

Patterson

**COMPENSATED DENSITY
NEUTRON
LOG**

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	Wrangler 44-32 Tr	Well	Wrangler 44-32 Tr
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	Colorado	State	Colorado
Location:	API # : 05 071 08561 00 1104' FSL & 922' FEL	Other Services	SIL
Permanent Datum	SEC 32 TWP 31S RGE 66W	Elevation	
Log Measured From	Ground Level	K.B. 7467'	
Drilling Measured From	Kelly Bushing 4' Above G.L.	D.F. -----	
	Kelly Bushing	G.L. 7463'	
Date	10-19-05		
Run Number	Two		
Depth Driller	2210'		
Depth Logger	2220'		
Bottom Logged Interval	2218'		
Top Log Interval	Surface		
Casing Driller	8 5/8" @ 1011'		
Casing Logger	1011'		
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	12:45 P.M.		
Time Logger on Bottom	4:00 P.M.		
Maximum Recorded Temperature	///		
Equipment Number	T720		
Location	Trinidad		
Recorded By	M. Norton		
Witnessed By	Mr. Edsel Pool		

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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

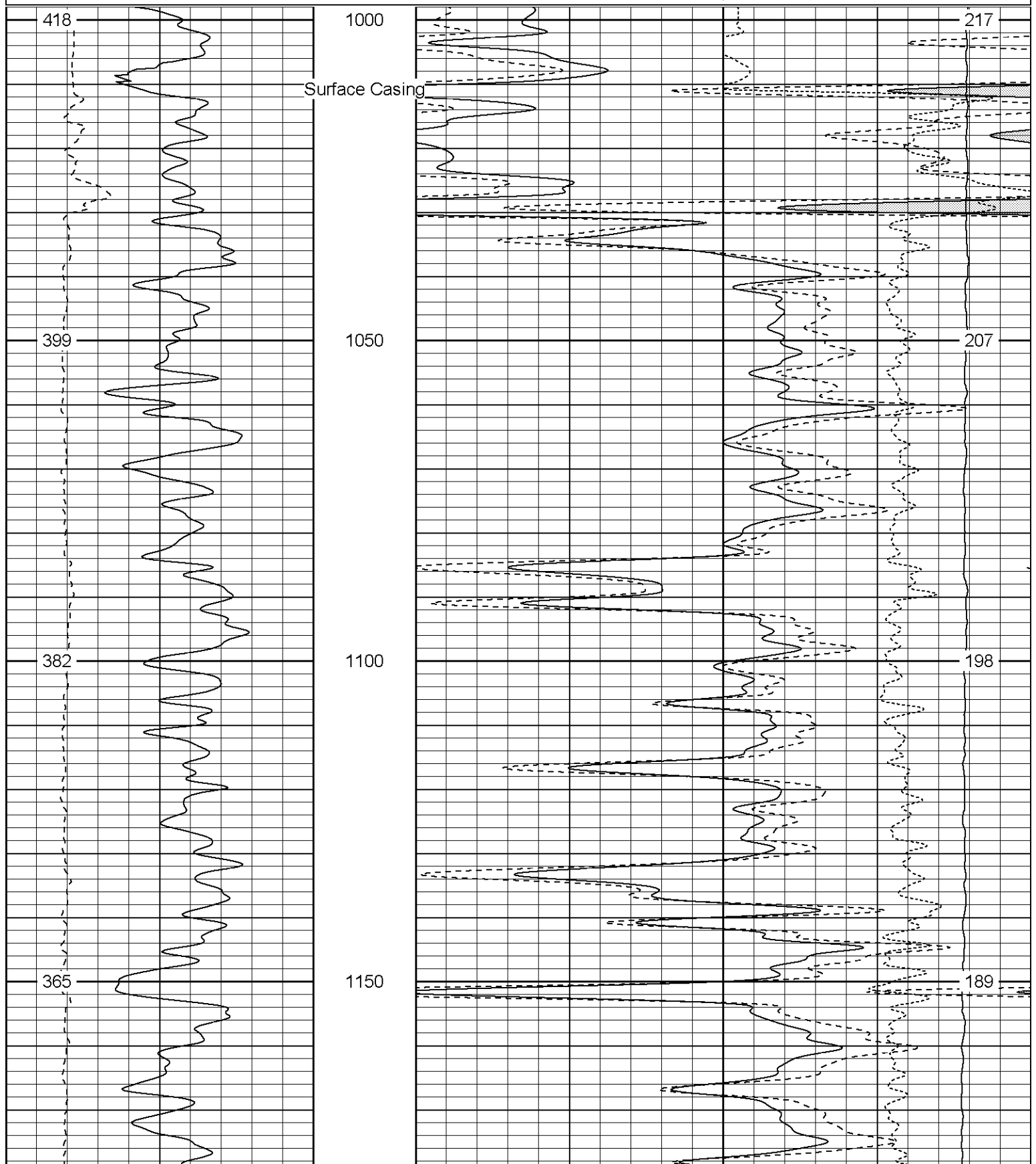
Neutron Density Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.
Well Directions:
Aguilar West, Second Left Past Jarosa Gravel Pit On Main Road,
Drive Thru One Location, Go Thru Double Gates Dead End On Location.

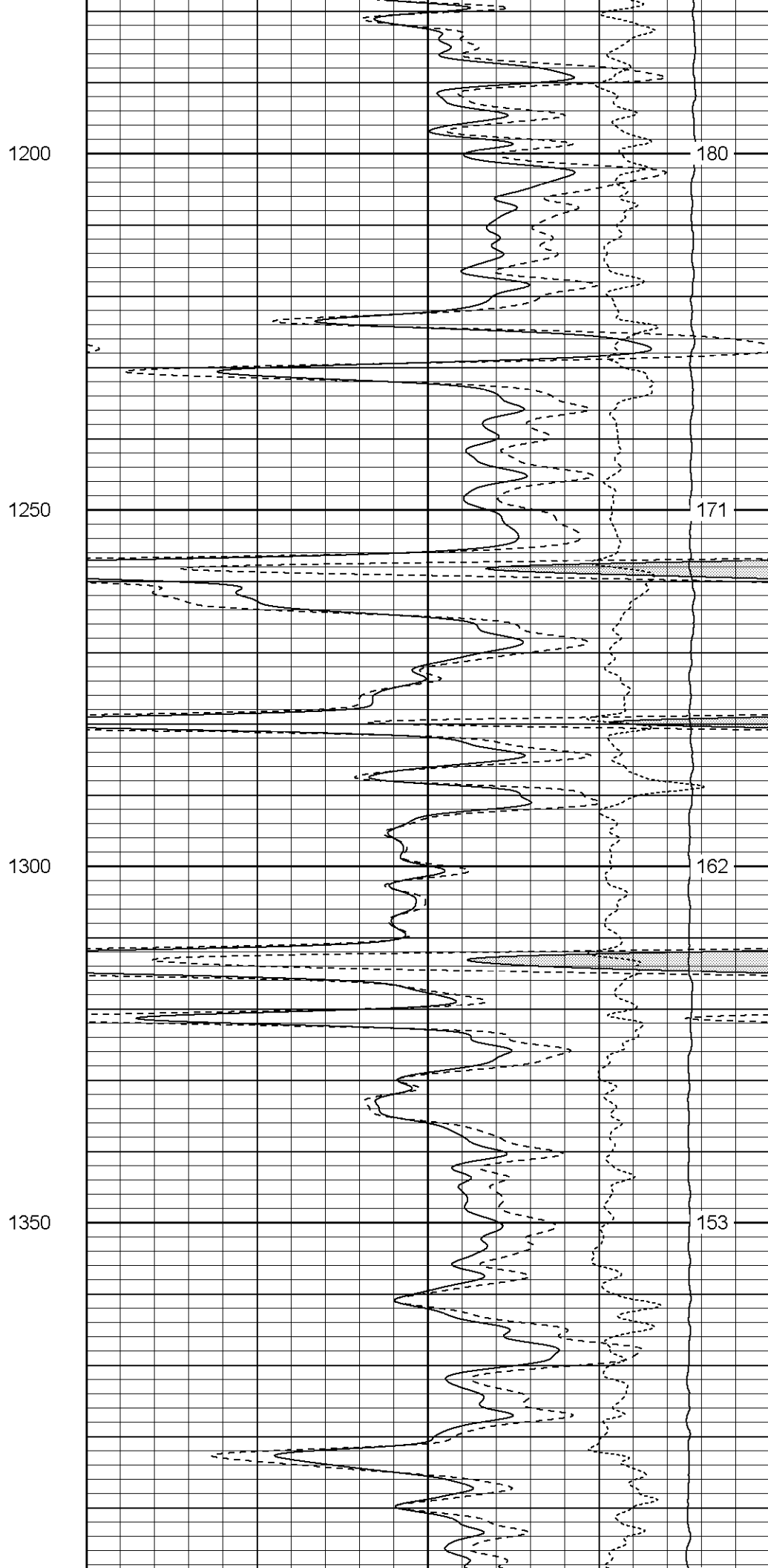
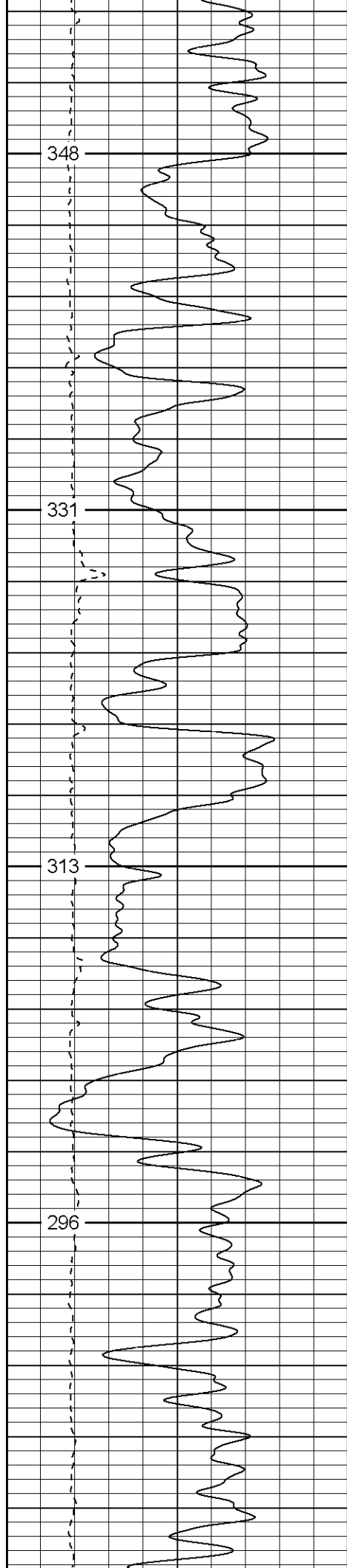
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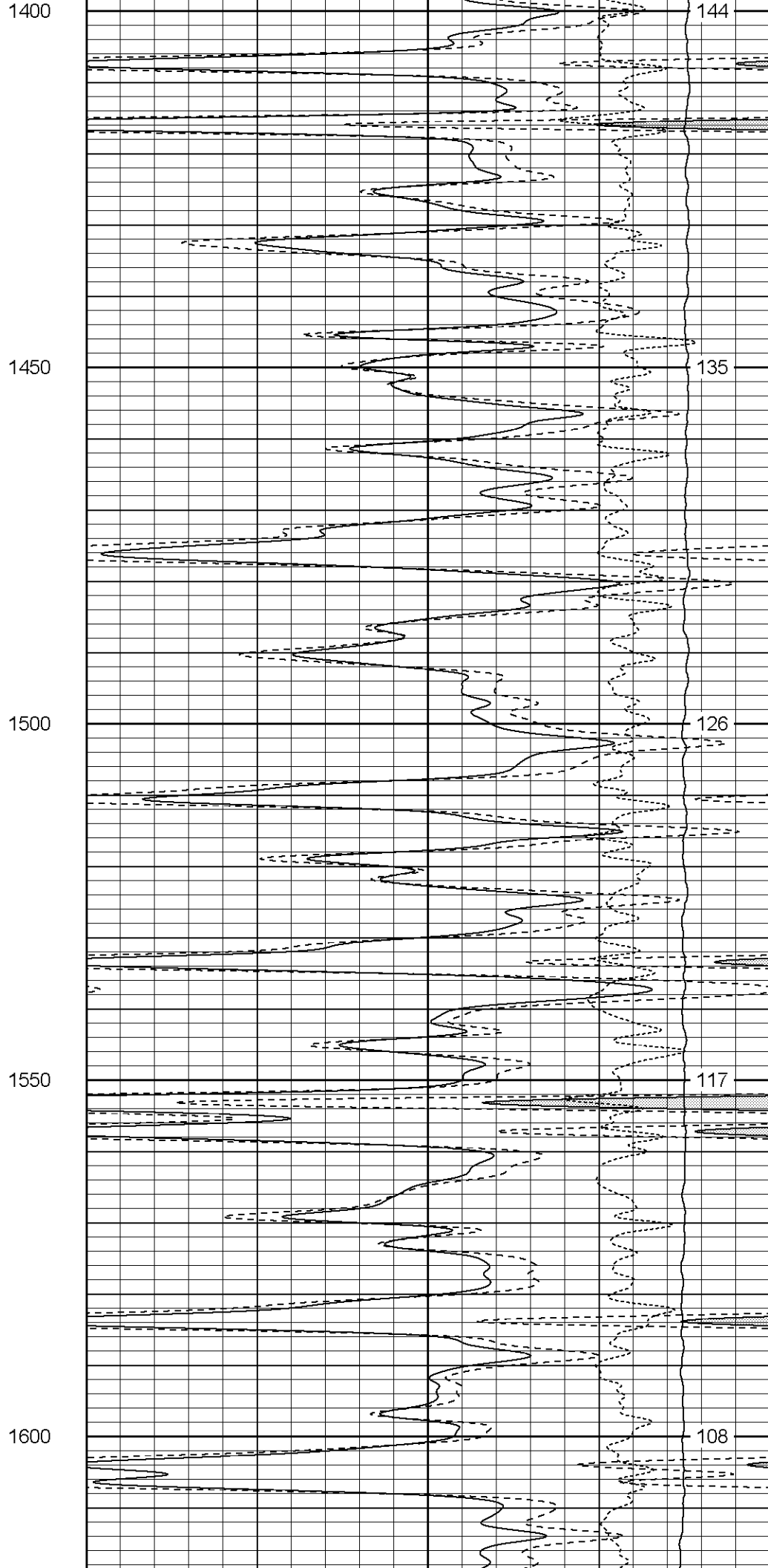
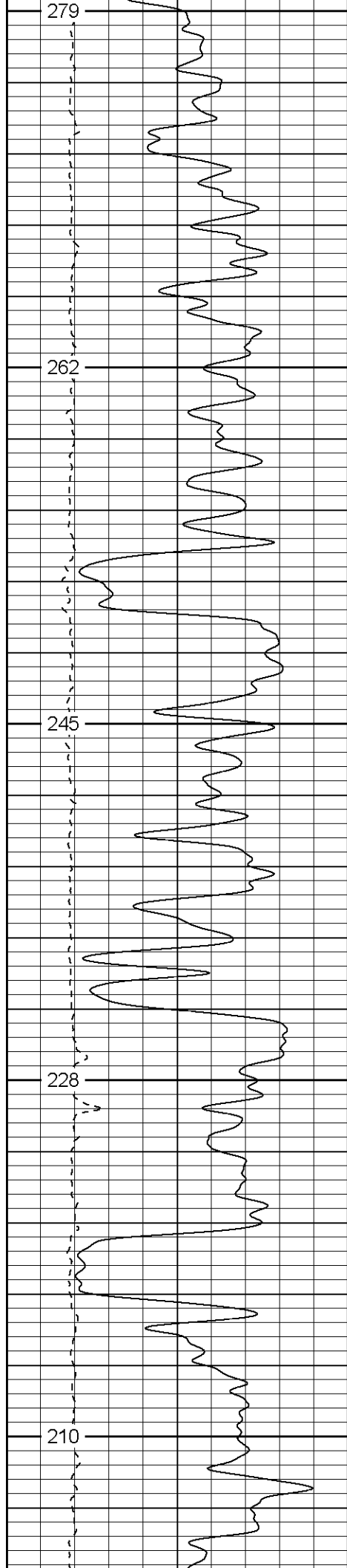
Main Pass

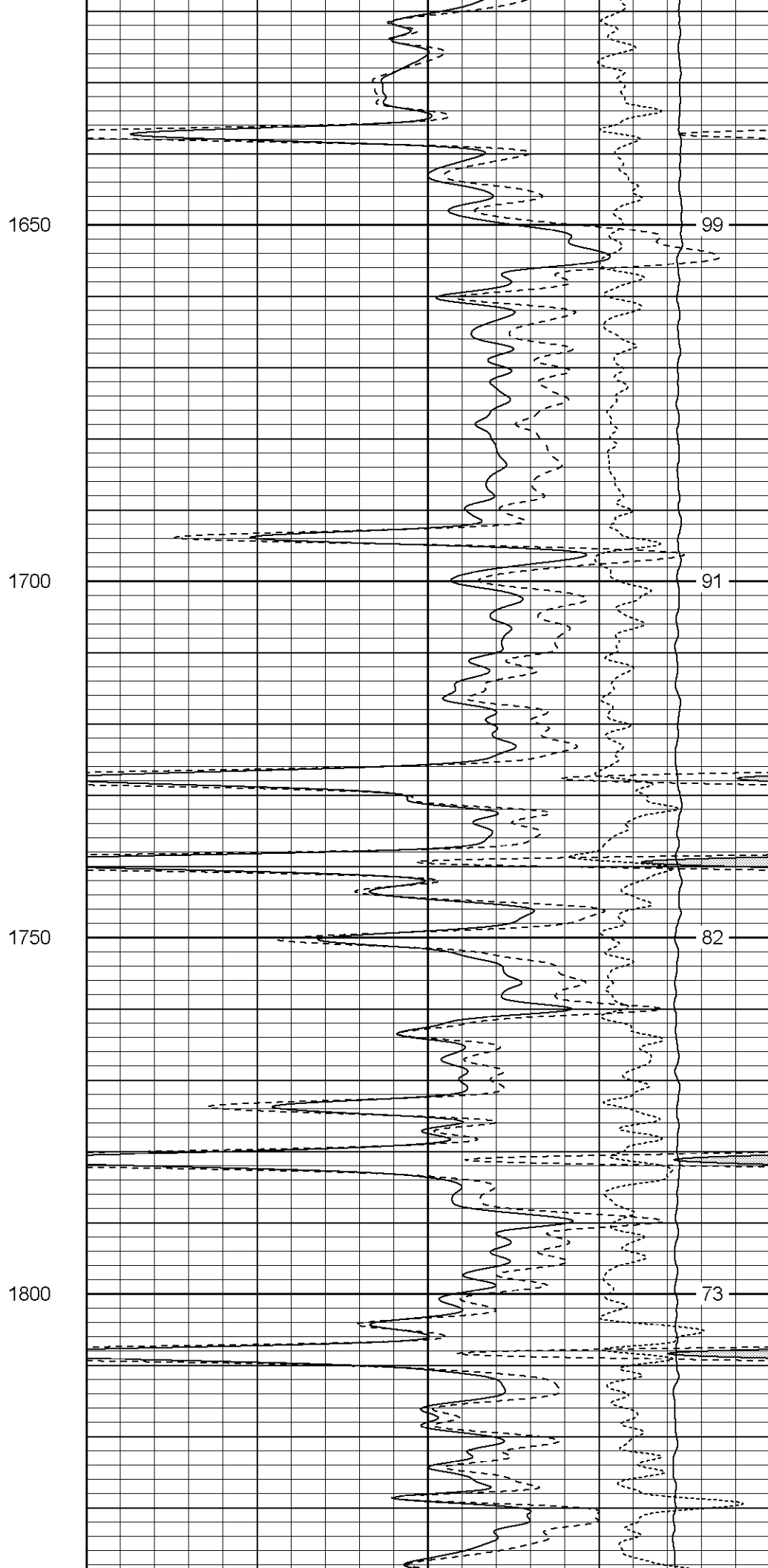
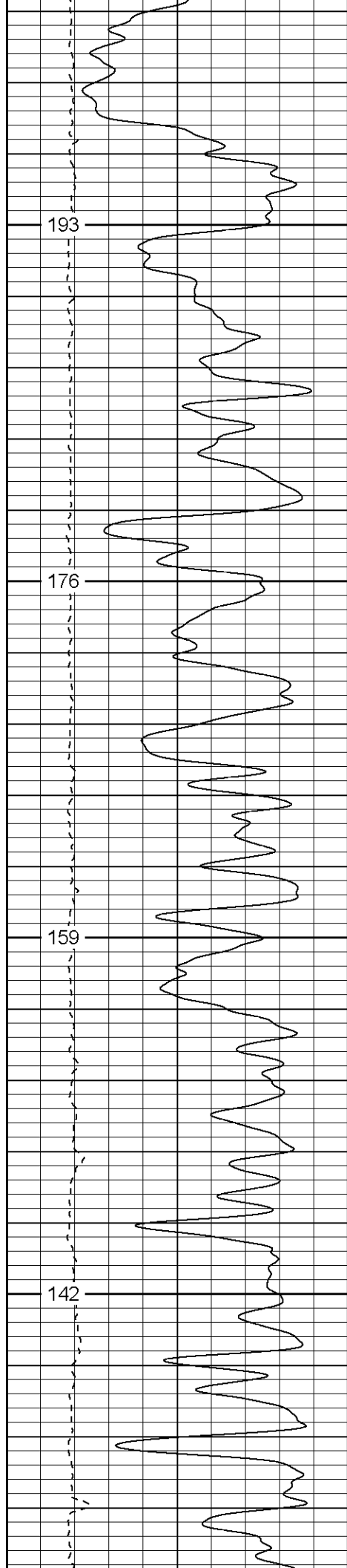
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Dataset Pathname: pass4.1
Presentation Format: cdl
Dataset Creation: Wed Oct 19 17:25:00 2005 by Calc Warrior 7.0 STD Ope
Charted by: Depth in Feet scaled 1:240

