



DUAL INDUCTION LOG

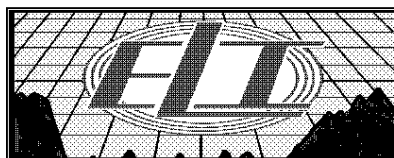
Company	MAI OIL OPERATIONS, INC.		
Well	NETTLEINGHAM #1		
Field	TRAPP		
County	BARTON		
State	KANSAS		
Company	MAI OIL OPERATIONS, INC.		
Well	NETTLEINGHAM #1		
Field	TRAPP		
County	BARTON		
State	KANSAS		
Location:	API # : 15-009-26283-0000 810' FNL & 1180' FWL SE - NE - NW - NW		
Permanent Datum	GROUND LEVEL	Elevation	1938
Log Measured From	KELLY BUSHING	9' A.G.L.	
Drilling Measured From	KELLY BUSHING		
Date	12/3/19		
Run Number	ONE		
Depth Driller	3470		
Depth Logger	3472		
Bottom Logged Interval	3470		
Top Log Interval	00		
Casing Driller	8 5/8"@460'		
Casing Logger	460		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 7,400 PPM	
Density / Viscosity	9.2/49		
pH / Fluid Loss	9.5/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.70@69F		
Rmf @ Meas. Temp	1.28@69F		
Rmc @ Meas. Temp	2.04@69F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	1.06@111F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	9:00 P.M.		
Maximum Recorded Temperature	111F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	JIM MUSGROVE		

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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 HAYS, KANSAS (785) 628-6395
DIRECTIONS
SUSANK, KS., 1N., TURN E., & IMMEDIATELY BACK S. INTO



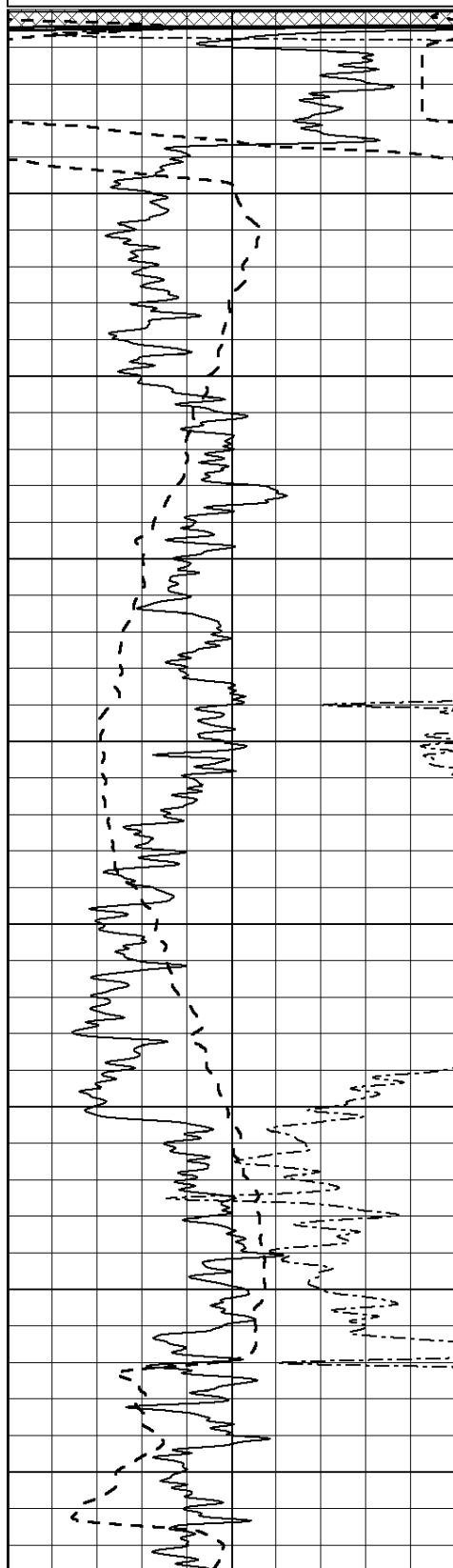
MAIN SECTION

Database File: 4389ddn.db
 Dataset Pathname: pass3.4
 Presentation Format: dil2
 Dataset Creation: Tue Dec 03 22:09:49 2019 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:600

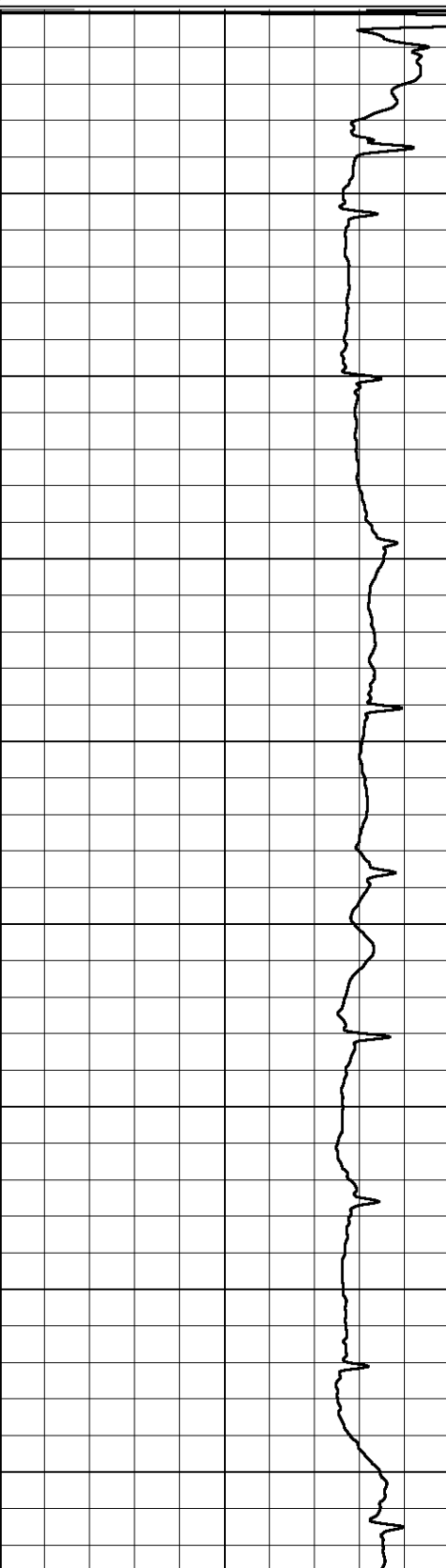
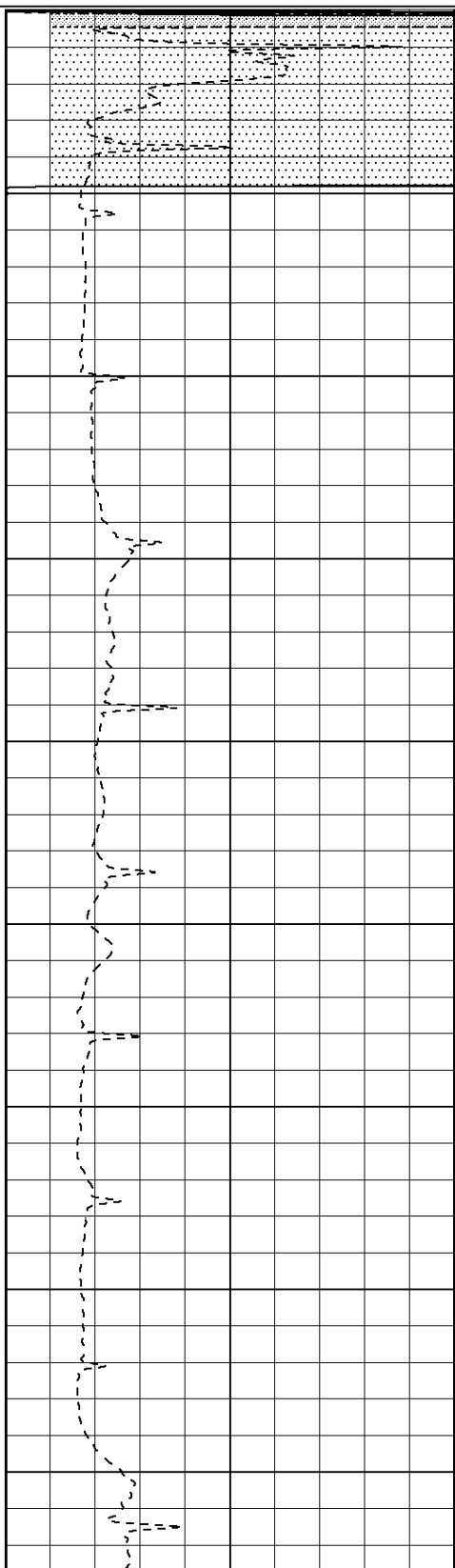
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

