



DUAL INDUCTION LOG

Company PICKRELL DRILLING COMPANY, INC.
 Well CURTIS "S" #1
 Field PRAIRIE RIDGE NORTHWEST
 County LANE
 State KANSAS

Company PICKRELL DRILLING COMPANY, INC.
 Well CURTIS "S" #1
 Field PRAIRIE RIDGE NORTHWEST
 County LANE State KANSAS

Location: API #: 15-101-22689-0000
 330' FNL & 840' FWL
 W2 - NE - NW - NW
 SEC 1 TWP 16S RGE 27W
 Permanent Datum GROUND LEVEL Elevation 2559
 Log Measured From KELLY BUSHING 7' A.G.L
 Drilling Measured From KELLY BUSHING
 Other Services
 CDL/CNL
 PE/MEI
 Elevation
 K.B. 2566
 D.F. 2564
 G.L. 2559

Date	9/4/23
Run Number	ONE
Depth Driller	4530
Depth Logger	4529
Bottom Logged Interval	4527
Top Log Interval	00
Casing Driller	8 5/8 @ 221
Casing Logger	221
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3/75
PH / Fluid Loss	10.0/7.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.00 @ 82F
Rmt @ Meas. Temp	.750 @ 82F
Rmc @ Meas. Temp	1.20 @ 82F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.678 @ 121F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	11:30 P.M.
Maximum Recorded Temperature	121F
Equipment Number	8916
Location	HAYS, KANSAS
Recorded By	COLE ROBBEN
Witnessed By	AARON YOUNG

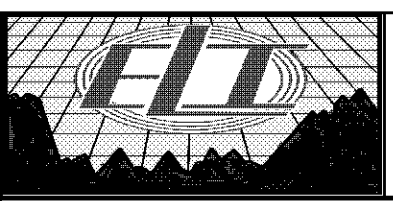
<<< Fold Here >>>

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

THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

DIRECTIONS:
 FROM UTICA, KANSAS GO WEST 3 MILES TO ROAD 'A', 4.5 MILES NORTH TO GOVE CO. ROAD 'A',
 2 MILES WEST TO OLD FARMSTEAD, FOLLOW TRAIL WEST THROUGH TREES

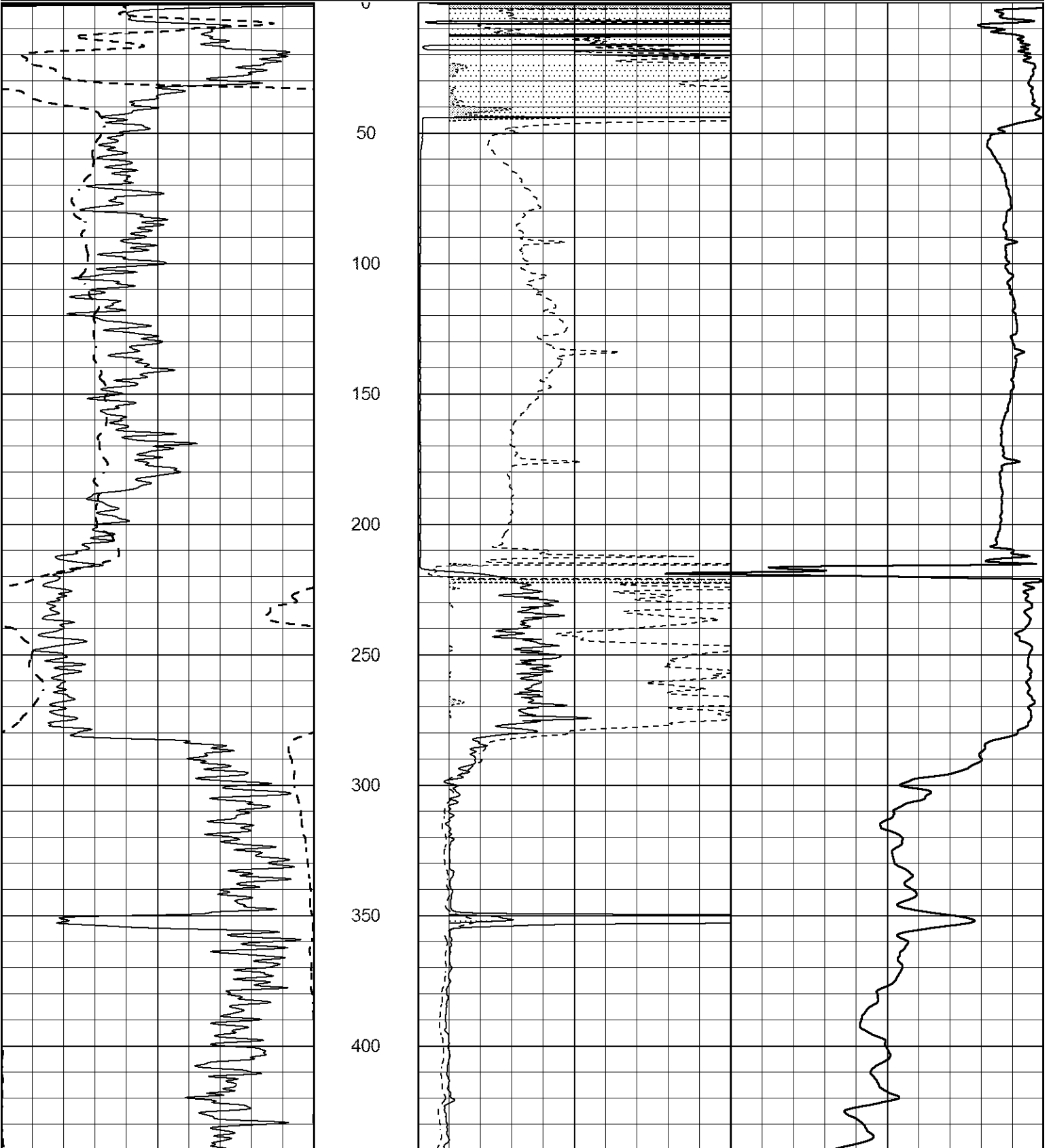


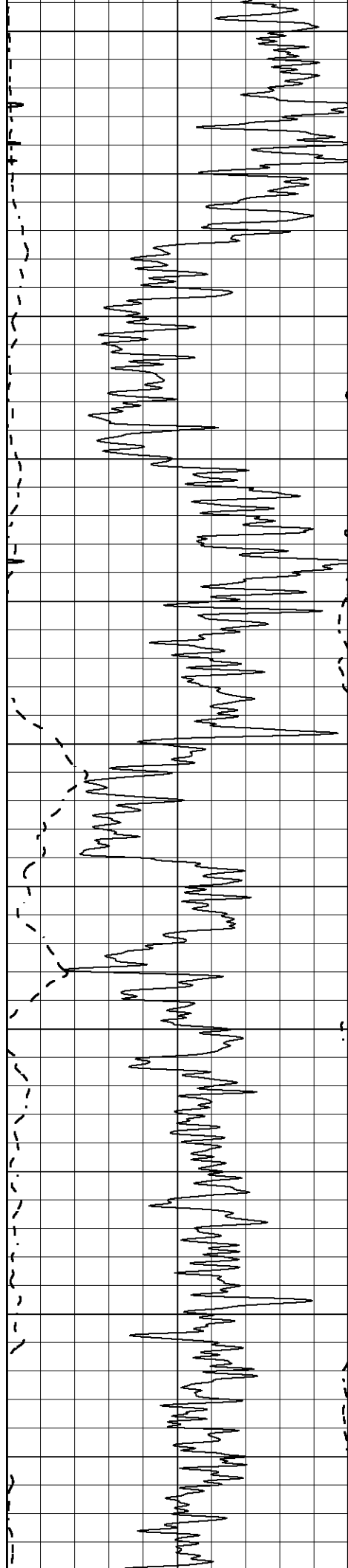
MAIN SECTION

Database File 7719pe.db
 Dataset Pathname pass4M
 Presentation Format _dil2
 Dataset Creation Tue Sep 05 01:37:35 2023
 Charted by Depth in Feet scaled 1:600

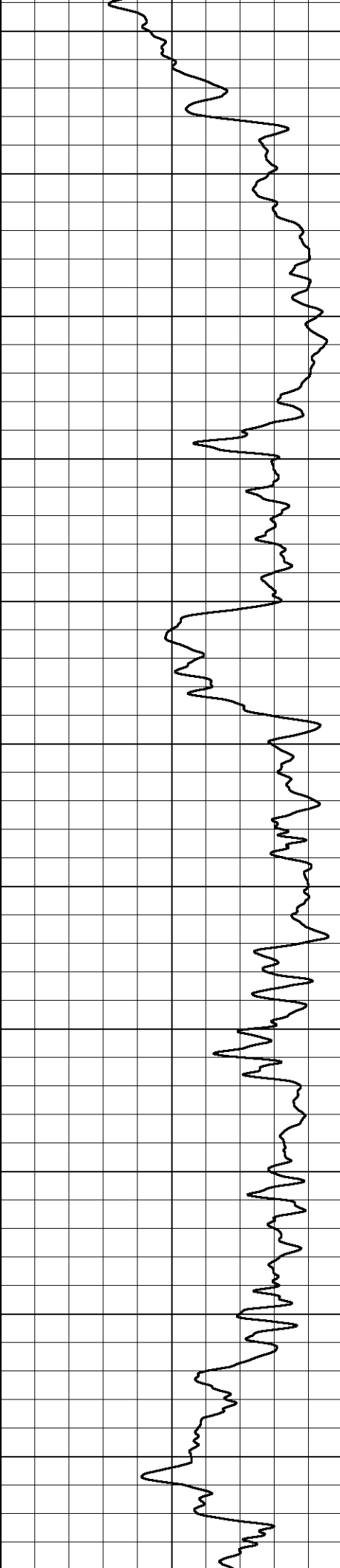
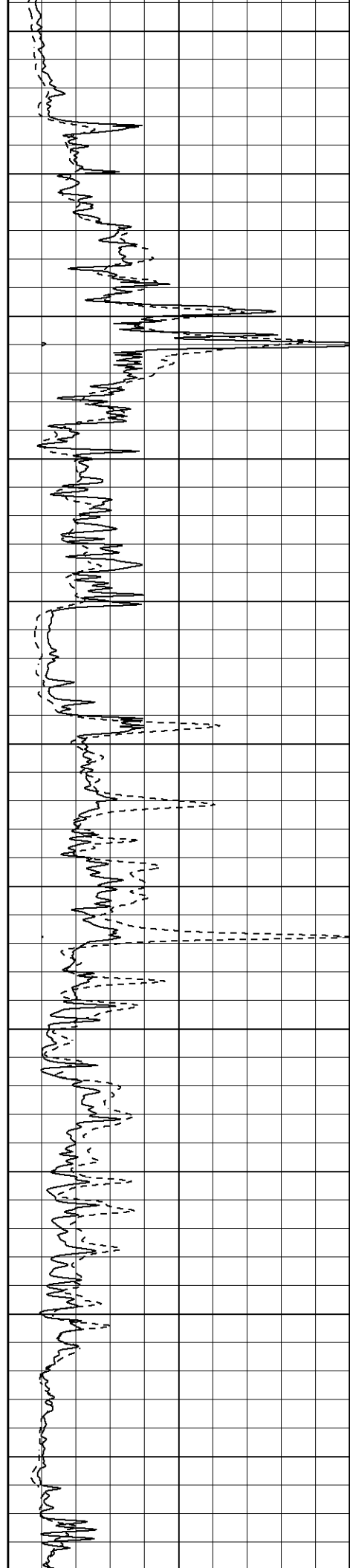
0 Gamma Ray (GAPI) 150
 -100 SP (mV) 100

