



SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Hill Ranch 25-14
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09340 00

224' FSL & 1674' FWL

SEC 25 TWP 34S RGE 67W

Permanent Datum Ground Level Elevation 7660'
Log Measured From Ground Level
Drilling Measured From Ground Level

Other Services
dill
Elevation
K.B. -----
D.F. -----
G.L. 7660'

Date 8-27-07

Run Number One

Depth Driller 2350'

Depth Logger 2341'

Bottom Logged Interval 23-17'

Top Log Interval Surface Casing

Casing Driller 8 5/8" @ 493'

Casing Logger 493'

Bit Size 7 7/8"

Type Fluid in Hole Water

Density / Viscosity ///

pH / Fluid Loss ///

Source of Sample ///

Rm @ Meas. Temp ///

Rmf @ Meas. Temp ///

Rmc @ Meas. Temp ///

Source of Rmf / Rmc ///

Rm @ BHT ///

Time Circulation Stopped 11:00 A.M.

Time Logger on Bottom 1:45 P.M.

Maximum Recorded Temperature 115 DEGF

Equipment Number T0701

Location Trinidad

Recorded By C. Sisneros

Witnessed By Mr. Don Johnson

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

Comments

Compensated Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.
Neutron Porosity invalid from 1688' to 1826'
due to foam in well.
Well Directions:
Up Lorencito Canyon, turn right on rd. to XTO,
drive past the Hill Ranch 34-02 location,
take next right, drive thru Hill Ranch 34-04 location,
next location.

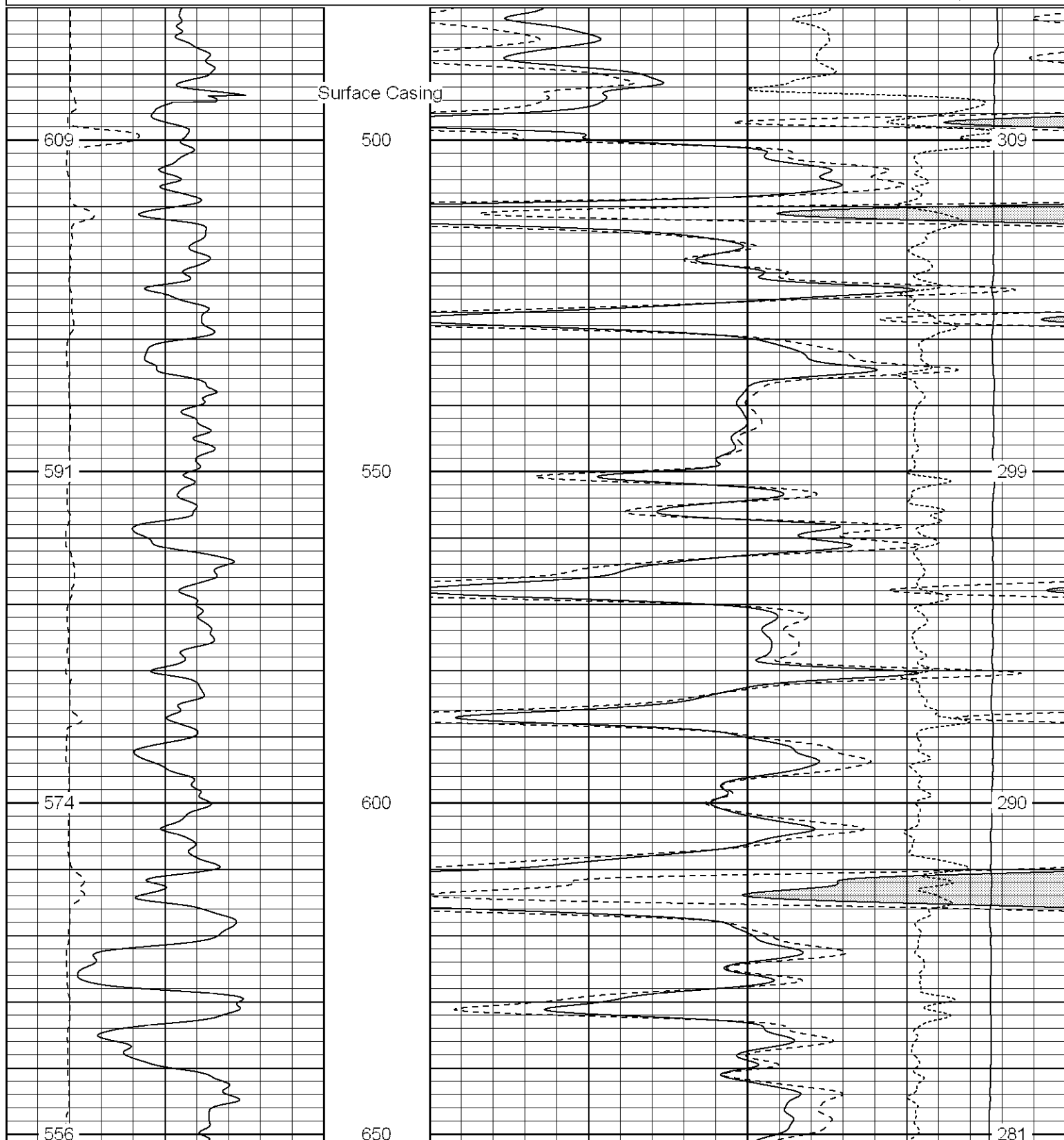


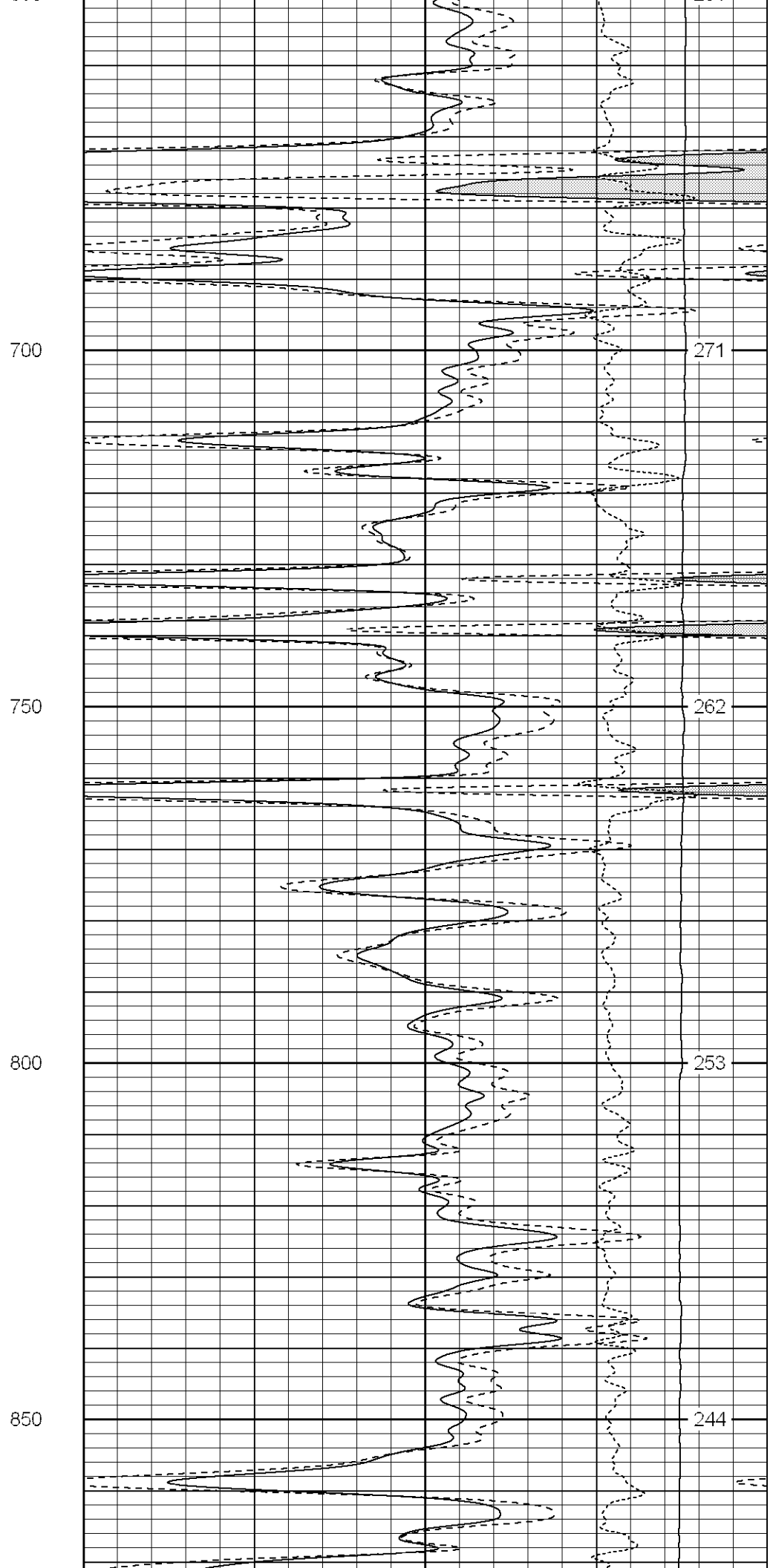
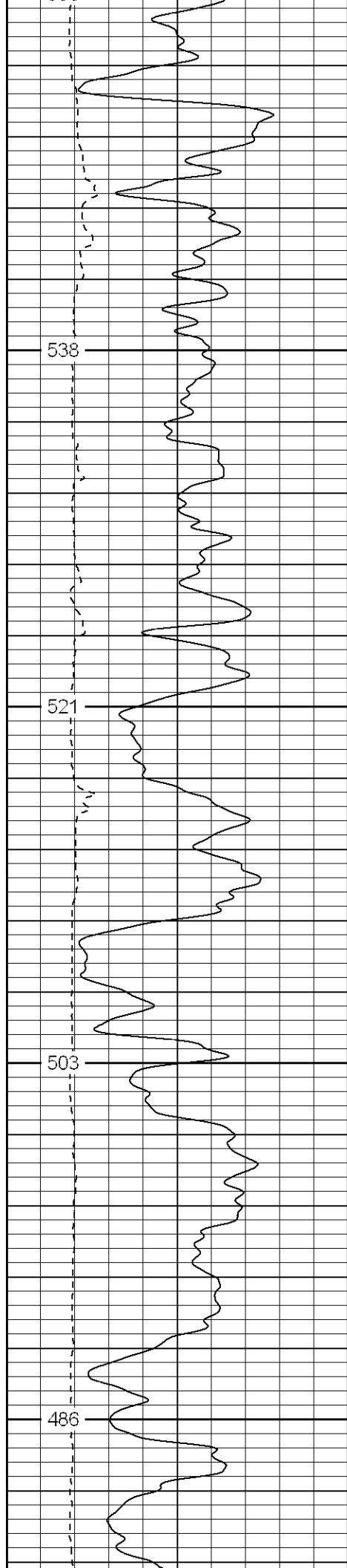
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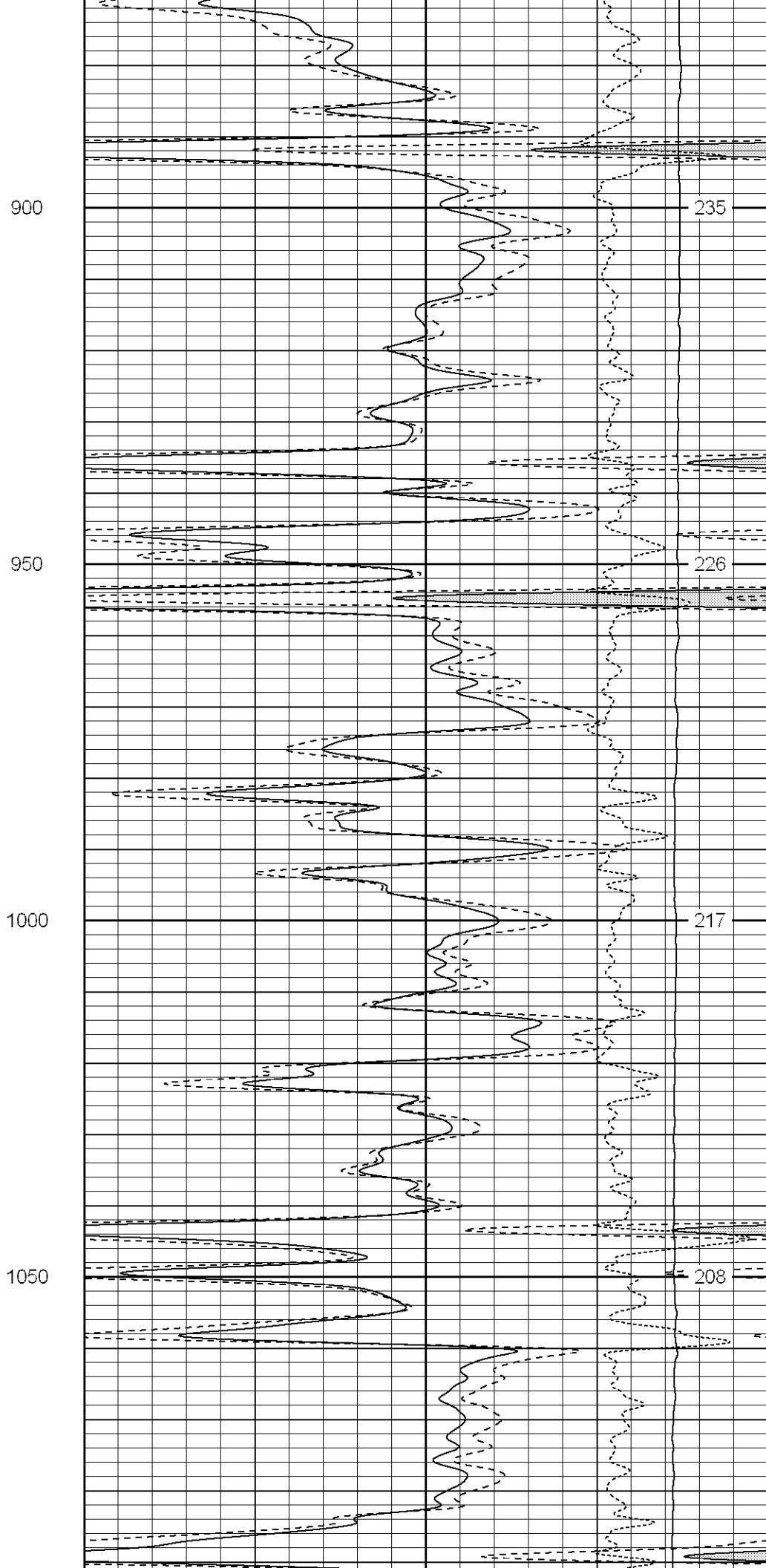
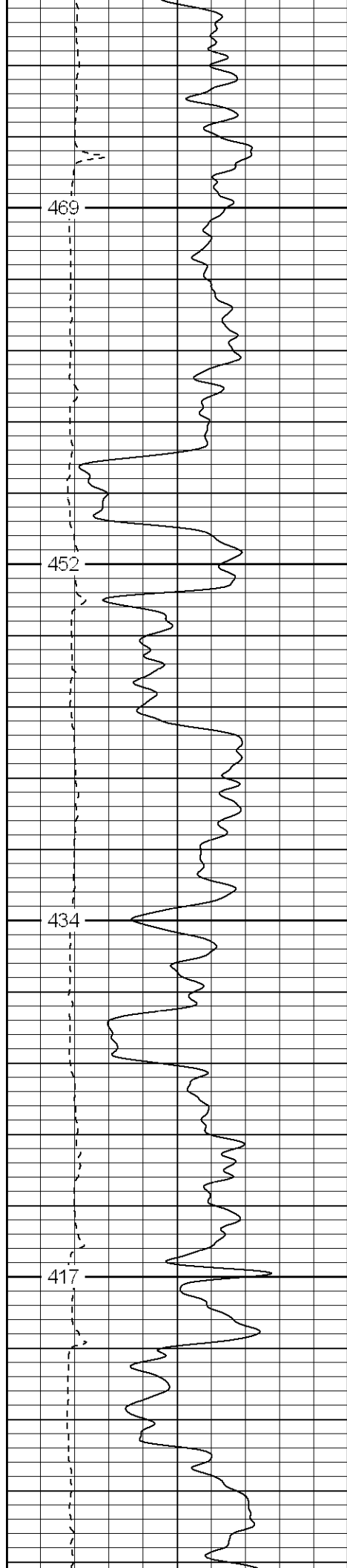
Main Pass

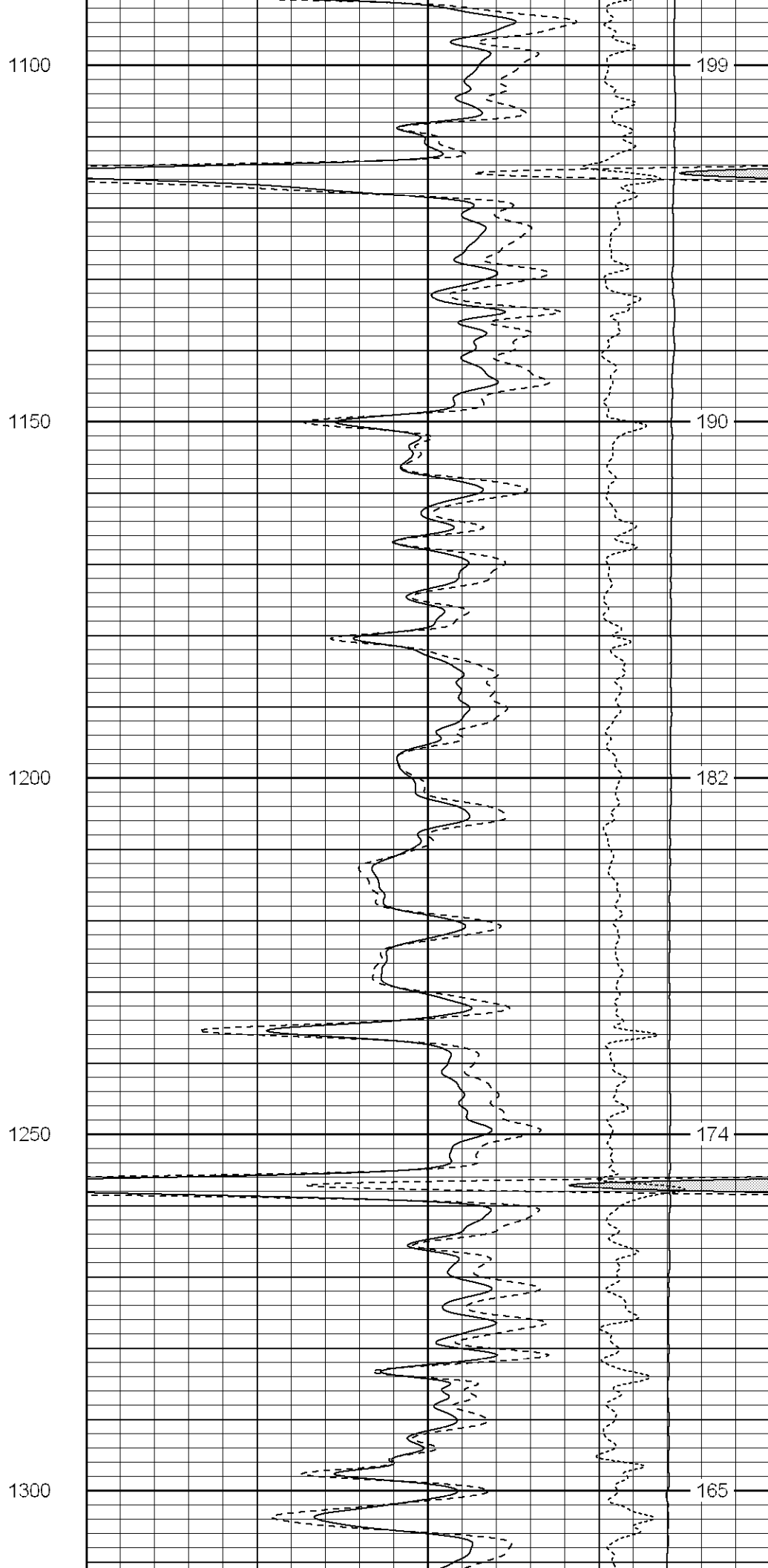
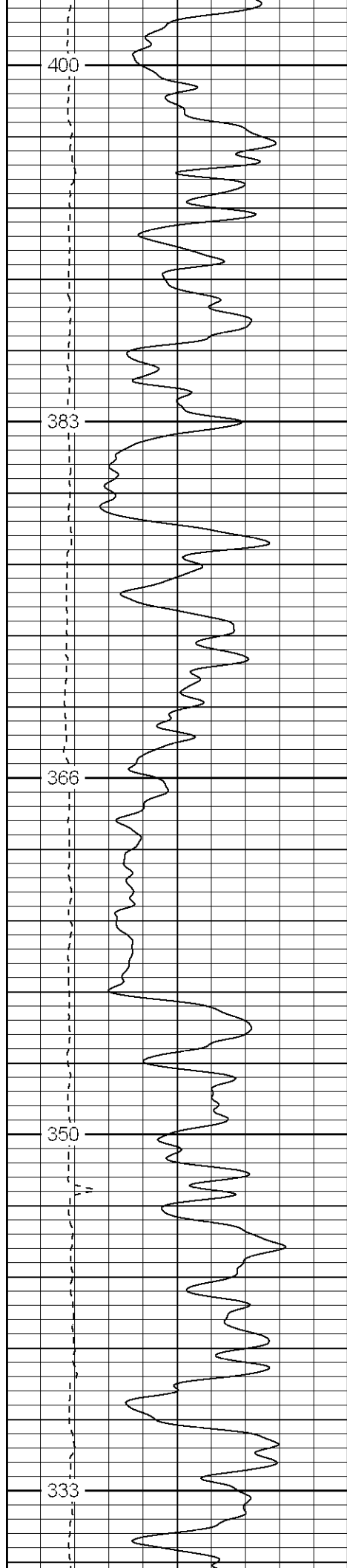
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 Presentation Format: cdl
 Dataset Creation: Mon Aug 27 15:34:22 2007 by Calc Open-Cased 070508
 Charted by: Depth in Feet scaled 1:240

