

DUAL
INDUCTION
LOG

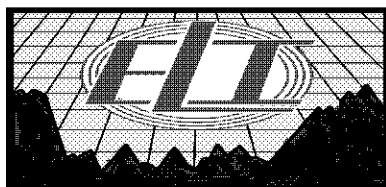
Company	TRIPLE CROWN OPERATING, LLC.		
Well	WONDERLAND #1-9		
Field			
County	NESS	State	KANSAS
Location:	API # : 15-135-25999-00-00		Other Services CDL/CNL MEL/SON
	2510' FSL & 1750' FWL		
Permanent Datum	SEC 9	TWP 20S	RGE 22W
Log Measured From	GROUND LEVEL		Elevation 2240
Drilling Measured From	KELLY BUSHING 5' A.G.L		K.B. 2245 D.F. 2243 G.L. 2240
Date	4/12/18		
Run Number	ONE		
Depth Driller	4500		
Depth Logger	4503		
Bottom Logged Interval	4501		
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	9000 PPM
Density / Viscosity	9.3/48		
pH / Fluid Loss	9.0/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.44 @ 65F		
Rmf @ Meas. Temp	.33 @ 65F		
Rmc @ Meas. Temp	.52 @ 65F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.23 @ 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	ELI FELTS		

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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
BAZINE, KS. - 3 WEST TO AA RD. - 8 SOUTH TO RD 50 - 1 WEST TO RD. Z
1/2 SOUTH - EAST INTO

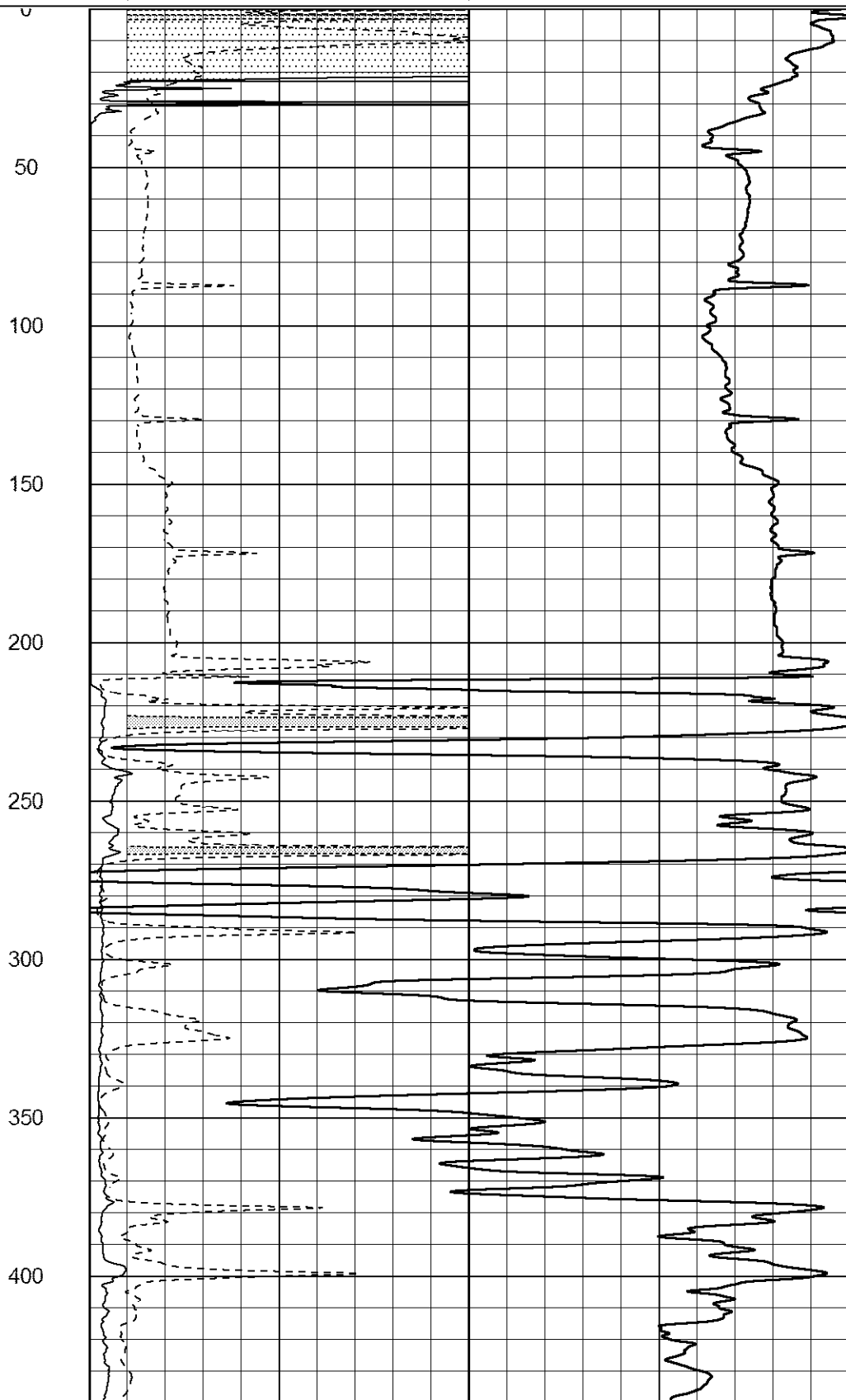
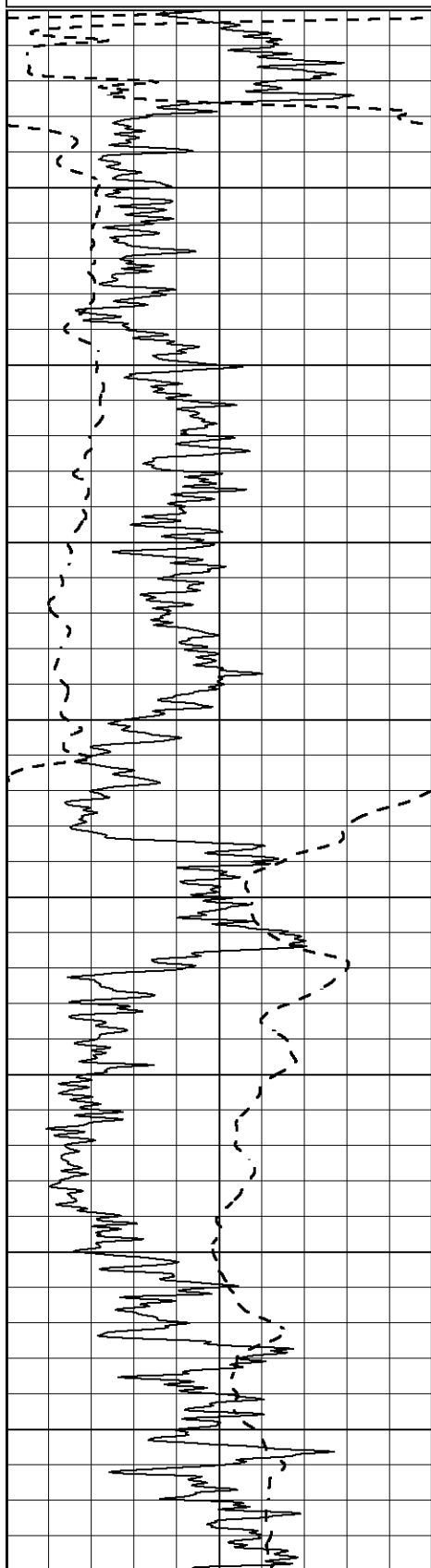


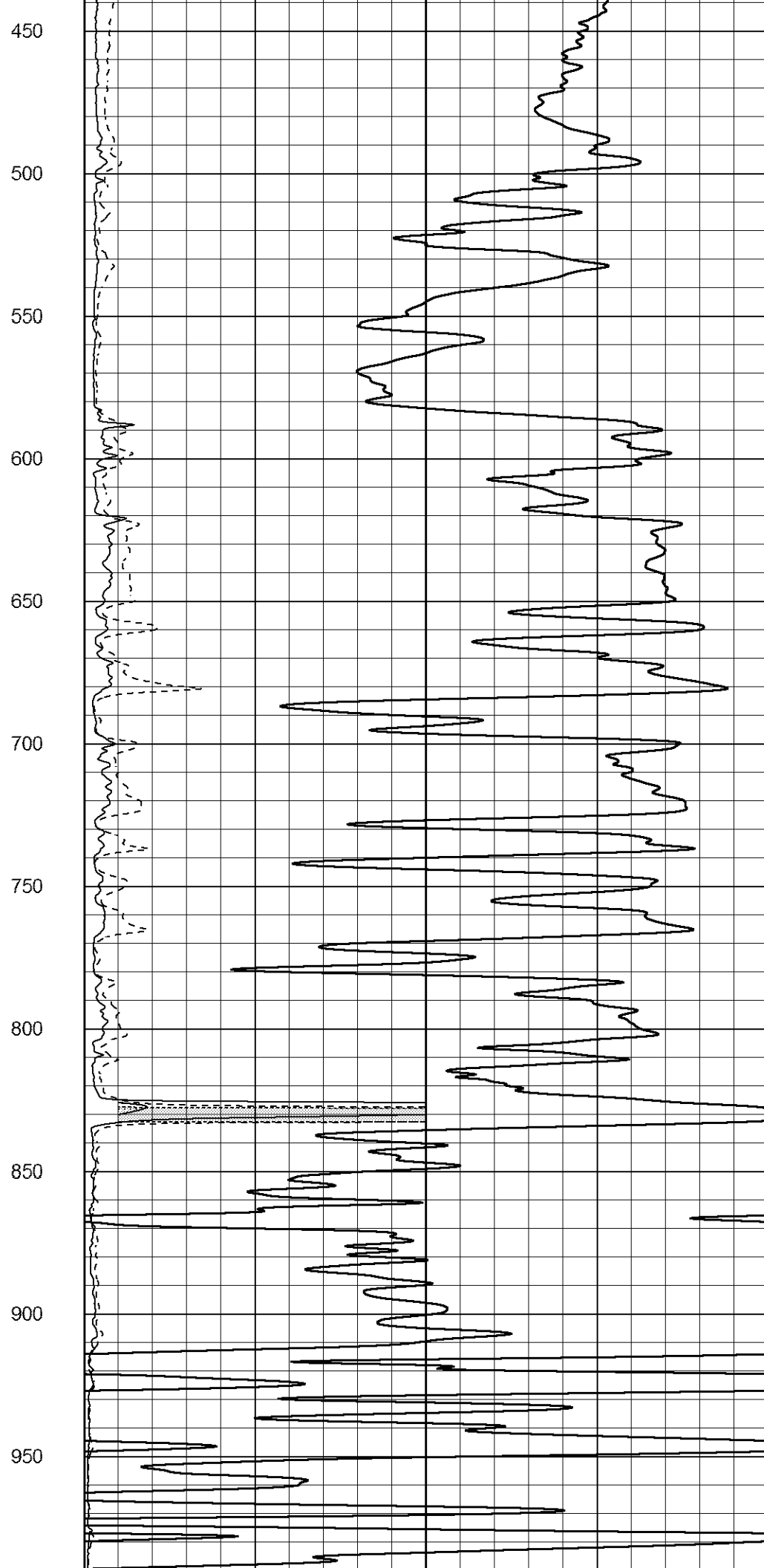
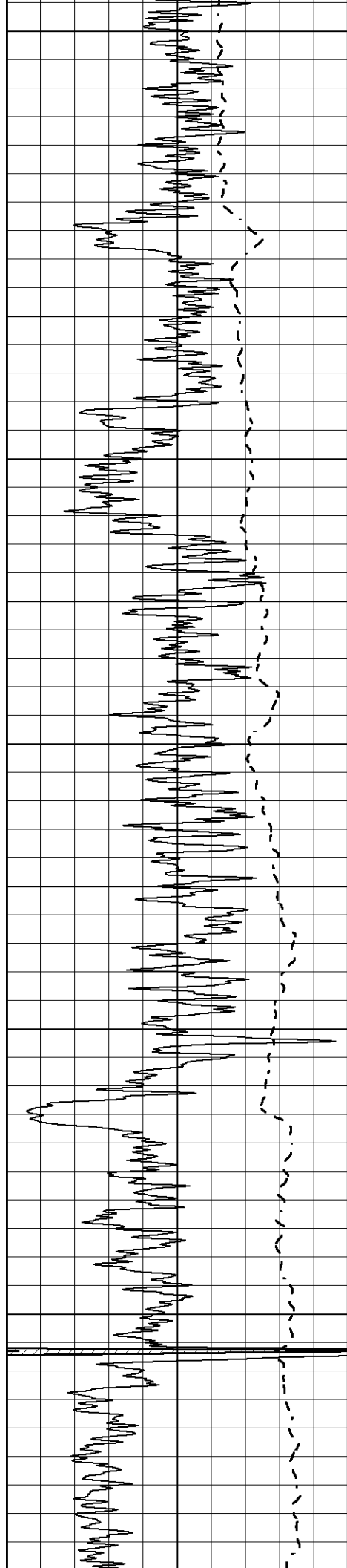
MAIN SECTION

