



DUAL INDUCTION LOG

Company JASPAR COMPANY, INC.		Company JASPAR COMPANY, INC.	
Well BJW #4		Well BJW #4	
Field EDGAR SOUTHWEST		Field EDGAR SOUTHWEST	
County ROOKS		County ROOKS	
State KANSAS		State KANSAS	
Location: API #: 15-163-24485-0000		Other Services	
SEC 10 TWP 6S RGE 20W		CDL/CNL MEL/SON	
Permanent Datum GROUND LEVEL Elevation 2159		Elevation	
Log Measured From KELLY BUSHING 7' A.G.L		K.B. 2166	
Drilling Measured From KELLY BUSHING		D.F. 2164	
		G.L. 2159	
Date 7/17/23	Run Number ONE		
Depth Driller	3650		
Depth Logger	3644		
Bottom Logged Interval	3642		
Top Log Interval	00		
Casing Driller	8 5/8 @ 218		
Casing Logger	218		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 900 PPM	
Density / Viscosity	9.2/58		
pH / Fluid Loss	11/7.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.40 @ 74F		
Rmf @ Meas. Temp	1.05 @ 74F		
Rmc @ Meas. Temp	1.68 @ 74F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.917 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	8:30 P.M.		
Maximum Recorded Temperature	113F		
Equipment Number	8916		
Location	HAYS, KANSAS		
Recorded By	COLE ROBEN		
Witnessed By	CAMERON BRIN		

<<< Fold Here >>>

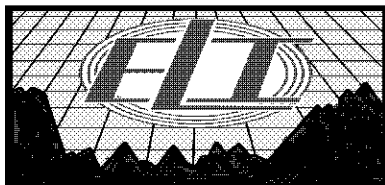
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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:

NINE MILES NORTH OF STOCKTON, KANSAS TO 'A' ROAD, WEST THIRTEEN MILES ON 'A' ROAD TO 5 ROAD, SOUTH ON 5 ROAD ONE MILE AND A HALF, WEST INTO

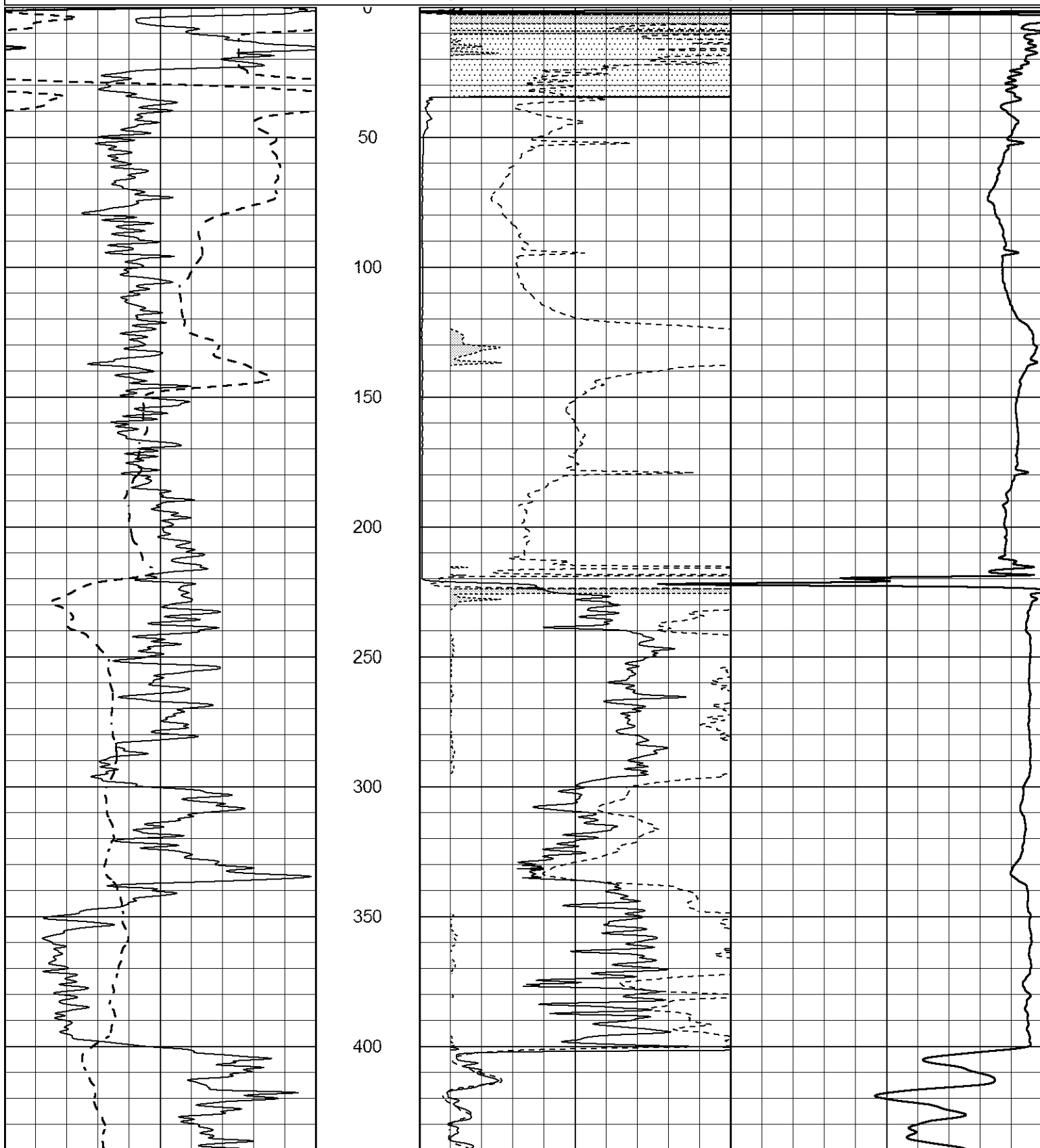


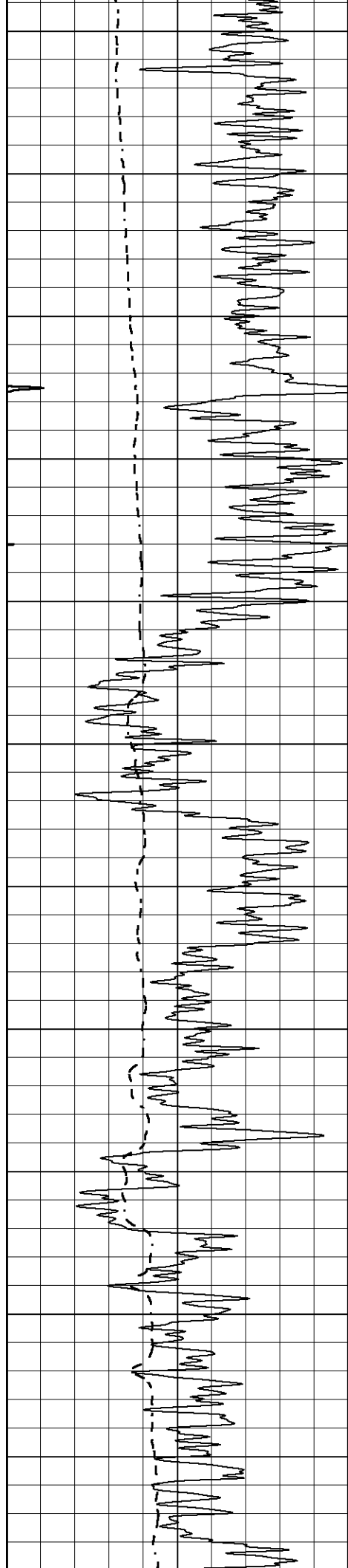
MAIN SECTION

Database File 7704ddn.db
Dataset Pathname pass3M
Presentation Format _dil2
Dataset Creation Mon Jul 17 21:46:17 2023
Charted by Depth in Feet scaled 1:600

