



DUAL INDUCTION LOG

Company	JONES OIL, LLC.
Well	DUNN #1
Field	BRENN
County	STAFFORD
State	KANSAS
Location:	AP1 # : 15-185-24007-00-00 969' FNL & 330' FEL
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL KELLY BUSHING 7' A.G.L. KELLY BUSHING
SEC 24 TWP 23S RGE 14W	Other Services CDL/CNL/MEL SONIC
Elevation	K.B. 1943 D.F. 1941 G.L. 1936
Date	02/10/18
Run Number	ONE
Depth Driller	4040
Depth Logger	4041
Bottom Logged Interval	4039
Top Log Interval	600
Casing Driller	8 5/8" @ 639
Casing Logger	639
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.365
pH / Fluid Loss	10.0/10.4
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.70@54
Rmt @ Meas. Temp	.53@54
Rmc @ Meas. Temp	.84@54
Source of Rmt / Rmc	MEASURED
Rm @ BHT	.33@115
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	///
Maximum Recorded Temperature	115F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	KEATON JONES

<<< Fold Here >>>

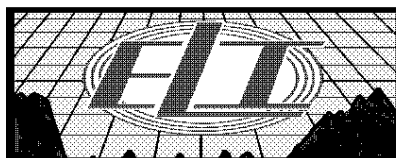
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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, HAYS, KS. (785) 628-6395

DIRECTIONS

SOUTH SIDE OF ST. JOHN 3 WEST, NORTH ON BLACK TOP 3.5 MILES
WEST INTO.

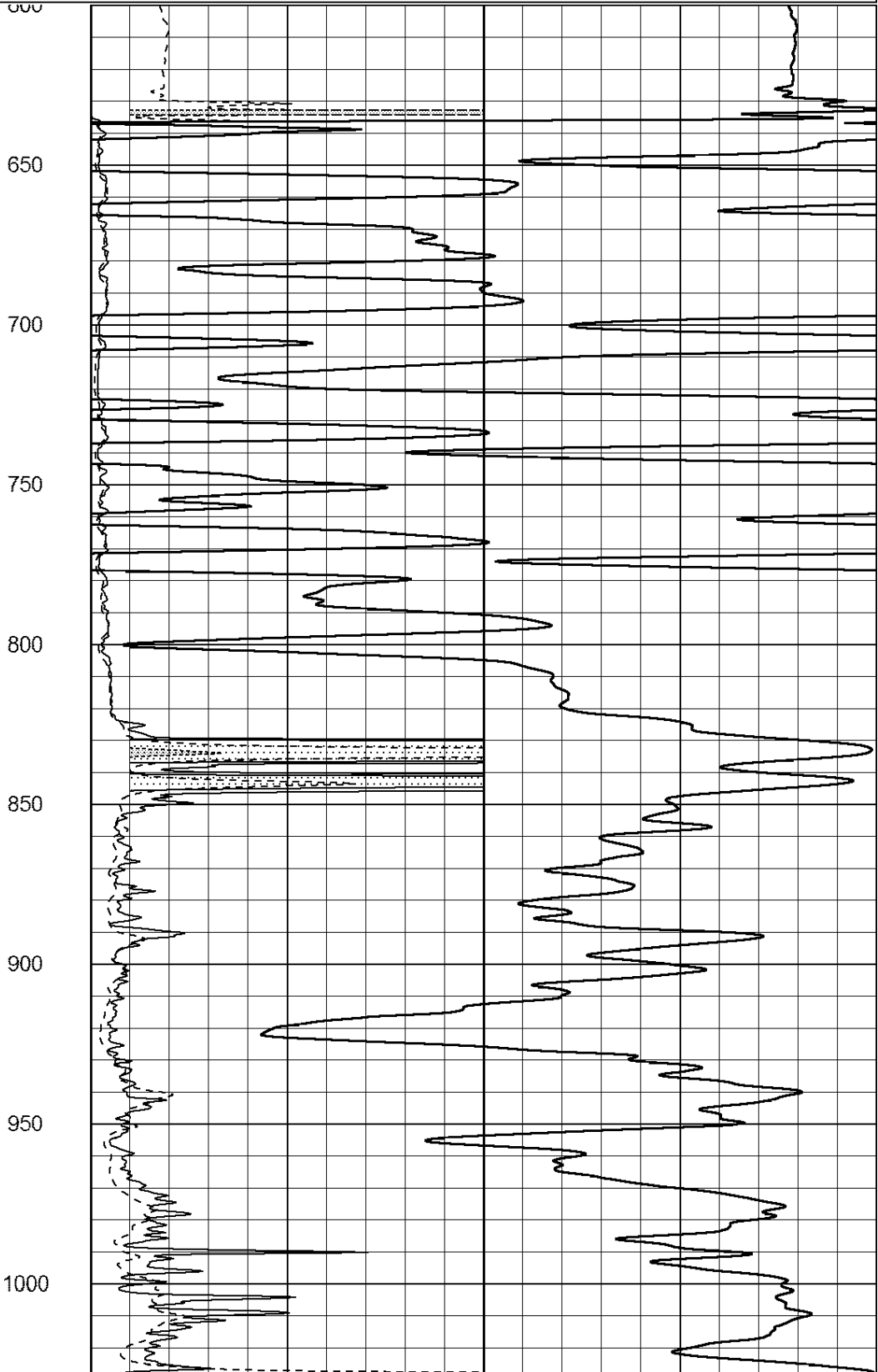
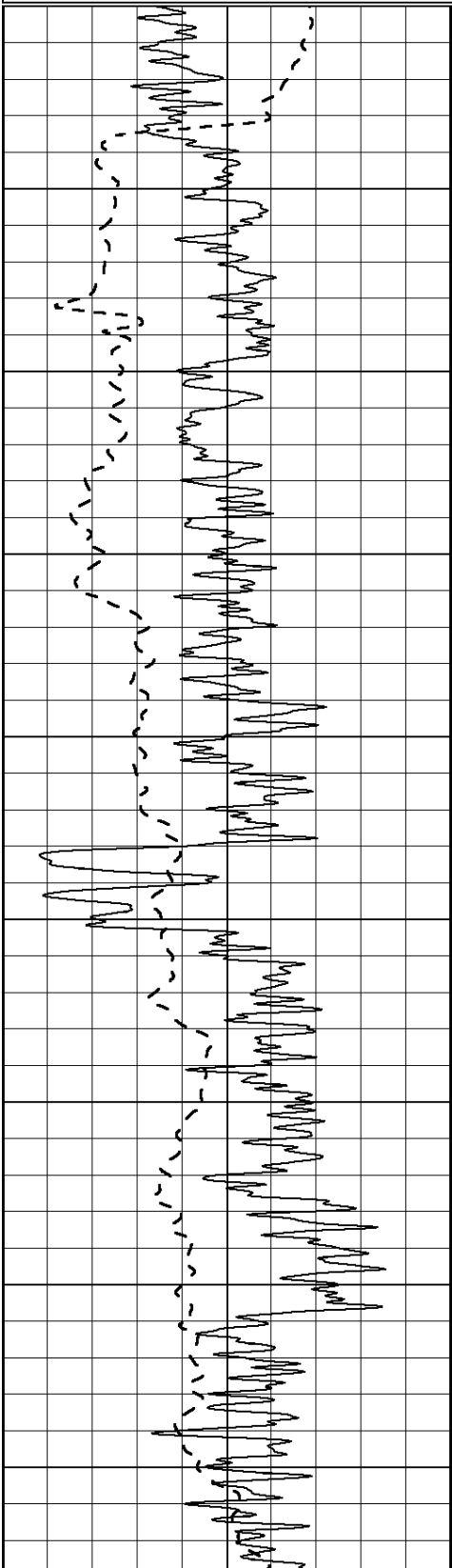