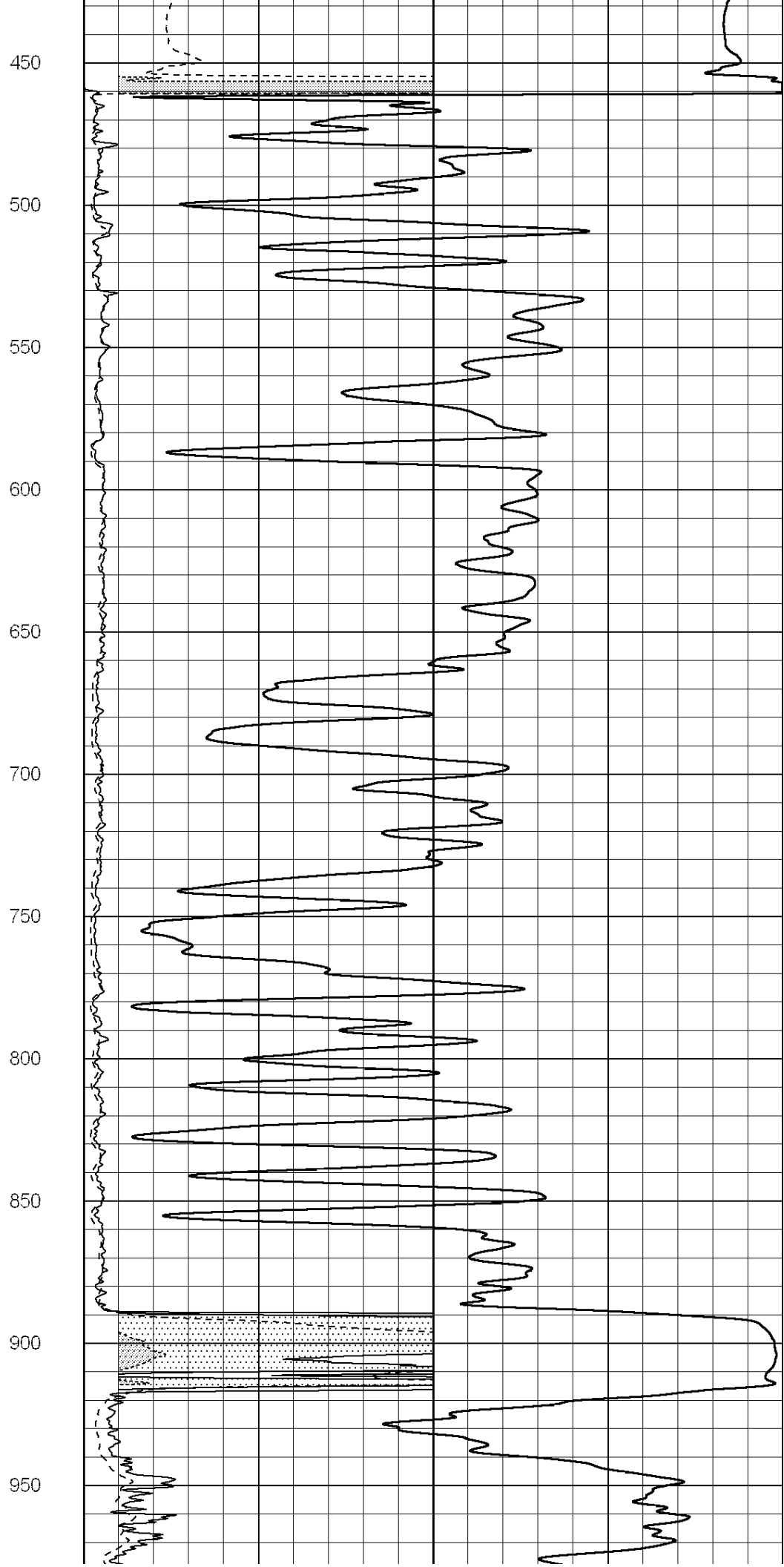
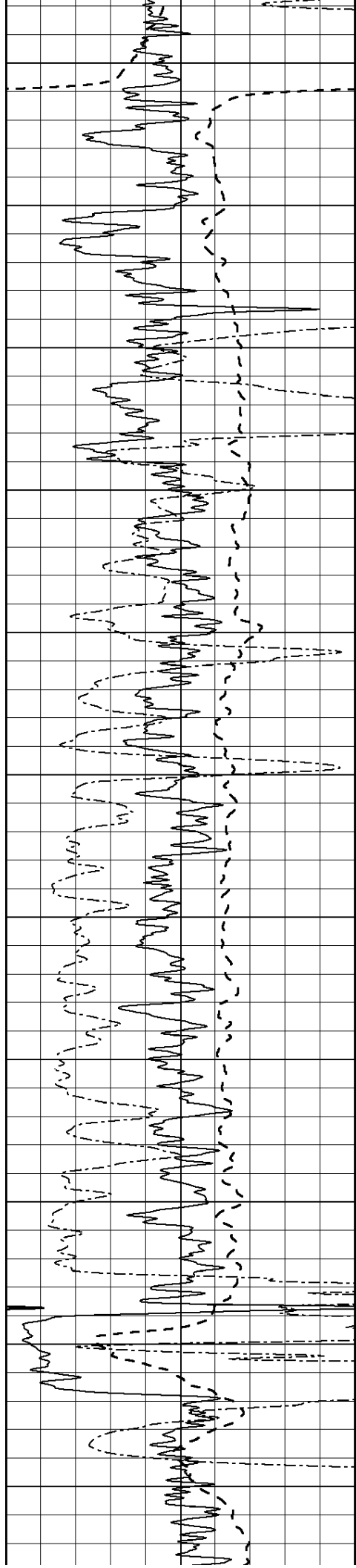
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
1000	CILD (mmho/m)	0

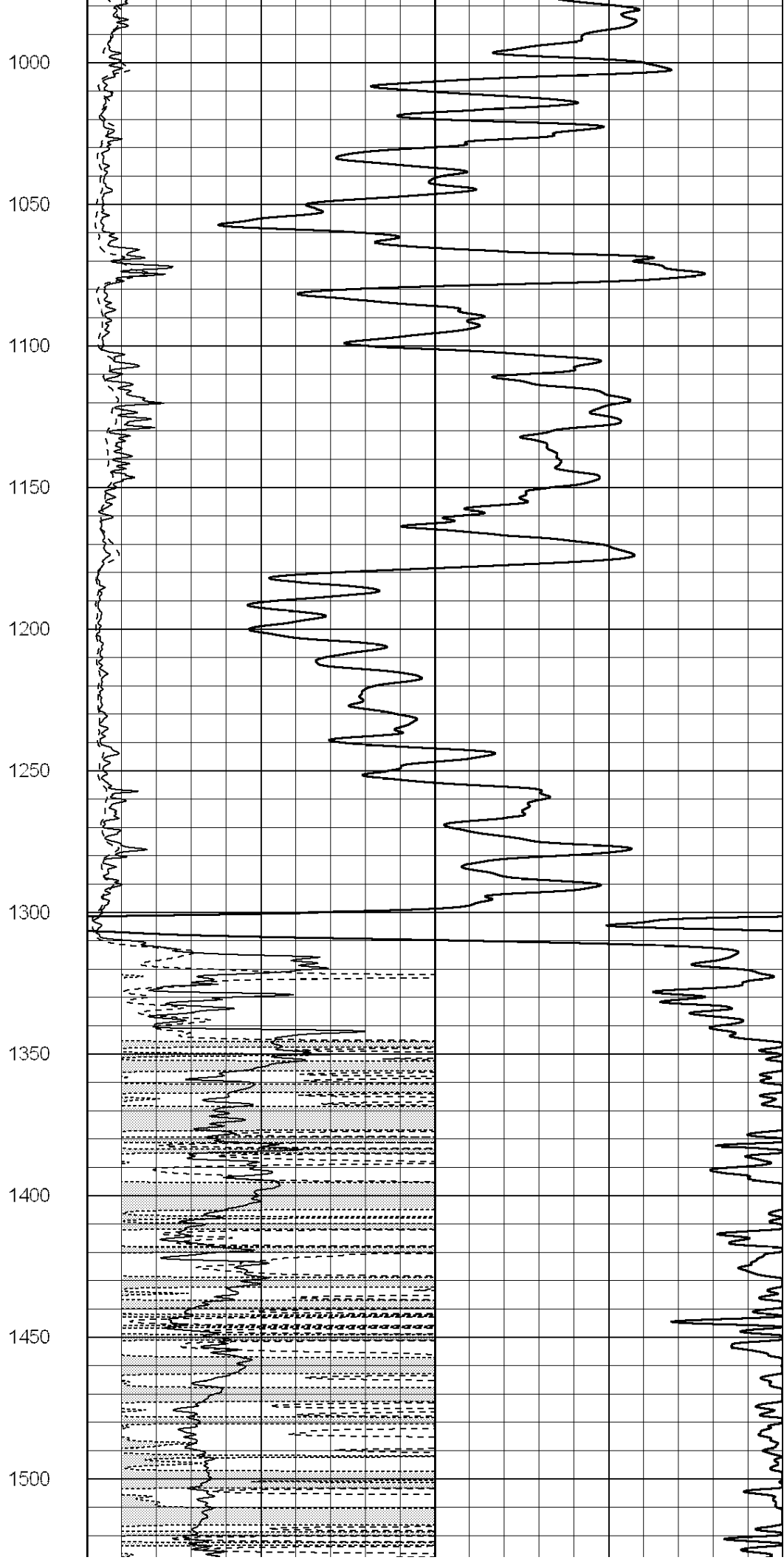
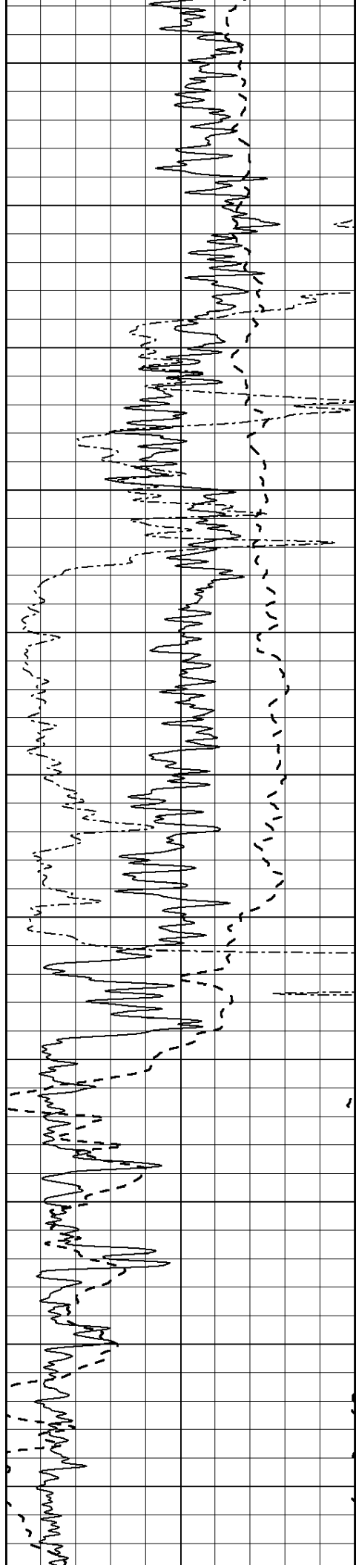
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

