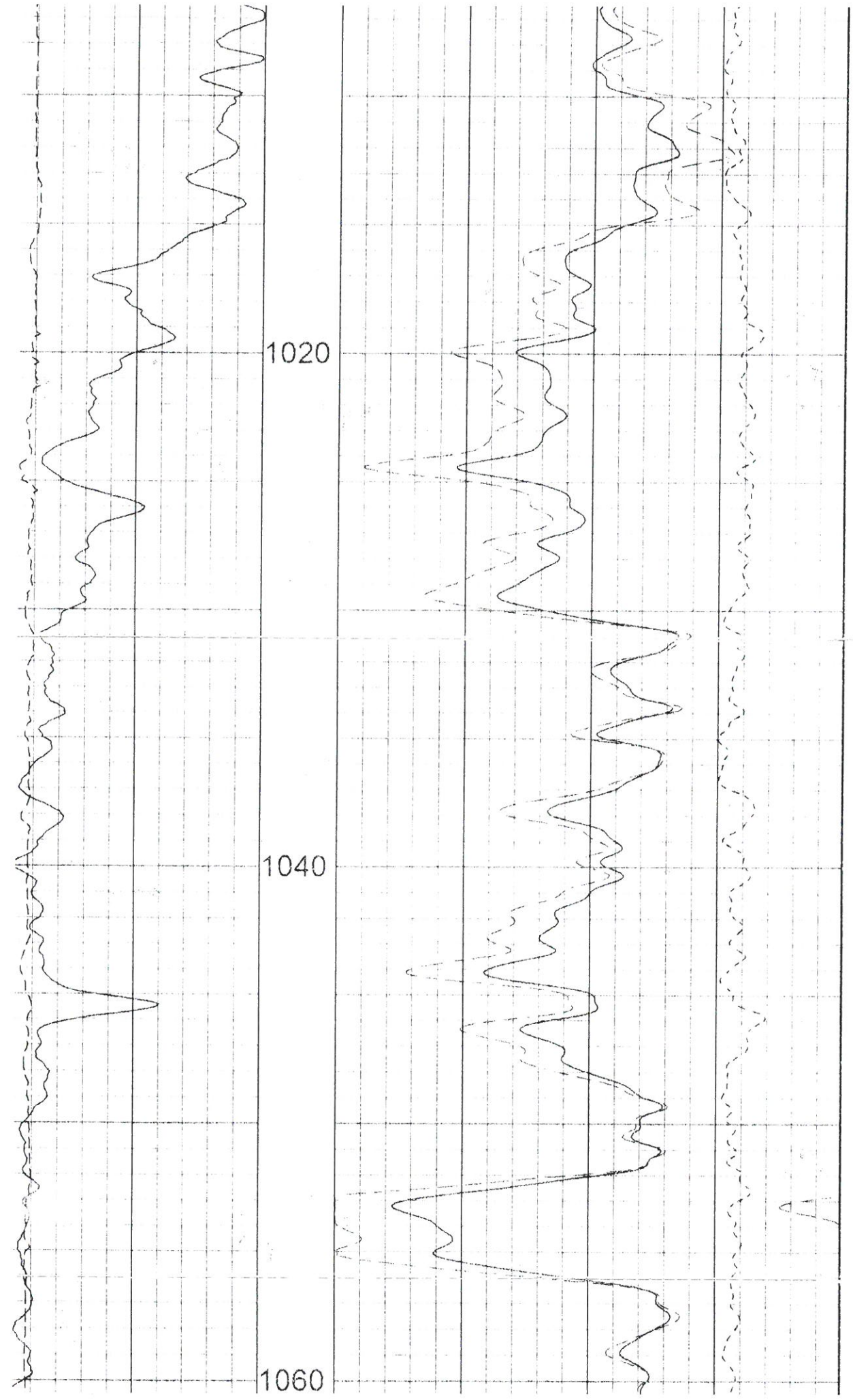
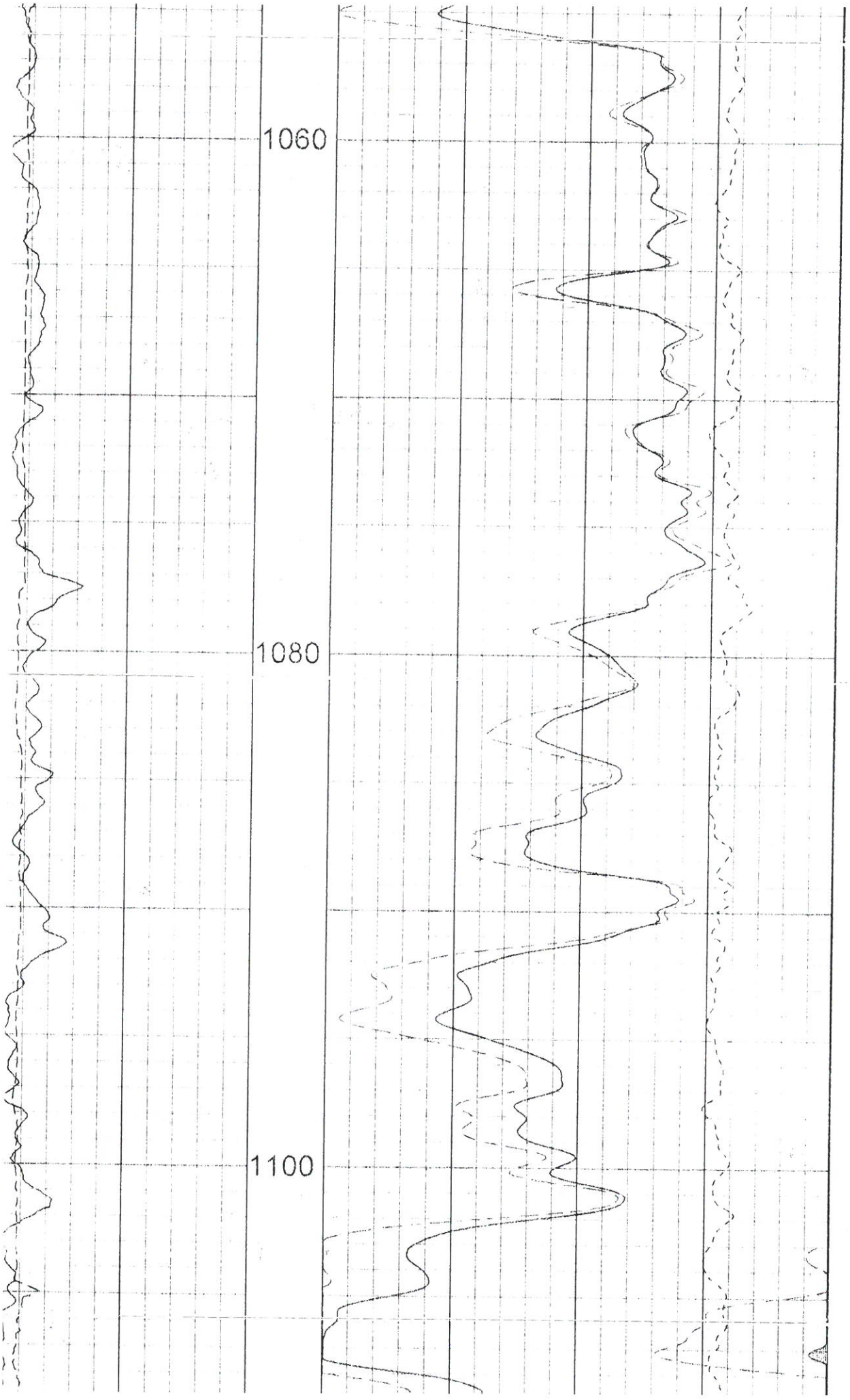
