



# DUAL INDUCTION LOG

**Company** FOURWINDS OIL CORPORATION  
**Well** MARY #2  
**Field** RAY  
**County** PHILLIPS  
**State** KANSAS

**Location:** API #: 15-147-20763-0000  
 715' FNL & 1765' FWL  
 NE - SW - NE - NW  
 SEC 28 TWP 5S RGE 20W  
**Permanent Datum** GROUND LEVEL Elevation 2209  
**Log Measured From** KELLY BUSHING 8' A.G.L  
**Drilling Measured From** KELLY BUSHING  
**Other Services** CDL/CNL MEL/SON  
**Elevation** K.B. 2217 D.F. 2215 G.L. 2209

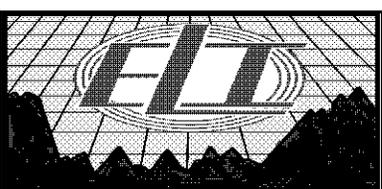
Date	9/25/23		
Run Number	ONE		
Depth Driller	3700		
Depth Logger	3699		
Bottom Logged Interval	3697		
Top Log Interval	00		
Casing Driller	8 5/8" @ 221'		
Casing Logger	221'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1,200 PPM	
Density / Viscosity	9.4/46		
pH / Fluid Loss	10.5/8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.60 @ 79F		
Rmt @ Meas. Temp	1.20 @ 79F		
Rmc @ Meas. Temp	1.92 @ 79F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.19 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	2:00 A.M.		
Maximum Recorded Temperature	113F		
Equipment Number	8916		
Location	HAYS, KANSAS		
Recorded By	COLE ROBBEN		
Witnessed By	CAMERON BRIN		

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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

THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. ( 785 ) 628-6395  
  
 DIRECTIONS:  
 FROM STOCKTON, KANSAS GO 11 MILES NORTH TO COZY COVE ROAD, WEST 15 MILES,  
 SOUTH INTO OVER CATTLE GUARD ON WEST SIDE OF TANK BATTERY

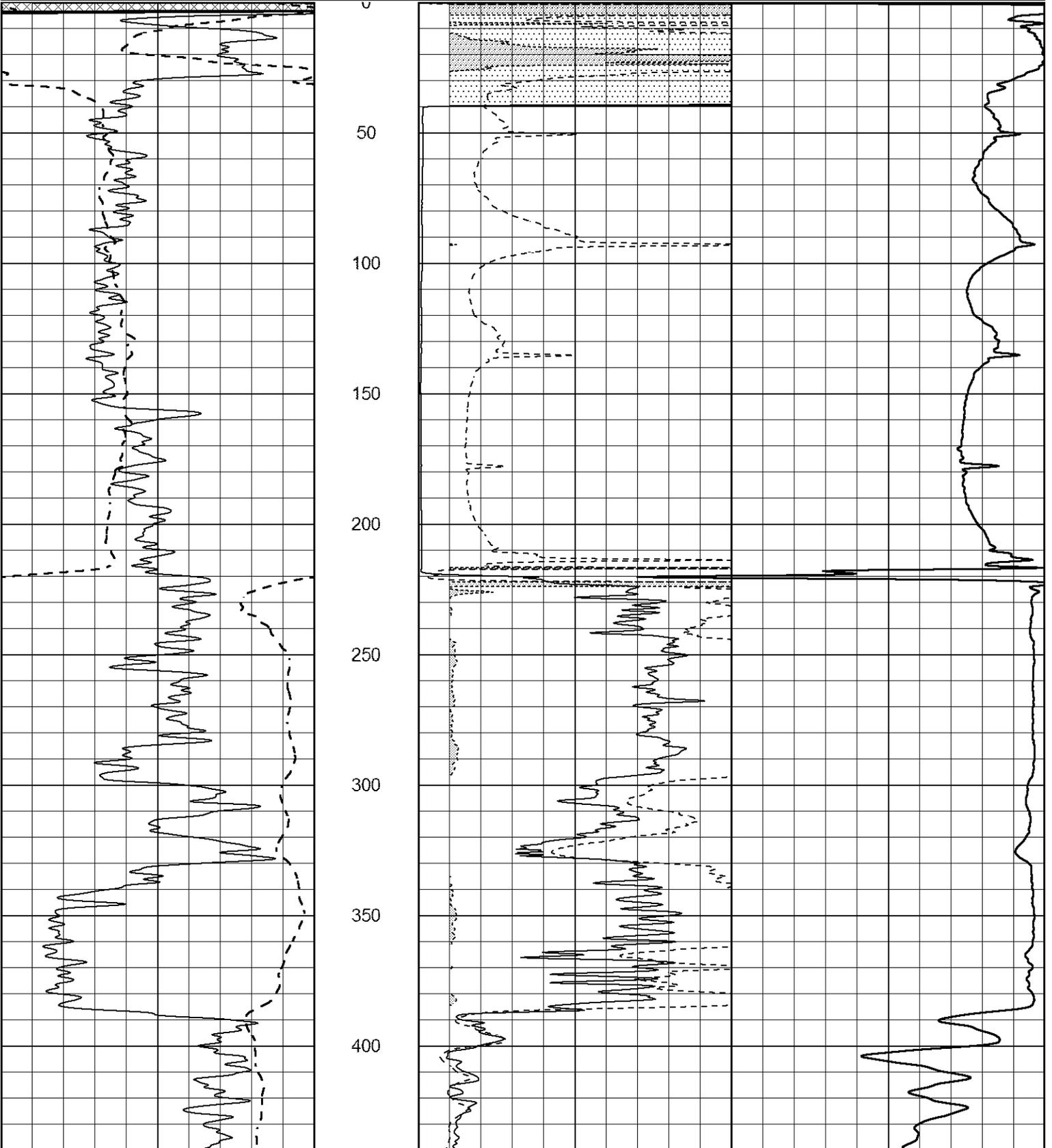


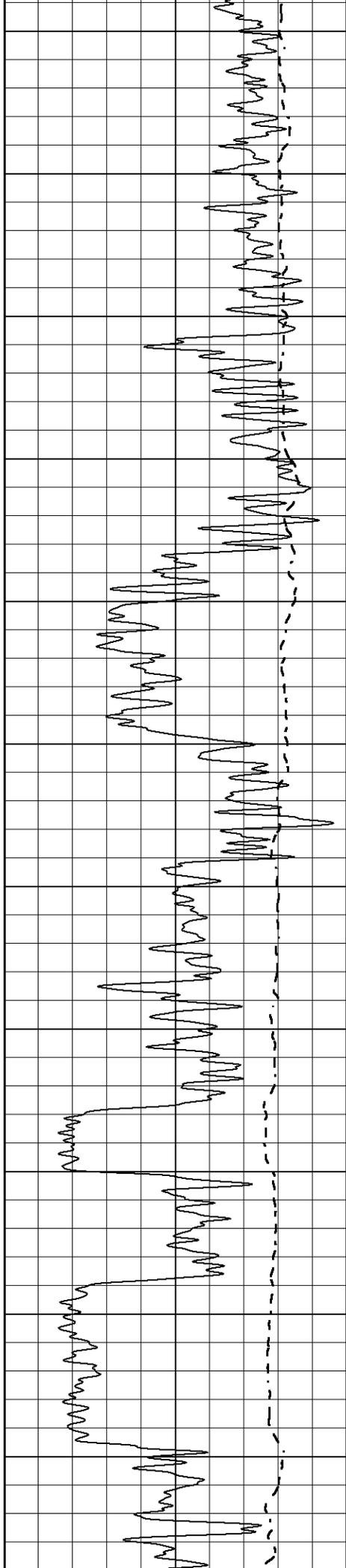
# MAIN SECTION

Database File 8351ddn.db  
 Dataset Pathname pass4D  
 Presentation Format \_dil2  
 Dataset Creation Mon Sep 25 03:11:55 2023  
 Charted by Depth in Feet scaled 1:600

