



# DUAL INDUCTION LOG

Company CHIZUM OIL, LLC.  
 Well LHR #2-26  
 Field GERTRUDE NORTHWEST  
 County SHERMAN  
 State KANSAS

Company CHIZUM OIL, LLC.  
 Well LHR #2-26  
 Field GERTRUDE NORTHWEST  
 County SHERMAN State KANSAS

Location: API #: 15-181-20645-0000  
 1408' FNL & 2550' FEL  
 N.W. - NW - SW - NE  
 SEC 26 TWP 7S RGE 37W  
 Permanent Datum GROUND LEVEL Elevation 3437  
 Log Measured From KELLY BUSHING 6' A.G.L.  
 Drilling Measured From KELLY BUSHING  
 Other Services  
 CDL/CNL  
 MEL  
 Elevation  
 K.B. 3443  
 D.F. 3441  
 G.L. 3437

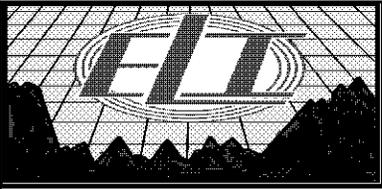
Date	6/25/22
Run Number	ONE
Depth Driller	4870
Depth Logger	4871
Bottom Logged Interval	4869
Top Log Interval	00
Casing Driller	8 5/8" @ 368
Casing Logger	368
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/58
PH / Fluid Loss	10.0/8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.800 @ 80F
Rmt @ Meas. Temp	.600 @ 80F
Rmc @ Meas. Temp	.960 @ 80F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.516 @ 124F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	12:30 P.M.
Maximum Recorded Temperature	124F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	COLE ROBBEN
Witnessed By	TIM PRIEST

<<< 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 BREWSTER, KANSAS TAKE MANCHESTER ROAD WEST THREE MILES  
 TO ROAD 35, NORTH TO ROAD 70, EAST HALF MILE, AND SOUTH INTO

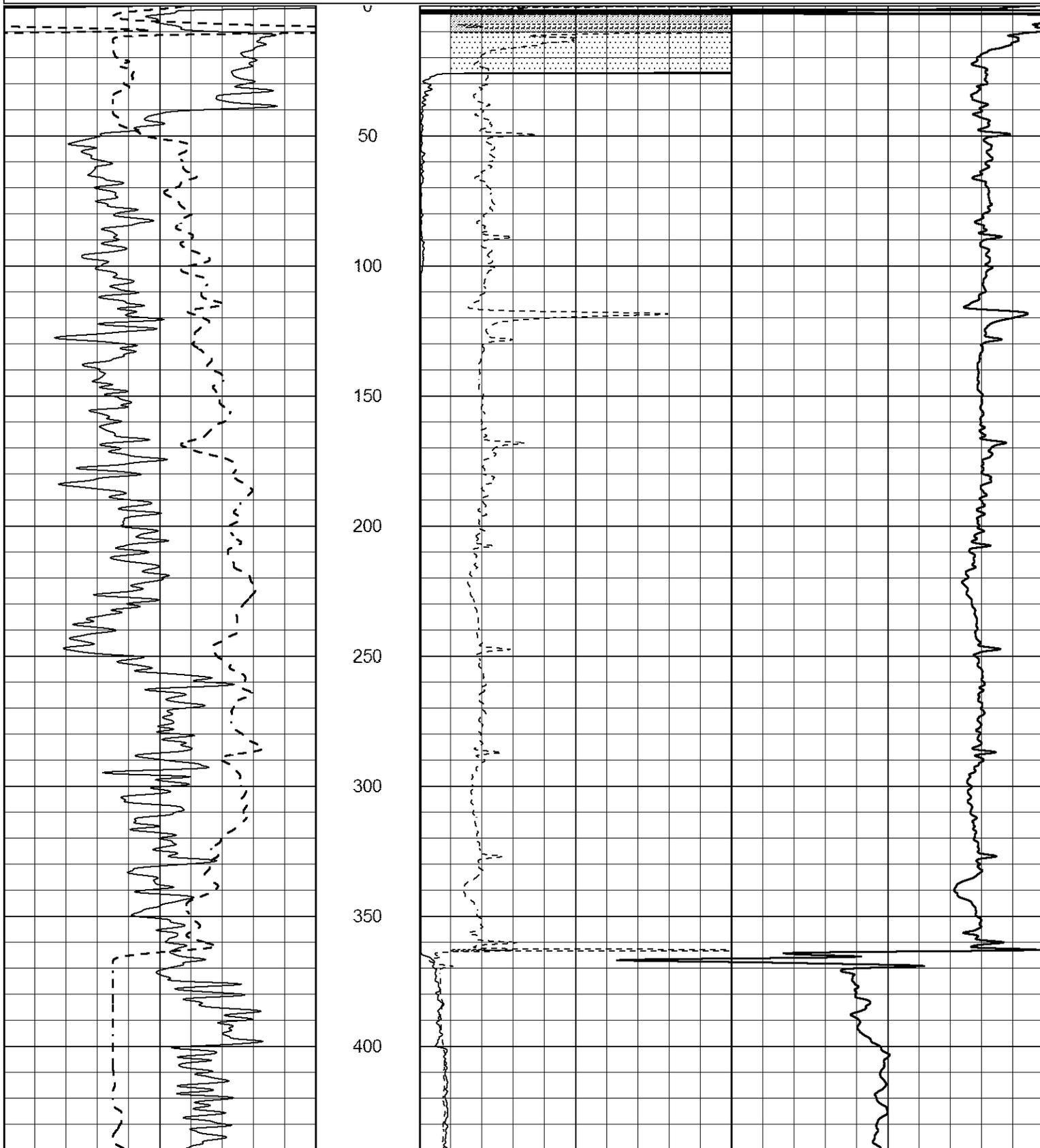


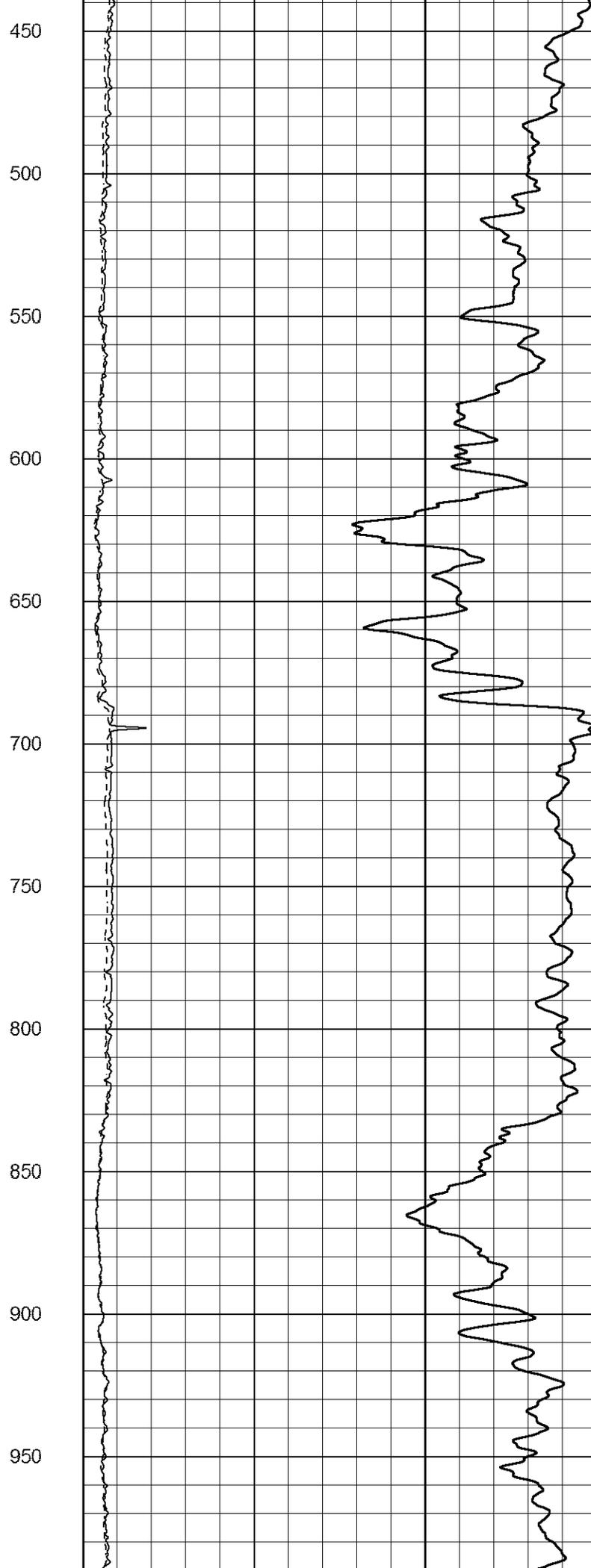
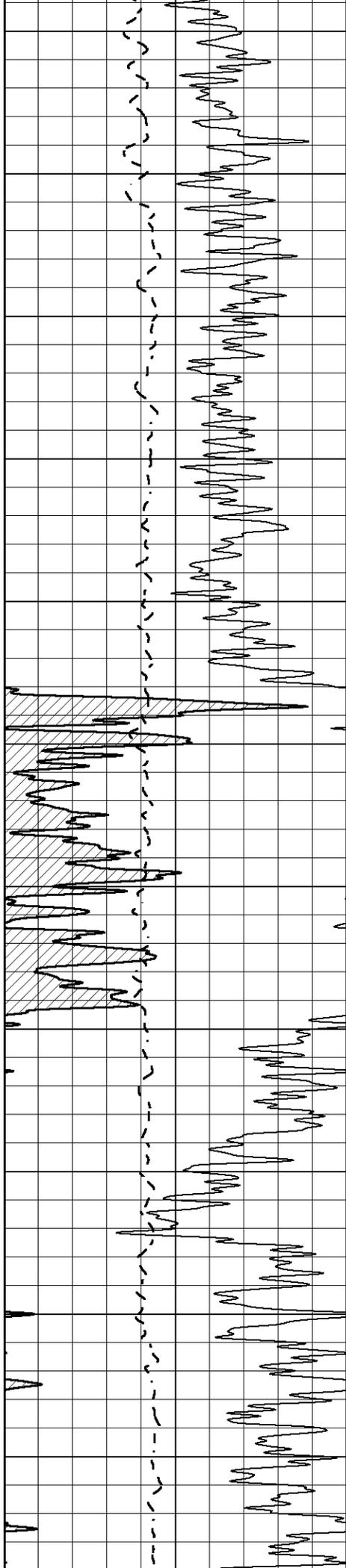
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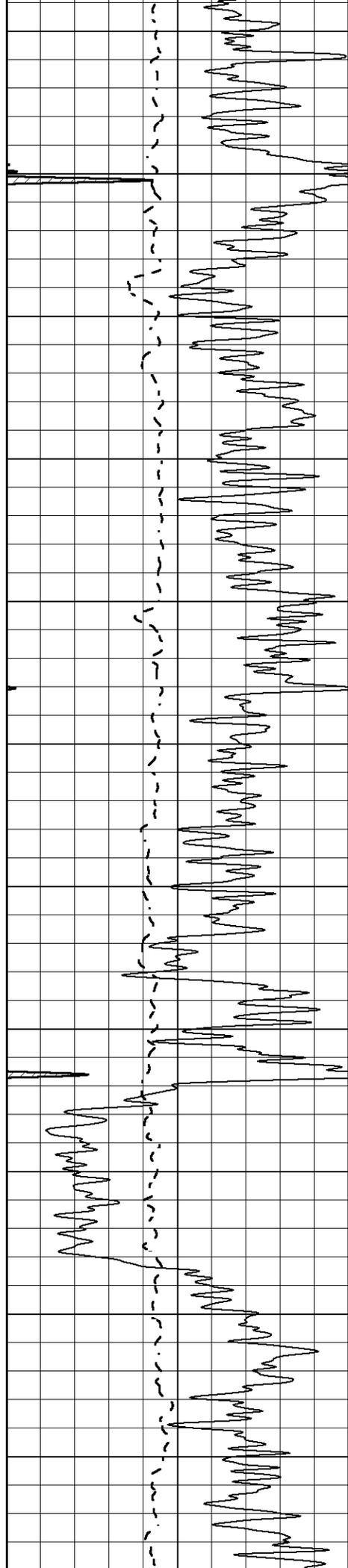
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 Dataset Pathname pass8.1M  
 Presentation Format \_dil2  
 Dataset Creation Sat Jun 25 15:44:15 2022  
 Charted by Depth in Feet scaled 1:600