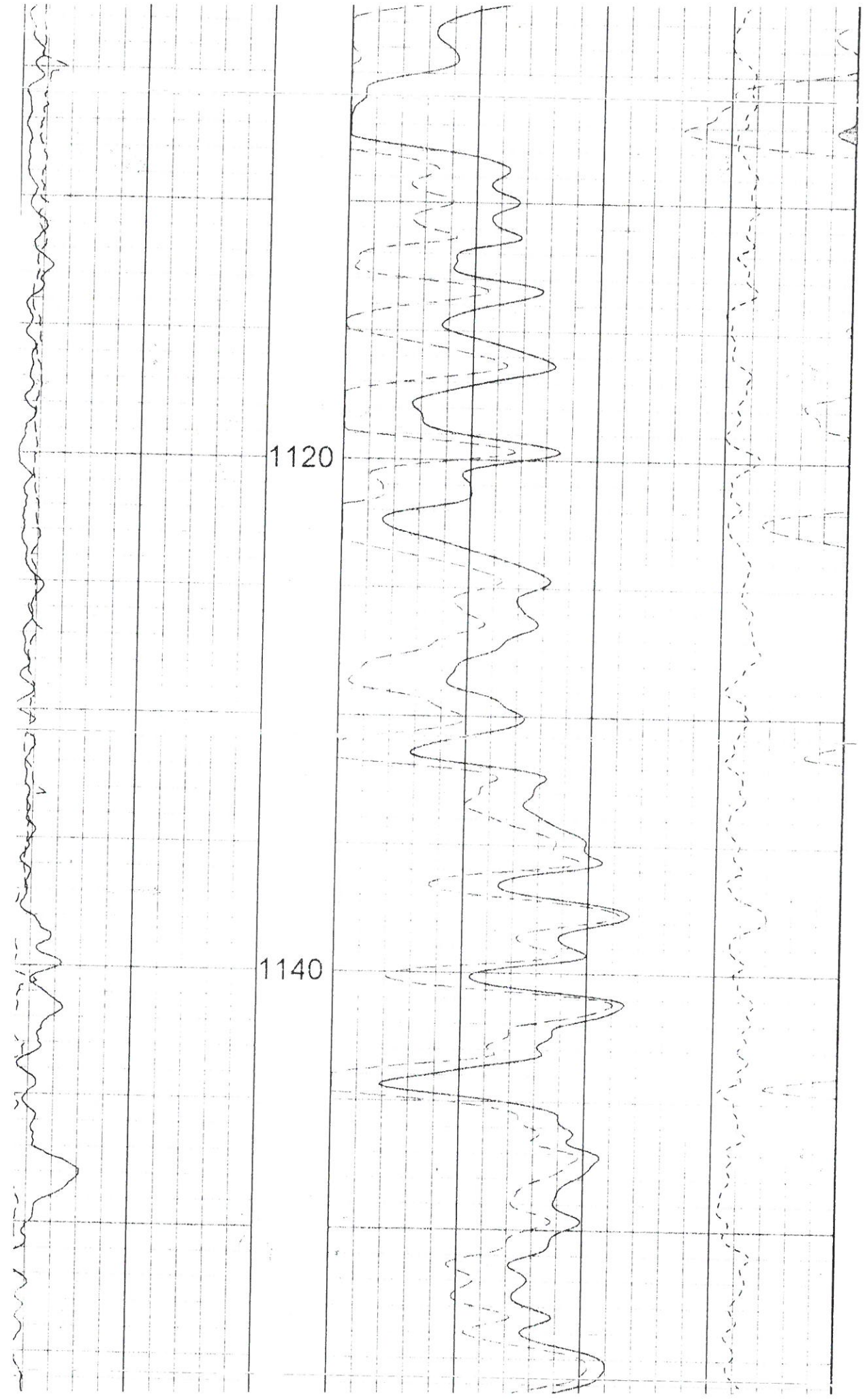
1000


