



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

## COMPENSATED DENSITY LOG

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	General Vera 11-28	Well	General Vera 11-28
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	Colorado	State	Colorado
Location:	API # : 05 071 09084 00 1094' FNL & 210' FWL		
Permanent Datum	SEC 28 TWP 31S RGE 66W	Ground Level	Elevation 7262'
Log Measured From	Kelly Bushing 4' Above G.L.	Elevation	K.B. 7266'
Drilling Measured From	Kelly Bushing	G.L.	D.F. ----- G.L. 7262'
Date	03-03-07	03-05-07	03-05-07
Run Number	One	Two	Twenty
Depth Driller	2490'	2490'	2490'
Depth Logger	1088'	1052'	2412'
Bottom Logged Interval	1072'	no log ran	2410'
Top Log Interval	Surface Casing	///	5.5" casing @ 1932'
Casing Driller	8.625" @ 700'	8.625" @ 700'	8.625" @ 700'
Casing Logger	700'	700'	700'
Bit Size	7.875"	7.875"	7.875"
Type Fluid in Hole	Water	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	10:30 a.m.	6:00 p.m / 3-4-07	6:00 p.m / 3-4-07
Time Logger on Bottom	12:45 p.m.	8:30 p.m.	10:00 p.m.
Maximum Recorded Temperature	84 @ 1088'	///	///
Equipment Number	T701	T701	T701
Location	Trinidad	Trinidad	Trinidad
Recorded By	L. Smith	L. Smith	L. Smith
Witnessed By	Mr. Ray Decker	Mr. Clayton Brooker	Mr. Clayton Brooker

>>> Fold Here >>>

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

Density Porosity Presented On Sanstone Matrix.

ABHV Calculated For 5.5" Casing.

Pass one hit bridge at 1088'.Ran spud bar TD 1088'.

Pass two ran after well was reconditioned TD 1052'.Ran spud bar TD 1052'.

Ran spud bar below 5.5" casing @ 1042' TD 1081'.Ran spud bar below 5.5" casing @ 1082' TD 1236'.

Pass four below 5.5" casing @ 1082' TD 1236'.Ran spud bar below 5.5" casing @ 1202' TD 1374'.

Pass six below 5.5" casing @ 1202' TD 1374'. Ran spud bar below 5.5" casing @ 1362' TD 1453'.

Pass eight below 5.5" casing @ 1362' TD 1453'.Ran spud bar below 5.5" casing @ 1446' TD 1516'.

Pass ten below 5.5" casing @ 1446' TD 1516'.Ran spud bar below 5.5" casing @ 1486' TD 1676'.

Pass twelve below 5.5" casing @ 1486' TD 1618'. Ran spud bar below 5.5" casing @ 1570' TD 1657'.

Pass fourteen below 5.5" casing @ 1570' TD 1657'.Ran spud bar below 5.5" casing @ 1648' TD 1740'.

Pass sixteen below 5.5" casing @ 1648' TD 1740'. Ran spud bar below 5.5" casing @ 1730' TD 1963'.

Pass eighteen below 5.5" casing @ 1730' TD 1963'.Ran spud bar below 5.5" casing @ 1932 TD 2415'.



**SUPERIOR**

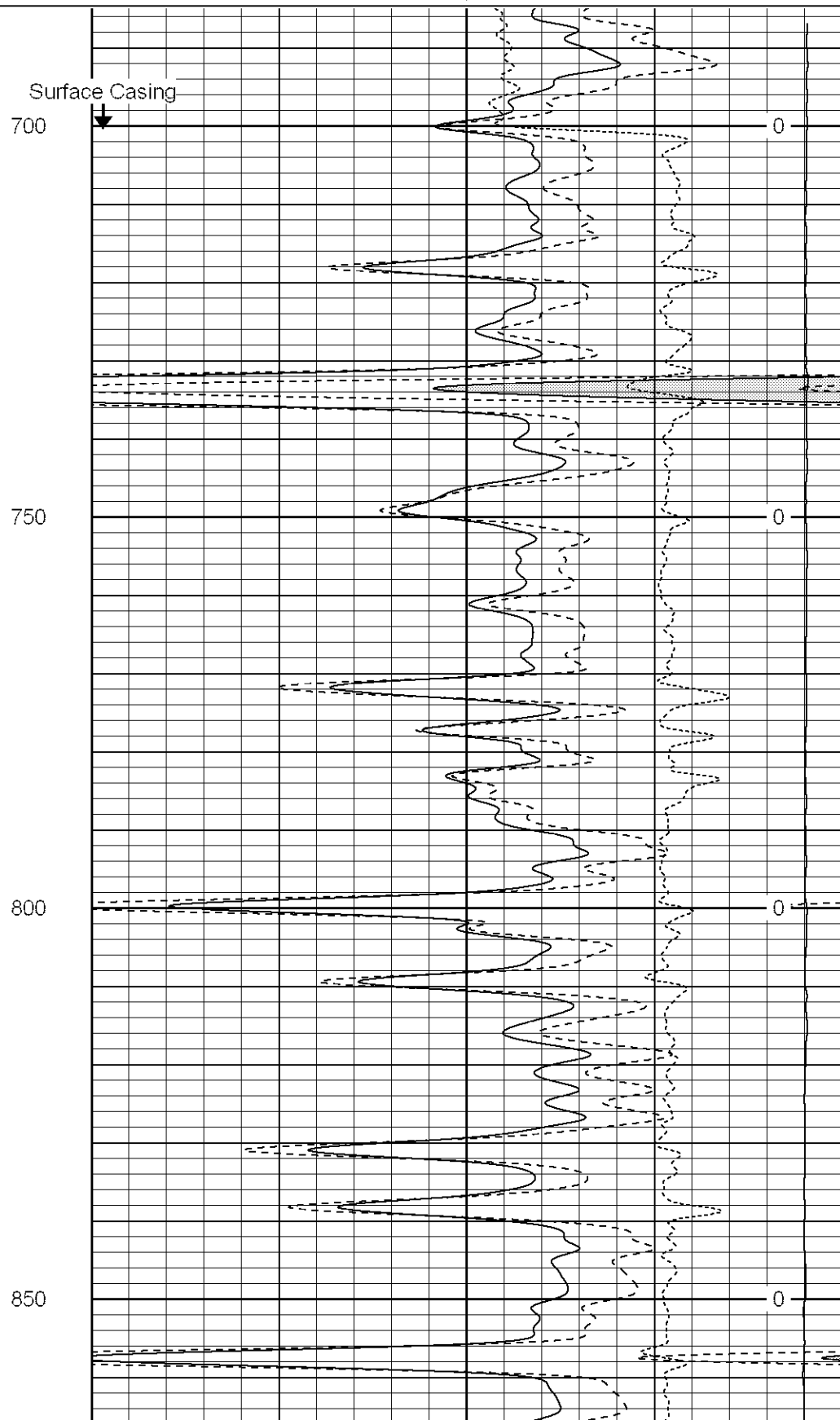
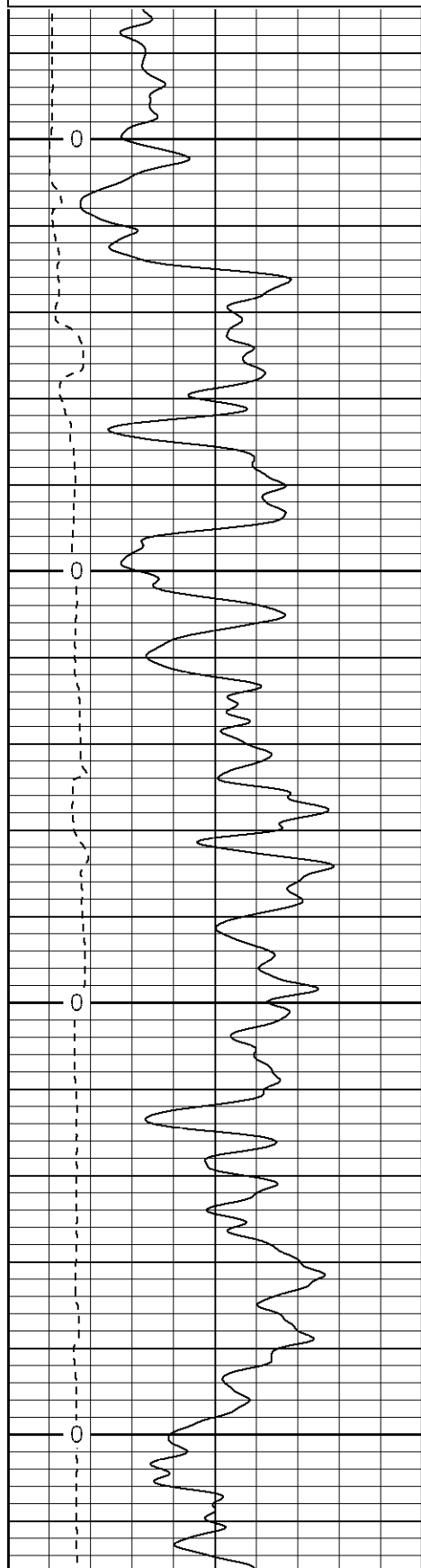
Black Lick, Pa.  
Mercer, Pa.  
Wooster, Oh.  
Cleveland, Ok.  
Trinidad, Co.

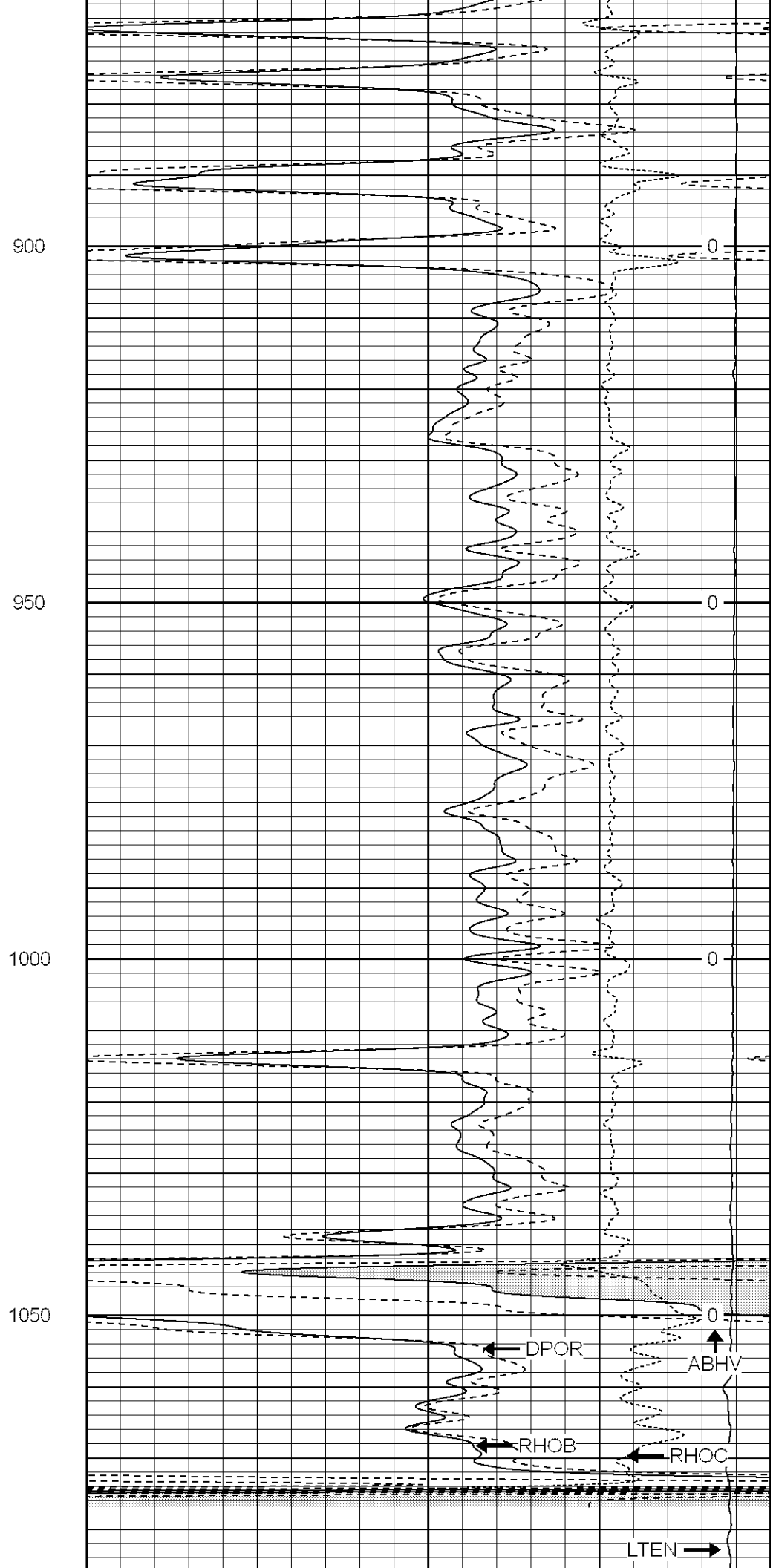
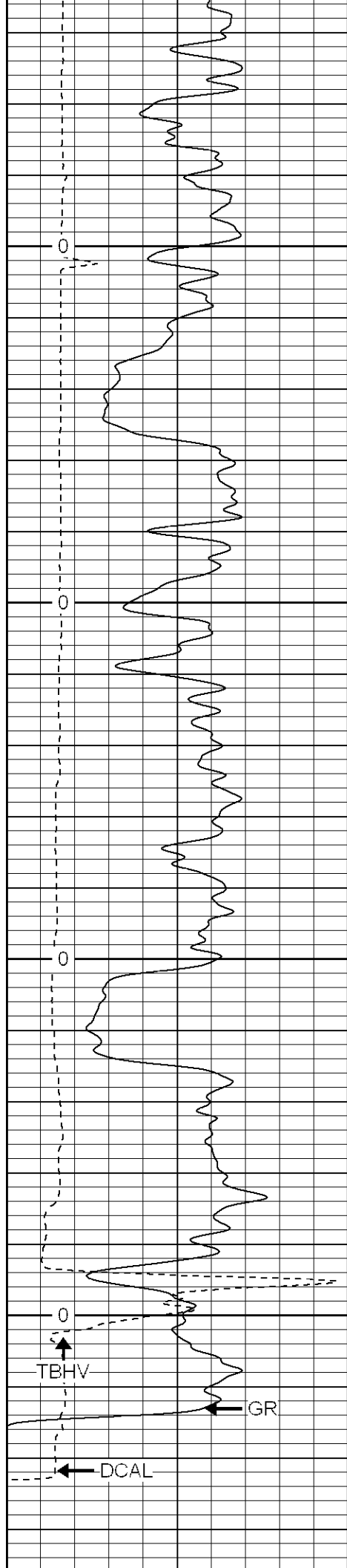
# Main Pass

Database File: general vera.db  
Dataset Pathname: pass2.1  
Presentation Format: cdl  
Dataset Creation: Mon Mar 05 02:48:36 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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

1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0





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



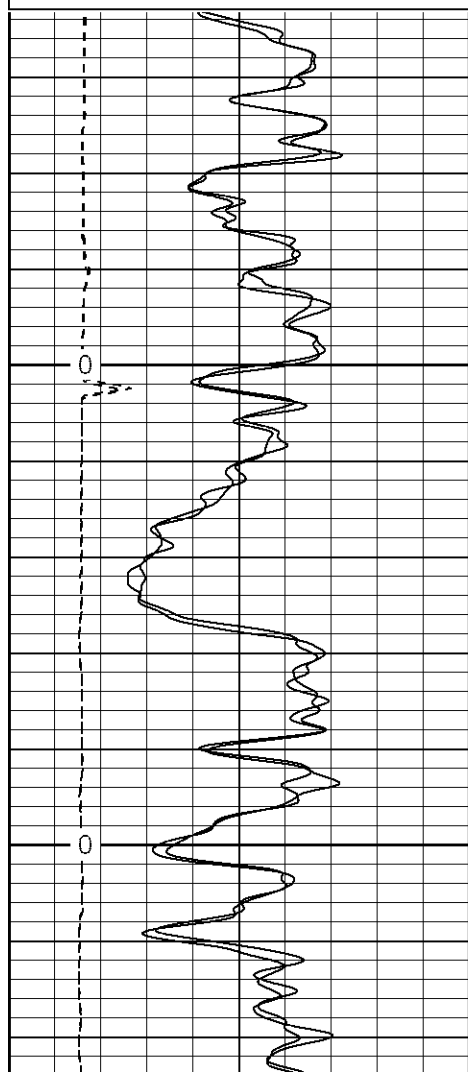
**SUPERIOR**

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

# Repeat Pass

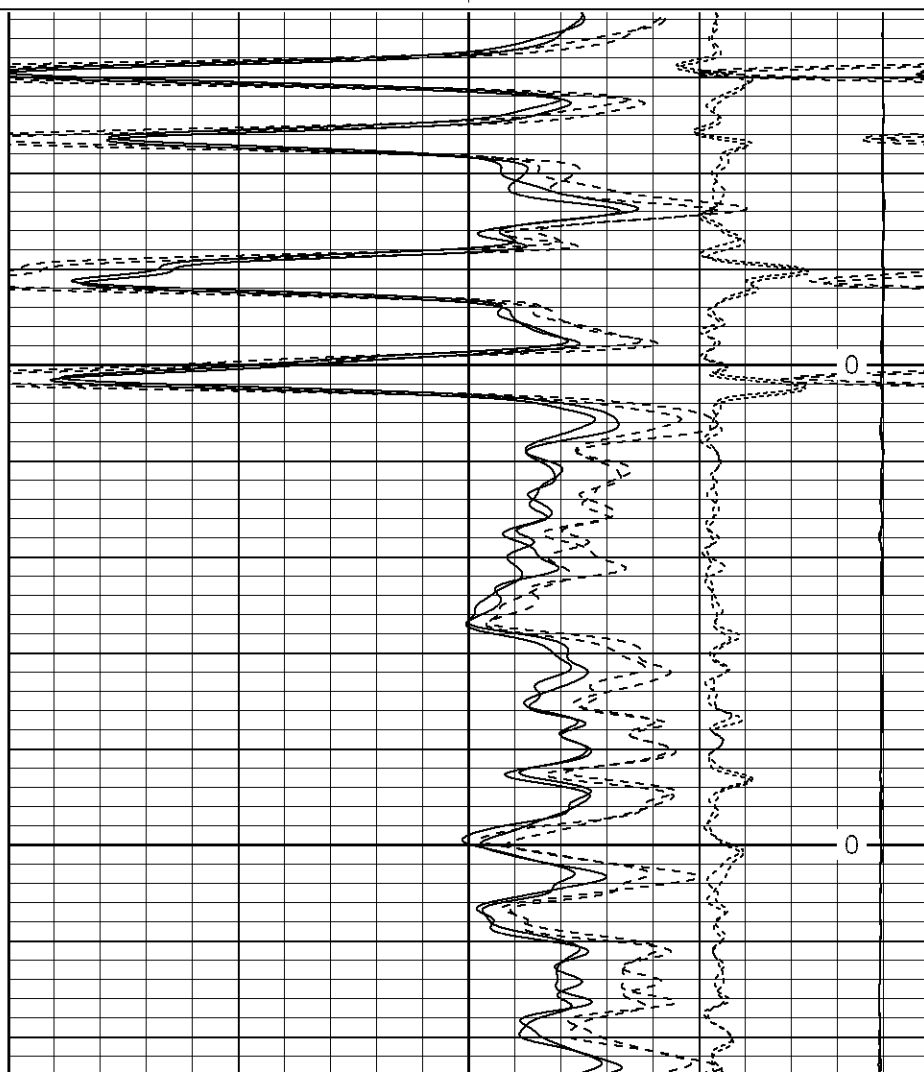
Database File: general vera.db  
Dataset Pathname: pass1.1  
Presentation Format: cdl  
Dataset Creation: Mon Mar 05 02:47:28 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

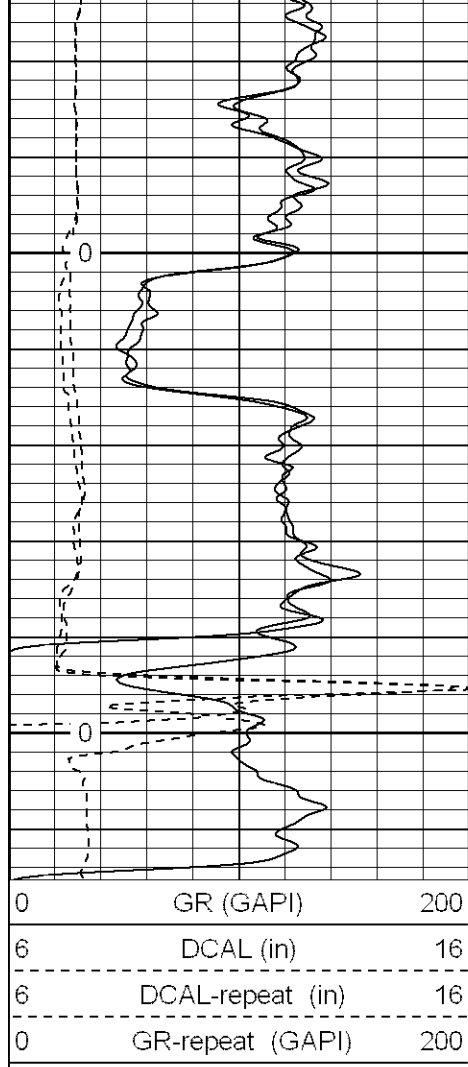
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
6	DCAL-repeat (in)	16	30	DPOR-repeat (pu)	-10
0	GR-repeat (GAPI)	200	2	RHOB-repeat (g/cc)	3
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0
			-0.5	RHOC-repeat (g/cc)	0.5
			4000	LTEN-repeat (lb)	0



900

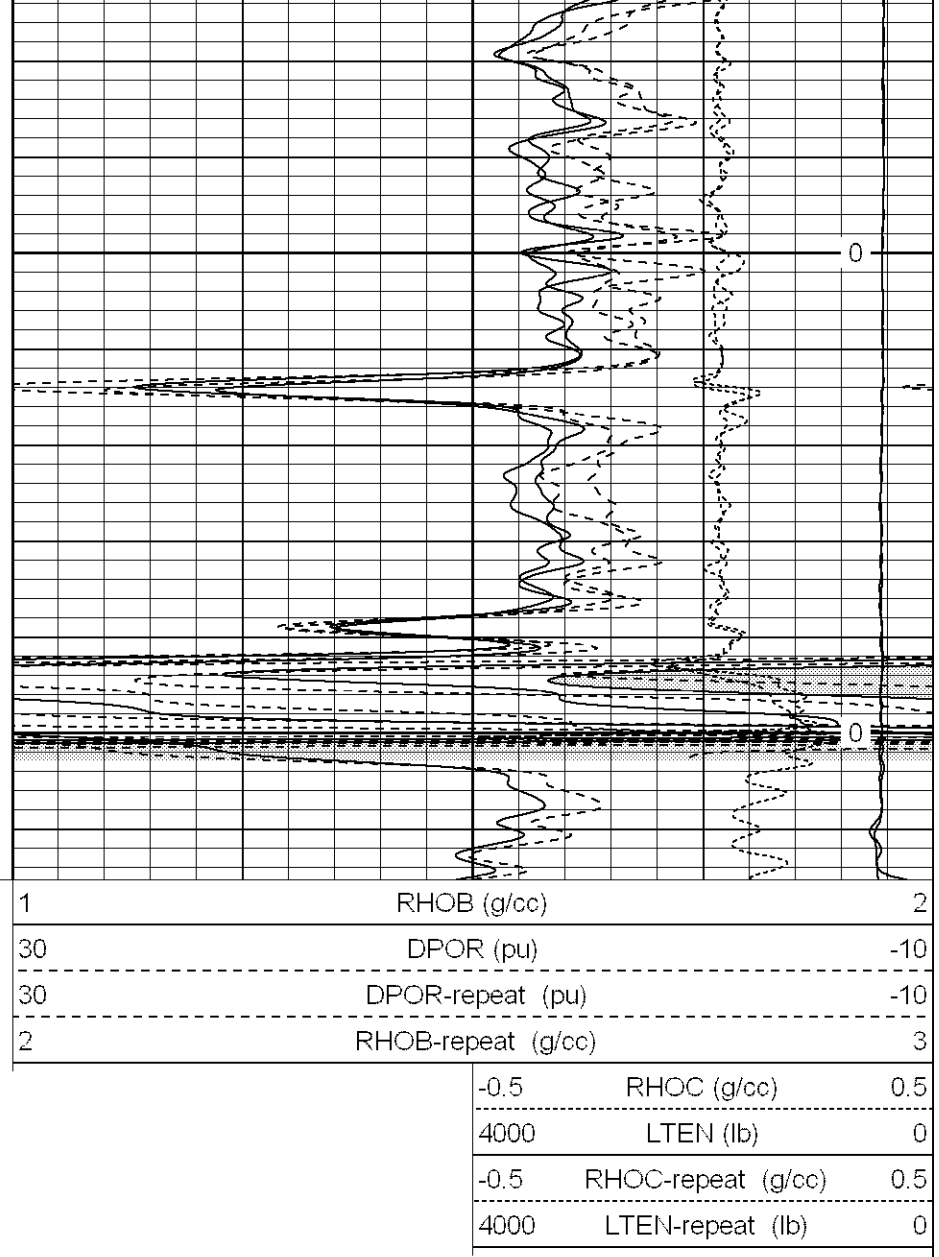
950



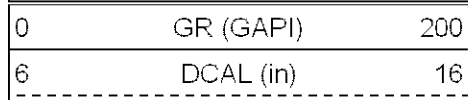


1000

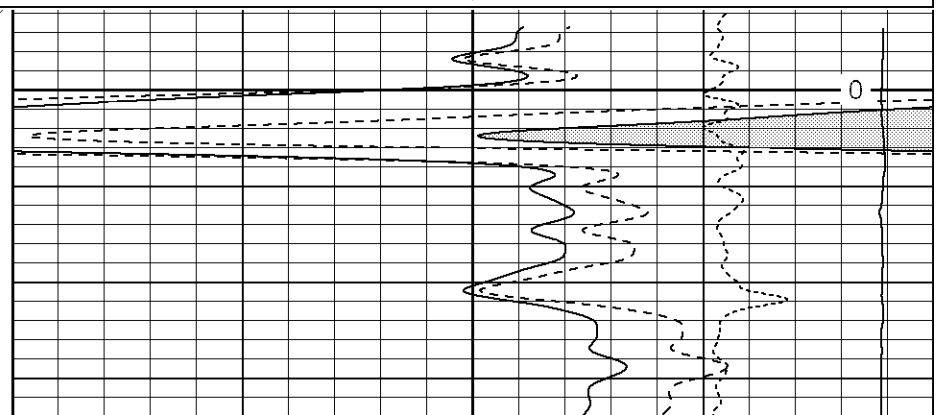
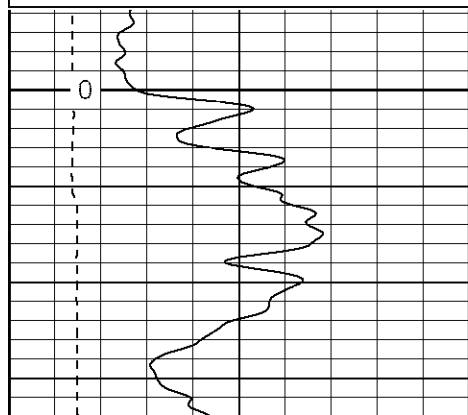
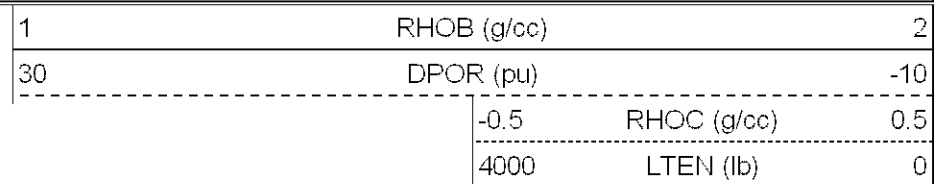
1050

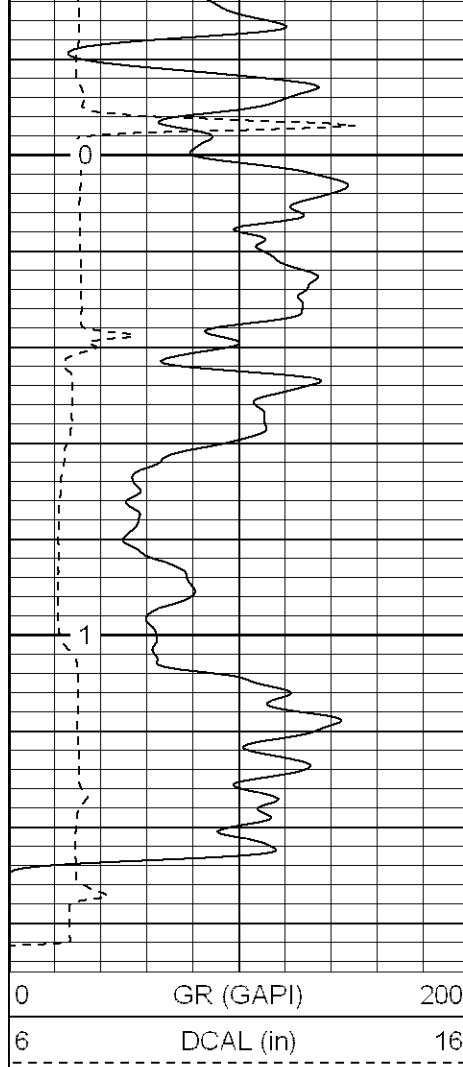


Database File: general vera.db  
 Dataset Pathname: pass4.1  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 09:27:20 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240



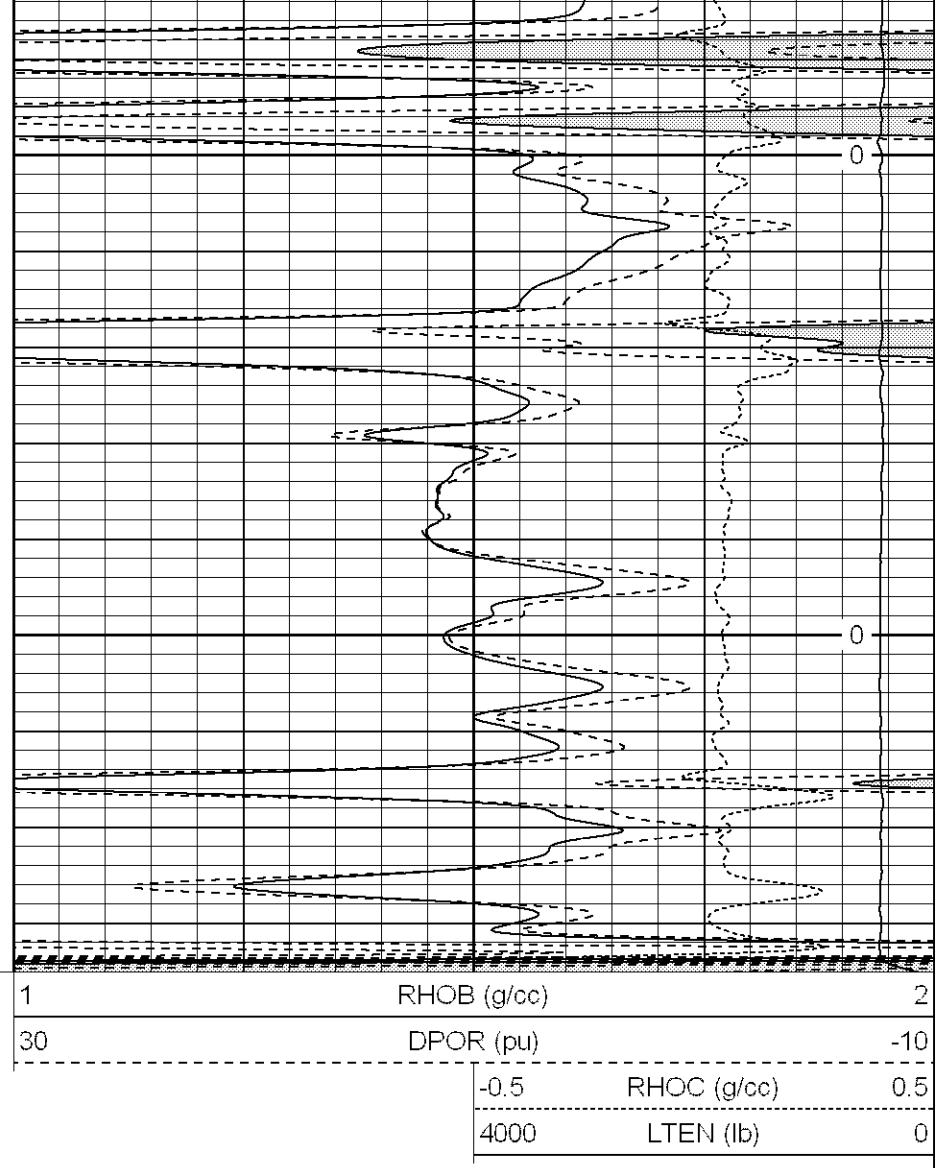
1100



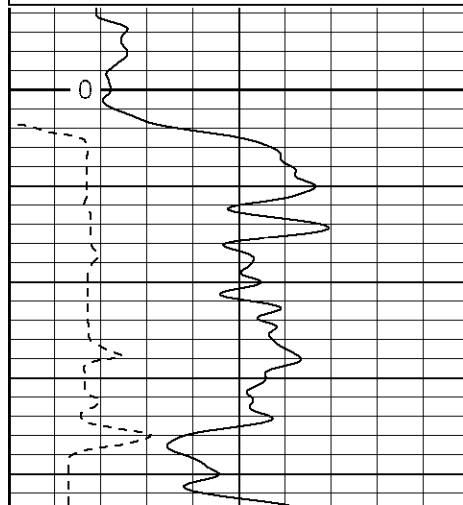
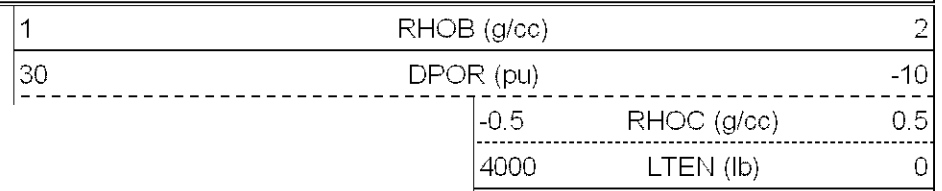
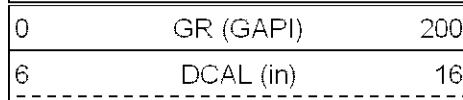