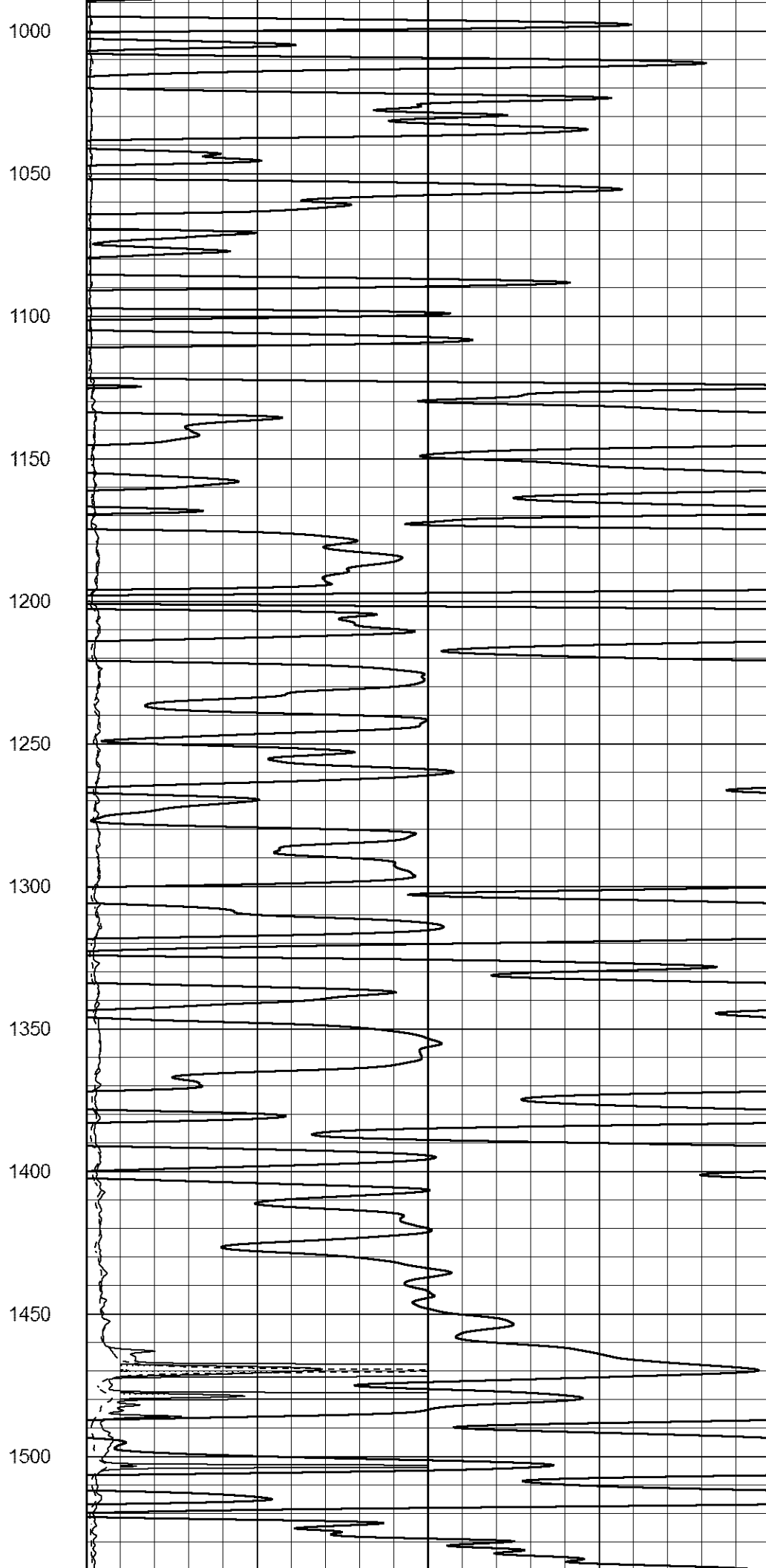
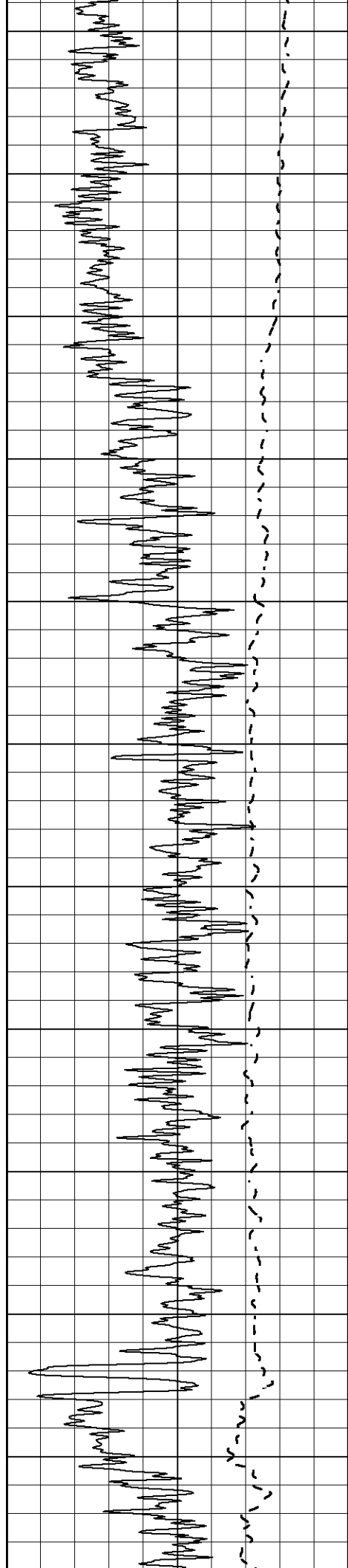
Database File 2041ddn8.db
Dataset Pathname pass3.3
Presentation Format _dil2
Dataset Creation Thu Apr 12 11:43:32 2018
Charted by Depth in Feet scaled 1:600

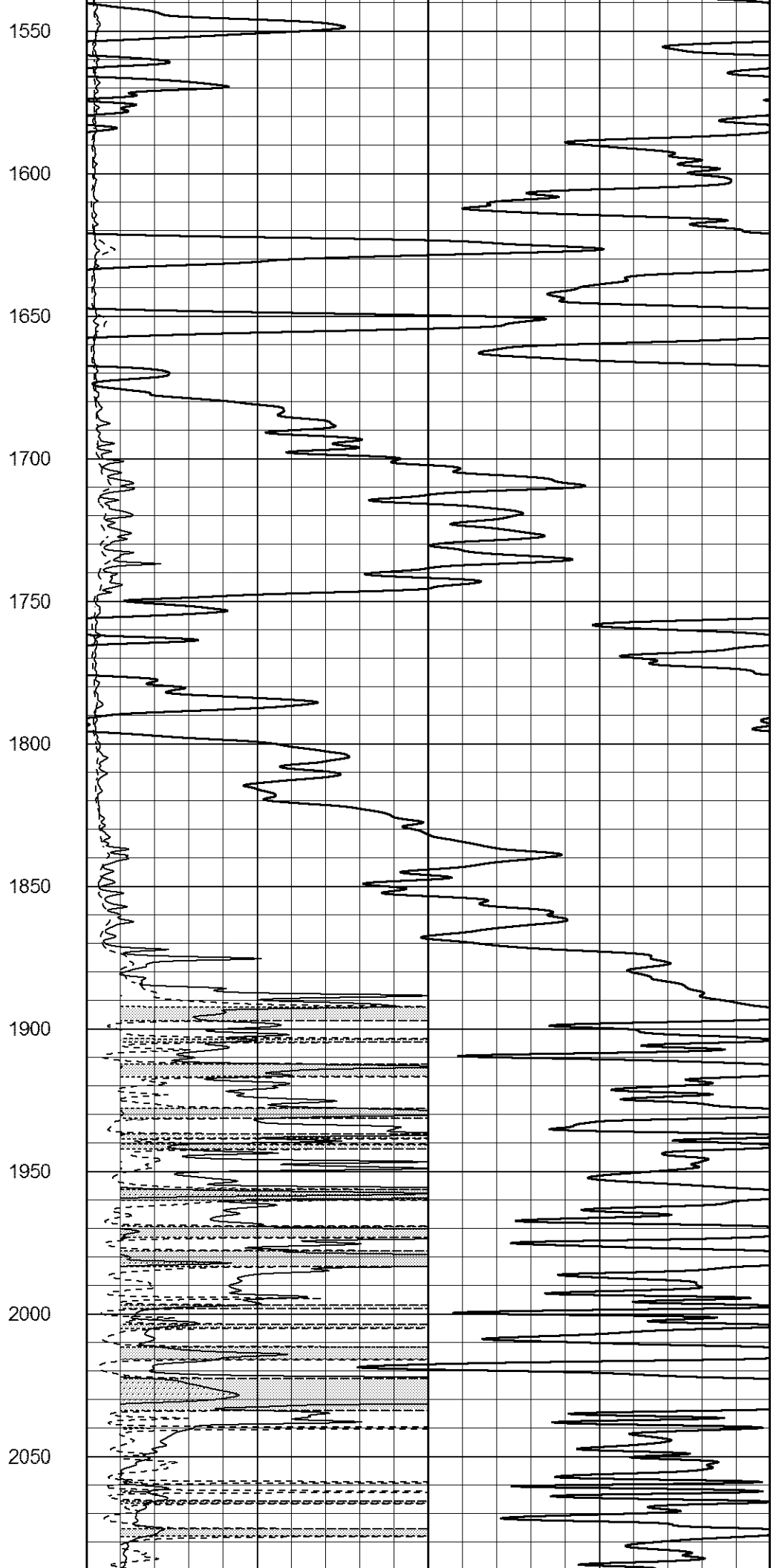
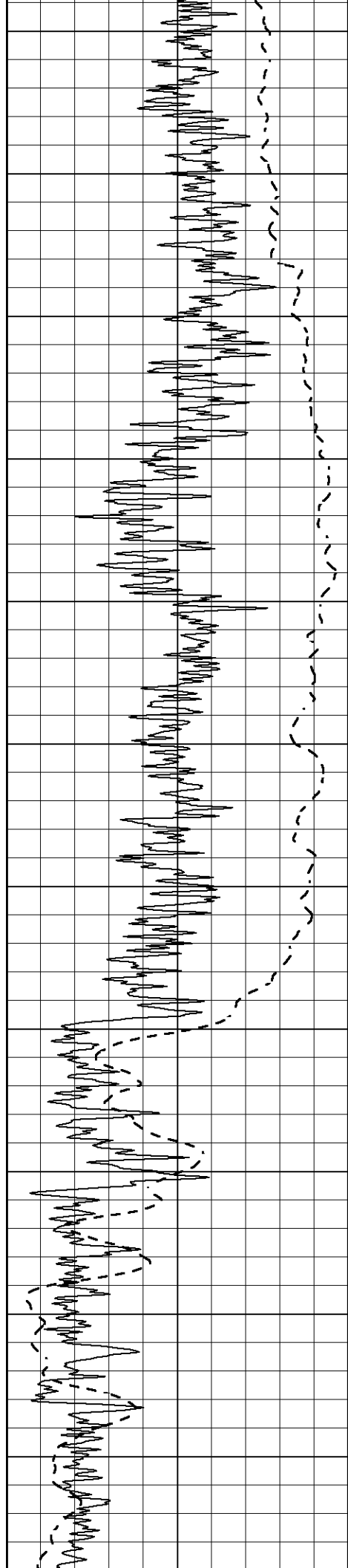
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