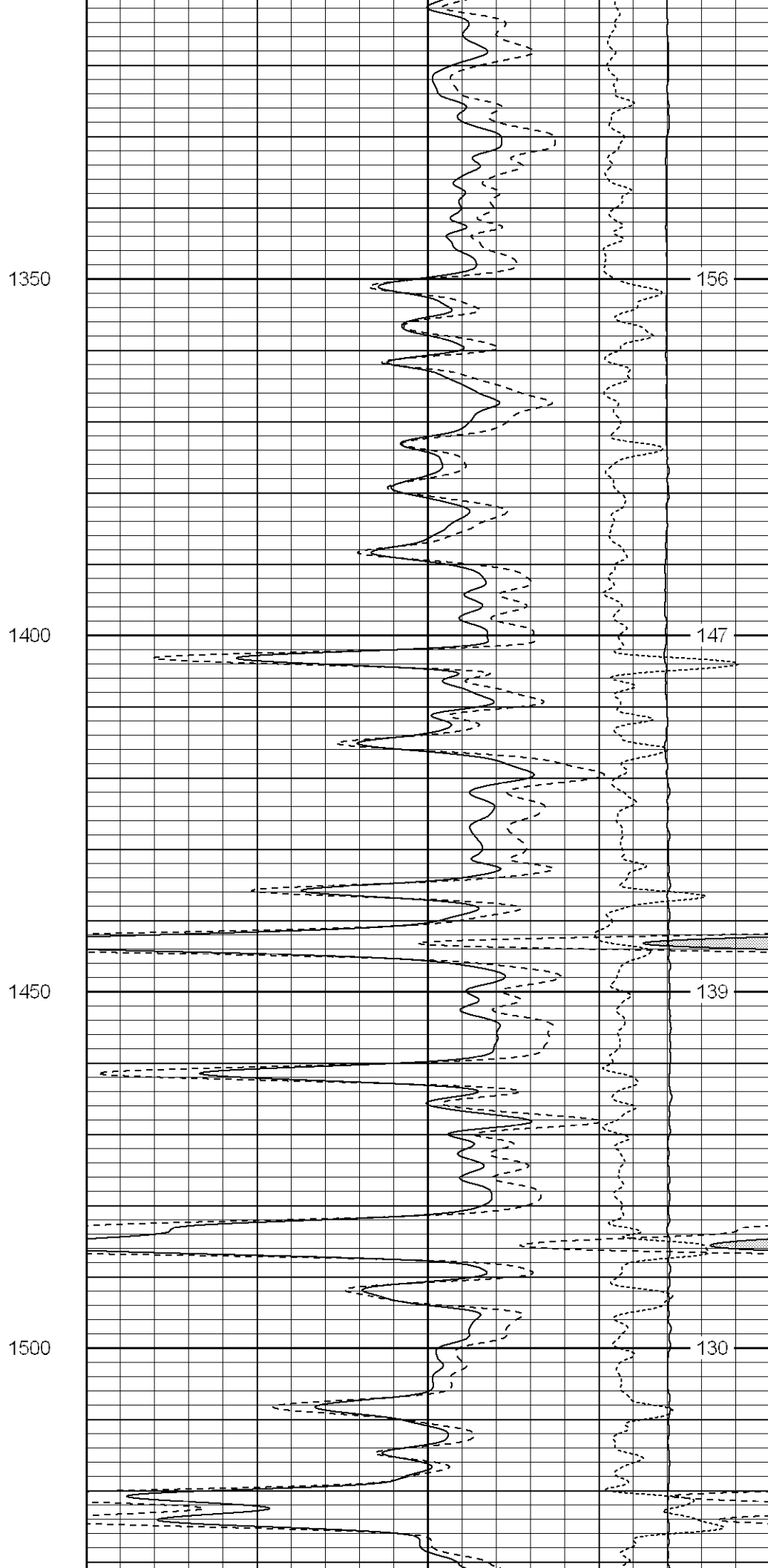
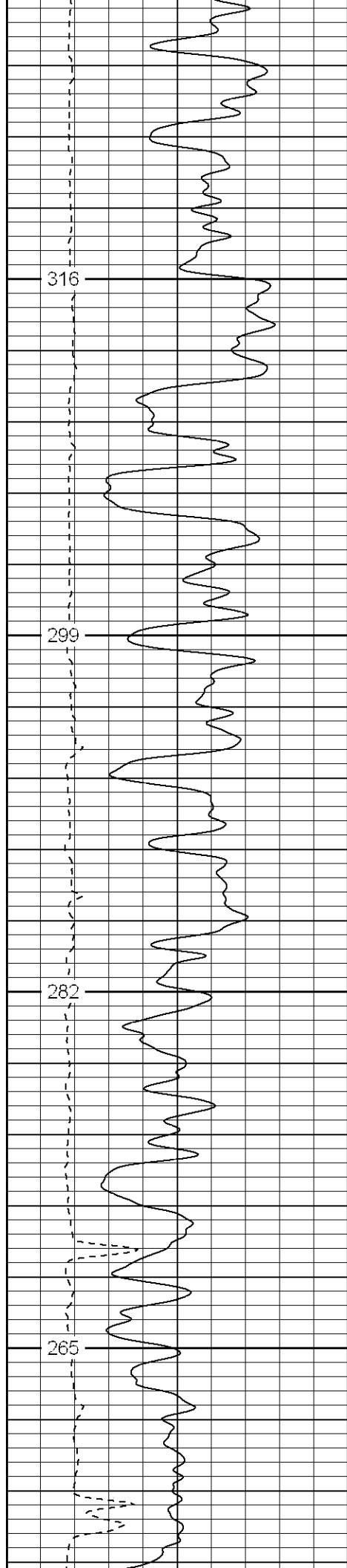
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6	DCAL (in)	16	1	RHOB (g/cc)	2
TBHV (ft3)			30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0
					ABHV (ft3)

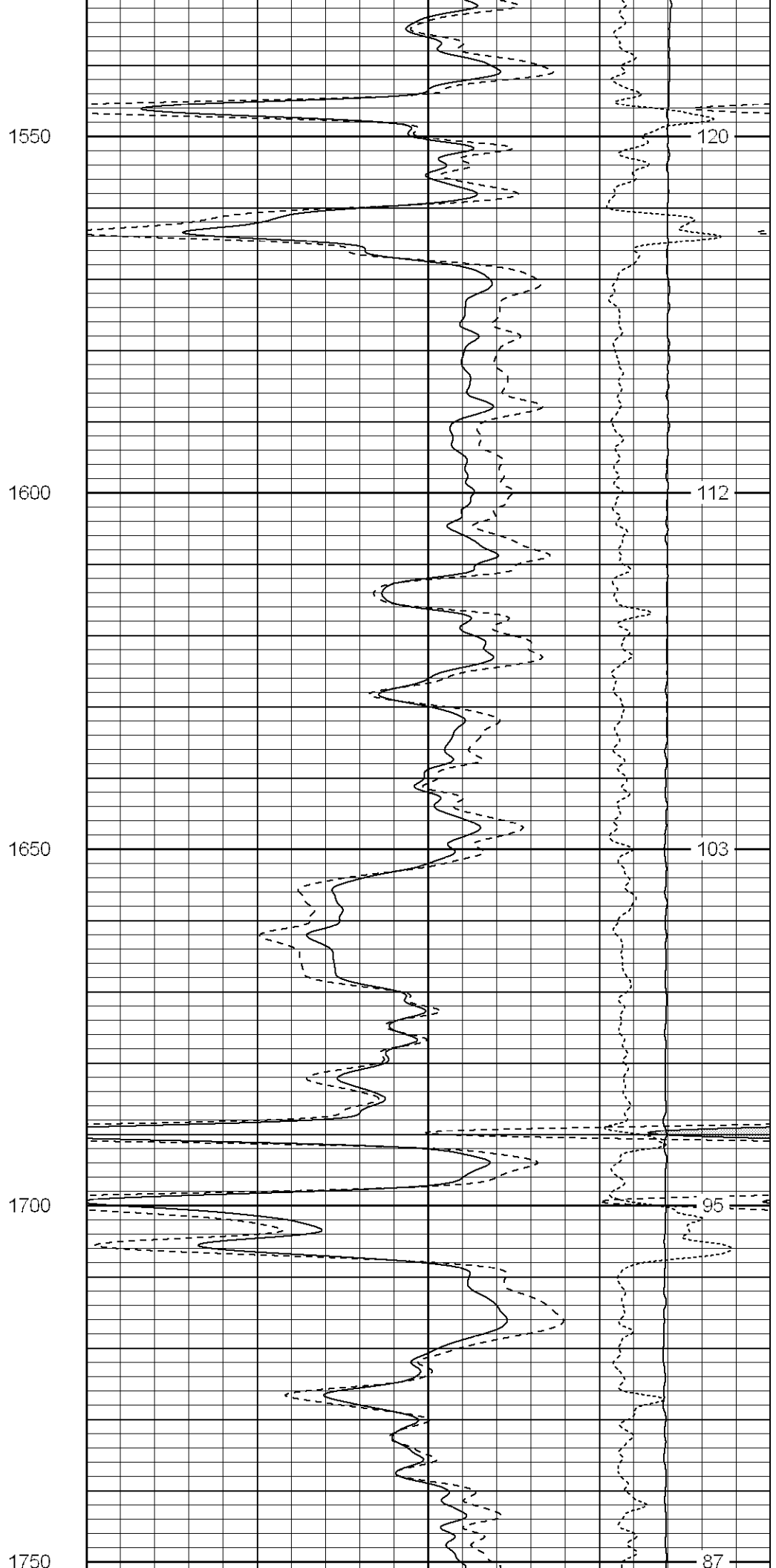
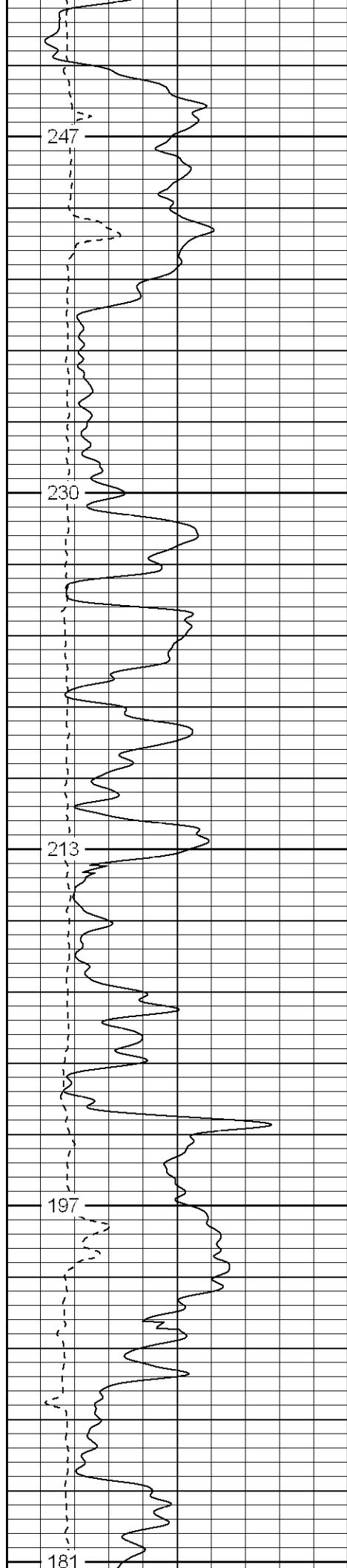


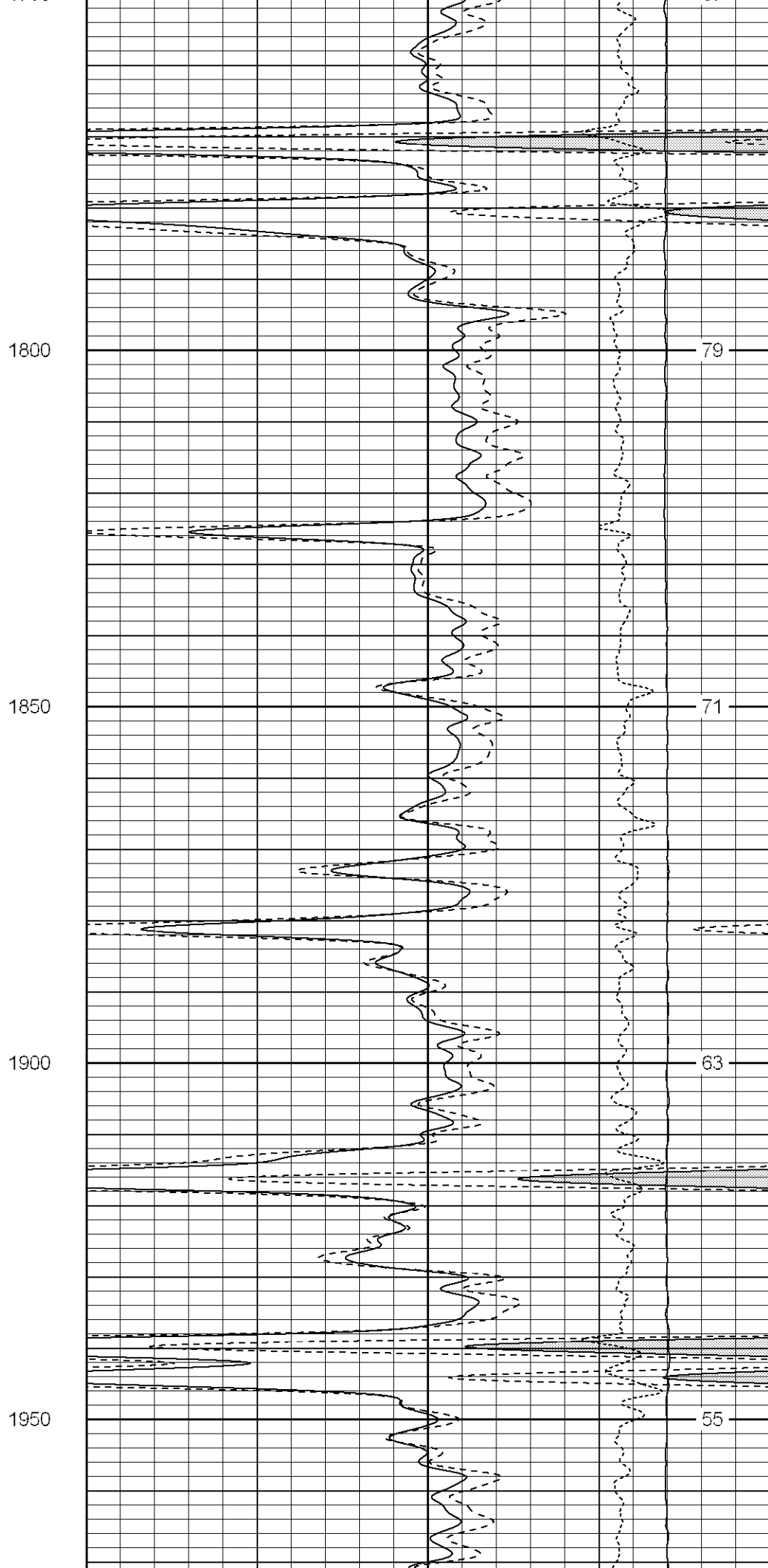
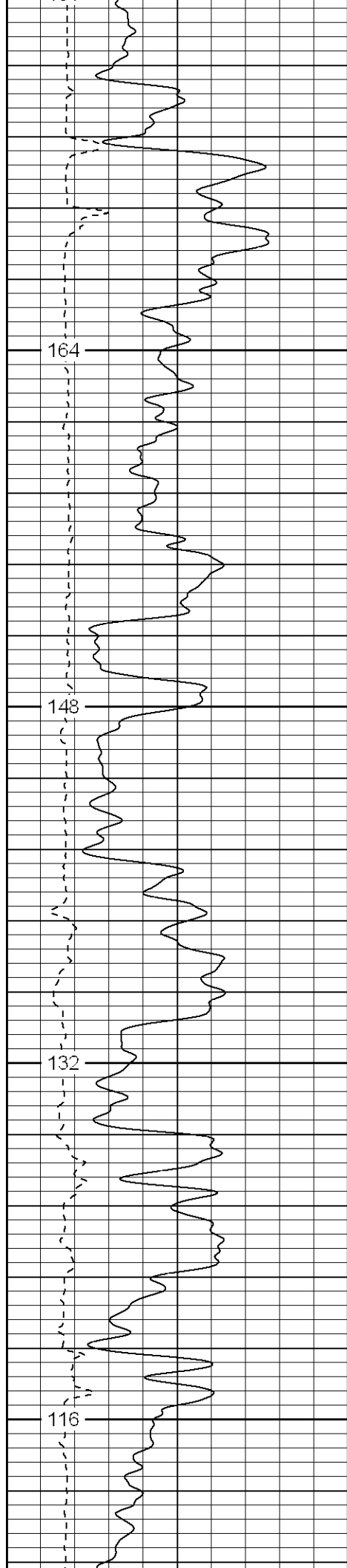


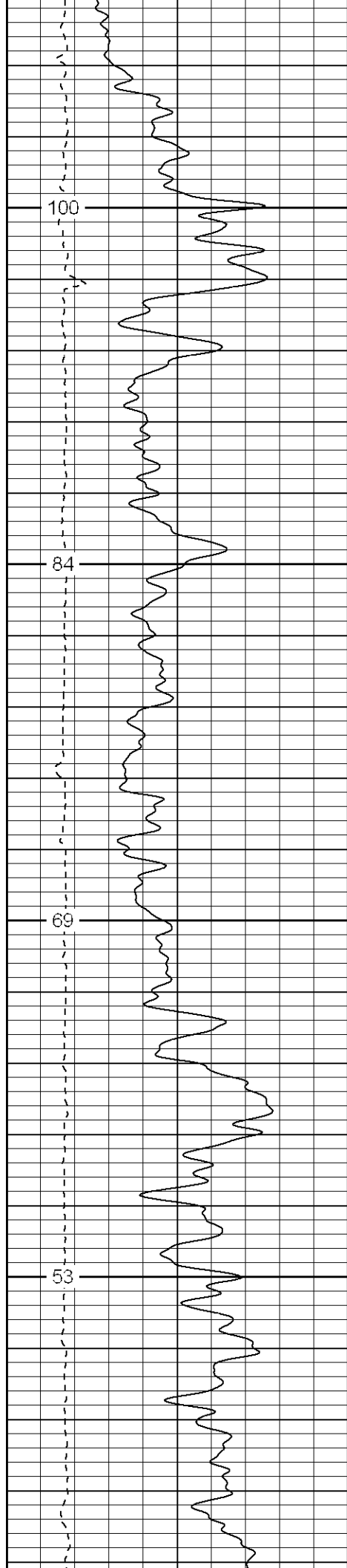










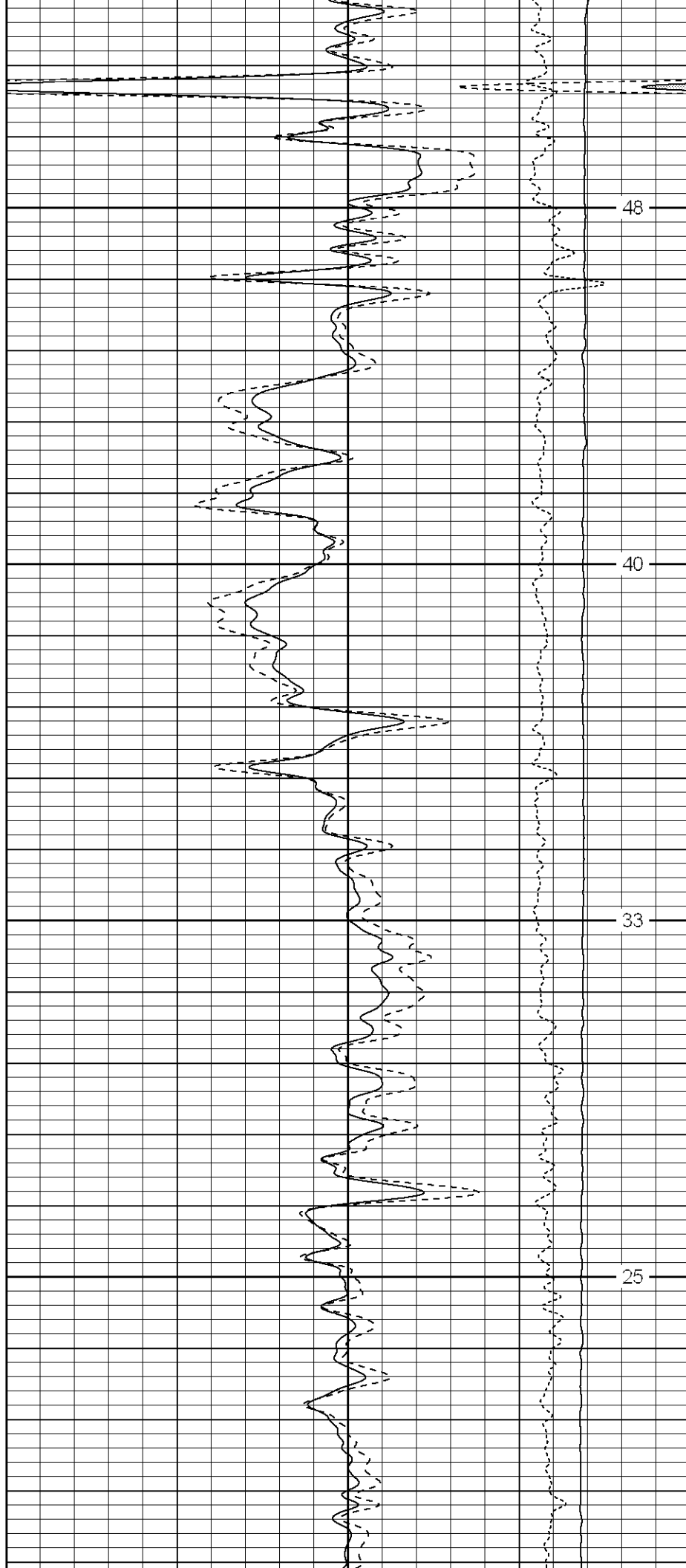


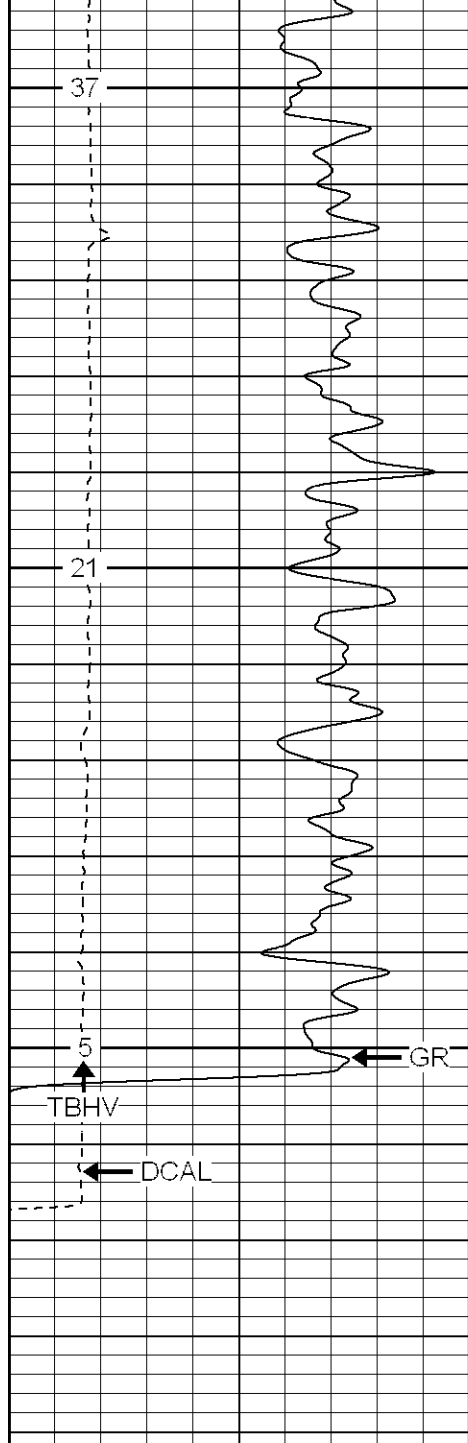
2000

2050

2100

2150



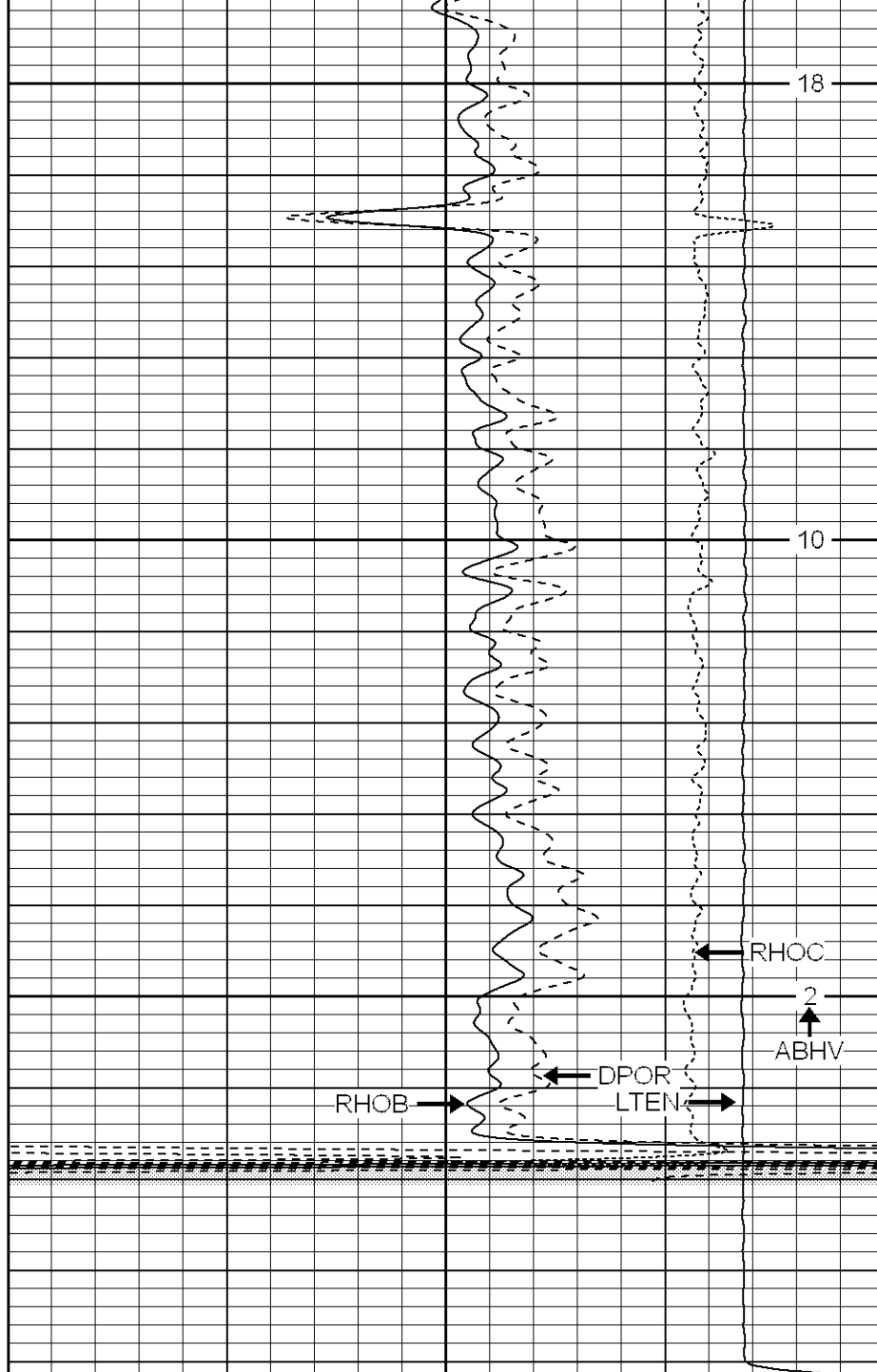


0 GR (GAPI) 200
6 DCAL (in) 16
TBHV (ft3)

2200

2250

2300



2 RHOB (g/cc) 3
1 RHOB (g/cc) 2
30 DPOR (pu) -10

-0.5 RHOOC (g/cc) 0.5
4000 LTEN (lb) 0

ABHV (ft3)