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

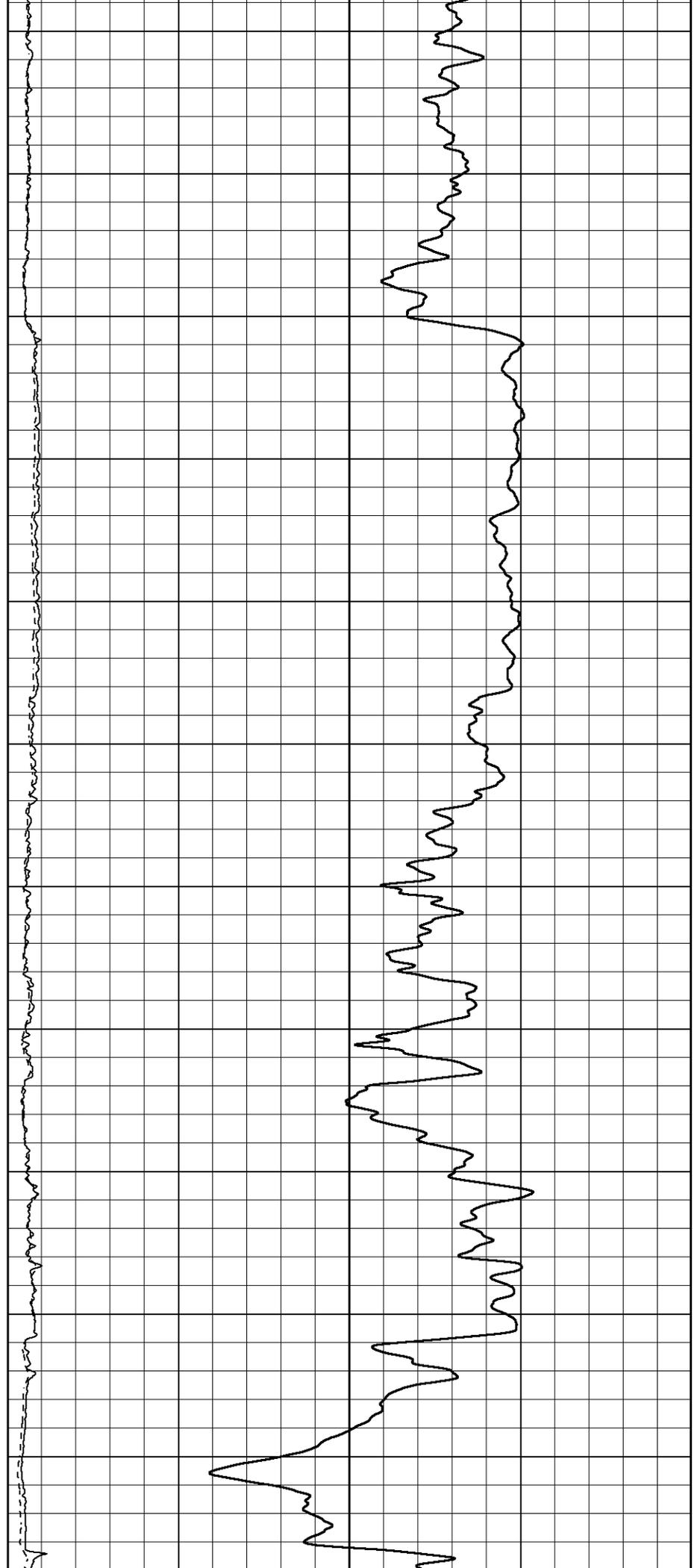
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

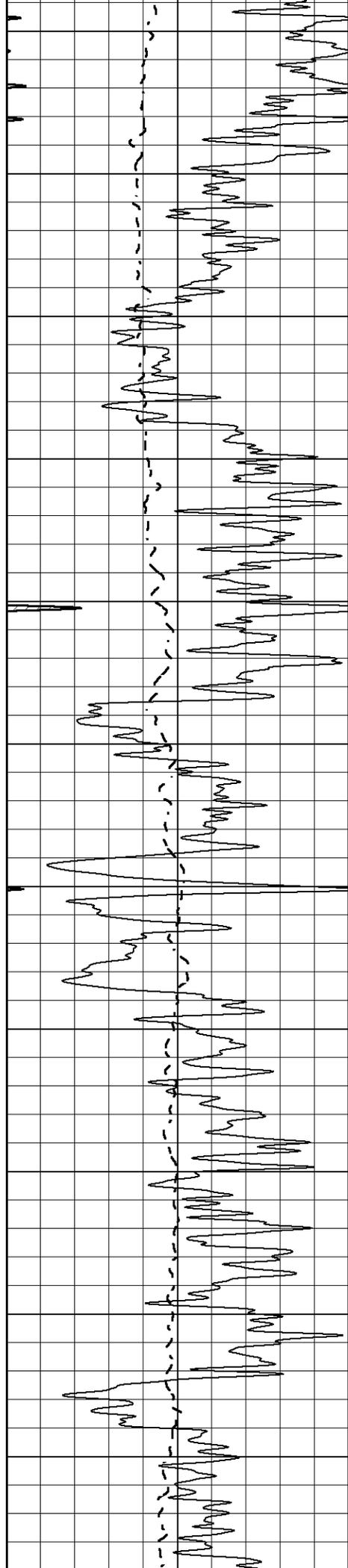




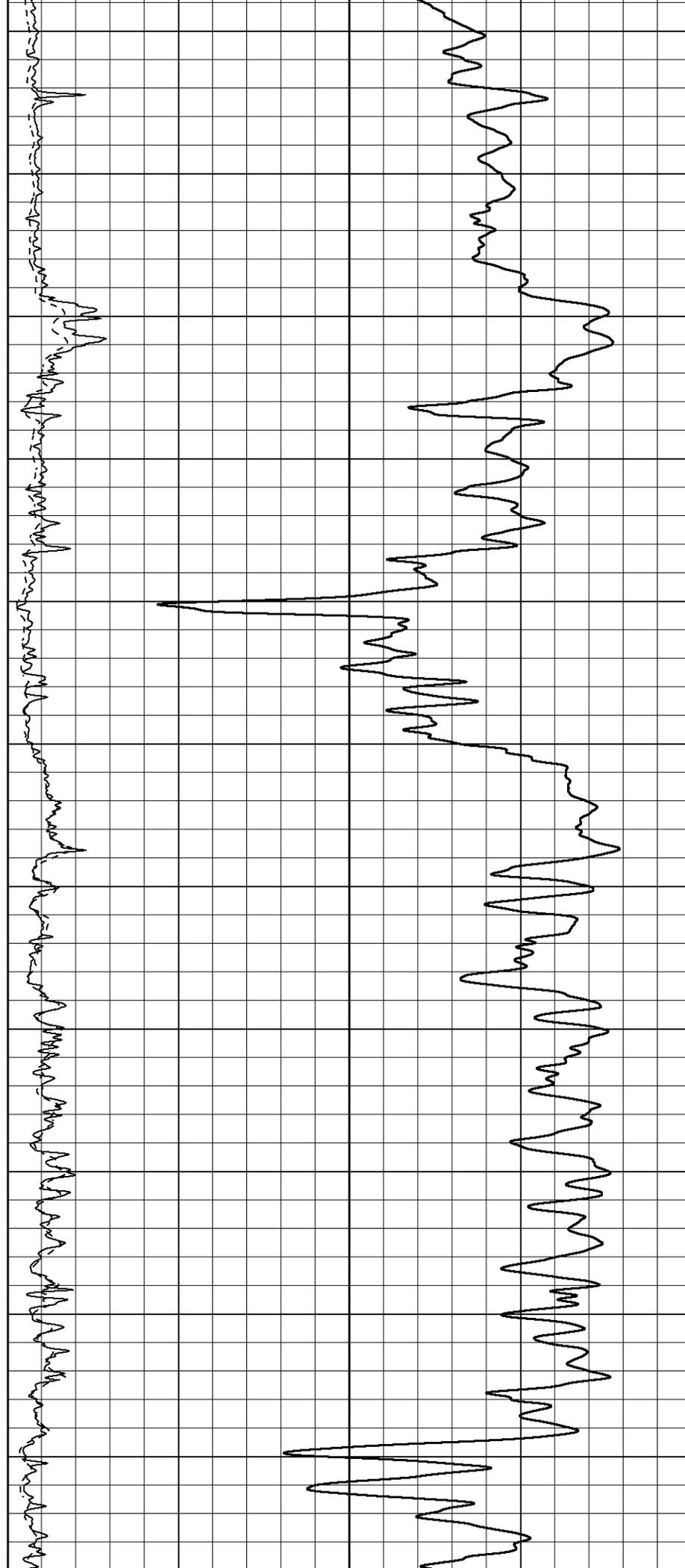


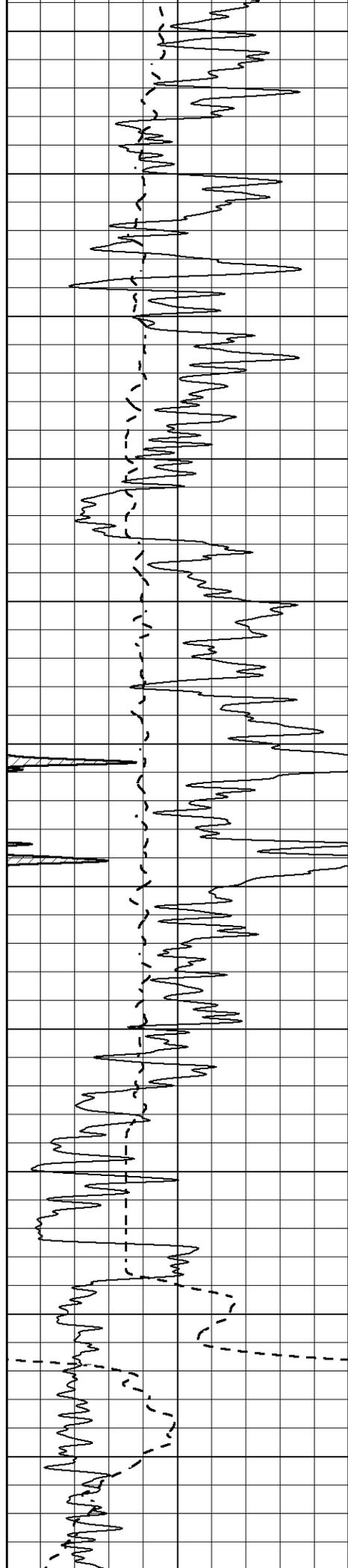
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1100  
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1200  
1250  
1300  
1350  
1400  
1450  
1500