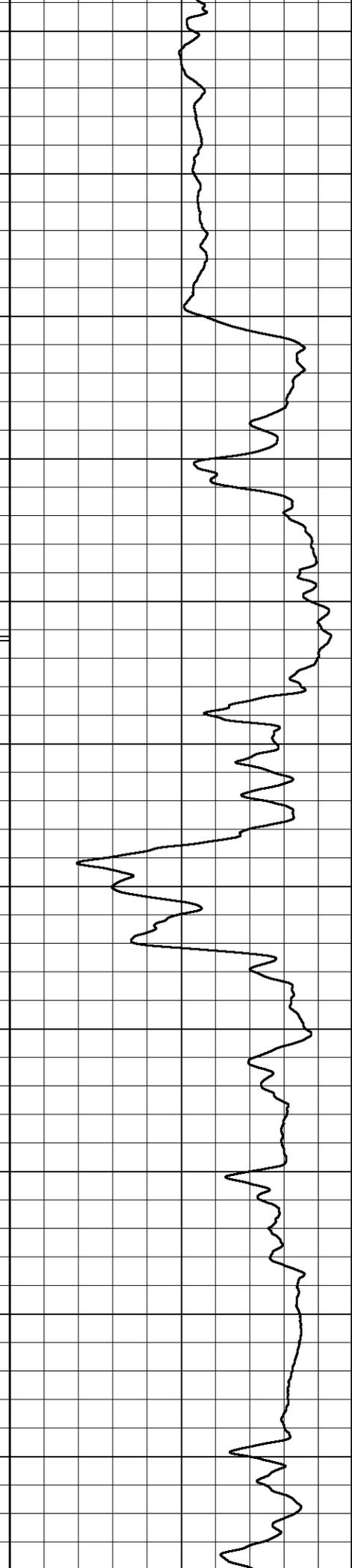
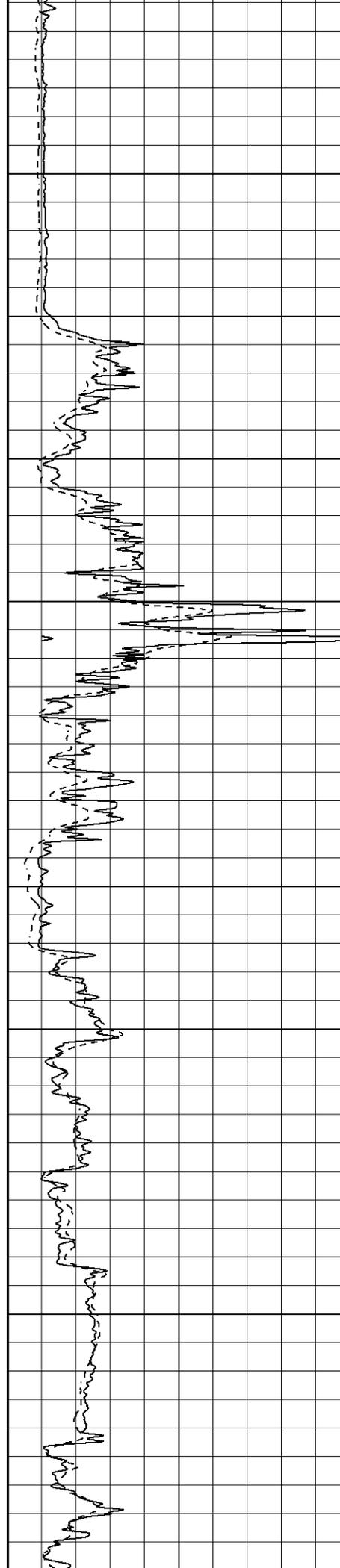
0 Gamma Ray (GAPI) 150  
 -100 SP (mV) 100

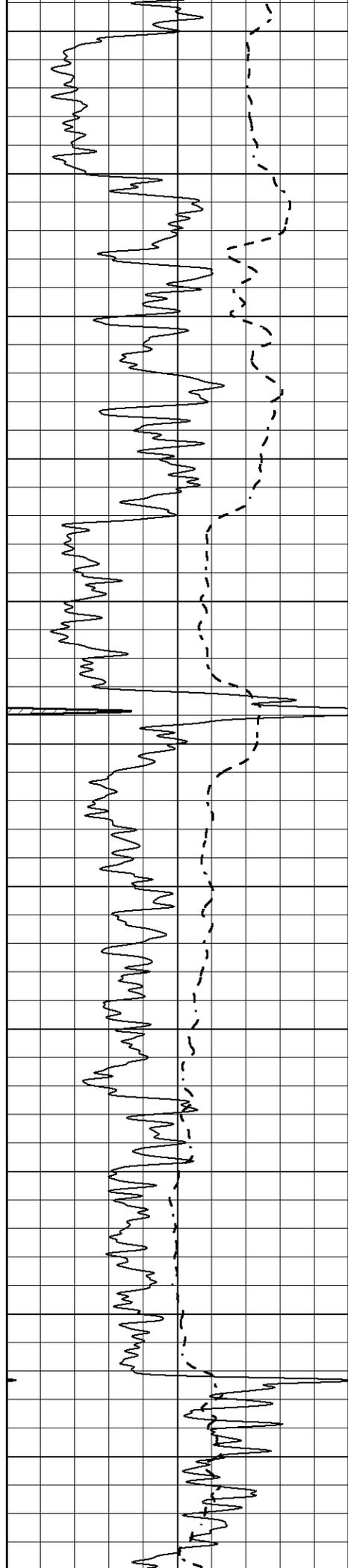
1000 CILD (mmho/m) 0  
 0 RLL3 (Ohm-m) 50  
 0 Deep Induction (Ohm-m) 50  
 50 RILD X10 (Ohm-m) 500  
 50 RLL3 X10 (Ohm-m) 500



