KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1052696

Form ACO-18
Form must be typed
Form must be signed
May 2009

APPLICATION FOR VENTING OR FLARING OF GAS OTHER THAN CASINGHEAD GAS (K.A.R. 82-3-314)

Venting / Flaring ID # 111204

Operator Information:

OPERATOR: License # 34192
Name: SandRidge Exploration and Production LLC
Address 1: 123 ROBERT S. KERR AVE
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406
Contact Person: Tyler Howle
Phone: (405) 429-6326

Well Information:

API No. 15 - 15-033-21581-01-00
Spot Description:
S2 - SW - SW Sec. 25 Twp. 31 S. R. 20 ☐ East ☐ West
330 Feet from ☐ North / ☐ South Line of Section
660 Feet from ☐ East / ☐ West Line of Section
County: Comanche
Lease Name: Kerstetter Well #: 1-25H

☑ **A. Formation/Interval and estimated BTU Value of gas to be vented:**

Formation: Mississippi Interval: 5060-5500 Estimated BTU Value: 1100

☑ **B. Expected Maximum Gas Vented Volume:**

Formation: Mississippi BOPD: 50 MCFPD: 1000 BWPD: 2000

☑ **C. Distance to the nearest pipeline or gathering facility:** 7

Include the following attachments for all applications:

☑ 1. Wireline log of subject well, if available. If not available attach, a written explanation why not available.

☑ 2. Completed Well Completion form for the subject well, Form ACO-1.

☑ 3. Method of measuring vented / flared gas.

☑ 4. Written explanation of why venting or flaring is necessary.

☑ 5. Signed certificate showing service of the application and affidavit of publication as required in K.A.R. 82-3-135a.

Include the following for coalbed natural gas venting applications only:

☑ 6. Plat Map including location of subject well, all other wells on subject lease and all wells on offsetting leases. Include the names and address of offsetting operators.

☑ 7. Completed Affidavit for Venting of Coalbed Natural Gas, Form CG-4.

AFFIDAVIT

I am the affiant and I hereby certify that to the best of my current information, knowledge and personal belief, this request to vent/flare natural gas is true and proper and I have no information or knowledge, which is inconsistent with the information supplied in this application.

KCC Office Use Only

☐ Denied ☐ Approved Permit Expires: 10/01/2011

15-Day Periods Ends:

Approved By: Jim Hemmen 05/02/2011 Date: 05/02/2011

Submitted Electronically

Protests may be filed by any party having a valid interest in the application. Protests must be in writing and comply with K.A.R. 82-3-135b and must be filed within 15 days of publication of the notice of the application.

Mail will all required attachments and files to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Well Name:

County, State:

Date:

Accum BB Gas	611		
Prev Acc BB Gas	611		
Daily BB Gas	0		
Start LTR	25,584	OIL SOLD	177
Cumulative Flair			
Previous Cum Flair			
Daily Gas Flair			

Cumulative Gas:	0
Previous Cum Gas:	0
Daily Gas Sales:	0
BOPD:	0
CBO:	0
BWPD	0
CBLWR:	0
BLWLTR:	0
WATER PUMP TOTAL	0

Operator: **email:** **Phone #:**
Operator: **email:** **Phone #:**
Company Man: **email:** **Phone #:**

TIME	TBG	CSG	INJ PRESS	CHOKE	Wtr/HO	STATIC	CUMU HR	MCFD	INJ GAS	BB Gas	BOPH	BOPD	CBO	BWPH	BWPD	CBLWR	BLWLTR	Comments
Begin												0	0		0	0	0	
6:00am												0	0		0	0	0	
7:00am												0	0		0	0	0	
8:00am												0	0		0	0	0	
9:00am												0	0		0	0	0	
10:00am												0	0		0	0	0	
11:00am												0	0		0	0	0	
12:00pm												0	0		0	0	0	
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3:00pm												0	0		0	0	0	
4:00pm												0	0		0	0	0	
5:00pm												0	0		0	0	0	
6:00pm												0	0		0	0	0	
7:00pm												0	0		0	0	0	
8:00pm												0	0		0	0	0	
9:00pm												0	0		0	0	0	
10:00pm												0	0		0	0	0	
11:00pm												0	0		0	0	0	
12:00am												0	0		0	0	0	
1:00am												0	0		0	0	0	
2:00am												0	0		0	0	0	
3:00am												0	0		0	0	0	
4:00am												0	0		0	0	0	
5:00am												0	0		0	0	0	

Proposed

Spud: 3/22/2011

Field	Six Moons
County	Comanche
State	Kansas
Well	**Kerstetter 1-25H**
Location	SEC 25, TWP 31S, RGE 20W
KB	2020'
GL	2000'

Wellbore Schematic

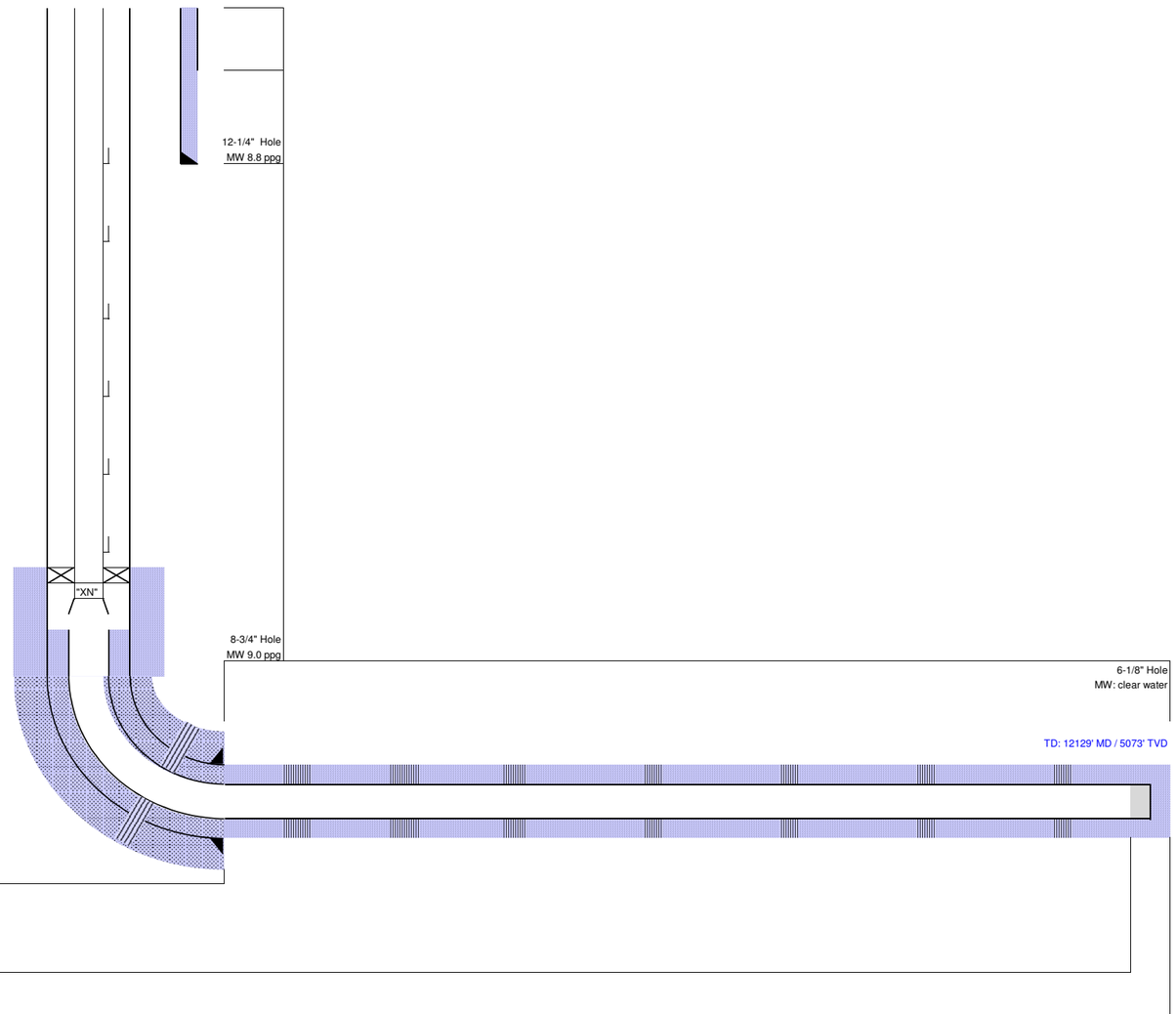
1503-321-58101
API No.

Original Completion ☐
Current ☐
☐
Proposed X

Well Bore Data	MD	TVD
20" 94# H-40 Conductor	90'	90'
9-5/8" 36# J-55 LT&C Csg @	804'	804'
Cplg OD=10.625", ID=8.921" Drift=8.765", Collpase=2020 psi, Internal Yield=3520 psi		
245 sks Class H cmt @ 12.7 ppg (Yield=1.84).		

	Length	Bottom
KB		20'
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #6		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #5		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #4		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #3		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #2		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #1		
1 jts 3-1/2" 9.3# J-55 8rd EUE		
3-1/2" x 7" Arrowset Pkr		
10' 3-1/2" 9.3# sub		
3-1/2" XN Nipple		
WLEG		

Calc'd TOC behind 7" @	3781'	3781'
Top of Liner @	4232'	4232'
126 jts 7" 26# P-110 LT&C	4835'	4830'
13 jts 7" 26# N-80 LT&C Csg @	5483'	5132'
N-80: Cplg OD=7.656", ID=6.276" Drift=6.151", Collpase=5410 psi, Internal Yield=7240 psi		
P-110: Cplg OD=7.656", ID=6.276" Drift=6.151", Collpase=6210 psi, Internal Yield=9950 psi		
Cmt'd w/ 260 sks Class A @ 13.6 ppg (Yield=1.43).		
PBTD @	12084'	5075'
200 jts 4-1/2" 11.6# N-80 LT&C @	12127'	5073'
Cplg OD=5.00", ID= 4.000", Drift=3.875", Collpase=6350 psi, Internal Yield=7780 psi		
Cmt'd w/ 760 sks 50/50 Poz @ 13.6 ppg (Yield=1.44).		



Jason McElvany
4/18/2011

Summary Production Report

Lease Name:	**JUDITH**		
Lease Number:	MULTIPLE	Cum Oil:	24,466
Operator Name:	AMERICAN WARRIOR INCORPOR	Cum Gas:	101,584
State:	KANSAS	Cum Water:	
County:	COMANCHE	First Production Date:	MAY 2001
Field:	PIPELINE NORTHWEST	Last Production Date:	DEC 2010
Production ID:	SUM002223527		
Reservoir Name:	MISSISSIPPIAN		
Prod Zone:	MISSISSIPPIAN		
Basin Name:	ANADARKO BASIN		
Status:	ACTIVE MULTIPLE		

Annual Production **(10 years)**

Year	Oil BBLS	Gas MCF	Water BBLS
Beginning Cum:			
2001	2,741	16,448	
2002	3,673	9,702	
2003	2,673	9,062	
2004	2,862	11,457	
2005	2,533	10,223	
2006	2,231	9,273	
2007	2,212	9,007	
2008	1,914	8,621	
2009	1,908	9,656	
2010	1,719	8,135	
Totals:	24,466	101,584	

Monthly Production

Date MO/YR	Oil BBLS	Gas MCF	Water BBLS	# of Wells	Days on
MAY 2001	266			1	
JUN 2001	139			1	
JUL 2001	559	3,210		2	
AUG 2001	464	5,793		2	
SEP 2001	488	4,502		2	
OCT 2001	330	1,240		2	
NOV 2001	166	777		2	
DEC 2001	329	926		2	
Totals: 2001	2,741	16,448			
JAN 2002	315	1,046		2	
FEB 2002	476	1,310		2	

MAR 2002	319	1,063		2
APR 2002	332	808		2
MAY 2002	319	617		2
JUN 2002	289	676		2
JUL 2002	163	729		2
AUG 2002	317	724		2
SEP 2002	324	740		2
OCT 2002	165	747		2
NOV 2002	328	687		2
DEC 2002	326	555		2
Totals:				
2002	3,673	9,702		
JAN 2003	132	720		2
FEB 2003	296	515		2
MAR 2003	163	693		2
APR 2003	327	800		2
MAY 2003	157	791		2
JUN 2003	325	747		2
JUL 2003	161	762		2
AUG 2003	159	1,044		2
SEP 2003	323	801		2
OCT 2003	164	856		2
NOV 2003	309	604		2
DEC 2003	157	729		2
Totals:				
2003	2,673	9,062		
JAN 2004	162	744		2
FEB 2004	297	821		2
MAR 2004	306	792		2
APR 2004	160	923		2
MAY 2004	325	1,141		2
JUN 2004	164	1,014		2
JUL 2004	324	1,034		2
AUG 2004	160	999		2
SEP 2004	323	1,068		2
OCT 2004	164	896		2
NOV 2004	160	1,065		2
DEC 2004	317	960		2
Totals:				
2004	2,862	11,457		
JAN 2005	163	876		2
FEB 2005	160	805		2
MAR 2005	325	1,030		2
APR 2005	165	916		2
MAY 2005	100	900		2
JUN 2005	319	845		2
JUL 2005	159	874		2
AUG 2005	325	863		2
SEP 2005	165	793		2
OCT 2005	161	838		2
NOV 2005	330	717		2
DEC 2005	161	766		2
Totals:				
2005	2,533	10,223		

JAN 2006	138	832		2
FEB 2006	166	744		2
MAR 2006	326	885		2
APR 2006	156	718		2
MAY 2006	166	834		2
JUN 2006	162	811		2
JUL 2006	319	852		2
AUG 2006	161	881		2
SEP 2006		733		2
OCT 2006	309	833		2
NOV 2006	162	532		2
DEC 2006	166	618		2
Totals:				
2006	2,231	9,273		
JAN 2007	157	857		2
FEB 2007	155	725		2
MAR 2007	326	874		2
APR 2007	157	655		2
MAY 2007	163	785		2
JUN 2007	160	791		2
JUL 2007	314	754		2
AUG 2007	141	790		2
SEP 2007	159	752		2
OCT 2007	319	755		2
NOV 2007	161	716		2
DEC 2007		553		1
Totals:				
2007	2,212	9,007		
JAN 2008	319	632		2
FEB 2008	159	757		2
MAR 2008	141	681		2
APR 2008	162	773		2
MAY 2008	164	804		2
JUN 2008	164	672		2
JUL 2008	159	738		2
AUG 2008	162	758		2
SEP 2008	159	753		2
OCT 2008	163	414		2
NOV 2008	162	786		2
DEC 2008		853		1
Totals:				
2008	1,914	8,621		
JAN 2009		809		2
FEB 2009	462	658		2
MAR 2009		700		2
APR 2009	326	760		2
MAY 2009	166	960		2
JUN 2009		821		2
JUL 2009	318	865		2
AUG 2009		842		2
SEP 2009	155	797		2
OCT 2009	324	850		2
NOV 2009		847		2

DEC 2009	157	747		2
Totals:				
2009	1,908	9,656		
JAN 2010	154	710		2
FEB 2010	160	585		2
MAR 2010	153	737		2
APR 2010	164	625		2
MAY 2010	158	659		2
JUN 2010	162	543		2
JUL 2010		753		2
AUG 2010	142	650		2
SEP 2010	147	574		2
OCT 2010	162	737		2
NOV 2010	163	746		2
DEC 2010	154	816		2
Totals:				
2010	1,719	8,135		

COMPACT WELL SHUTTLE ARRAY INDUCTION LOG

Weatherford®

COMPANY	SANDRIDGE ENERGY
WELL	KERSTETTER 1-25H
FIELD	SIX MOONS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS
LOCATION	S2 SW4 SW4
	330' FSL & 660' FWL

40 Years of Wireline 1970 2010

SEC	TWP	RGE	Other Services
25	31S	20W	MPD/MDN

API Number 15-033-21581
Permit Number

Permanent Datum GL, Elevation 2000 feet
Log Measured From KB @ 20 FEET above Permanent Datum
Drilling Measured From KB

Elevations:	feet
KB	2020.00
DF	2018.00
GL	2000.00

Date	14-APR-2011			
Run Number	ONE			
Depth Driller	12129.00	feet		
Depth Logger	12112.00	feet		
First Reading	12109.00	feet		
Last Reading	5450.00	feet		
Casing Driller	5483.00	feet		
Casing Logger	5483.00	feet		
Bit Size	6.125	inches		
Hole Fluid Type	WATER			
Density / Viscosity	8.40 lb/USg	27.00 CP		
PH / Fluid Loss	10.50			
Sample Source	FLOWLINE			
Rm @ Measured Temp	2.0 @ 60.0	ohm-m		
Rmf @ Measured Temp	1.60 @ 60.0	ohm-m		
Rmc @ Measured Temp	2.40 @ 60.0	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	0.93 @137.0	ohm-m		
Time Since Circulation	12 HOURS			
Max Recorded Temp	137.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	18077	OKC		
Recorded By	GUTHMUELLER			
Witnessed By	K GENTRY			

BOREHOLE RECORD

Last Edited: 14-APR-2011 02:05

Bit Size inches	Depth From feet	Depth To feet
12.250	0.00	804.00
8.750	804.00	5483.00
6.125	5483.00	12129.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURF	9.625	0.00	804.00	36.00
INTER	7.000	0.00	5483.00	26.00

REMARKS

WLS SOFTWARE VERSION 11.02.3186 USED
TOOLS RUN ON DRILLPIPE USING COMPACT WELL SHUTTLE DEPLOYMENT TECHNIQUE

DEPTH MEASURED USING ADVANTAGE RIG DEPTH SYSTEM CORRECTED TO PIPE STRAP.

TOOLS DEPLOYED WITH MULE SHOE SITTING AT 12031 FT.
AFTER DEPLOYMENT LOGGING TOOL WAS AT 12113 FT.

4.5 INCH PRODUCTION CASING WAS USED TO CALCULATE ANNULAR HOLE VOLUMES

OPERATORS: D TURNER, M FISHER
S.O. # 3529776
RIG: LARIAT 45

2 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 14-APR-2011 03:10
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340depth.dta
Recorded on 14-APR-2011 01:01
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
4 9 14
14 19 24

Bit Size
inches
4 9 14

Depth In Feet

Replay Scale 1:600

Array Ind. Four Cond Ct
mmhos
1000 750 500 250 0
2000 1750 1500 1250 1000

Array Ind. Four Res 20
ohm metres
0 50 100
0 500 1000

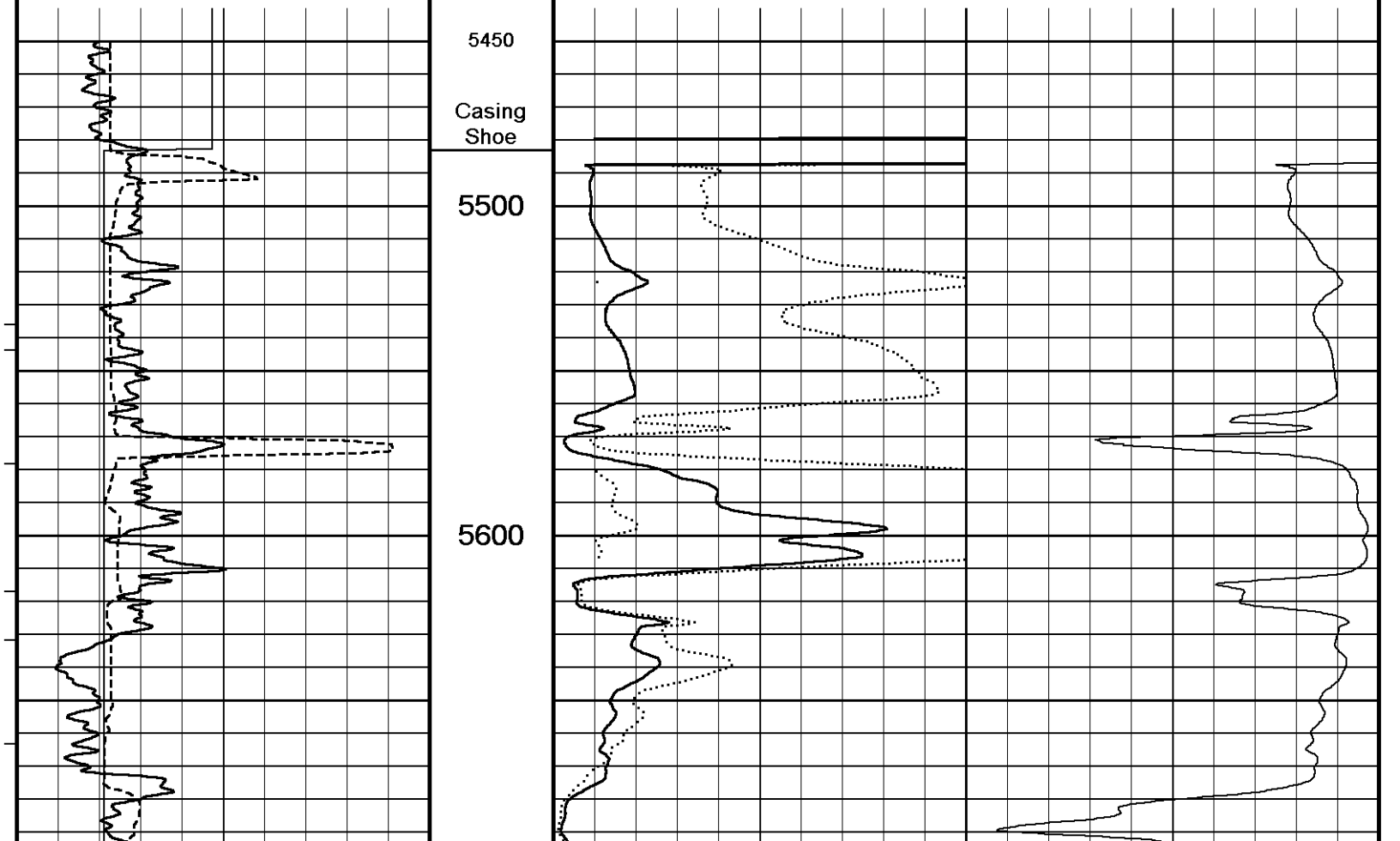
Array Ind. Four Res Rt
ohm metres
0 50 100
0 500 1000

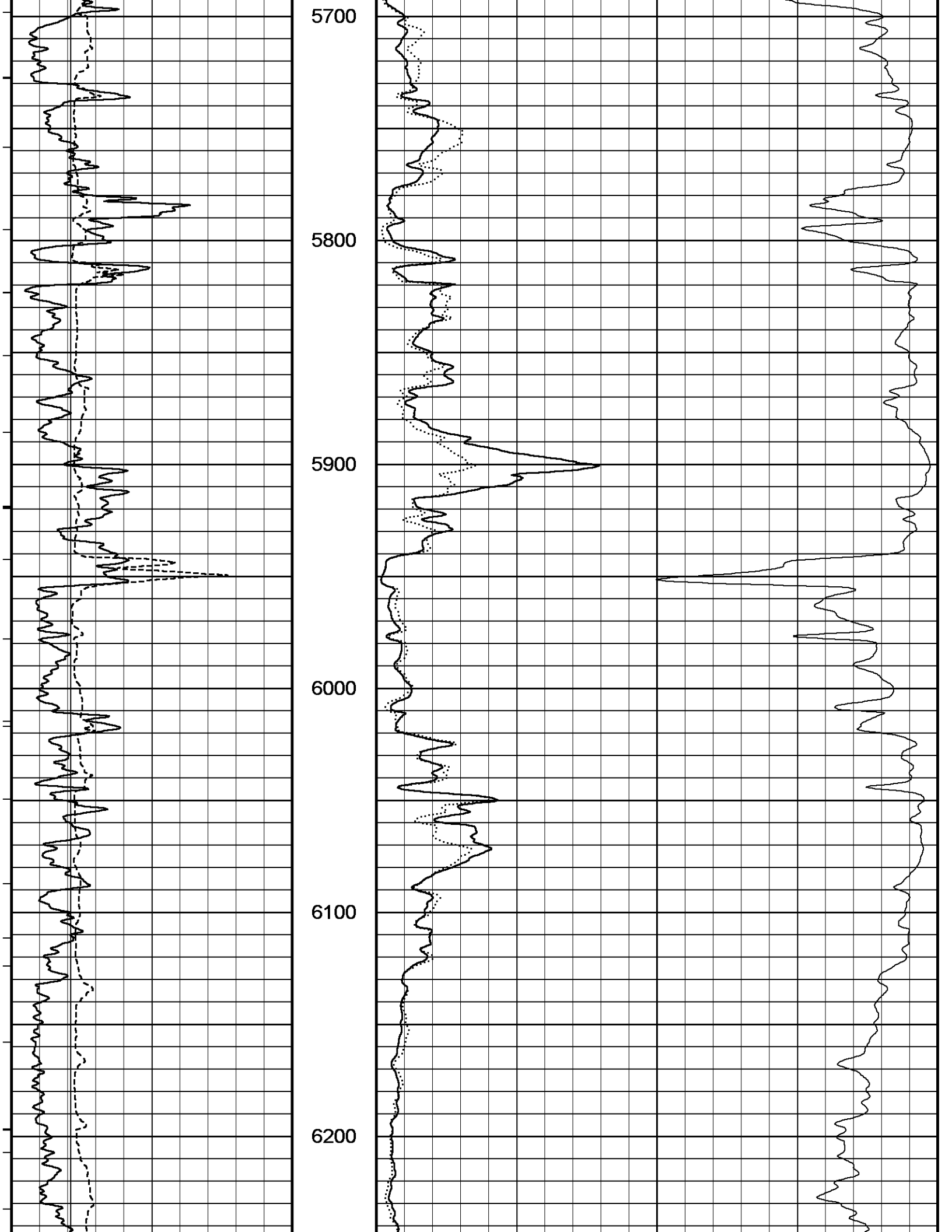
5450

Casing Shoe

5500

5600

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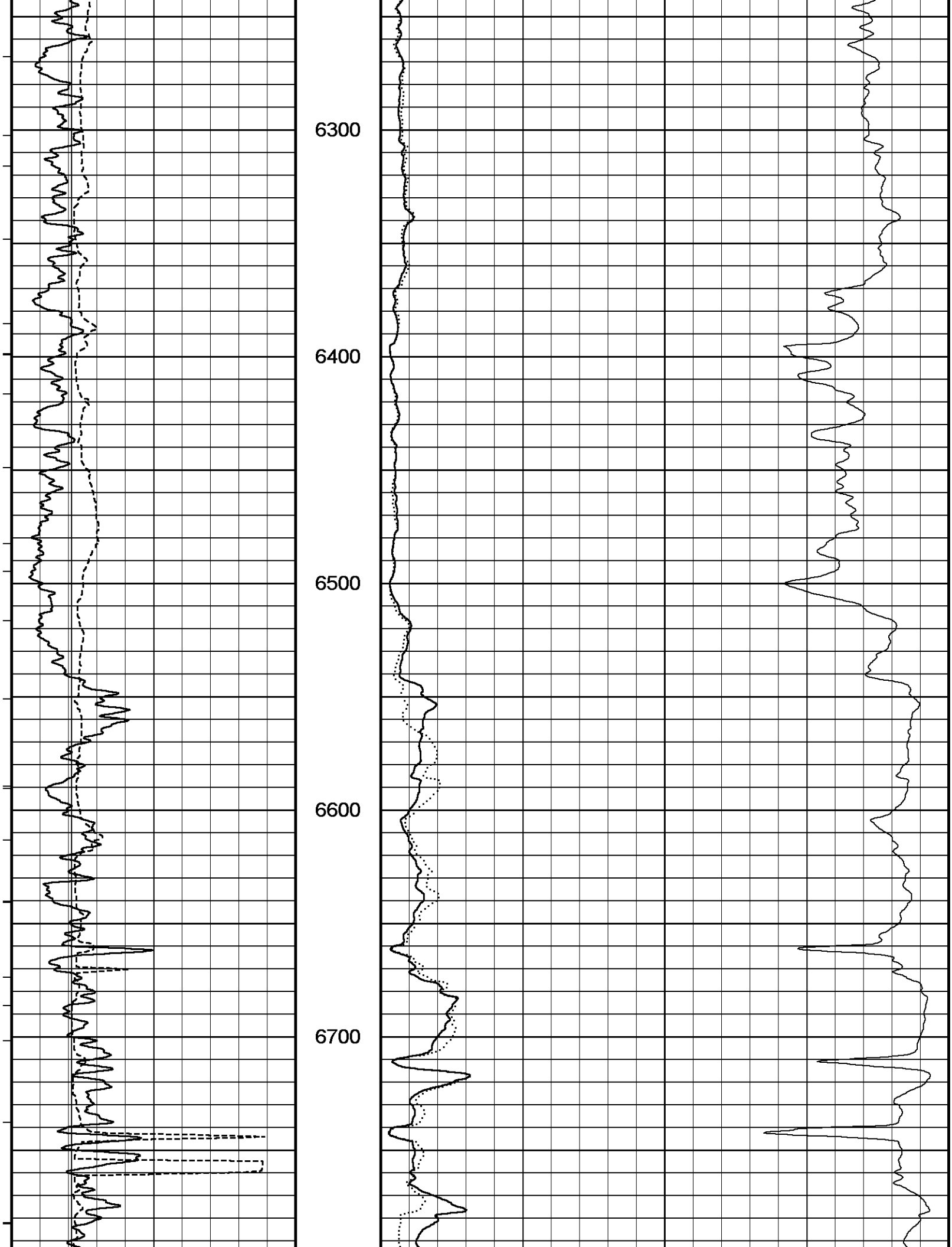
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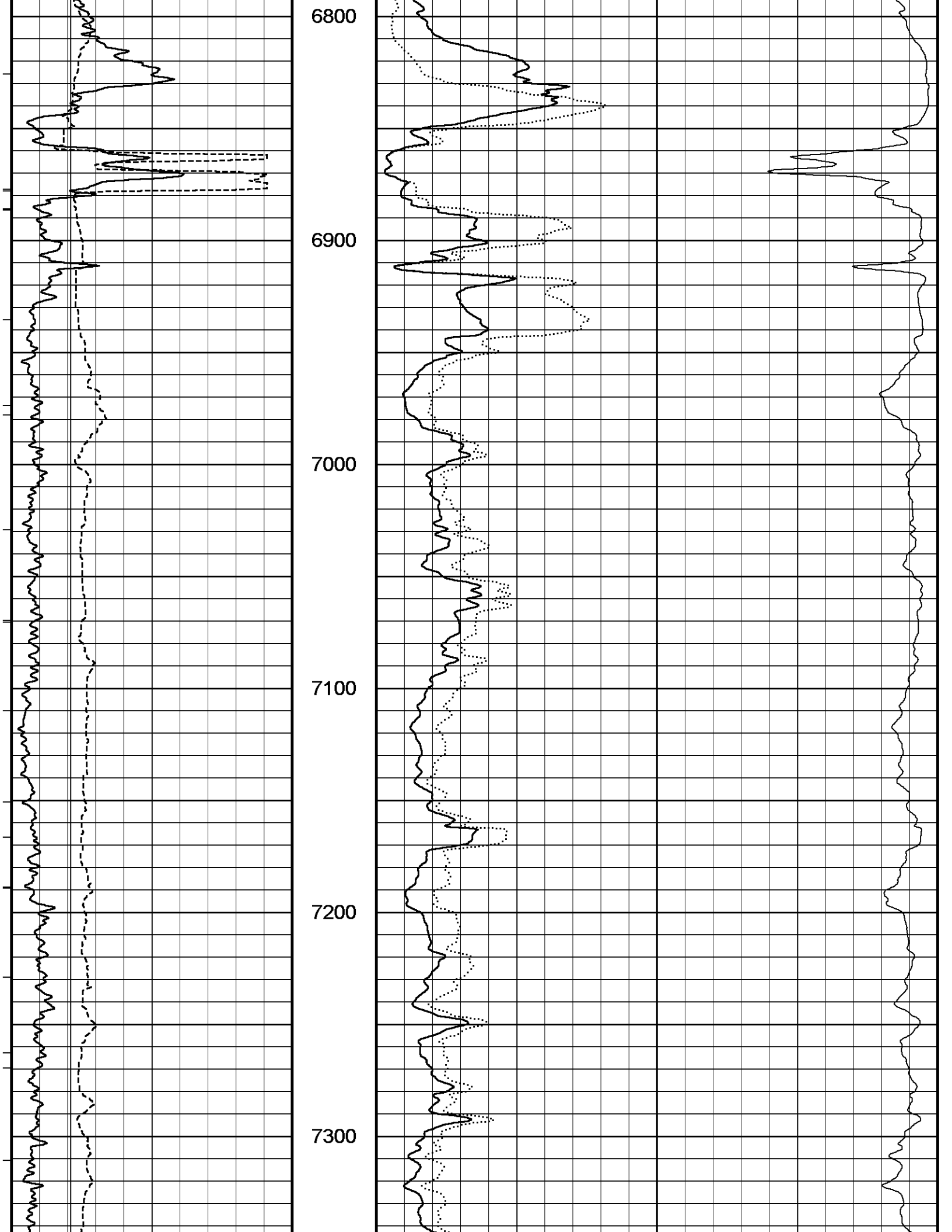
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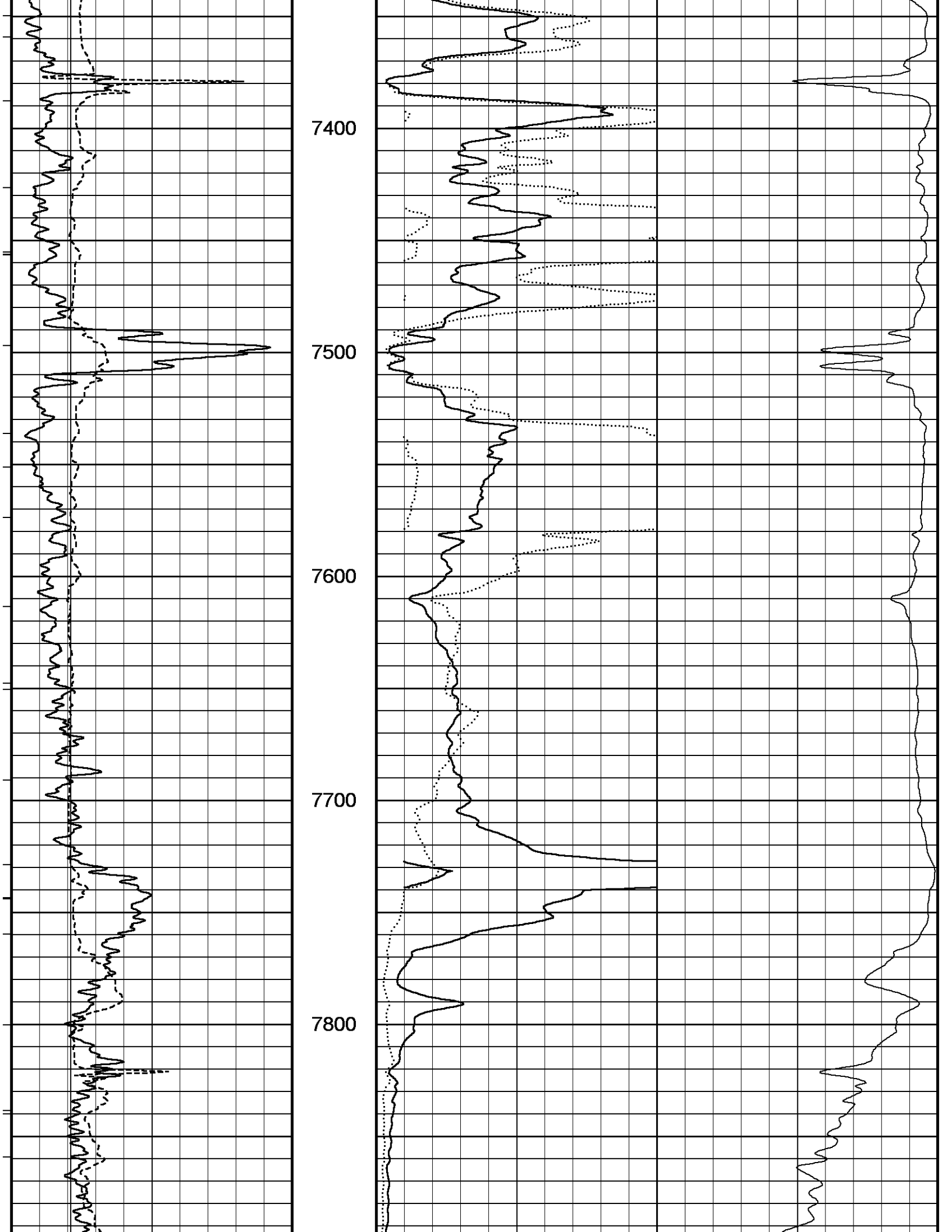
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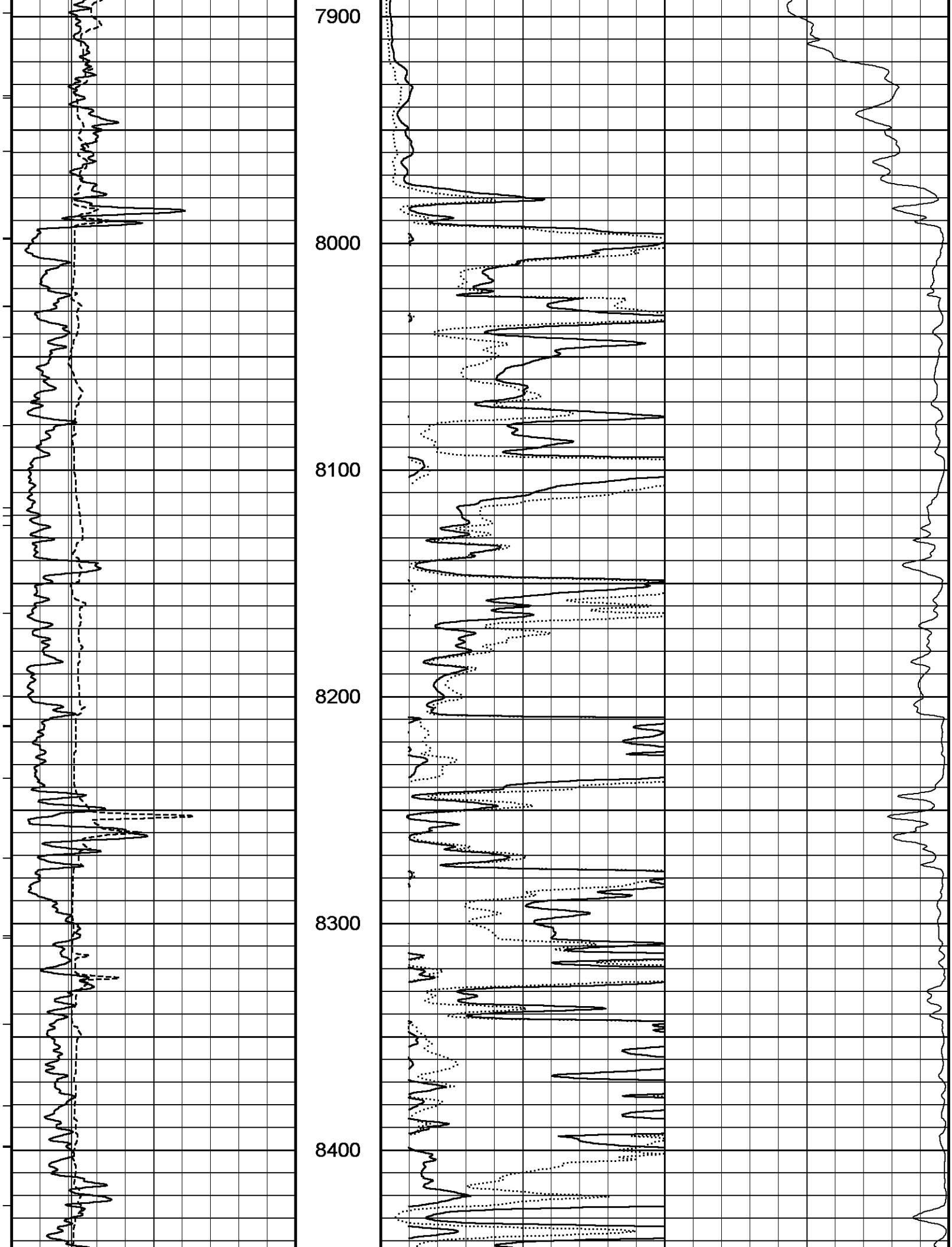
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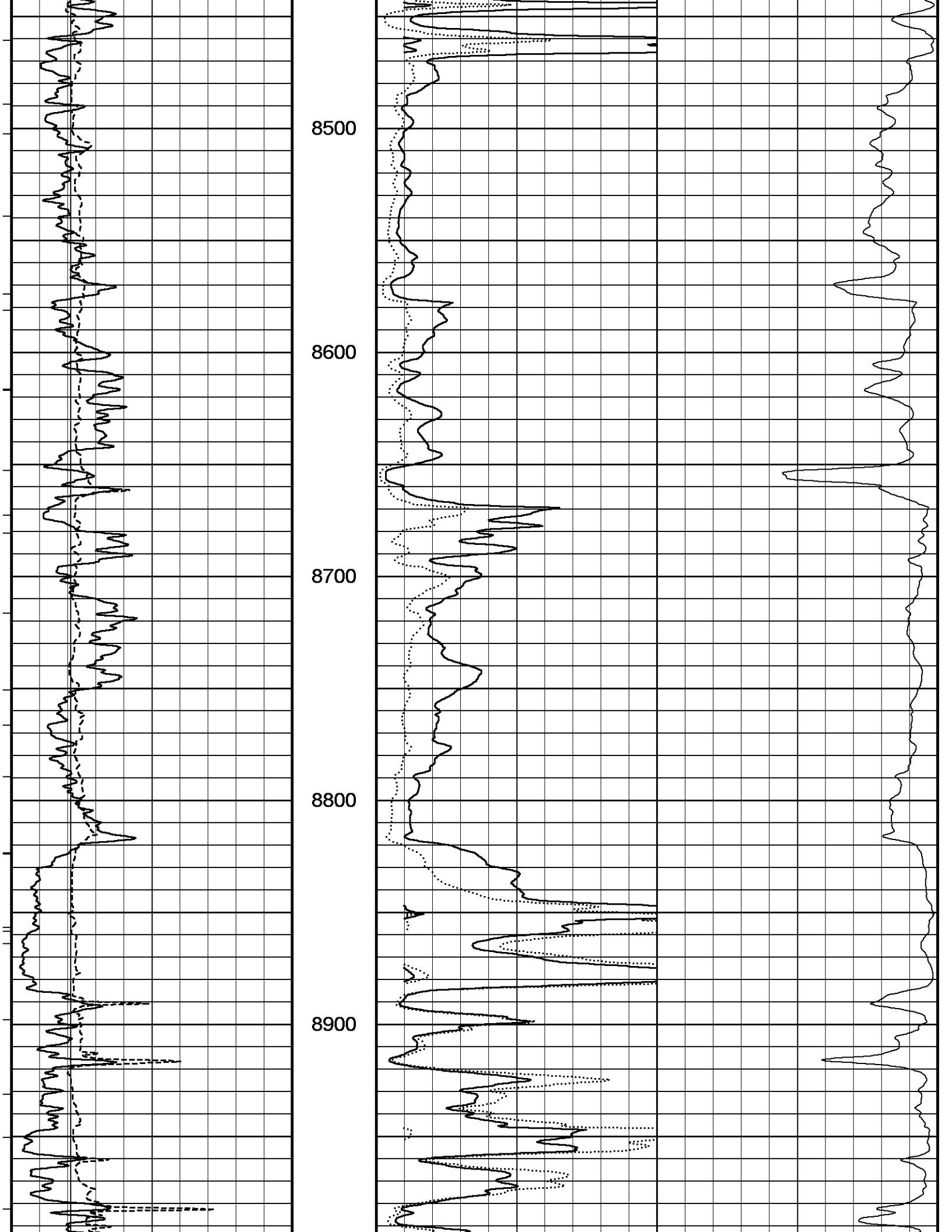
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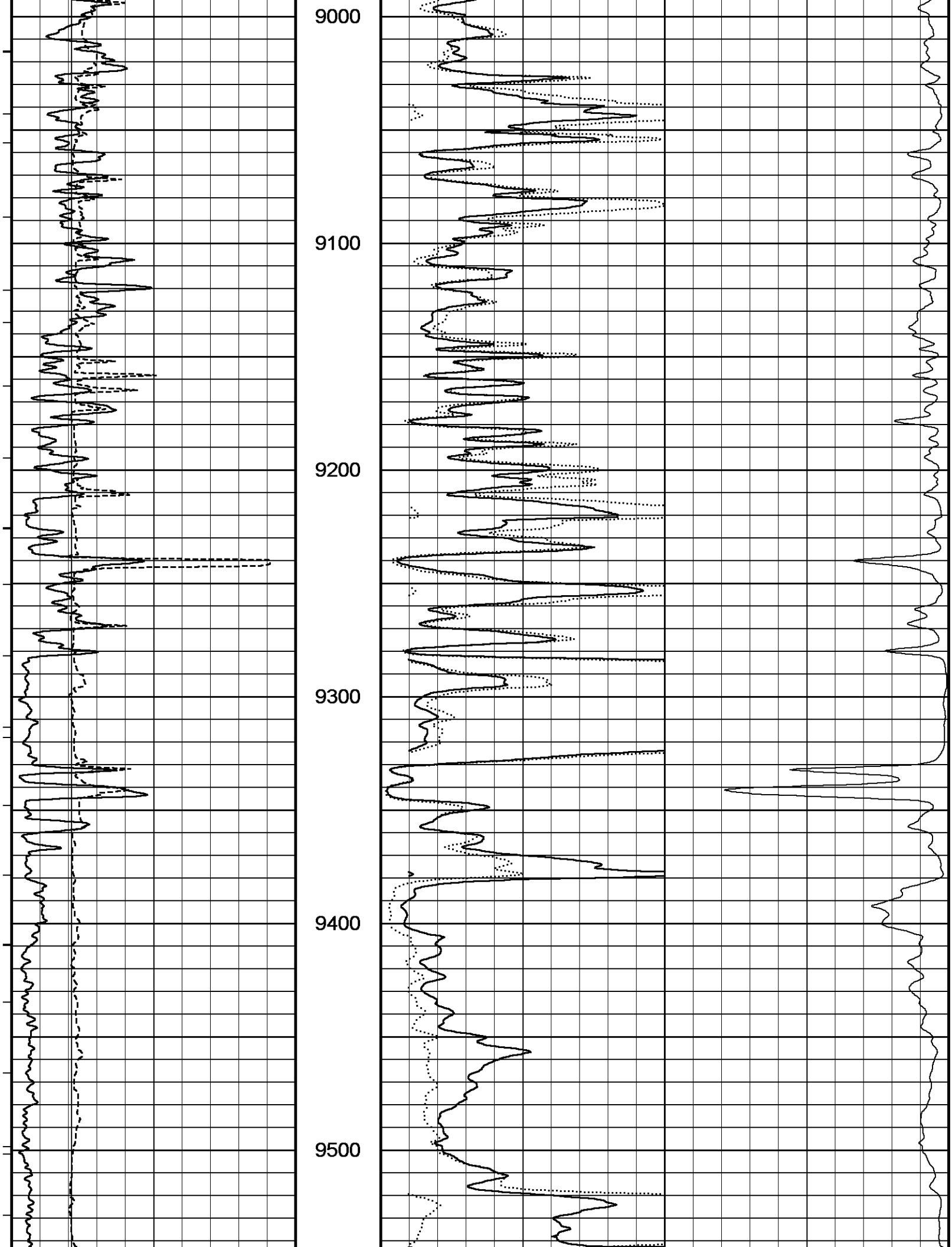
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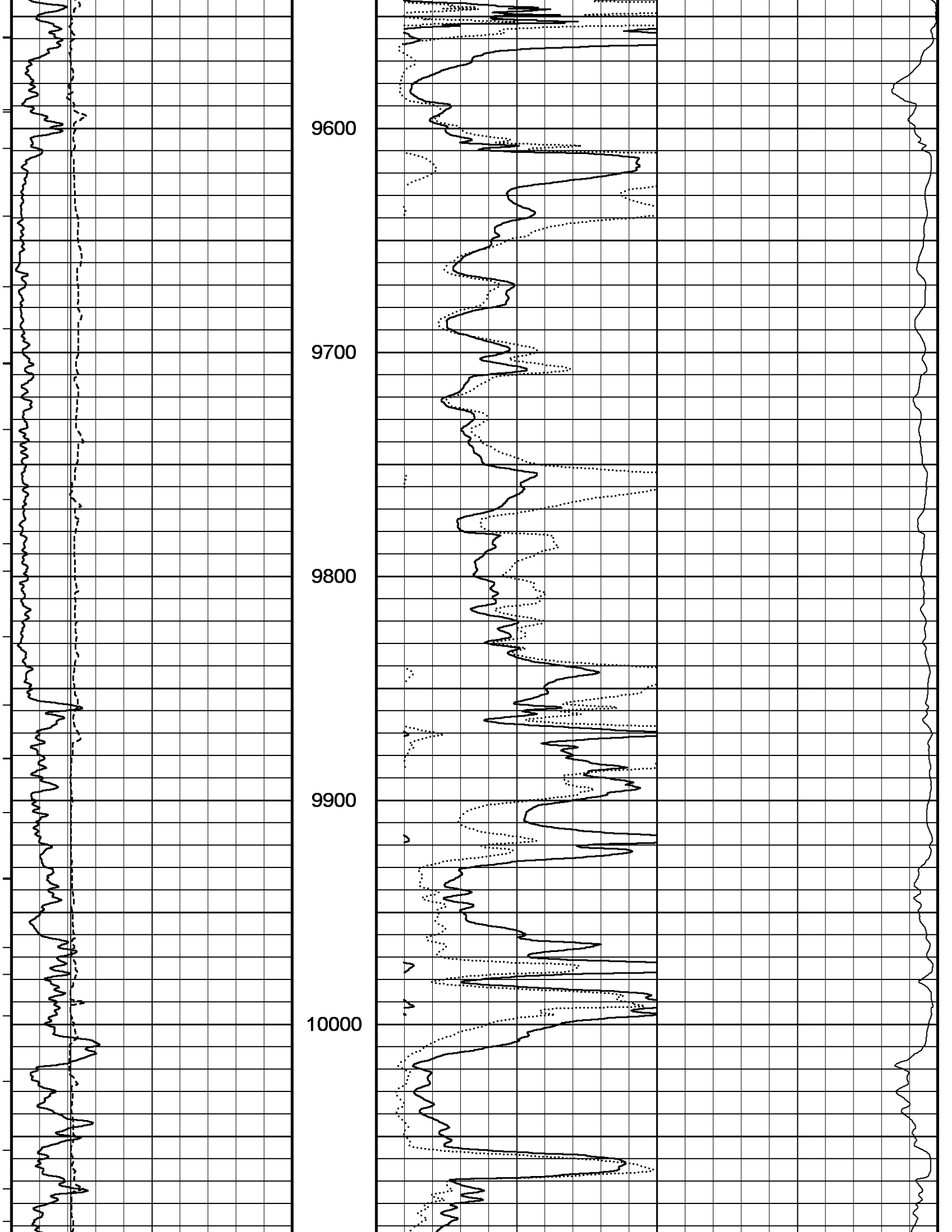
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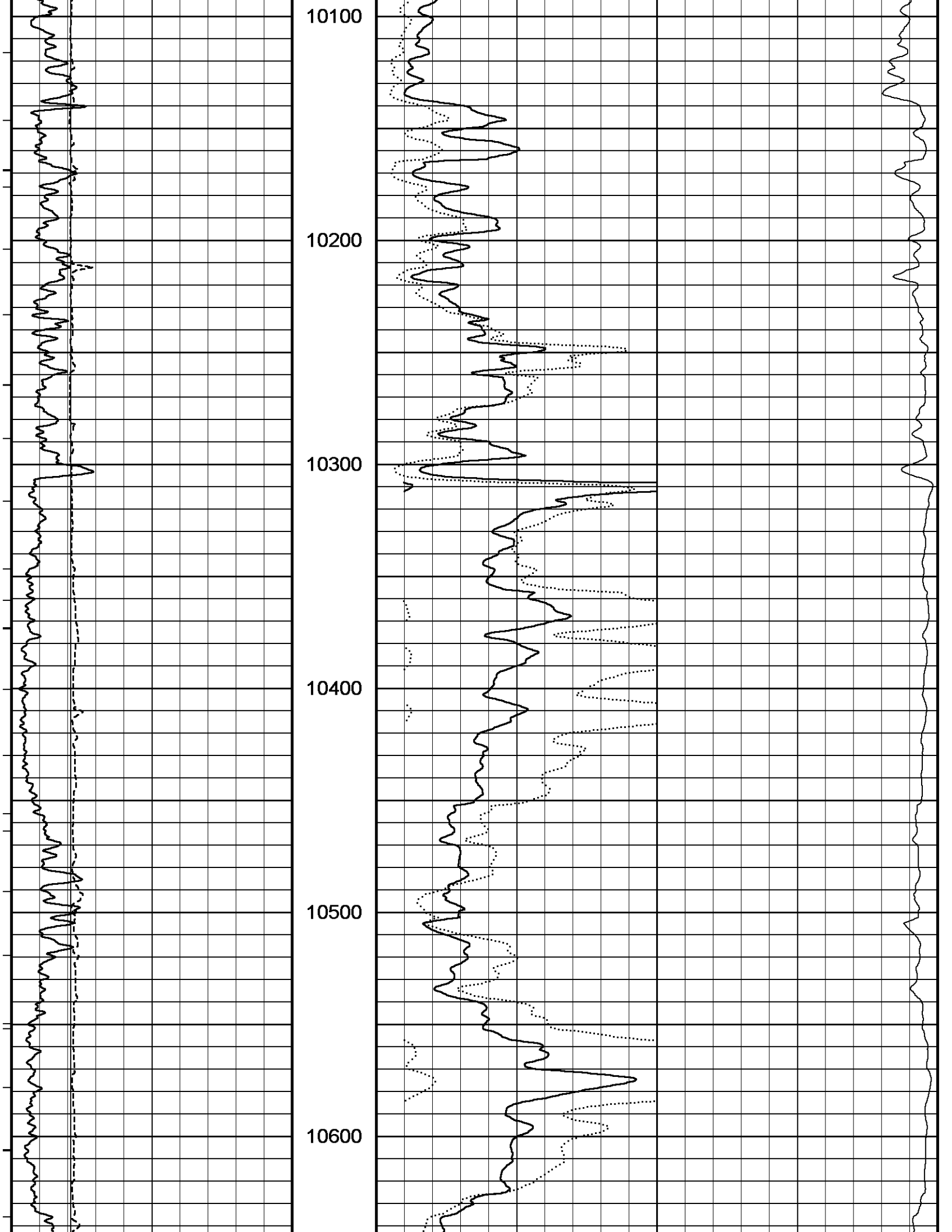
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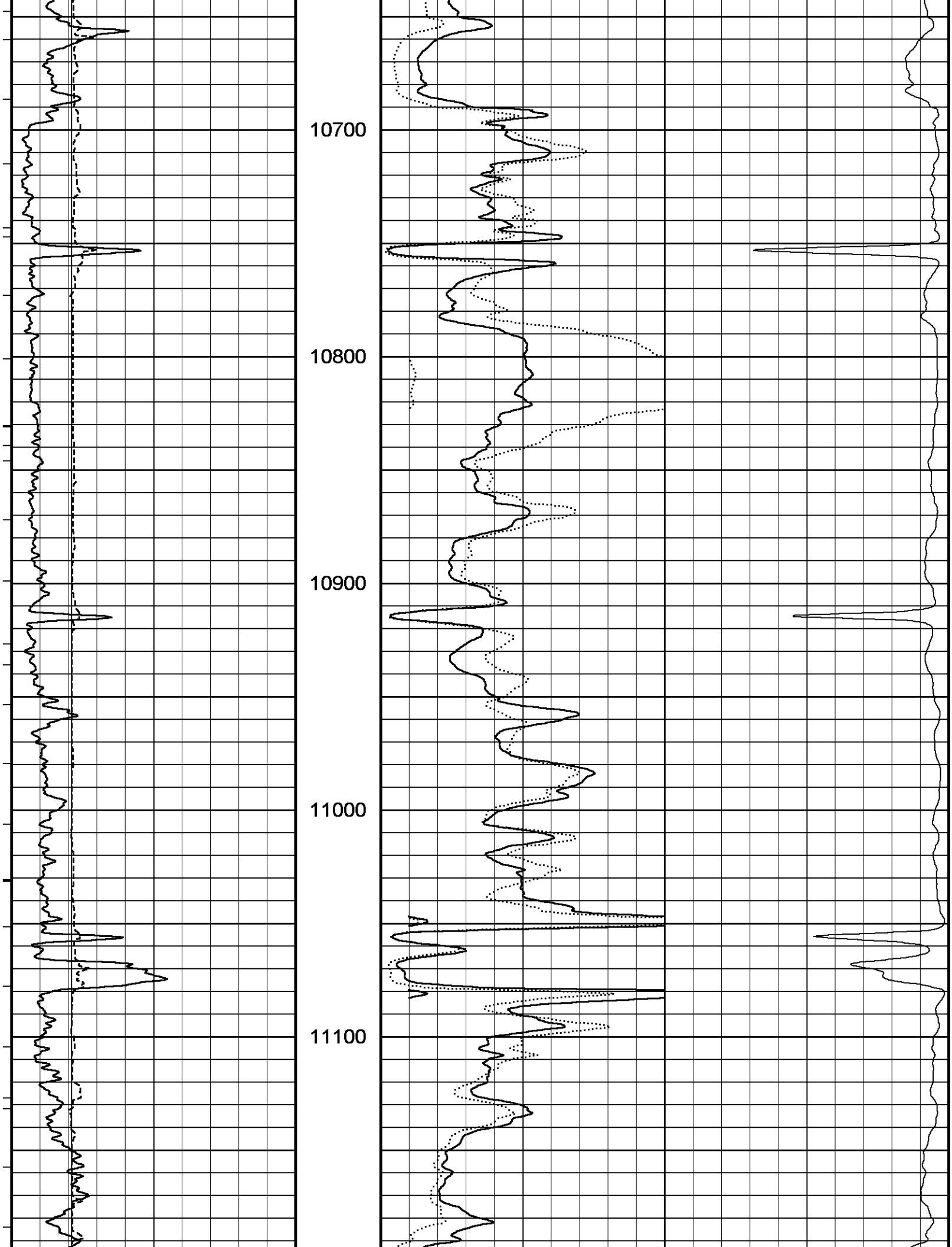
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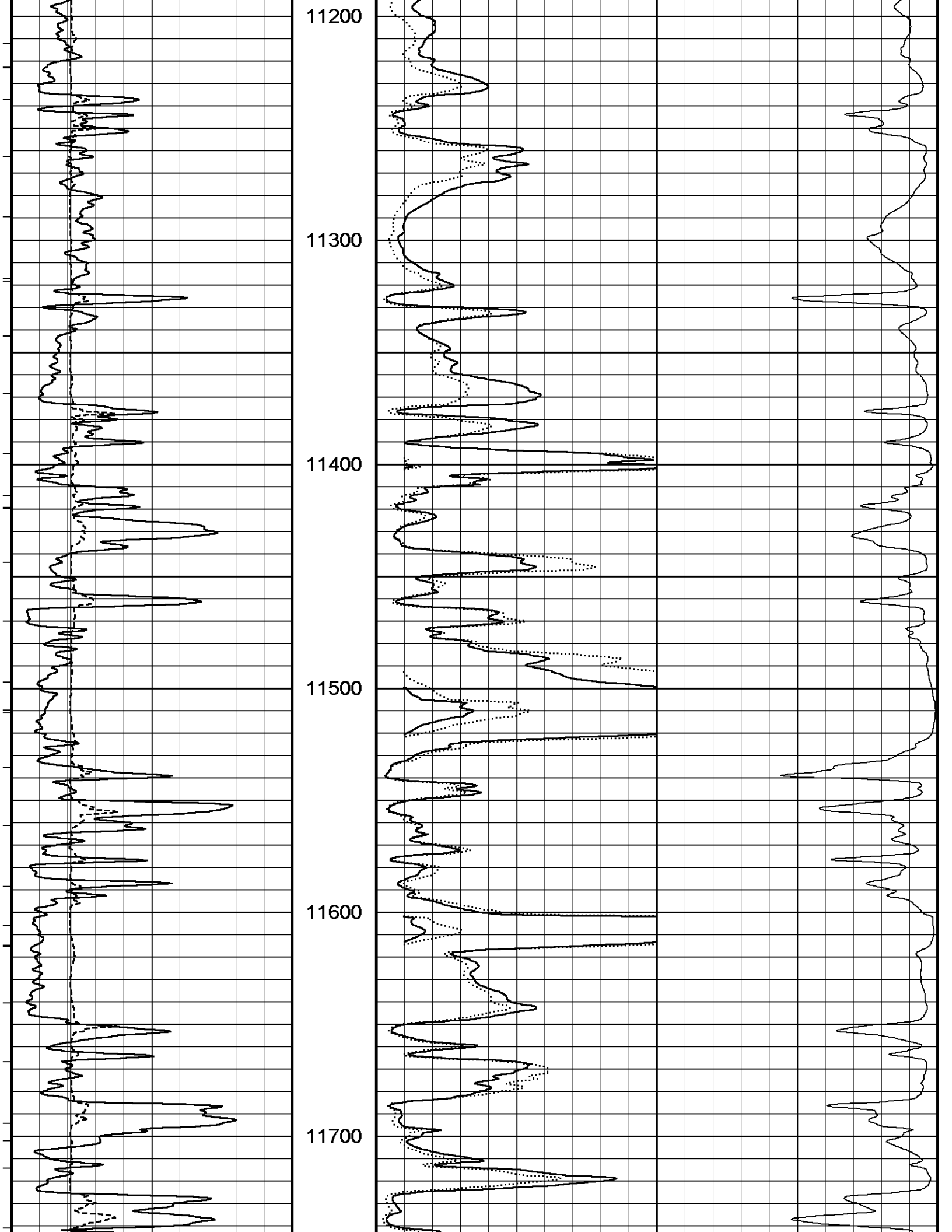
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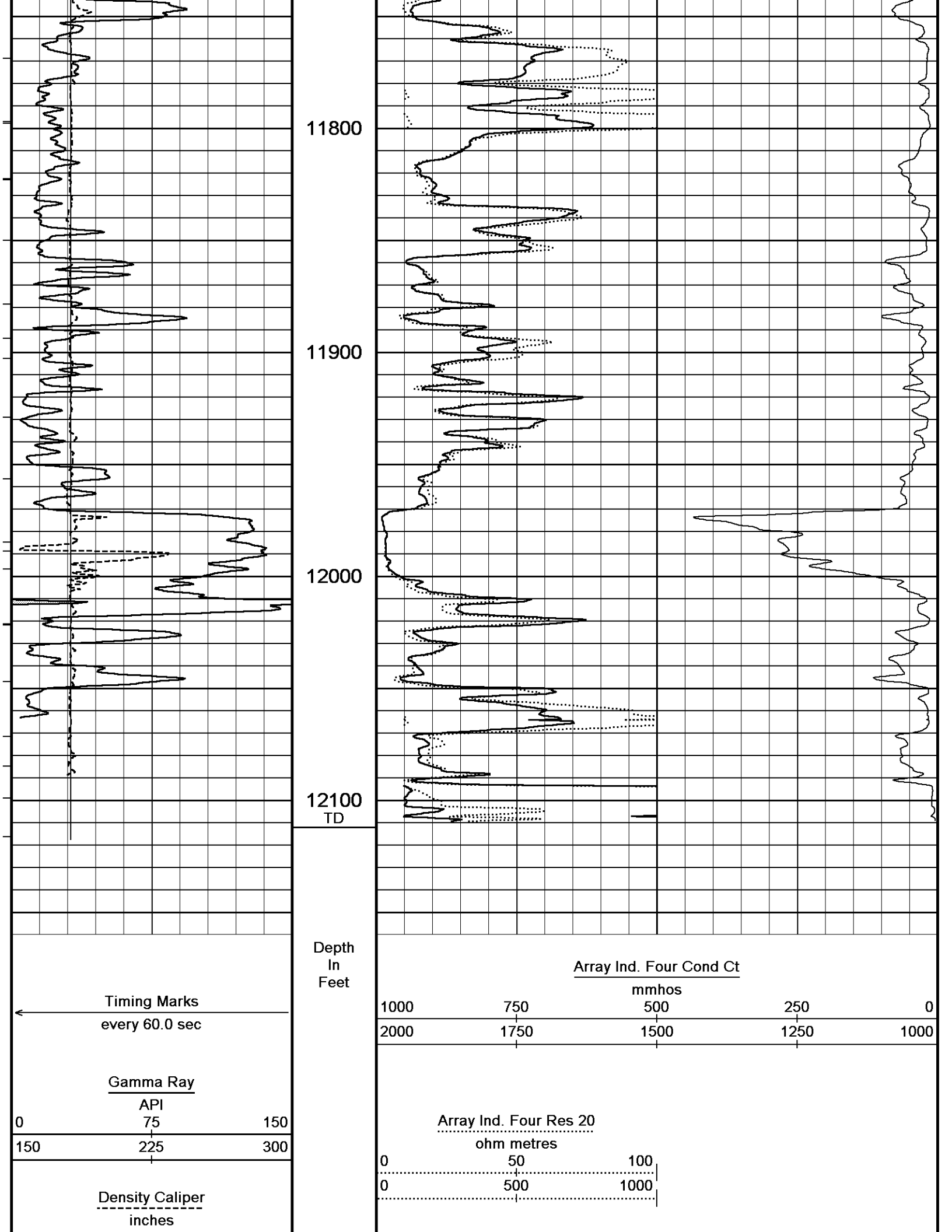

