



**DUAL  
INDUCTION  
LOG**

Company RL INVESTMENT, LLC.  
Well PRATT "A" #2-35  
Field HOXIE WEST  
County SHERIDAN  
State KANSAS

Company RL INVESTMENT, LLC.  
Well PRATT "A" #2-35  
Field HOXIE WEST  
County SHERIDAN State KANSAS

Location: API #: 15-179-21444-0000  
1700' FNL & 345' FWL  
SEC 35 TWP 8S RGE 29W  
Permanent Datum GROUND LEVEL Elevation 2821  
Log Measured From KELLY BUSHING 7' A.G.L.  
Drilling Measured From KELLY BUSHING  
Elevation  
K.B. 2828  
D.F. 2826  
G.L. 2821

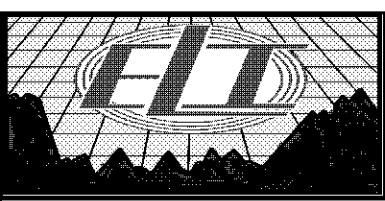
Date	4/1/18
Run Number	ONE
Depth Driller	4470
Depth Logger	4470
Bottom Logged Interval	4468
Top Log Interval	00
Casing Driller	8 5/8" @ 265
Casing Logger	263
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/60
PH / Fluid Loss	10.5/7.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.95 @ 82F
Rmt @ Meas. Temp	.71 @ 82F
Rmc @ Meas. Temp	1.14 @ 82F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.64 @ 120F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	120F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	RICHARD BELL

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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  
HOXIE, KS. - 2 SOUTH TO 30 RD. - 5 WEST TO 50 RD. - 1/2 SOUTH - EAST INTO

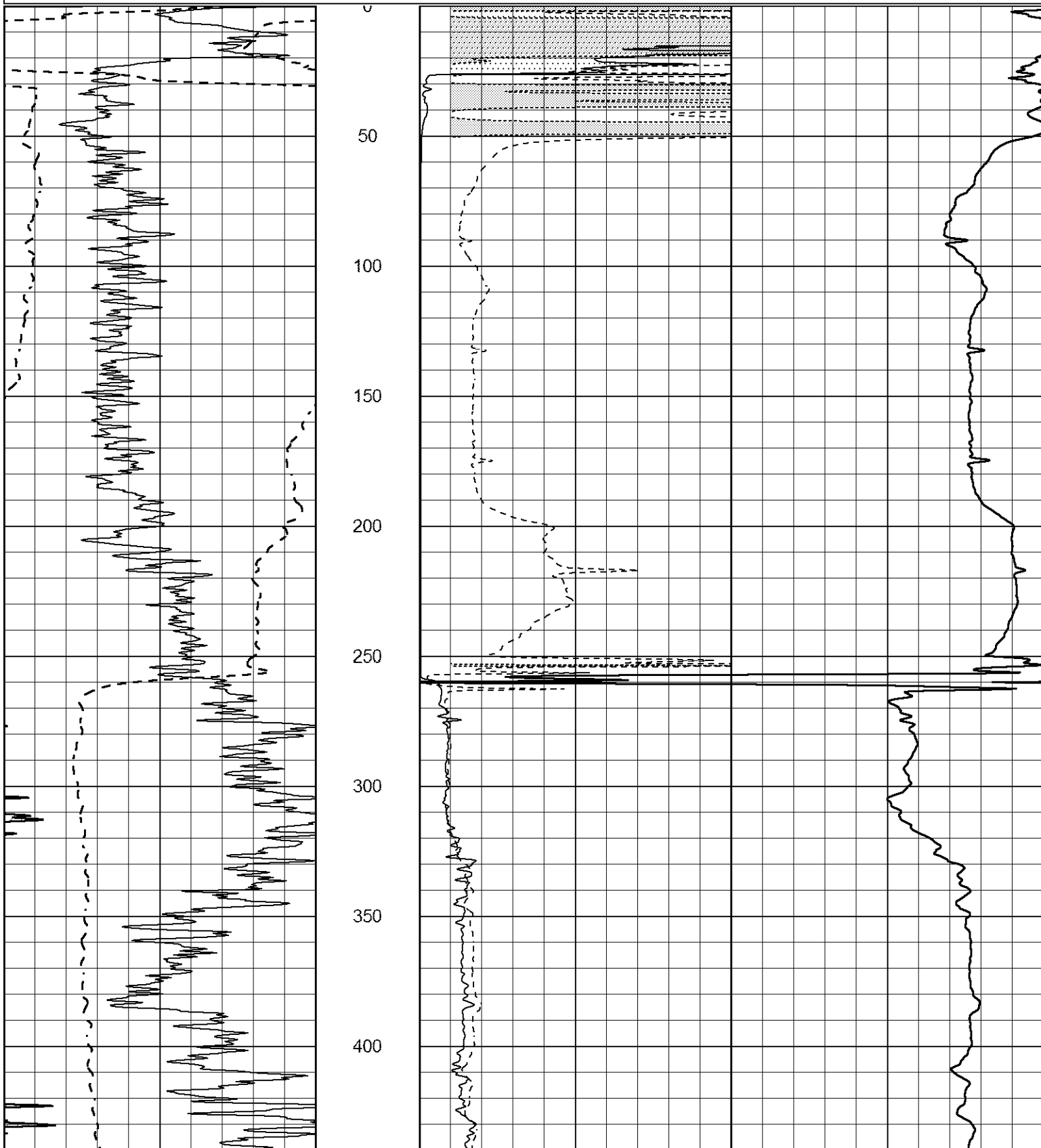


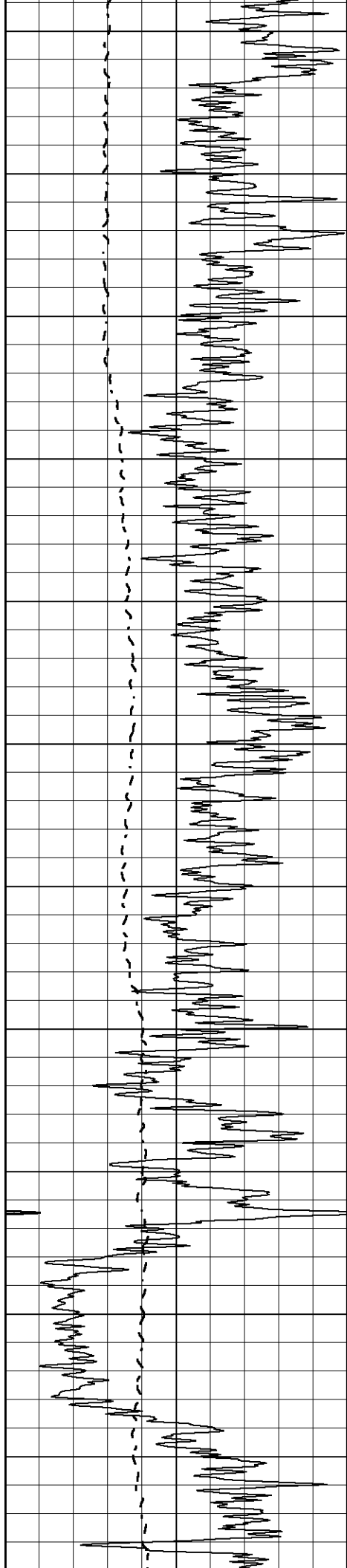
**MAIN SECTION**

Database File 2039ddn8.db  
 Dataset Pathname pass3.3  
 Presentation Format \_dil2  
 Dataset Creation Sun Apr 01 18:25:36 2018  
 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

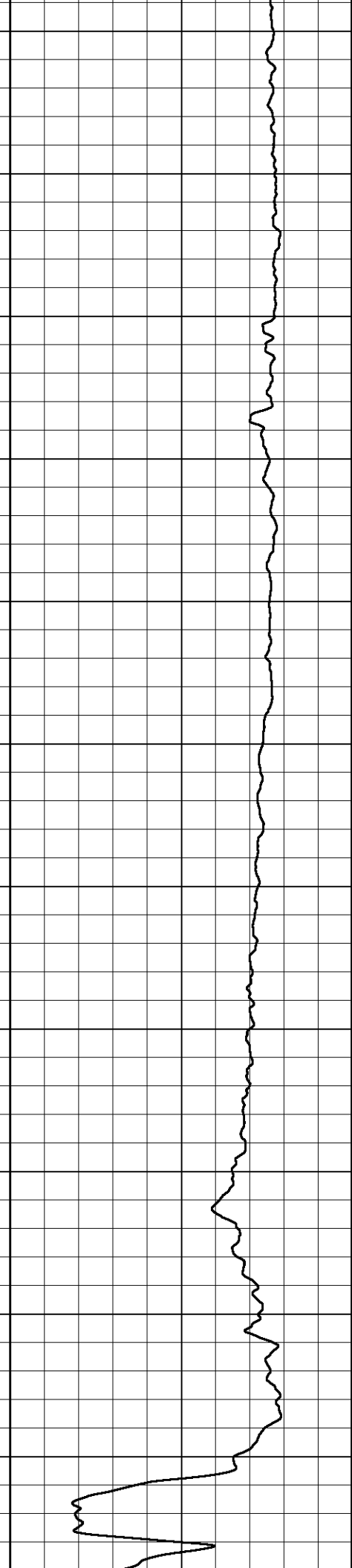
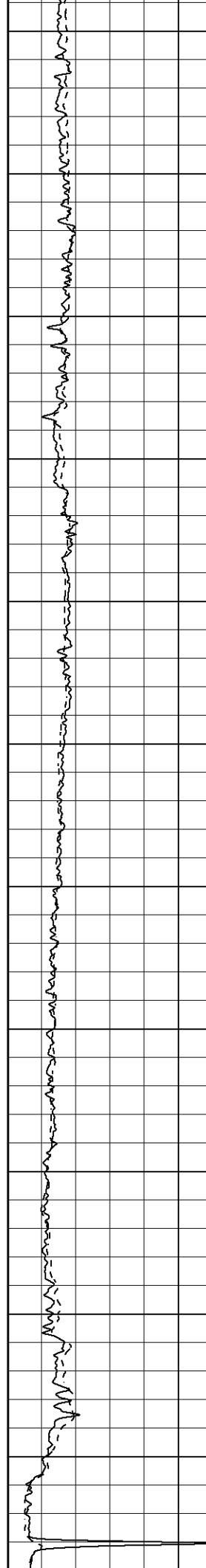
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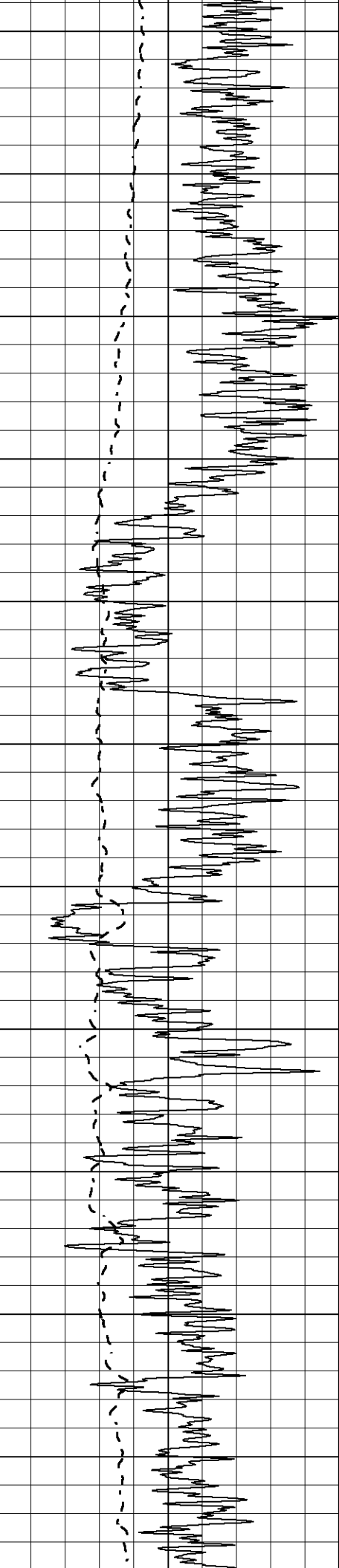
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850