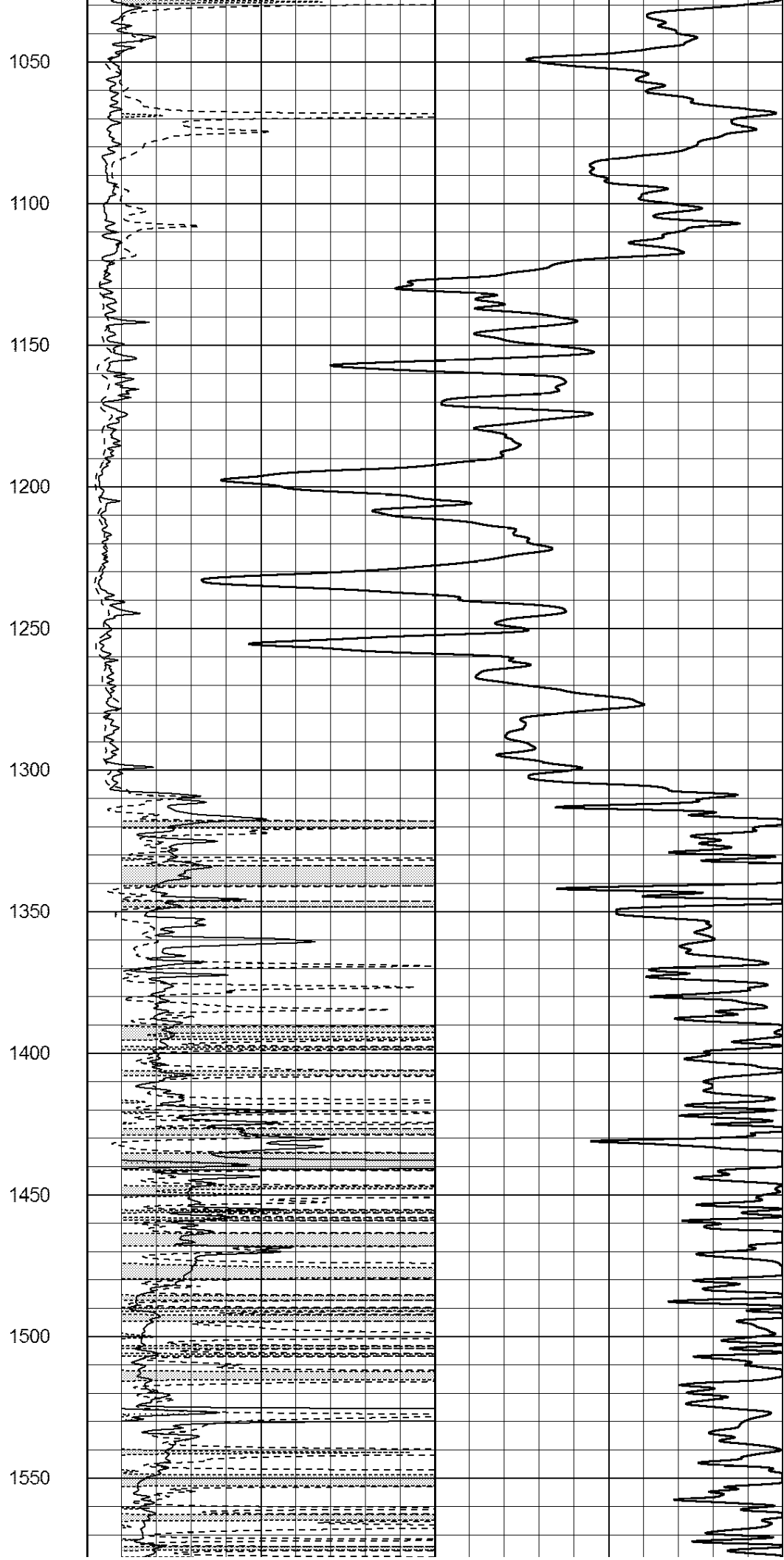
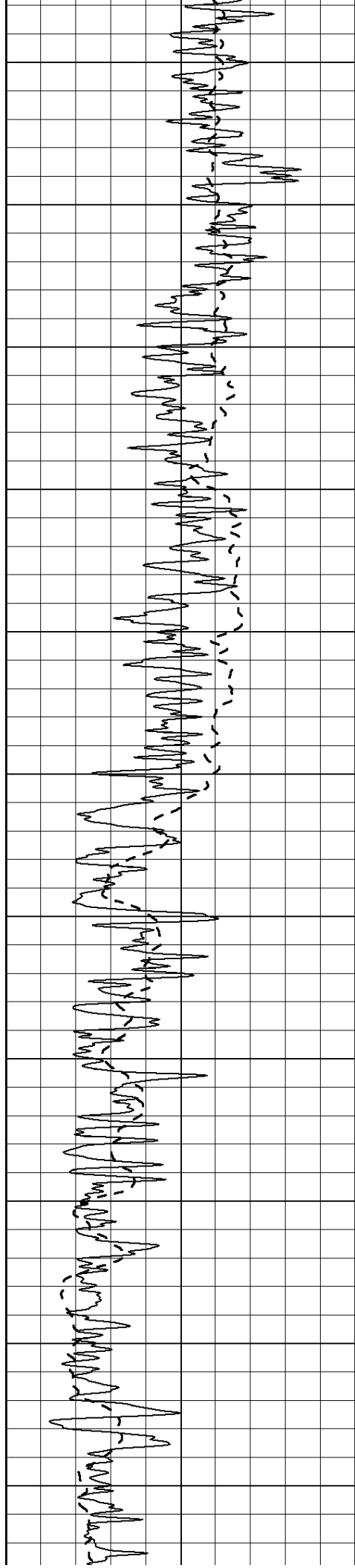
MAIN PASS