1150

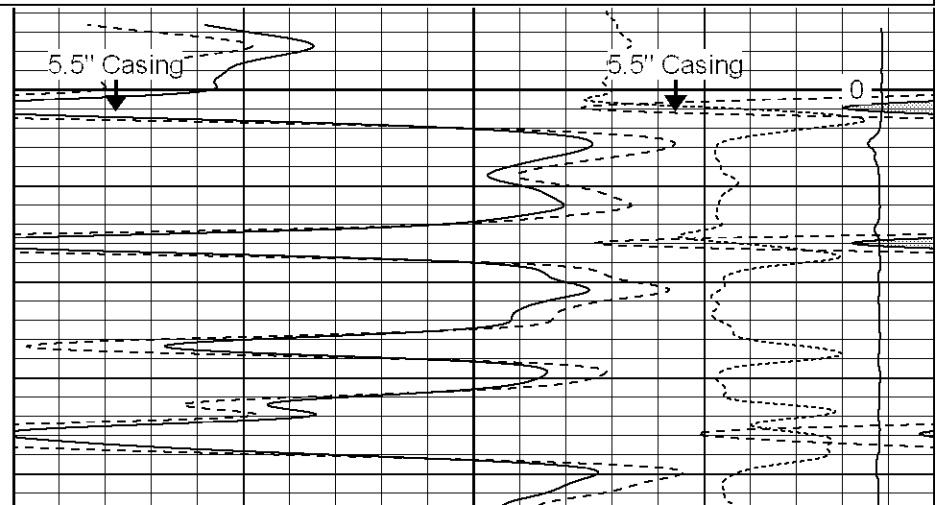
1200

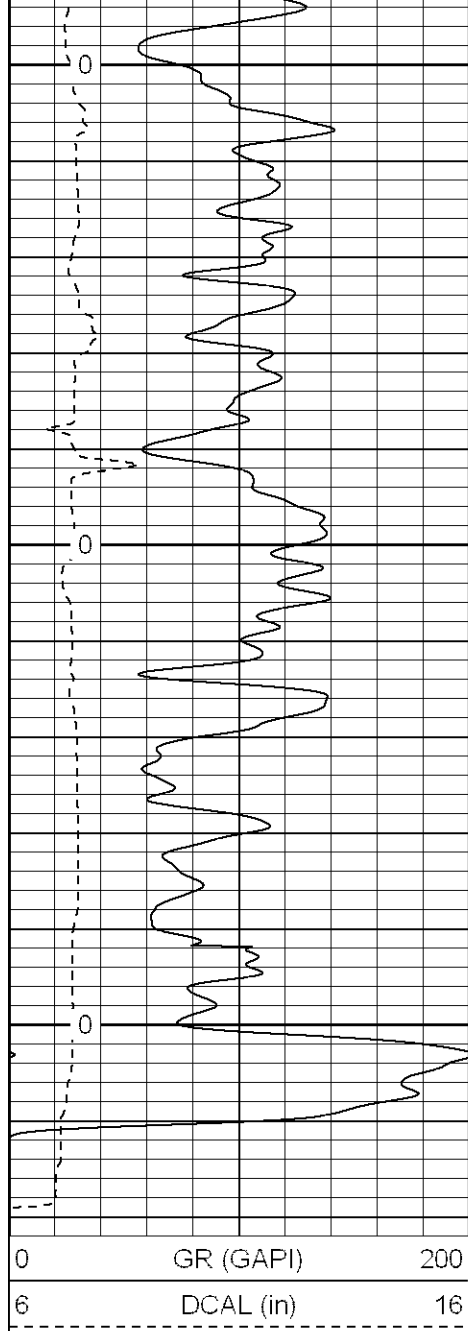


Database File: general vera.db  
 Dataset Pathname: pass6  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 11:17:38 2007 by Log Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240



1200

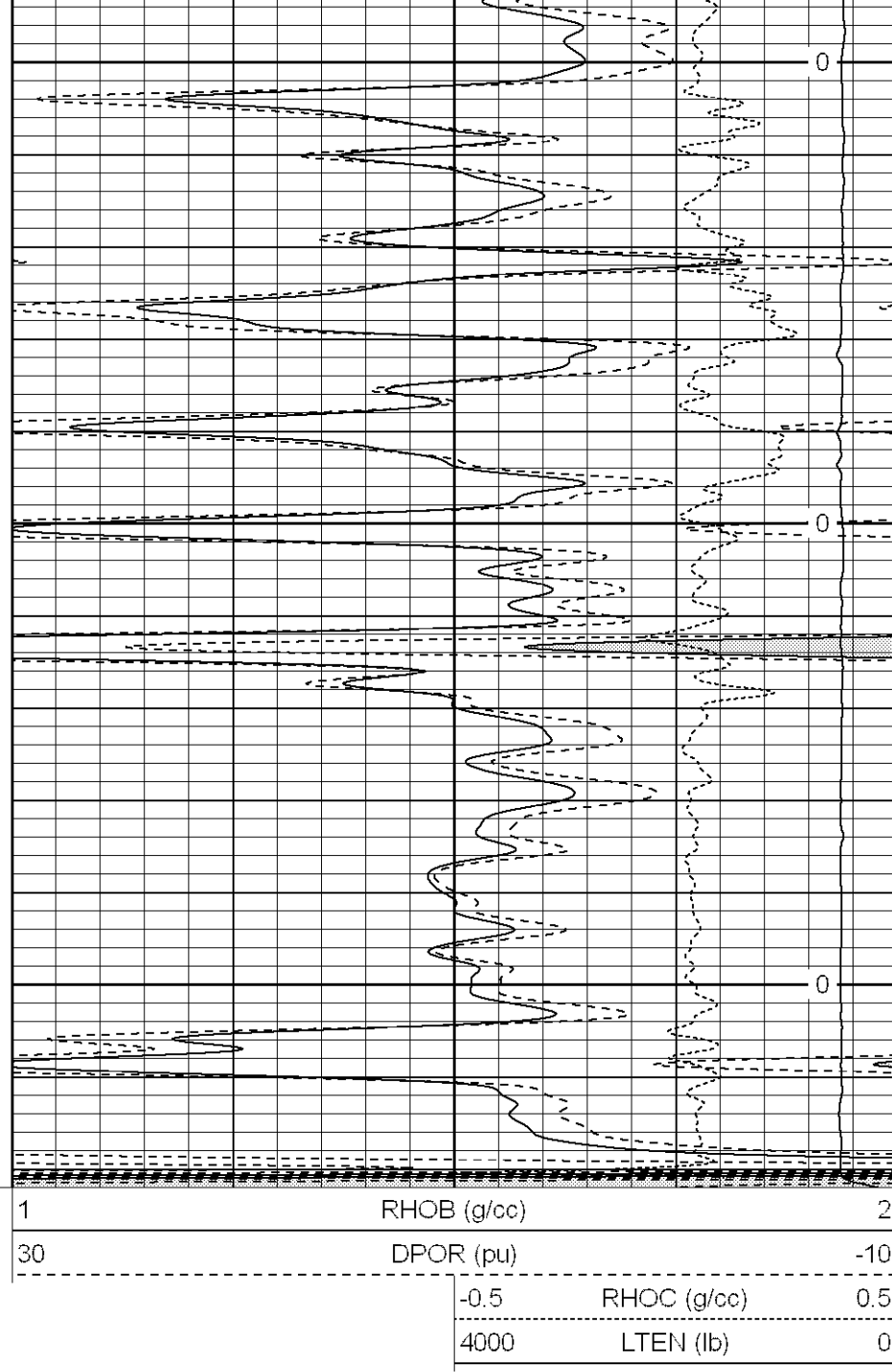




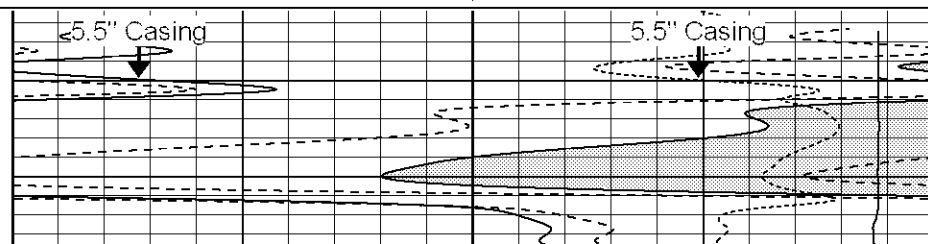
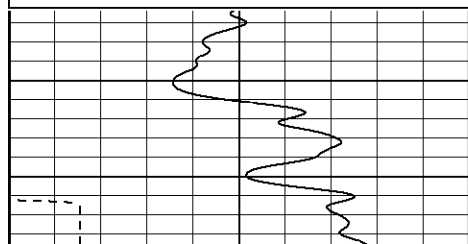
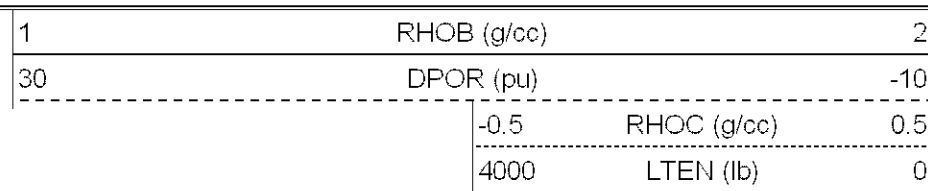
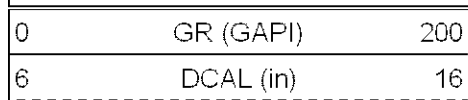
1250

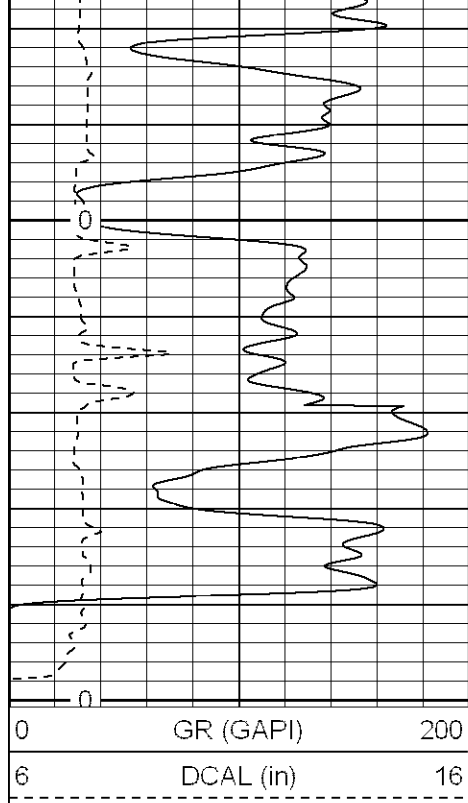
1300

1350



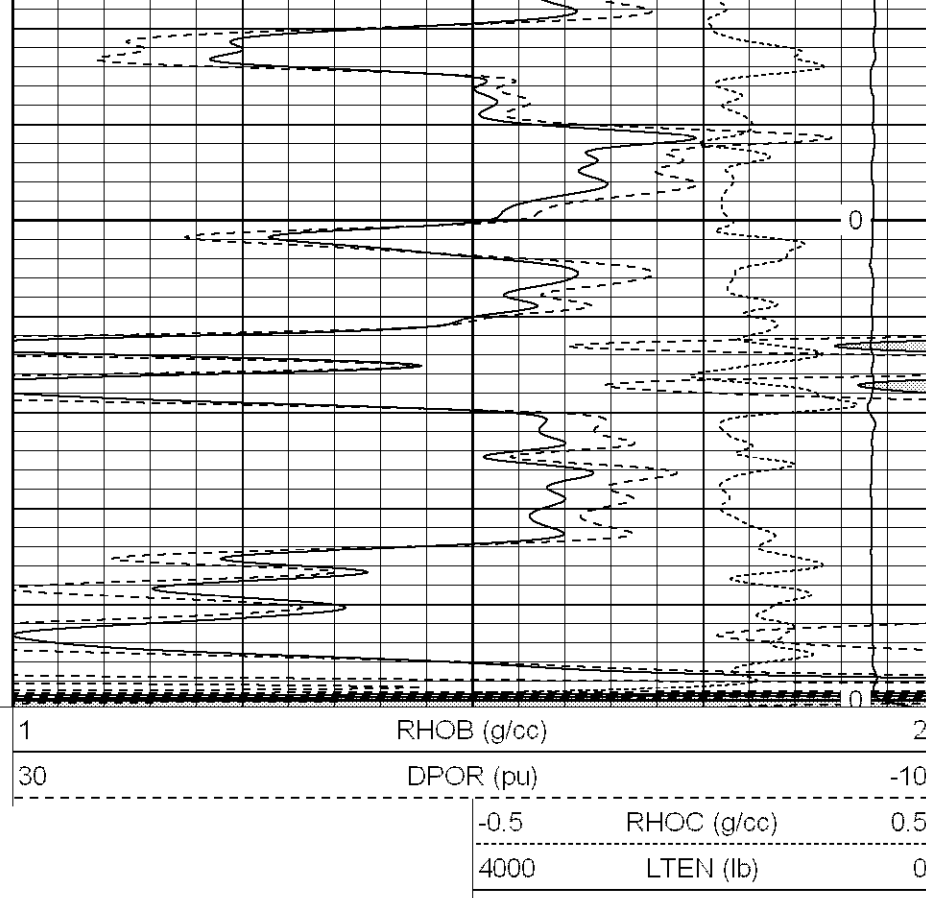
Database File: general vera.db  
 Dataset Pathname: pass8  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 12:36:49 2007 by Log Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240



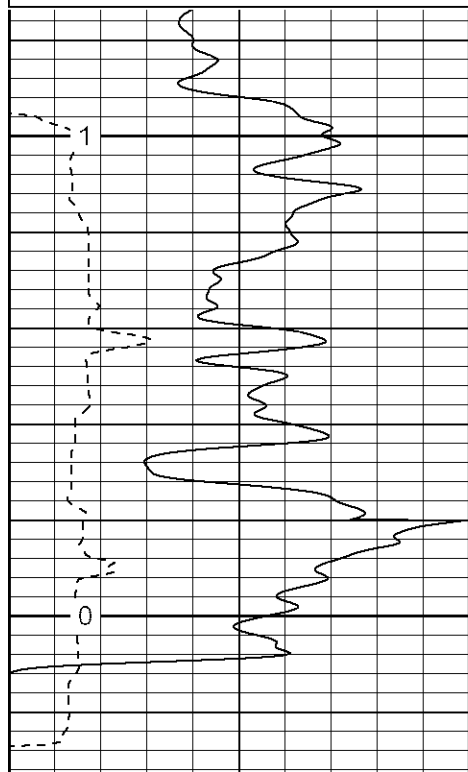
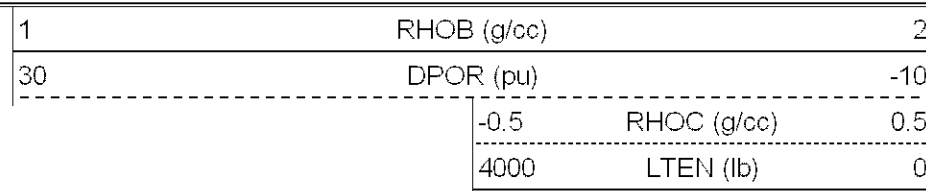
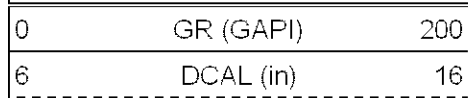


1400

1450

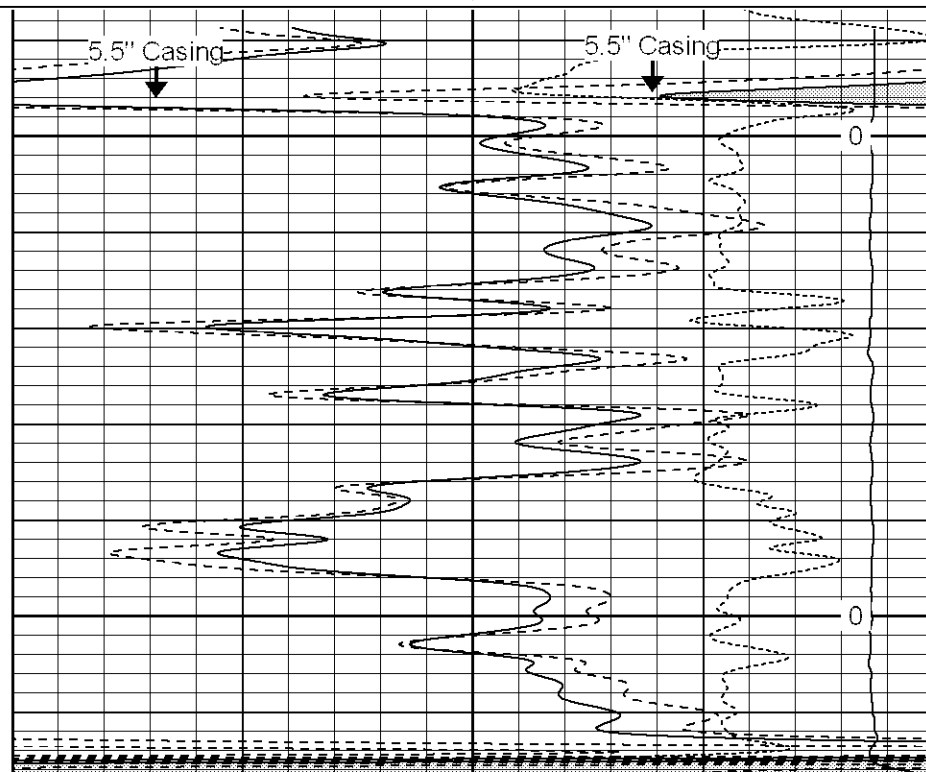


Database File: general vera.db  
 Dataset Pathname: pass11  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 13:43:27 2007 by Log Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240



1450

1500



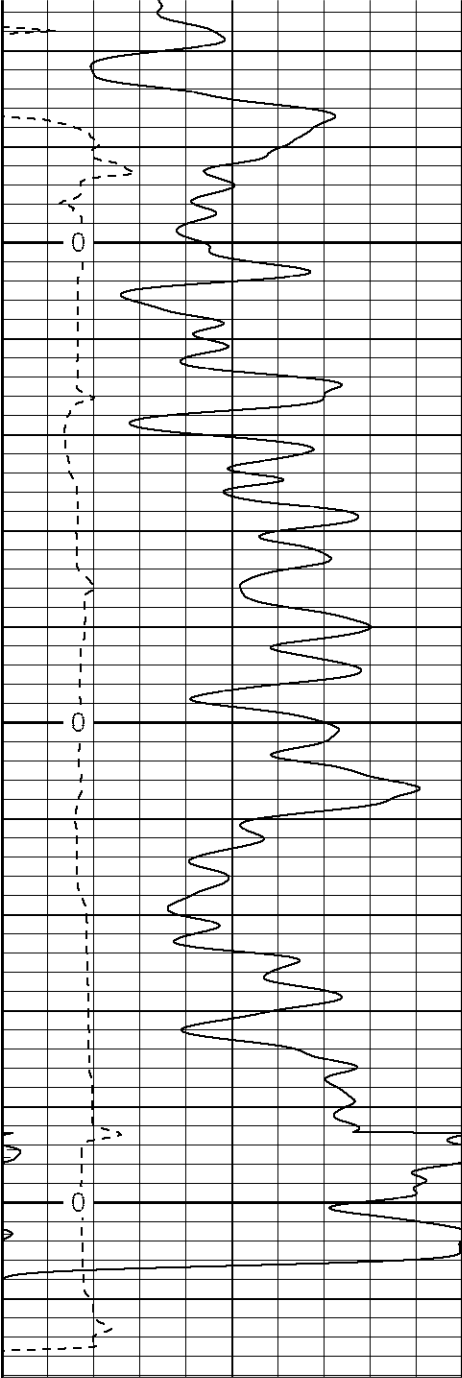
0	GR (GAPI)	200
6	DCAL (in)	16
<hr/>		

1	RHOB (g/cc)	2
30	DPOR (pu)	-10
<hr/>		
-0.5	RHOC (g/cc)	0.5
<hr/>		
4000	LTEN (lb)	0

Database File:	general vera.db
Dataset Pathname:	pass13
Presentation Format:	cdl
Dataset Creation:	Mon Mar 05 14:59:55 2007 by Log Open-Cased 061129
Charted by:	Depth in Feet scaled 1:240

0	GR (GAPI)	200
6	DCAL (in)	16
<hr/>		

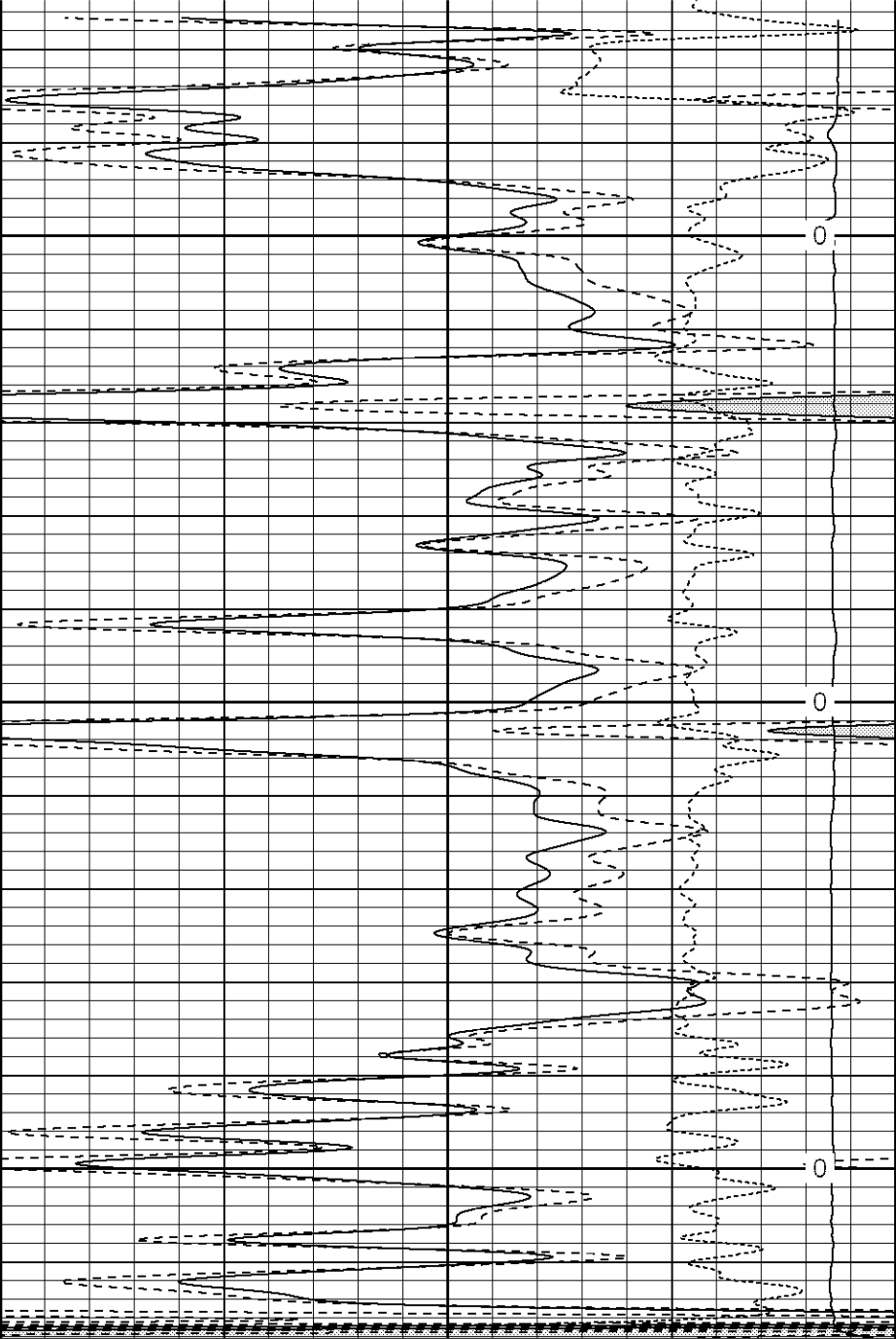
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
<hr/>		
-0.5	RHOC (g/cc)	0.5
<hr/>		
4000	LTEN (lb)	0



1500

1550

1600



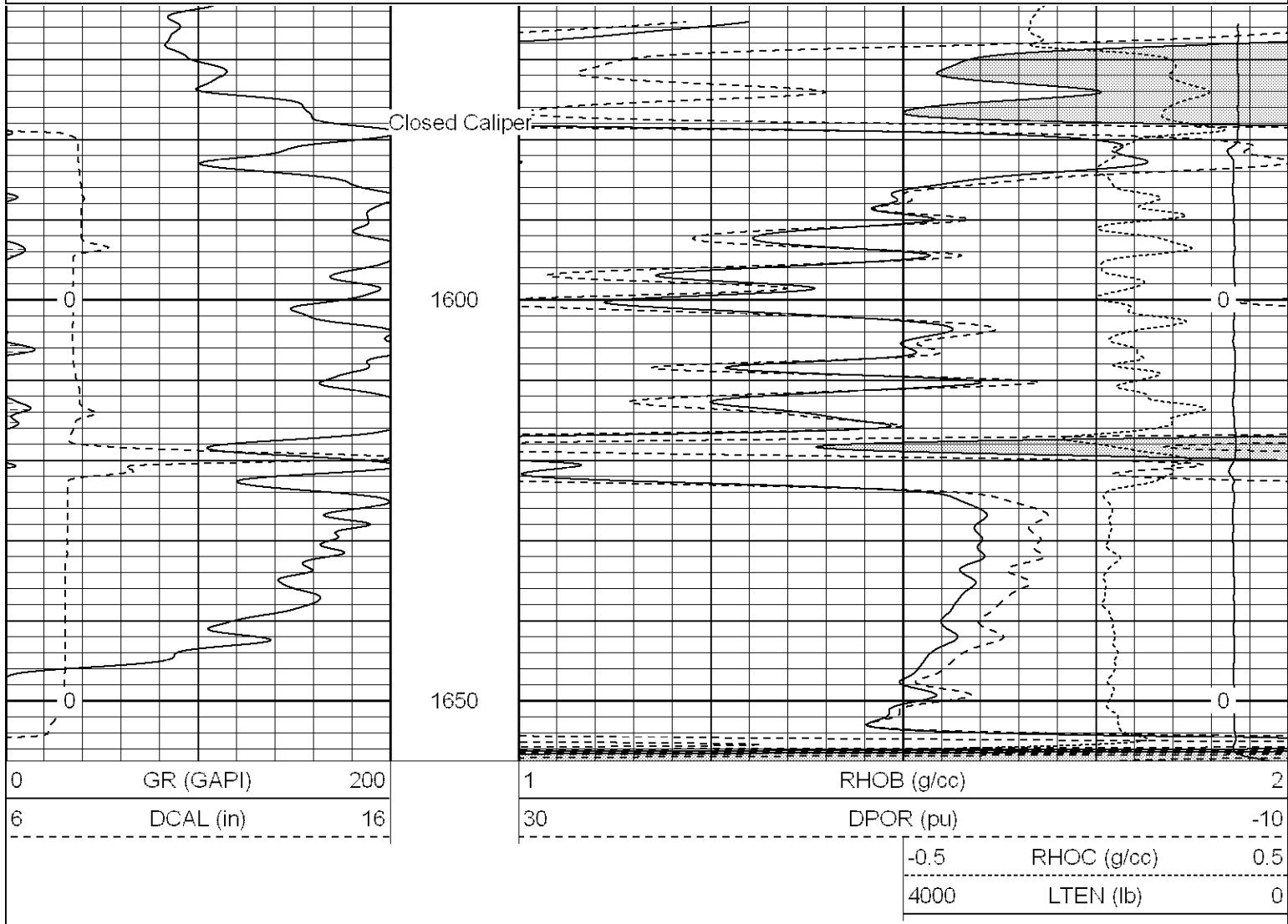
0	GR (GAPI)	200
6	DCAL (in)	16
<hr/>		

1	RHOB (g/cc)	2
30	DPOR (pu)	-10
<hr/>		

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

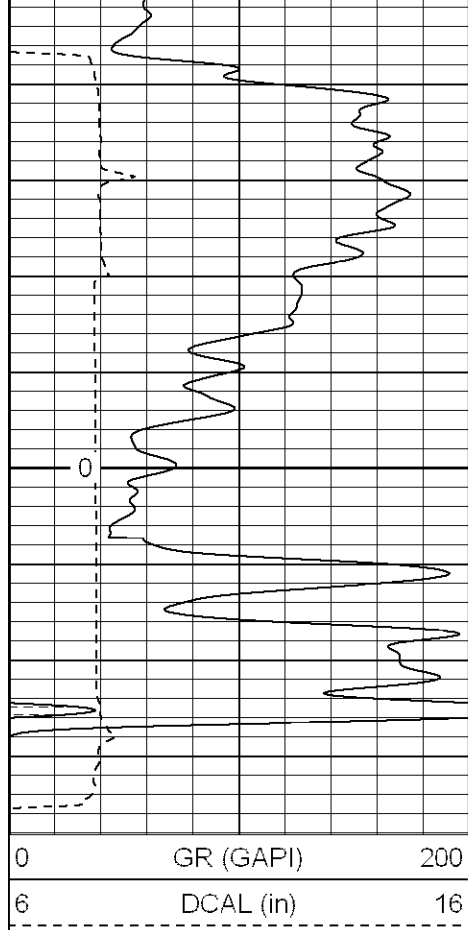
Database File: general vera.db  
Dataset Pathname: pass15  
Presentation Format: cdl  
Dataset Creation: Mon Mar 05 16:17:20 2007 by Log Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

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

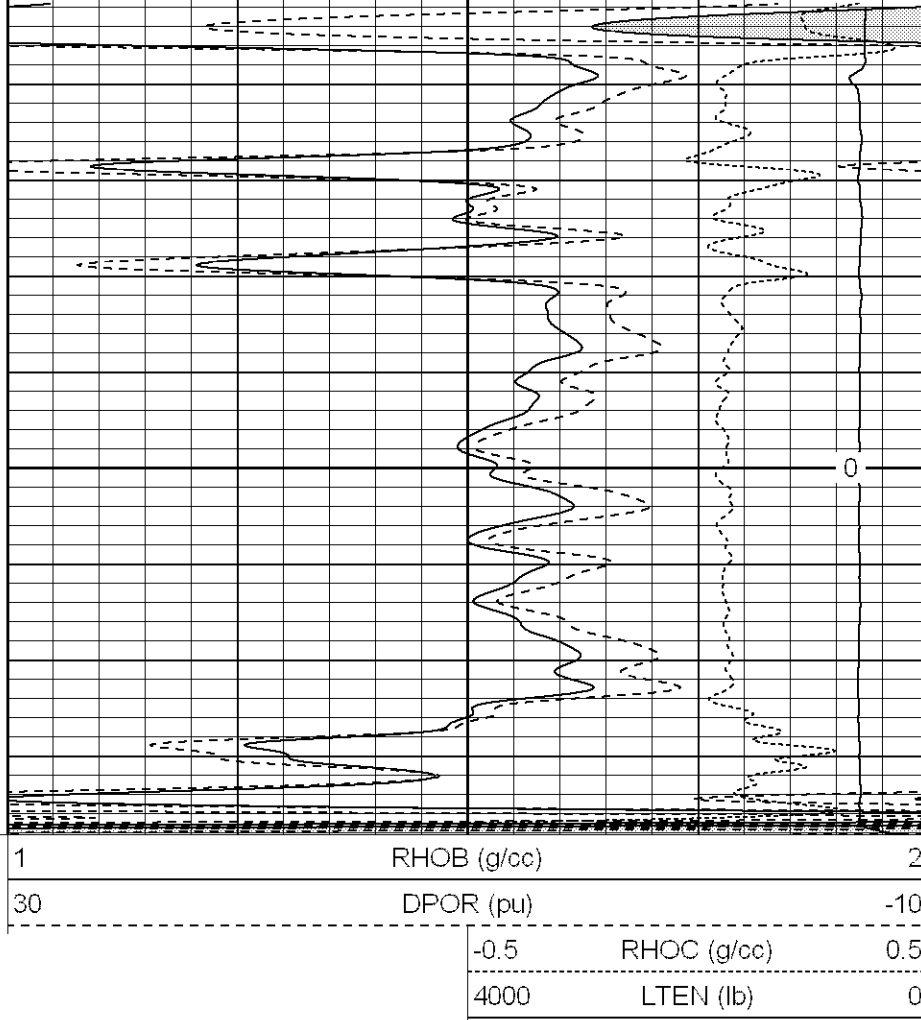


Database File: general vera.db  
Dataset Pathname: pass17  
Presentation Format: cdl  
Dataset Creation: Mon Mar 05 17:30:45 2007 by Log Open-Cased 061129  
Charted by: Depth in Feet scaled 1:240

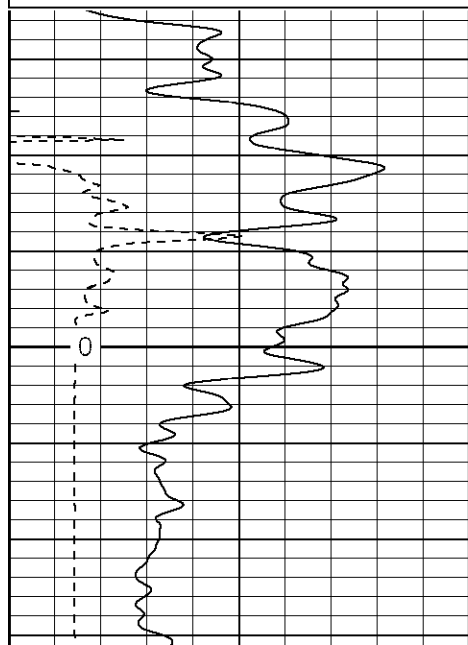
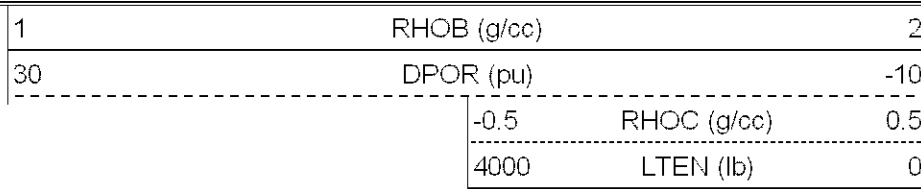
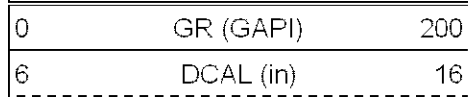
0	GR (GAPI)	200	1	RHOB (g/cc)	2
6	DCAL (in)	16	30	DPOR (pu)	-10
			-0.5	RHOC (g/cc)	0.5
			4000	LTEN (lb)	0