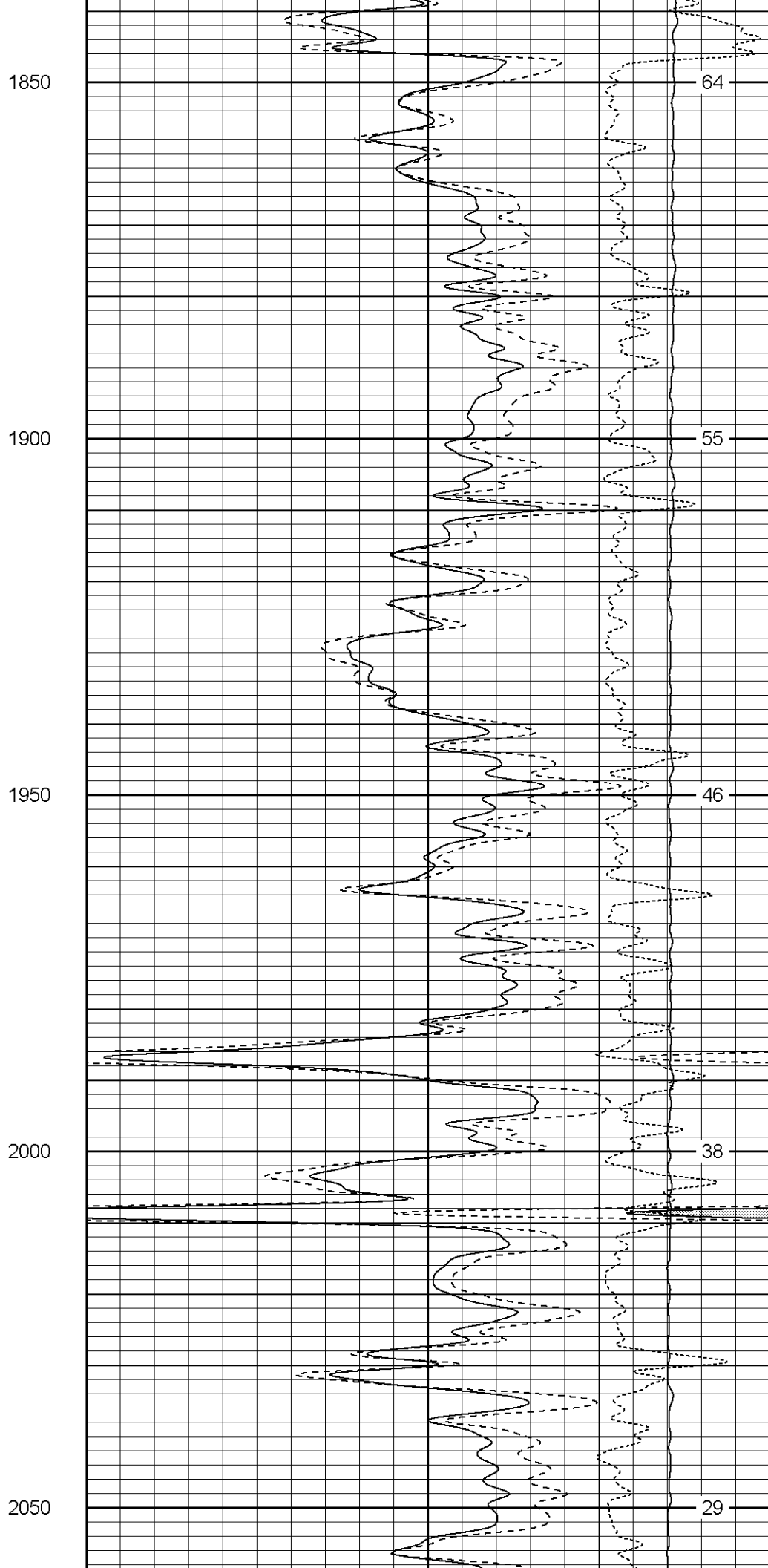
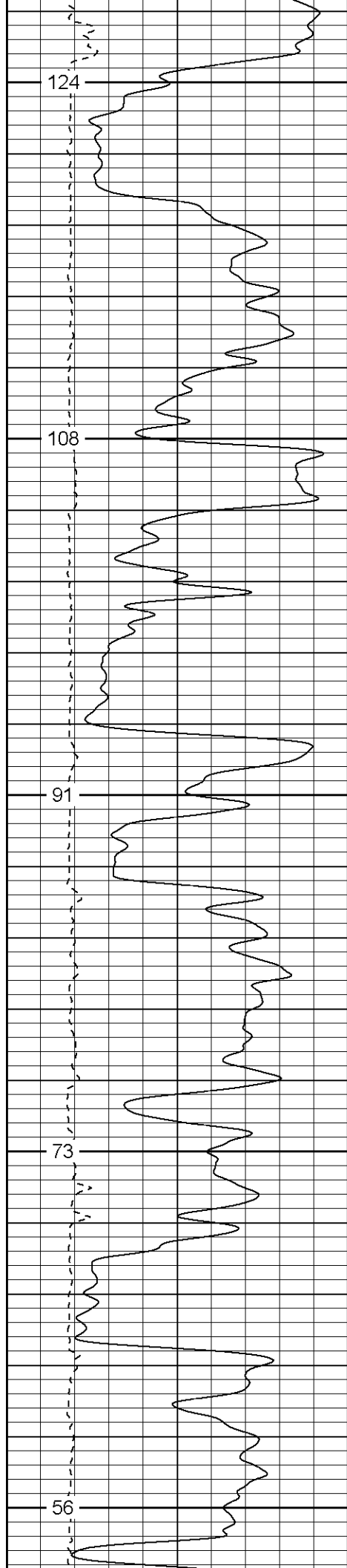
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0

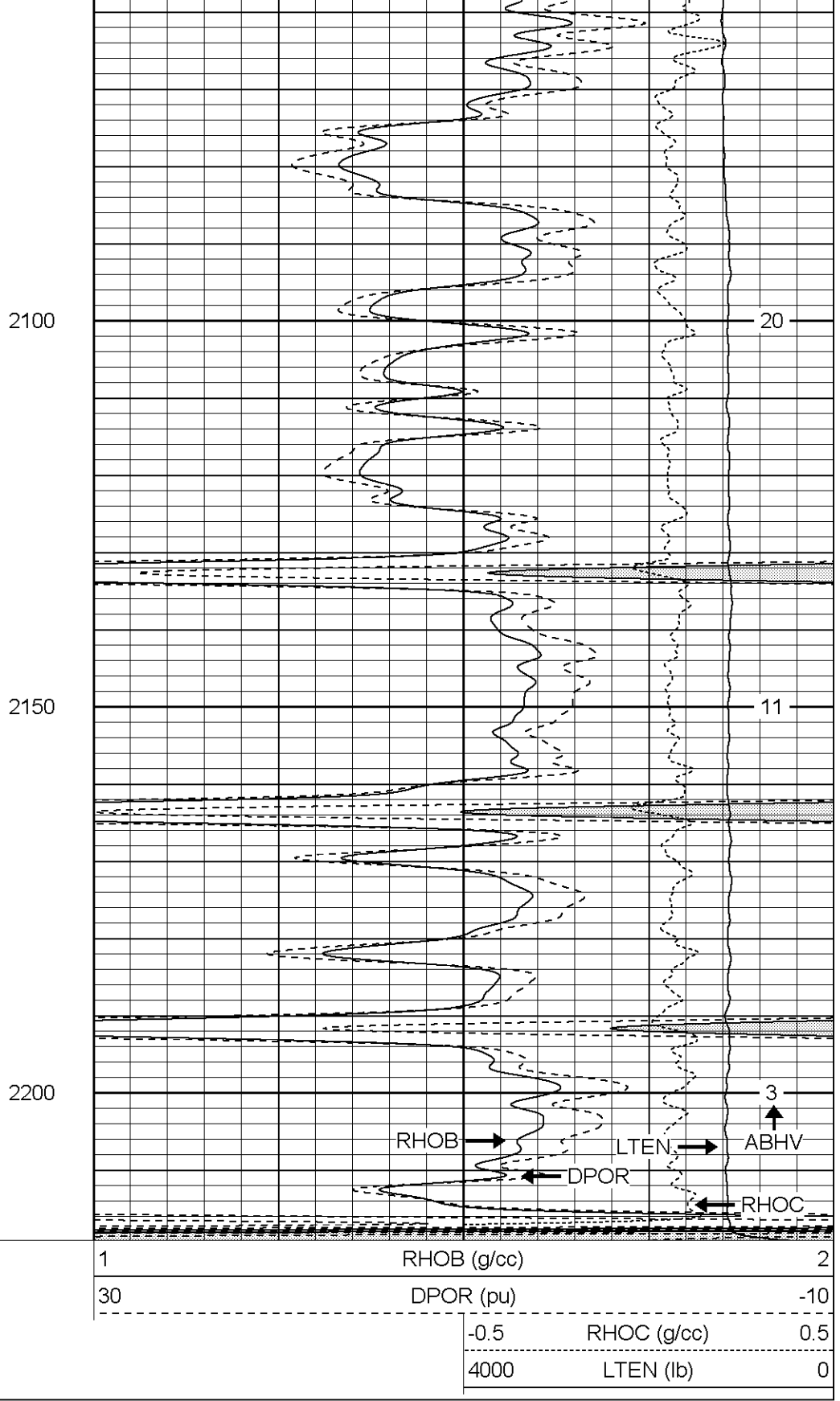
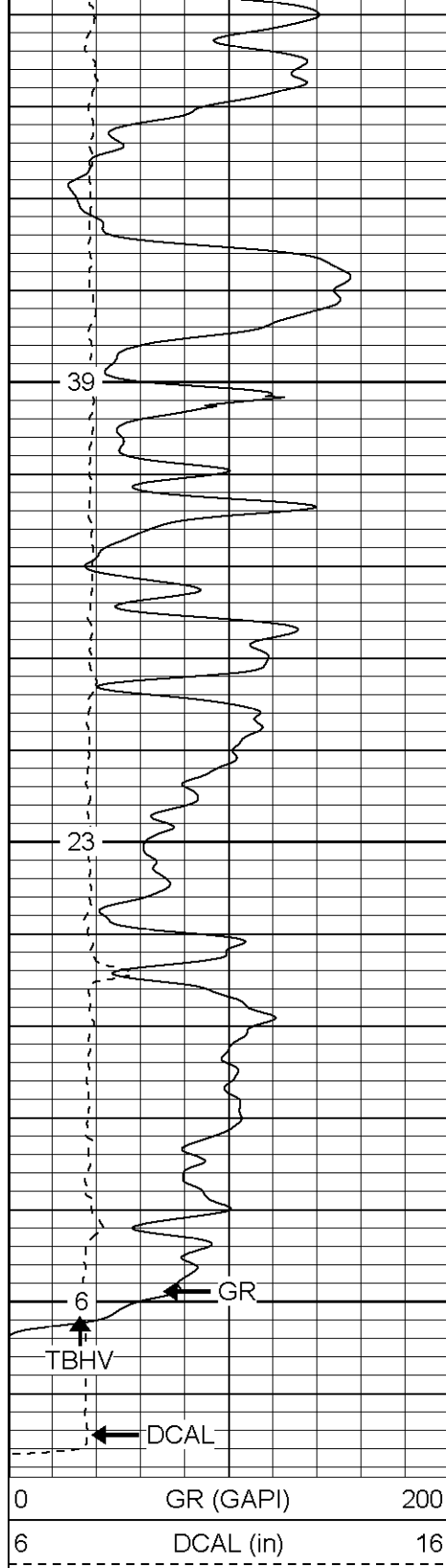












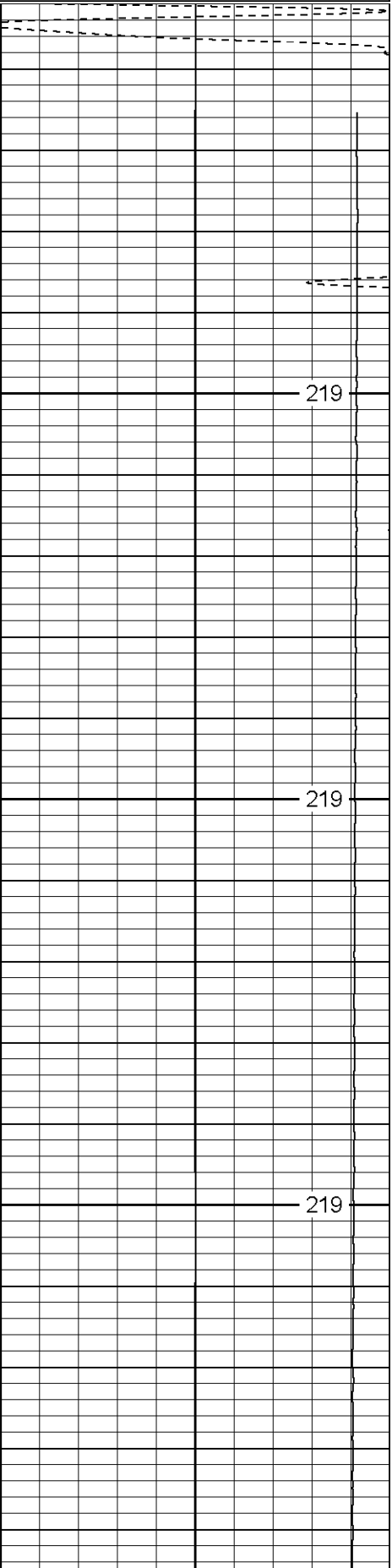
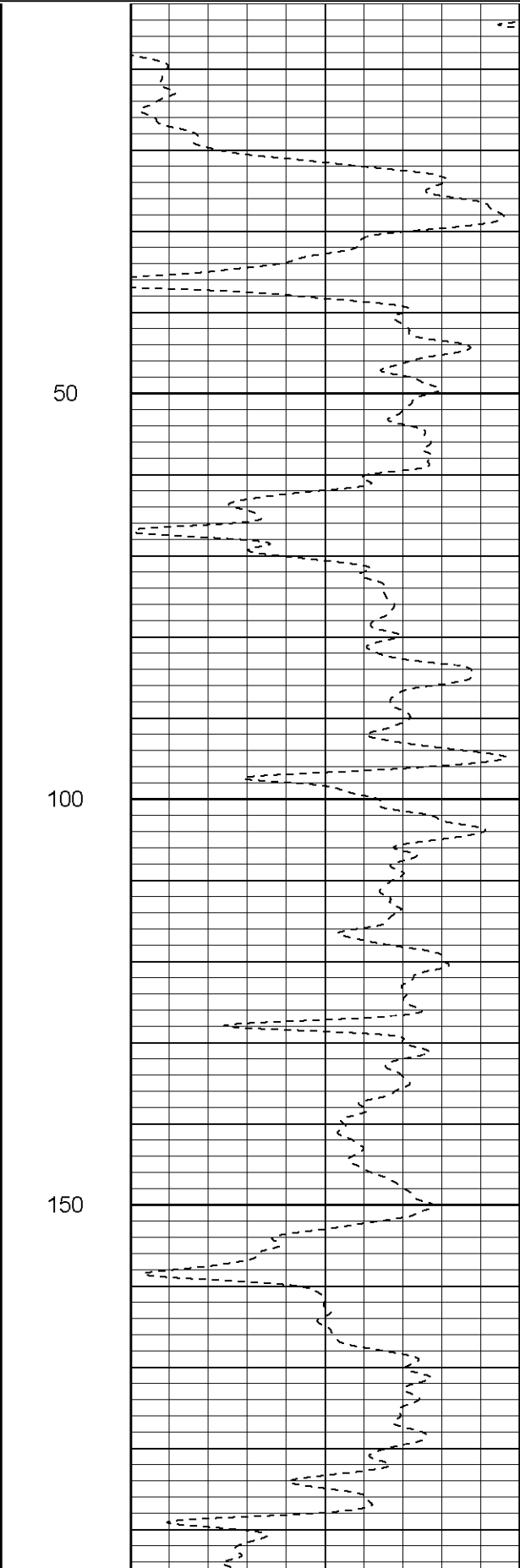
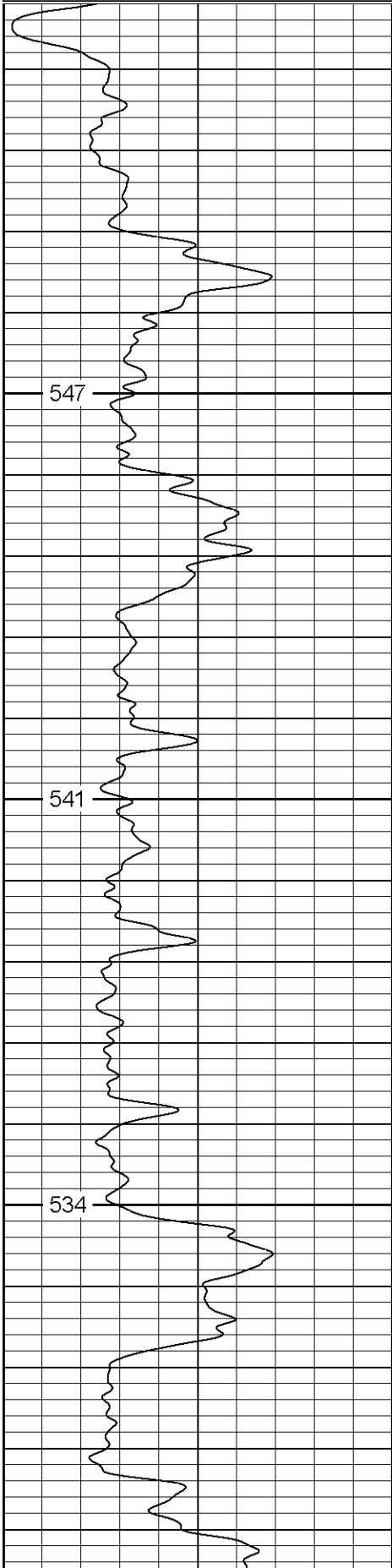
Patterson