1020
1040
1060


1060
1080
1100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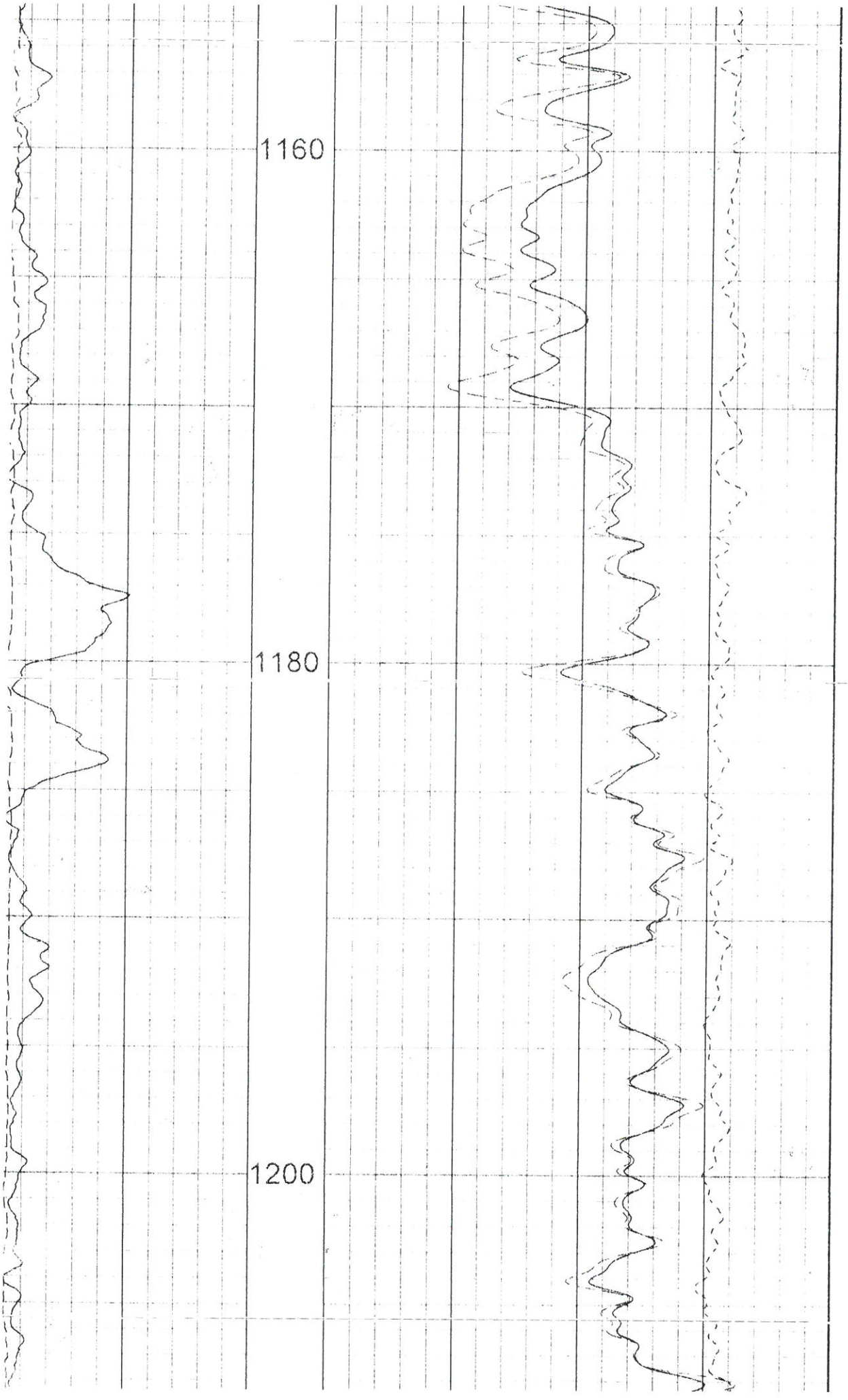
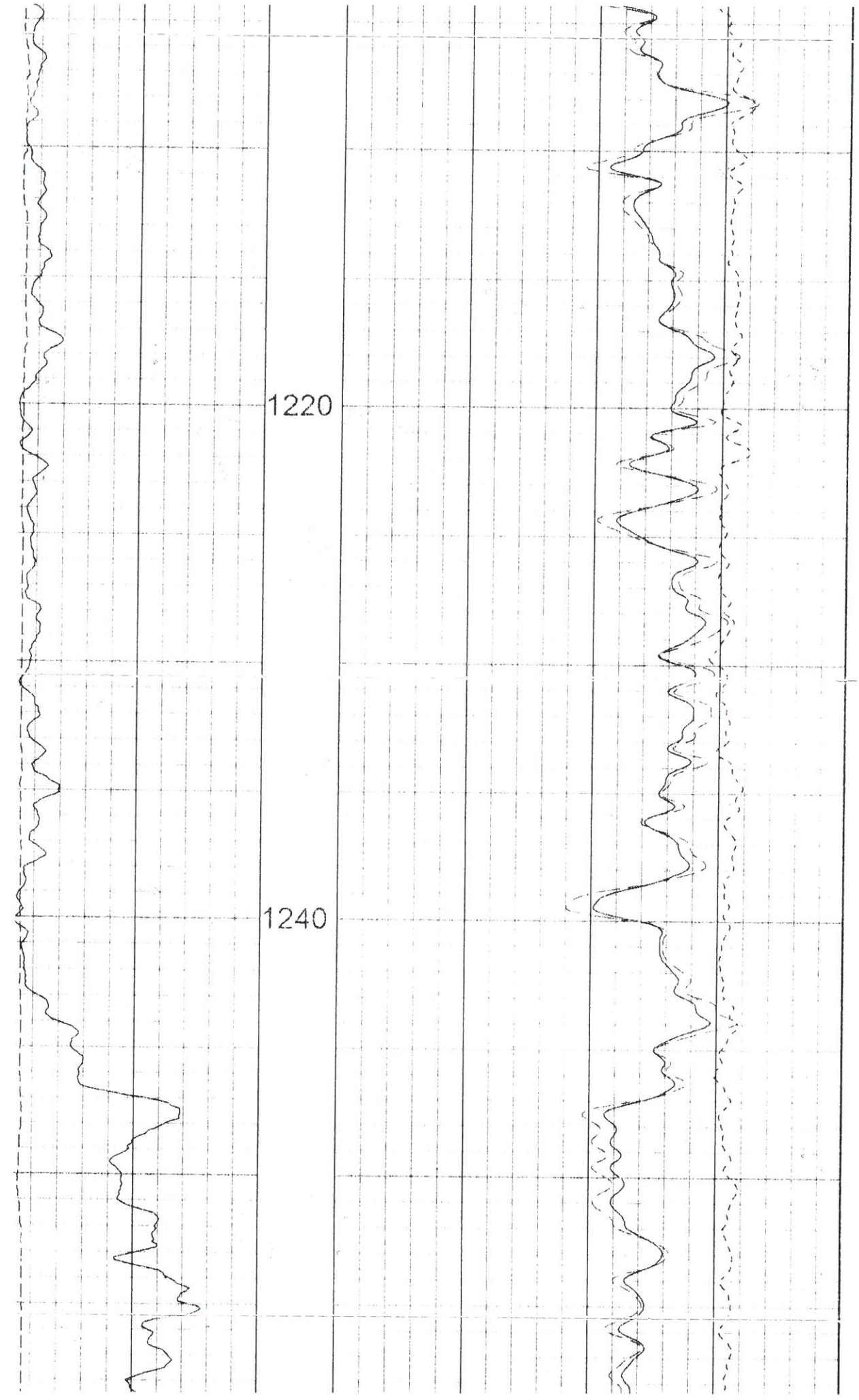
1140