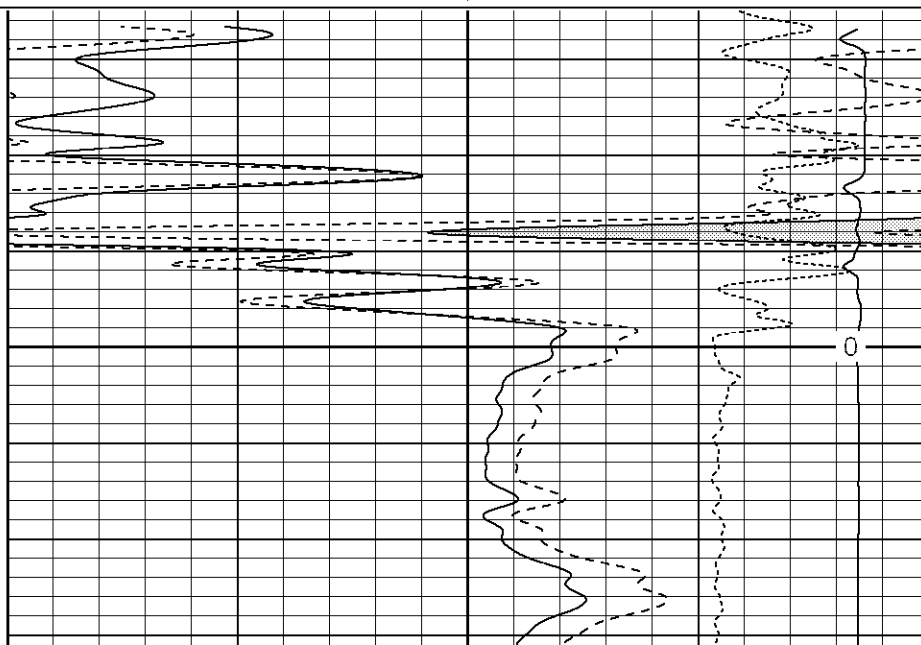
1700

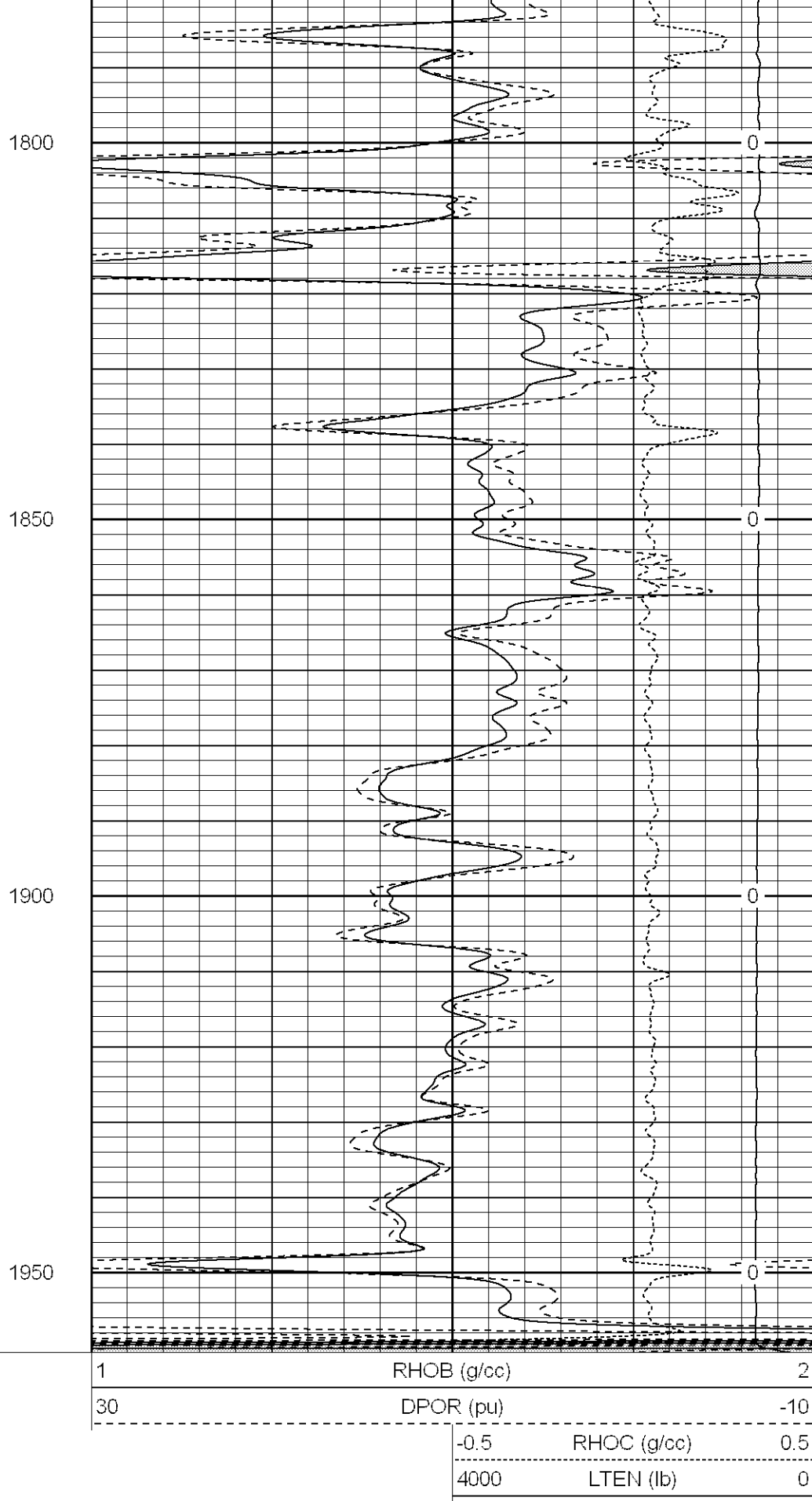
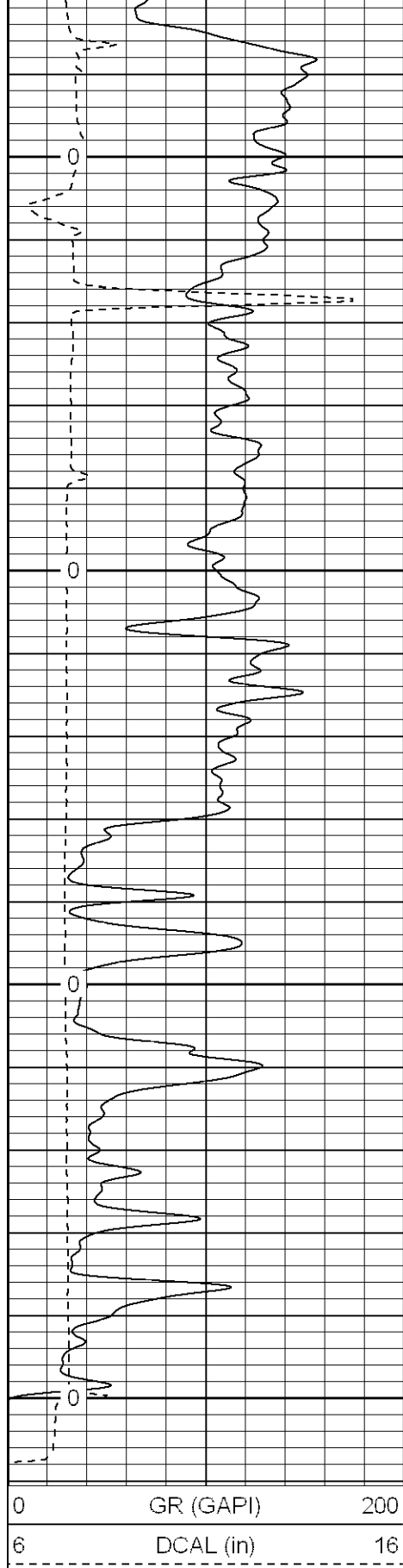


Database File: general vera.db  
 Dataset Pathname: pass19.1  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 19:40:22 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:240



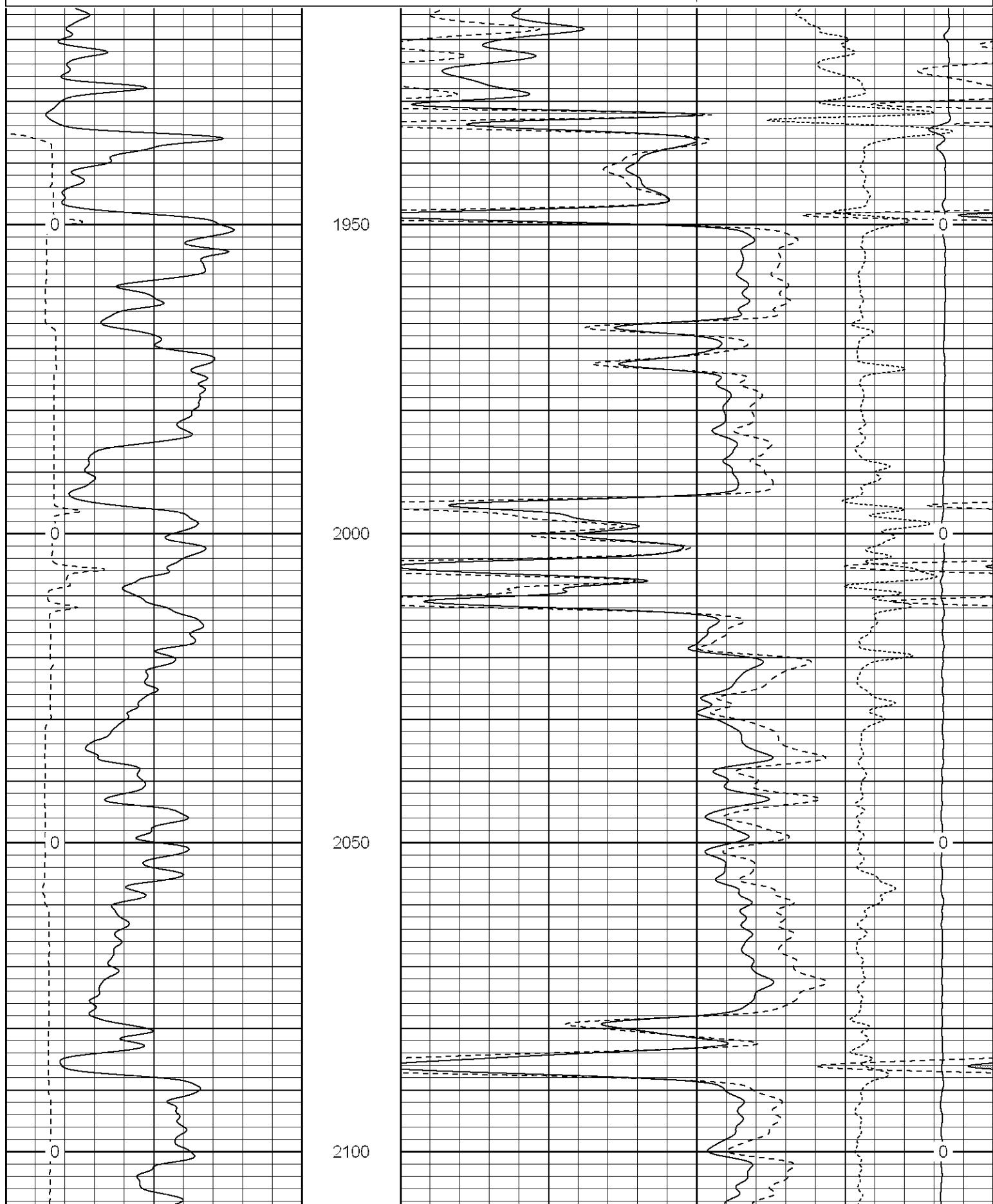
1750

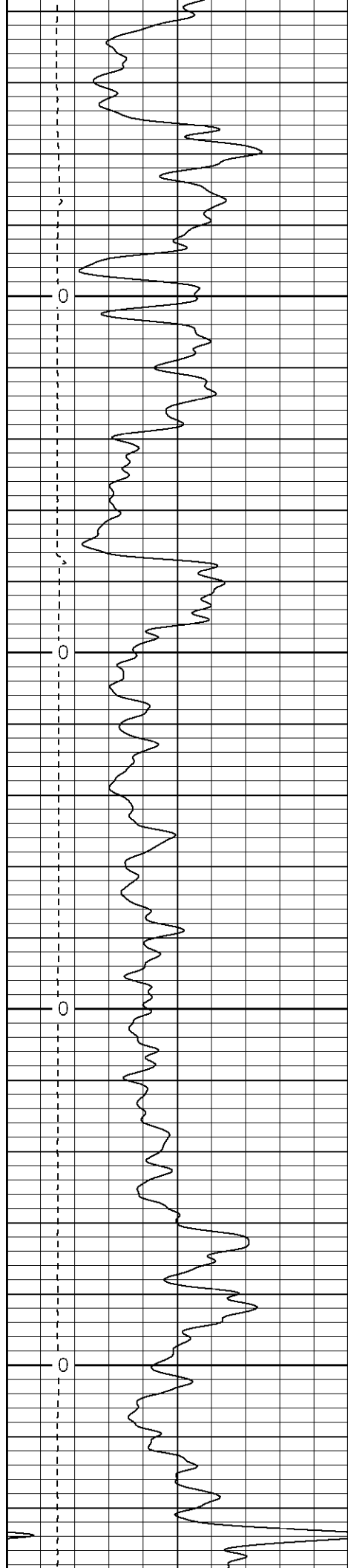




Database File: general vera.db  
 Dataset Pathname: pass210  
 Presentation Format: cdl  
 Dataset Creation: Mon Mar 05 22:22:47 2007 by Calc Open-Cased 061129

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		



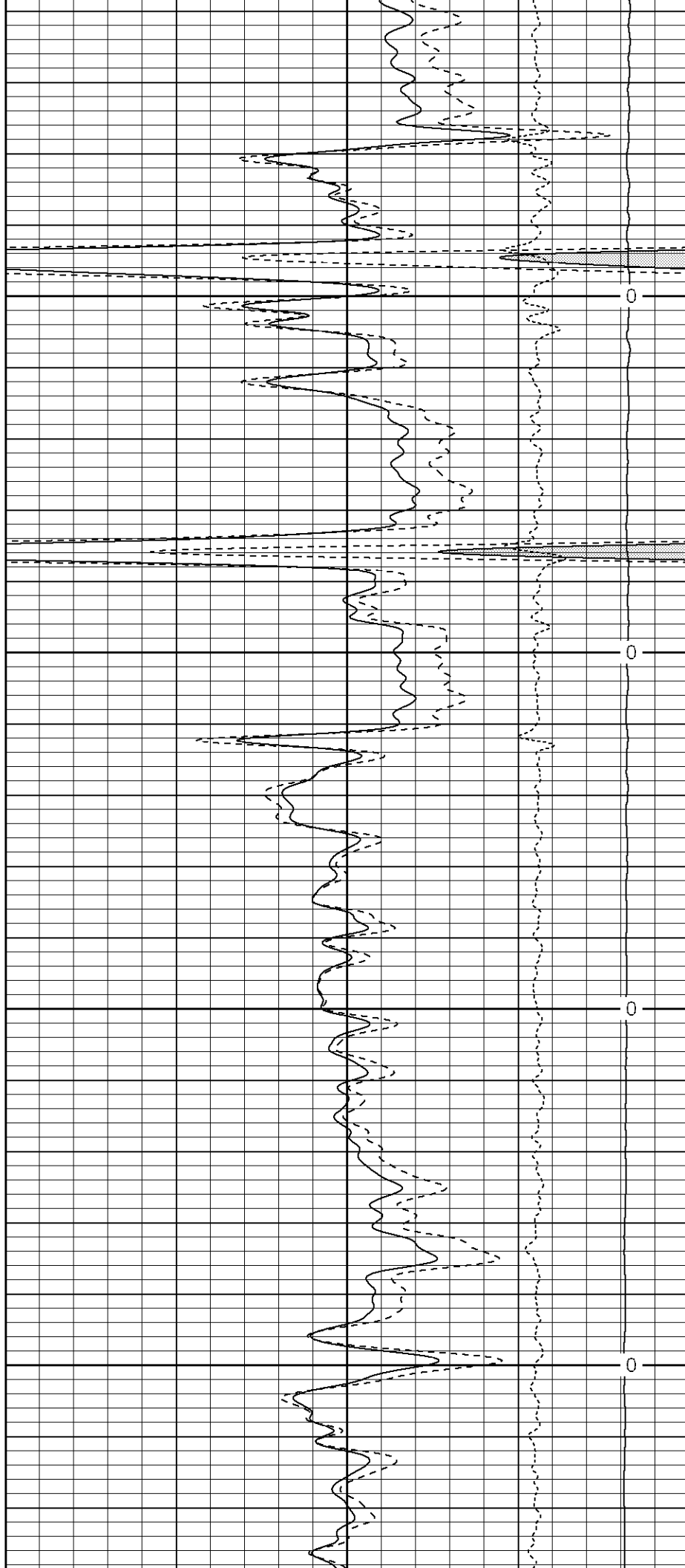


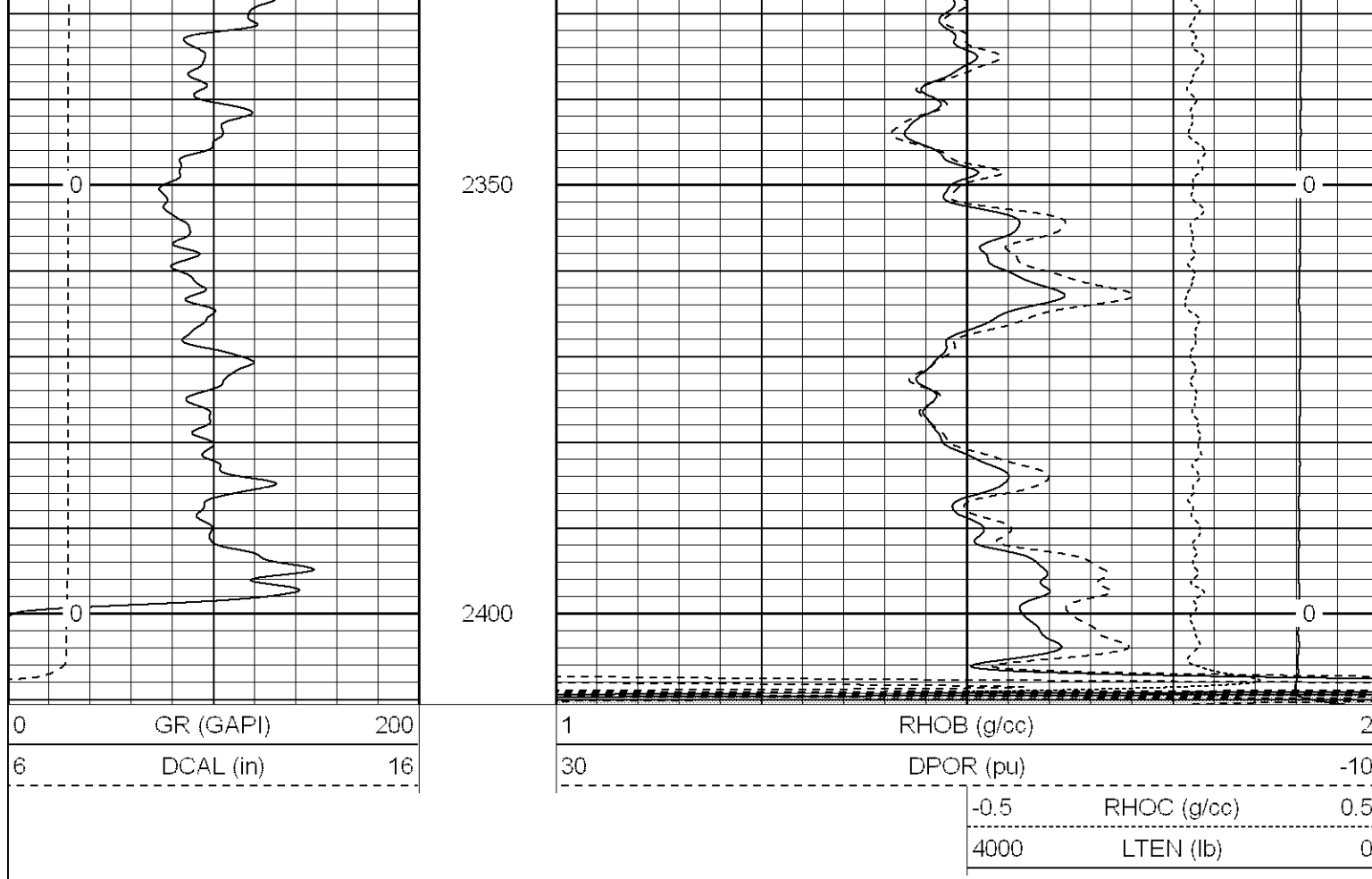
2150

2200

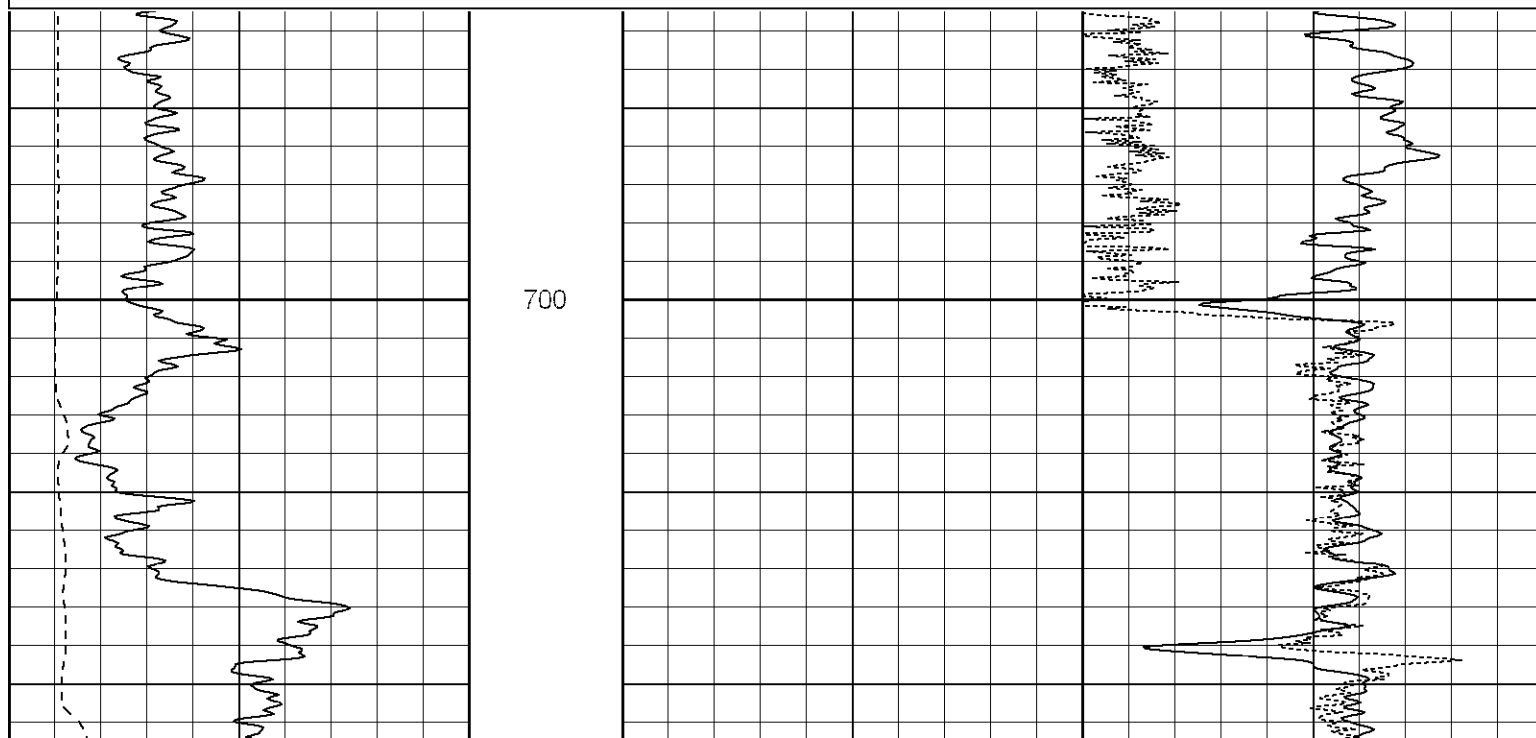
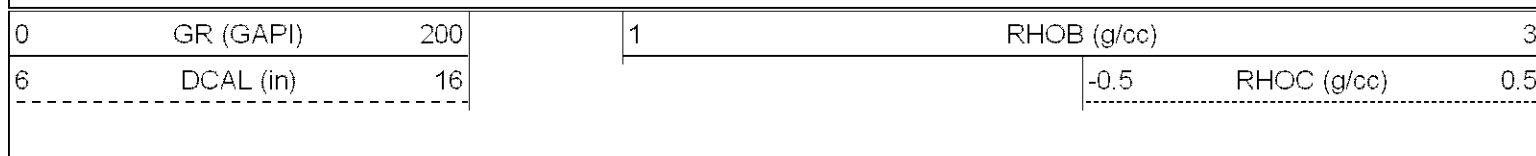
2250

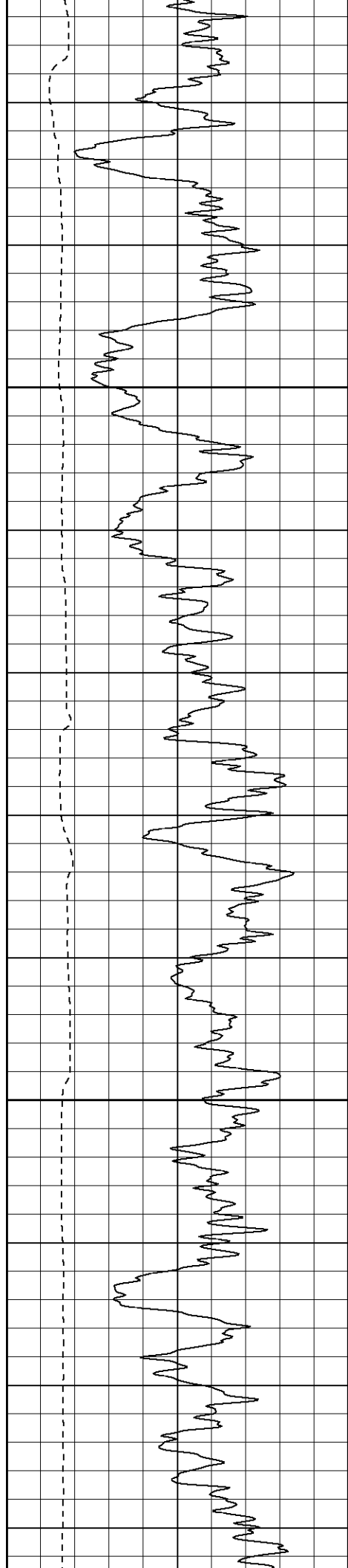
2300





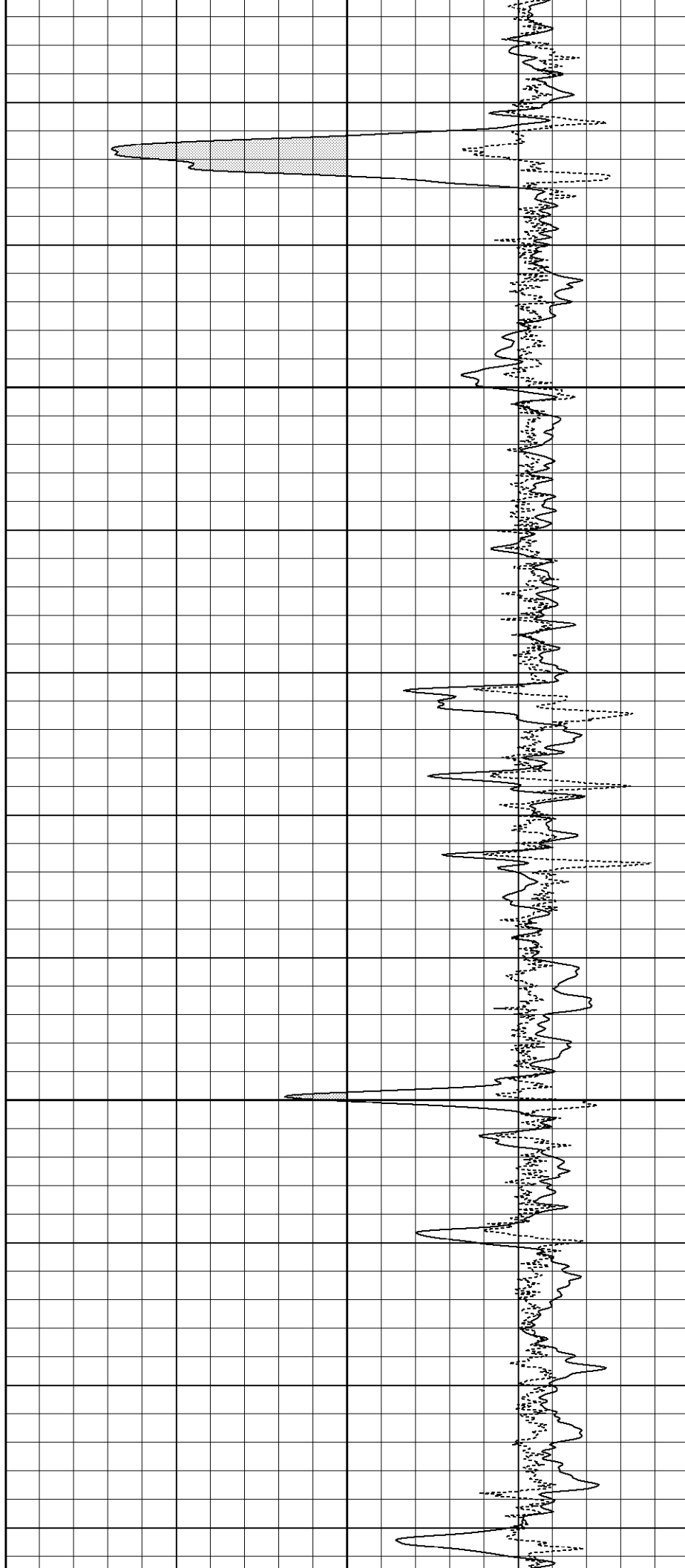
Database File: general vera.db  
 Dataset Pathname: pass2.2  
 Presentation Format: cdlhr  
 Dataset Creation: Mon Mar 05 09:34:35 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:120