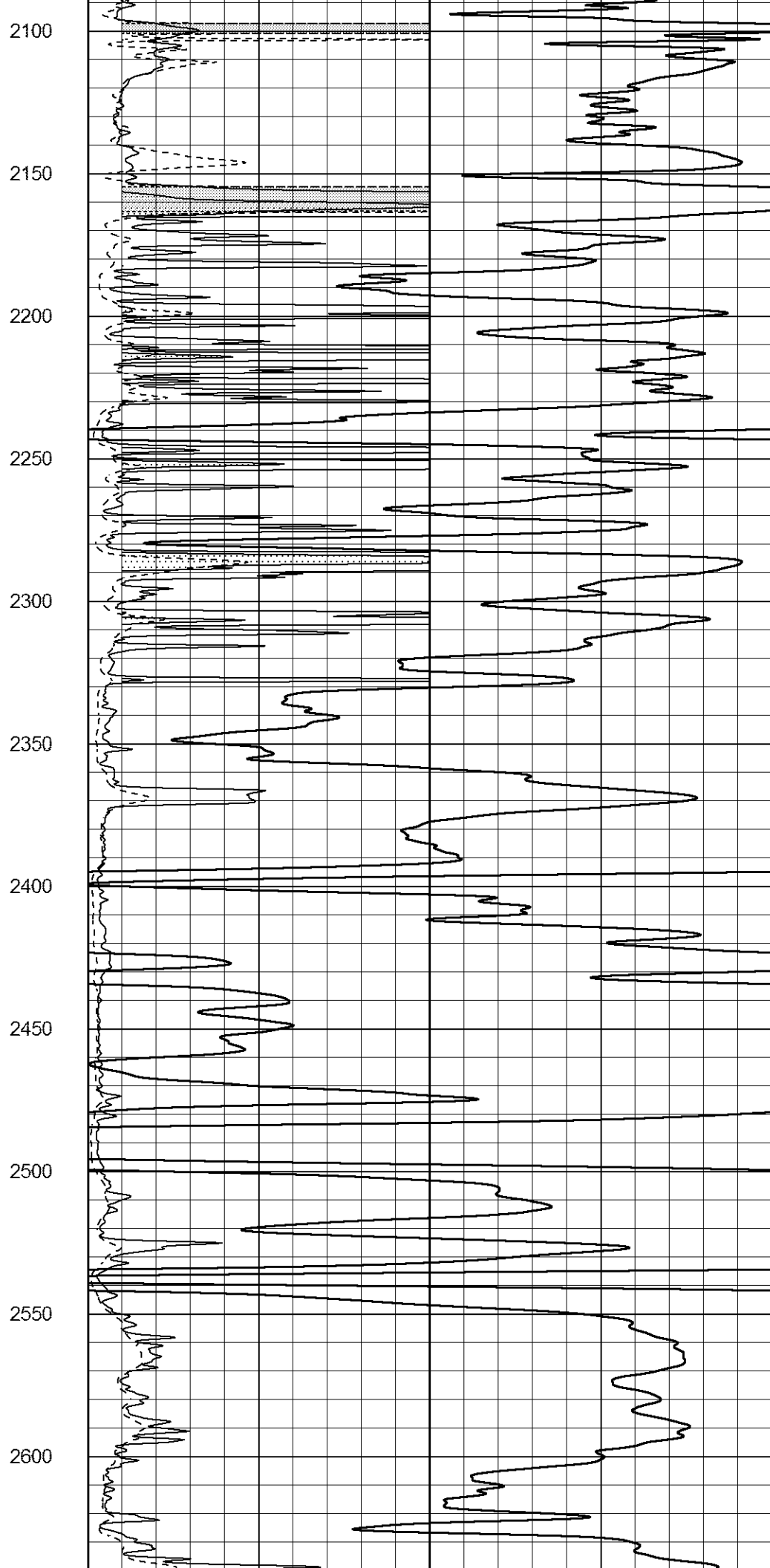
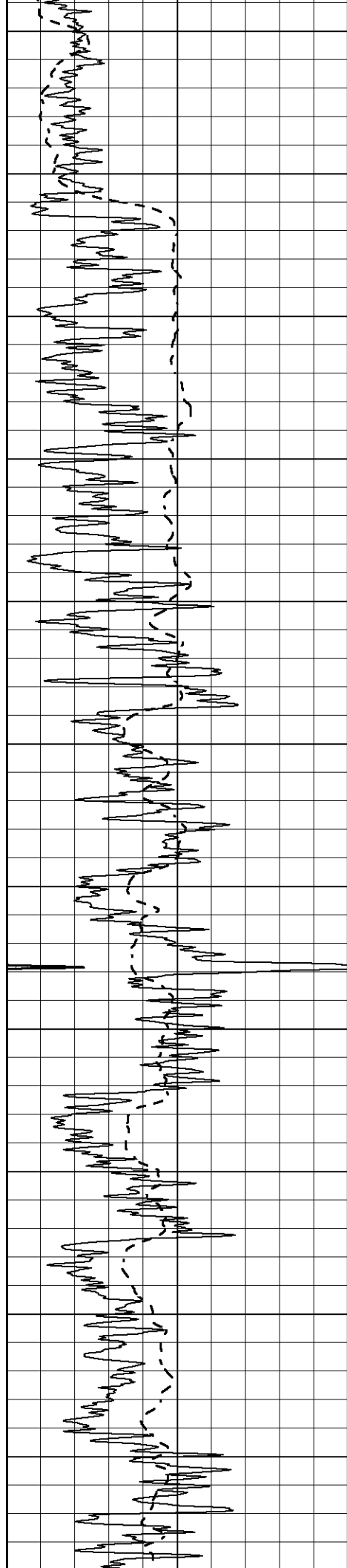
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