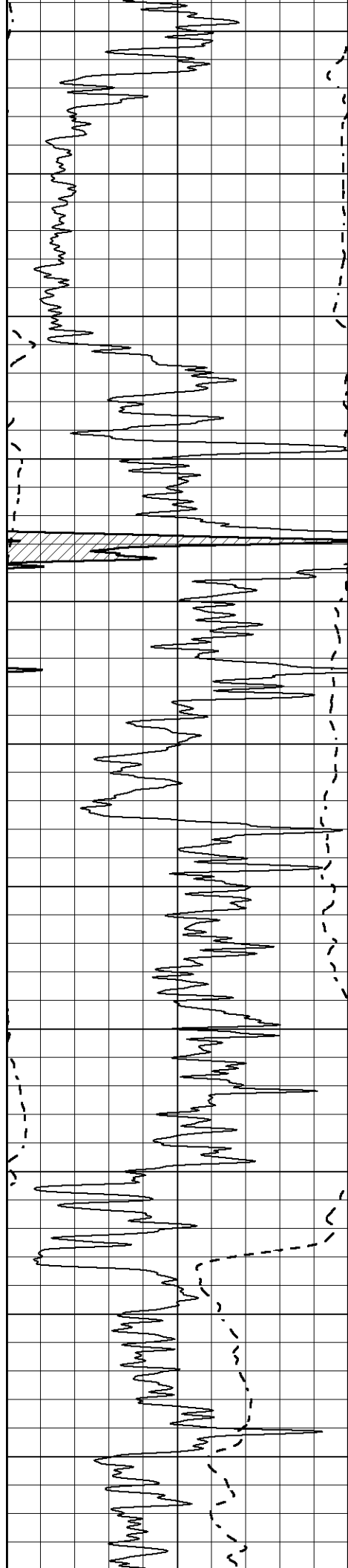
1000 CILD (mmho/m) 0
 0 RLL3 (Ohm-m) 50
 0 Deep Induction (Ohm-m) 50
 50 RILD X10 (Ohm-m) 500
 50 RLL3 X10 (Ohm-m) 500



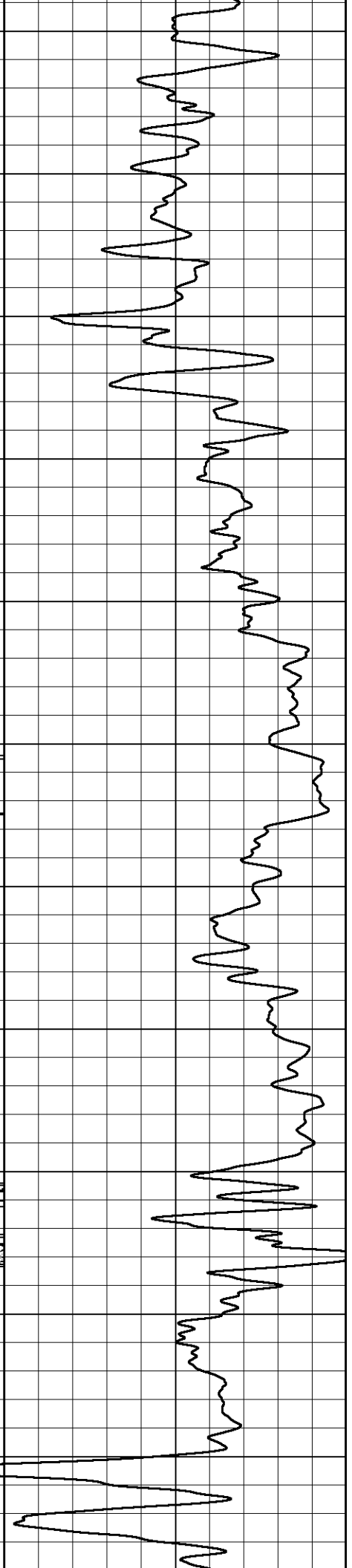
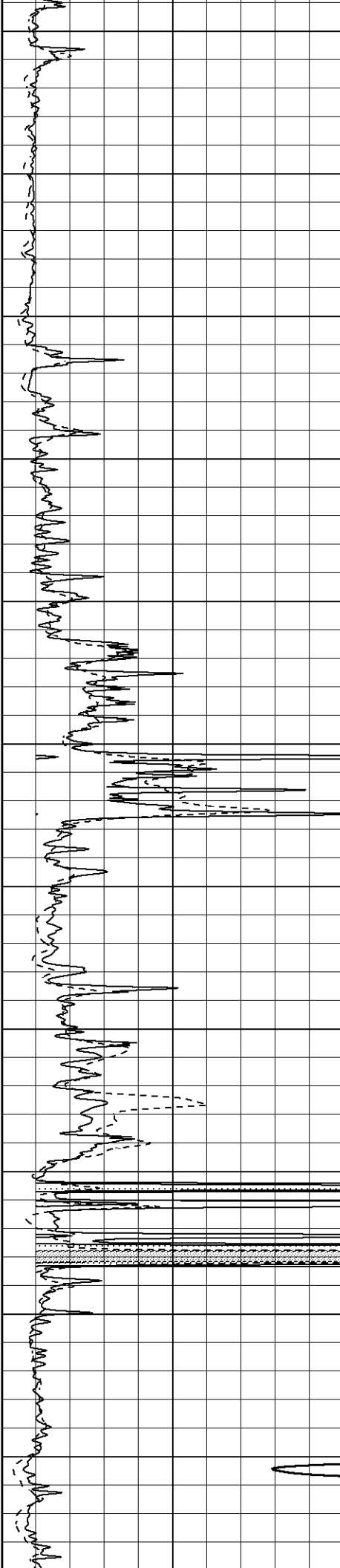


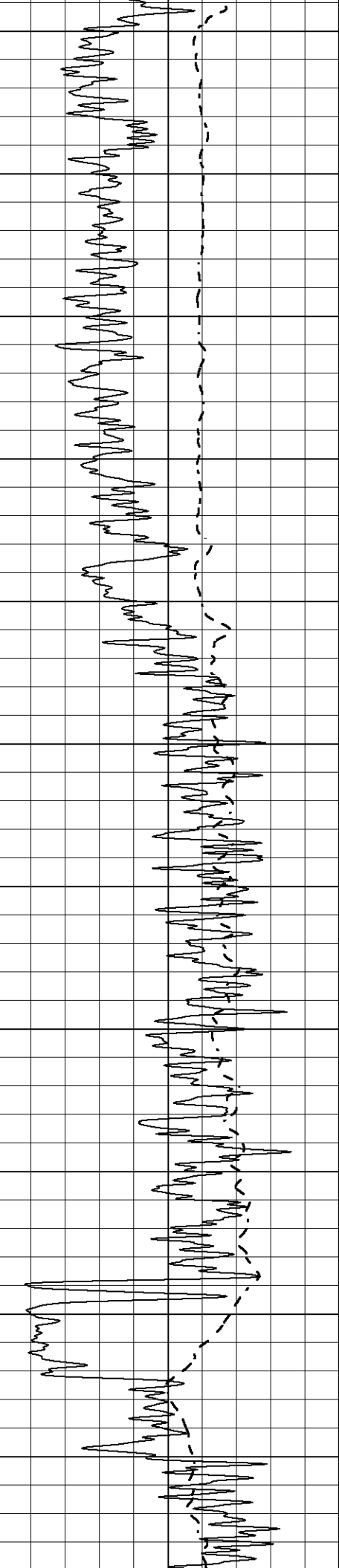
450
500
550
600
650
700
750
800
850
900
950



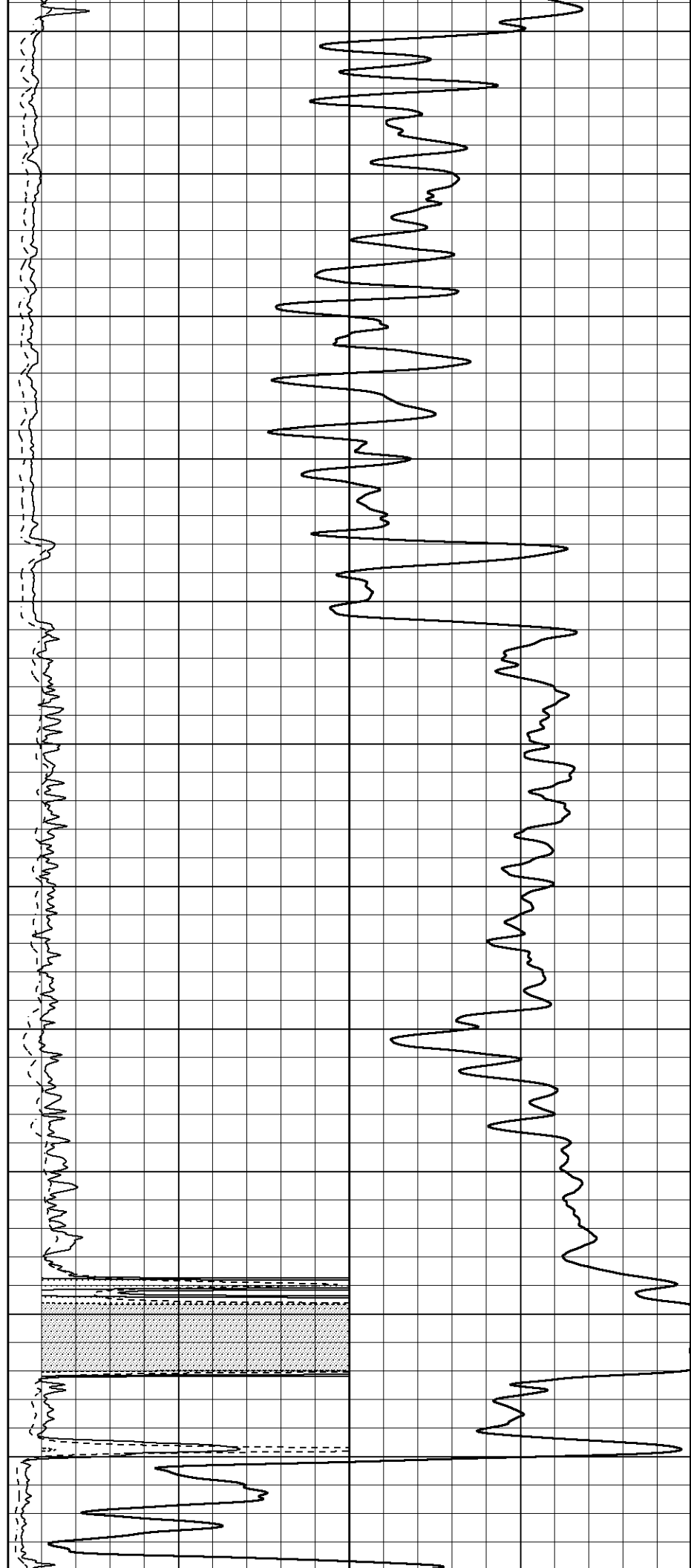


1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

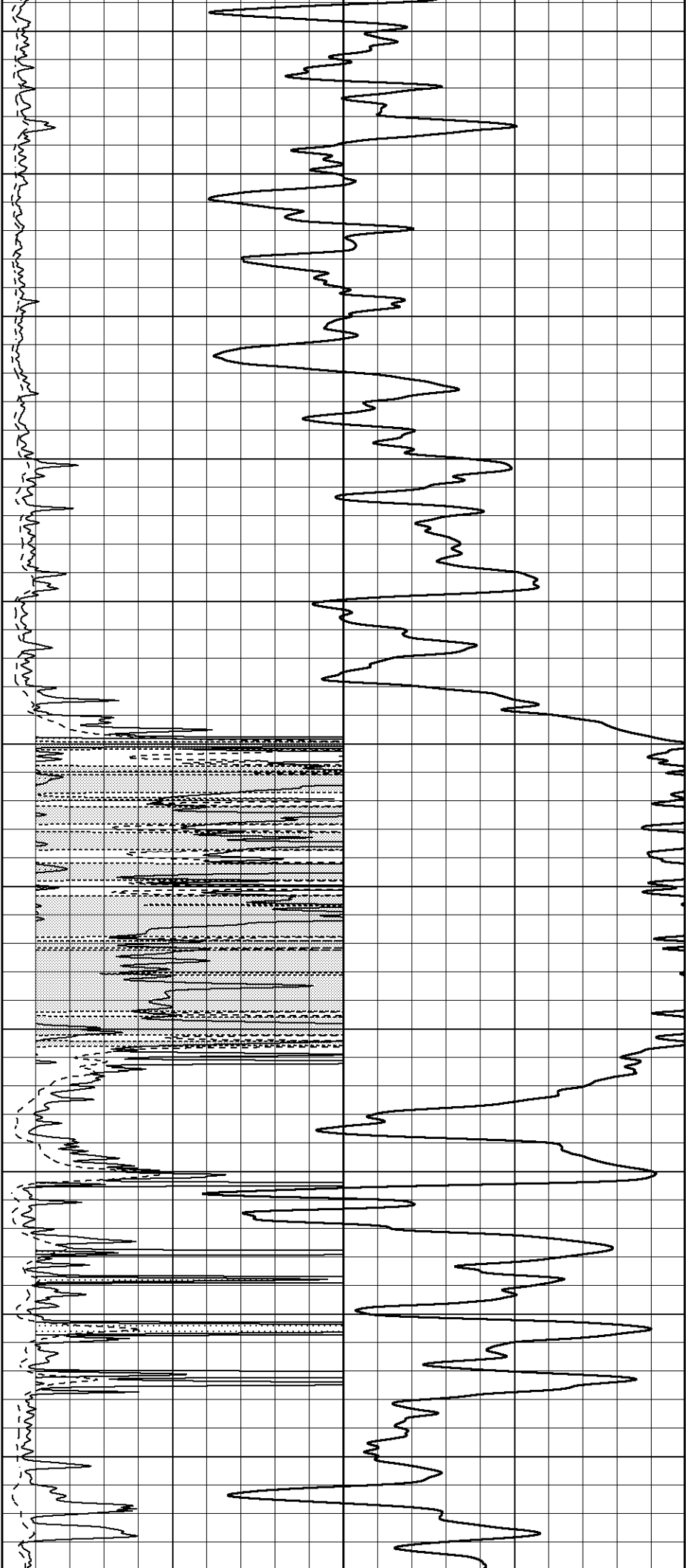
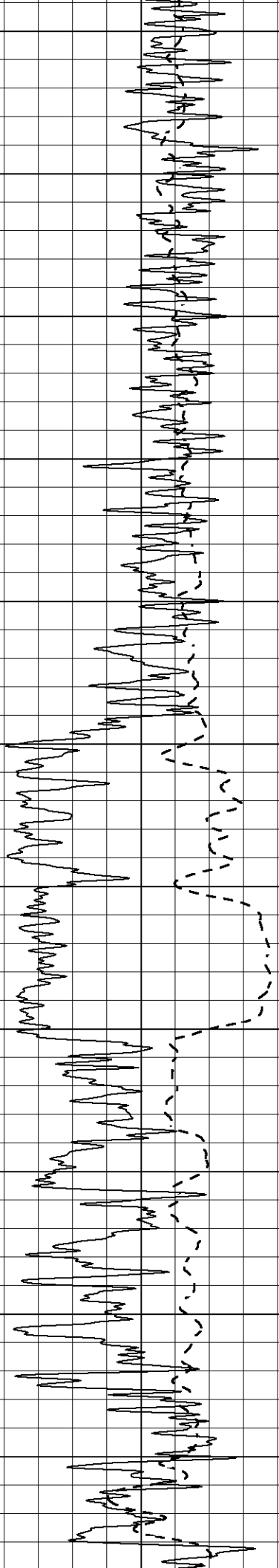