11800
11900
12000
12100
TD
Depth
In
Feet
Timing Marks
every 60.0 sec
Gamma Ray
API
0
75
150
150
225
300
Density Caliper
inches
Array Ind. Four Cond Ct
mmhos
1000
750
500
250
0
2000
1750
1500
1250
1000
Array Ind. Four Res 20
ohm metres
0
50
100
0
500
1000

4 9 14

14 19 24

Bit Size
inches
4 9 14

Replay
Scale
1:600

Array Ind. Four Res Rt
ohm metres
0 50 100
0 500 1000

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340depth.dta
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Plotted on 14-APR-2011 03:10
Recorded on 14-APR-2011 01:01

2 INCH MAIN LOG

5 INCH MAIN LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340depth.dta
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Plotted on 14-APR-2011 03:10
Recorded on 14-APR-2011 01:01

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
4 9 14
14 19 24

Bit Size
inches
4 9 14

Depth
In
Feet

Replay
Scale
1:240

5450

Array Ind. Four Res 20
ohm metres
0.20 1 10 100 2000

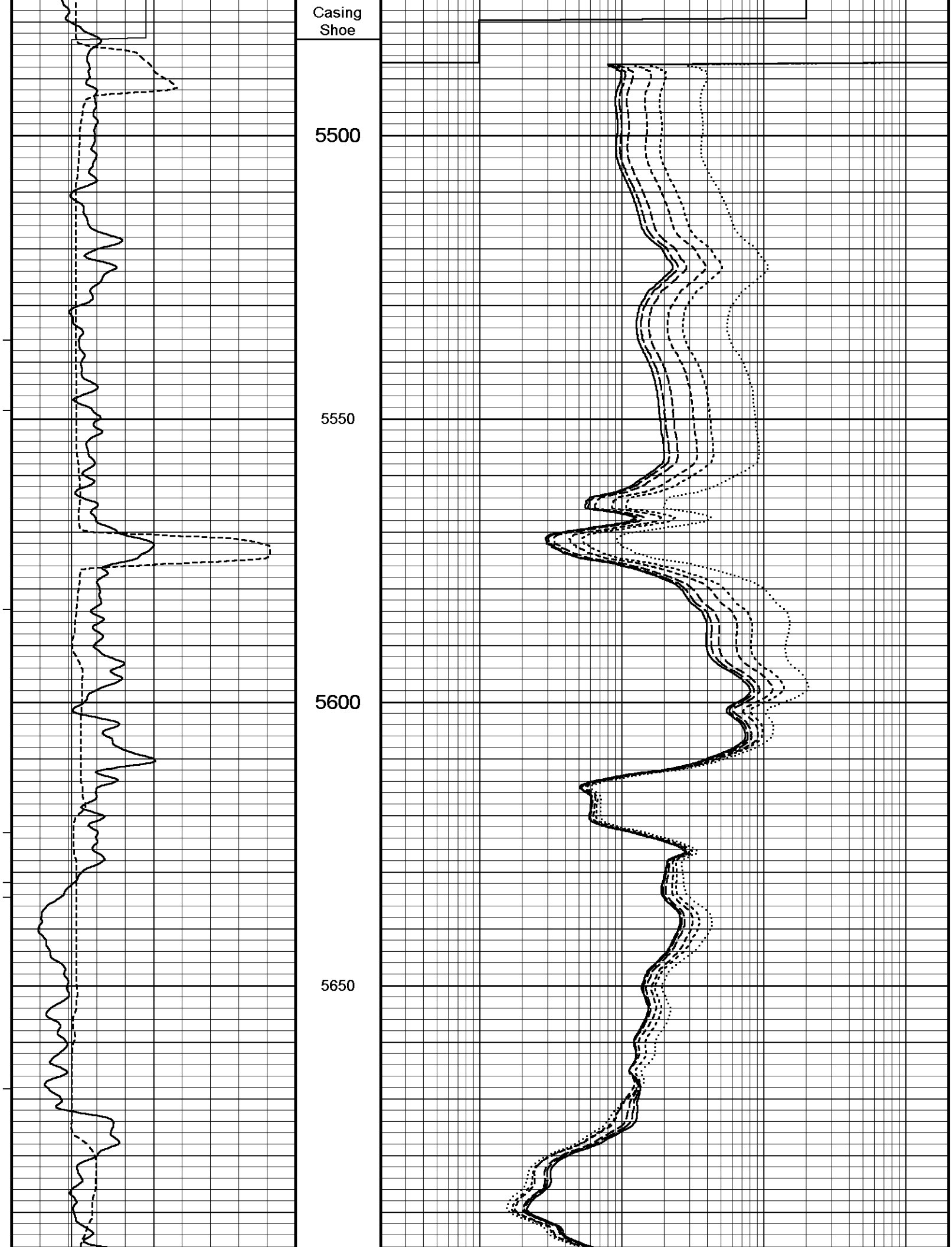
Array Ind. Four Res 30
ohm metres
0.20 1 10 100 2000