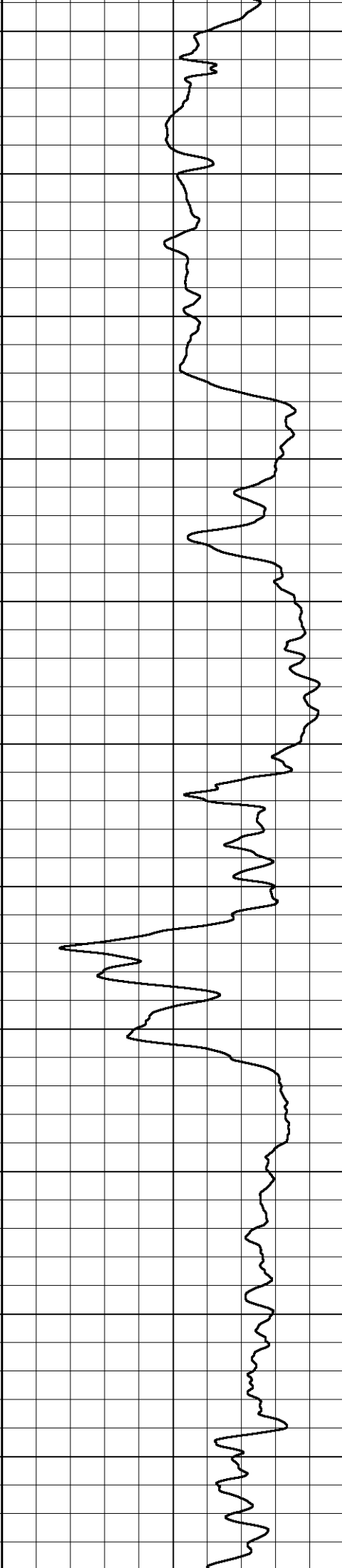
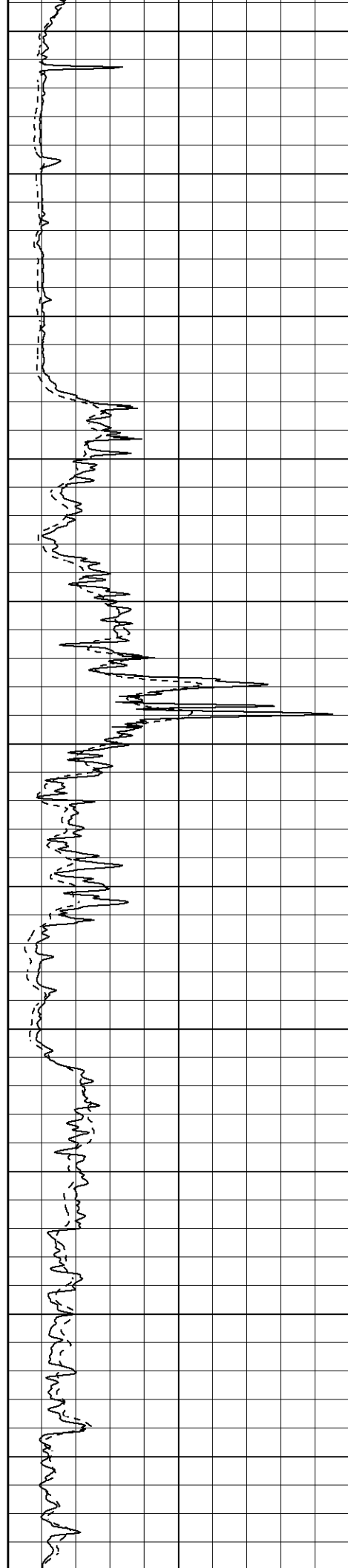
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

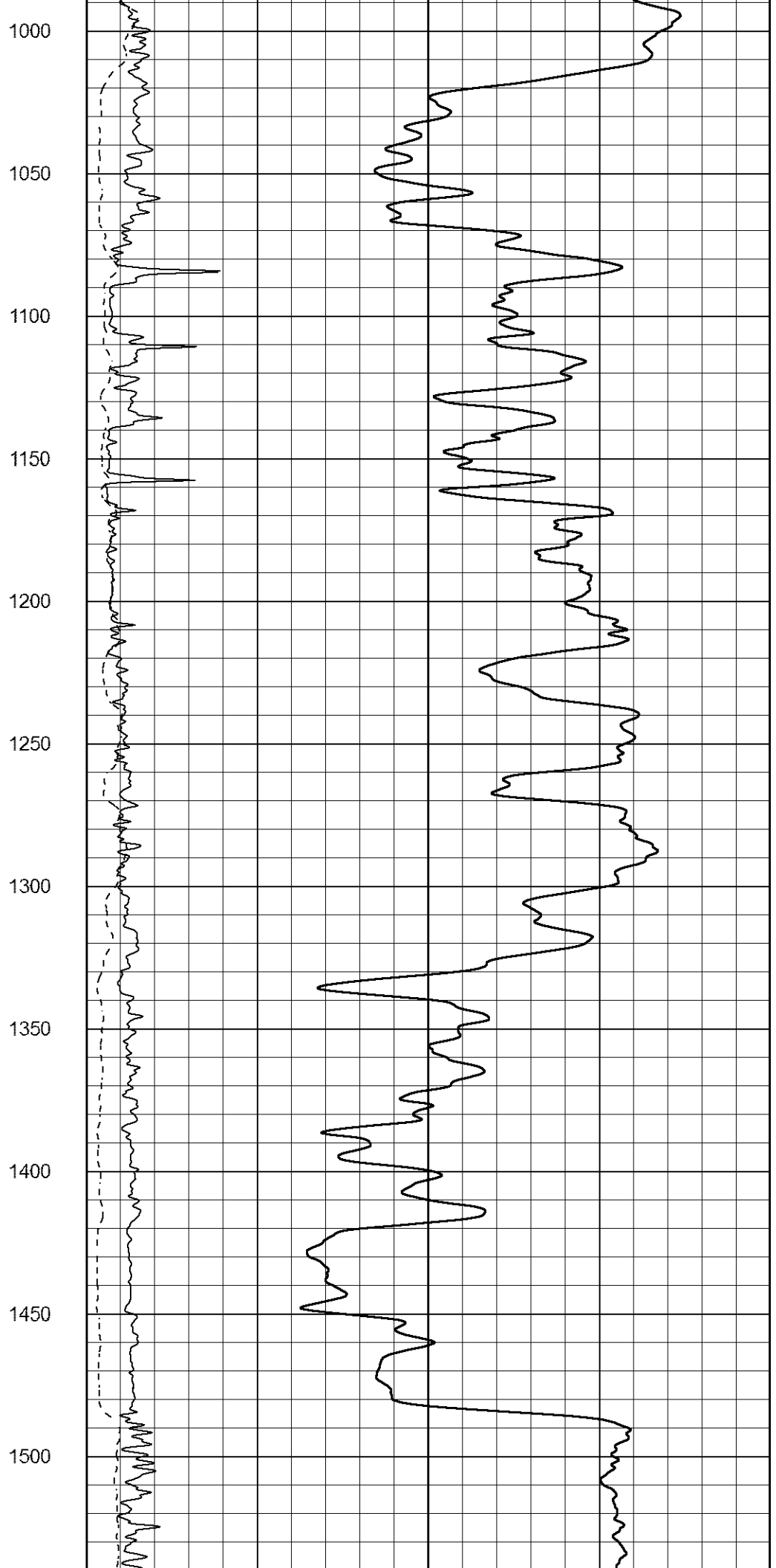
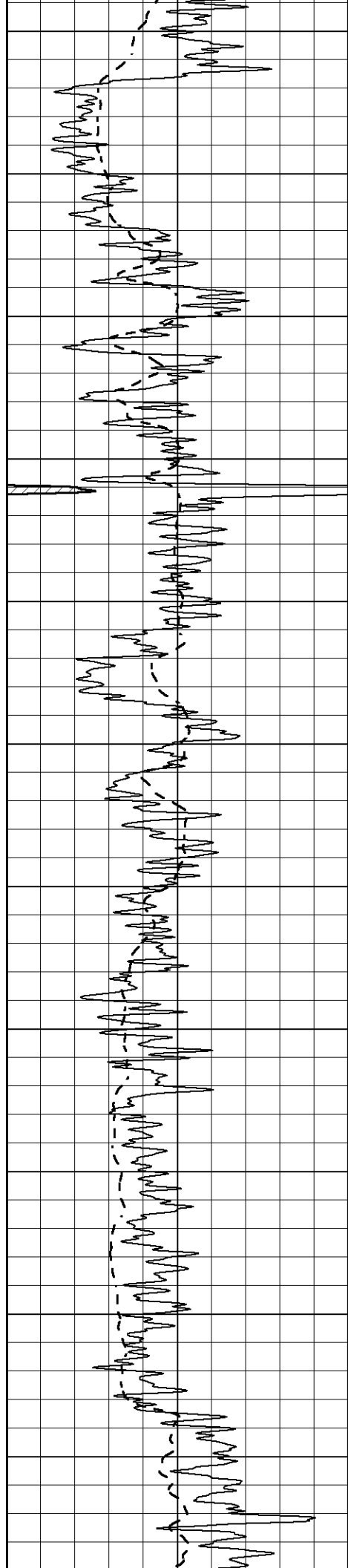
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