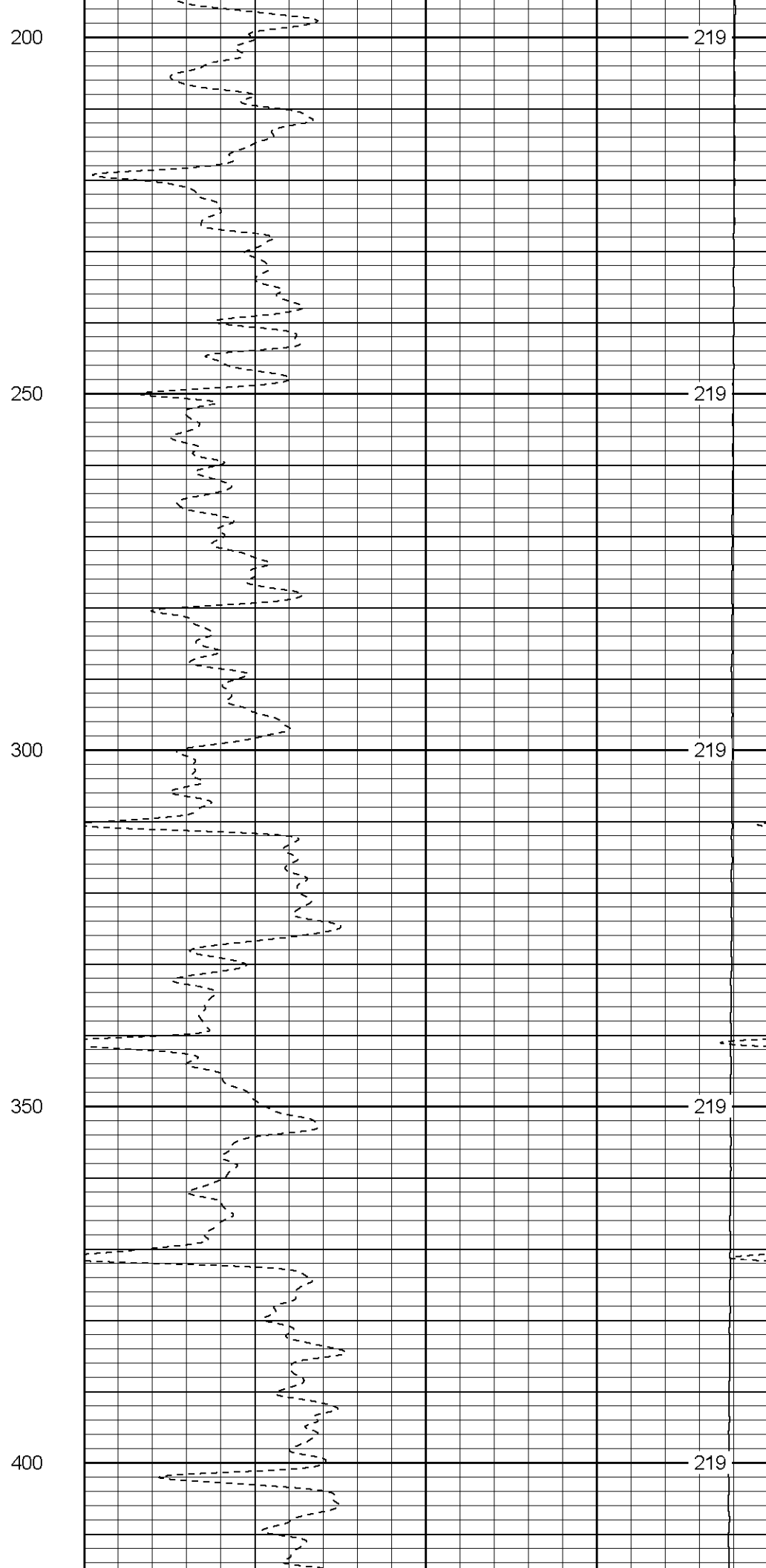
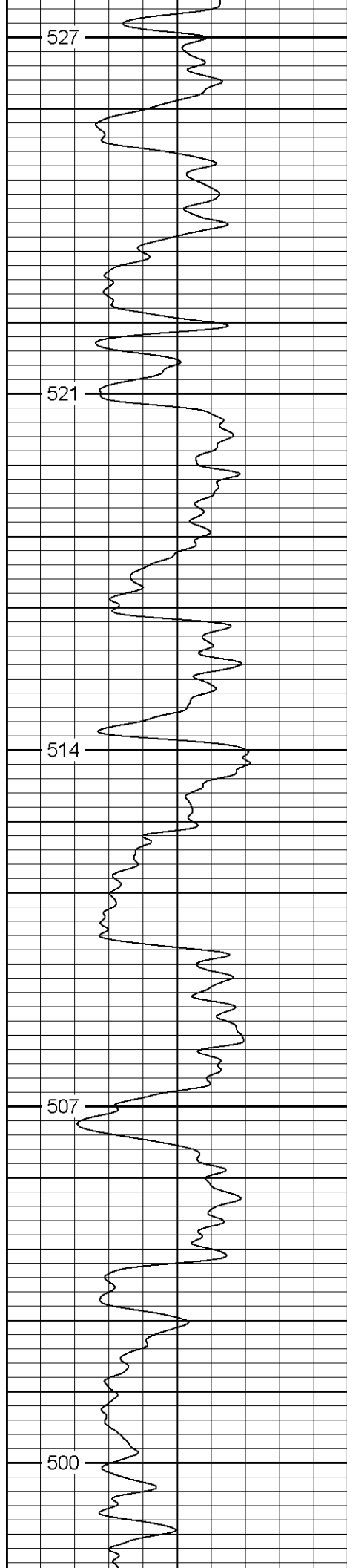
Main Pass

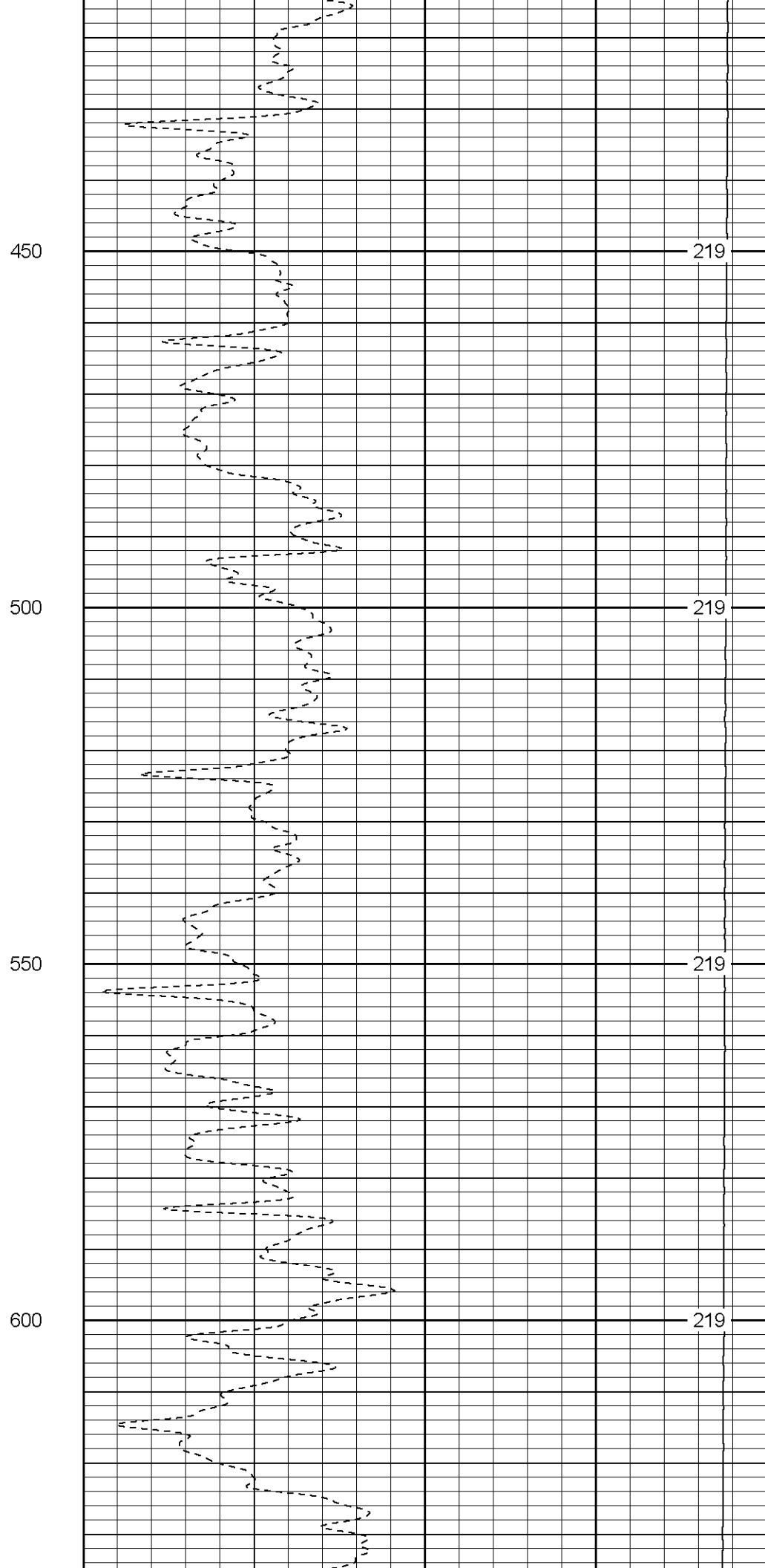
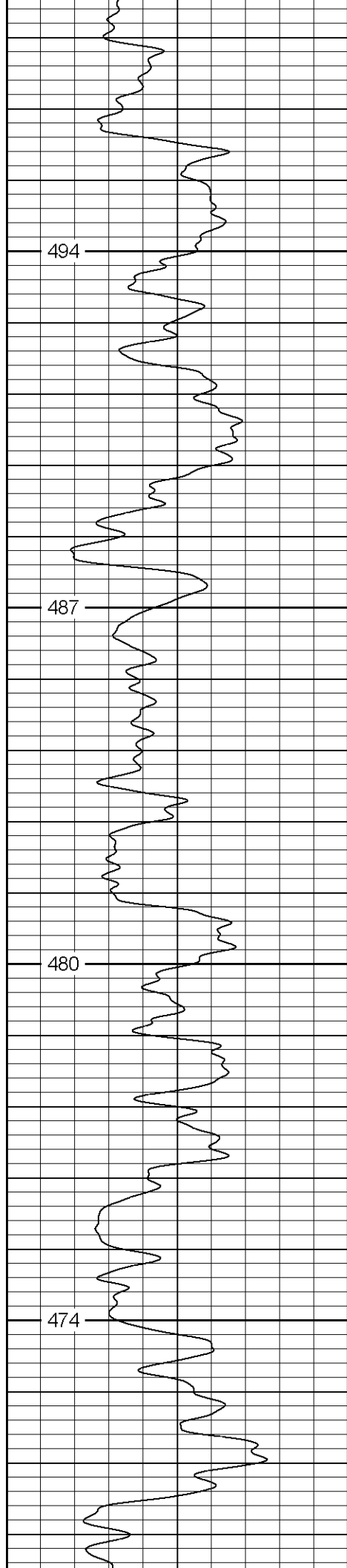
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 Presentation Format: cdnl
 Dataset Creation: Wed Oct 19 17:25:00 2005 by Calc Warrior 7.0 STD One

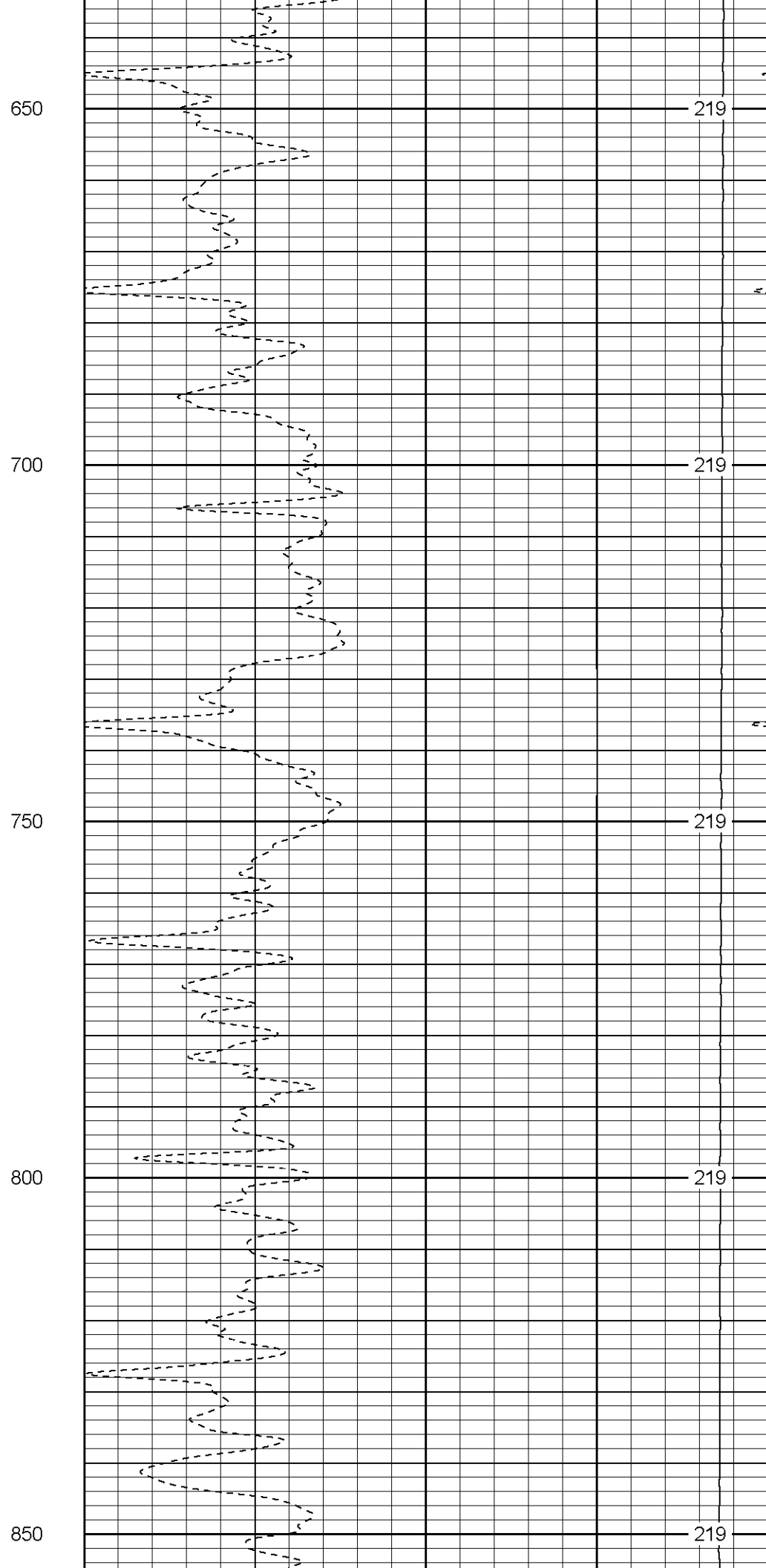
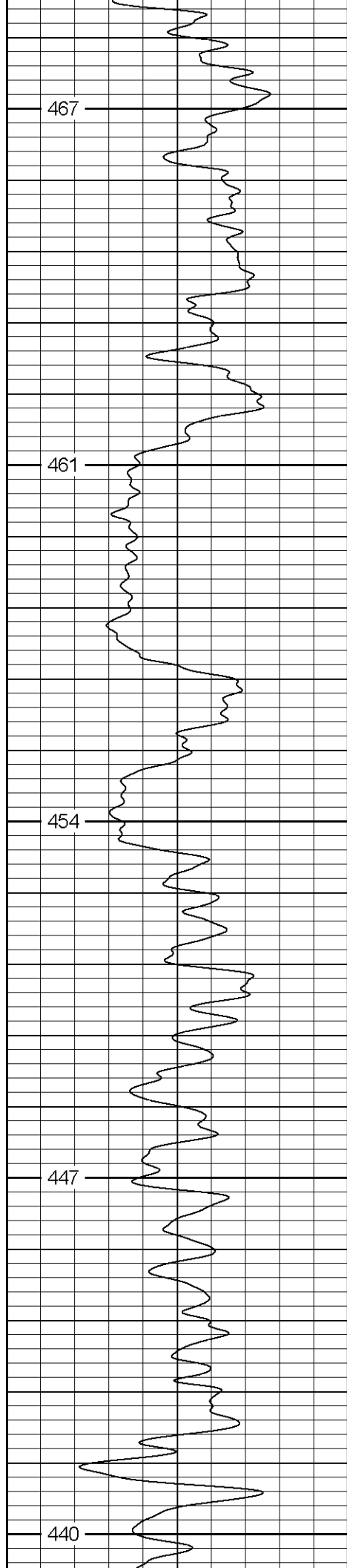
0	GR (GAPI)	200
6	DCAL (in)	16

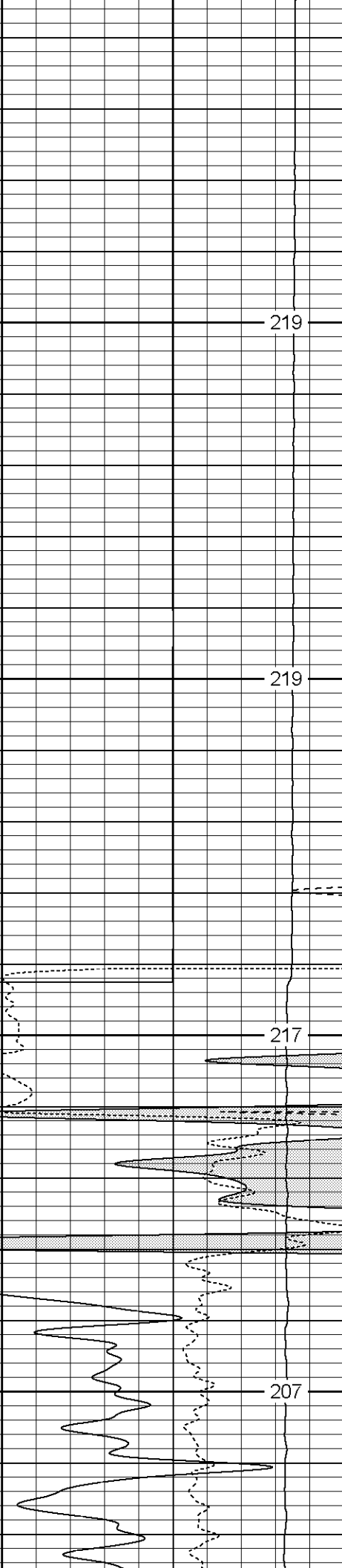
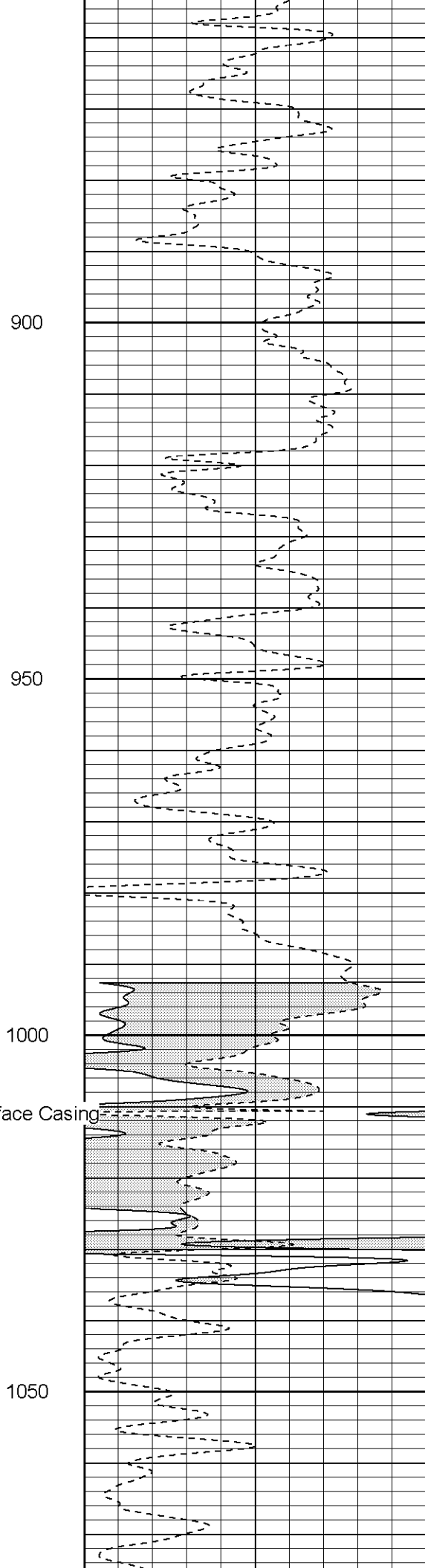
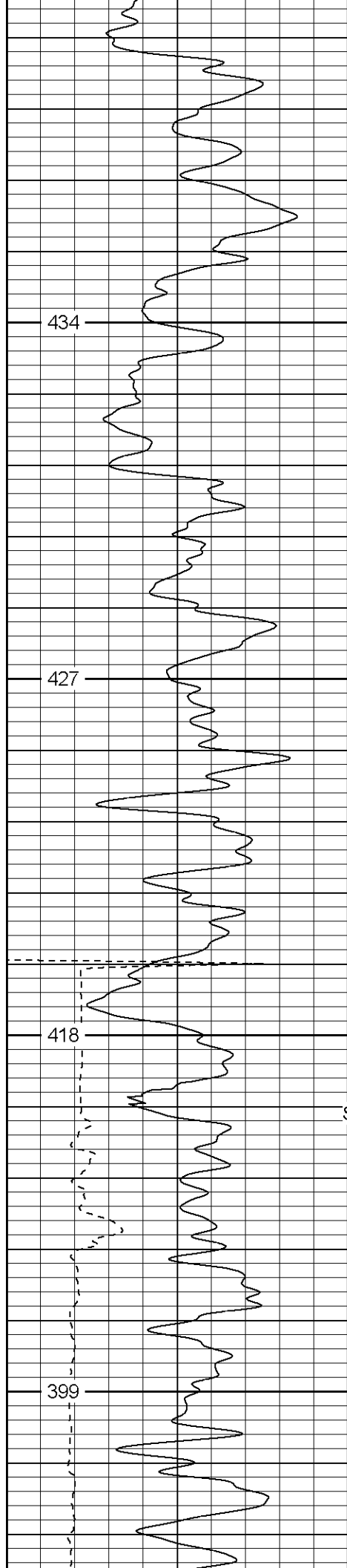
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
5000	LTEN (lb)	0