Array Ind. Four Res 40
ohm metres
0.20 1 10 100 2000

Array Ind. Four Res 60
ohm metres
0.20 1 10 100 2000

Array Ind. Four Res 85
ohm metres
0.20 1 10 100 2000

Array Ind. Four Res Rt
ohm metres
0.20 1 10 100 2000


Casing
Shoe
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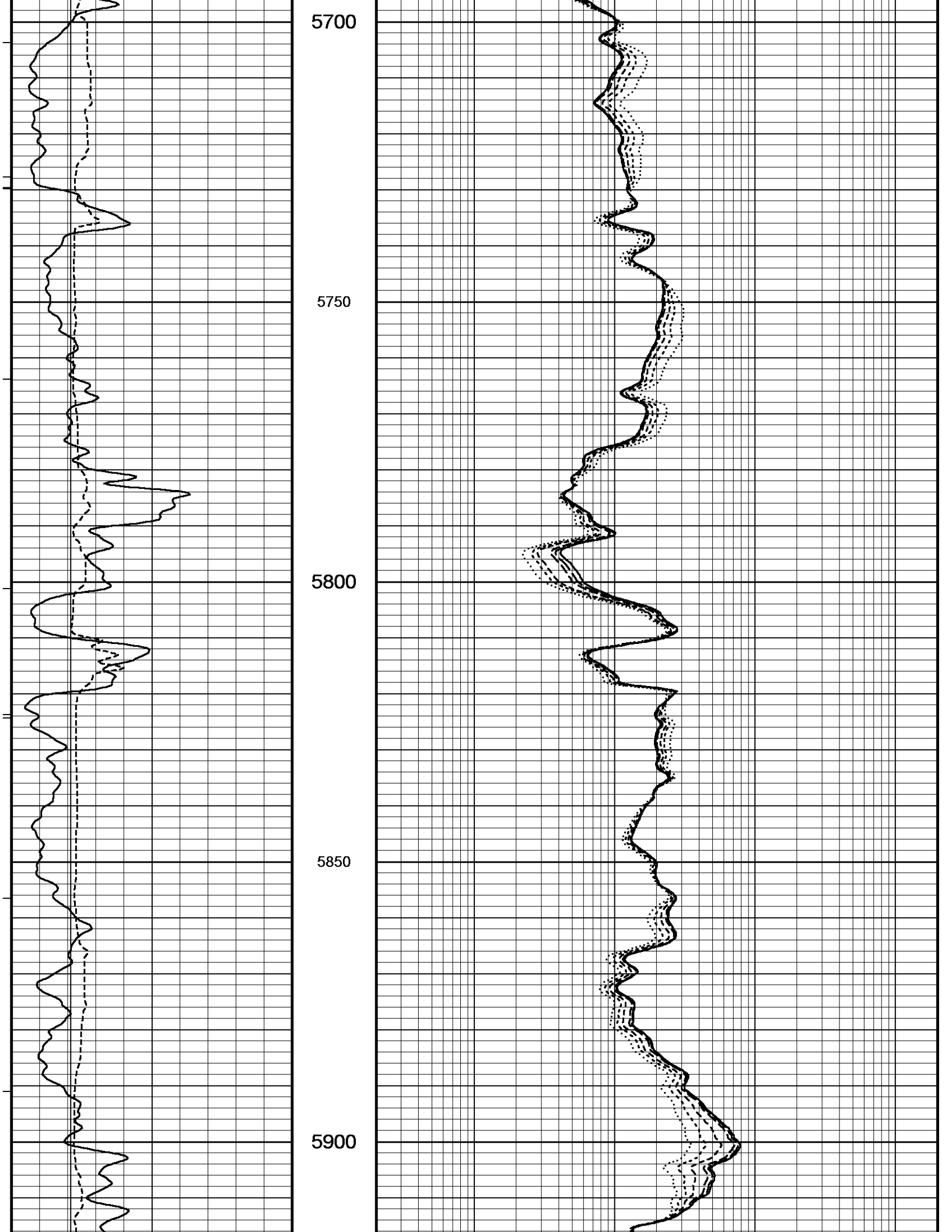
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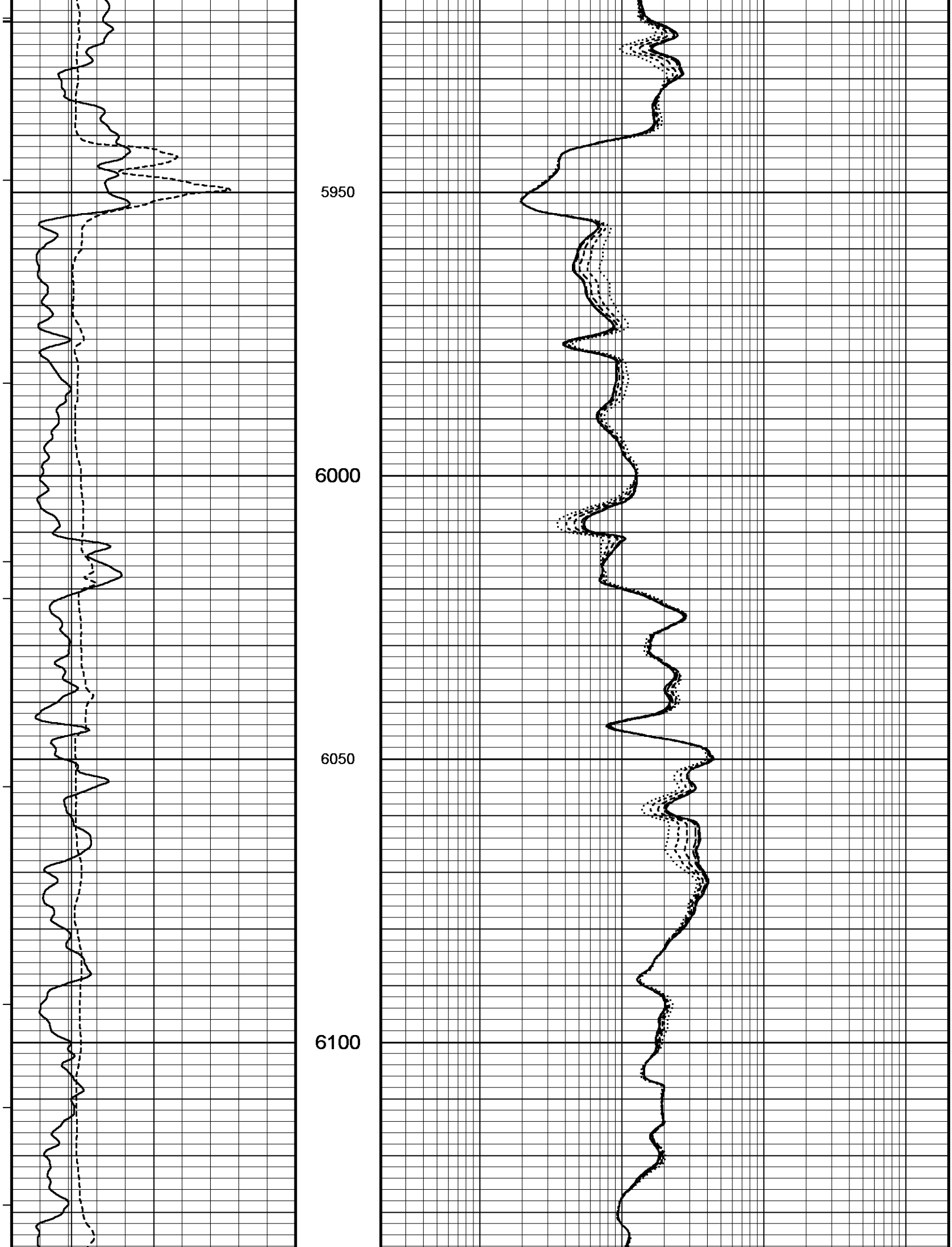
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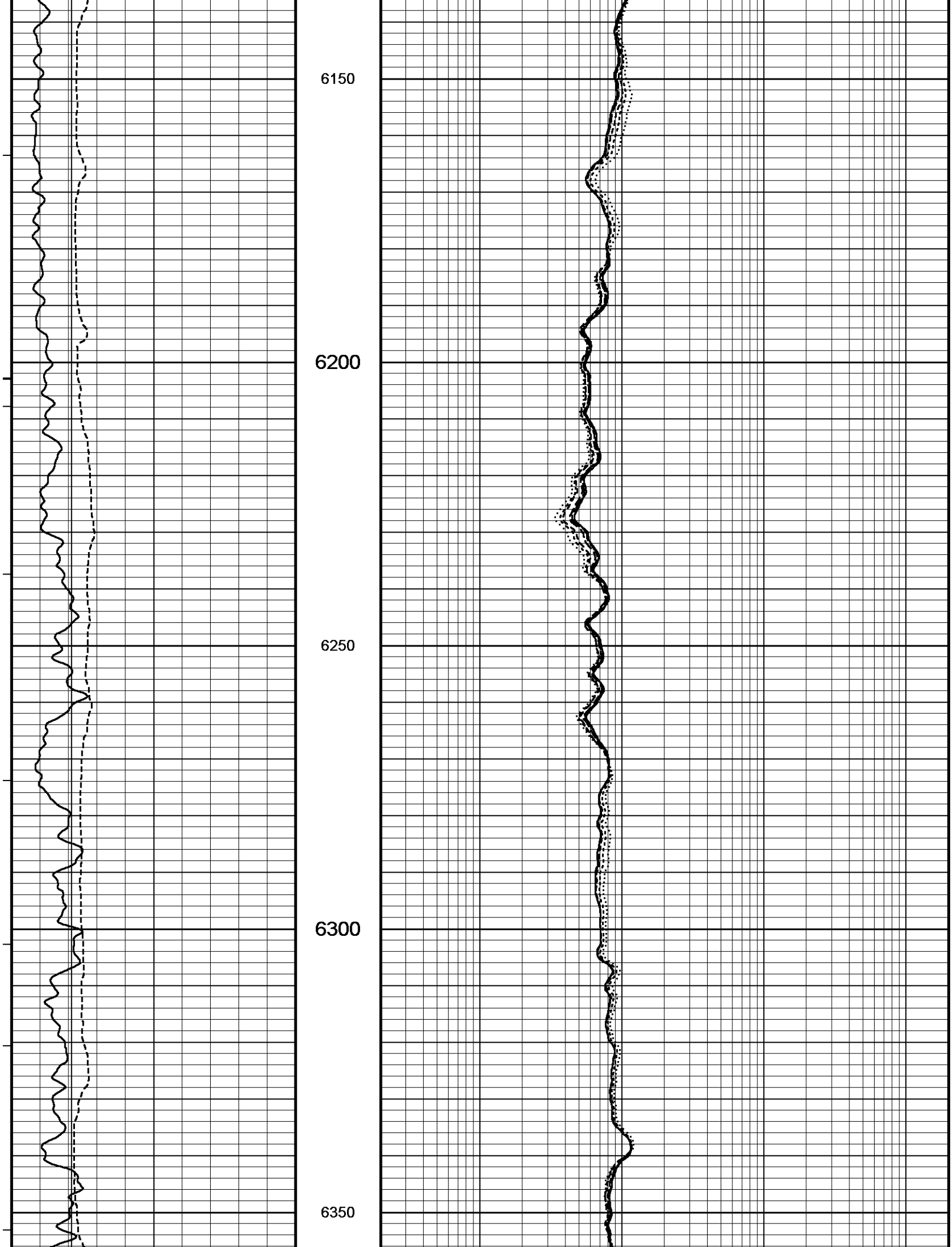
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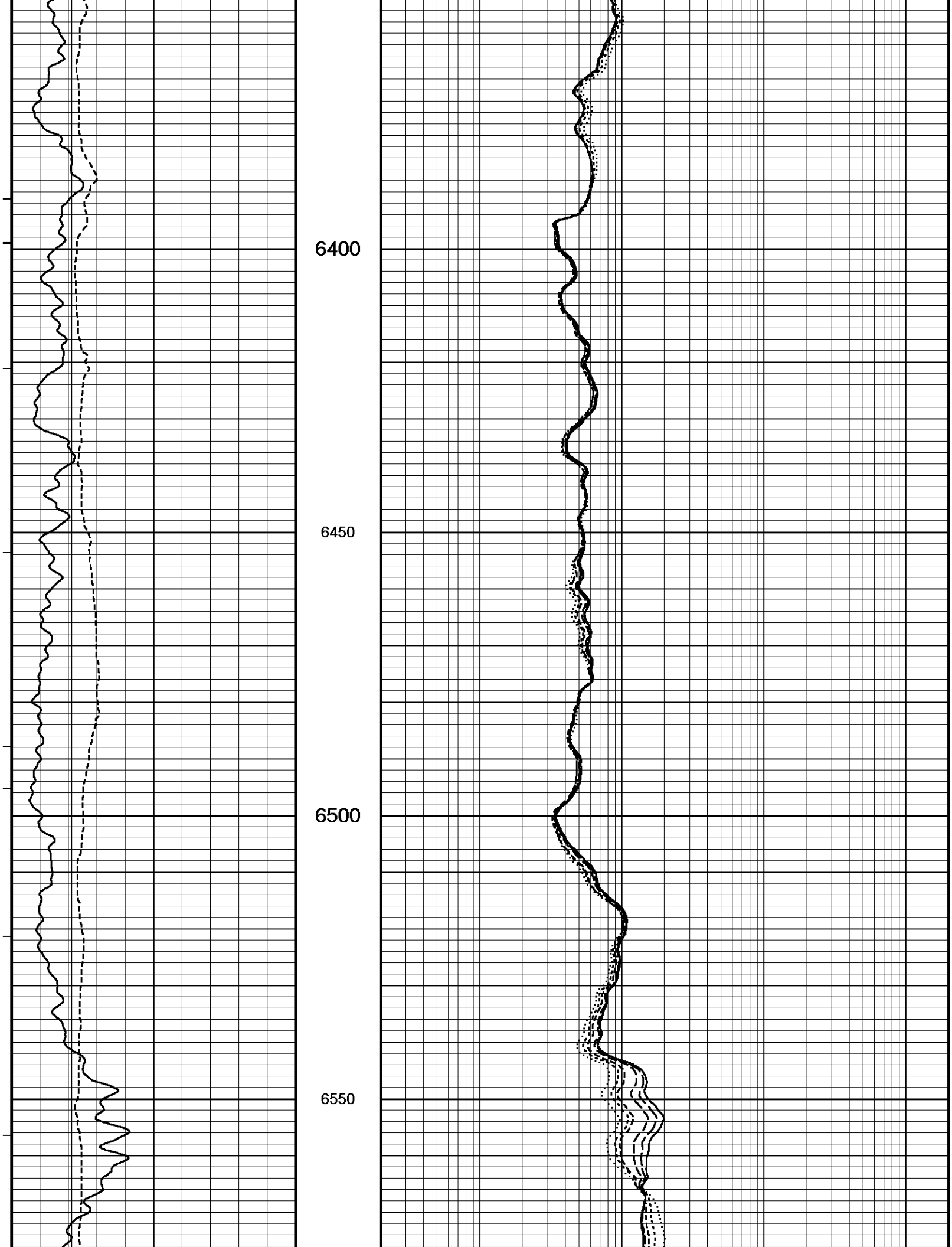
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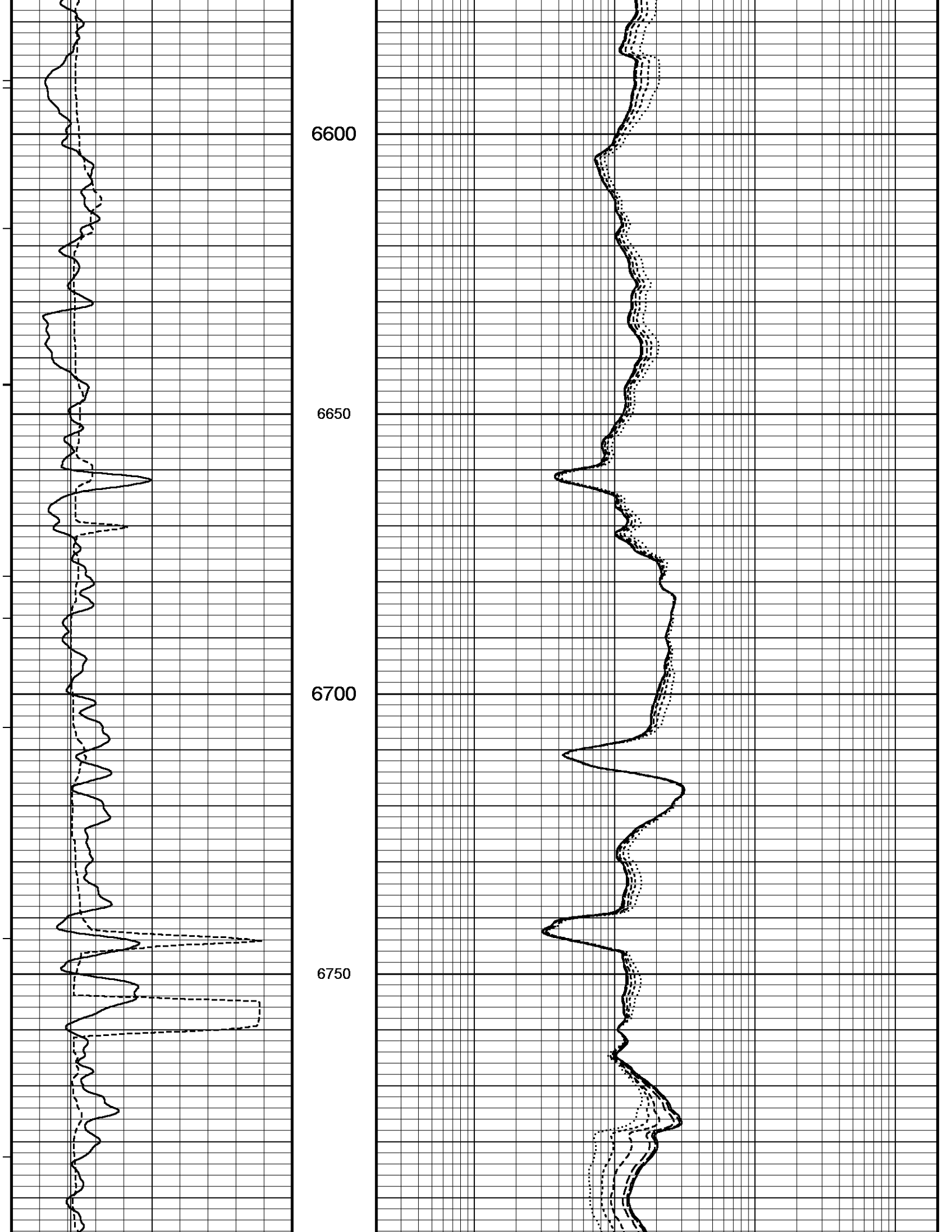
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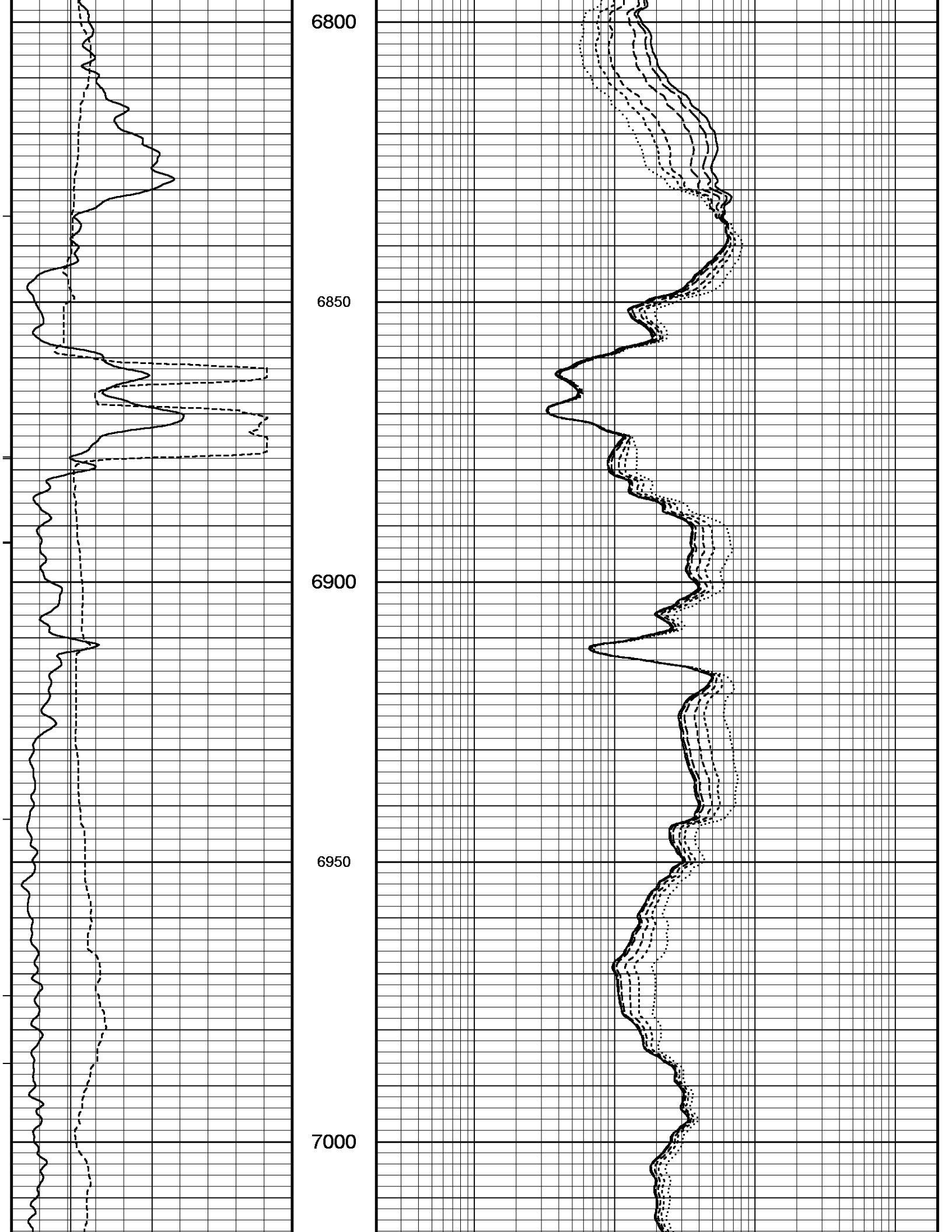
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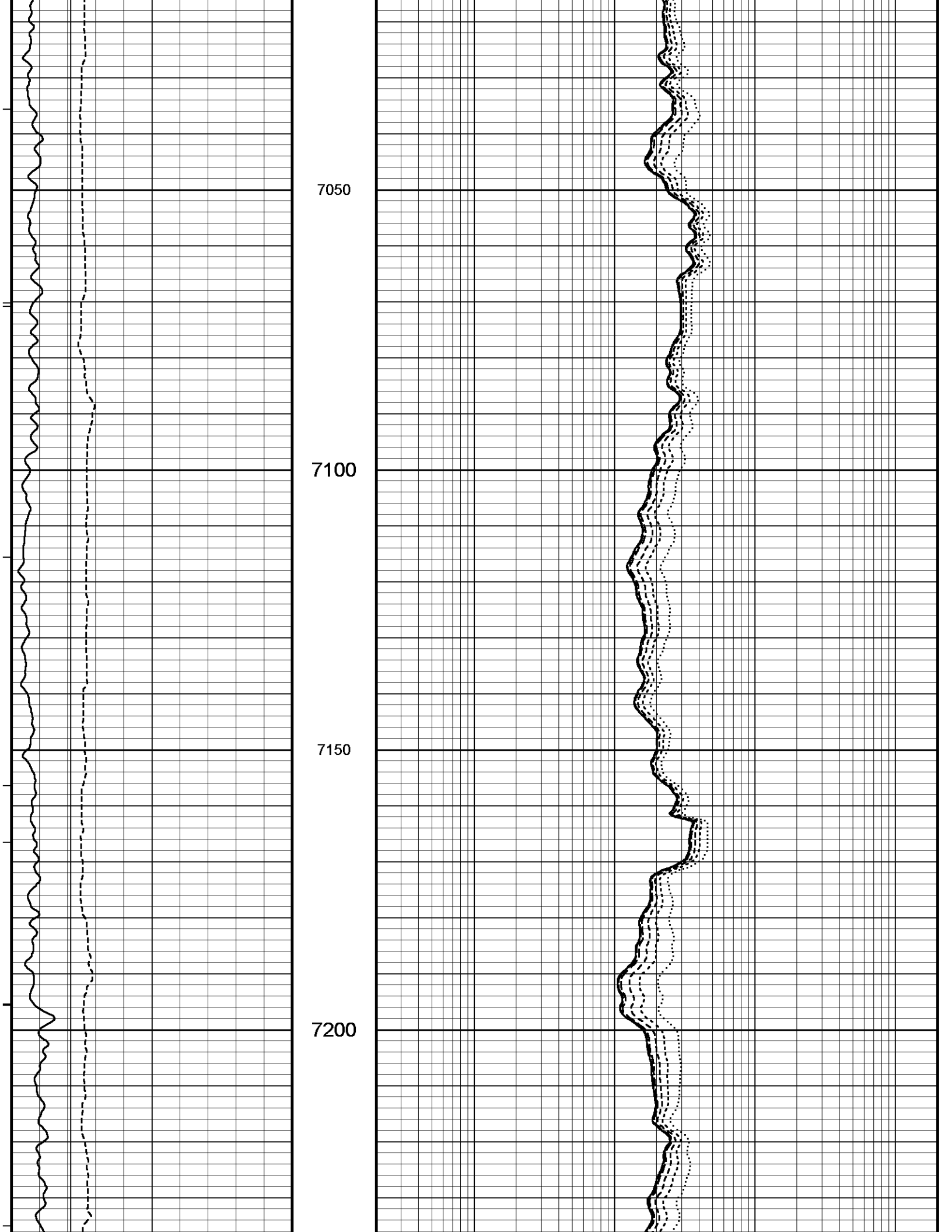
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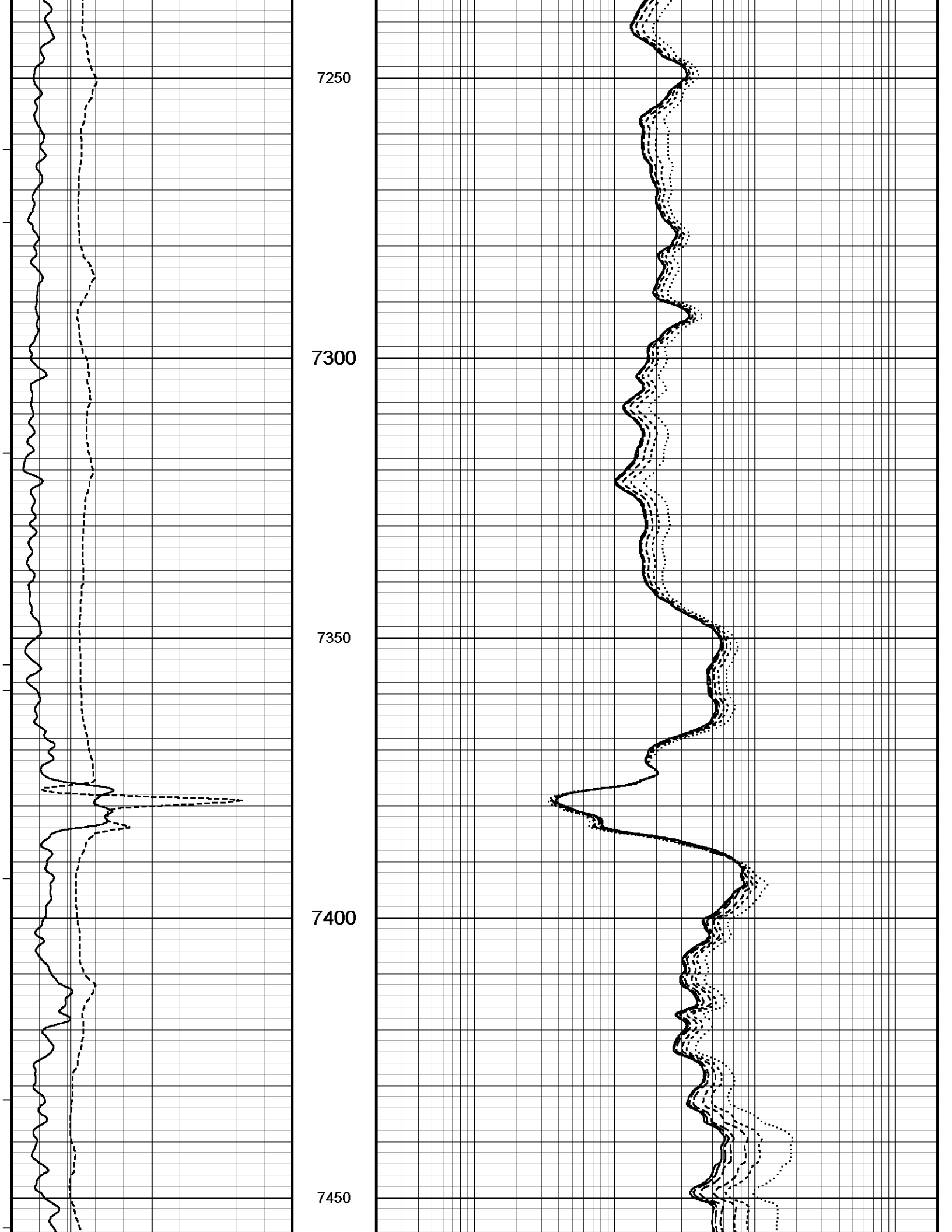
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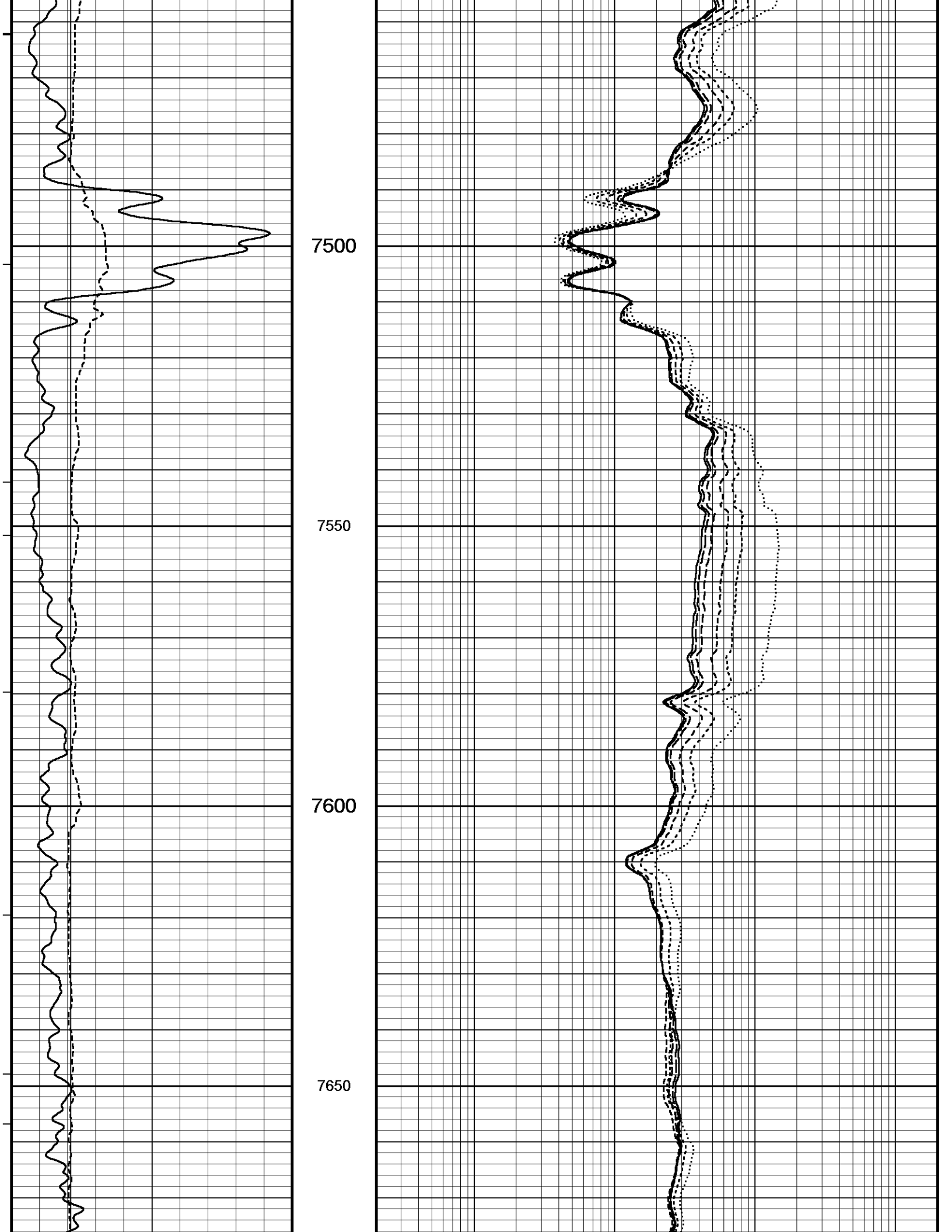
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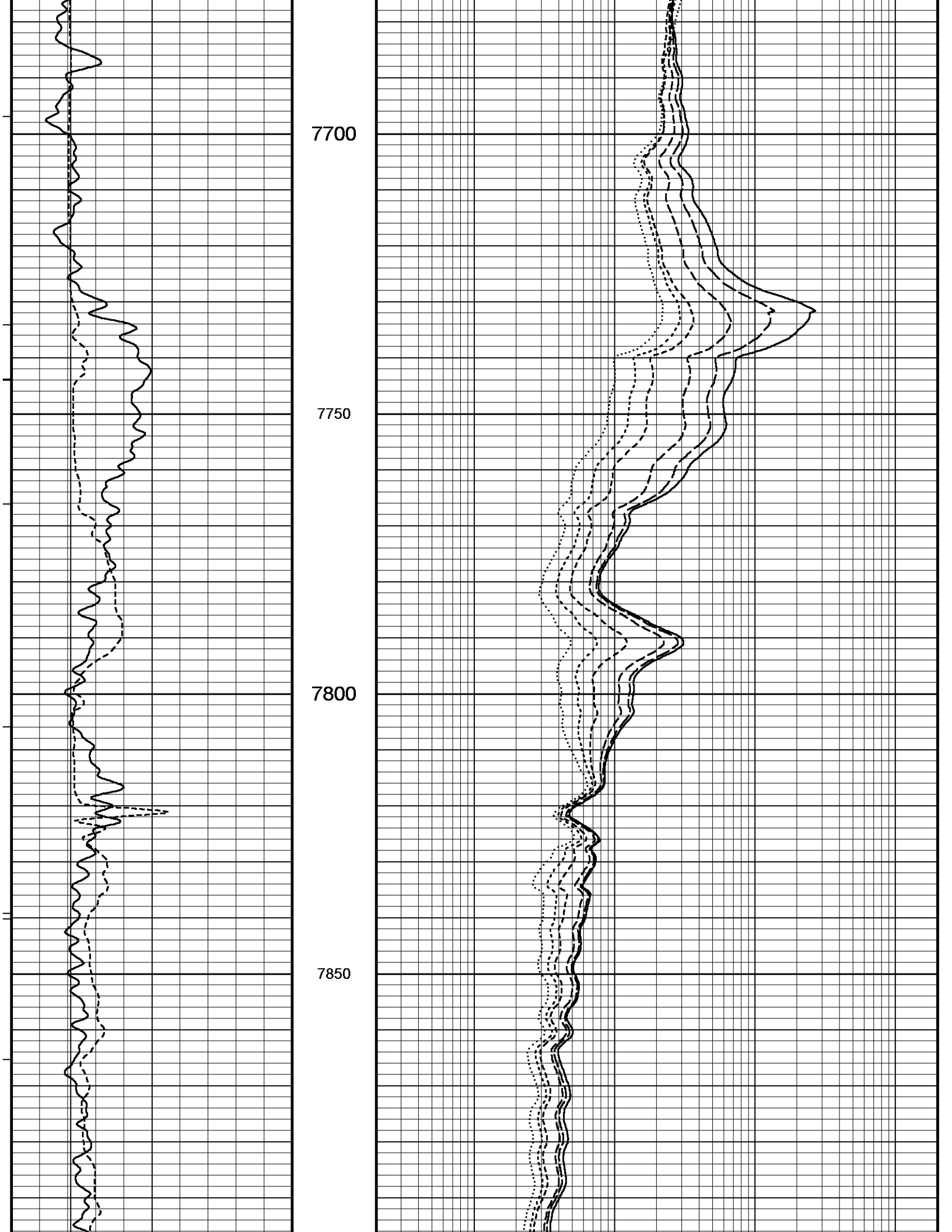
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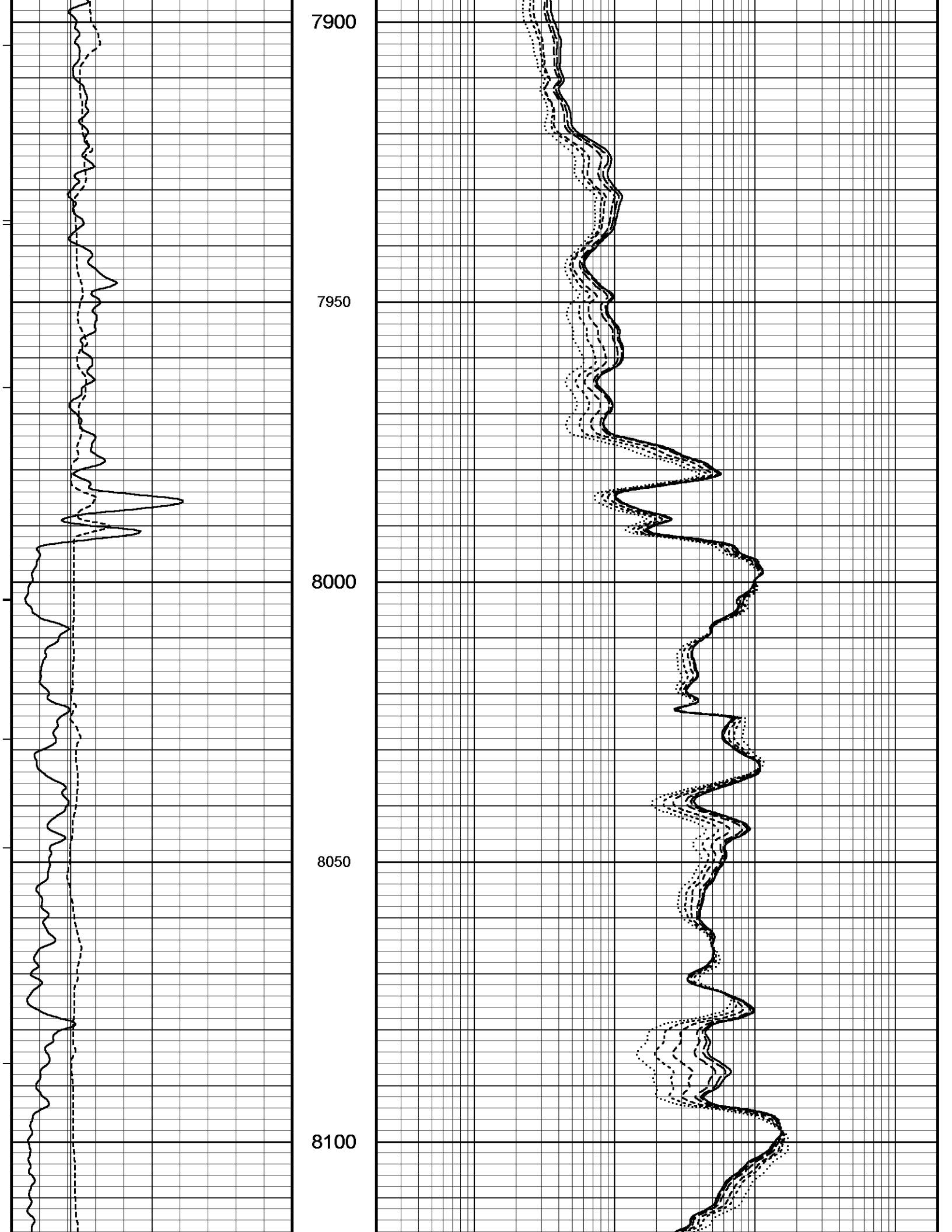
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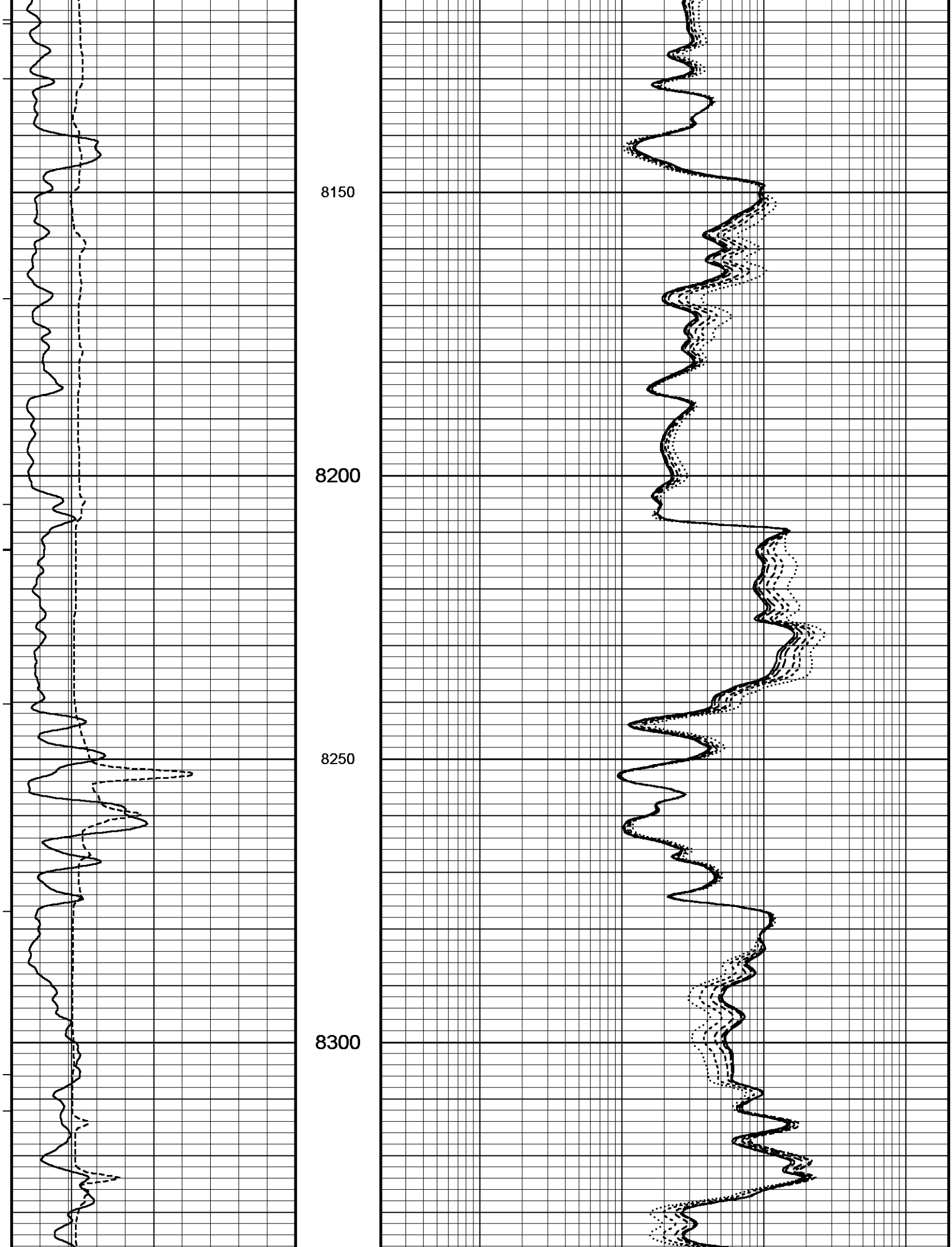
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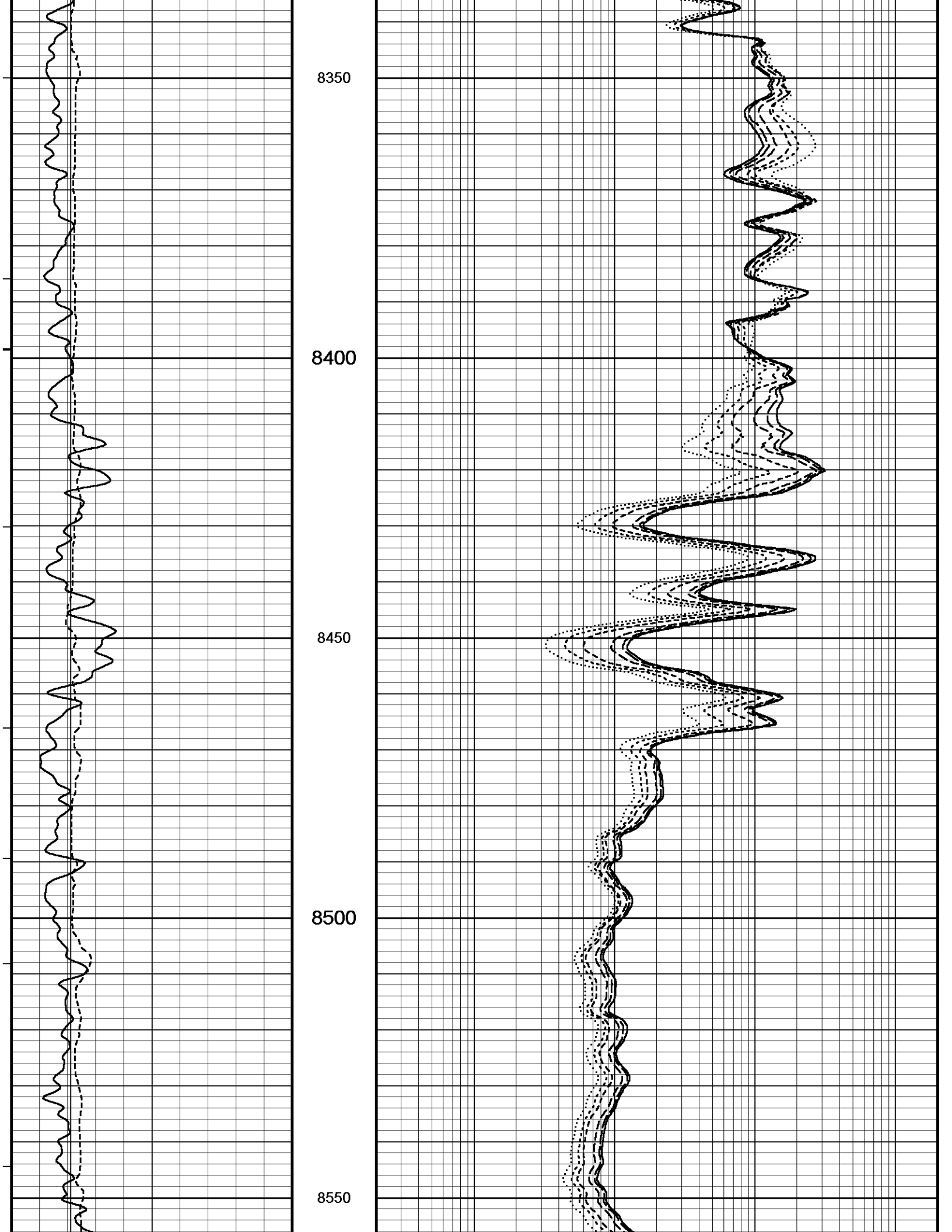
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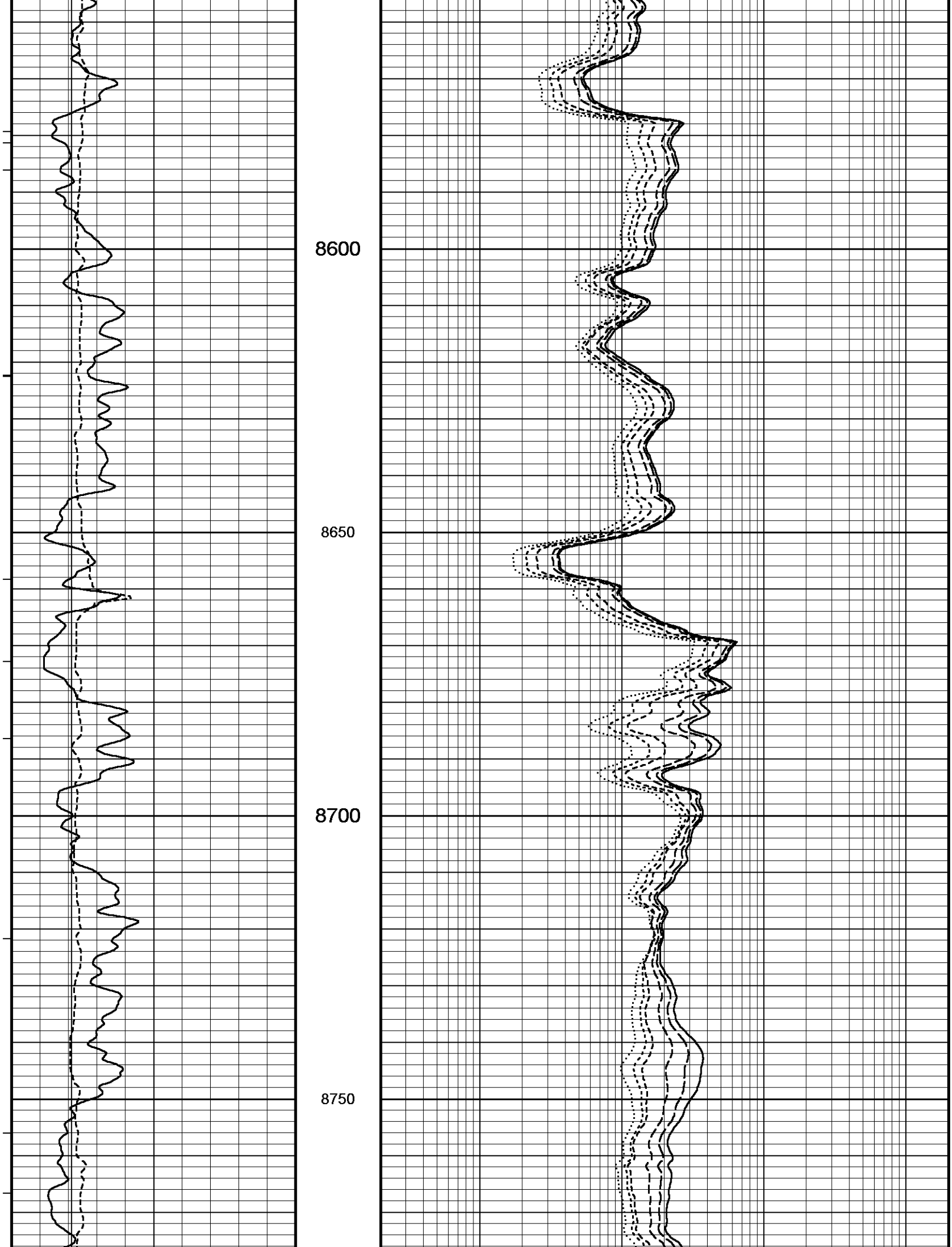
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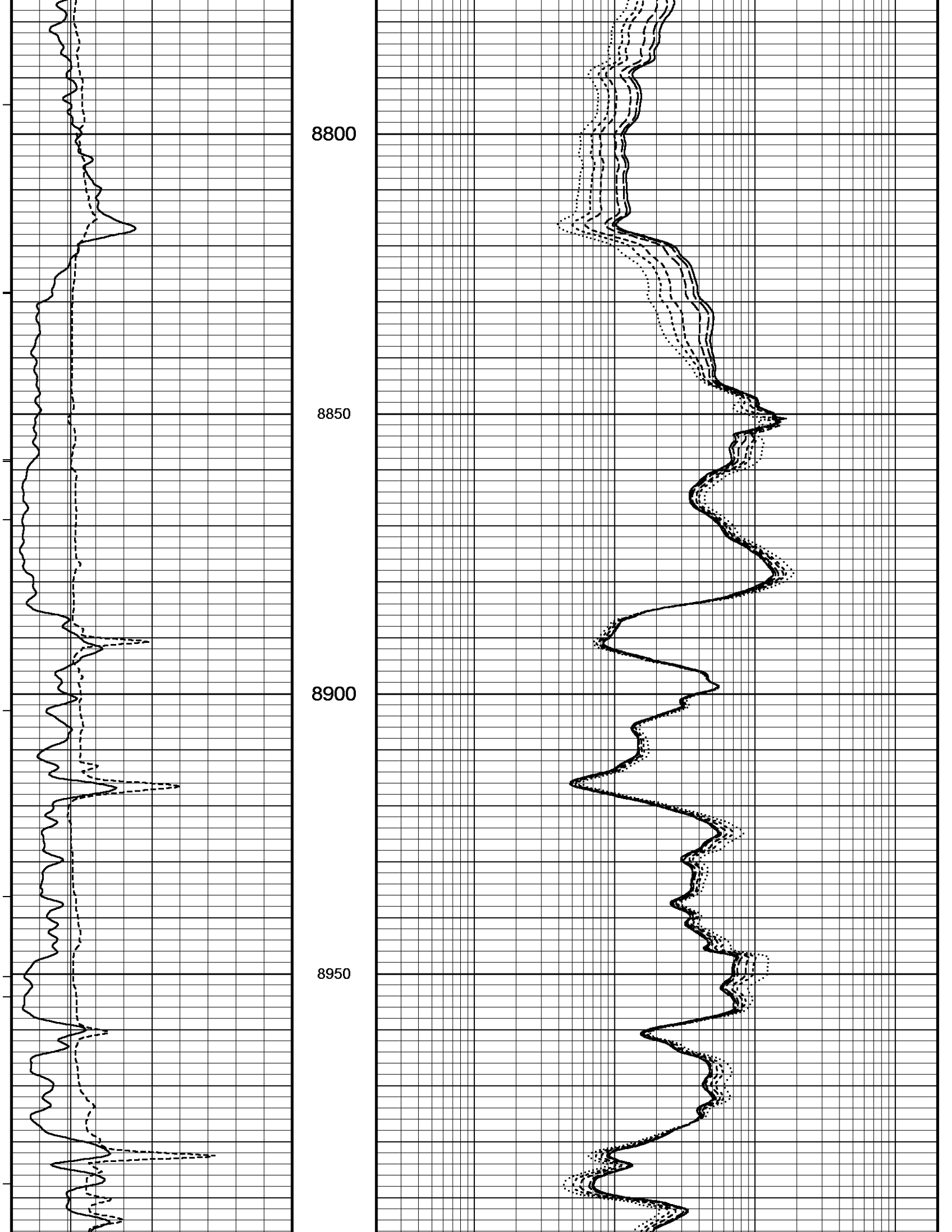
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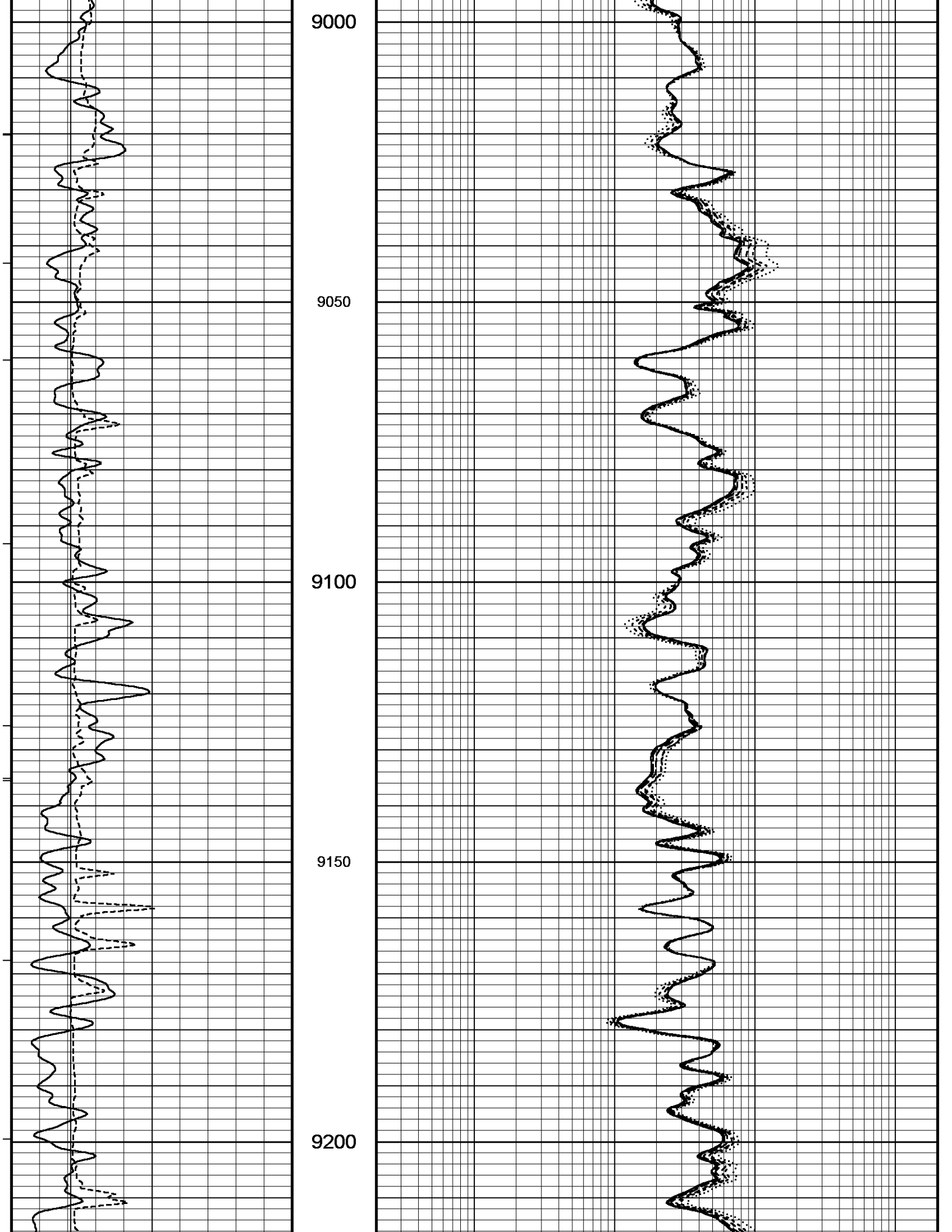
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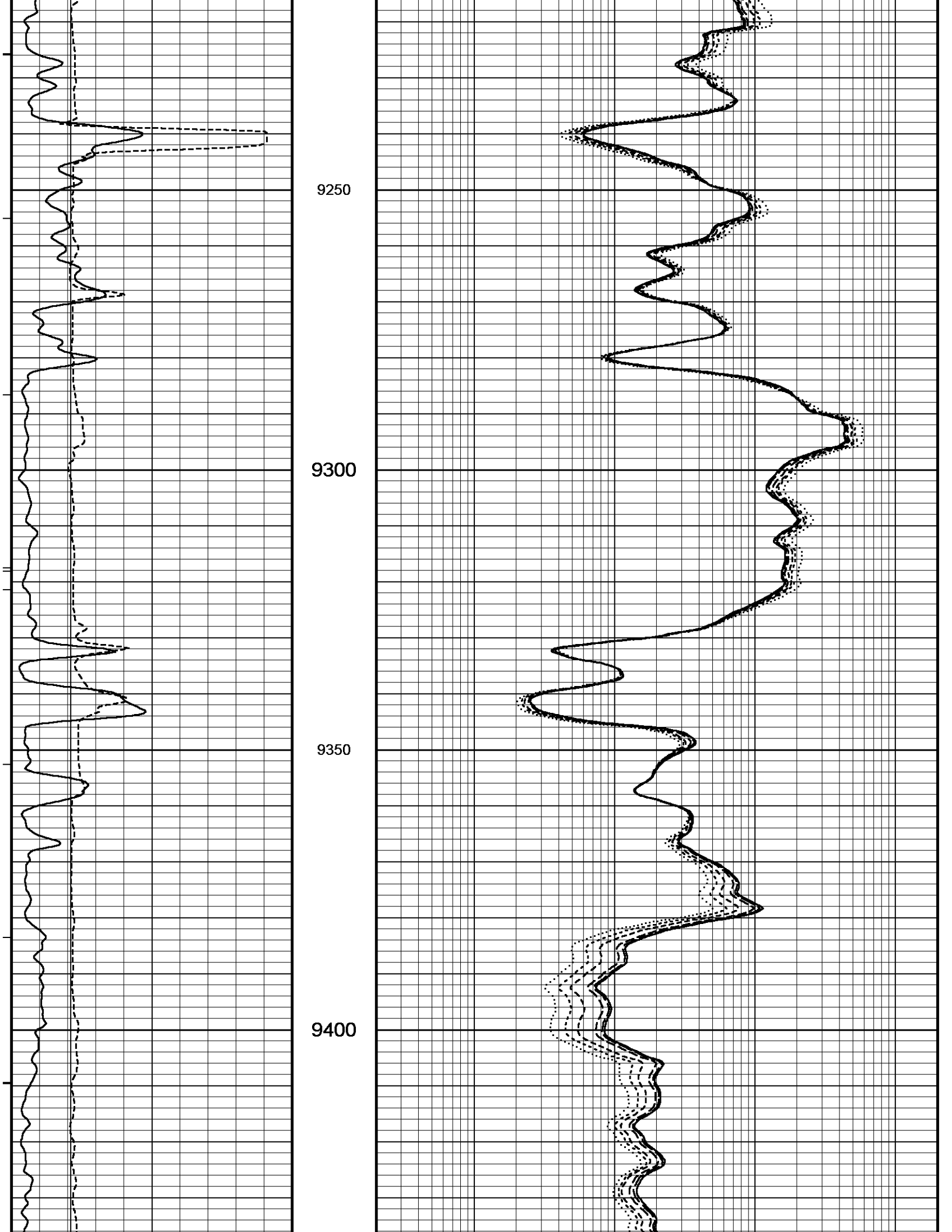
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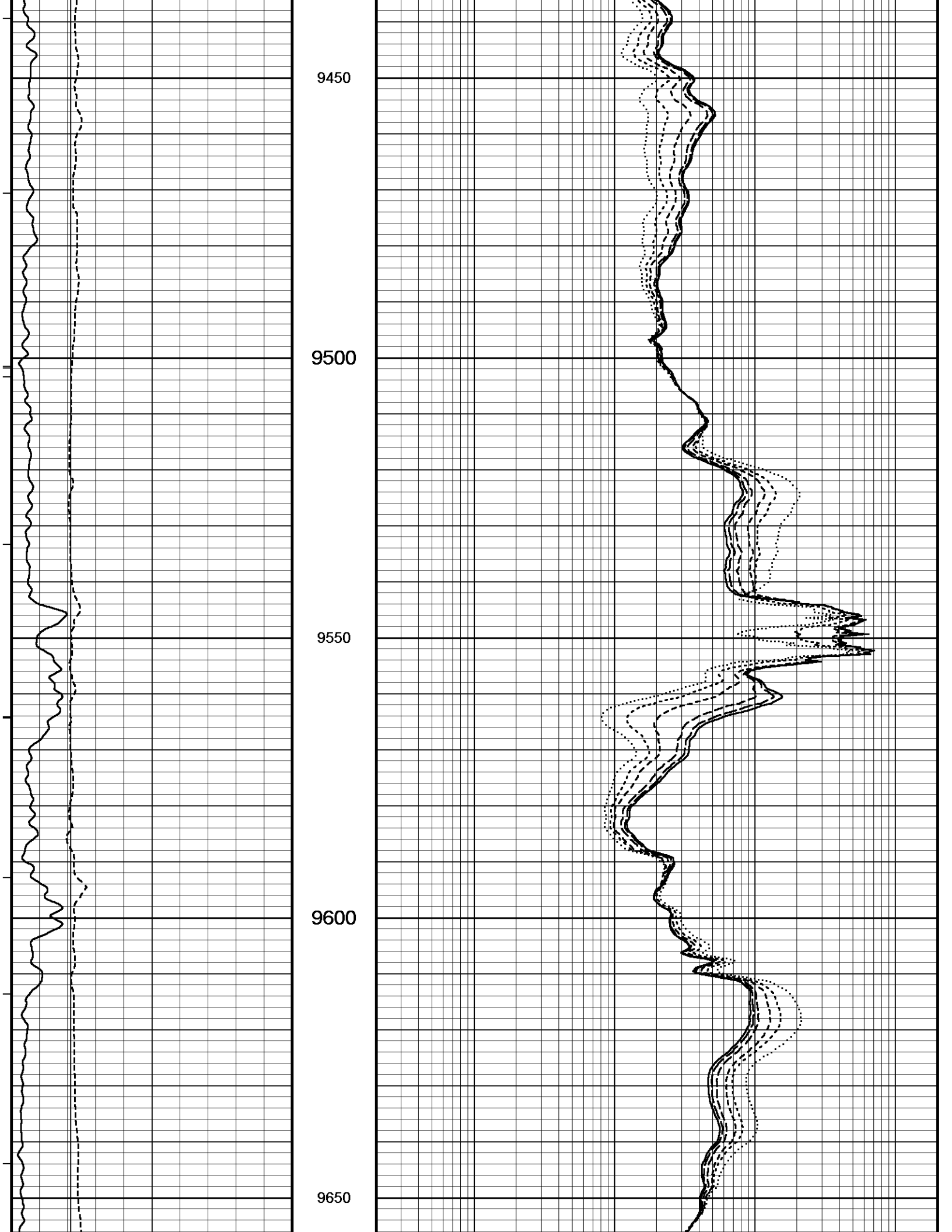
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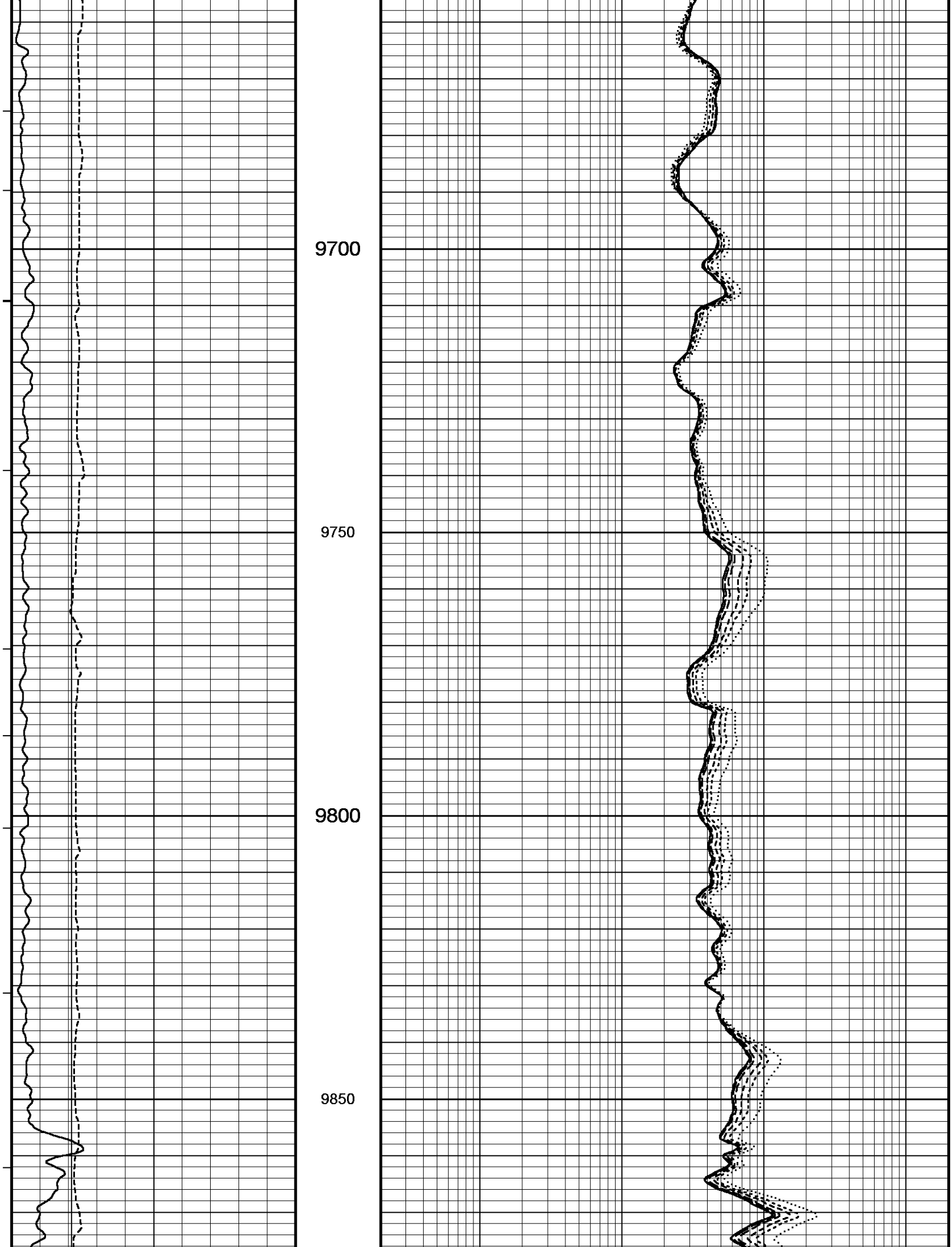
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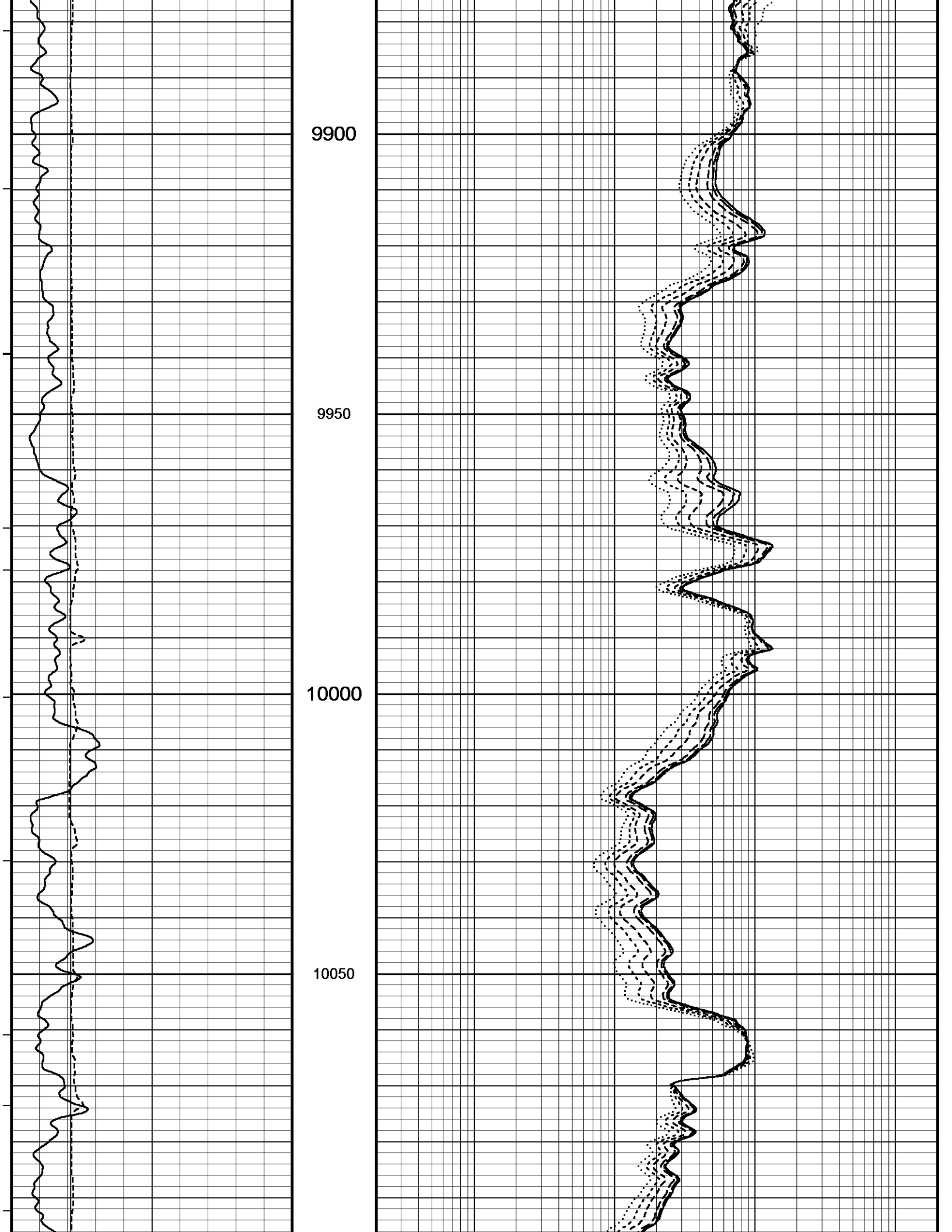
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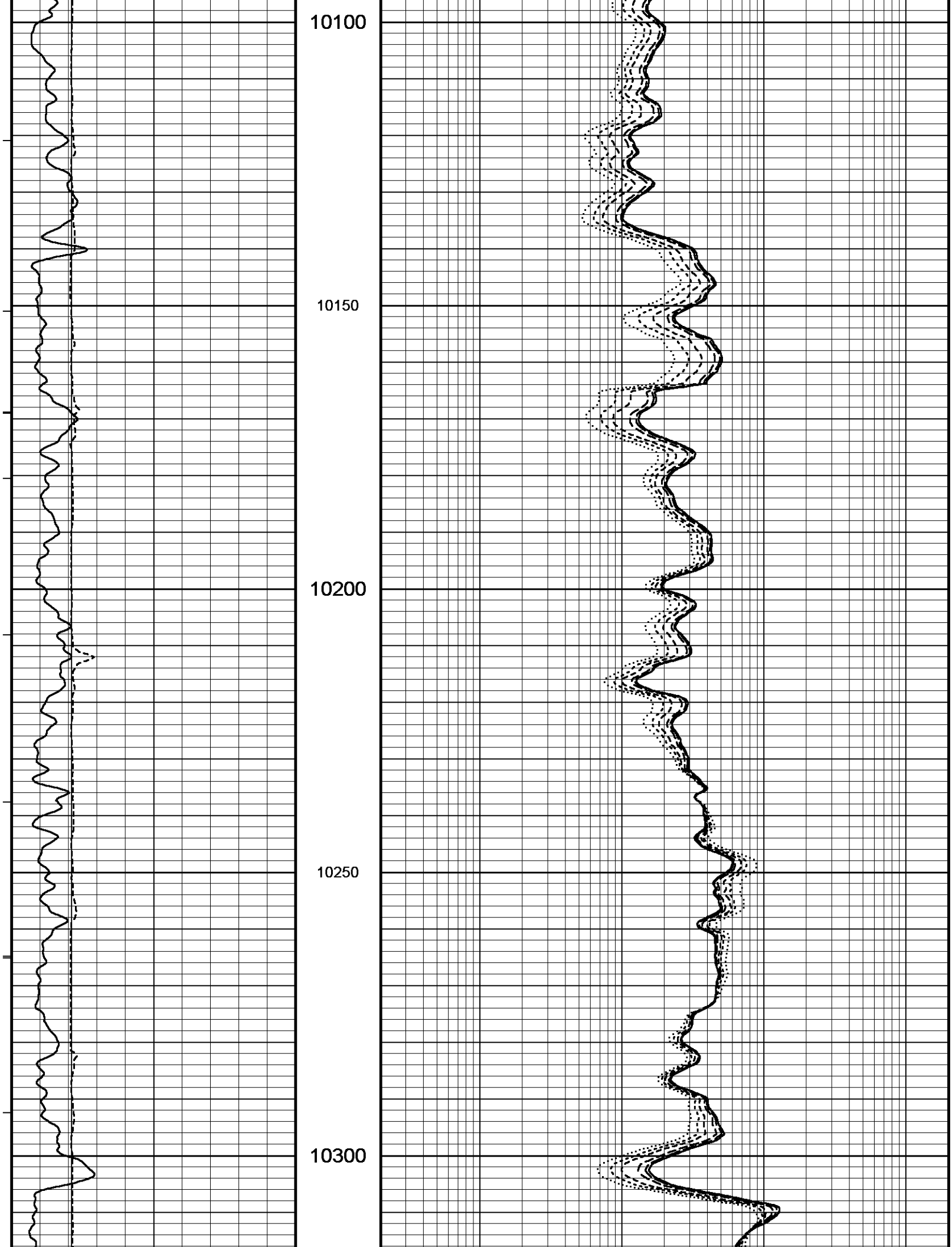
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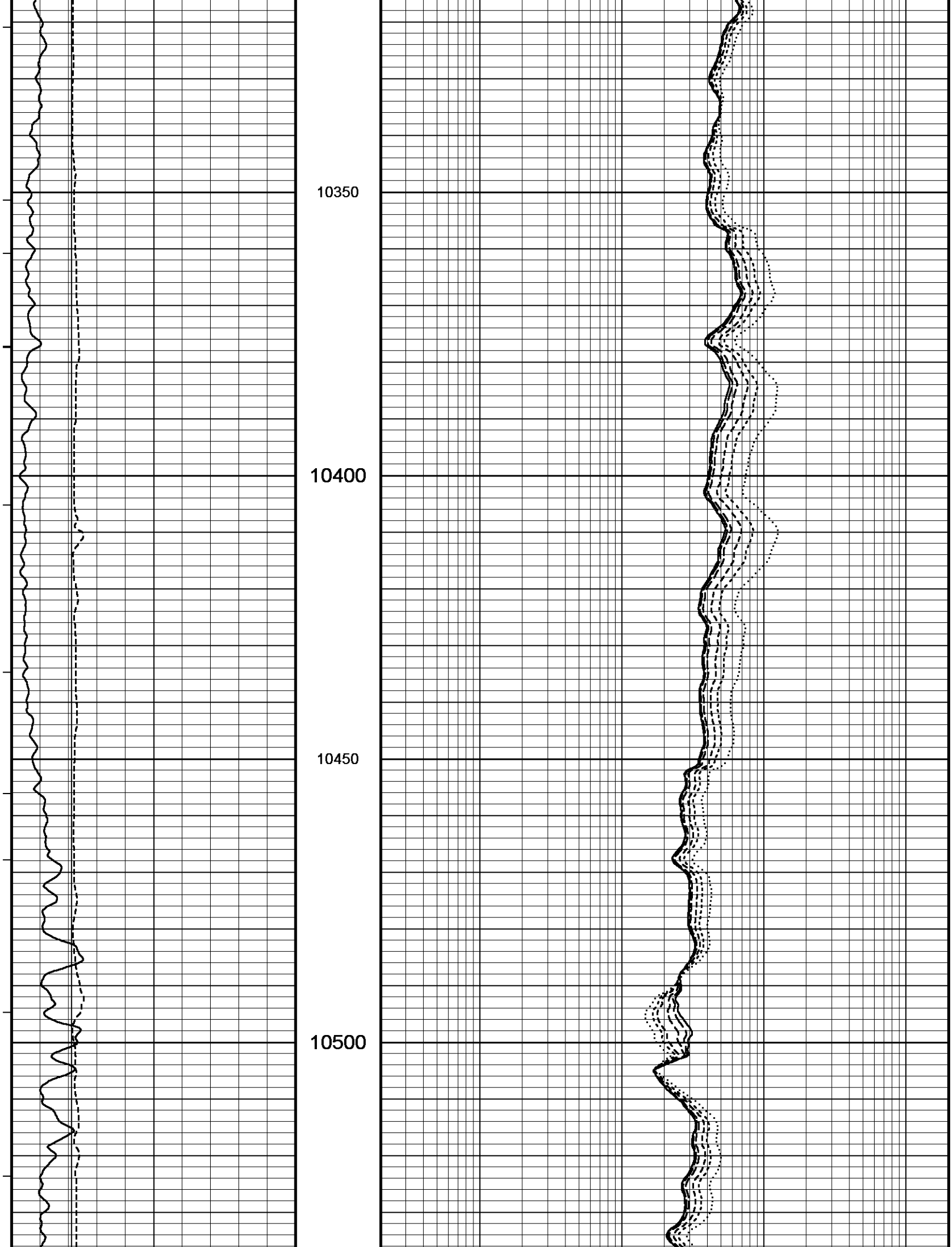
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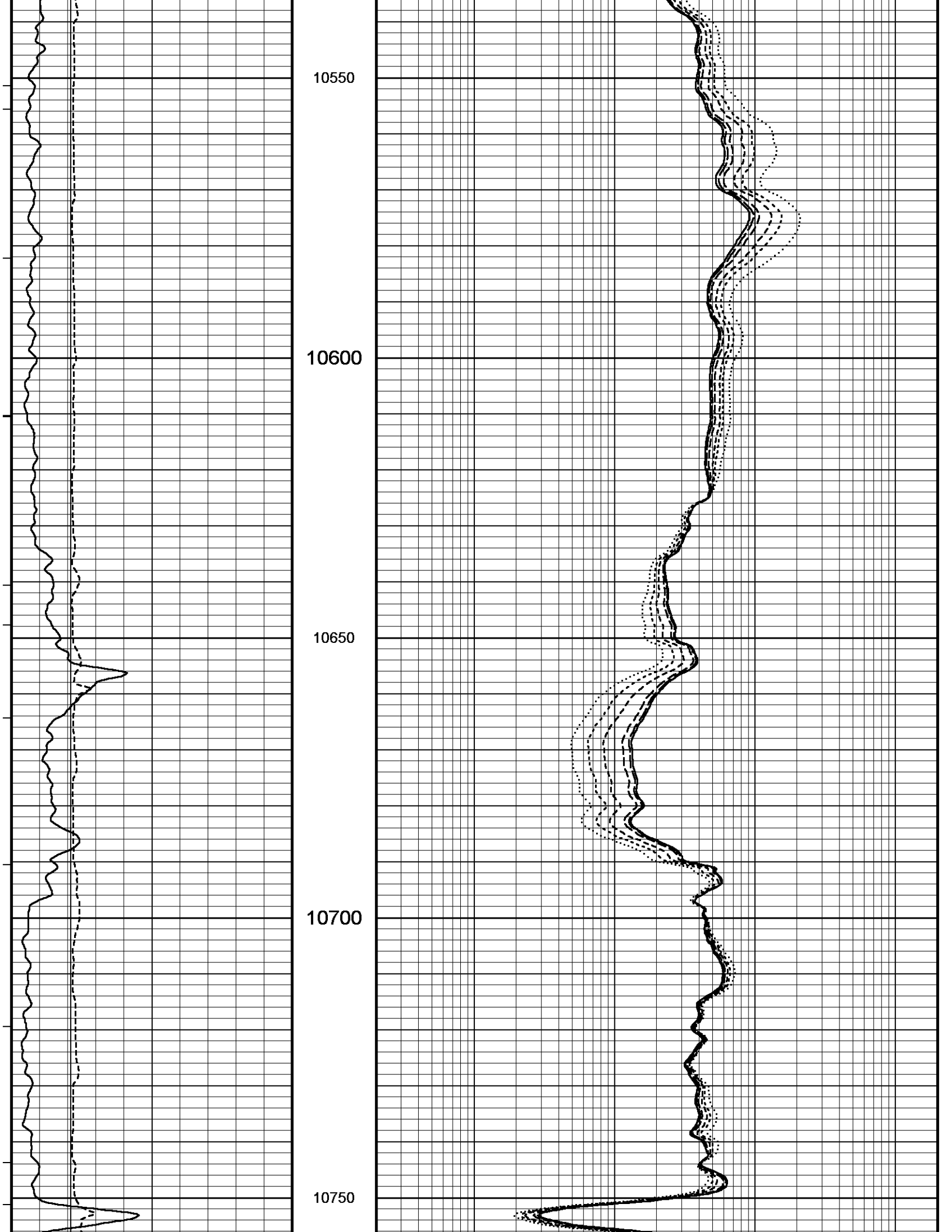
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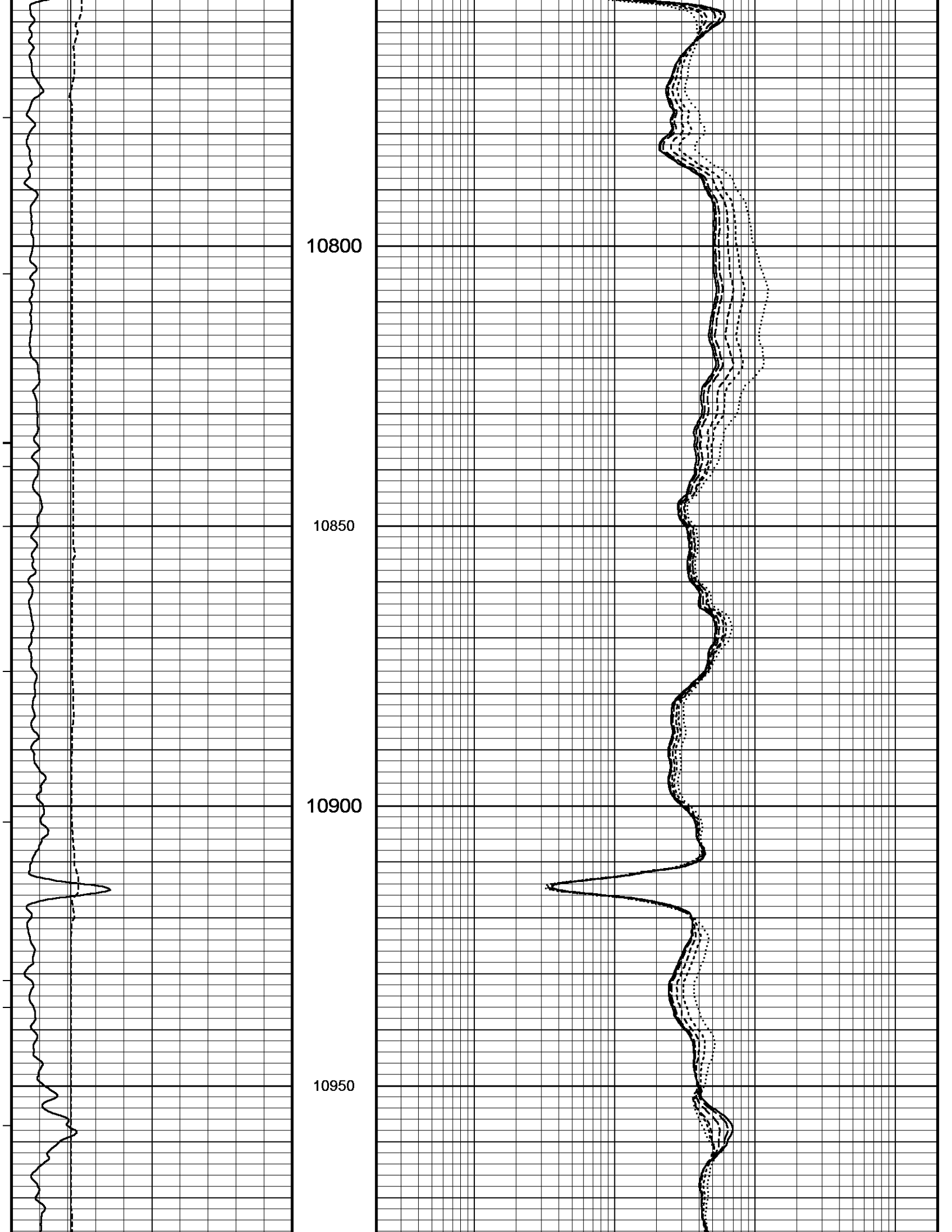
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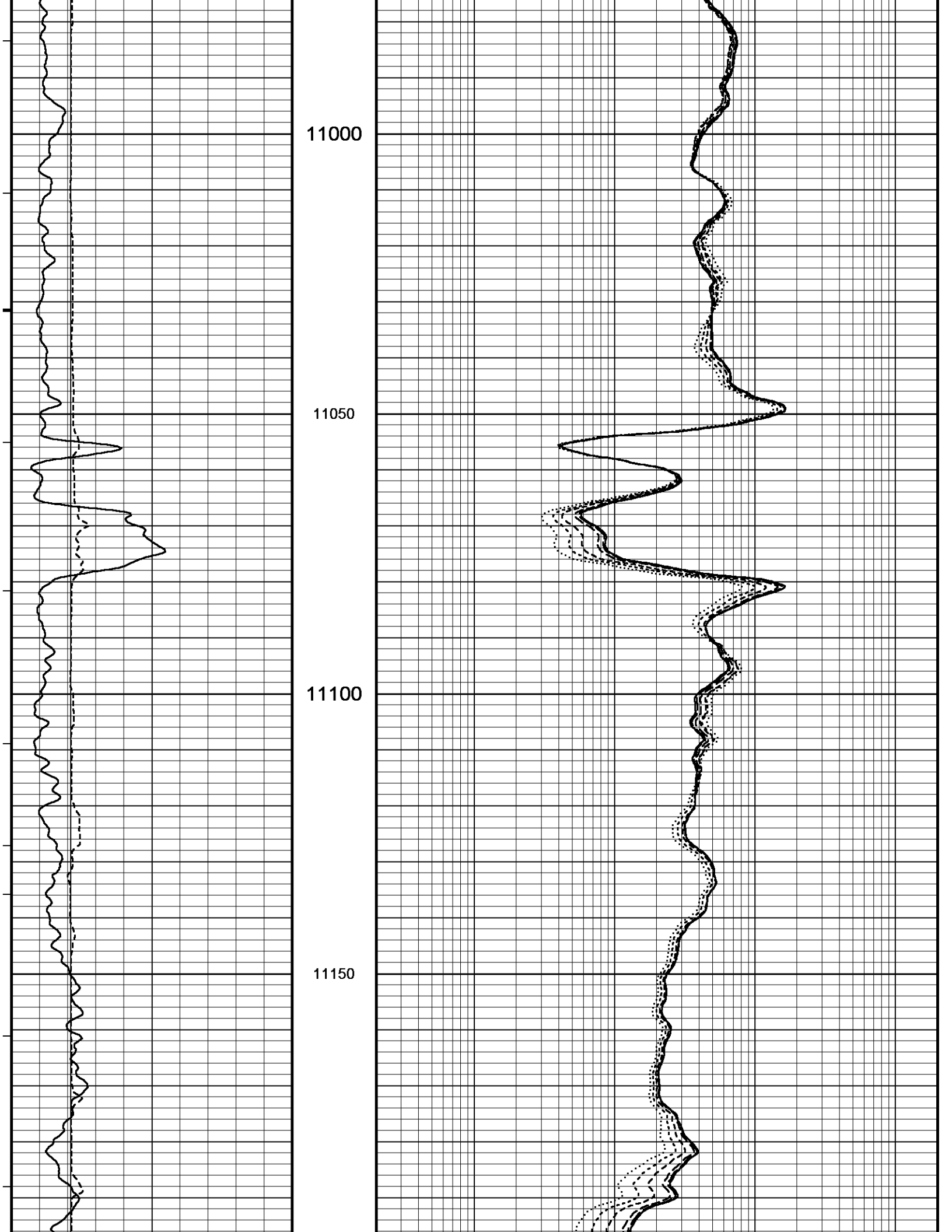
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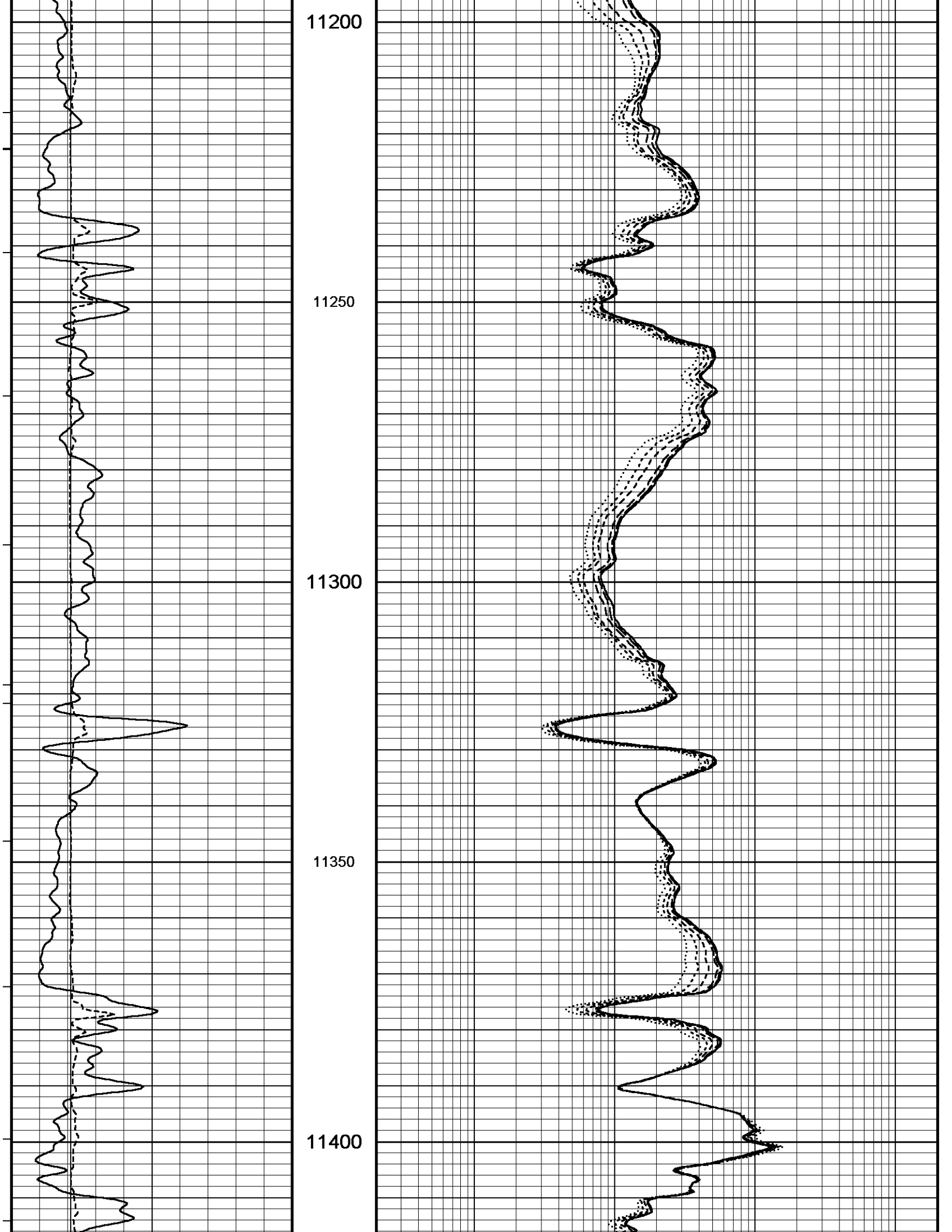
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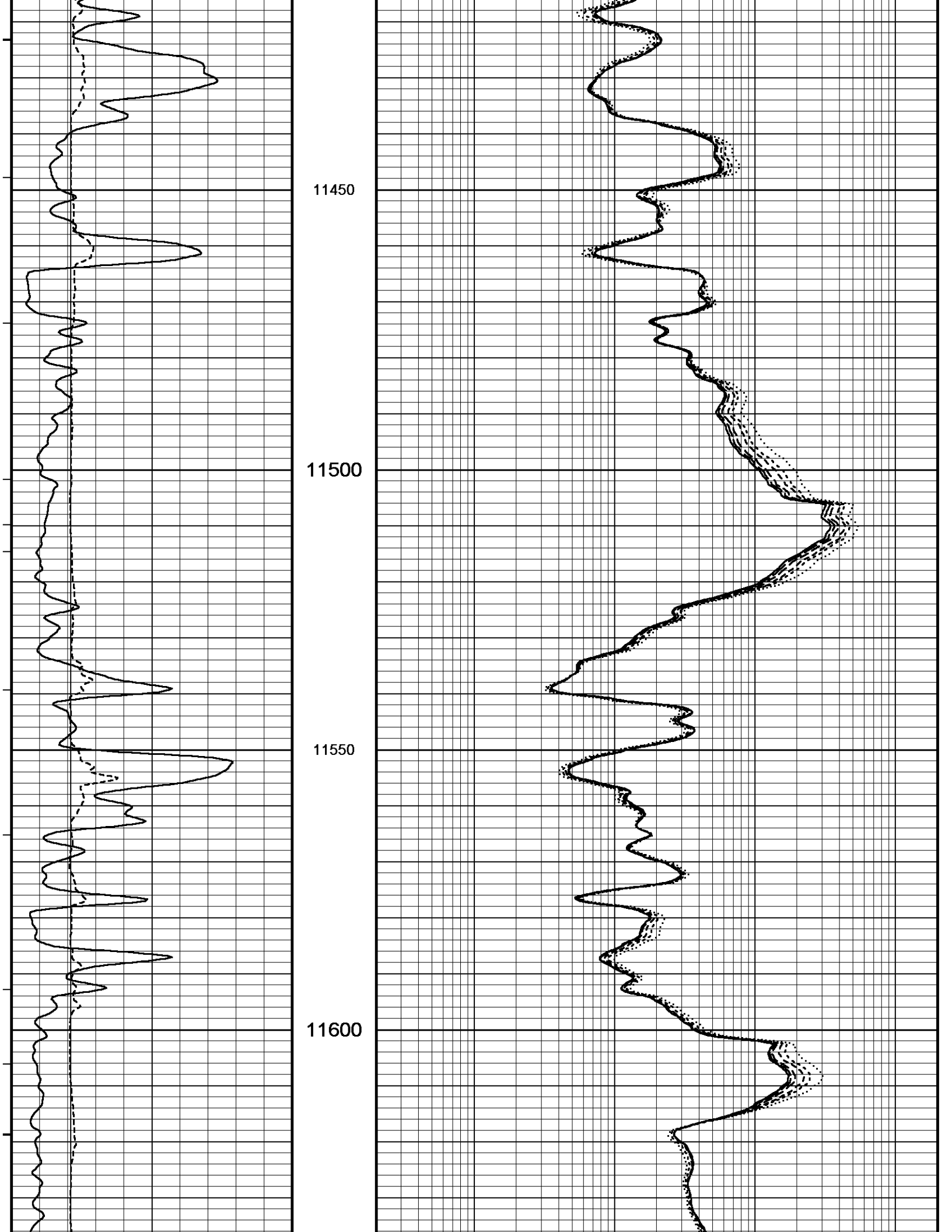
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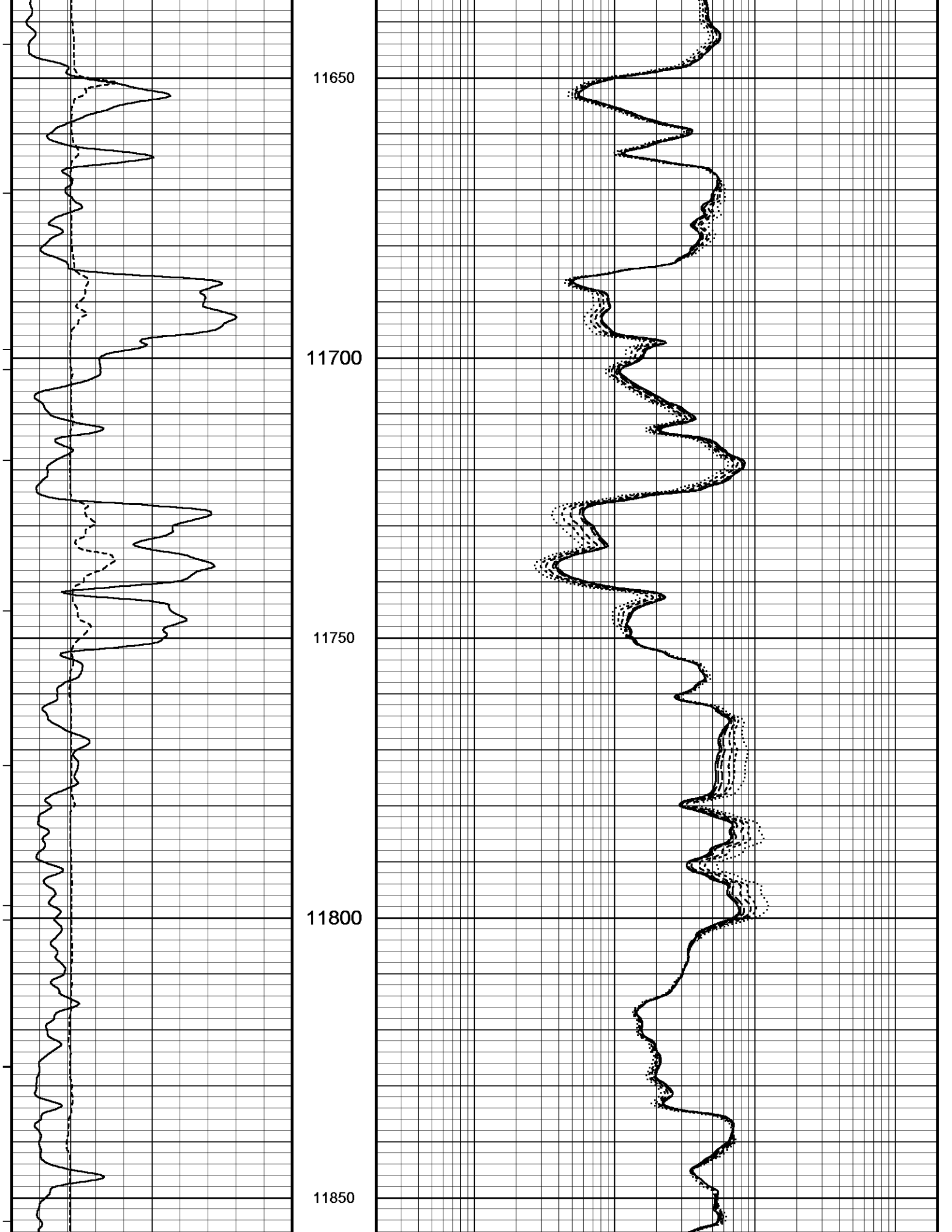
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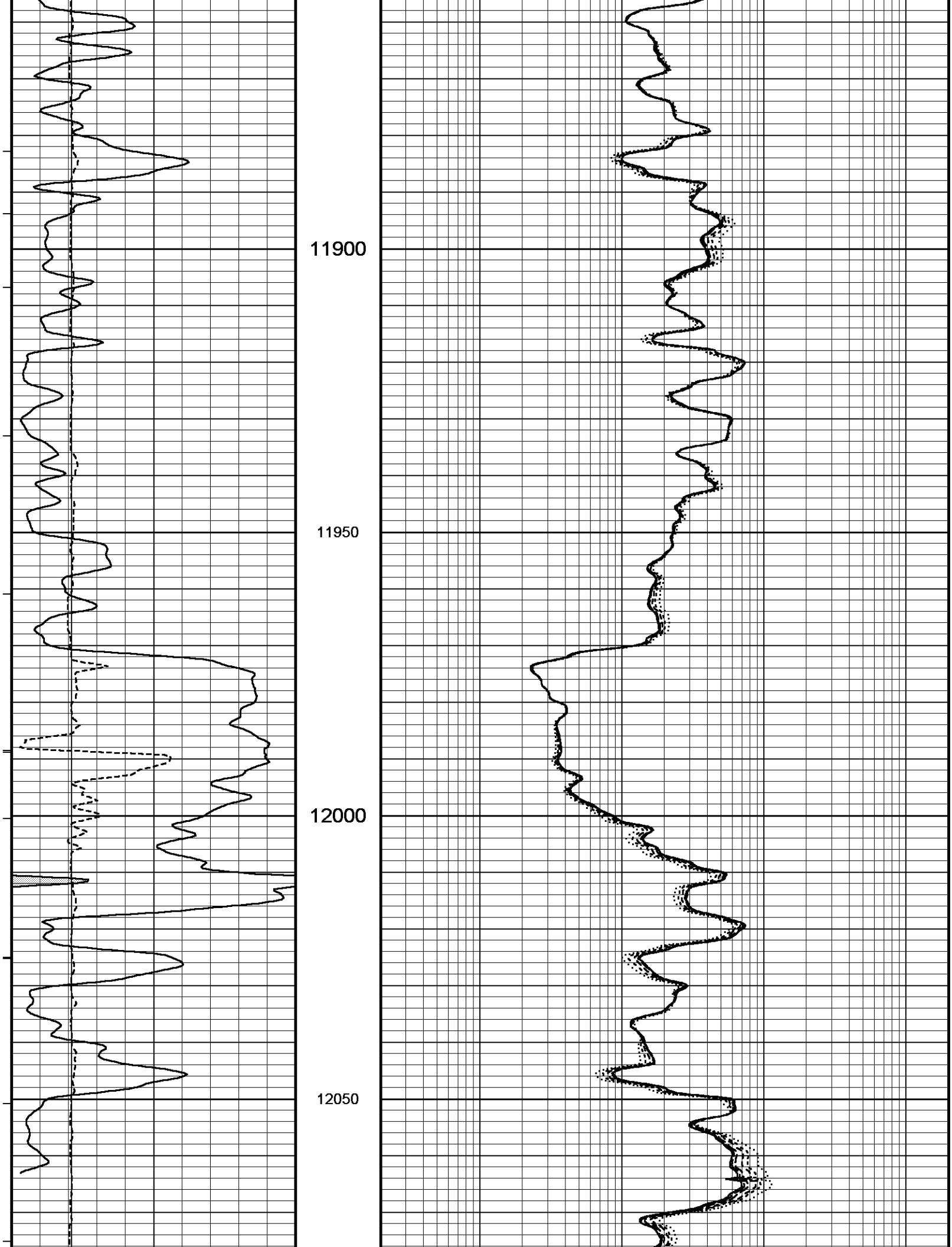
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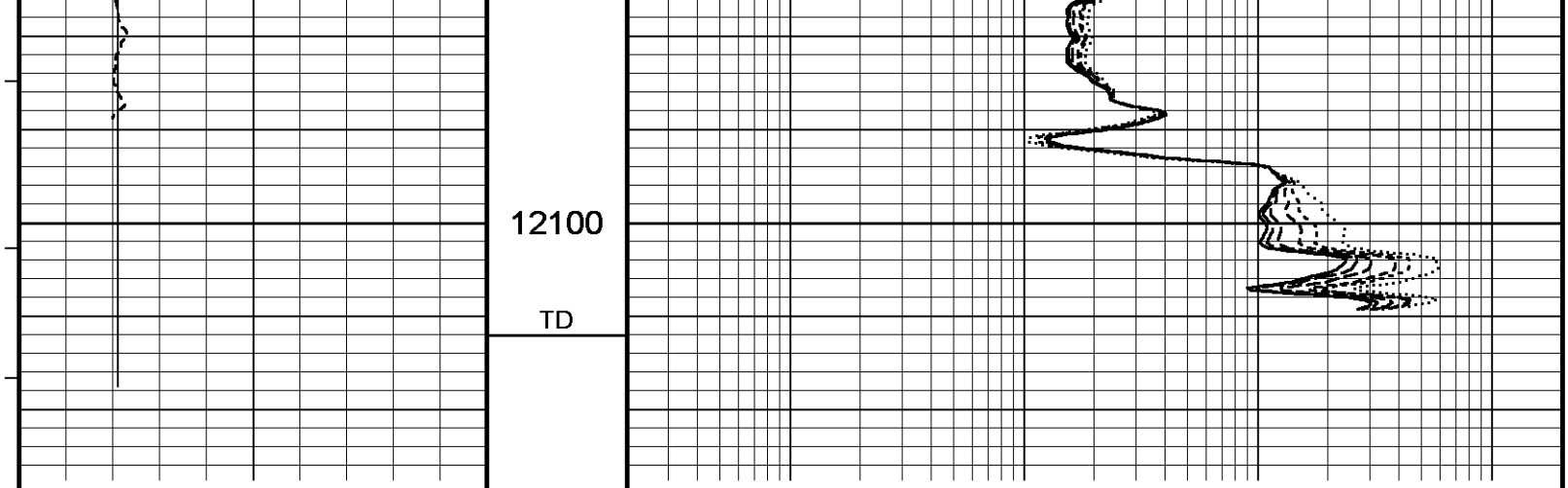