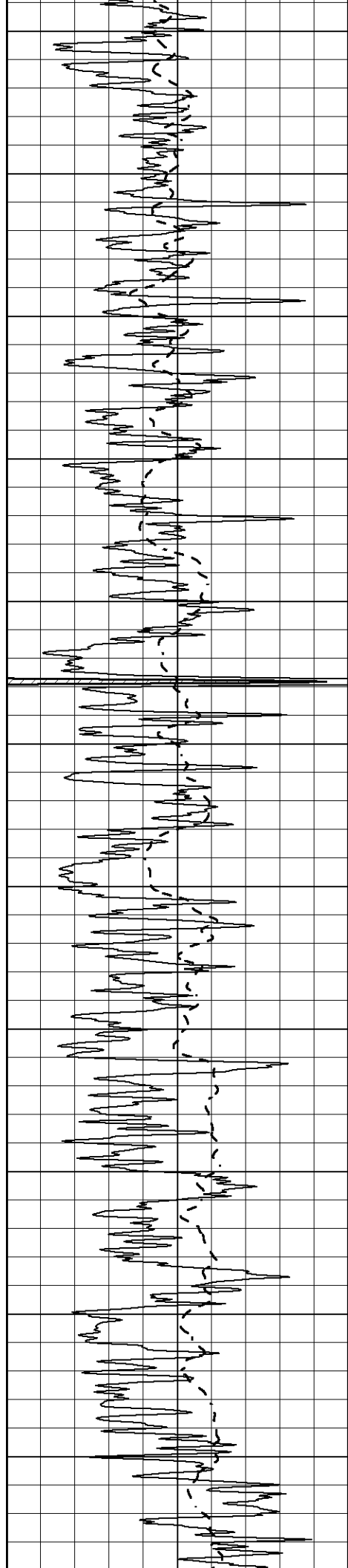












2650

2700

2750

2800

2850

2900

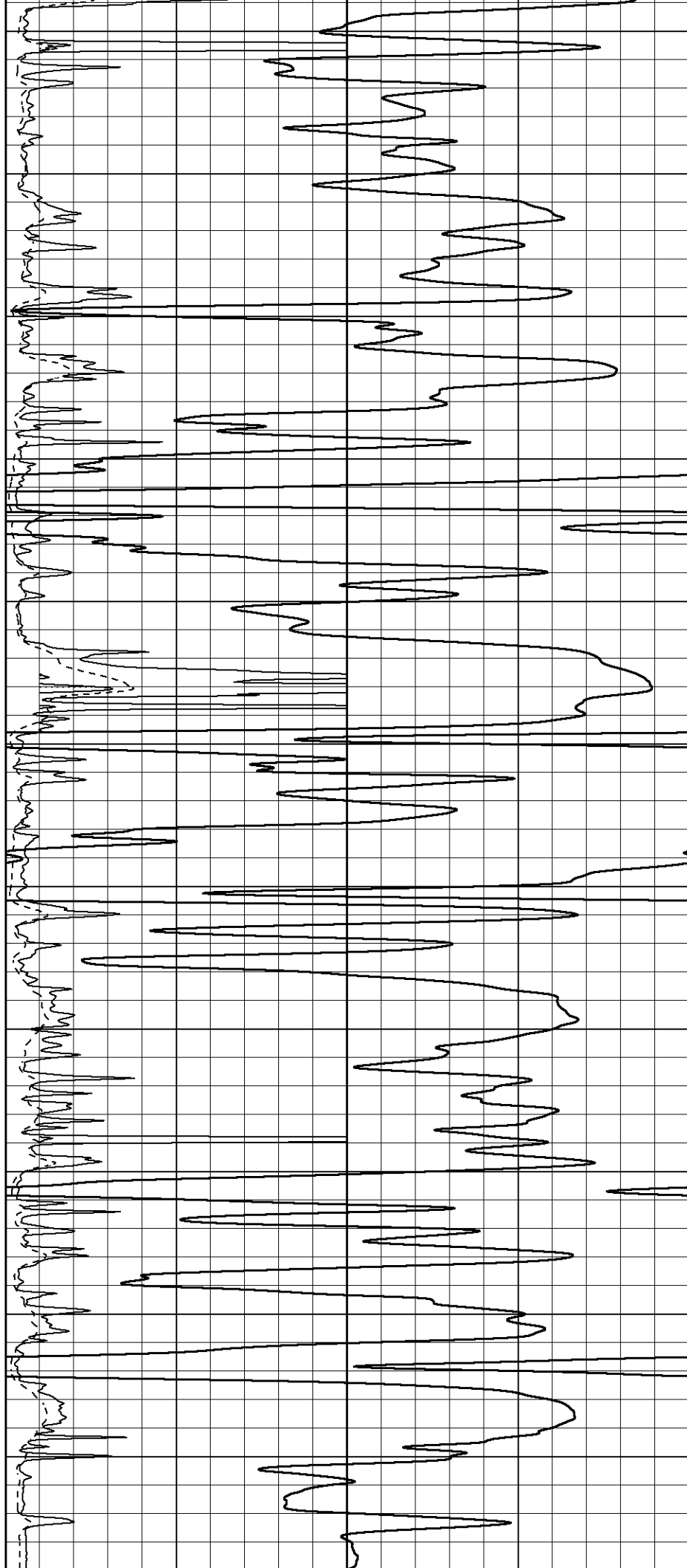
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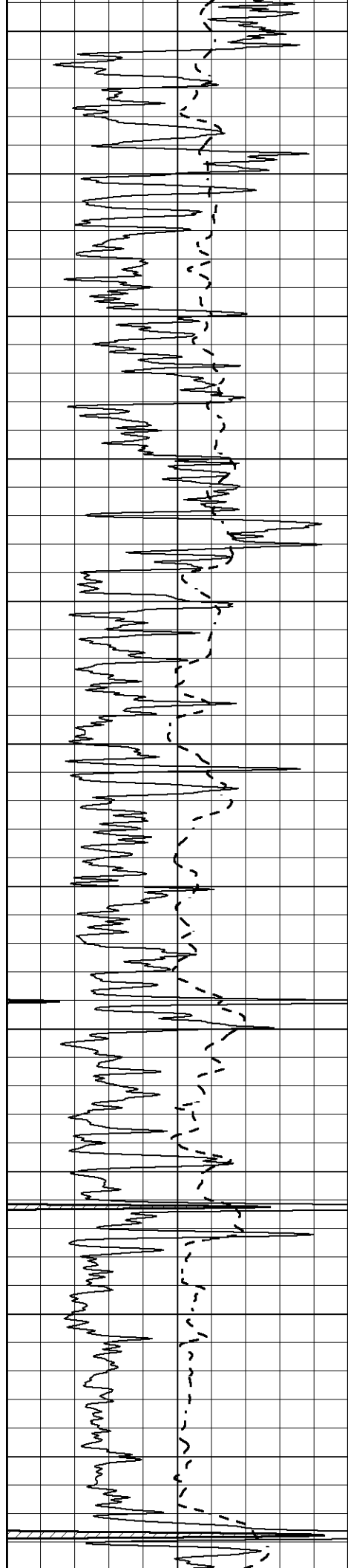
3000

3050

3100

3150





3200

3250

3300

3350

3400

3450

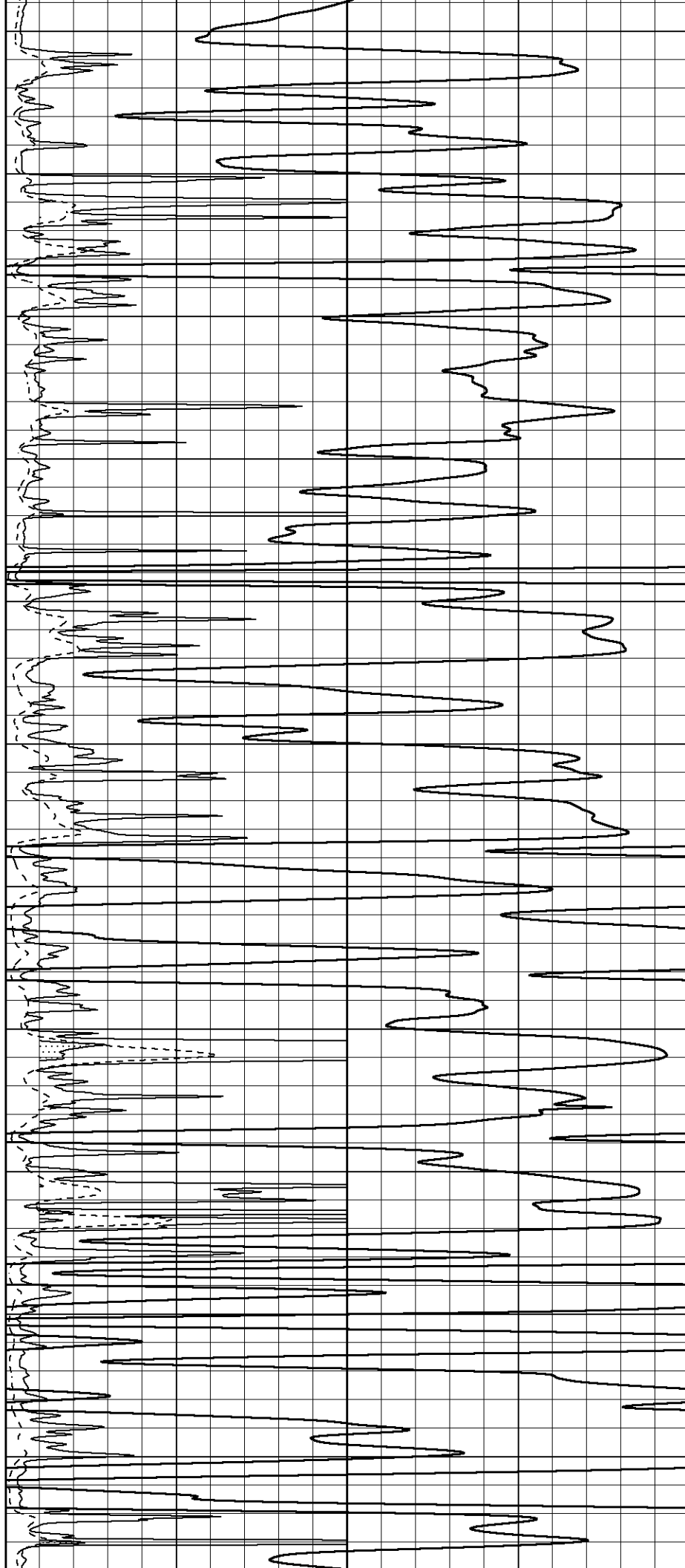
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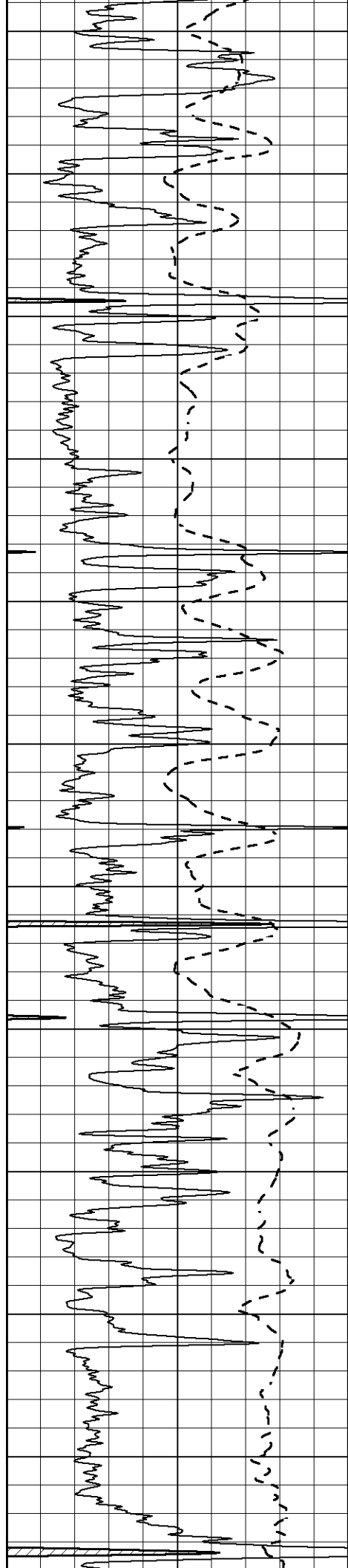
3550