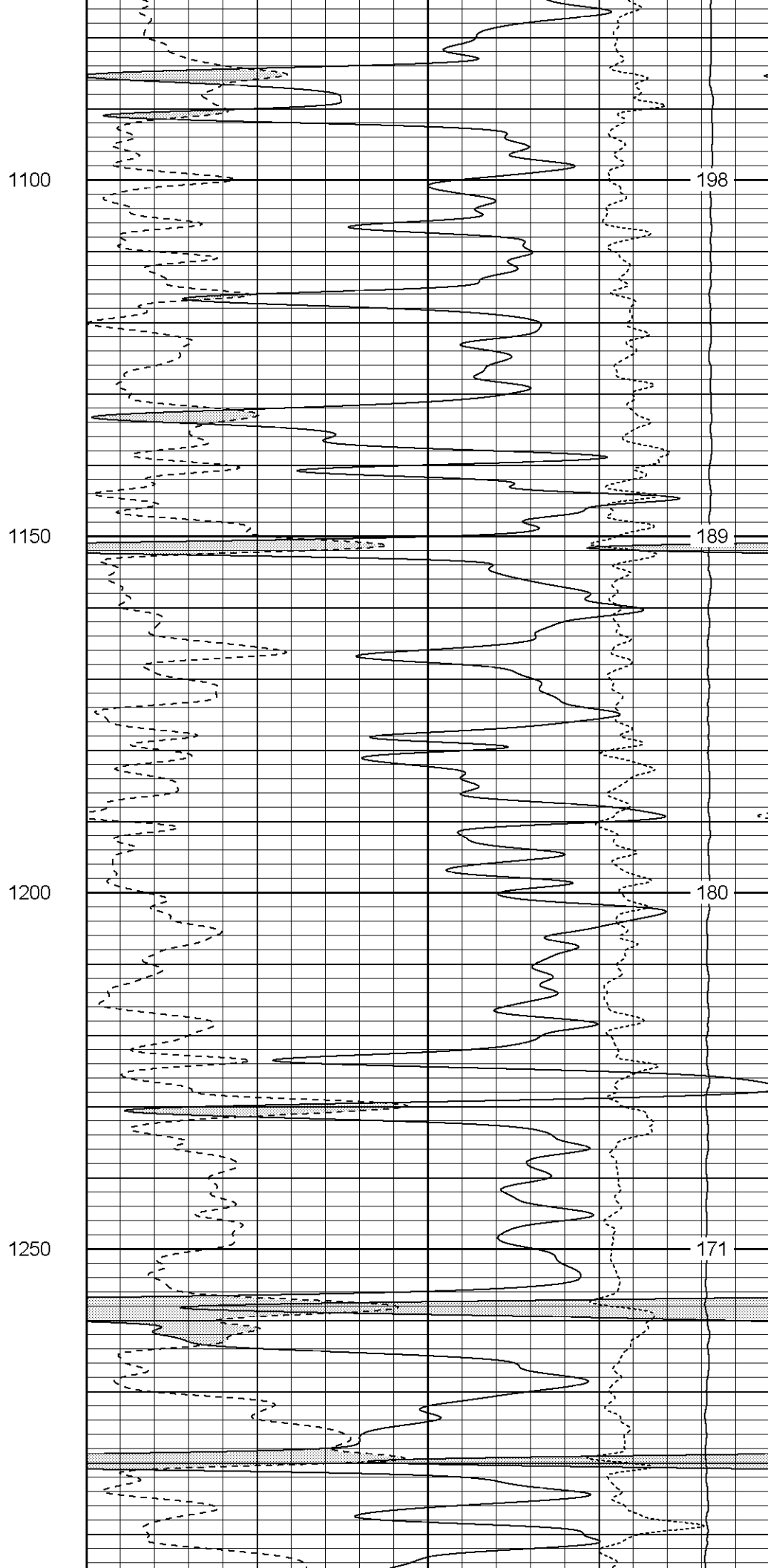
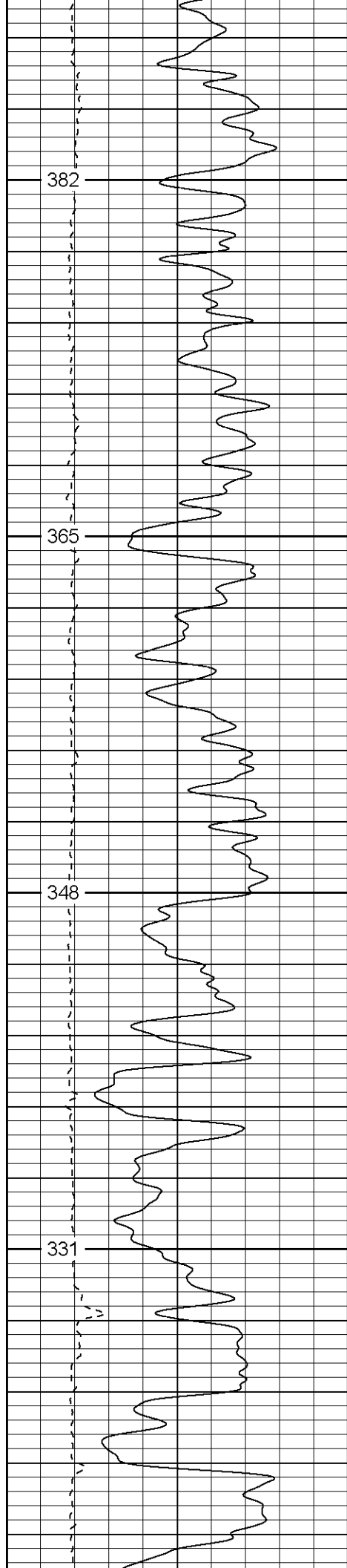


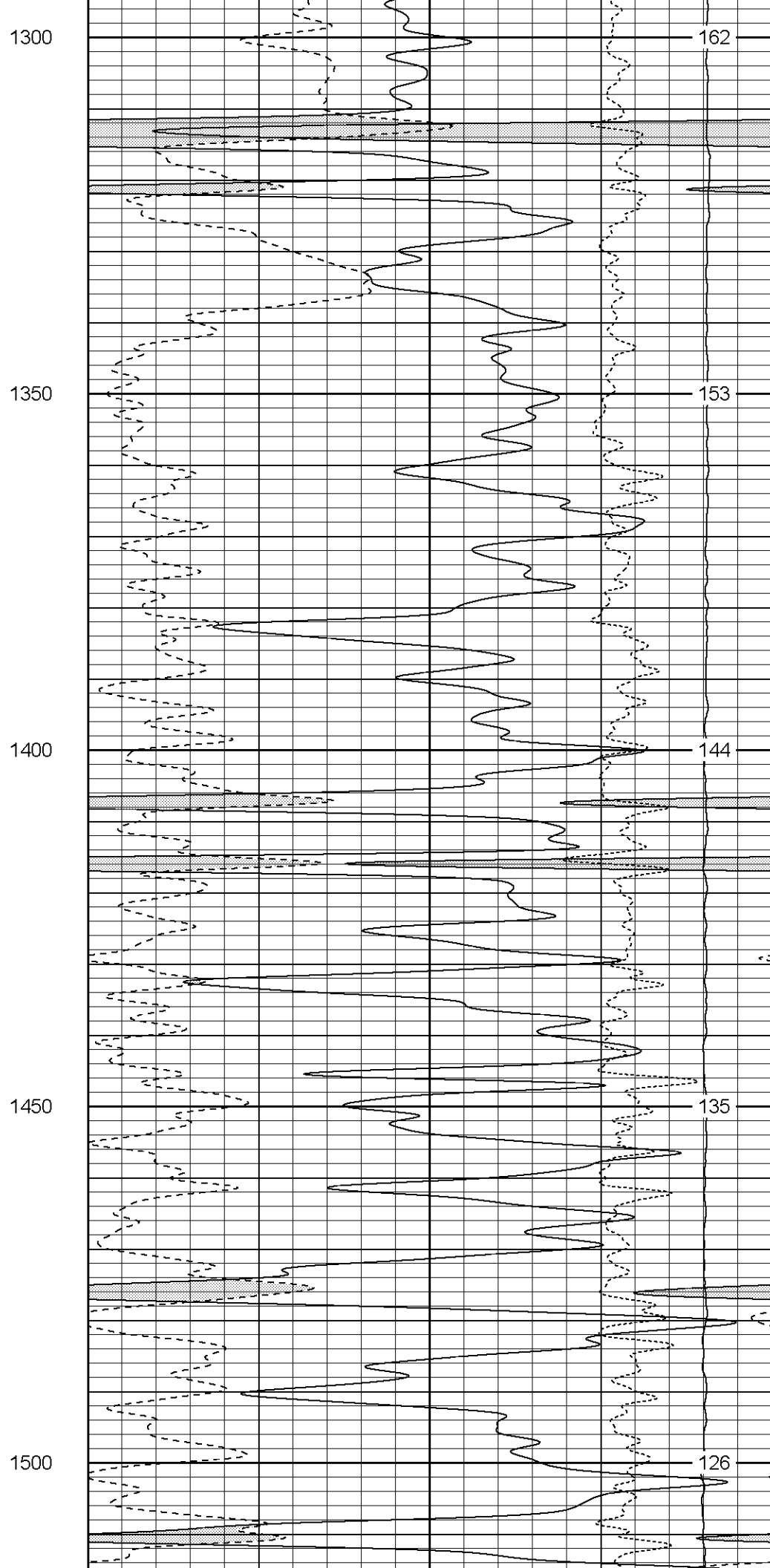
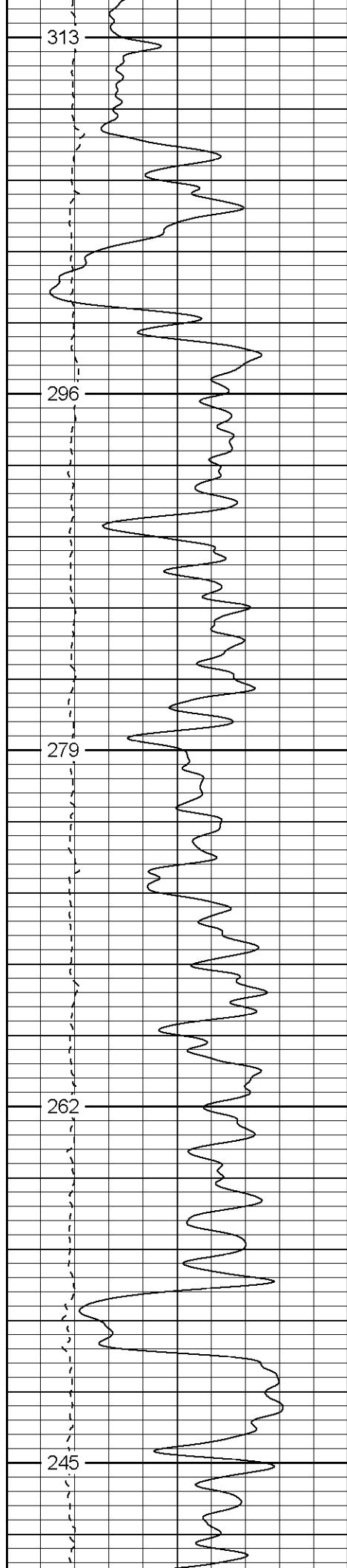


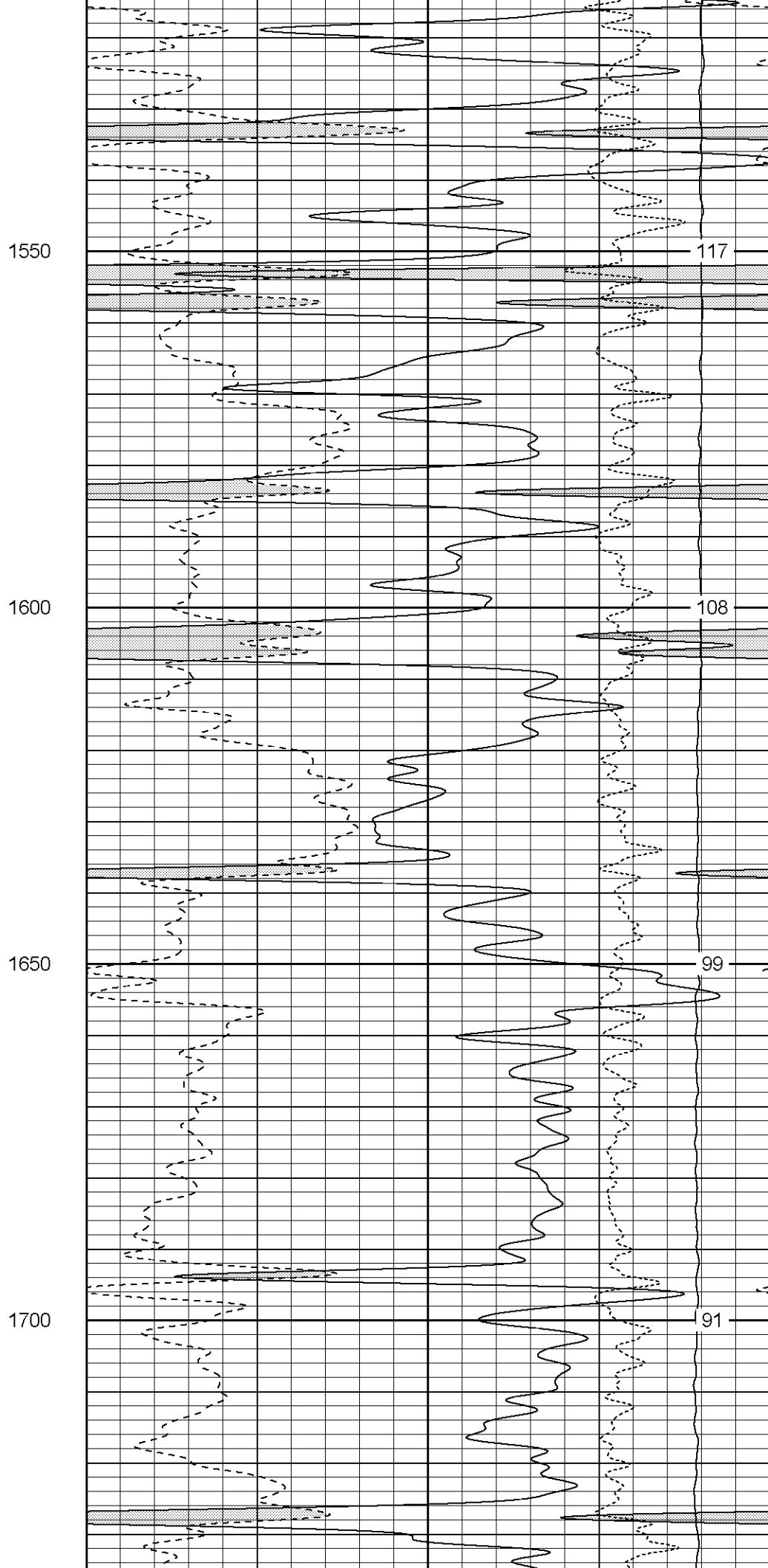
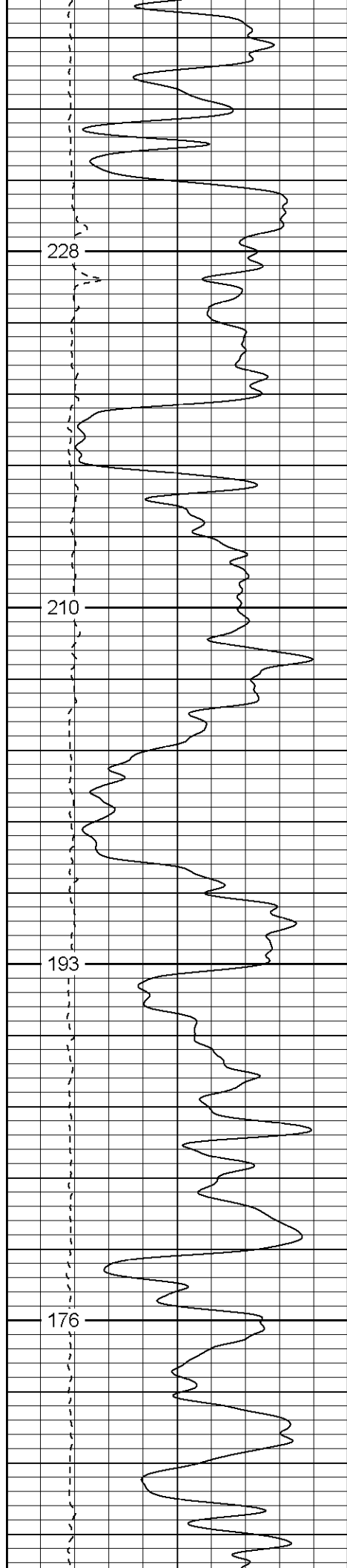