12100

TD

Depth
In
Feet

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
4 9 14
14 19 24

Bit Size
inches
4 9 14

Replay
Scale
1:240

Array Ind. Four Res 20
ohm metres
0.20 1 10 100 1000 2000

Array Ind. Four Res 30
ohm metres
0.20 1 10 100 1000 2000

Array Ind. Four Res 40
ohm metres
0.20 1 10 100 1000 2000

Array Ind. Four Res 60
ohm metres
0.20 1 10 100 1000 2000

Array Ind. Four Res 85
ohm metres
0.20 1 10 100 1000 2000

Array Ind. Four Res Rt
ohm metres
0.20 1 10 100 1000 2000

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 14-APR-2011 03:10
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340depth.dta
Recorded on 14-APR-2011 01:01
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

5 INCH MAIN LOG

BEFORE SURVEY CALIBRATION

C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta

General Constants All 000

Last Edited on 14-APR-2011,01:58

General Parameters

Mud Resistivity	2.000	ohm-metres
Mud Resistivity Temperature	76.000	degrees F

Mud Resistivity Temperature	76.000	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Limestone Density Por.	
Resistivity used	Array Ind. Four Res Rt	
RWA Constant A	0.610	
RWA Constant M	2.150	

Down-hole Tension Calibration SMS 0

Field Calibration on 07-FEB-2006 14:19

Reading No	Measured	Calibrated (lbs)
1	16292.42	0.00
2	17072.79	420.00

Strain Gauge Constants SER-A 146

Last Edited on

Atmospheric Pressure	14.70	psi
Serial Number	0	
Calibration Date	01-JAN-1998	
Base Check Date		
Dead Weight Serial Number	0	
Dead Weight Gravitational Correction	1.0	

Temperature	75.0		150.0		250.0		350.0	degrees F
Pressure psia	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.
0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10000.0	0.000		0.000		0.000		0.000	

Gamma Calibration MGS-C.J 108

Field Calibration on 12-APR-2011,23:14

	Measured	Calibrated (API)
Background	41	28
Calibrator (Gross)	1372	925
Calibrator (Net)	1331	897

Gamma Constants MGS-C.J 108

Last Edited on 12-APR-2011,23:14

Gamma Calibrator Number	056	
Mud Density	1.01	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

SP Calibration MGS-C.J 108

Field Calibration on 13-APR-2011,01:21

	Measured	Calibrated (mV)
Reference 1	100.0	100.0
Reference 2	-100.0	-100.0

High Resolution Temperature Calibration MGS-C.J 108

Field Calibration on 13-APR-2011,01:21

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MGS-C.J 108

Last Edited on

Pre-filter Length	11

Neutron Calibration MDN-A.B 165

Base Calibration on 18-JAN-2011 09:45
Field Check on 12-APR-2011,23:35

Base Calibration

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2962	92	3714	110
Ratio	32.226		33.764	

Field Calibrator at Base	Calibrated (cps)	
	1292	1857
Ratio	0.696	

Field Check	Calibrated (cps)	
	1294	1854
Ratio	0.698	

Neutron Constants MDN-A.B 165

Last Edited on 12-APR-2011,23:42

Neutron Source Id	p31112b	
Neutron Jig Number	5917ne	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.14	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	MGS External Temperature	
Temperature	N/A	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

Induction Calibration MAI-B.J 392

Base Calibration on 07-MAR-2011,14:45
Field Check on 12-APR-2011 23:32

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) High
1	17.1	467.1	9.3	966.2
2	6.1	375.5	7.6	821.4
3	3.2	259.2	5.2	566.0
4	2.2	129.4	2.6	279.2

Array Temperature	74.7	Deg F

Channel	Base Check (mmho/m) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	0.0	0.0	13.0	3890.3
2	0.0	0.0	30.8	3591.7
3	0.0	0.0	29.2	3050.5
4	0.0	0.0	19.5	2141.0
Deep	0.0	0.0	17.4	2000.9
Medium	0.0	0.0	43.2	3975.1
Shallow	0.0	0.0	46.6	5307.3
Array Temperature	0.0		67.1	Deg F

Induction Constants MAI-B.J 392

Last Edited on 14-APR-2011,03:04

Induction Model	RtAP-WBM	
Caliper for Borehole Corr.	Density Caliper	
Hole Size for Borehole Correction	N/A	inches
Tool Centred	No	
Stand-off Type	Fins	
Stand-off	0.50	inches
Number of Fins on Stand-off	6.0000	
Stand-off Fin Angle	60.00	degrees
Stand-off Fin Width	0.5000	inches
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MGS External Temperature	
Squasher Start	0.0080	mhos/metre
Squasher Offset	N/A	mhos/metre

Squasher Offset	N/A	mmhos/metre	

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

High Resolution Temperature Calibration MAI-B.J 392

Field Calibration on 27-SEP-2010,09:40

	Measured	Calibrated(Deg C)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI-B.J 392

Last Edited on

Pre-filter Length	11

Caliper Calibration MPD-B 166

Base Calibration on 04-FEB-2011,04:24
Field Calibration on 12-APR-2011,23:37

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13324	4.01
2	22796	5.96
3	32616	7.98
4	42176	9.86
5	52894	11.88
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
6.08	6.00

Photo Density Calibration MPD-B 166

Base Calibration on 31-MAR-2011,23:58
Field Check on 12-APR-2011 23:24

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	48644	24559	59869	31110
Reference 2	20824	2451	24557	2522

Field Check at Base

1194.7	1301.1

Field Check

1188.8	1292.2

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	219	1062		
Reference 1	18351	48453	0.383	0.369
Reference 2	5790	20687	0.284	0.271

Field Check at Base	218.6	1061.9
Field Check	215.7	1058.8

Density Constants MPD-B 166

Last Edited on 12-APR-2011,23:15

Density Source Id		
Nylon Calibrator Number		
Aluminium Calibrator Number		
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.01	gm/cc
Mud Density Z/A Multiplier	1.10	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Advanced	

Matrix Density (gm/cc)	Depth (ft)
2.71	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

DOWNHOLE EQUIPMENT

C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta

Shuttle Mechanical Release (SMR A)
SMR-A 146 LG: 8.53 ft WT: 77.2 lb OD: 2.52 in

Shuttle Electrical Release
SER-A 146 LG: 6.90 ft WT: 50.7 lb OD: 2.24 in

MBS-G.A 200v Compact Battery Sub
MBS-G.A 113 LG: 16.66 ft WT: 132.3 lb OD: 2.24 in

Compact Memory Sub E.B
MMS-E.B 134 LG: 5.20 ft WT: 37.5 lb OD: 2.24 in

Compact Short Gamma
MGS-C.J 108 LG: 3.41 ft WT: 24.3 lb OD: 2.24 in

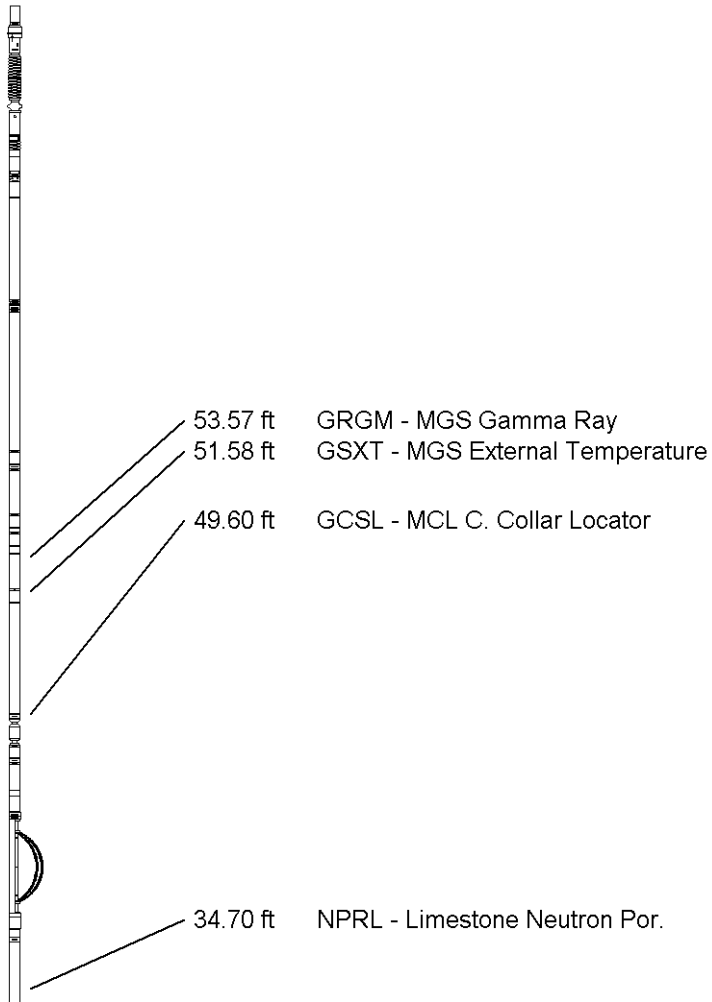
Compact Collar Locator
MCL-B.J 60 LG: 3.17 ft WT: 26.5 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint
SKJ-E.A 476 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 442 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 593 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron
MDN-A.B 165 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in



Compact Density/Caliper
MPD-B 166 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 591 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

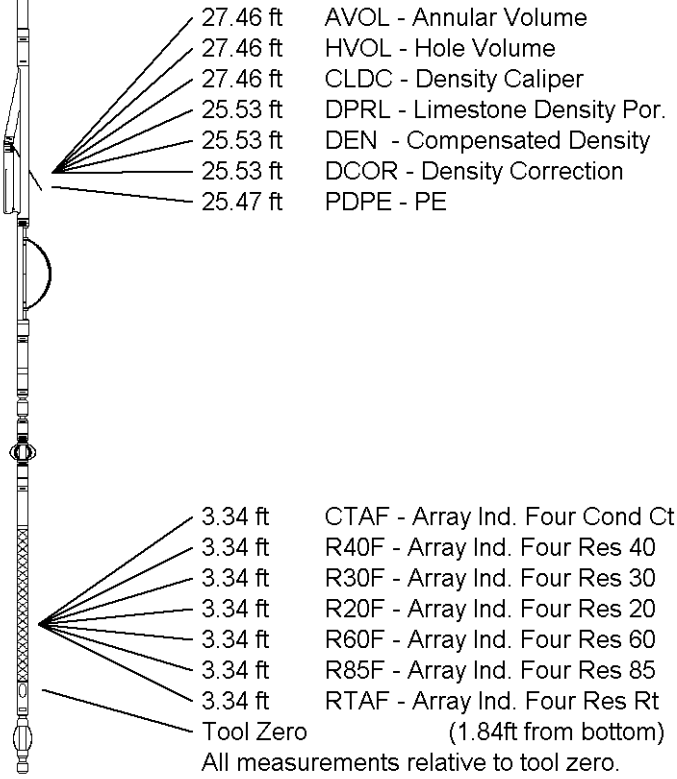
SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 438 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint
SKJ-E.A 477 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-E.B Compact Inline Standoff sub
MIS-E.B 577 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction
MAI-B.J 392 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 93.49 ft Weight: 712.1 lb



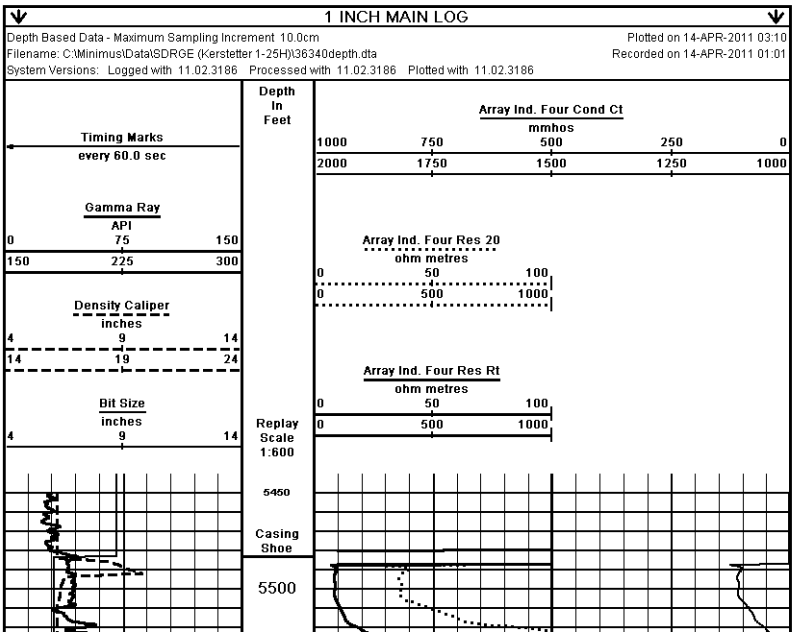
COMPANY	SANDRIDGE ENERGY
WELL	KERSTETTER 1-25H
FIELD	SIX MOONS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS

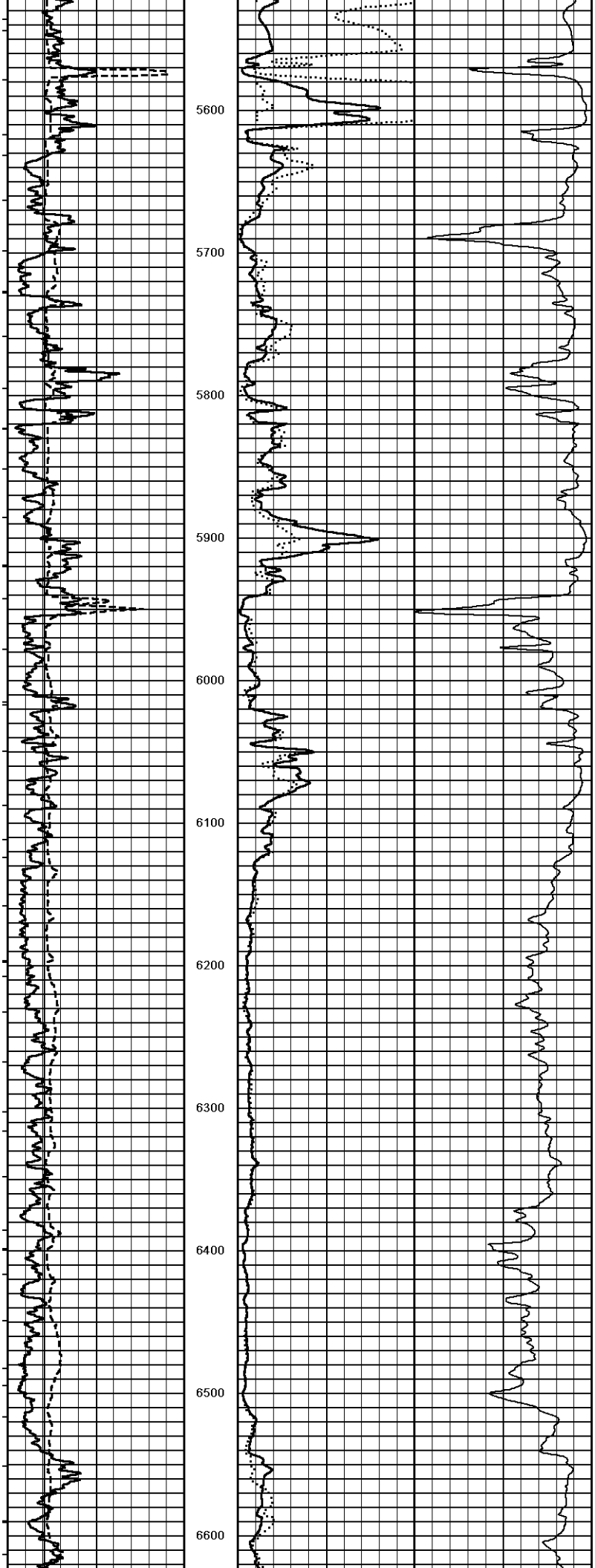
Elevation Kelly Bushing	2020.00	feet	First Reading	12109.00	feet
Elevation Drill Floor	2018.00	feet	Depth Driller	12129.00	feet
Elevation Ground Level	2000.00	feet	Depth Logger	12112.00	feet

Weatherford®

COMPACT WELL SHUTTLE ARRAY INDUCTION LOG

40 Years of Wireline 1970 2010

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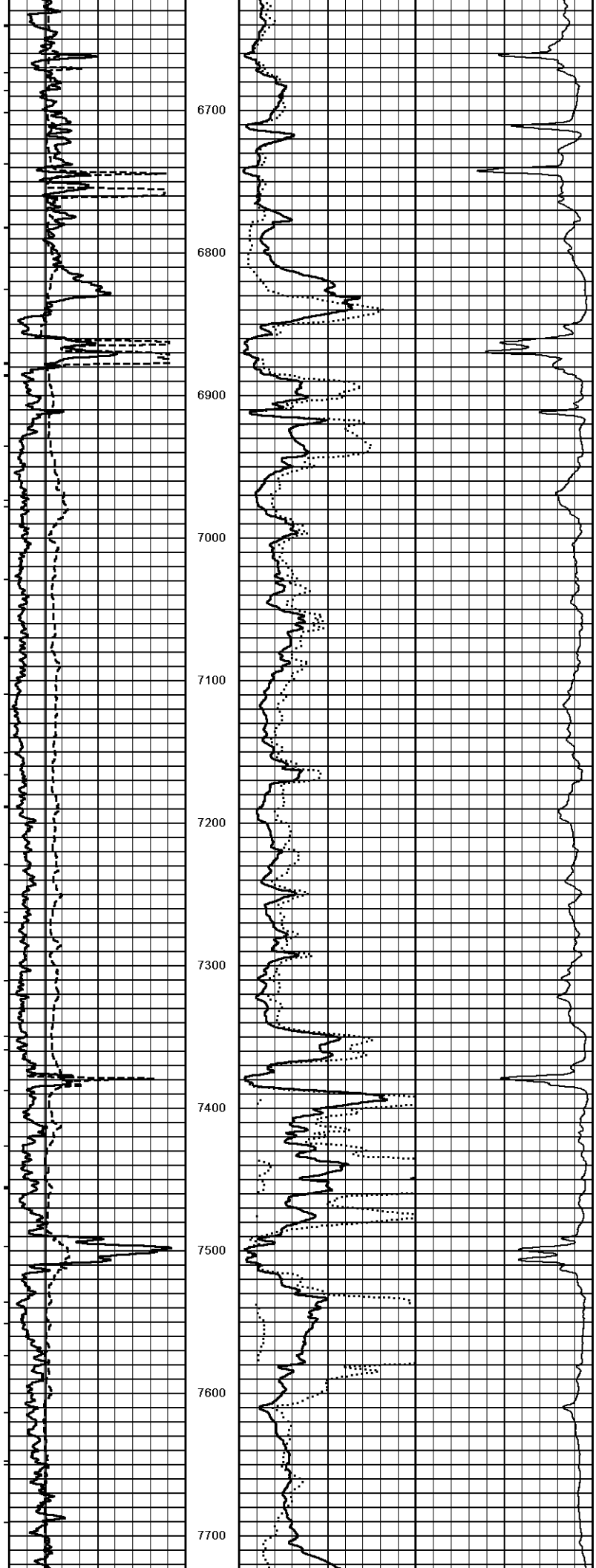
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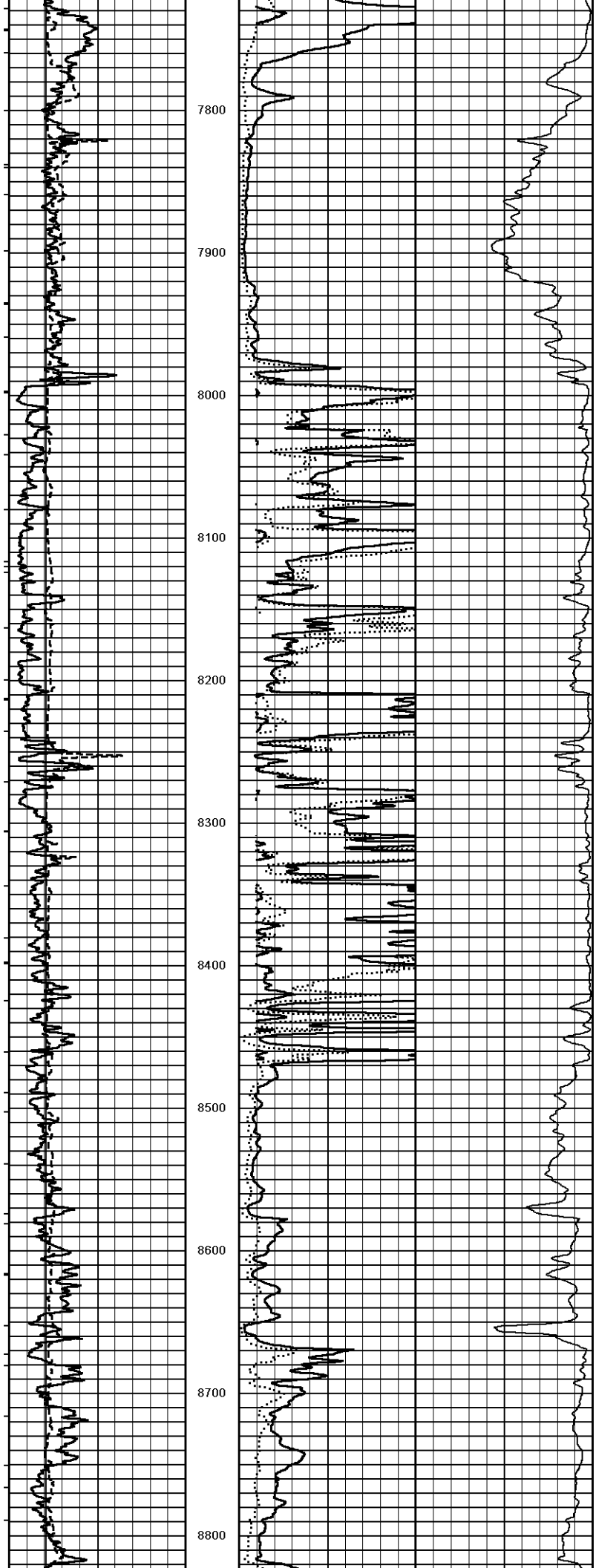
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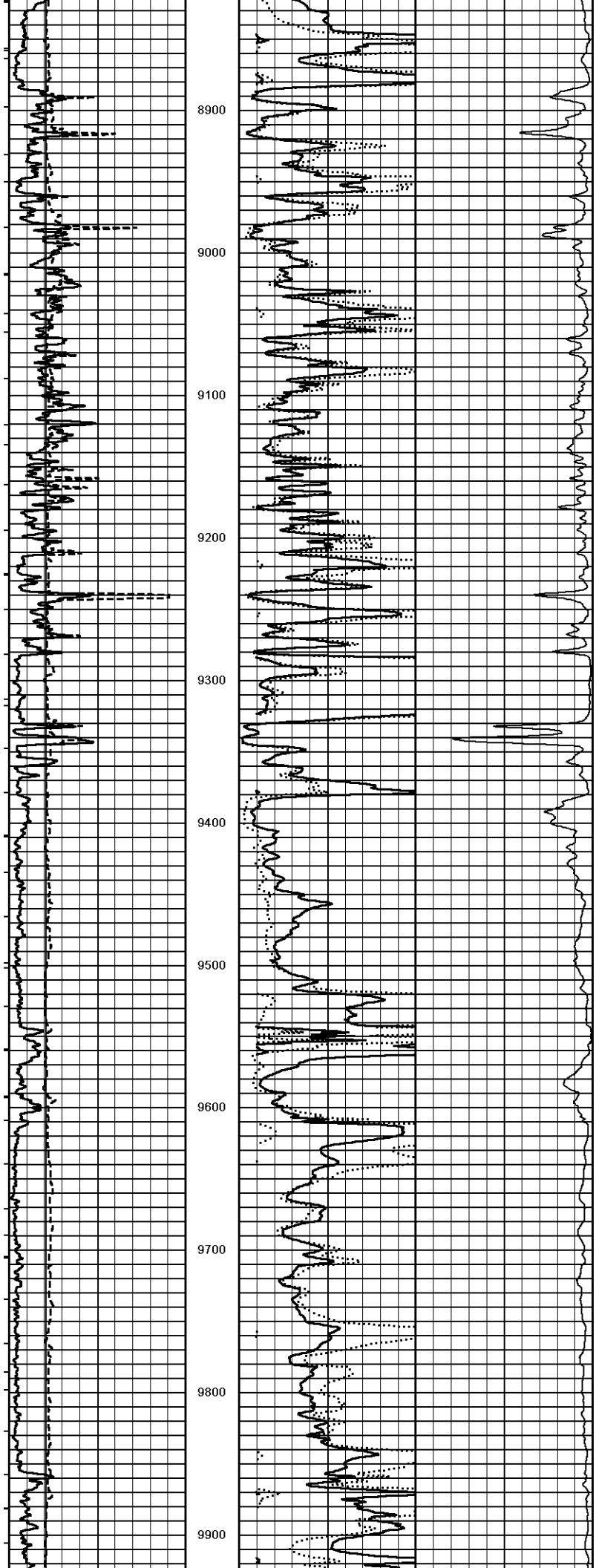
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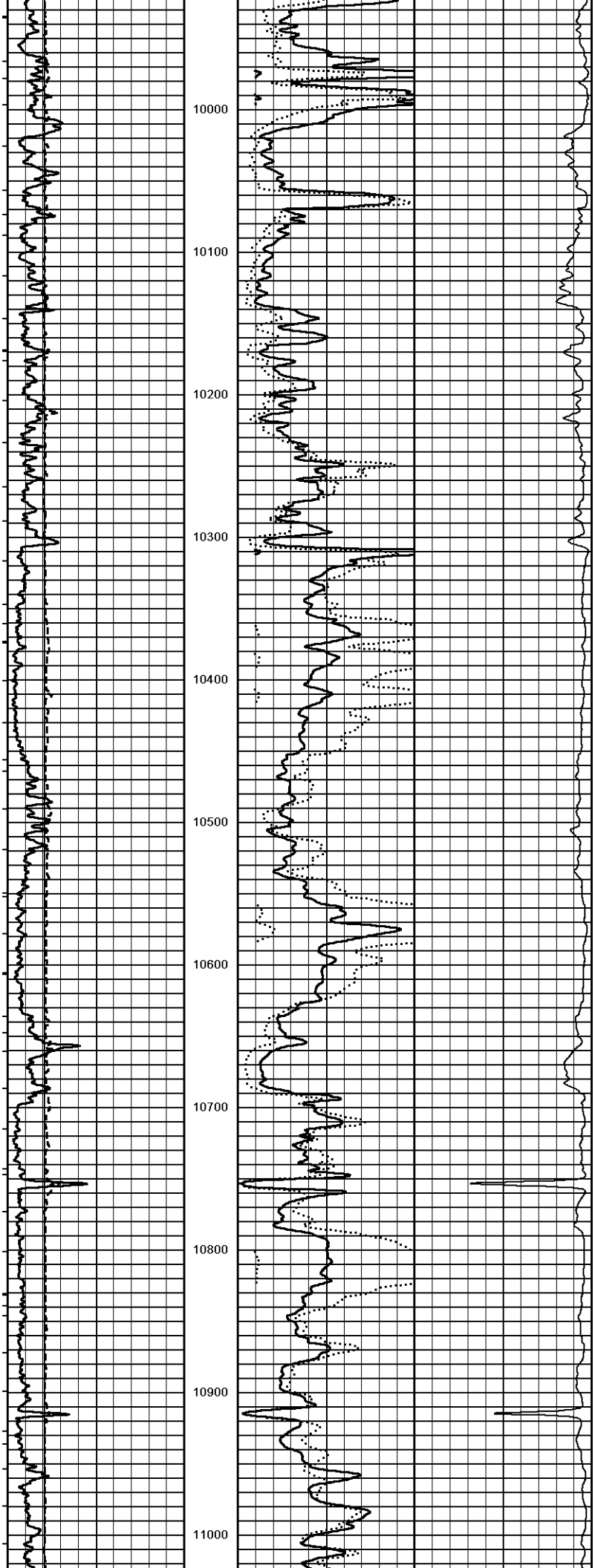
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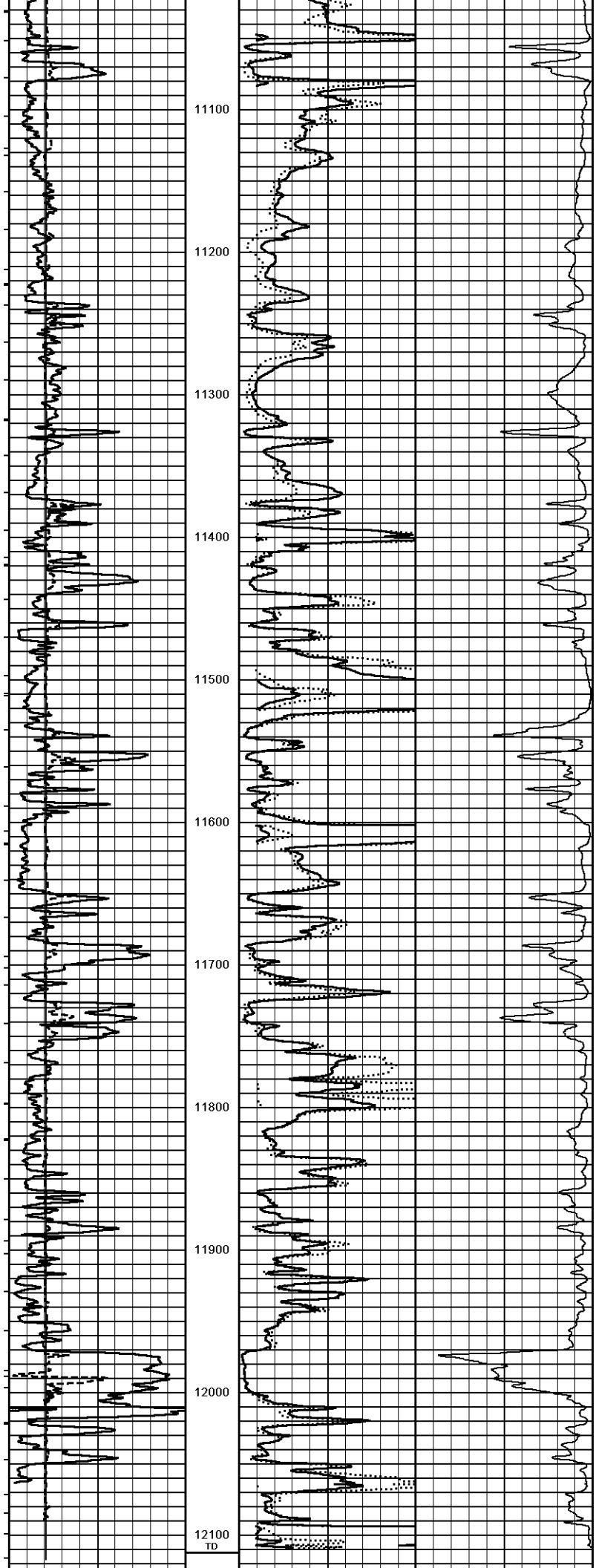
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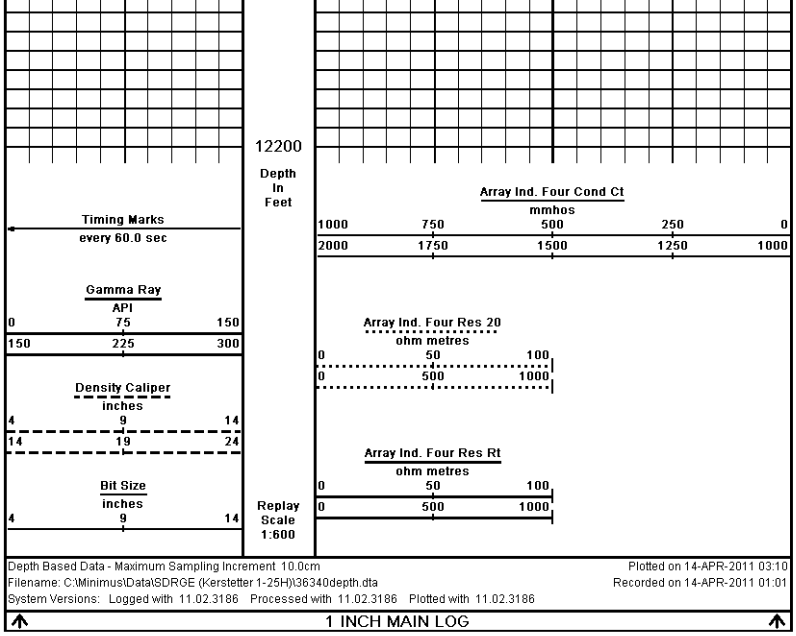


Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 14-APR-2011 03:10
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340depth.dta — Recorded on 14-APR-2011 01:01
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

1 INCH MAIN LOG

COMPANY	SANDRIDGE ENERGY
WELL	KERSTETTER 1-25H
FIELD	SIX MOONS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS

Elevation Kelly Bushing	2020.00	feet	First Reading	12109.00	feet
Elevation Drill Floor	2018.00	feet	Depth Driller	12129.00	feet
Elevation Ground Level	2000.00	feet	Depth Logger	12112.00	feet

Weatherford

COMPACT WELL SHUTTLE
ARRAY INDUCTION
LOG

COMPACT WELL SHUTTLE
COMPACT PHOTO DENSITY
COMPENSATED NEUTRON LOG

Weatherford®

COMPANY	SANDRIDGE ENERGY
WELL	KERSTETTER 1-25H
FIELD	SIX MOONS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS
LOCATION	S2 SW4 SW4
	330' FSL & 660' FWL

40 Years of Wireline 1970 2010

SEC	TWP	RGE	Other Services
25	31S	20W	MAI

API Number 15-033-21581
Permit Number

Permanent Datum GL, Elevation 2000 feet
Log Measured From KB @ 20 FEET above Permanent Datum
Drilling Measured From KB

Elevations:	feet
KB	2020.00
DF	2018.00
GL	2000.00

Date	14-APR-2011			
Run Number	ONE			
Depth Driller	12129.00	feet		
Depth Logger	12112.00	feet		
First Reading	12087.50	feet		
Last Reading	5450.00	feet		
Casing Driller	5483.00	feet		
Casing Logger	5483.00	feet		
Bit Size	6.125	inches		
Hole Fluid Type	WATER			
Density / Viscosity	8.40 lb/USg	27.00 CP		
PH / Fluid Loss	10.50			
Sample Source	FLOWLINE			
Rm @ Measured Temp	2.0 @ 60.0	ohm-m		
Rmf @ Measured Temp	1.60 @ 60.0	ohm-m		
Rmc @ Measured Temp	2.40 @ 60.0	ohm-m		
Source Rmf / Rmc	CALC	CALC		
Rm @ BHT	0.93 @137.0	ohm-m		
Time Since Circulation	12 HOURS			
Max Recorded Temp	137.00	deg F		
Equipment Name	COMPACT			
Equipment / Base	18077	OKC		
Recorded By	GUTHMUELLER			
Witnessed By	K GENTRY			

BOREHOLE RECORD

Last Edited: 14-APR-2011 02:05

Bit Size inches	Depth From feet	Depth To feet
12.250	0.00	804.00
8.750	804.00	5483.00
6.125	5483.00	12129.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURF	9.625	0.00	804.00	36.00
INTER	7.000	0.00	5483.00	26.00

REMARKS

WLS SOFTWARE VERSION 11.02.3186 USED
TOOLS RUN ON DRILLPIPE USING COMPACT WELL SHUTTLE DEPLOYMENT TECHNIQUE

DEPTH MEASURED USING ADVANTAGE RIG DEPTH SYSTEM CORRECTED TO PIPE STRAP.

TOOLS DEPLOYED WITH MULE SHOE SITTING AT 12031 FT.
AFTER DEPLOYMENT LOGGING TOOL WAS AT 12113 FT.

4.5 INCH PRODUCTION CASING WAS USED TO CALCULATE ANNULAR HOLE VOLUMES

OPERATORS: D TURNER, M FISHER
S.O. # 3529776
RIG: LARIAT 45

5 INCH POROSITY LOG

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 14-APR-2011 02:27
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta
Recorded on 14-APR-2011 01:01
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Timing Marks
every 60.0 sec

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
4 9 14
14 19 24

Bit Size
inches
4 9 14

Depth In Feet

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Limestone Neutron Por.
percent
30 20 10 0 -10
70 60 50 40 30

Limestone Density Por.
percent
30 20 10 0 -10
70 60 50 40 30

PE
barns/electron
0 5 10

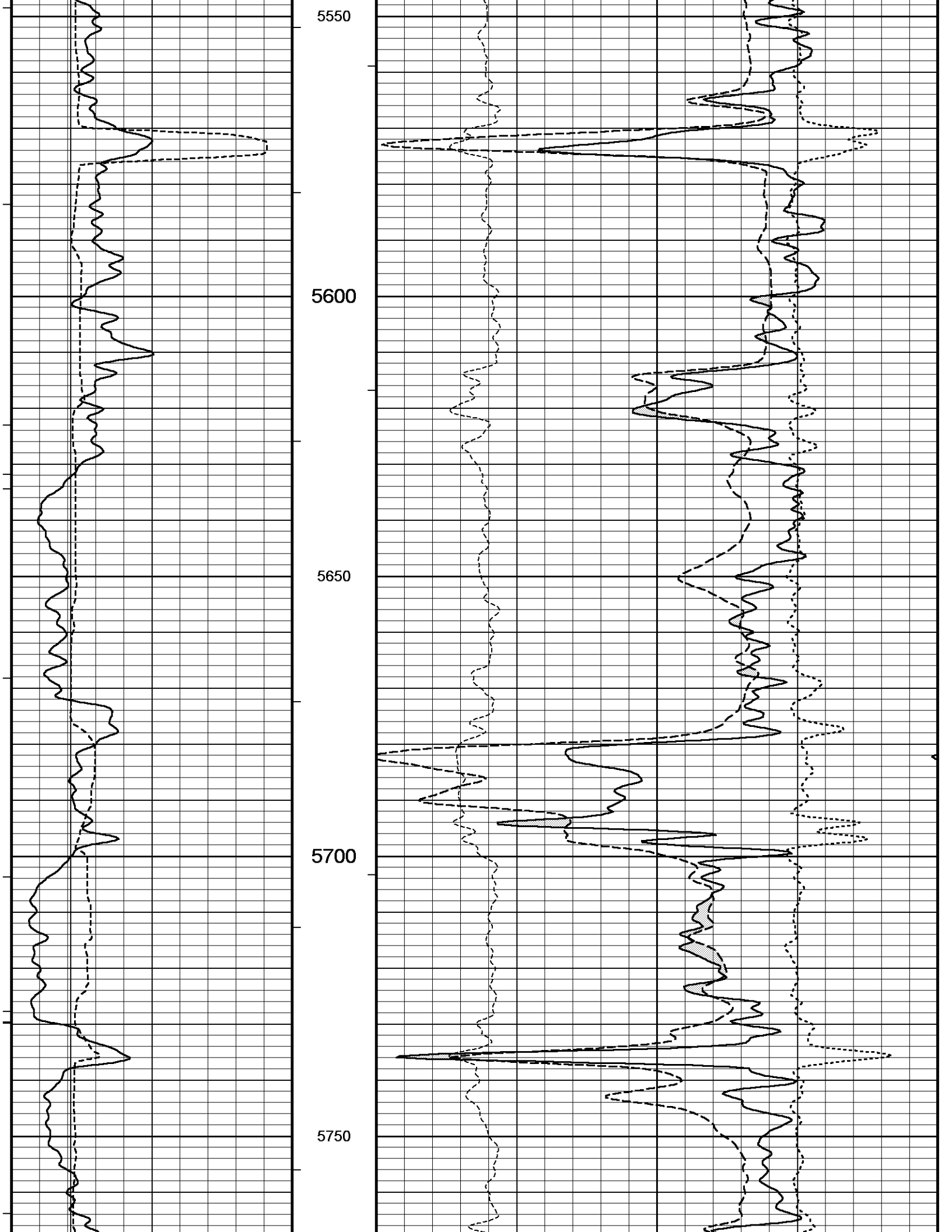
Density Correction
grams/cc
-0.25 0 0.25