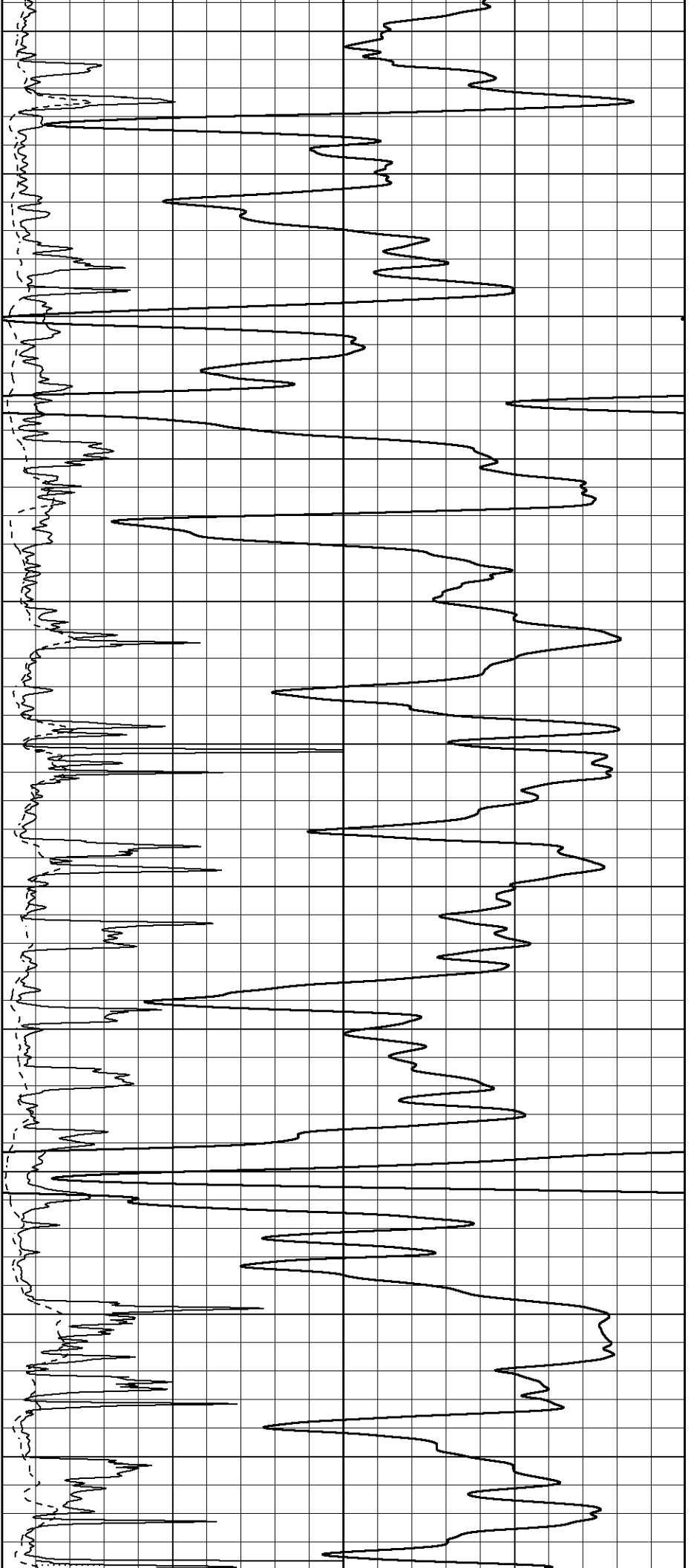
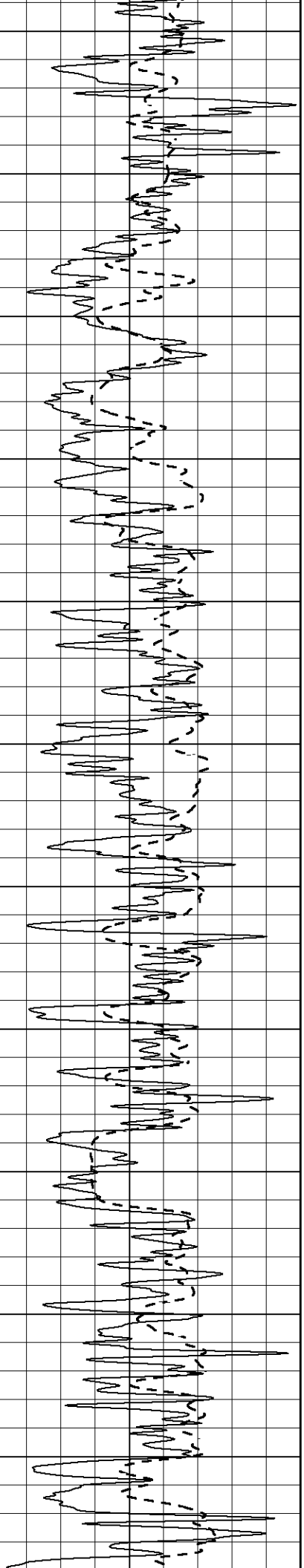
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050