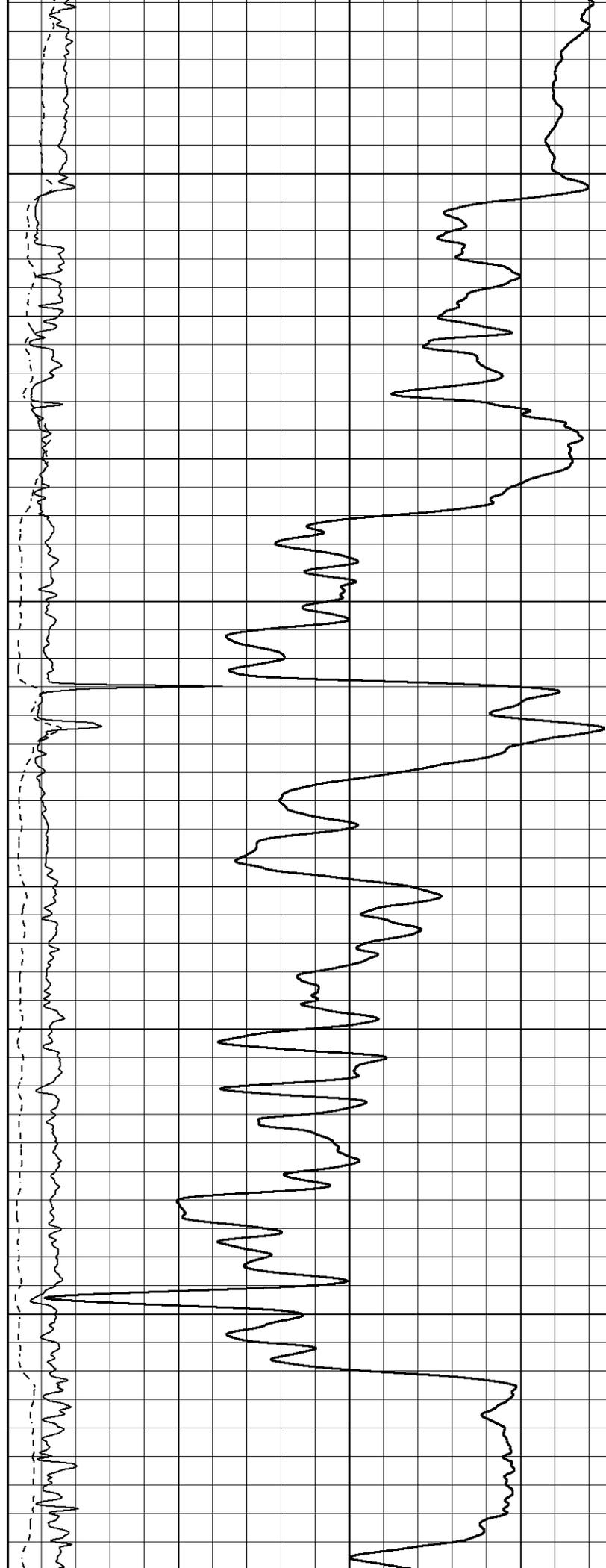


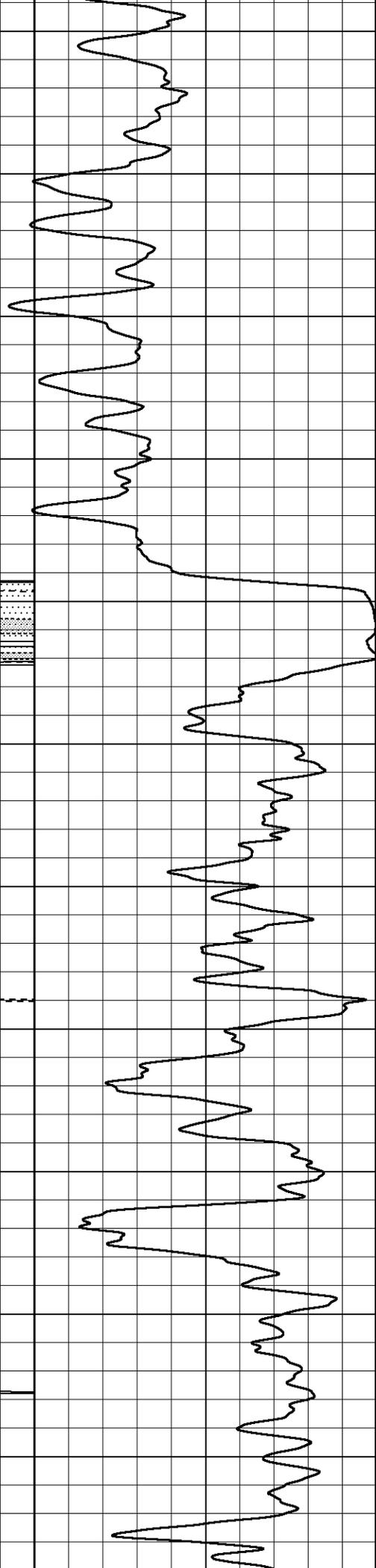
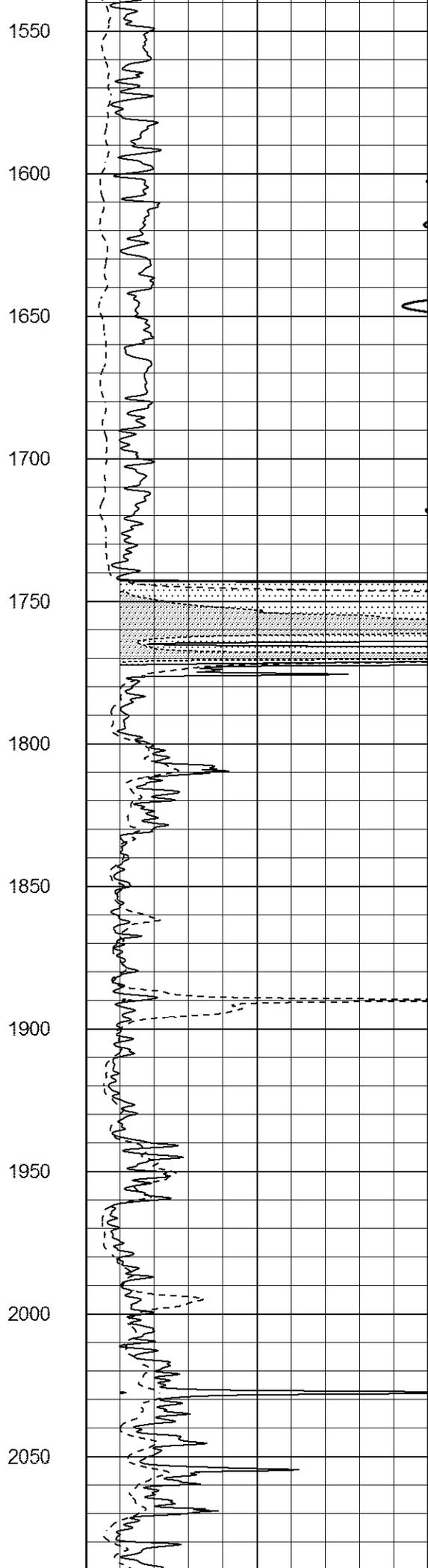
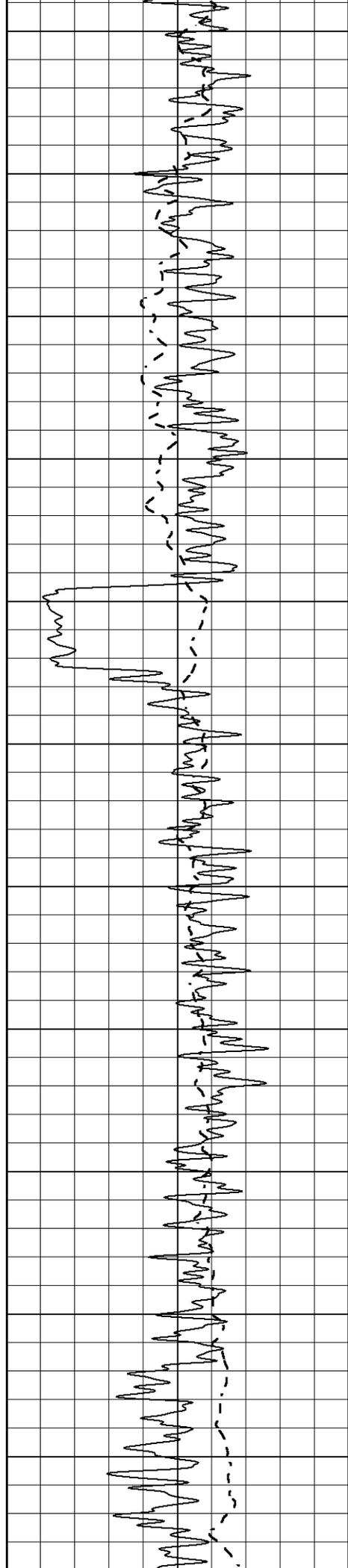
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500  
550  
600  
650  
700  
750  
800  
850  
900  
950

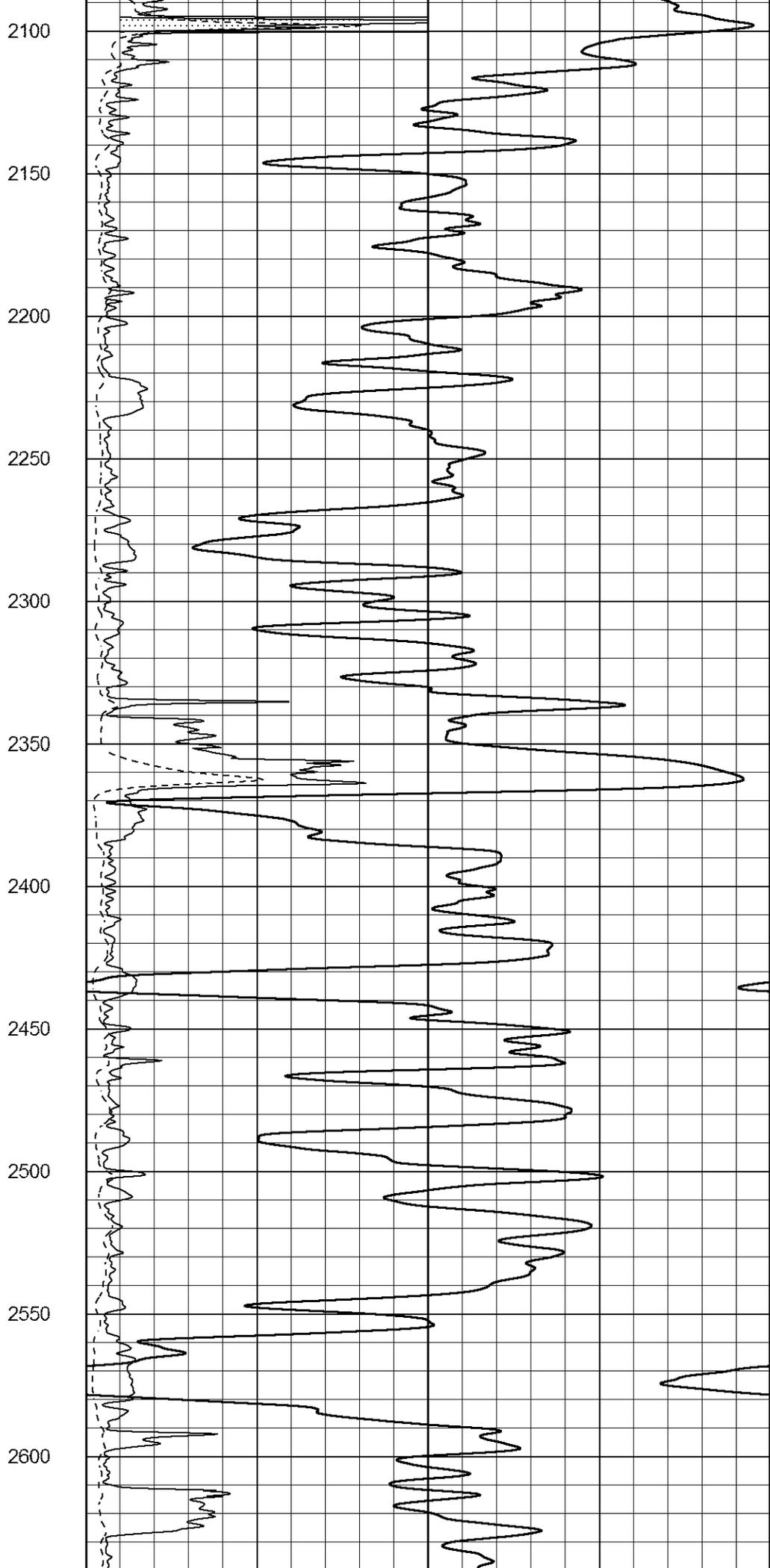
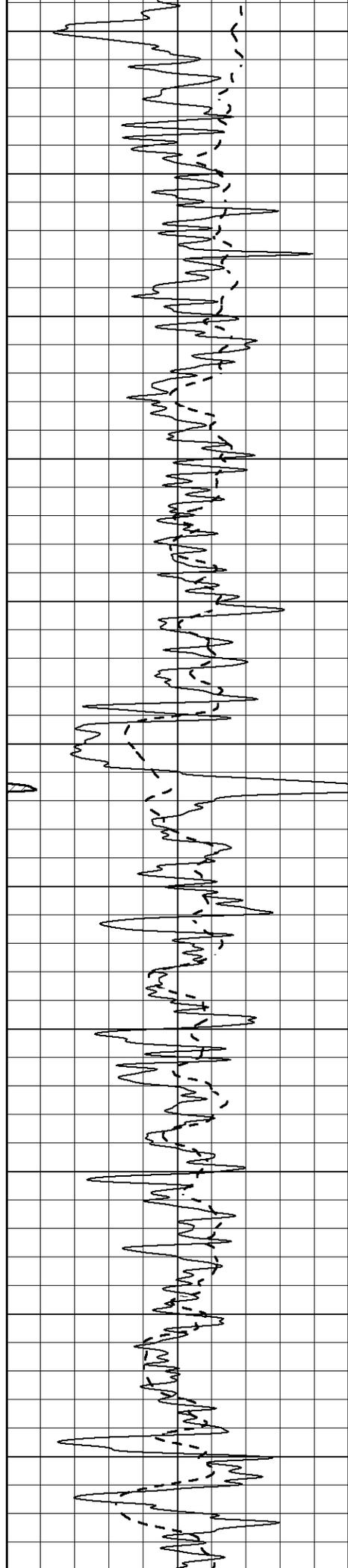