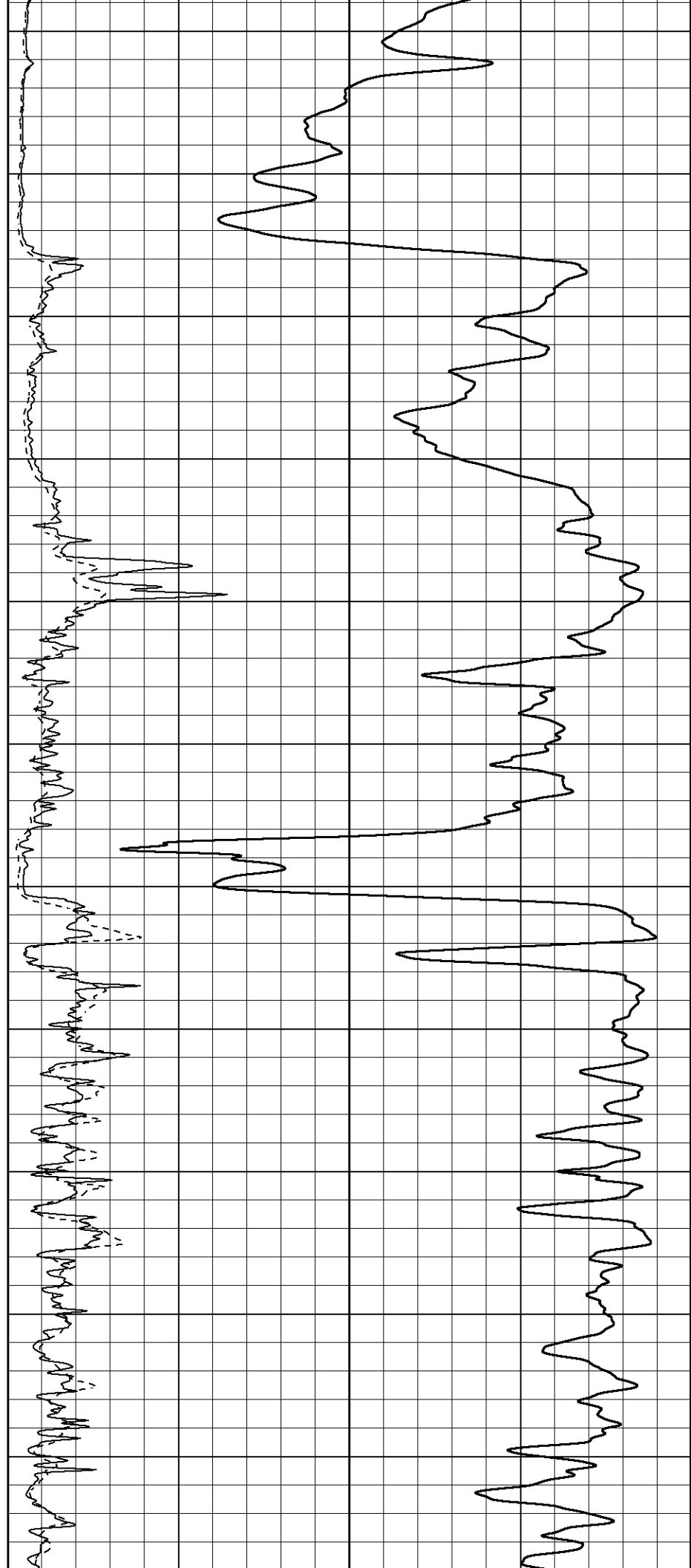
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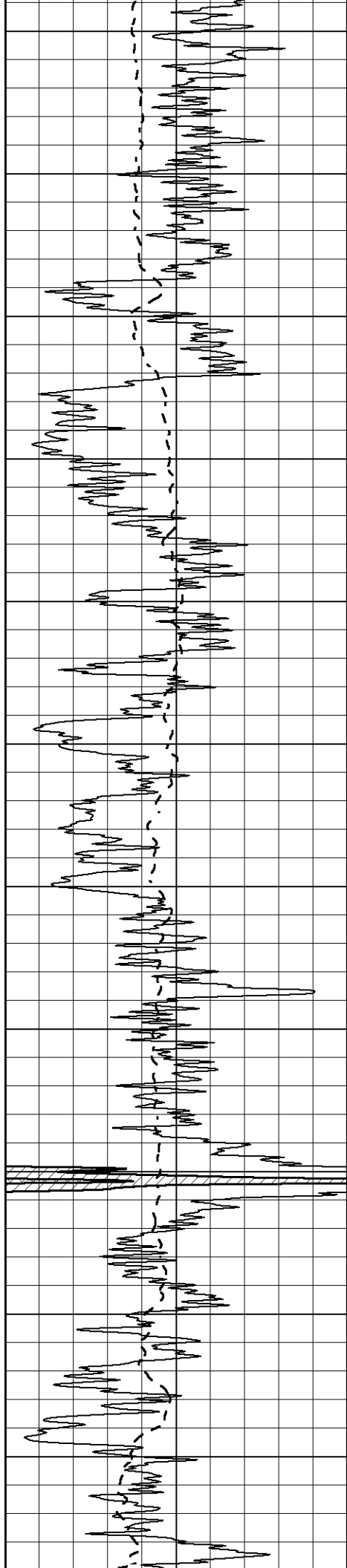
950





1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350  
1400  
1450  
1500





1550

1600

1650

1700

1750

1800

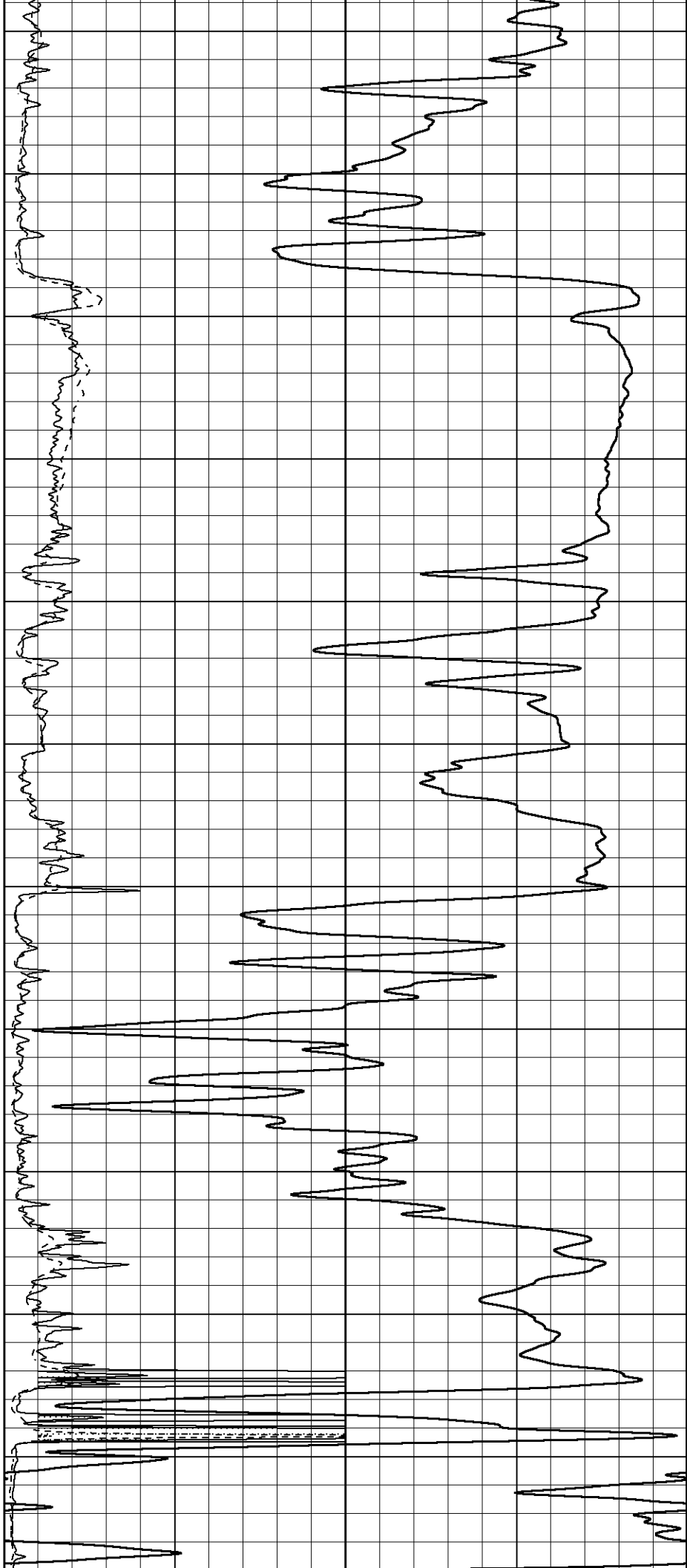
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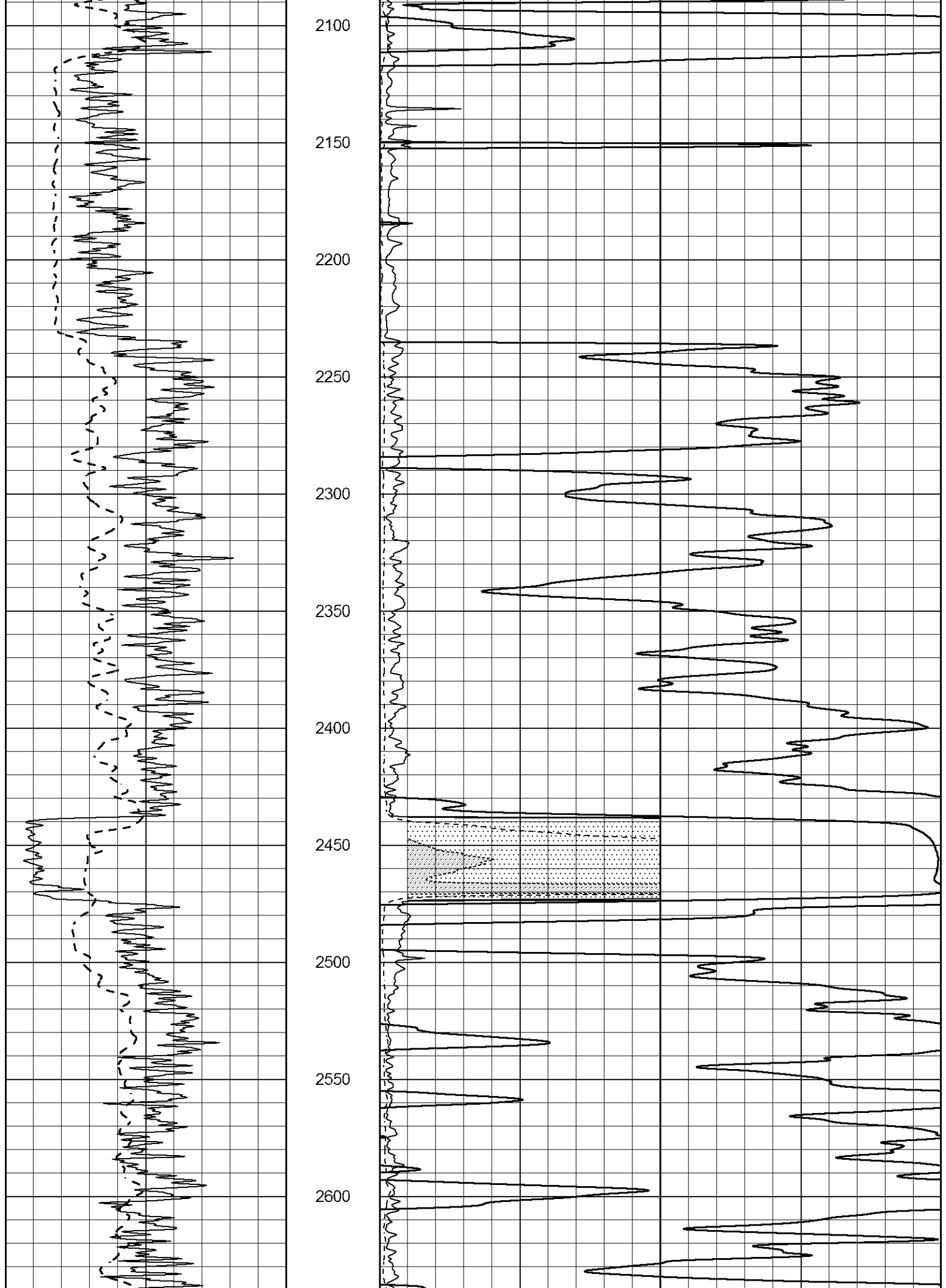
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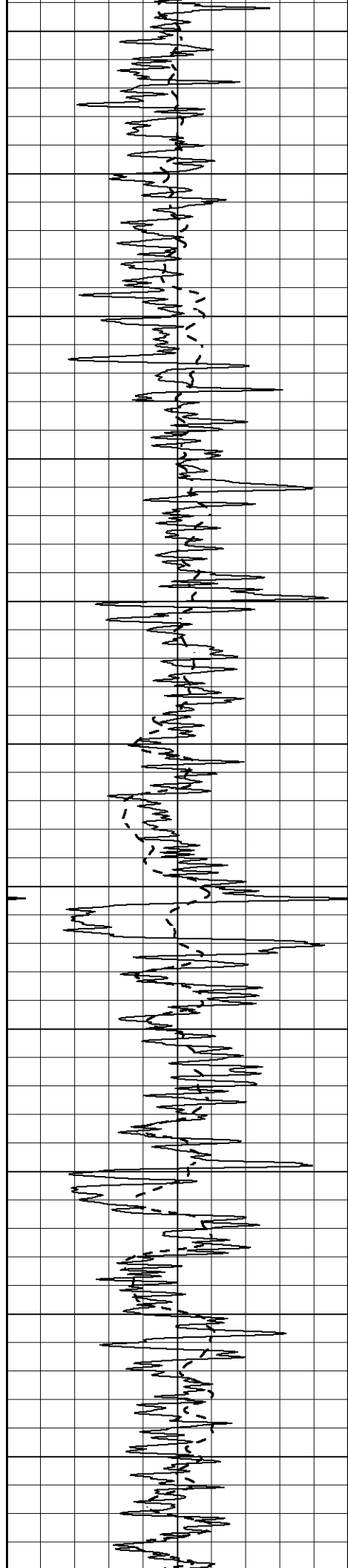
1950