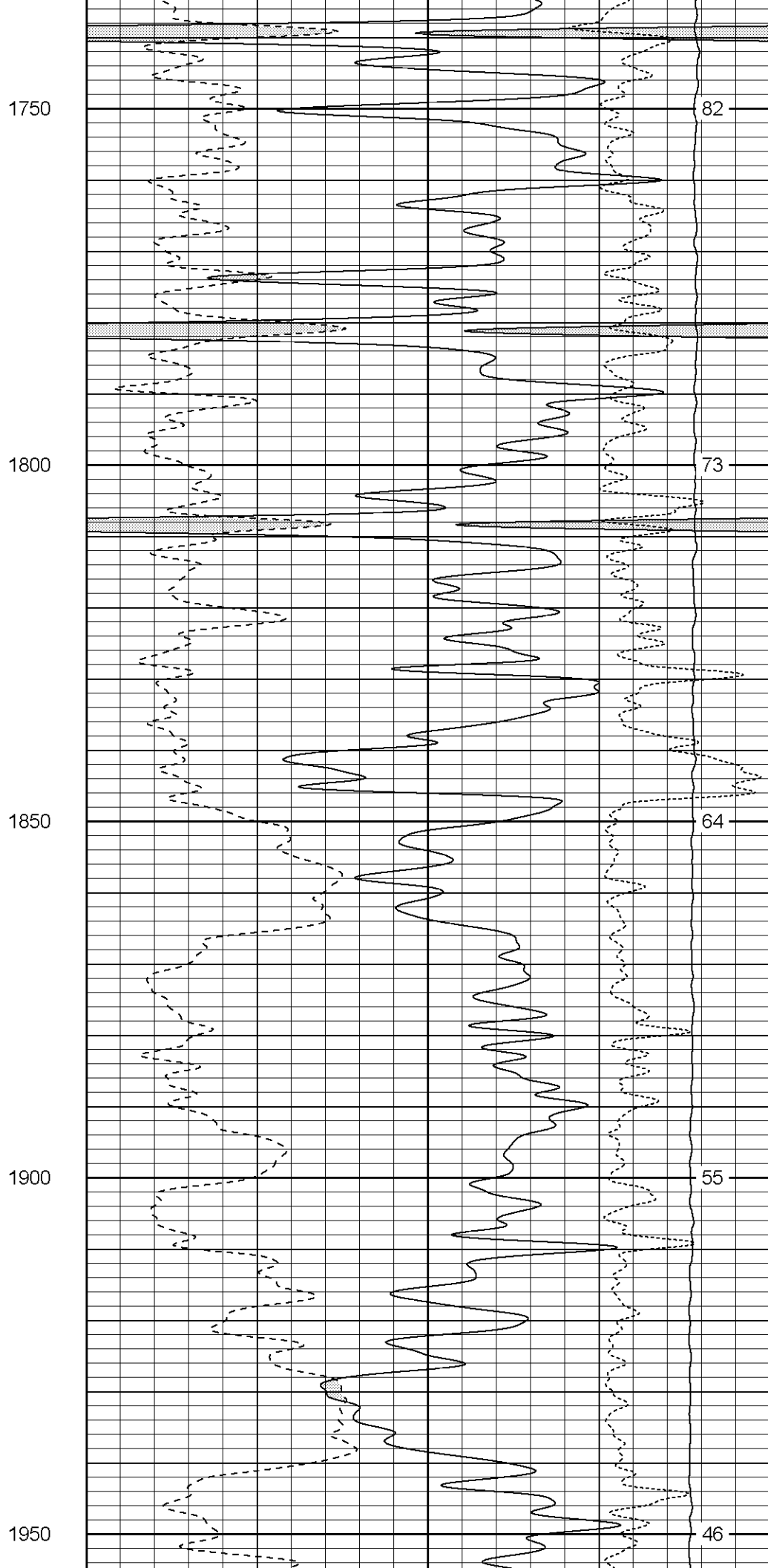
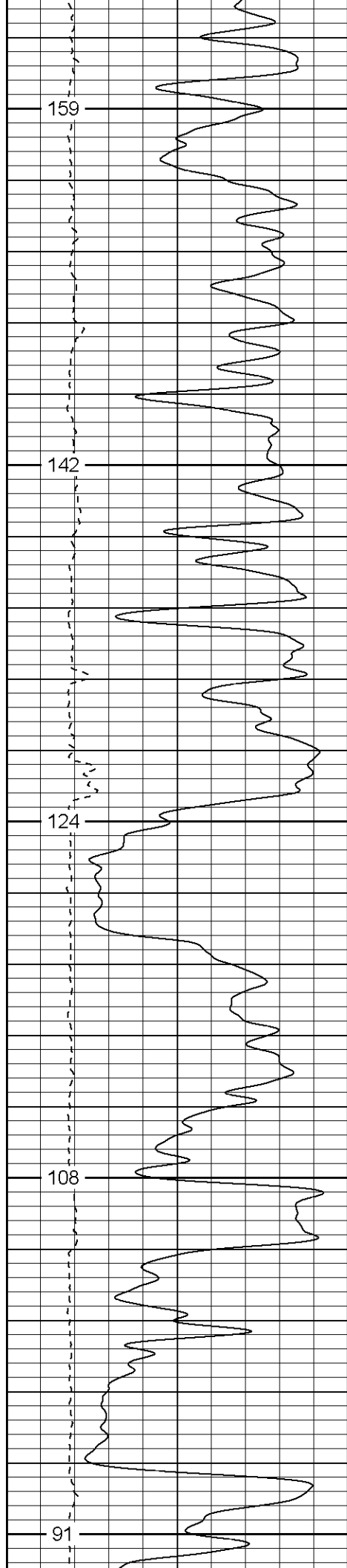


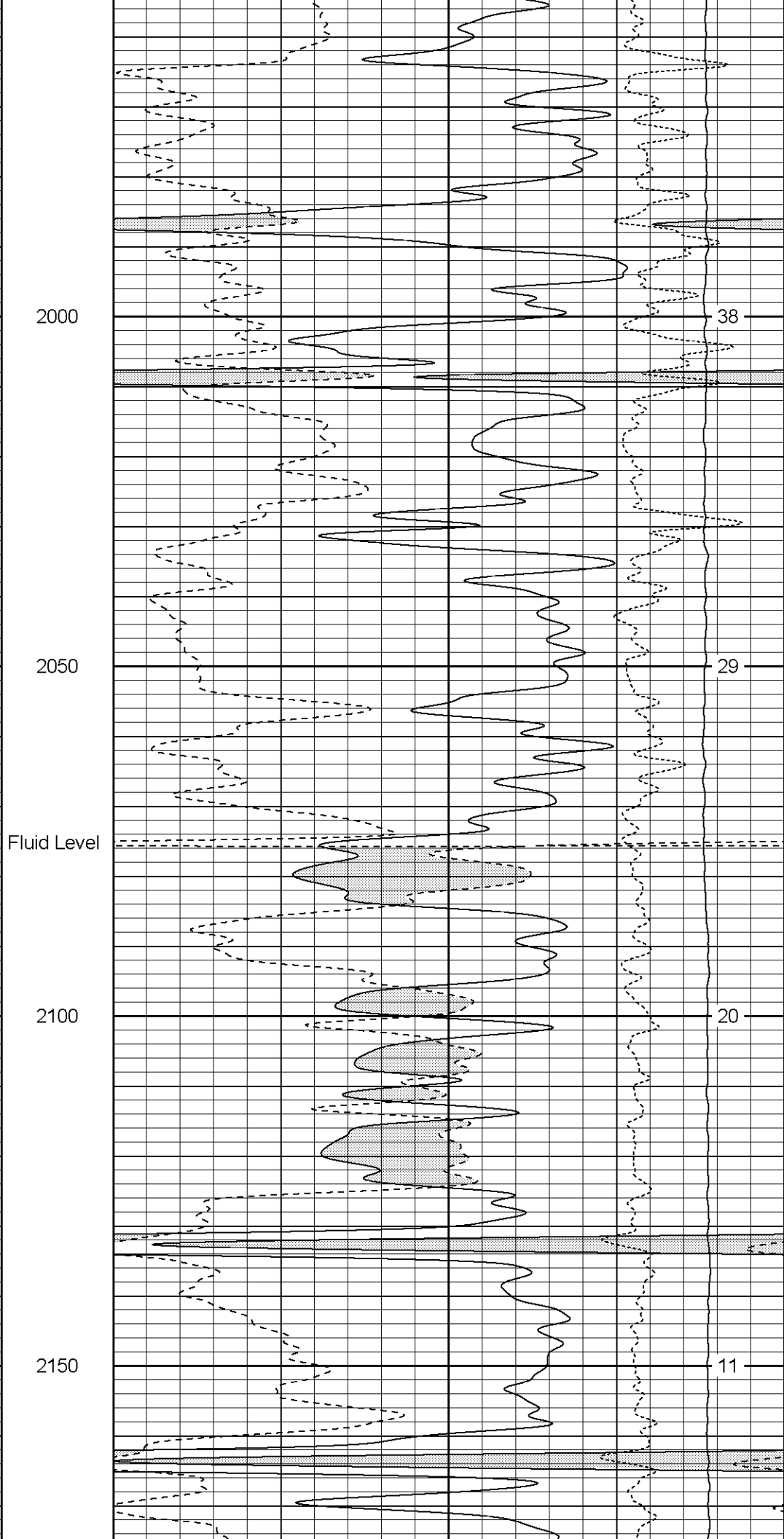
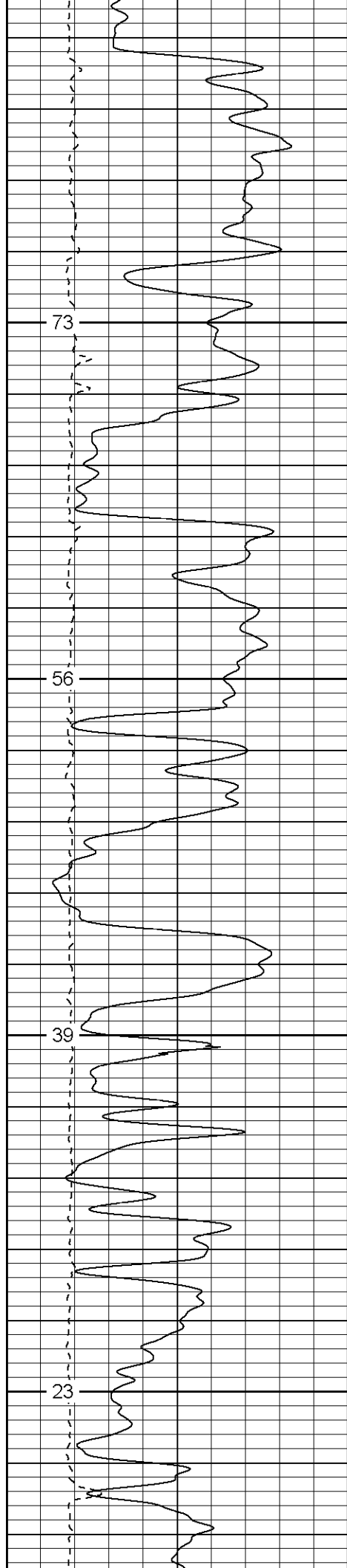
Surface Casing

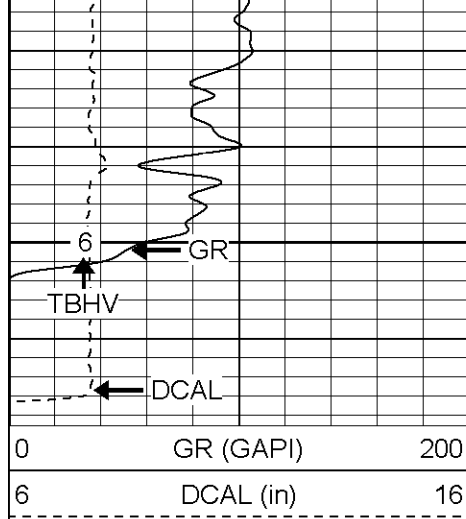




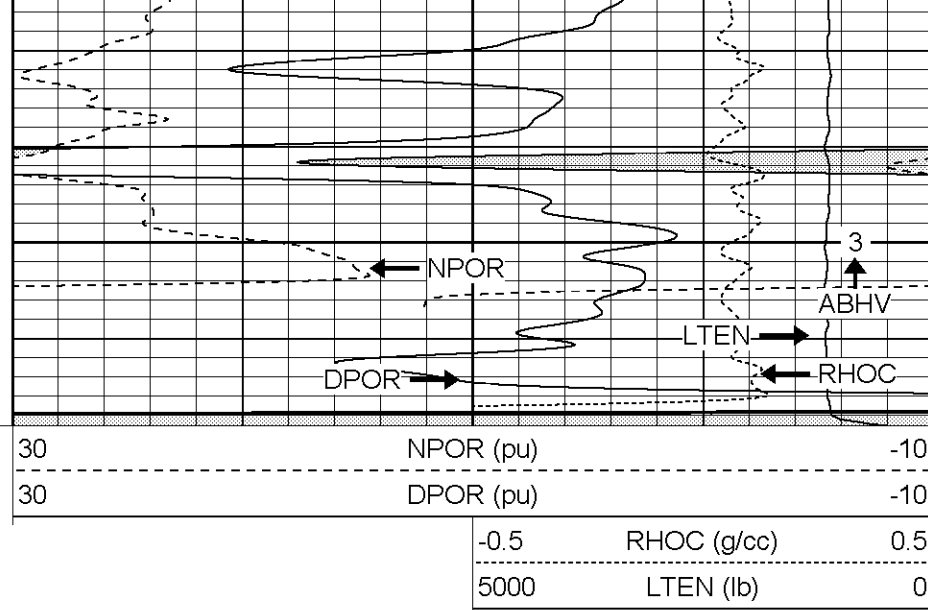








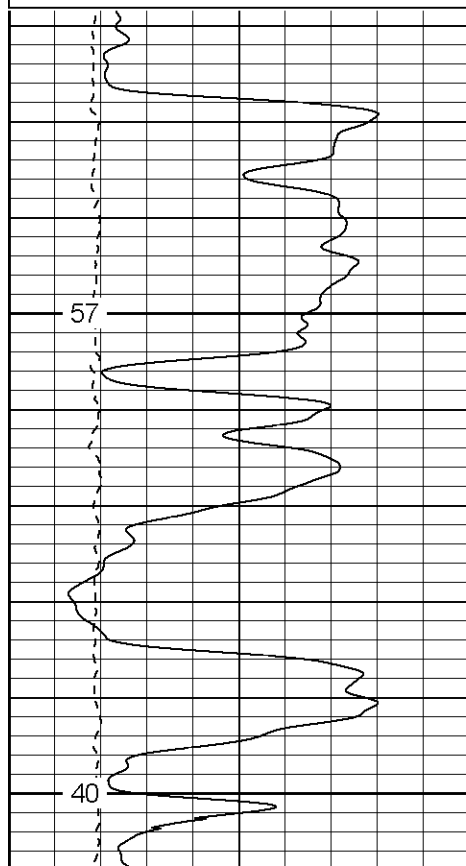
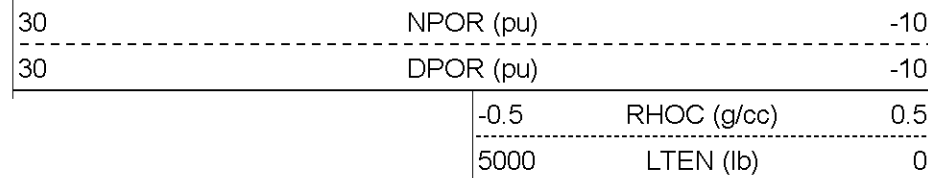
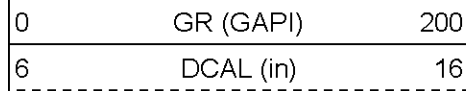
2200



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Repeat Section

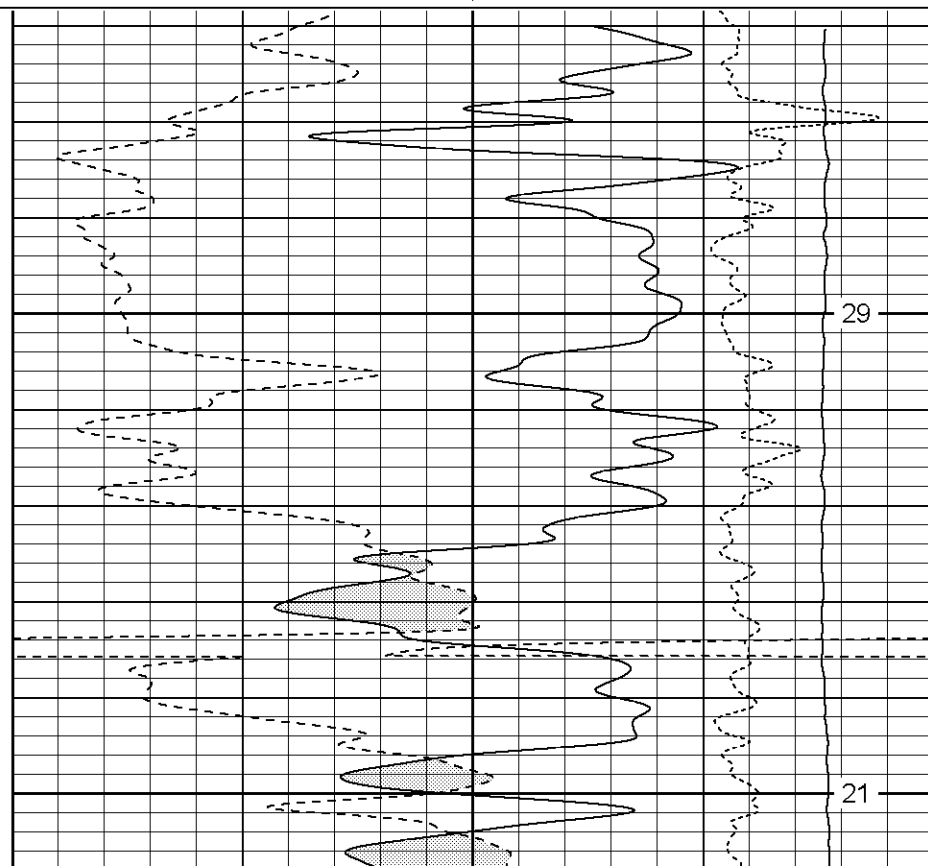
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 Charted by: Depth in Feet scaled 1:240