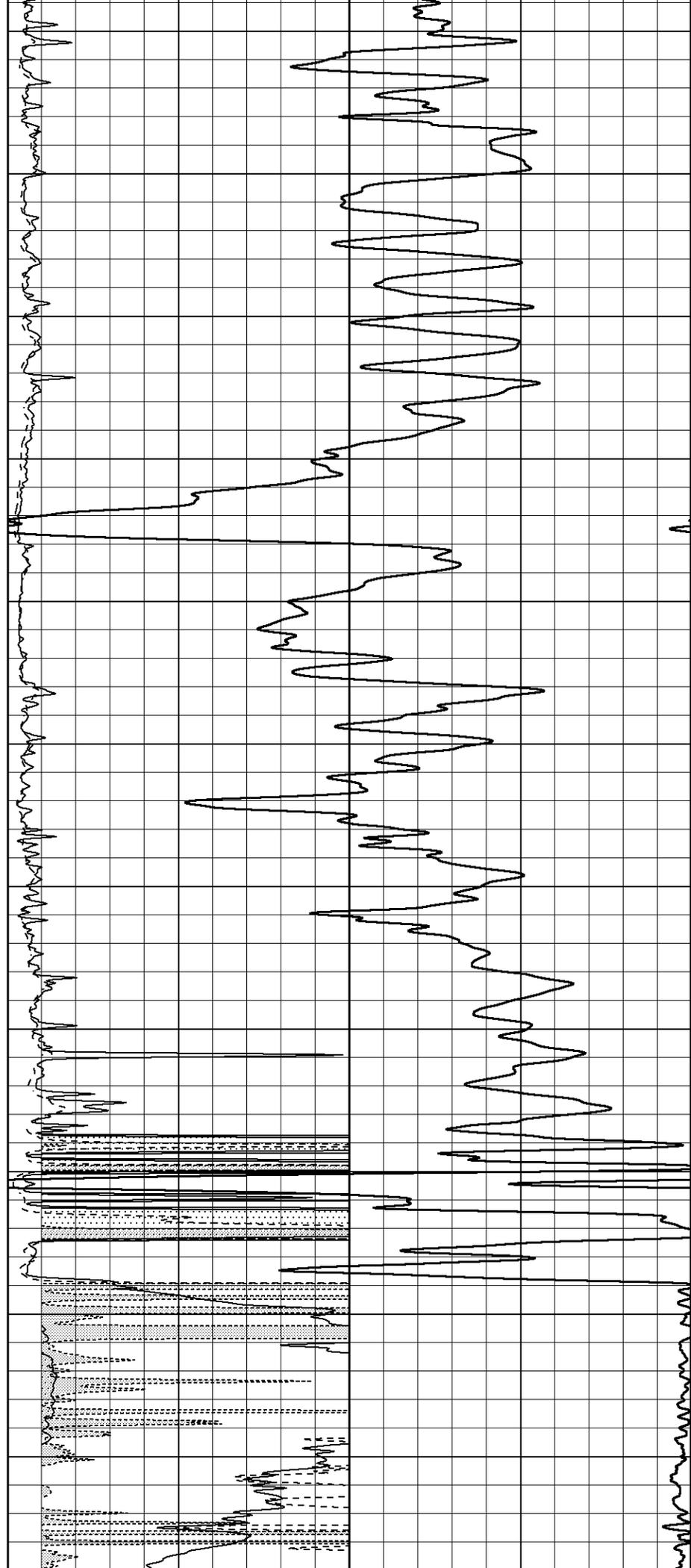


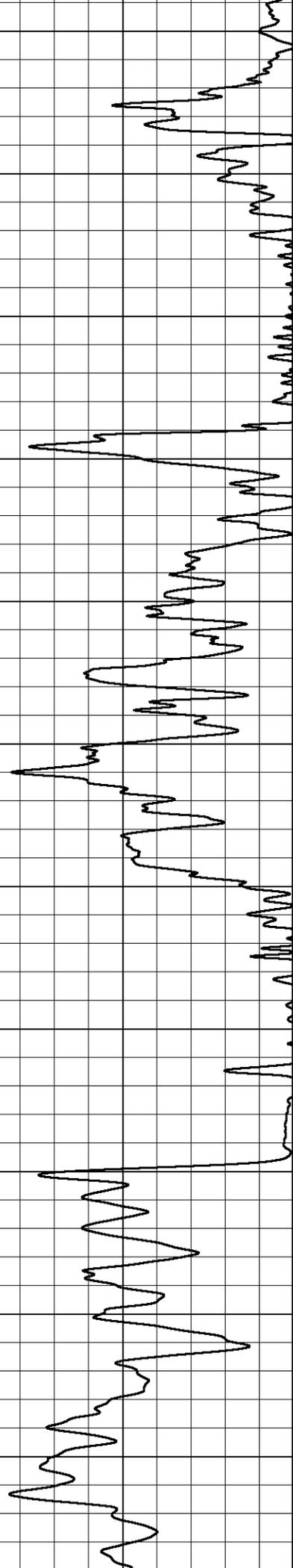
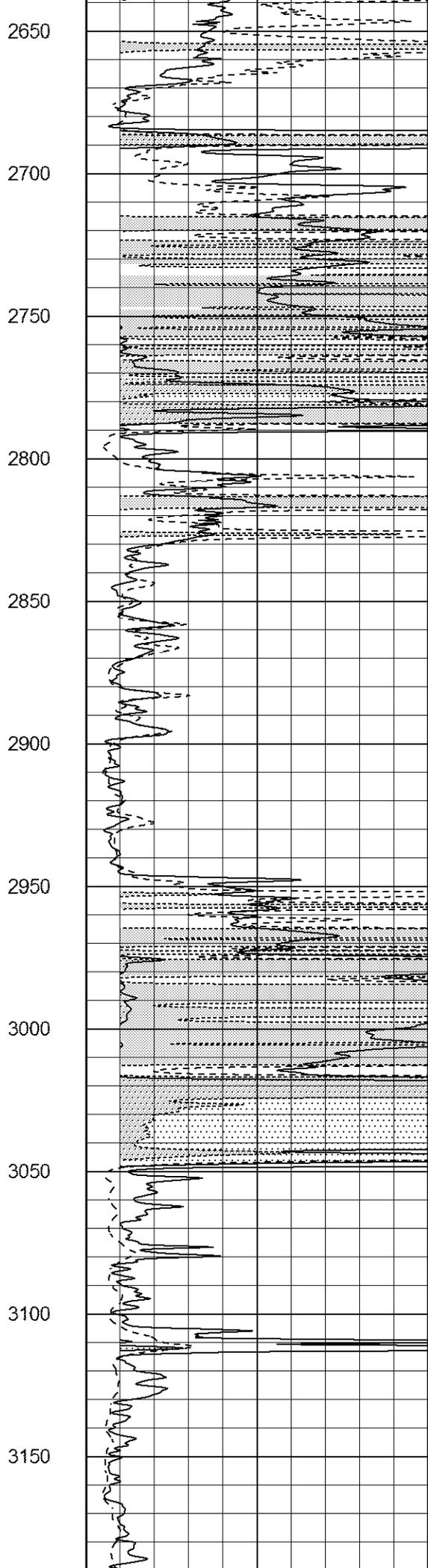
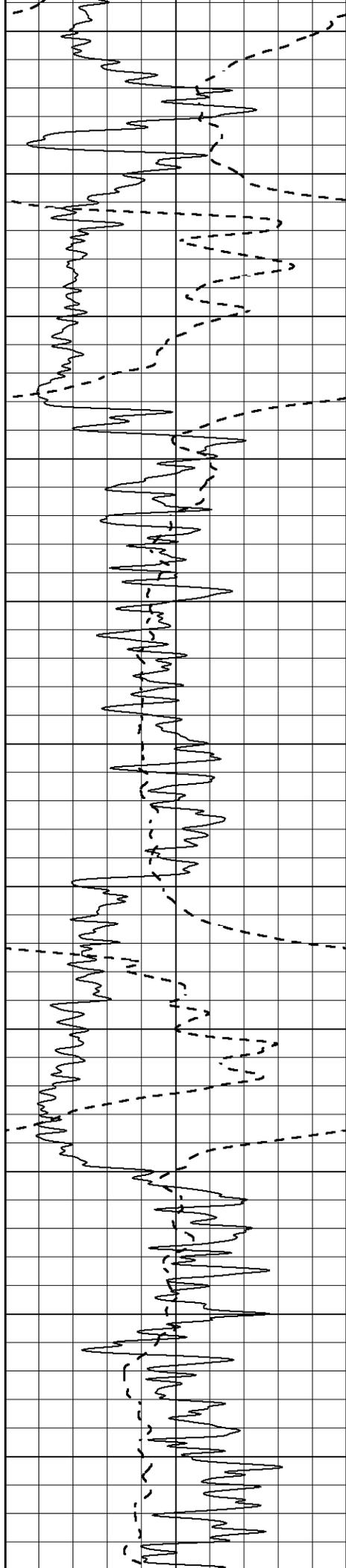
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1950  
2000  
2050