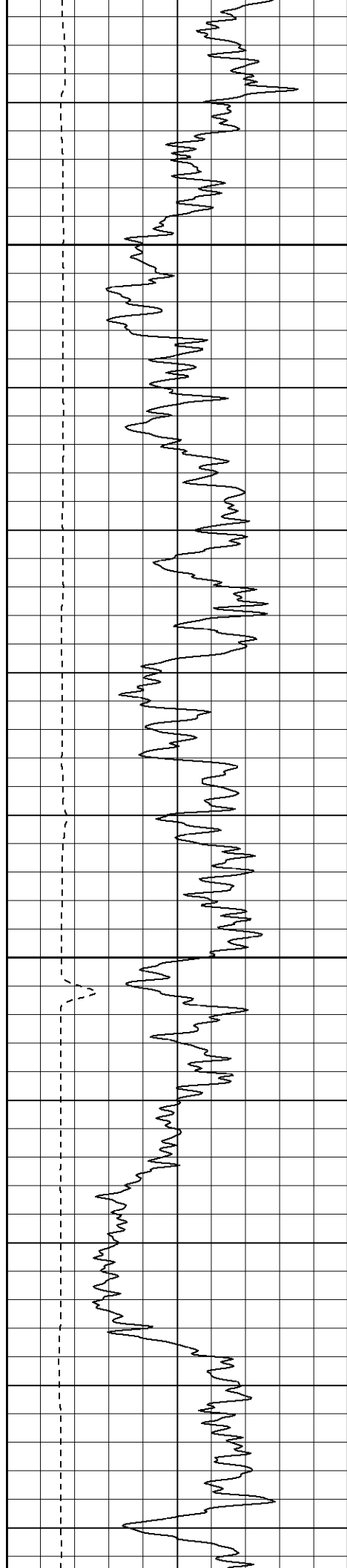




750

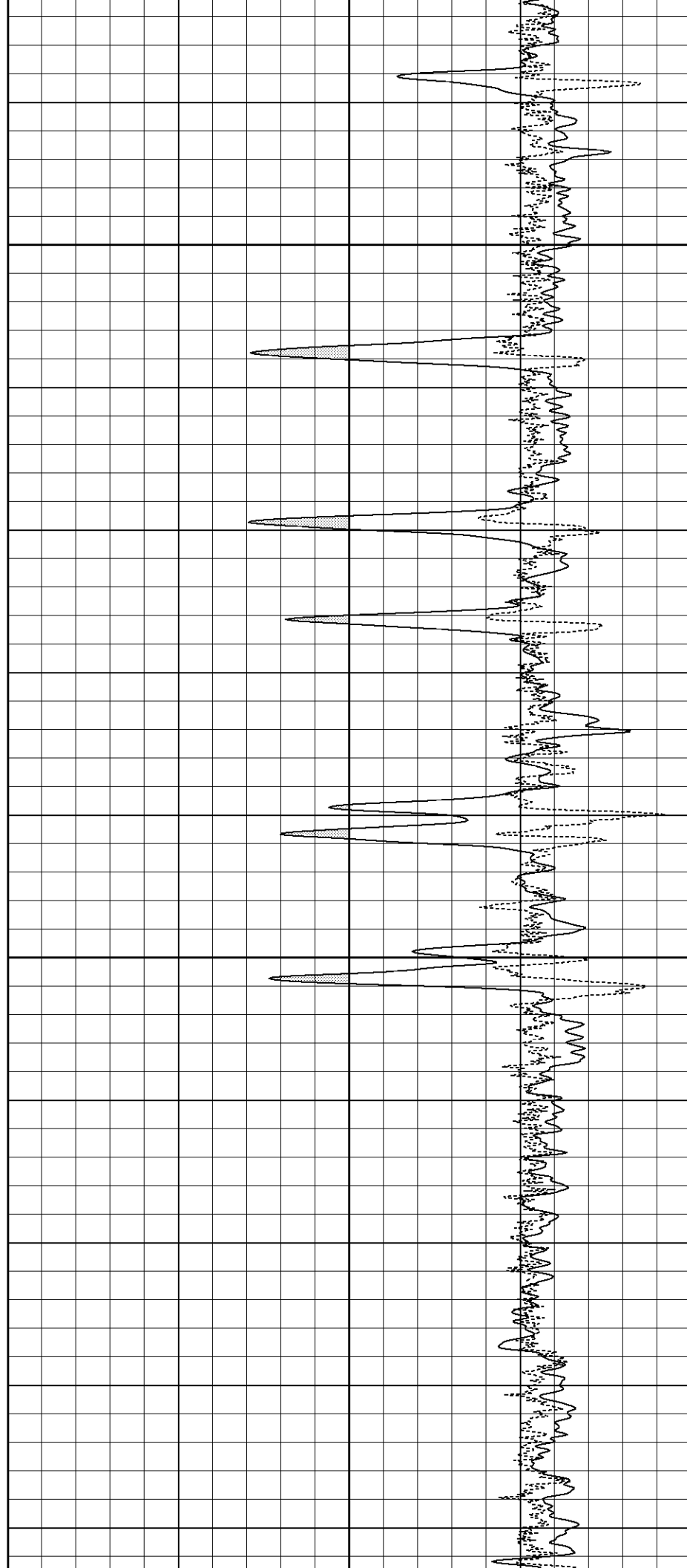
800

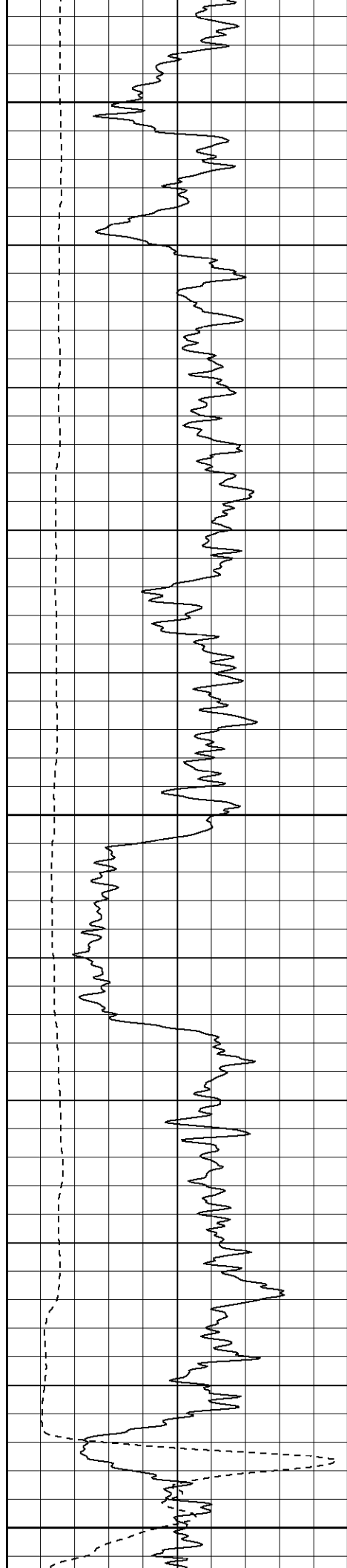




850

900

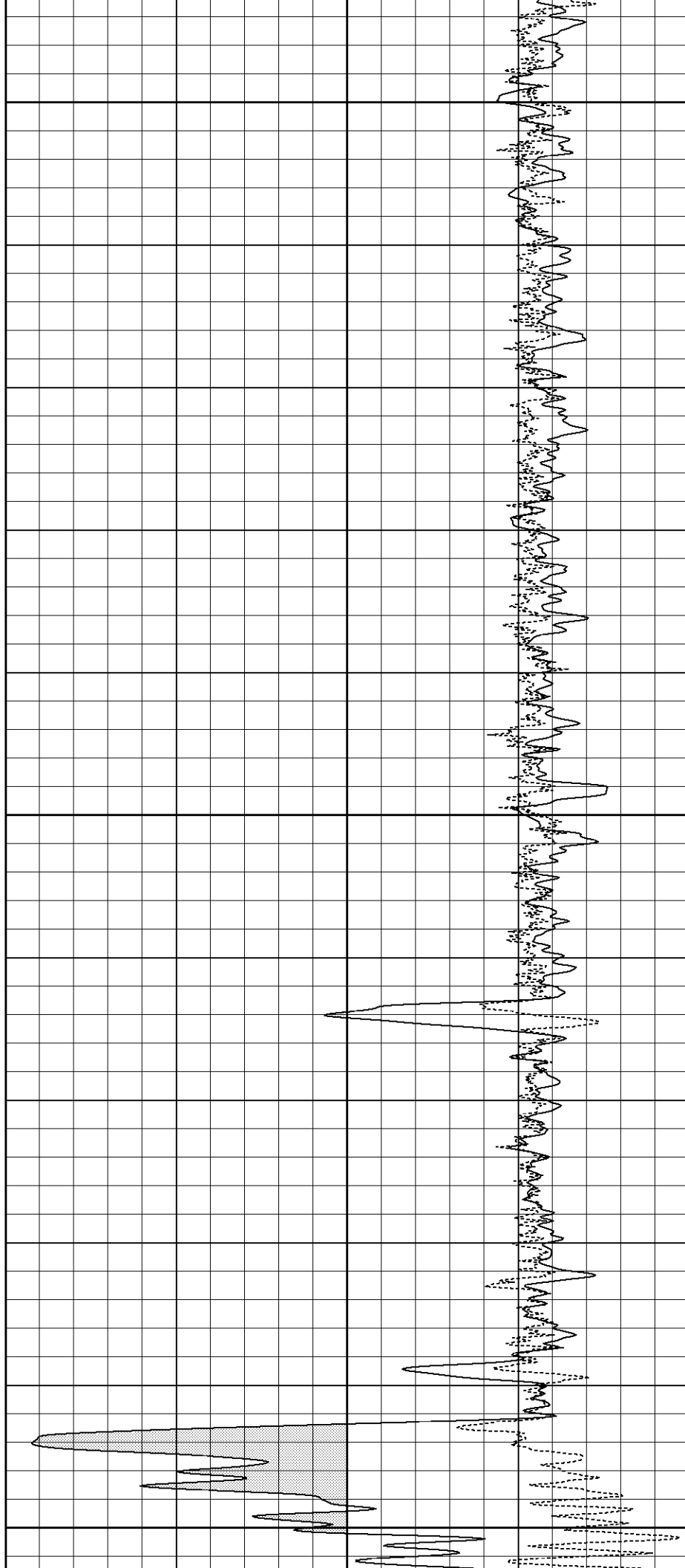


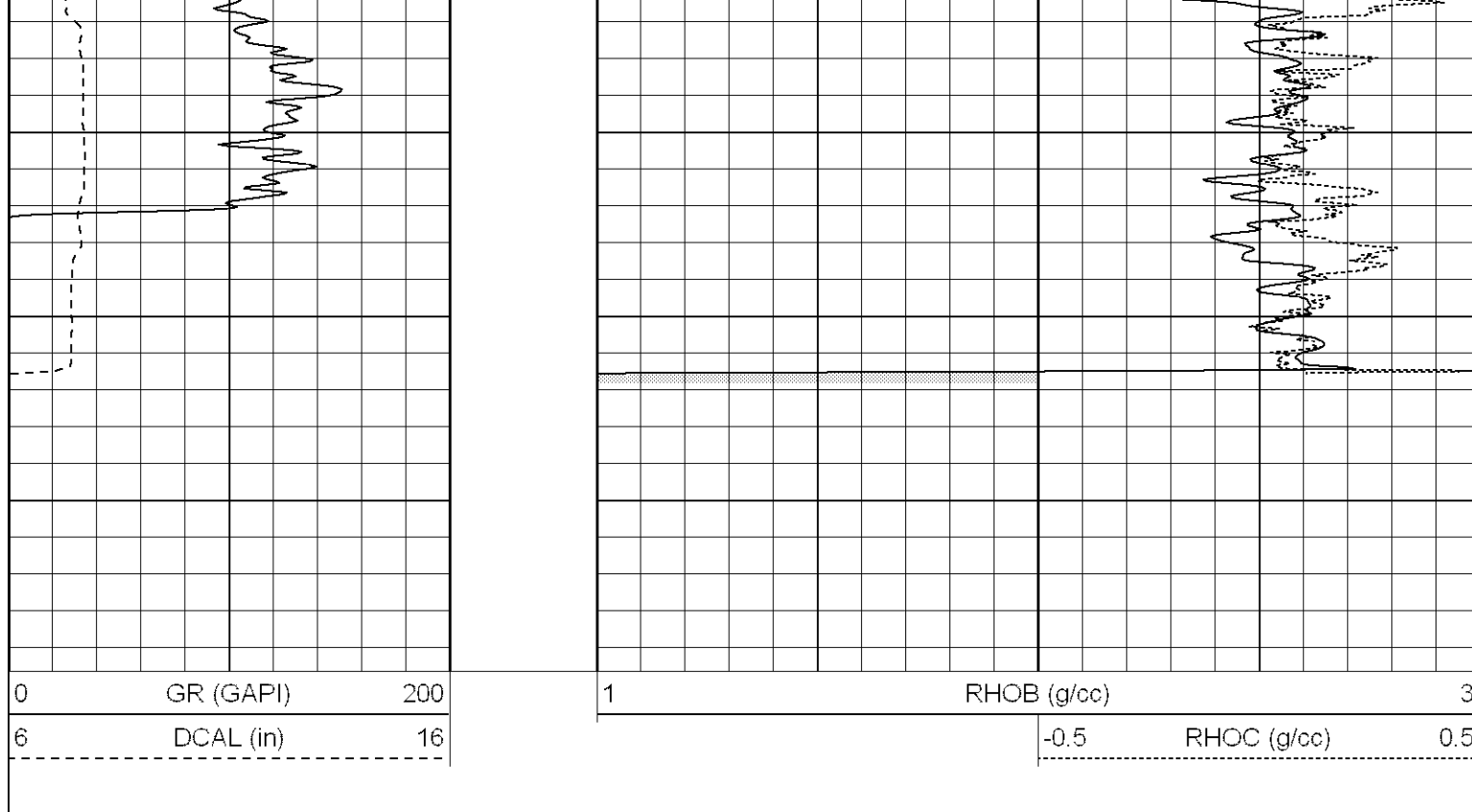


950

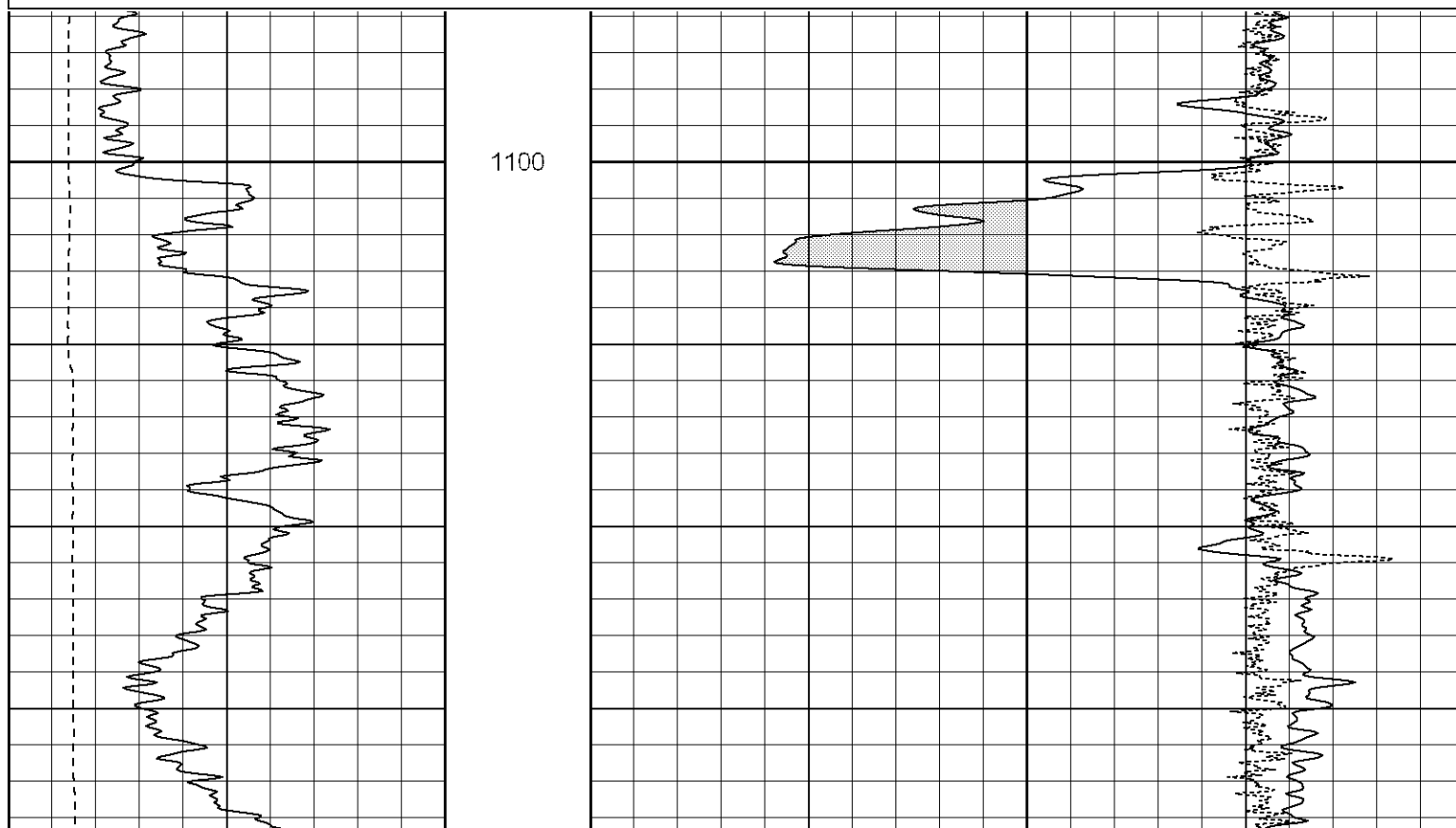
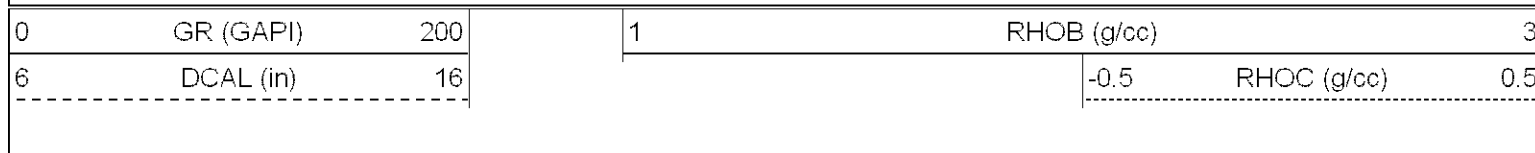
1000

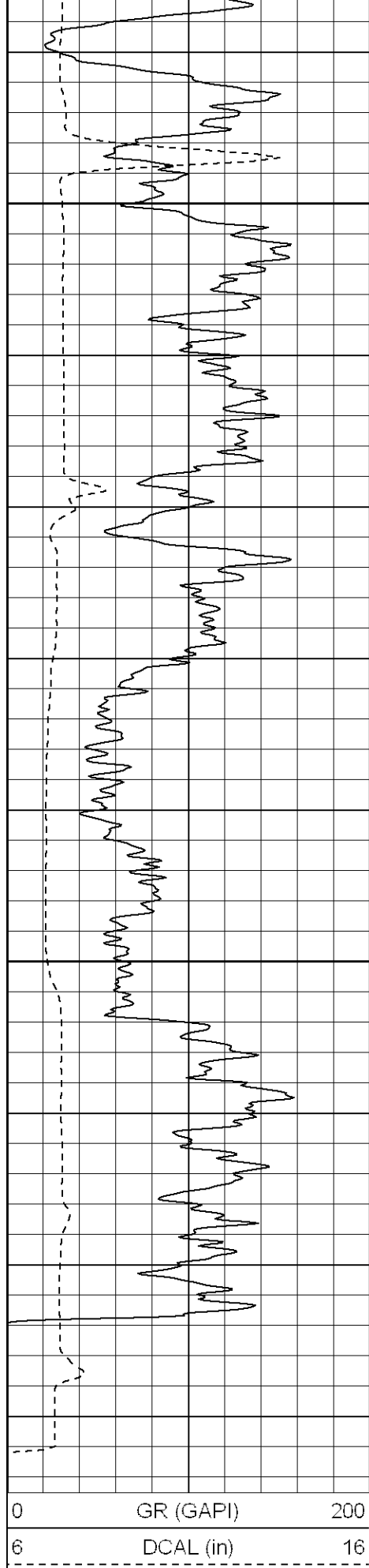
1050





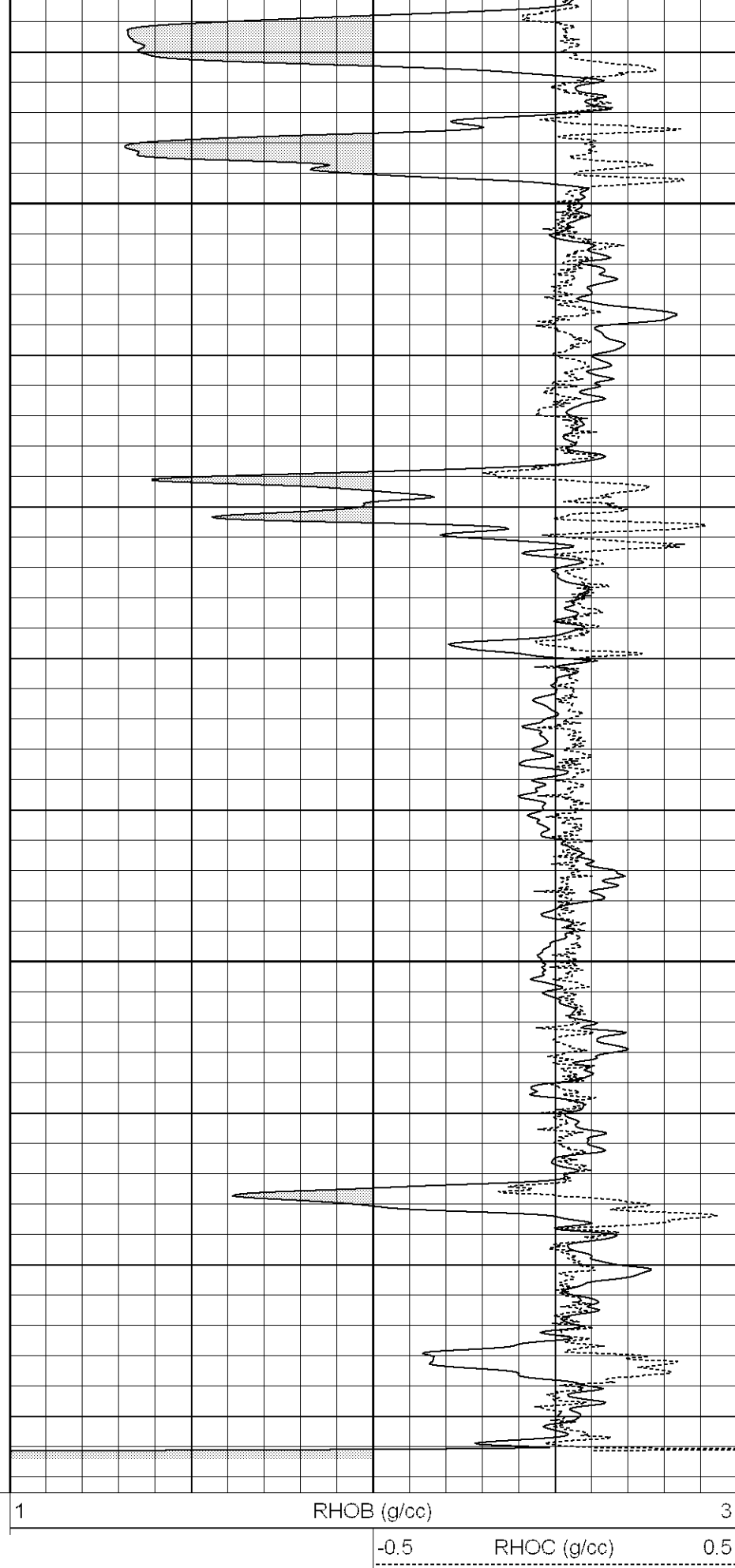
Database File: general vera.db  
 Dataset Pathname: pass4.2  
 Presentation Format: cdlhr  
 Dataset Creation: Mon Mar 05 09:35:57 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:120





1150

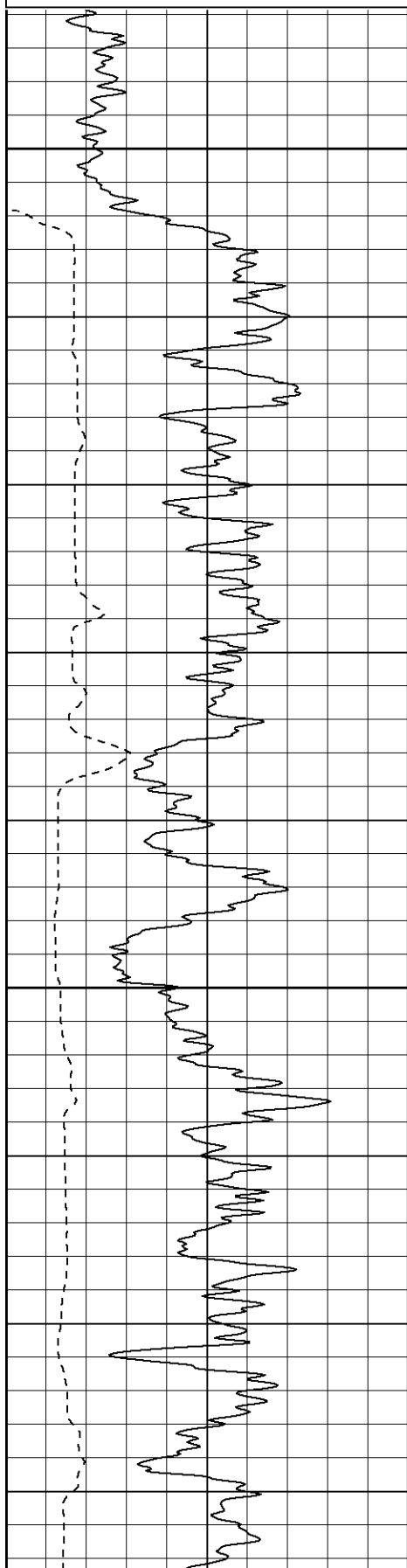
1200



Database File: general vera.db  
Dataset Pathname: pass6.1  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 05 11:46:17 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

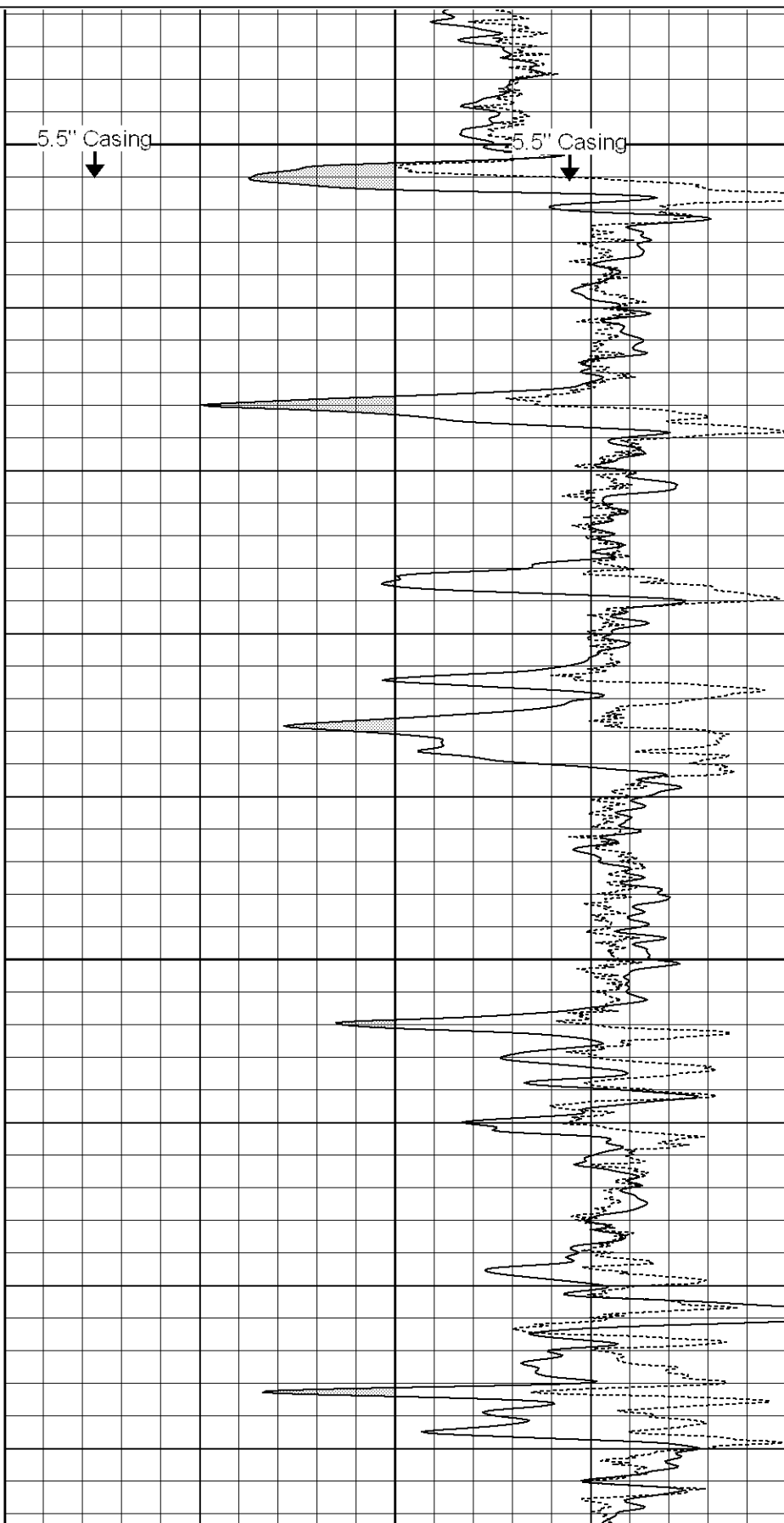
0	GR (GAPI)	200
6	DCAL (in)	16

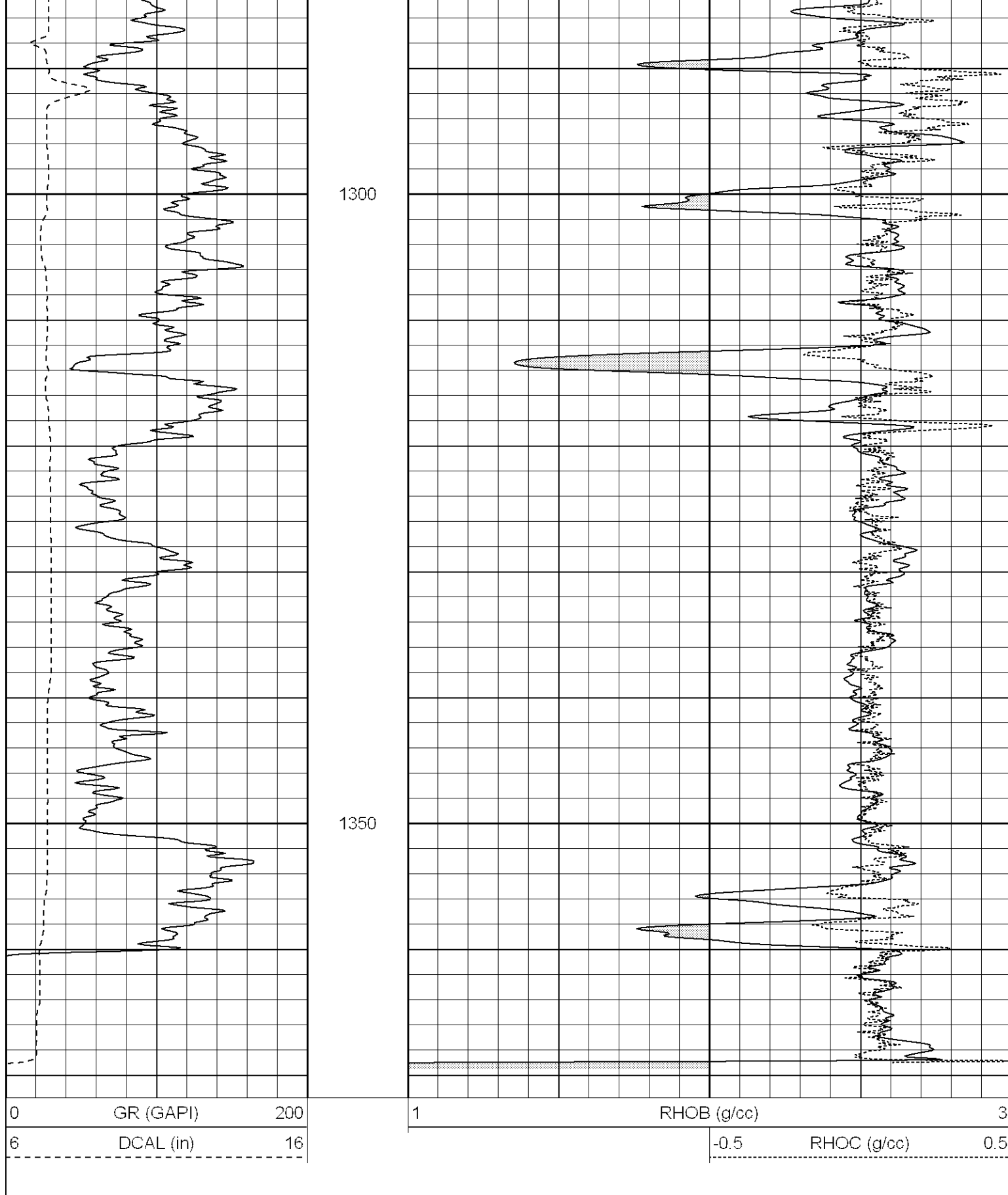
1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5



1200

1250

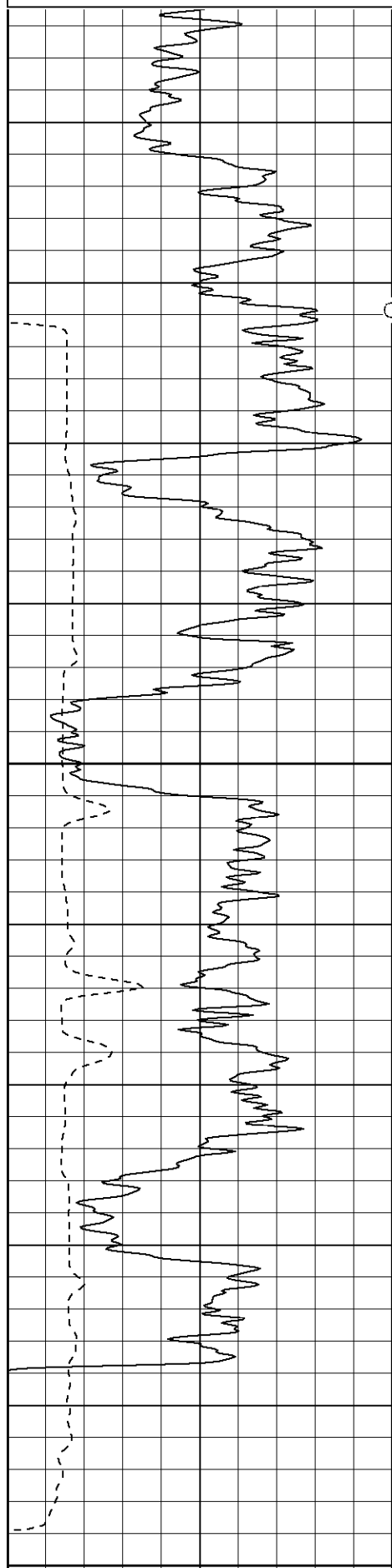




Database File: general vera.db  
Dataset Pathname: pass8.1  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 05 15:07:50 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

6 DCAL (in) 16

-0.5 RHOC (g/cc) 0.5

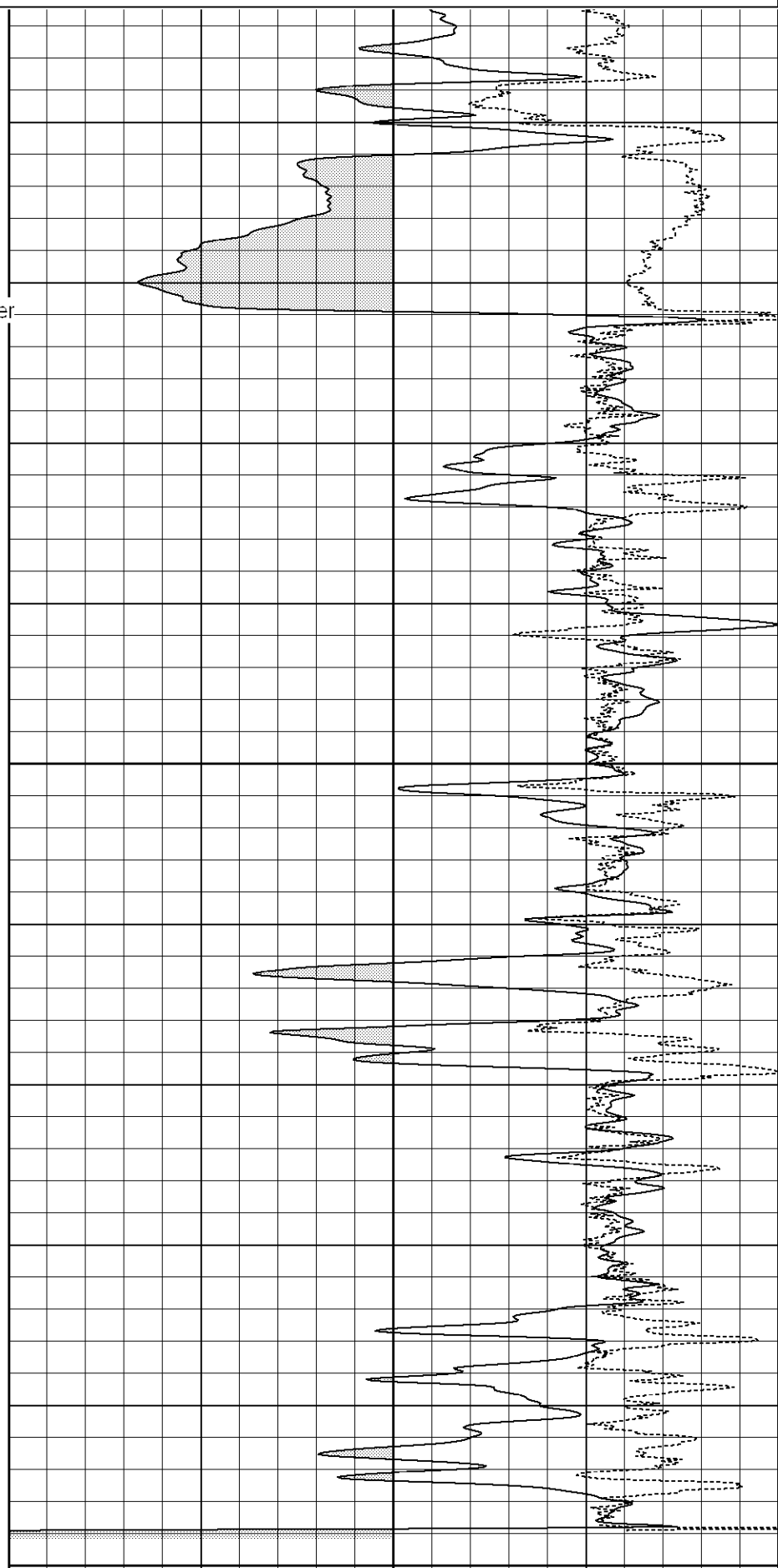


0 GR (GAPI) 200  
6 DCAL (in) 16

Closed Caliper

1400

1450

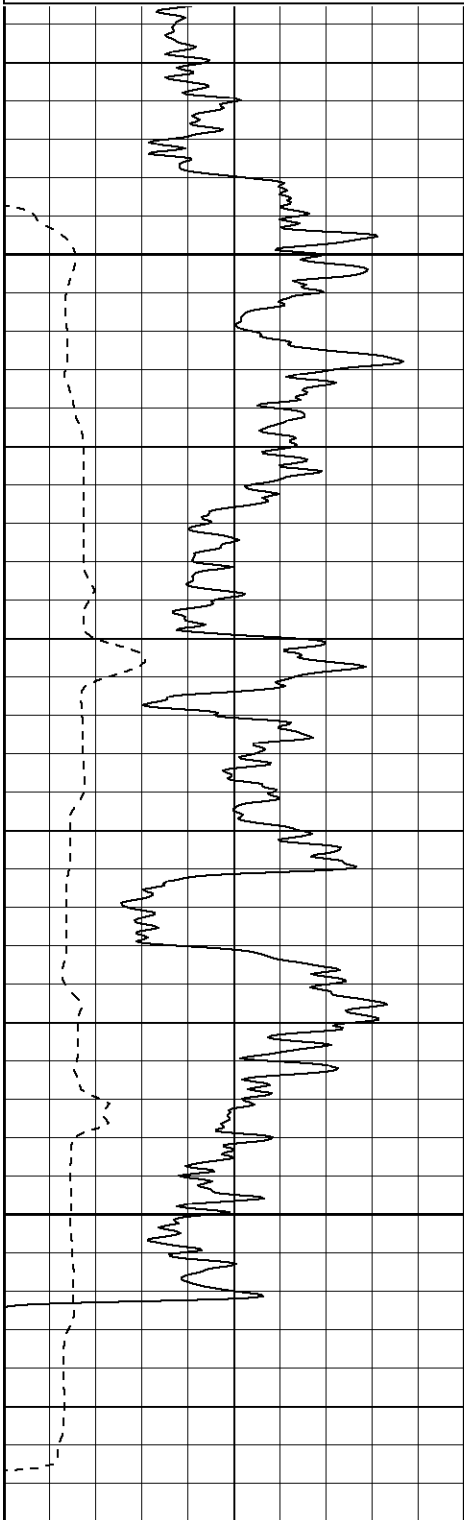


1 RHOB (g/cc) 3  
-0.5 RHOC (g/cc) 0.5

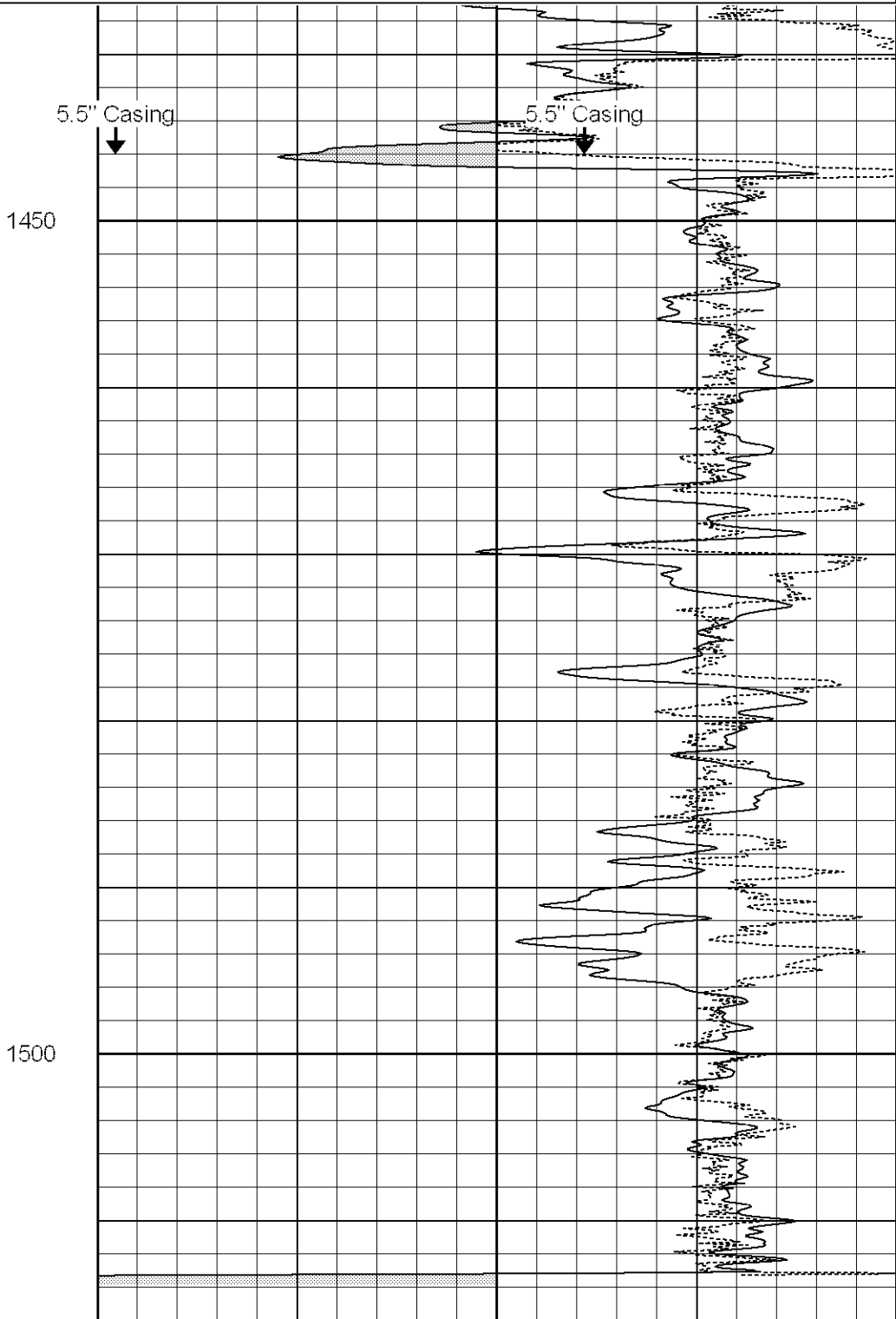
Database File: general vera.db  
Dataset Pathname: pass11.1  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 05 15:08:24 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