1160
1180
1200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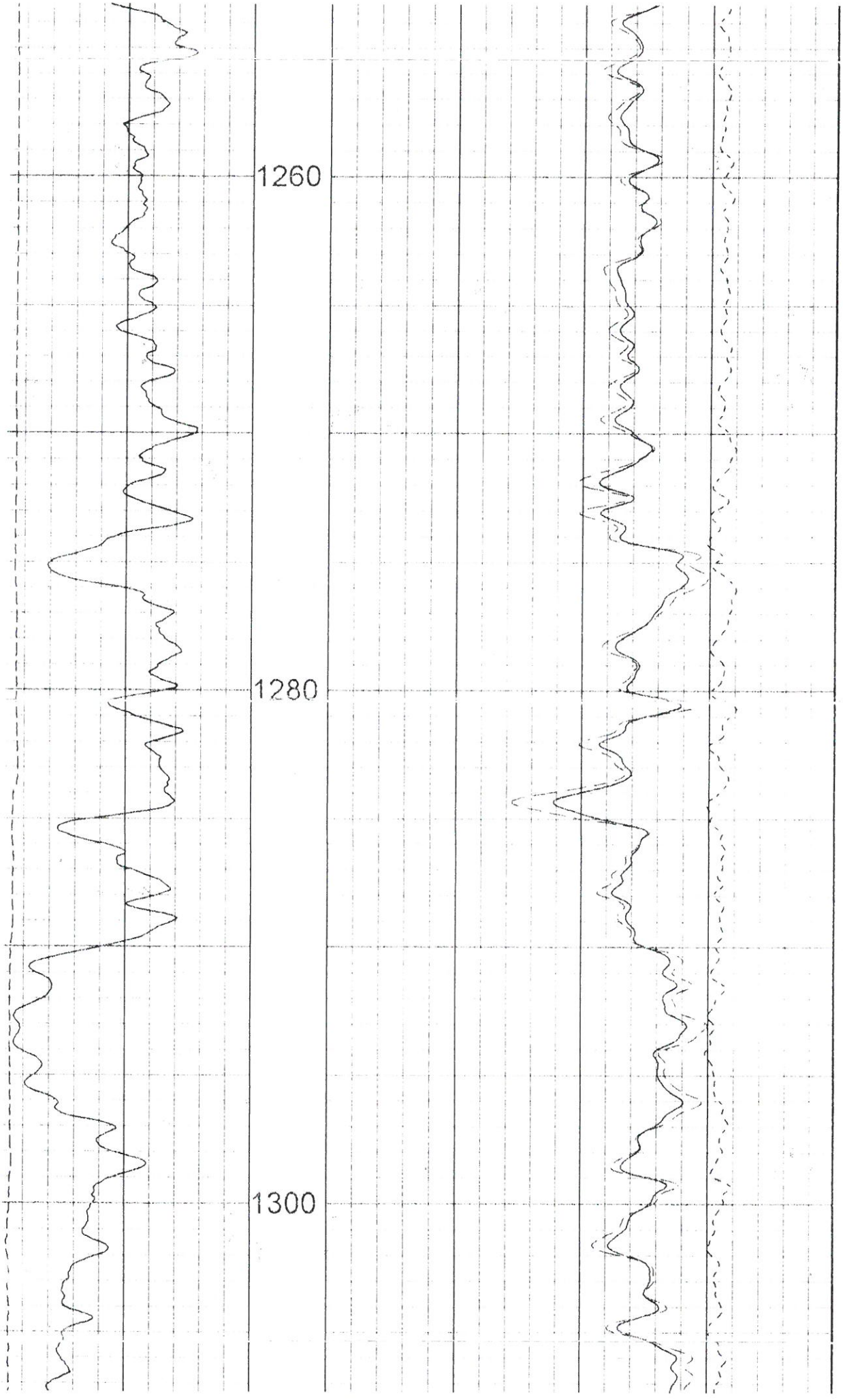
1240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1280
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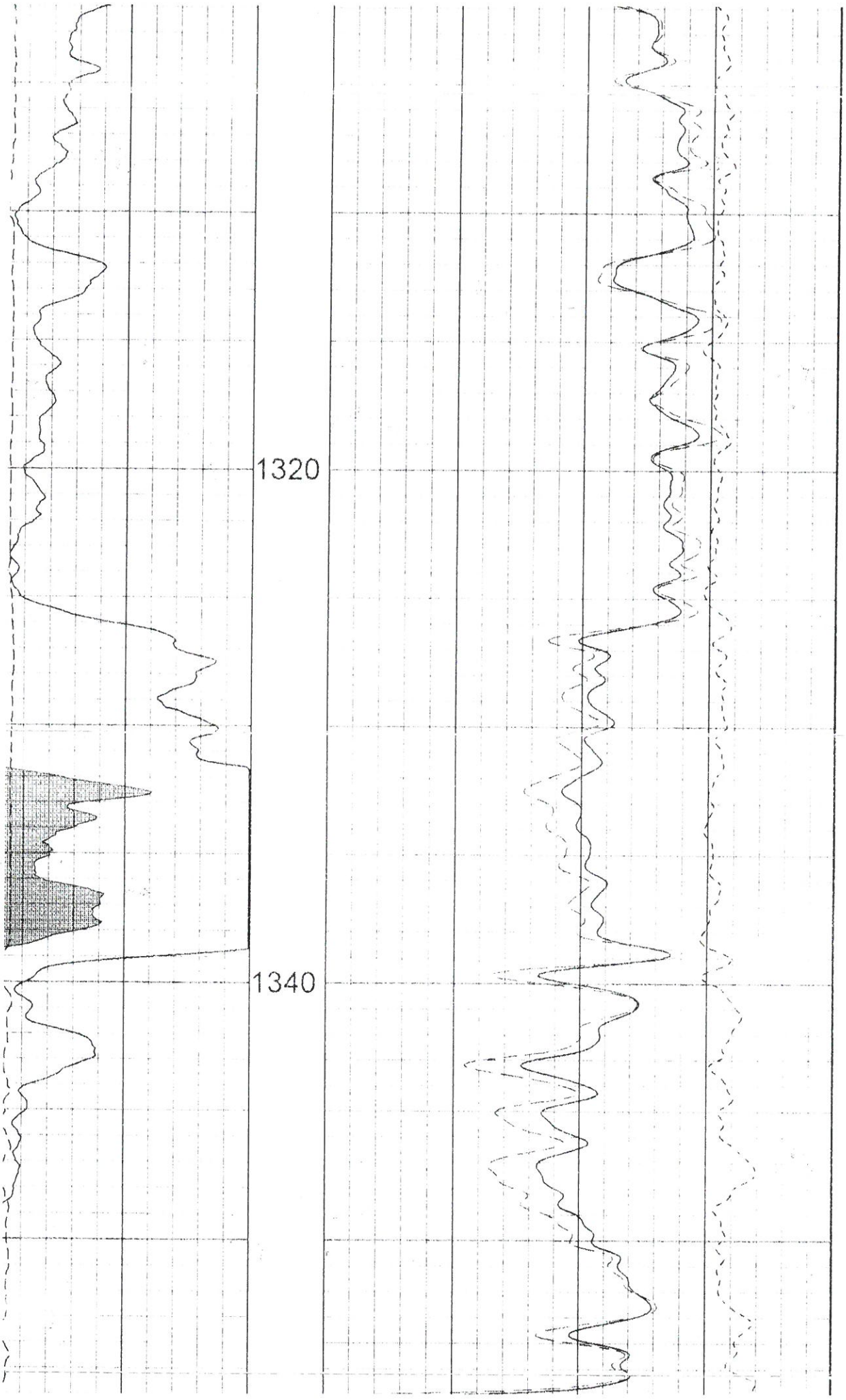
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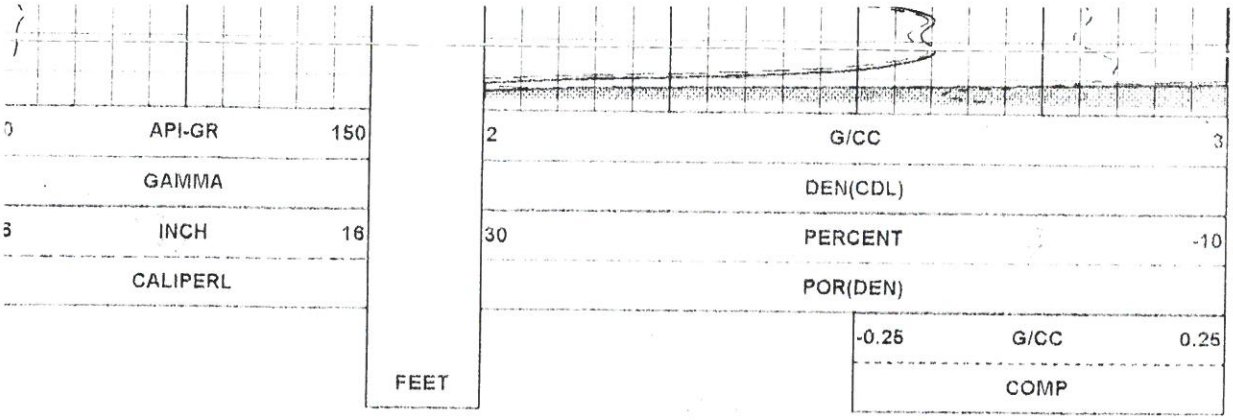
1340