2000

2050







2650

2700

2750

2800

2850

2900

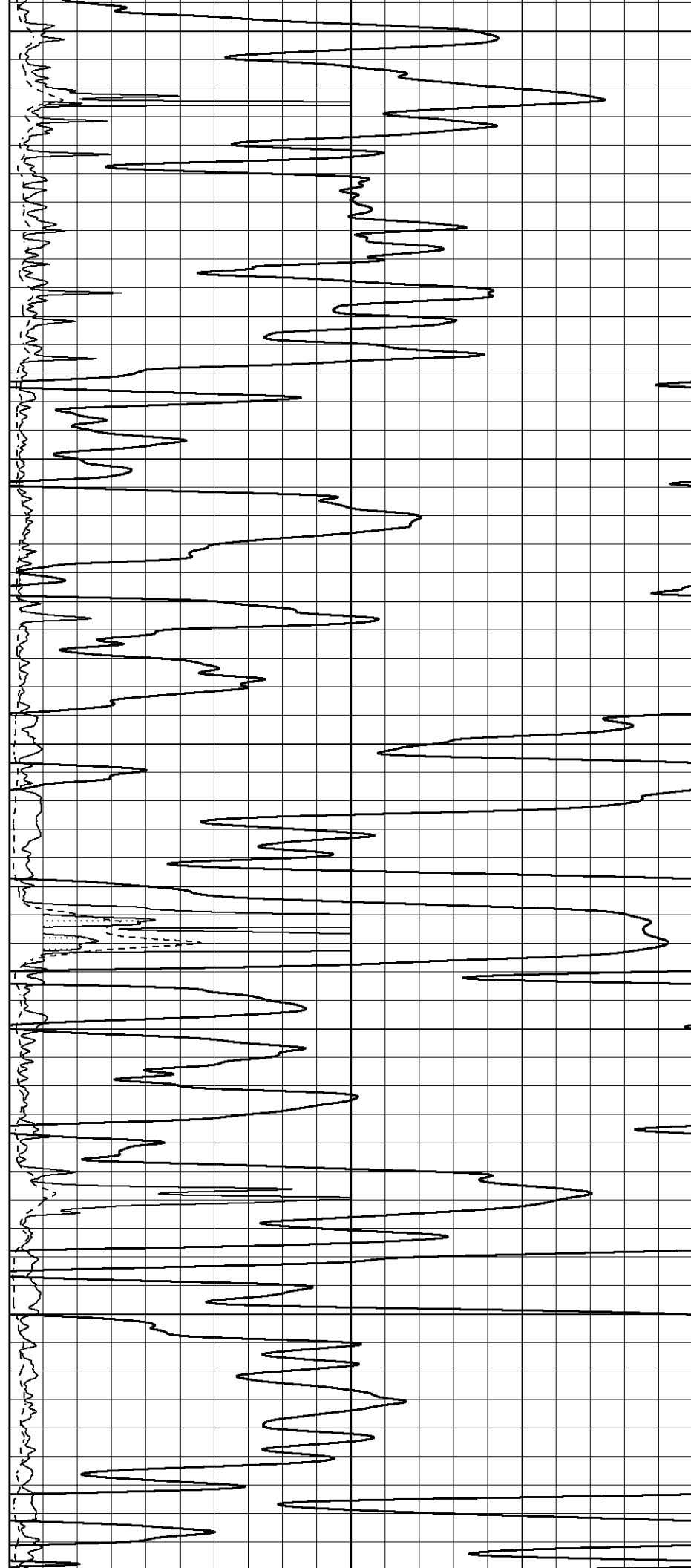
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3000

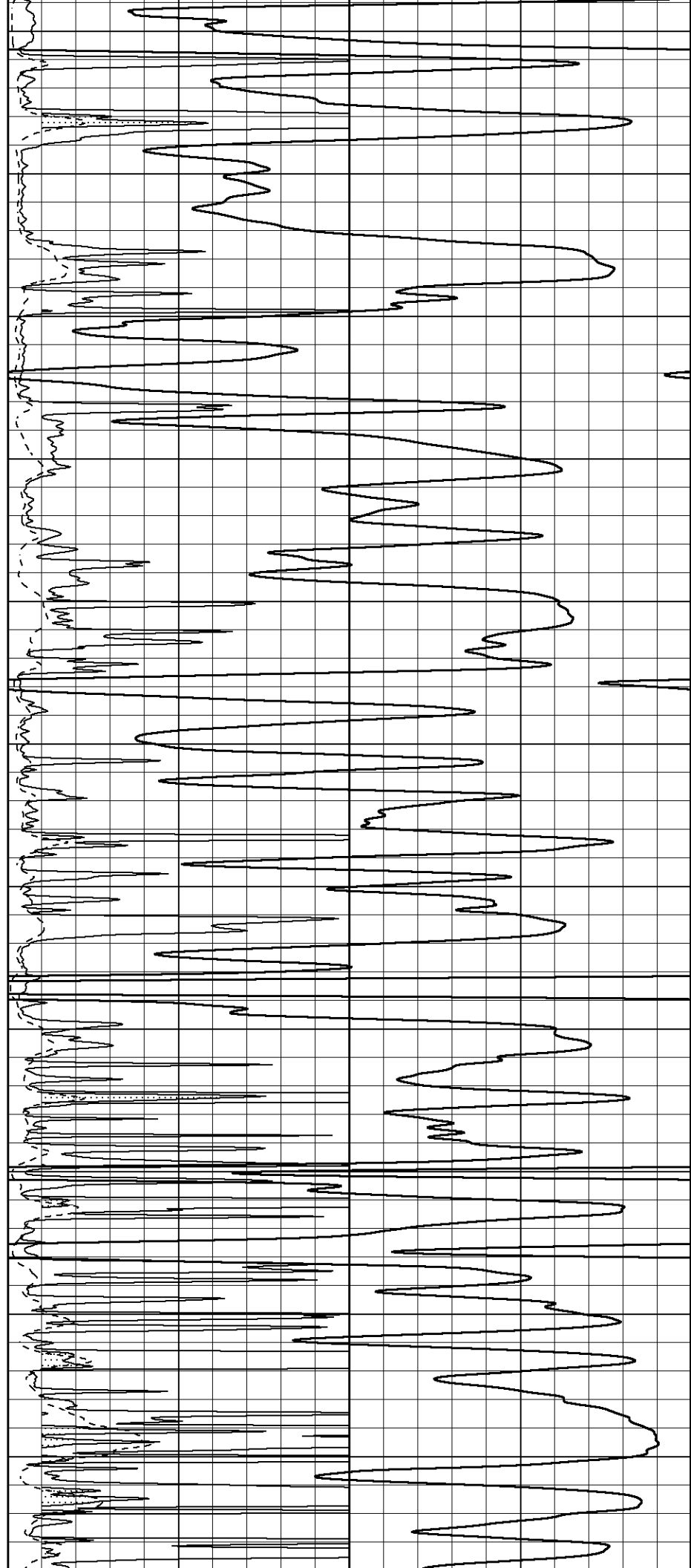
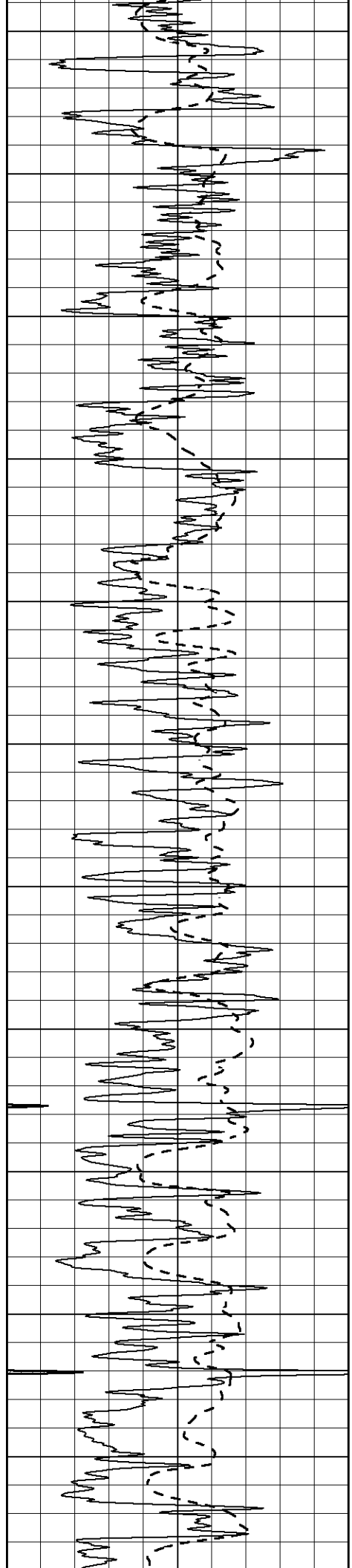
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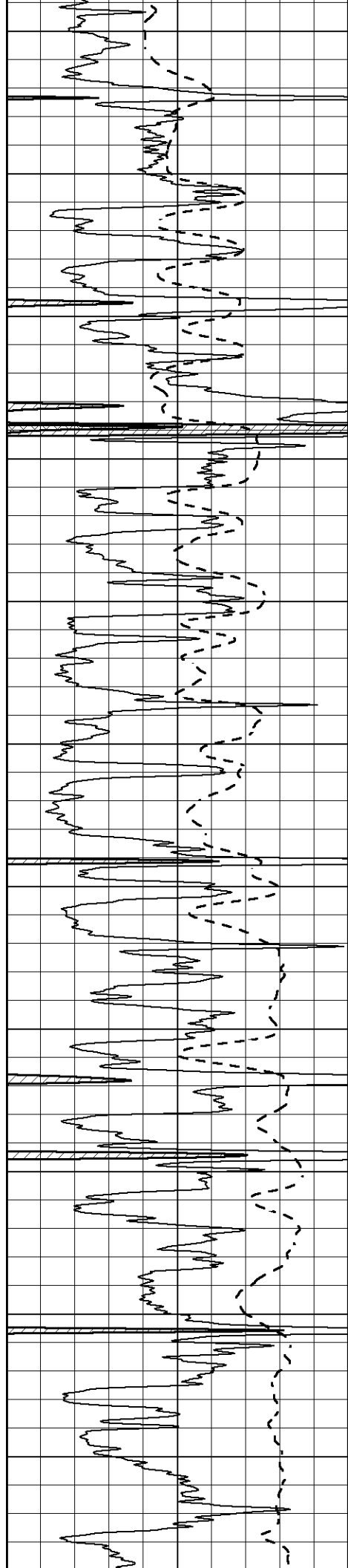
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3150