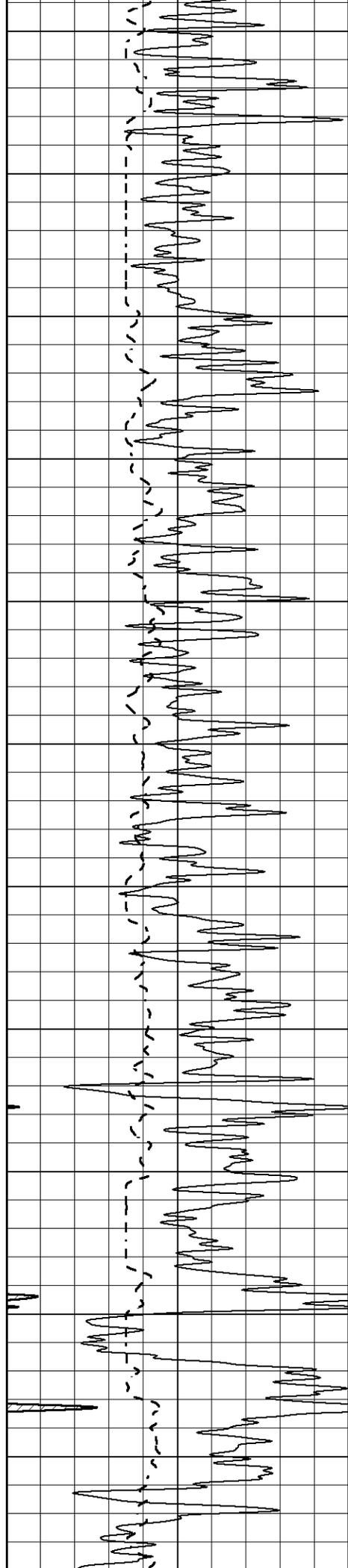




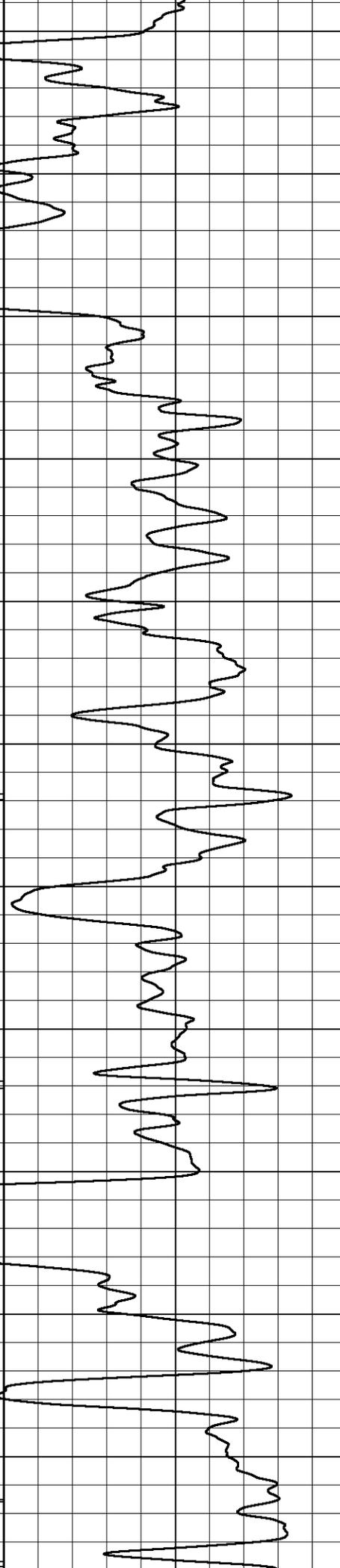
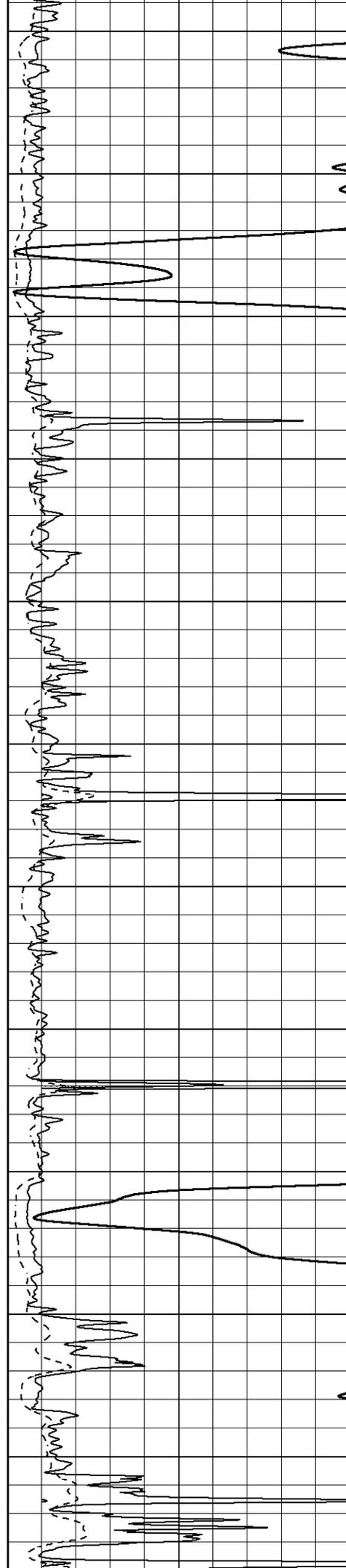
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2300  
2350  
2400  
2450  
2500  
2550  
2600

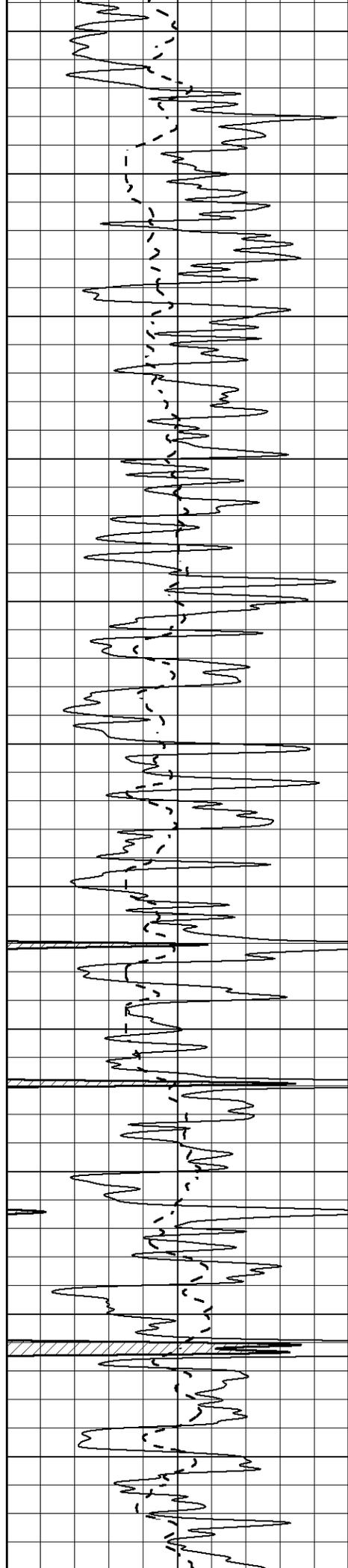






3200  
3250  
3300  
3350  
3400  
3450  
3500  
3550  
3600  
3650  
3700





3750

3800

3850

3900

3950

4000

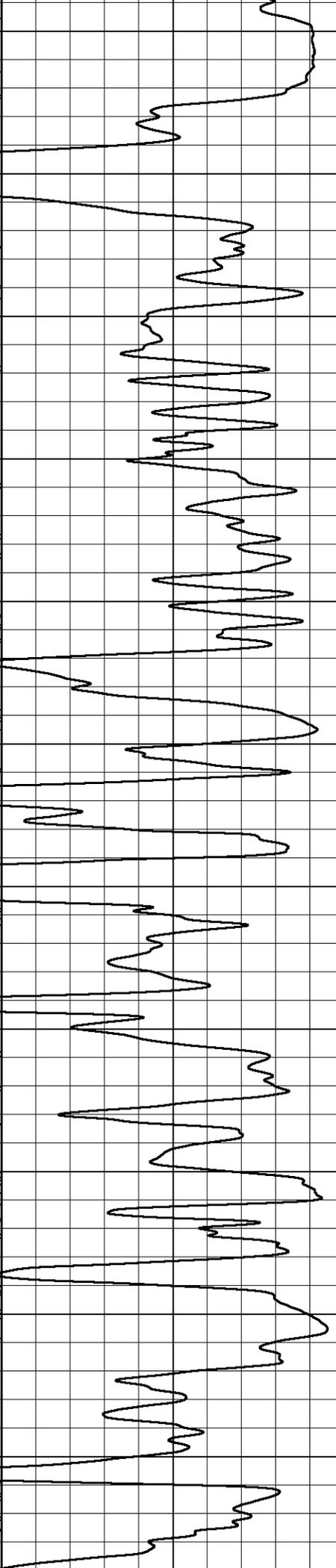
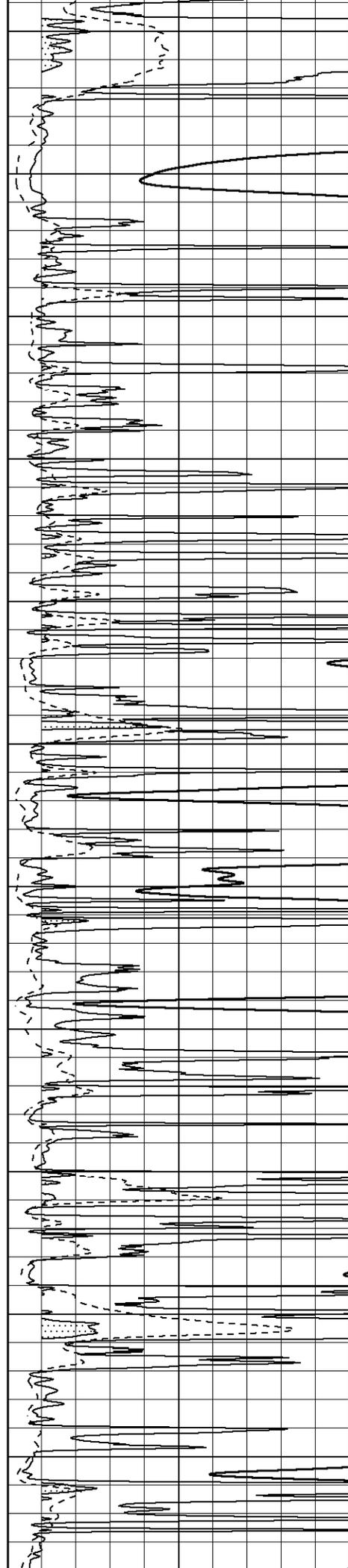
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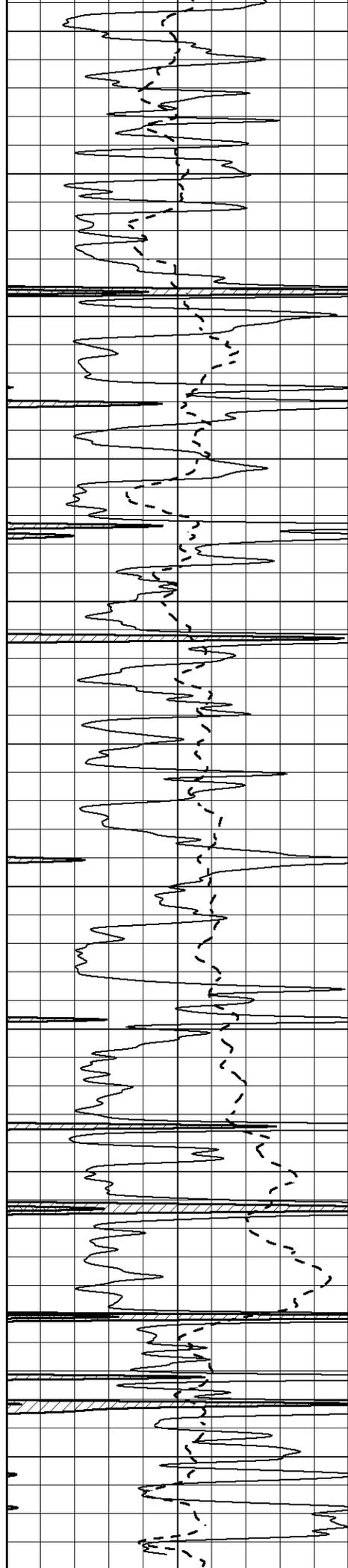
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4150