25 INCH LOG, HIGH RES. DENSITY LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY = 2.71	NEUTRON MATRIX = LIMESTONE	MATRIX DELTA T = 49
MAGNETIC DECL = 0	ELECT. CUTOFF = 3777	BIT SIZE = 6.75
PRESENTATION NAME/DATE =	CWS CHANUTE CDL 25.0 03/01/2008	VERSION = 3.64F1

DIFFERENTIAL TEMPERATURE LOG

LASSMAN #122

CORNISH WIRELINE SERVICES, INC.

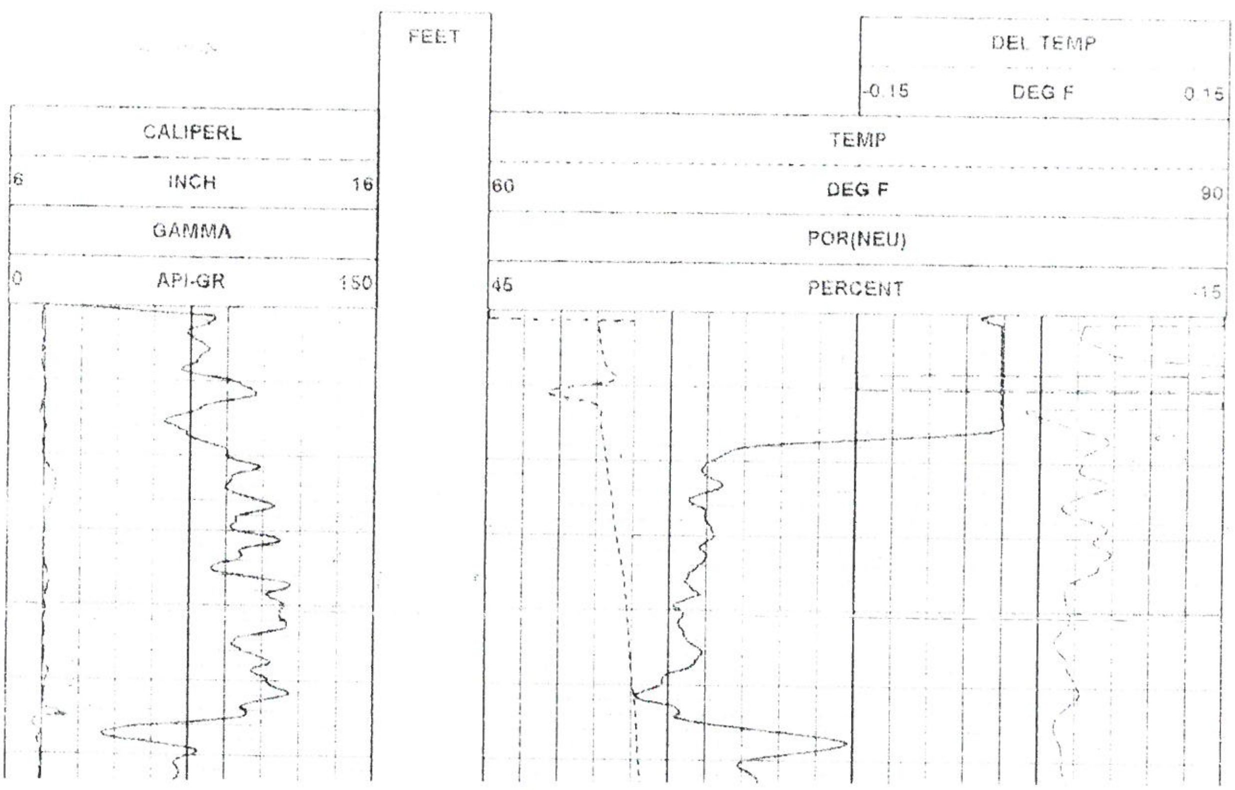
COMPANY	BIRK PETROLEUM	OTHER SERVICES
WELL	LASSMAN #122	NDL
FIELD	HUMBOLDT	DIL
COUNTY	ALLEN	D TEMP
STATE	KANSAS	
LOCATION	300'FSL / 400'FWL - SE SW SW SW	
SECTION	8	
TOWNSHIP	26S	
[illegible]	19E	
API NO	[illegible]-29738-00-00	
LICENSE NO	[illegible]	
PERMANENT DATUM	GL	[illegible]VATION KB
LOG MEASURED FROM	GL	[illegible]
DRL MEASURED FROM	GL	ELEVATION GL [illegible]
DATE	04/30/08	
DEPTH DRILLER	1356	
BIT SIZE	6.75	
LOG TOP	30.00	
LOG BOTTOM	1356.30	
CASING OD	8 5/8	
CASING BOTTOM	20	
CASING TYPE	STEEL	
BOREHOLE FLUID	WATER	
RM TEMPERATURE		
MUD RES		
MUD WEIGHT	8.3	
WITNESSED BY	B BIRK	
RECORDED BY	G ANDREWS	
REMARKS 1	POROSITIES CALCULATED ON SANDSTONE MATRIX FROM 1015 TO SURFACE	
REMARKS 2		