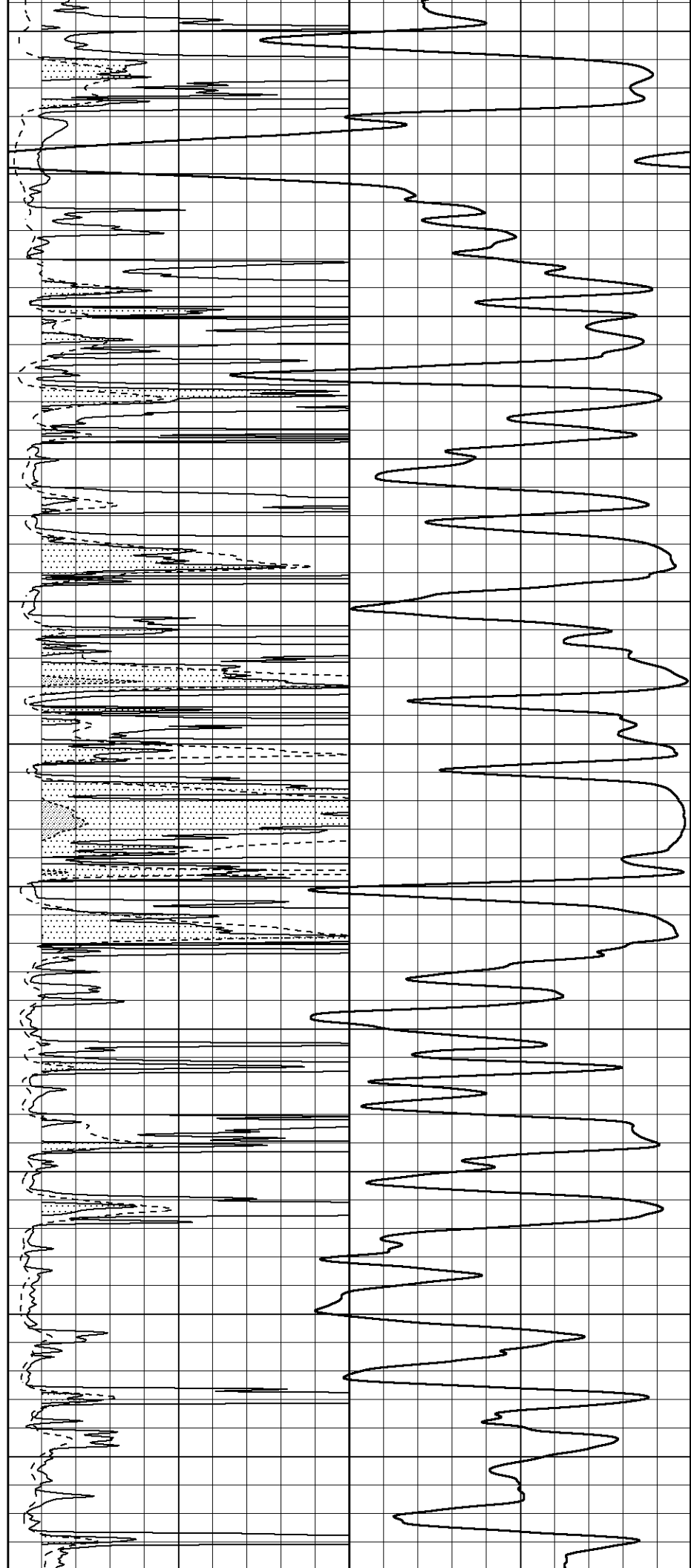


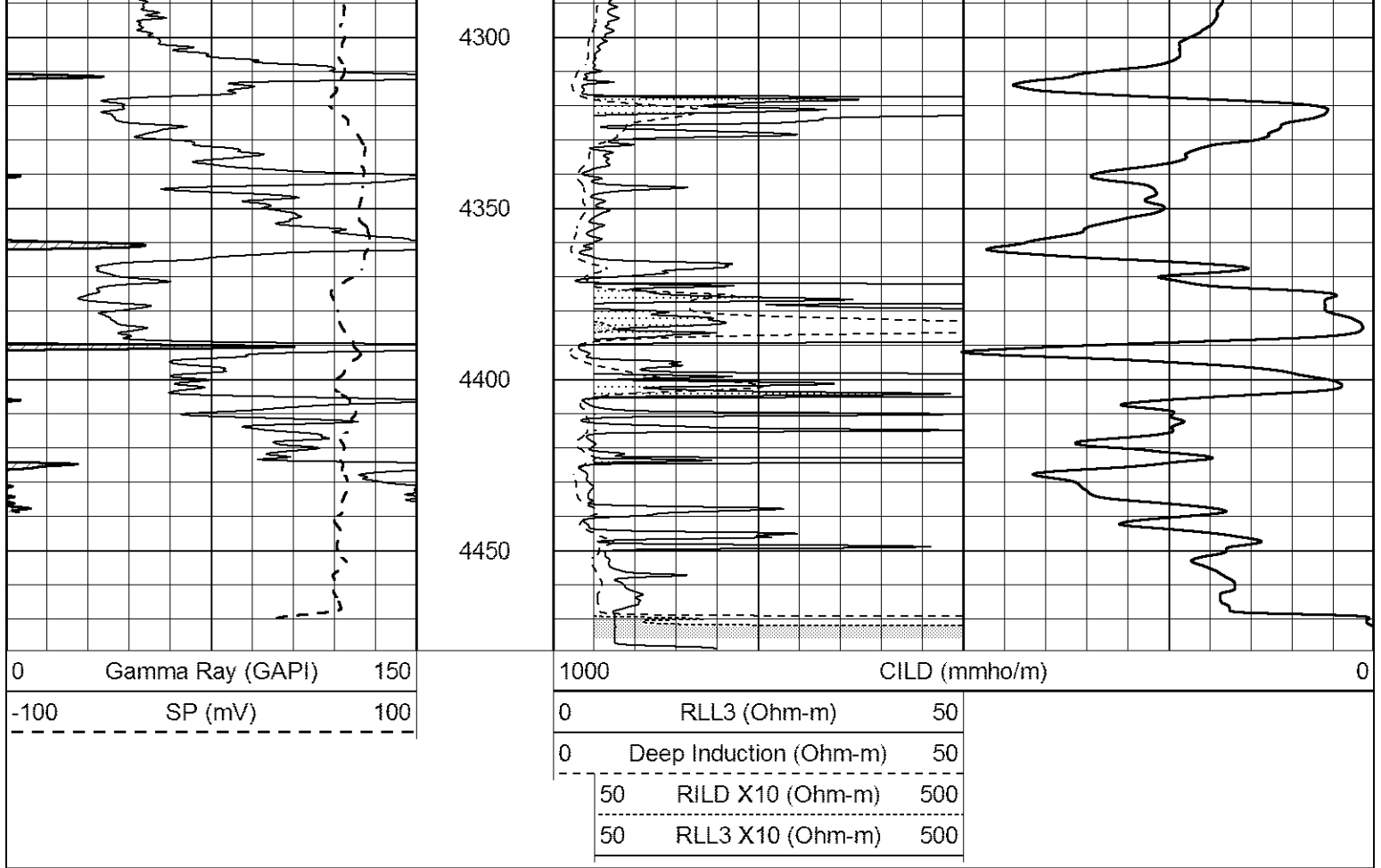
3200  
3250  
3300  
3350  
3400  
3450  
3500  
3550  
3600  
3650  
3700