5450

Casing Shoe

5500

1500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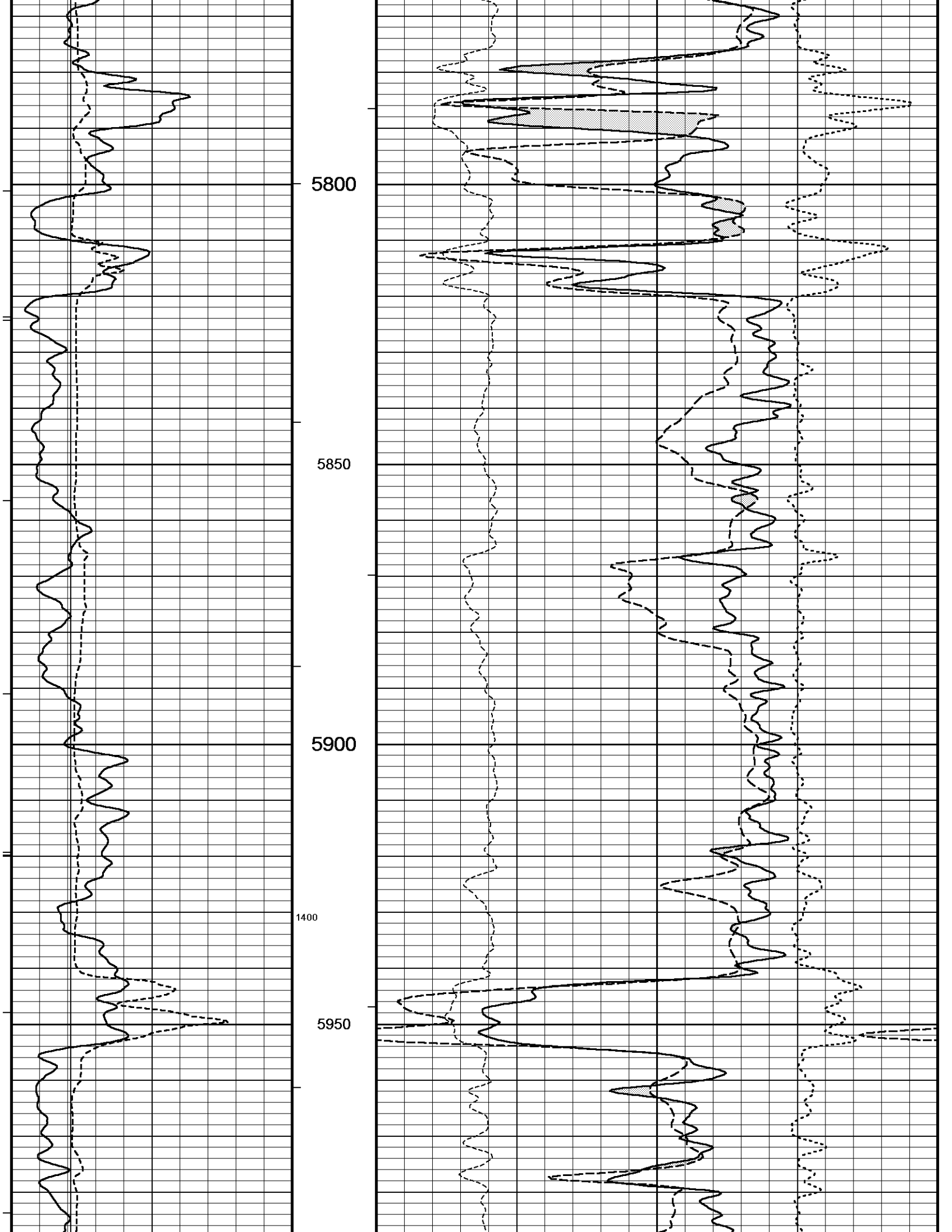
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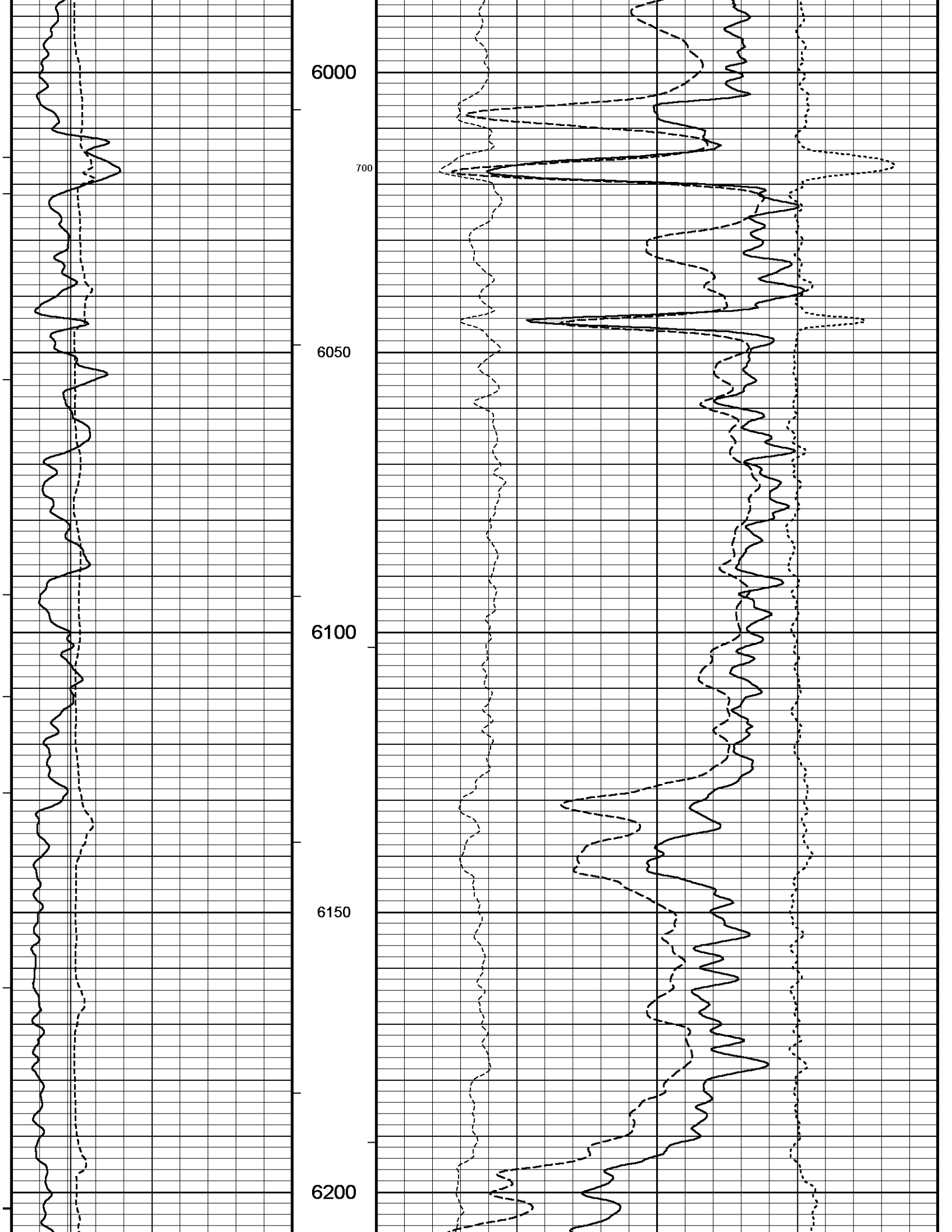
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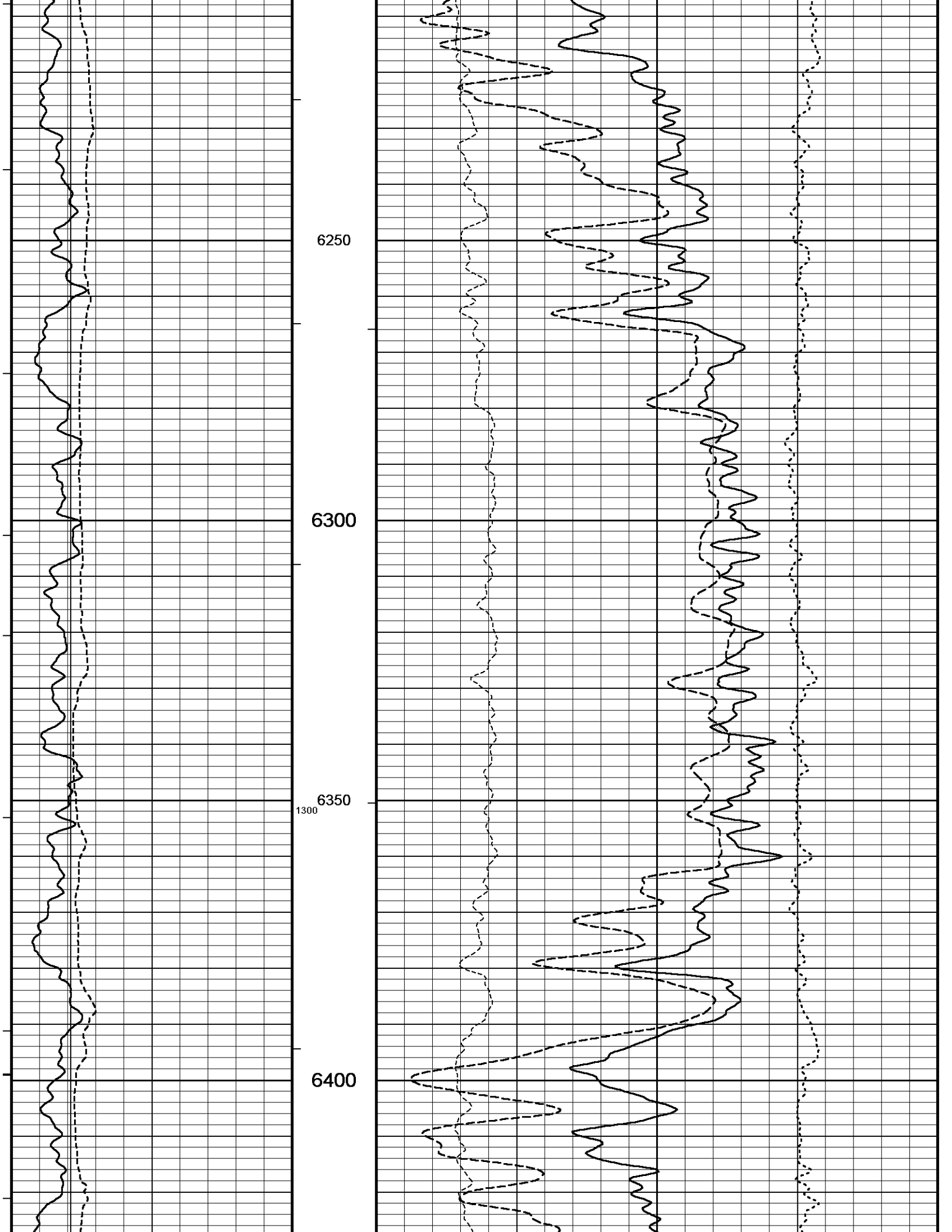
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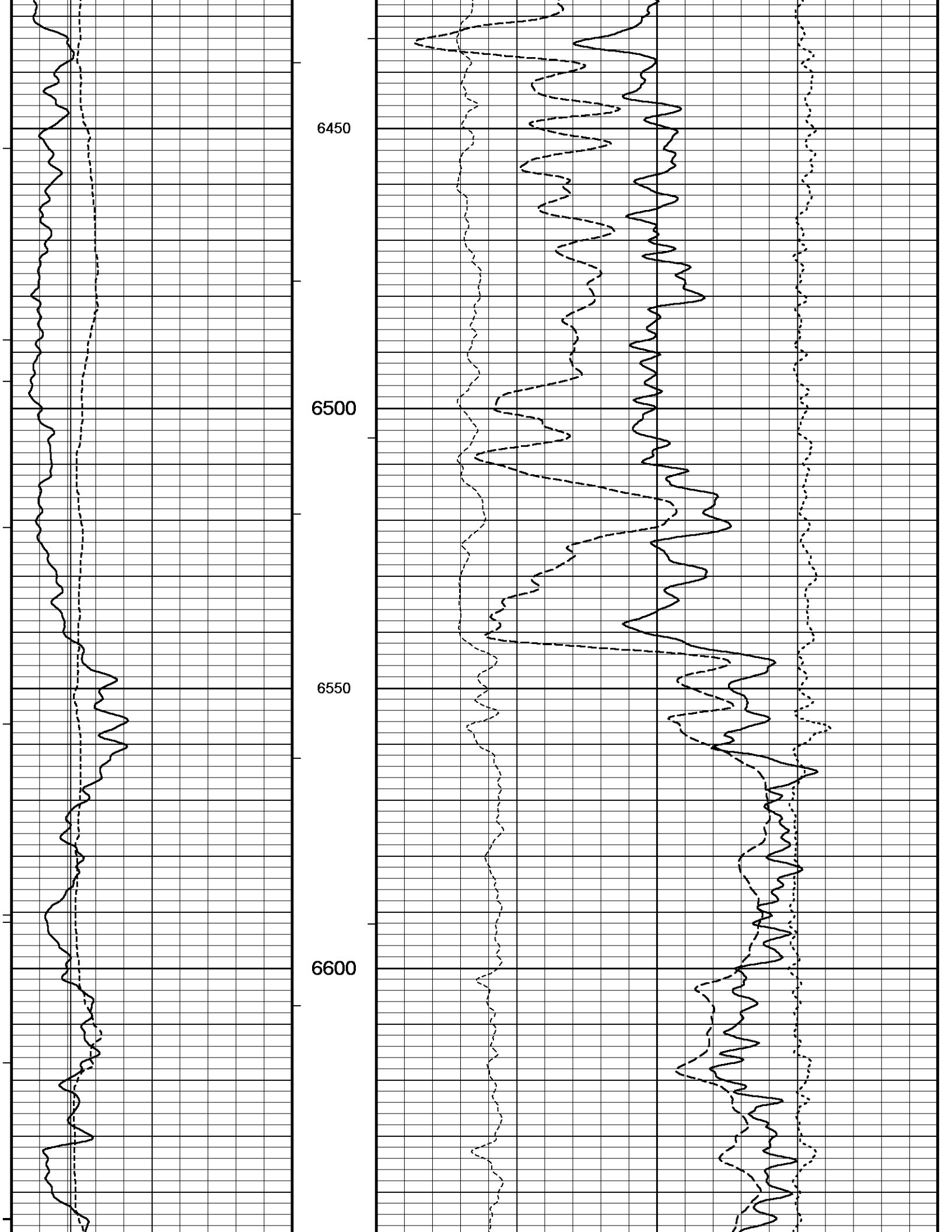
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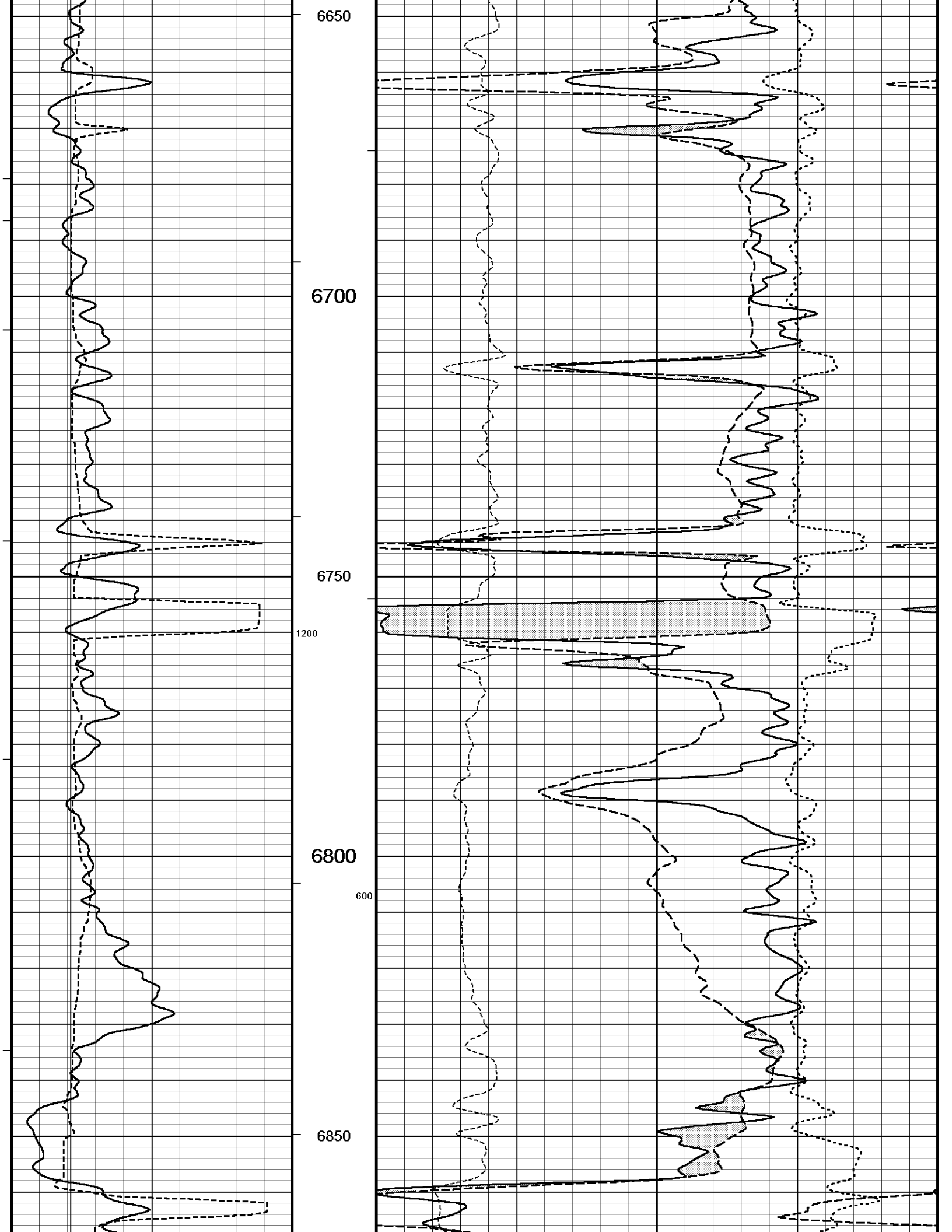
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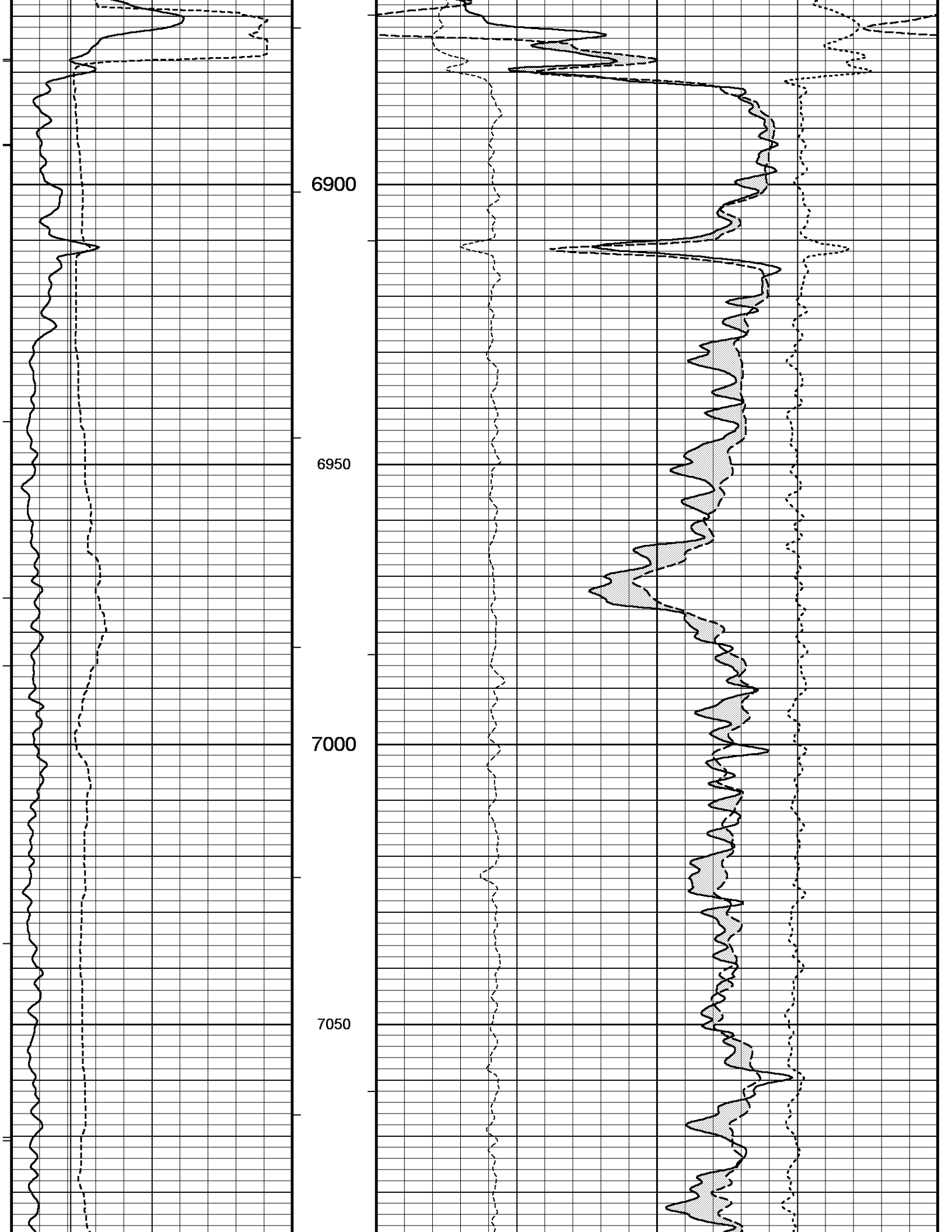
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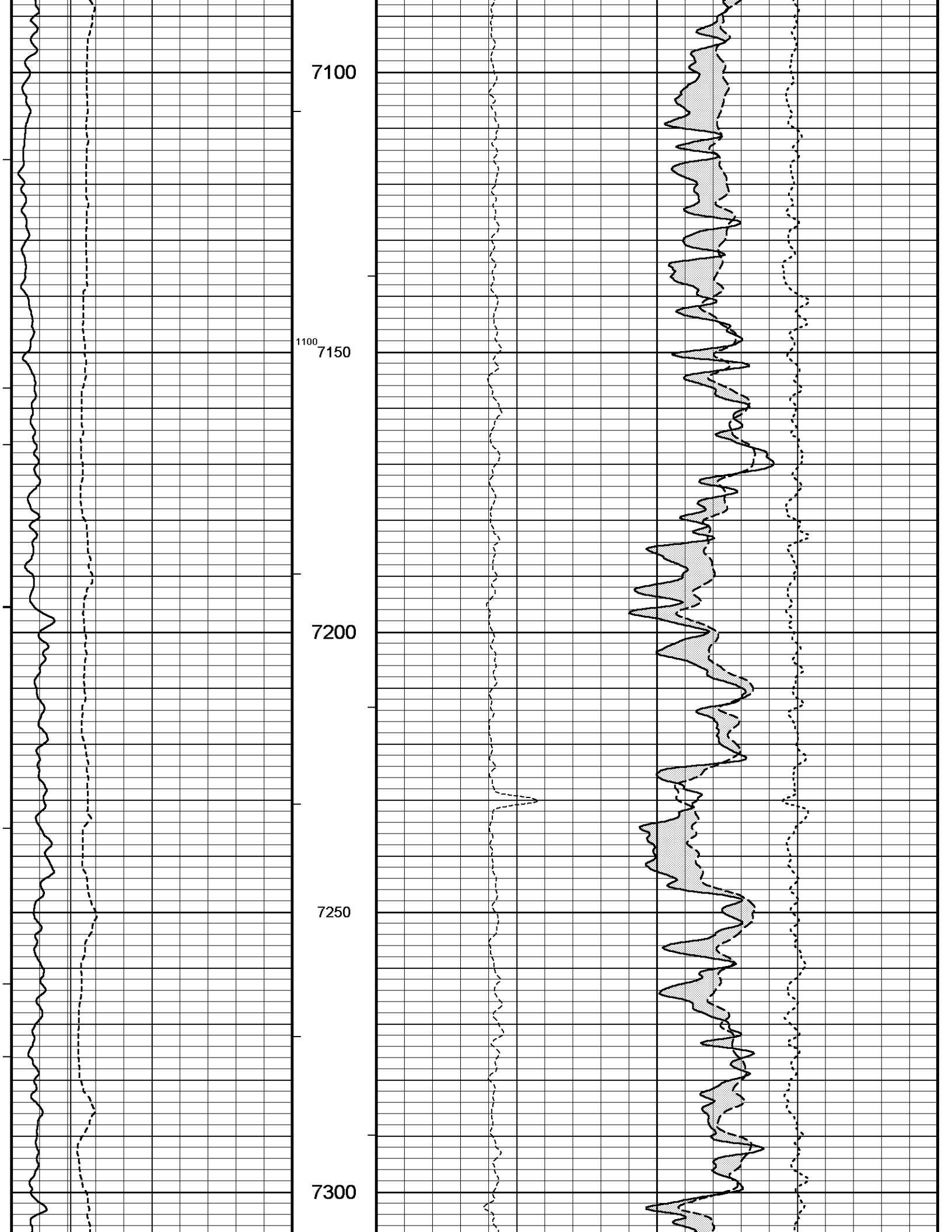
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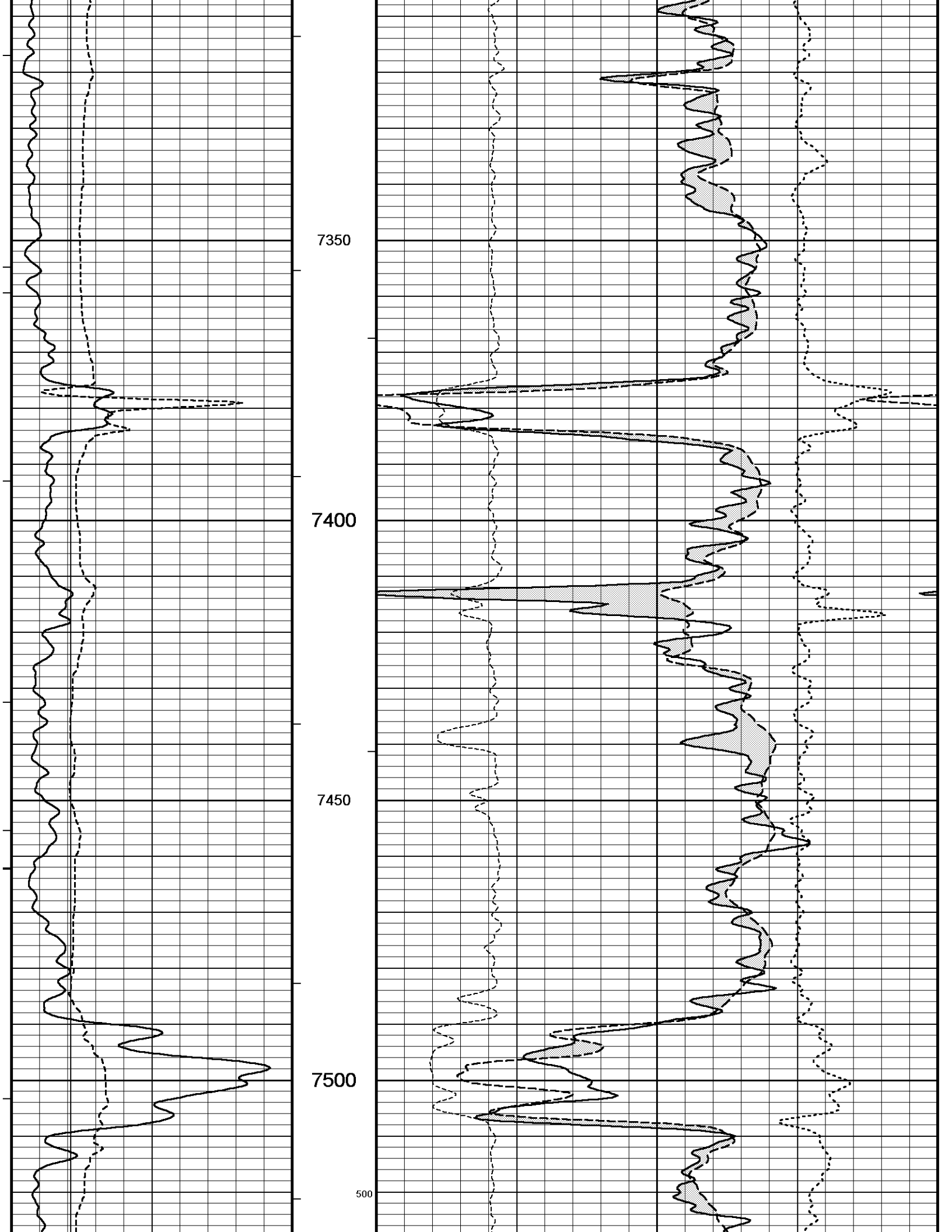
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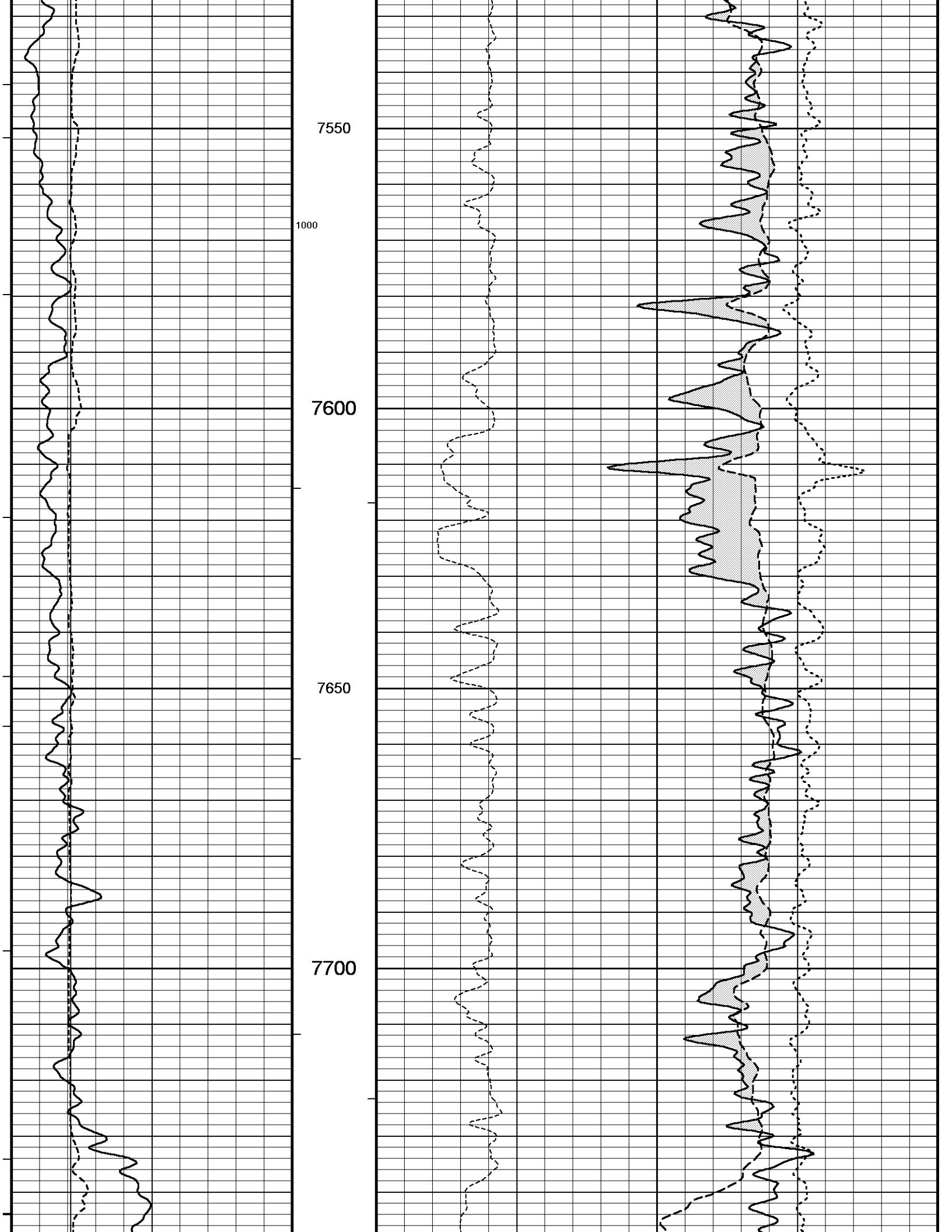
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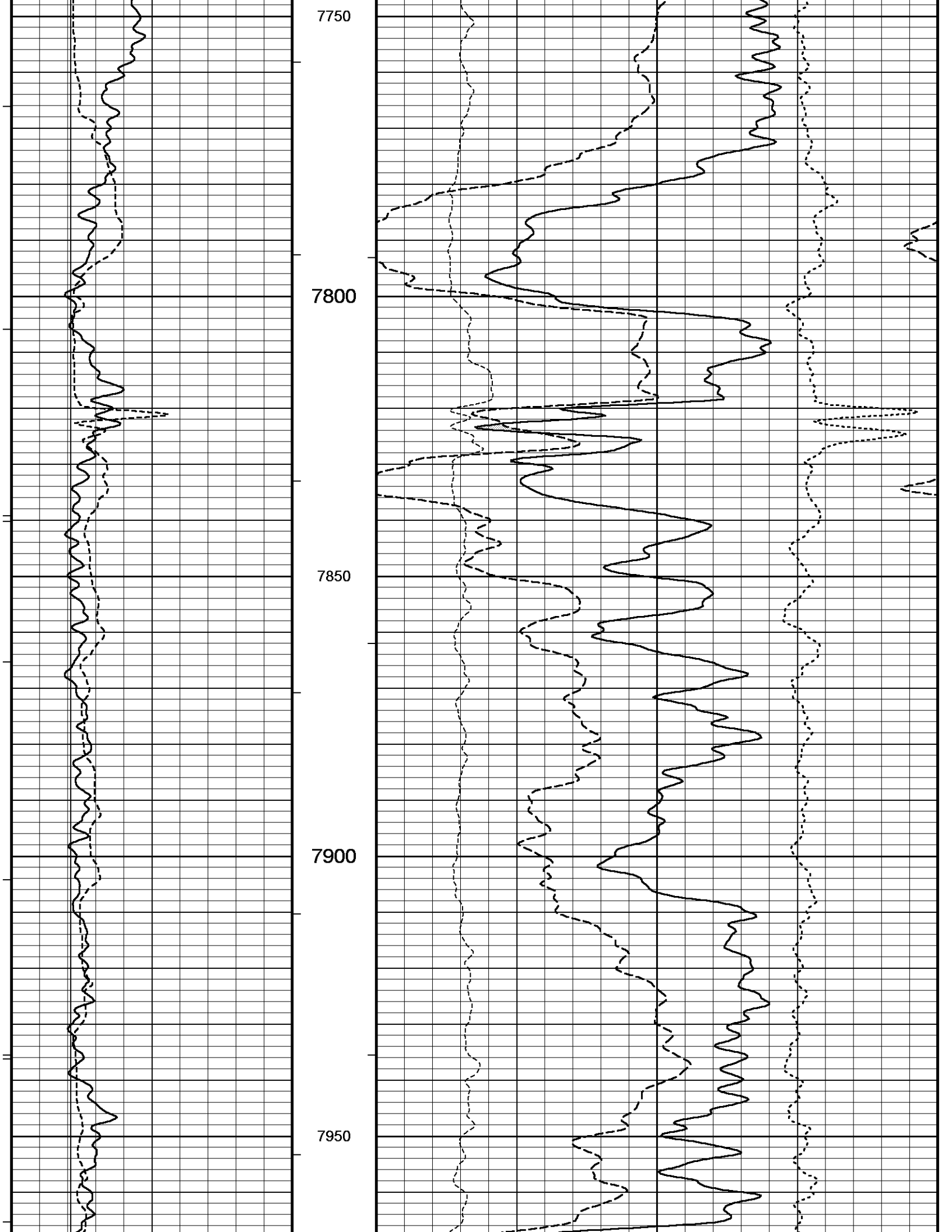
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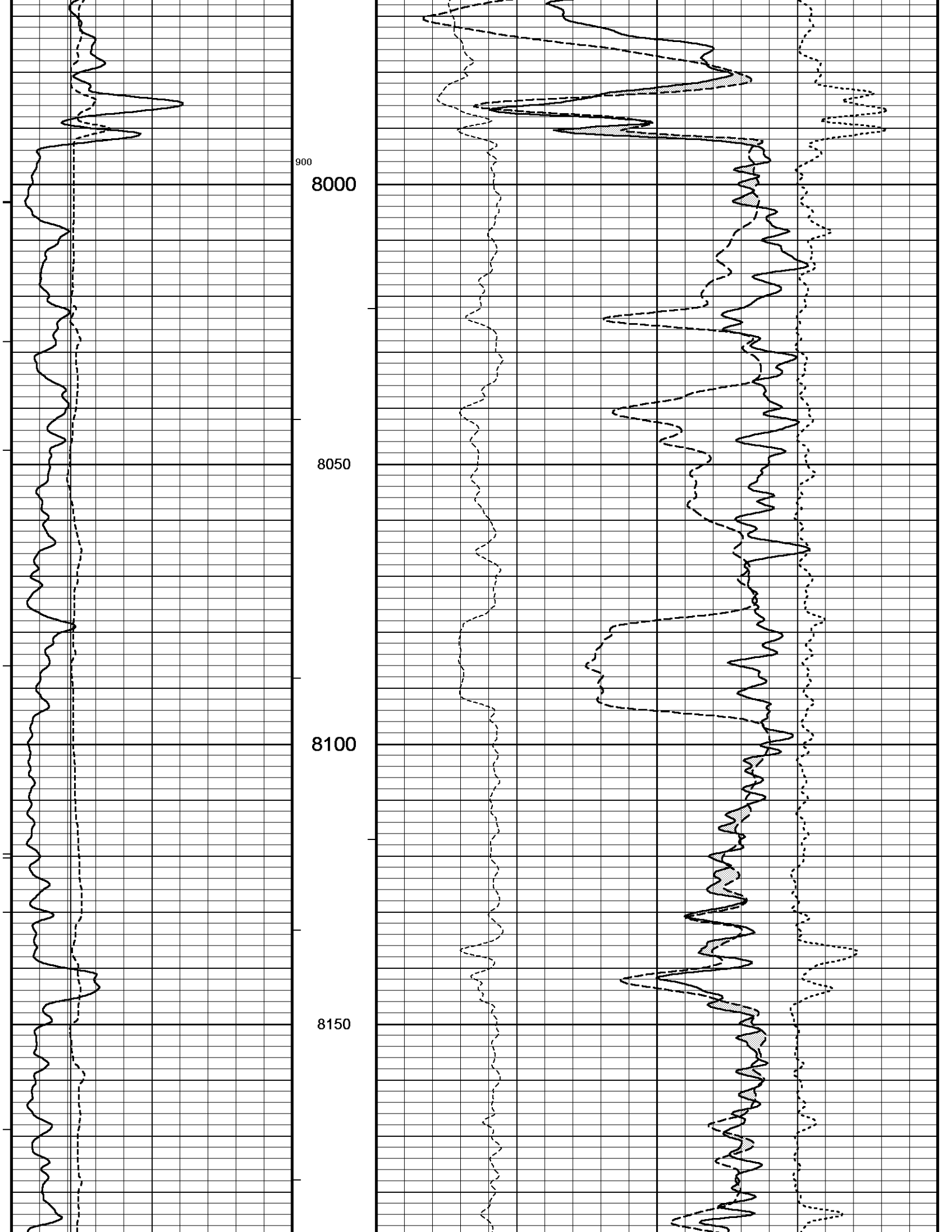
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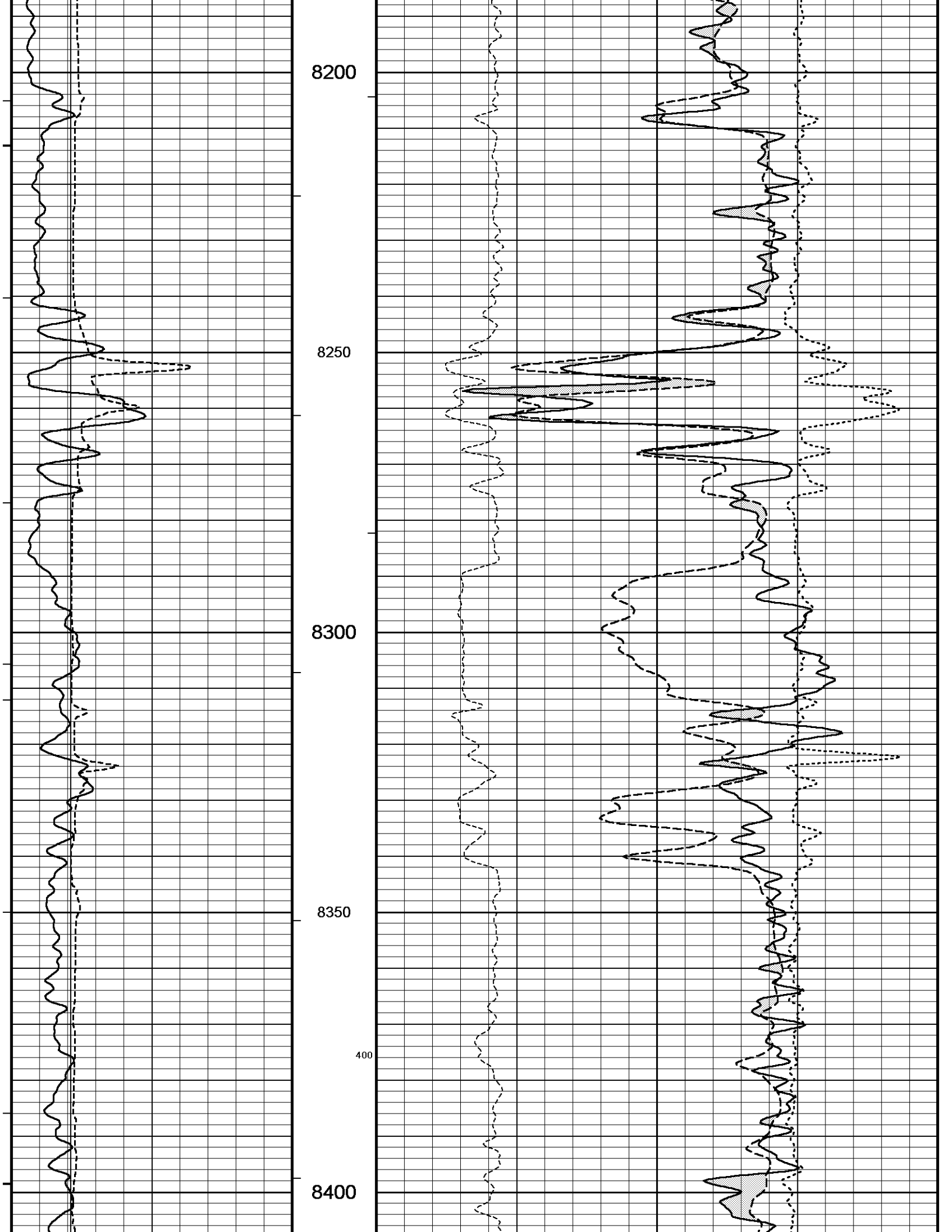
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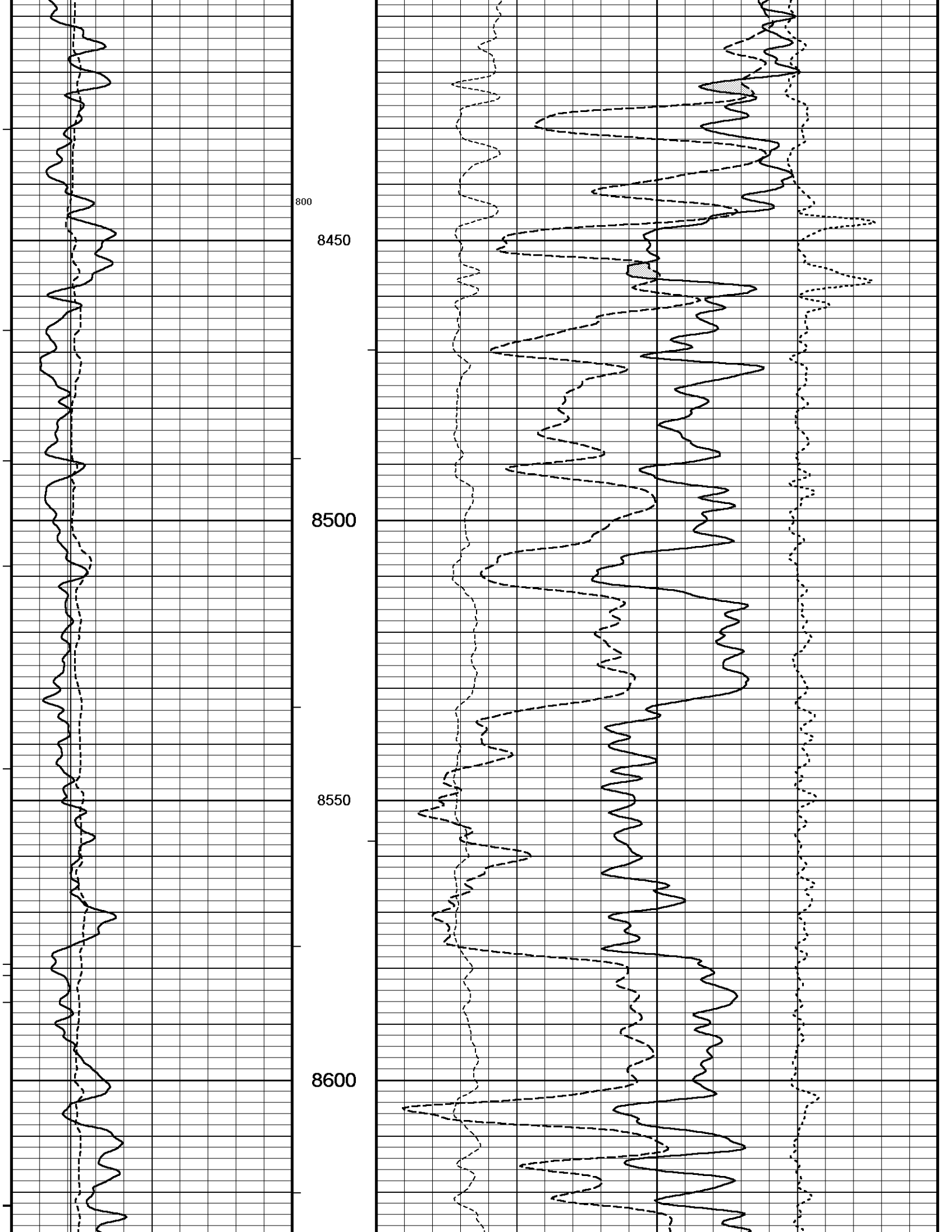
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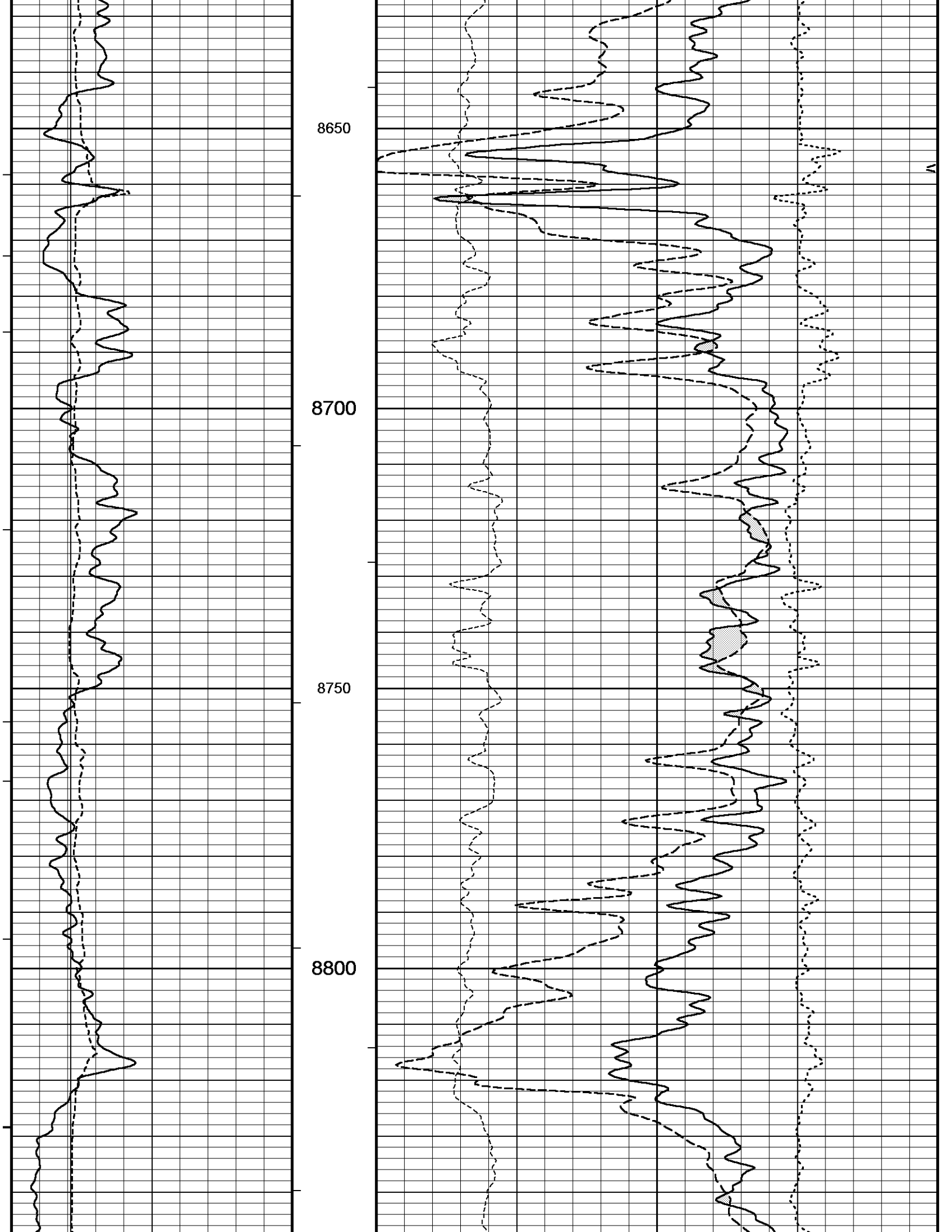
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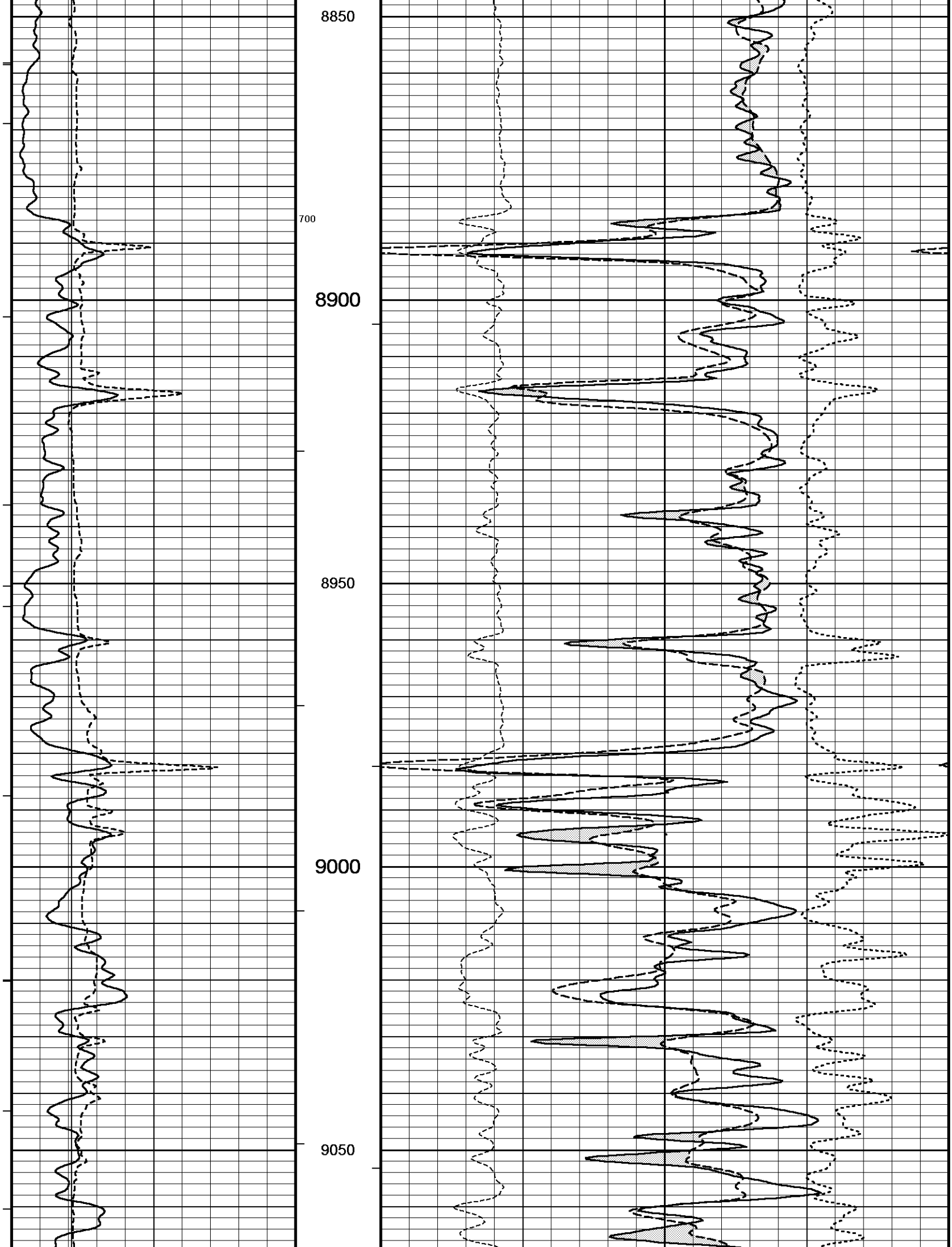
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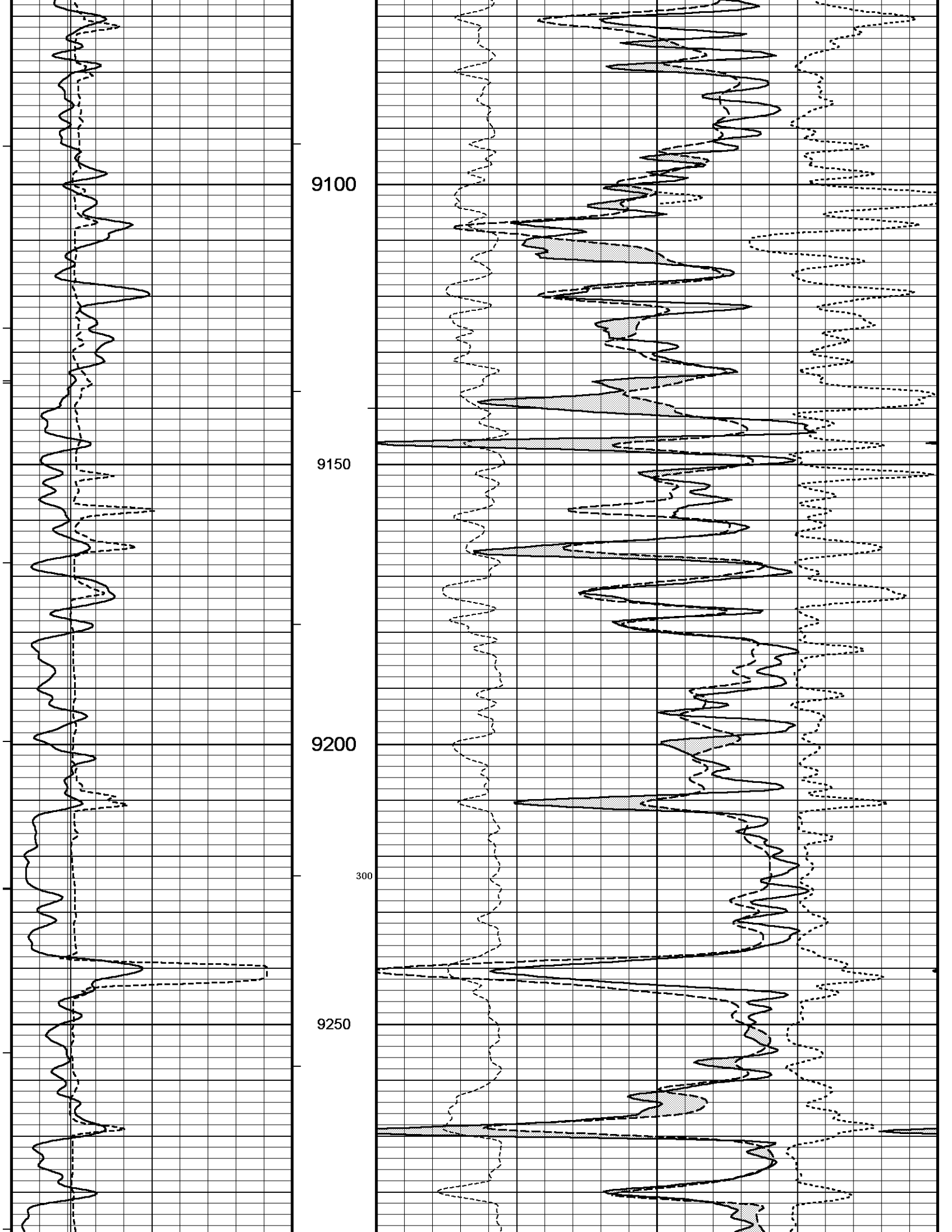
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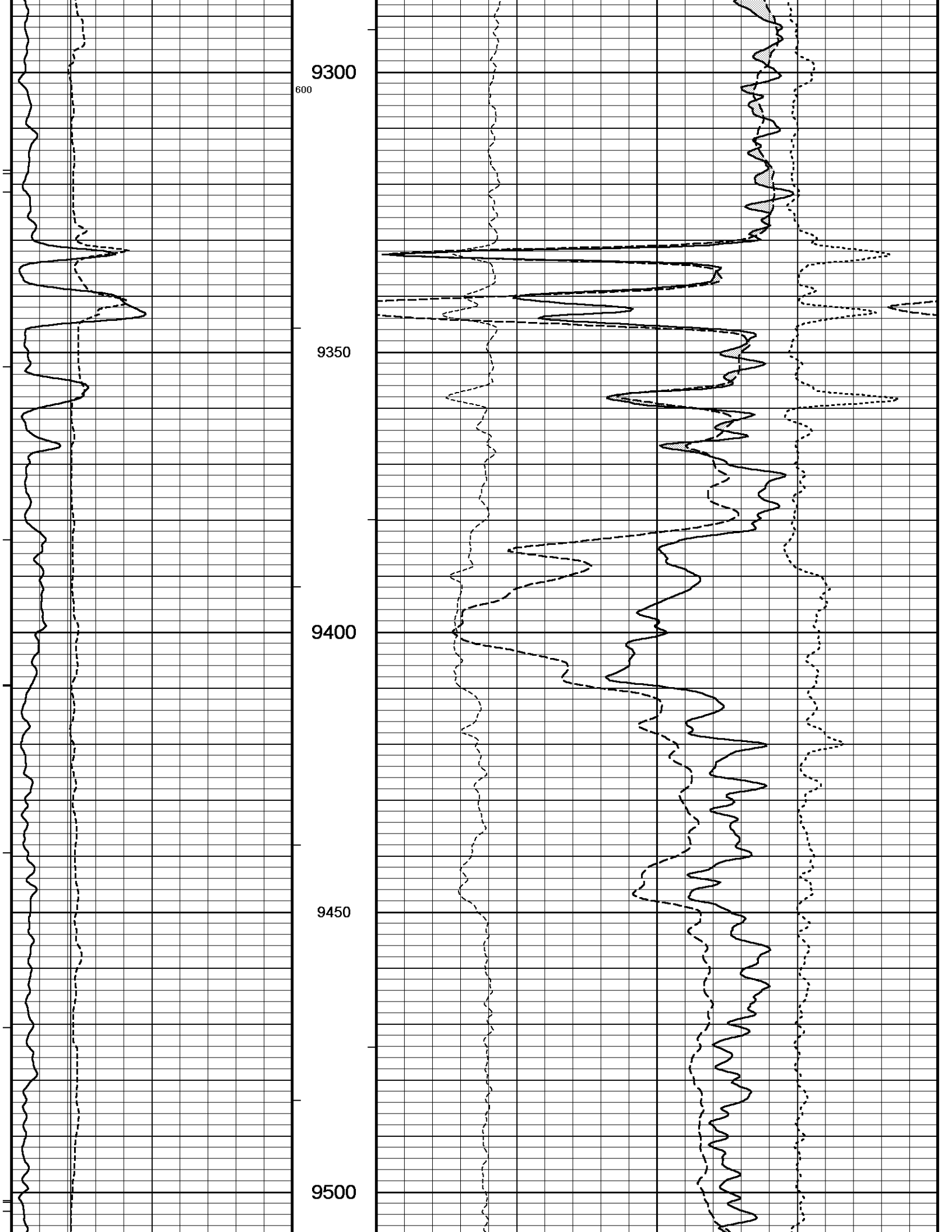
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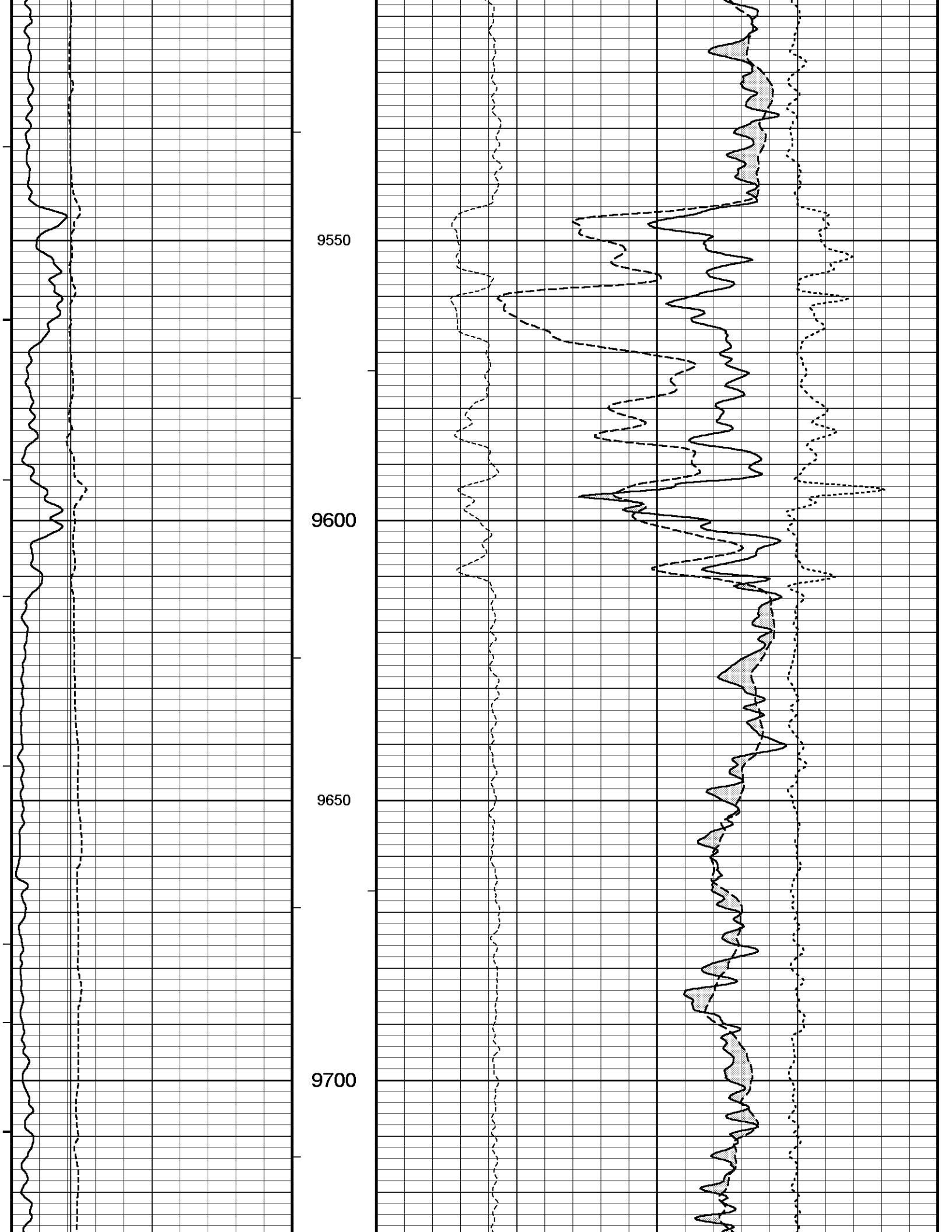
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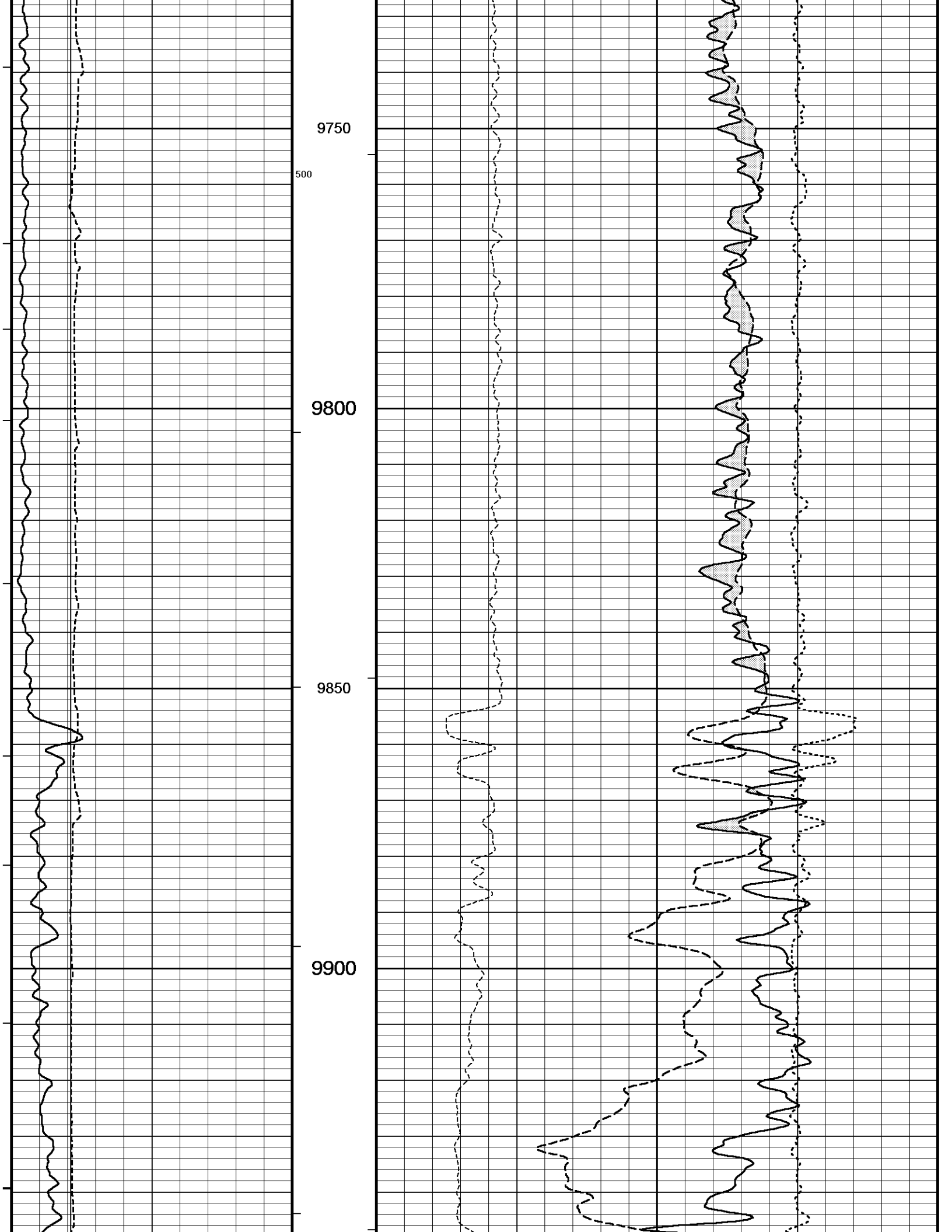
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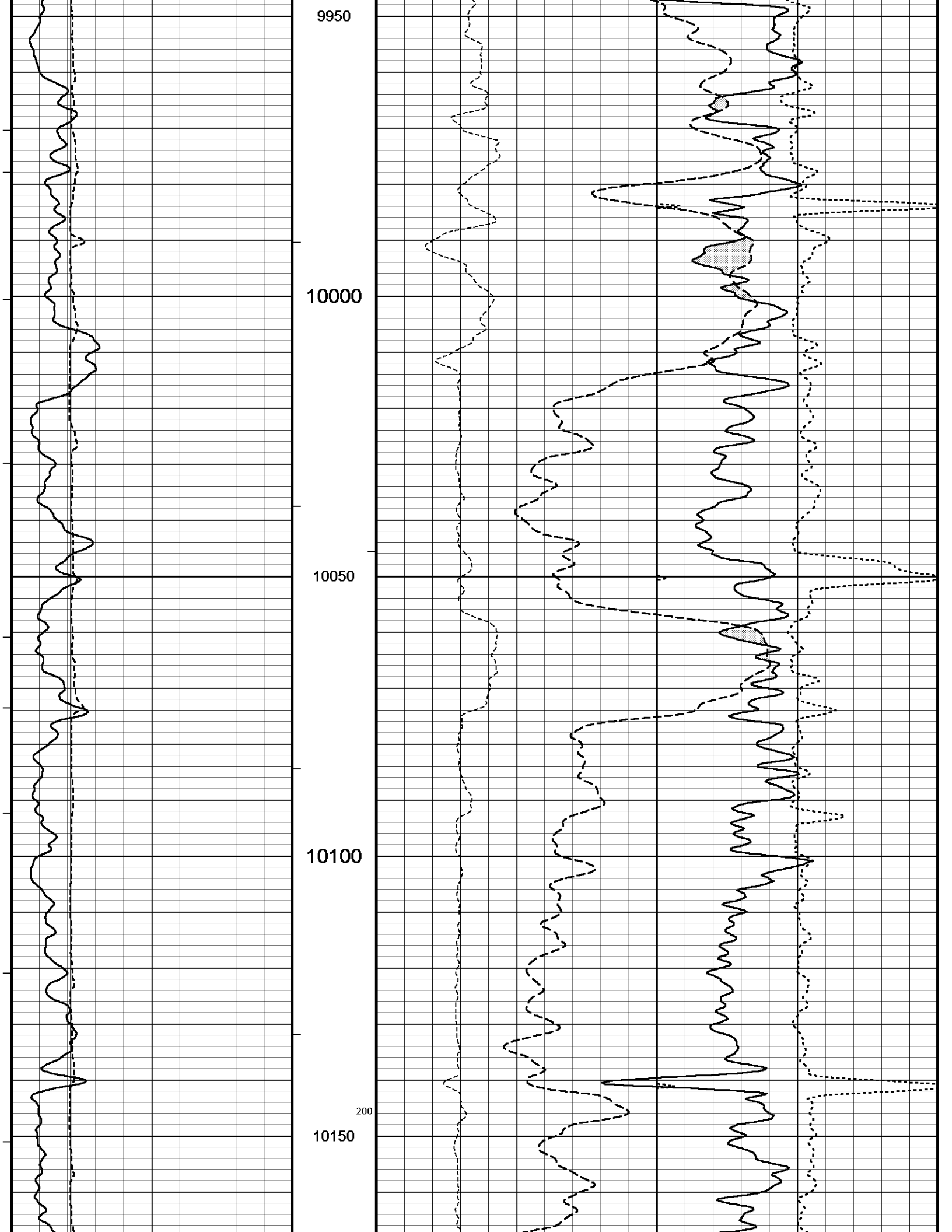
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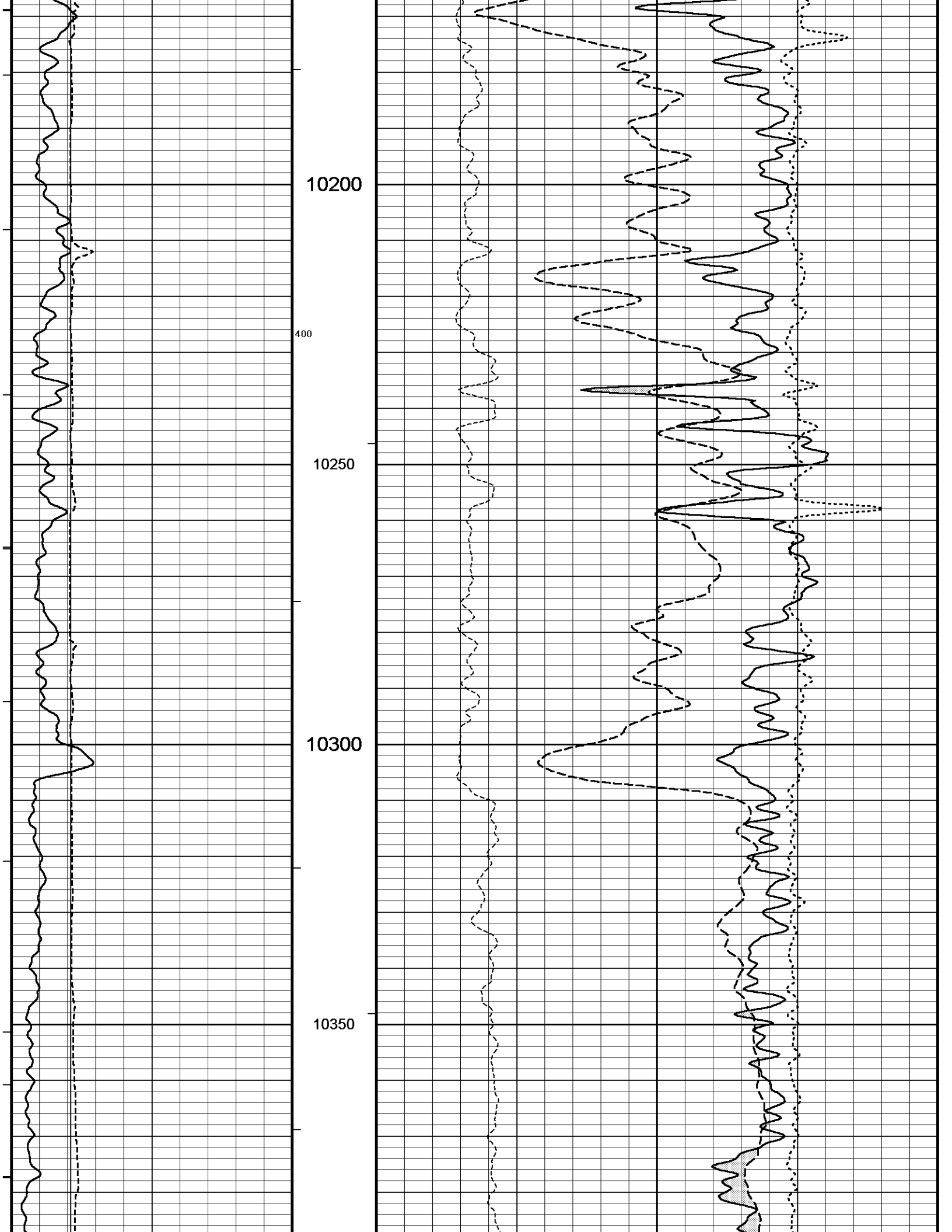
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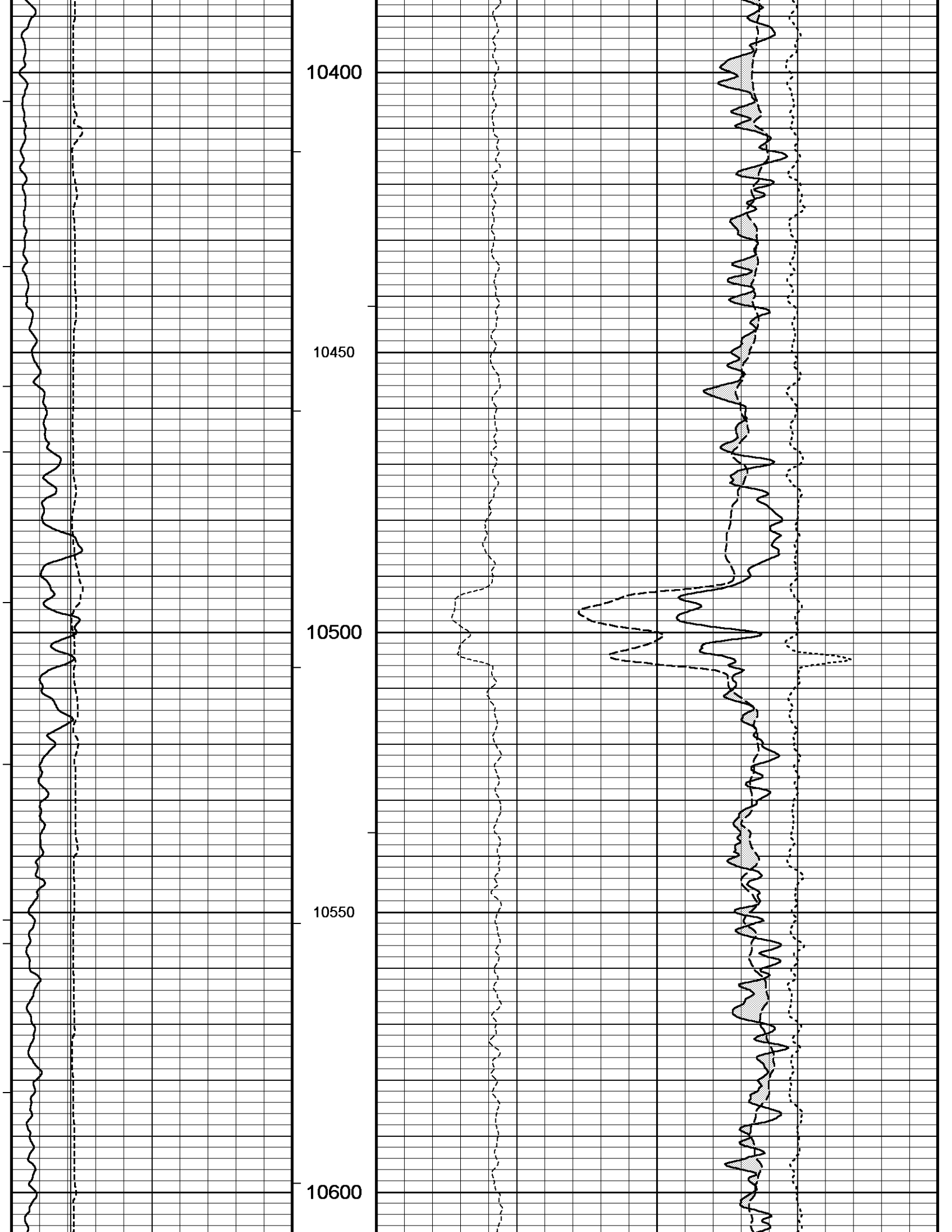
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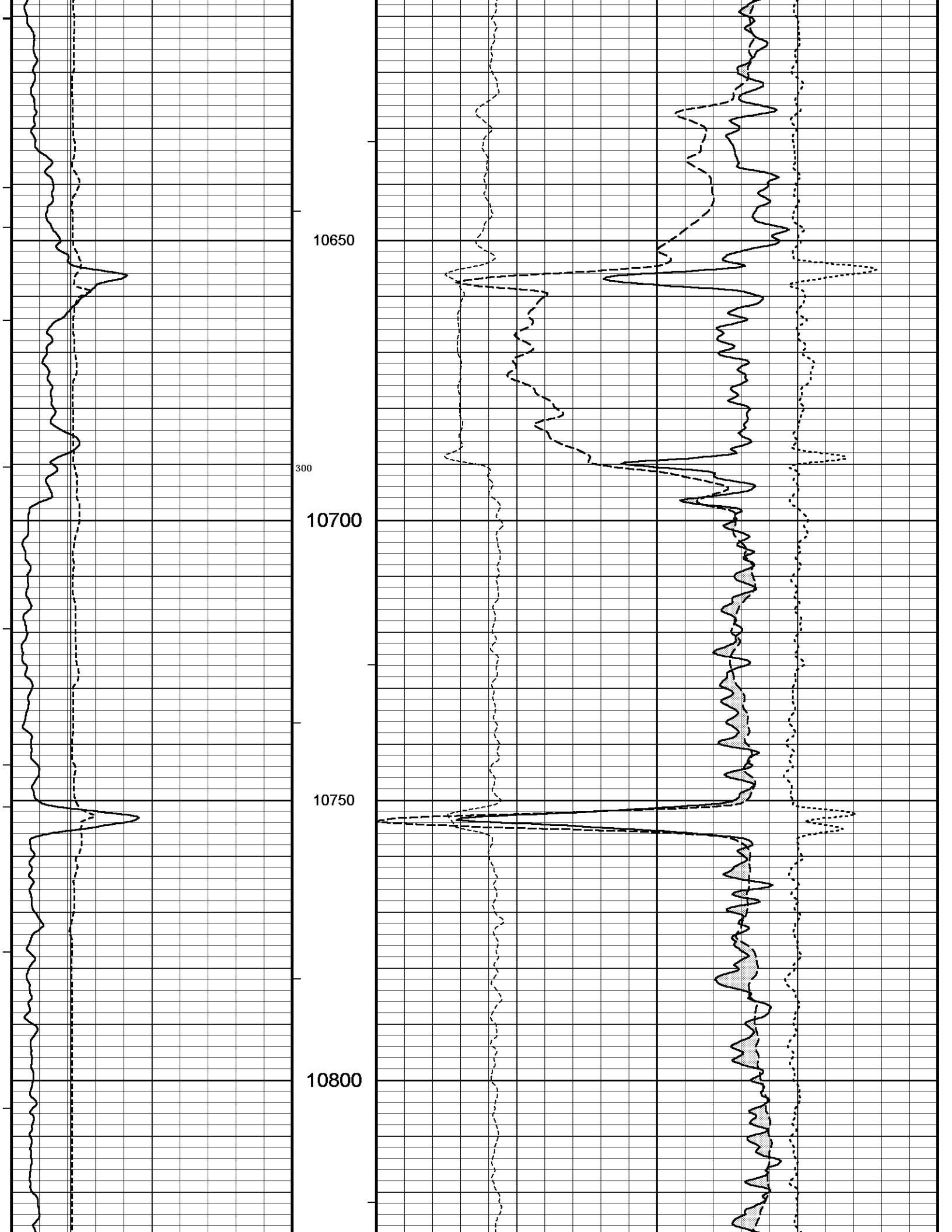
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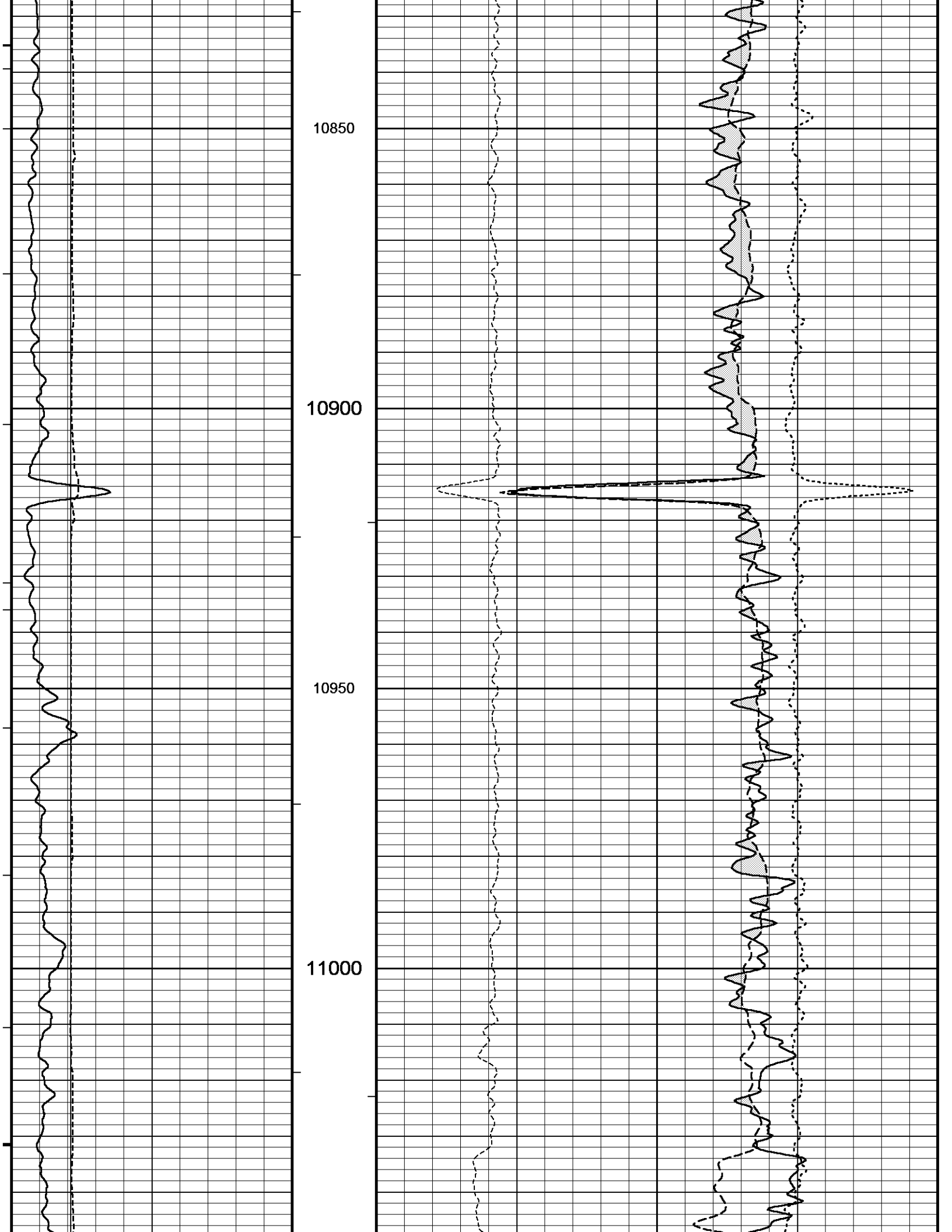
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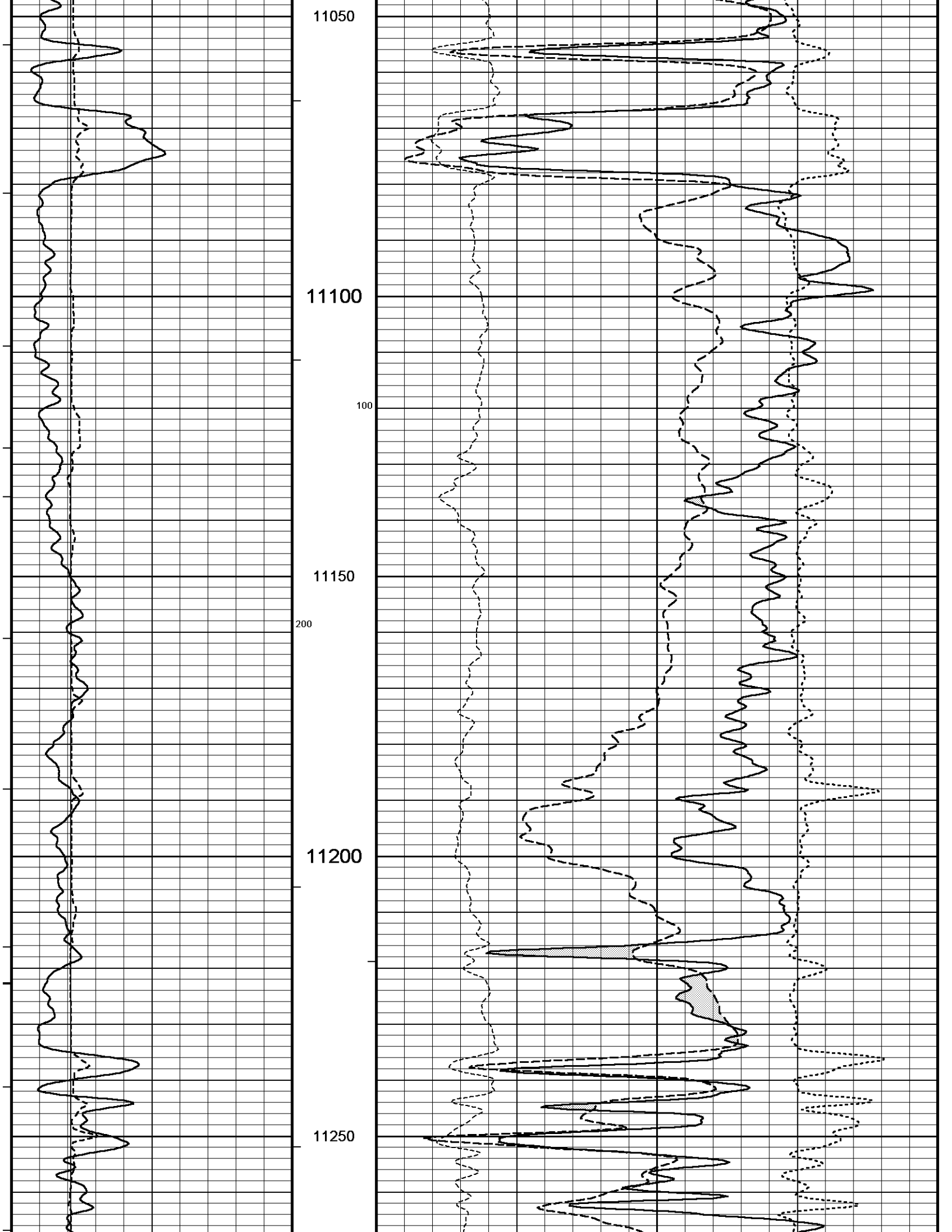
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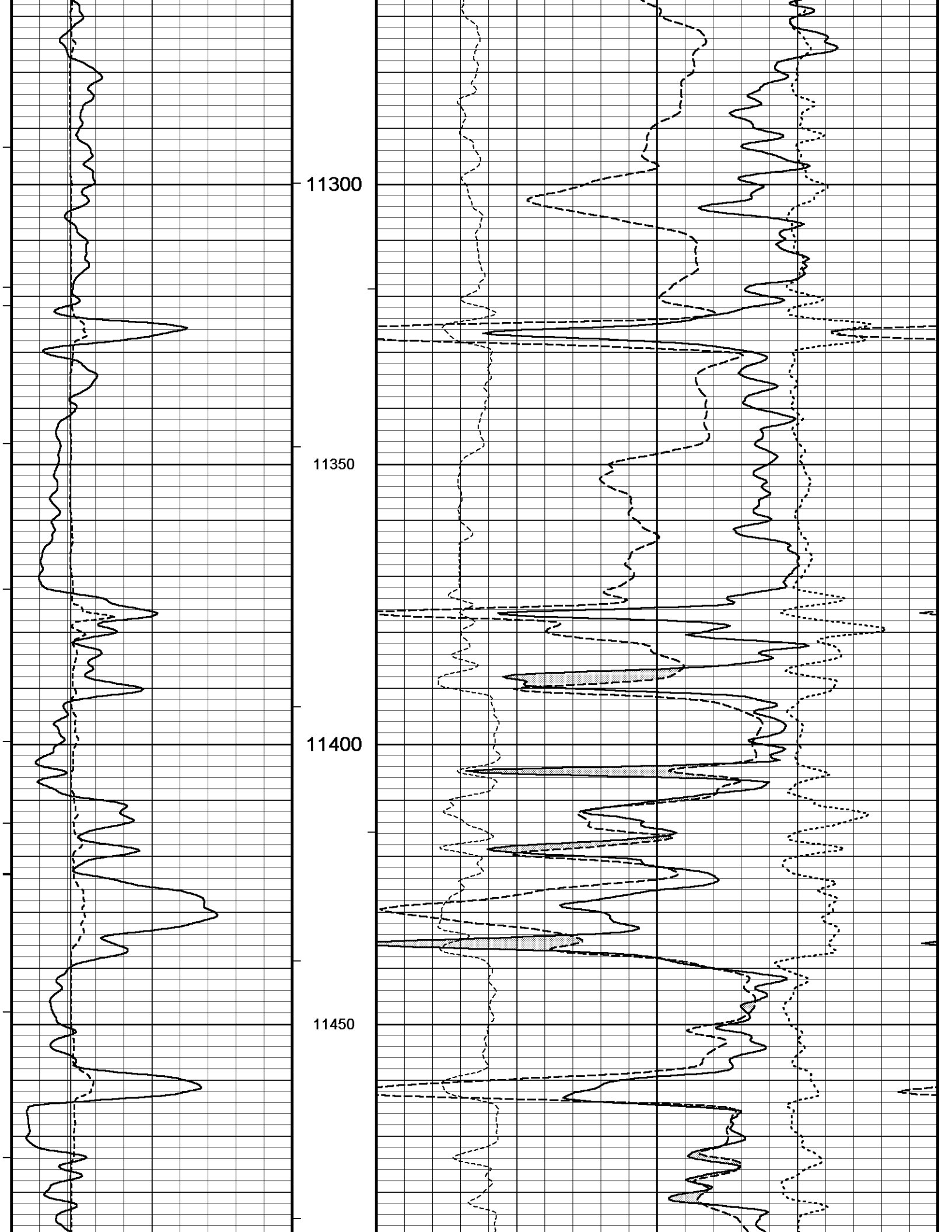
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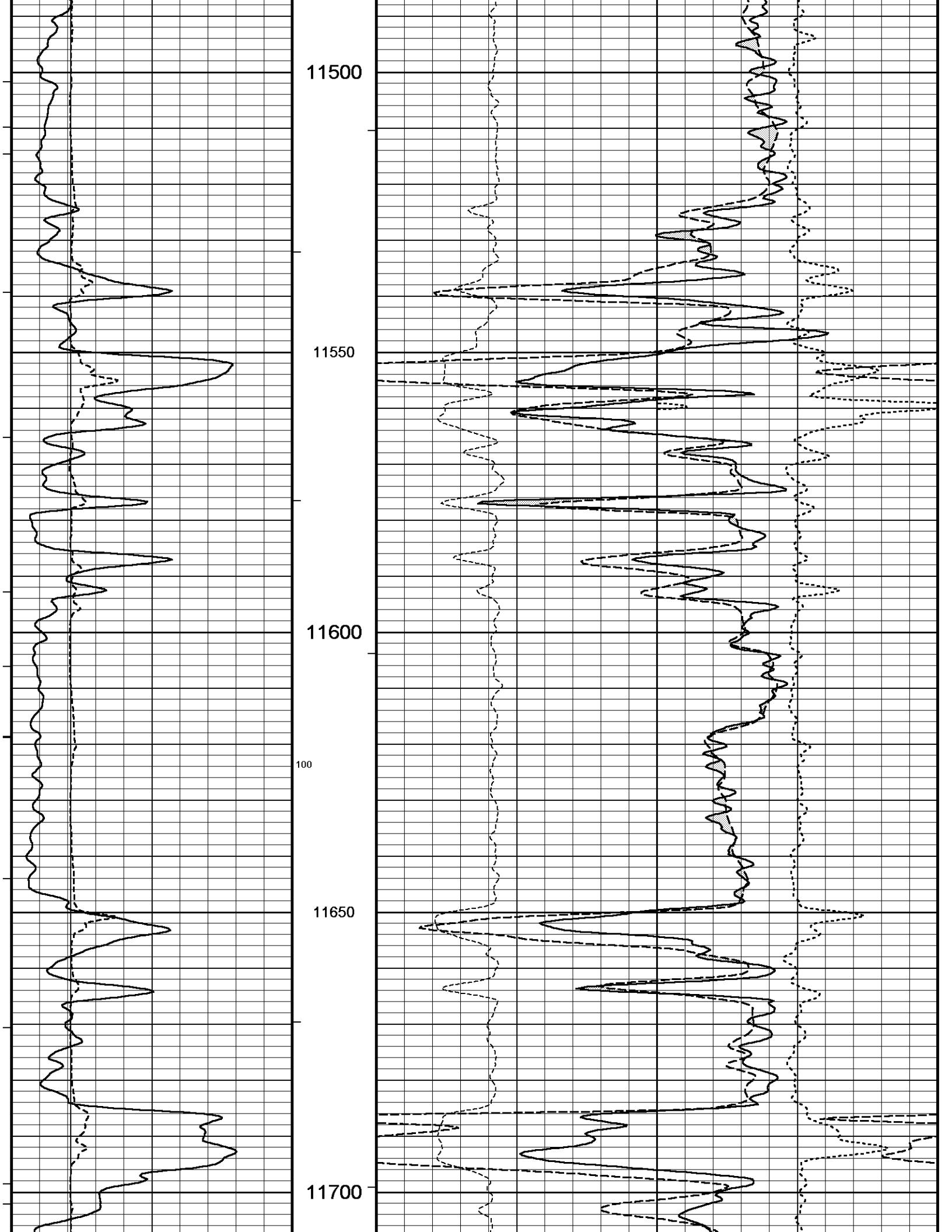
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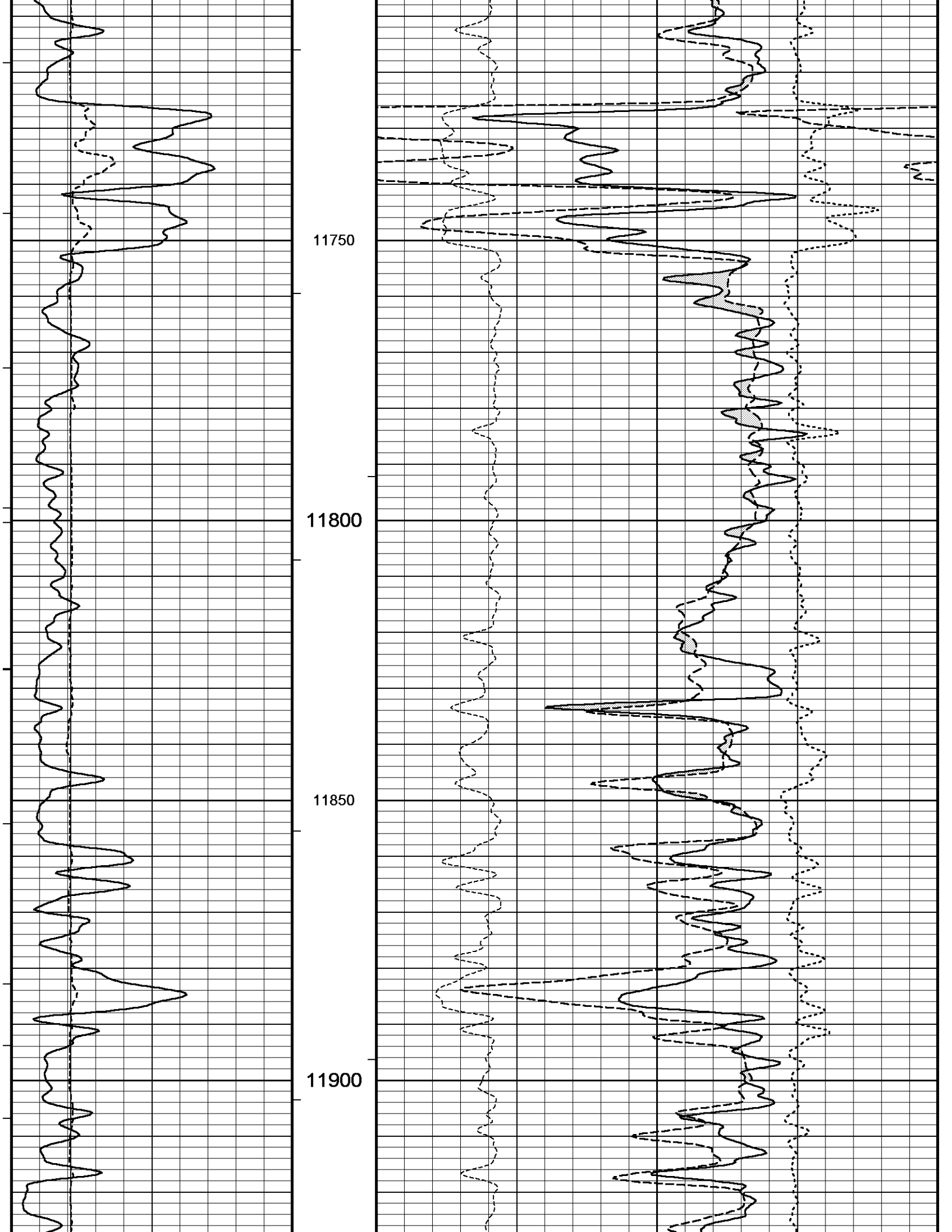
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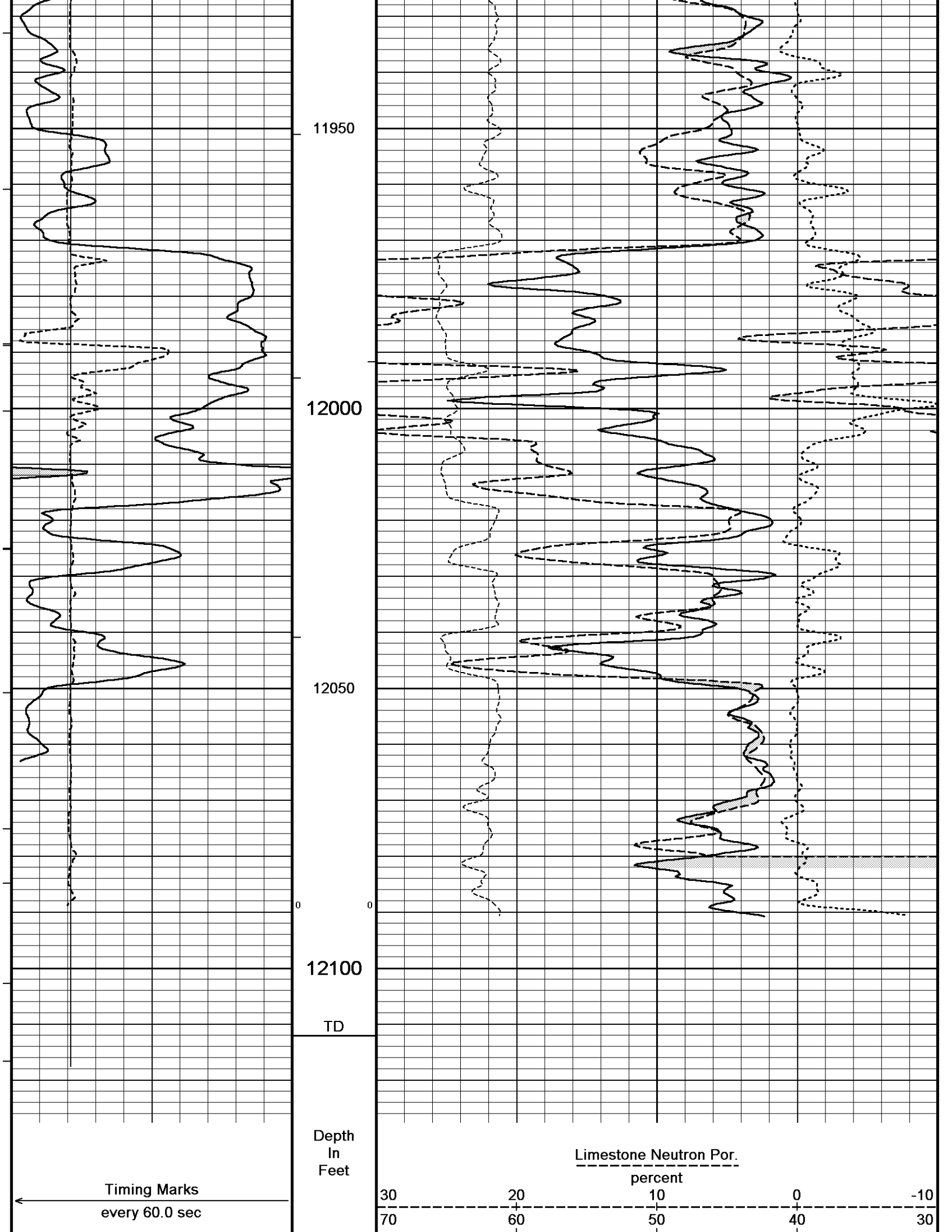
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TD
Depth
In
Feet
Timing Marks
every 60.0 sec
Limestone Neutron Por.
percent
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20
10
0
-10
70
60
50
40
30