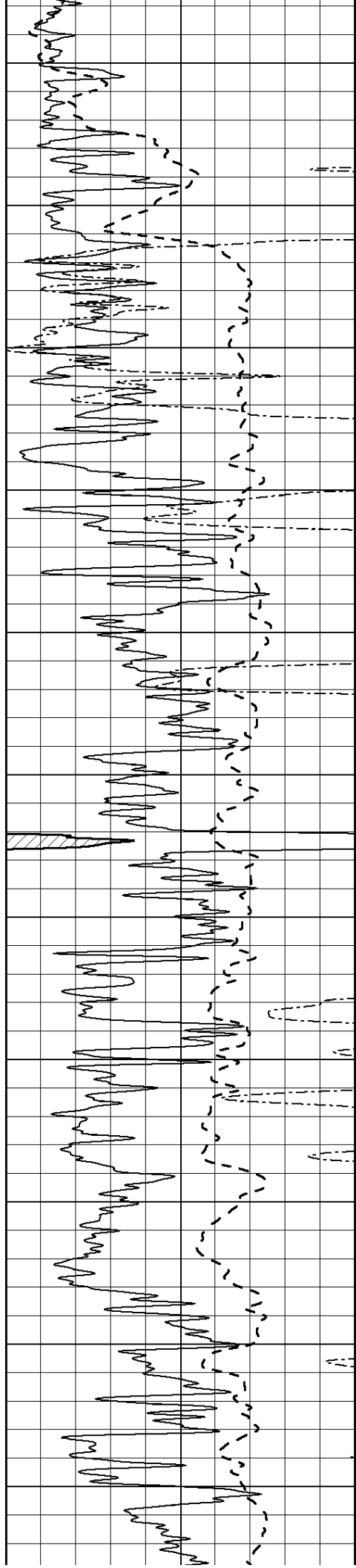


0
50
100
150
200
250
300
350
400









1550

1600

1650

1700

1750

1800

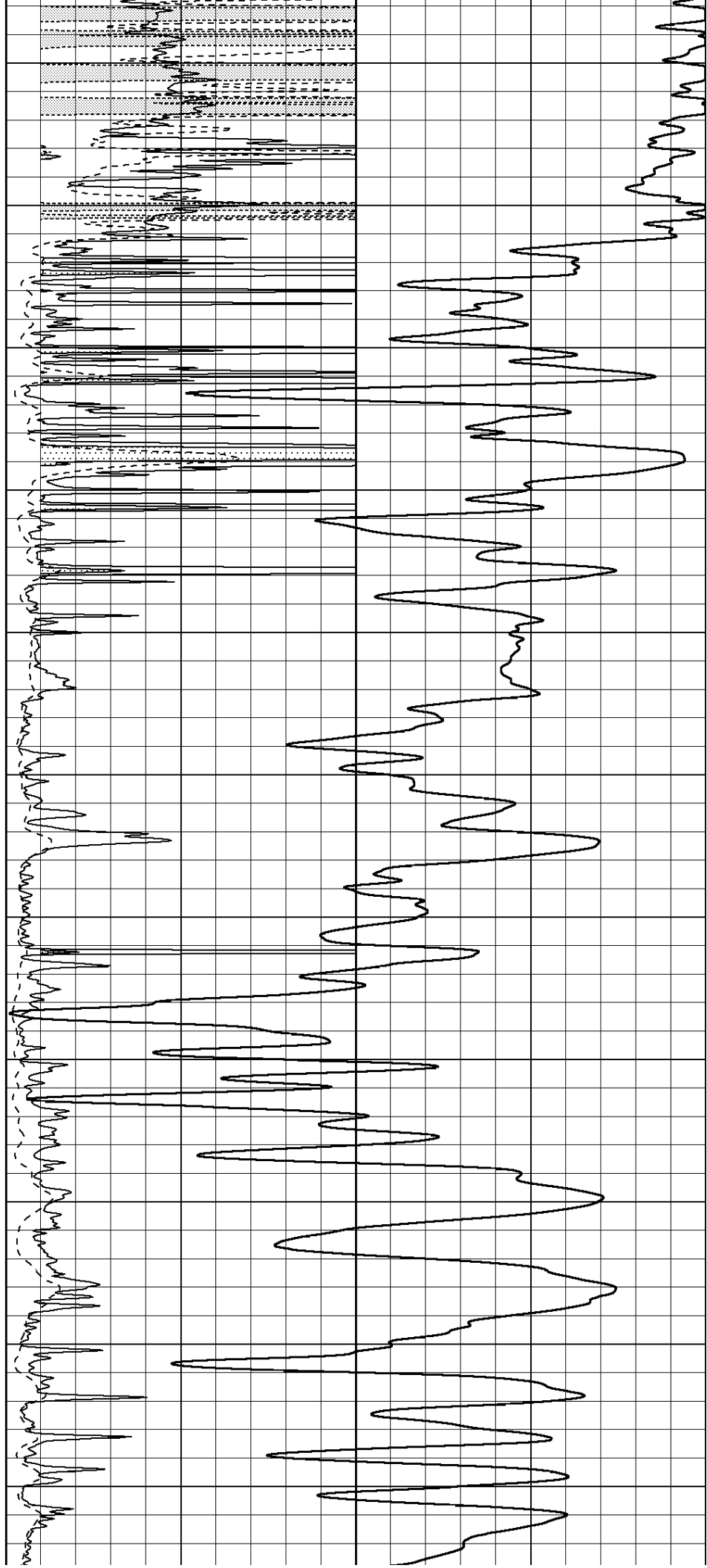
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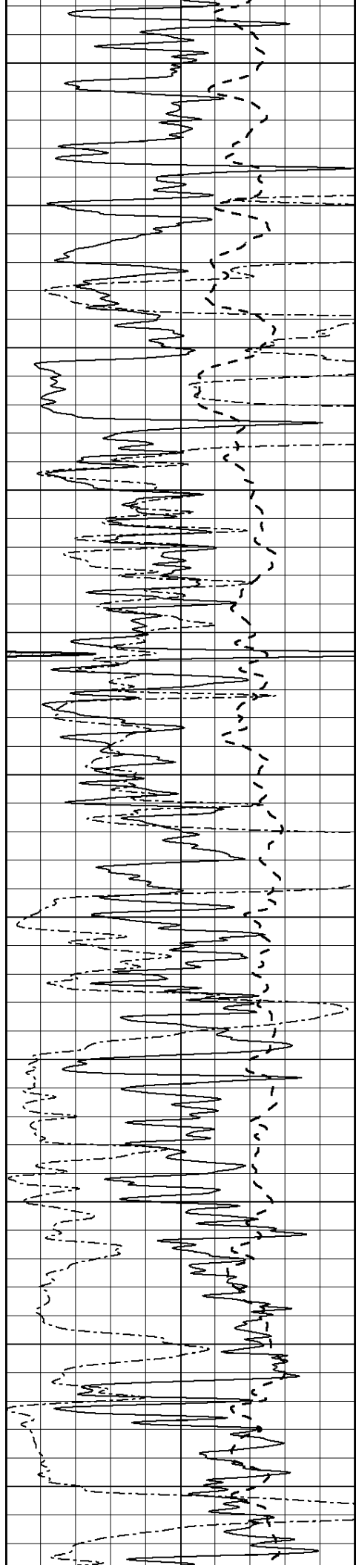
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