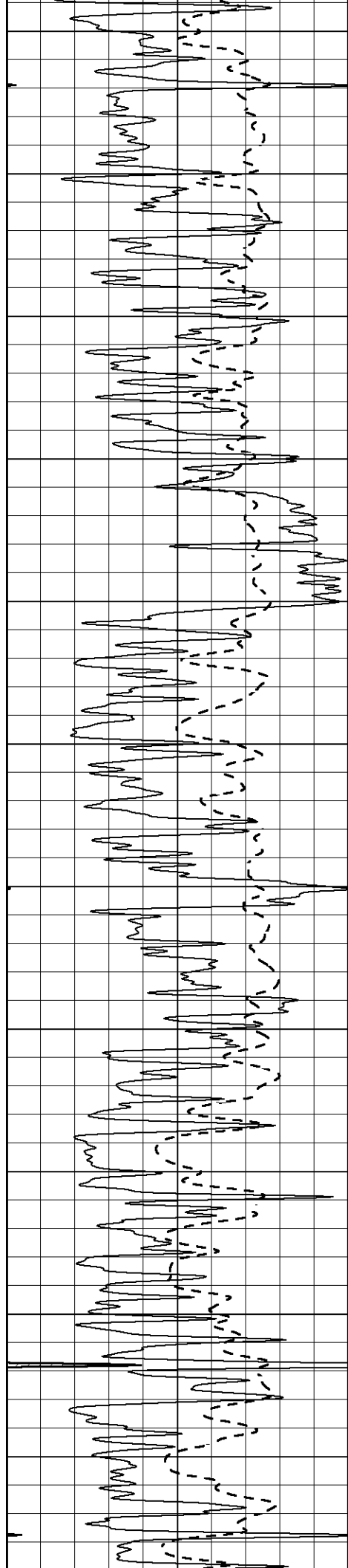


2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600



2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150





3200

3250

3300

3350

3400

3450

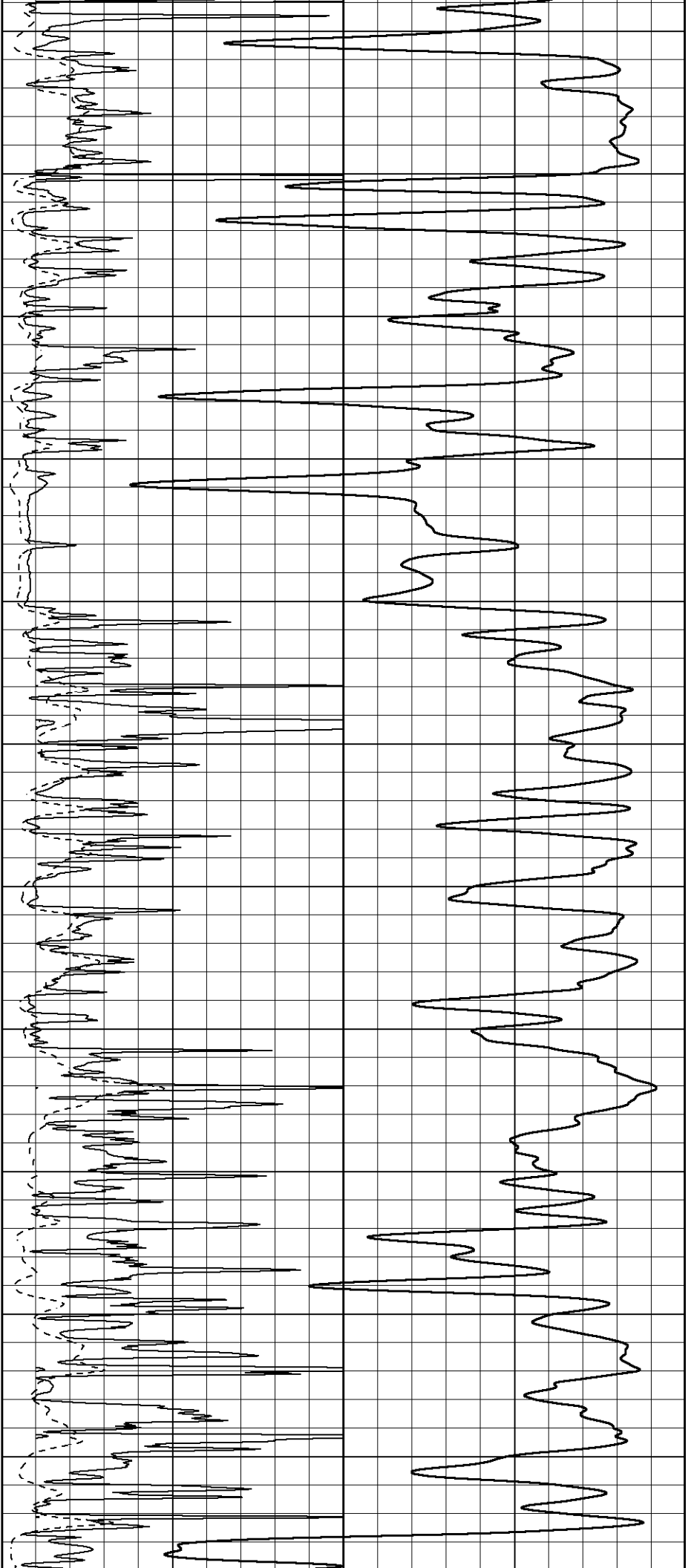
3500

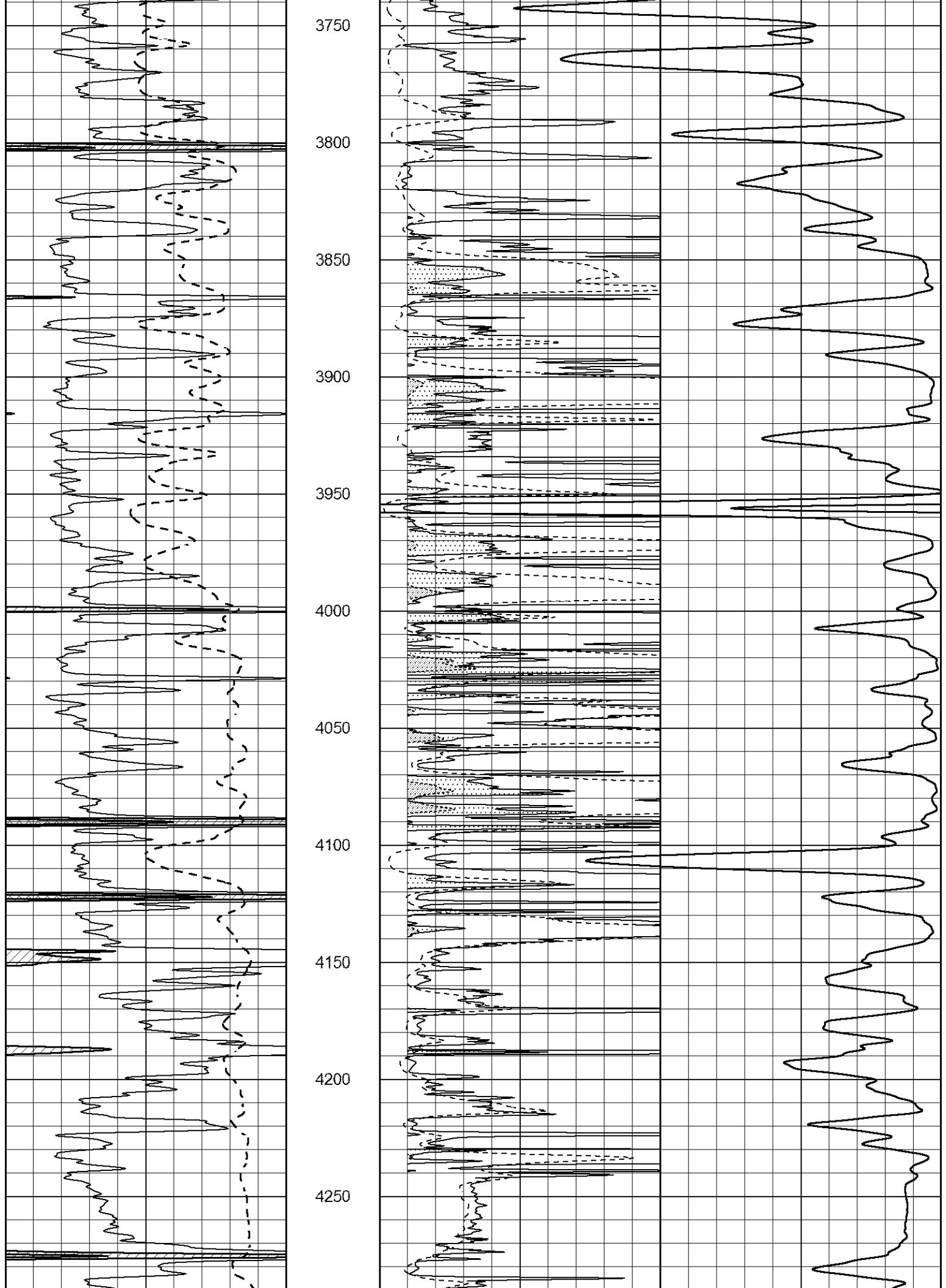
3550

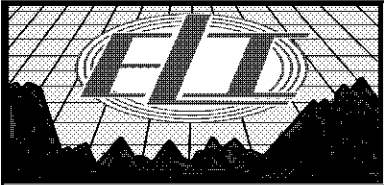
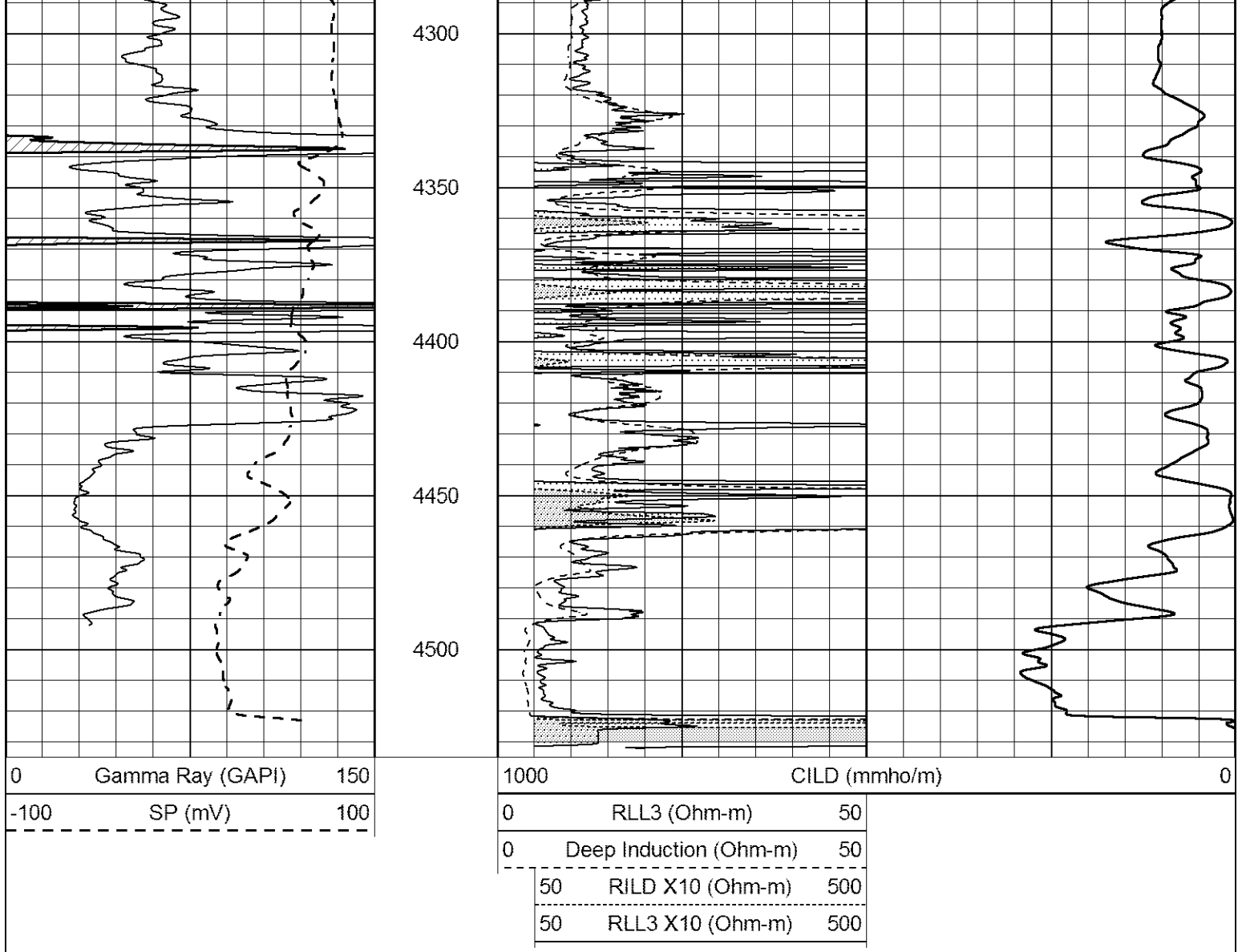
3600

3650

3700



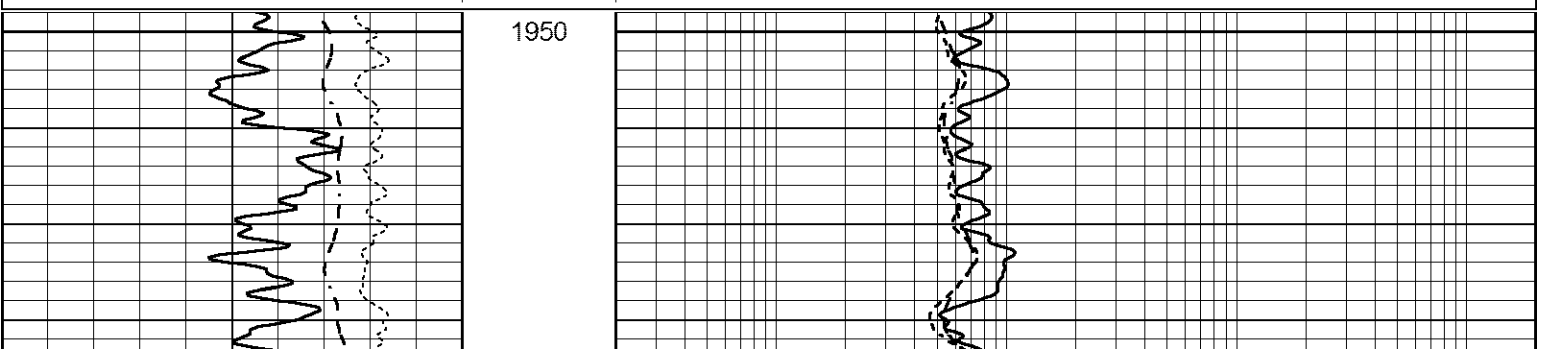


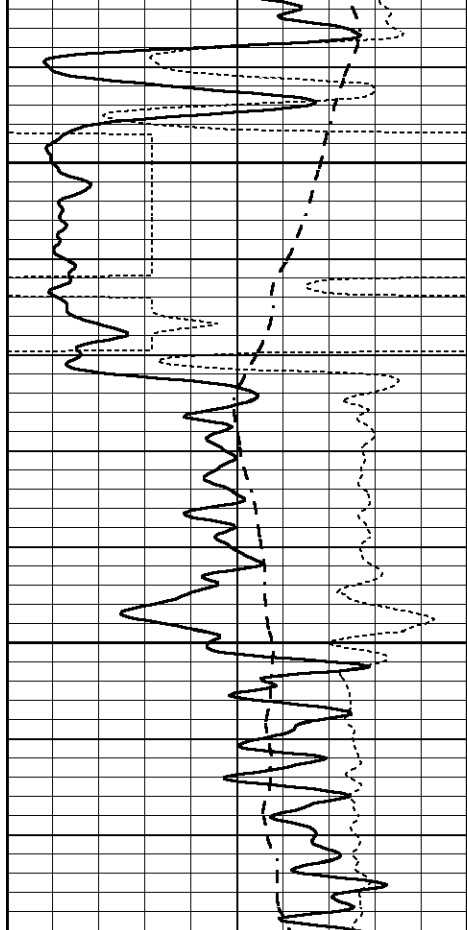


ANHYDRITE

Database File 7719pe.db
 Dataset Pathname pass4A
 Presentation Format _dil
 Dataset Creation Tue Sep 05 01:00:55 2023
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