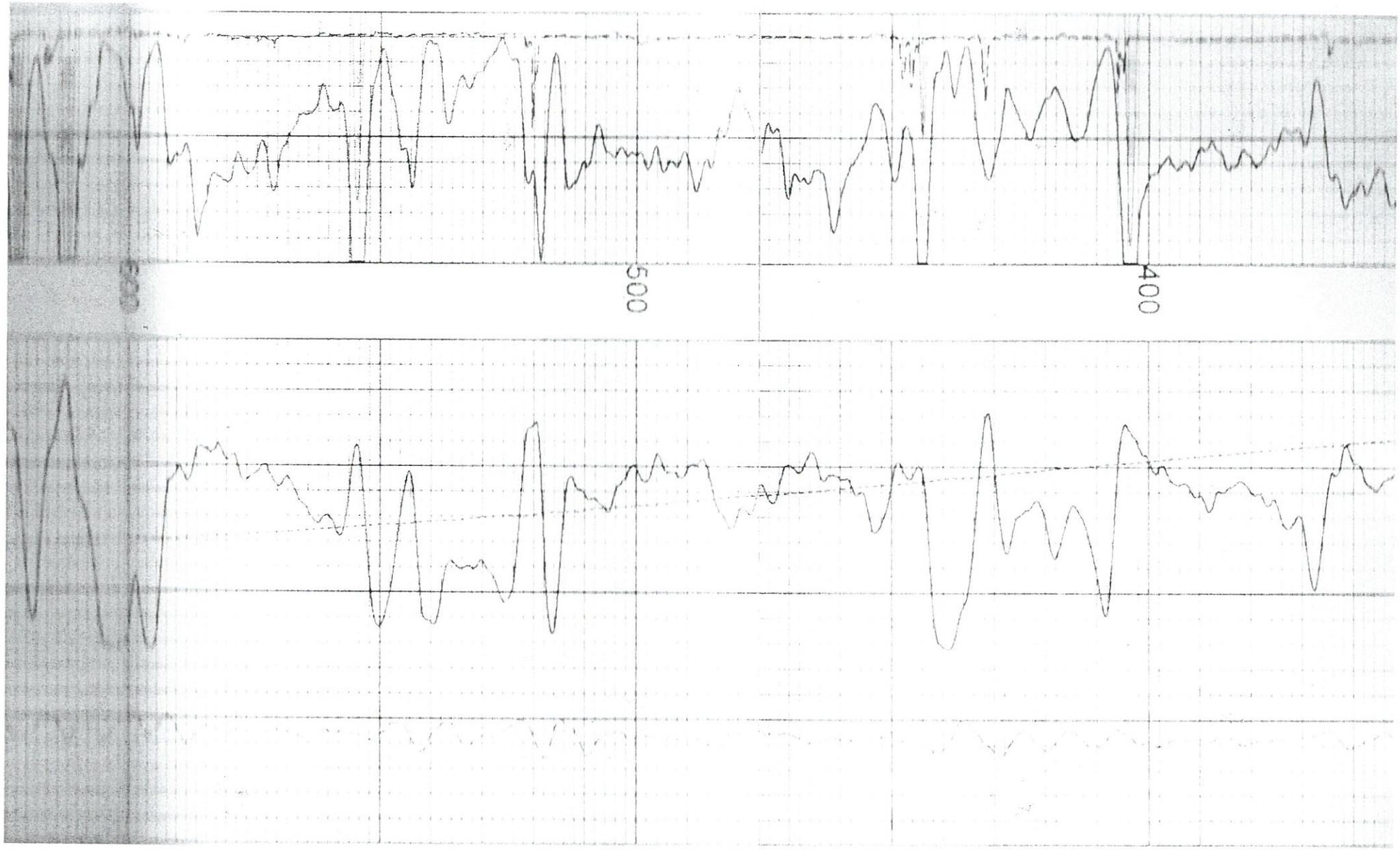
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

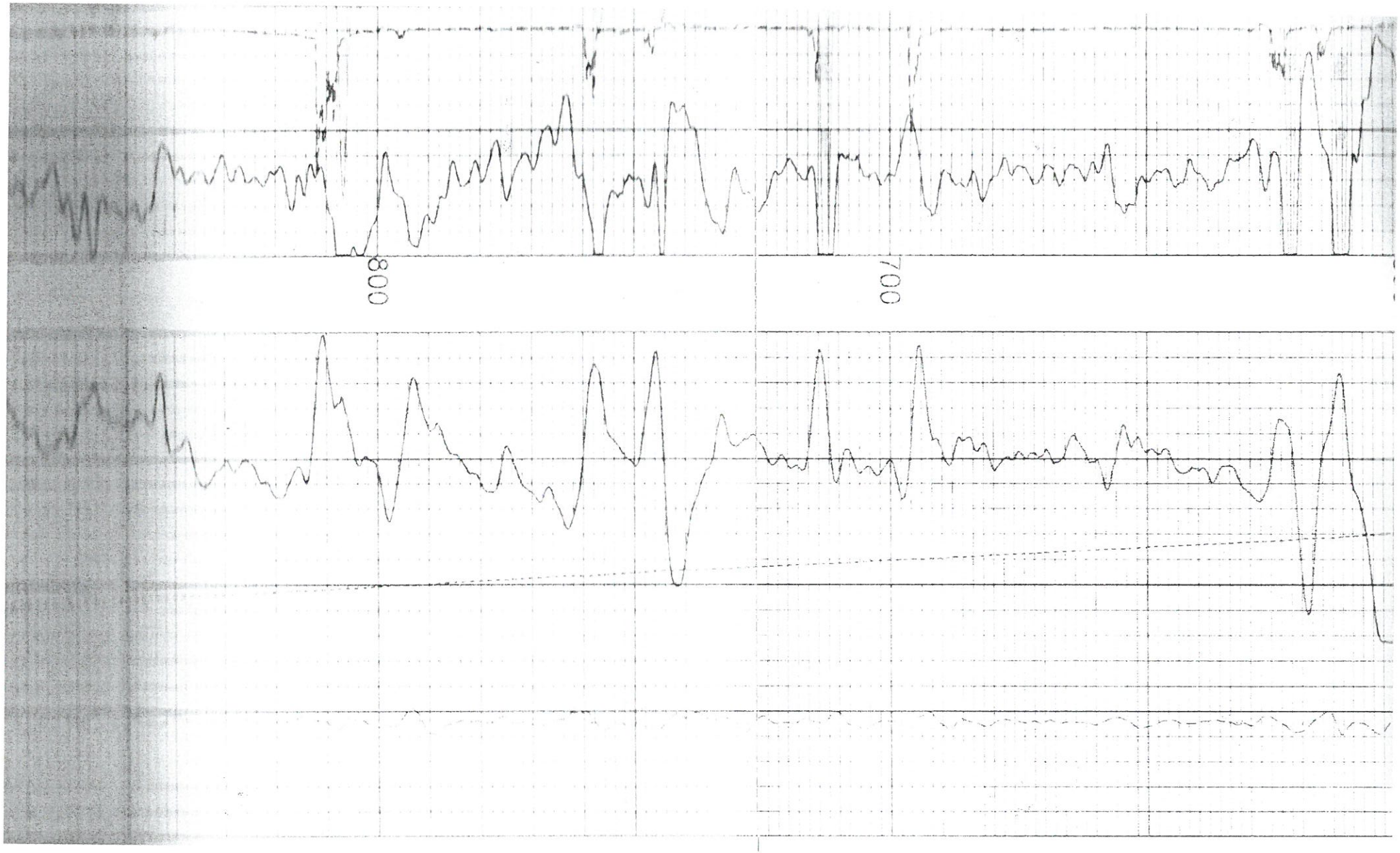
5 INCH LOG, DELTA TEMP LASSMAN #122 04/30/08