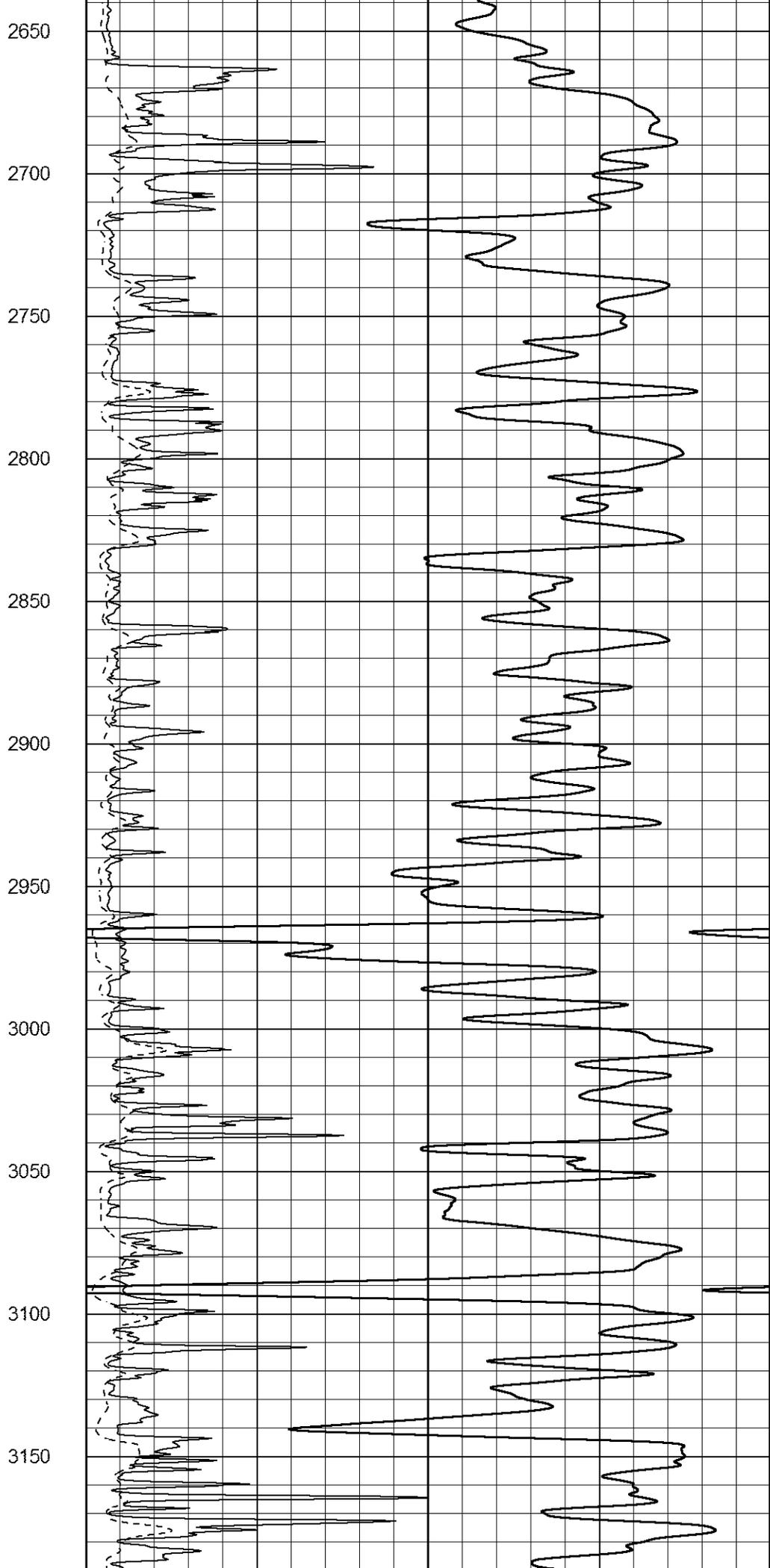
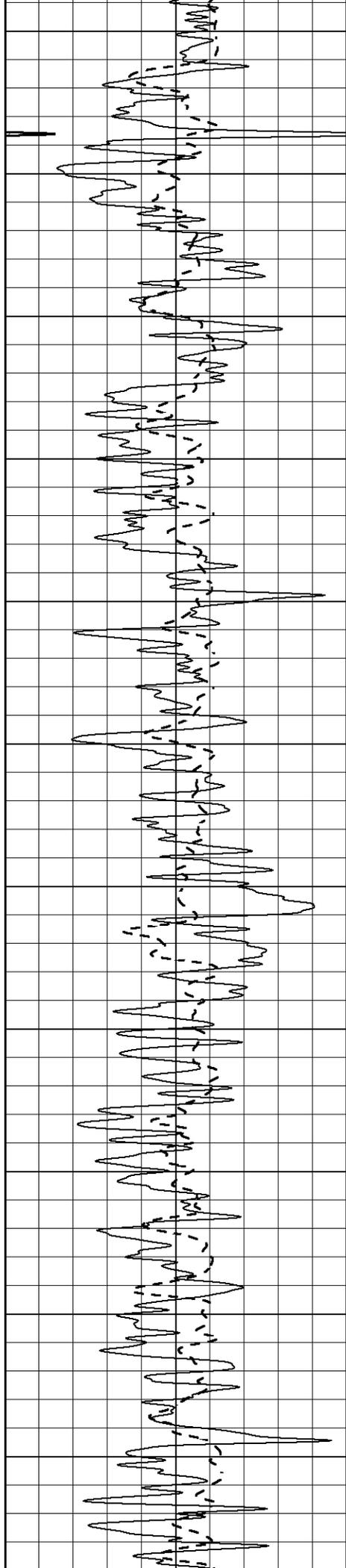


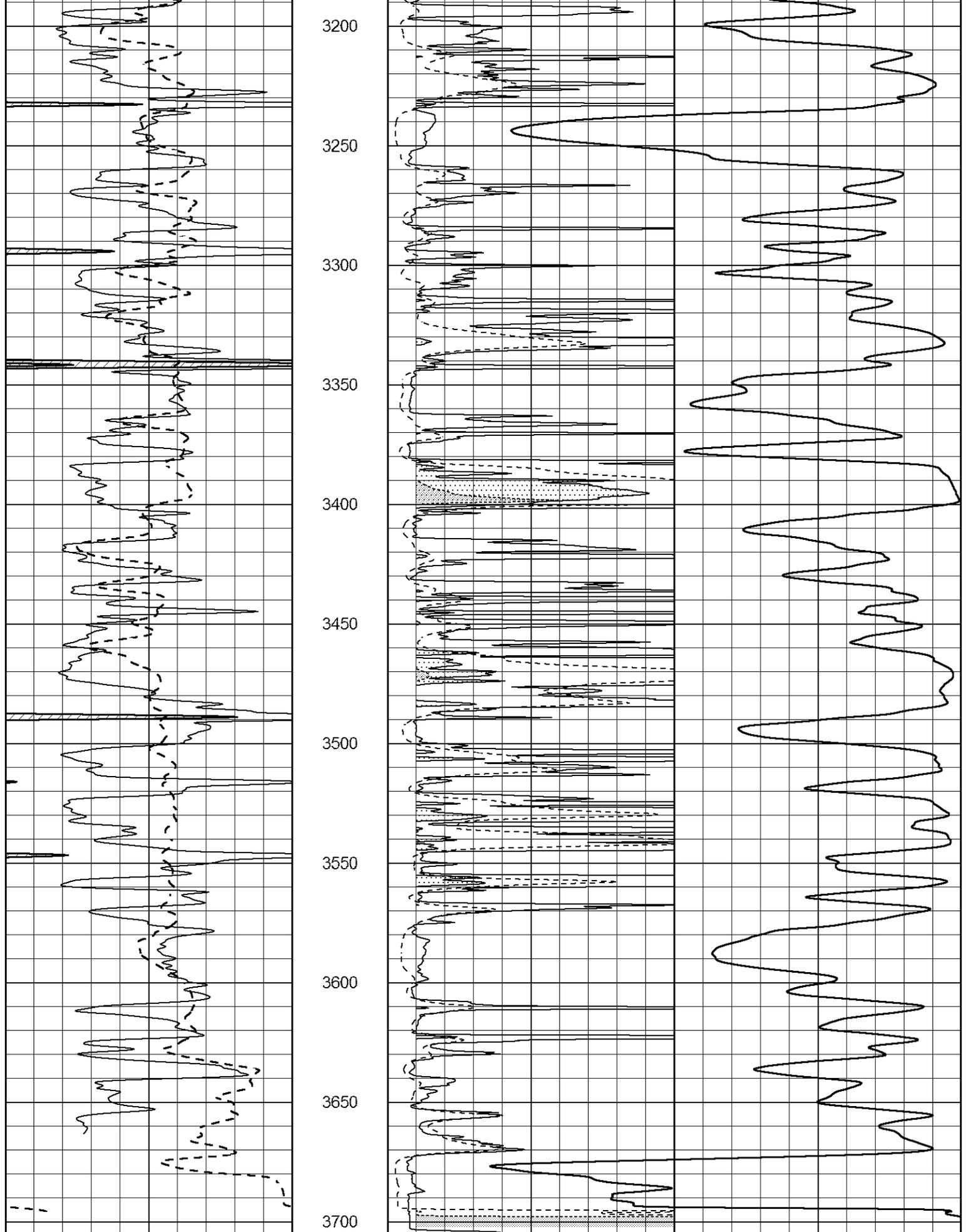
1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350  
1400  
1450  
1500