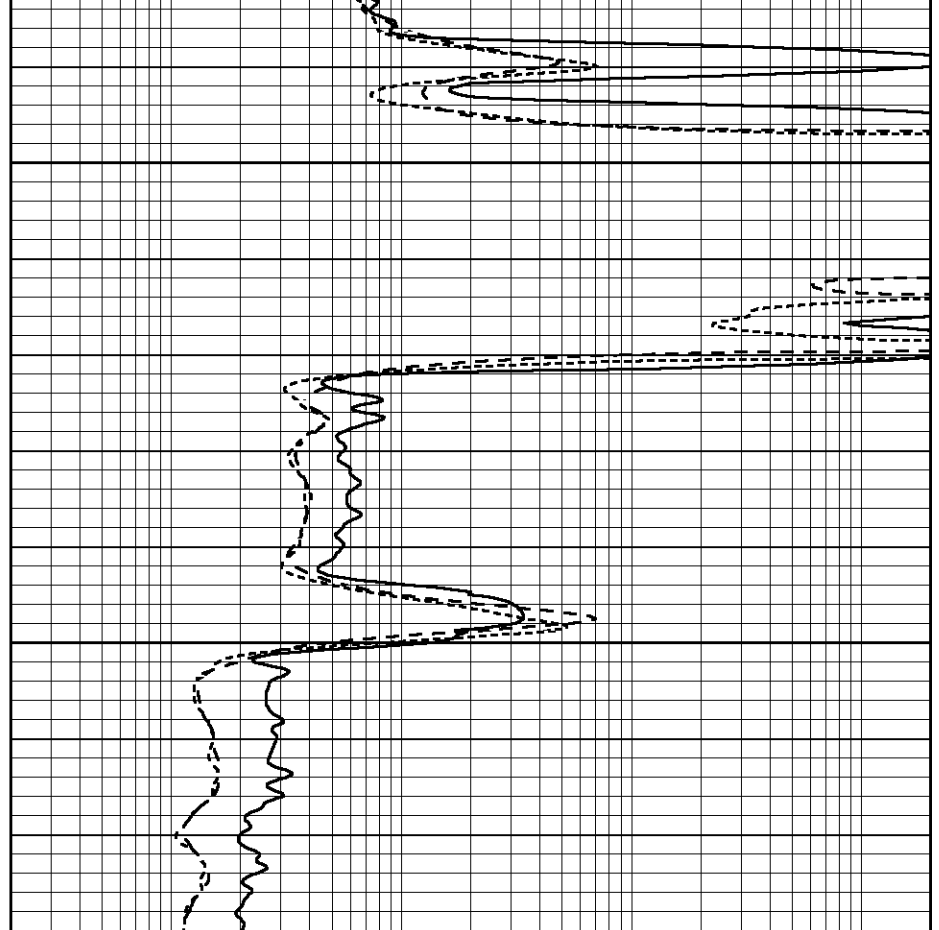




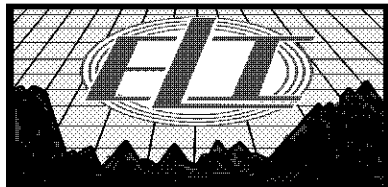
2000

2050

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50



0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

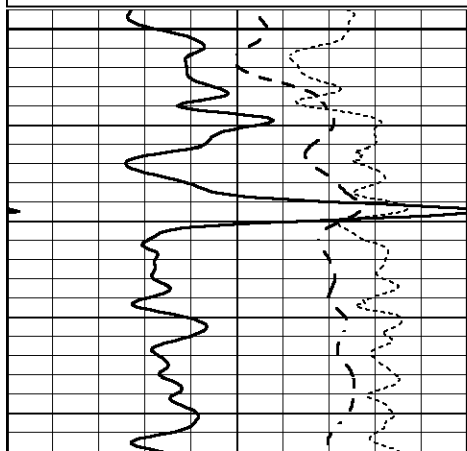


MAIN SECTION

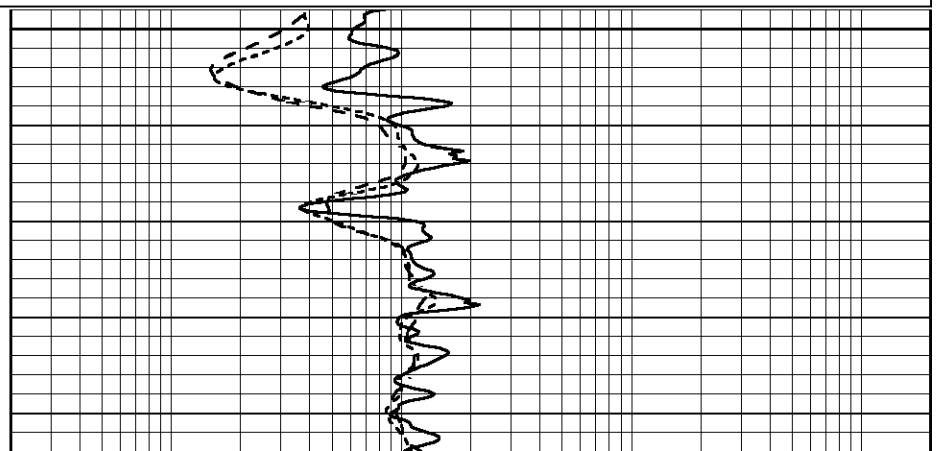
Database File 7719pe.db
 Dataset Pathname pass4D
 Presentation Format _dil
 Dataset Creation Tue Sep 05 01:14:05 2023
 Charted by Depth in Feet scaled 1:240

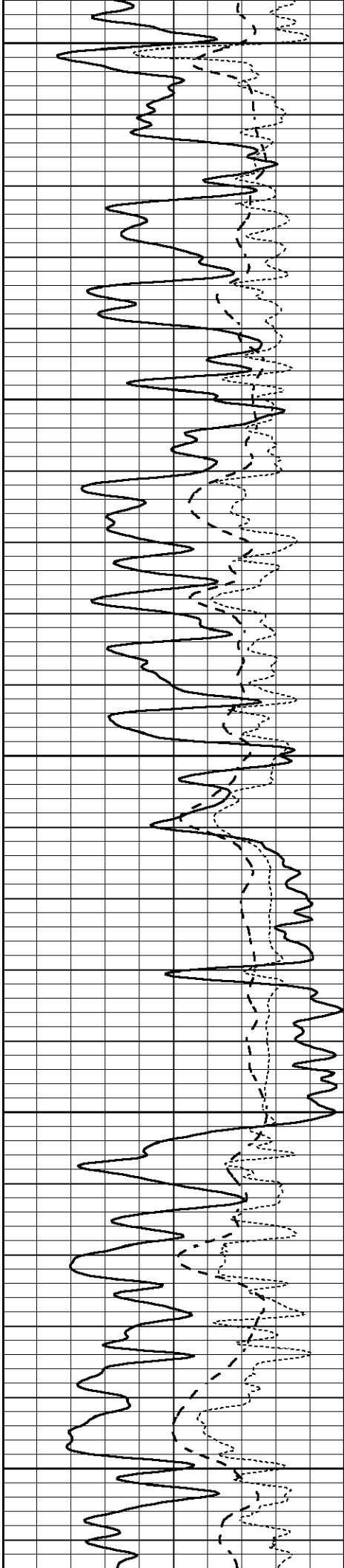
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