3600

3650

3700





3750

3800

3850

3900

3950

4000

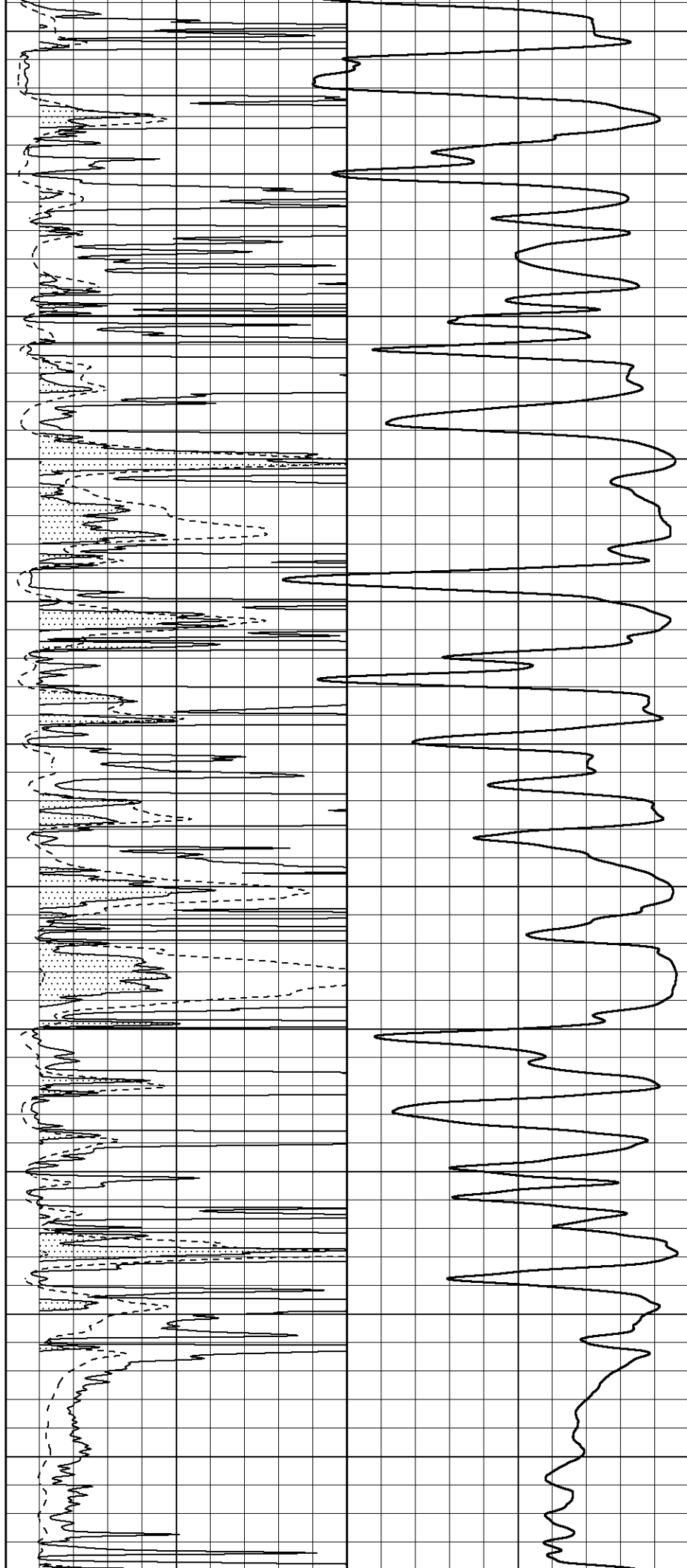
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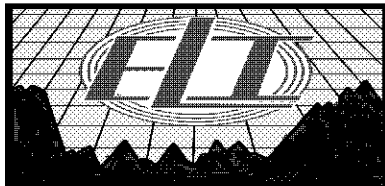
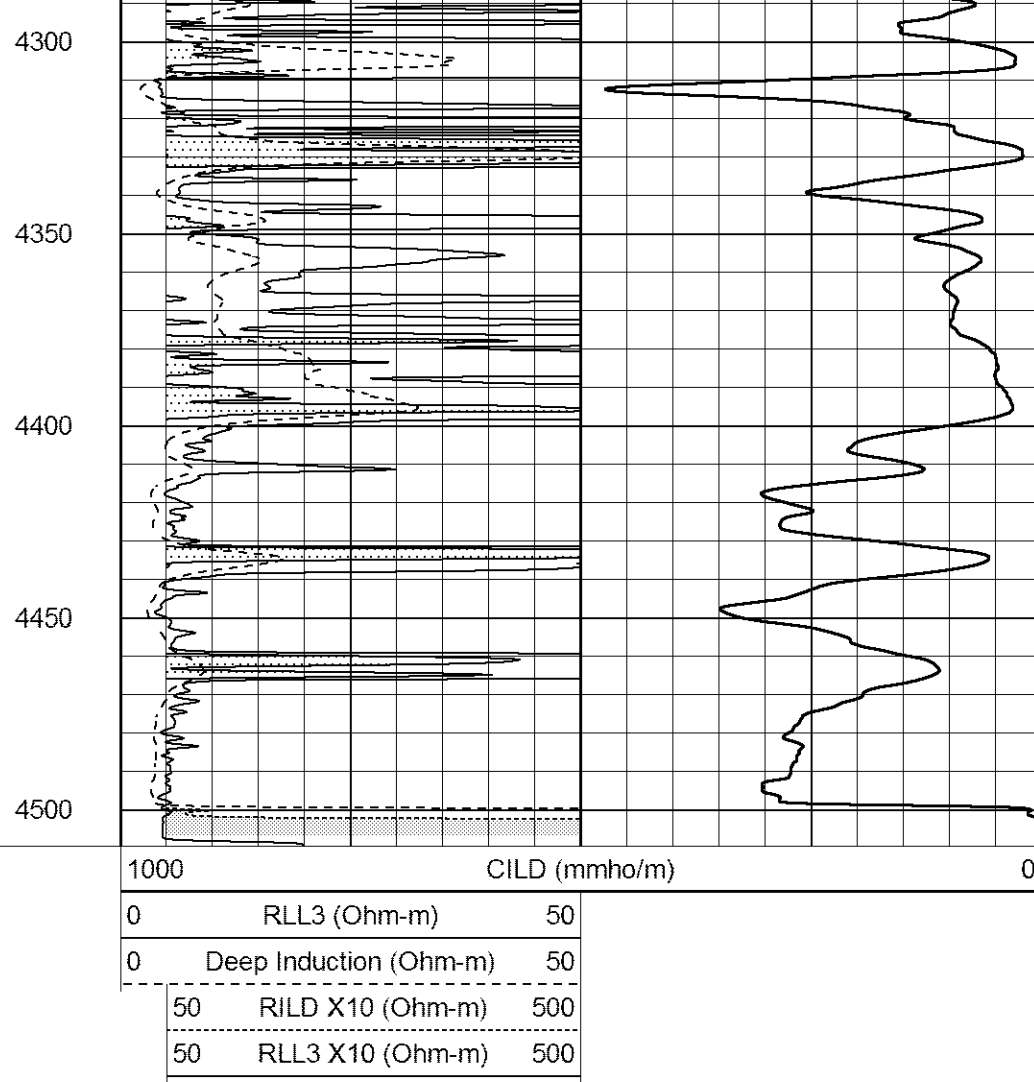
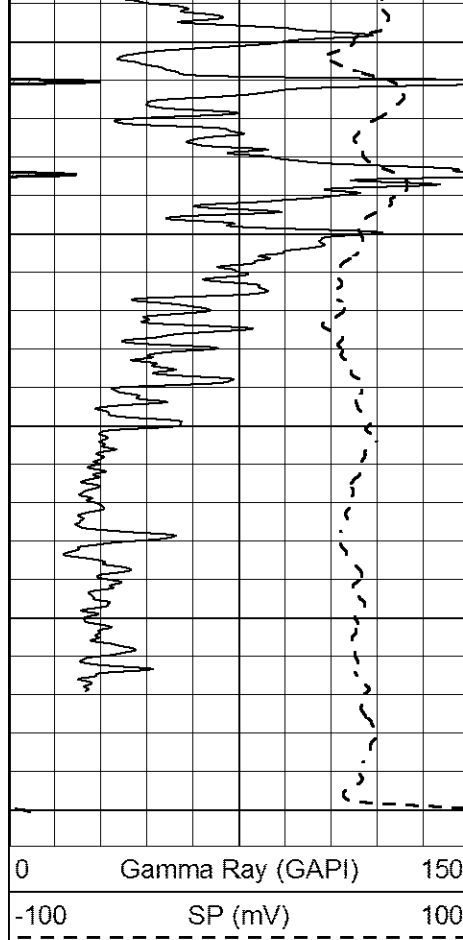
4100

4150

4200

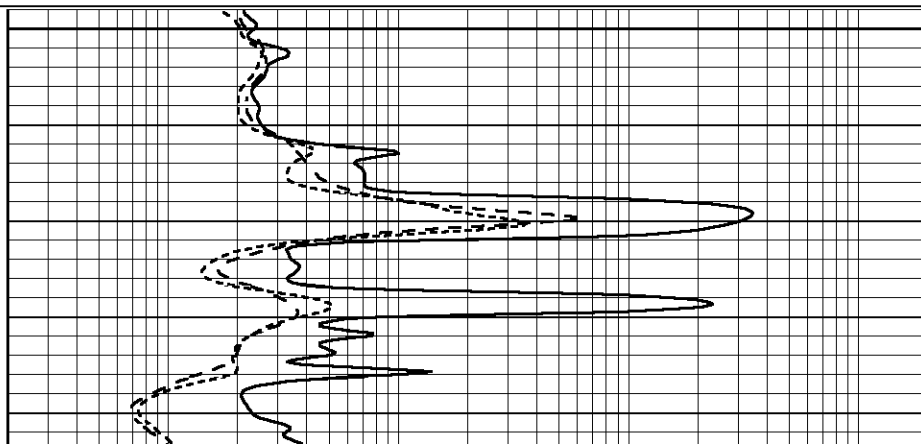
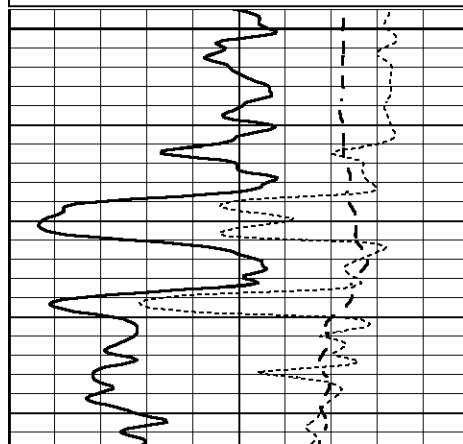
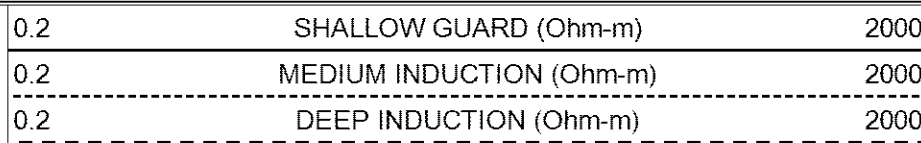
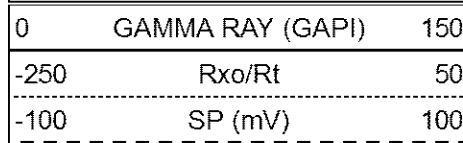
4250

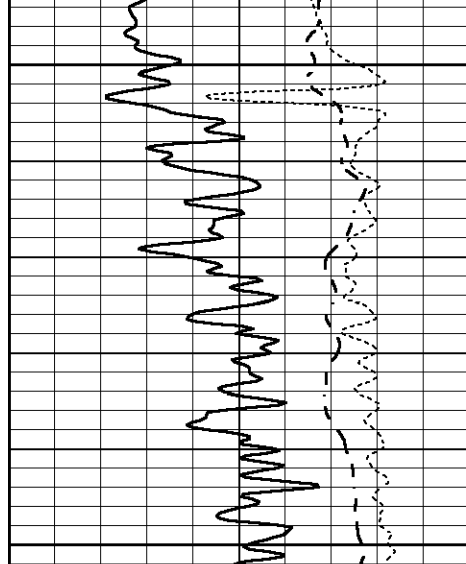




ANHYDRITE

Database File 2041ddn8.db
Dataset Pathname pass3.2
Presentation Format _dil
Dataset Creation Thu Apr 12 11:04:22 2018
Charted by Depth in Feet scaled 1:240

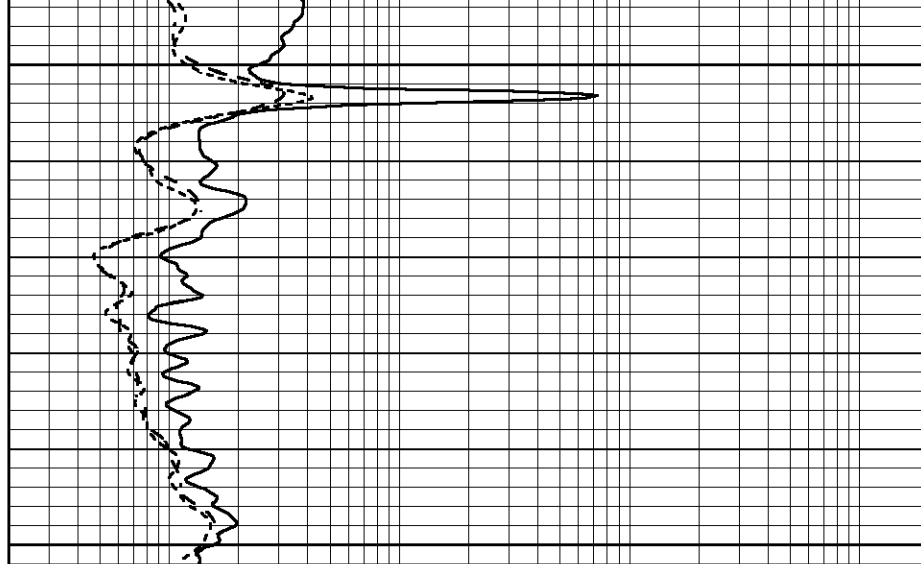




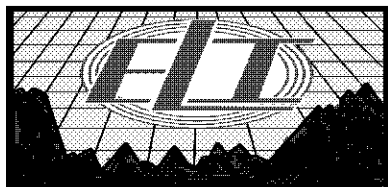
1500

1550

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

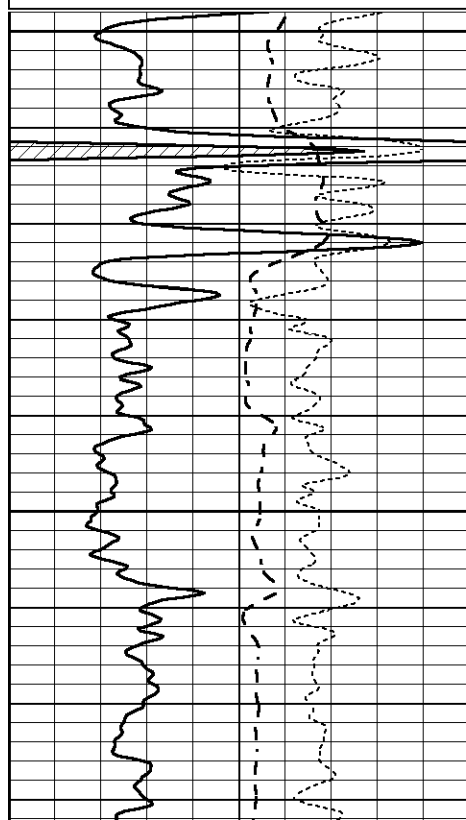


MAIN SECTION

Database File 2041ddn8.db
 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Thu Apr 12 10:44:50 2018
 Charted by Depth in Feet scaled 1:240