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Main Pass

Database File: xtohr2514.db
Dataset Pathname: pass2.1
Presentation Format: cdnl
Dataset Creation: Mon Aug 27 15:34:22 2007 by Calc Open-Cased 070508

Charted by:

Depth in Feet scaled 1:240

0 GR (GAPI) 200

6 DCAL (in) 16

TBHV (ft3)

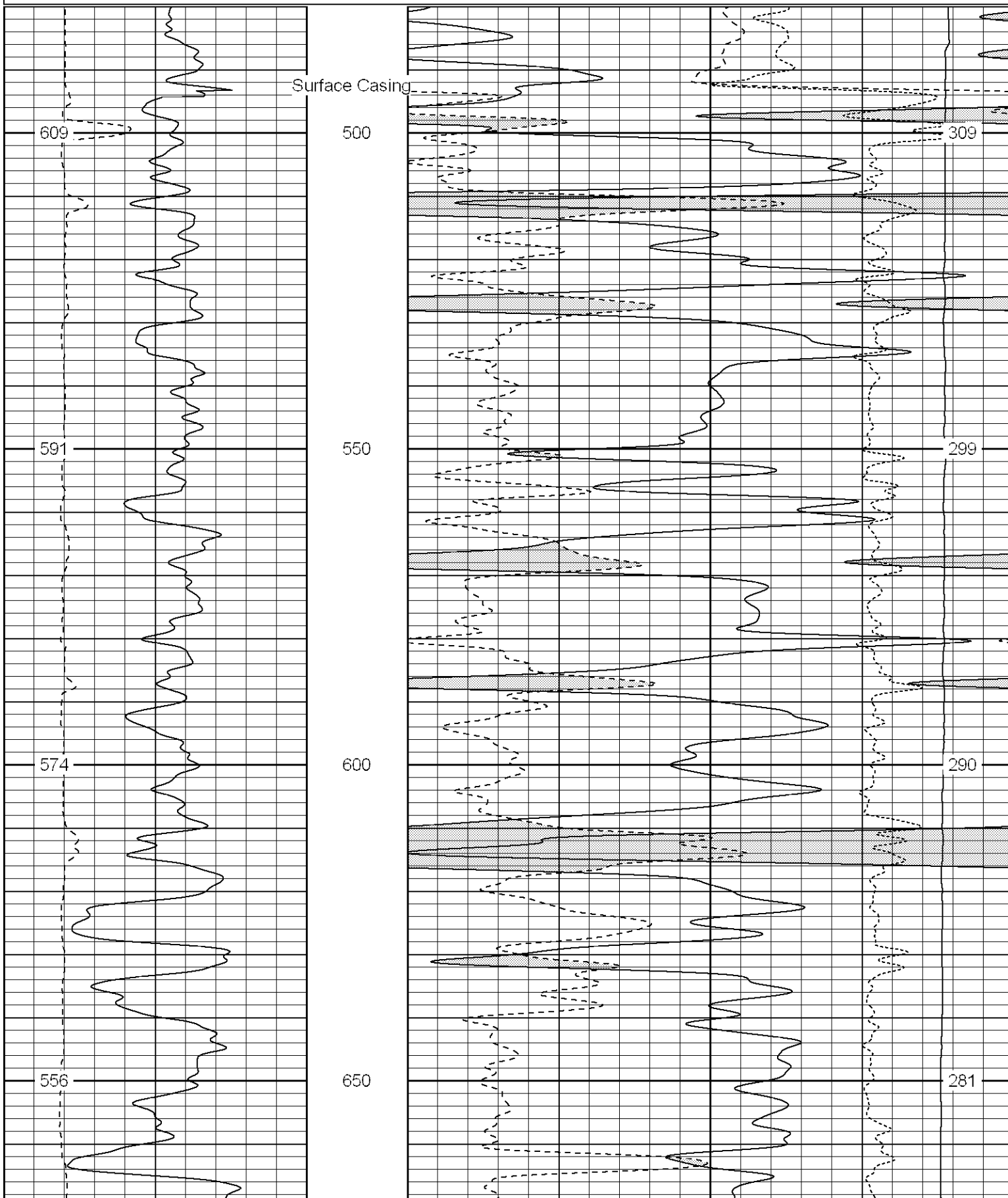
30 NPOR (pu) -10

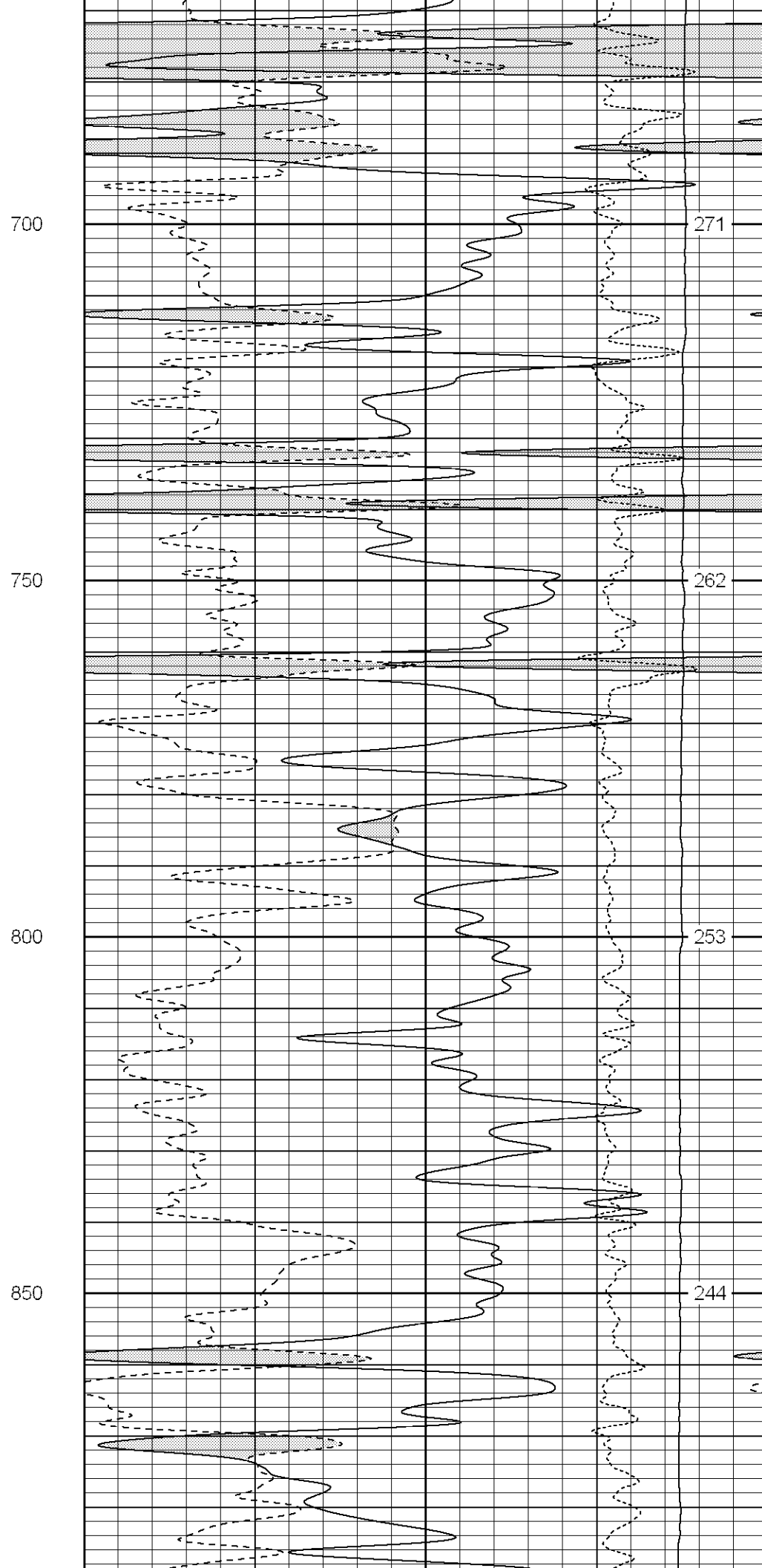
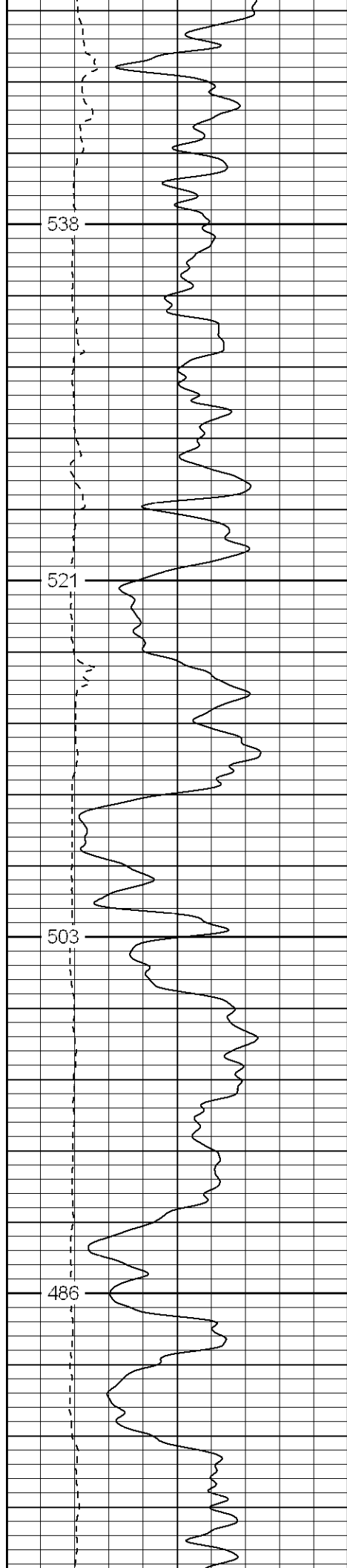
30 DPOR (pu) -10

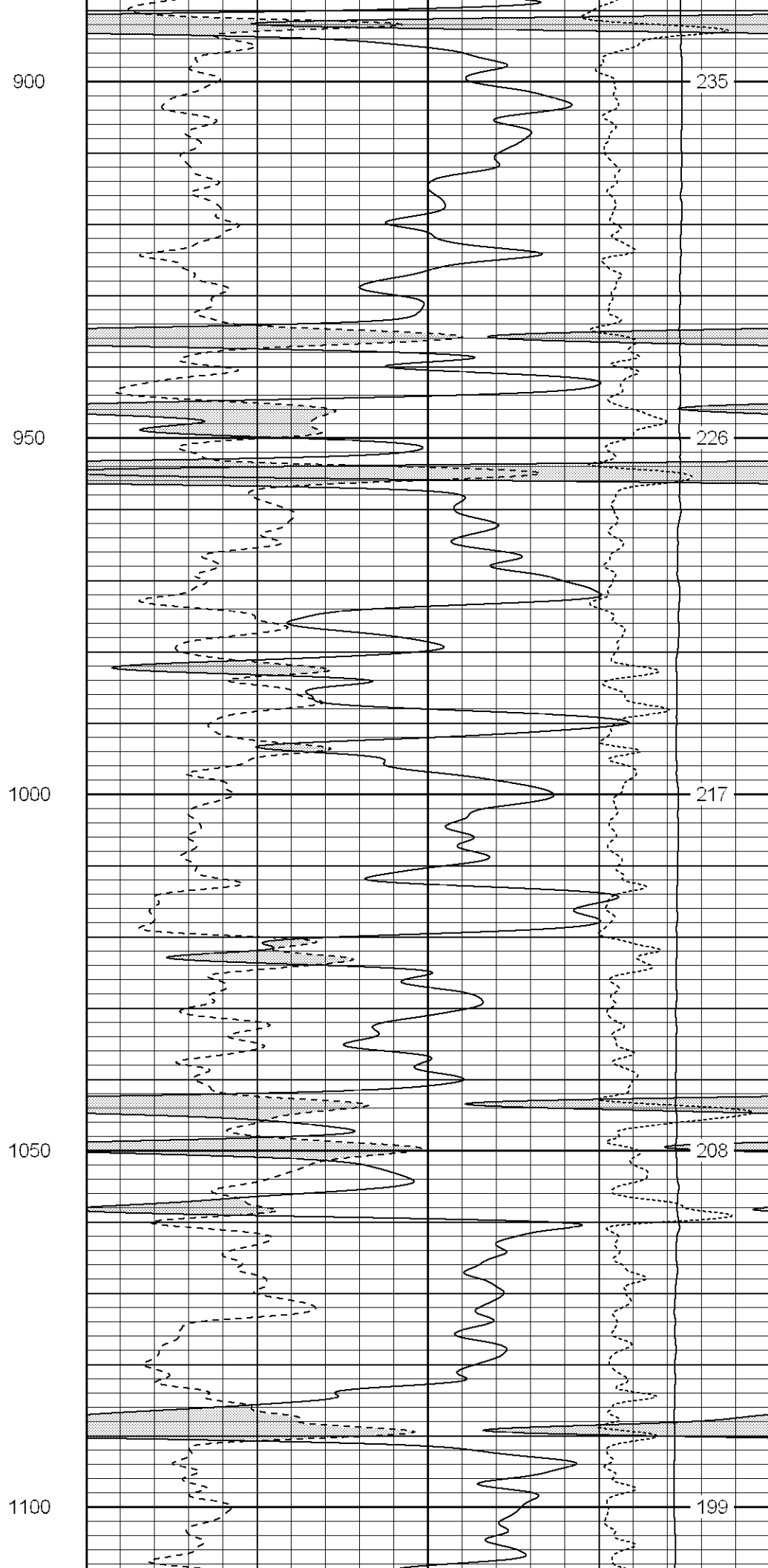
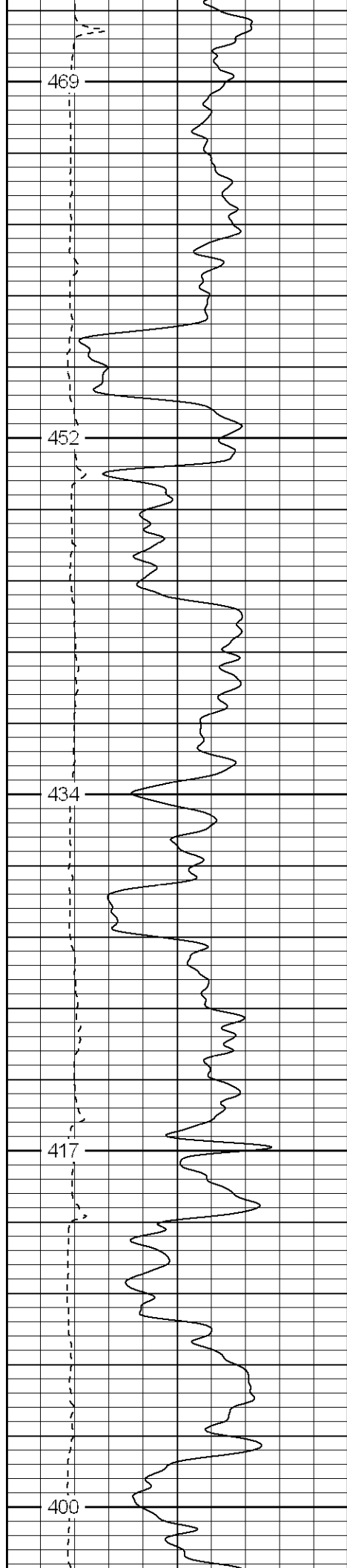
-0.5 RHOC (g/cc) 0.5

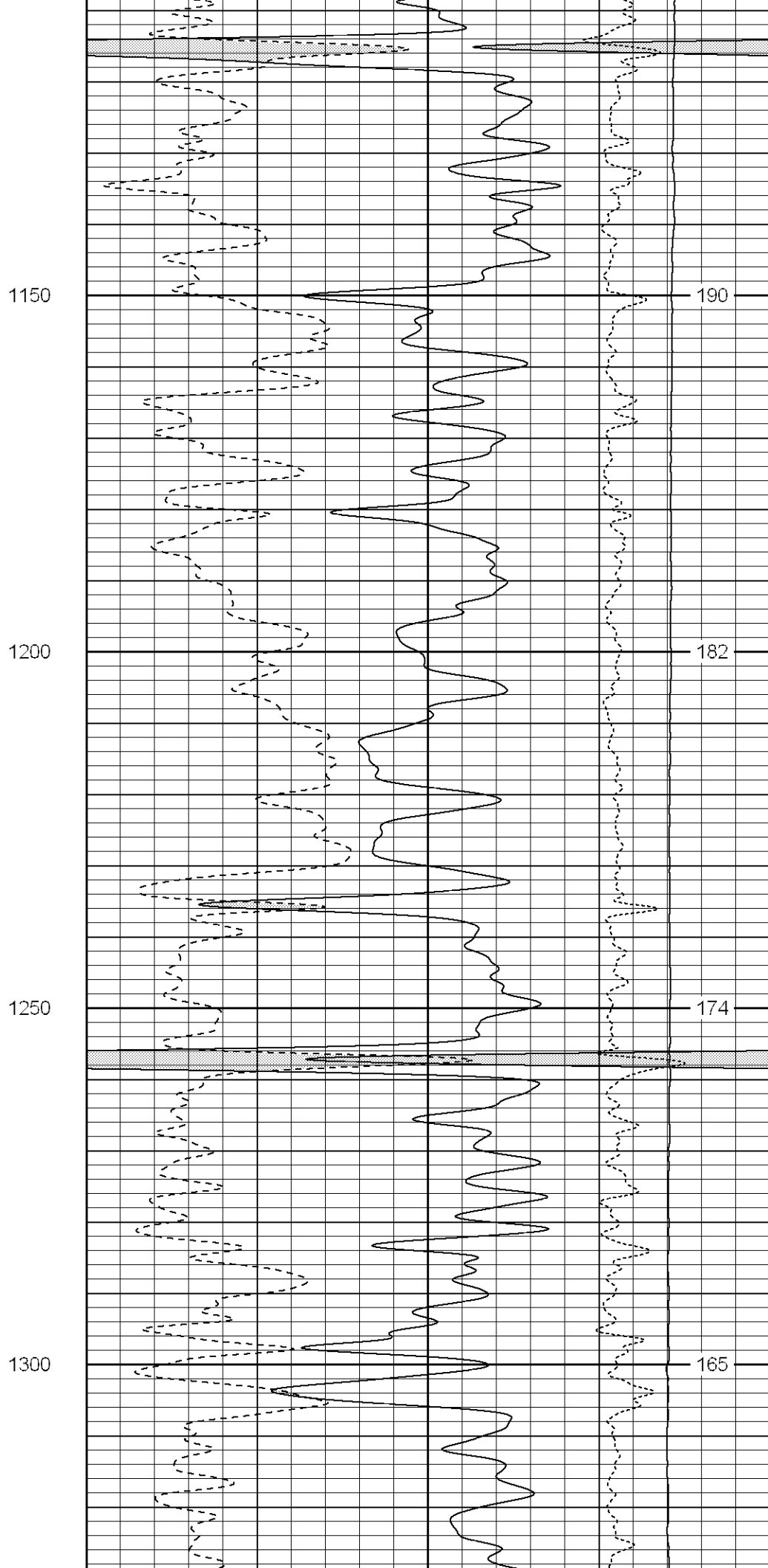
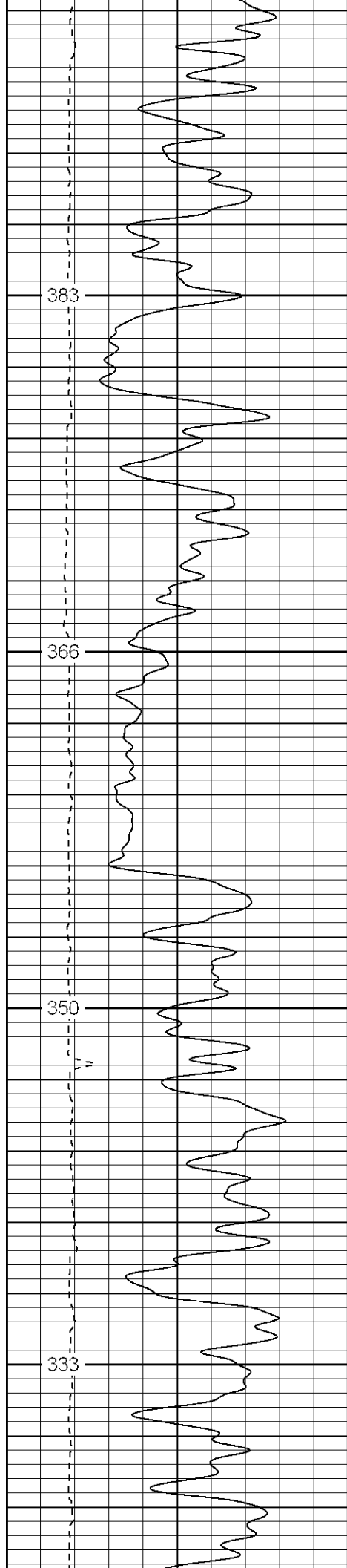
4000 LTEN (lb) 0