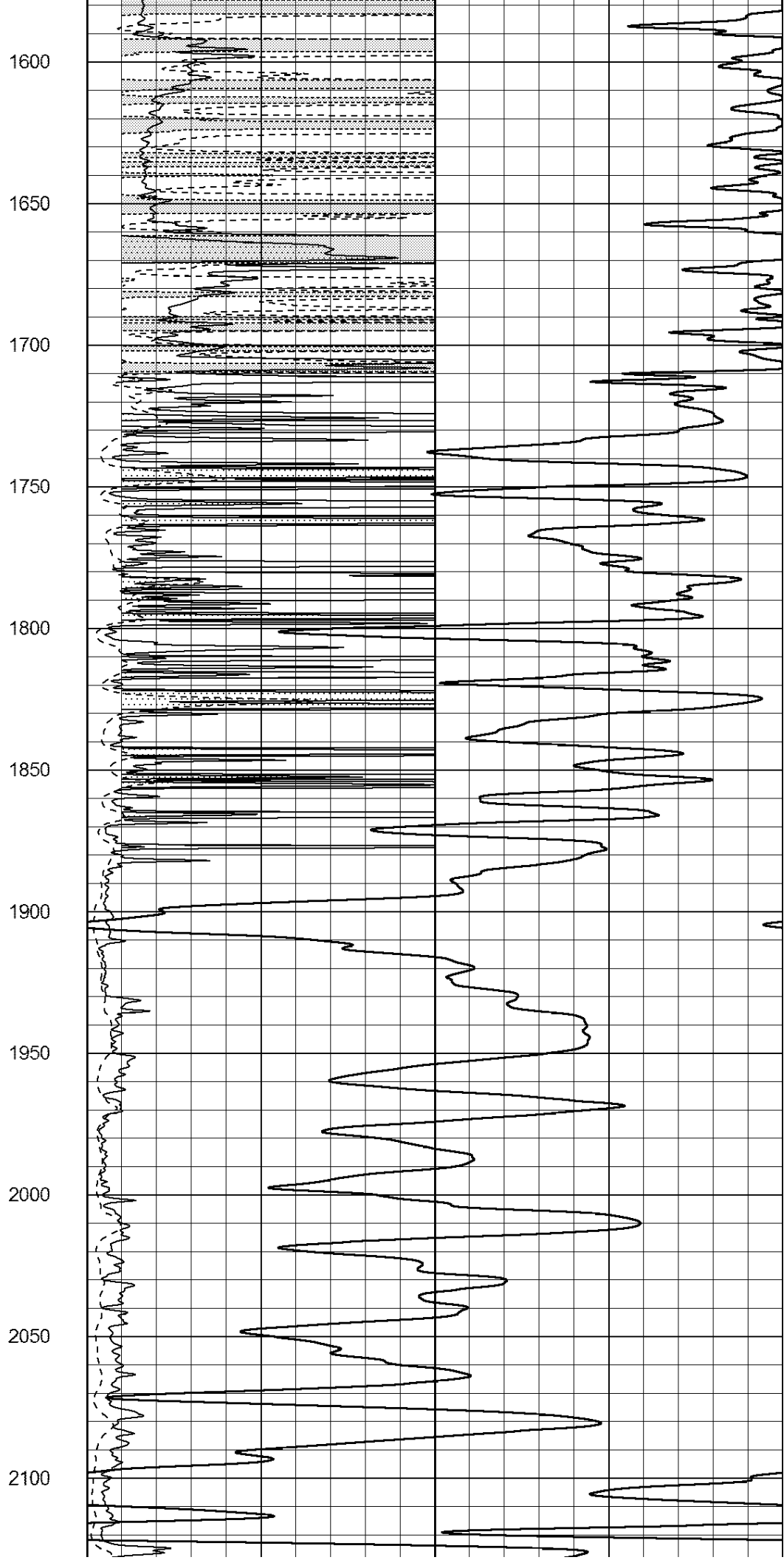
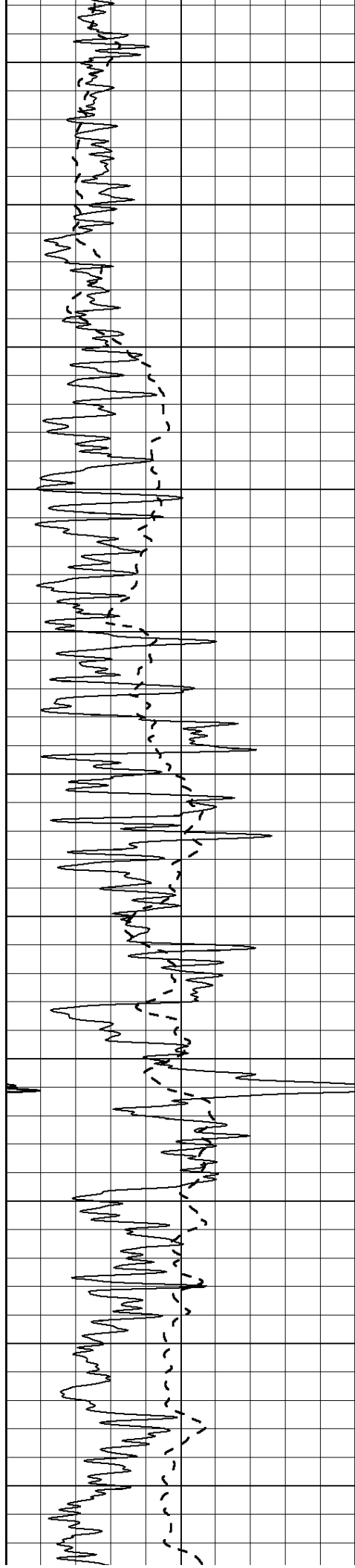
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Dataset Pathname: pass3.1
Presentation Format: _dil2
Dataset Creation: Sat Feb 10 19:26:34 2018 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:600