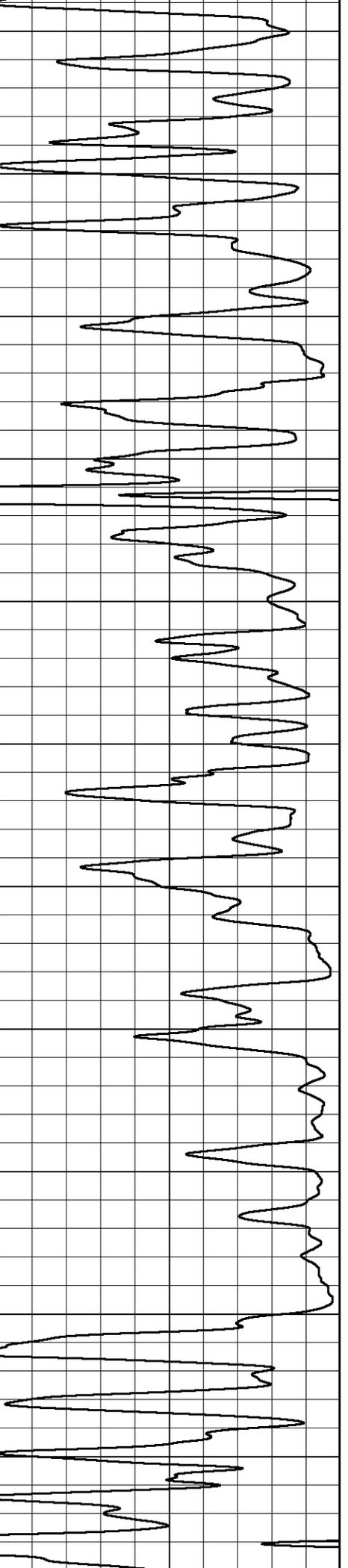
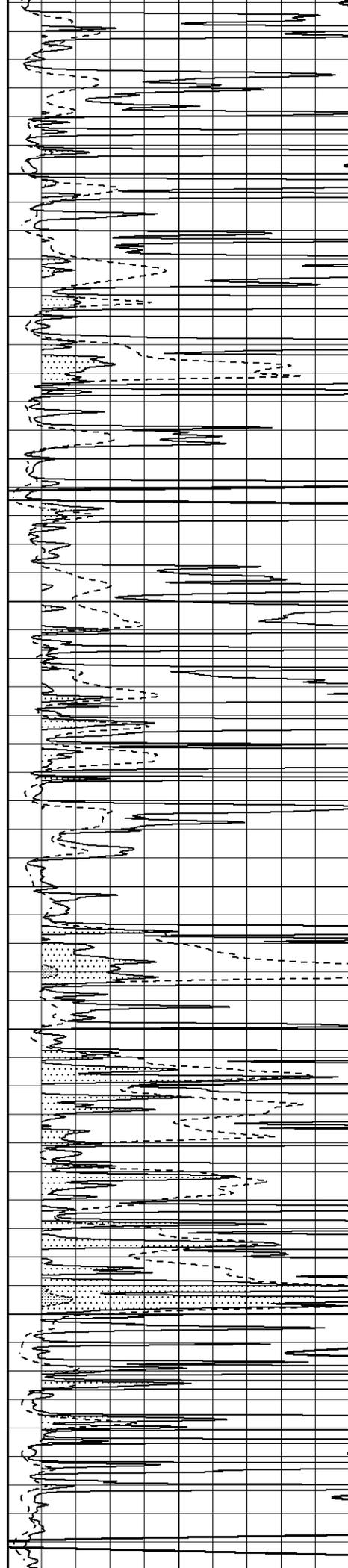
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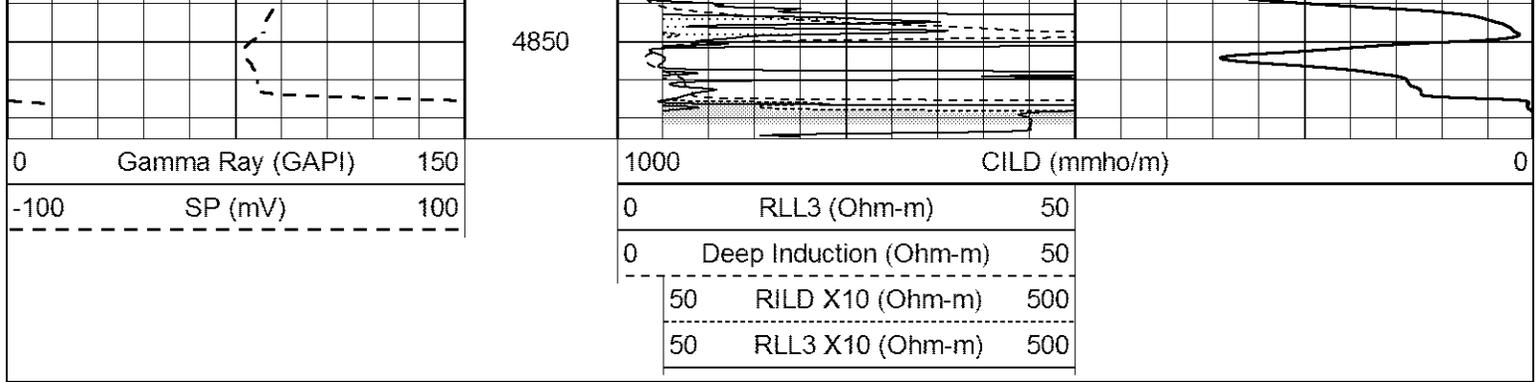
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4350  
4400  
4450  
4500  
4550  
4600  
4650  
4700  
4750  
4800

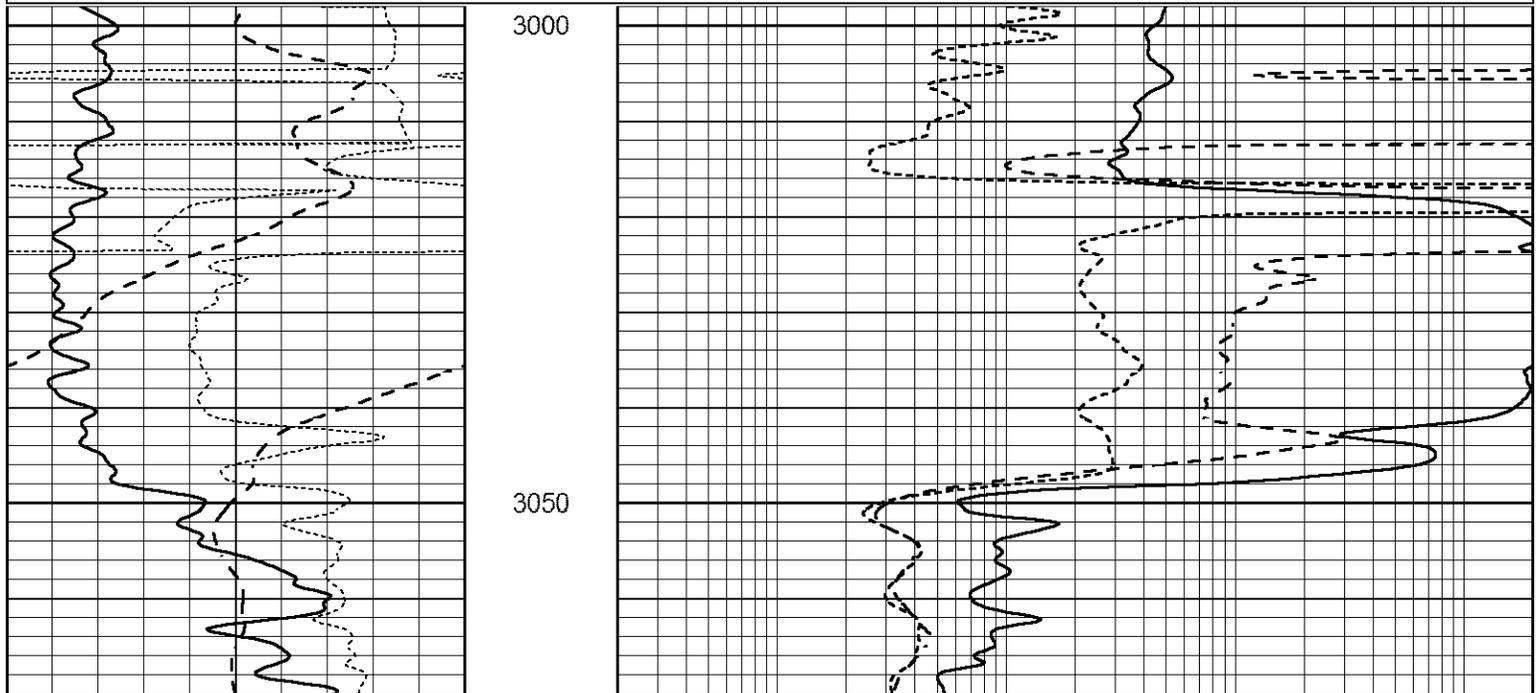




# ANHYDRITE

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 Presentation Format \_dil  
 Dataset Creation Sat Jun 25 15:47:25 2022  
 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