Gamma Ray
API
0 75 150
150 225 300

Density Caliper
inches
4 9 14
14 19 24

Bit Size
inches
4 9 14

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:240

Limestone Density Por.
percent
30 20 10 0 -10
70 60 50 40 30

PE
barns/electron
0 5 10

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Plotted on 14-APR-2011 02:27
Recorded on 14-APR-2011 01:01

5 INCH POROSITY LOG

5 INCH BULK DENSITY

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

Plotted on 14-APR-2011 02:27
Recorded on 14-APR-2011 01:01

Timing Marks
every 60.0 sec

Depth In Feet

Compensated Density
grams/cc
2 2.25 2.50 2.75 3

Gamma Ray
API
0 75 150
150 225 300

HVI every 10 cu ft

Limestone Density Por.
percent
30 20 10 0 -10
70 60 50 40 30

Density Caliper
inches
6 11 16
16 21 26

Annular Integral every 10 cu ft

PE
barns/electron
0 5 10

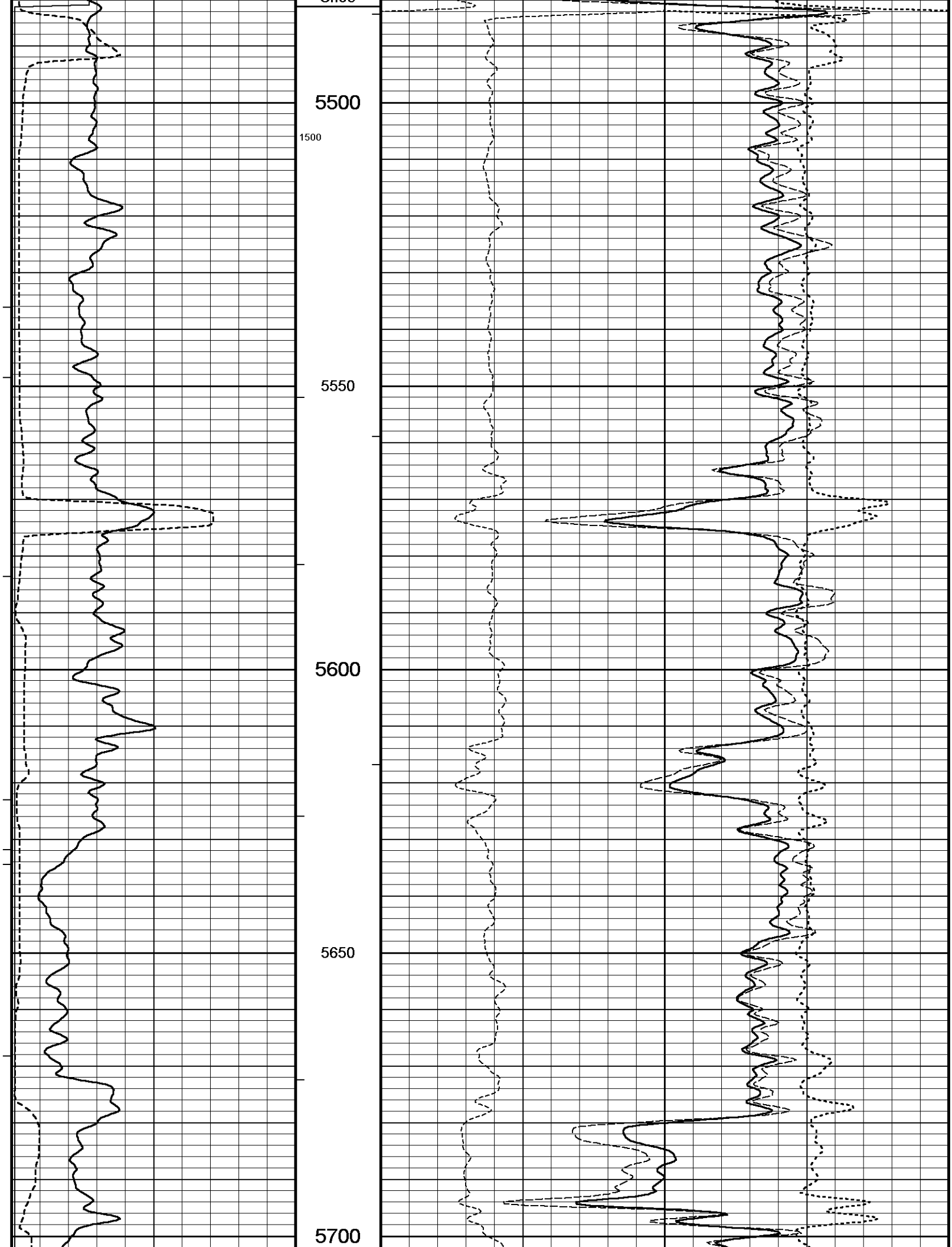
Density Correction
grams/cc
-0.25 0 0.25