3750  
3800  
3850  
3900  
3950  
4000  
4050  
4100  
4150  
4200  
4250

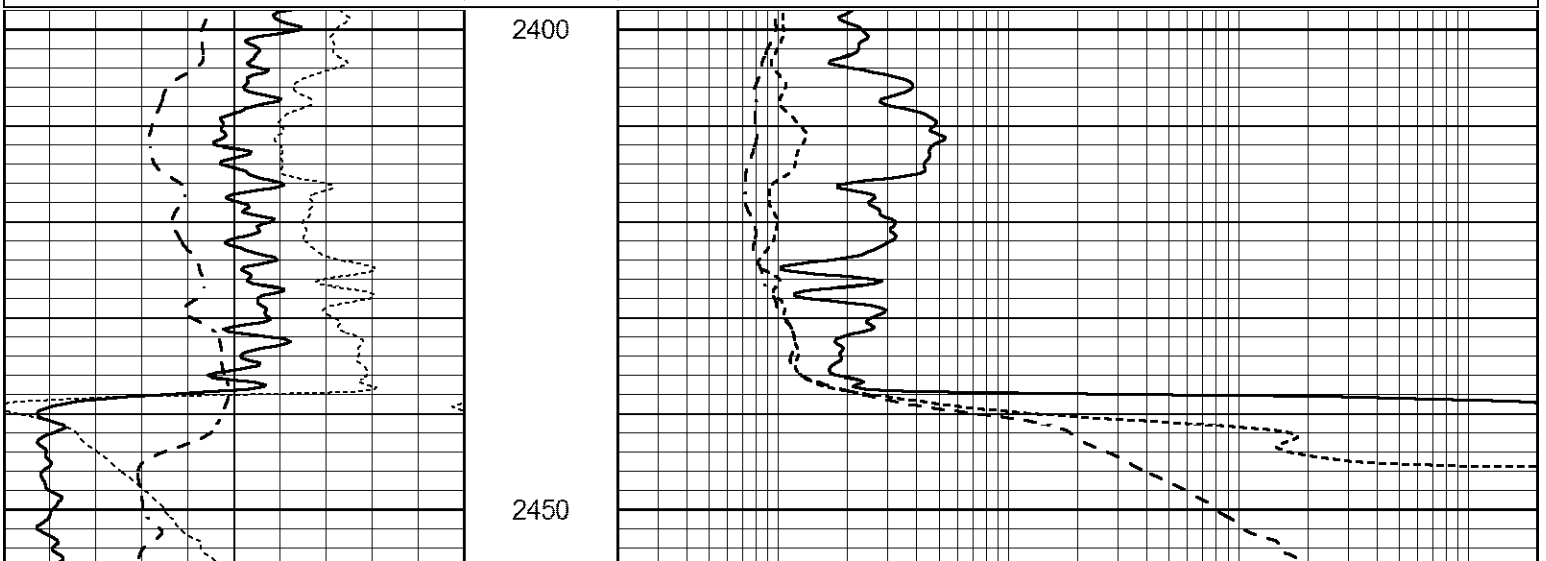


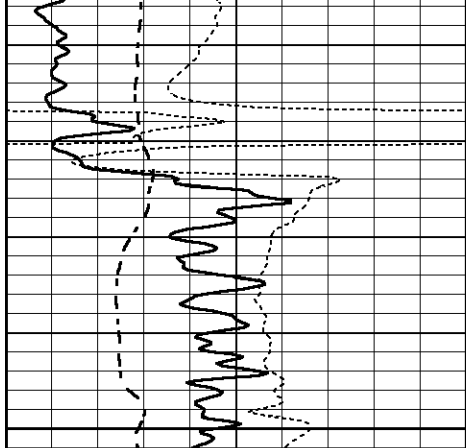


# ANHYDRITE

Database File 2039ddn8.db  
 Dataset Pathname pass3.2  
 Presentation Format \_dil  
 Dataset Creation Sun Apr 01 17:50:53 2018  
 Charted by Depth in Feet scaled 1:240

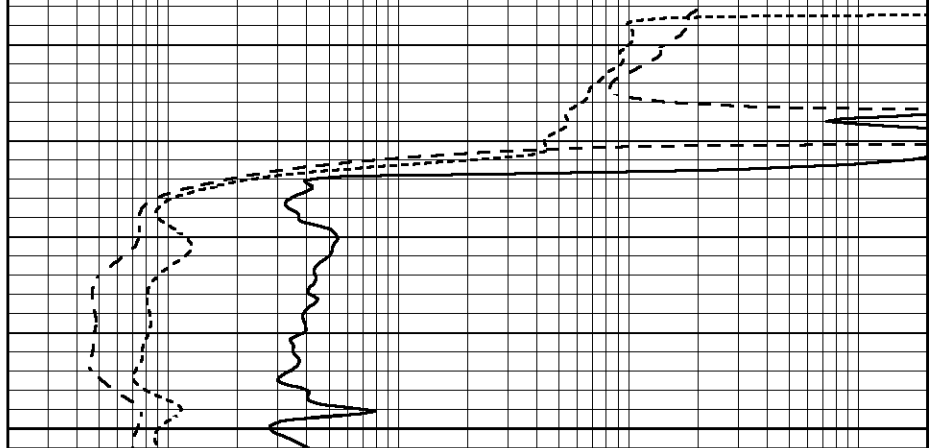
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000



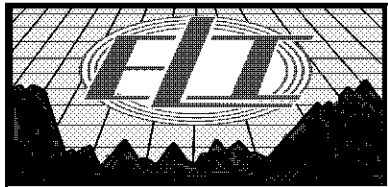


2500

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



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

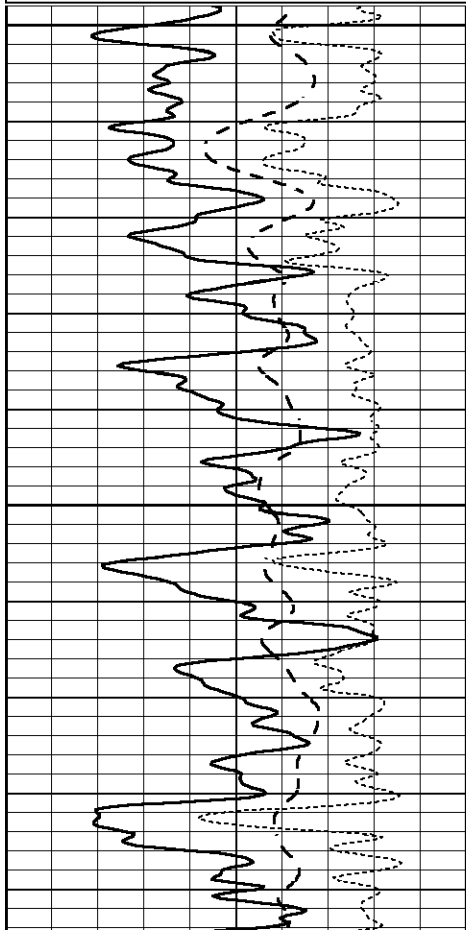


# MAIN SECTION

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 Dataset Pathname pass3.1  
 Presentation Format \_dil  
 Dataset Creation Sun Apr 01 17:42:14 2018  
 Charted by Depth in Feet scaled 1:240

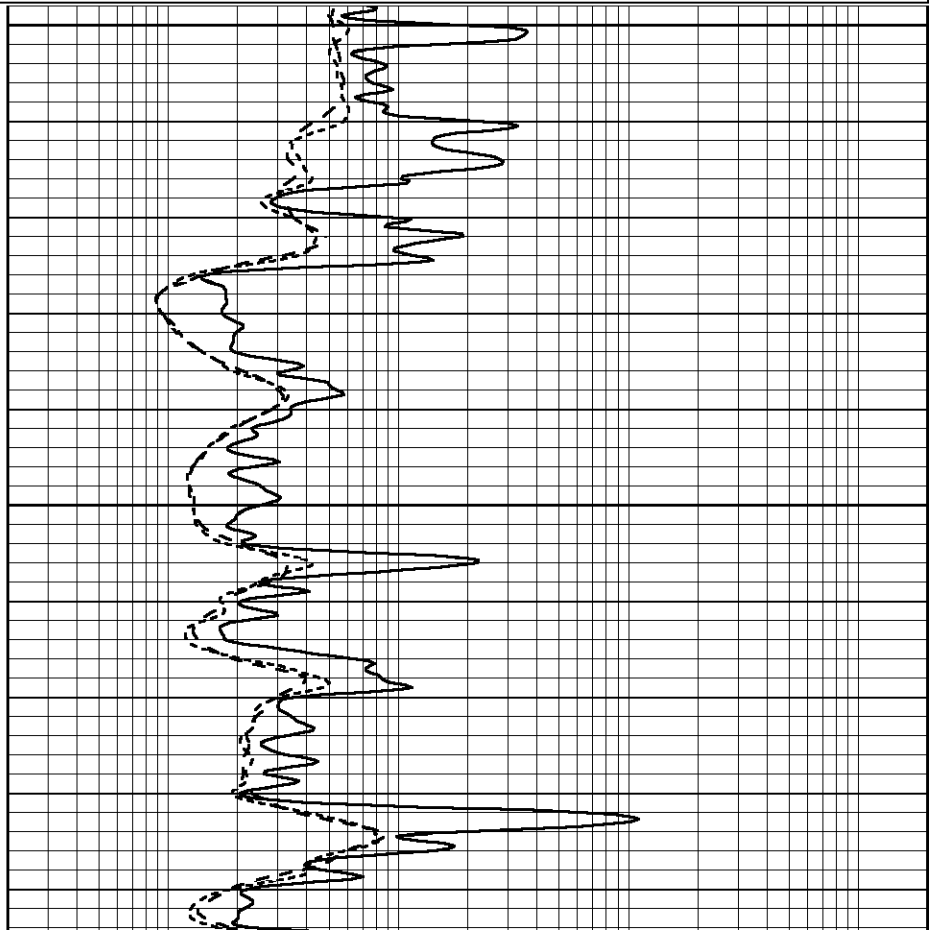
0	GAMMA RAY (GAPI)	150
-250	Rxo/Rt	50
-100	SP (mV)	100