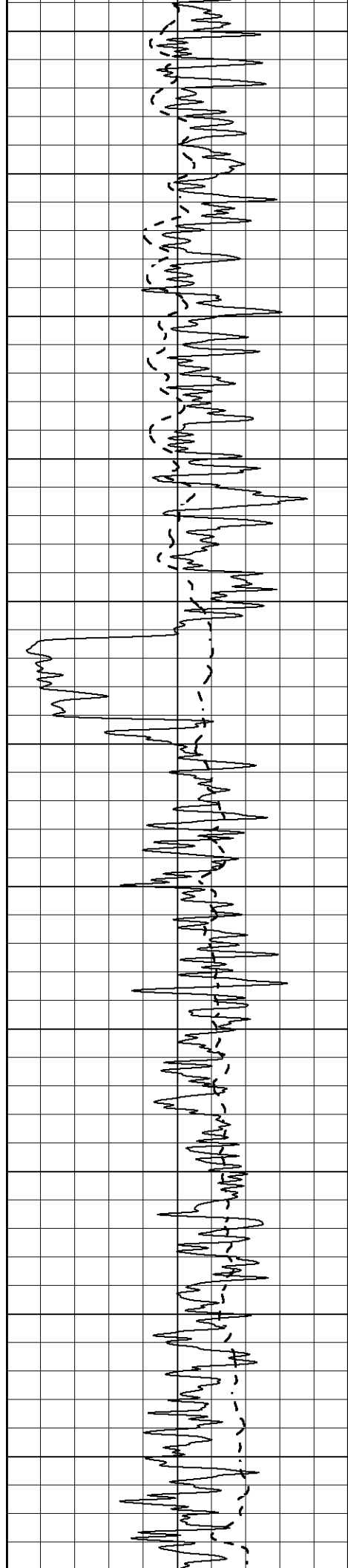




450
500
550
600
650
700
750
800
850
900
950







1550

1600

1650

1700

1750

1800

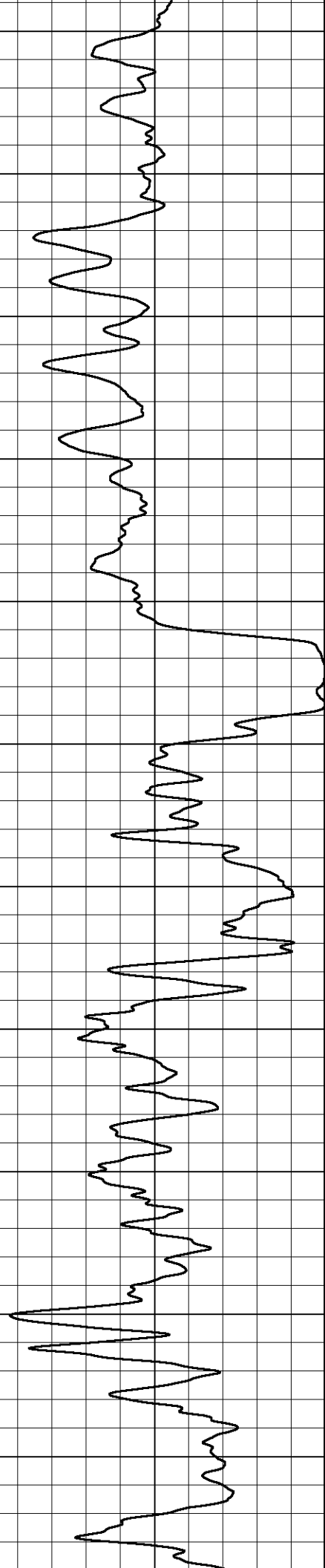
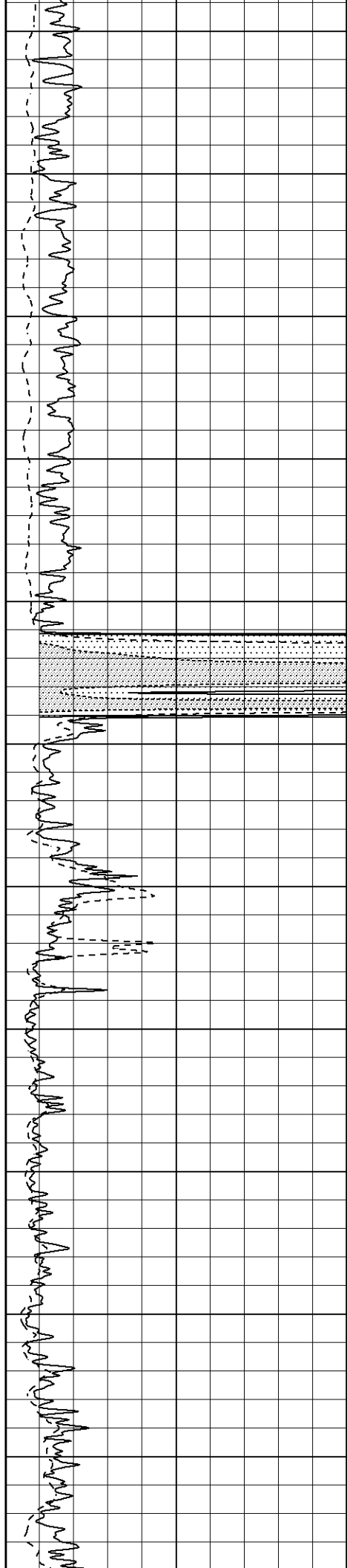
1850

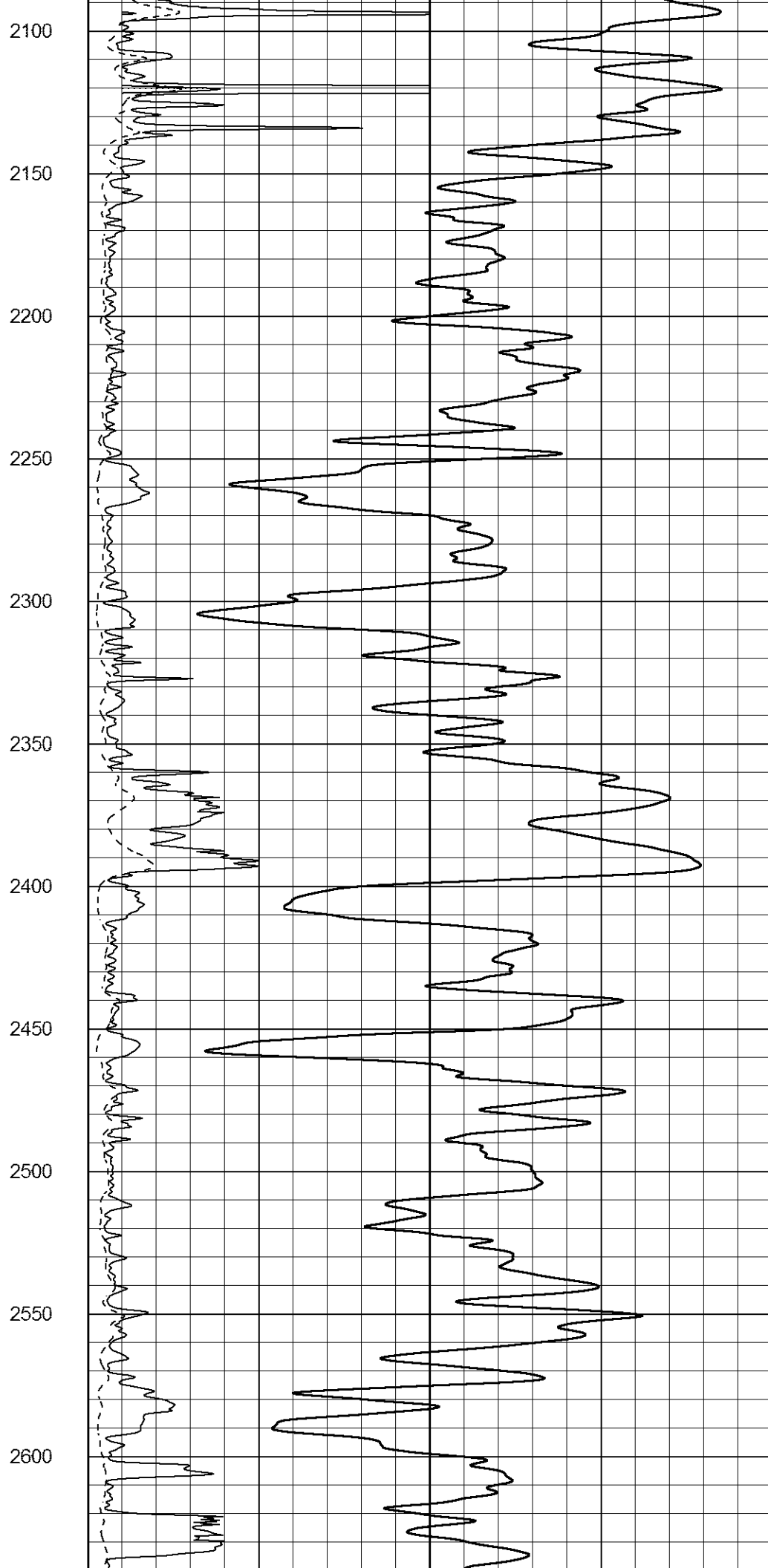
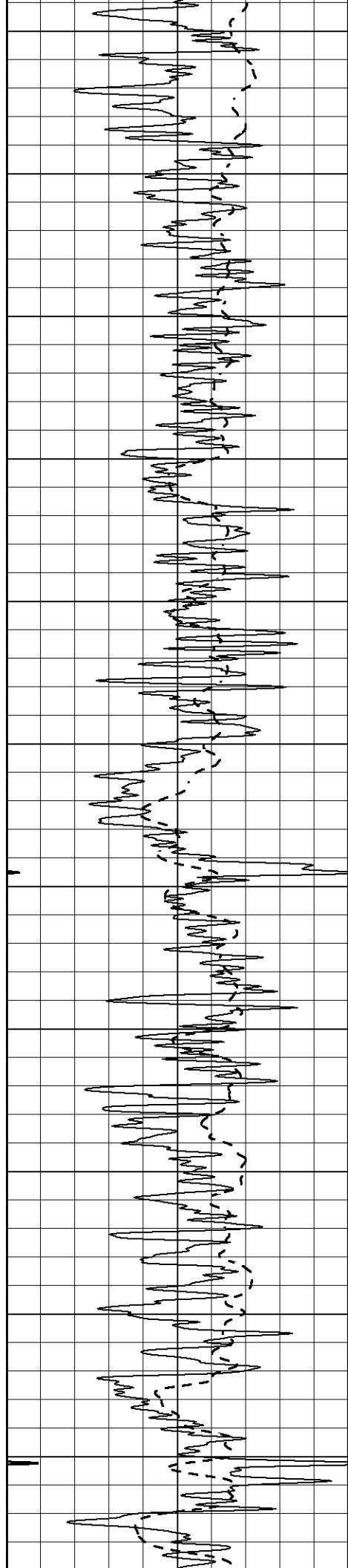
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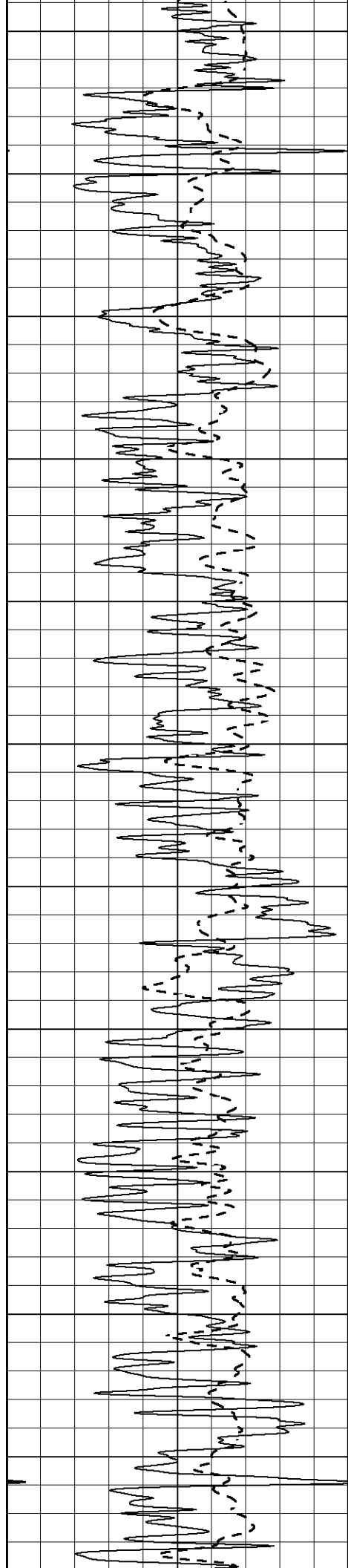
1950