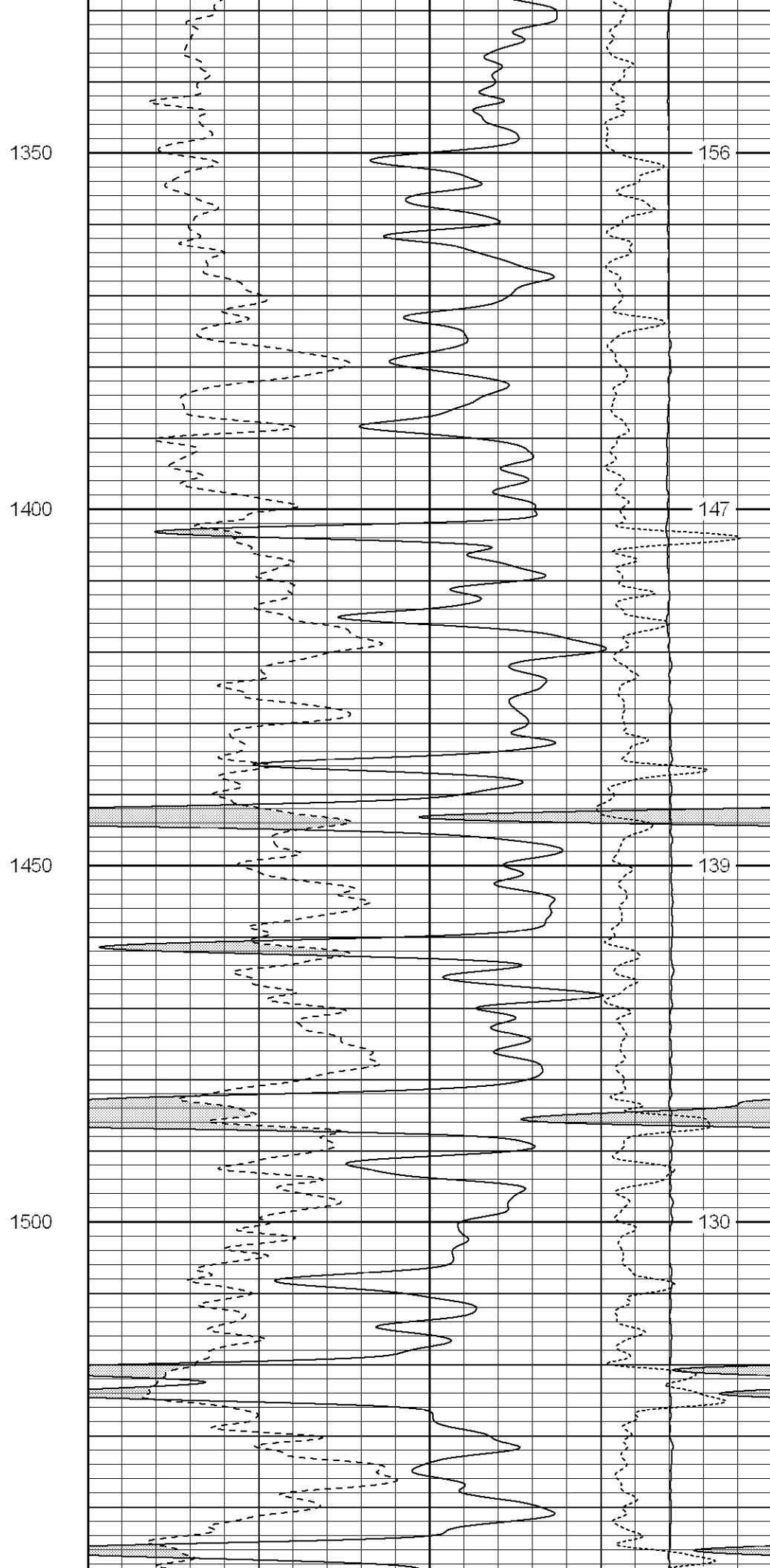
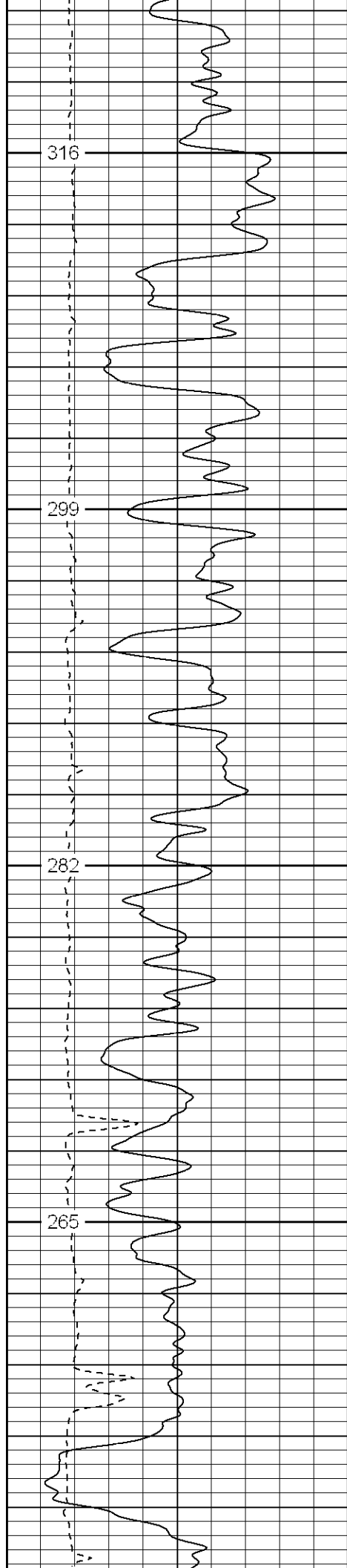
ABHV (ft3)

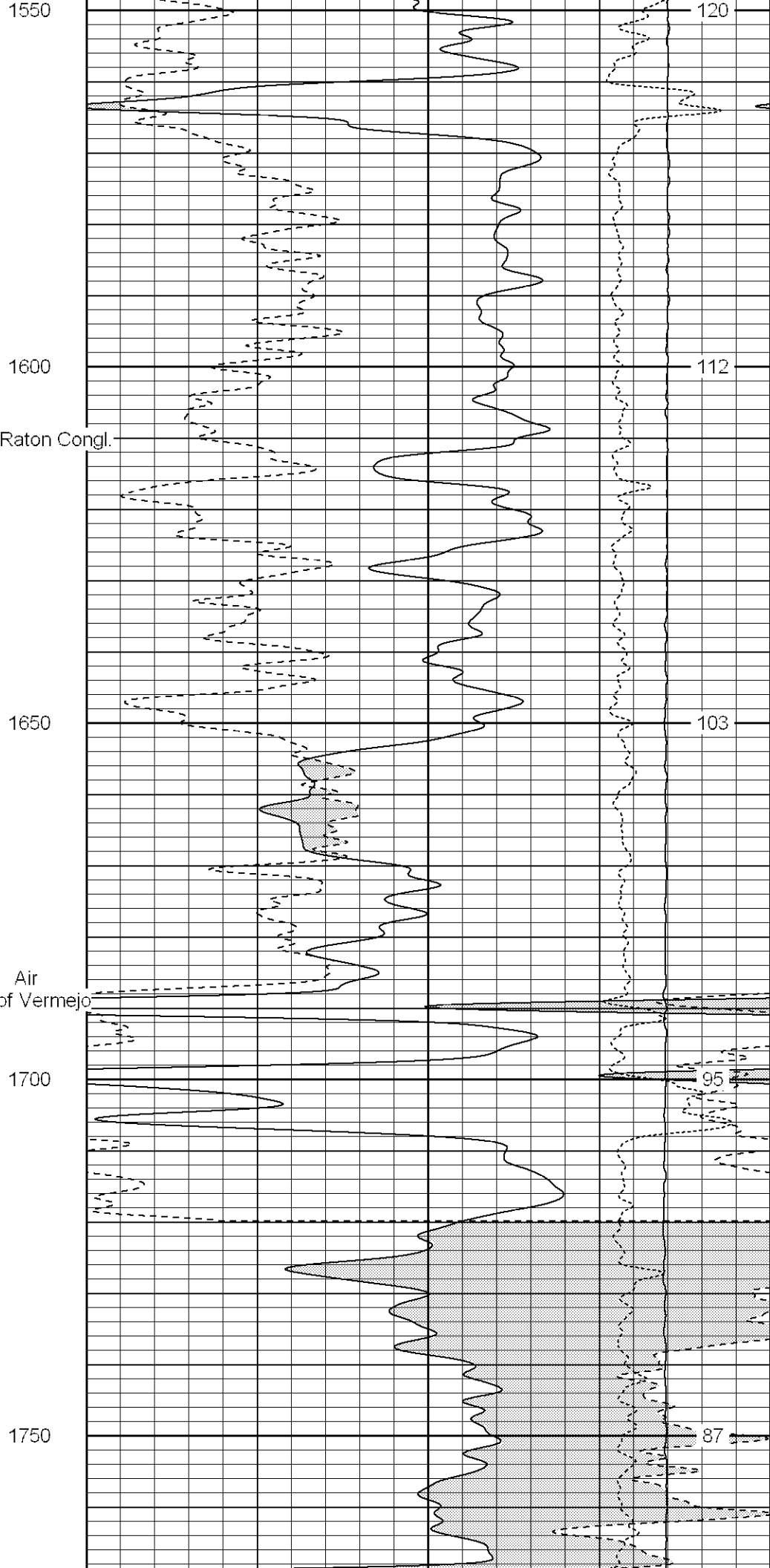
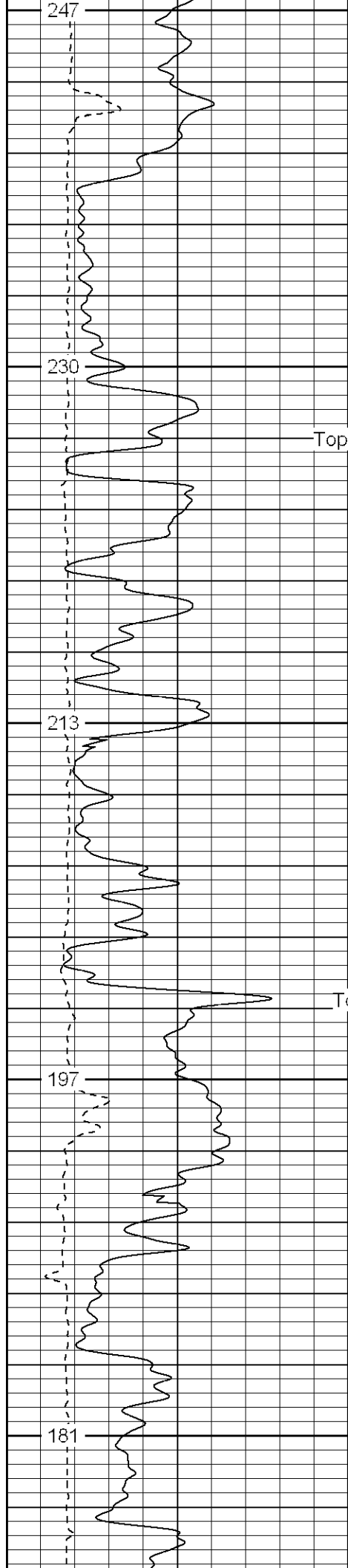


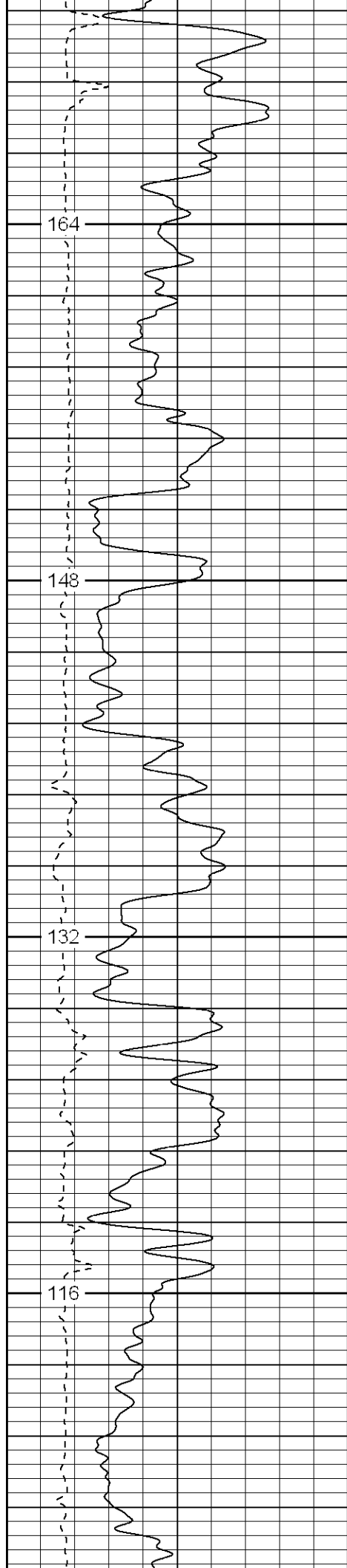












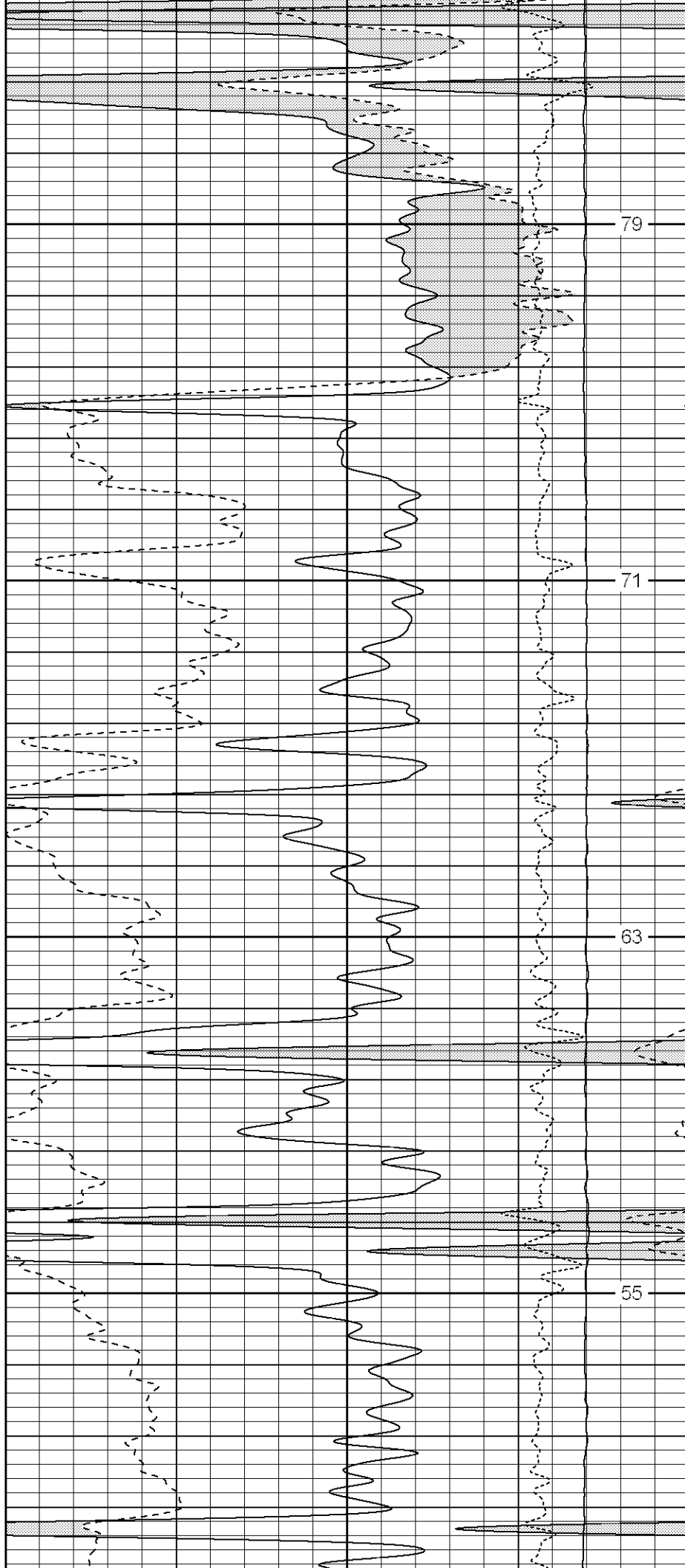
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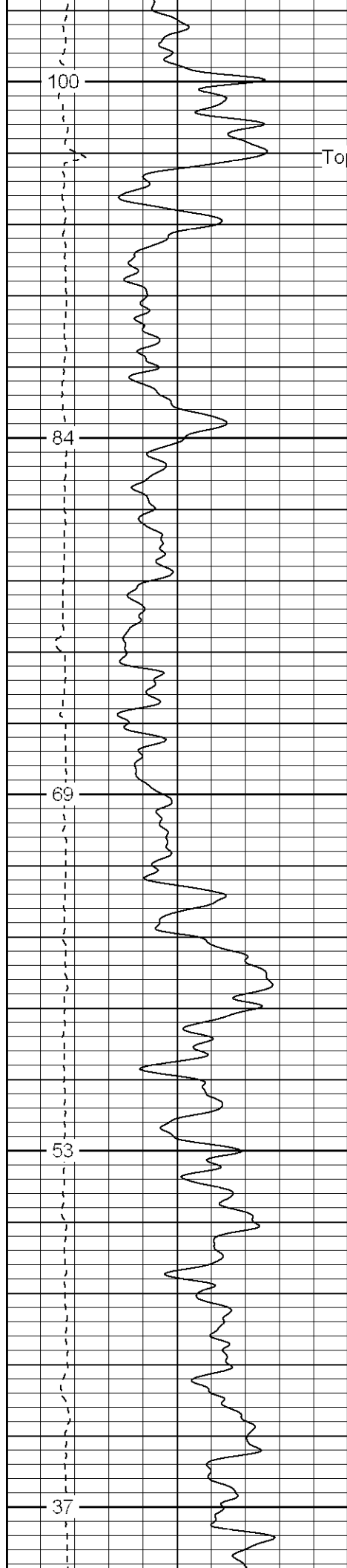
Foam