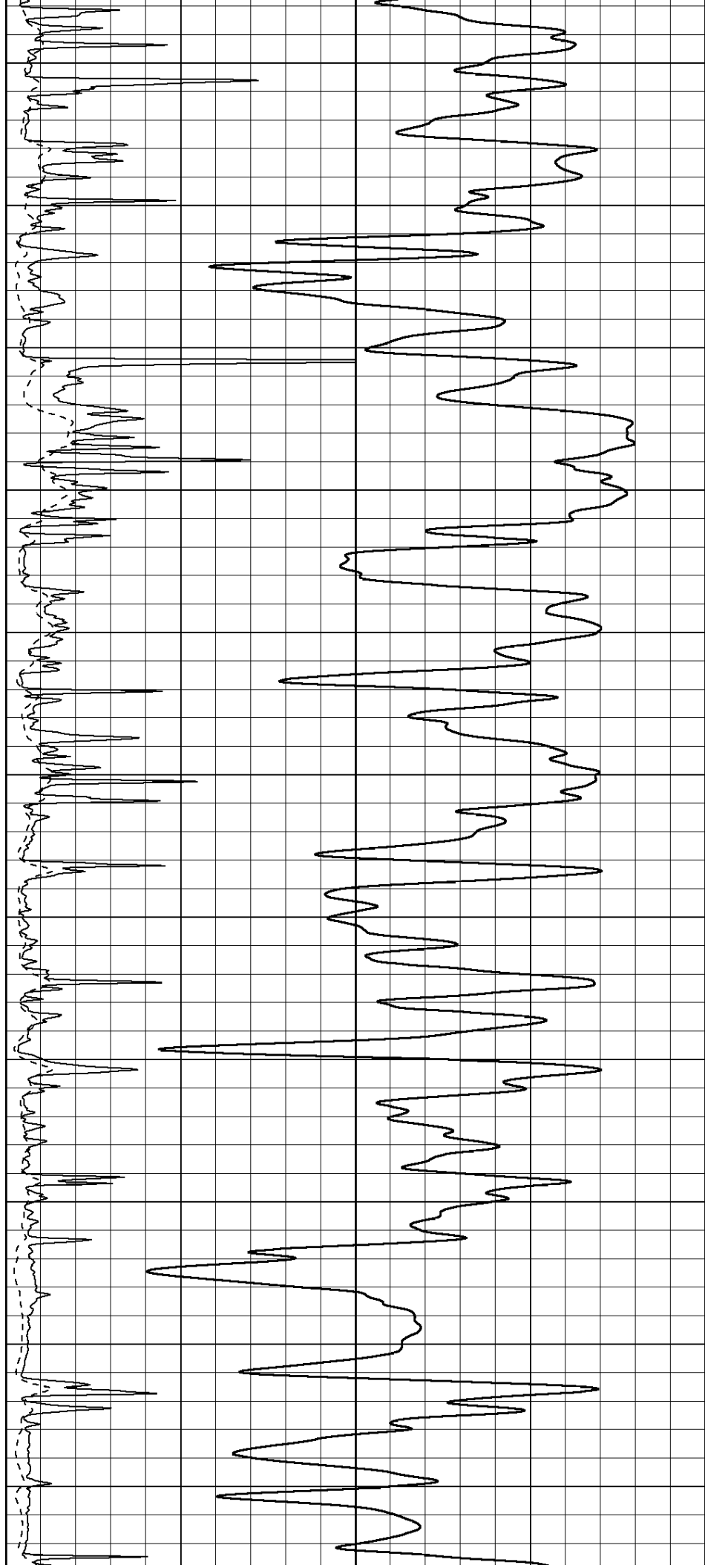
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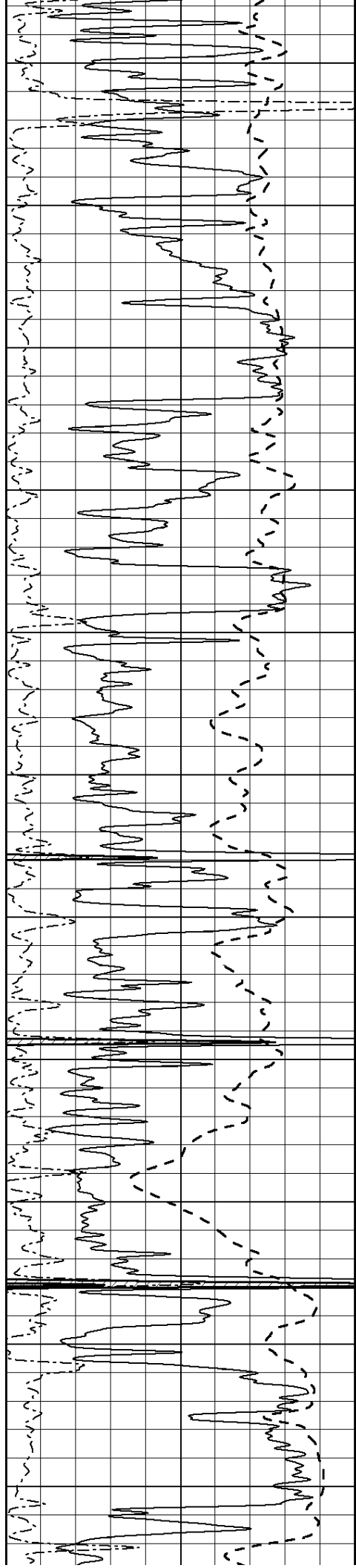
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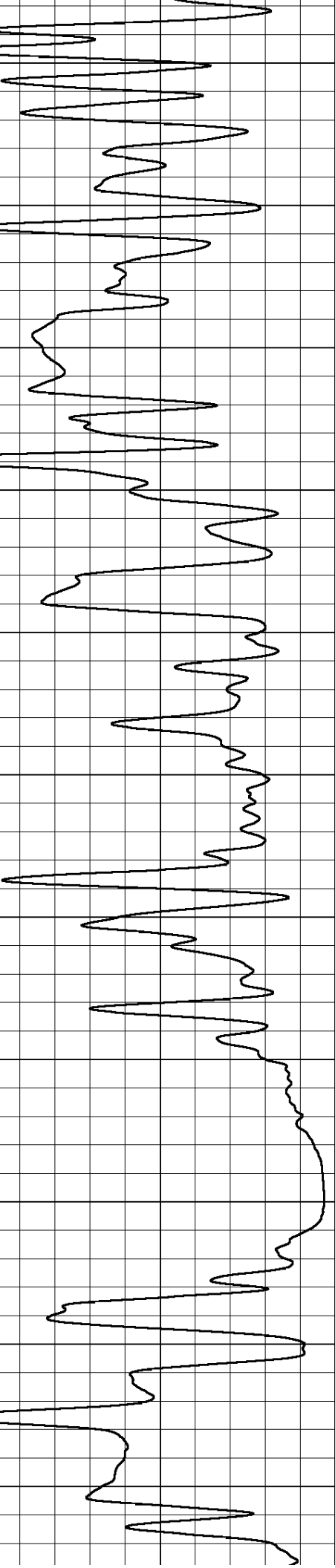
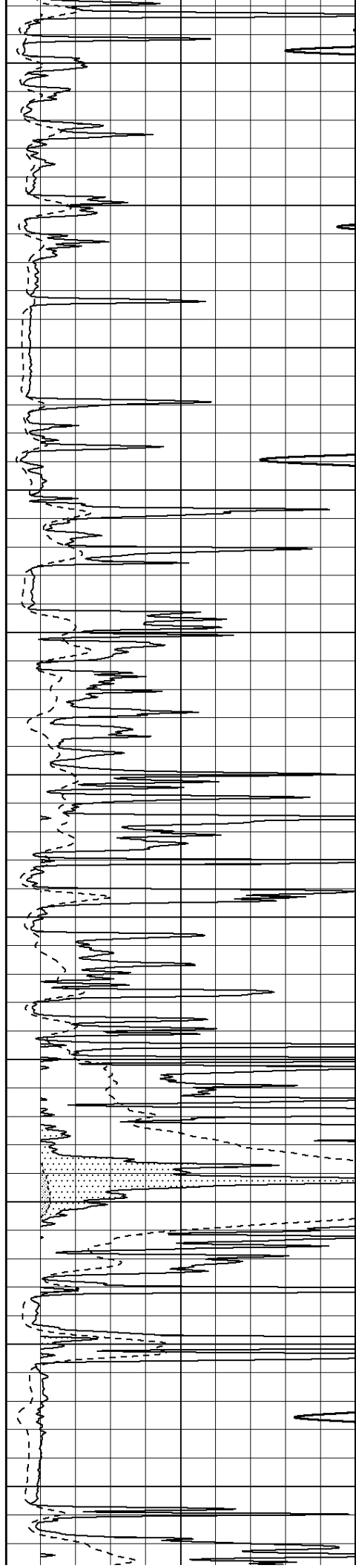
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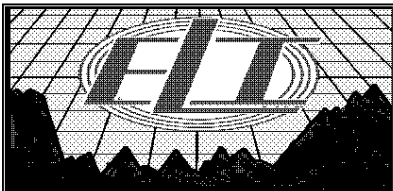
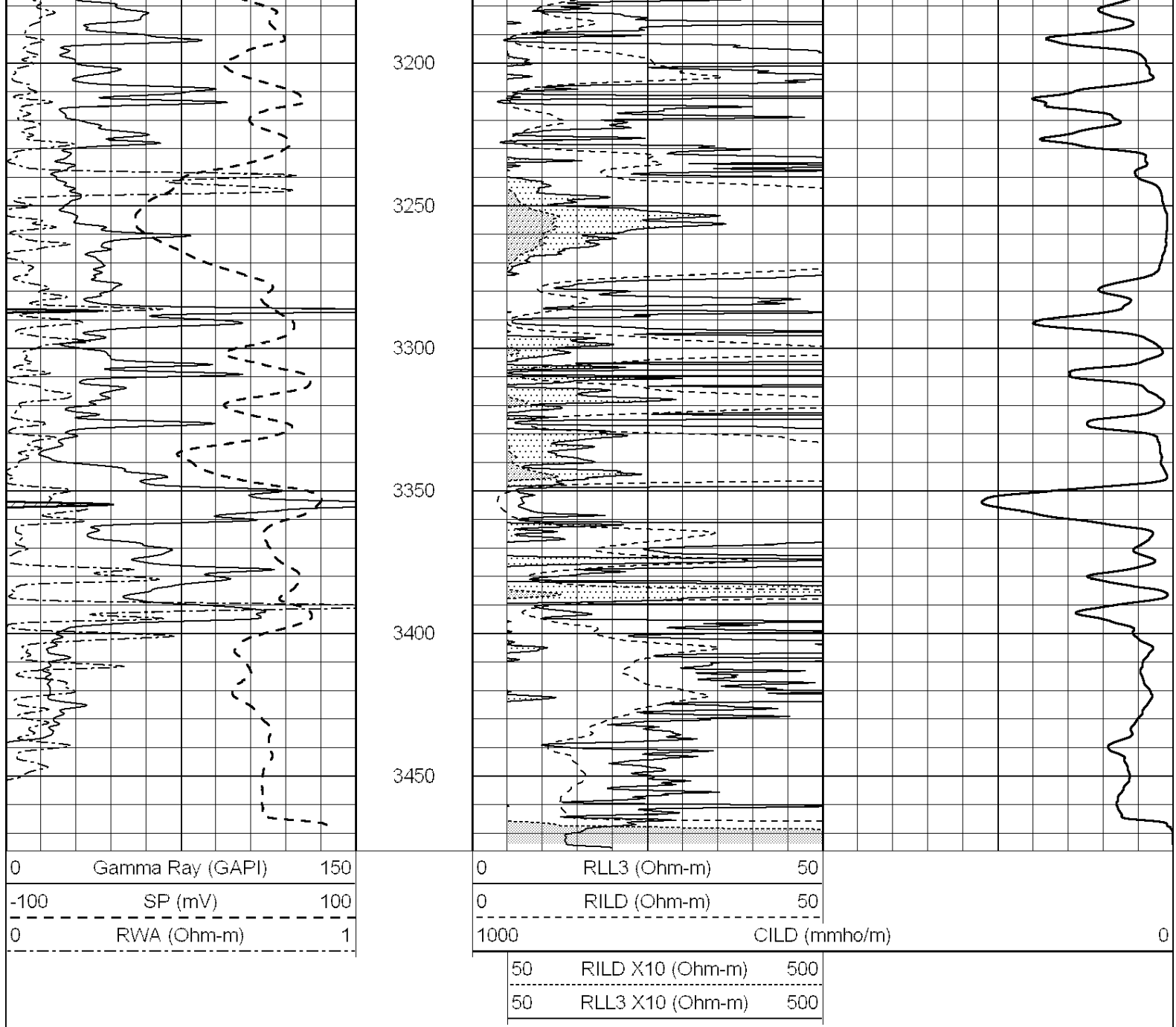
2600