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



3400

3450



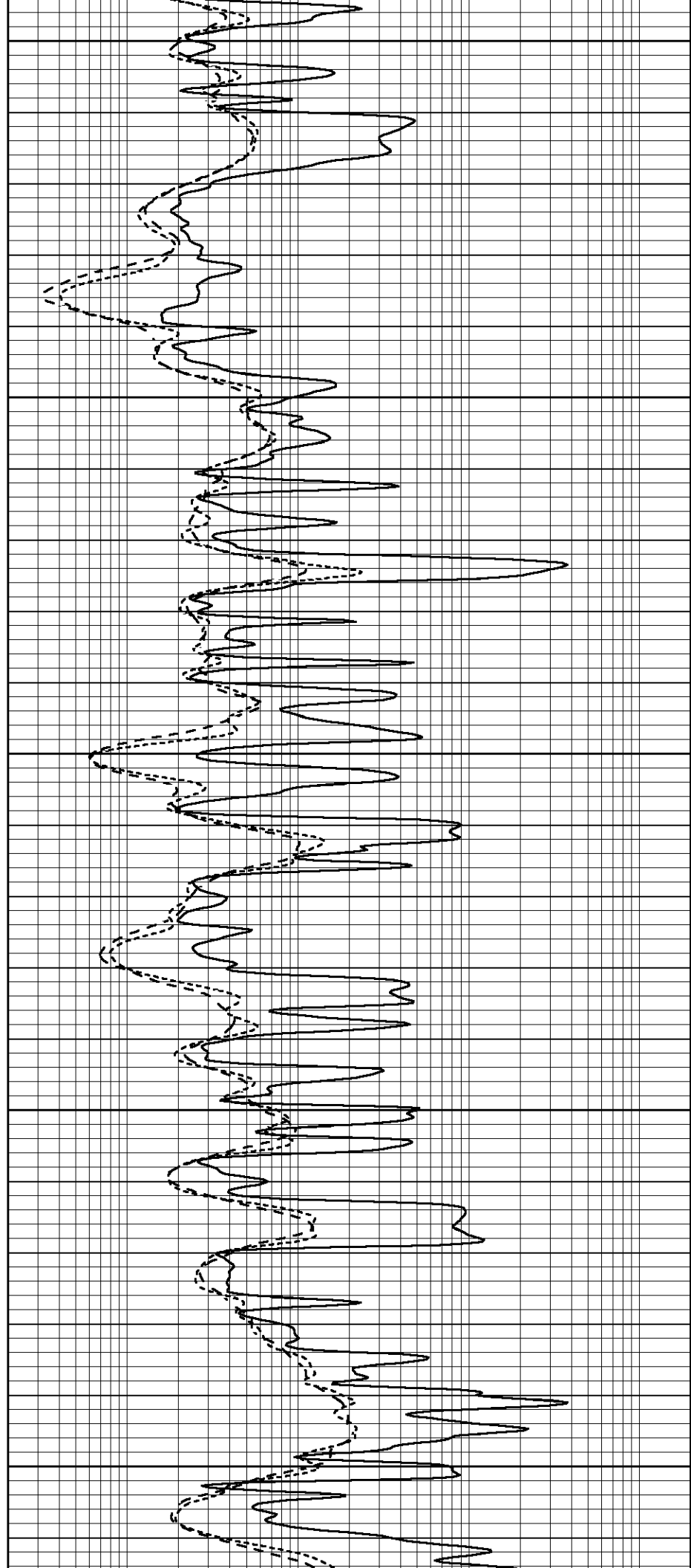
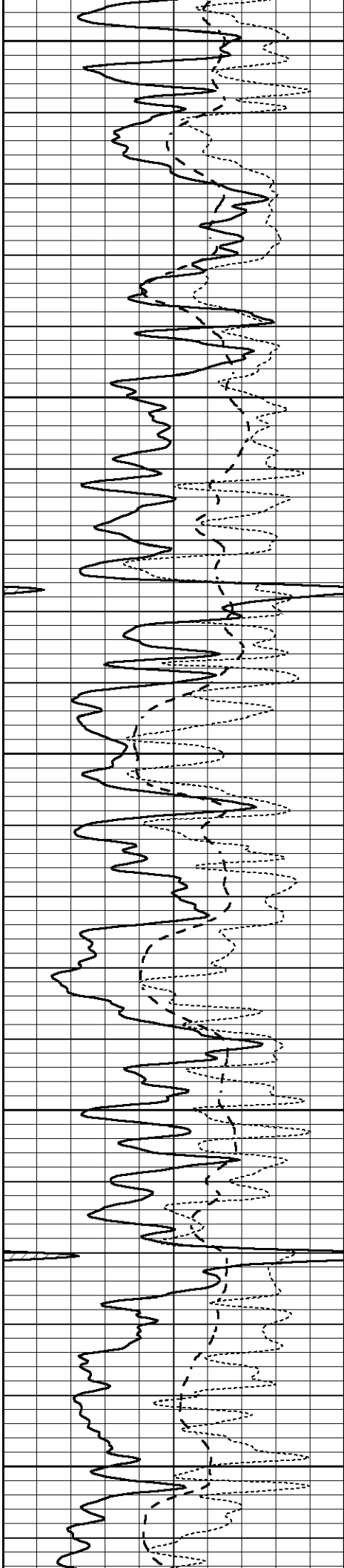
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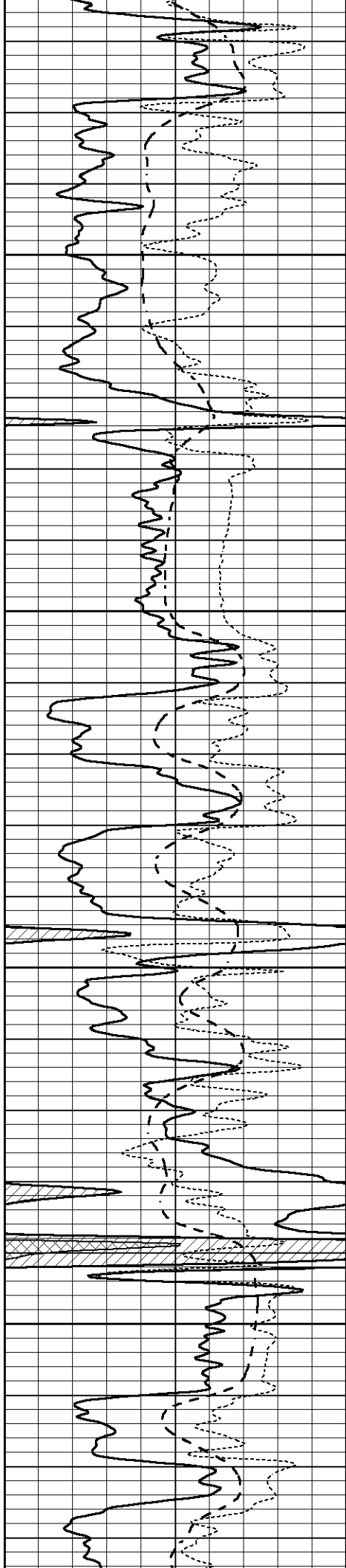
3550