2000

2050







2650

2700

2750

2800

2850

2900

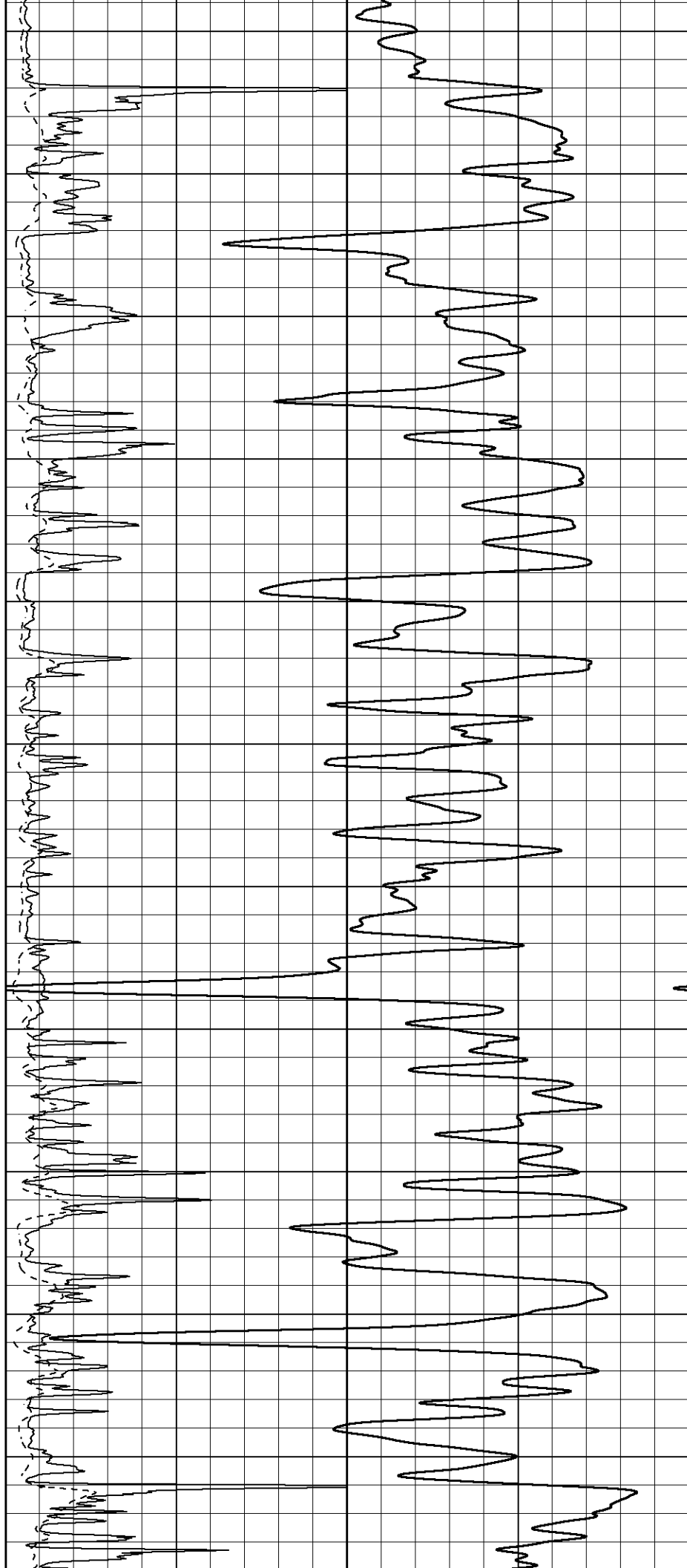
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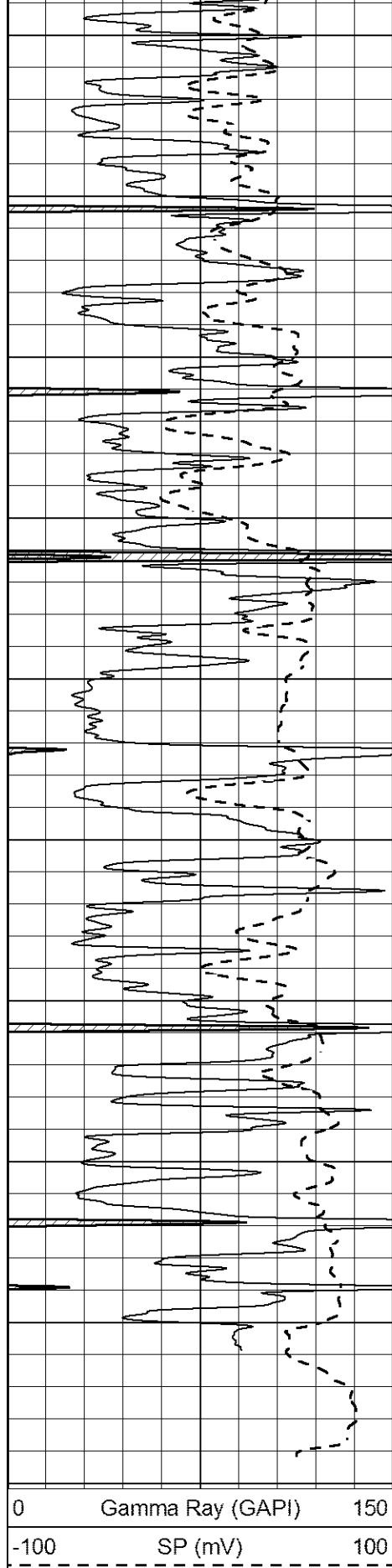
3000