3200





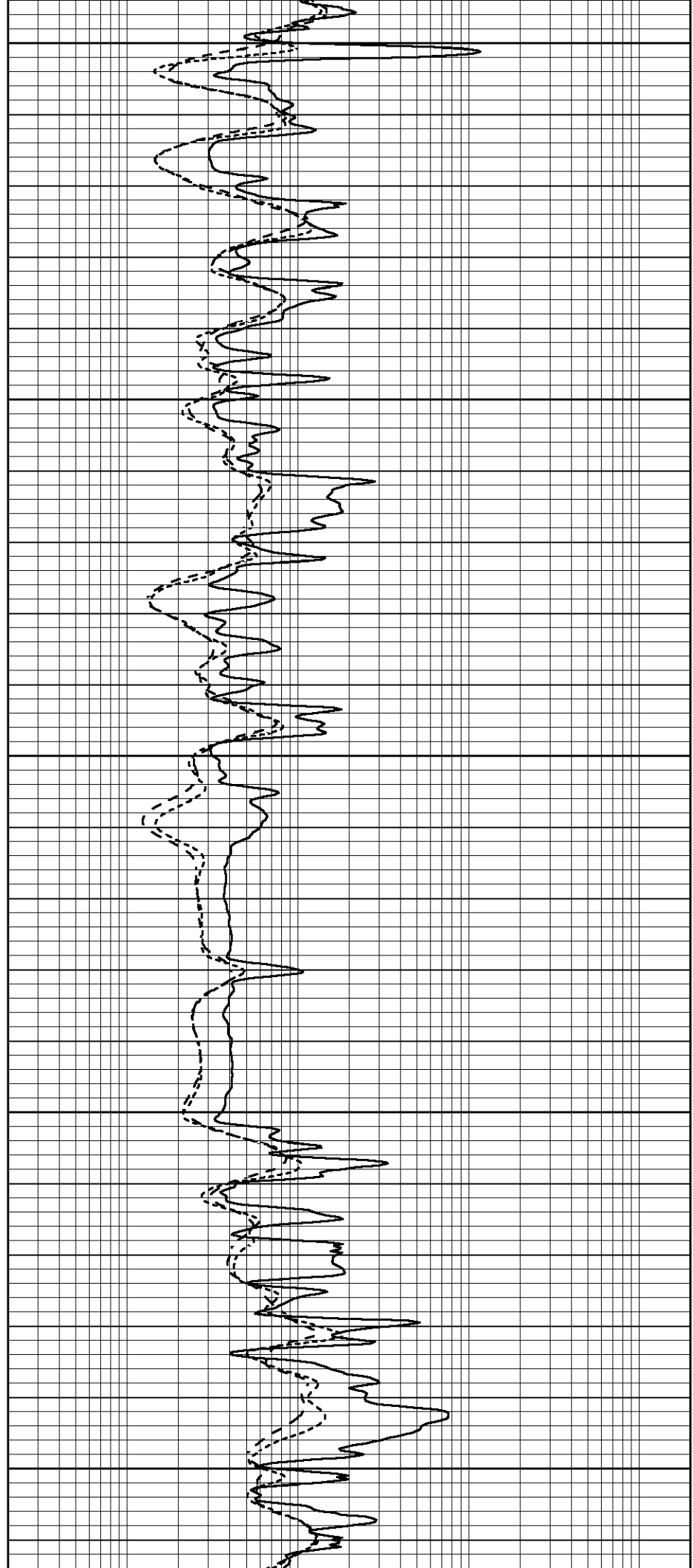
3250

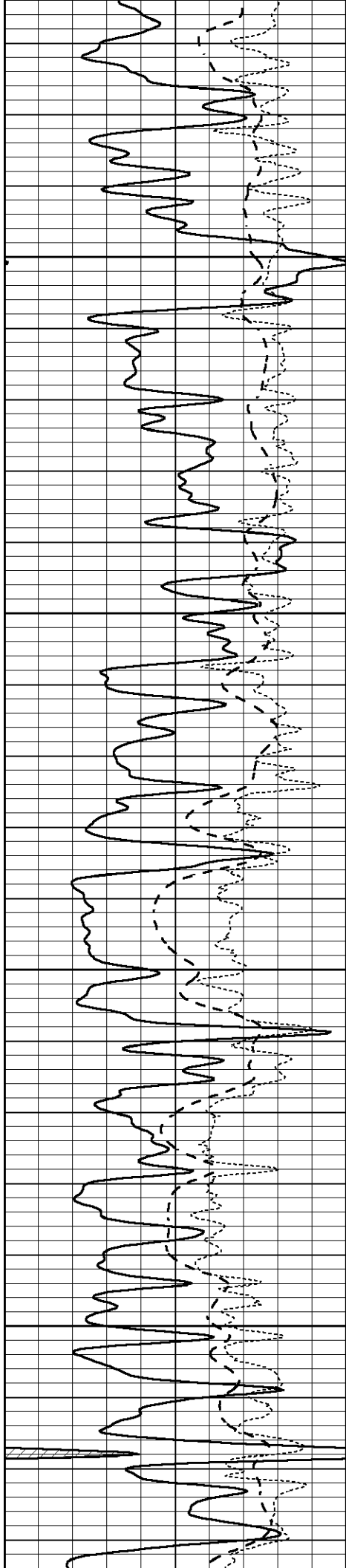
3300

3350

3400

3450



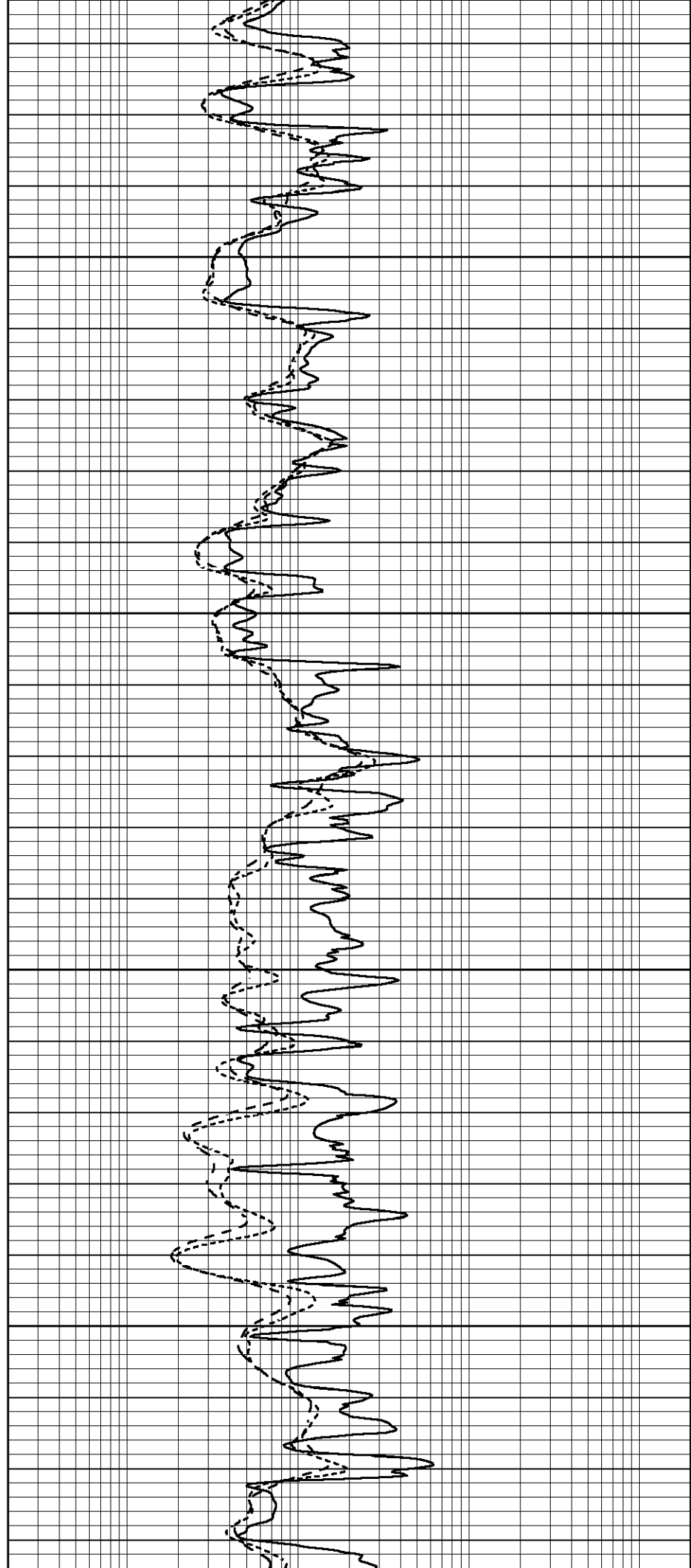


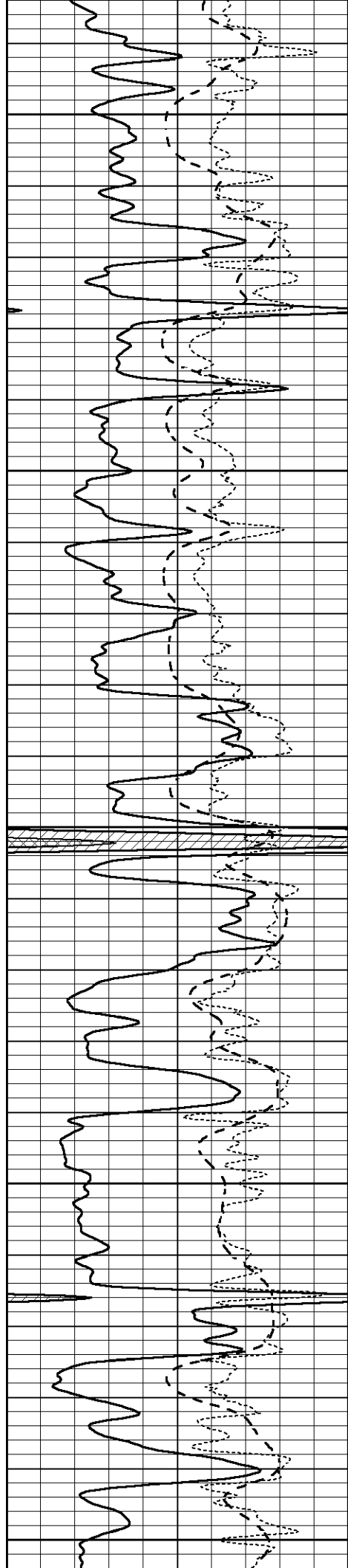
3500

3550

3600

3650





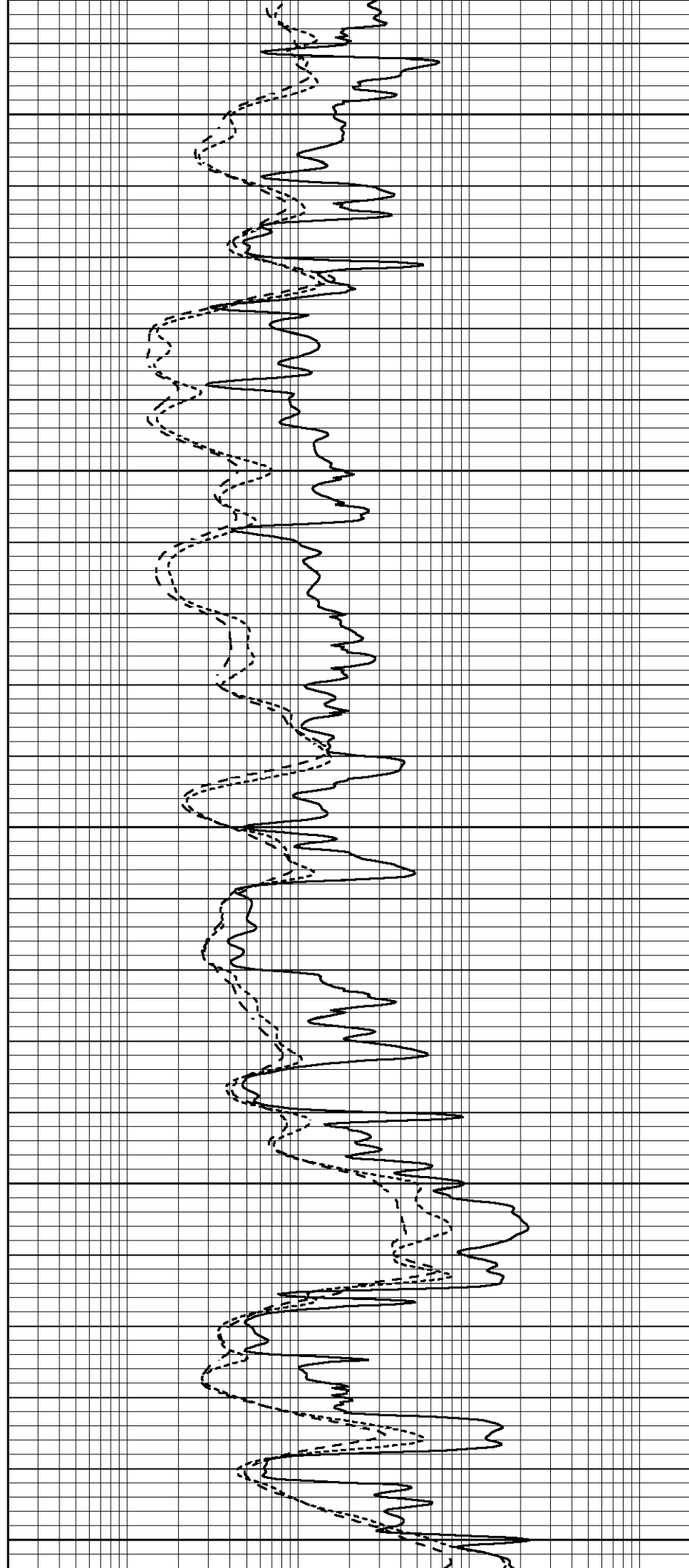
3700

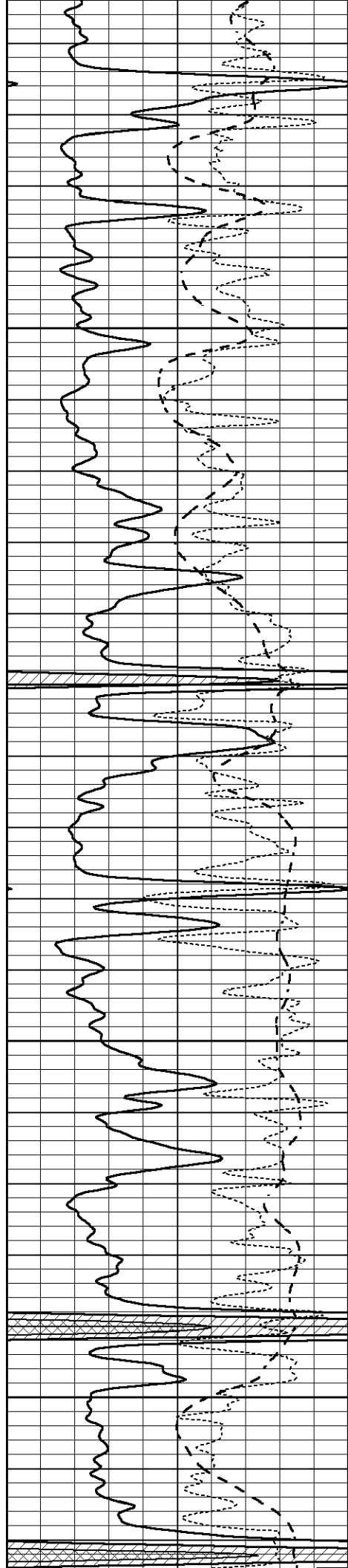
3750

3800

3850

3900



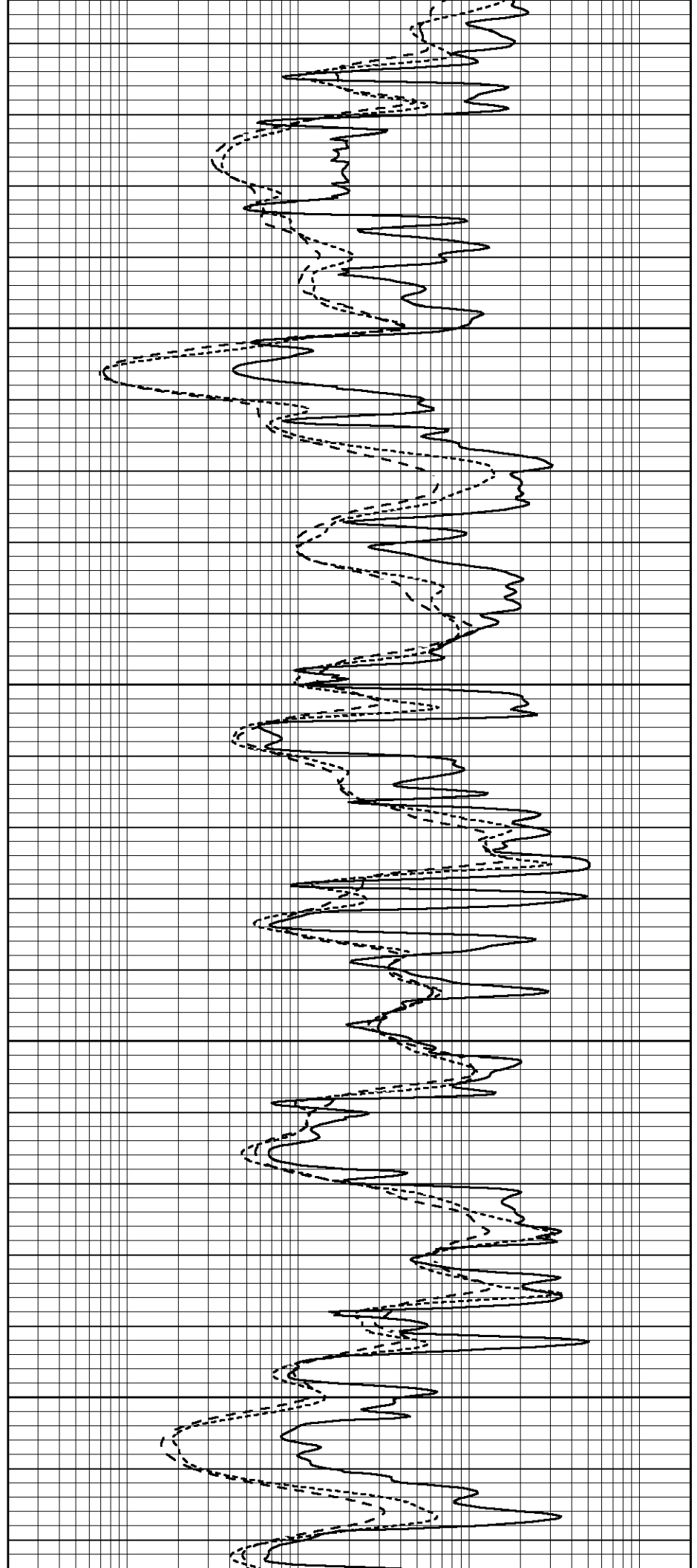


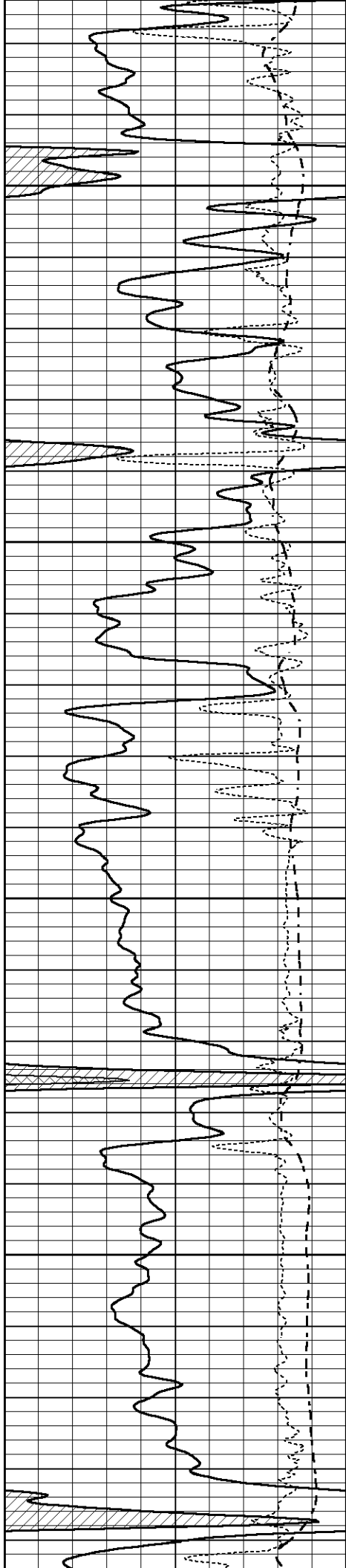
3950

4000

4050

4100



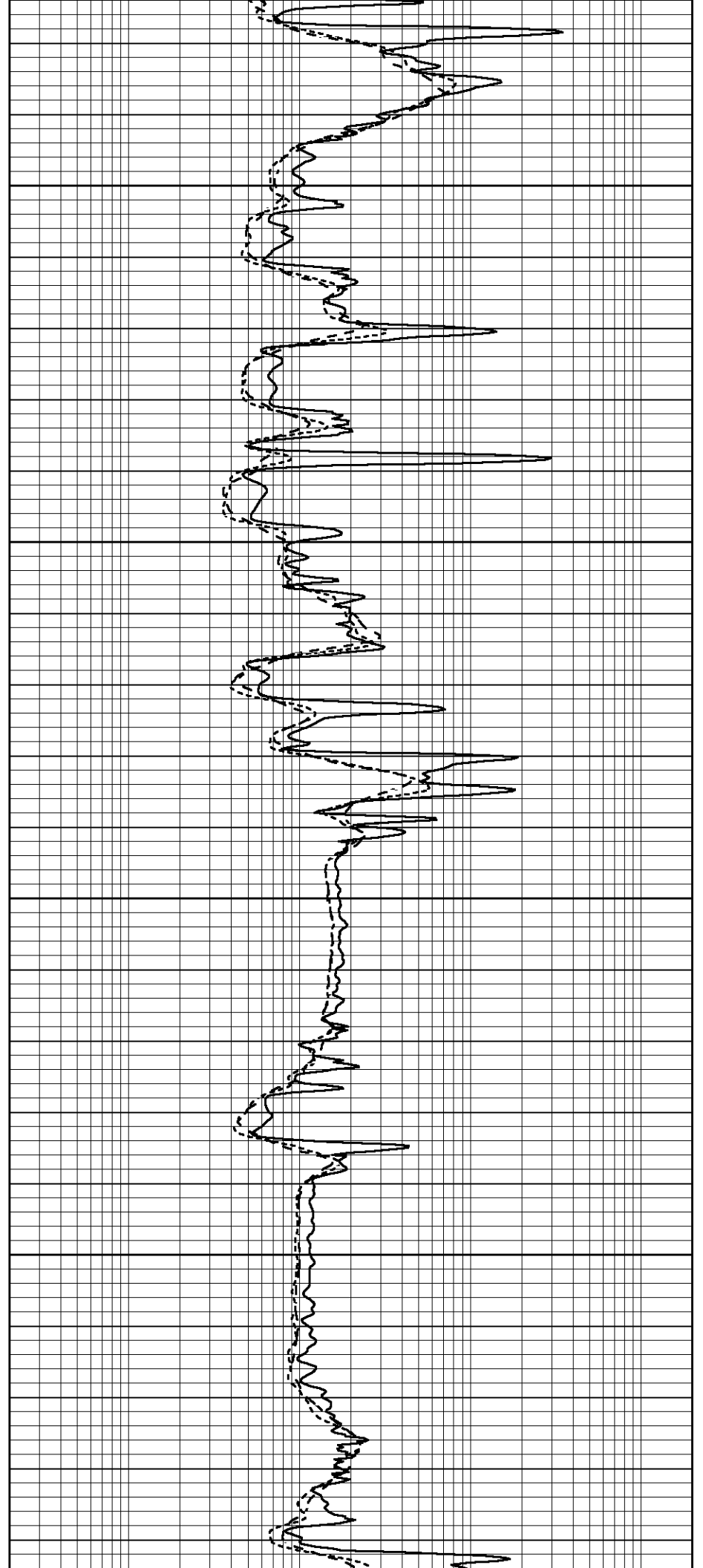


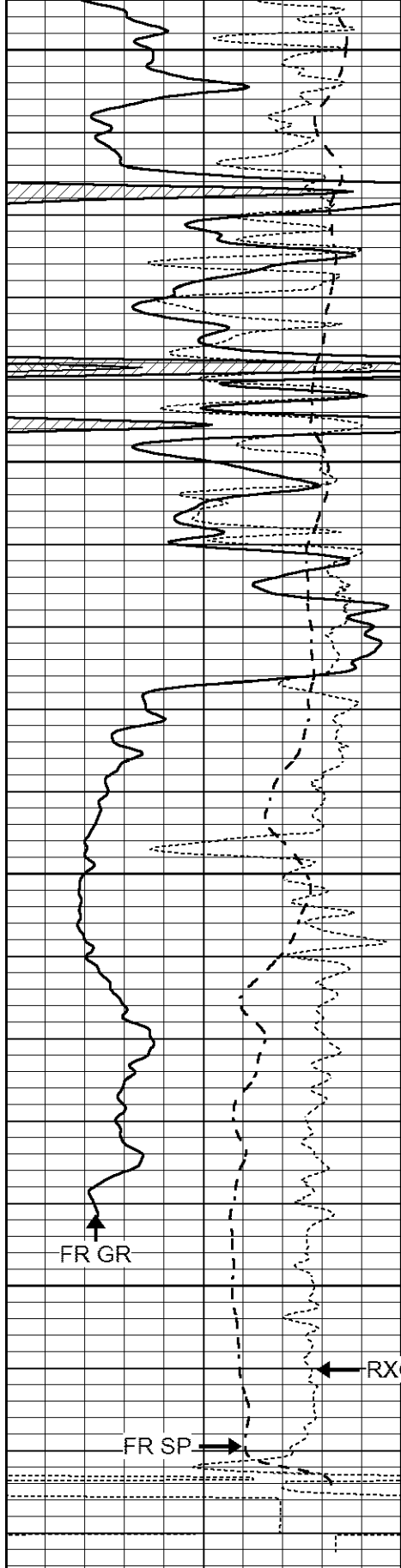
4150