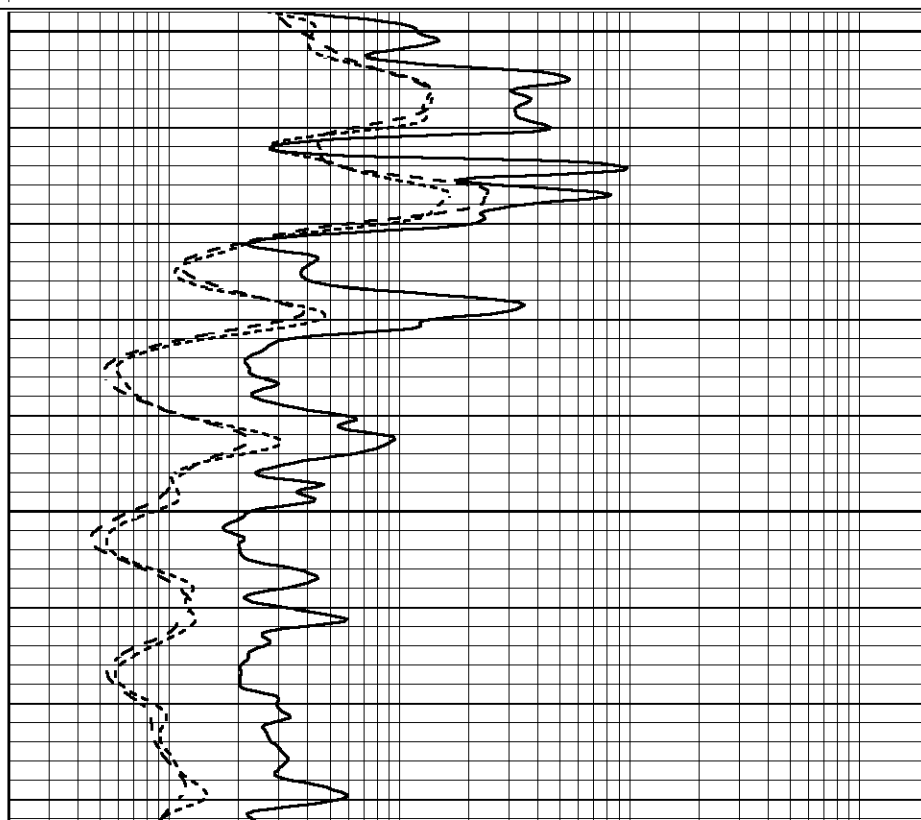
0	GAMMA RAY (GAPI)	150
-250	Rxo/Rt	50
-100	SP (mV)	100

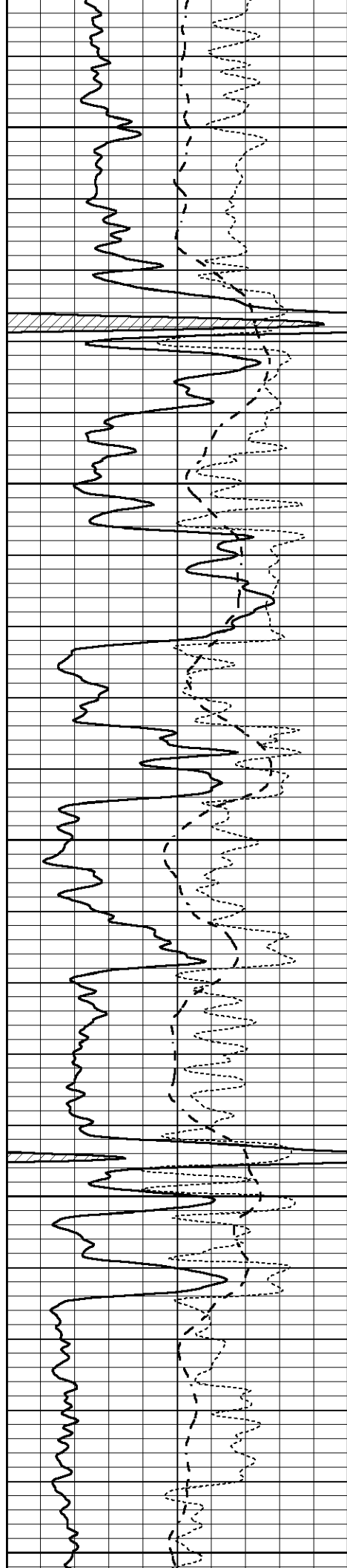
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