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

1	RHOB (g/cc)		3
	-0.5	RHOC (g/cc)	0.5
<hr/>			



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



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

Database File: general vera.db  
Dataset Pathname: pass13.1  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 05 15:08:54 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

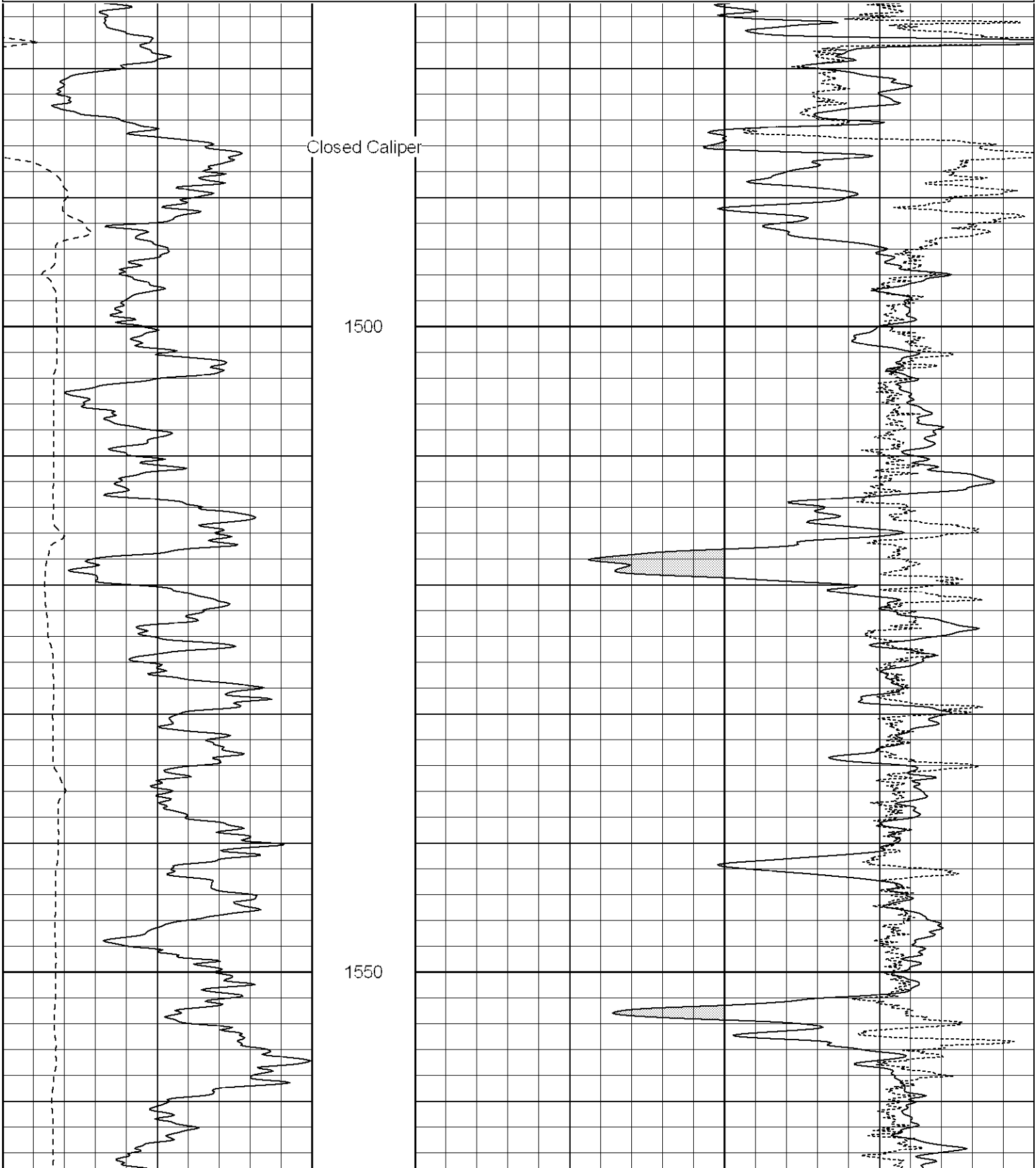
0 GR (GAPI) 200  
6 DCAL (in) 16

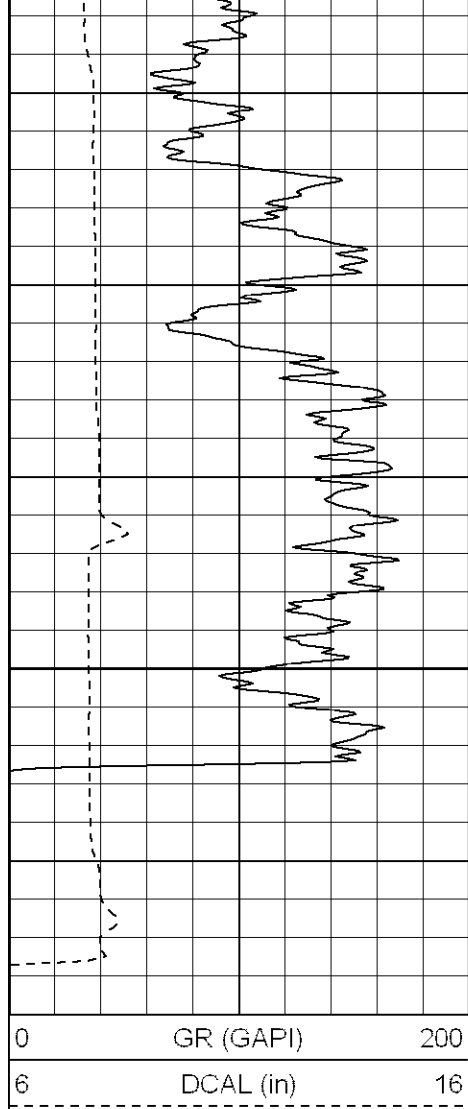
1 RHOB (g/cc) 3  
-0.5 RHOC (g/cc) 0.5

Closed Caliper

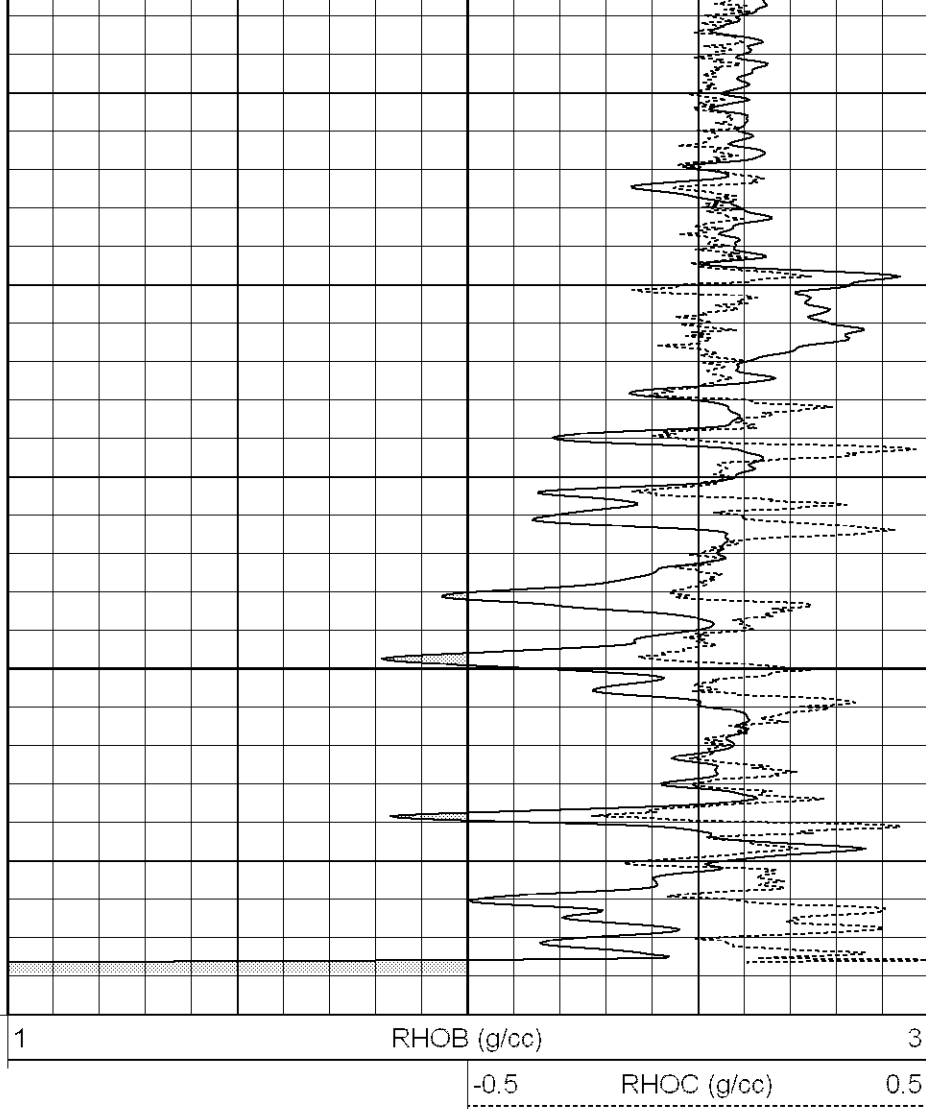
1500

1550

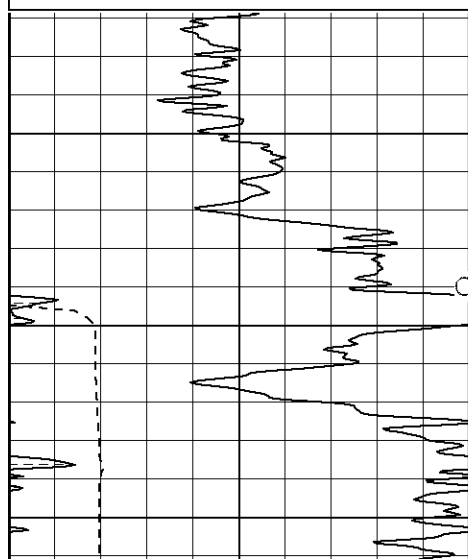
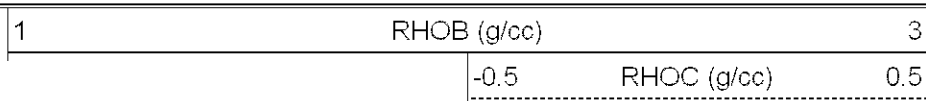
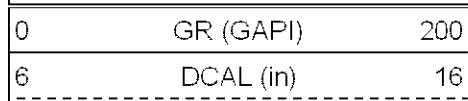




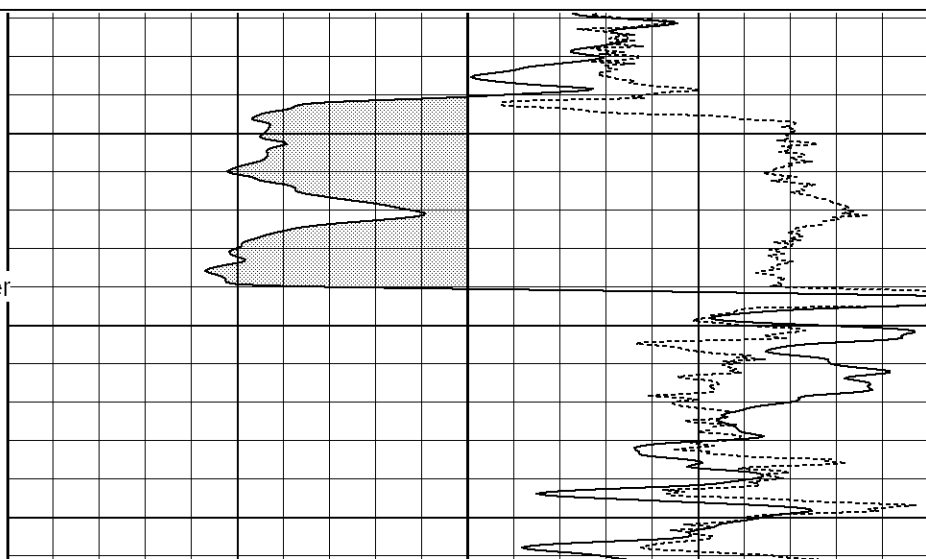
1600

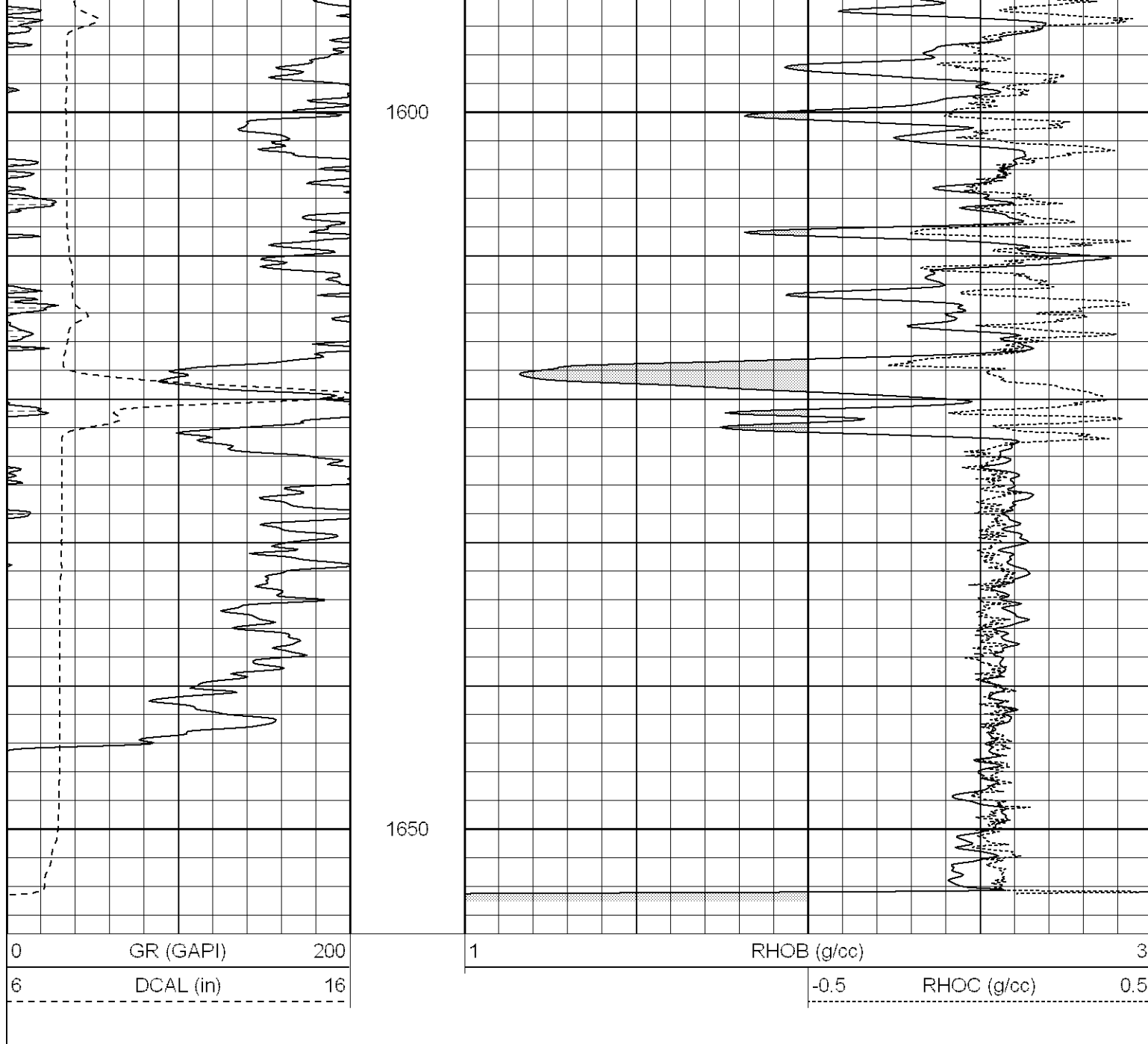


Database File: general vera.db  
Dataset Pathname: pass15.1  
Presentation Format: cdlhr  
Dataset Creation: Mon Mar 05 16:22:48 2007 by Calc Open-Cased 061129  
Charted by: Depth in Feet scaled 1:120

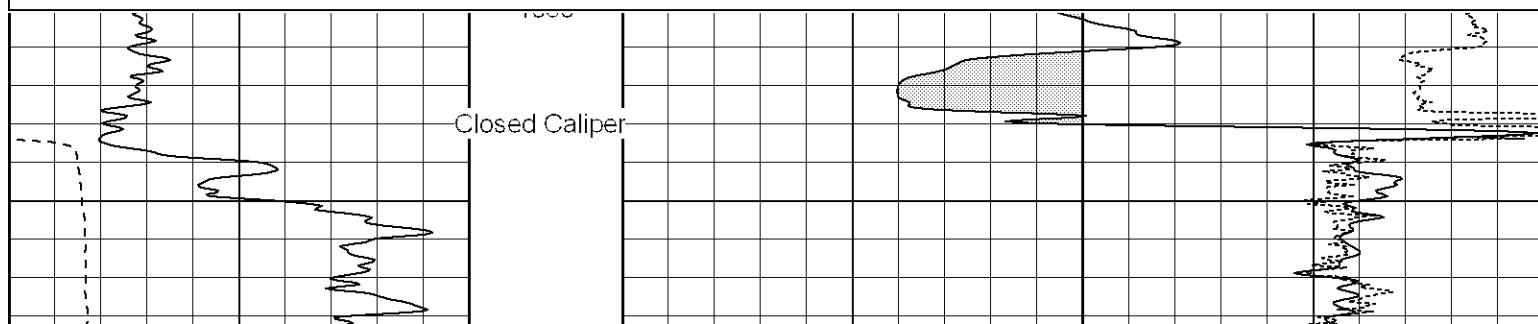
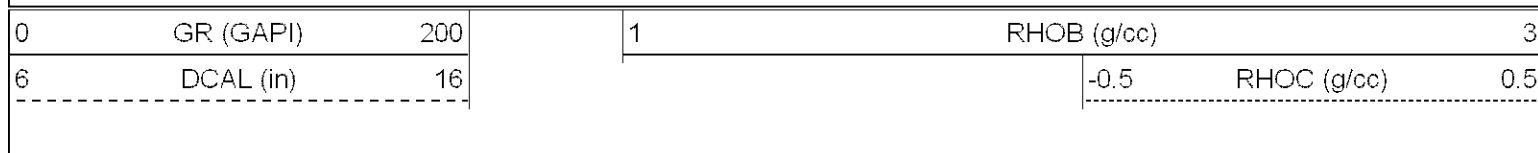


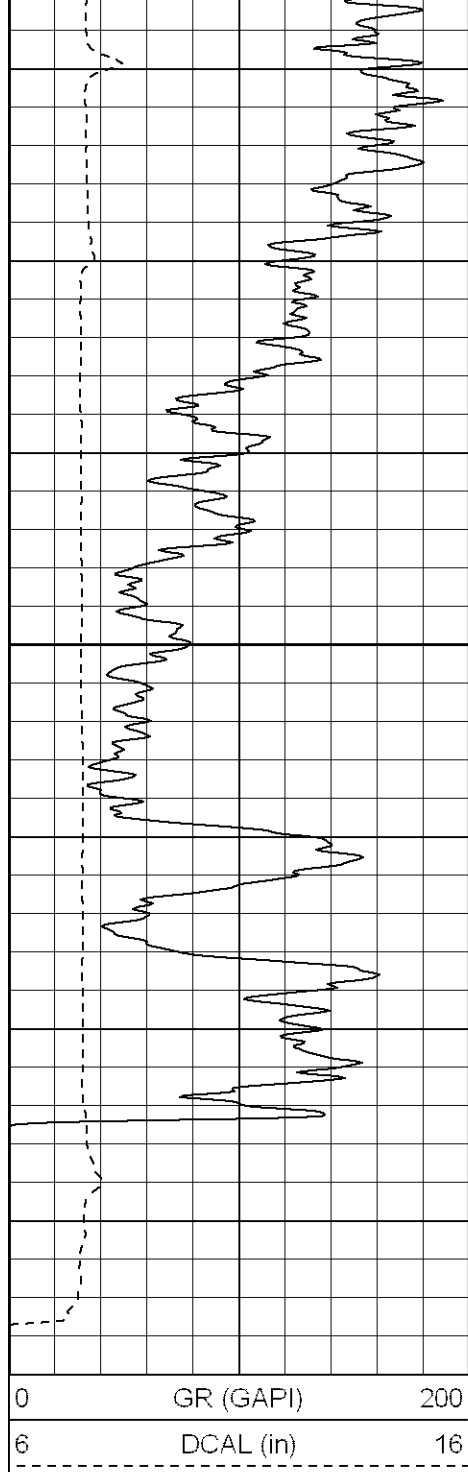
Closed Caliper



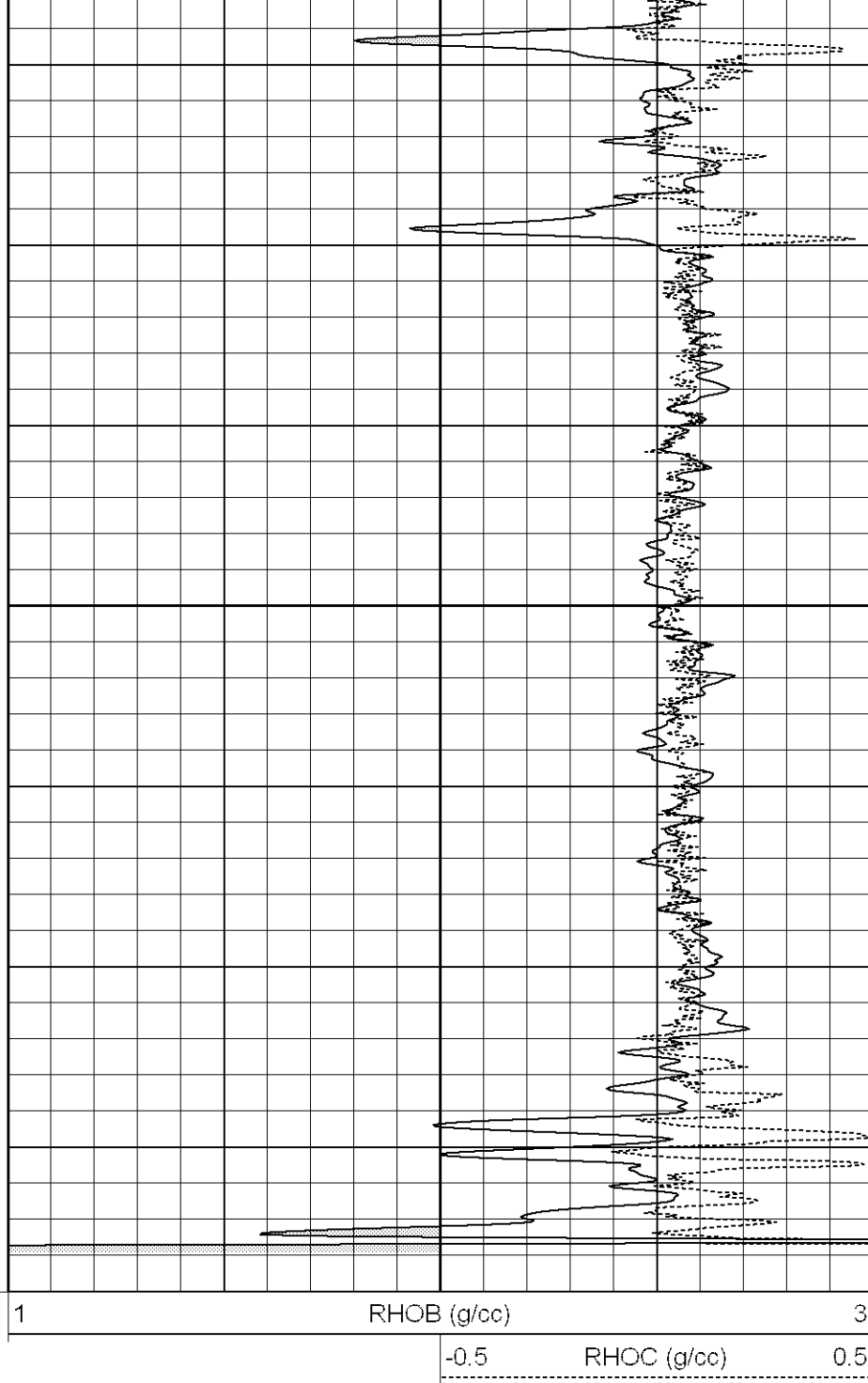


Database File: general vera.db  
 Dataset Pathname: pass17.1  
 Presentation Format: cdlhr  
 Dataset Creation: Mon Mar 05 17:48:06 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:120

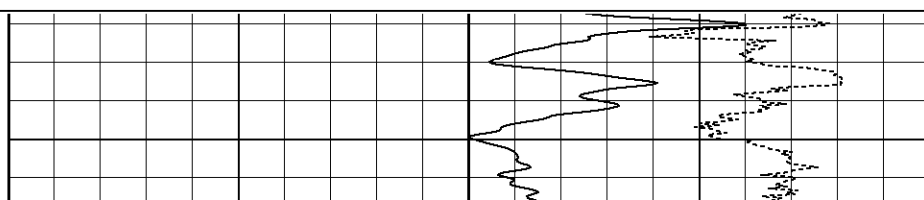
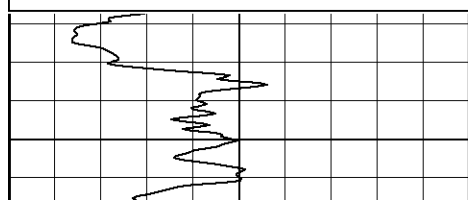
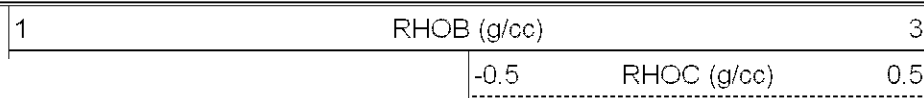
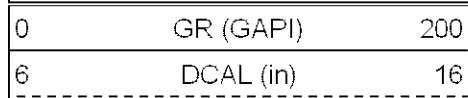


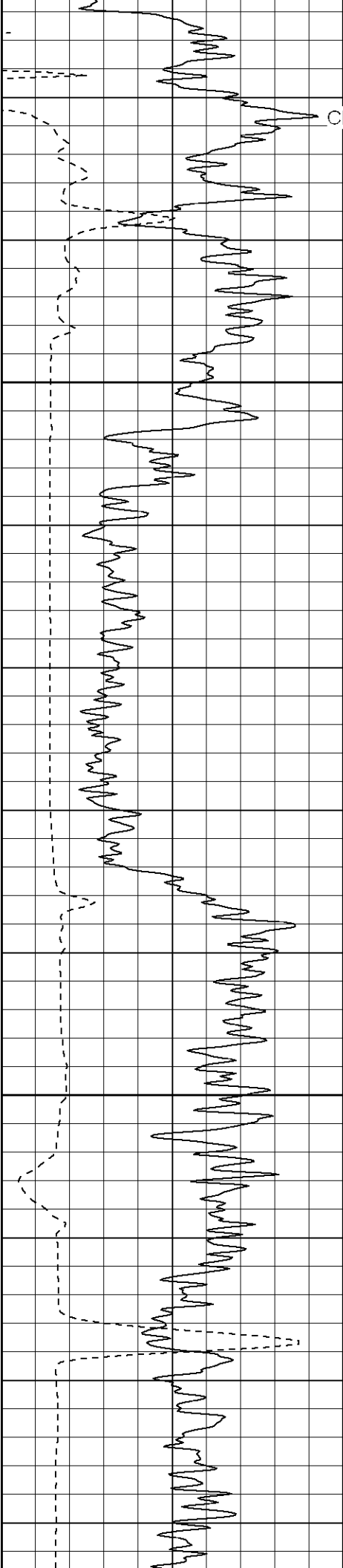


1700



Database File: general vera.db  
 Dataset Pathname: pass19.2  
 Presentation Format: cdlhr  
 Dataset Creation: Mon Mar 05 19:41:26 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:120