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

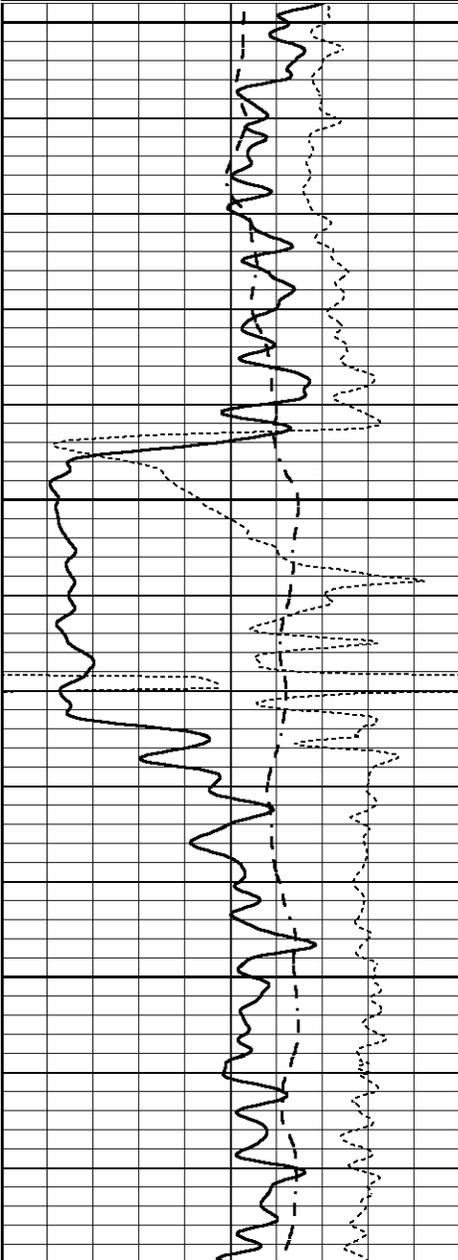


# ANHYDRITE

Database File 8351ddn.db  
 Dataset Pathname pass4A  
 Presentation Format \_dil  
 Dataset Creation Mon Sep 25 02:48:48 2023  
 Charted by Depth in Feet scaled 1:240

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

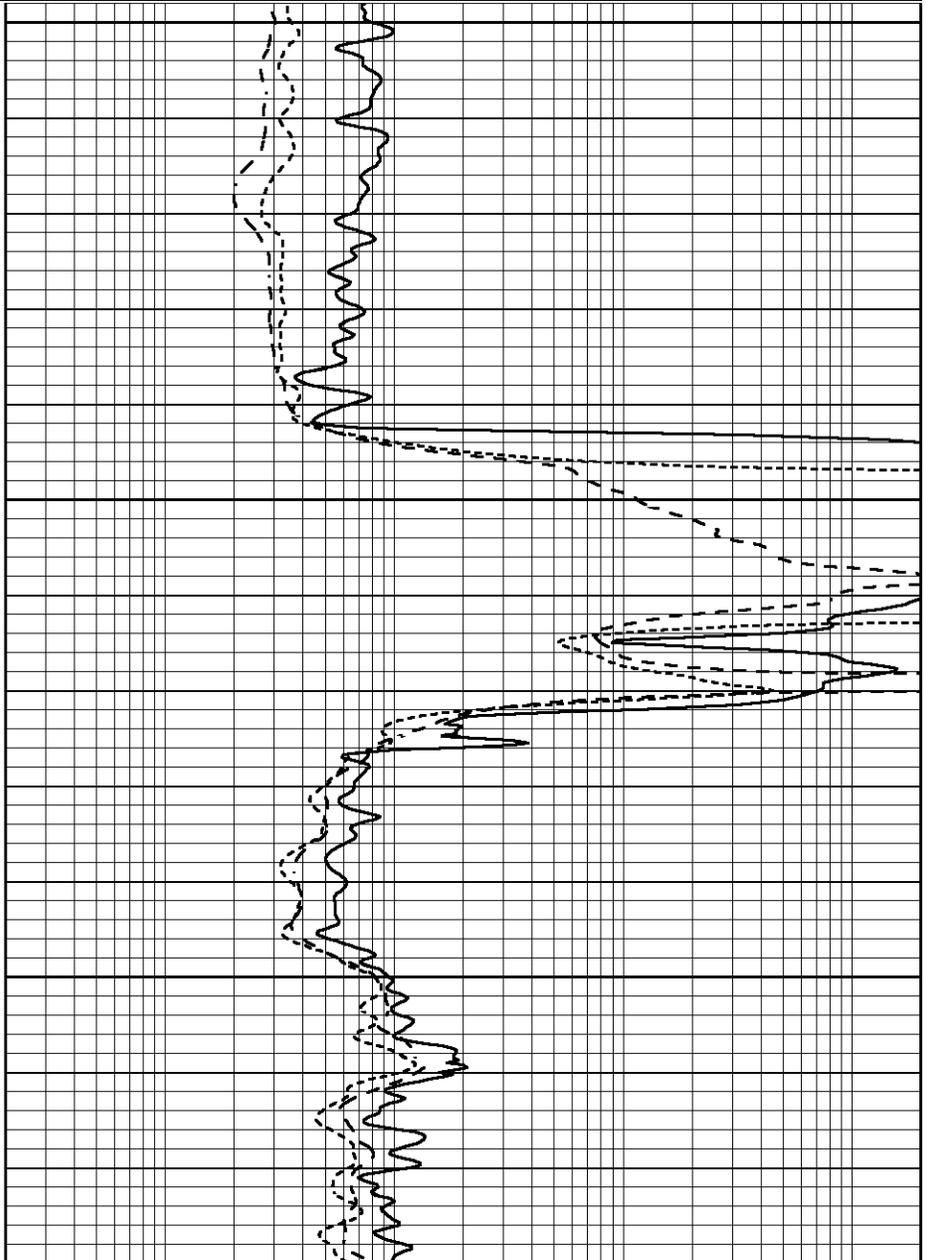
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