3600

3650

3700



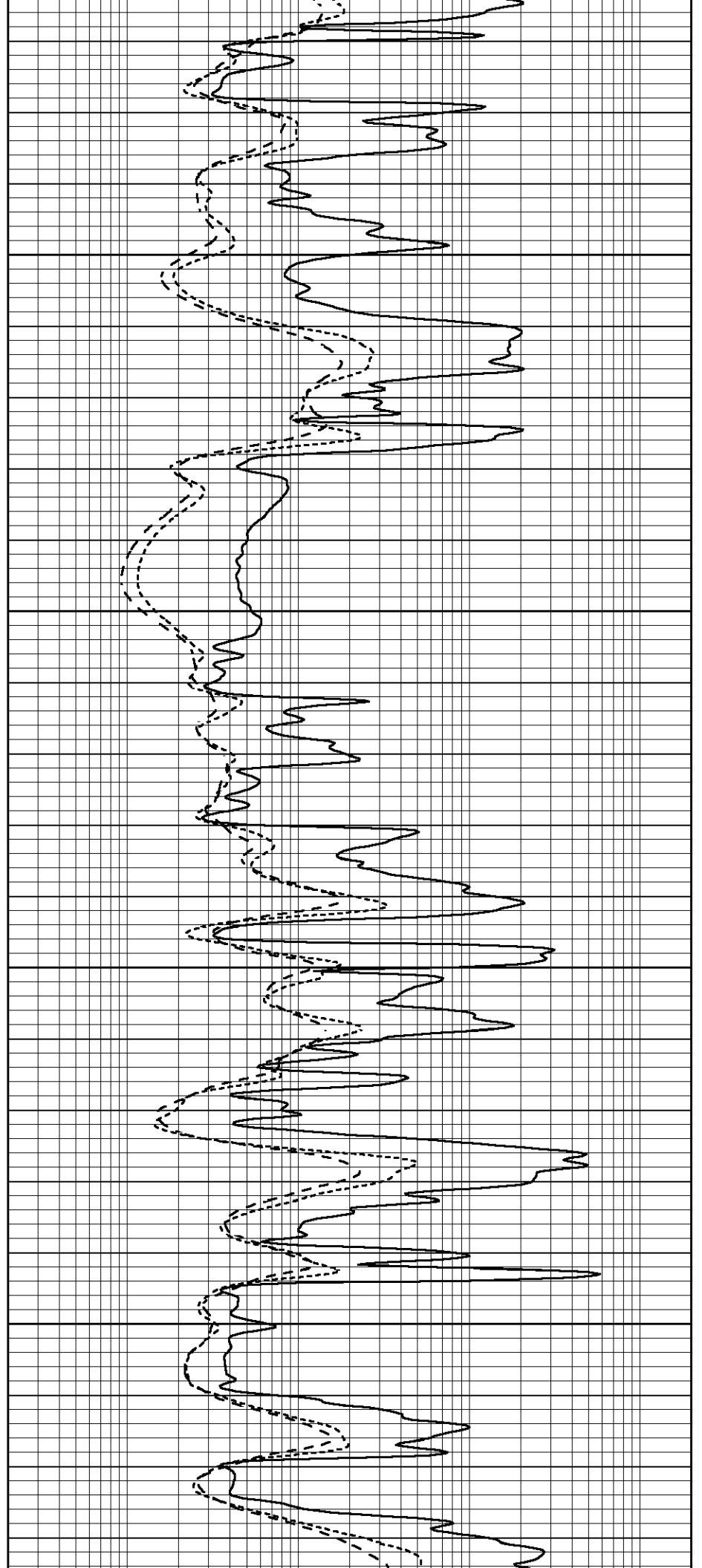


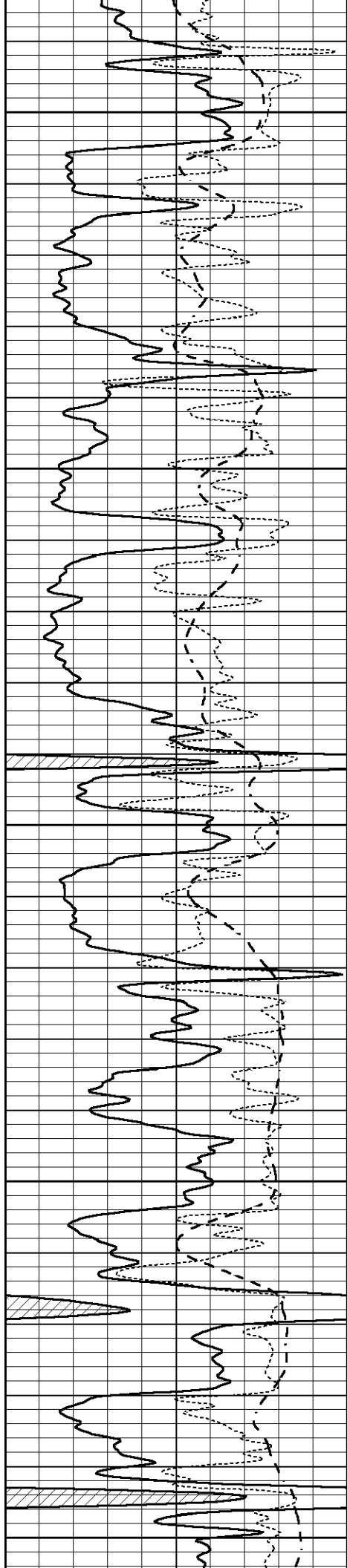
3750

3800

3850

3900





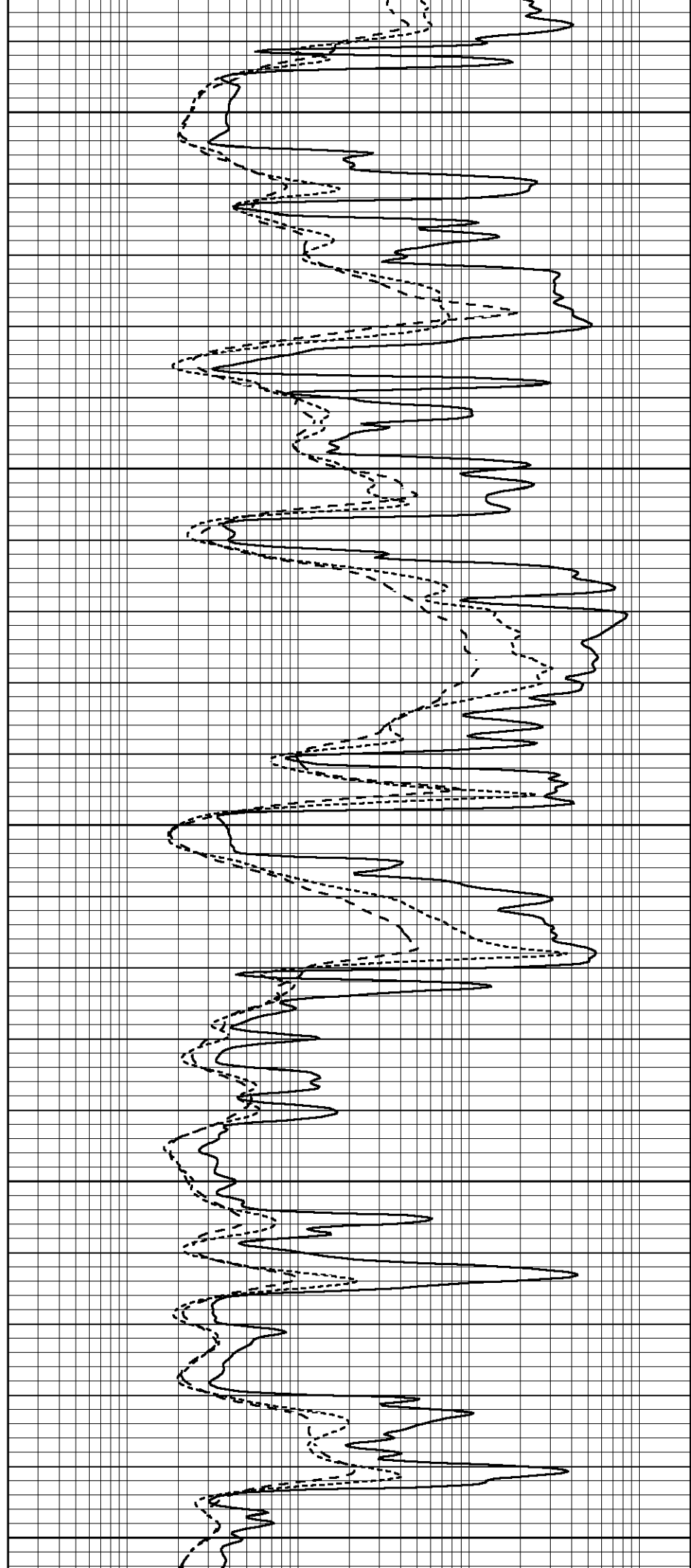
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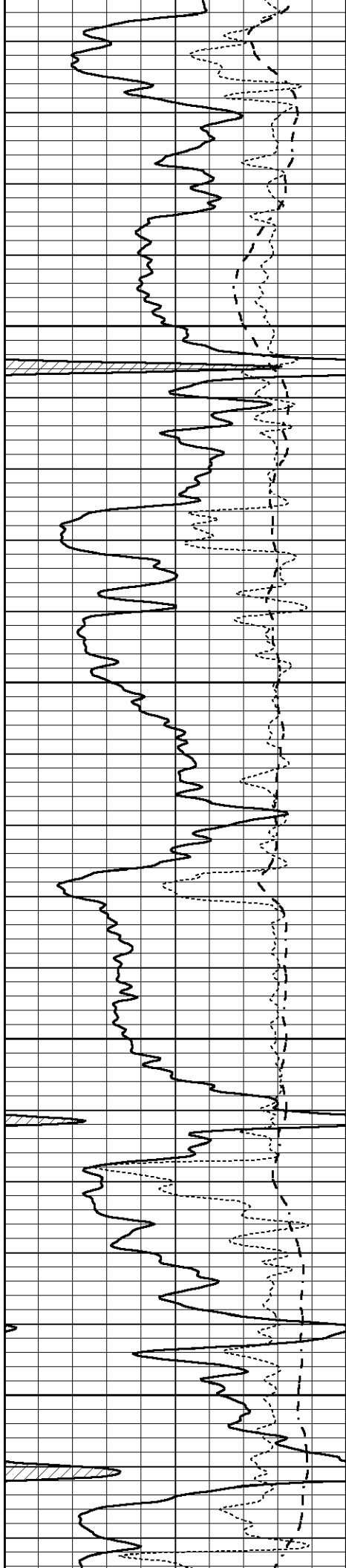
4000