4200

4250

4300





4350

4400

4450

4500

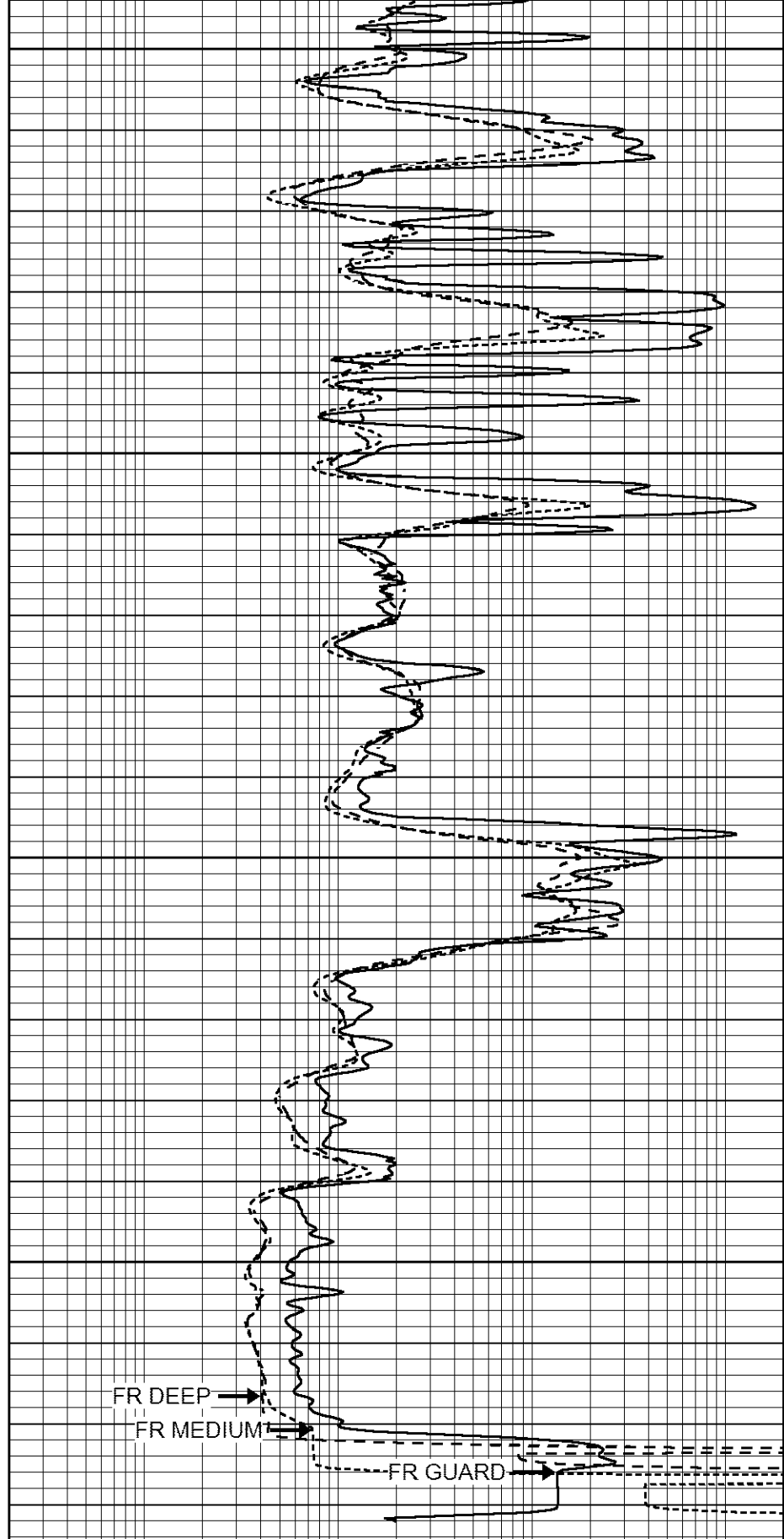
FR GR

RXO/RT

FR SP

LTD 4529

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50



FR DEEP

FR MEDIUM

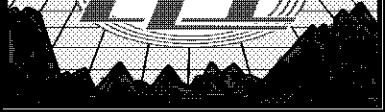
FR GUARD

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



REPEAT SECTION

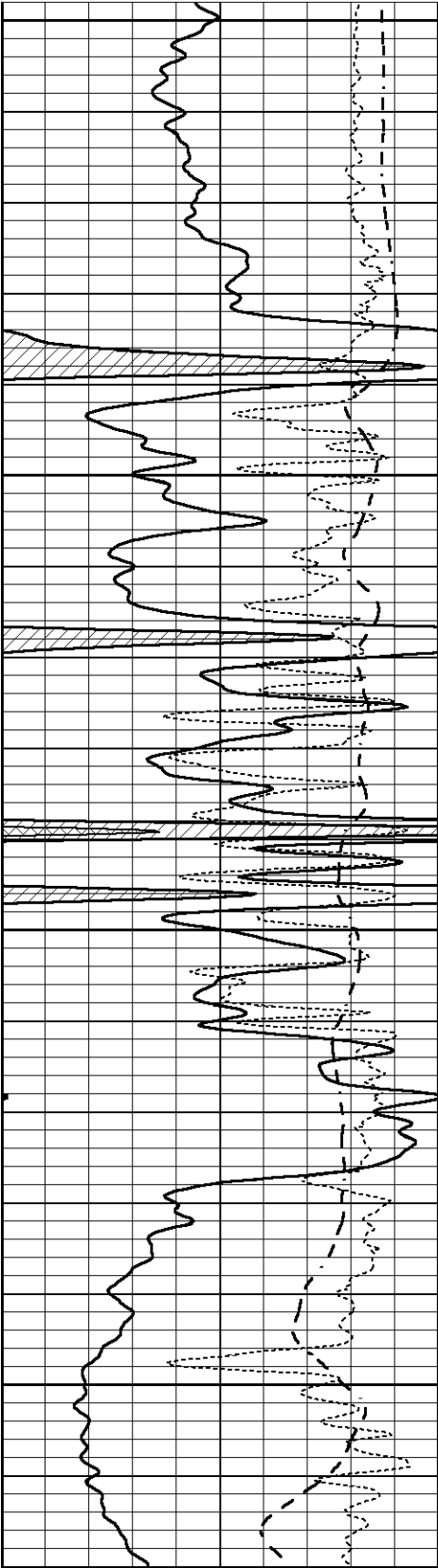
REPEAT SECTION



Database File 7719pe.db
Dataset Pathname pass2.1
Presentation Format _dil
Dataset Creation Tue Sep 05 01:23:27 2023
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