3050

3100

3150





3200

3250

3300

3350

3400

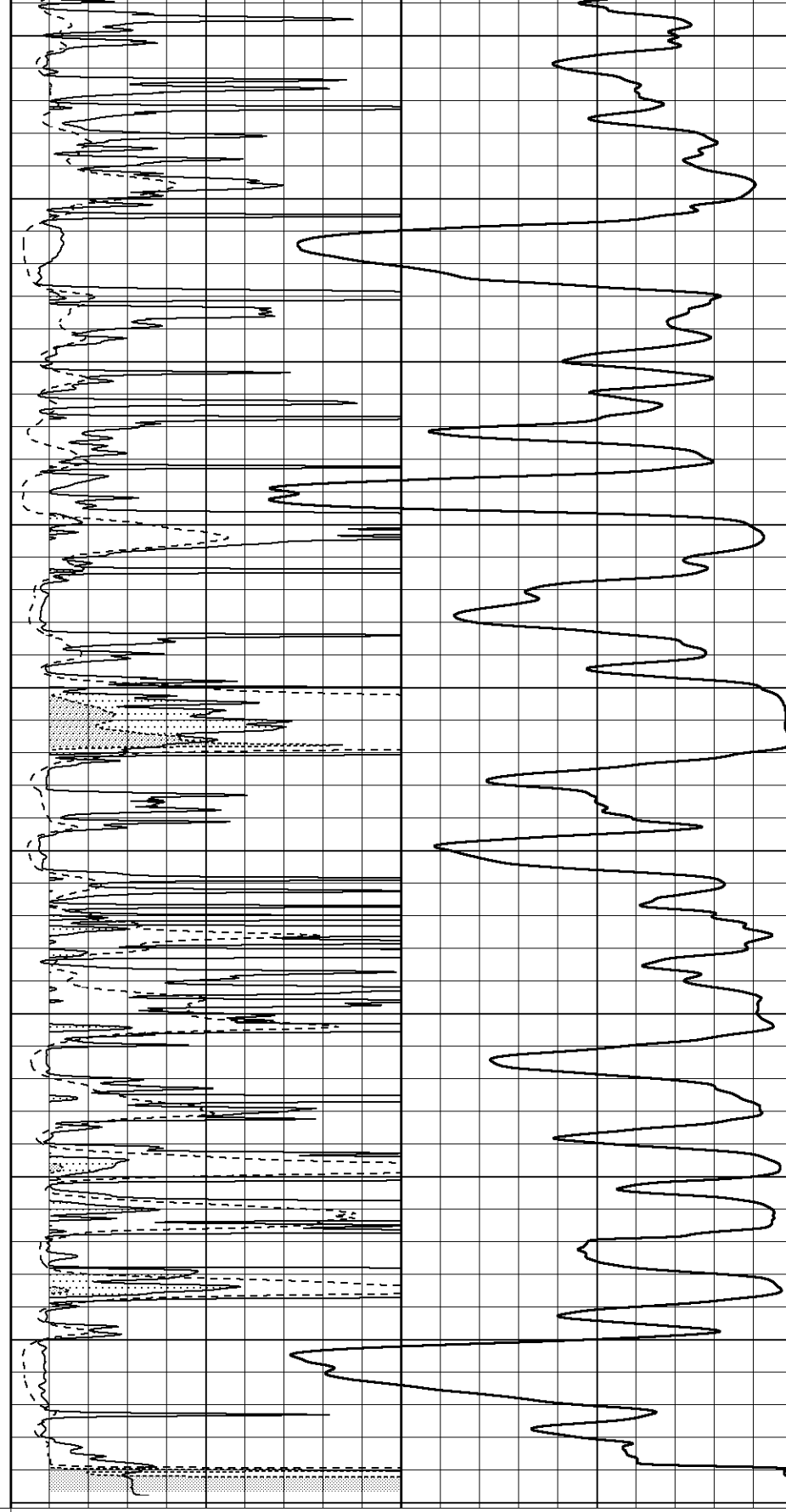
3450

3500

3550

3600

3650



1000

CILD (mmho/m)

0

0

RLL3 (Ohm-m)

50

0

Deep Induction (Ohm-m)

50

50

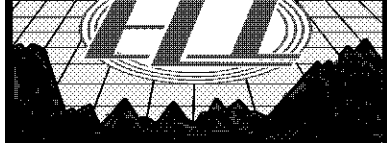
RILD X10 (Ohm-m)

500

50

RLL3 X10 (Ohm-m)

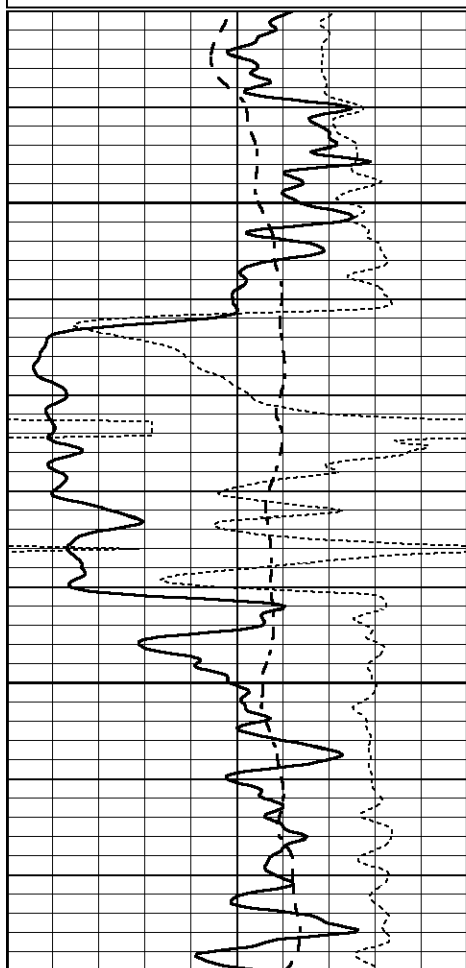
500



ANHYDRITE

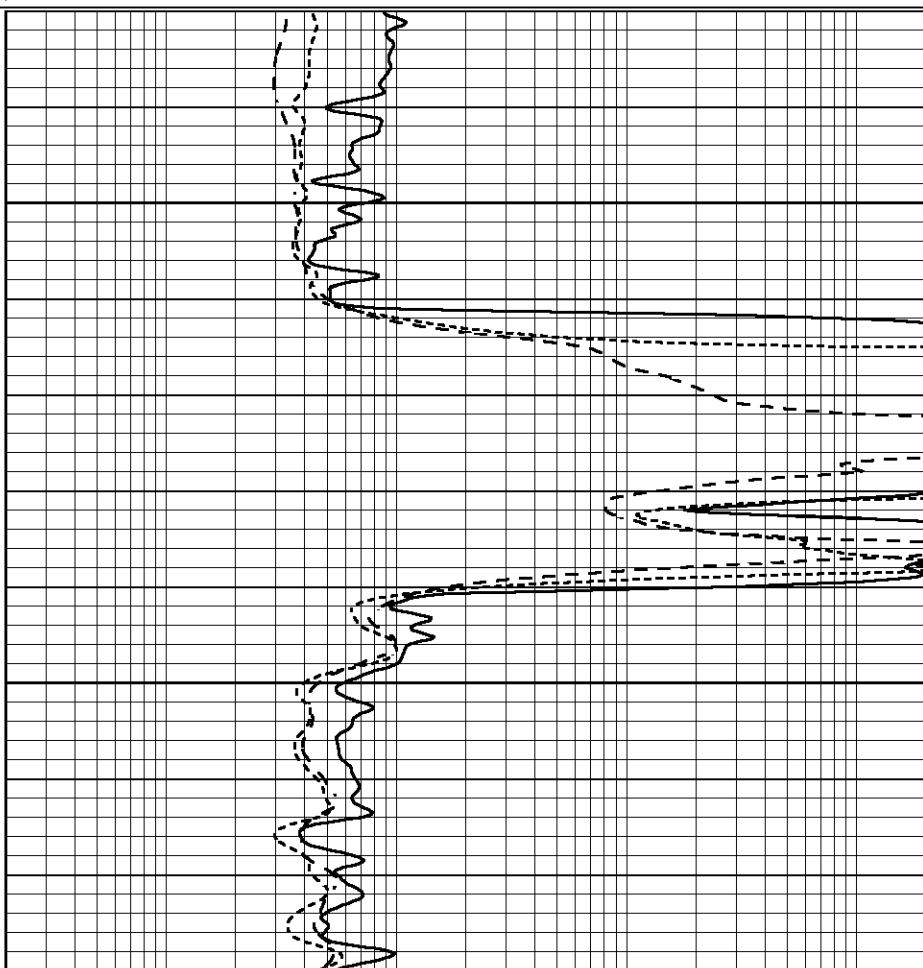
Database File 7704ddn.db
Dataset Pathname pass3A
Presentation Format _dil
Dataset Creation Mon Jul 17 21:27:18 2023
Charted by Depth in Feet scaled 1:240