4050

4100

4150



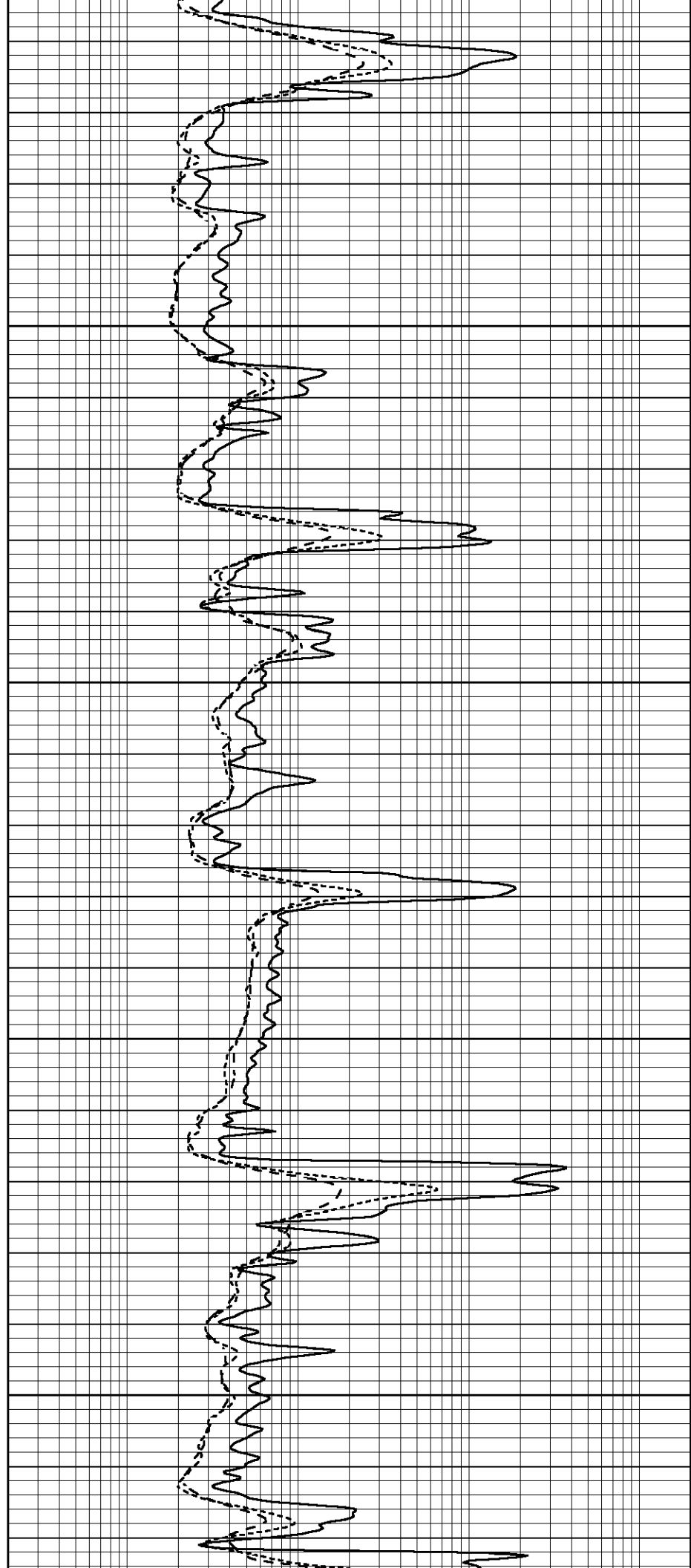


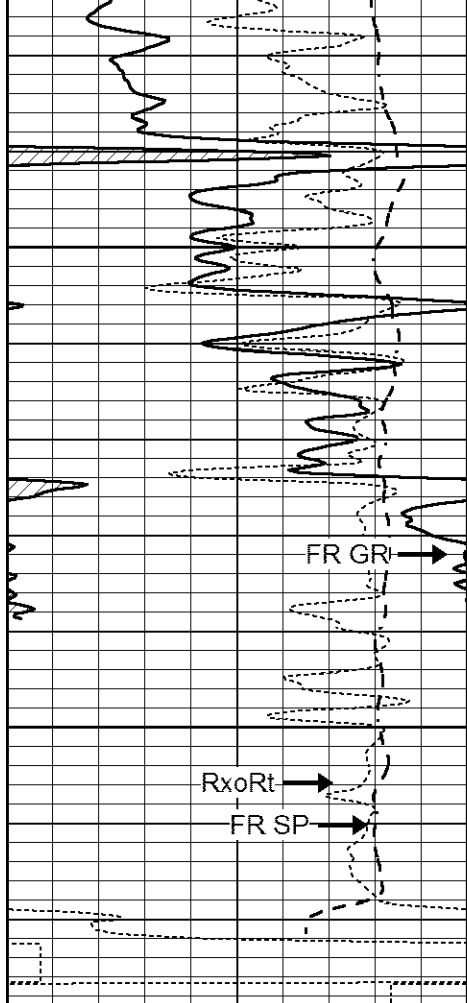
4200

4250

4300

4350





4400

4450

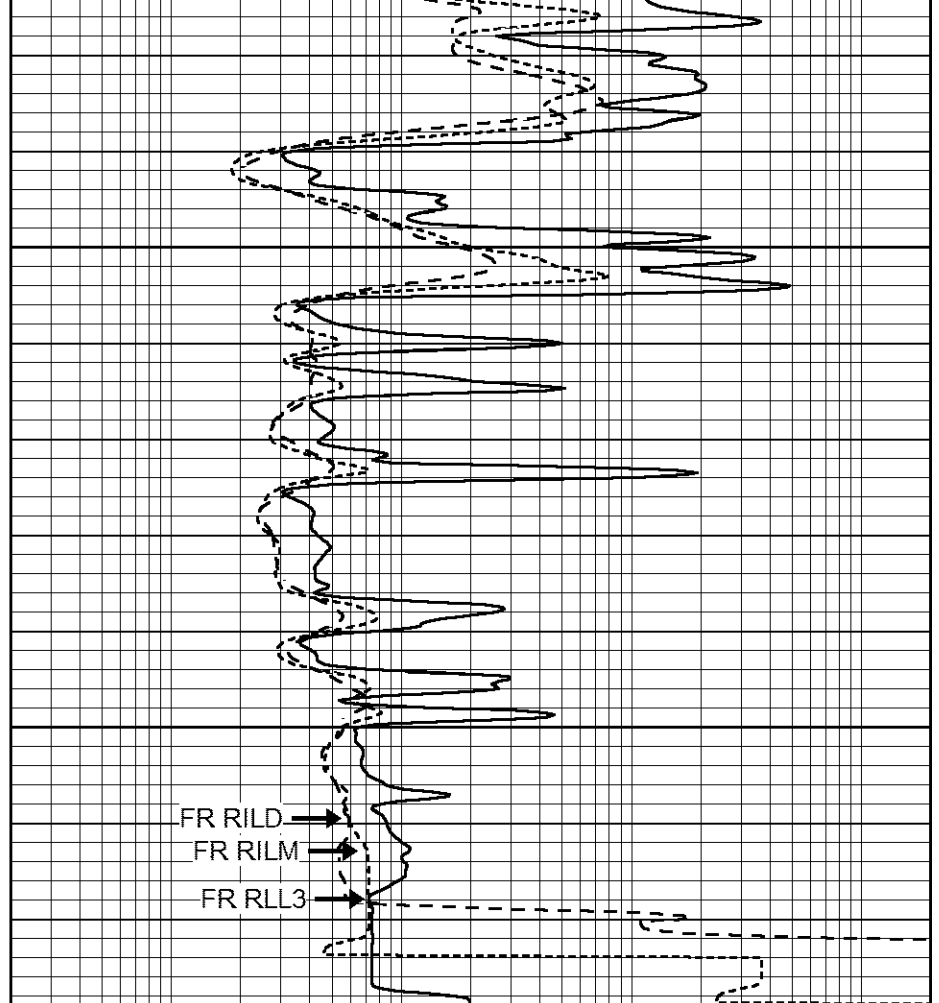
LTD 4470

FR GR

Rxo/Rt

FR SP

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

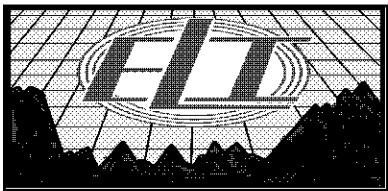


FR RILD

FR RILM

FR RLL3

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

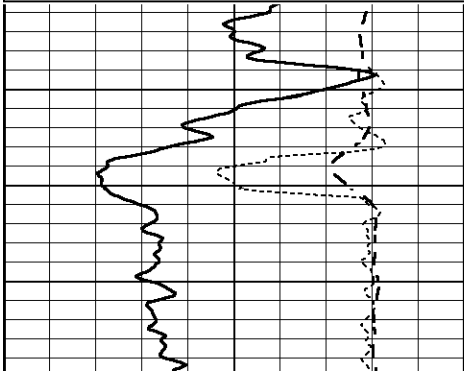


# REPEAT SECTION

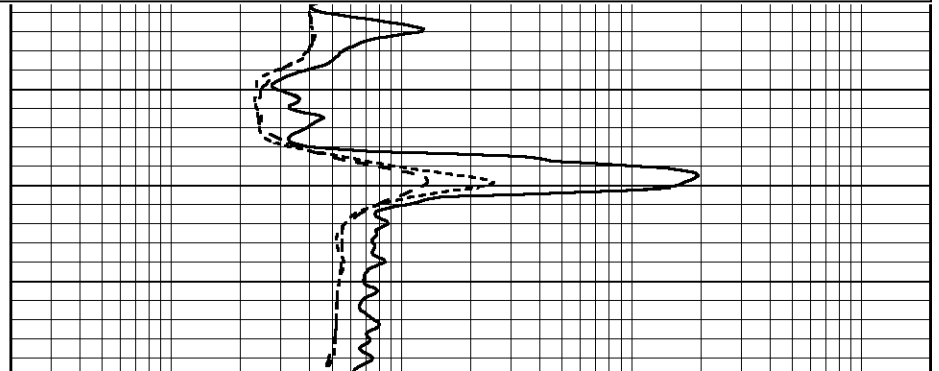
Database File 2039ddn8.db  
 Dataset Pathname pass2.1  
 Presentation Format \_dil  
 Dataset Creation Sun Apr 01 17:41:12 2018  
 Charted by Depth in Feet scaled 1:240

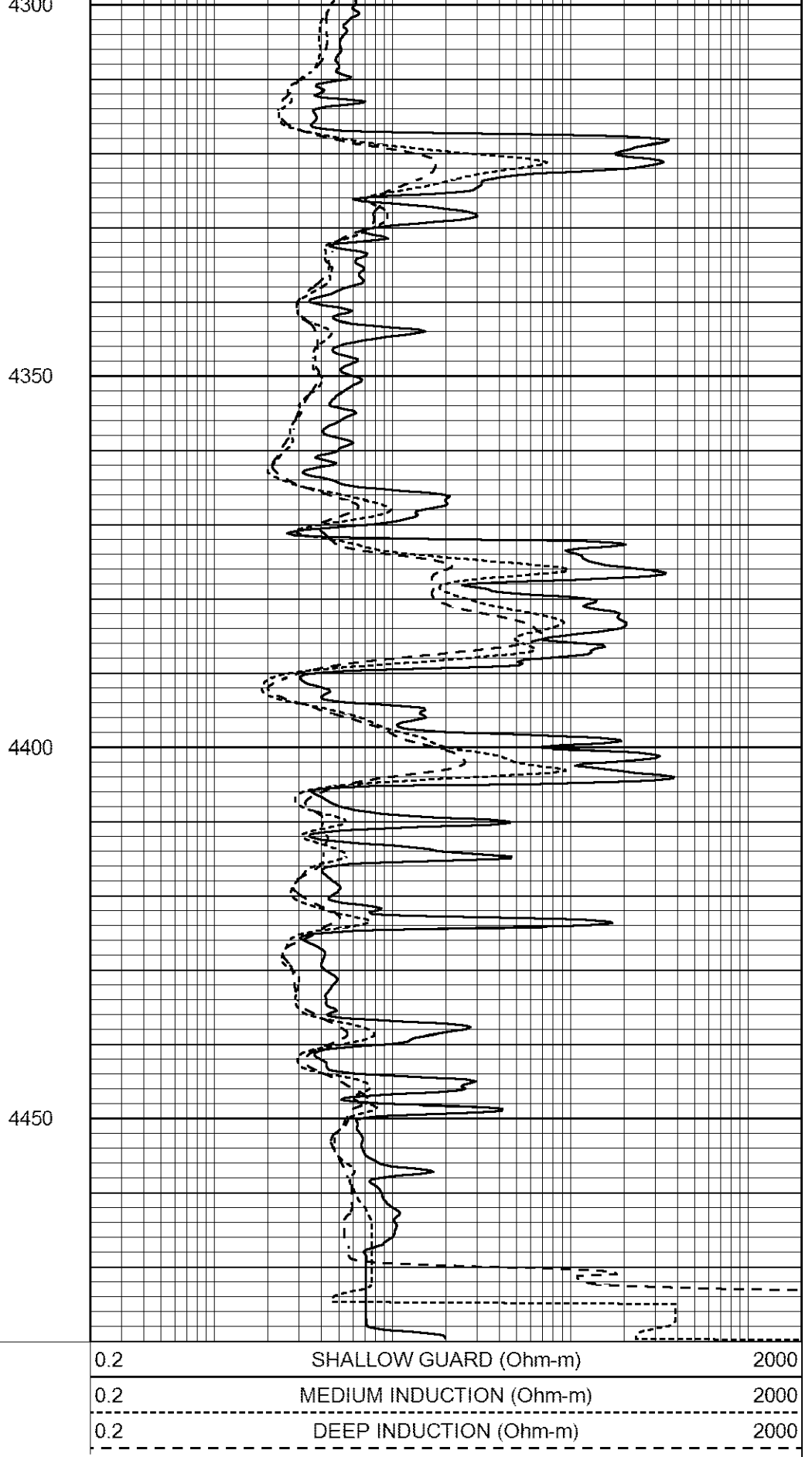
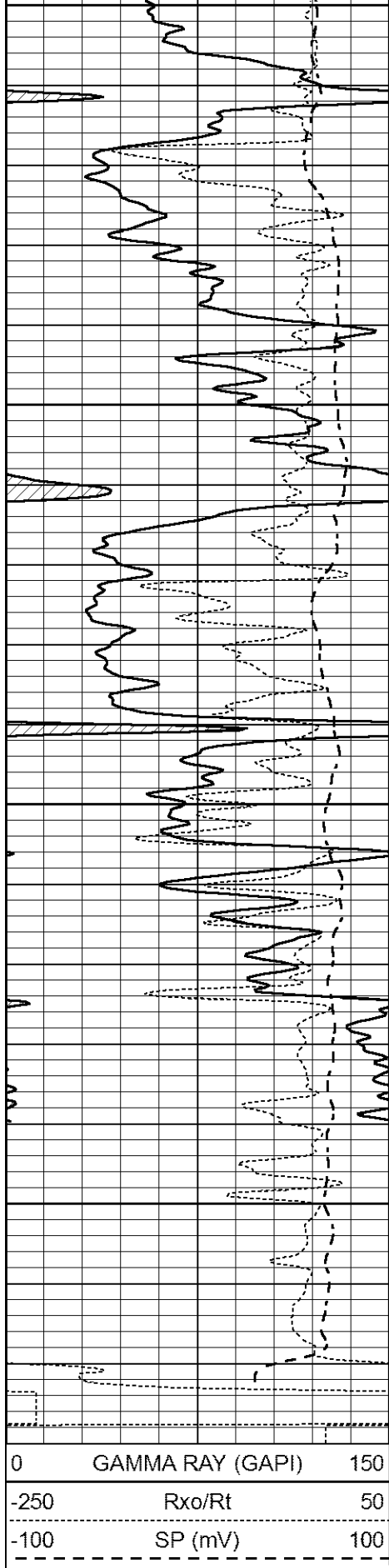
0	GAMMA RAY (GAPI)	150
-250	Rxo/Rt	50
-100	SP (mV)	100

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



4400





Calibration Report

Database File 2039ddn8.db  
 Dataset Pathname pass2.1  
 Dataset Creation Sun Apr 01 17:41:12 2018

**Dual Induction Calibration Report**

Serial-Model: FW1410-56-Probe  
 Surface Cal Performed: Tue Jul 25 12:15:33 2017  
 Downhole Cal Performed: Tue Jul 25 12:15:37 2017  
 After Survey Verification Performed: Tue Jul 25 12:15:38 2017

**Surface Calibration**

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	527.061	-3.201
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	567.187	32.510
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.005	0.624	V	0.000	400.000	mmho/m	645.611	-3.034
Medium	0.012	0.721	V	0.000	464.000	mmho/m	653.591	-7.532

**Downhole Calibration**

Readings				References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.647	301.329	mmho/m	-0.780	336.378	mmho/m	1.117	-0.058
Medium	38.256	411.013	mmho/m	39.046	441.706	mmho/m	1.080	-2.280
LL3		7.471	V		2500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.085	V		5000.000	mmho-m		

**After Survey Verification**

Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.647	301.329	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	38.256	411.013	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: Wed Feb 11 18:53:41 2015

	Background	Aluminum	Magnesium	
Window 1	613.01	6027.40	27508.60	cps
Window 2	48.21	1424.77	7132.66	cps
Window 4	266.48	1373.19	5767.15	cps
Window 5	622.07	10090.30	18937.90	cps
Window 6	49.07	1682.84	3271.18	cps
Window 8	298.04	3248.38	5980.58	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha: : -1.8451      SS Alpha: : -0.7542      LS CPE: : 1.0882  
 LS Beta: : 138648.8473      SS Beta: : 21960.9250      SS CPE: : 1.5181

**Before Survey Background Counts Verification**

Performed: Wed Dec 31 18:00:00 1969

Window 1      0.00      cps

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: Wed Feb 11 18:53:41 2015

Results		Readings		References (in)		Gain	Offset
Low	High	Low	High				
1107.5	7124.1	8.0	15.0			0.0	6.3

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: 070558  
Tool Model: Probe1  
Performed: Tue Jul 25 12:16:33 2017

Calibrator Value: 1.0 GAPI

Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4000	GAPI/cps