2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150

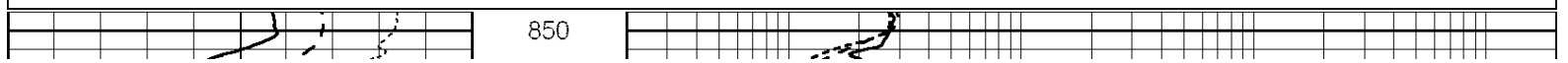


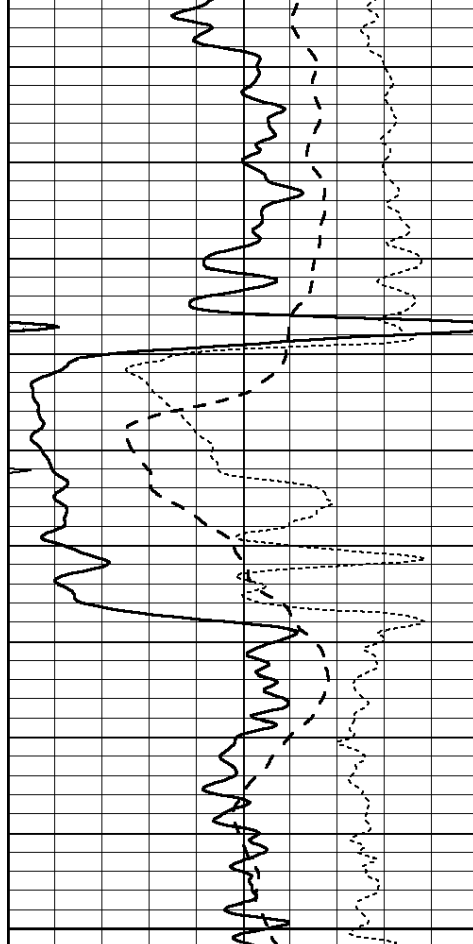


ANHYDRITE

Database File: 4389ddn.db
 Dataset Pathname: pass3.5
 Presentation Format: _dil
 Dataset Creation: Tue Dec 03 22:10:11 2019 by Calc SOC 120430
 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	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			

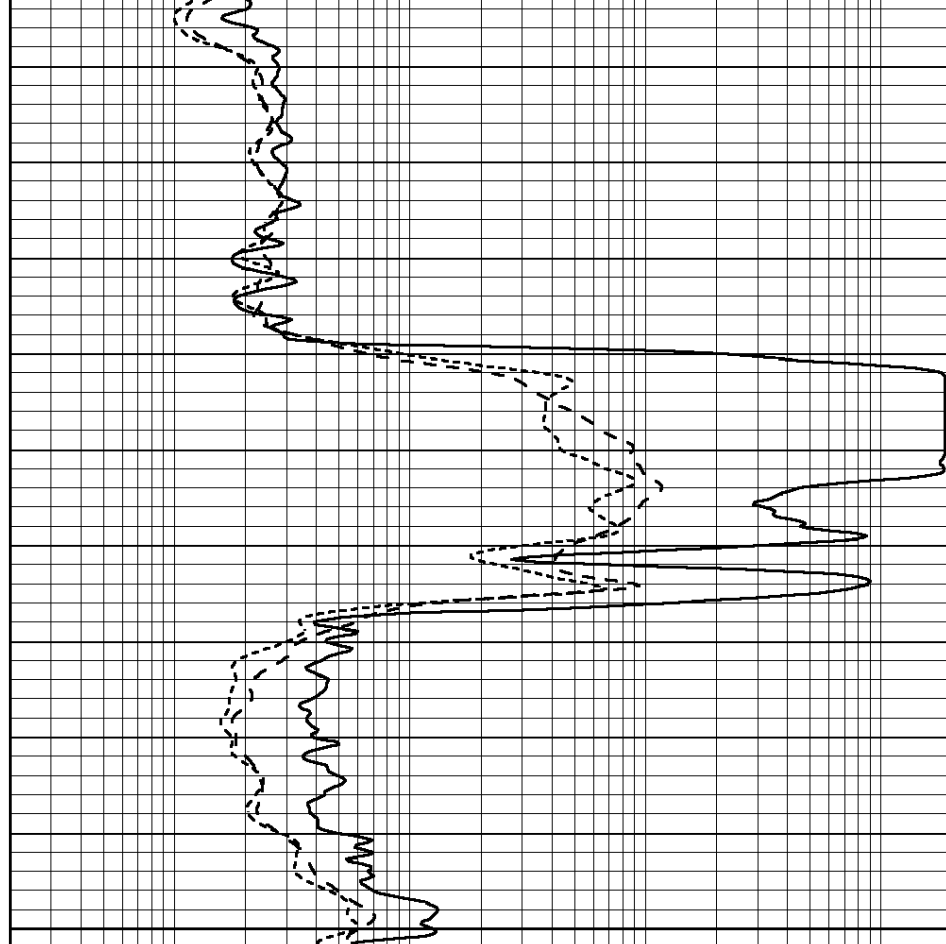




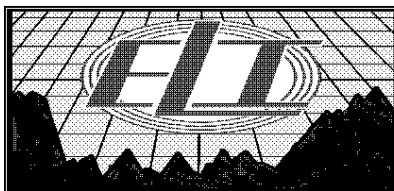
900

950

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



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



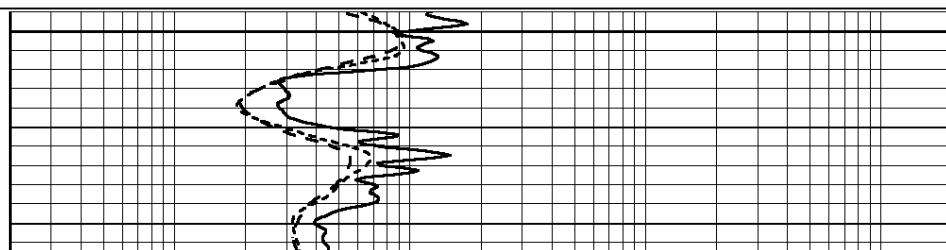
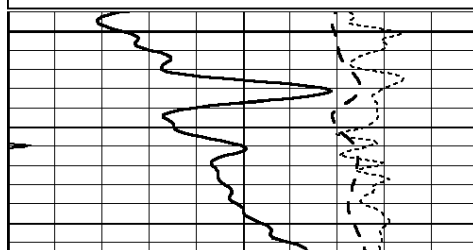
MAIN SECTION

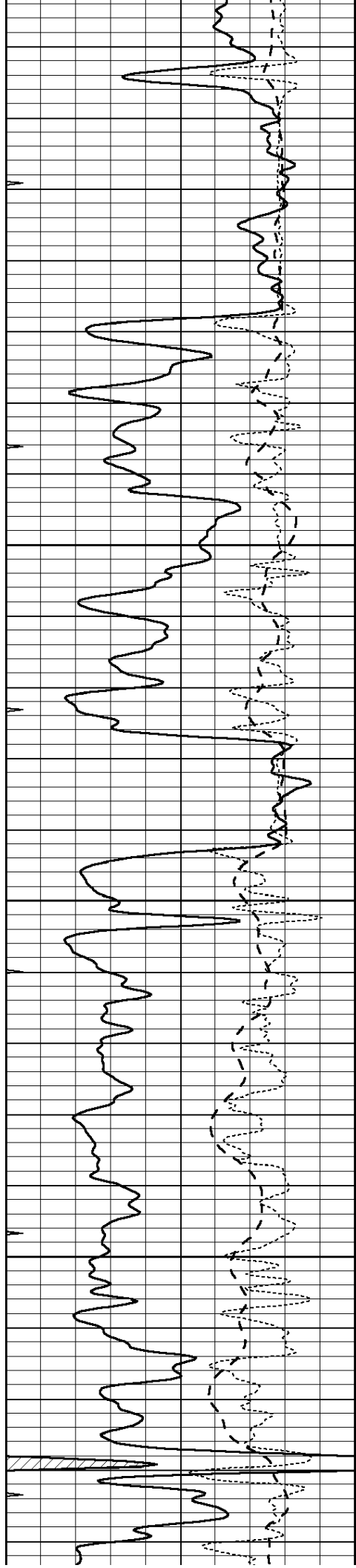
Database File: 4389ddn.db
 Dataset Pathname: pass3.4
 Presentation Format: _dil
 Dataset Creation: Tue Dec 03 22:09:49 2019 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