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



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



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



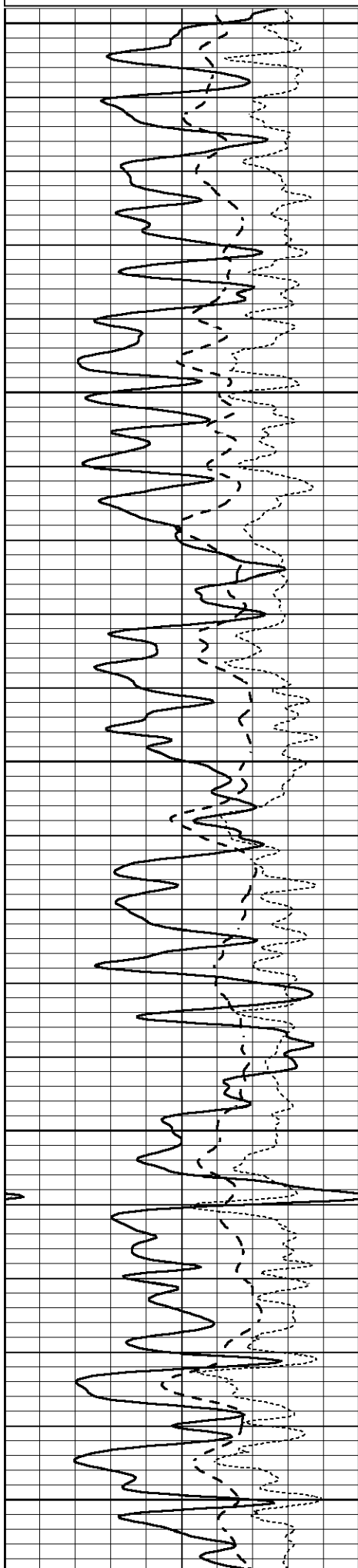
MAIN SECTION

Database File 7704ddn.db
Dataset Pathname pass3D
Presentation Format _dil
Dataset Creation Mon Jul 17 21:34:19 2023
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100