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



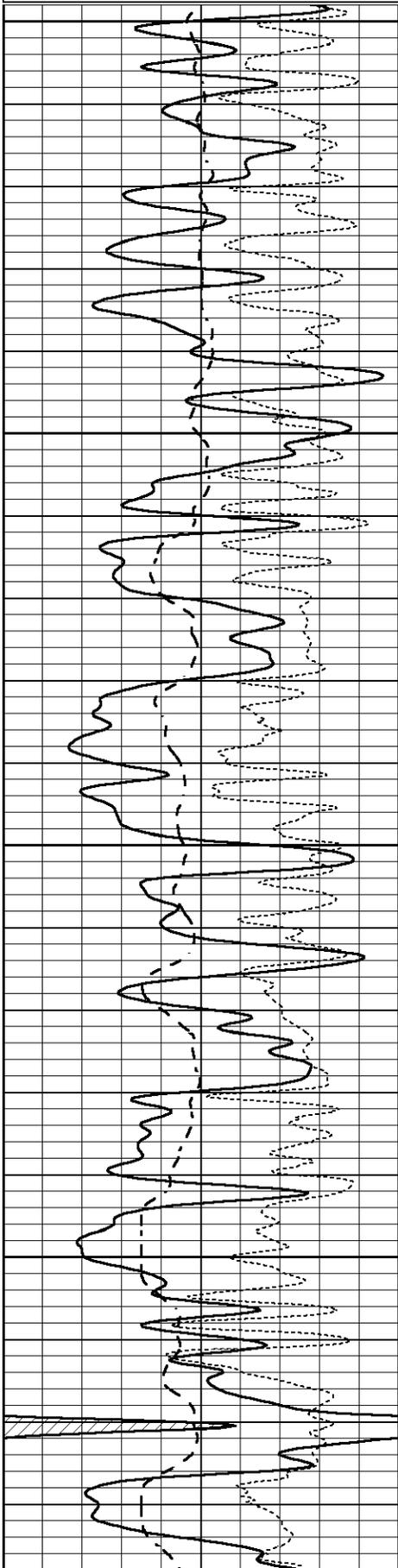
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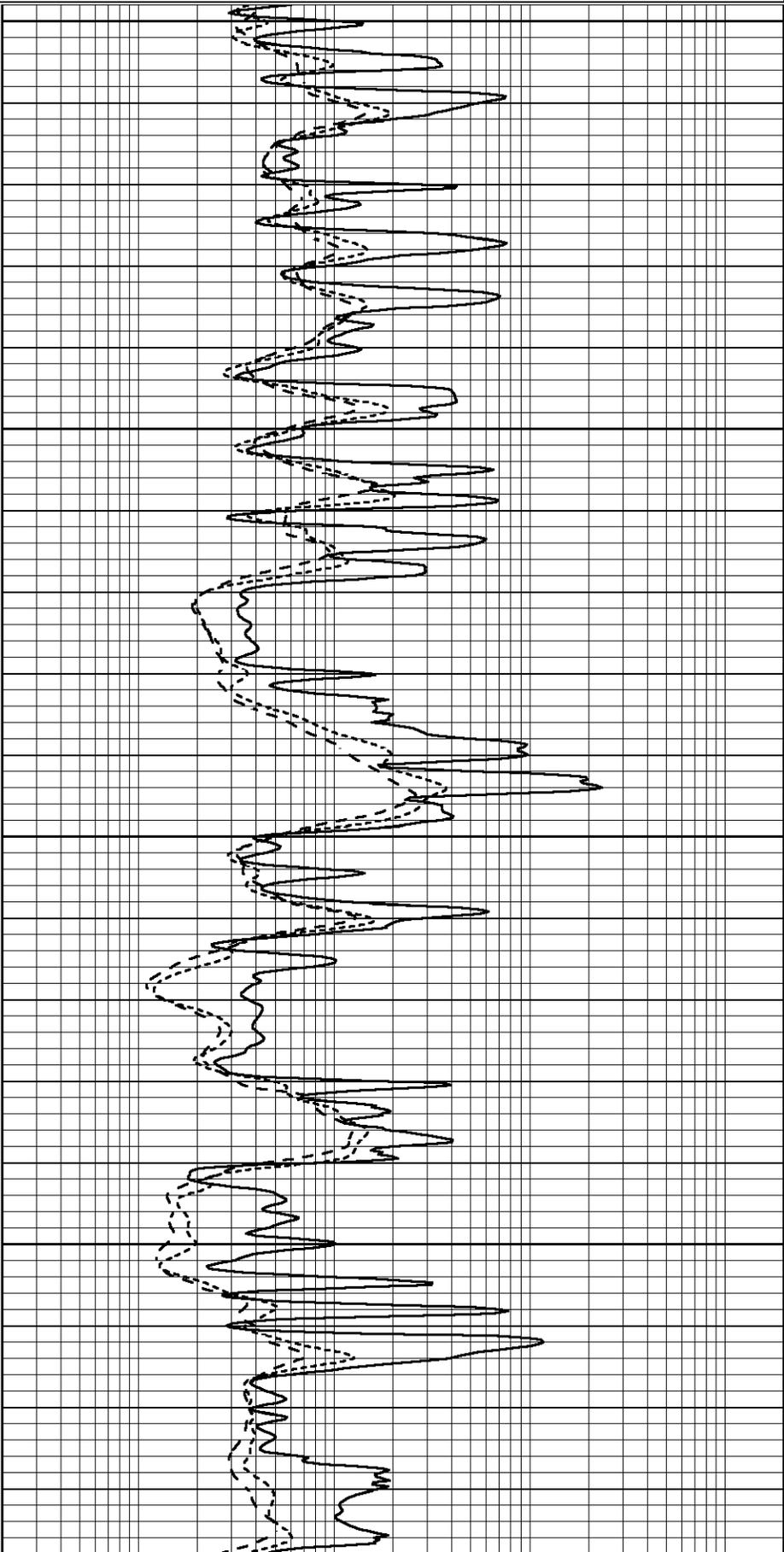
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 Presentation Format \_dil  
 Dataset Creation Sat Jun 25 15:44:15 2022  
 Charted by Depth in Feet scaled 1:240

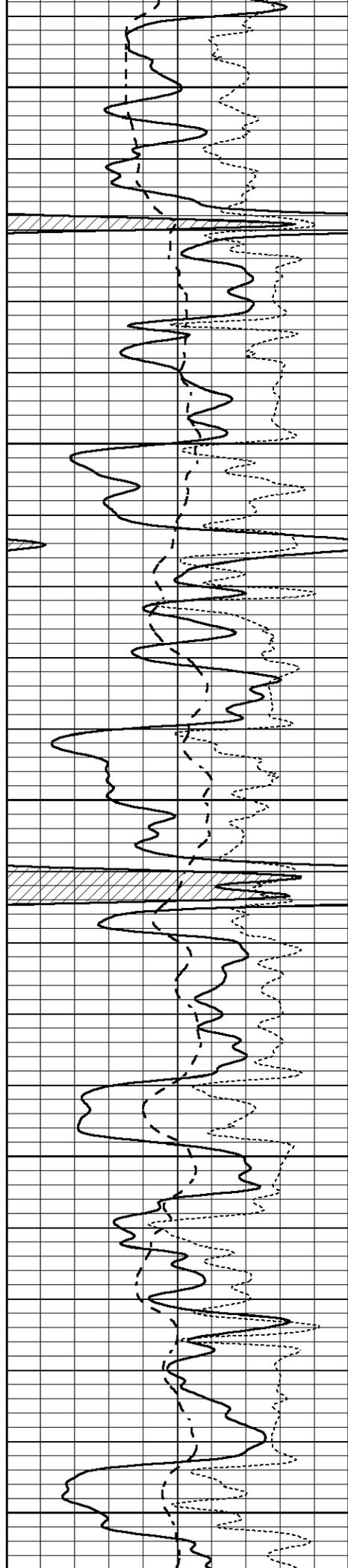
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



3900  
 3950  
 4000  
 4050





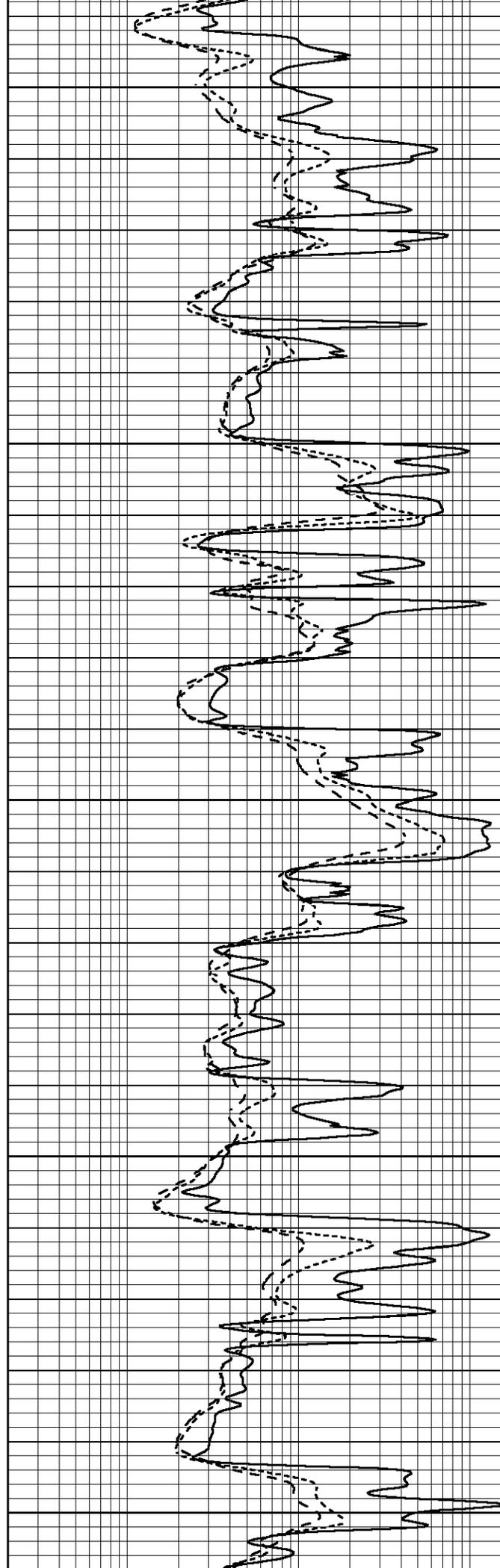
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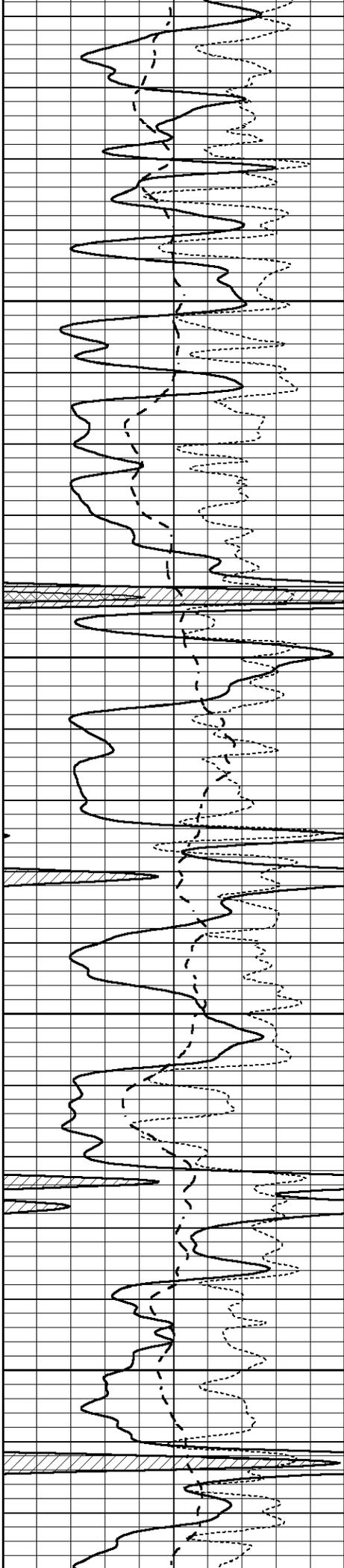
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4200