1850

1900

1950





2000

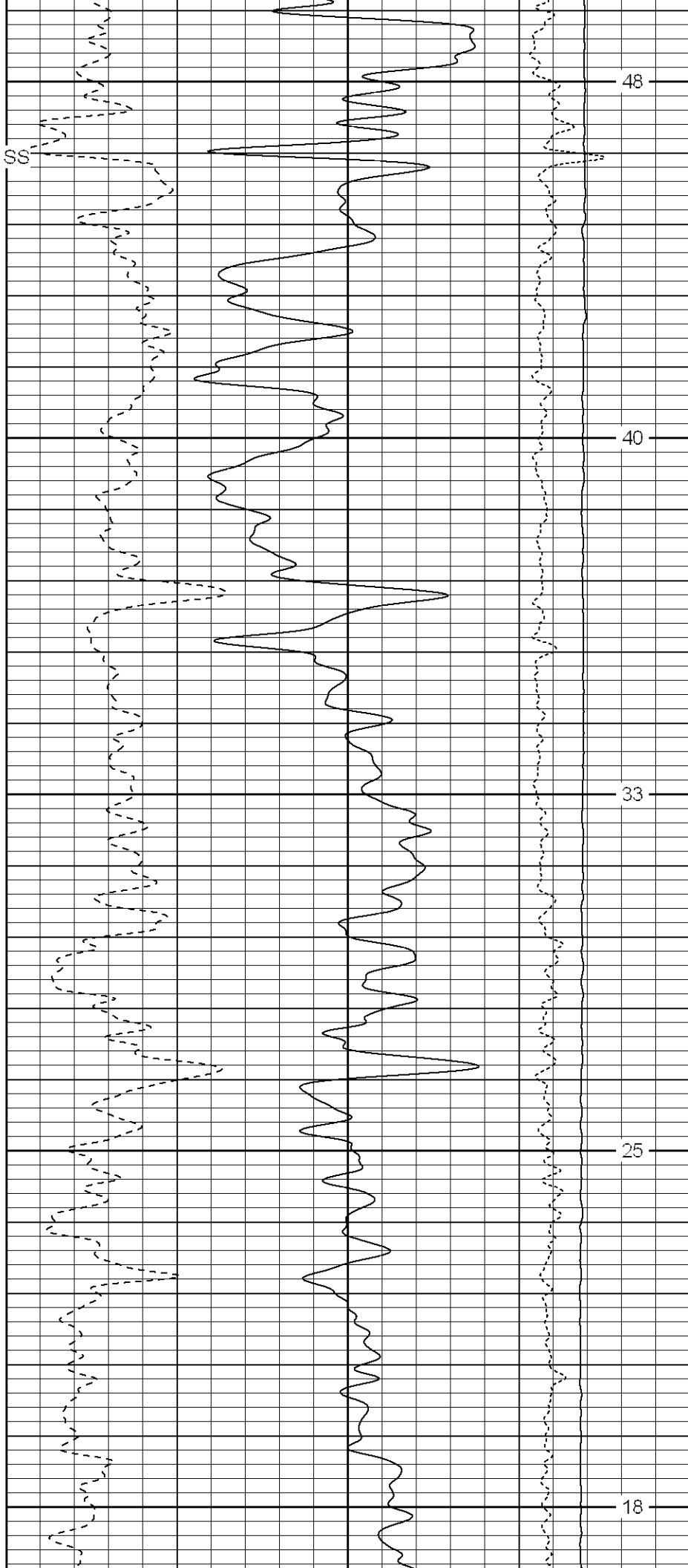
Top of Trinidad SS

2050

2100

2150

2200



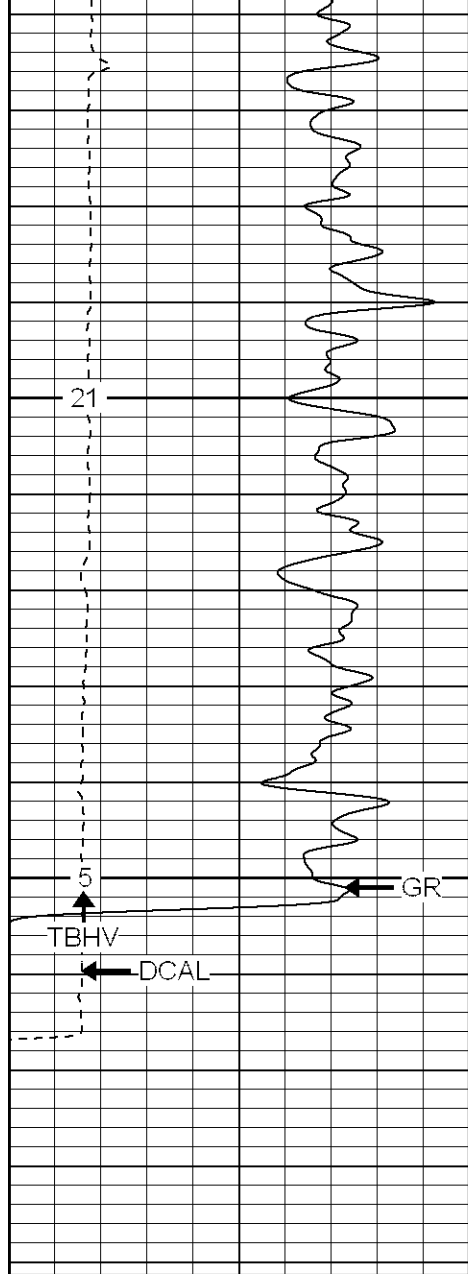
48

40

33

25

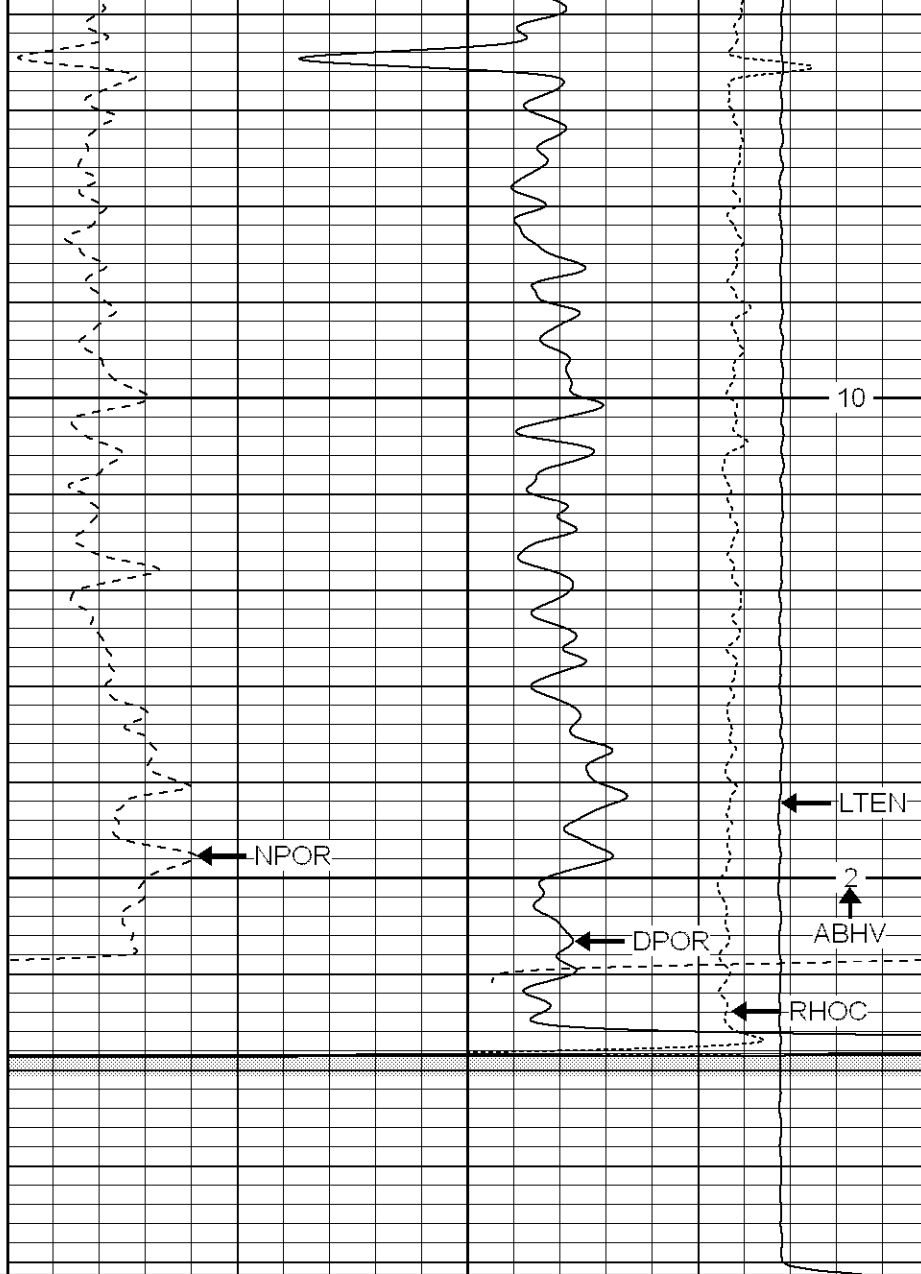
18



0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

2250

2300



30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		



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Repeat Pass

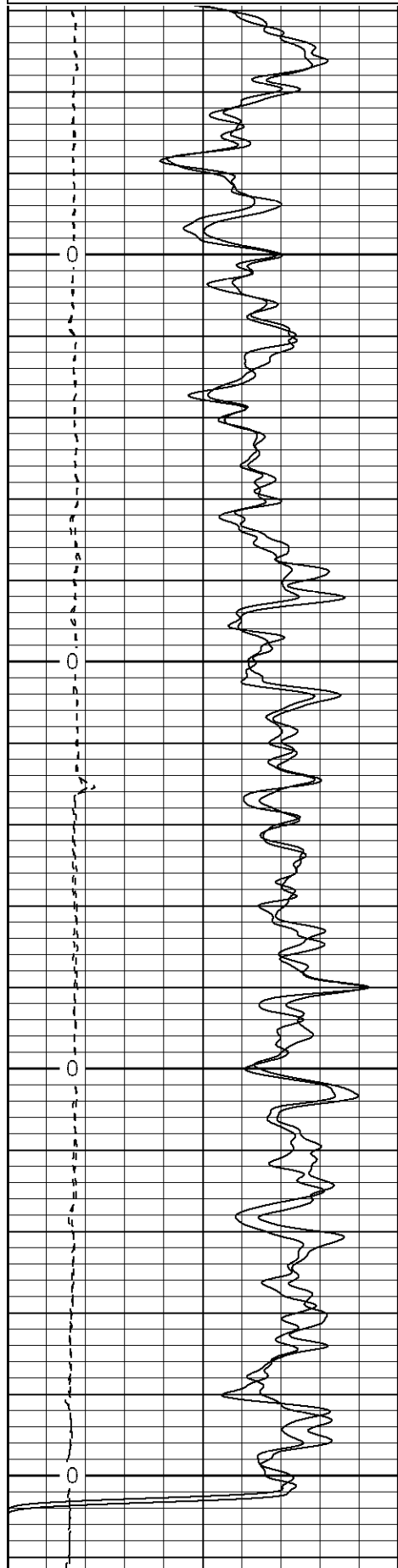
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Presentation Format: cdnl
Dataset Creation: Mon Aug 27 14:44:30 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:240

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6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16

30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10

0	LOCAL-repeat (in)	10
TBHV (ft3)		

50	LFOR-repeat (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
4000	LTEN-repeat (lb)	0
ABHV (ft3)		

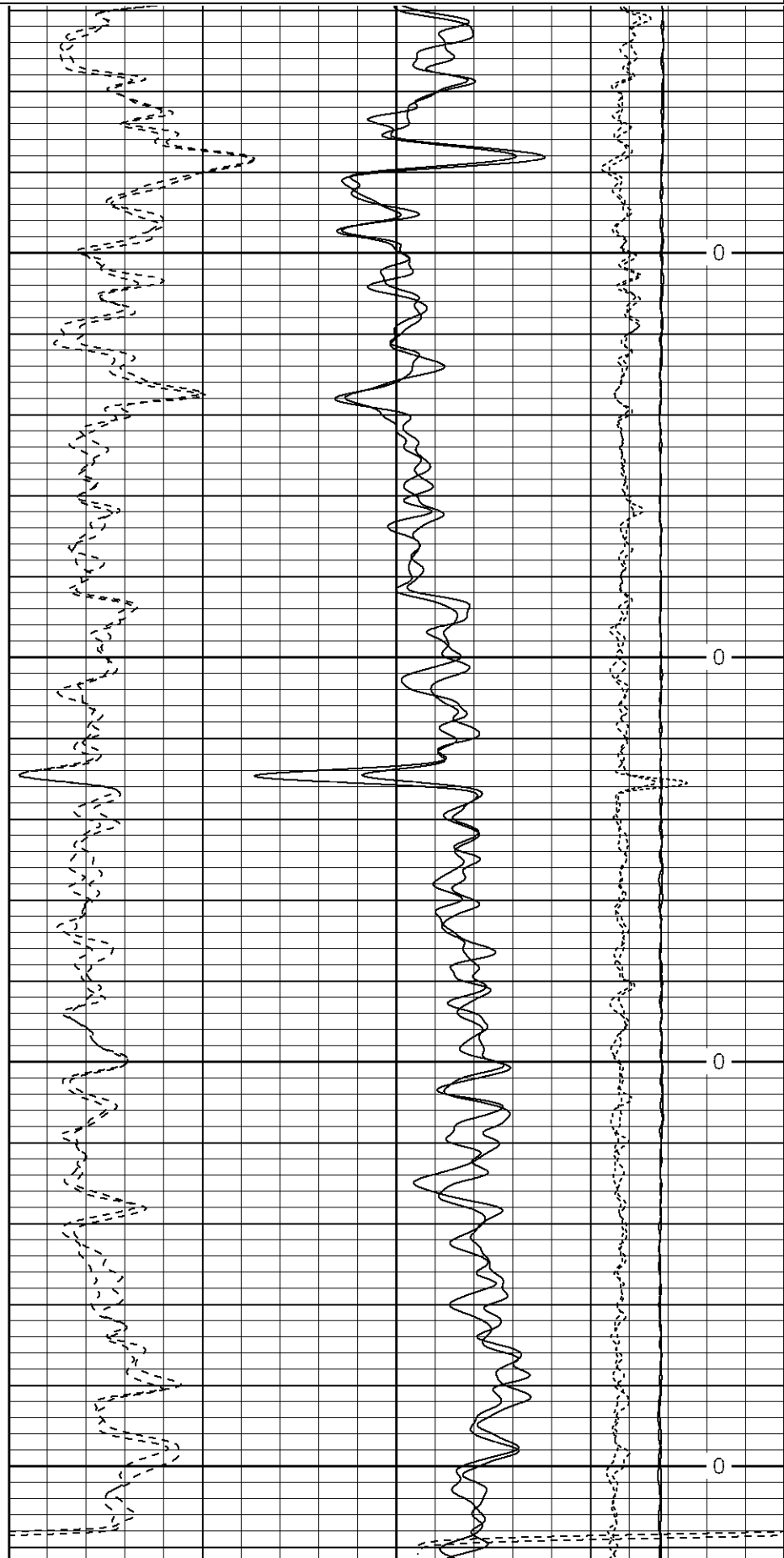


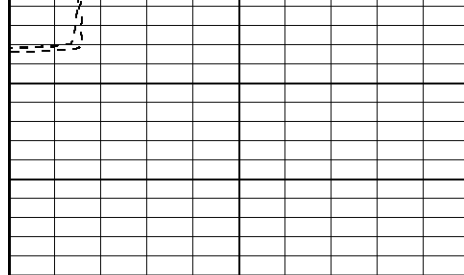
2150

2200

2250

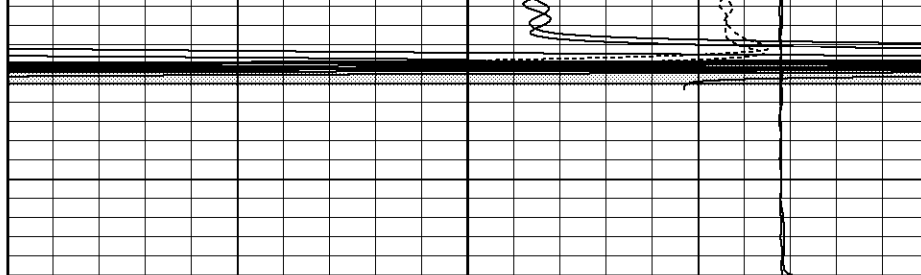
2300





0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16

TBHV (ft3)



30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10

-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
4000	LTEN-repeat (lb)	0

ABHV (ft3)



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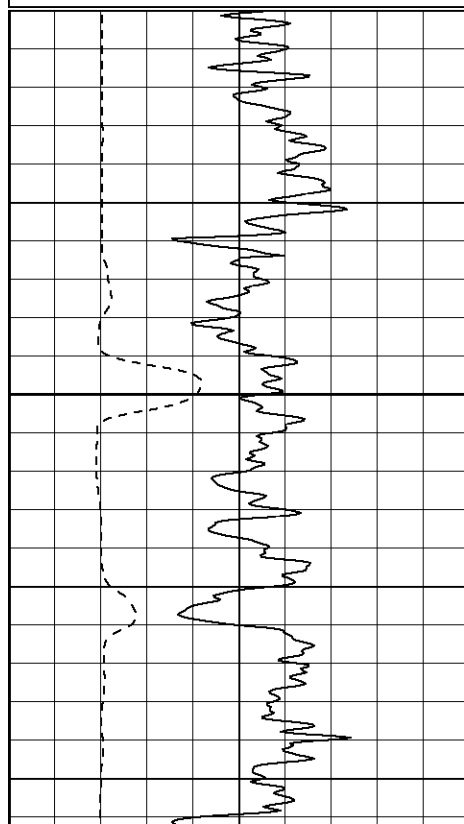
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High Resolution Pass

Database File: xtohr2514.db
Dataset Pathname: pass2.2
Presentation Format: cdlhr
Dataset Creation: Tue Aug 28 07:52:28 2007 by Calc Open-Cased 070508
Charted by: Depth in Feet scaled 1:120

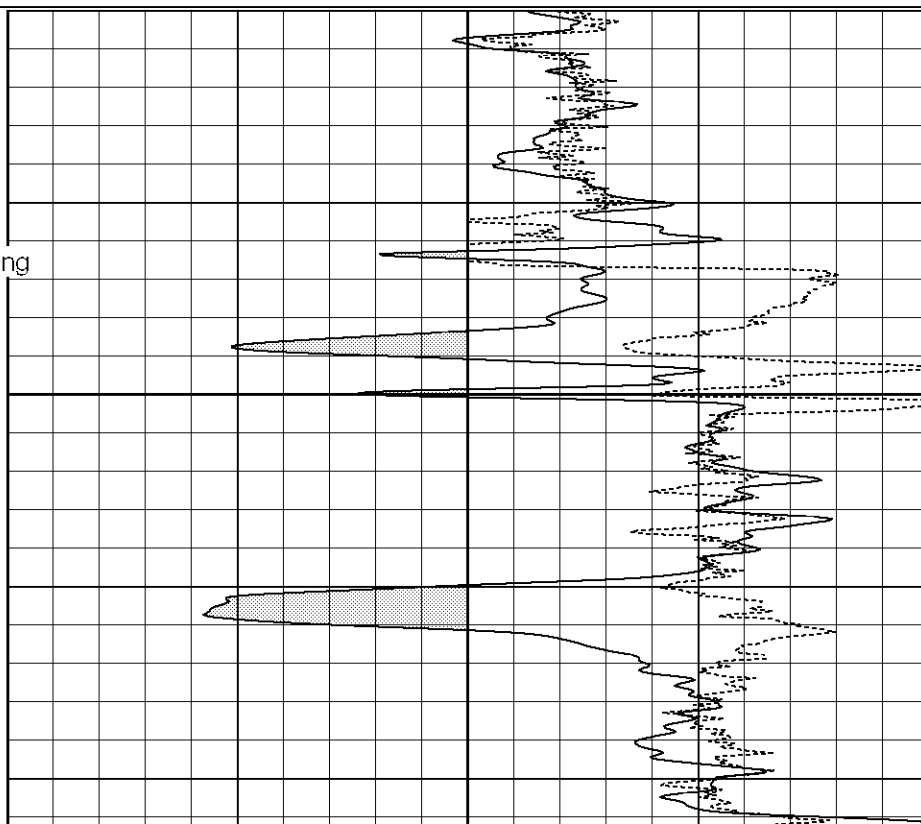
0	GR (GAPI)	200
6	DCAL (in)	16

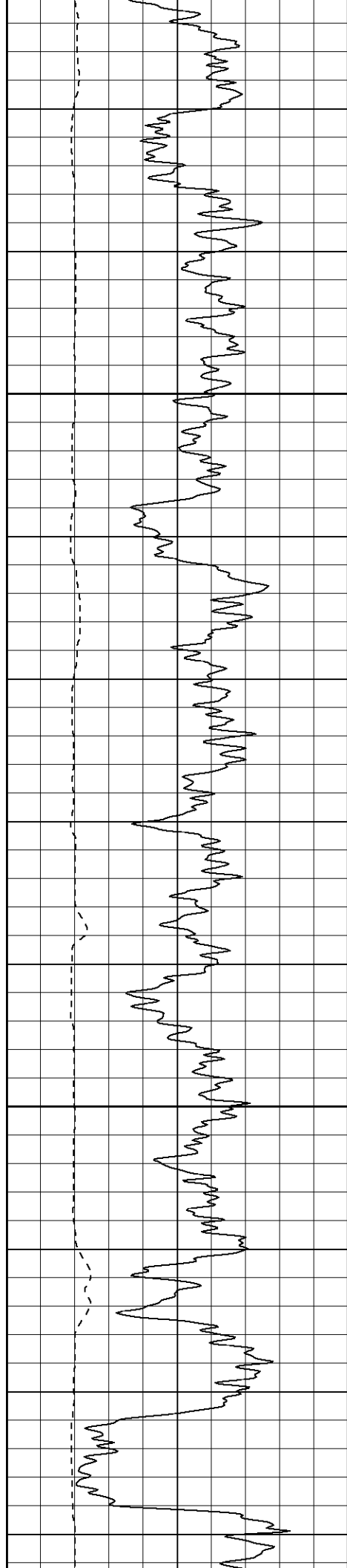
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



Surface Casing

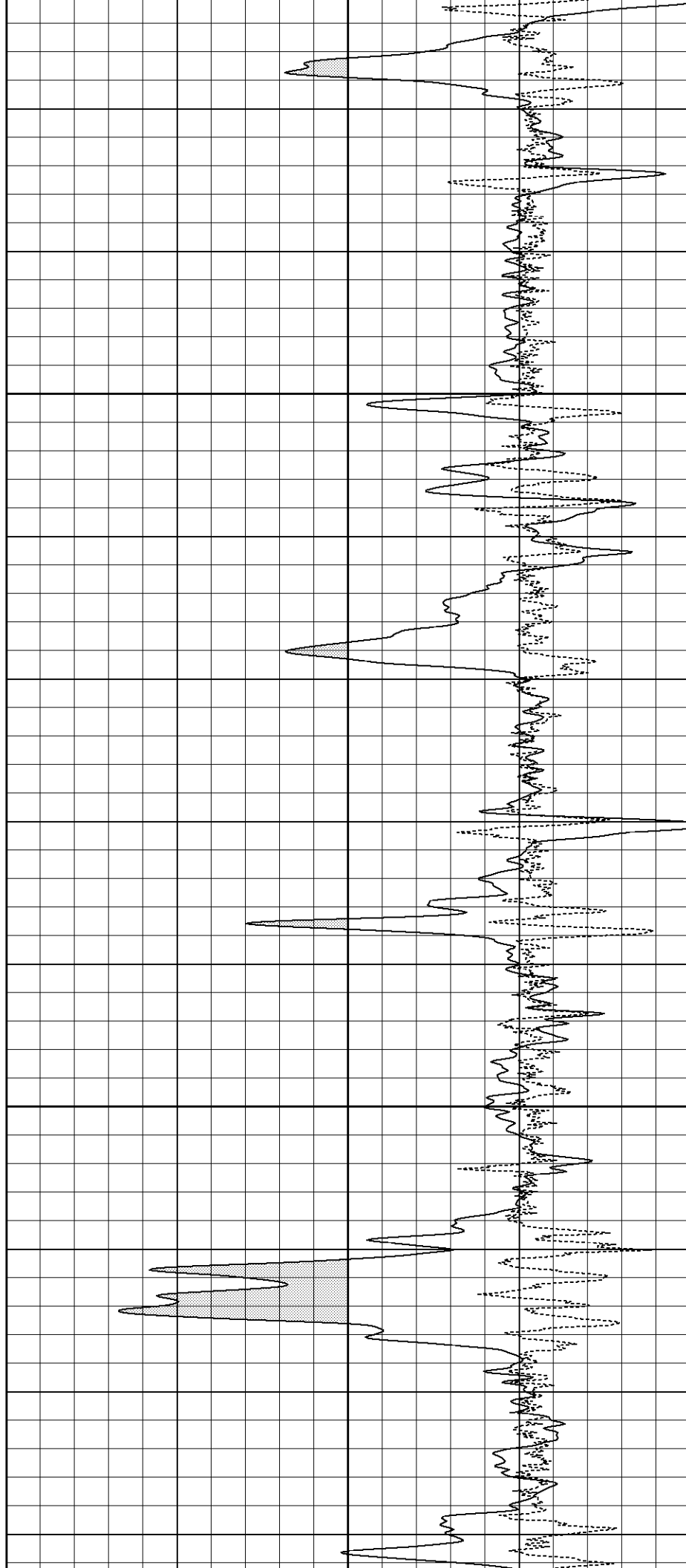
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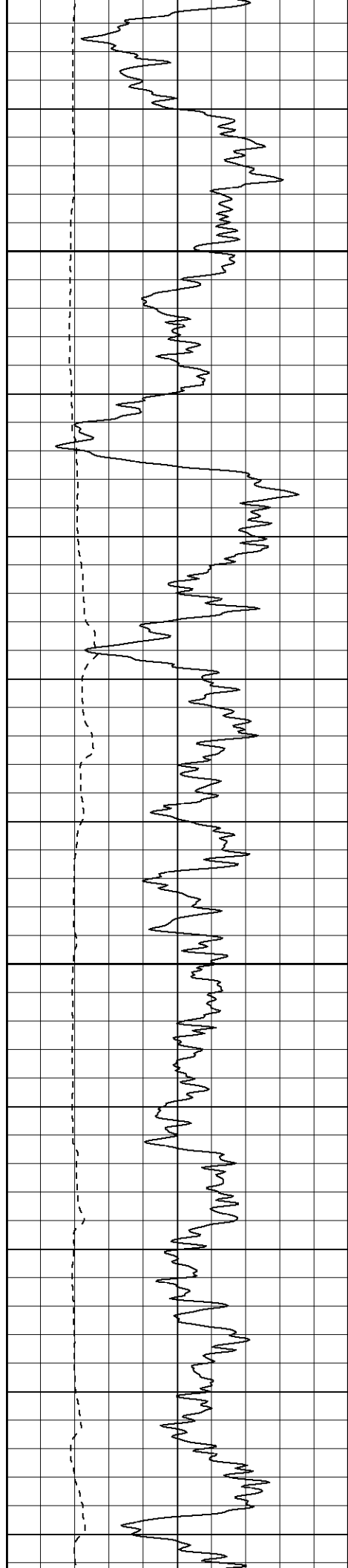




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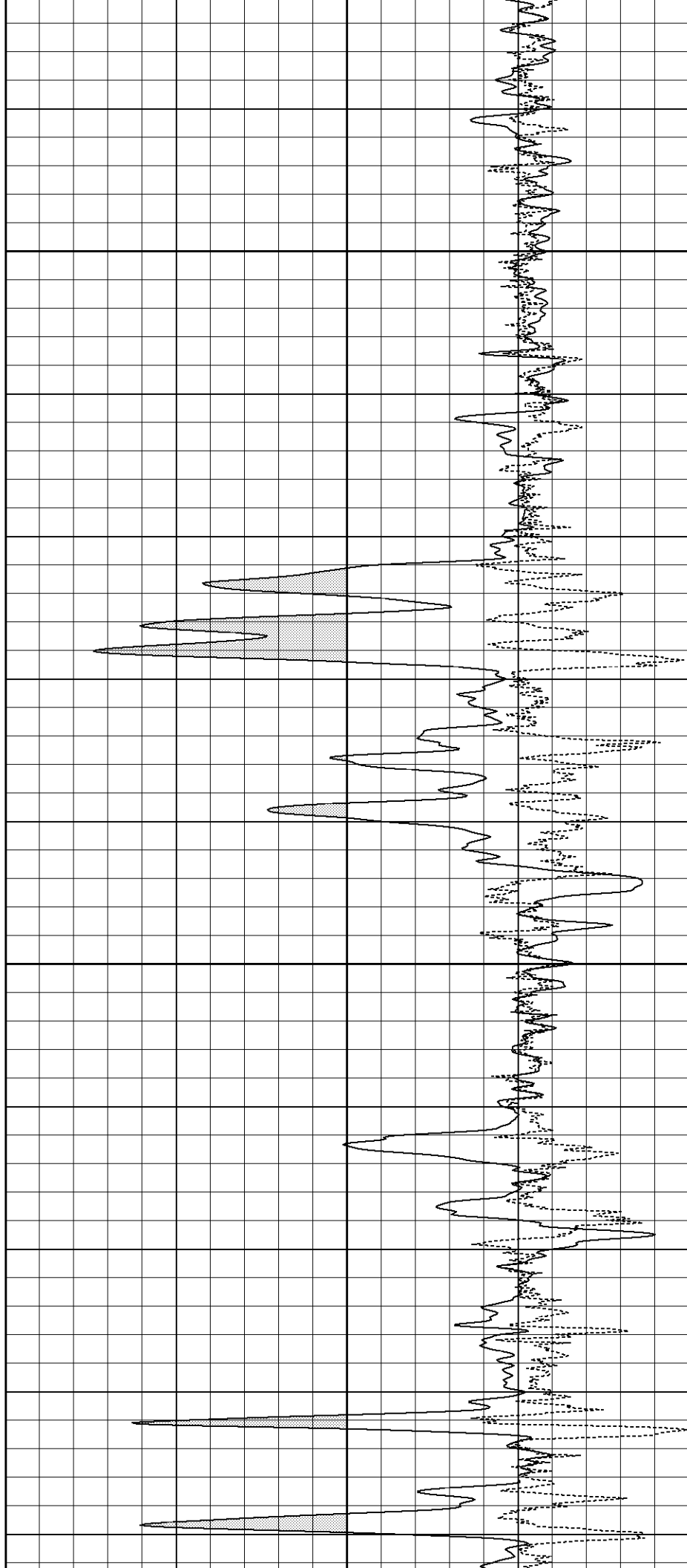
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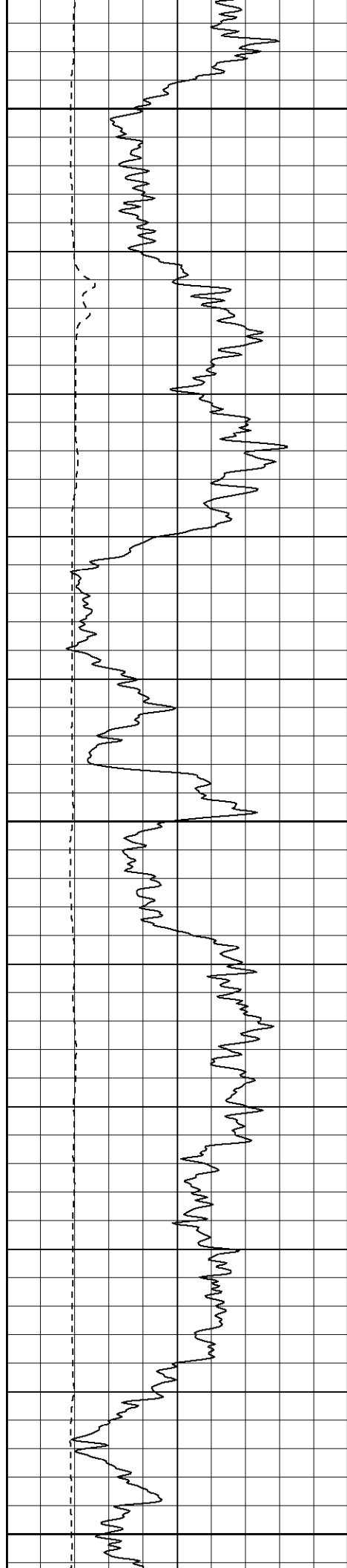