2700



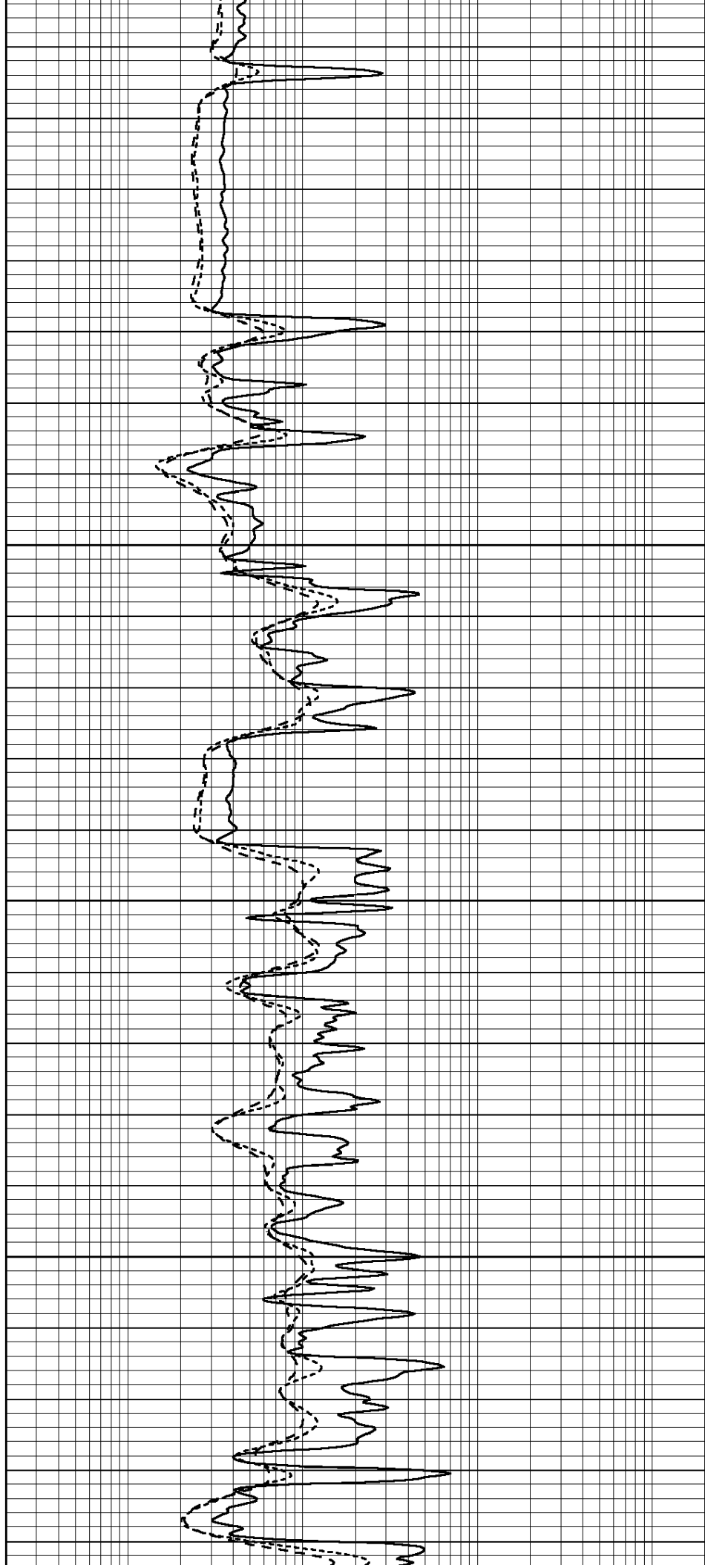


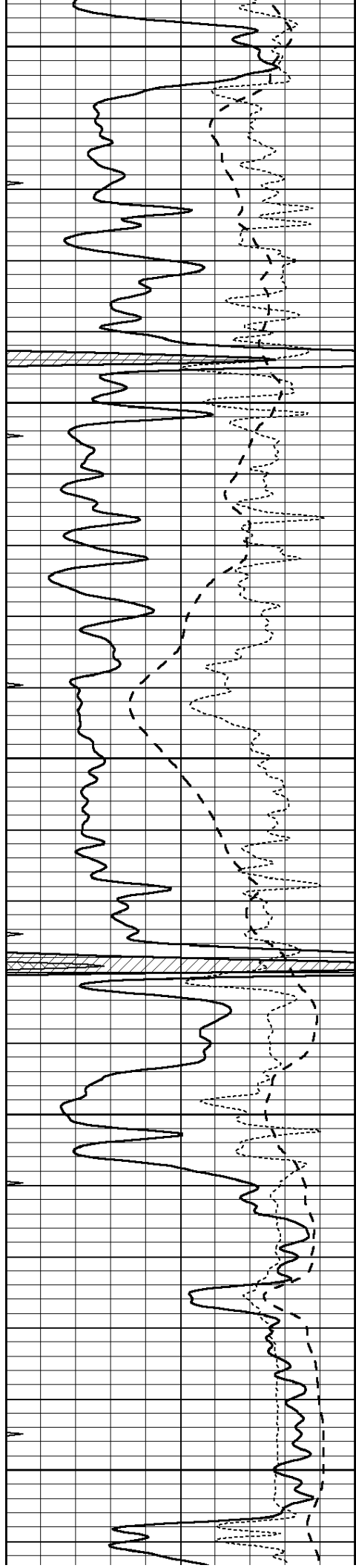
2750

2800

2850

2900





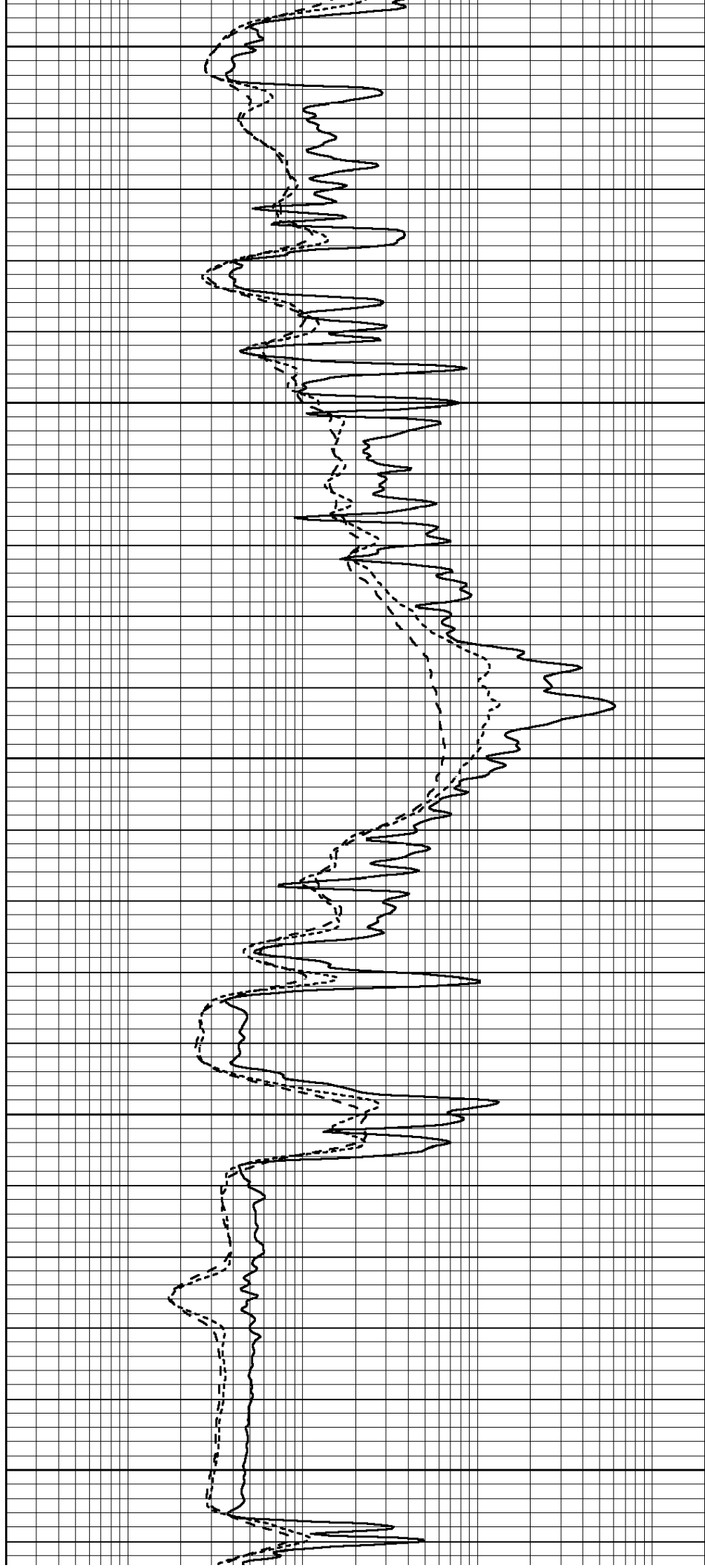
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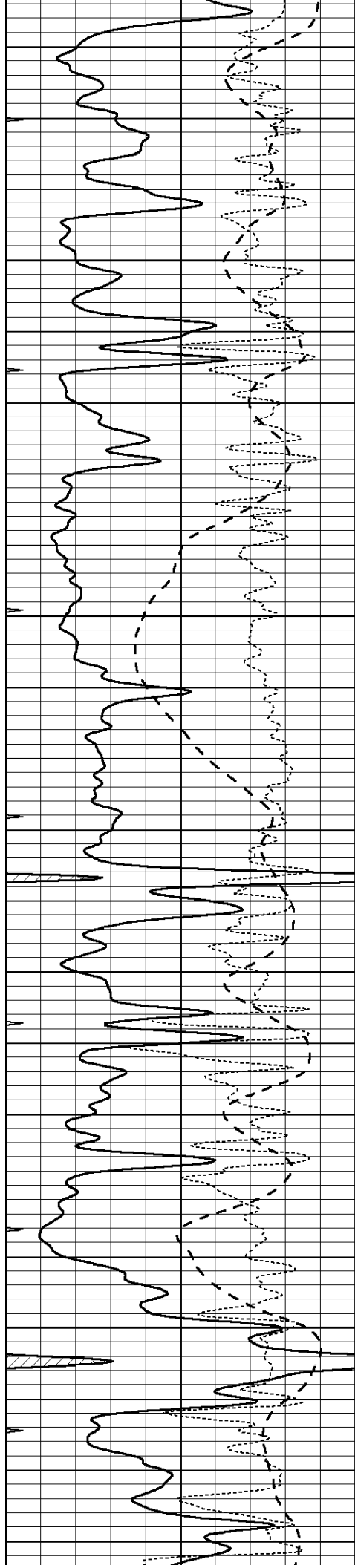
3000