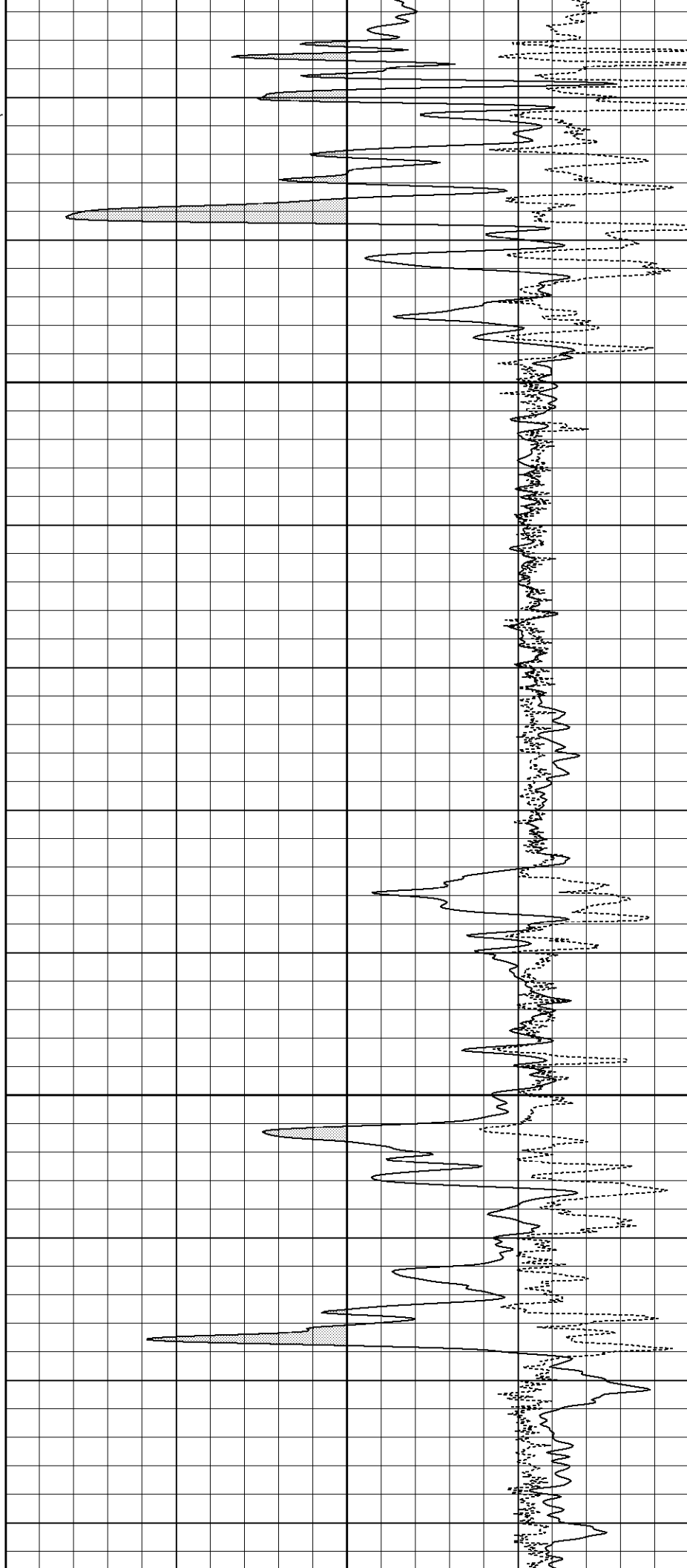


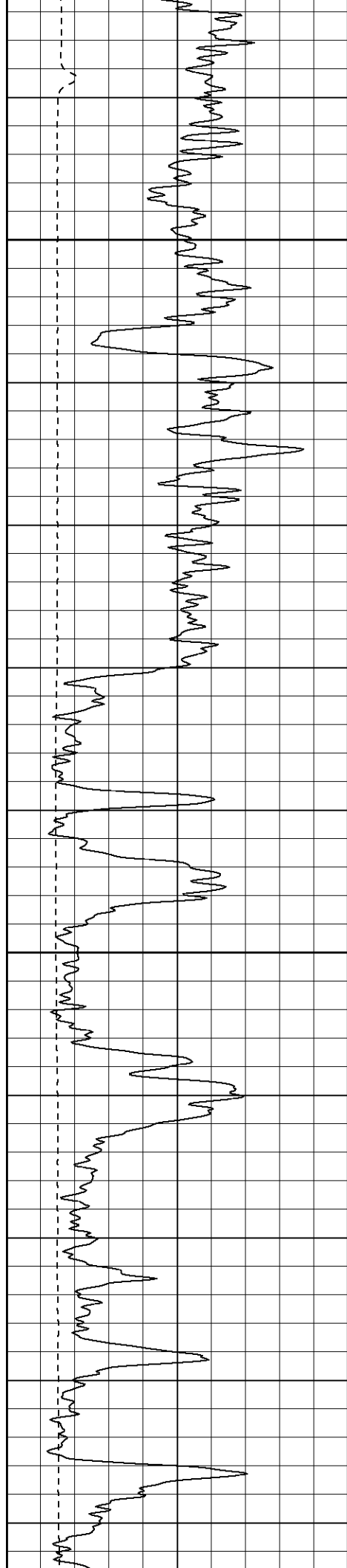


Closed Caliper

1750

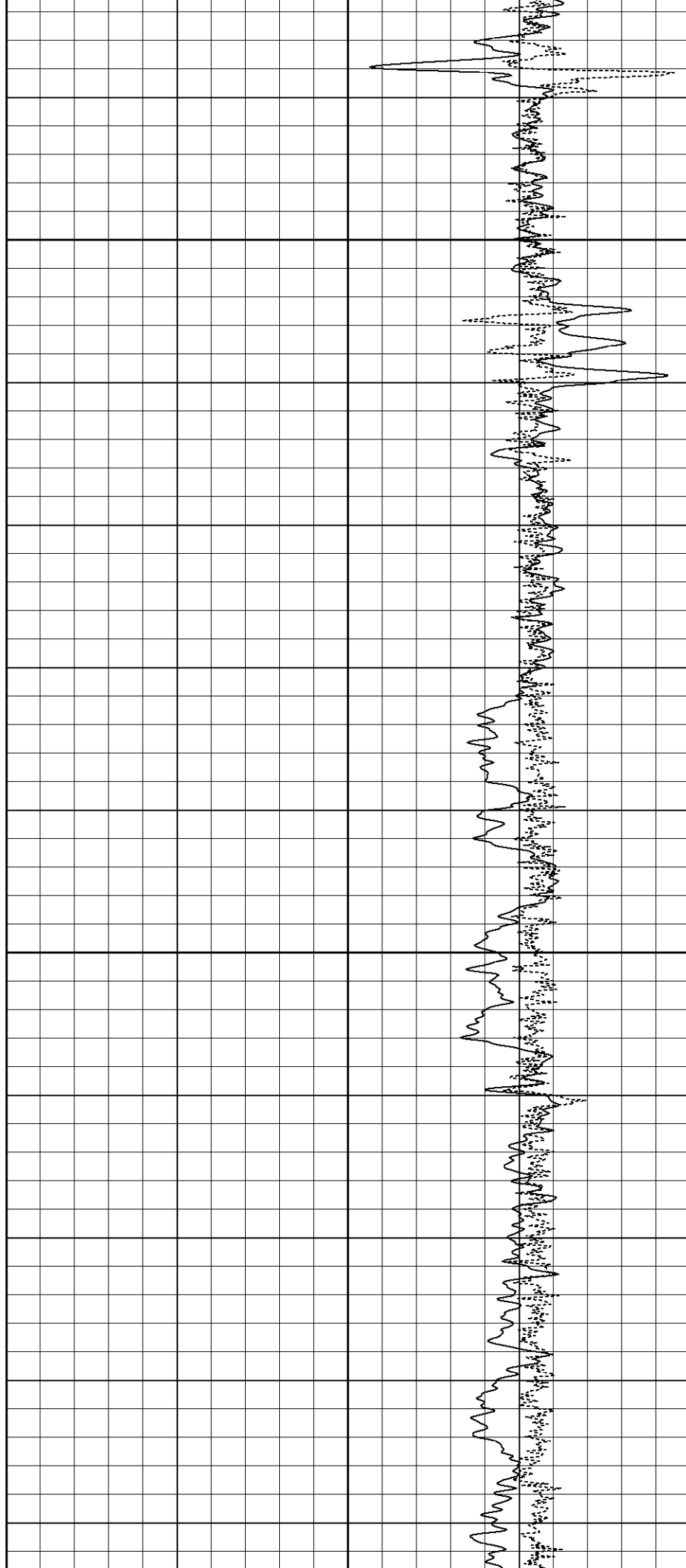
1800

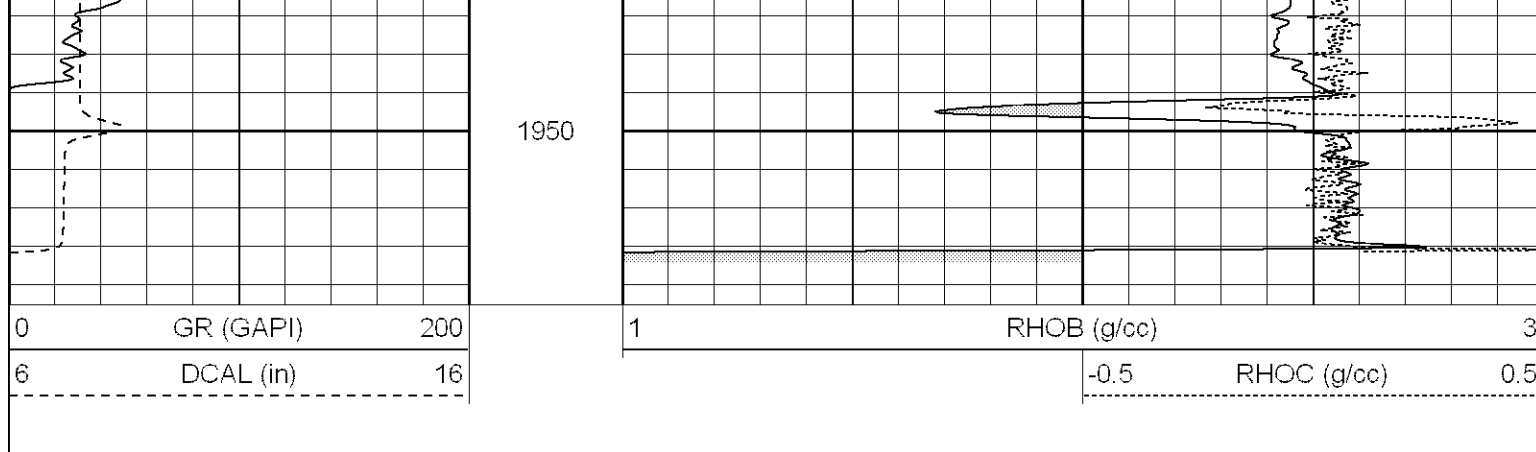




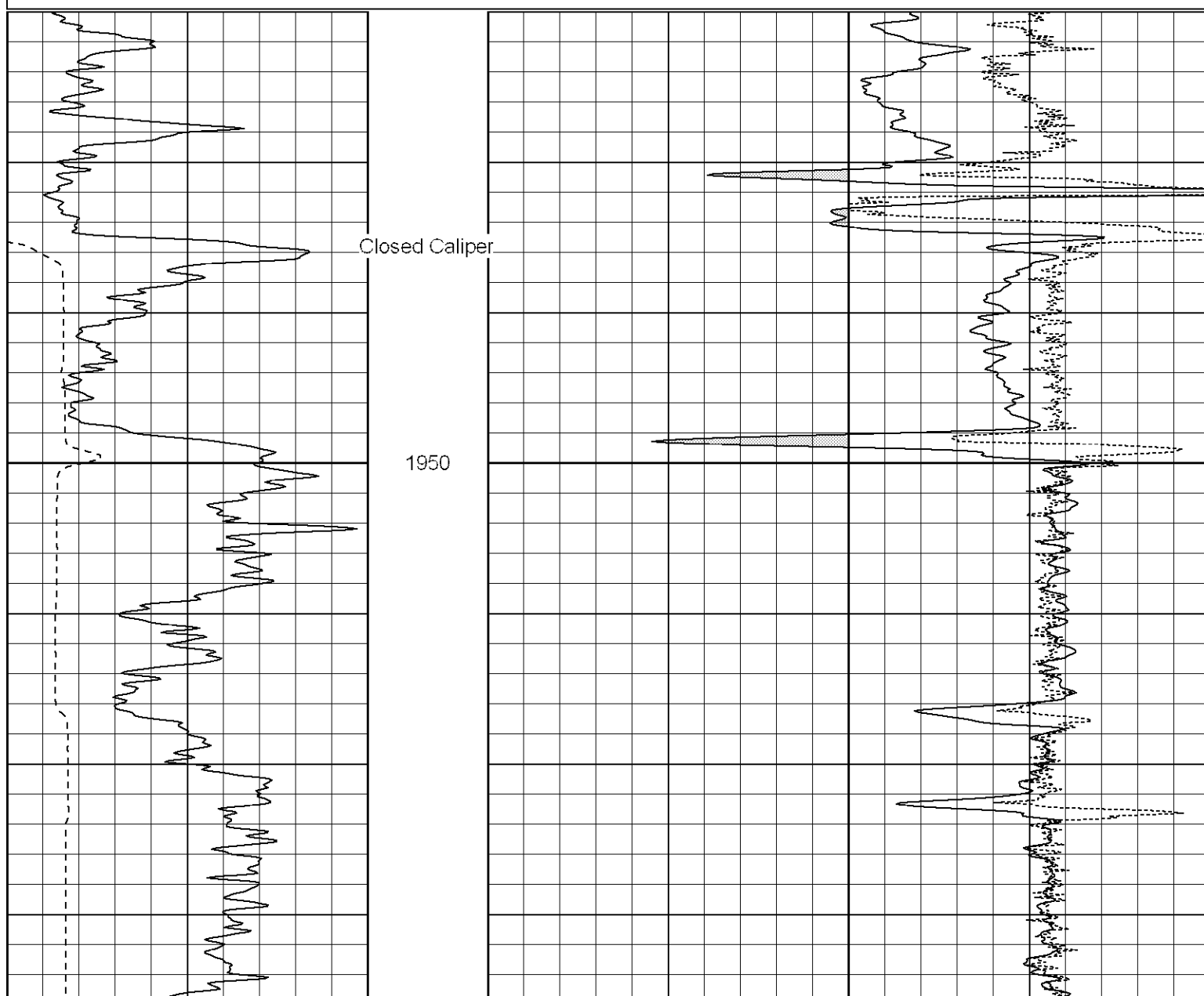
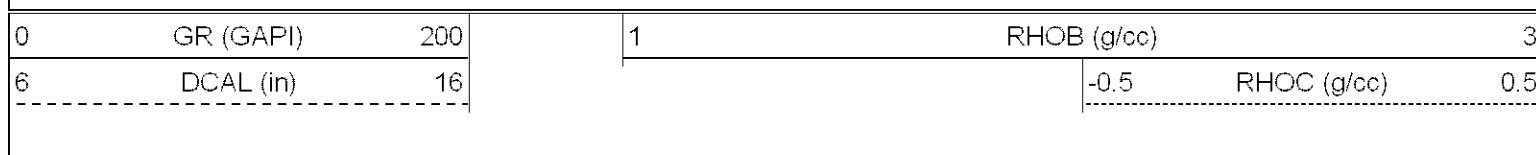
1850

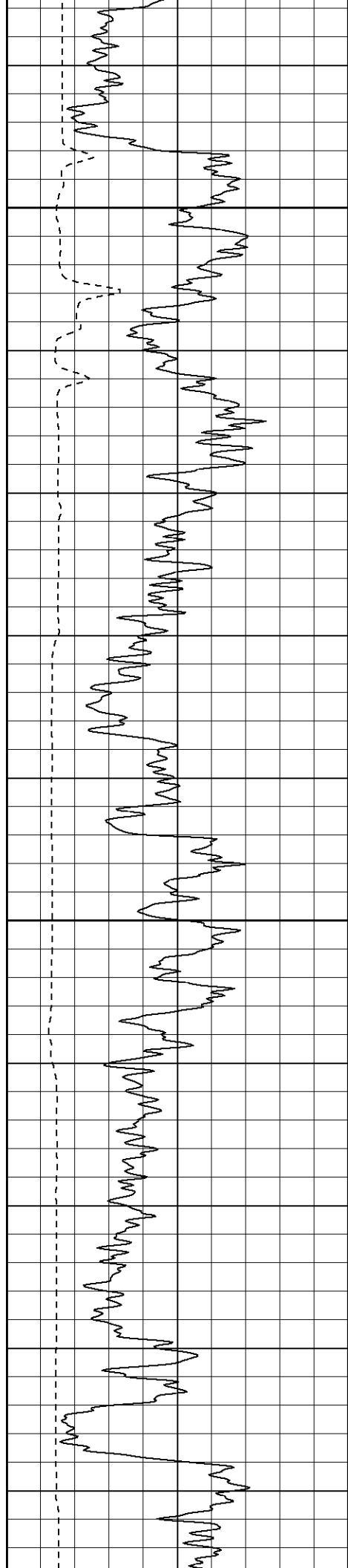
1900





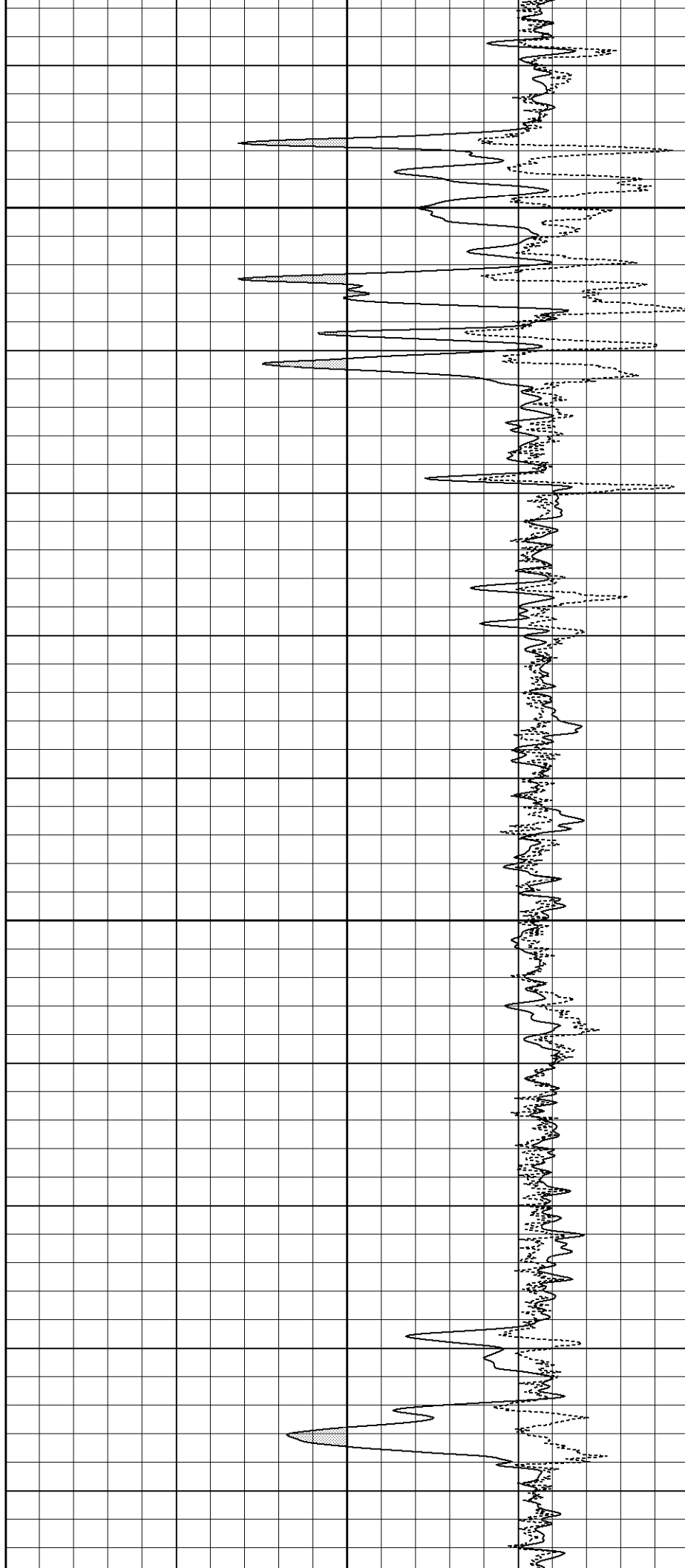
Database File: general vera.db  
 Dataset Pathname: pass210.1  
 Presentation Format: cdlhr  
 Dataset Creation: Wed Mar 07 08:19:14 2007 by Calc Open-Cased 061129  
 Charted by: Depth in Feet scaled 1:120