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4300



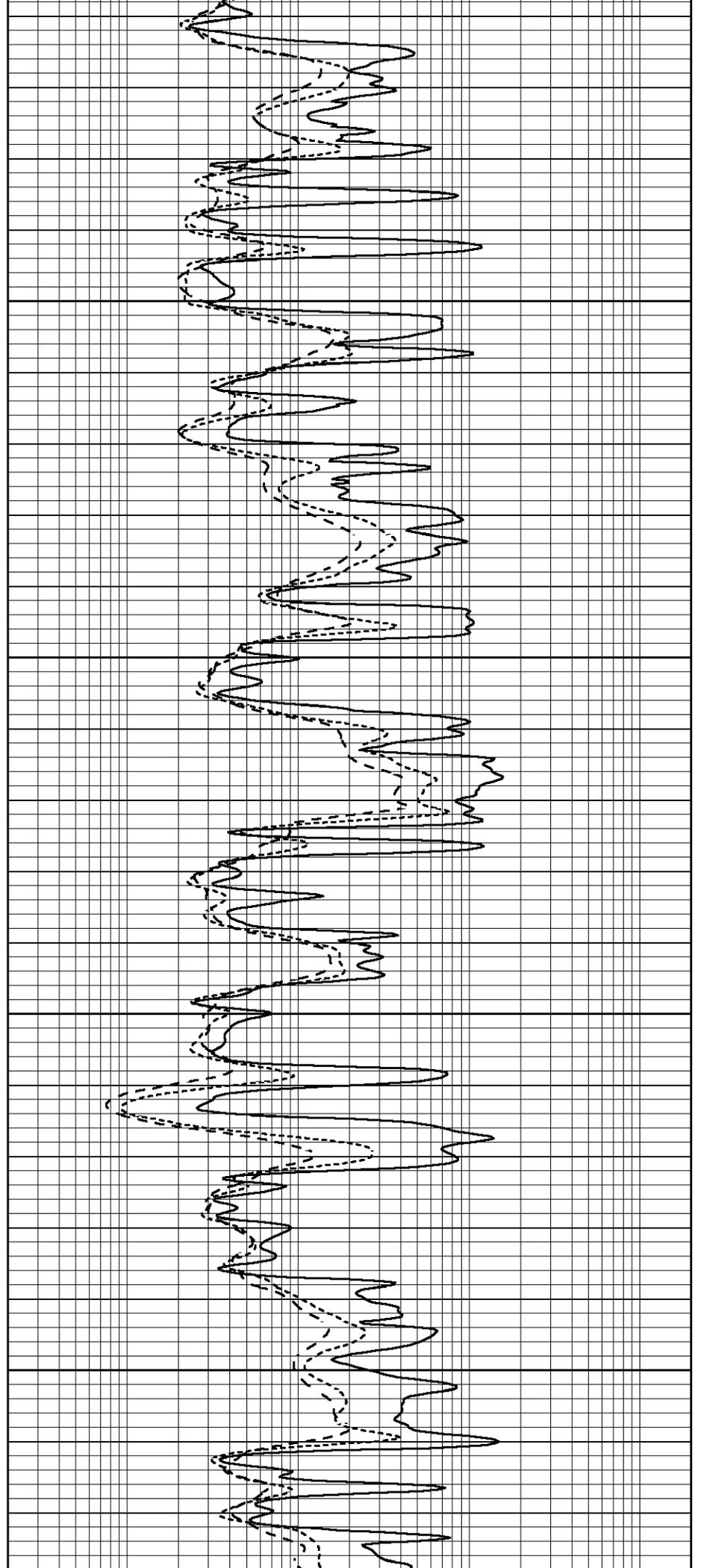


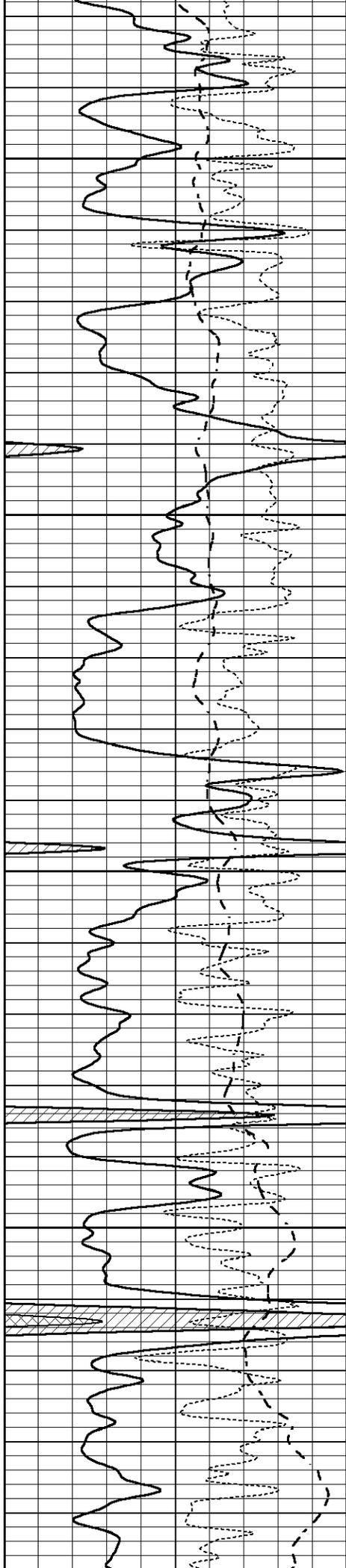
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4450

4500



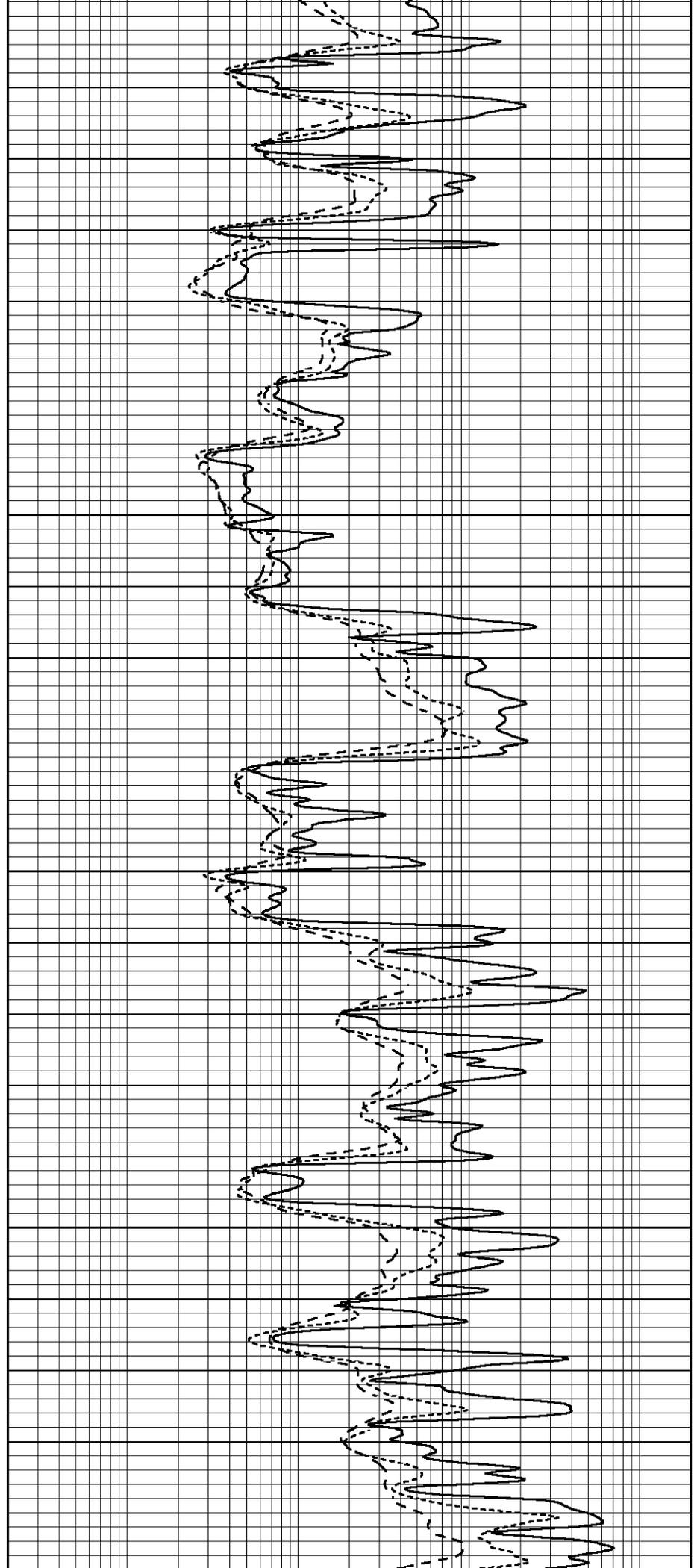


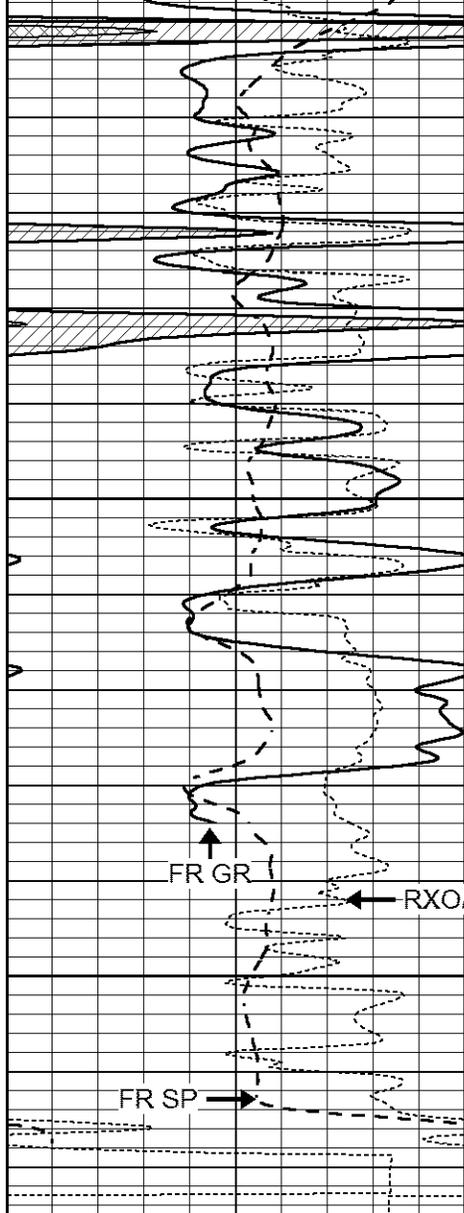
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4600