3050

3100

3150



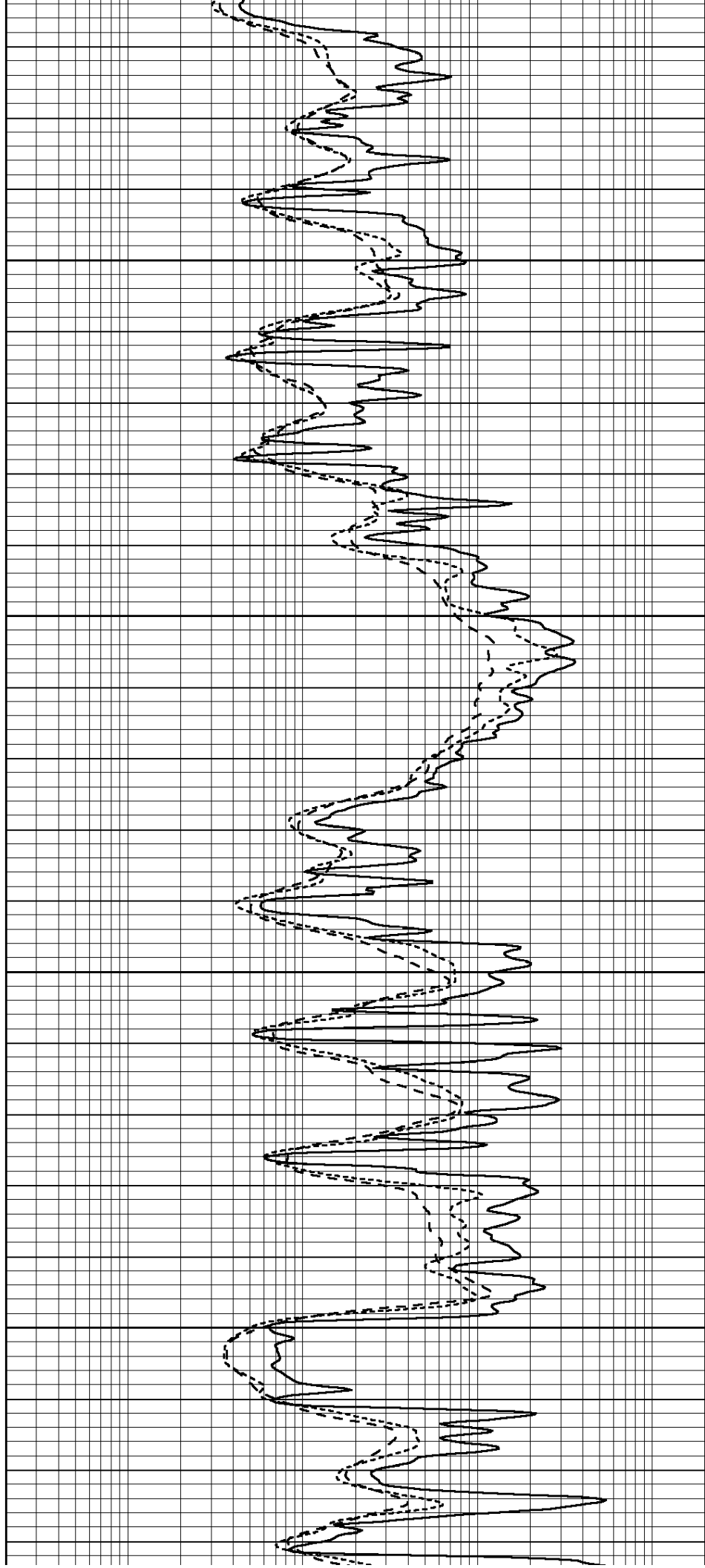


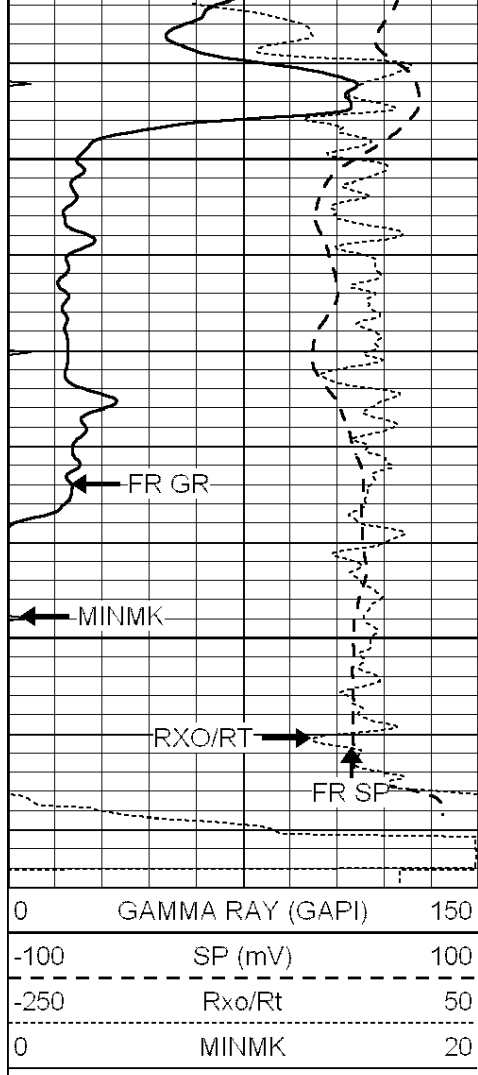
3200

3250

3300

3350

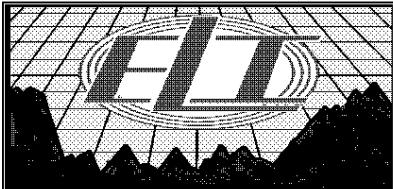
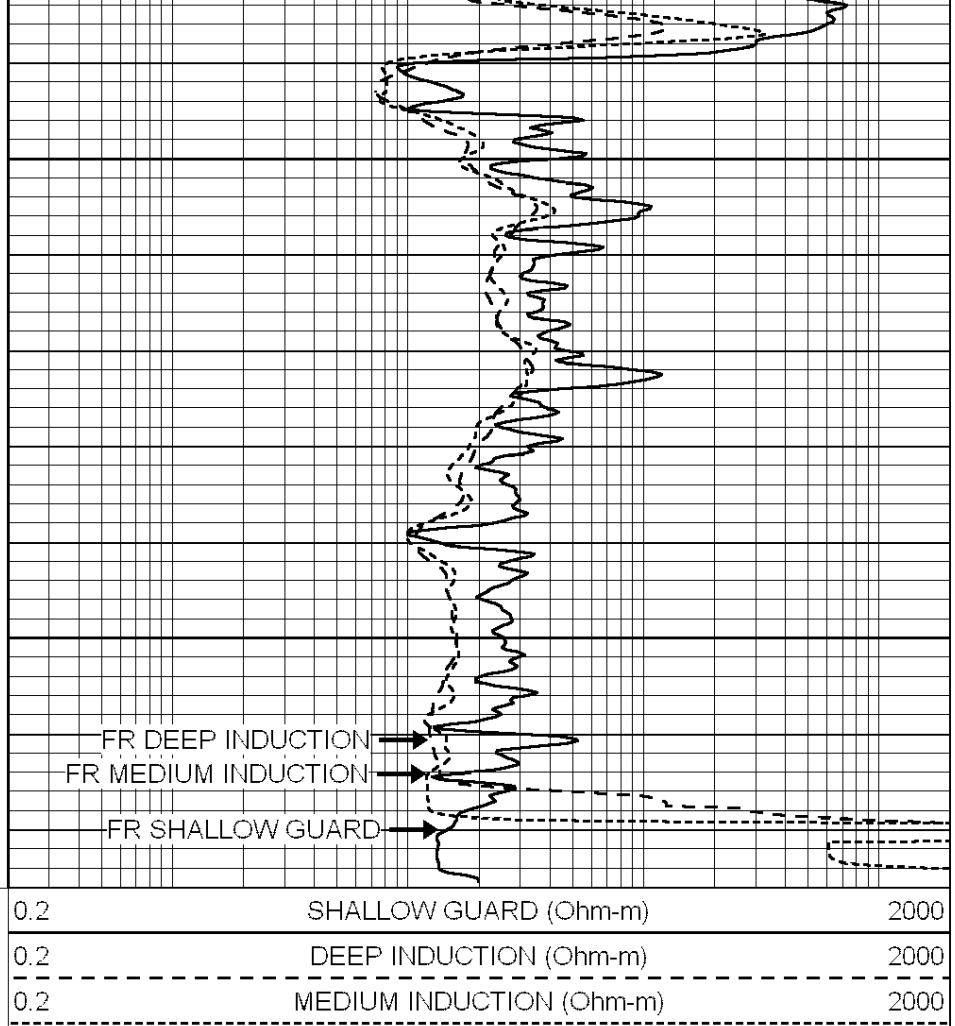