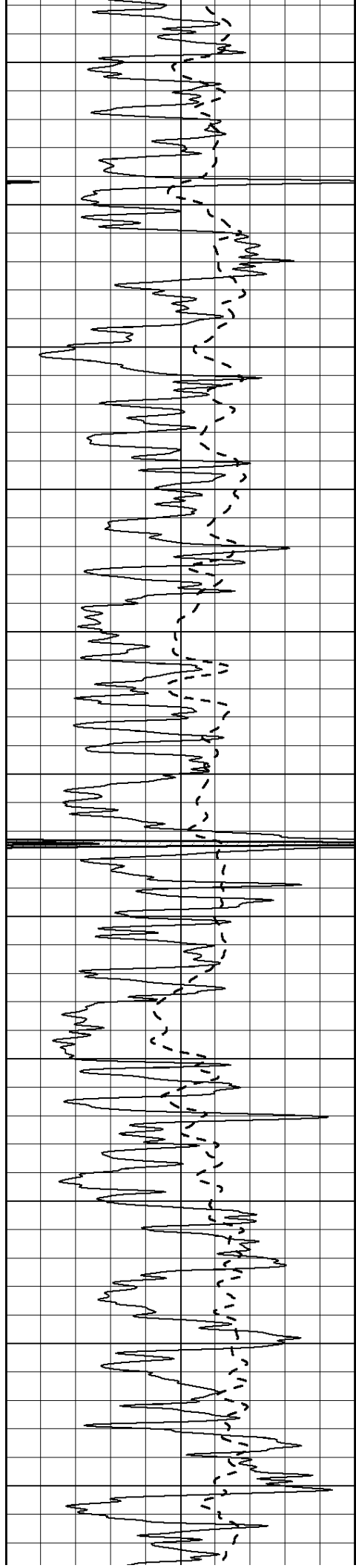
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