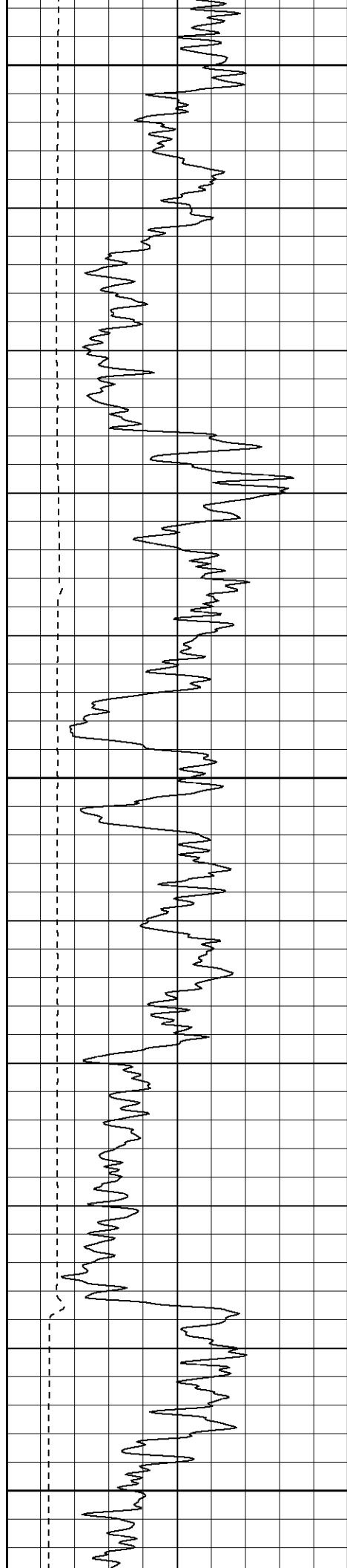




2000

2050

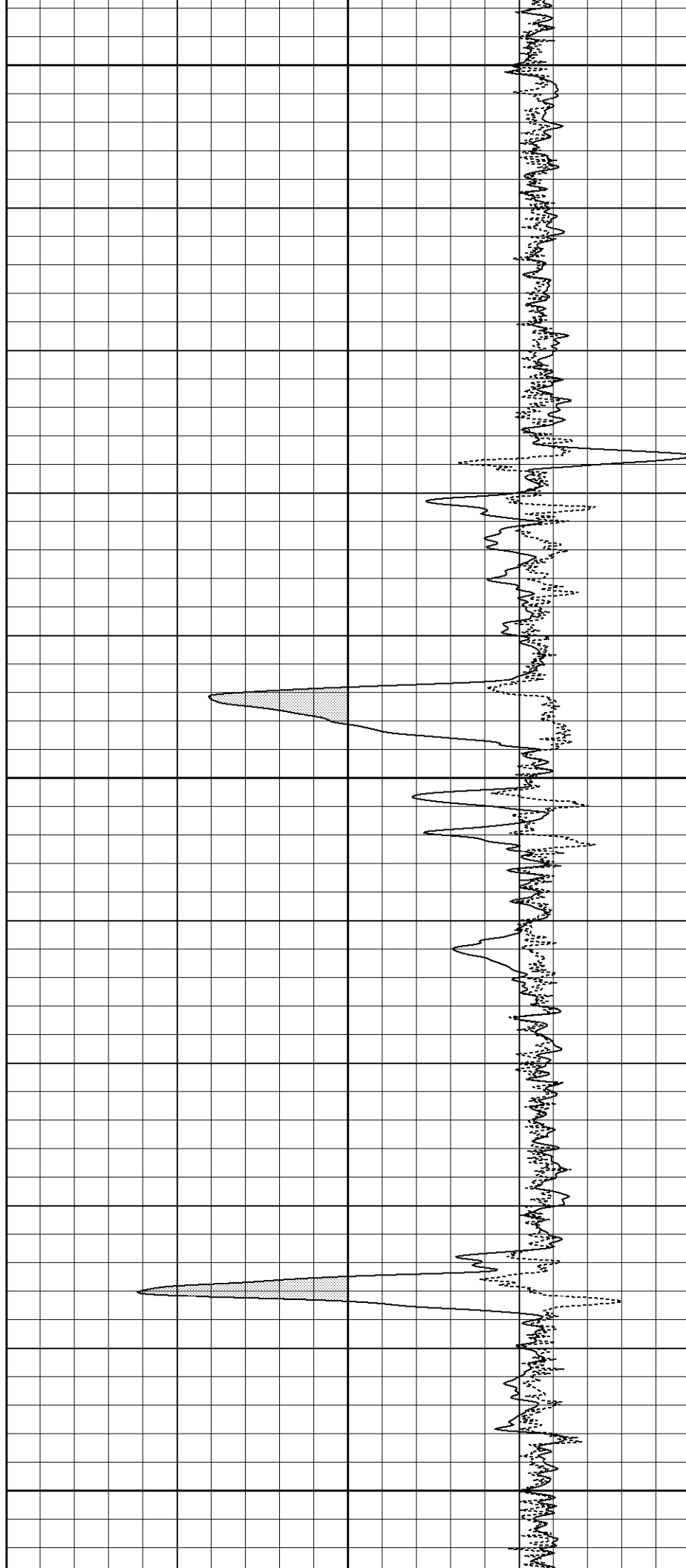


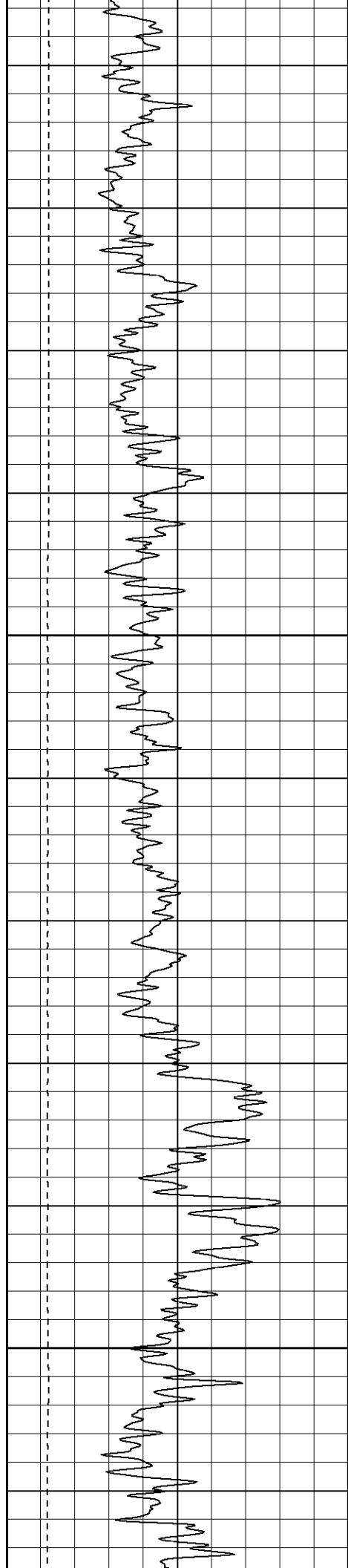


2100

2150

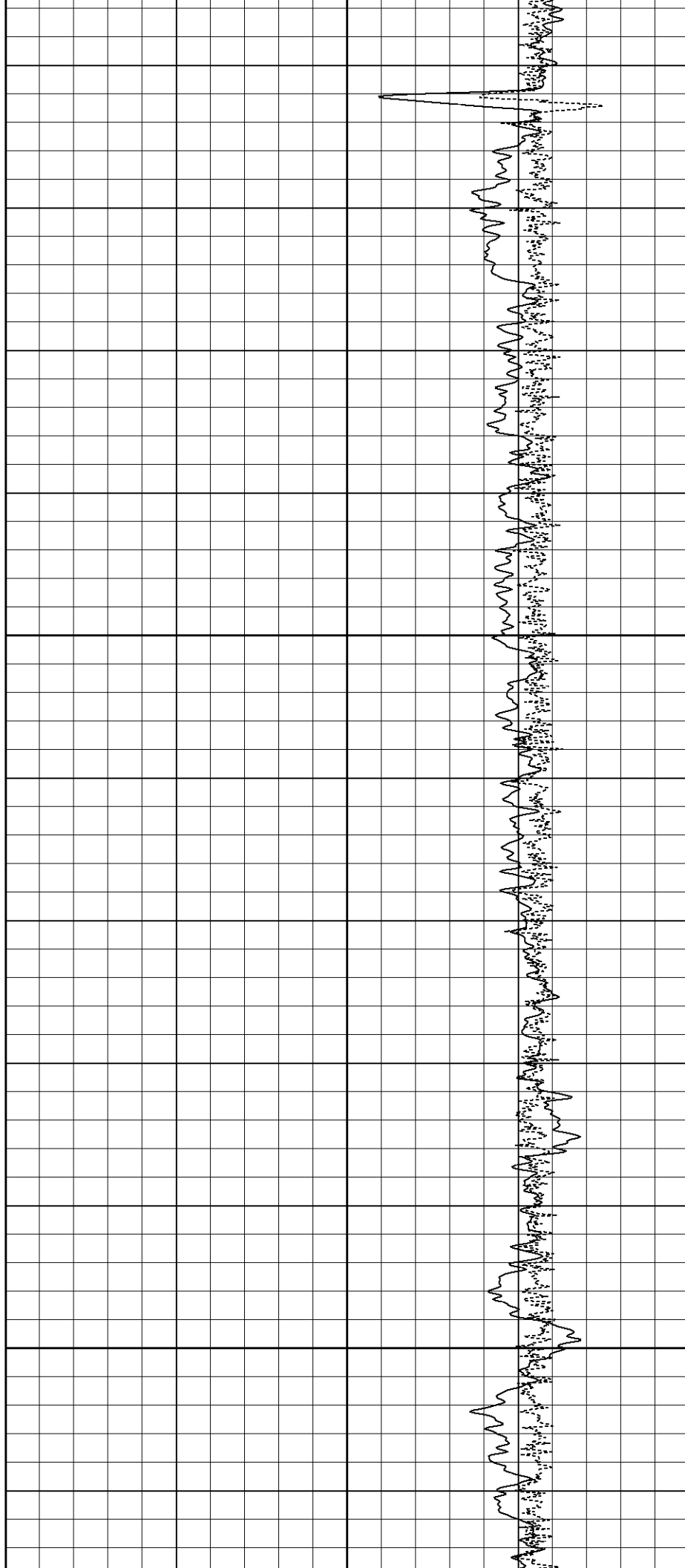
2200

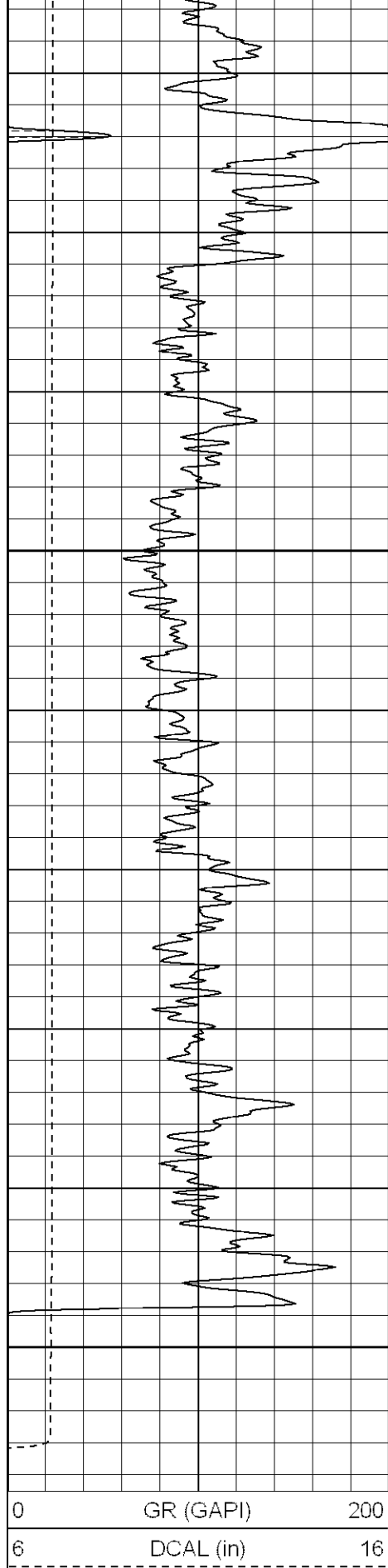




2250

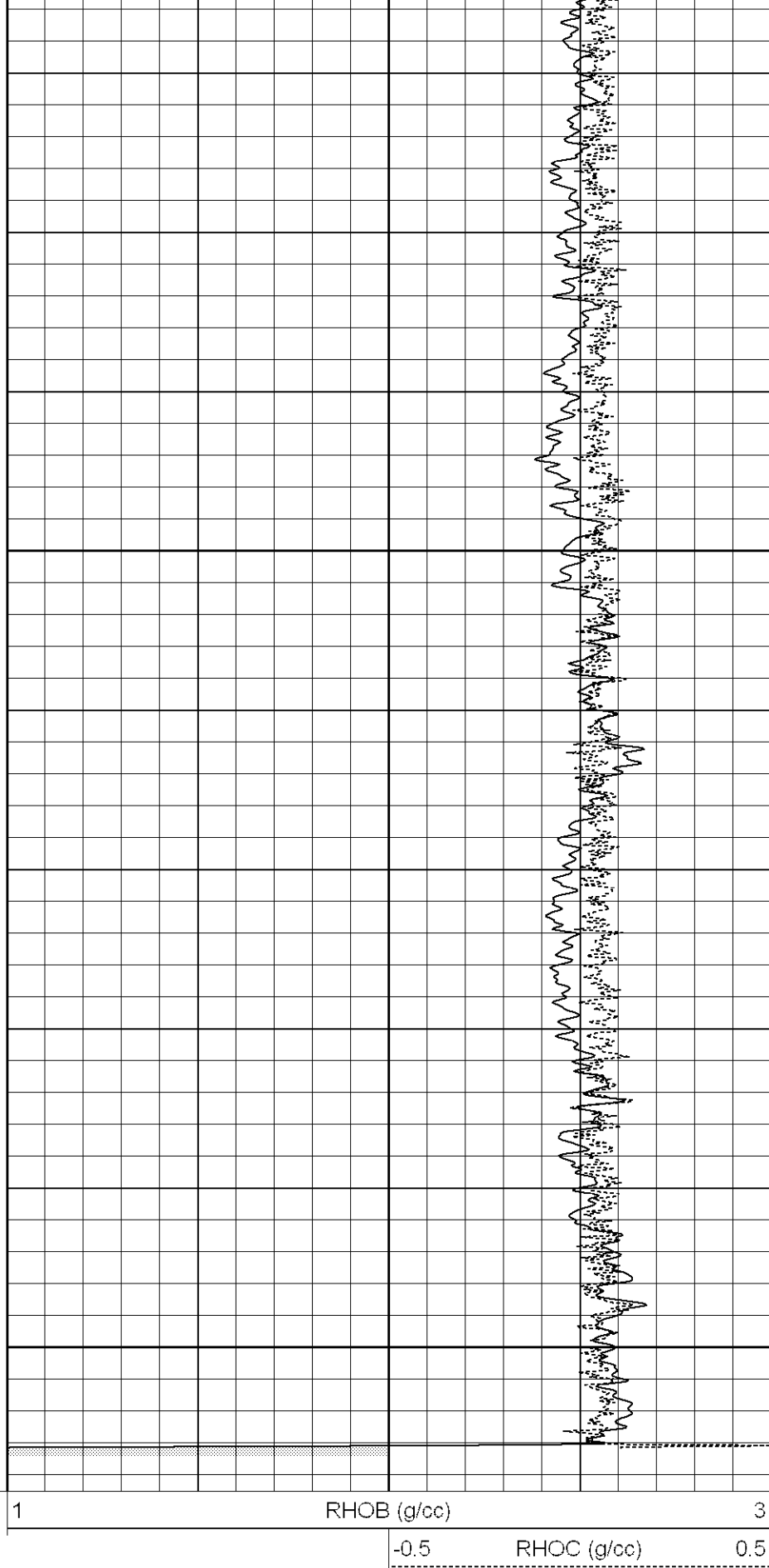
2300



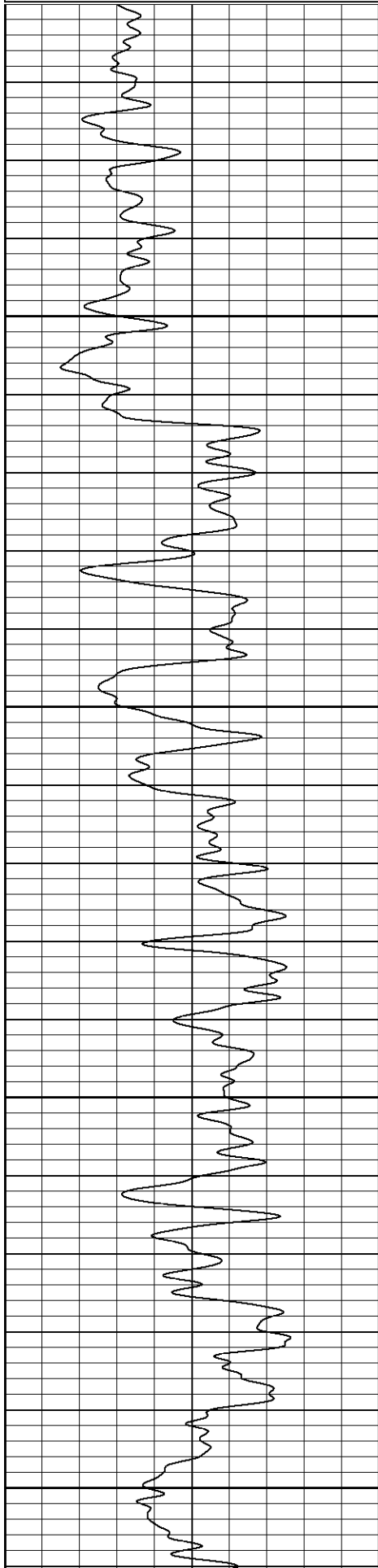


2350

2400



0 GR (GAPI) 200

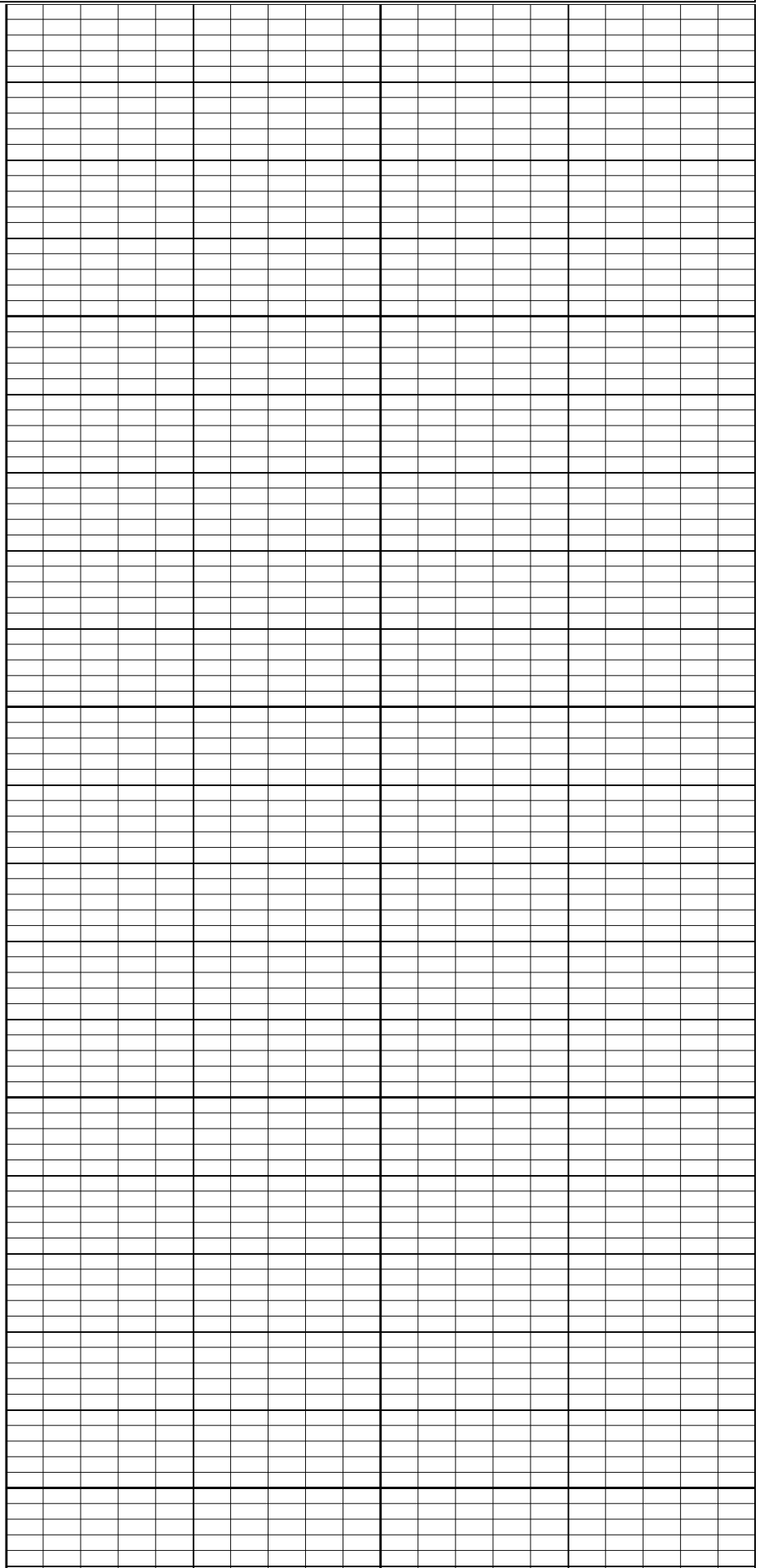


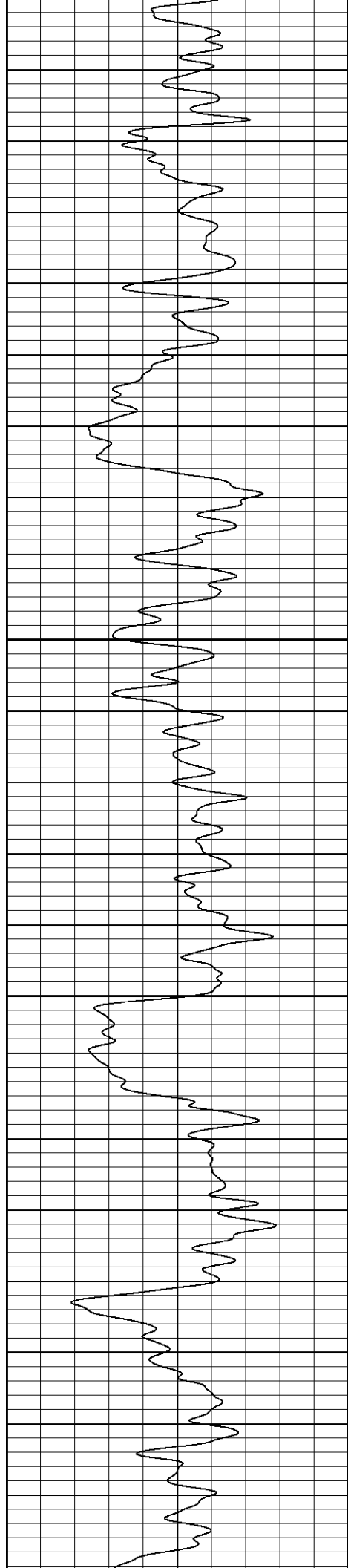
700

750

800

850



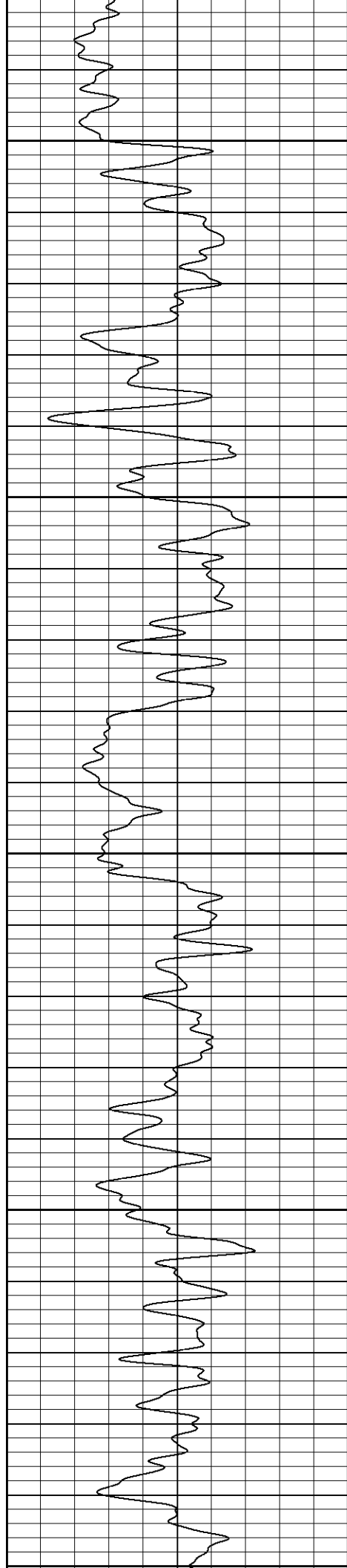


900

950

1000

1050



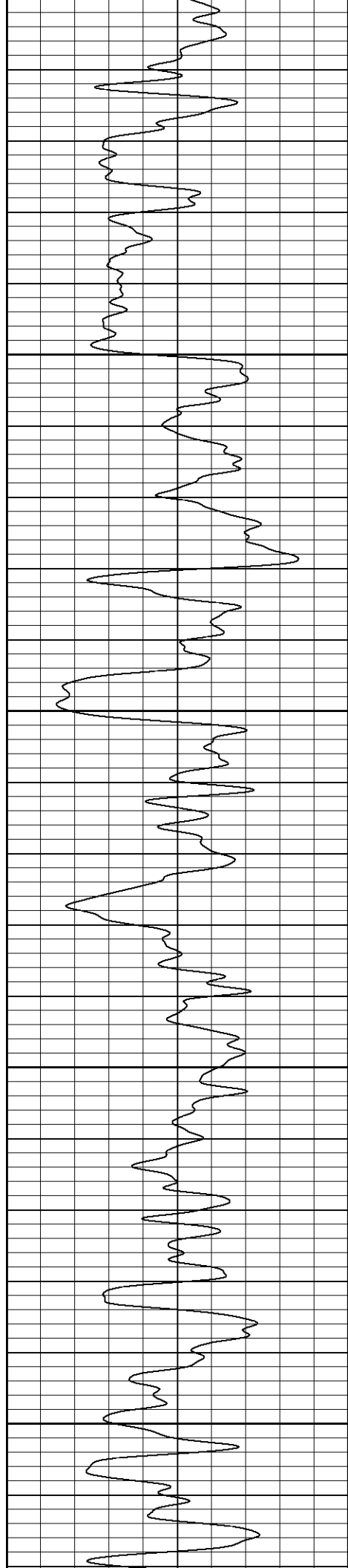
1100

1150

1200

1250

1300



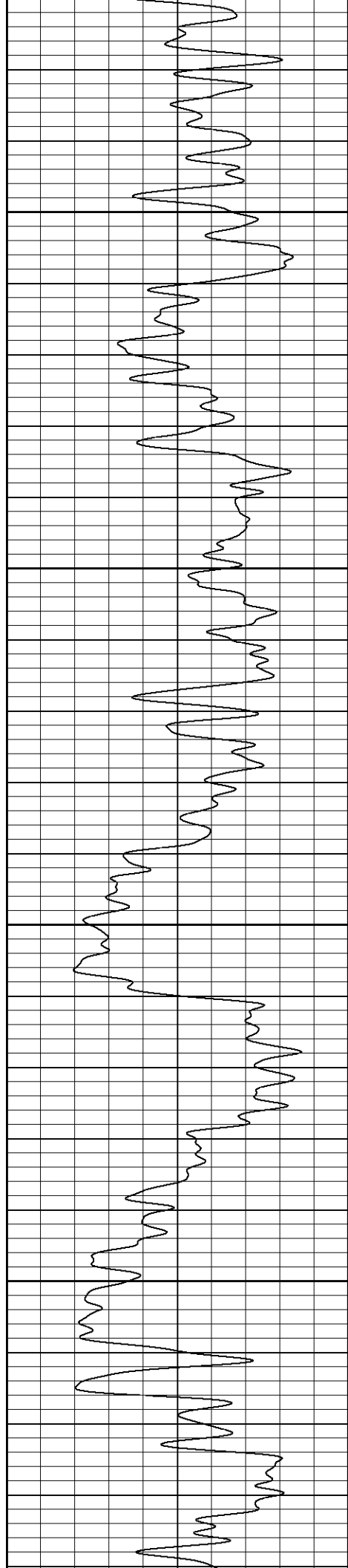
1300

1350

1400

1450

1500

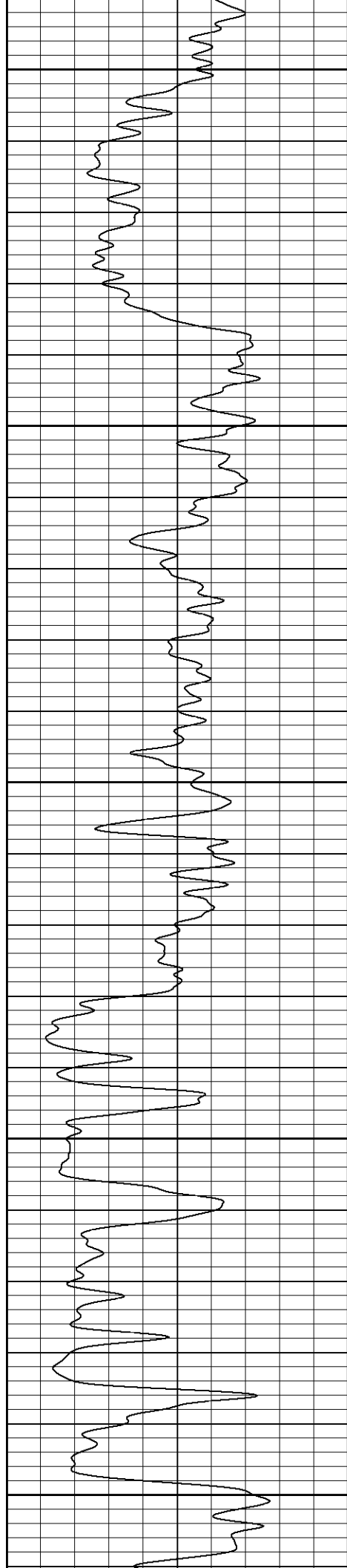


1550

1600

1650

1700



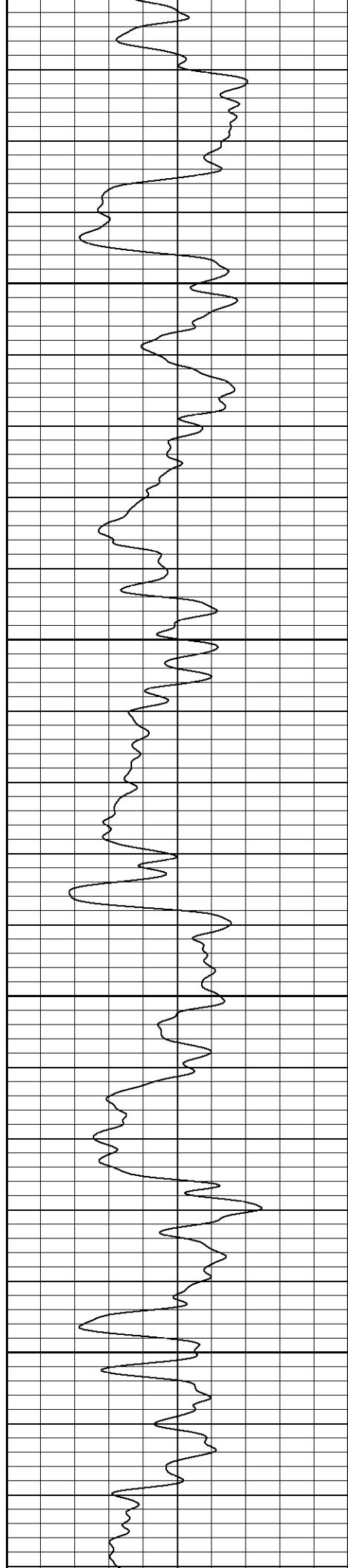
1750

1800

1850

1900

1950

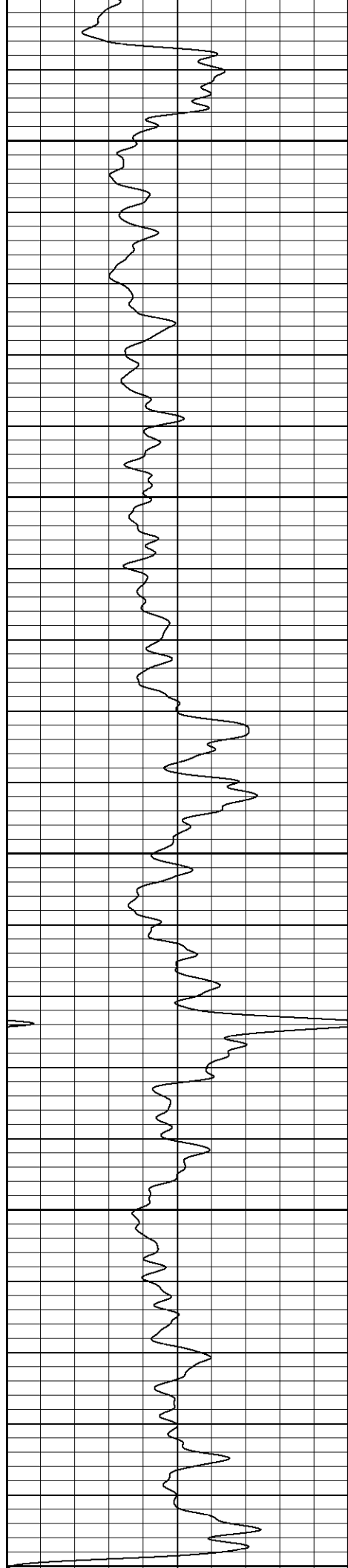


2000

2050

2100

2150



2200

2250

2300

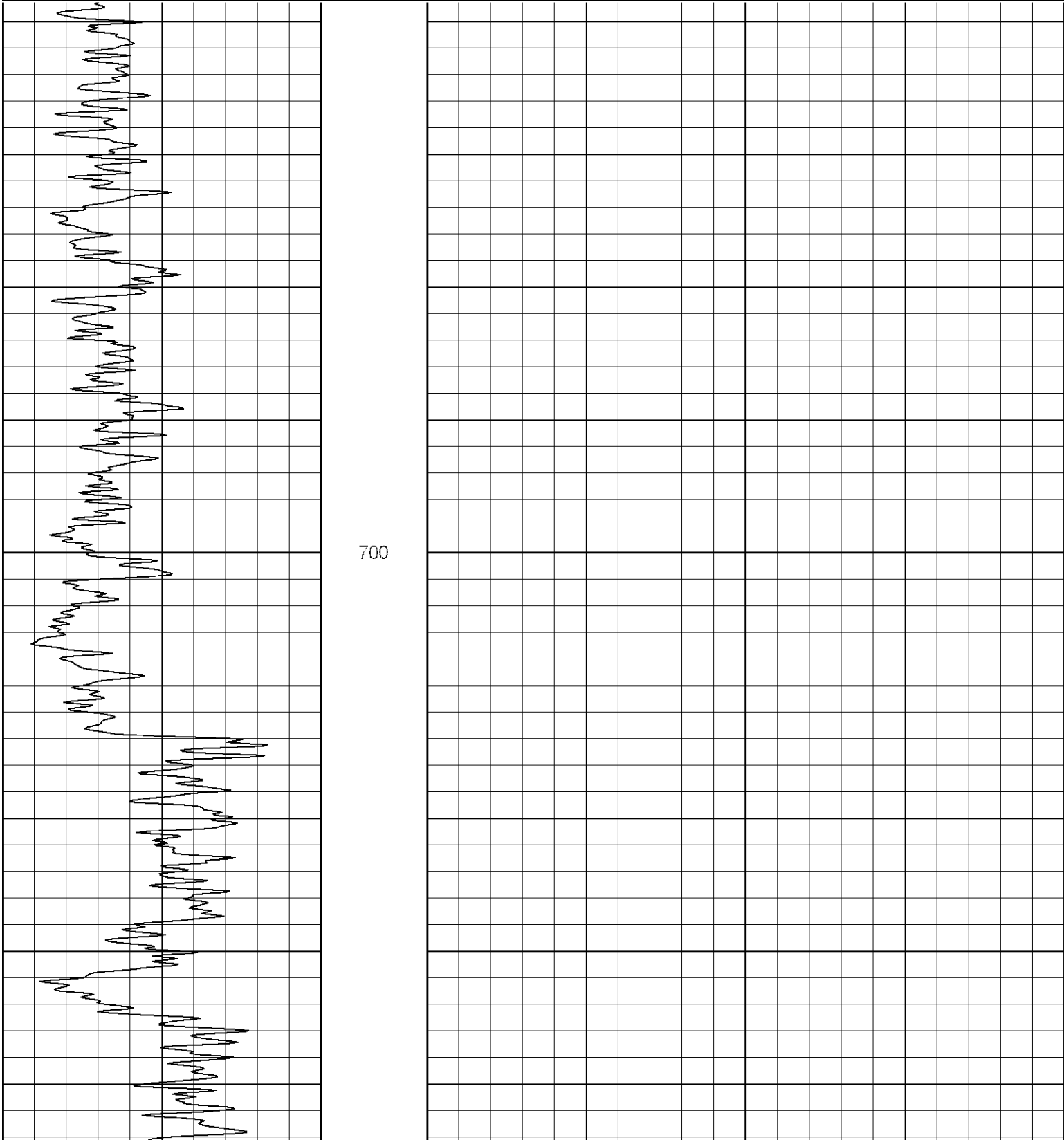
2350

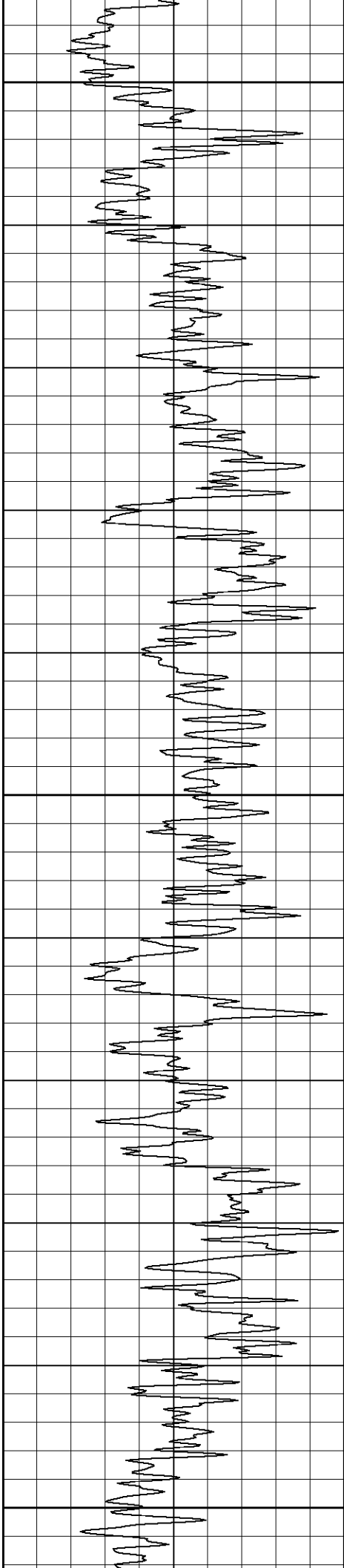
2400

0	GR (GAPI)	200	2400

Database File: general vera.db  
Dataset Pathname: pass1hrgr  
Presentation Format: cdlhr  
Dataset Creation: Wed Mar 07 08:16:43 2007  
Charted by: Depth in Feet scaled 1:120