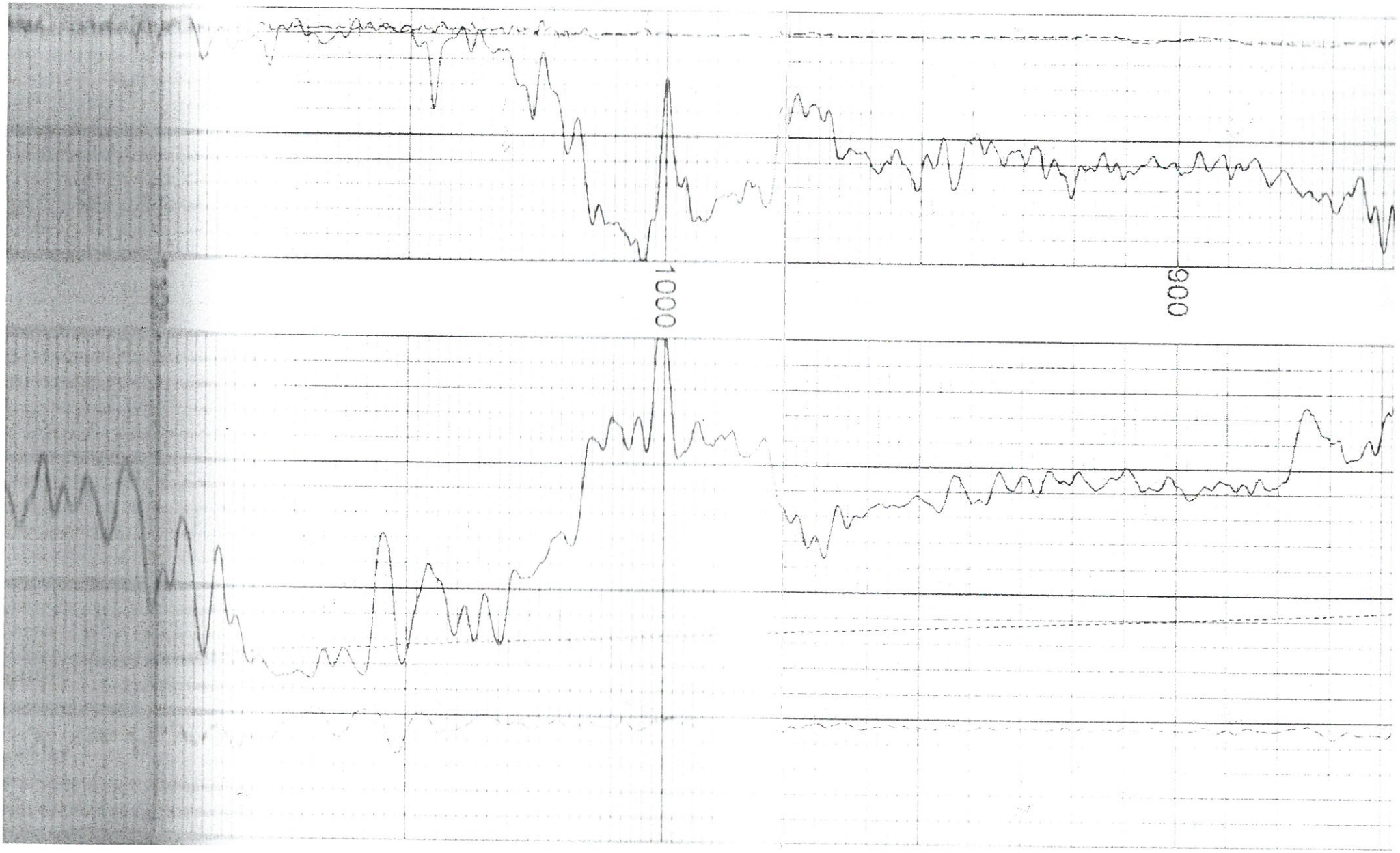
LOG PARAMETERS

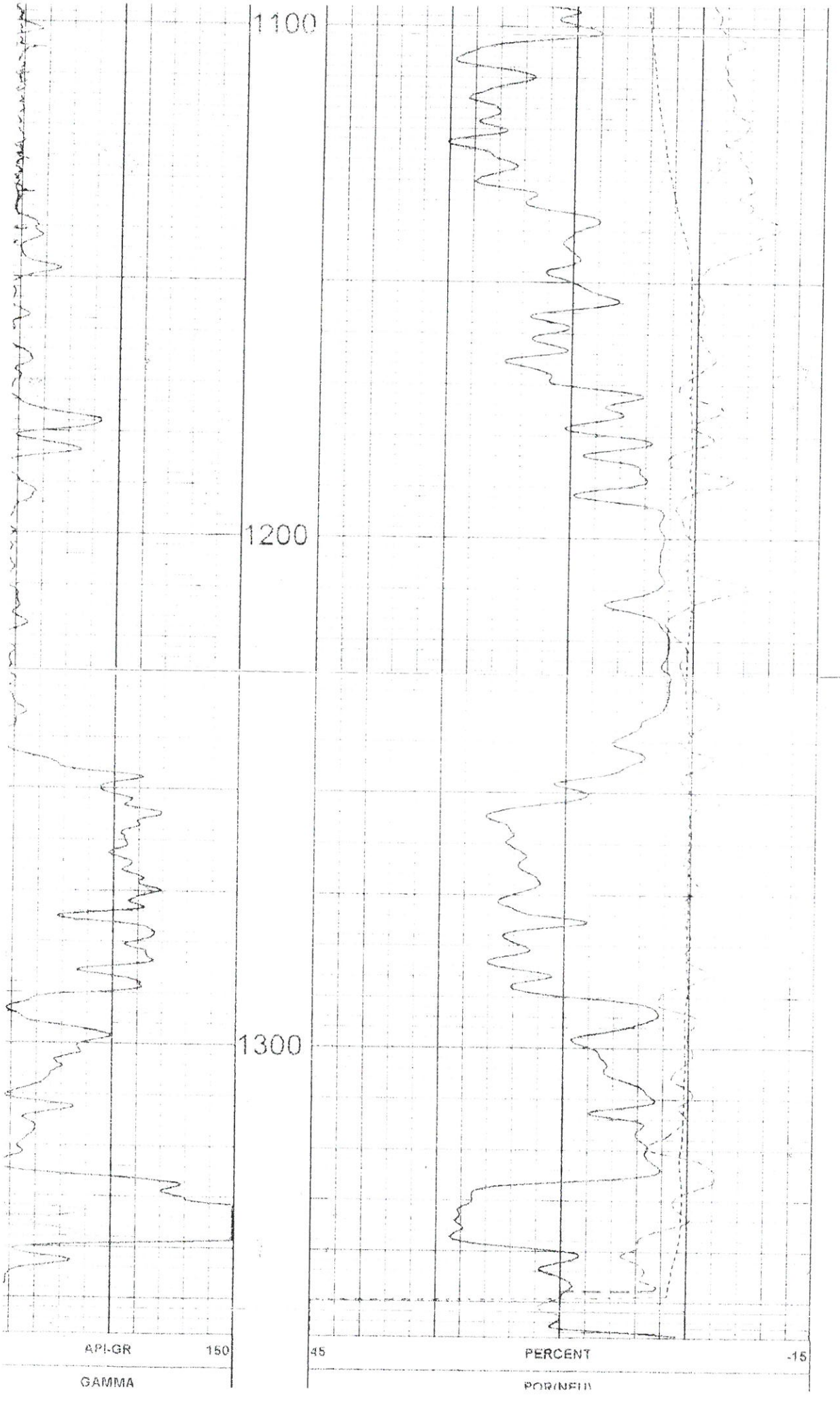
MATRIX DENSITY 2.71	NEUTRON MATRIX LIMESTONE	MATRIX DELTA T [illegible]
MAGNETIC DECL 0	ELECT. CUTOFF 3777	BIT SIZE [illegible]
PRESENTATION NAME/DATE — [illegible] CHANUTE TEMP 5.0 03/25/2008		VERSION [illegible]