4650

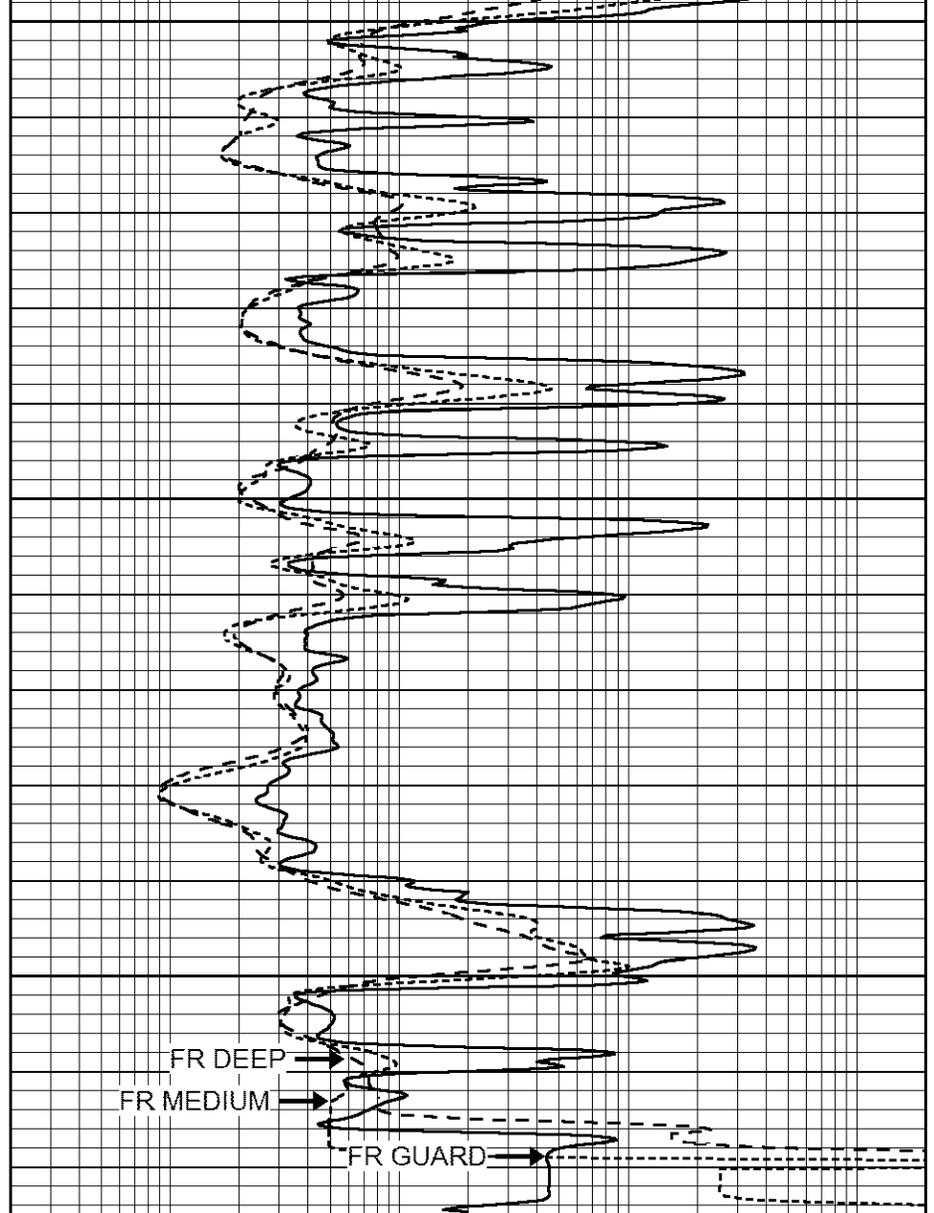
4700





4750  
4800  
4850  
LTD 4871

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

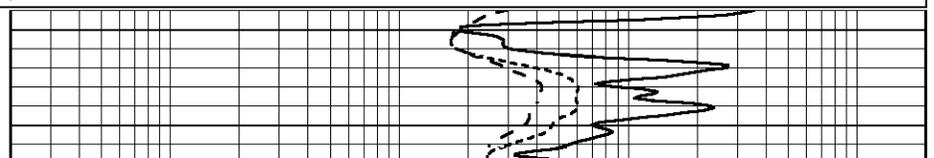
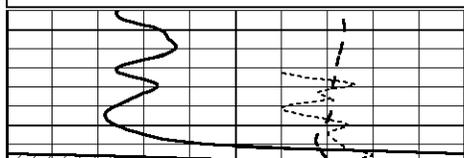


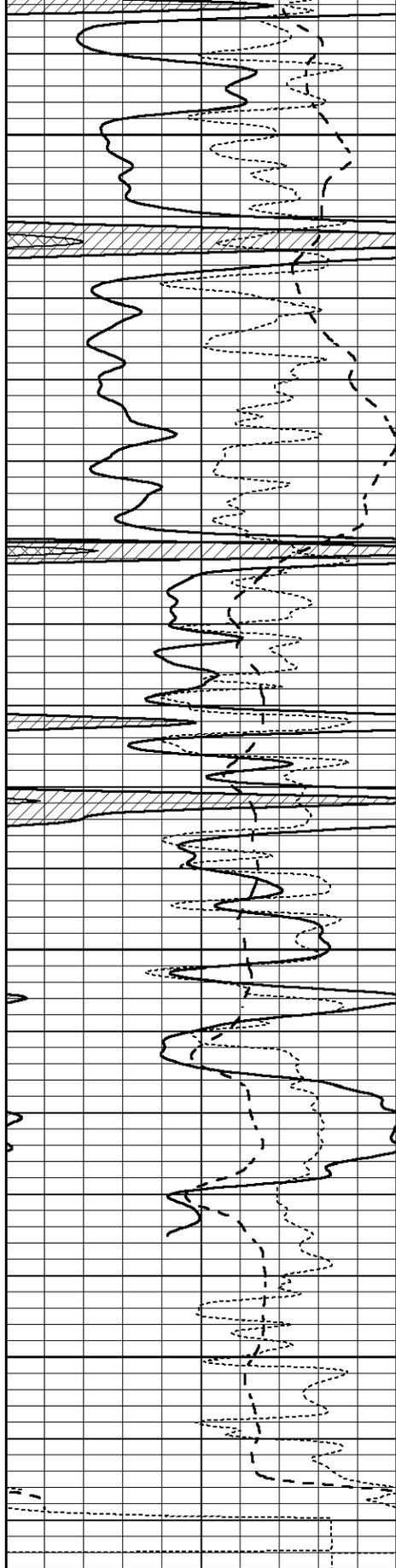
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Database File 6547ddn.db  
 Dataset Pathname pass7.2R  
 Presentation Format \_dil  
 Dataset Creation Sat Jun 25 15:27:26 2022  
 Charted by Depth in Feet scaled 1:240

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





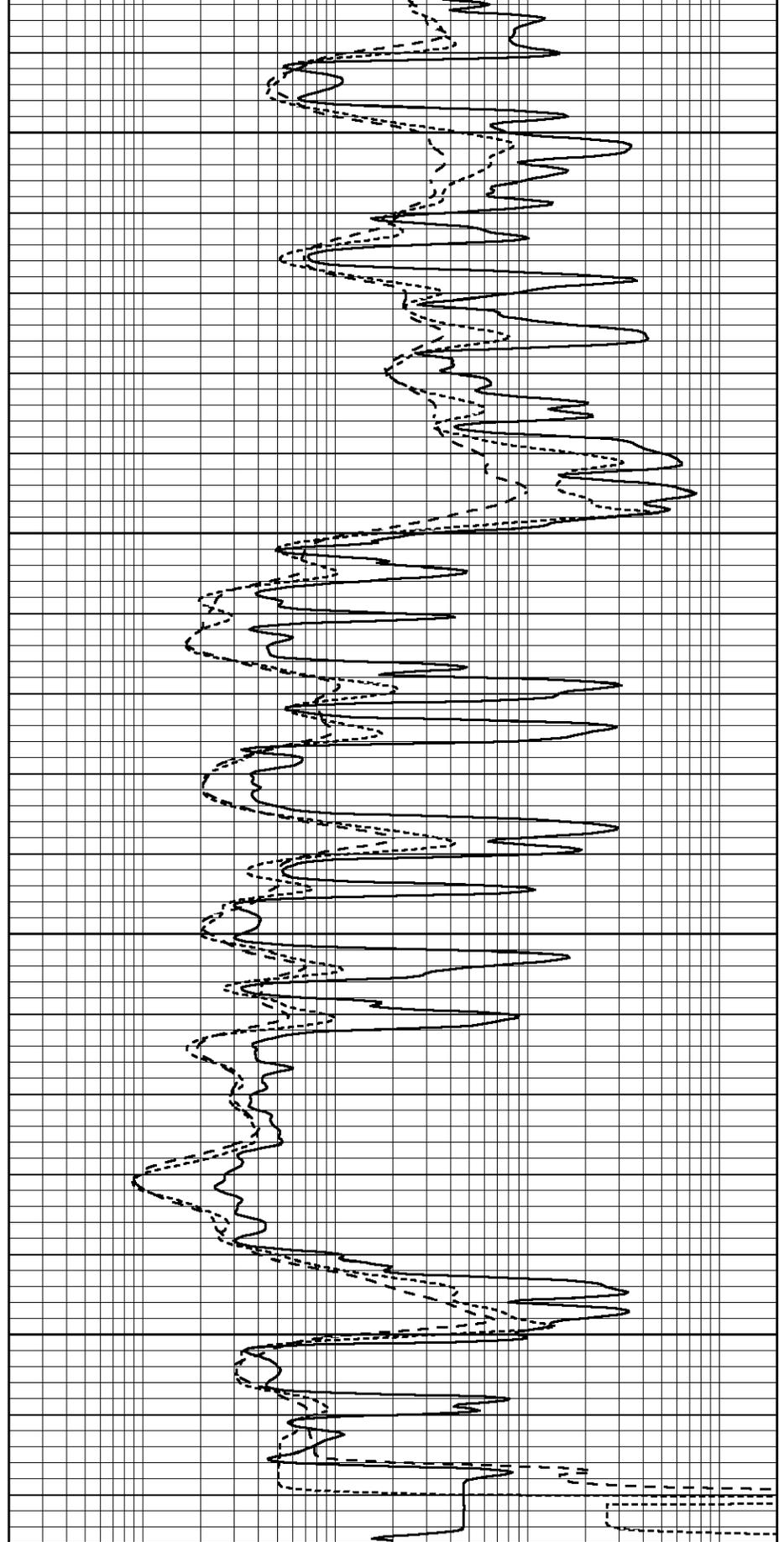
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4750

4800

4850

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

### Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe  
 Surface Cal Performed: Sun May 15 19:17:36 2022  
 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			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	650.000	-2.000
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	-12.000
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: Mon May 23 14:22:47 2022

	Background	Aluminum	Magnesium	
Window 1	511.07	5437.36	23664.68	cps
Window 2	40.76	1220.39	5745.34	cps
Window 4	223.73	1233.64	5301.27	cps
Window 5	531.57	7878.13	15405.81	cps
Window 6	48.52	1245.17	2497.97	cps
Window 8	246.02	2578.14	4974.07	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha: : -1.8413      SS Alpha: : -0.8034      LS CPE: : 1.1579  
 LS Beta: : 124864.8423      SS Beta: : 19537.1506      SS CPE: : 1.6371

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: Mon May 23 14:22:47 2022

Results Readings		References (in)		Gain	Offset
Low	High	Low	High		
8210.8	12139.3	7.0	14.0	0.0	-7.3

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: Thu May 26 08:56:46 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.5500 GAPI/cps