3400

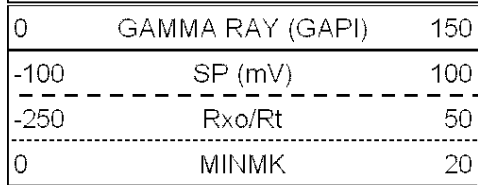
3450

LTD 3472

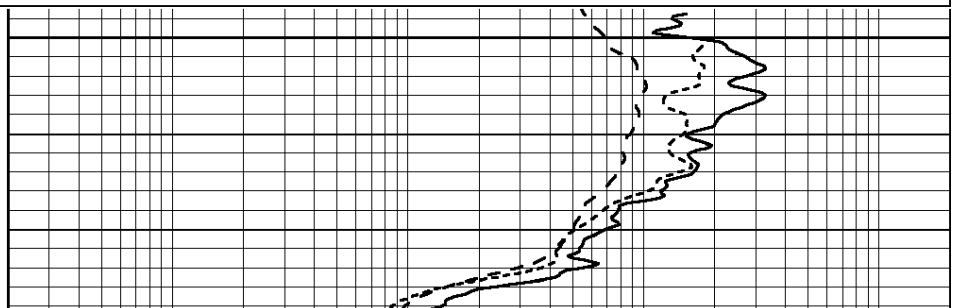
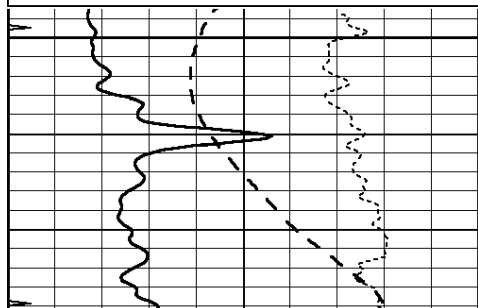
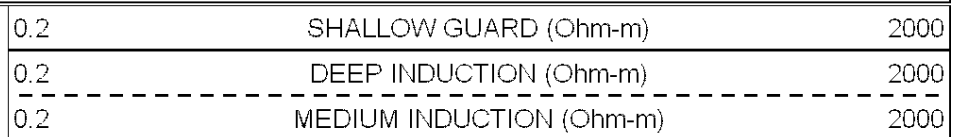


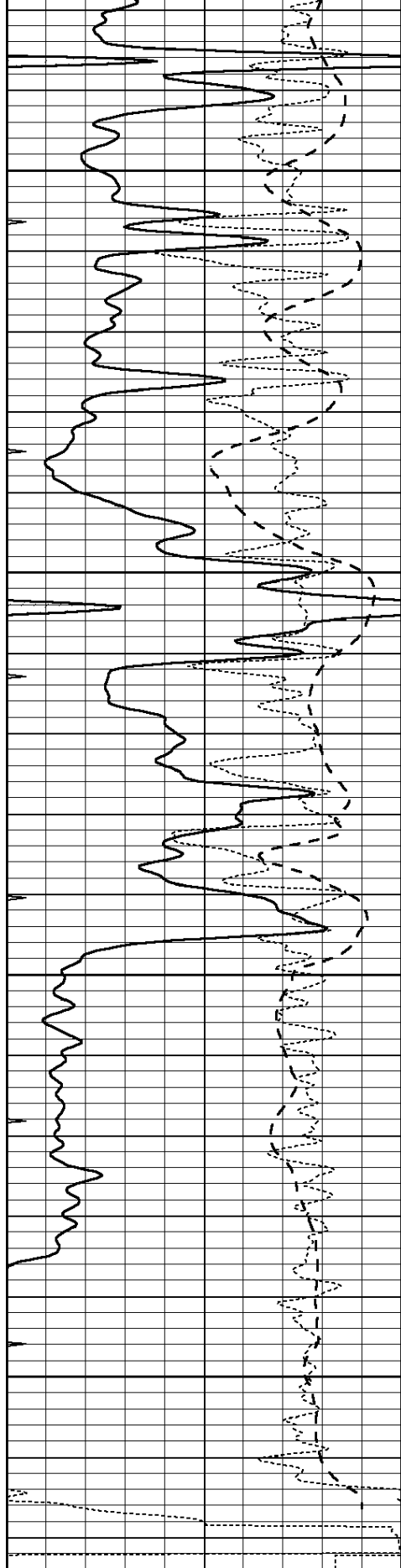
REPEAT SECTION

Database File: 4389ddn.db
 Dataset Pathname: pass2.3
 Presentation Format: _dil
 Dataset Creation: Tue Dec 03 21:15:26 2019 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240



3250





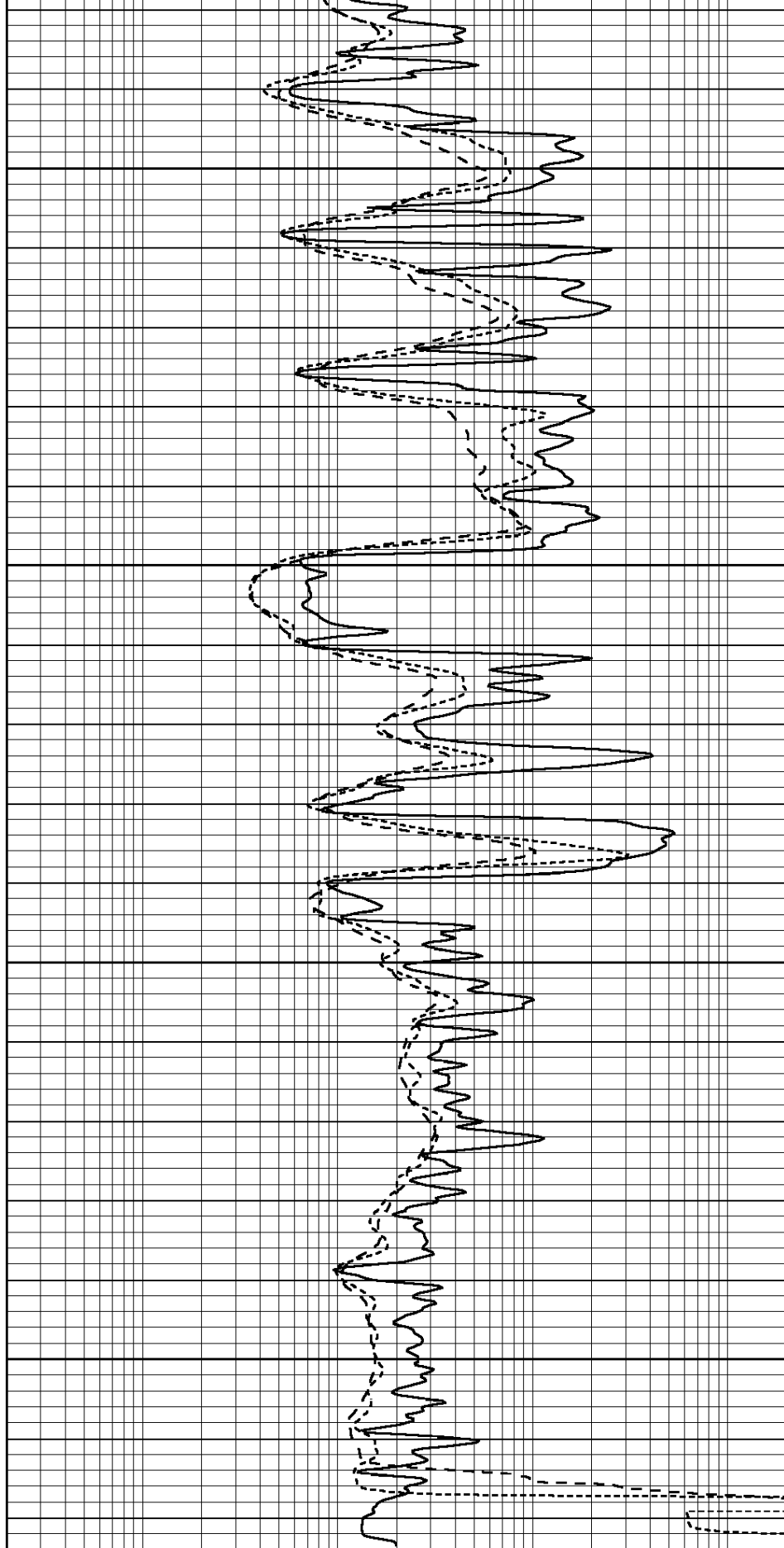
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

3300

3350

3400

3450



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

Calibration Report								
Database File:		1598ddn.db						
Dataset Pathname:		pass4						
Dataset Creation:		Wed Aug 30 02:13:00 2017 by Log SOC 120430						
Dual Induction Calibration Report								
Serial-Model:			PROBE7-DILG					
Surface Cal Performed:			Wed Aug 30 00:06:33 2017					
Downhole Cal Performed:			Mon Jul 28 12:02:56 2008					
After Survey Verification Performed:			Mon Jul 28 12:02:56 2008					
Surface Calibration								
		Readings		References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-44.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102
Downhole Calibration								
		Readings		References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		
After Survey Verification								
		Readings		Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		
Litho Density Calibration Report								
Serial: 002			Model: PRB					
Master Calibration								
Performed Mon Aug 21 11:27:42 2017								
	Background	Magnesium		Aluminum		Sandstone		
Window 1	837.1	10632.5		2945.1		12110.1		cps
Window 2	772.0	9117.4		2570.1		10197.3		cps
Window 3	631.7	4669.0		1481.9		5042.9		cps
Window 4	187.0	187.5		185.9		189.9		cps
Long Space	0.0	8345.4		1798.1		9425.3		cps
Short Space	1.1	1927.9		1285.9		2050.2		cps
Rho		1.7100		2.5960		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio			: 0.558	
Spine Angle	: 75.2	Spine Slope	: 3.790	Spine Intercept			: -19.6	

Before 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	

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: 070808
Tool Model: Probe

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: OPEN_GR
Performed: Wed May 31 00:09:32 2017

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2800 GAPI/cps