650

700

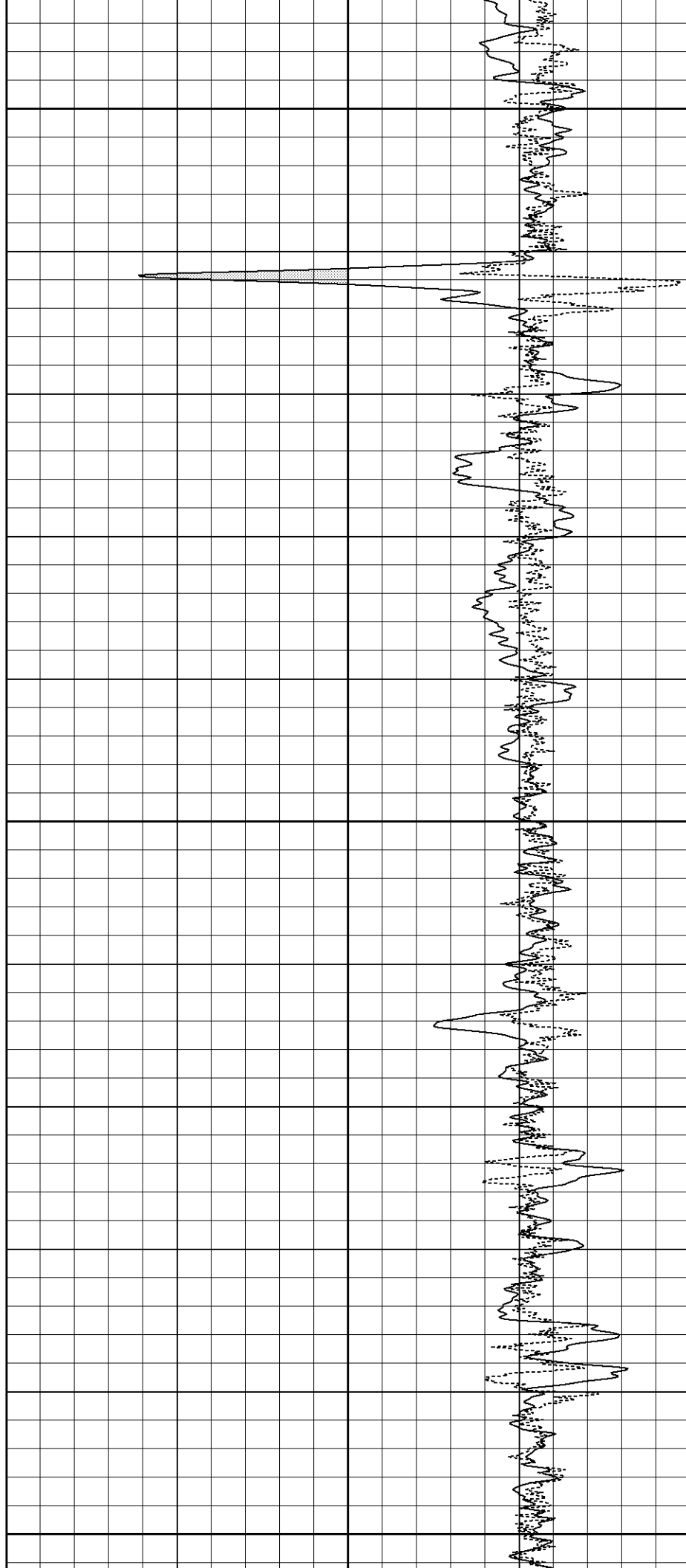


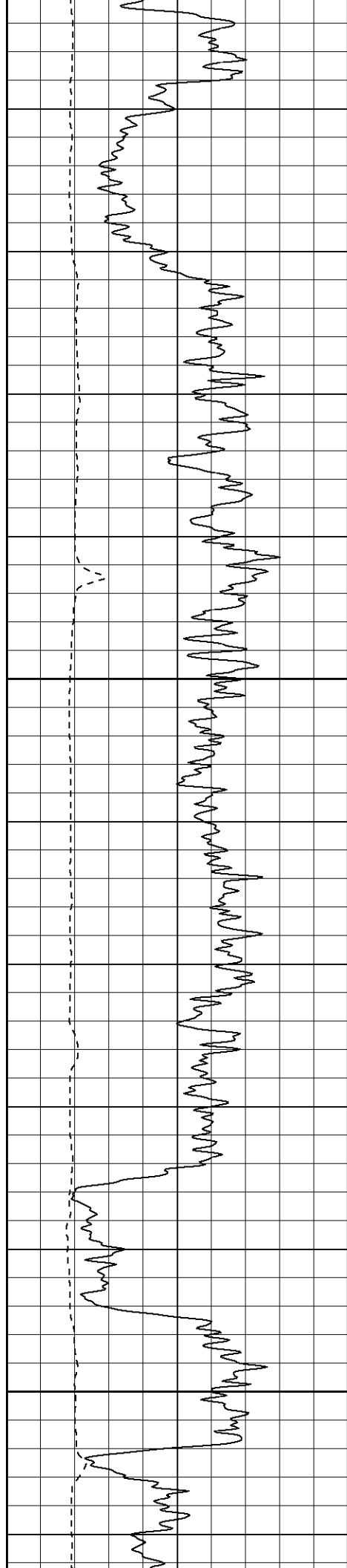


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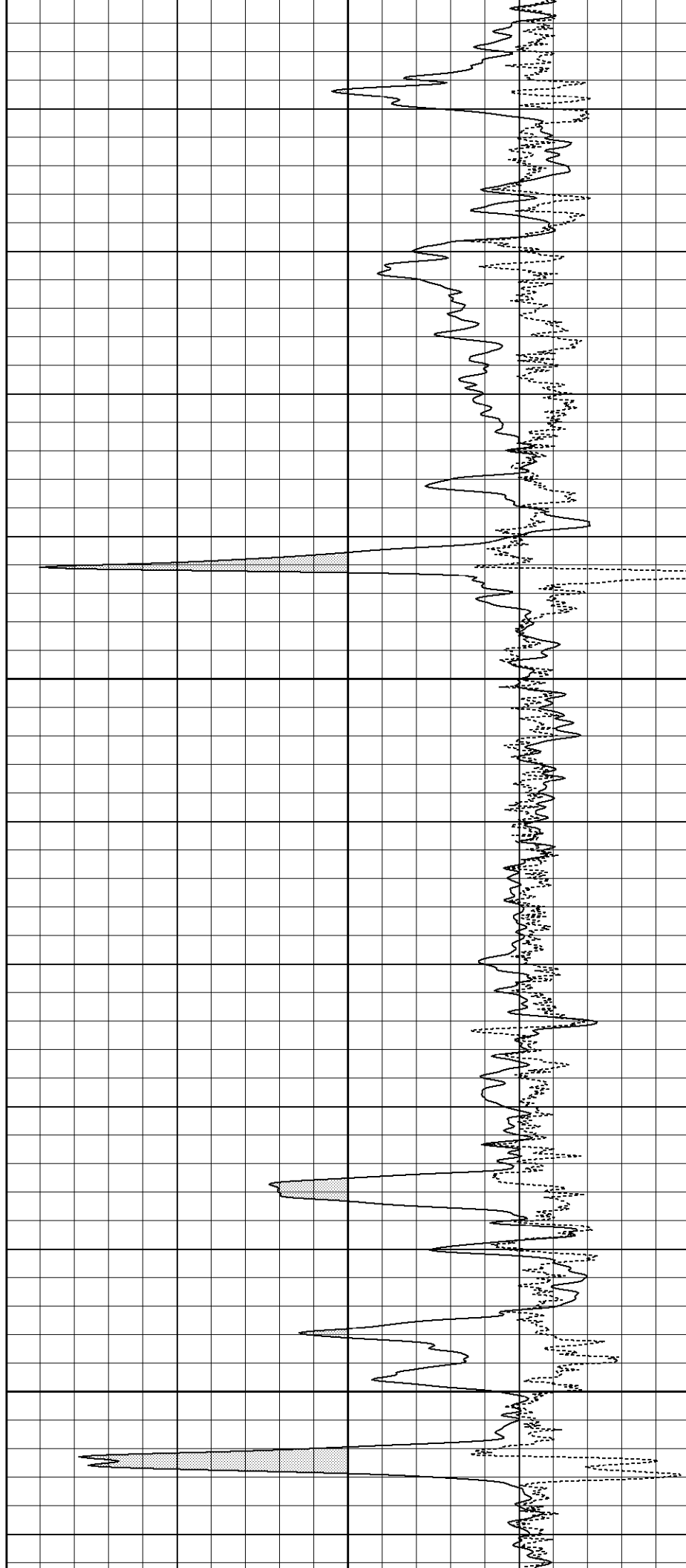
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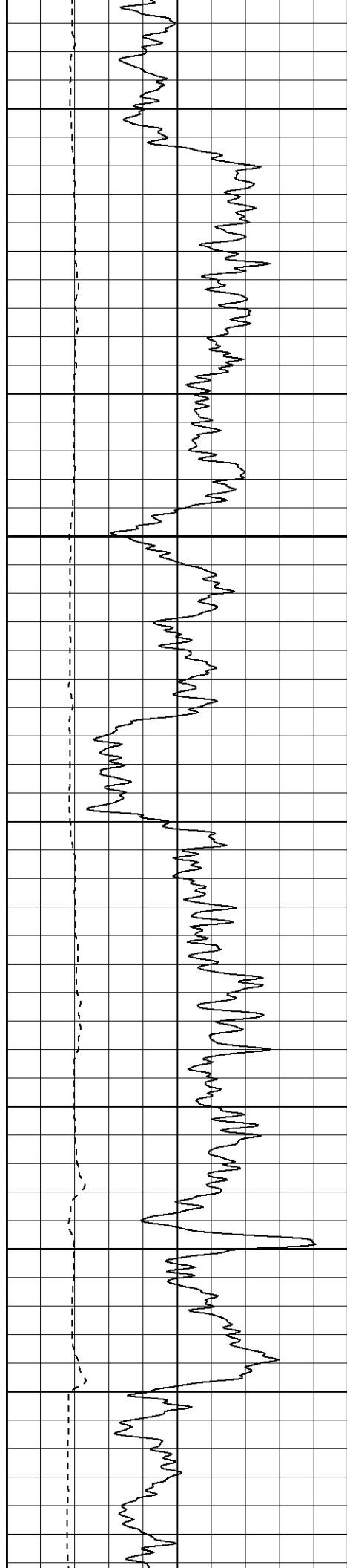




900

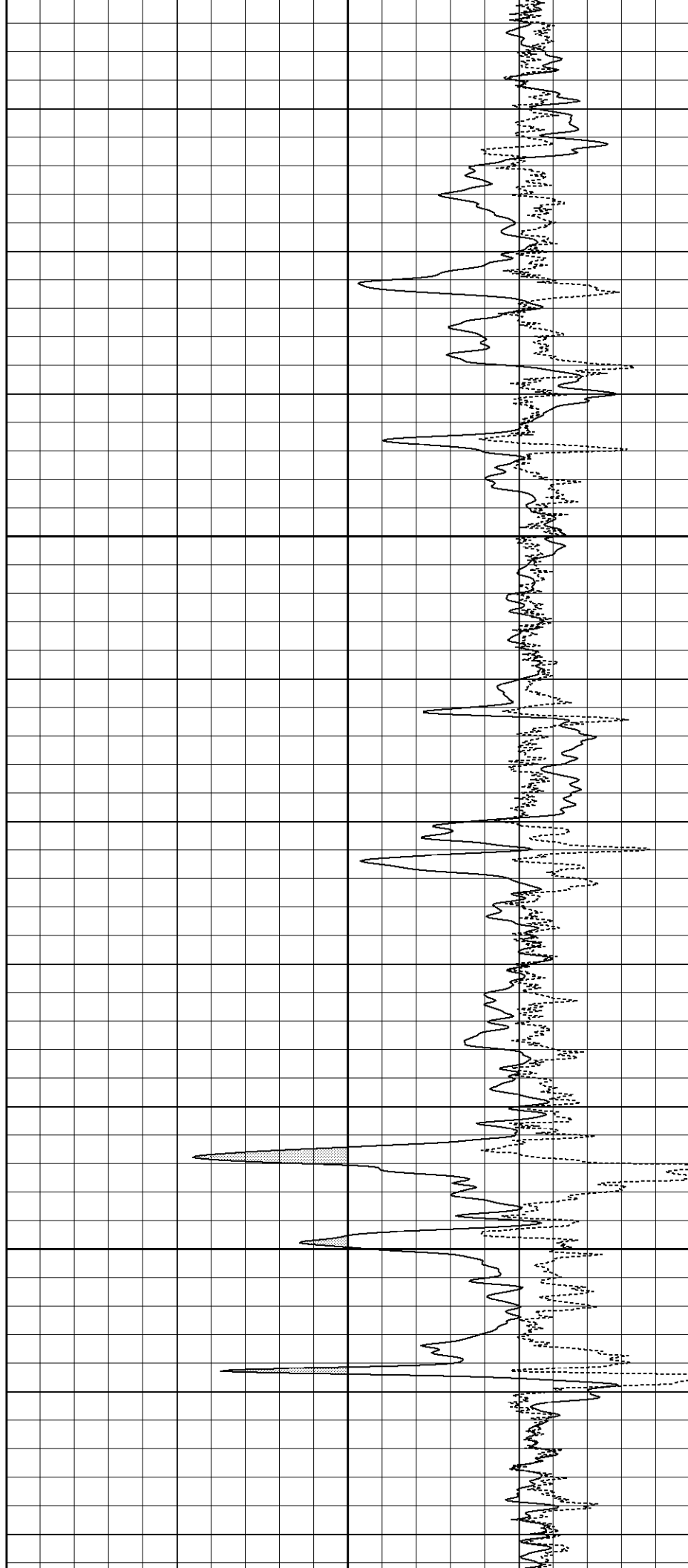
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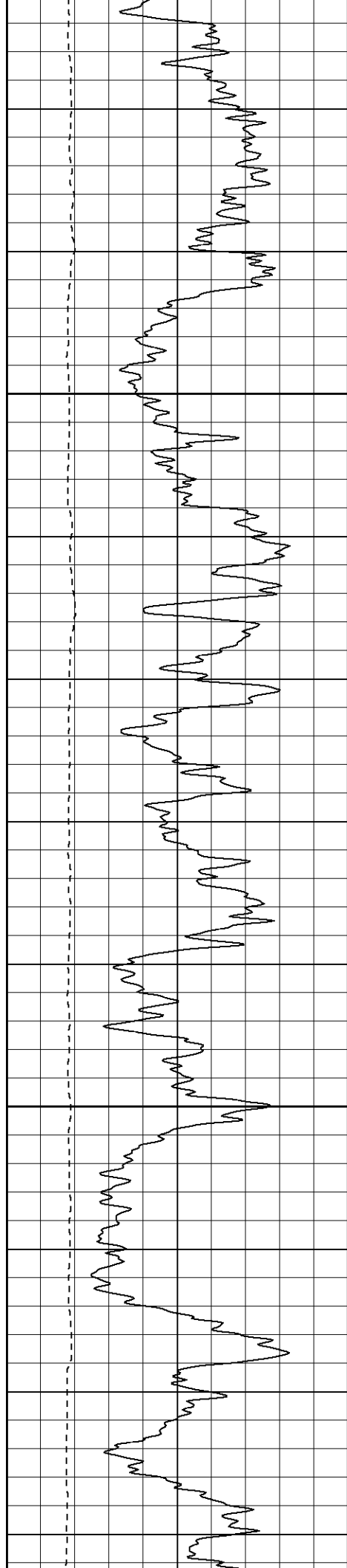




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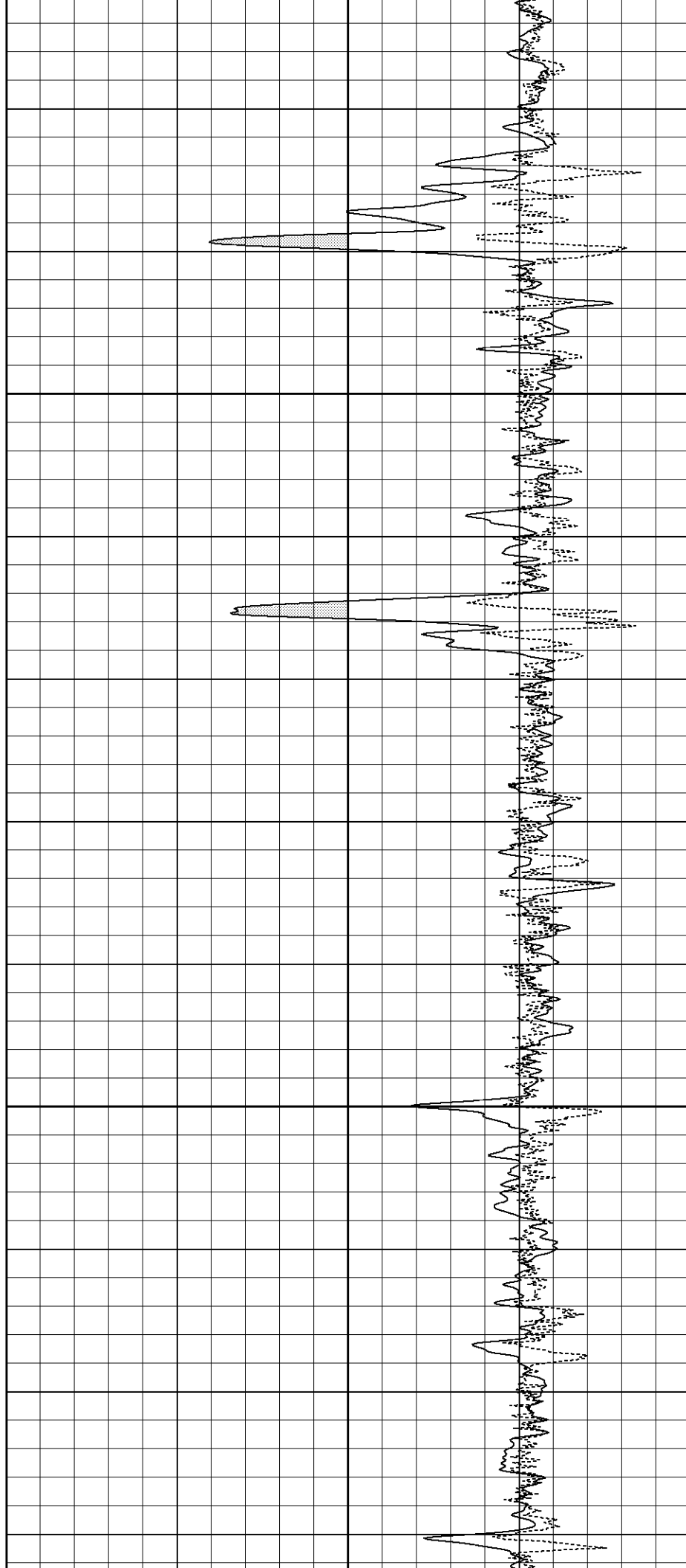
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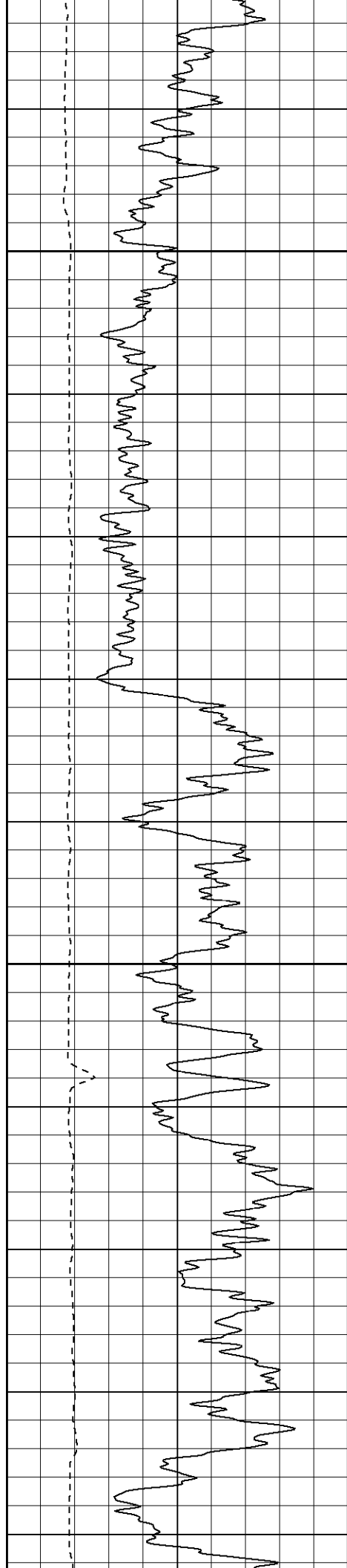