1700

1750

1800



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

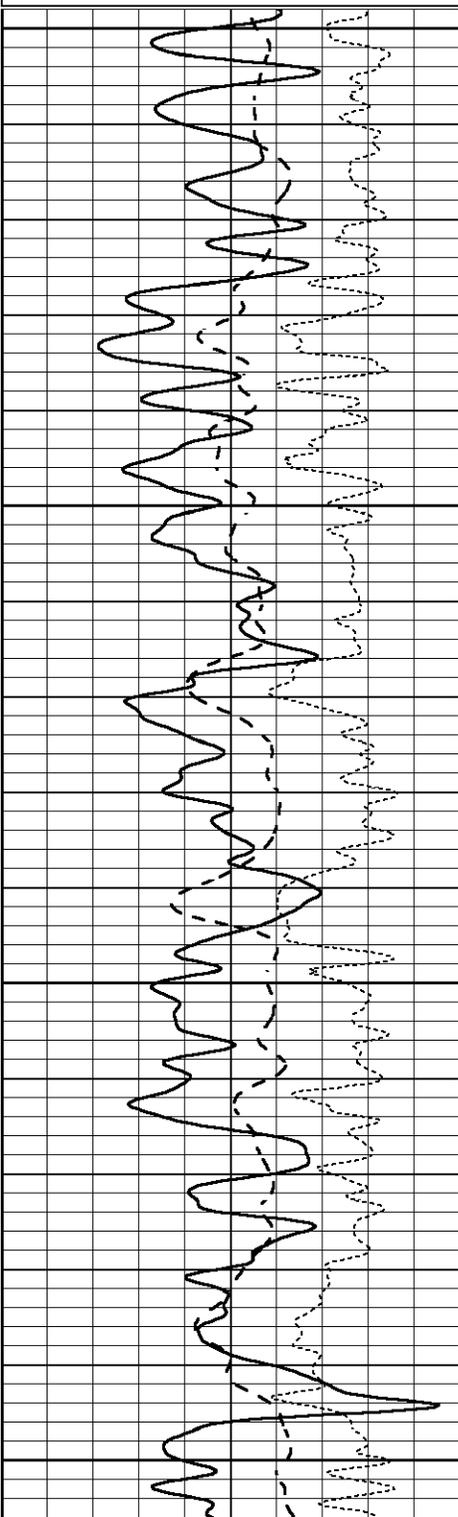


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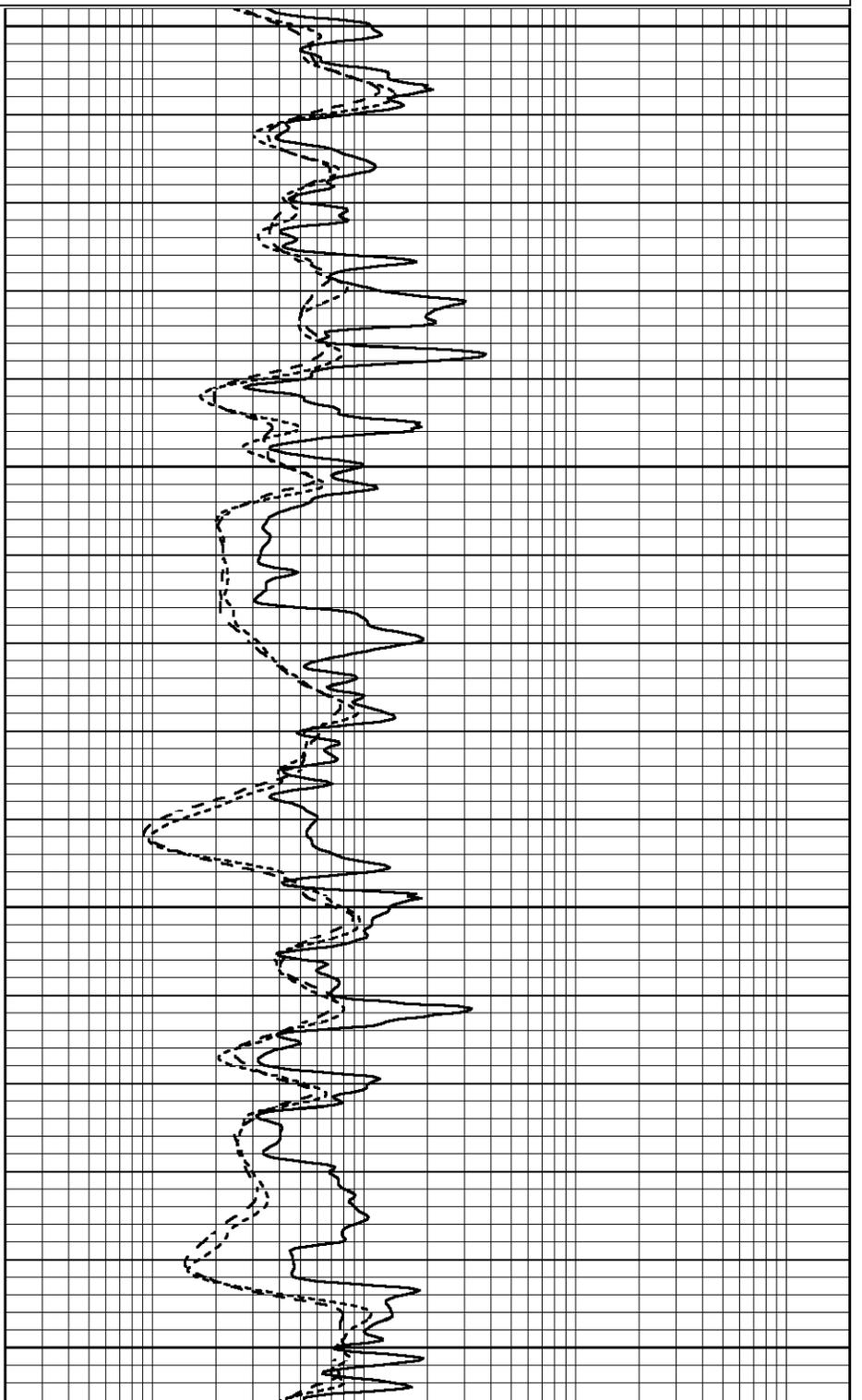
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Dataset Creation Mon Sep 25 03:11:55 2023  
Charted by Depth in Feet scaled 1:240

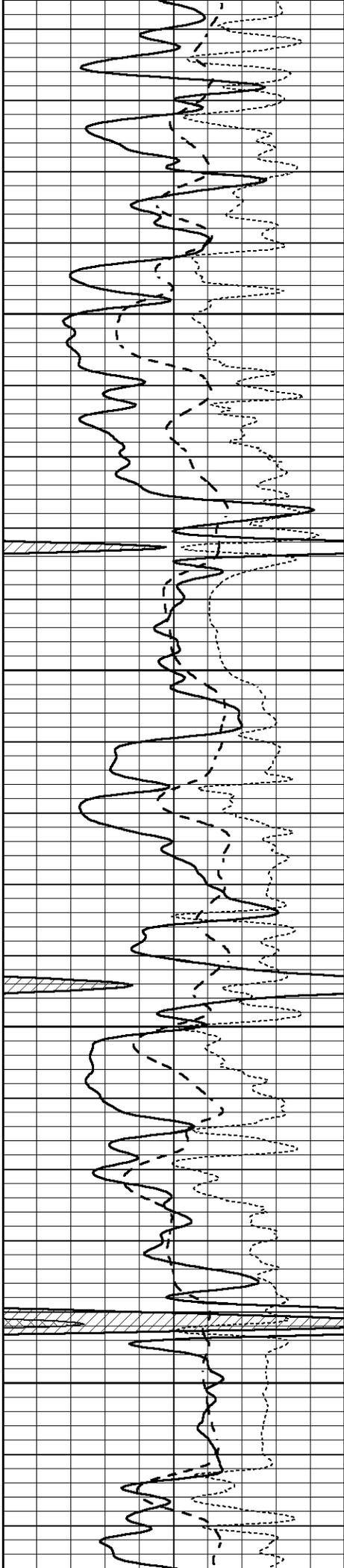
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