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

100 0.2 100
-250 Rxo/Rt 50



3000

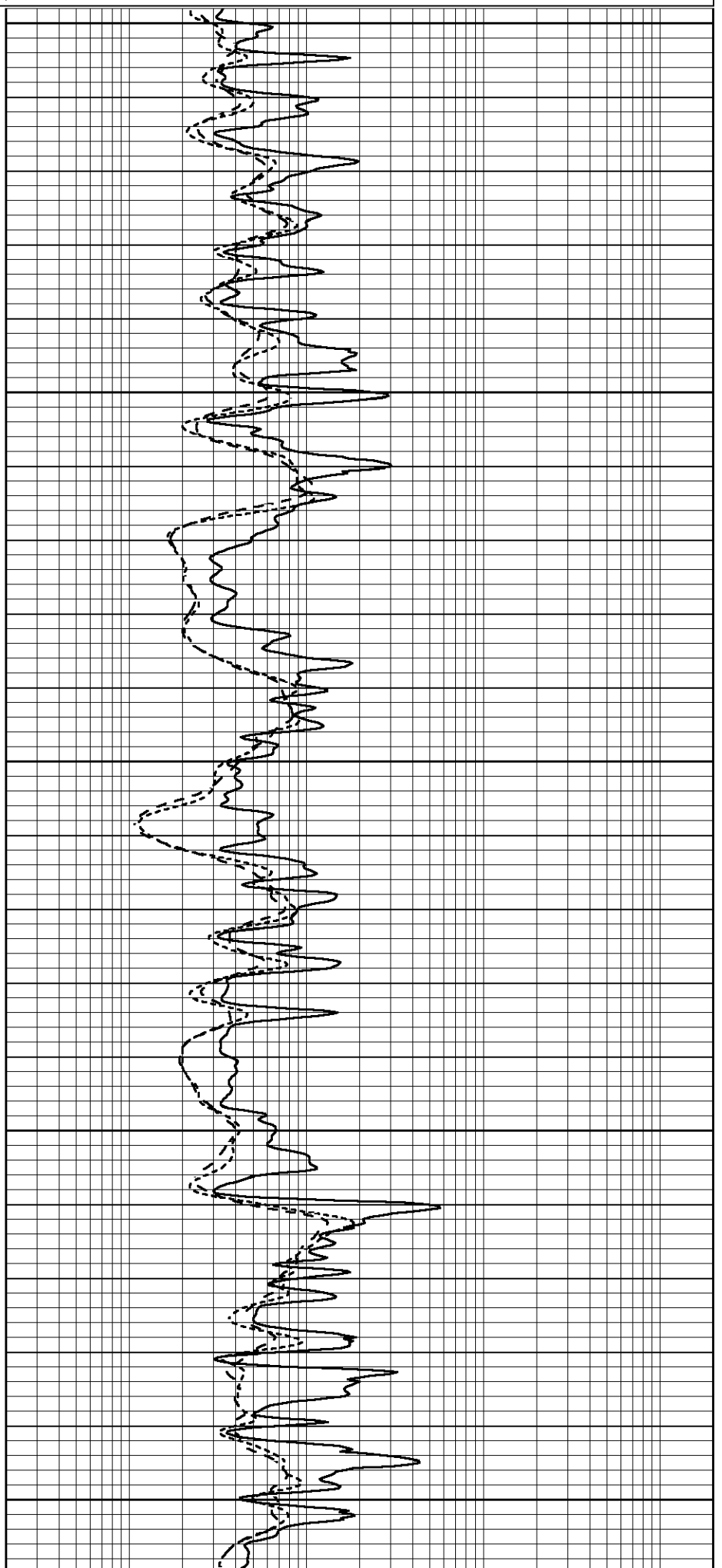
3050

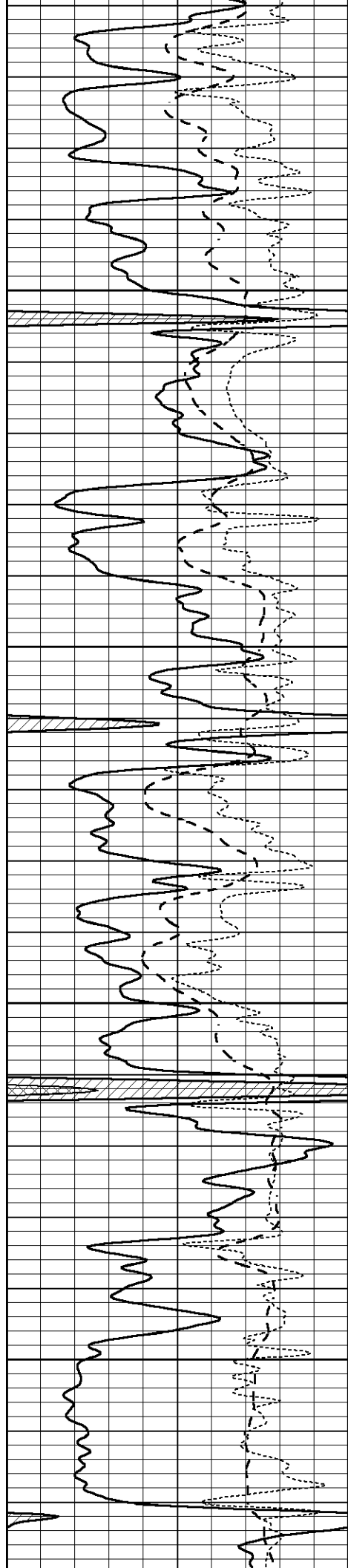
3100

3150

3200

0.2 2000
0.2 DEEP INDUCTION (Ohm-m) 2000



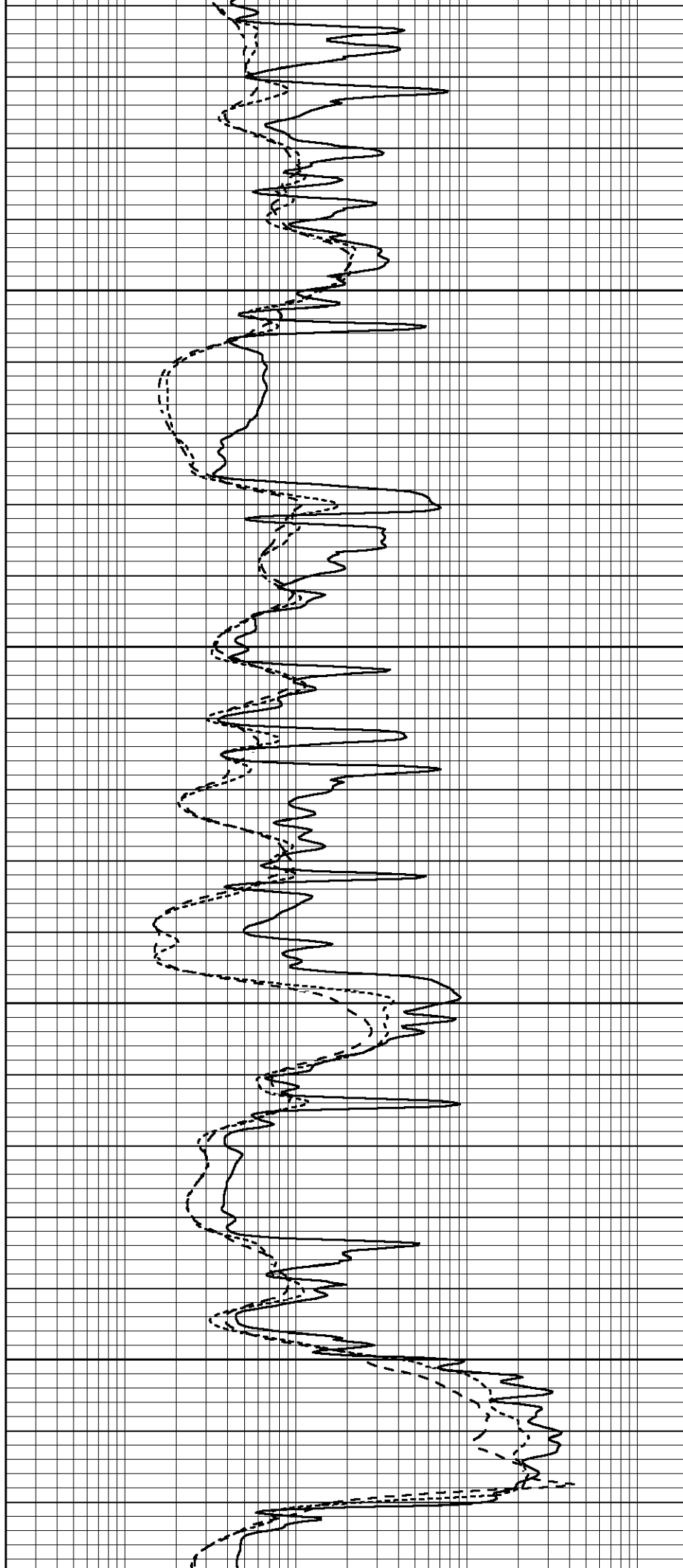


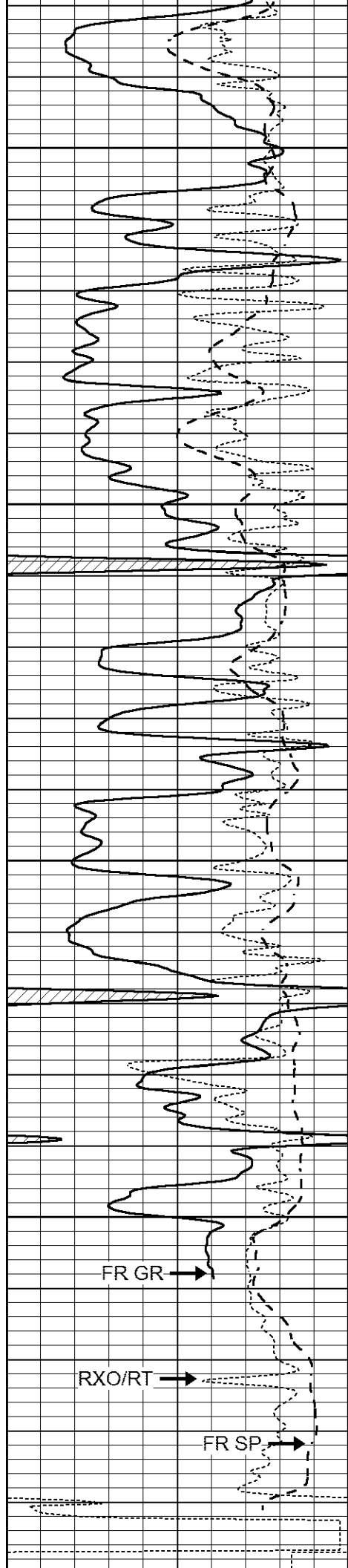
3250

3300

3350

3400





3450

3500

3550

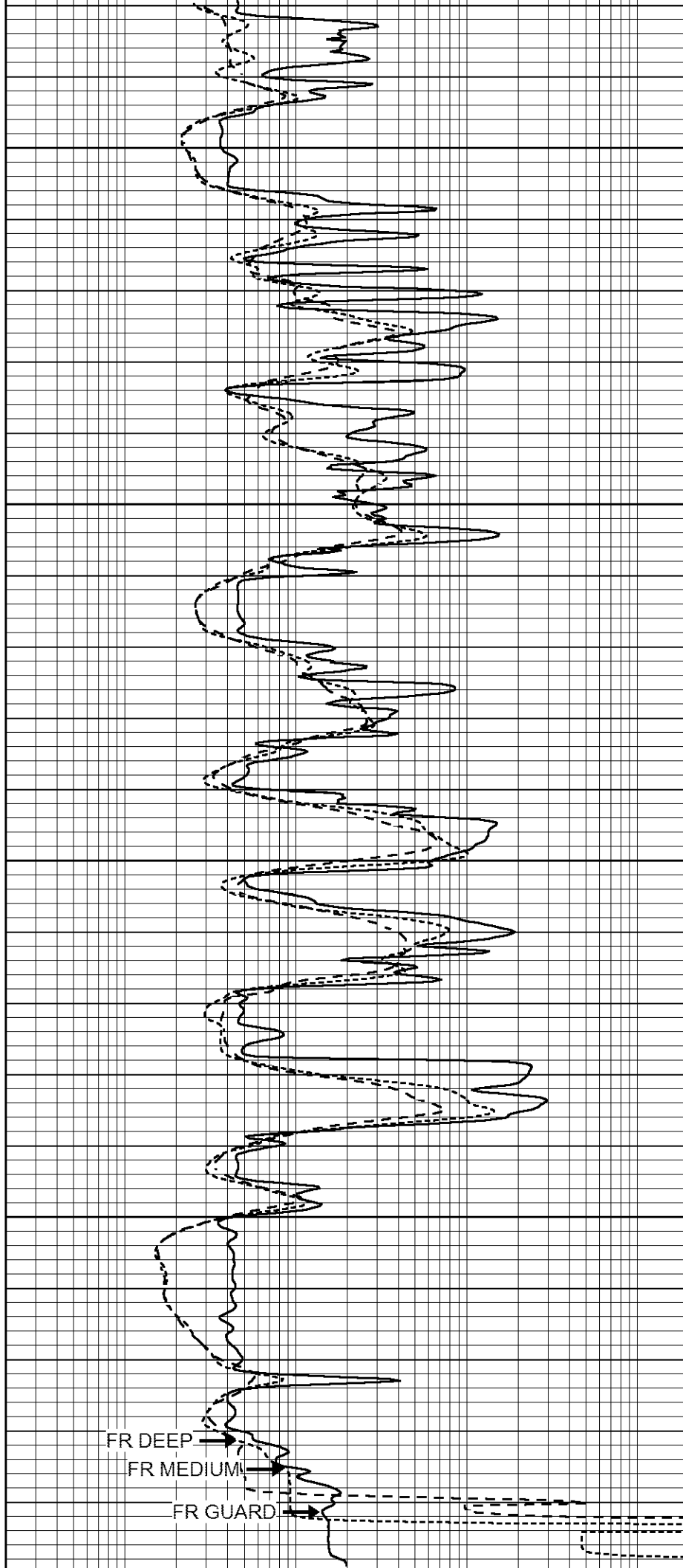
3600

FR GR →

RXO/RT →

FR SP →

LTD 3644

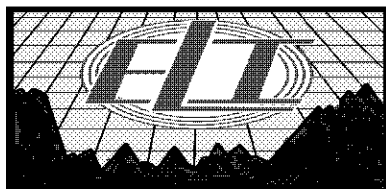


FR DEEP →

FR MEDIUM →

FR GUARD →

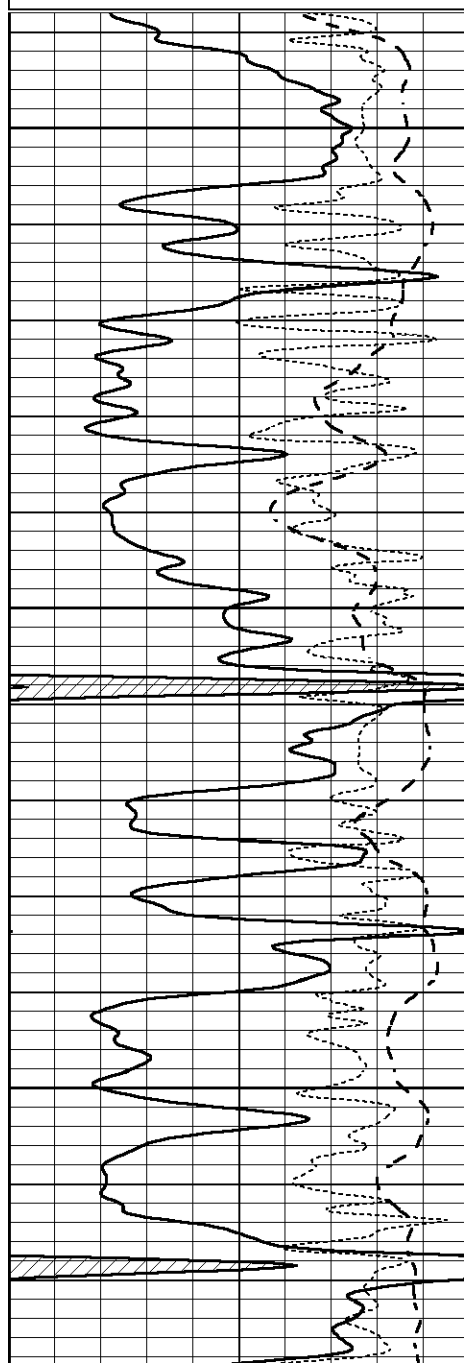
0	GAMMA RAY (GAPI)	150	3650	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100		0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50		0.2	DEEP INDUCTION (Ohm-m)	2000