0	GR (GAPI)	200

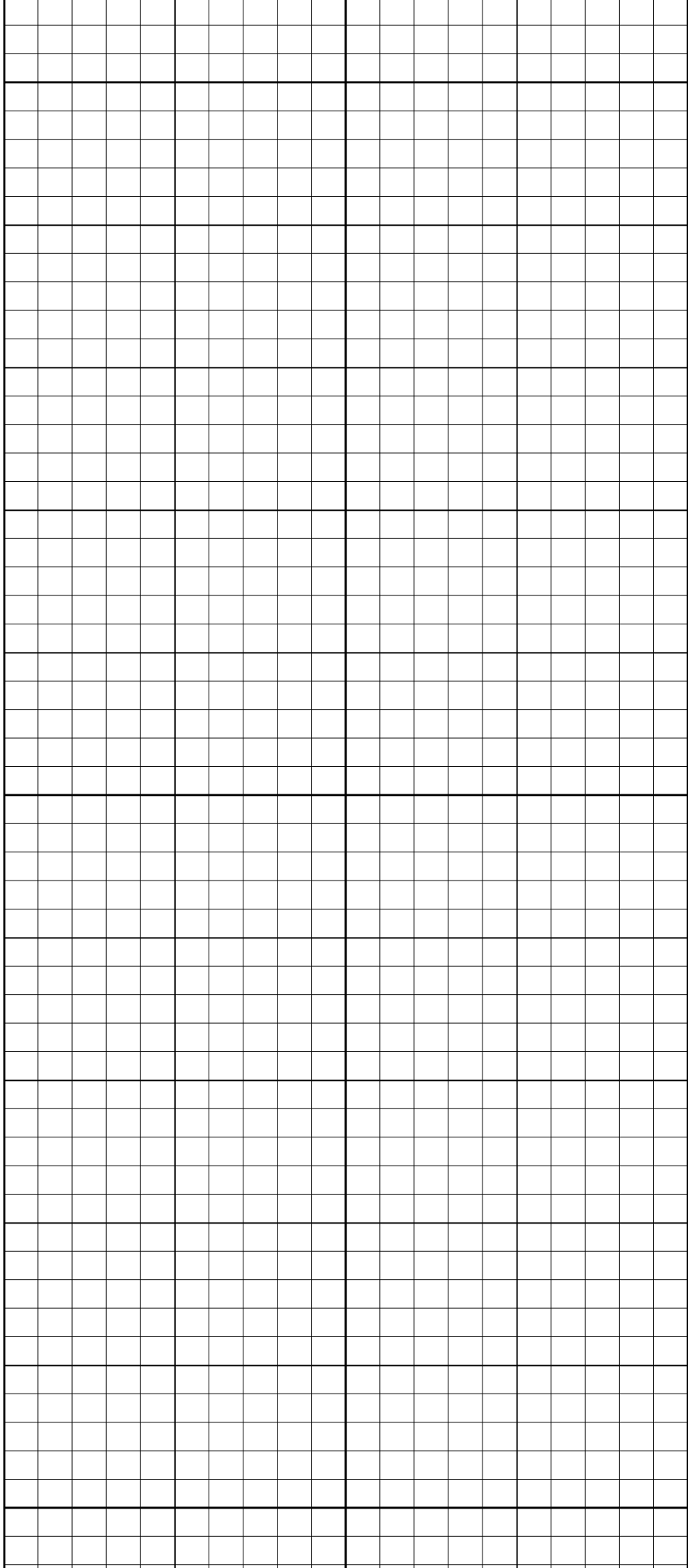


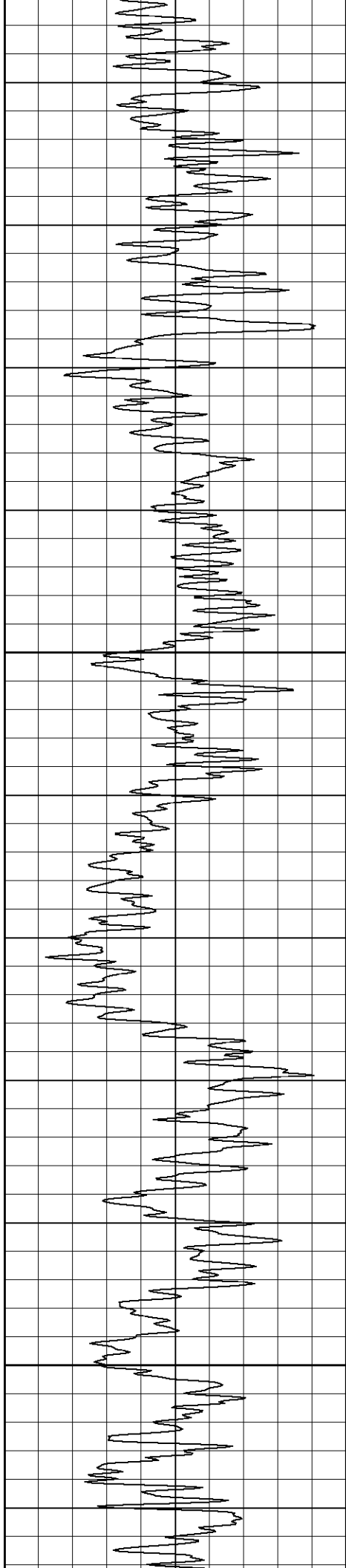


750

800

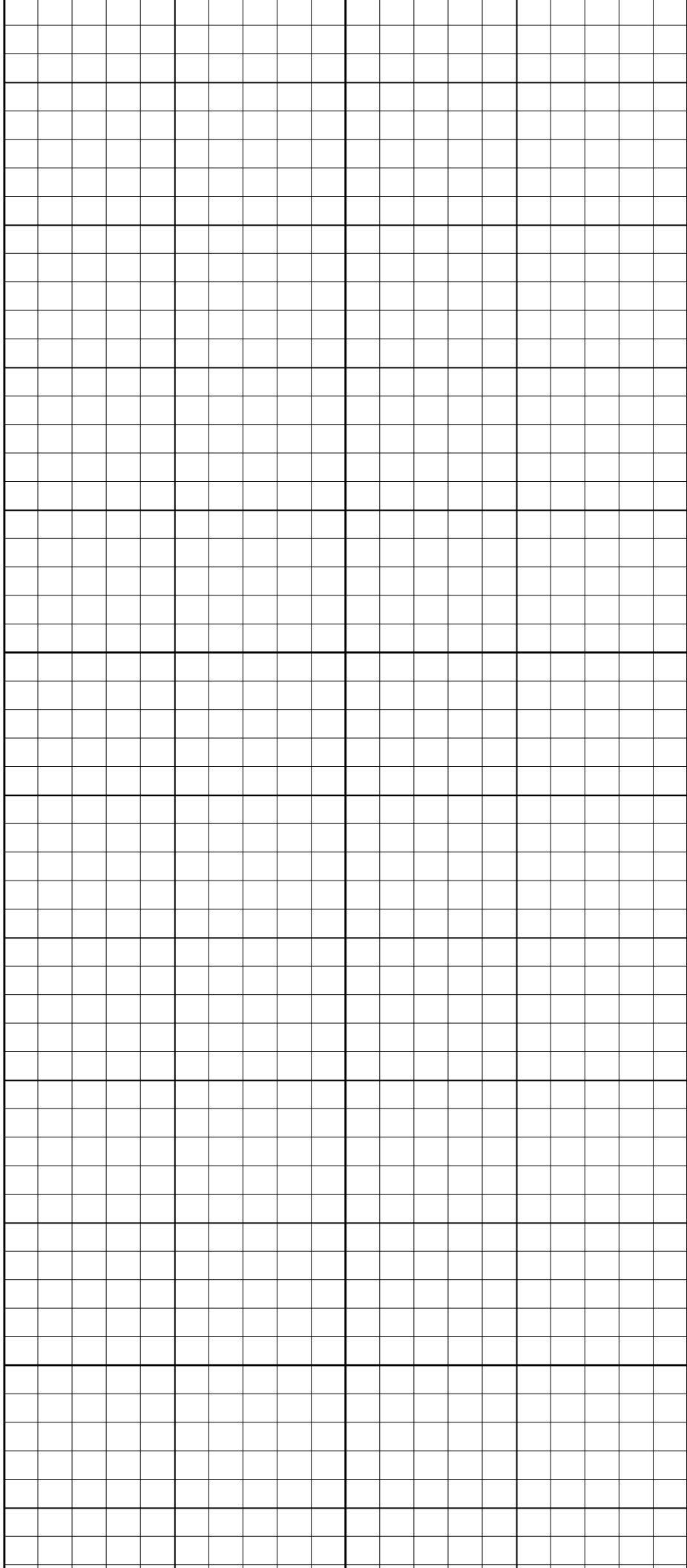
850



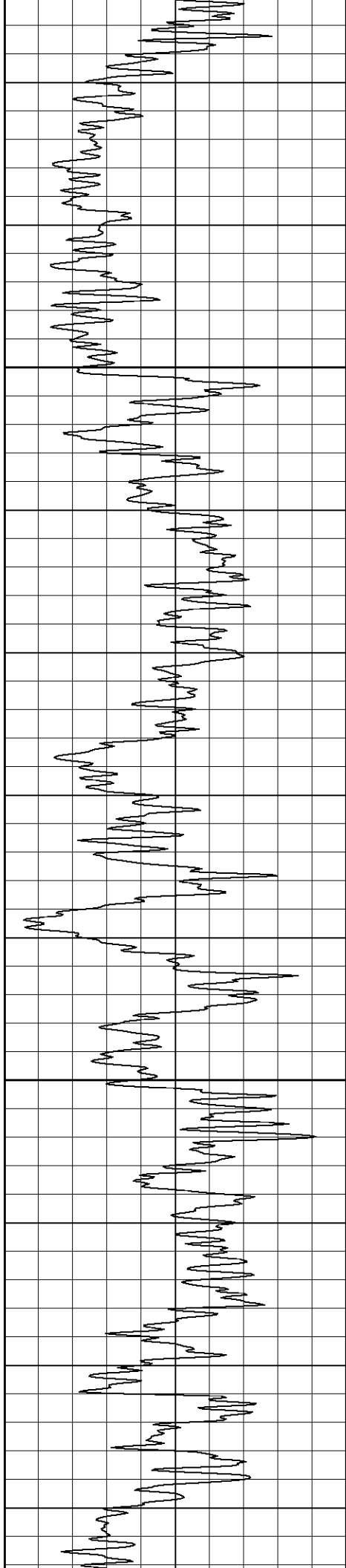


900

950

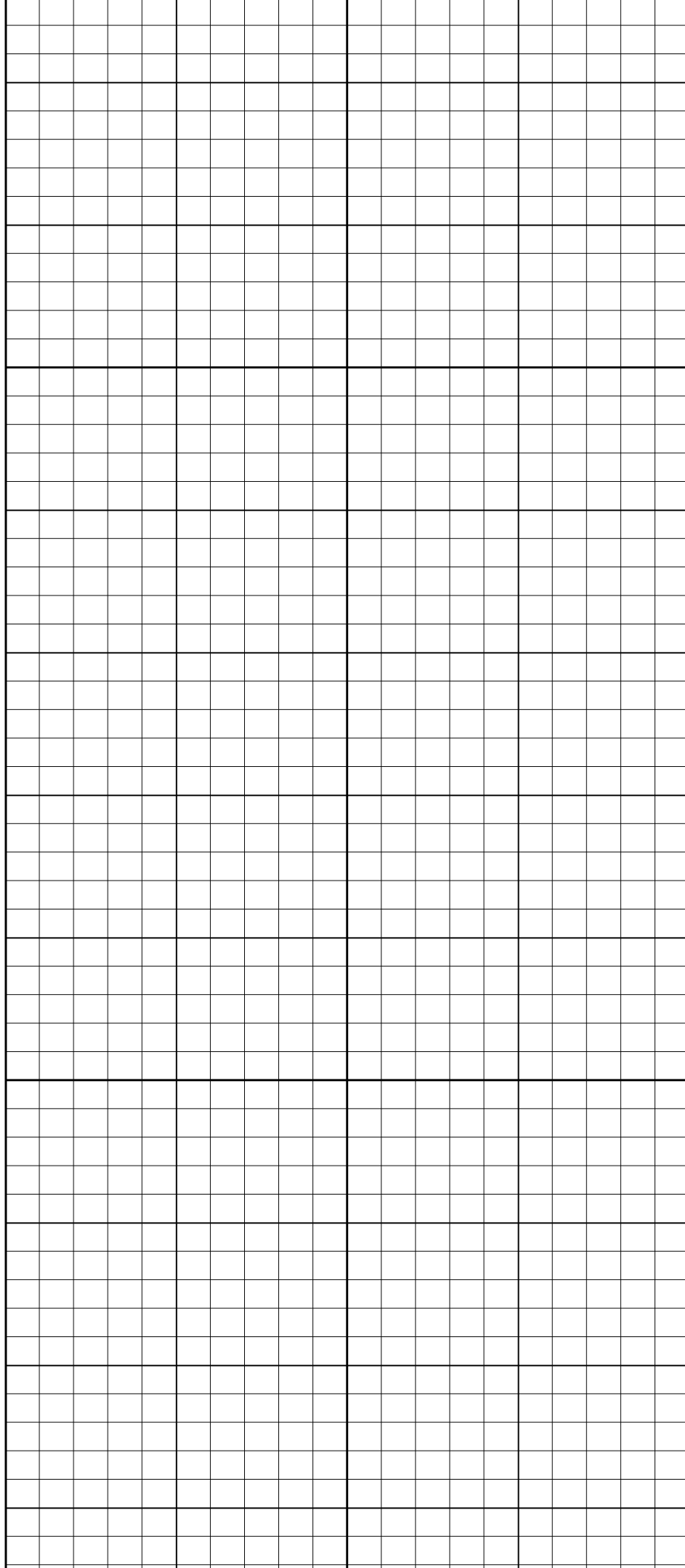




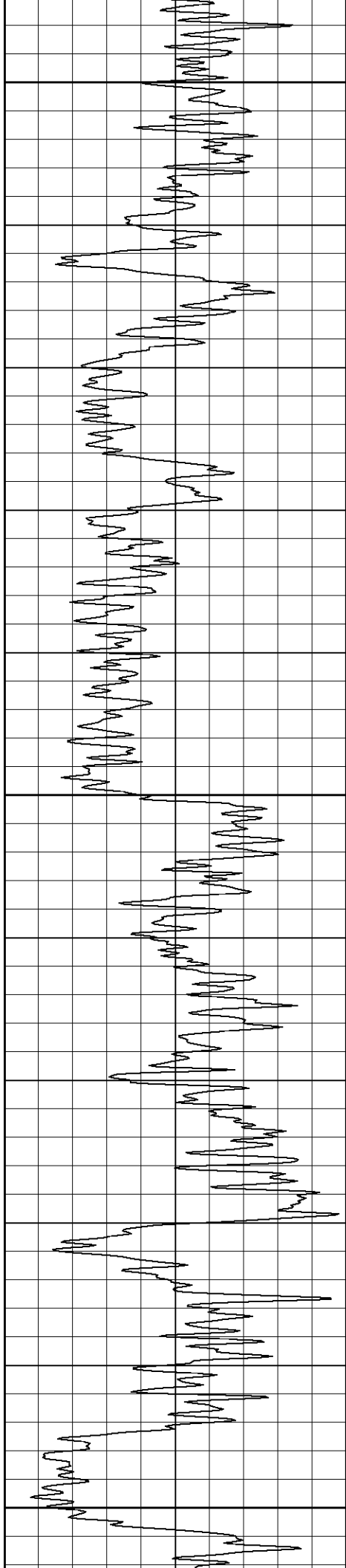


1100

1150



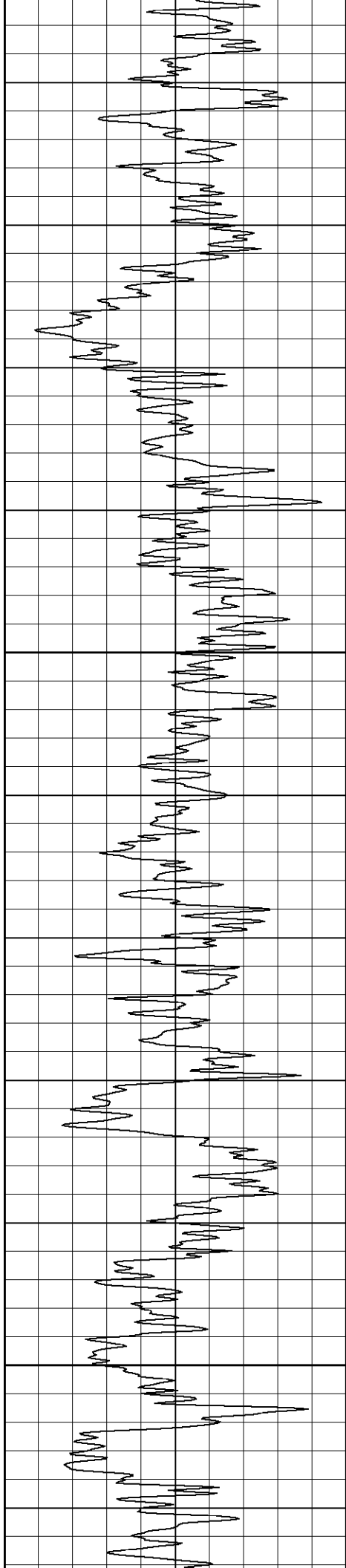




1300

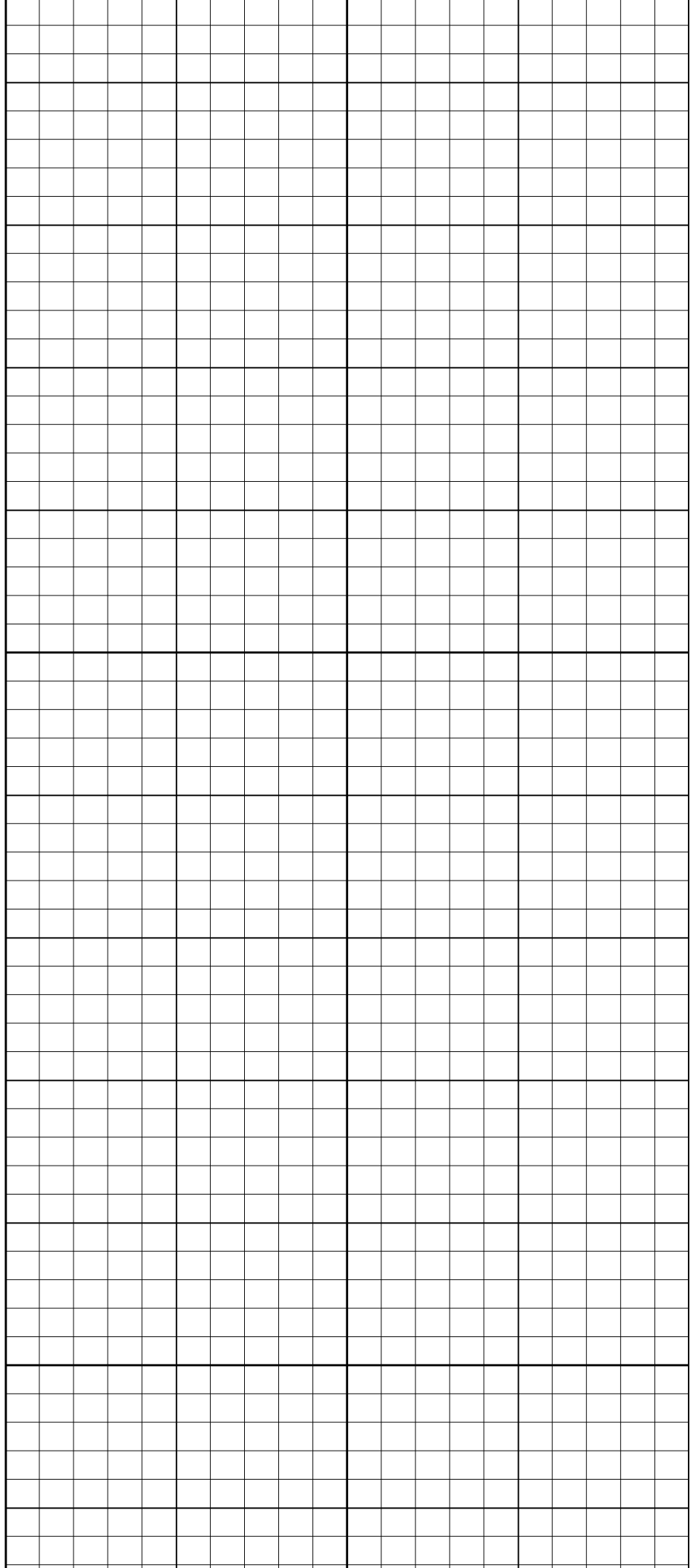
1350

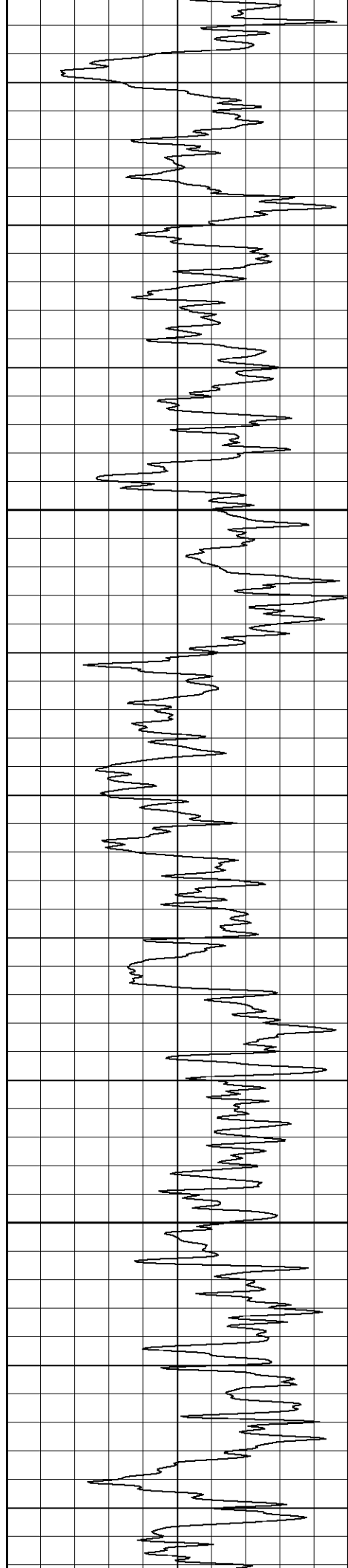
1400



1450

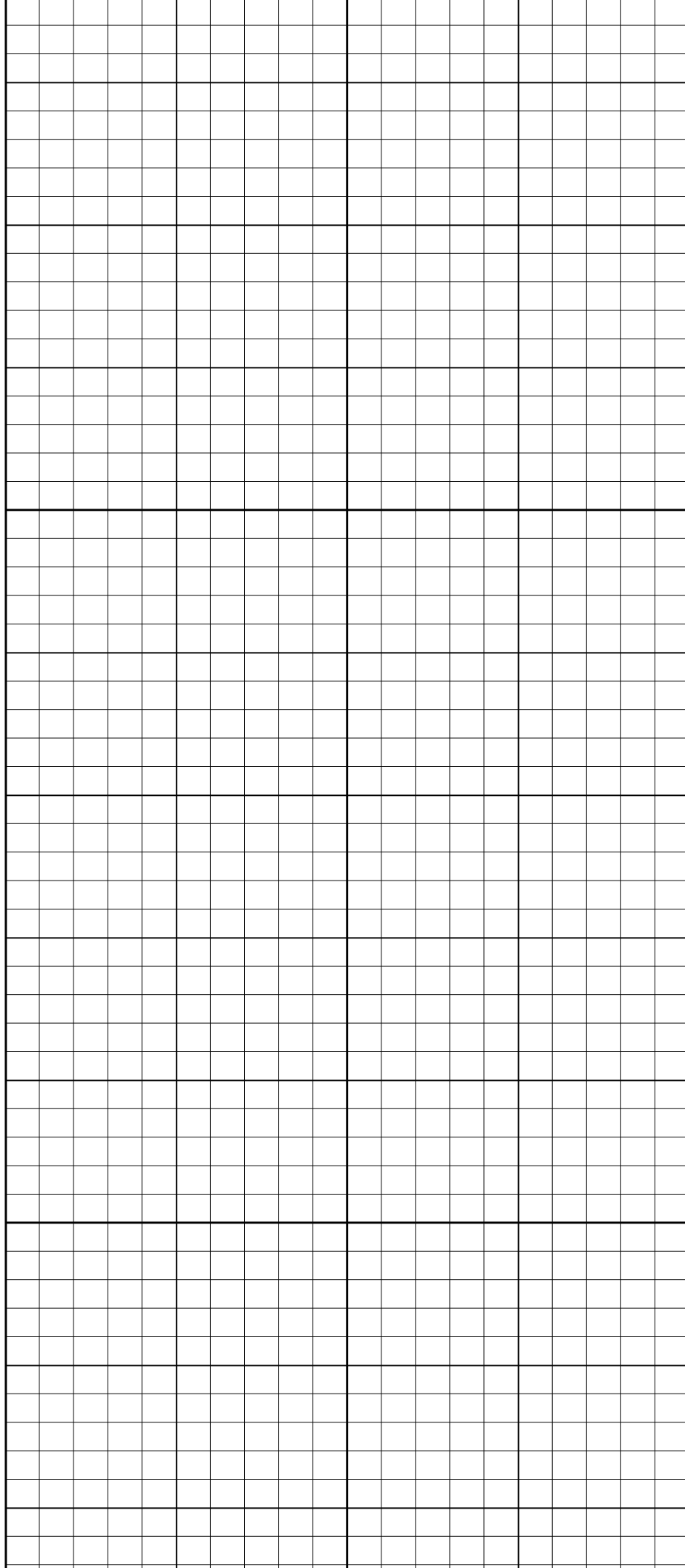
1500



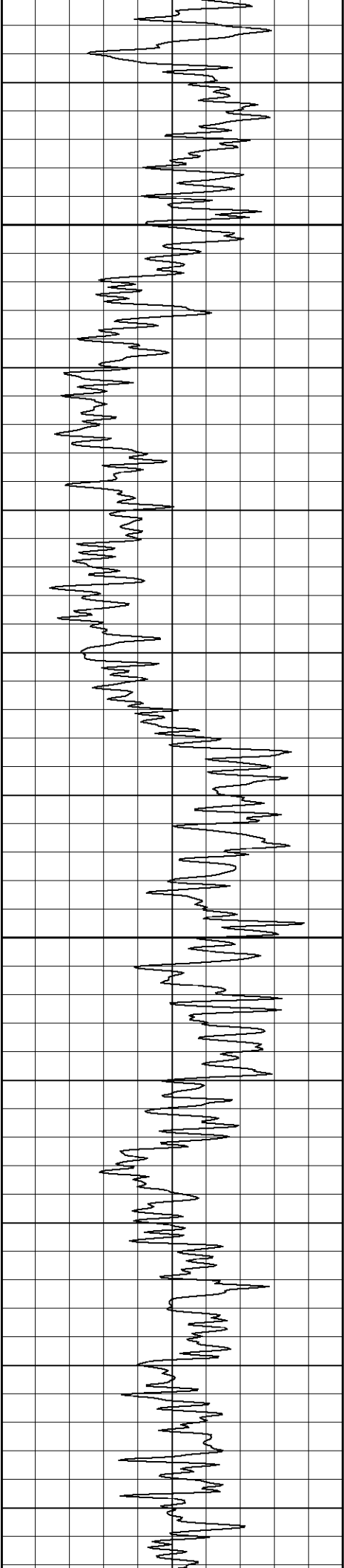


1550

1600

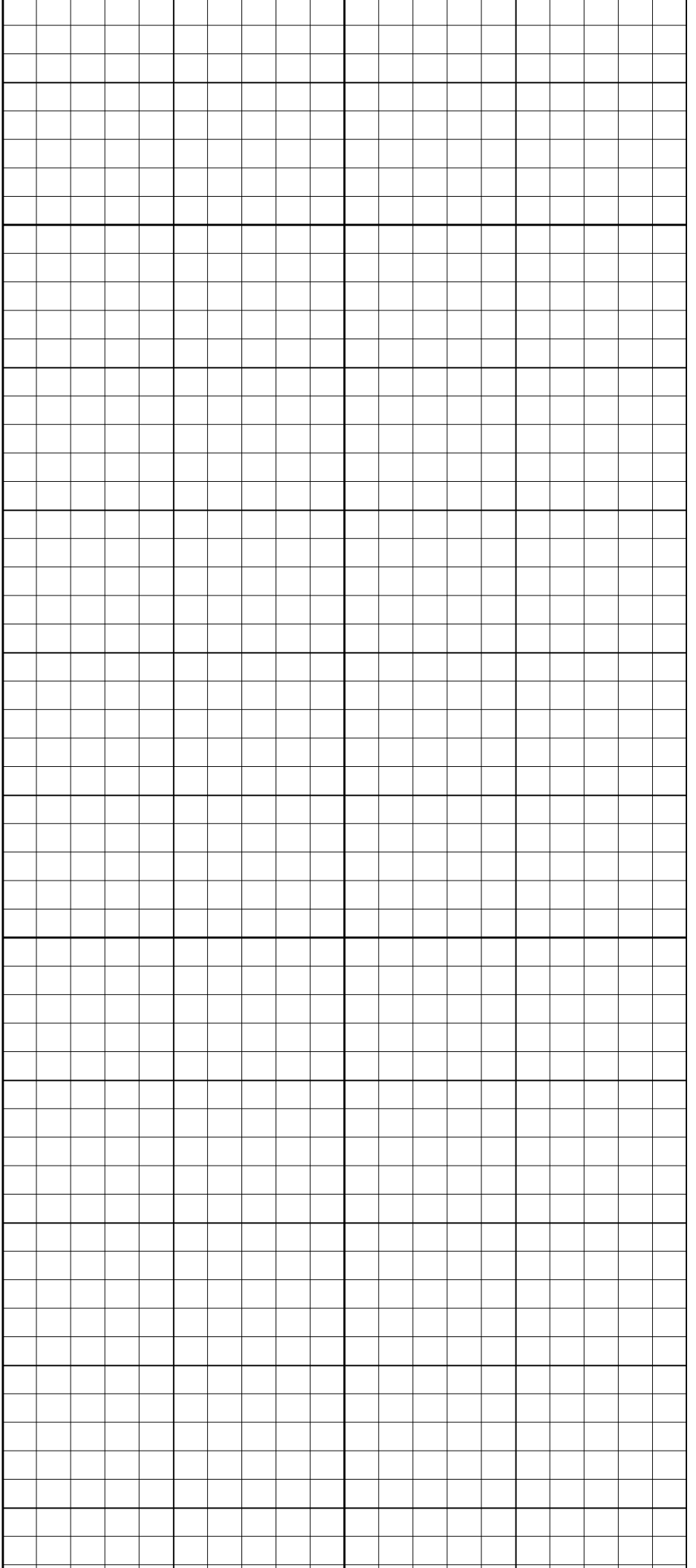


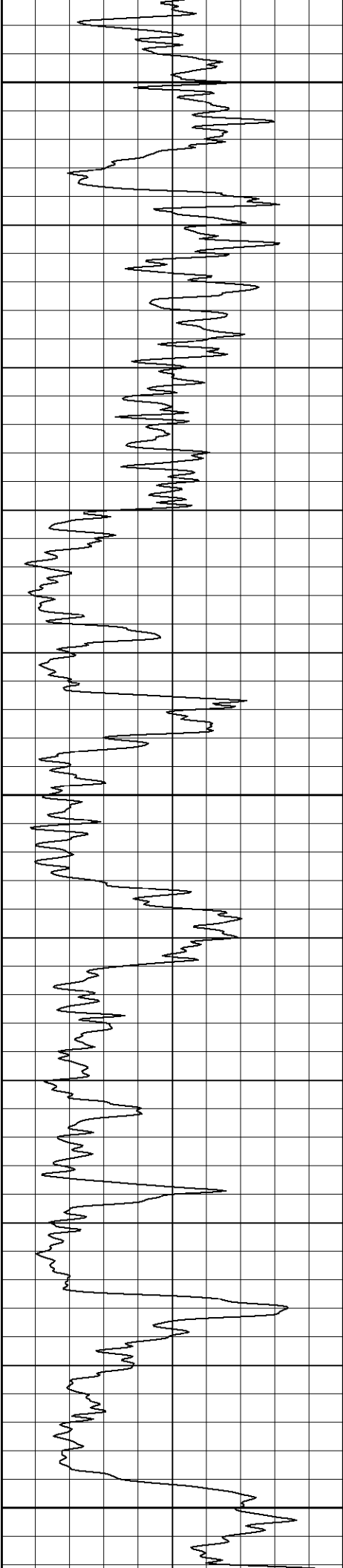




1750

1800

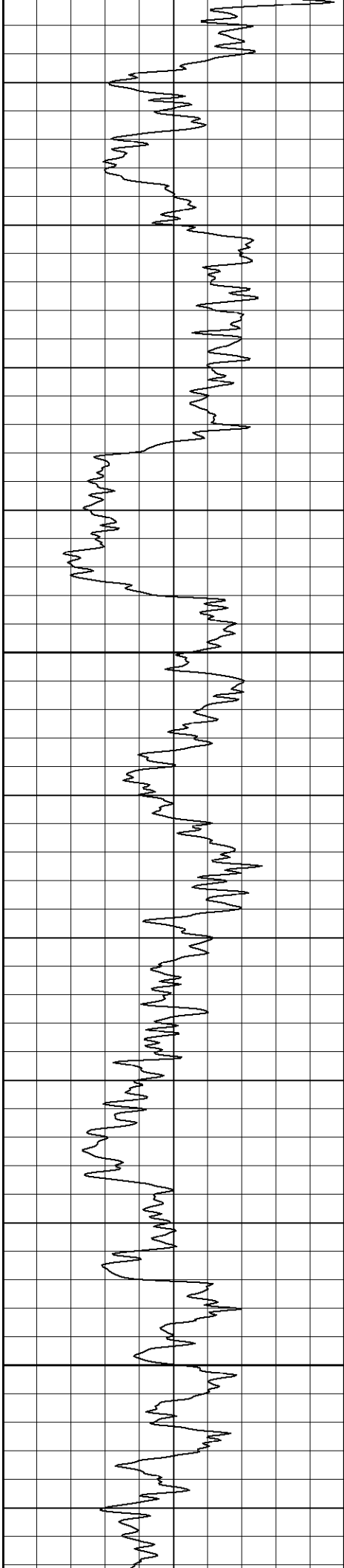




1850

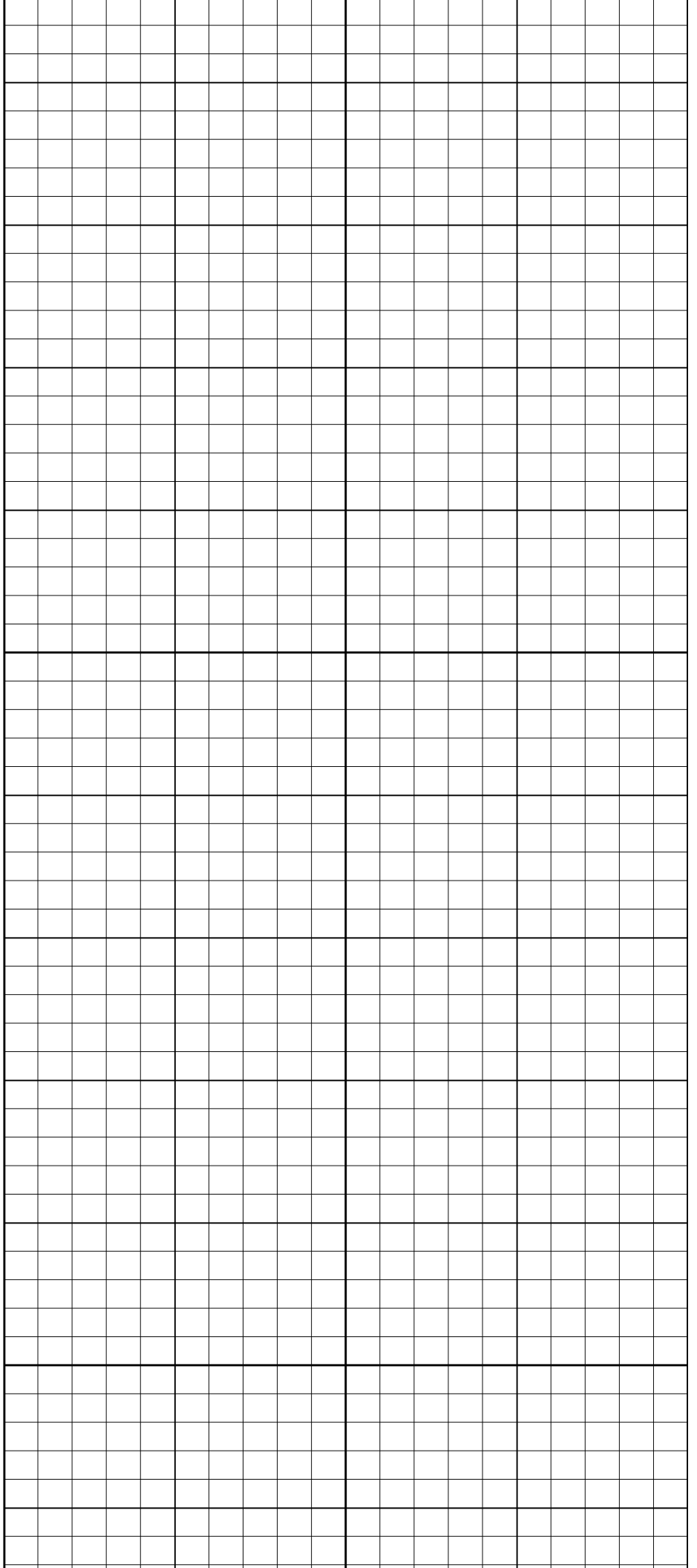
1900

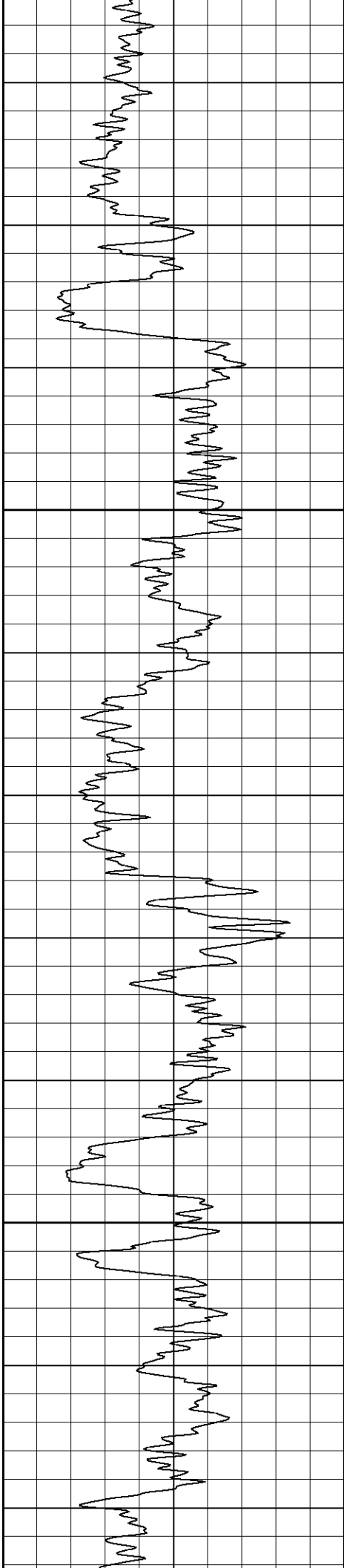
1950



2000

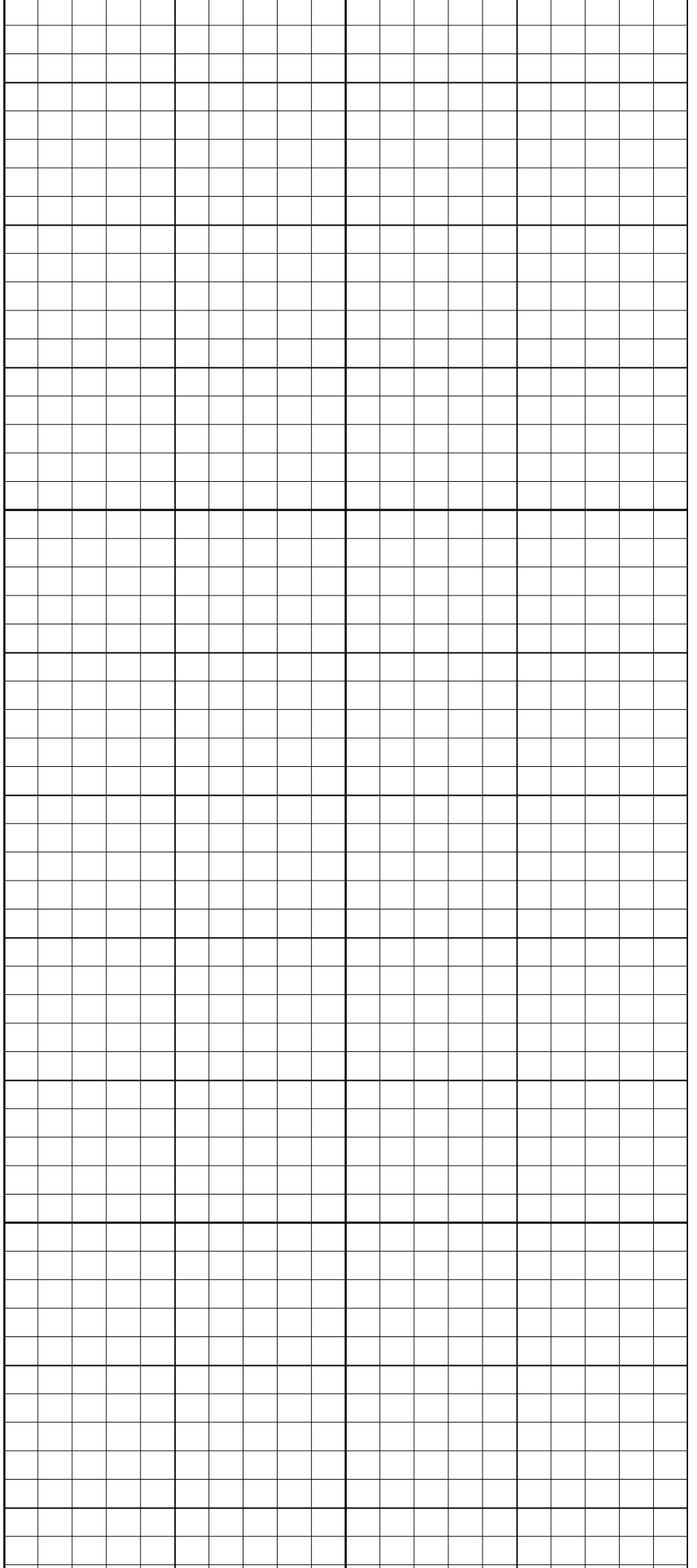
2050



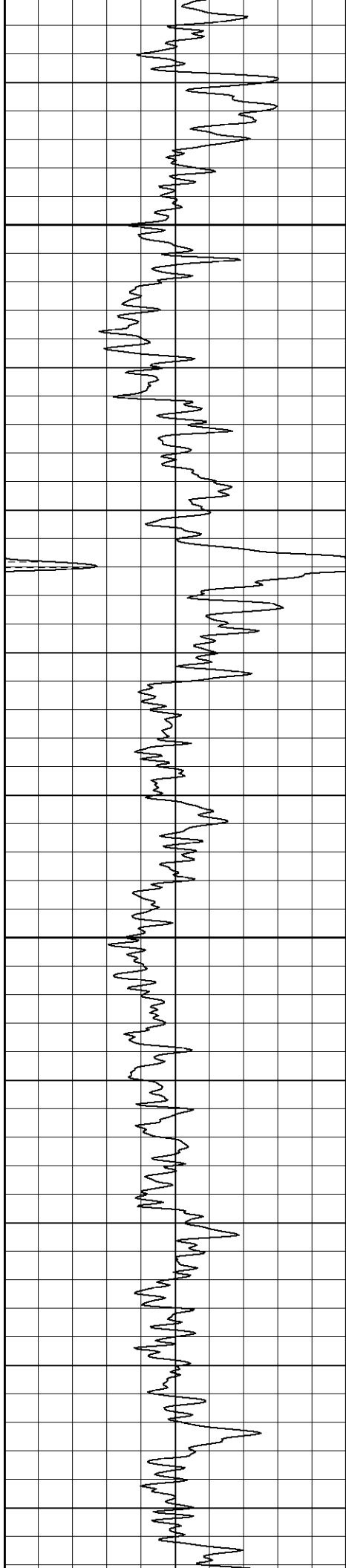


2100

2150

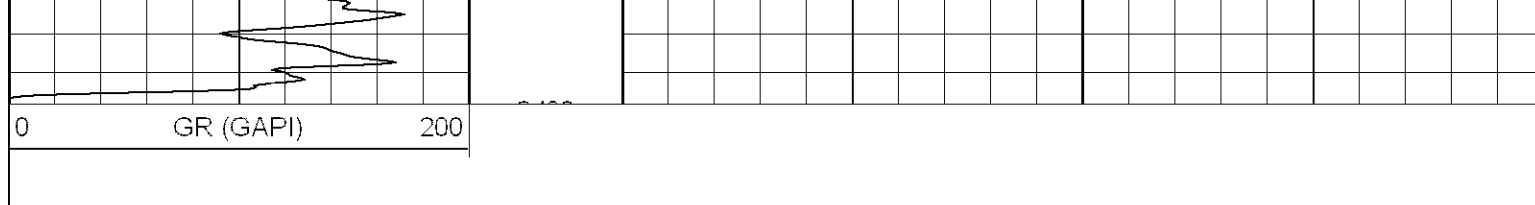






2300

2350



Calibration Report

Database File: general vera.db  
 Dataset Pathname: pass1  
 Dataset Creation: Sat Mar 03 18:46:23 2007 by Log Open-Cased 061129

Induction Tool Calibration Report

Serial Number:	040903		
Tool Model:	Probe		
Downhole Cal Performed:	Thu Feb 15 05:01:25 2007		
Surface Cal Performed:	Thu Feb 15 05:01:01 2007		
Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.015	0.649	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.015	0.649	V
Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	-0.289	500.164	mmho
Conductivity Reading:	0.255	499.961	V
Short Normal Reference:	0.000	20.000	Ohm-m
Short Normal Reading:	0.007	0.235	V
Results:	Gain	Offset	
Loop Conductivity:	788.860	-11.782	
Downhole Correction:	1.001	-0.544	
Short Normal Resistivity:	62.000	-0.570	


Compensated Density Calibration Report

Serial-Model:	902-2.75POH				
Source / Verifier:	/				
Master Calibration Performed:	Fri Feb 09 11:24:21 2007				
Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1015.57	498.52	cps
Aluminum	2.590	g/cc	183.60	250.82	cps
Spine Angle = 68.12			Density/Spine Ratio = 0.477		
	Size		Reading		
Small Ring	7.95	in	1.84	V	
Large Ring	17.00	in	4.32	V	

Gamma Ray Calibration Report

Serial Number:	804
Tool Model:	2.75POH
Performed:	Fri Feb 09 00:46:24 2007
Calibrator Value:	1.0
	GAPI

Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
GR	24.84		None	0.75	1.50	5.00	
			GR-2.75POH (804) Probe	3.73	2.75	43.00	
			CDL-2.75POH (902) Probe	8.43	2.75	106.00	
LSD	16.21						
DCAL	15.94						
SSD	15.69						
DIC	6.24		IEL-Probe (040903)	13.46	2.75	93.00	
SP	2.25						
SN	1.71						
Dataset: general vera.db: field/well/run1/pass1 Total Length: 26.37 ft Total Weight: 247.00 lb O.D. 2.75 in							