Bit Size
inches
6 11 16

Replay Scale 1:240

5450

Casing Shoe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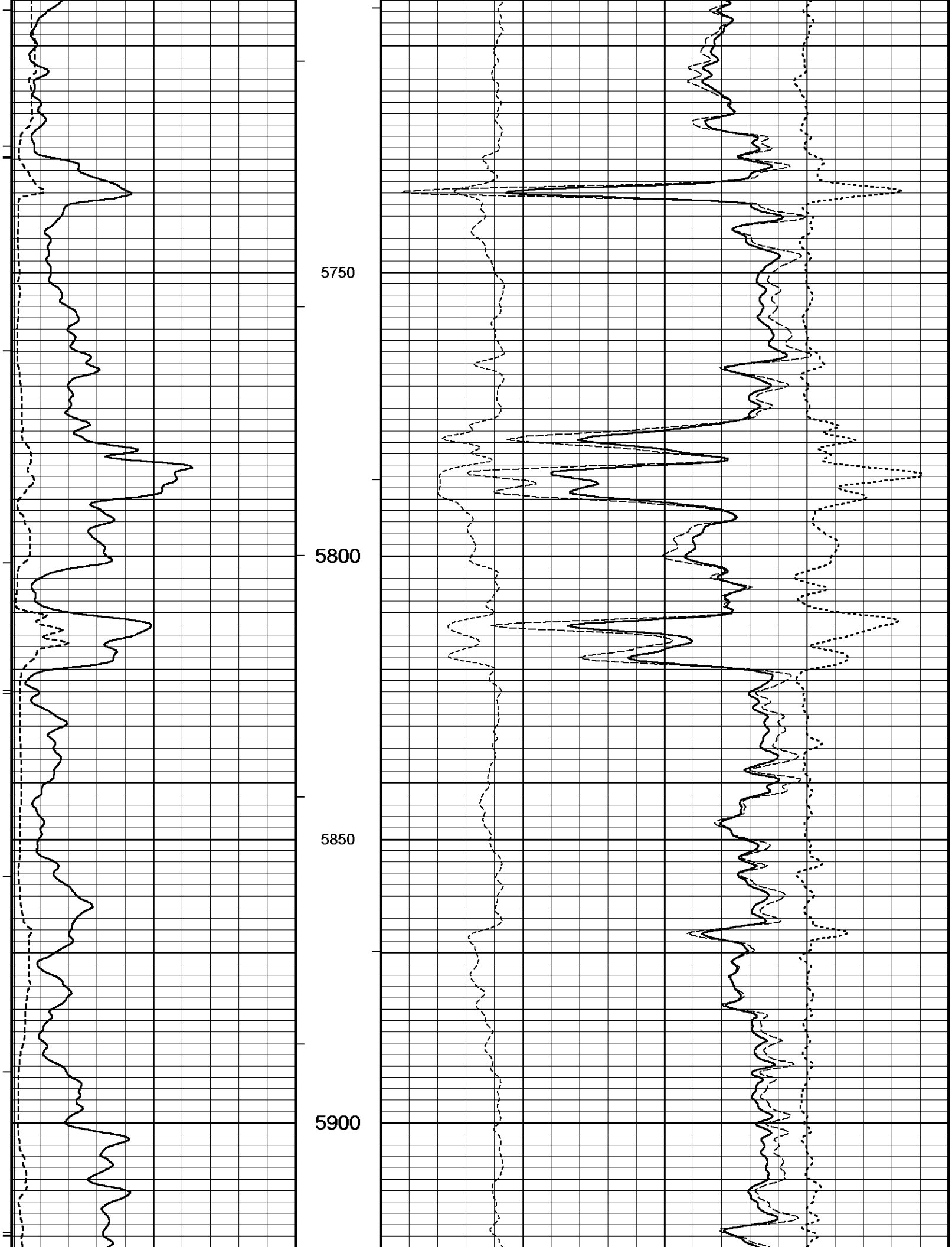
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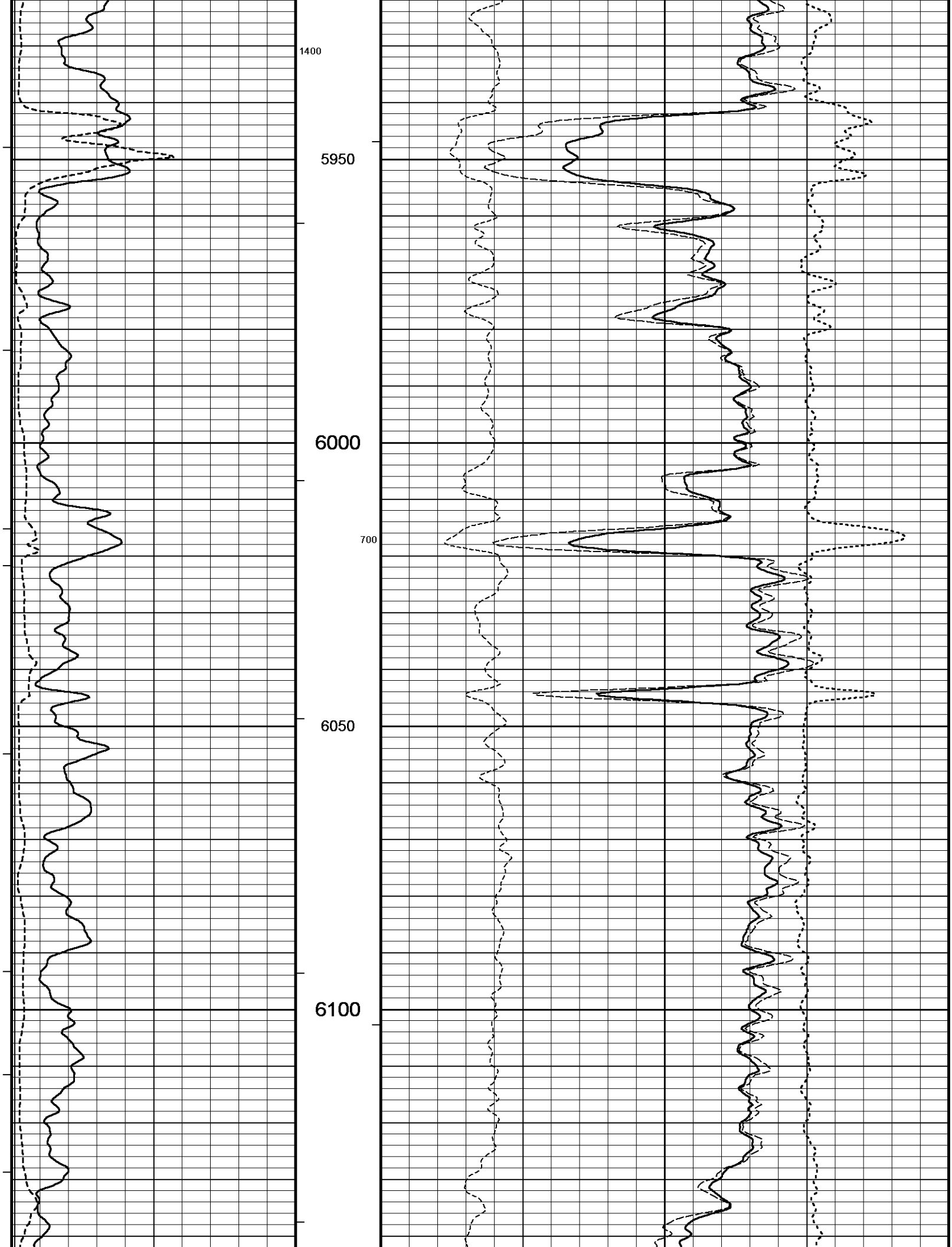
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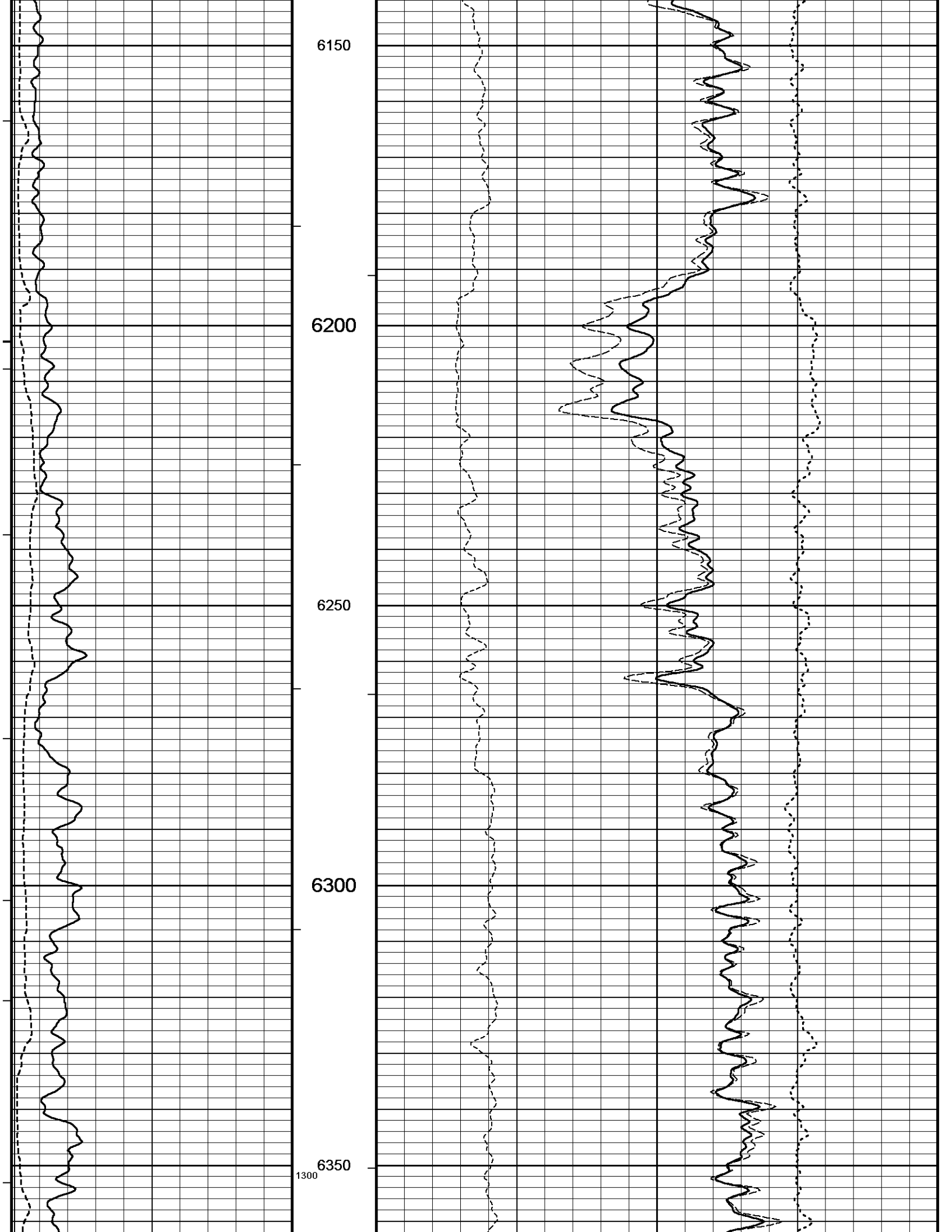
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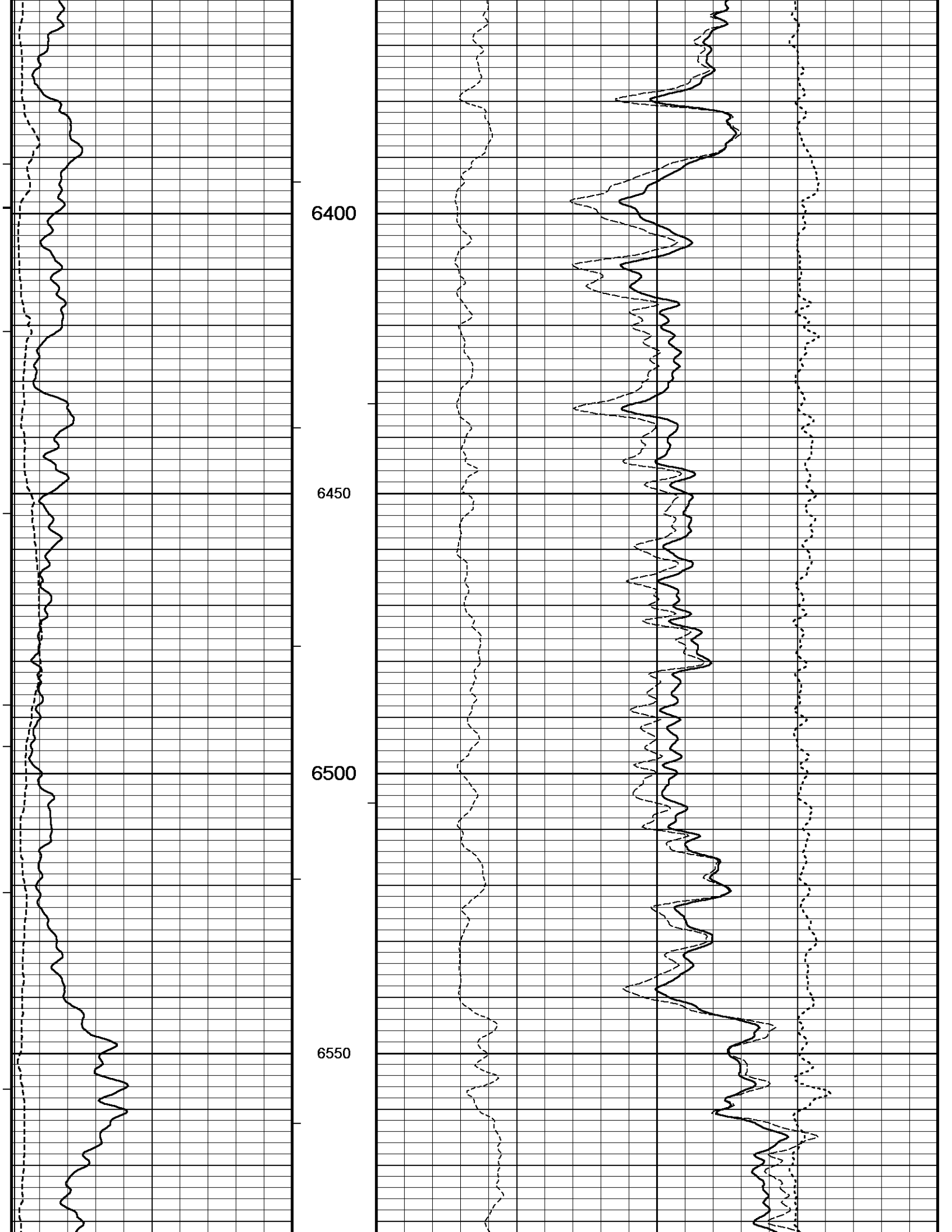
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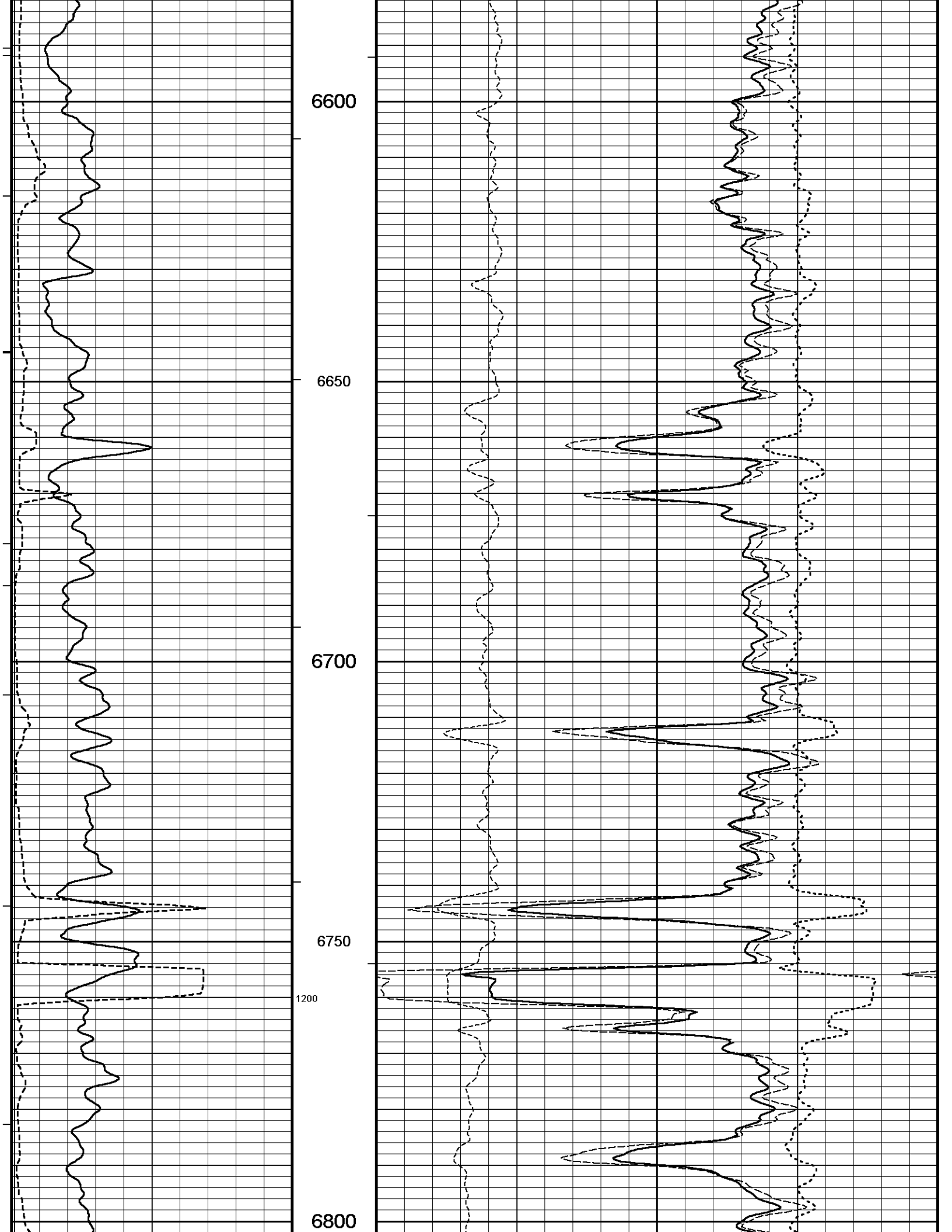
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6750
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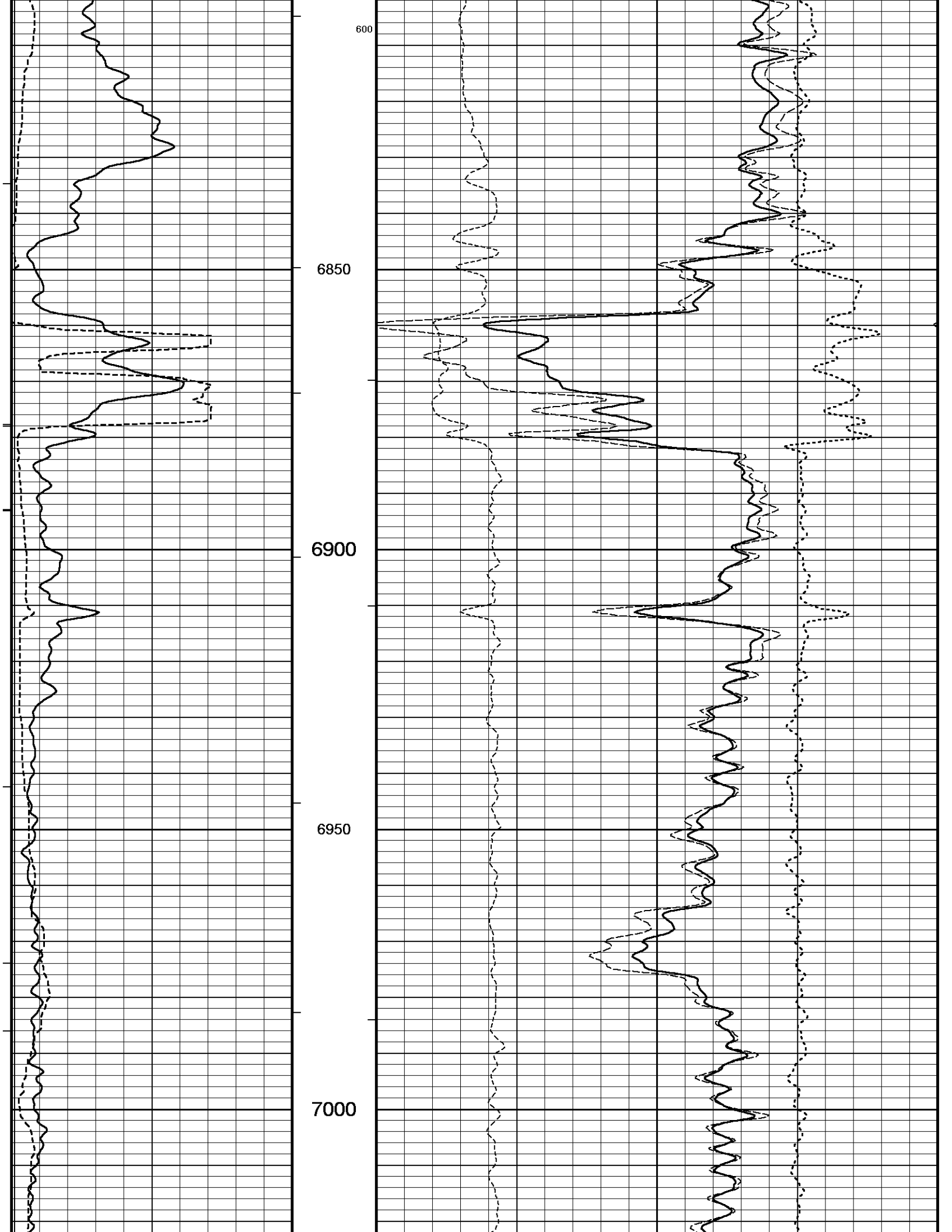
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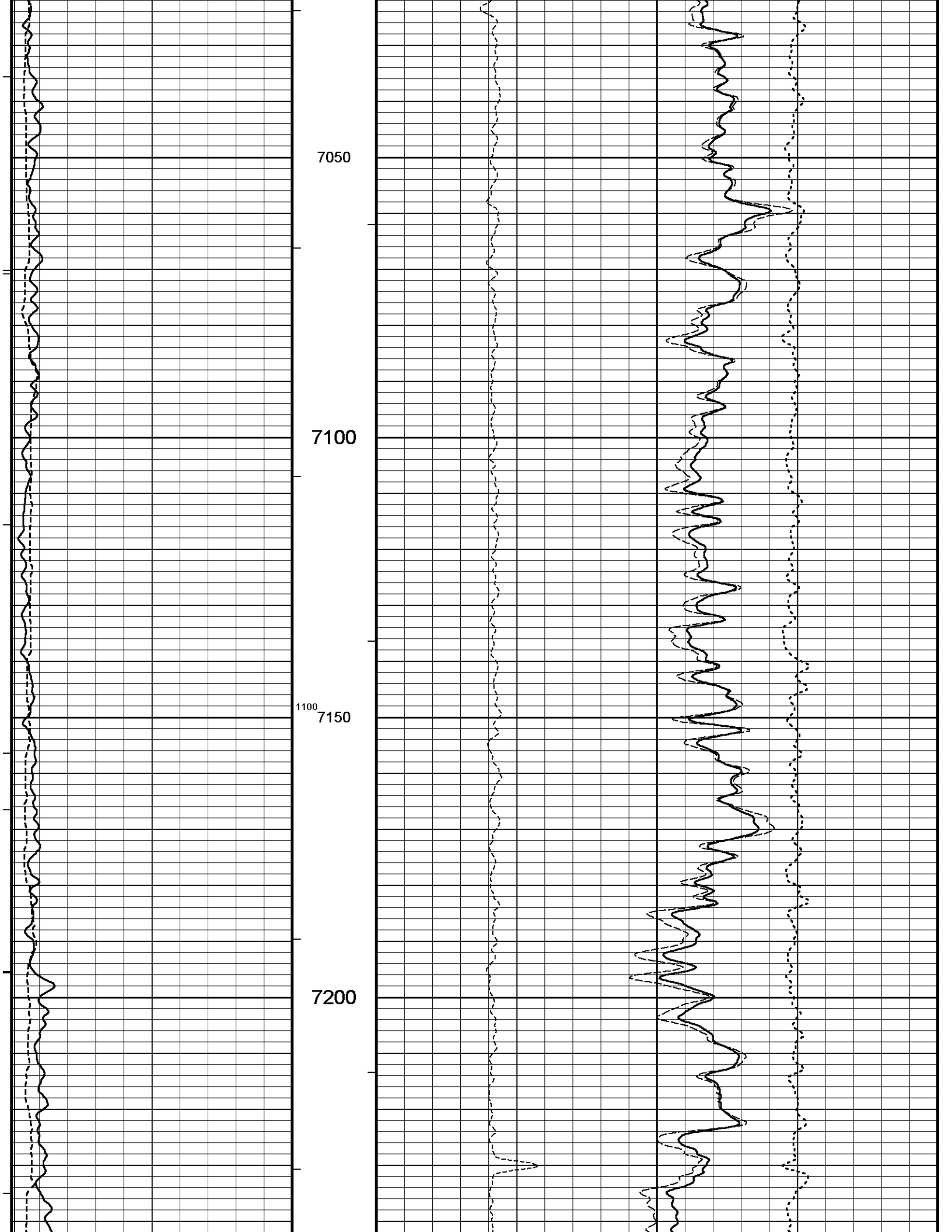
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7150
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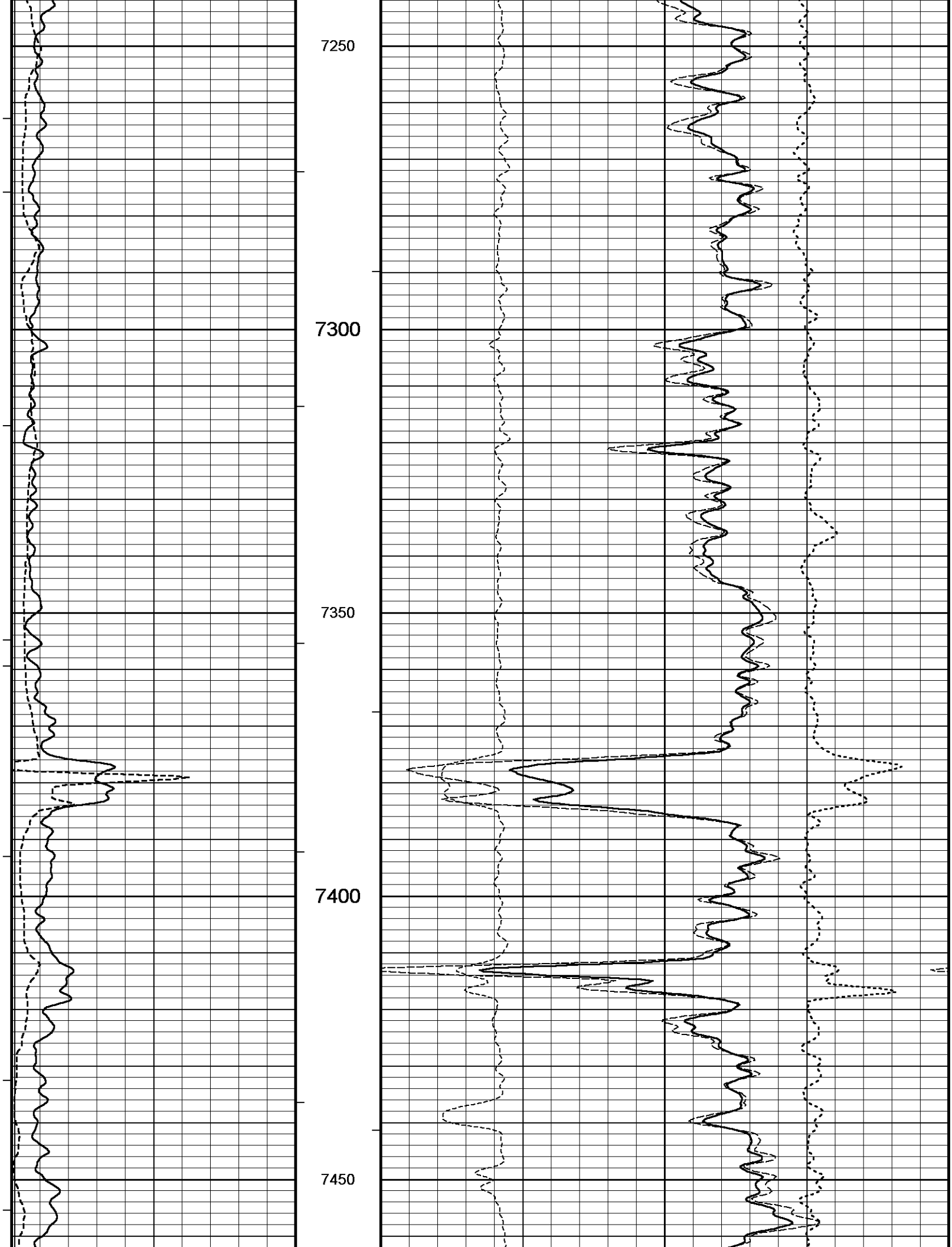
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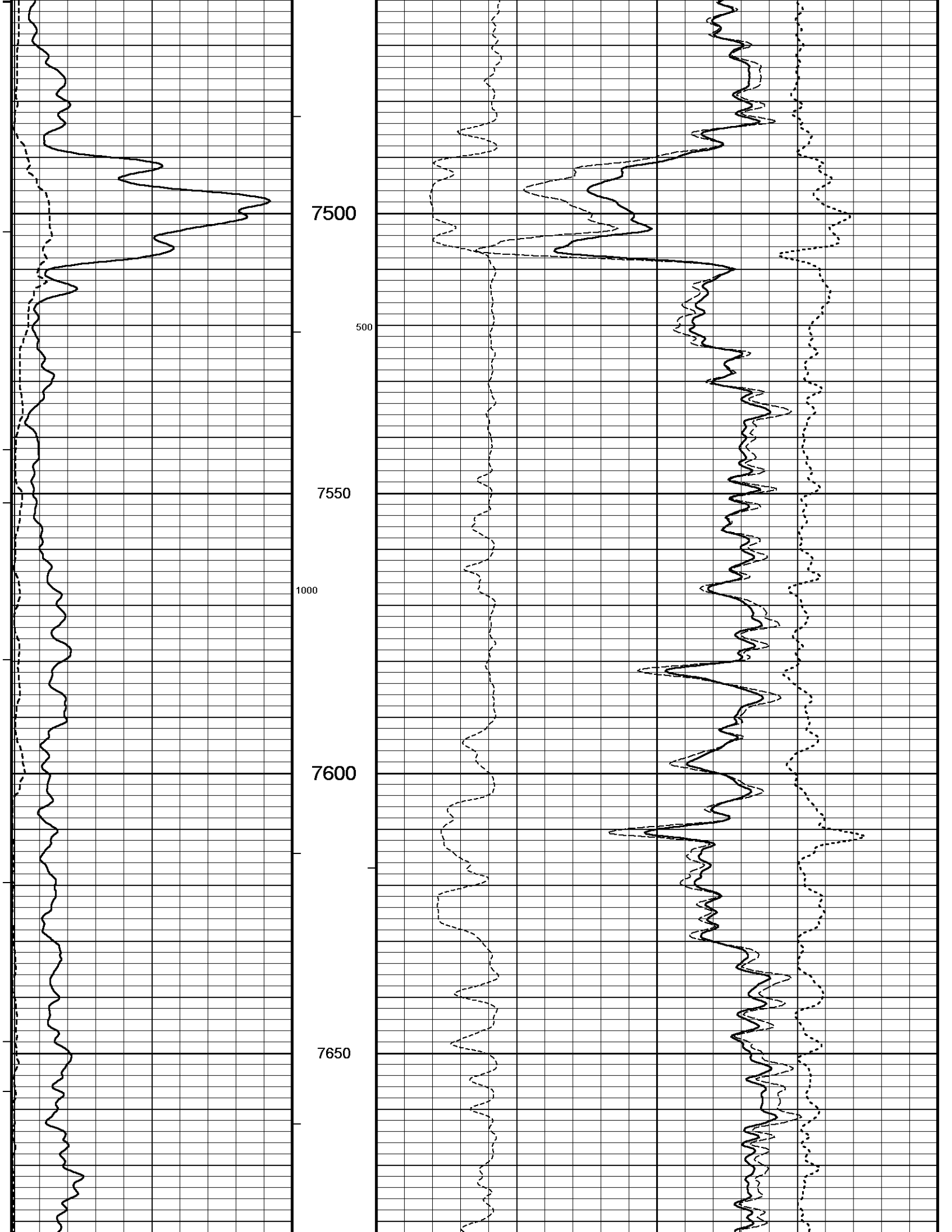
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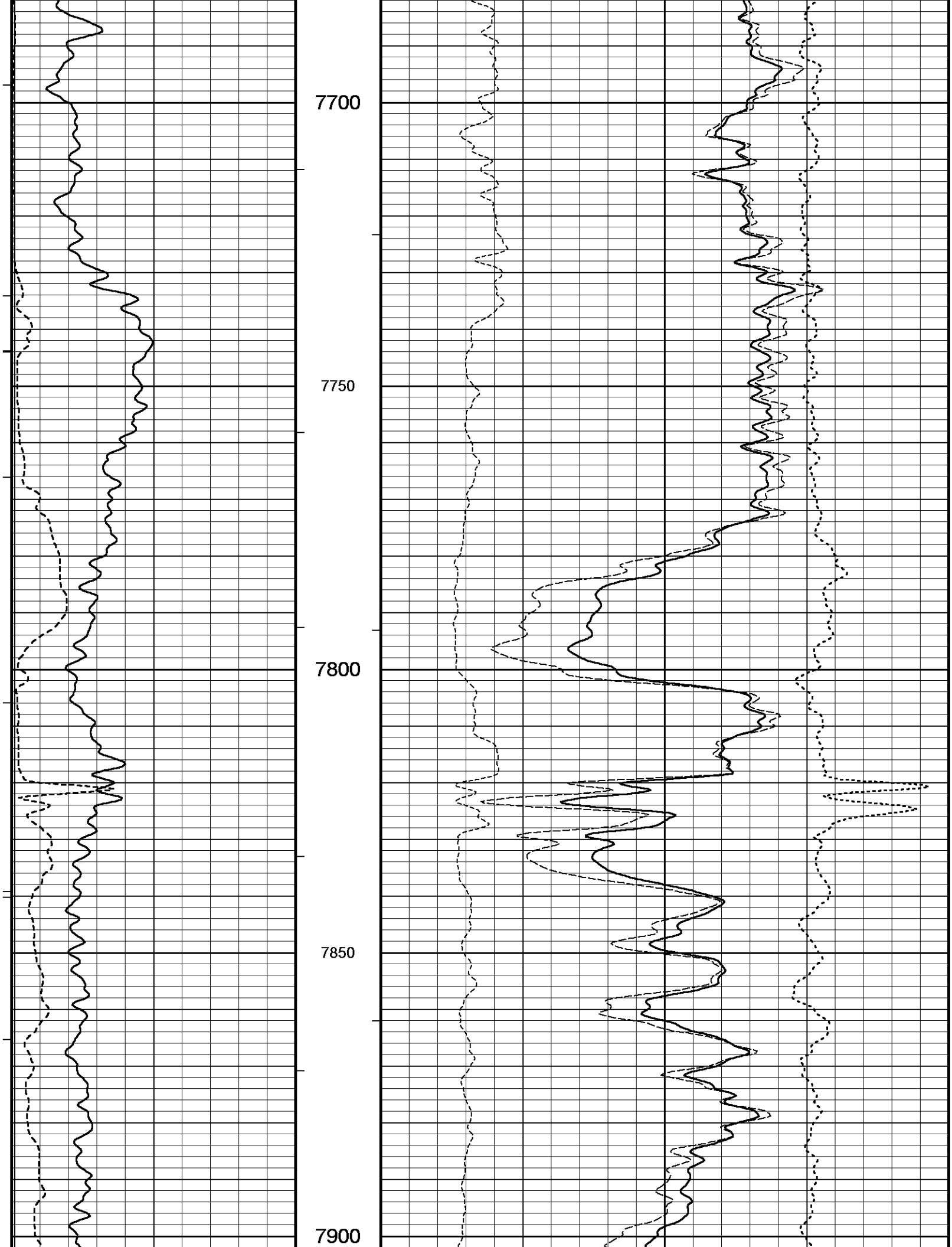
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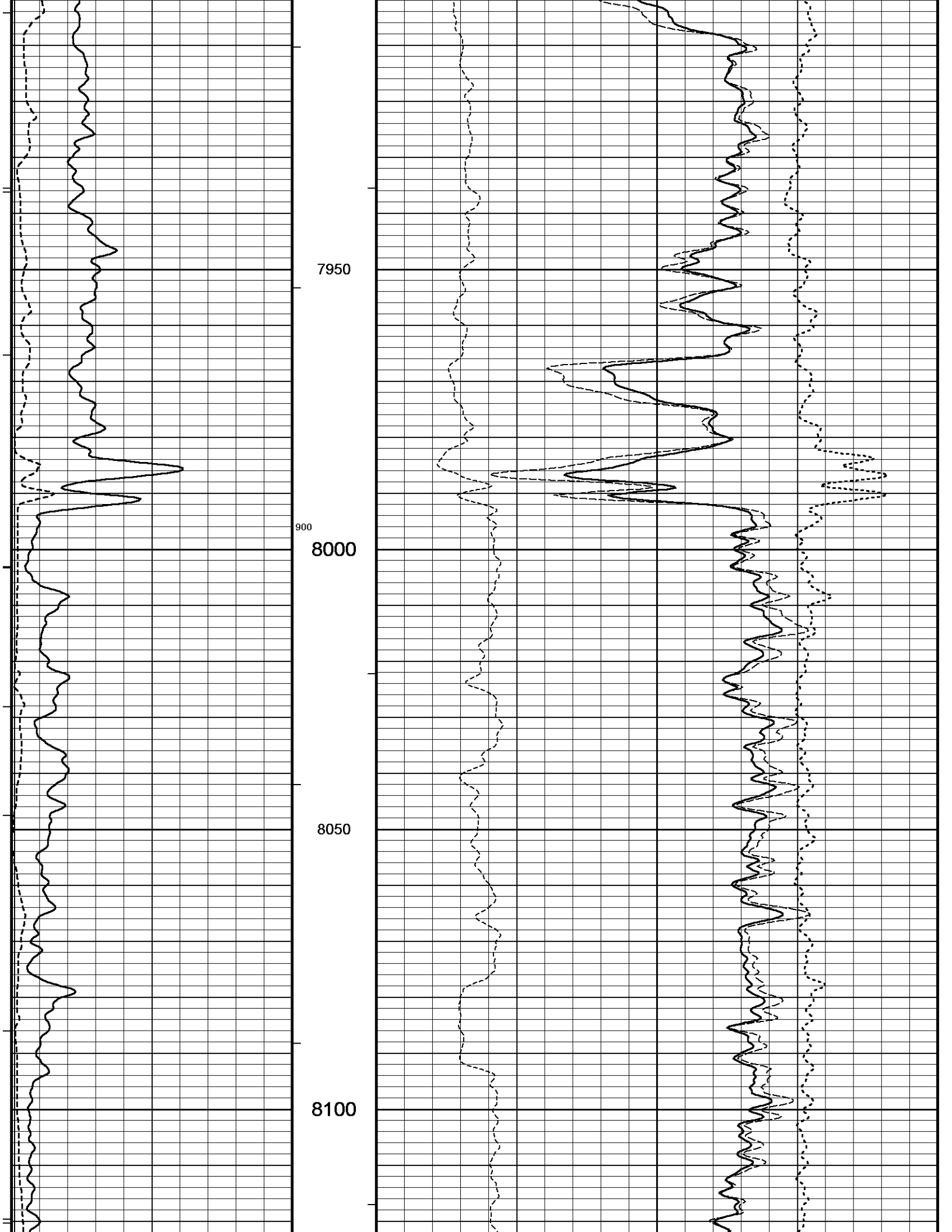
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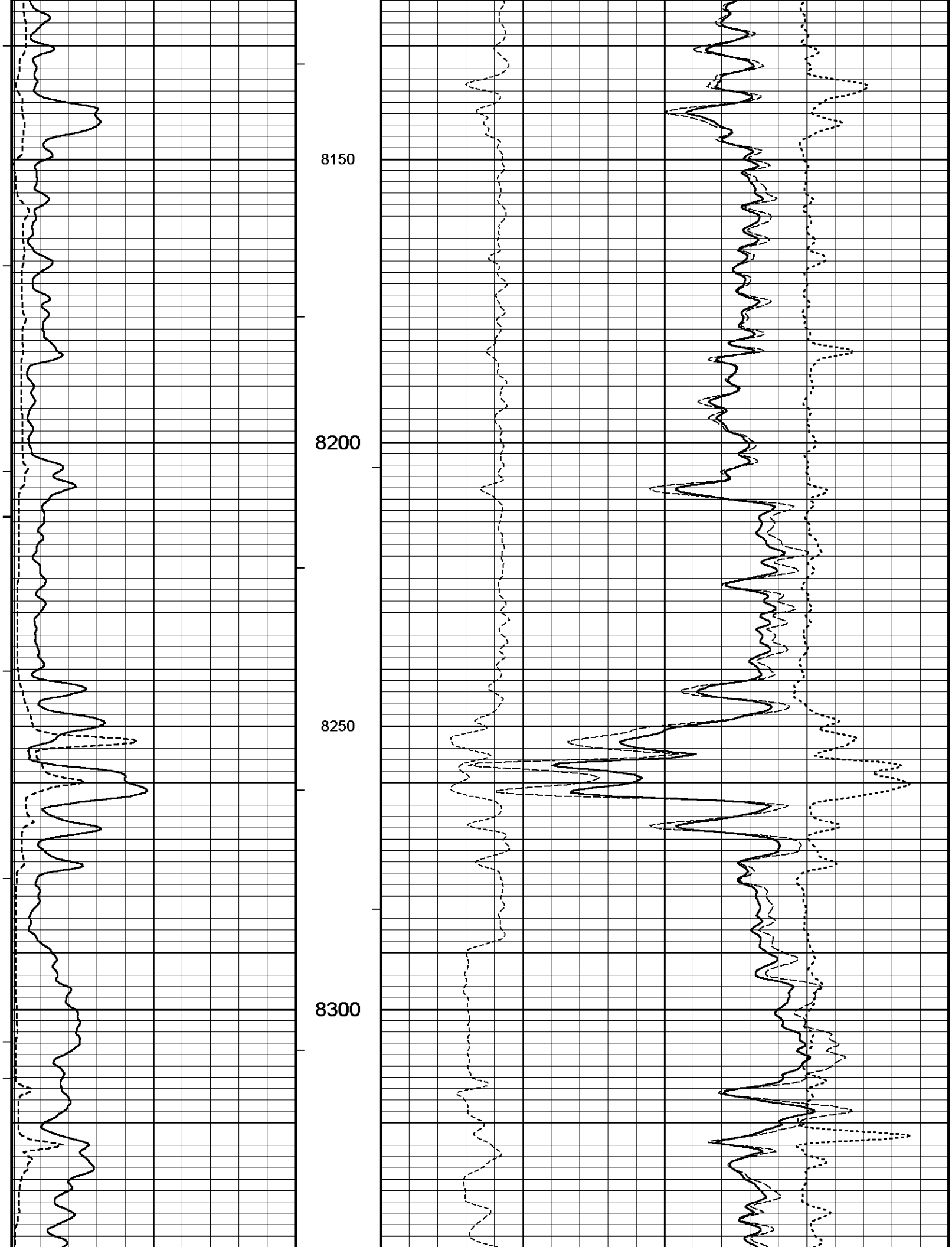
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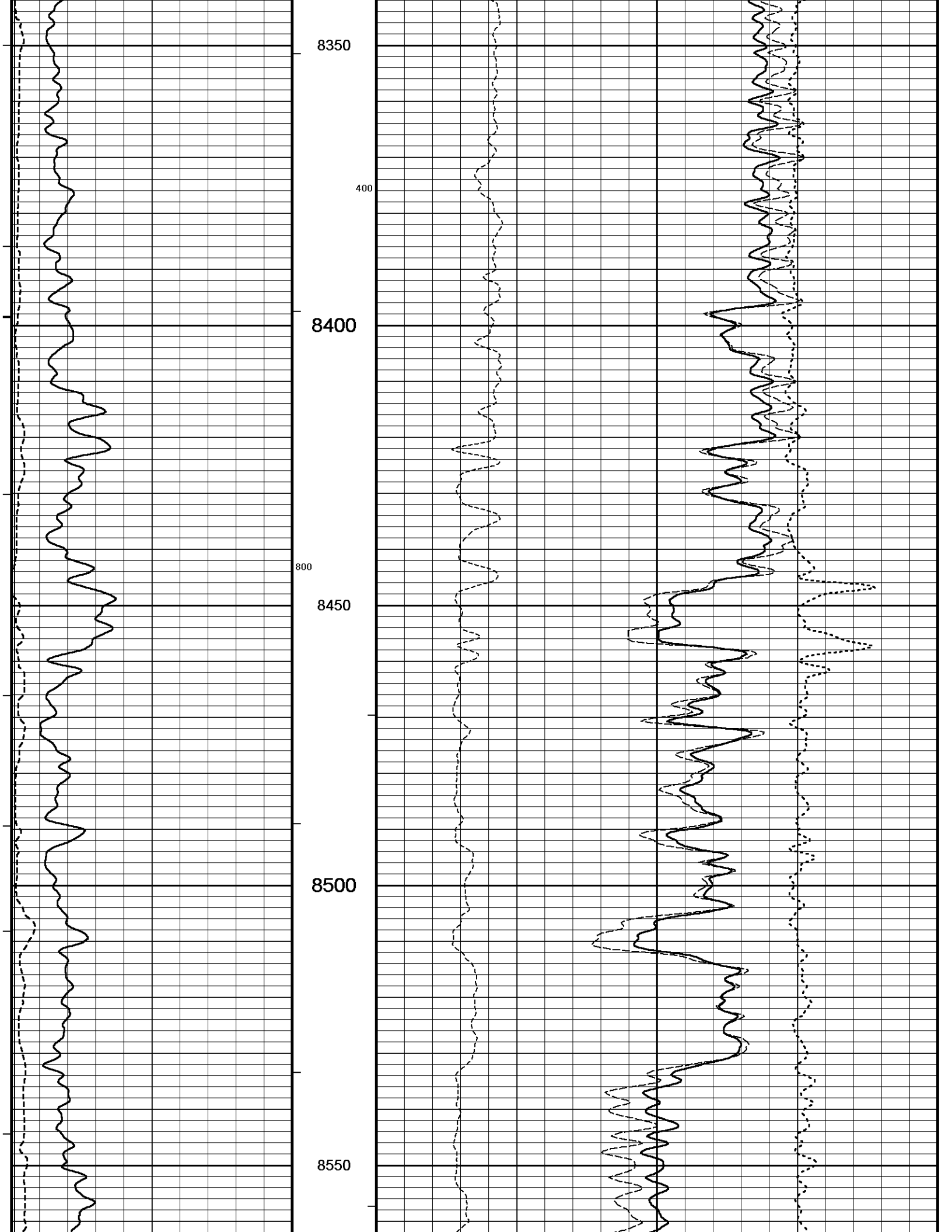
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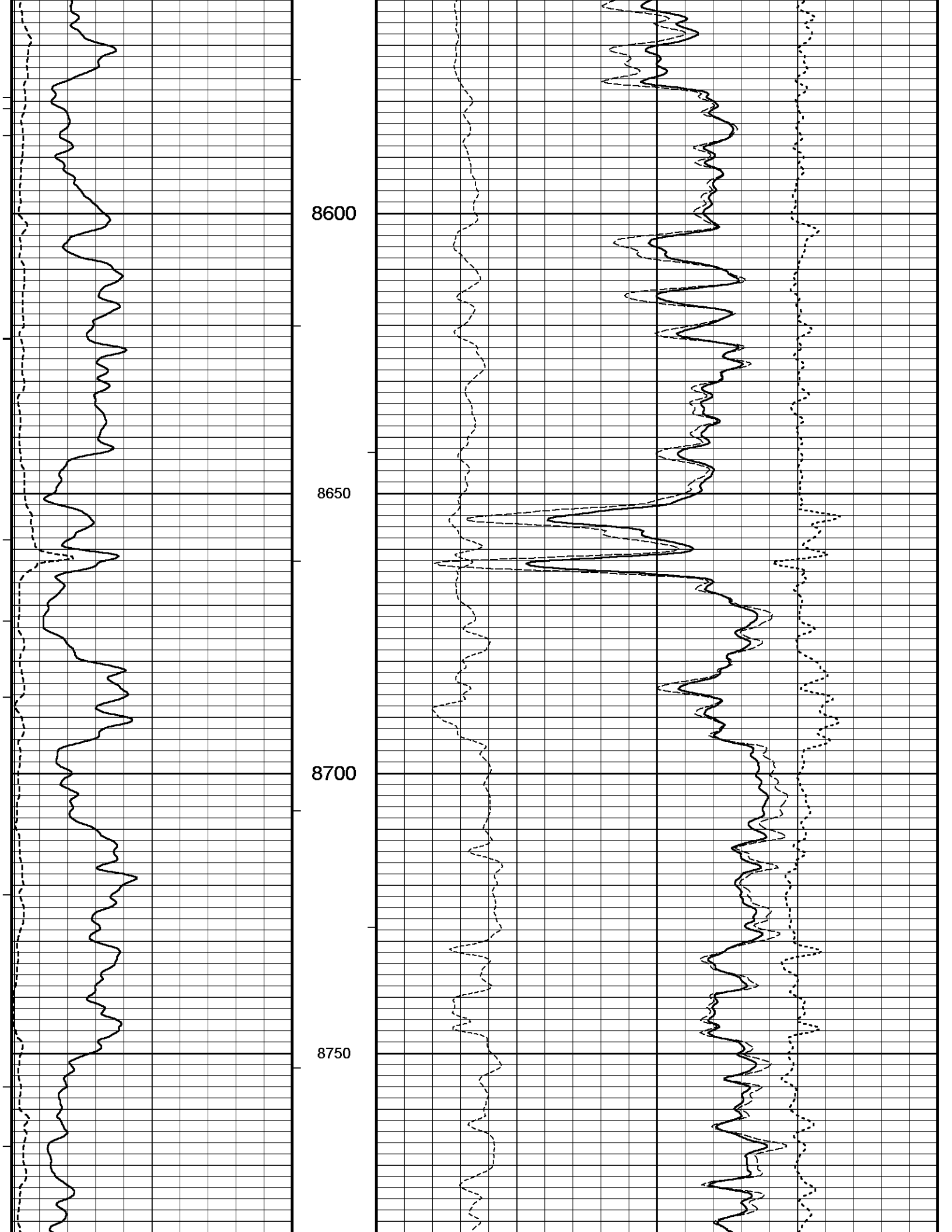
8500
8550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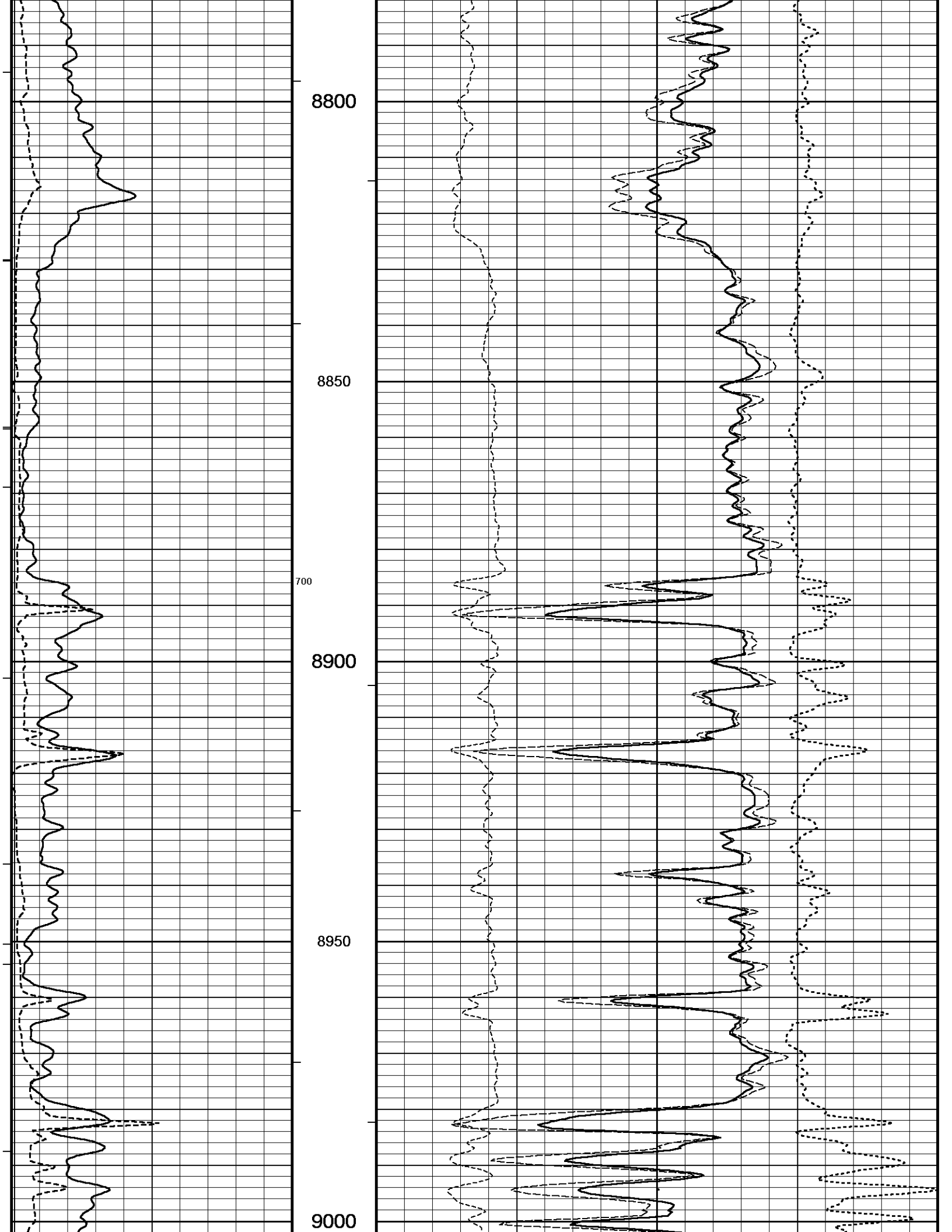
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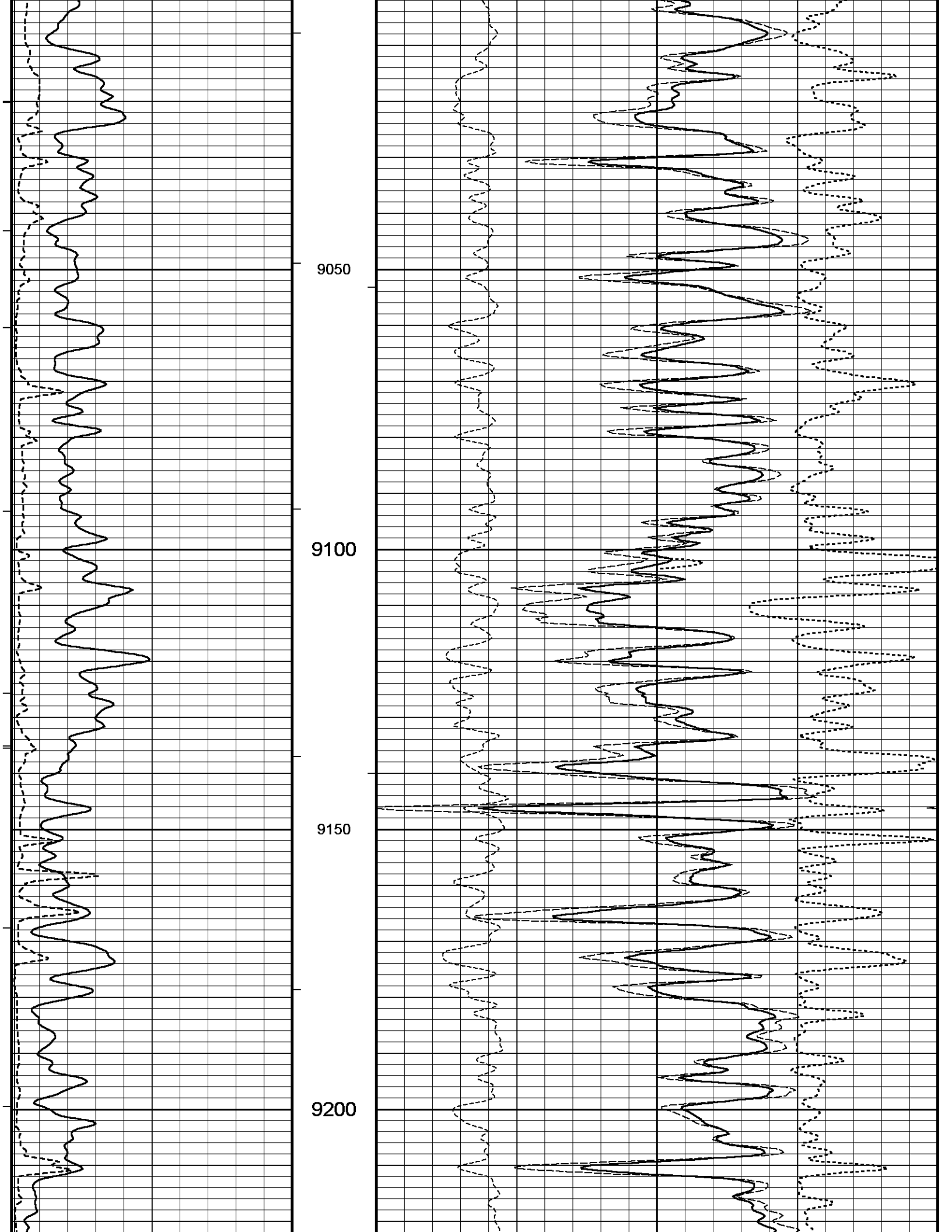
8900
8950
9000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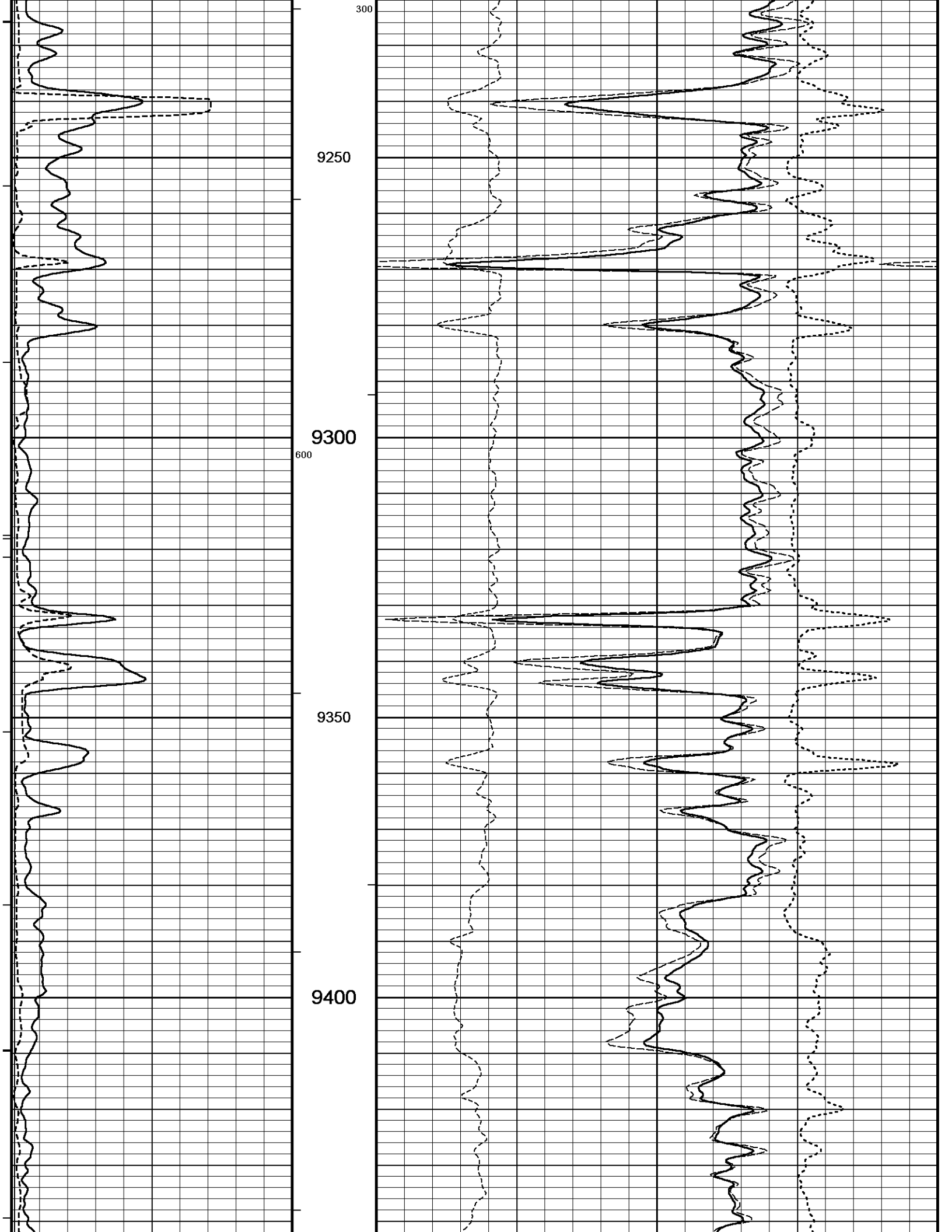
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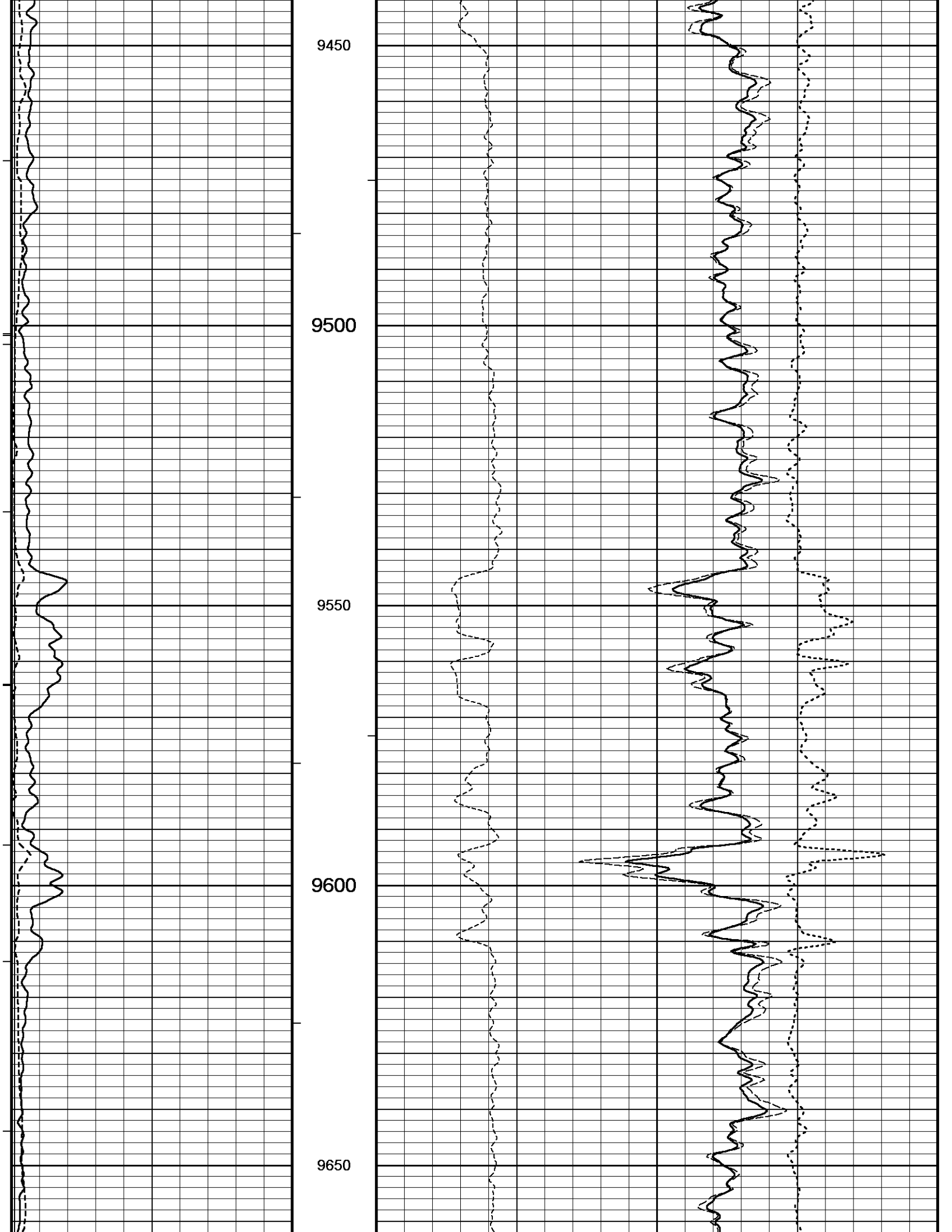
9400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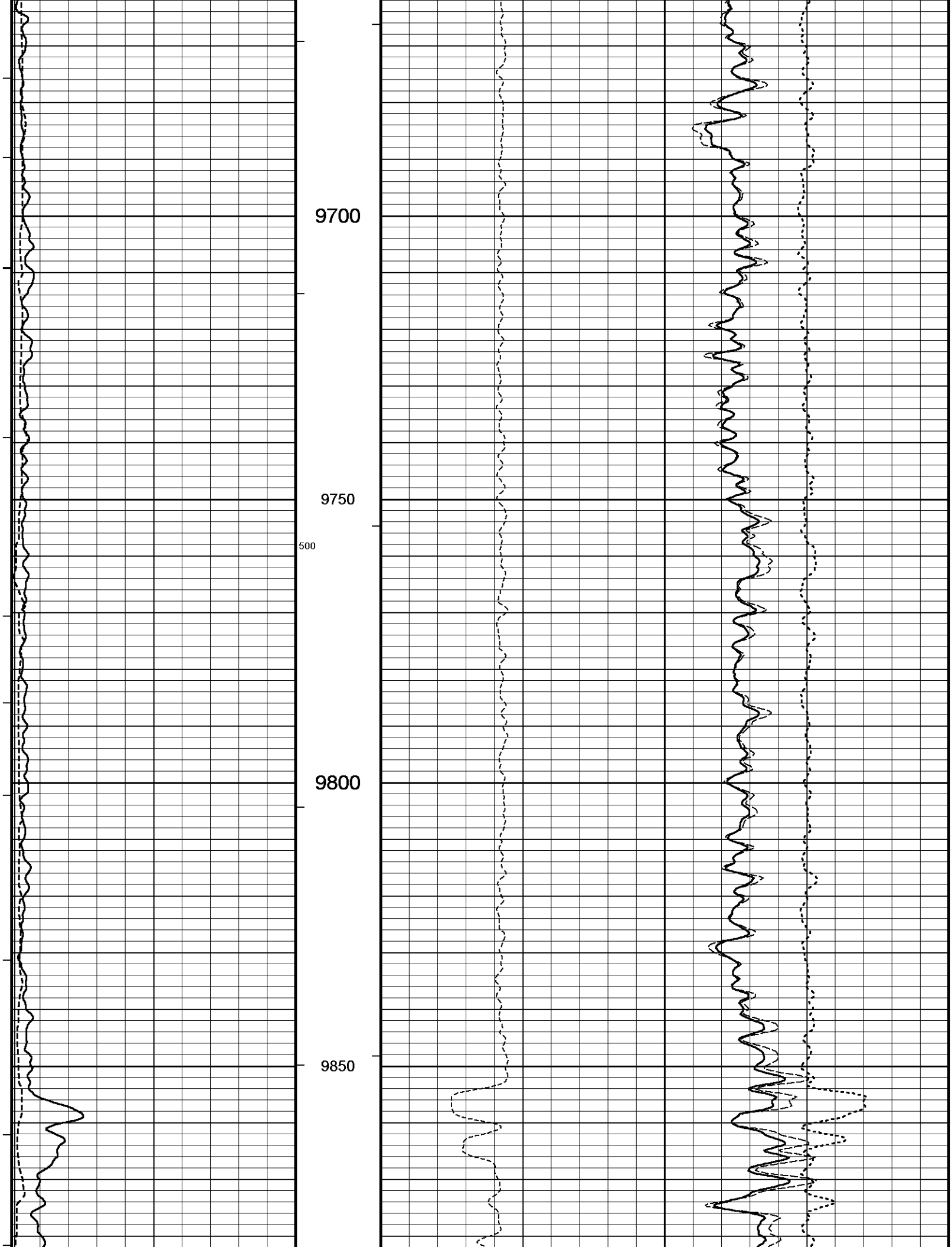
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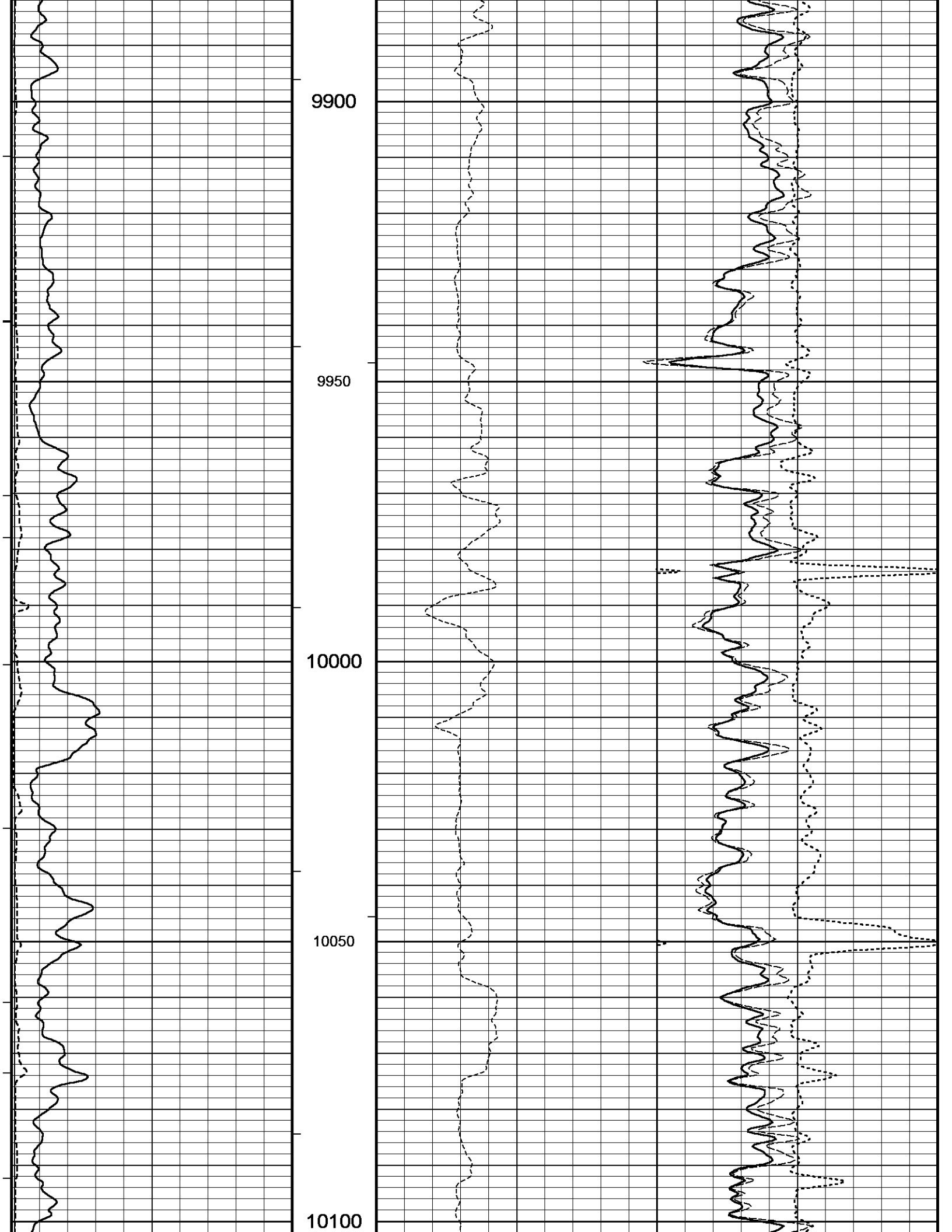
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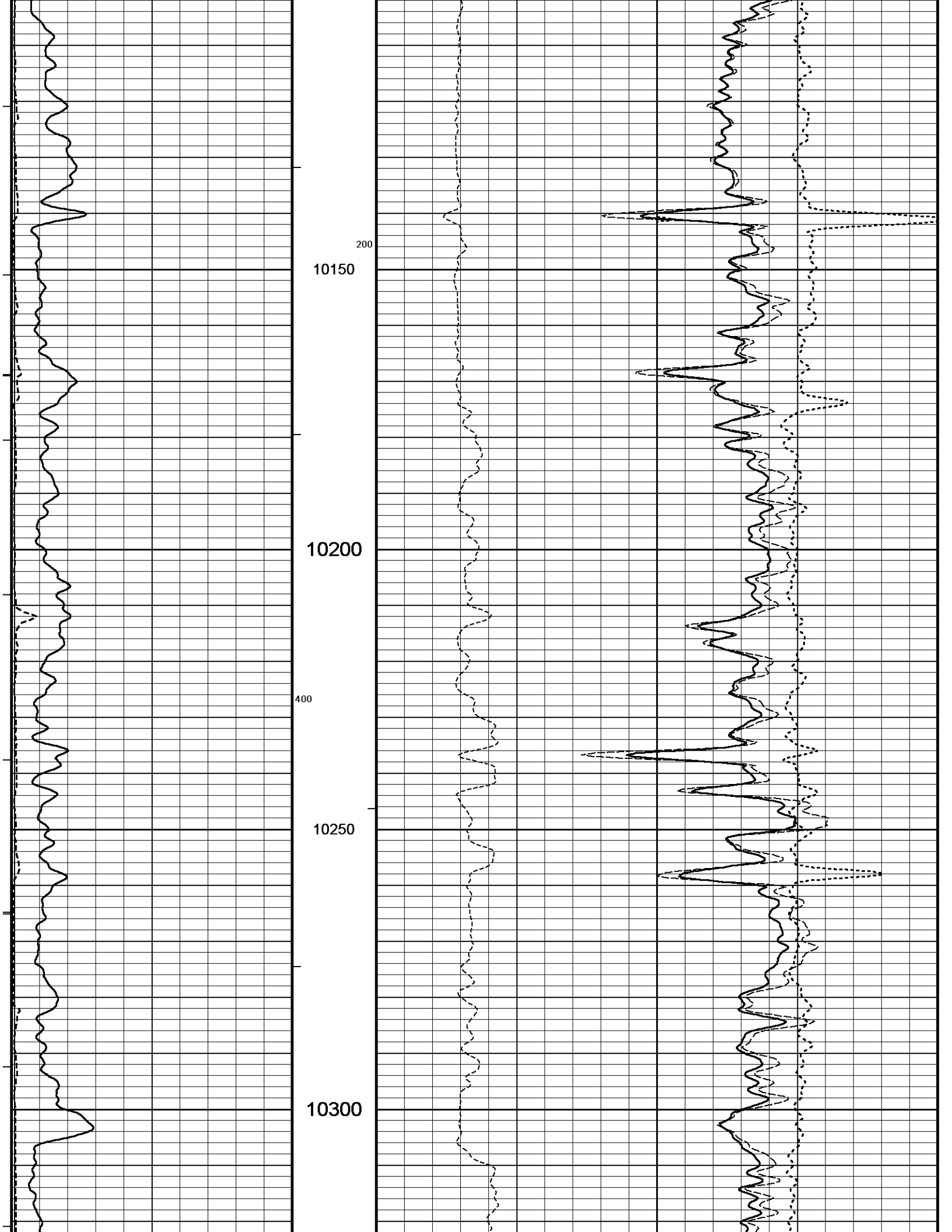
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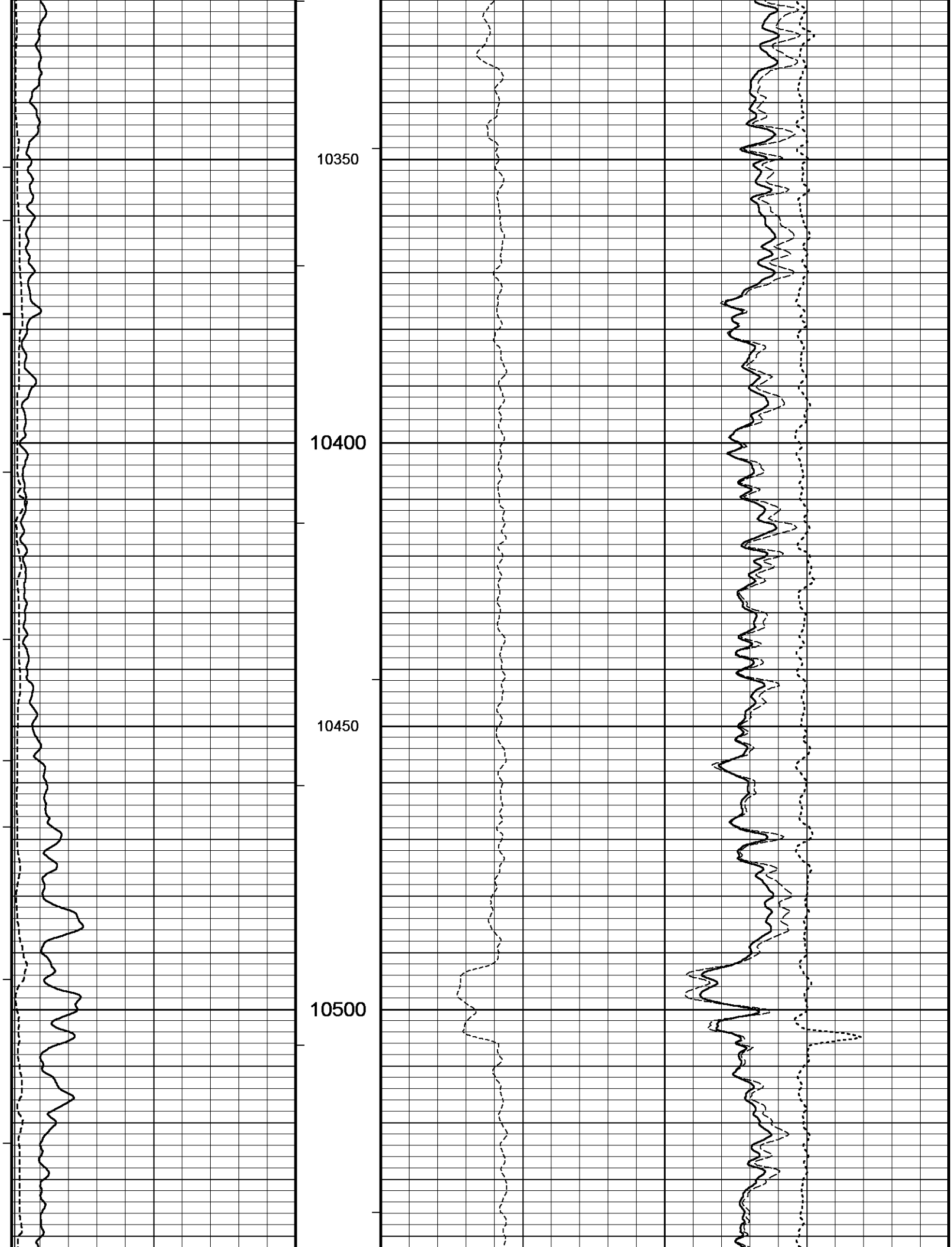
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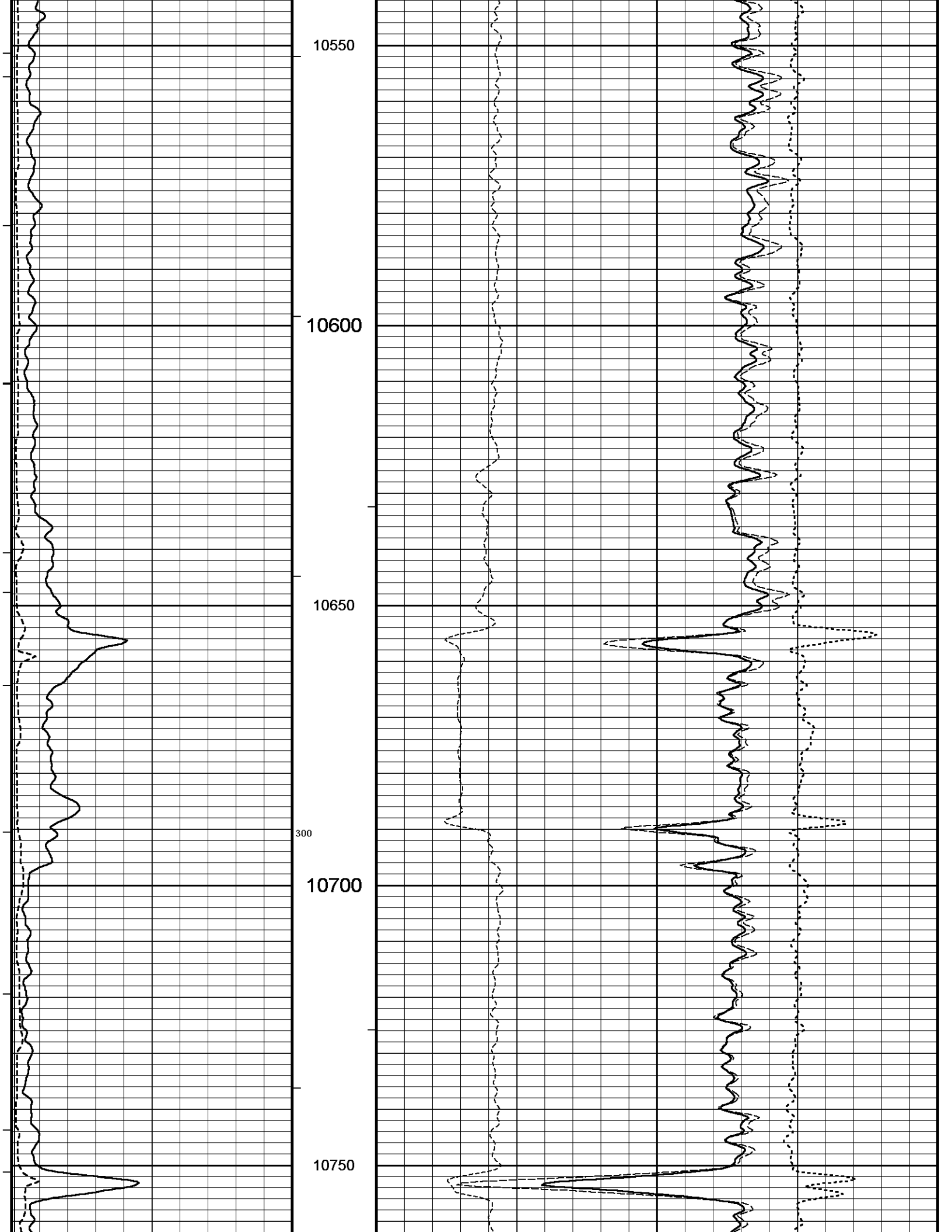
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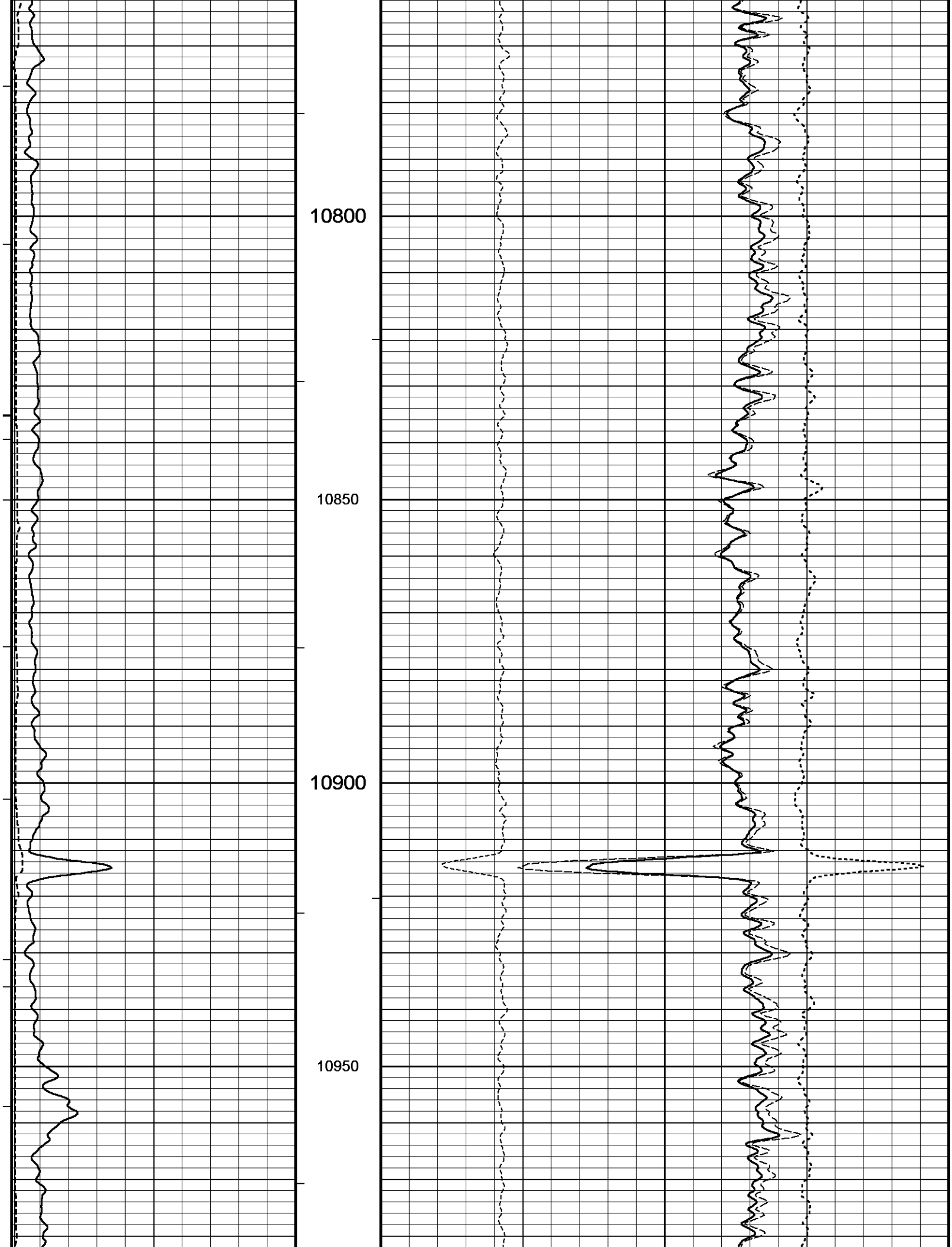
10750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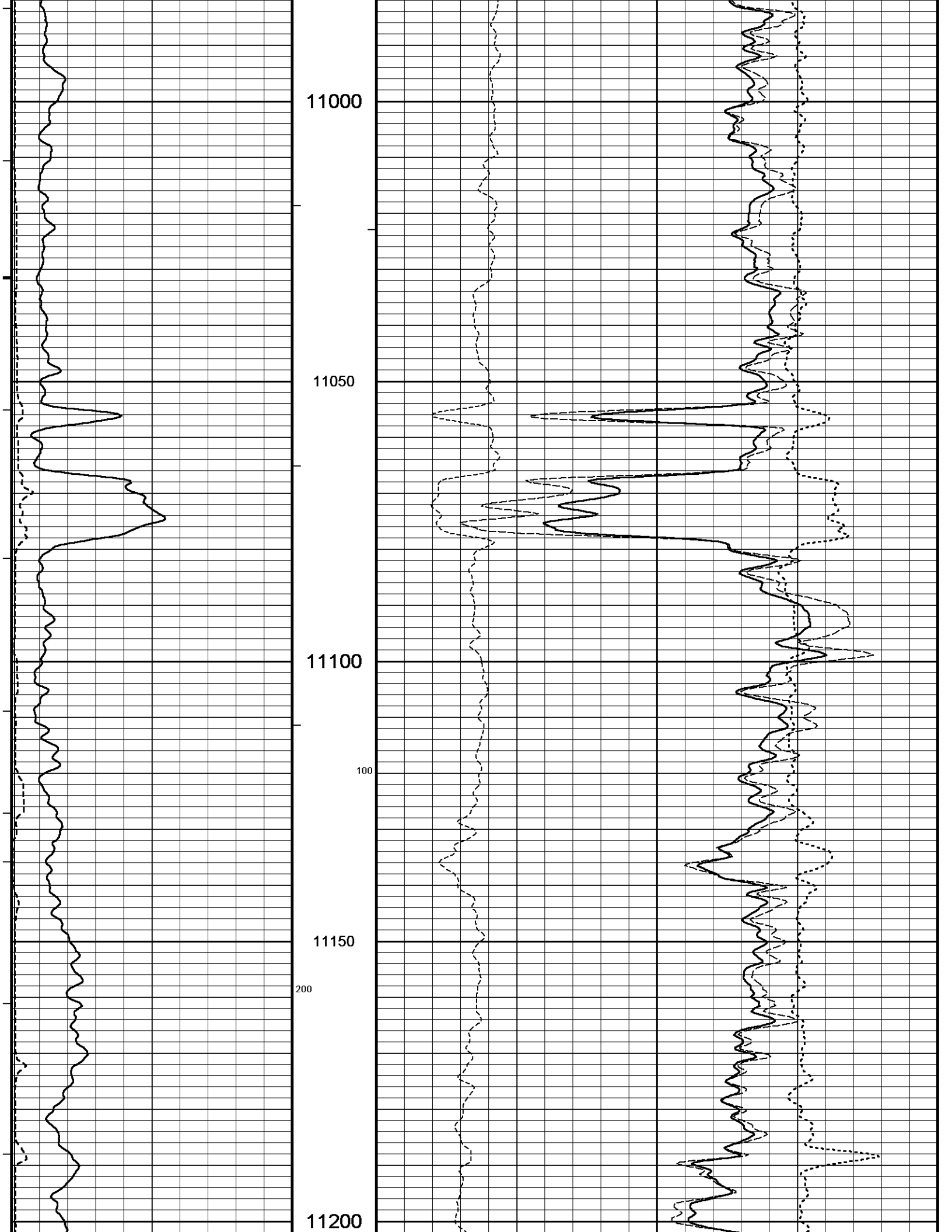
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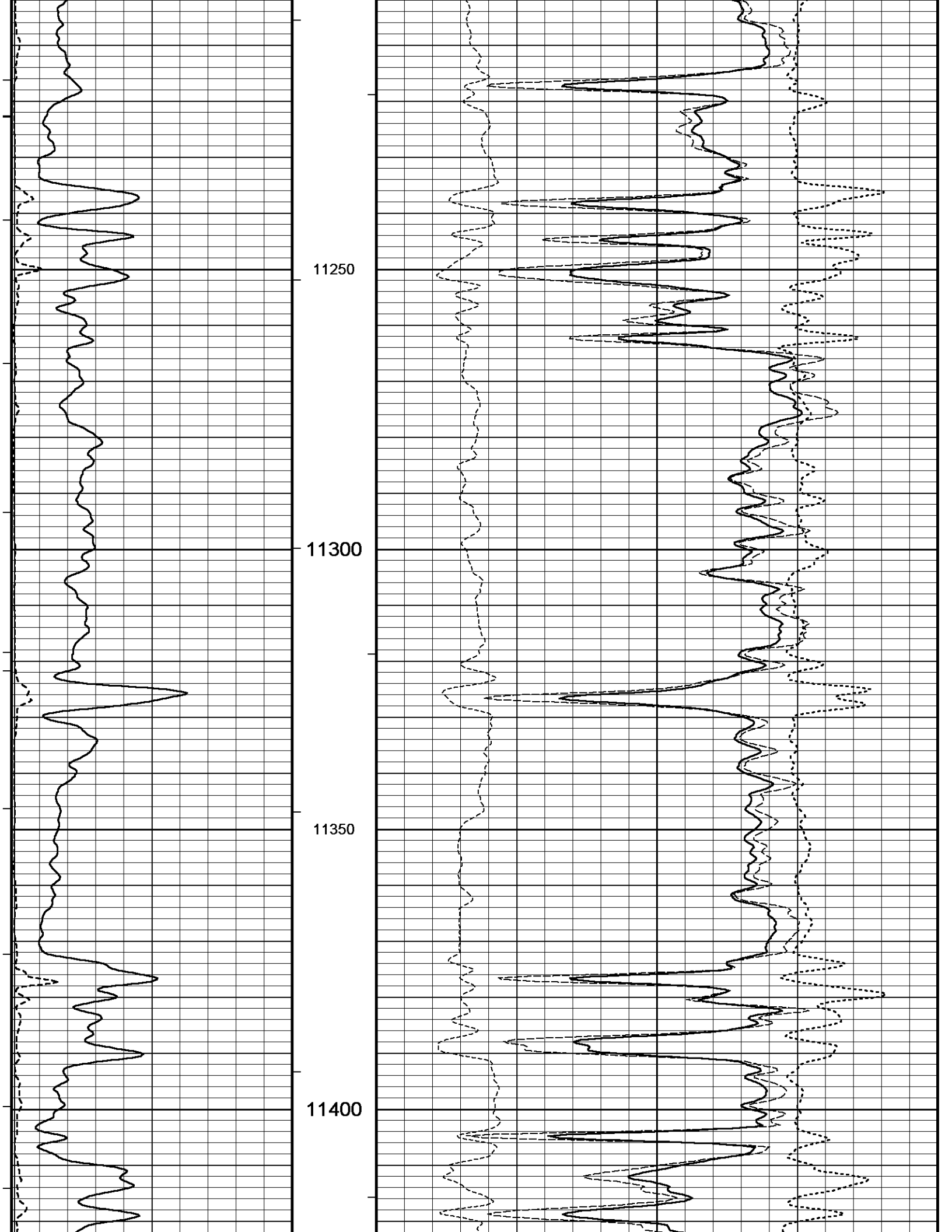
11100
100
11150
200
11200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11350
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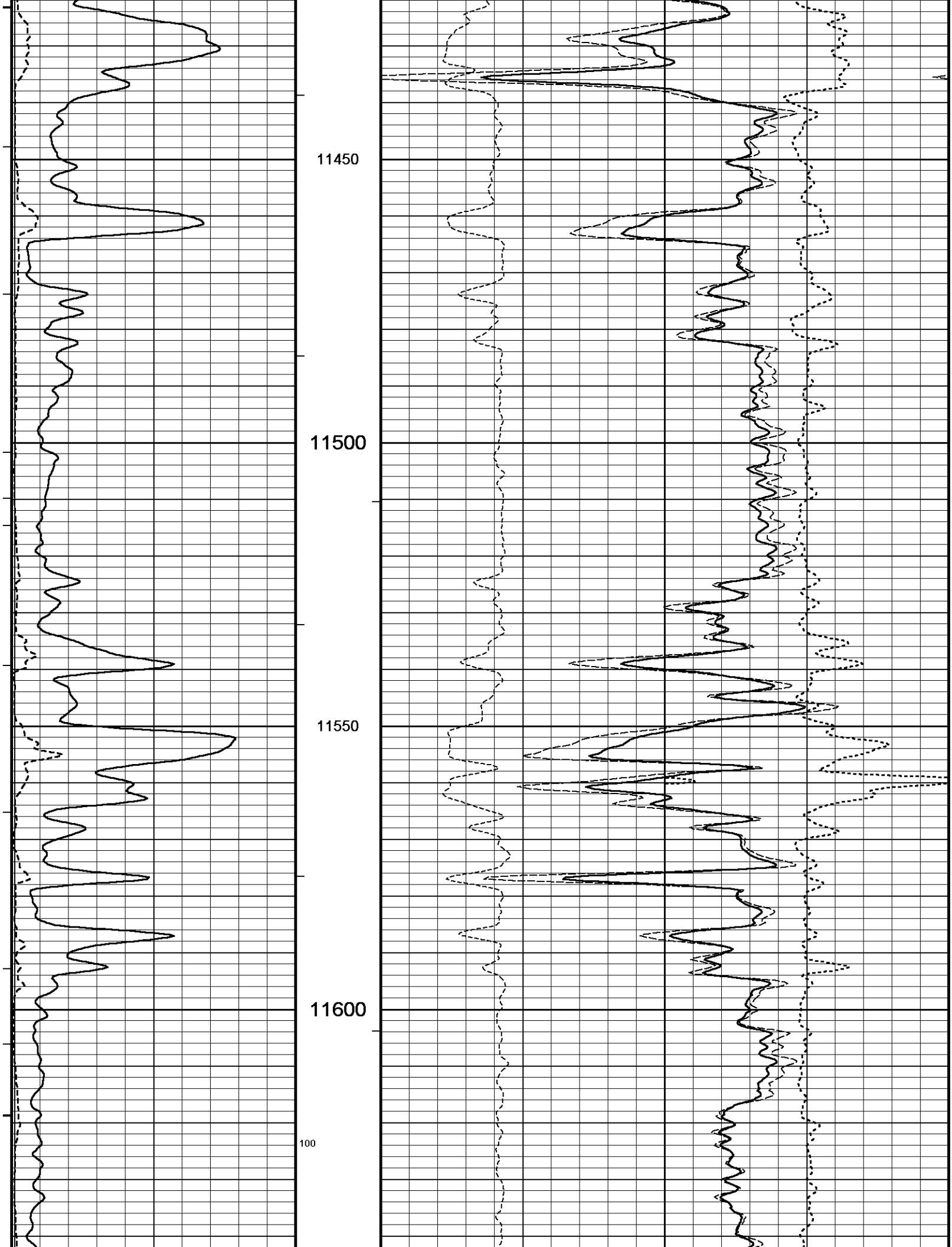
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11500
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11600
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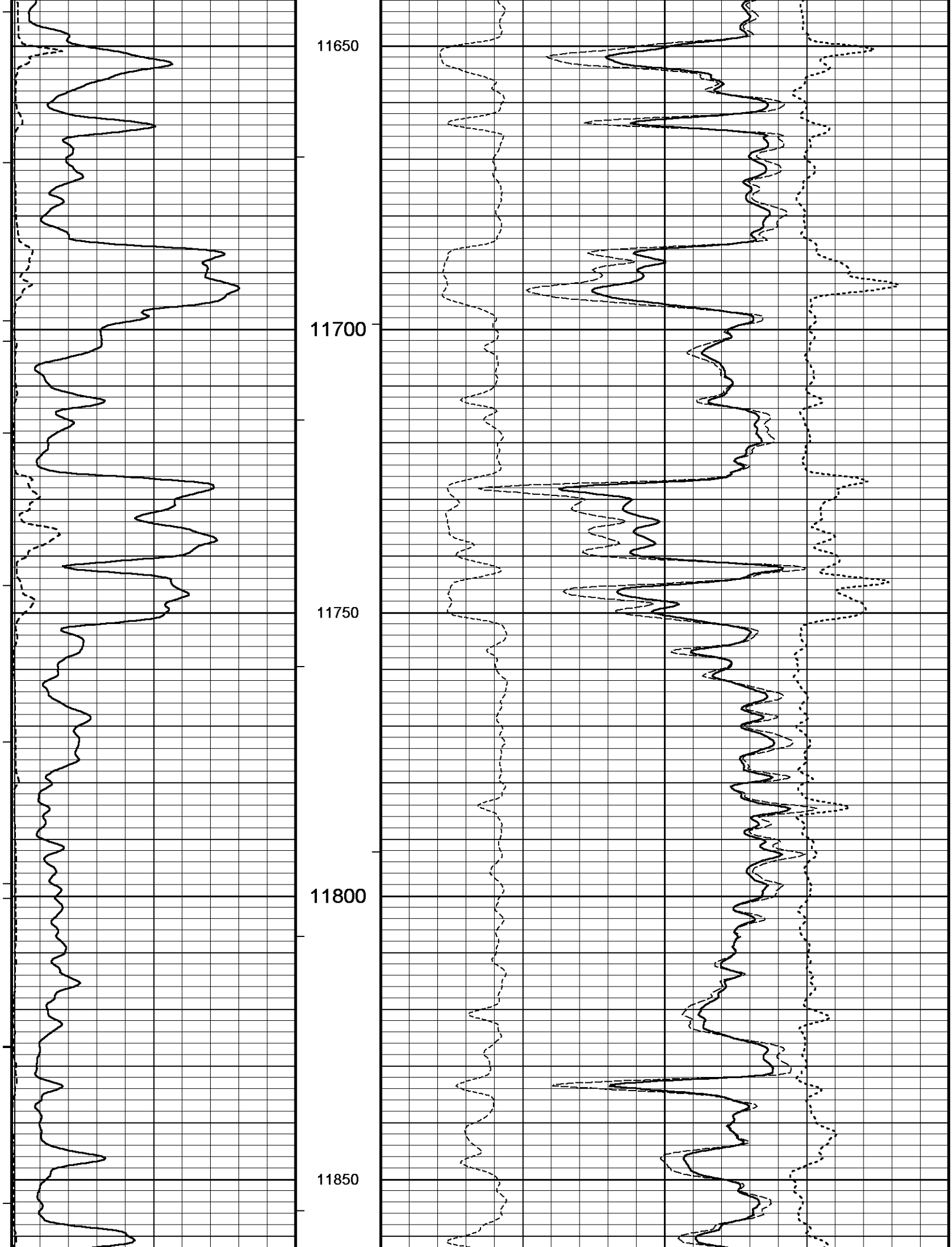
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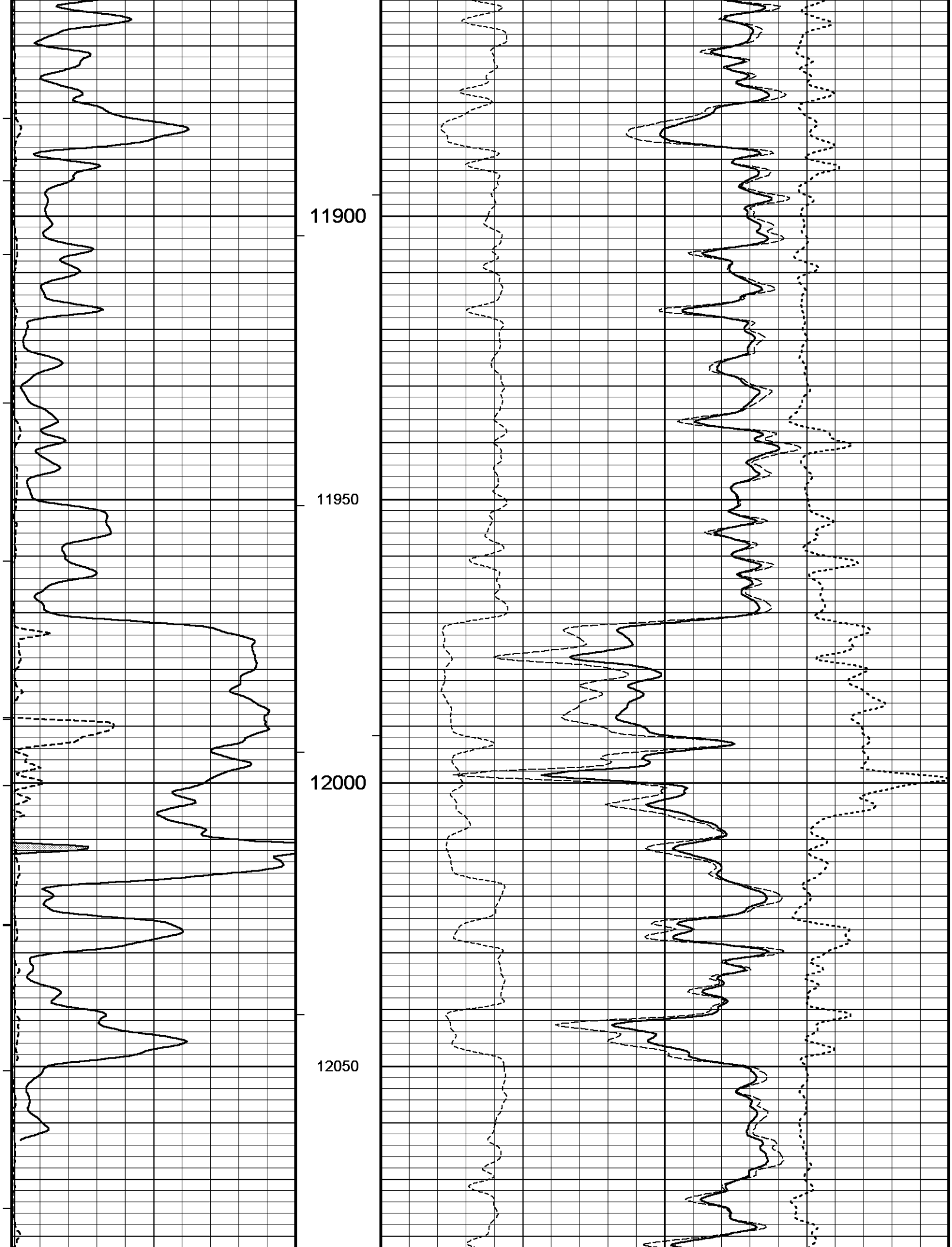
11700
11750
11800
11850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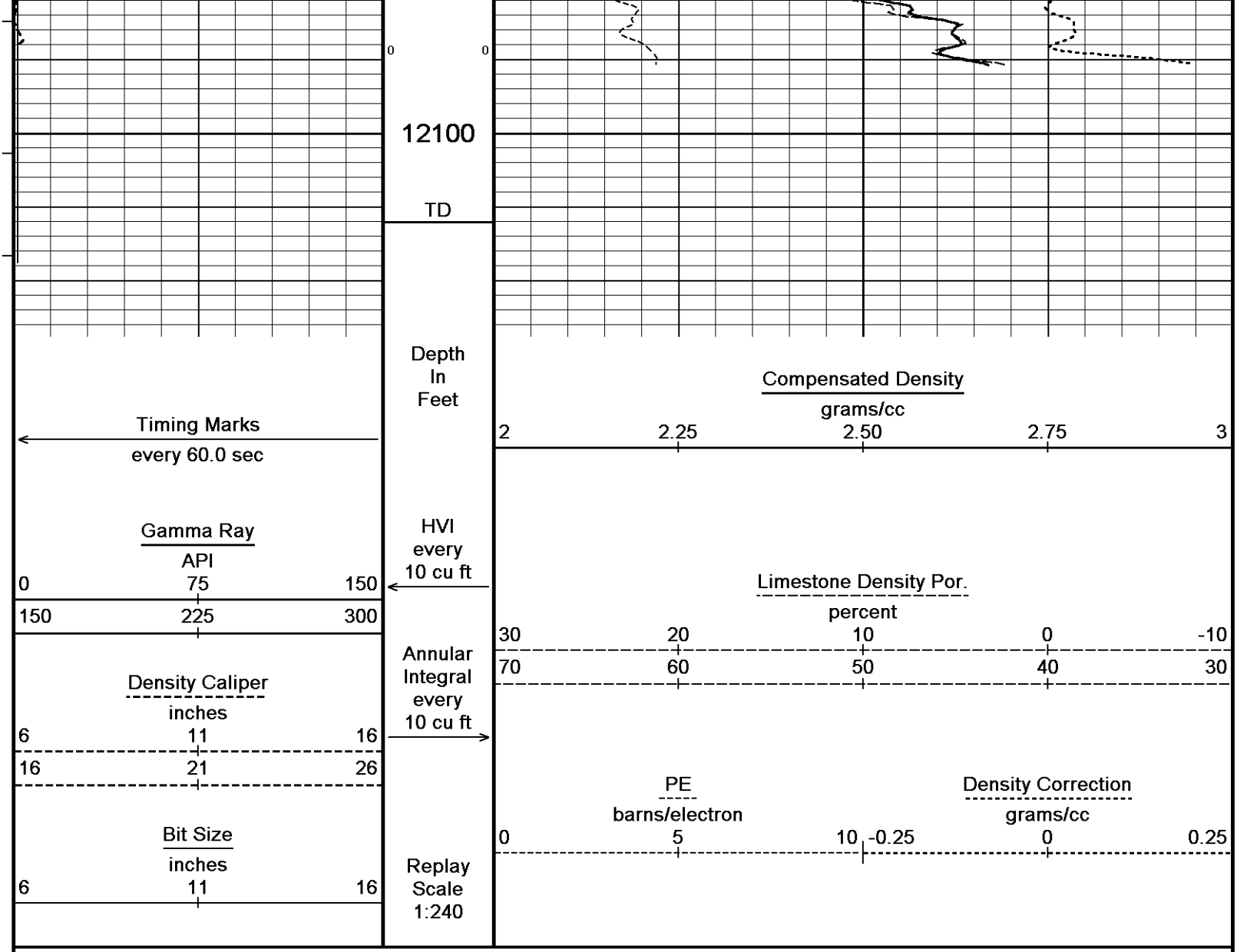


Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 14-APR-2011 02:27
Filename: C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta
Recorded on 14-APR-2011 01:01
System Versions: Logged with 11.02.3186 Processed with 11.02.3186 Plotted with 11.02.3186

5 INCH BULK DENSITY

BEFORE SURVEY CALIBRATION

C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\TOOLSTRING.dta

General Constants All 000

Last Edited on 12-APR-2011,23:16

General Parameters		
Mud Resistivity	2.000	ohm-metres
Mud Resistivity Temperature	60.000	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Limestone Density Por.	
Resistivity used	Array Ind. Four Res Rt	
RWA Constant A	0.610	

RWA Constant M	2.150

Down-hole Tension Calibration SMS 0

Field Calibration on 07-FEB-2006 14:19

Reading No	Measured	Calibrated (lbs)
1	16292.42	0.00
2	17072.79	420.00

Gamma Calibration MCG-D.A 328

Field Calibration on 12-APR-2011,23:14

	Measured	Calibrated (API)
Background	42	29
Calibrator (Gross)	1361	926
Calibrator (Net)	1319	897

Gamma Constants MCG-D.A 328

Last Edited on 12-APR-2011,23:14

Gamma Calibrator Number	056	
Mud Density	1.01	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

SP Calibration MCG-D.A 328

Field Calibration on 07-APR-2011,14:20

	Measured	Calibrated (mV)
Reference 1	-100.0	-100.0
Reference 2	100.0	100.0

High Resolution Temperature Calibration MCG-D.A 328

Field Calibration on 07-APR-2011,14:20

	Measured	Calibrated(Deg F)
Lower	500.00	50.00
Upper	150.00	150.00

High Resolution Temperature Constants MCG-D.A 328

Last Edited on

Pre-filter Length	11

Gamma Calibration MGS-C.J 108

Field Calibration on 12-APR-2011,23:14

	Measured	Calibrated (API)
Background	41	28
Calibrator (Gross)	1372	925
Calibrator (Net)	1331	897

Gamma Constants MGS-C.J 108

Last Edited on 12-APR-2011,23:14

Gamma Calibrator Number	056	
Mud Density	1.01	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Constants MGS-C.J 108

Last Edited on

Pre-filter Length	11

Neutron Calibration MDN-A.B 165

Base Calibration on 18-JAN-2011 09:45
Field Check on 12-APR-2011,23:35

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2962	92	3714	110
Ratio	32.226		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1292	1857
Ratio	0.696	

Field Check

	Calibrated (cps)	
	1294	1854
Ratio	0.698	

Neutron Constants MDN-A.B 165

Last Edited on 12-APR-2011,23:34

Neutron Source Id	p31112b	
Neutron Jig Number	5917ne	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.14	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	MGS External Temperature	
Temperature	N/A	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

Induction Calibration MAI-B.J 392

Base Calibration on 07-MAR-2011,14:45
Field Check on 12-APR-2011 23:32

Base Calibration

Test Loop Calibration	Measured		Calibrated (mmho/m)	
Channel	Low	High	Low	High
1	17.1	467.1	9.3	966.2
2	6.1	375.5	7.6	821.4
3	3.2	259.2	5.2	566.0
4	2.2	129.4	2.6	279.2

Array Temperature 74.7 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)		
	Low	High	Low	High	
1	0.0	0.0	13.0	3890.3	
2	0.0	0.0	30.8	3591.7	
3	0.0	0.0	29.2	3050.5	
4	0.0	0.0	19.5	2141.0	
Deep	0.0	0.0	17.4	2000.9	
Medium	0.0	0.0	43.2	3975.1	
Shallow	0.0	0.0	46.6	5307.3	
Array Temperature	0.0		67.1		Deg F

Induction Constants MAI-B.J 392

Last Edited on 12-APR-2011,23:33

Induction Model	RtAP-WBM	
Caliper for Borehole Corr.	Density Caliper	
Hole Size for Borehole Correction	N/A	inches
Tool Centred	No	
Stand-off Type	Fins	
Stand-off	0.50	inches
Number of Fins on Stand-off	6.0000	
Stand-off Fin Angle	60.00	degrees
Stand-off Fin Width	0.5000	inches
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MGS External Temperature	
Squasher Start	0.0020	mhos/metre
Squasher Offset	N/A	mhos/metre

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre

Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

High Resolution Temperature Calibration MAI-B.J 392

Field Calibration on 27-SEP-2010,09:40

	Measured	Calibrated(Deg C)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI-B.J 392

Last Edited on

Pre-filter Length	11

Caliper Calibration MPD-B 166

Base Calibration on 04-FEB-2011,04:24
Field Calibration on 12-APR-2011,23:37

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13324	4.01
2	22796	5.96
3	32616	7.98
4	42176	9.86
5	52894	11.88
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
6.08	6.00

Photo Density Calibration MPD-B 166

Base Calibration on 31-MAR-2011,23:58
Field Check on 12-APR-2011 23:24

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	48644	24559	59869	31110
Reference 2	20824	2451	24557	2522

Field Check at Base

1194.7	1301.1

Field Check

1188.8	1292.2

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	219	1062		
Reference 1	18351	48453	0.383	0.369
Reference 2	5790	20687	0.284	0.271

Field Check at Base

218.6	1061.9

Field Check

215.7	1058.8

Density Constants MPD-B 166

Last Edited on 12-APR-2011,23:15

Density Source Id		
Nylon Calibrator Number		
Aluminium Calibrator Number		
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.01	gm/cc

Mud Density	1.01	gm/cc
Mud Density Z/A Multiplier	1.10	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Advanced	

Matrix Density (gm/cc)	Depth (ft)
2.71	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

DOWNHOLE EQUIPMENT

C:\Minimus\Data\SDRGE (Kerstetter 1-25H)\36340.dta

Shuttle Mechanical Release (SMR A)
SMR-A 146 LG: 8.53 ft WT: 77.2 lb OD: 2.52 in

Shuttle Electrical Release
SER-A 146 LG: 6.90 ft WT: 50.7 lb OD: 2.24 in

MBS-G.A 200v Compact Battery Sub
MBS-G.A 113 LG: 16.66 ft WT: 132.3 lb OD: 2.24 in

Compact Memory Sub E.B
MMS-E.B 134 LG: 5.20 ft WT: 37.5 lb OD: 2.24 in

Compact Short Gamma
MGS-C.J 108 LG: 3.41 ft WT: 24.3 lb OD: 2.24 in

Compact Collar Locator
MCL-B.J 60 LG: 3.17 ft WT: 26.5 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint
SKJ-E.A 476 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 442 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 593 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron
MDN-A.B 165 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

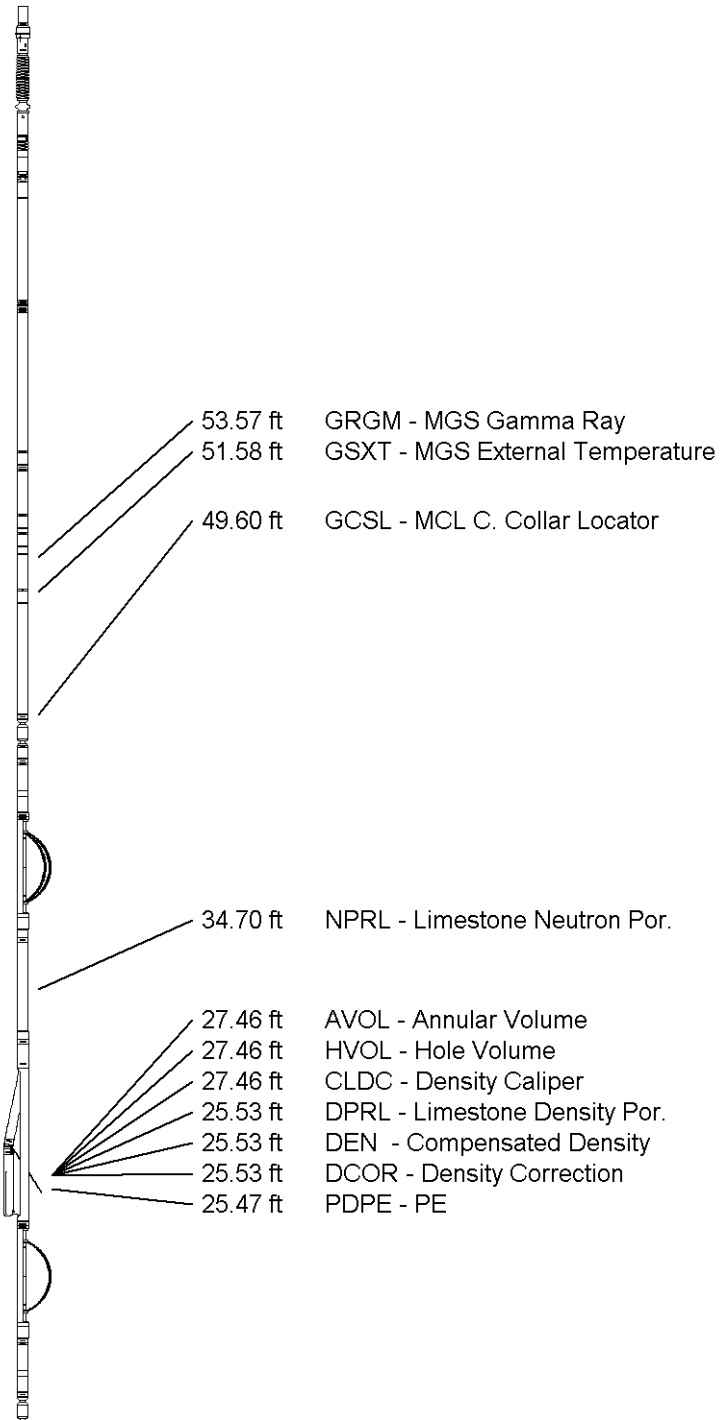
Compact Density/Caliper
MPD-B 166 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub
MIS-D.A 591 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor
SHA-J.A 438 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint
SKJ-E.A 477 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

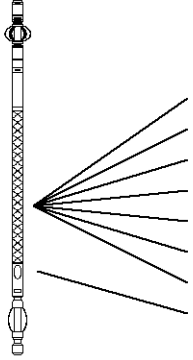
MIS-E.B Compact Inline Standoff sub



MIS-E.B Compact Inline Standoff sub
MIS-E.B 577 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction
MAI-B.J 392 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 93.49 ft Weight: 712.1 lb



3.34 ft	CTAF - Array Ind. Four Cond Ct
3.34 ft	R40F - Array Ind. Four Res 40
3.34 ft	R30F - Array Ind. Four Res 30
3.34 ft	R20F - Array Ind. Four Res 20
3.34 ft	R60F - Array Ind. Four Res 60
3.34 ft	R85F - Array Ind. Four Res 85
3.34 ft	RTAF - Array Ind. Four Res Rt
Tool Zero	(1.84ft from bottom)

All measurements relative to tool zero.

COMPANY	SANDRIDGE ENERGY
WELL	KERSTETTER 1-25H
FIELD	SIX MOONS
PROVINCE/COUNTY	COMANCHE
COUNTRY/STATE	USA / KANSAS

Elevation Kelly Bushing	2020.00	feet	First Reading	12087.50	feet
Elevation Drill Floor	2018.00	feet	Depth Driller	12129.00	feet
Elevation Ground Level	2000.00	feet	Depth Logger	12112.00	feet

Weatherford®

COMPACT WELL SHUTTLE
COMPACT PHOTO DENSITY
COMPENSATED NEUTRON LOG

40 Years of Wireline 1970 2010

Final TD Notice

April 14, 2011

Kerstetter *#1-25H, Section 25-T31S-R20W, Comanche County, KS*

API #1503321581-01-00

SL: 330' FSL& 660' FWL of SW/4
BHL: 330' FNL & 660' FWL of NW/4

Spud 3/22/11; Rig –Lariat 45/Drilling Engineer –Richard Hill
TMD reached @ 1:15 am, 4/12/11, TMD Driller @ 12,129' MD/5,075' TVD

Vertical E-logs –Gamma Ray only, MWD –Drill Right
Horizontal E-Logs received @ 5:15 am, 4/14/11, TMD Logger @ 12,112' MD –Weatherford
Mudlogging by Ed Berglund and Bud Walker

Datum 2,021' KB	E-LOG TOPS Gamma Ray only		MUD LOG TOPS Horizon Mudlogging	
FORMATION	MD/TVD	SUBSEA	MD/TVD	SUBSEA
Base Anhydrite	NDA	NDA	2498'	-477'
Base Heebner	4174'	-2153'	4172'	-2151'
Lansing Ls/Shale Group	4358'	-2337'	4357'	-2336'
Cherokee Group	5005'/4962'	-2941'	5009'/4964'	-2943'
Mississippi Lime	5165'/5061'	-3040'	5178'/5069'	-3048'

Mud Log –Throughout the lateral, the well path was in a Mississippian-aged white to off-white limestone with varying amounts of white, angular cherts (traces to 10%). Scattered yellow fluorescence, occasional milky white cut and residual ring with formation and connection gas shows of 0-100 units throughout the wellbore were noted. To be completed in the Mississippian section of rocks.

Feel free to call with questions/comments.

Best,

Kathy Gentry, Senior Geologist
Tammy Alcorn, Geologist

SandRidge ENERGY

Current

Spud: 3/22/2011

Field	Six Moons
County	Comanche
State	Kansas
Well	**Kerstetter 1-25H**
Location	SEC 25, TWP 31S, RGE 20W
KB	2020'
GL	2000'

Wellbore Schematic

1503-321-58101
API No.

Original Completion [x]
Current [ ]
[ ]
Proposed [ ]

Well Bore Data	**MD**	**TVD**
20" 94# H-40 Conductor	90'	90'
9-5/8" 26# J-55 LT&C Csg @	804'	804'

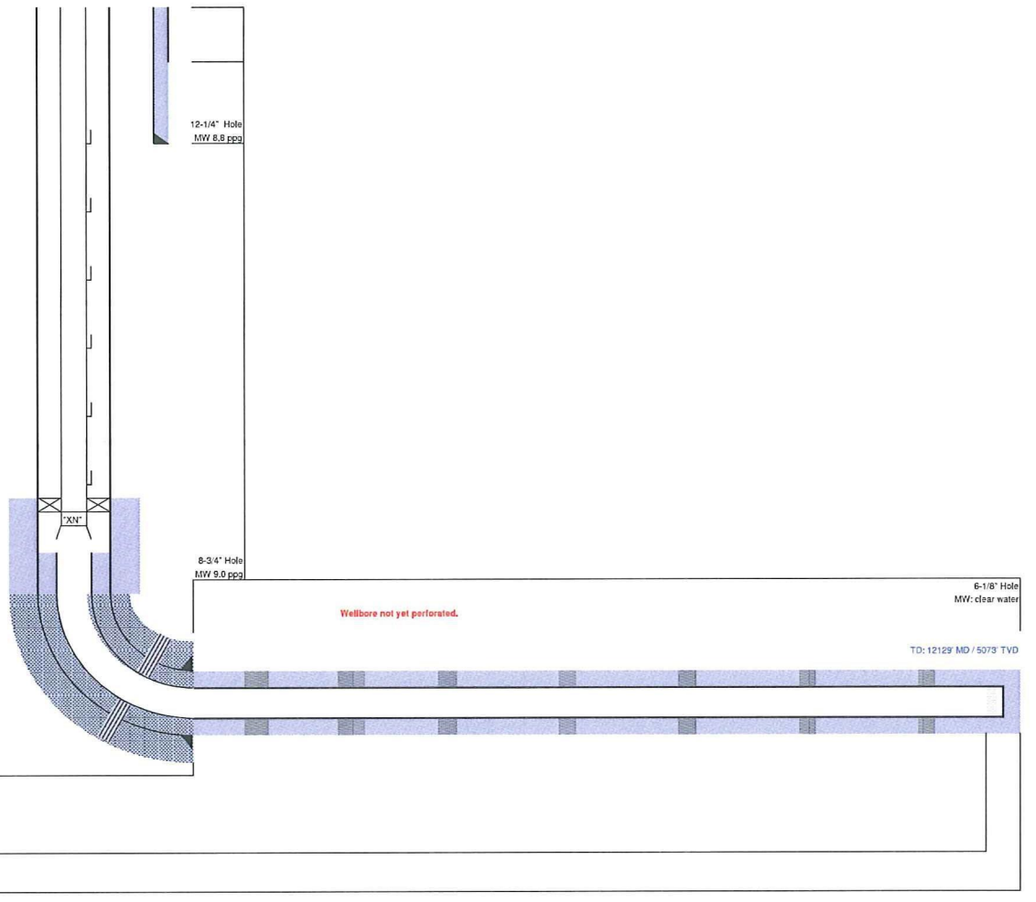
Cplg OD=10.625", ID=8.921" Drift=8.765", Collpase=2020 psi, Internal Yield=3520 psi
245 sks Class H cmt @ 12.7 ppg (Yield=1.84).

	Length	Bottom
KB		20'
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #6		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #5		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #4		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #3		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #2		
# jts 3-1/2" 9.3# J-55 8rd EUE		
GLV #1		
1 jts 3-1/2" 9.3# J-55 8rd EUE		
3-1/2" x 7" Arrowset Pkr		
10' 3-1/2" 9.3# sub		
3-1/2" XN Nipple		
WLEG		
Calc'd TOC behind 7" @	3781'	3781'
Top of Liner @	4232'	4232'
126 jts 7" 26# P-110 LT&C	4835'	4830'
13 jts 7" 26# N-80 LT&C Csg @	5483'	5132'

N-80: Cplg OD=7.656", ID=6.276" Drift=6.151", Collpase=5410 psi, Internal Yield=7240 psi
P-110: Cplg OD=7.656", ID=6.276" Drift=6.151", Collpase=6210 psi, Internal Yield=9950 psi
Cmt'd w/ 260 sks Class A @ 13.6 ppg (Yield=1.43).

PBTD @	12084'	5075'
200 jts 4-1/2" 11.6# N-80 LT&C @	12127'	5073'

Cplg OD=5.00", ID= 4.000", Drift=3.875", Collpase=6350 psi, Internal Yield=7780 psi
Cmt'd w/ 760 sks 50/50 Poz @ 13.6 ppg (Yield=1.44).



Jason McElhany
4/19/2011

AMENDED

ATTACHMENT TO FORM ACO18
SandRidge E&P, LLC
Kerstetter #1-25H (1052696)
API 15-033-21581-01-11
Comanche County, Kansas
Sec 25, T31S, R20W

C. Distance to nearest pipeline or gathering facility is 7 miles.

1. Wireline logs are attached.
2. Form ACO-1 is attached but missing data—this well is not yet completed. The report will be filed within KCC guidelines upon completion of the well which is anticipated to be around 5/2/2011.
3. Method of measuring flared gas: We will have a test meter on the flare. We will meter and record all volumes, including liquids and gas which are produced by this well. There will be contract flow testing personnel on location 24/7 until all utilities, equipment and safety mechanisms are in place. The flow hand will complete the attached report to closely monitor and record all pressures, rates, and volumes .
4. This is a new drill and we are still trying to evaluate and determine whether the well is capable of producing in economic quantities. In order to make that determination we need to produce the well to evaluate the production capabilities. The closest gas sales line is 7 miles away; therefore, we will need to temporarily flare to determine economic quantities. Our anticipated completion date is May 2, 2011, and we will need to begin flaring upon completion to gather sufficient data to make that determination.
5. A copy of the text submitted for publication is attached.

THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

IN THE MATTER OF THE REQUEST OF **SANDRIDGE EXPLORATION & PRODUCTION, LLC** FOR PERMISSION TO FLARE NATURAL GAS PURSUANT TO K.A.R. § 82-3-314(b)	)	KCC License No. 34192 Conservation Division

NOTICE OF PENDING REQUEST FOR PERMISSION TO FLARE NATURAL GAS

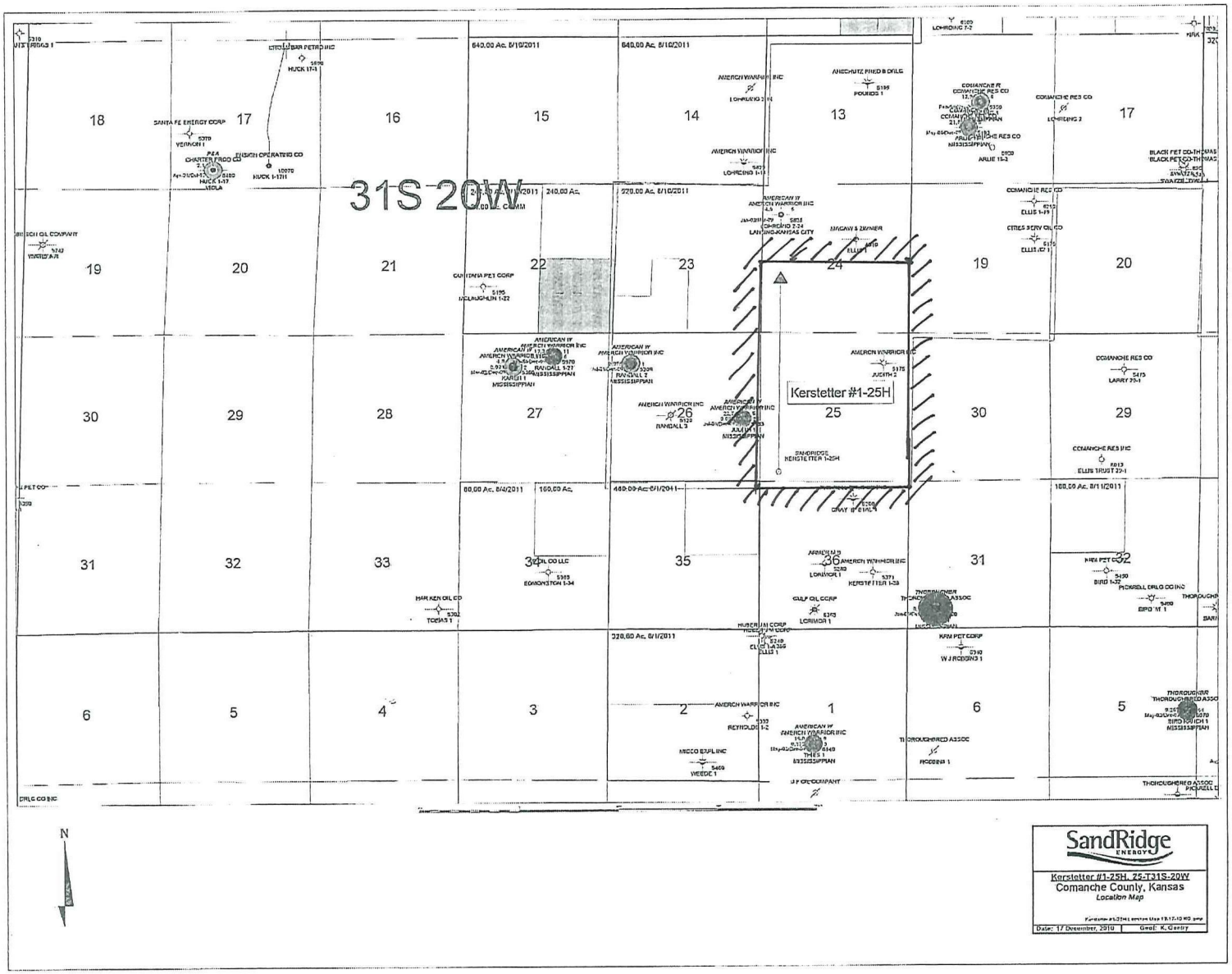
TO: ALL OIL AND GAS PRODUCERS, UNLEASED MINERAL INTEREST OWNERS, LANDOWNERS, AND ALL PERSONS WHOMSOEVER CONCERNED.

You, and each of you, are hereby notified that SANDRIDGE EXPLORATION & PRODUCTION, LLC has filed an Application for Venting or Flaring of Gas Other than Casinghead Gas and an Affidavit for Venting of Natural Gas with the State Corporation Commission of the State of Kansas (the "Commission") seeking permission to flare natural gas, pursuant to K.A.R. § 82-3-314, from the following well located in Comanche County, Kansas:

Kerstetter #1-25H well
API #15-033-21581-01-00
Surface Location: 330' FSL & 660' FWL of Section 25-31S-20W

The Commission may approve SANDRIDGE EXPLORATION & PRODUCTION, LLC's request to flare natural gas without a hearing. Any persons who object to or protest the request to flare natural gas from that well should file their objections or protests with the Commission within fifteen (15) days from the date of this publication. If any protests are timely filed, a hearing may be held on the 16th day of June, 2011, at 10:00 a.m. at the Kansas Corporation Commission, 130 South Market, Room 2078, Wichita, Kansas 67202. All parties in any way interested or concerned shall take notice of the foregoing and govern themselves accordingly.

David E. Bengtson (#12184)
STINSON MORRISON HECKER LLP
1625 N. Waterfront Pkwy., Suite 300
Wichita, Kansas 67206-6620
(316) 265-8800
Fax: (316) 265-1349
Attorneys for SandRidge Exploration & Production, LLC


31S 20W
Kerstetter #1-25H
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SandRidge ENERGY
Kerstetter #1-25H, 25-T31S-20W
Comanche County, Kansas
Location Map
Date: 17 December, 2010
Geol: K. Gentry

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34192
Name: SandRidge Exploration and Production LLC
Address 1: 123 ROBERT S. KERR AVE
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406
Contact Person: Karen Sharp
Phone: (405) 429-5745
CONTRACTOR: License # 34464
Name: Lariat Services, Inc.
Wellsite Geologist: Kathy Gentry
Purchaser:

Designate Type of Completion:

- [x] New Well [ ] Re-Entry [ ] Workover
- [x] Oil [ ] WSW [ ] SWD [ ] SIOW
- [ ] Gas [ ] D&A [ ] ENHR [ ] SIGW
- [ ] OG [ ] GSW [ ] Temp. Abd.
- [ ] CM *(Coal Bed Methane)*
- [ ] Cathodic [ ] Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening [ ] Re-perf. [ ] Conv. to ENHR [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

08/22/2011 (Spud Date or Recompletion Date) | 04/15/2011 (Date Reached TD) | (Completion Date or Recompletion Date)

API No. 15 - 15-033-21581-01-00
Spot Description:
_ - S2 - SW - SW Sec. 25 Twp. 31 S. R. 20 [ ] East [x] West
330 Feet from [ ] North / [x] South Line of Section
660 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[x] NE [ ] NW [ ] SE [x] SW
County: Comanche
Lease Name: Kerstetter Well #: 1-25H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 2001 Kelly Bushing: 2022
Total Depth: 0 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 804 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: ppm Fluid volume: bbls
Dewatering method used:
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. [ ] East [ ] West
County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature:
Title: Date:

KCC Office Use ONLY

- [ ] Letter of Confidentiality Received
  Date:
- [ ] Confidential Release Date:
- [ ] Wireline Log Received
- [ ] Geologist Report Received
- [ ] UIC Distribution

ALT [ ] I [ ] II [ ] III Approved by: Date:

Side Two

Operator Name: SandRidge Exploration and Production LLC Lease Name: Kerstetter Well #: 1-25H

Sec. 25 Twp. 31 S. R. 20 ☐ East ☑ West County: Comanche

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional Sheets)	☐ Yes	☑ No	☐ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes	☐ No	Name	Top	Datum
Cores Taken	☐ Yes	☐ No	Array Induction	5450	GL 2000
Electric Log Run	☐ Yes	☐ No	Compact Well Shuttle;Compact Photo Density; CN	5450	GL 2000
Electric Log Submitted Electronically (If no, Submit Copy)	☐ Yes	☐ No			

List All E. Logs Run:

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone	- -			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☑ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. (Submit ACO-5) ☐ Commingled (Submit ACO-4) ☐ Other (Specify)

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202