3600

3650





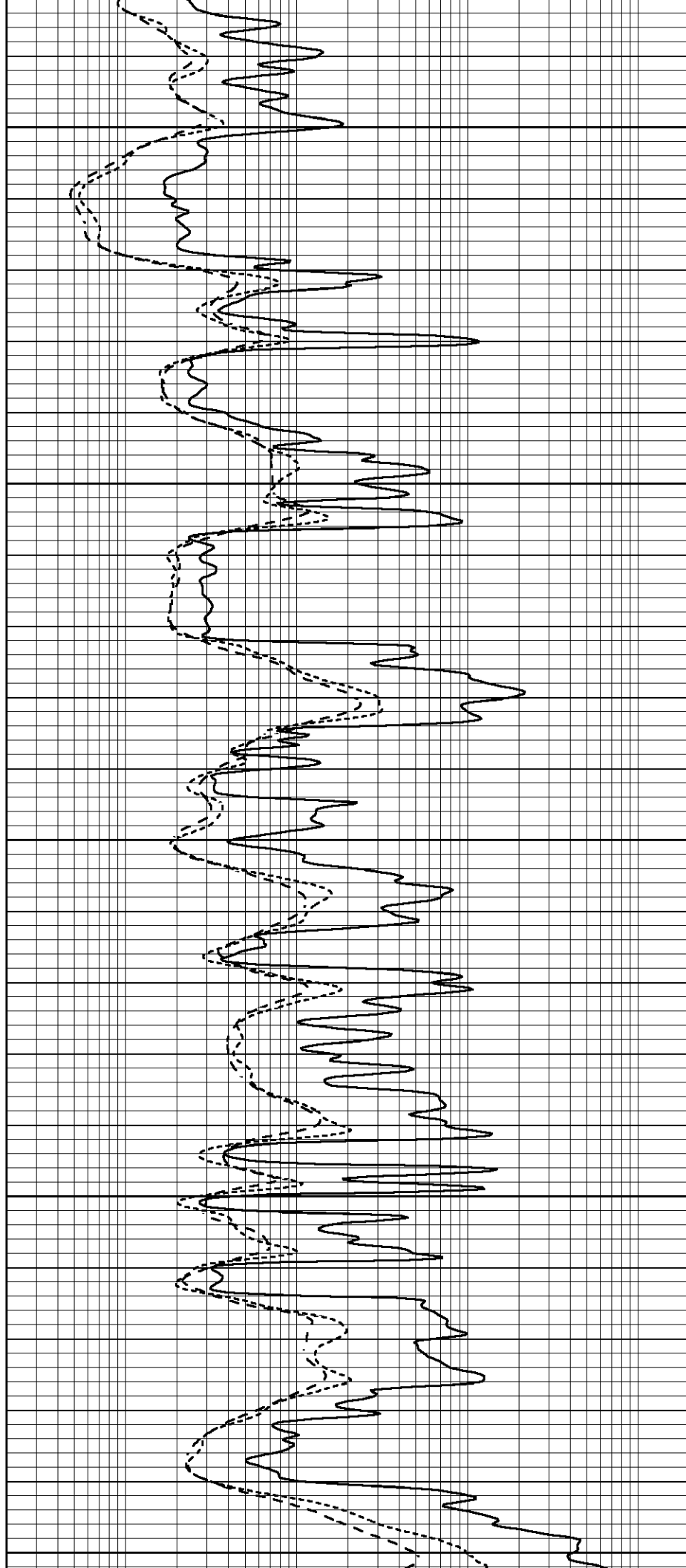
3700

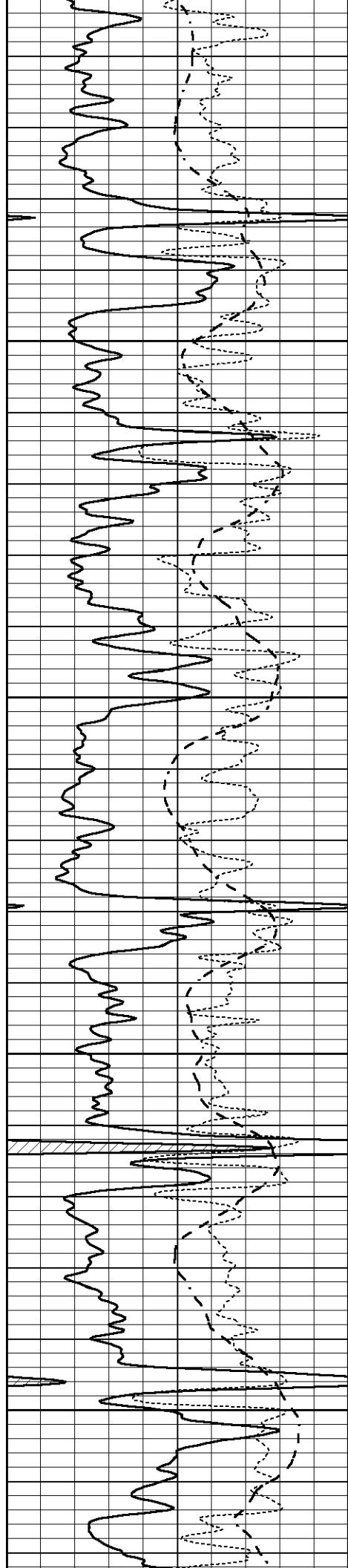
3750

3800

3850

3900



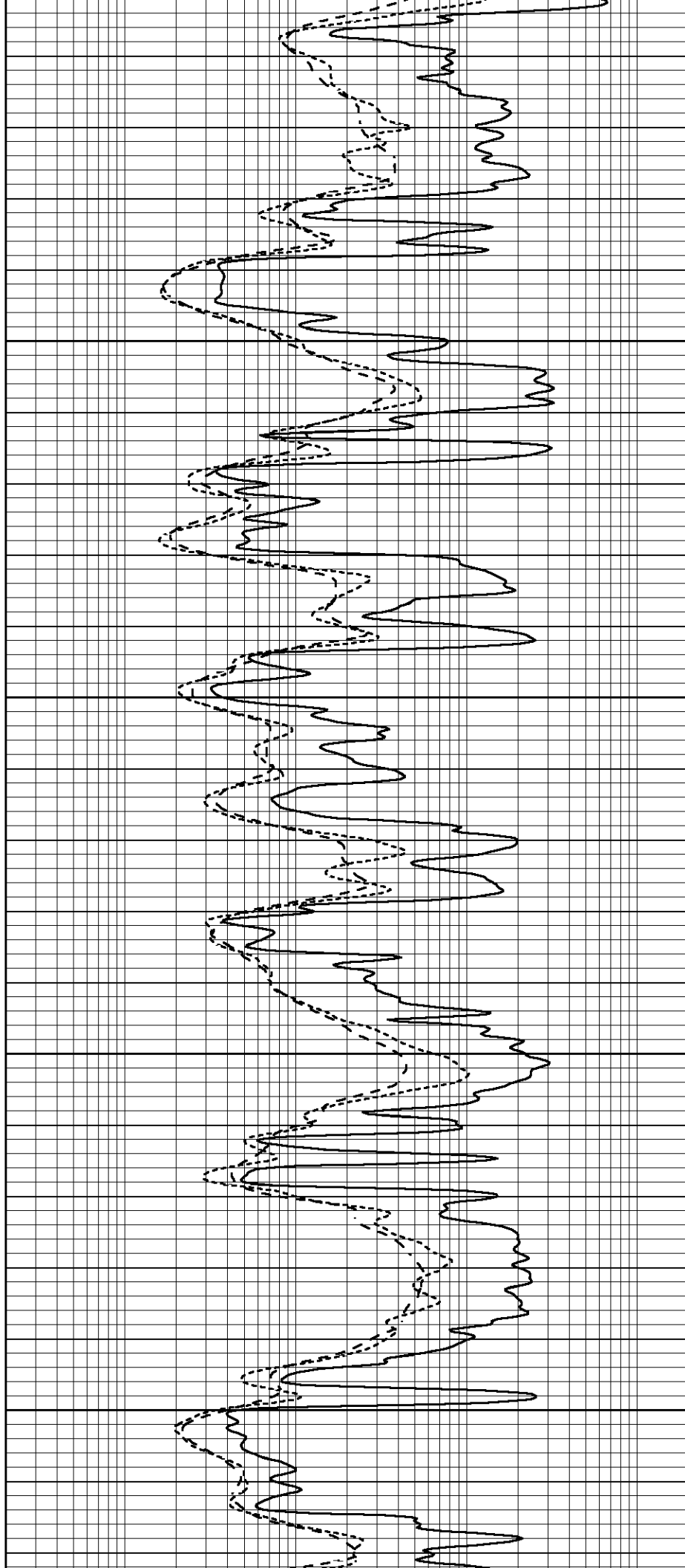


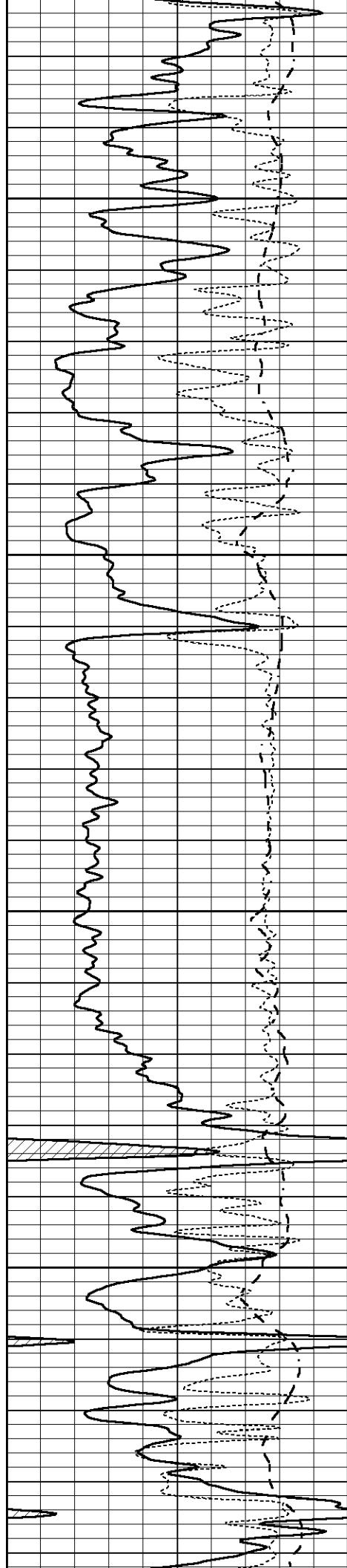
3950

4000

4050

4100



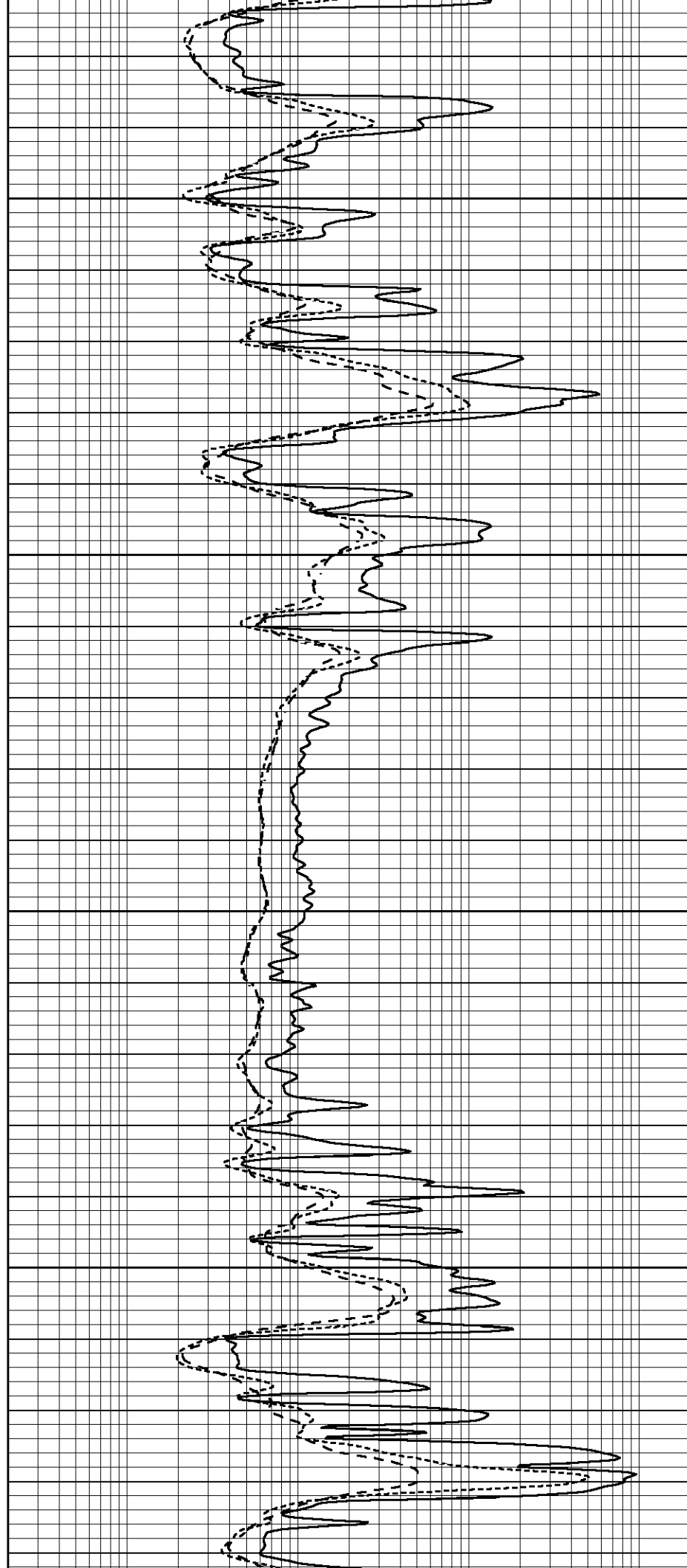


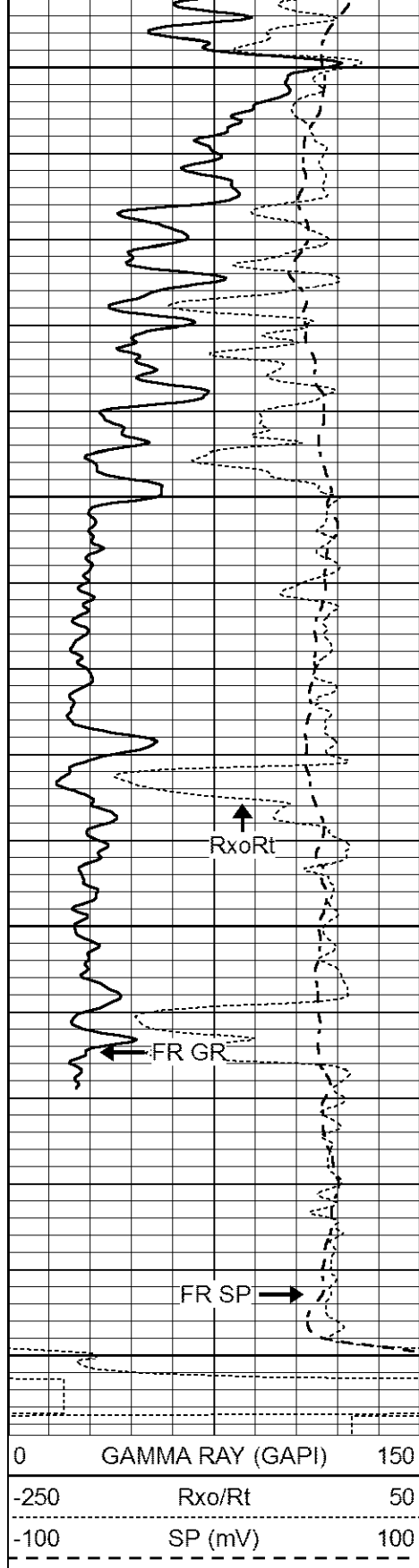
4150

4200

4250

4300



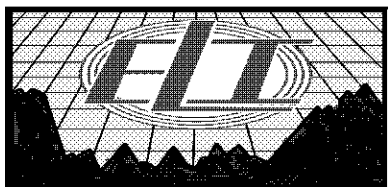
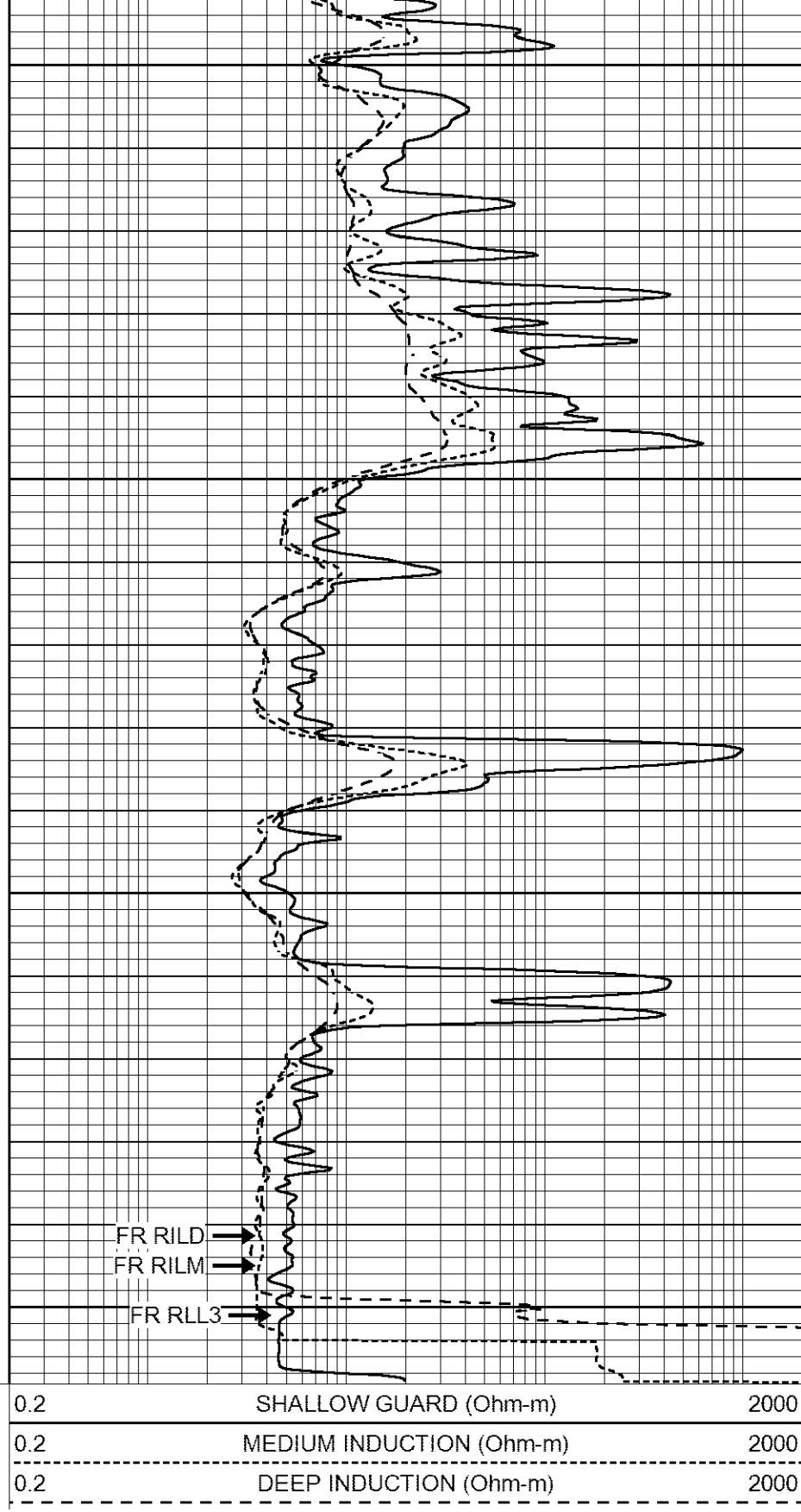


4350

4400

4450

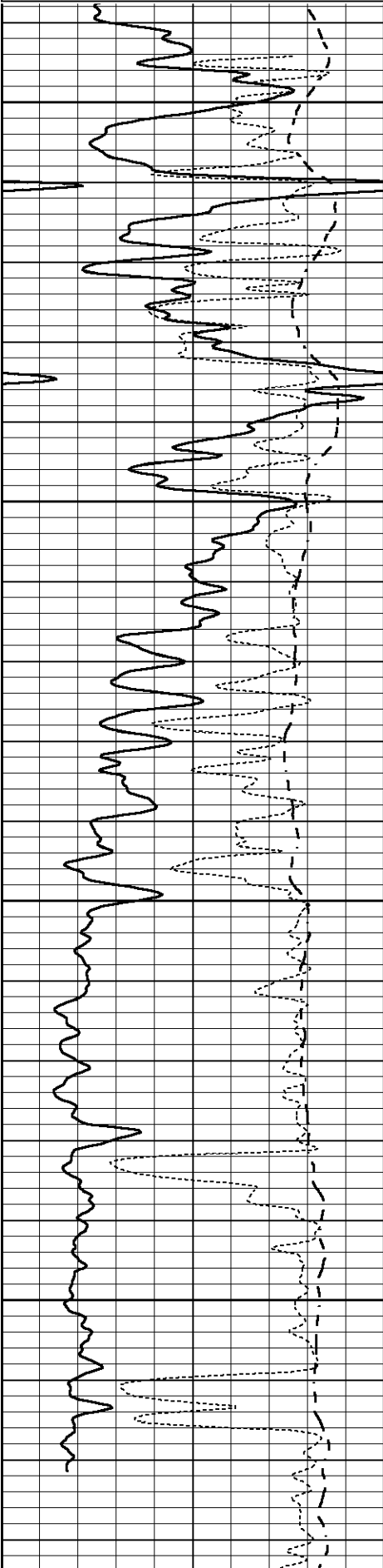
4500
LTD 4503



REPEAT SECTION

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

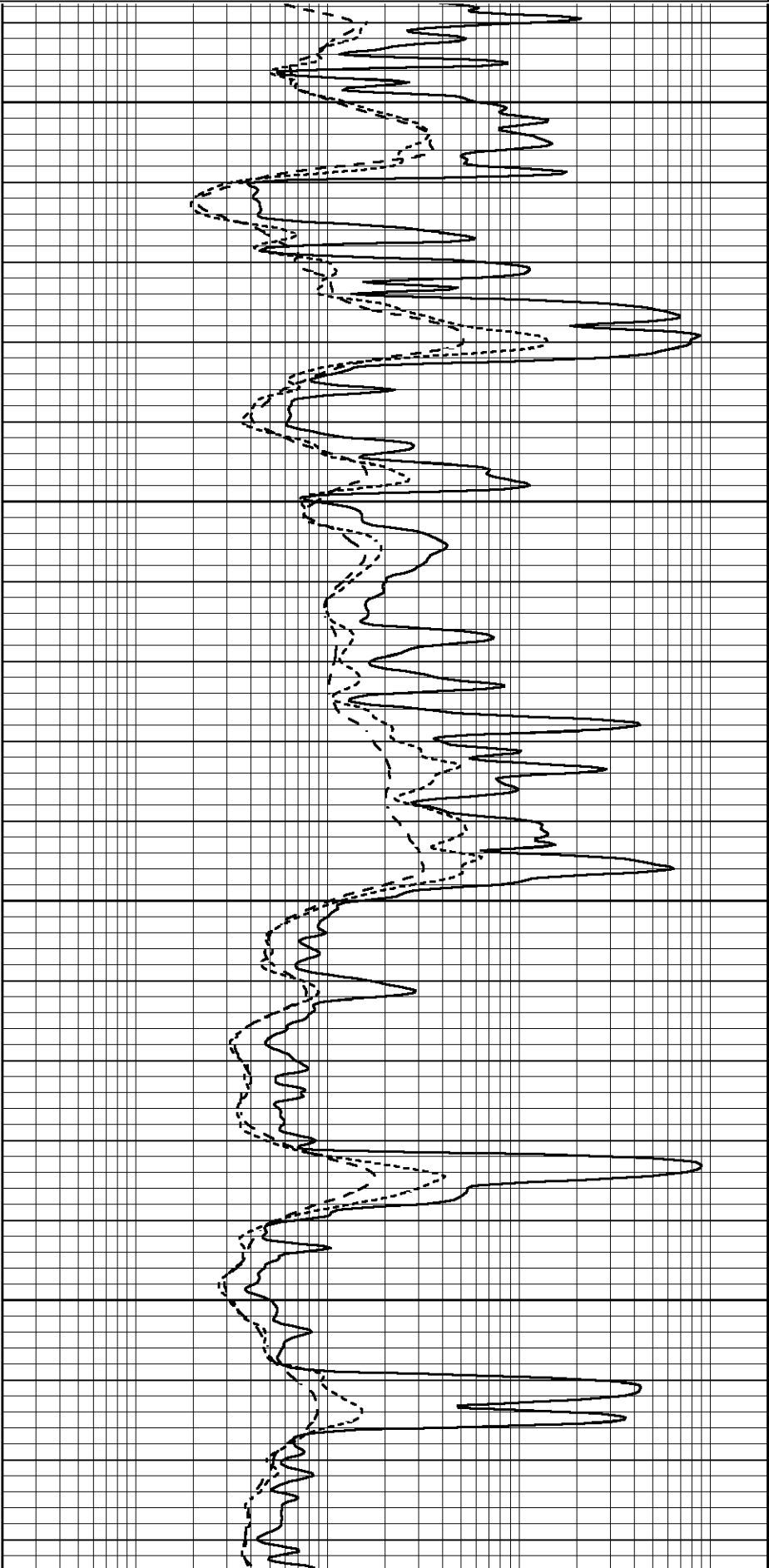


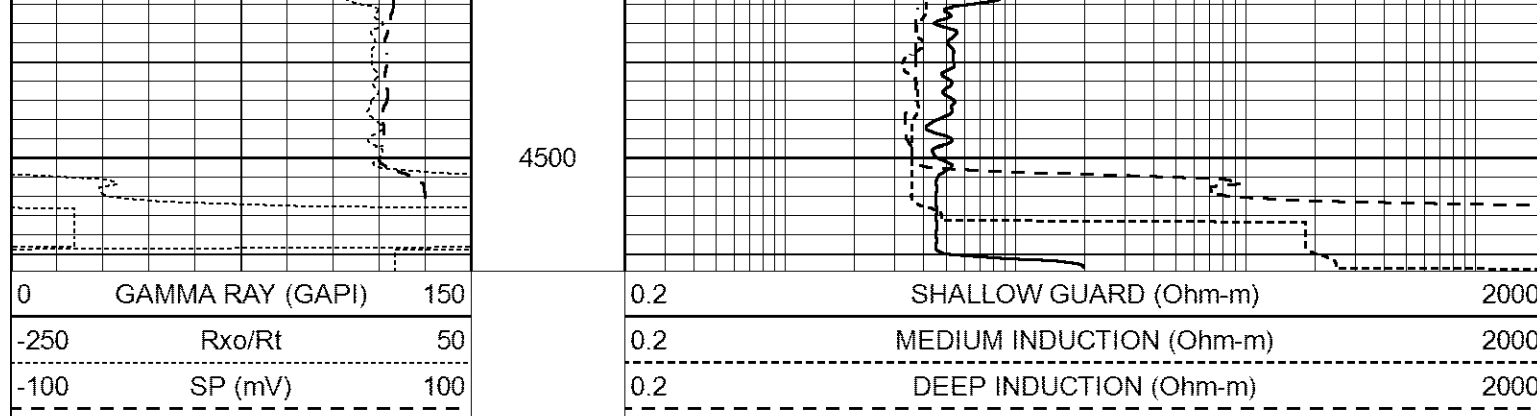
4300

4350

4400

4450





Calibration Report									
Database File	2041ddn8.db								
Dataset Pathname	pass2.1								
Dataset Creation	Thu Apr 12 10:34:12 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				

Master Calibration		Performed: Wed Feb 11 18:53:41 2015	
	Background	Aluminum	Magnesium
Window 1	613.01	6027.40	27508.60
Window 2	48.21	1424.77	7132.66
Window 4	266.48	1373.19	5767.15
Window 5	622.07	10090.30	18937.90
Window 6	49.07	1682.84	3271.18
Window 8	298.04	3248.38	5980.58
Bulk Density	-	2.6020	1.6830
Pe	-	3.0000	2.5070
LS Alpha:	: -1.8451	SS Alpha:	: -0.7542
LS Beta:	: 138648.8473	SS Beta:	: 21960.9250
		LS CPE:	: 1.0882
		SS CPE:	: 1.5181

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: Wed Feb 11 18:53:41 2015	
Results	Readings	References (in)	
Low	High	Low	High
1107.5	7124.1	8.0	15.0
		Gain	Offset
		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			
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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