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









2150

2200

2250

2300

2350

2400

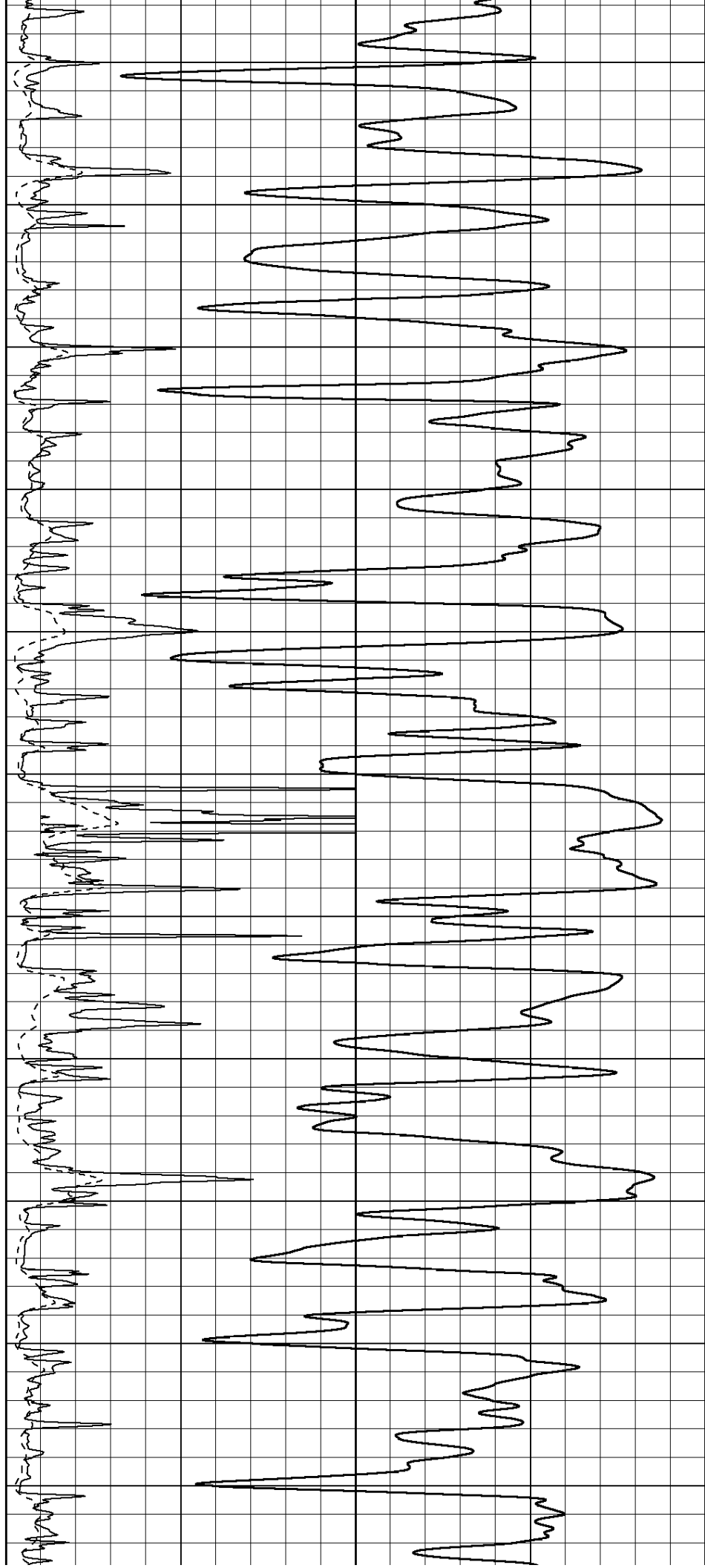
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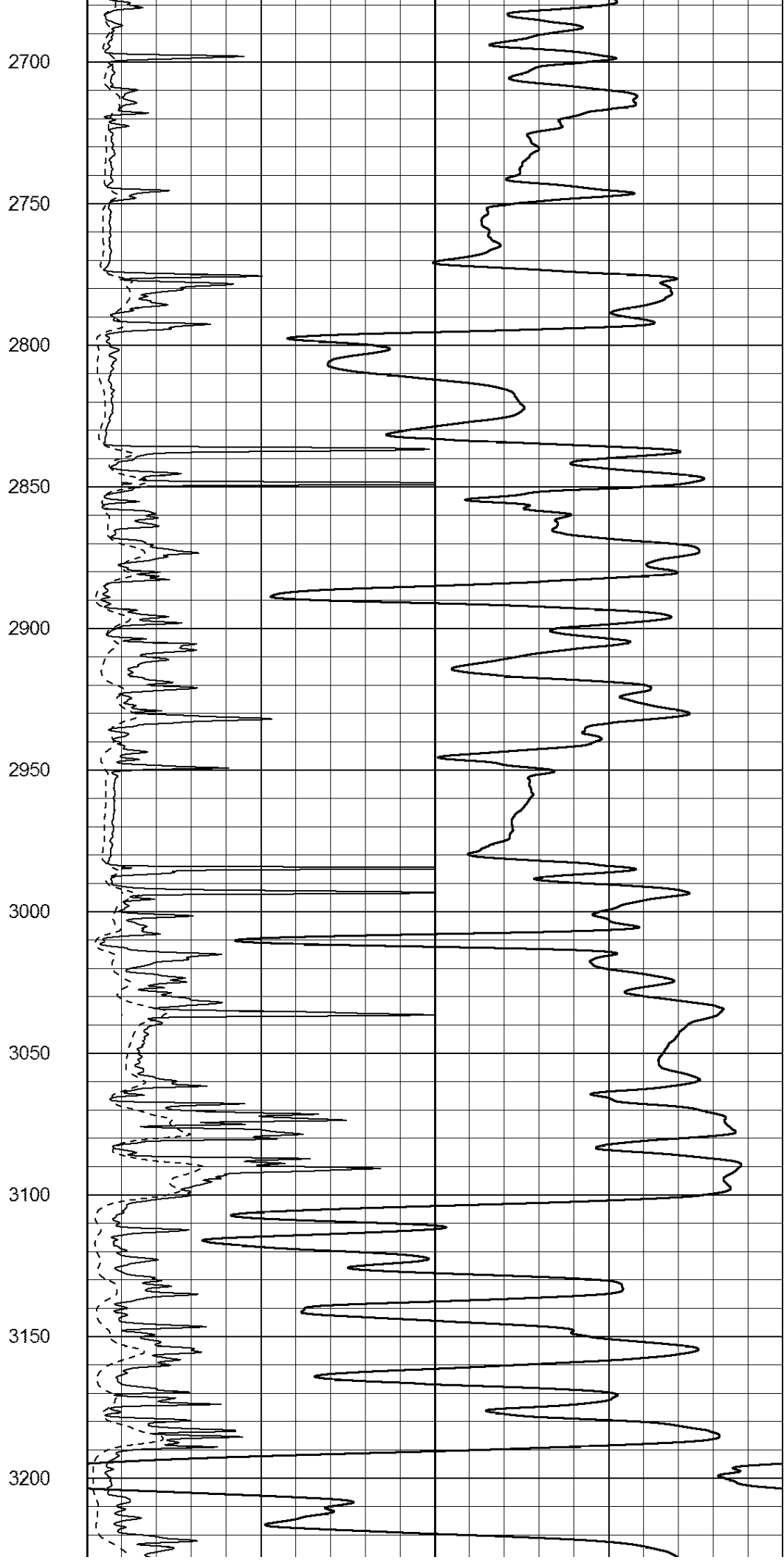