REPEAT SECTION

Database File 7704ddn.db
 Dataset Pathname pass2R
 Presentation Format _dil
 Dataset Creation Mon Jul 17 21:42:10 2023
 Charted by Depth in Feet scaled 1:240

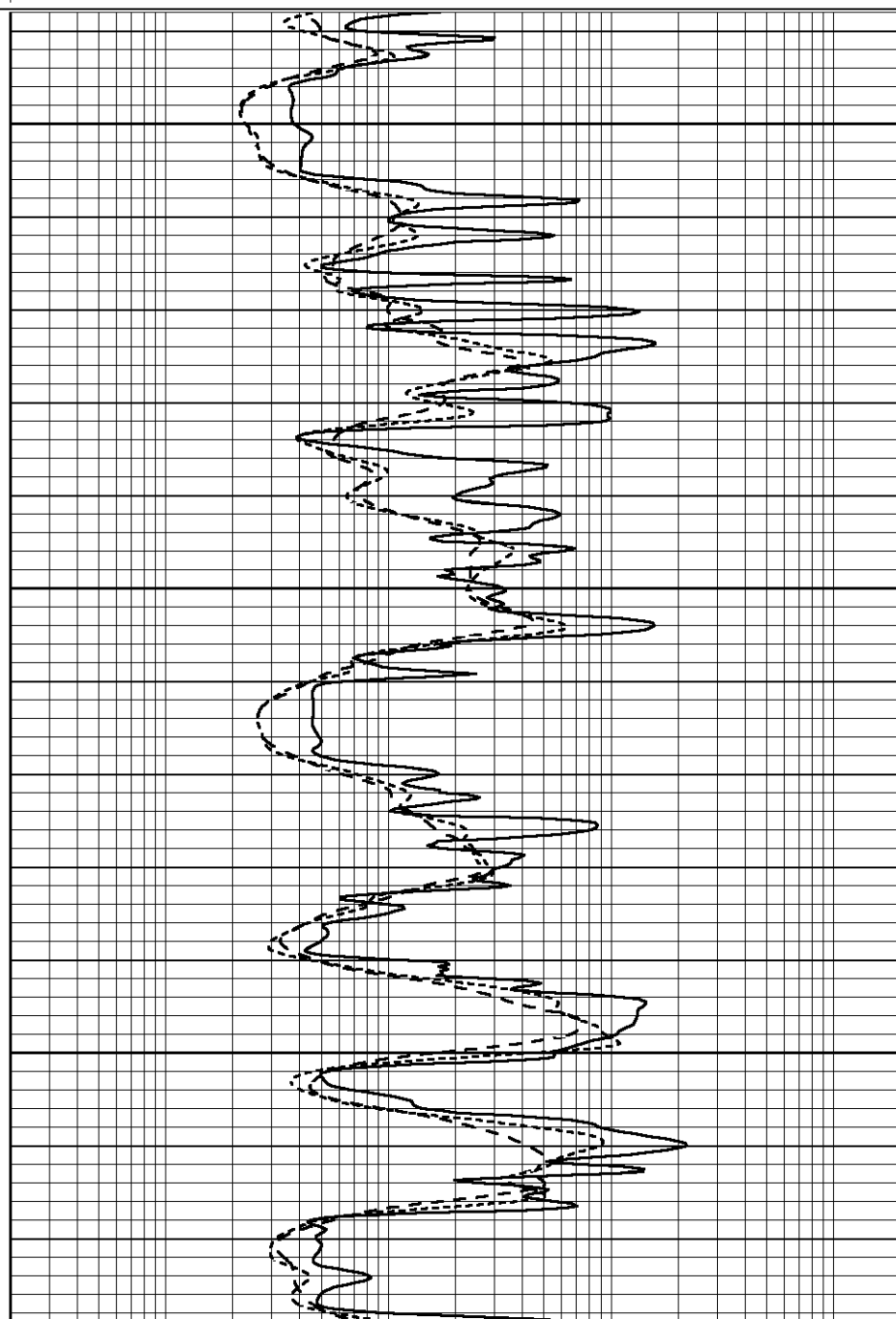
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

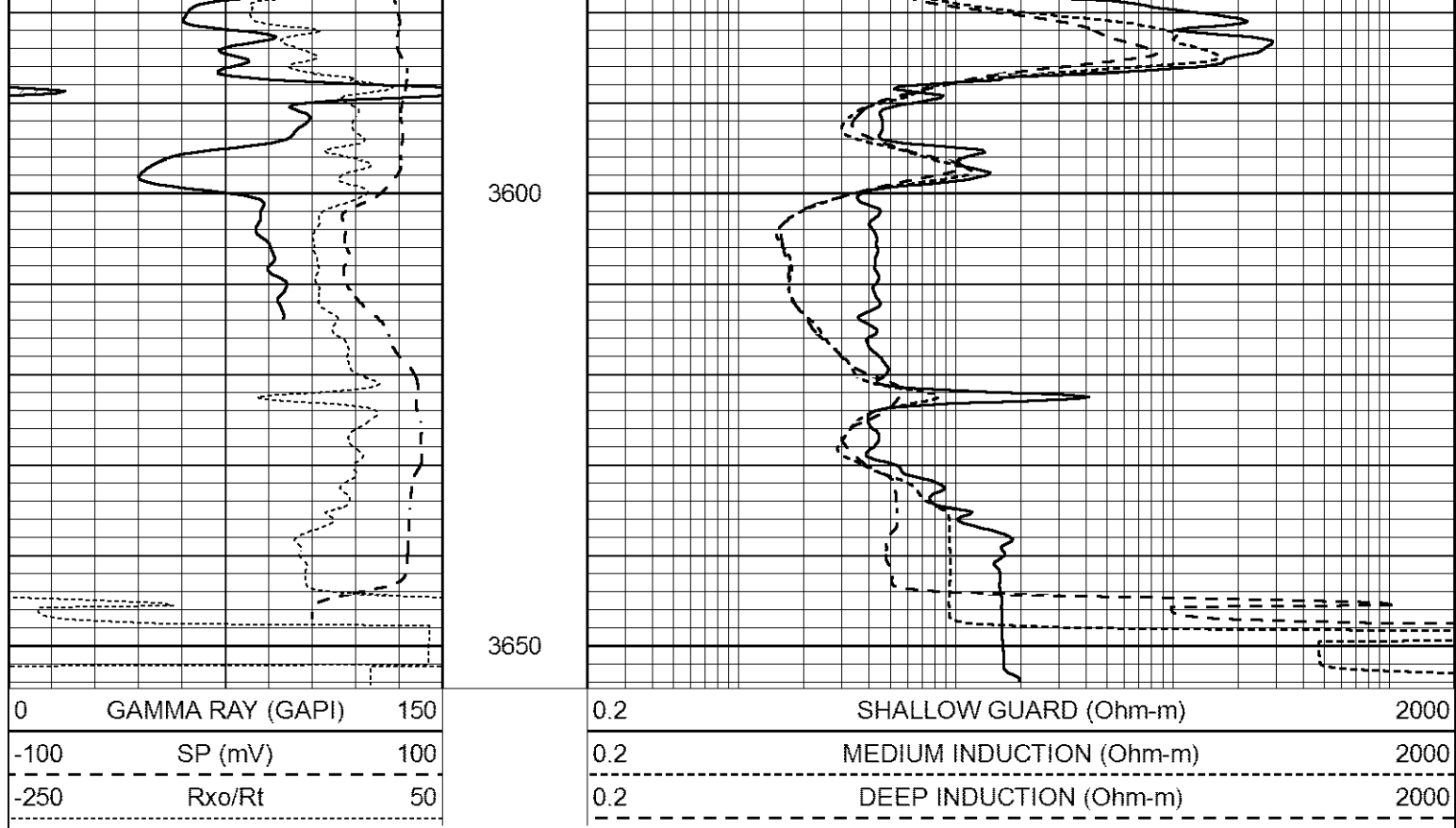


3450

3500

3550





Calibration Report									
Database File	7704ddn.db								
Dataset Pathname	pass3M								
Dataset Creation	Mon Jul 17 21:46:17 2023								
Dual Induction Calibration Report									
Serial-Model:					FW1410-55-Probe				
Surface Cal Performed:					Thu Jun 15 08:08:21 2023				
Downhole Cal Performed:					Tue Feb 19 11:44:24 2019				
After Survey Verification Performed:					Tue Feb 19 11:44:27 2019				
Surface Calibration									
		Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.011	0.656	V	1.000	400.000	mmho/m	550.000	-8.000	
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	530.000	-15.000	
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: 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)		Gain	Offset
Low	High	Low	High		
7228.5	10151.9	8.0	14.0	0.0	-7.2

Before Survey Caliper Verification

Performed:

Reference	Reading
_____	_____
Caliper (in)	

After Survey Caliper Verification		Performed:	
Reference	Reading		
Caliper (in)			

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:	Mon Jul 17 10:16:28 2023		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.4600	GAPI/cps	