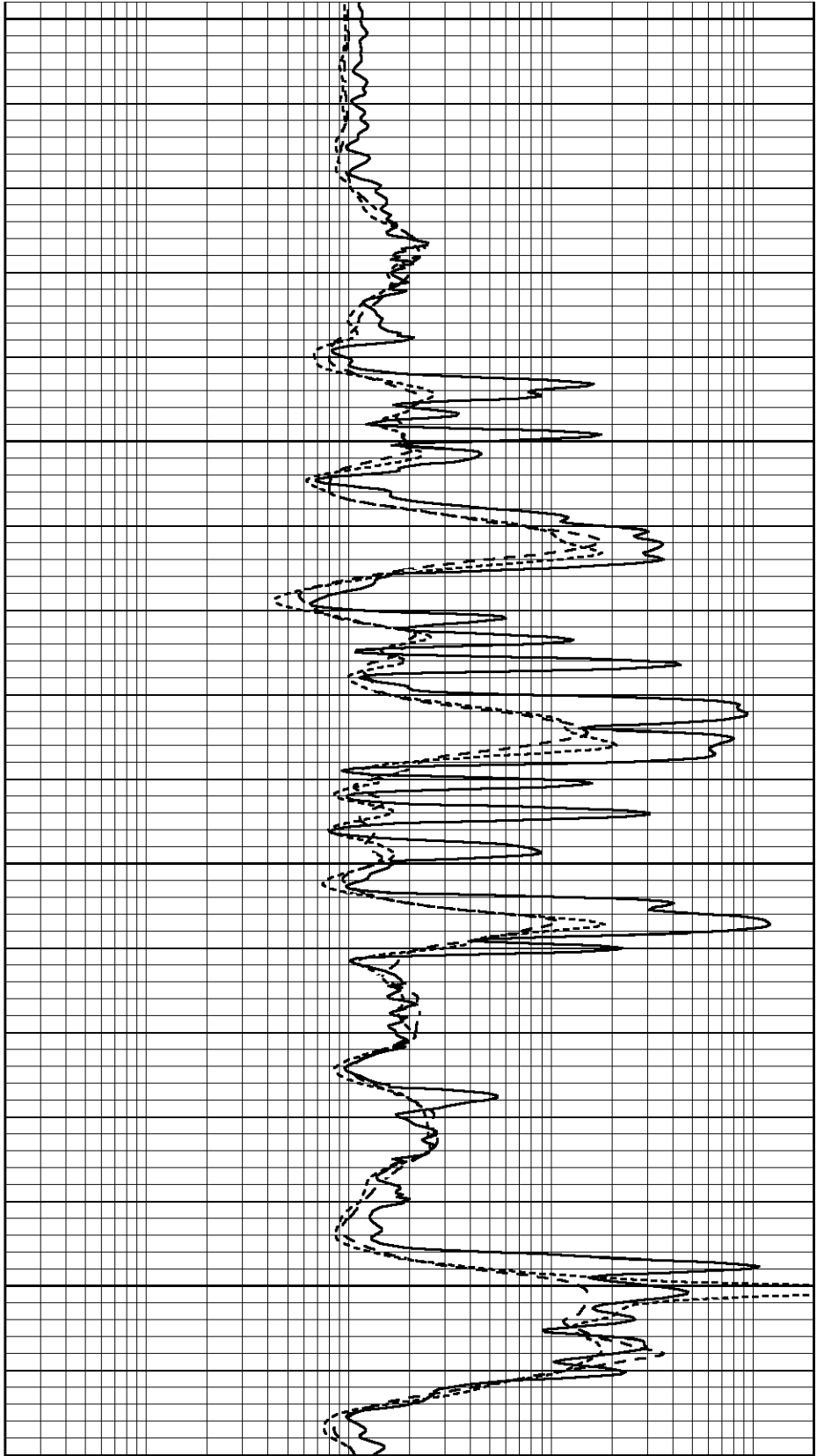


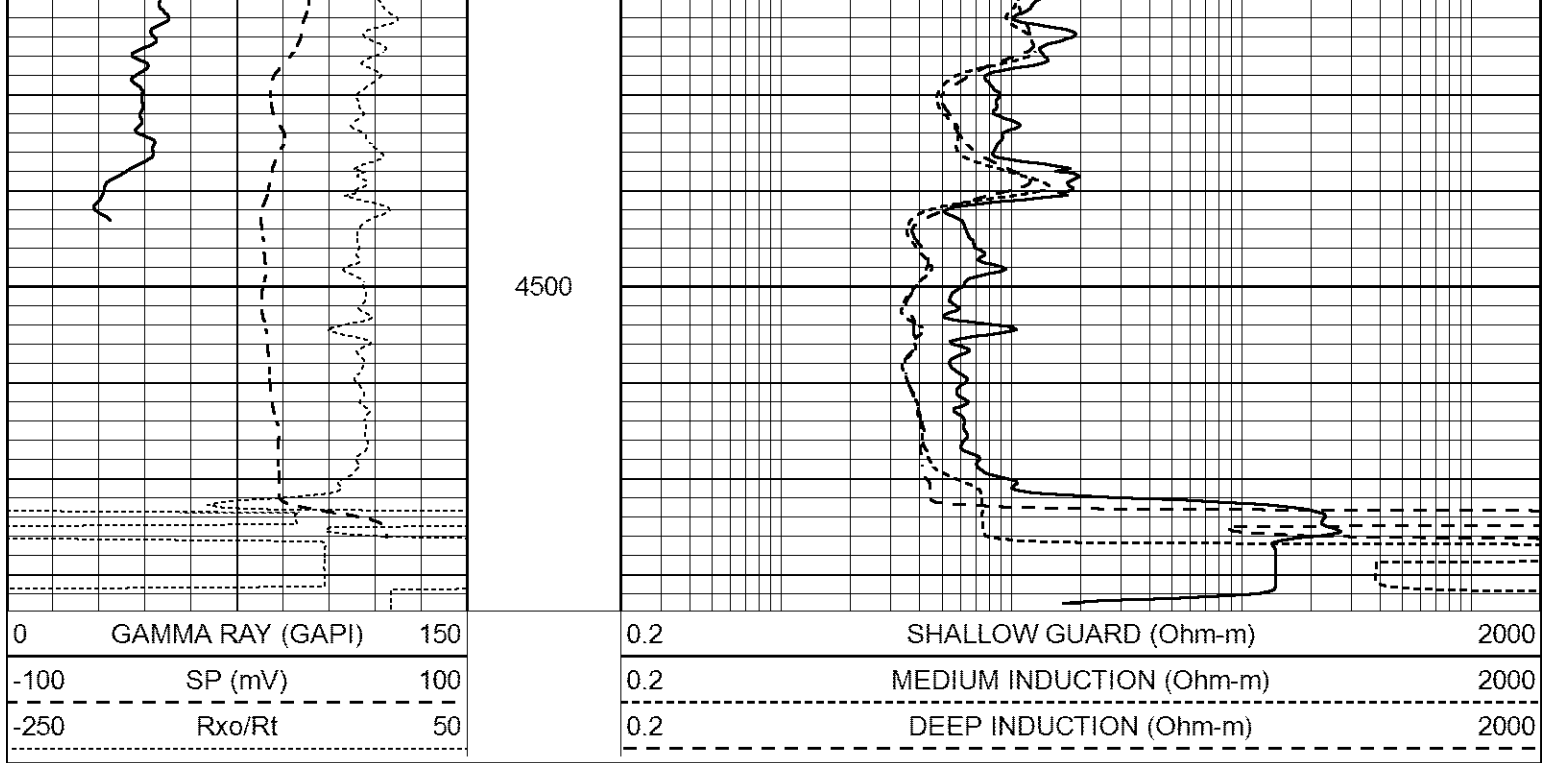
4300

4350

4400

4450





Calibration Report

Database File 7719pe.db
 Dataset Pathname pass4M
 Dataset Creation Tue Sep 05 01:37:35 2023

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
 Surface Cal Performed: Sat Jul 29 01:57:42 2023
 Downhole Cal Performed: Tue Feb 19 11:44:24 2019
 After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop		m	b
Deep	0.011	0.656		V	1.000	400.000	mmho/m	565.000	-12.000
Medium	-0.000	0.731		V	1.000	464.000	mmho/m	530.000	-12.000
Internal:	Zero			V	Cal			m	
Deep	0.007	0.649			V	0.000	400.000	mmho/m	623.784
Medium	0.004	0.743		V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			mmho/m	V	References			Results	
	Zero	Cal				Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	V	-0.976	397.550	mmho/m	1.004	-0.149	
Medium	3.565	471.327	mmho/m	V	3.468	471.590	mmho/m	1.001	-0.099	
LL3		7.503	V			1500.000	Ohm-m			
		0.001	V			20.000	Ohm-m			
		-7.481	V			3745.000	mmho-m			

After Survey Verification

	Readings			mmho/m	V	Targets			Results	
	Zero	Cal				Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	V	-0.824	395.917	mmho/m	1.000	0.000	

Decp	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
Medium					1500.000	Ohm-m		
LL3			Ohm-m		20.000	Ohm-m		
			mmho-m		3745.000	mmho-m		

Litho Density Calibration Report
 Serial: 140704
 Model: V4_10P
 Source Number: 74GBq-19

Master Calibration				Performed: Fri May 12 10:26:47 2023			
	Background		Aluminum		Magnesium		
Window 1	521.46		5212.91		23528.37		cps
Window 2	43.81		1175.90		6160.42		cps
Window 4	226.45		1217.97		4891.35		cps
Window 5	519.17		8959.34		17037.10		cps
Window 6	39.35		1453.85		2926.68		cps
Window 8	253.66		2919.24		5361.51		cps
Bulk Density	-		2.6020		1.6830		g/cc
Pe	-		3.0000		2.5070		b/e
LS Alpha:	:-1.7699		SS Alpha:	:-0.7448		LS CPE:	: 1.1844
LS Beta:	: 101708.6271		SS Beta:	: 19263.5258		SS CPE:	: 1.5835

Before Survey Background Counts Verification				Performed: Wed Dec 31 18:00:00 1969			
Window 1	0.00		cps				
Window 2	0.00		cps				
Window 4	0.00		cps				
Window 5	0.00		cps				
Window 6	0.00		cps				
Window 8	0.00		cps				

After Survey Background Counts Verification				Performed: Wed Dec 31 18:00:00 1969			
Window 1	0.00		cps				
Window 2	0.00		cps				
Window 4	0.00		cps				
Window 5	0.00		cps				
Window 6	0.00		cps				
Window 8	0.00		cps				

Lithodensity Caliper Calibration				Performed: Fri May 12 10:26:47 2023			
Results	Readings		References (in)				
	Low	High	Low	High	Gain	Offset	
	7228.5	10151.9	8.0	14.0	0.0	-23.4	

Before Survey Caliper Verification				Performed:			
	Reference		Reading				
Caliper (in)	_____		_____				

After Survey Caliper Verification				Performed:			
-----------------------------------	--	--	--	------------	--	--	--

Caliper (in)

Reference

Reading

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 7
Tool Model: Probe1
Performed: Tue Aug 01 20:36:29 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.4400 GAPI/cps