1100

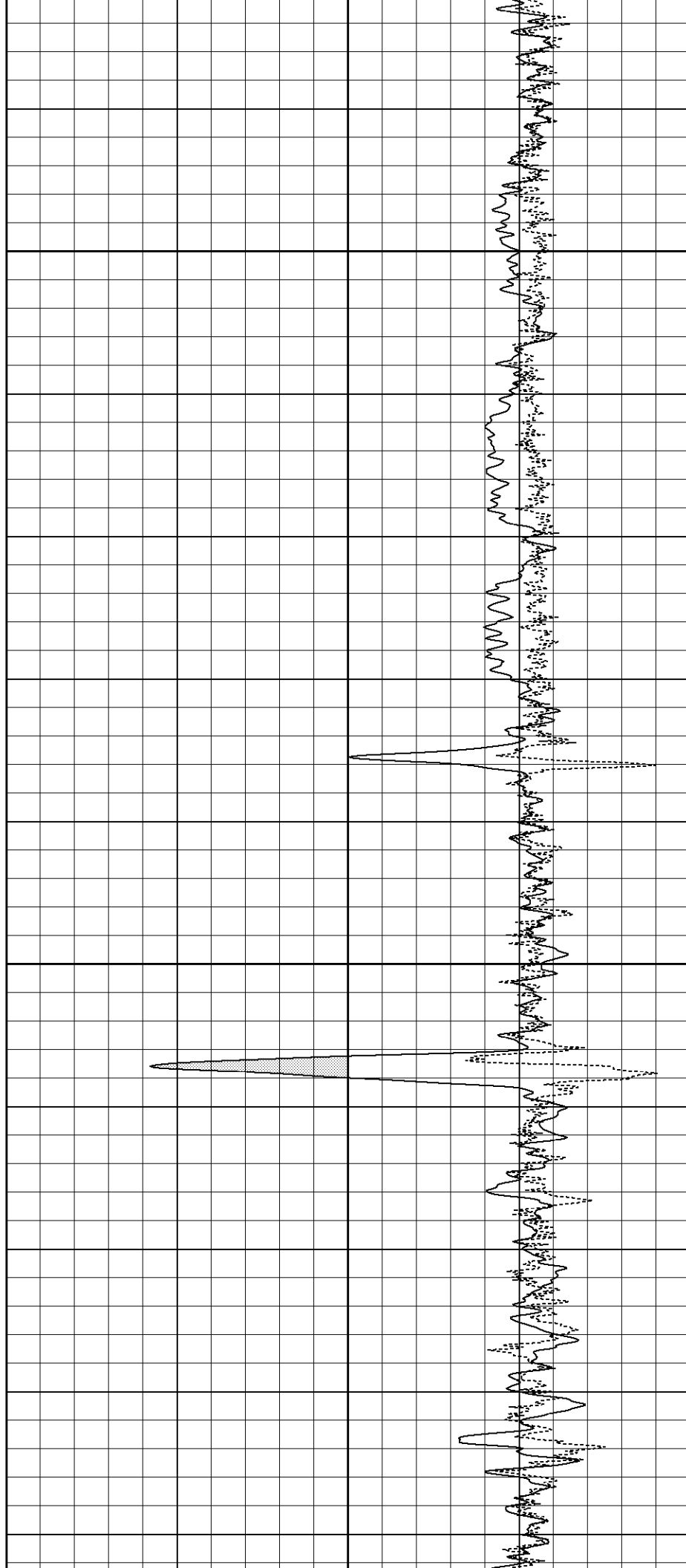
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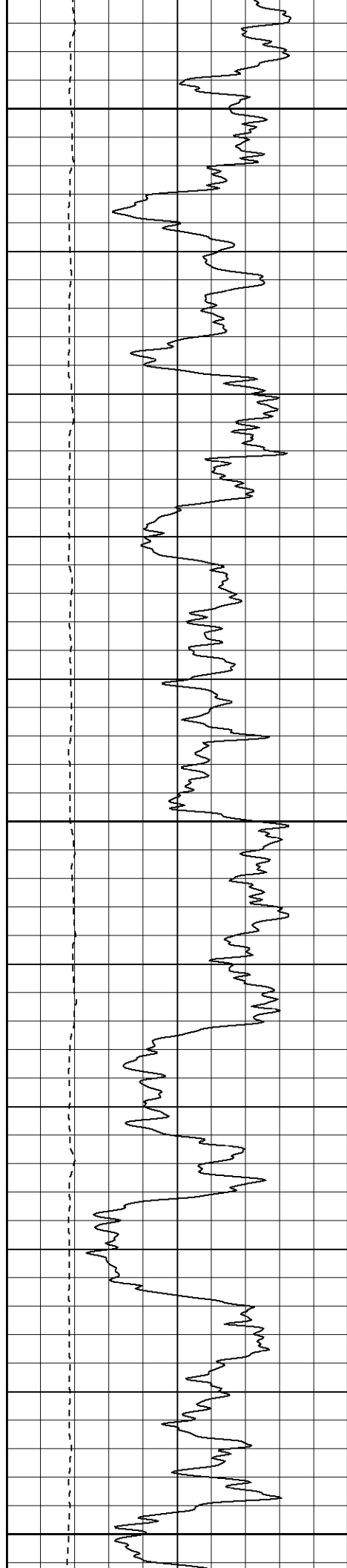




1200

1250

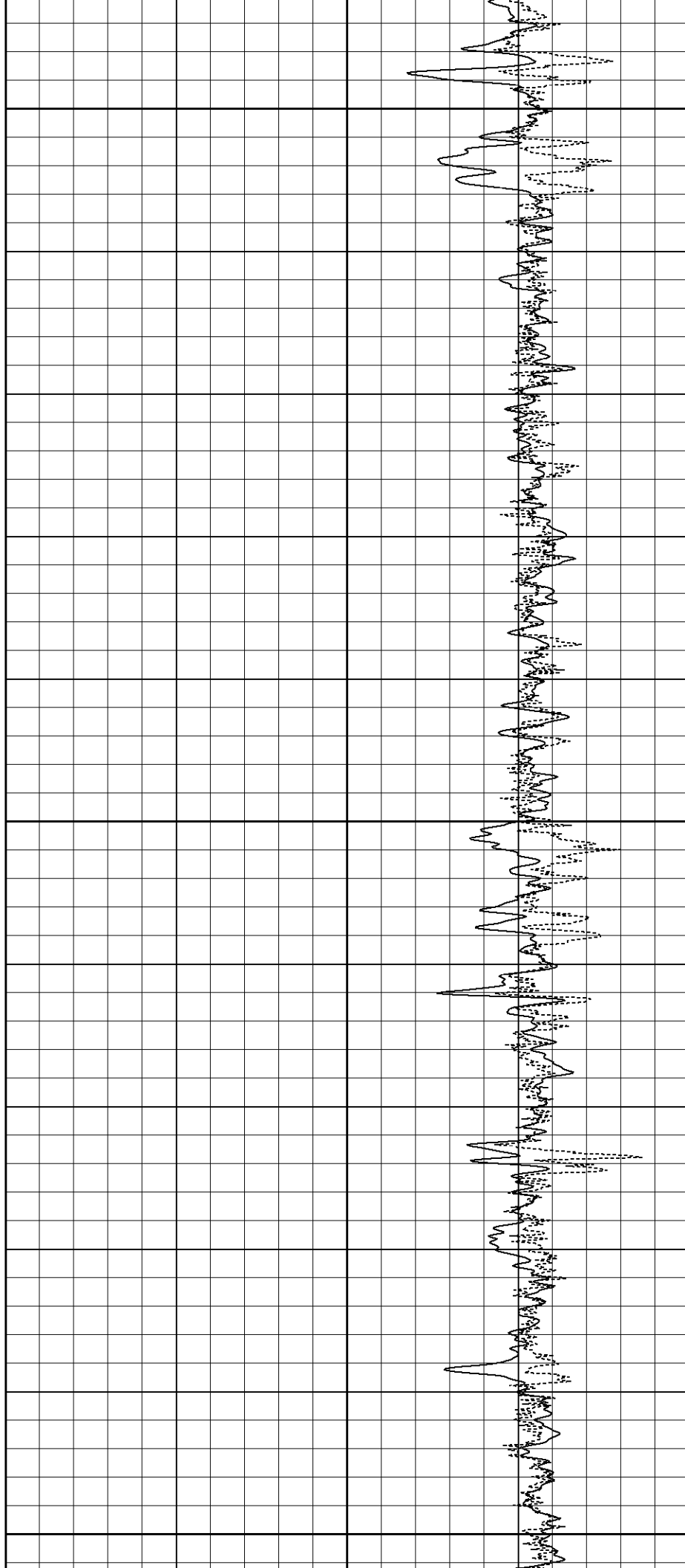


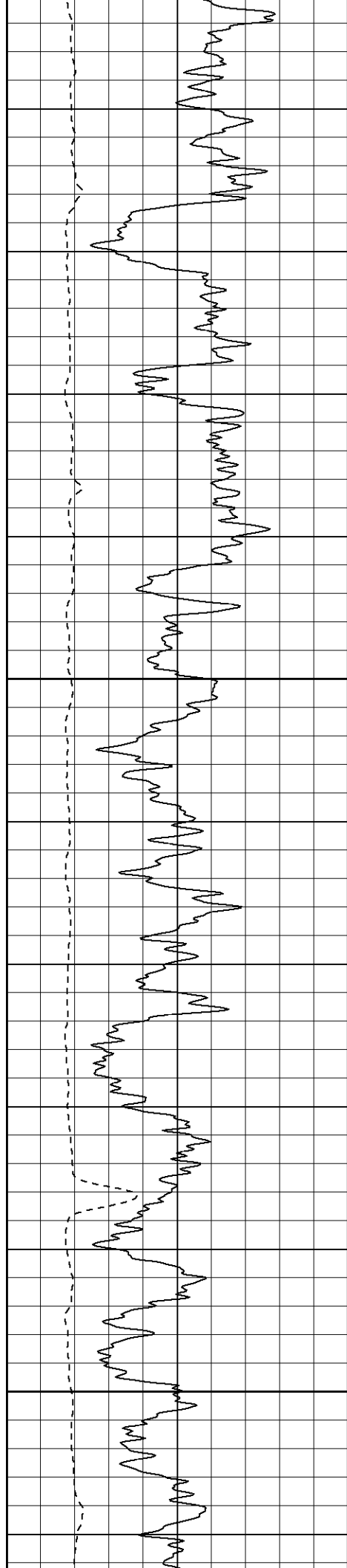


1300

1350

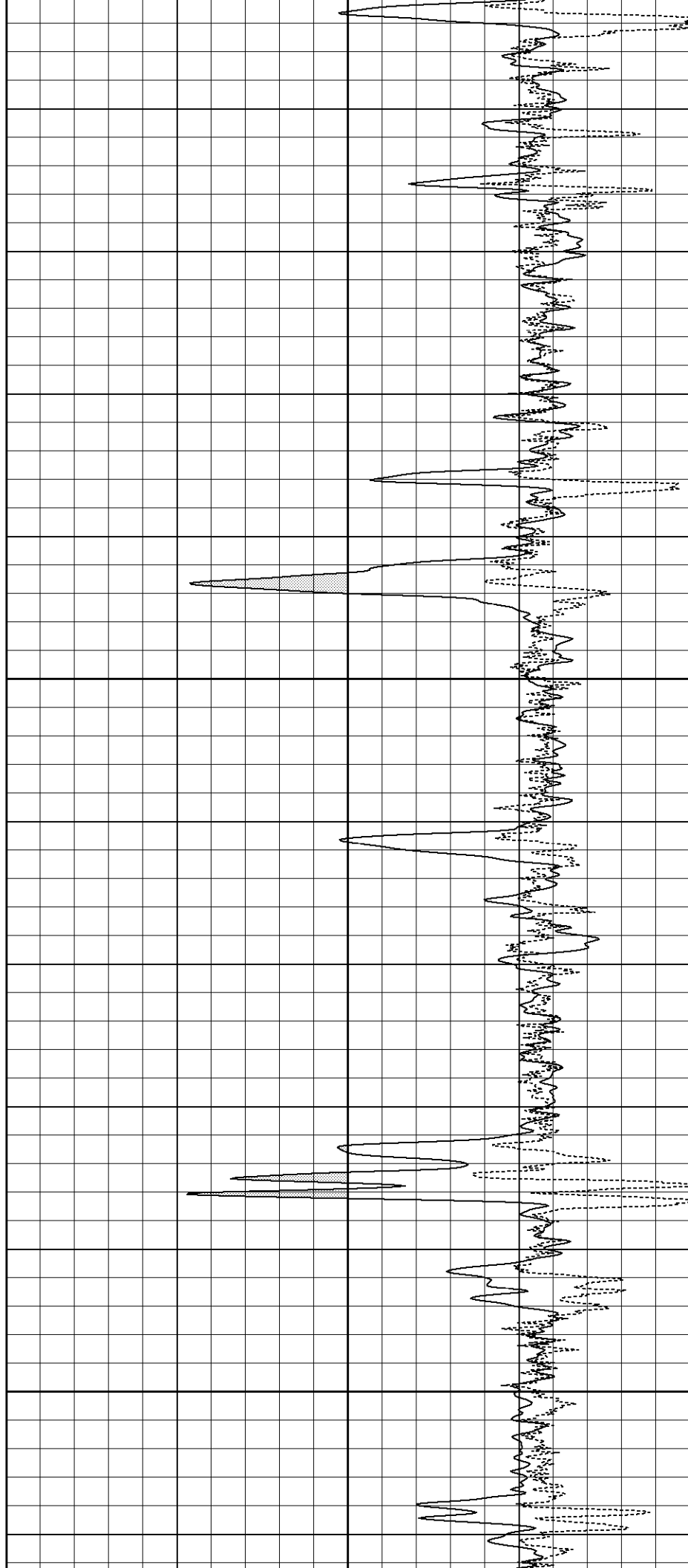
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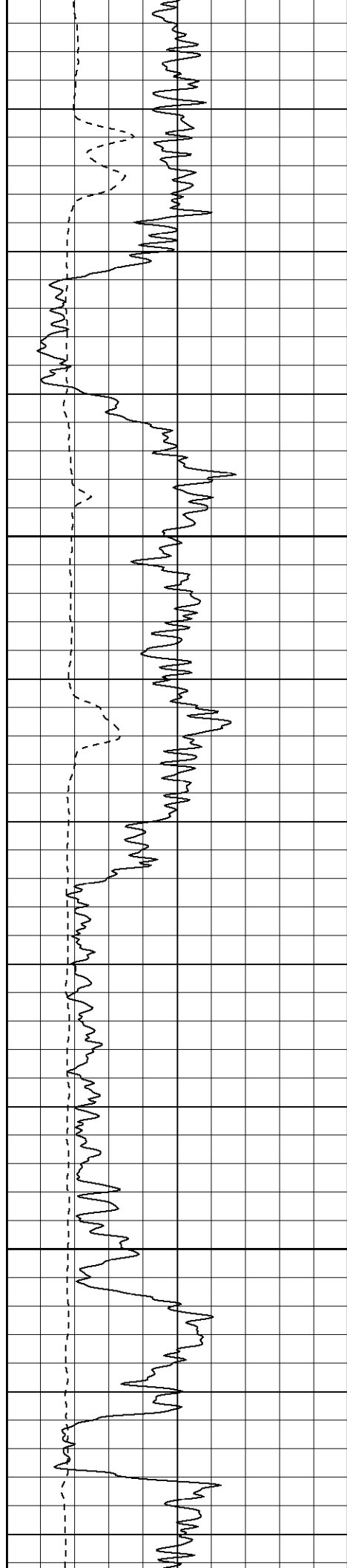




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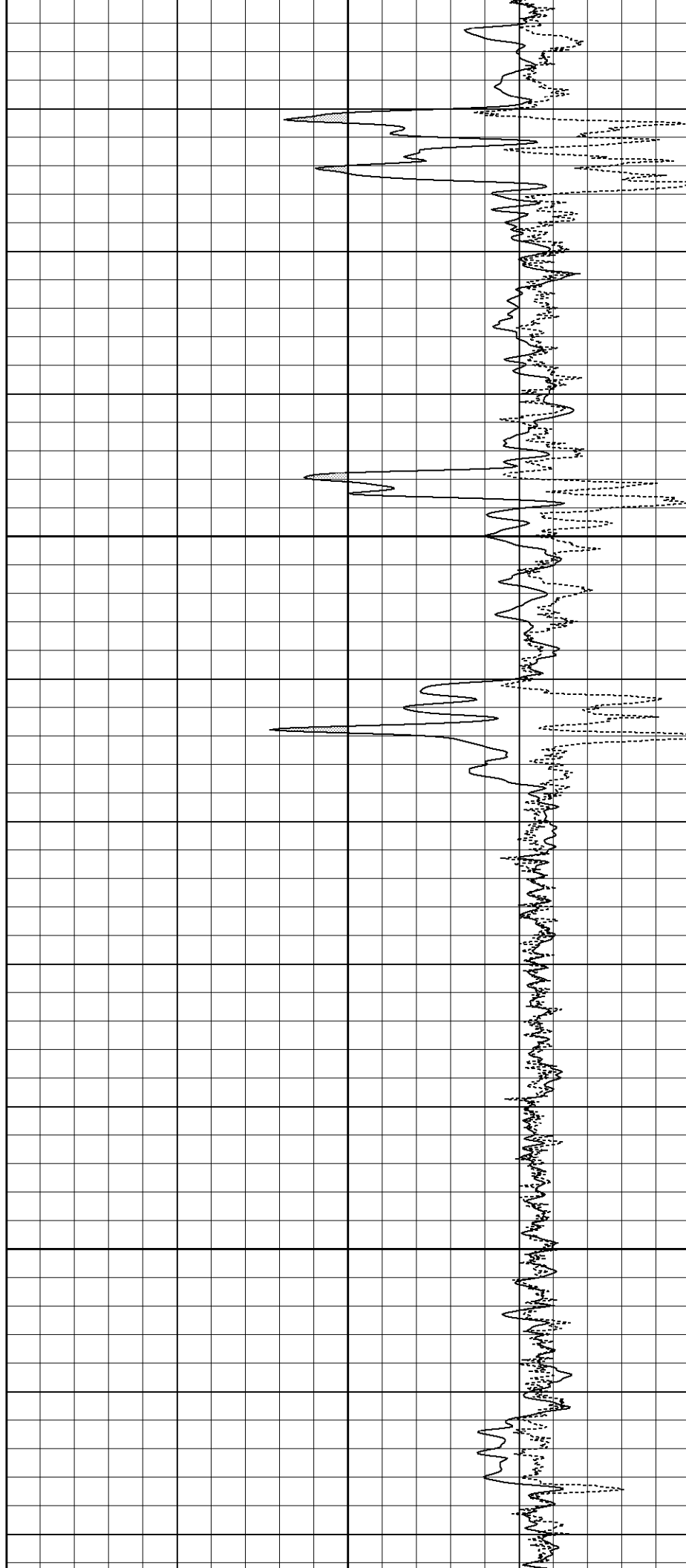
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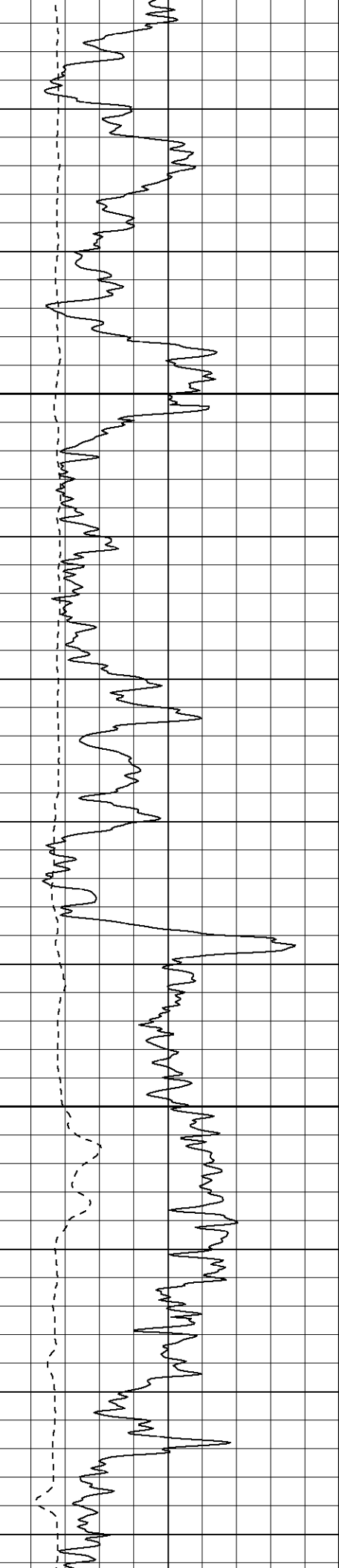




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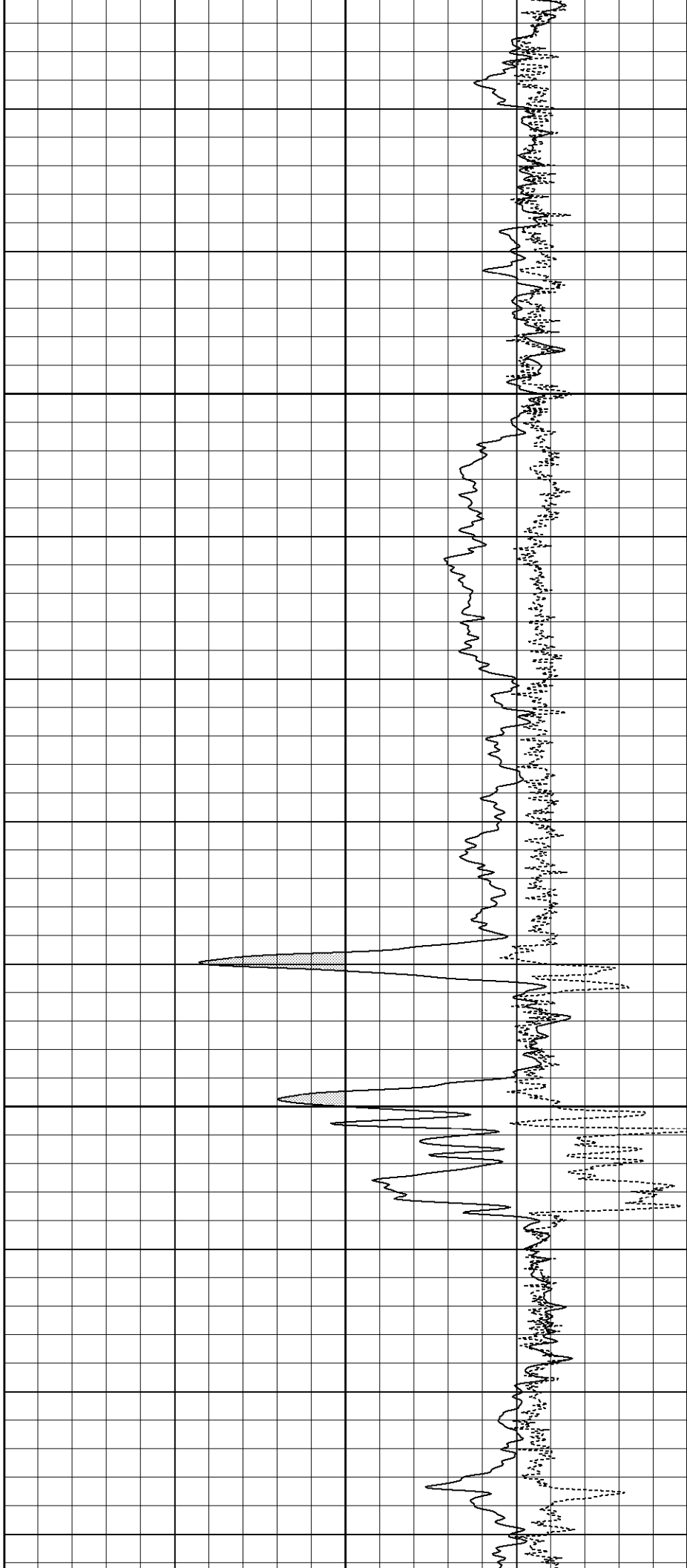
1600