3000  
3050  
3100  
3150



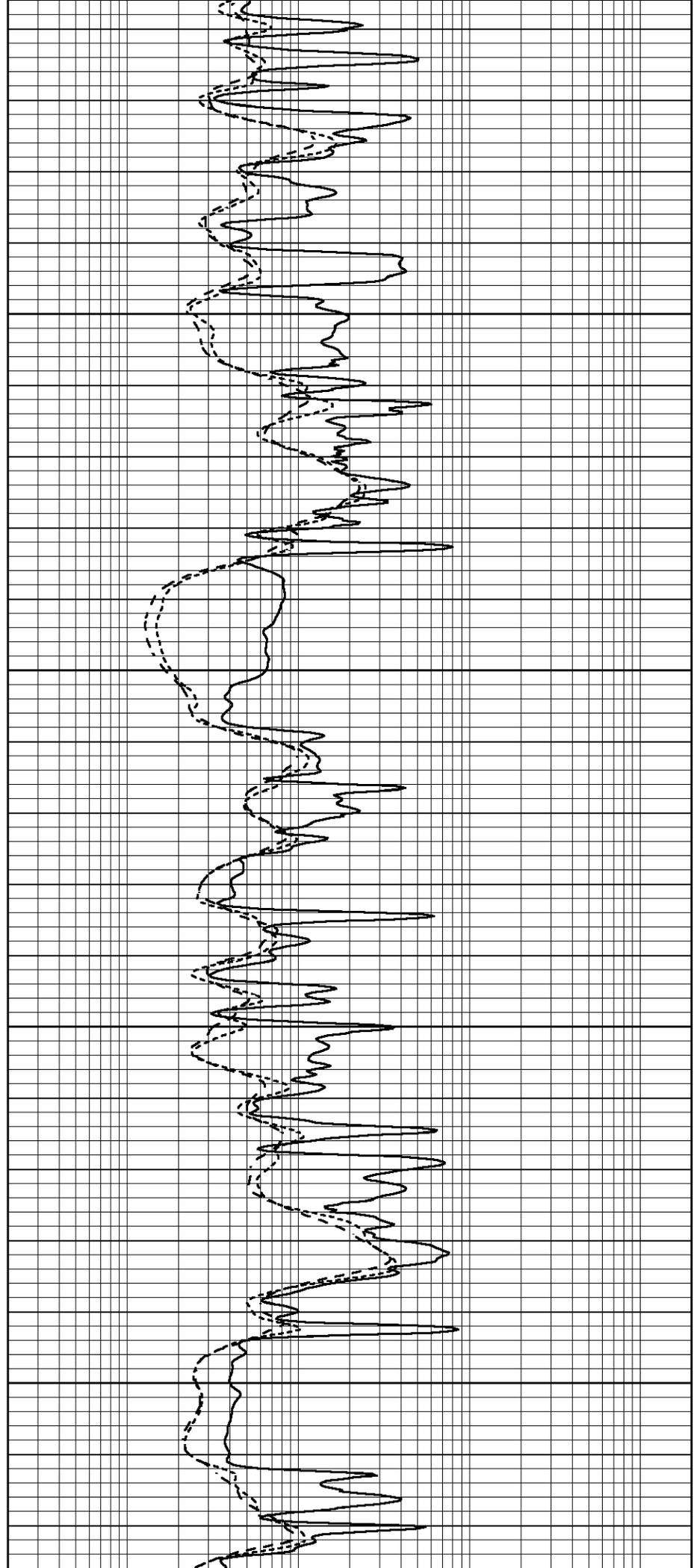


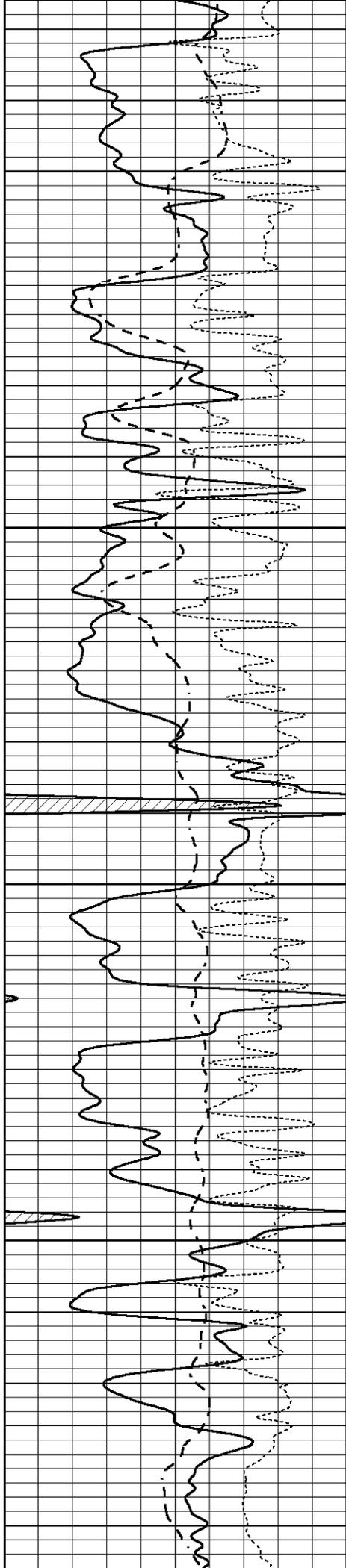
3200

3250

3300

3350



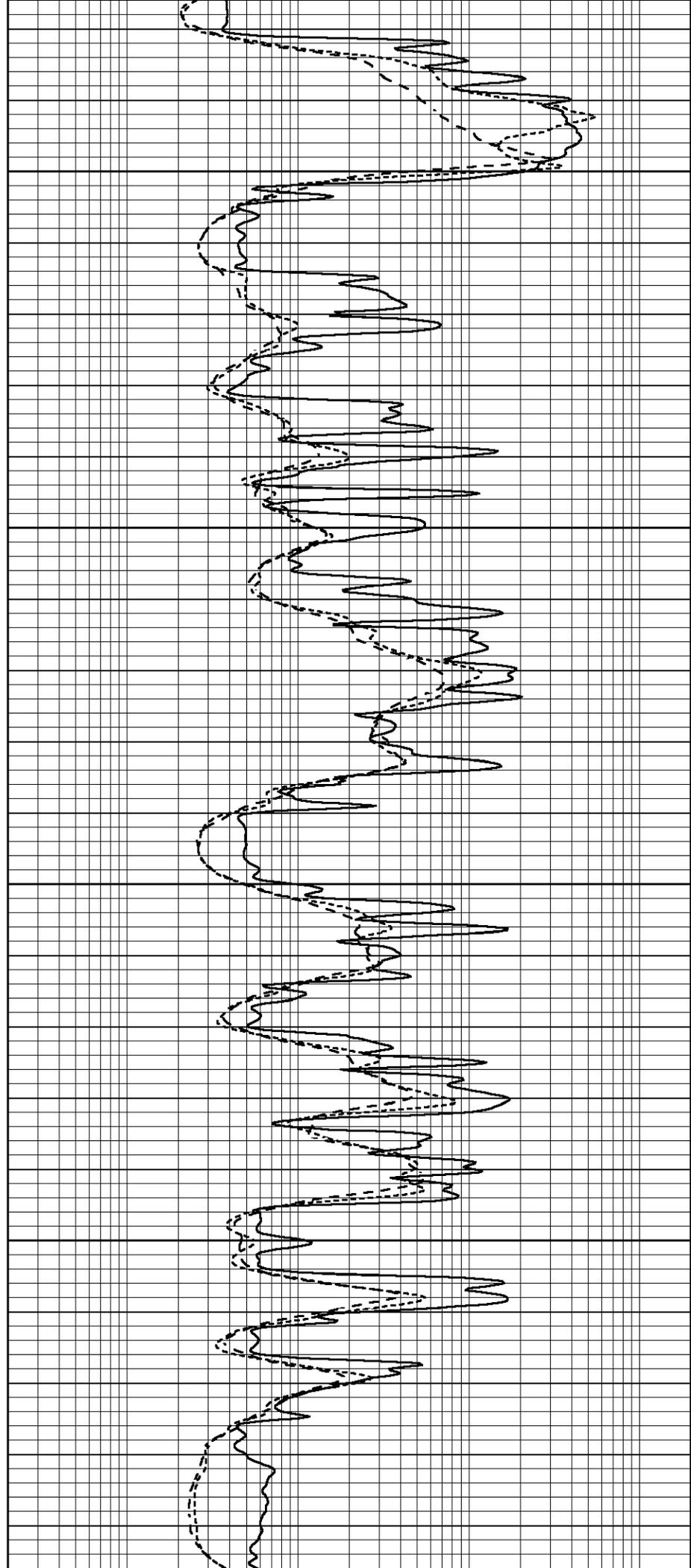


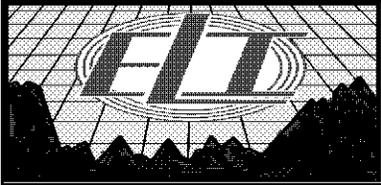
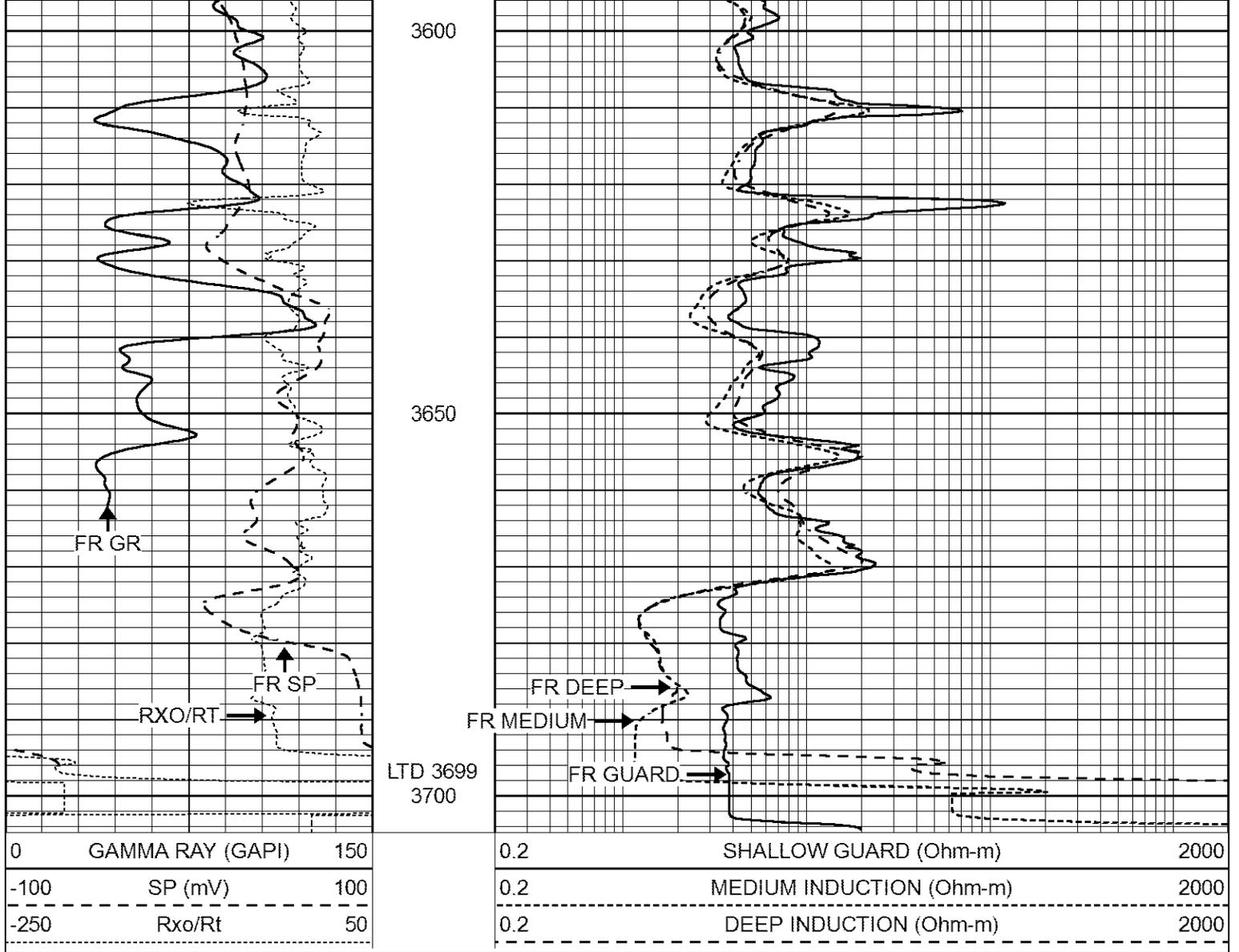
3400