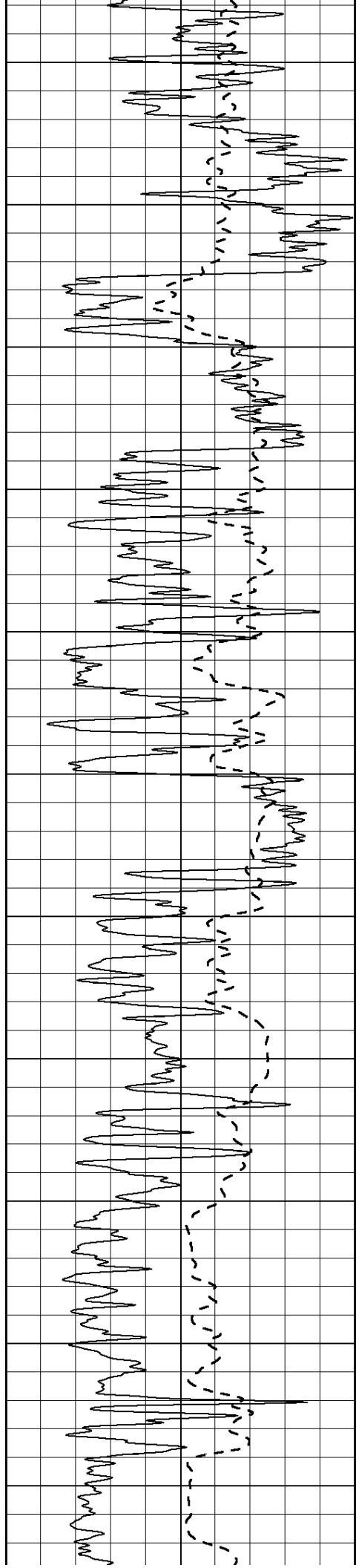
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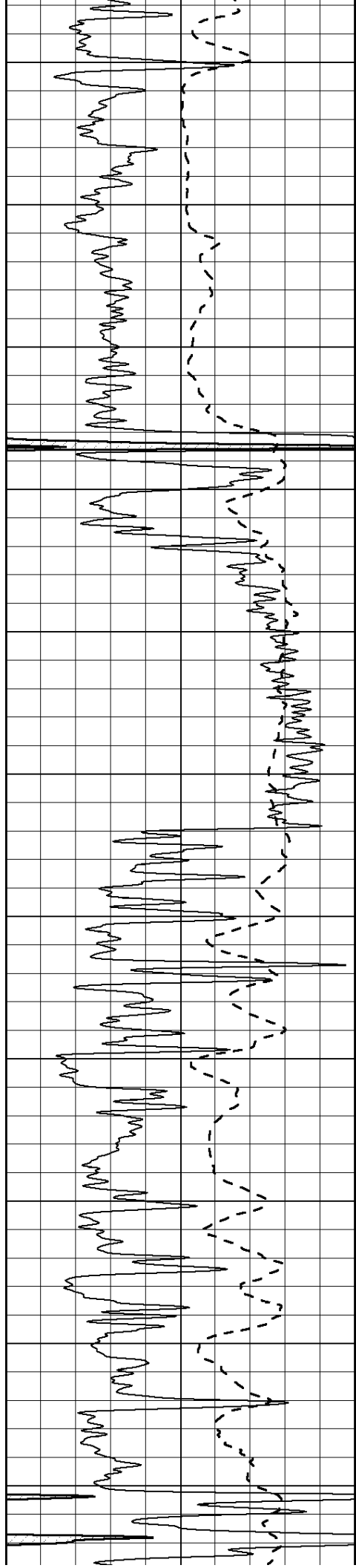
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2600