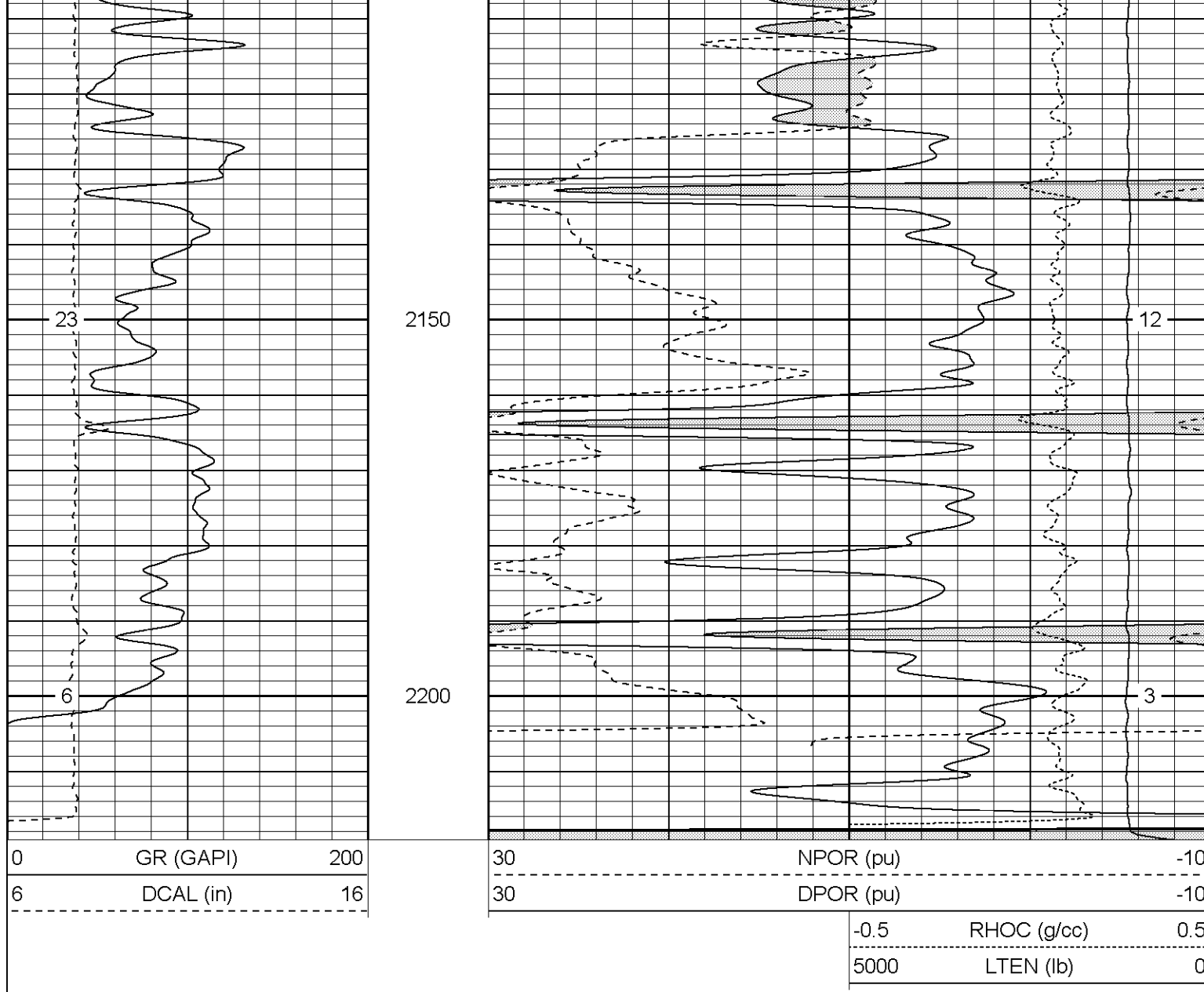
2050

Fluid Level

2100



21

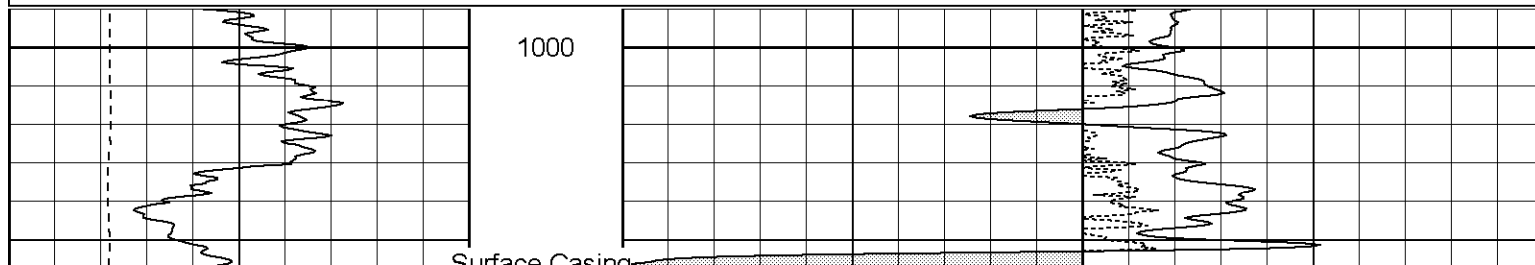


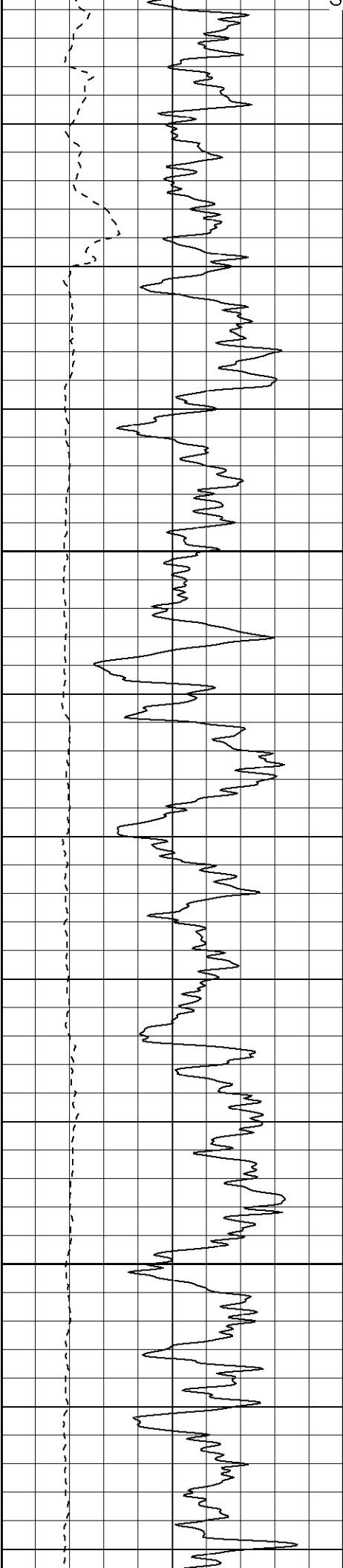
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High Resolution Pass

Database File: wranglertr.db
 Dataset Pathname: pass4.2
 Presentation Format: cdlhr
 Dataset Creation: Thu Oct 20 08:09:01 2005 by Calc Warrior 7.0 STD Ope
 Charted by: Depth in Feet scaled 1:120

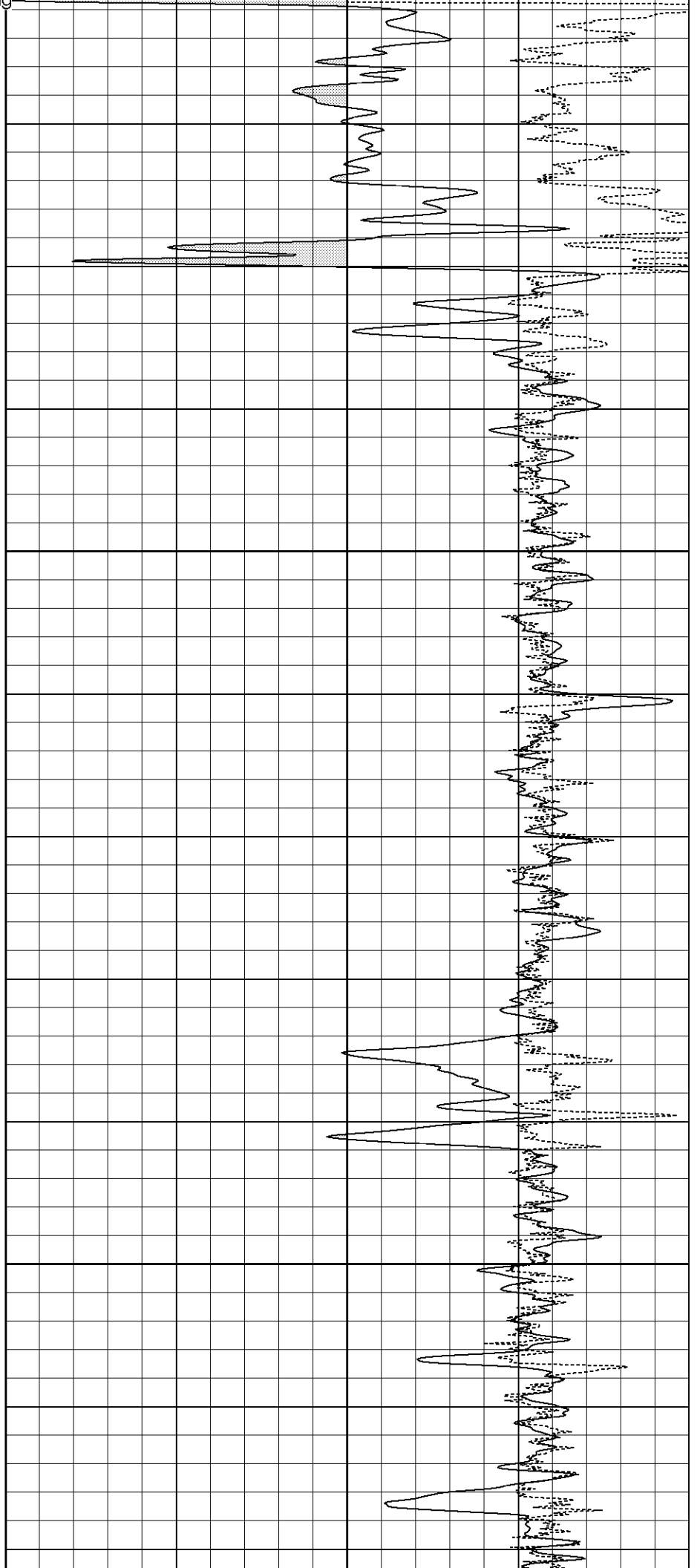
0	GR (GAPI)	200	1	RHOB (g/cc)		3
6	DCAL (in)	16		-0.5	RHOC (g/cc)	0.5