3450

3500

3550

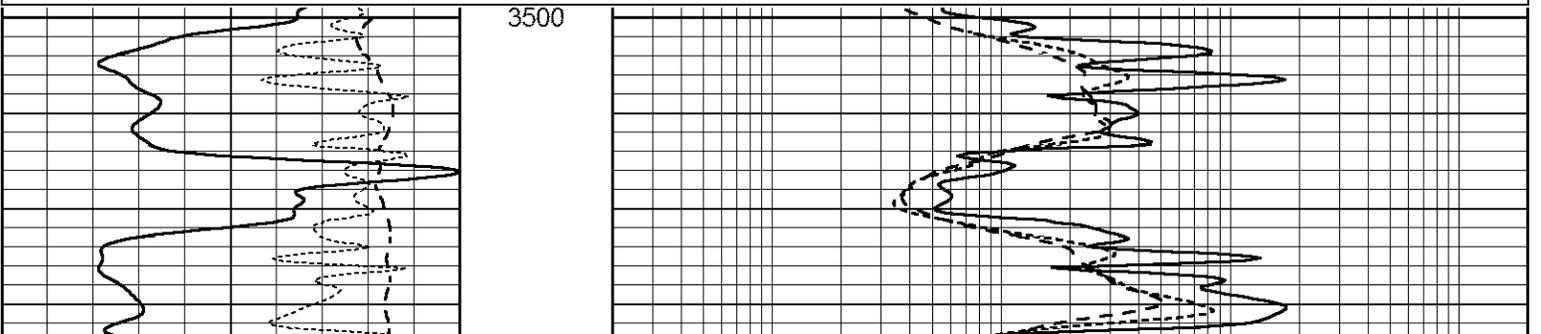


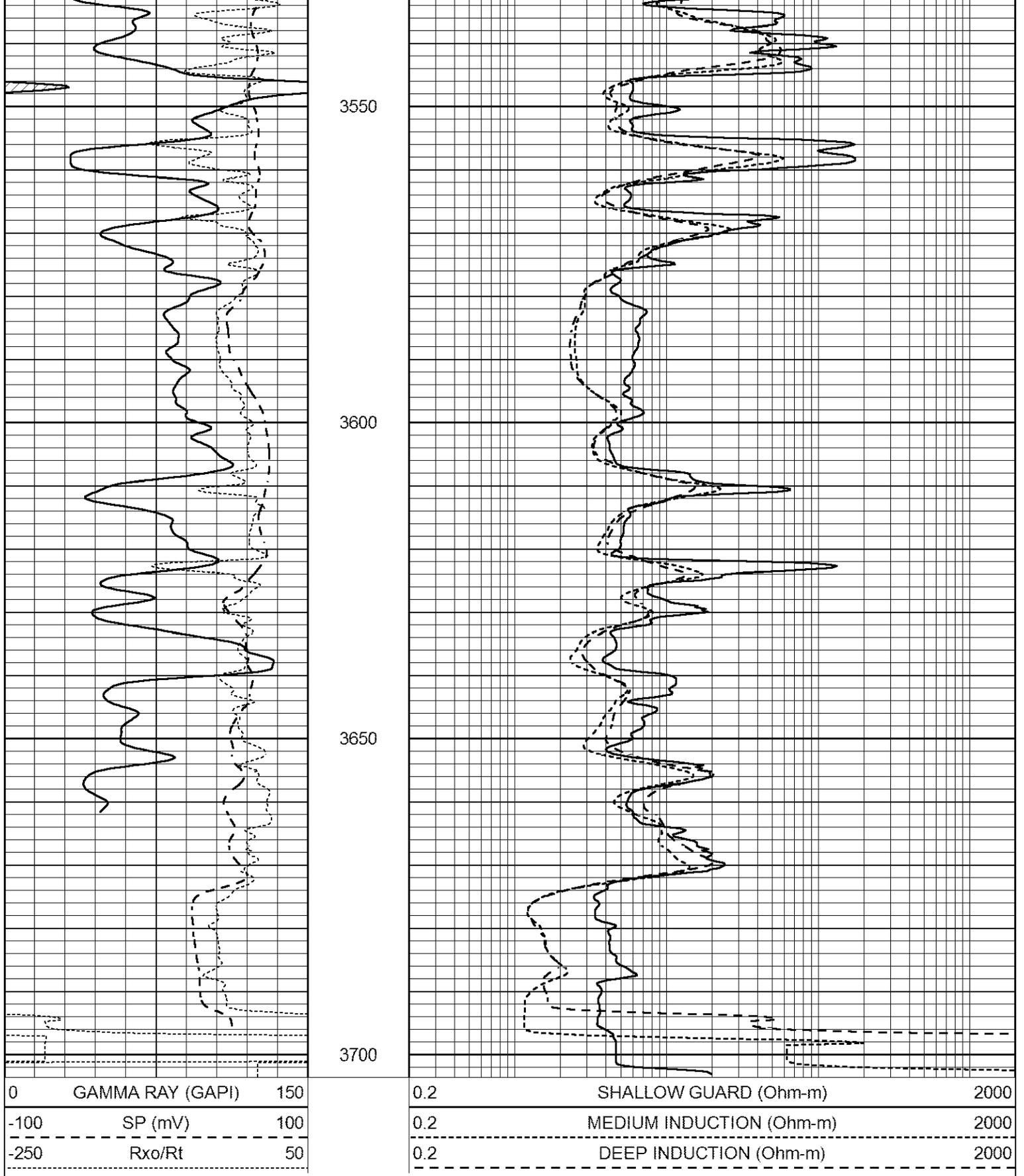


# REPEAT SECTION

Database File 8351ddn.db  
 Dataset Pathname pass2R.1  
 Presentation Format \_dil  
 Dataset Creation Mon Sep 25 03:34:23 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





Calibration Report

Database File 8351ddn.db  
 Dataset Pathname pass4D  
 Dataset Creation Mon Sep 25 03:11:55 2023

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe

Surface Cal Performed:  
 Downhole Cal Performed:  
 After Survey Verification Performed:

Sat Jul 29 01:57:42 2023  
 Tue Feb 19 11:44:24 2019  
 Tue Feb 19 11:44:27 2019

Surface Calibration								
Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	565.000	-9.000
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	530.000	-11.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	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			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report  
 Serial: 003      Model: PRB

Master Calibration					Performed Mon May 22 11:42:00 2023			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1512.3	7465.7	2749.0	2519.6				cps
Window 2	1398.8	6705.7	2507.3	2313.8				cps
Window 3	1289.2	5259.5	2124.1	2009.6				cps
Window 4	351.1	351.6	351.8	353.2				cps
Long Space	0.0	5306.9	1108.5	915.0				cps
Short Space	3.3	2239.9	1441.2	1212.0				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 44.3	Rib Slope	: 0.975	Density/Spine Ratio			: 0.541	
Spine Angle	: 74.3	Spine Slope	: 3.551	Spine Intercept			: -18.8	

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	0.0	0.0	0.0	0.0				cps
Window 2	0.0	0.0	0.0	0.0				cps
Window 3	0.0	0.0	0.0	0.0				cps
Window 4	0.0	0.0	0.0	0.0				cps
Long Space	0.0	0.0	0.0	0.0				cps
Short Space	0.0	0.0	0.0	0.0				cps

Measured Rho	0.0000	0.0000	0.0000	g/cc
Measured Correction	0.0000	0.0000	0.0000	g/cc
Measured Pe		0.0000	0.0000	

After Survey Verification

Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

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: 46001  
 Tool Model: Probe1  
 Performed: Thu Apr 20 09:55:57 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 0.4300 GAPI/cps