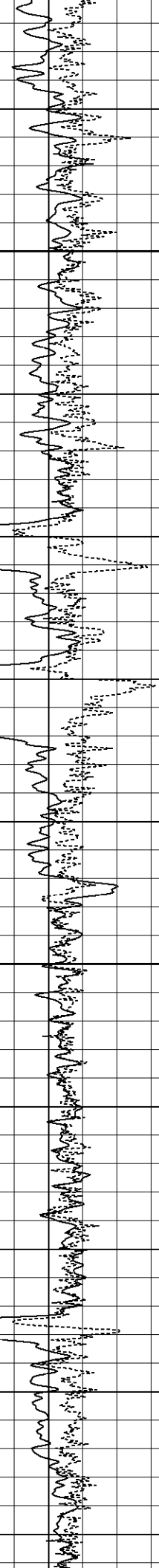
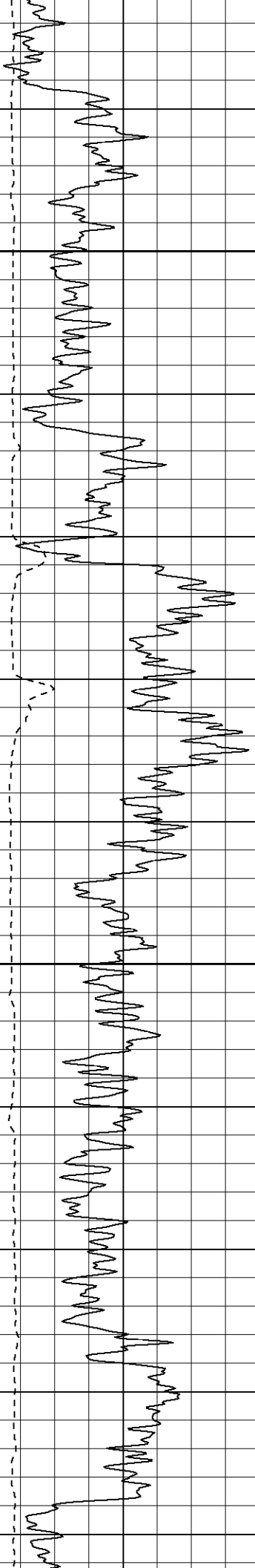
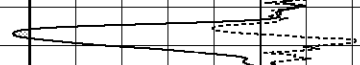
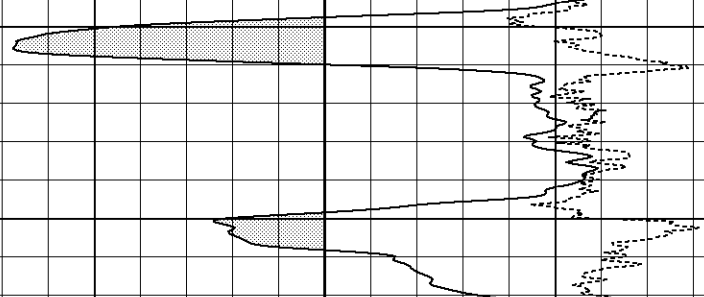
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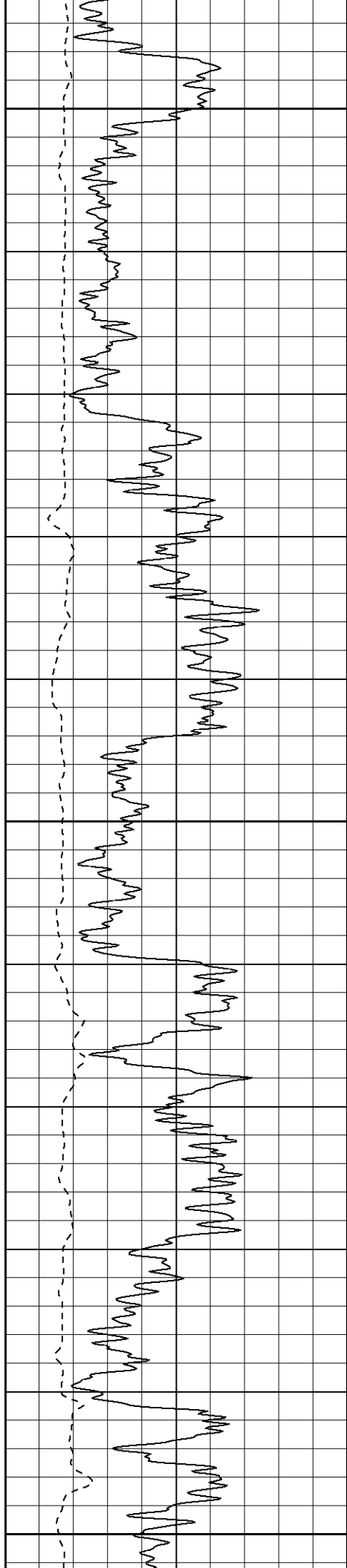
1700



1750

1800

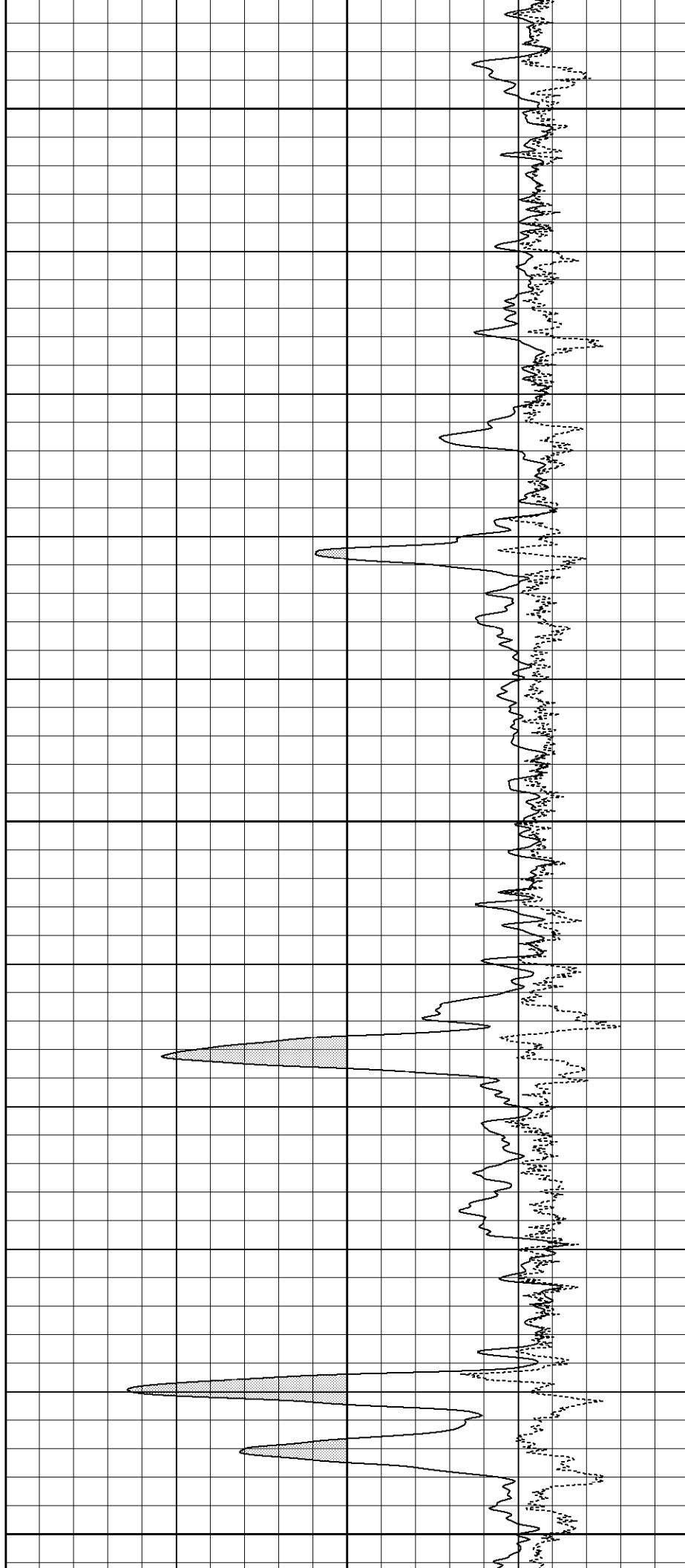


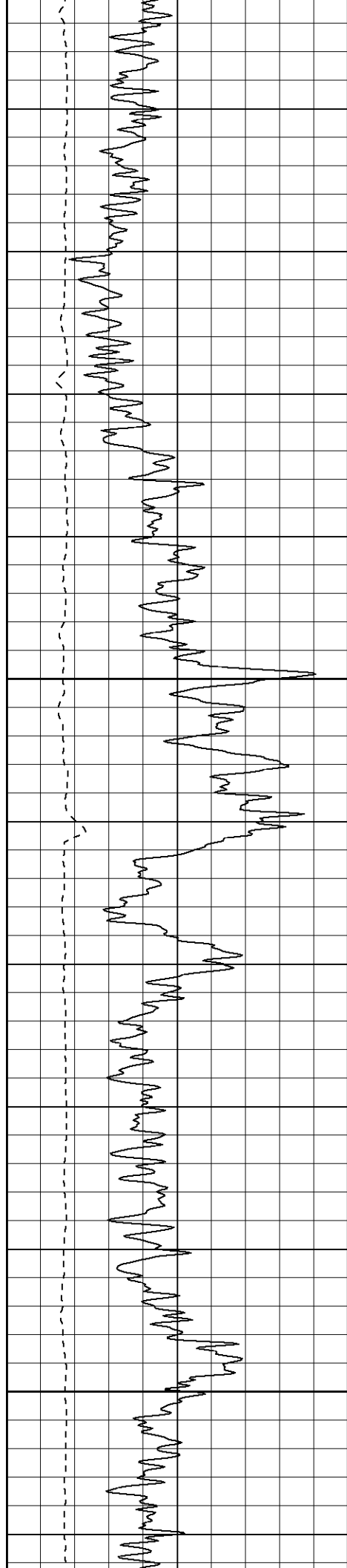


1850

1900

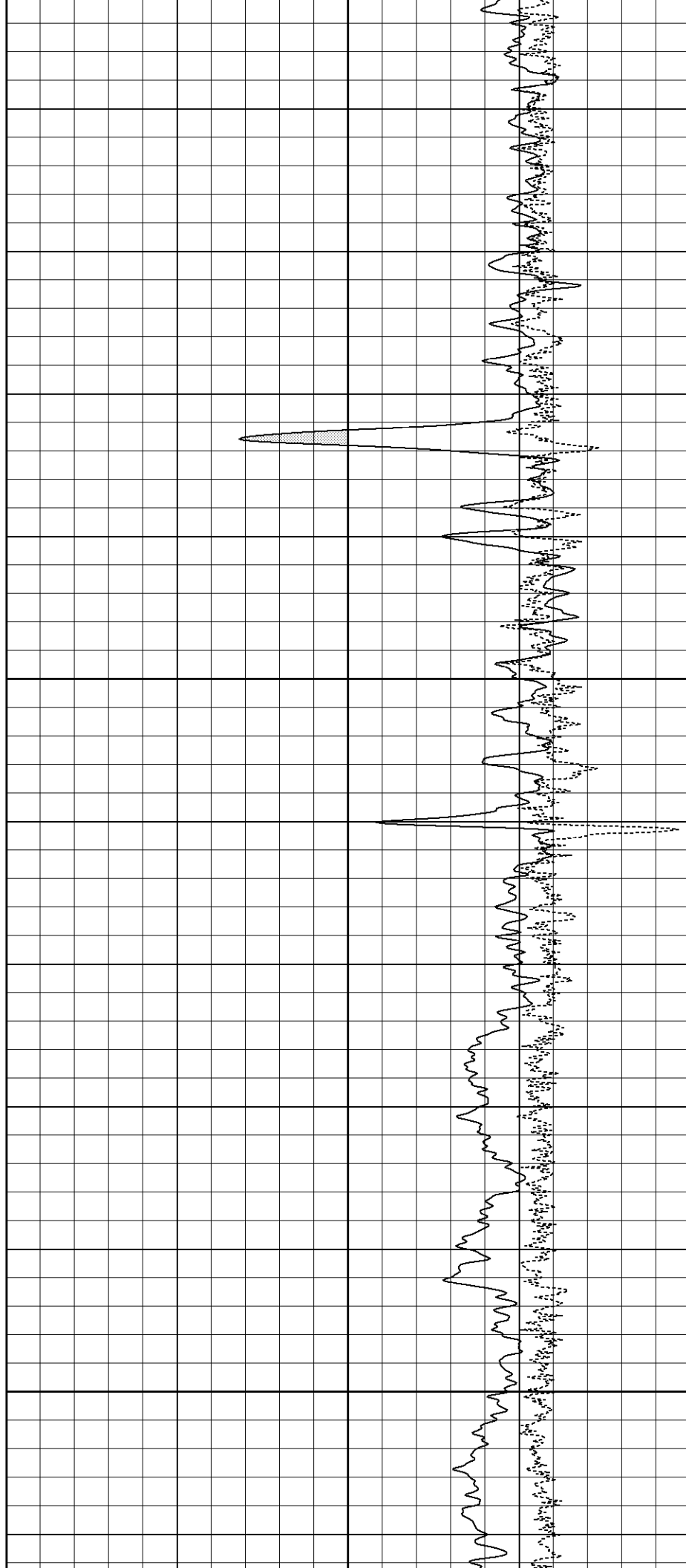
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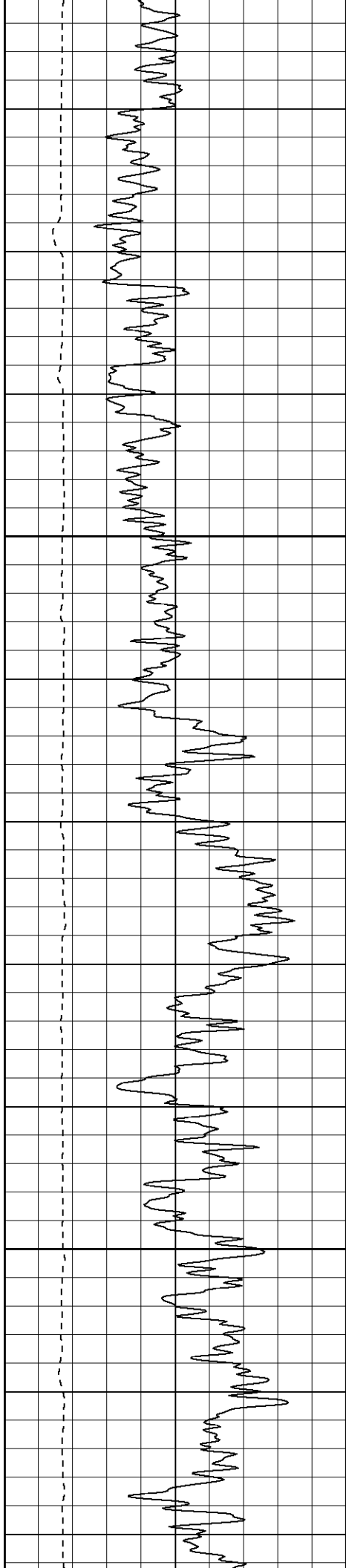




2000

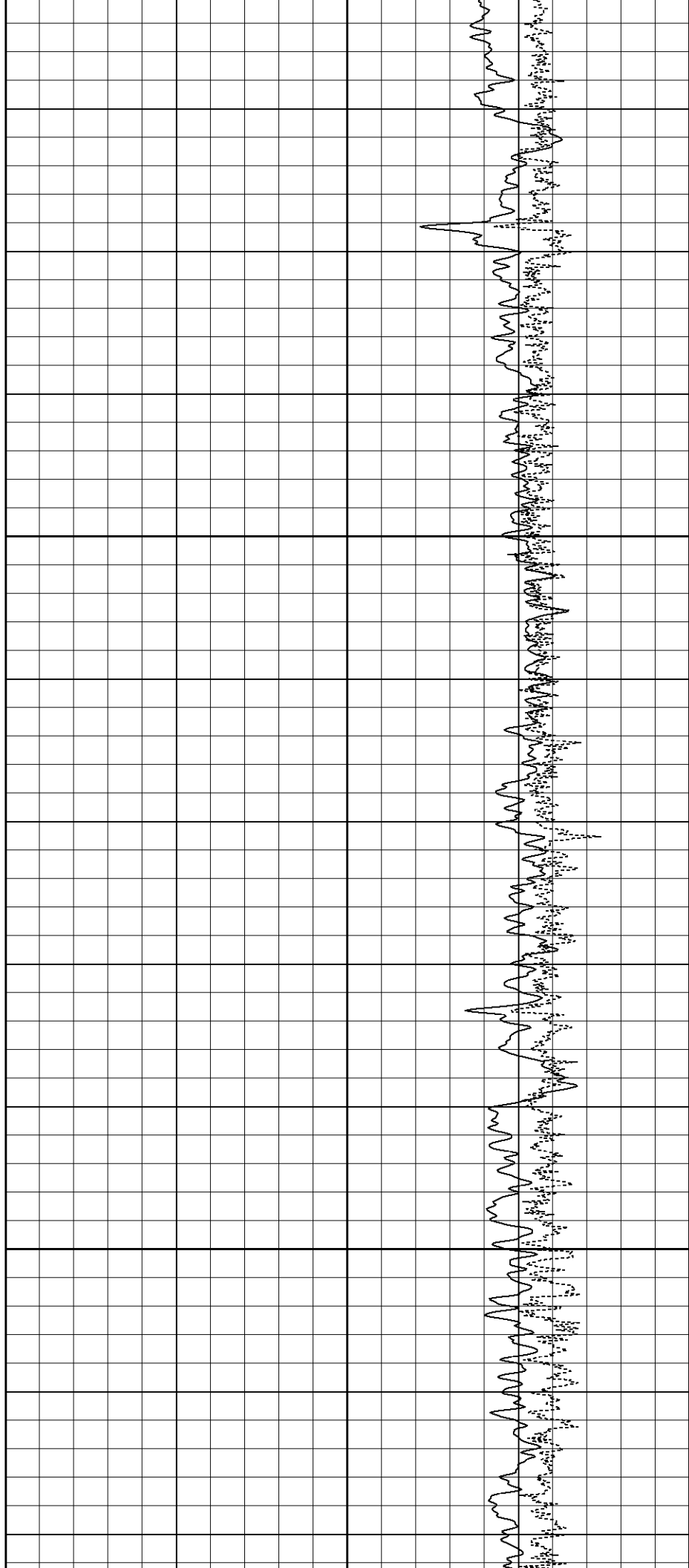
2050





2100

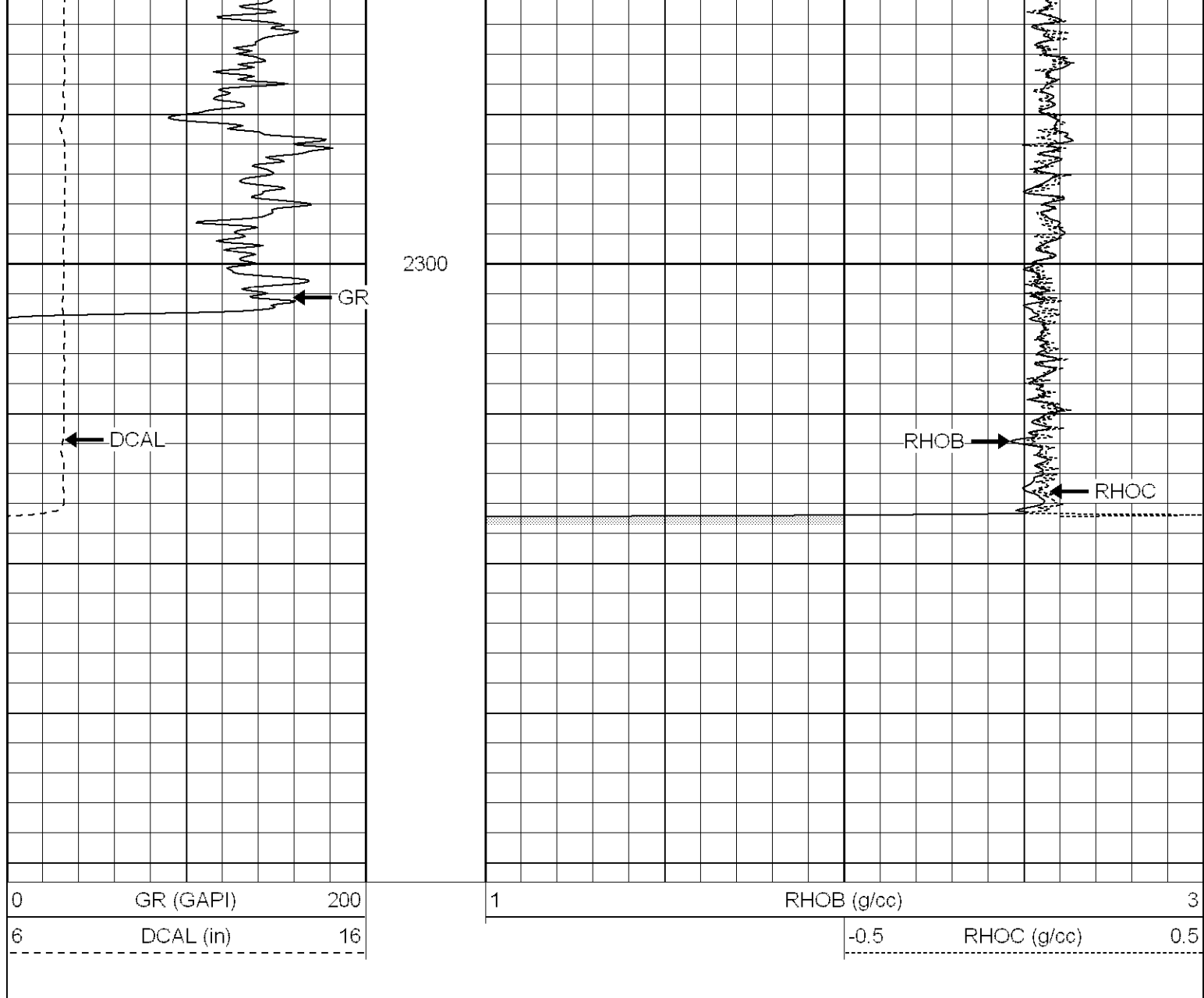
2150



2200

2250

+



Calibration Report

Database File: xtohr2514.db
 Dataset Pathname: pass1
 Dataset Creation: Mon Aug 27 13:55:04 2007 by Log Open-Cased 070508

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Wed Aug 22 09:06:29 2007
 Downhole Cal Performed: Wed Aug 22 09:07:17 2007

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.006	0.626	V	0.000	500.000	mmho-m	806.553	-5.233
Medium	0.010	0.751	V	0.000	550.000	mmho-m	742.127	-7.130
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.626	V	0.000	500.000	mmho-m	807.189	-5.533
Medium	0.010	0.750	V	0.000	550.000	mmho-m	742.763	-7.426

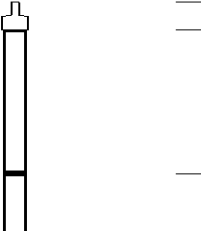
Downhole Calibration								
Readings			References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.212	500.118	mmho-m	0.295	499.902	mmho-m	0.999	0.084
Medium	0.385	549.964	mmho-m	0.290	549.819	mmho-m	1.000	-0.095
Shallow	2.509	0.017	V	500.000	2.000	Ohm-m	159.000	-7.400

Compensated Density Calibration Report								
Serial-Model:					902-2.75POH			
Source / Verifier:					/			
Master Calibration Performed:					Sat Aug 18 23:06:07 2007			

Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1100.11	545.88	cps
Aluminum	2.590	g/cc	193.54	268.05	cps
Spine Angle = 67.74			Density/Spine Ratio = 0.469		
	Size		Reading		
Small Ring	7.70	in	1.79	V	
Large Ring	17.00	in	4.21	V	

Neutron Calibration Report								
Serial Number:			803					
Tool Model:			2.75POH					
Performed:			Tue Aug 21 13:41:10 2007					
Calibrator Value:			1	NAPI				
Calibrator Reading:			1	cps				
Sensitivity:			1	NAPI/cps				

Gamma Ray Calibration Report								
Serial Number:			801					
Tool Model:			2.75POH					
Performed:			Sat Aug 18 23:06:21 2007					
Calibrator Value:			1.0	GAPI				
Background Reading:			0.0	cps				
Calibrator Reading:			1.0	cps				
Sensitivity:			0.8000	GAPI/cps				

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	37.84		None	0.75	1.50	5.00
			GR-2.75POH (801) Probe	3.73	2.75	43.00

Tool Joint	Length (ft)	Weight (lb)	OD (in)	Tool Joint	Length (ft)	Weight (lb)	OD (in)
NEU	32.30			NEU-2.75POH (803) Probe Epithermal	4.75	2.75	58.00
				CDL-2.75POH (902) Probe	8.43	2.75	106.00
LSD	24.47						
DCAL	24.19						
SSD	23.95			Probe	0.89	3.50	20.00
CILD	10.60			DIL-G (5375) Gearhart	20.83	4.00	345.00
SP	10.60						
CILM	6.89						
RLL3	1.70						
Dataset: xtohr2514.db: field/well/run1/pass1							
Total Length: 39.37 ft							
Total Weight: 577.00 lb							
O.D. 4.00 in							