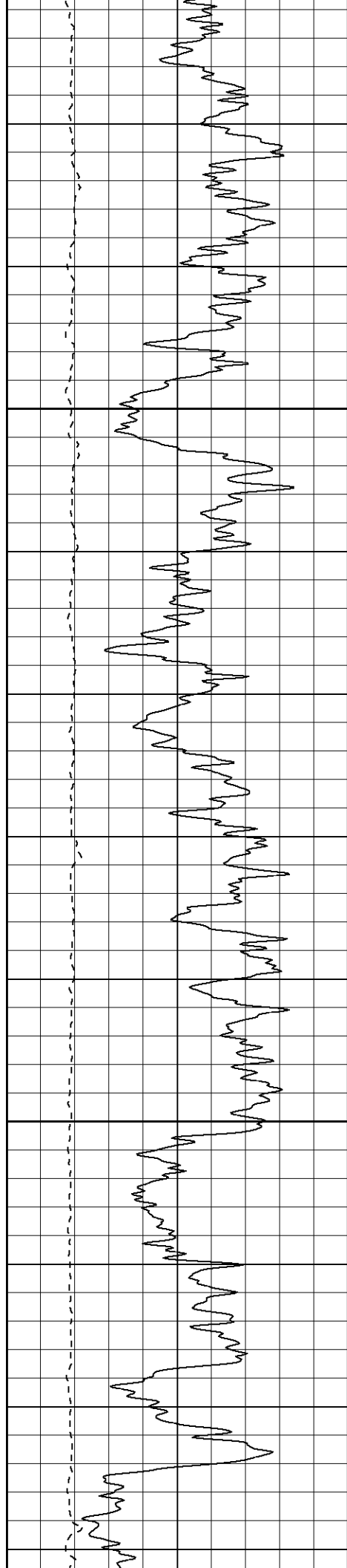




1050

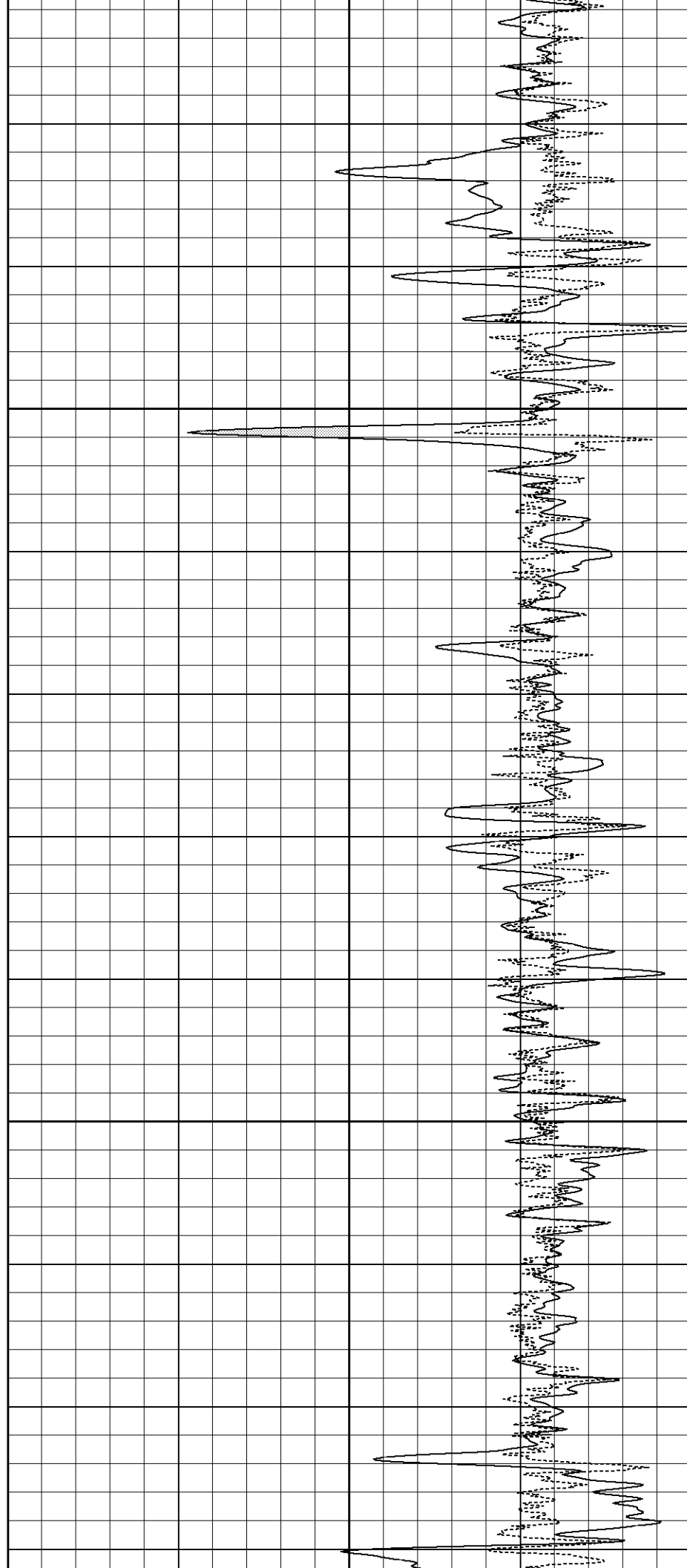
1100

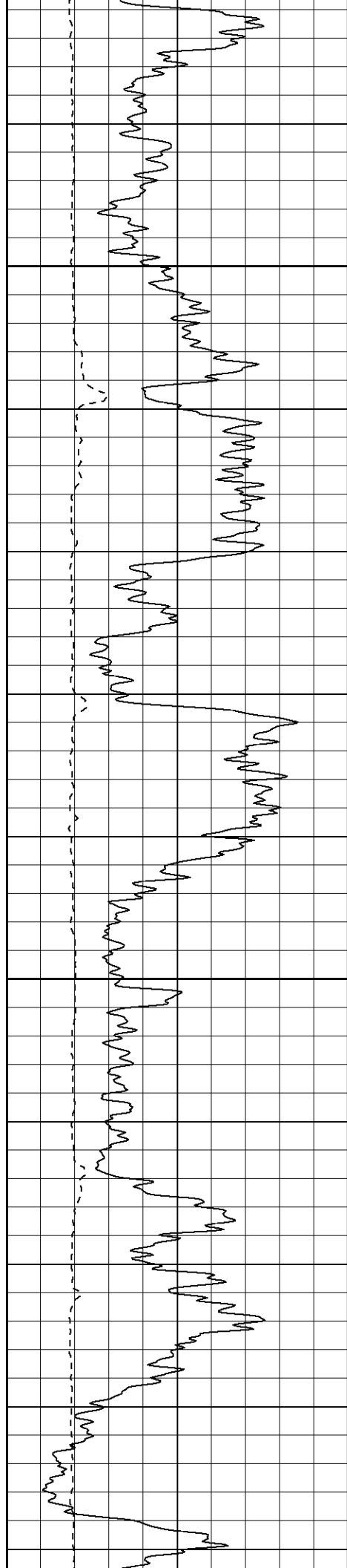




1150

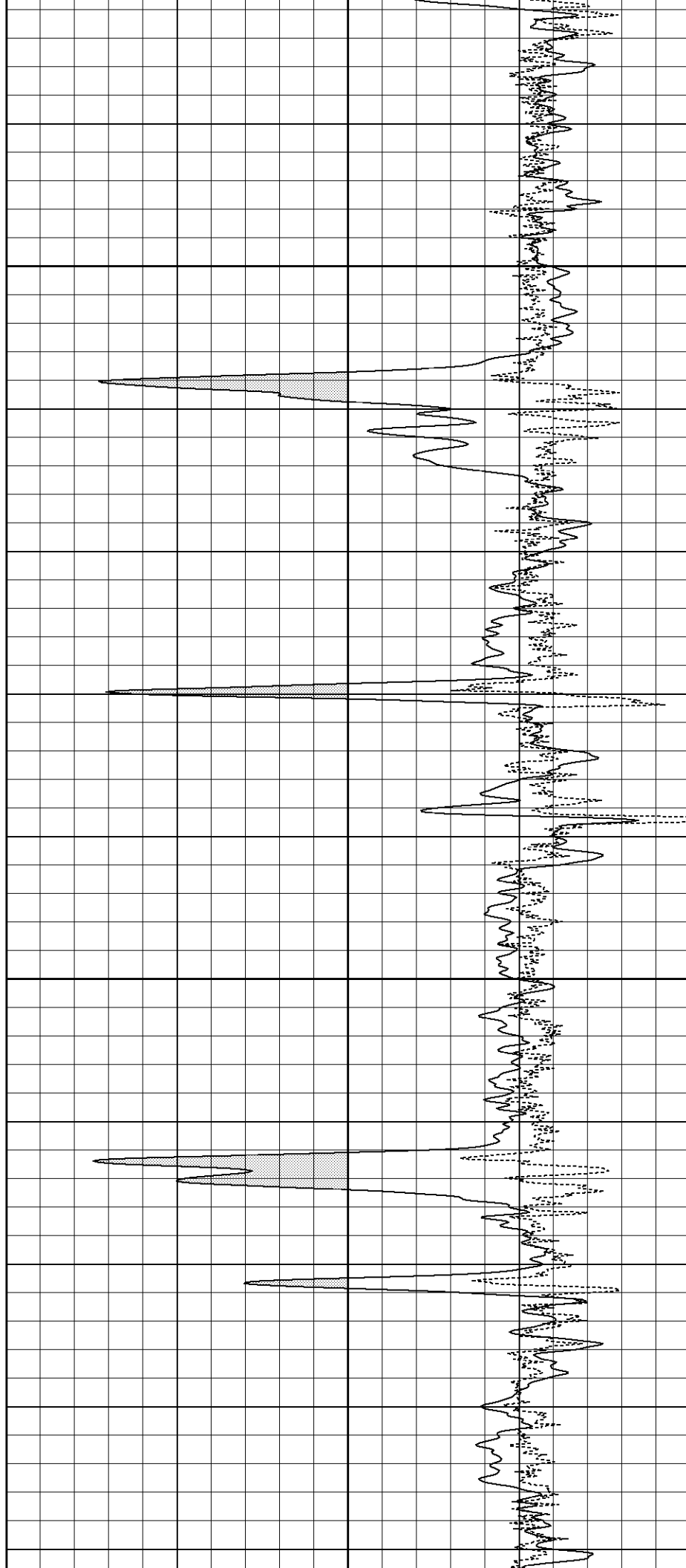
1200

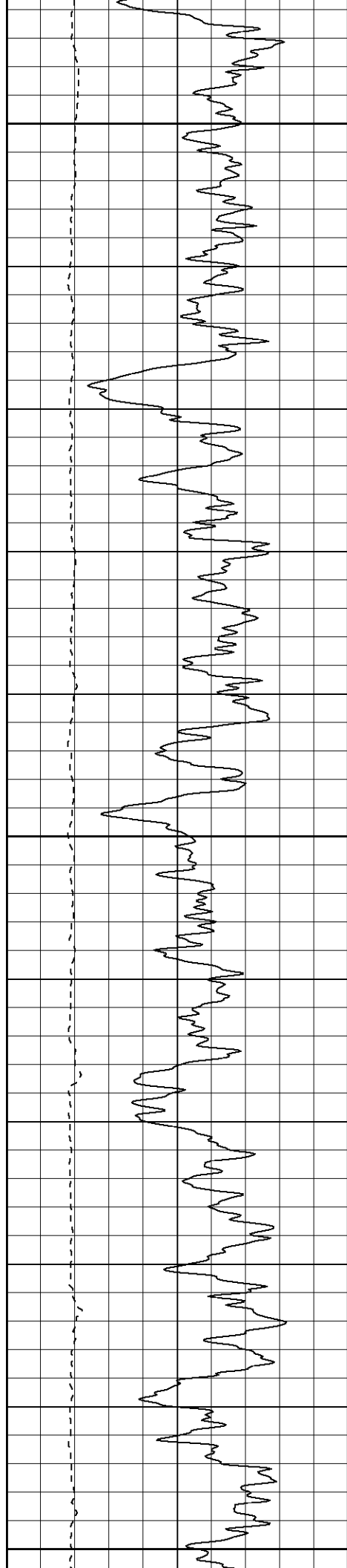




1250

1300

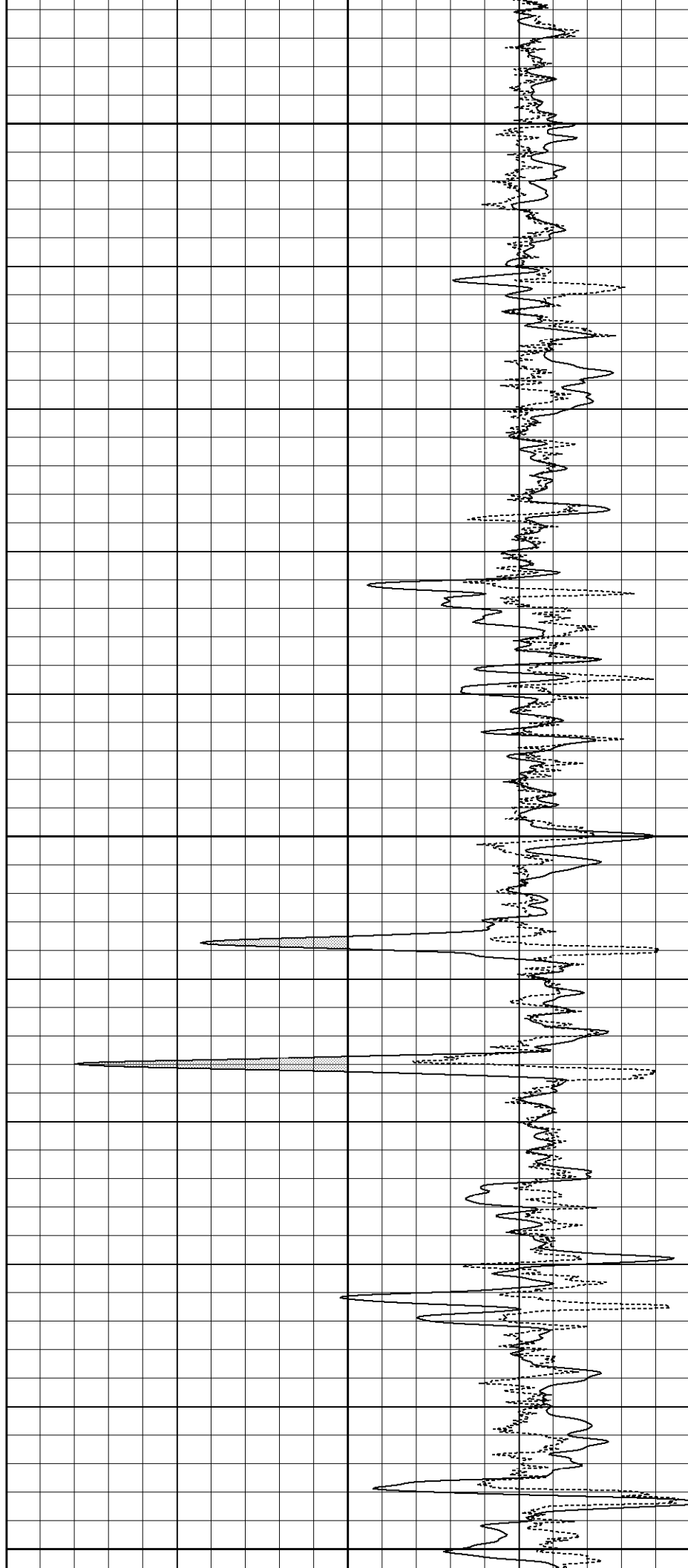


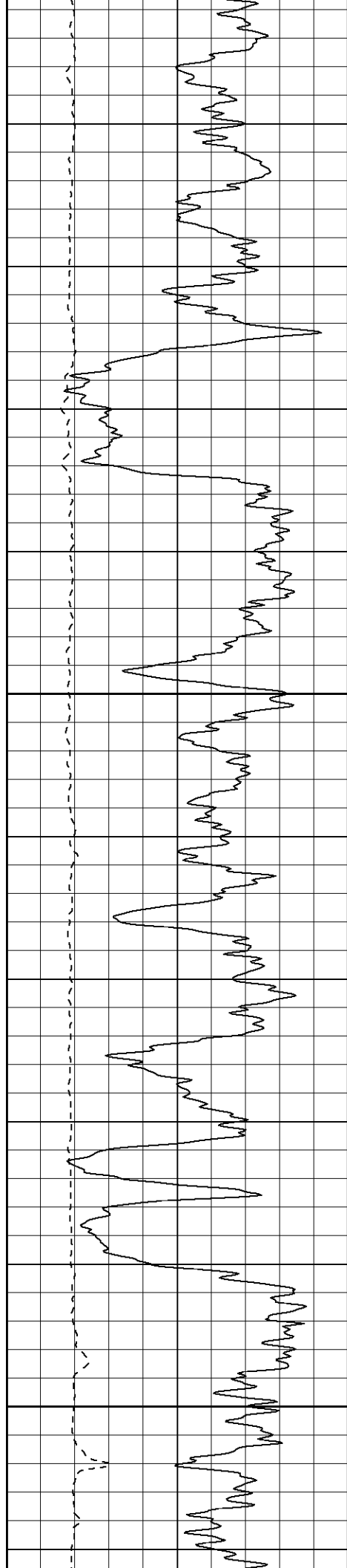


1350

1400

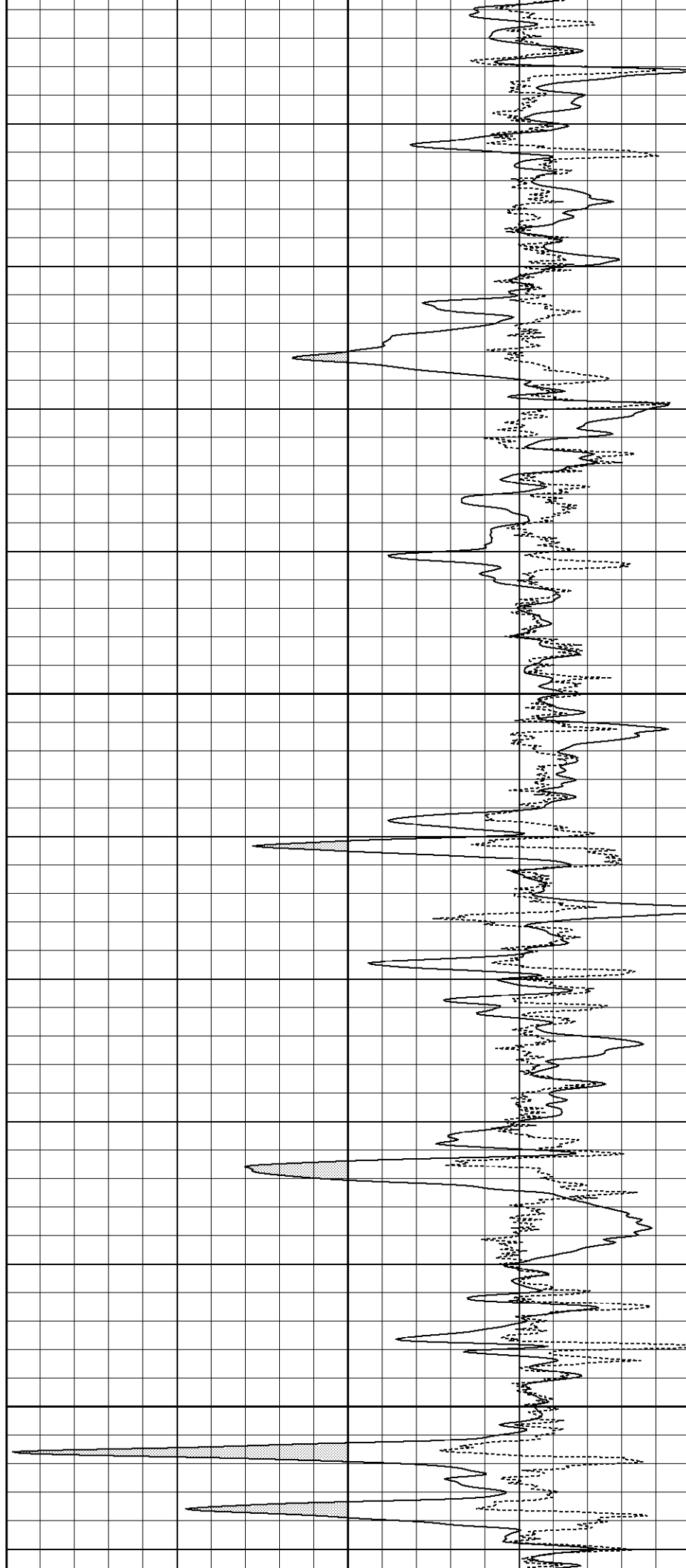
1450

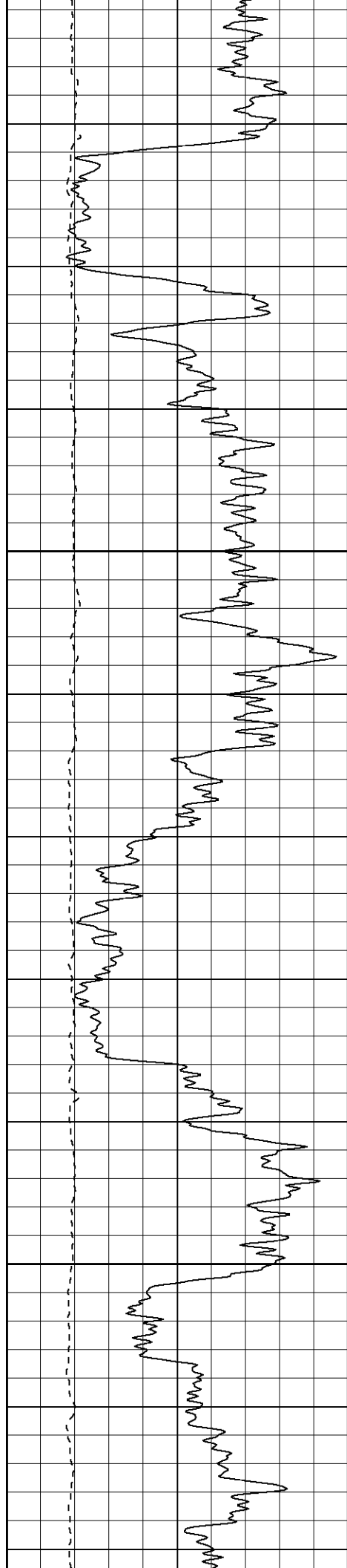




1500

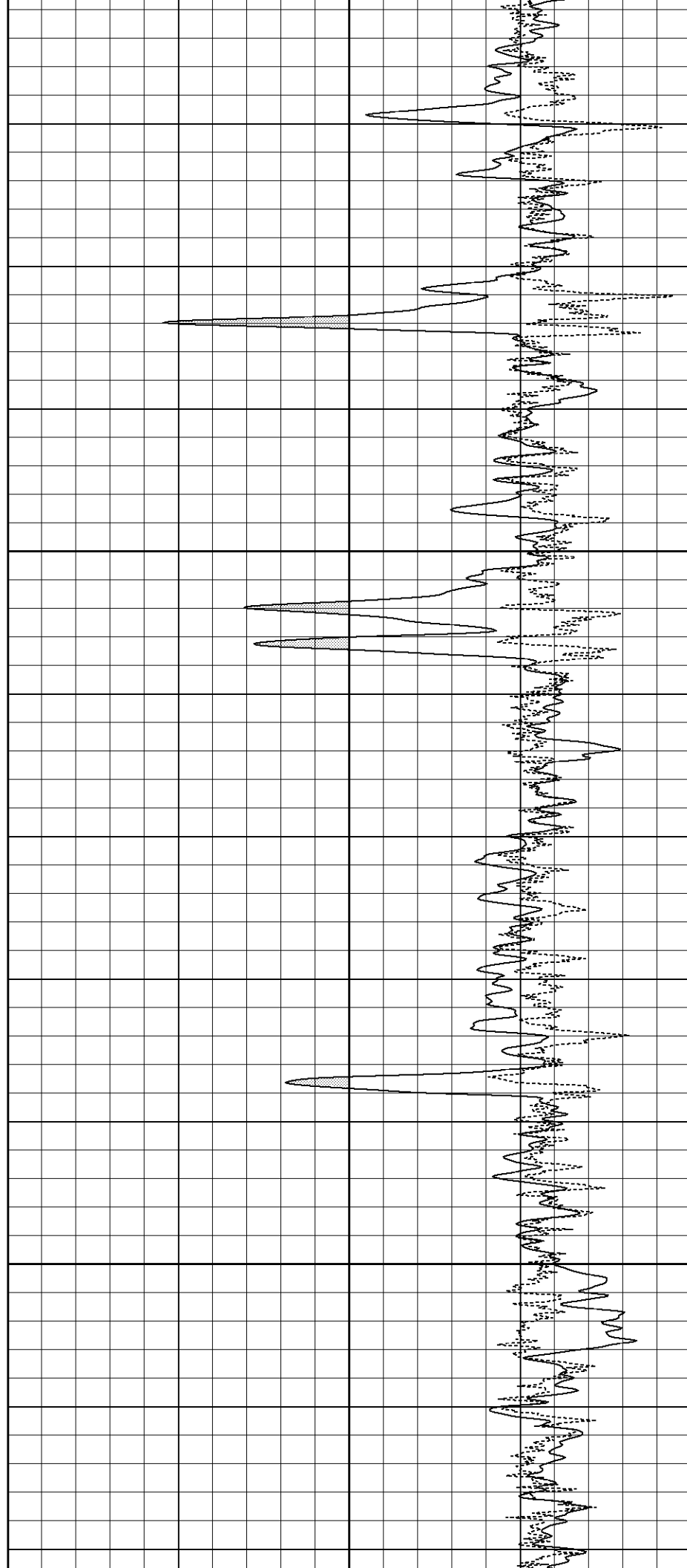
1550

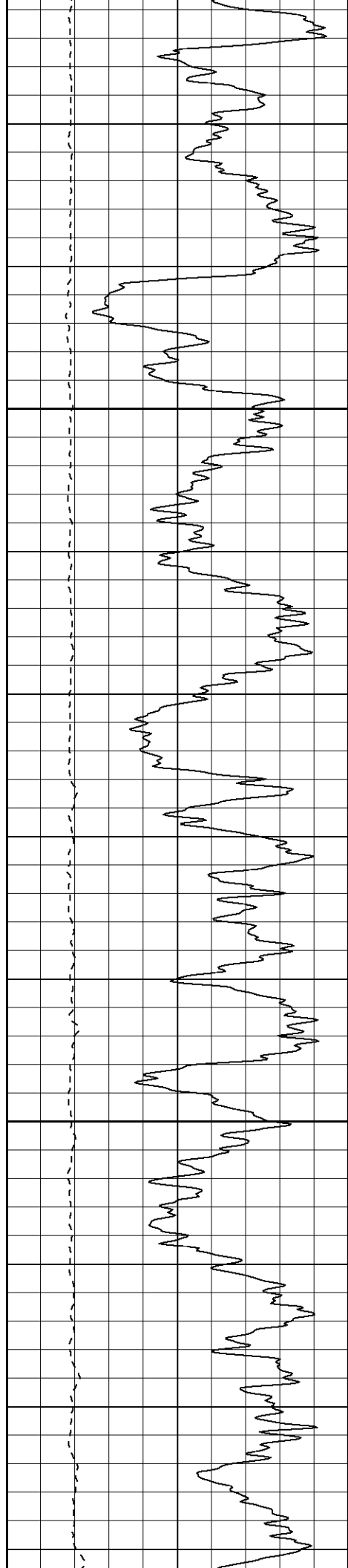




1600

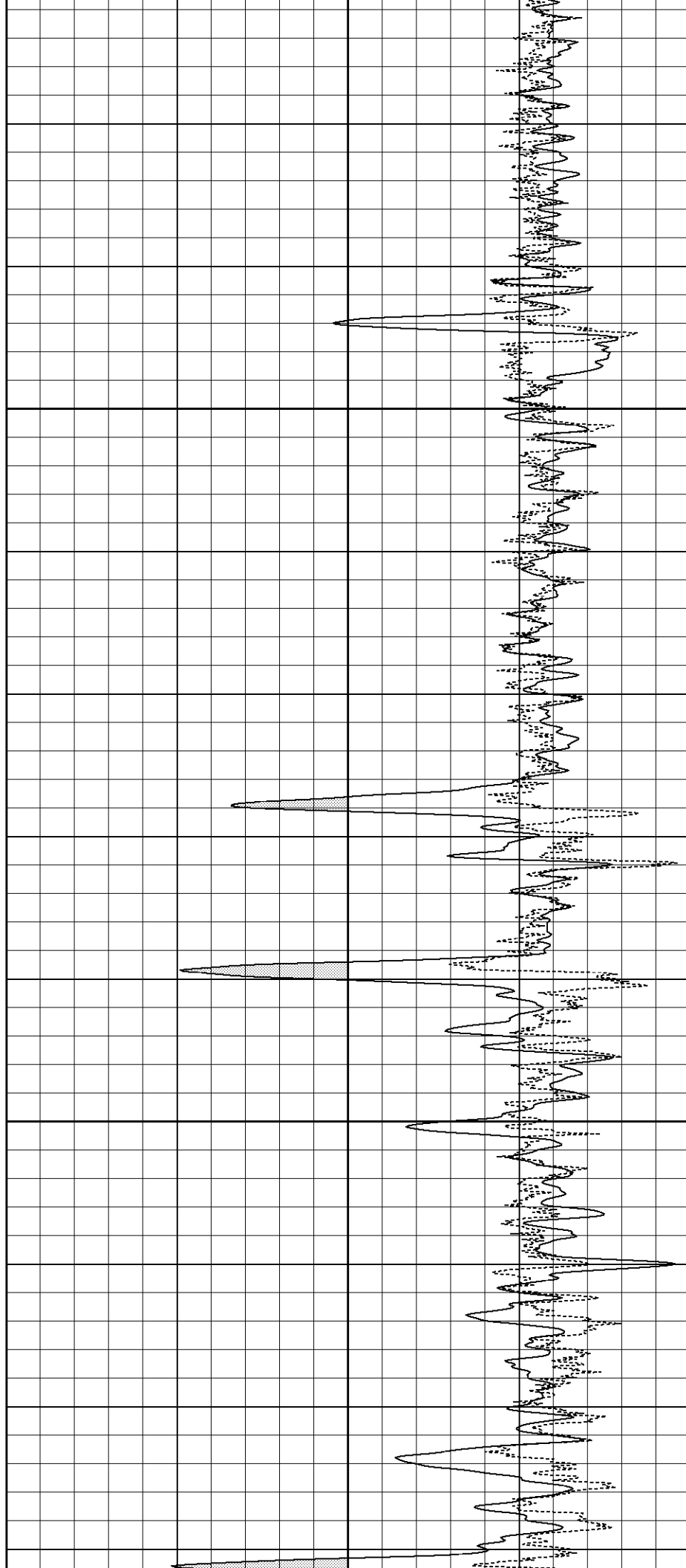
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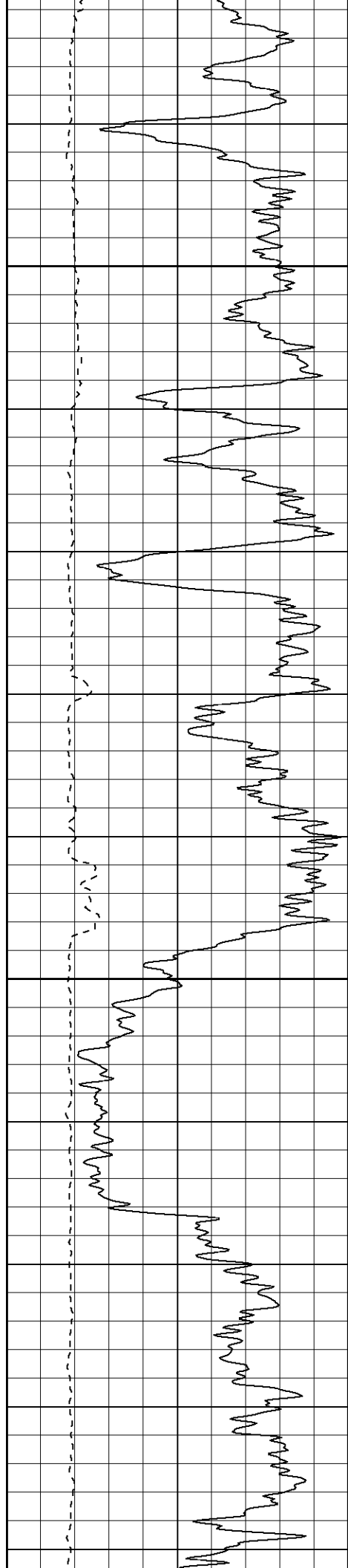