500
400


800
700


1000
900


1100
1200
1300
API-GR
150
GAMMA
45
PERCENT
-15
POR(NEU)

DIFFERENTIAL TEMPERATURE LOG
LASSMAN #122

OTHER SERVICES
NDL
DIL
D TEMP

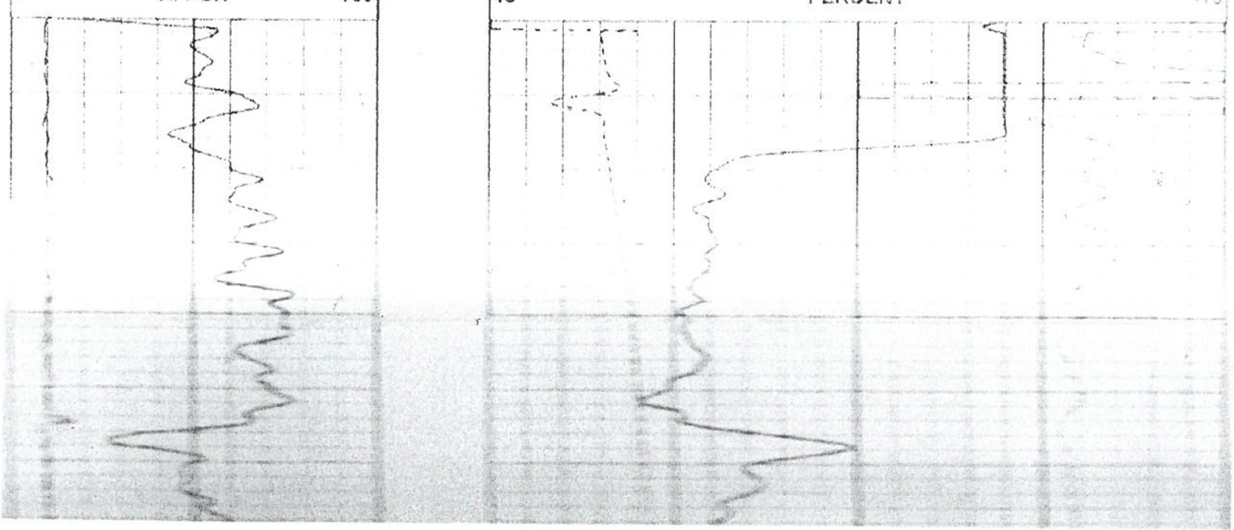
ELEVATION KB
D.F.
ELEVATION GL

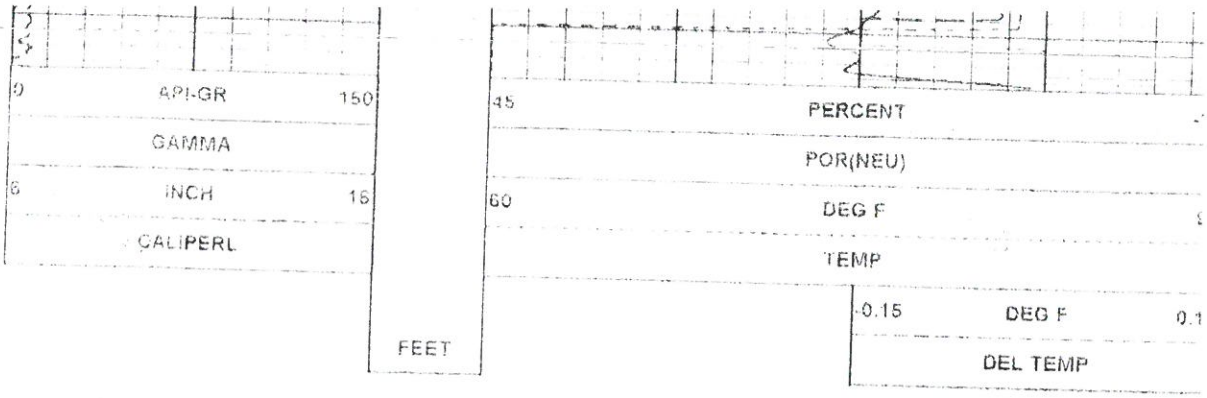
5 INCH LOG, DELTA TEMP LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY [illegible]	NEUTRON MATRIX LIMESTONE	MATRIX DELTA T 49
MAGNETIC DECL [illegible]	ELECT. CUTOFF 3777	BIT SIZE 6.75
PRESENTATION NAME/DATE [illegible] CHANUTE TEMP 5.0 03/25/2008		VERSION = 3.04R1

CALIPERL / GAMMA	FEET	TEMP / POR(NEU) / DEL TEMP
CALIPERL: 6 INCH 16		DEL TEMP: -0.15 DEG F 0.15
GAMMA: 0 API-GR 150		TEMP: 60 DEG F 90
		POR(NEU): 45 PERCENT -15





5 INCH LOG, DELTA TEMP LASSMAN #122 04/30/08

LOG PARAMETERS

MATRIX DENSITY = 2.71
MAGNETIC DECL = 0
PRESENTATION NAME/DATE = CWS CHANUTE TEMP 5.0 03/25/2008
NEUTRON MATRIX = LIMESTONE
ELECT CUTOFF = 3777
MATRIX DELTA T = 49
BIT SIZE = 6.75
VERSION = 3.64F1