1700

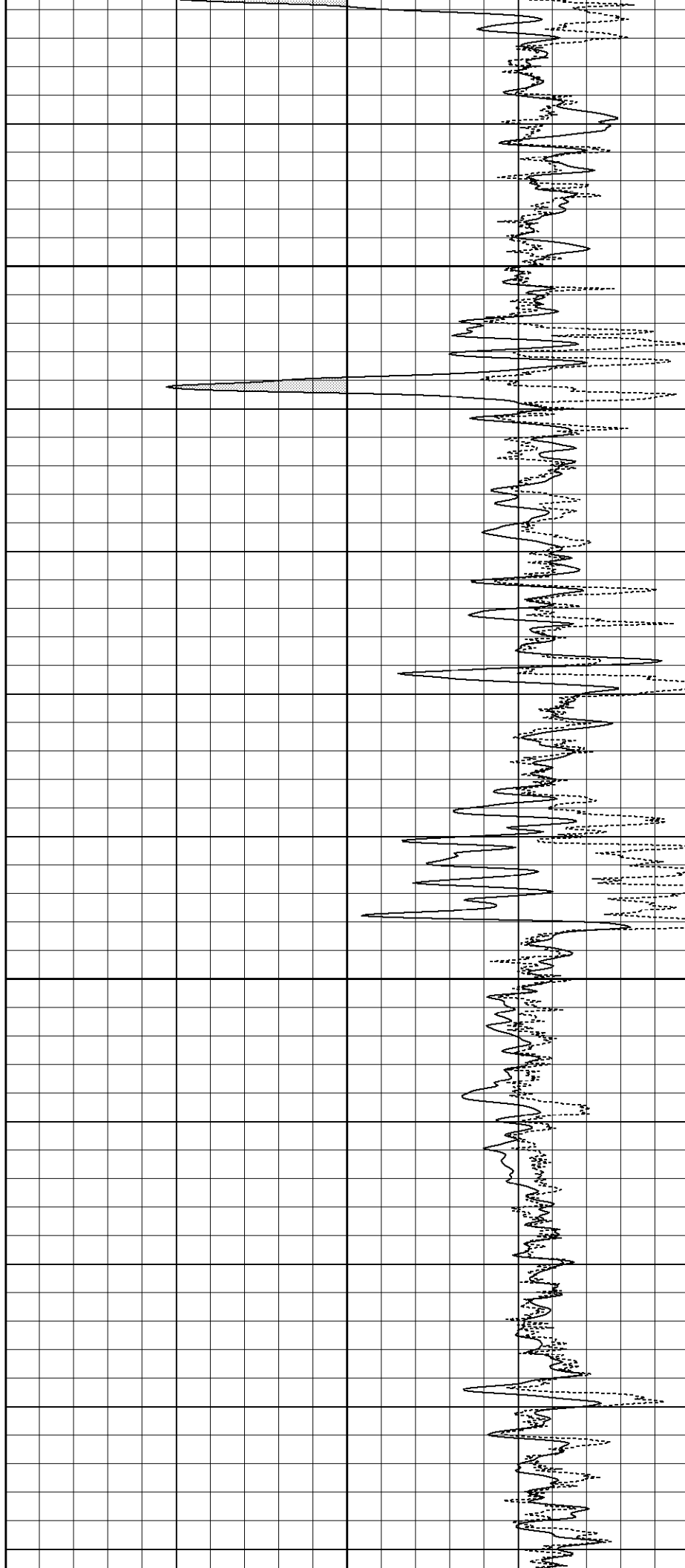
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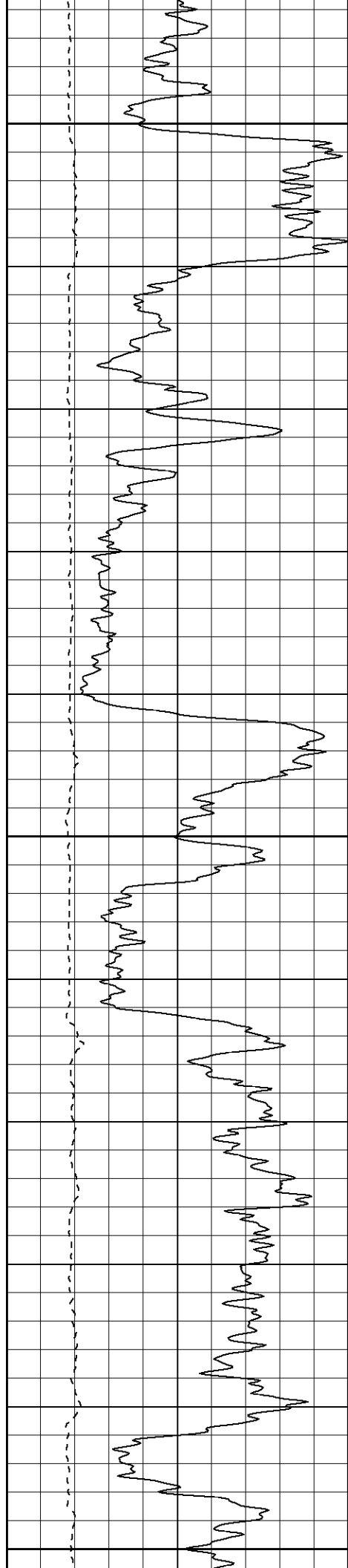




1800

1850

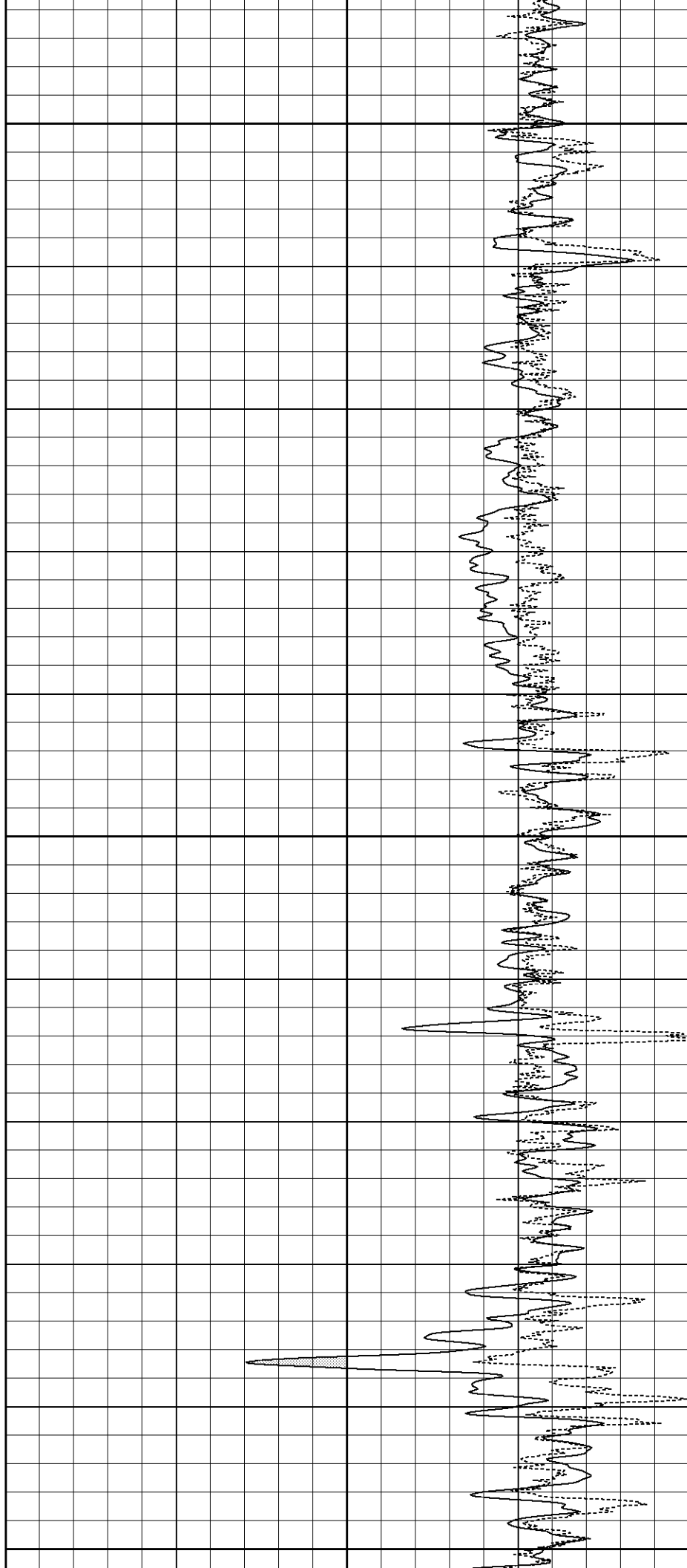


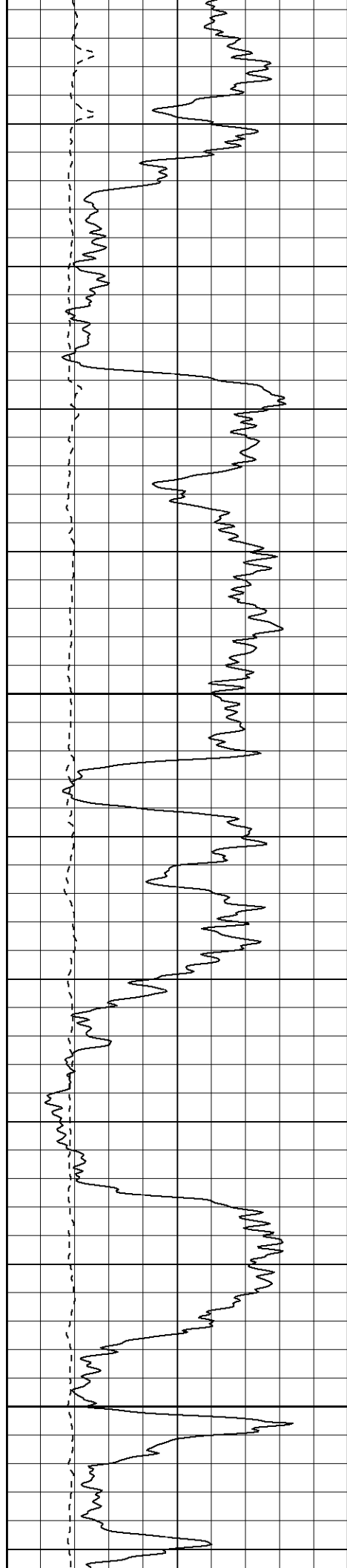


1900

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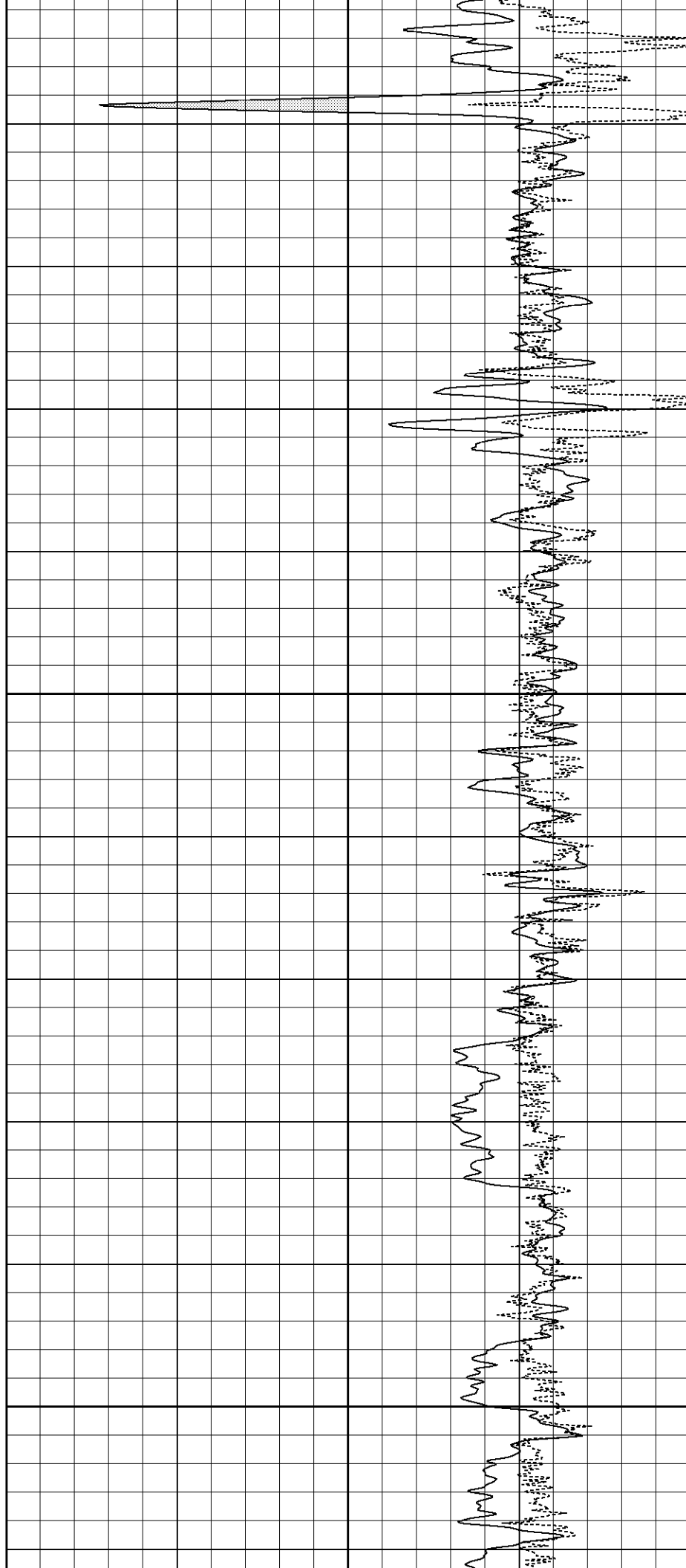
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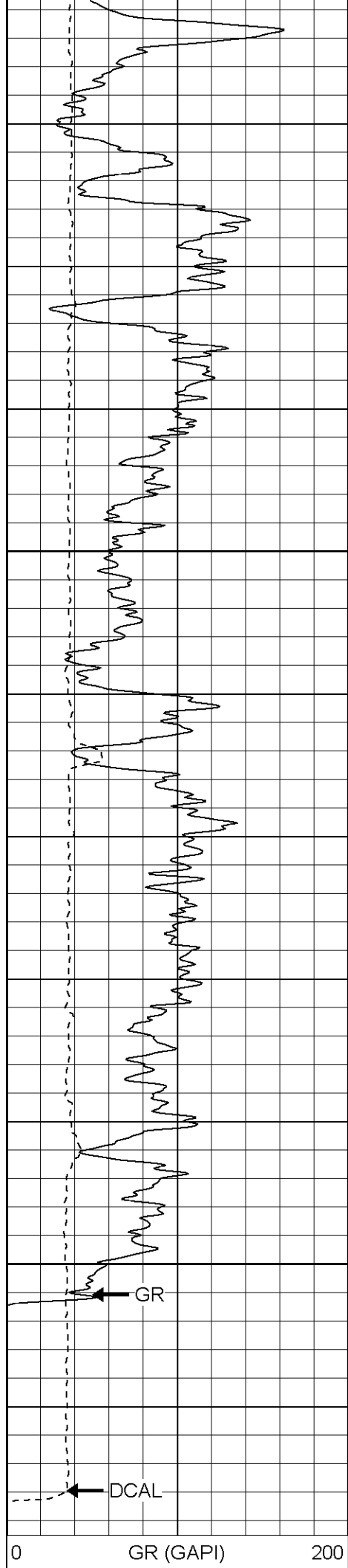




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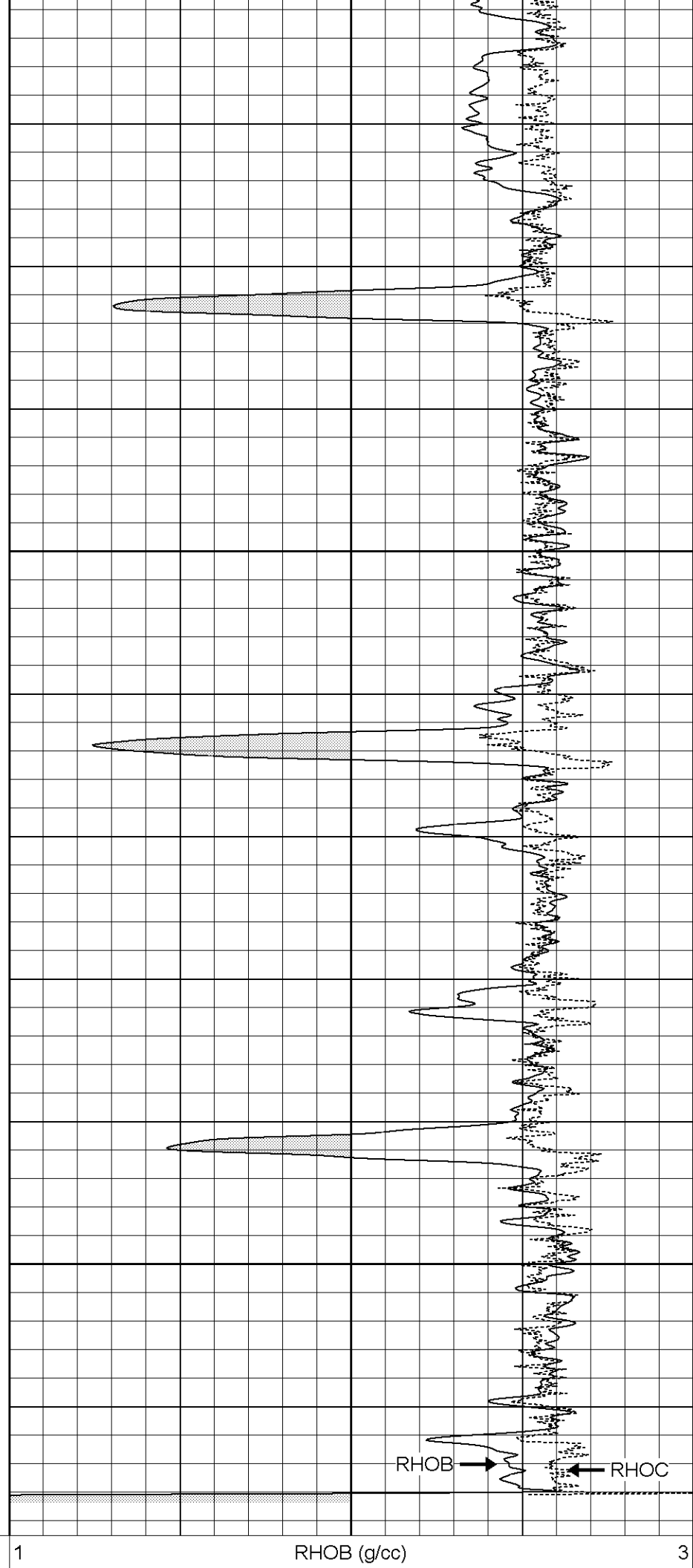
2100





2150

2200



6	DCAL (in)	16	-0.5	RHOC (g/cc)	0.5

Compensated Density Calibration Report					
Serial-Model:			2388-G		
Source / Verifier:			csv-j12 / blocks		
Master Calibration Performed:			Fri Oct 14 08:56:27 2005		
Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	845.17	475.81	cps
Aluminum	2.590	g/cc	193.44	333.27	cps
Spine Angle = 76.43			Density/Spine Ratio = 0.580		
	Size		Reading		
Small Ring	8.00	in	1.58	V	
Large Ring	14.00	in	4.71	V	

Gamma Ray Calibration Report			
Serial Number:	2388OH		
Tool Model:	D		
Performed:	Sat Oct 15 02:24:59 2005		
Calibrator Value:	170.0	GAPI	
Background Reading:	55.0	cps	
Calibrator Reading:	201.0	cps	
Sensitivity:	0.6000	GAPI/cps	
Neutron Calibration Report			
Serial Number:	5138		
Tool Model:	G		
Performed:	Fri Oct 14 08:57:15 2005		
Calibrator Value:	1	NAPI	
Calibrator Reading:	1	cps	
Sensitivity:	1	NAPI/cps	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	15.92		None	0.75	1.50	5.00
NEU	14.12		NEU-G (5138) Gearhart Epithermal	5.75	3.50	85.00
GR	8.92		GR-D (2388OH) Gearhart	2.50	3.63	74.00
LSD	2.83		CDL-G (2388) Gearhart	6.92	4.00	201.00
DCAL	2.50					

DCAL SSD	2.30 2.25	<div></div>			
<div><div>Dataset:</div><div>Total Length:</div><div>Total Weight:</div><div>O.D.</div><div>/field/well/run1/_plots_/_jobs_/cdl</div><div>15.92 ft</div><div>365.00 lb</div><div>4.00 in</div></div>					