2650







3250

3300

3350

3400

3450

3500

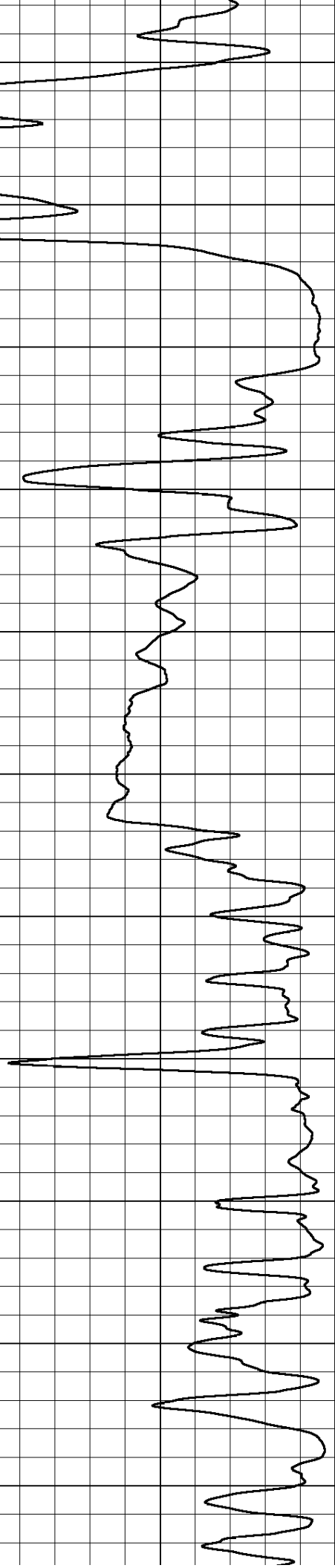
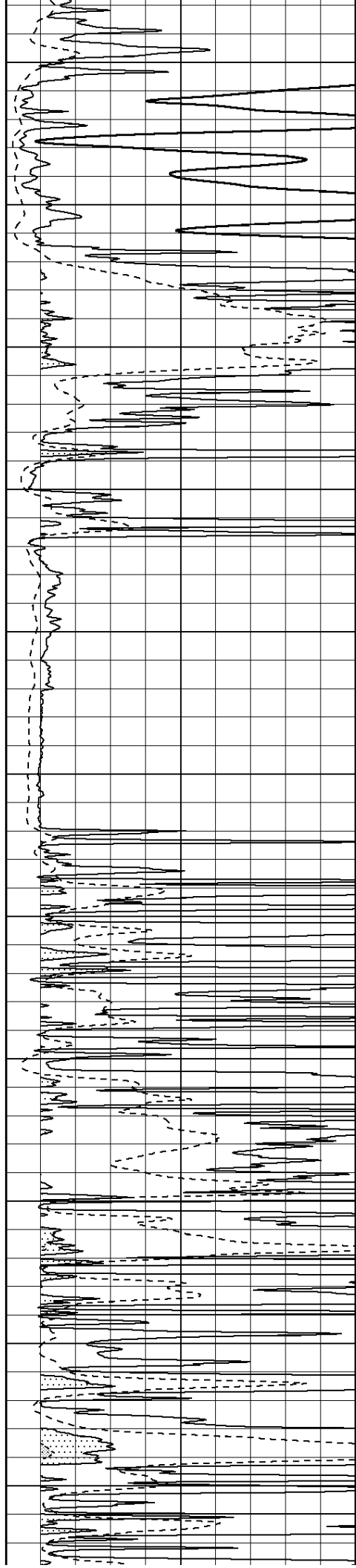
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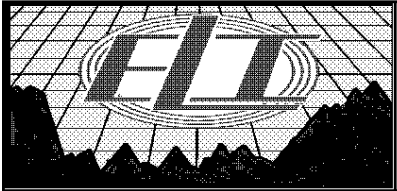
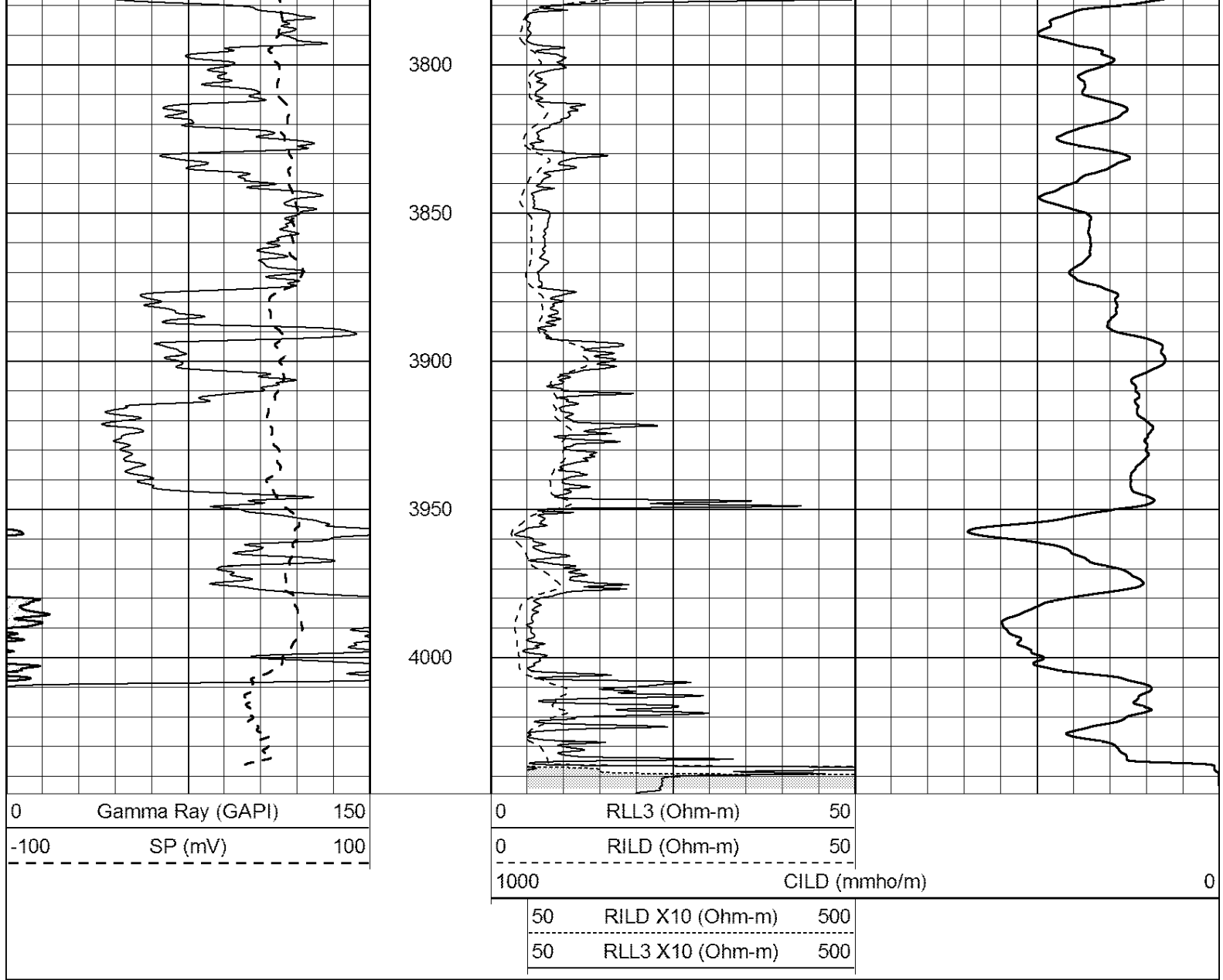
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3650

3700

3750

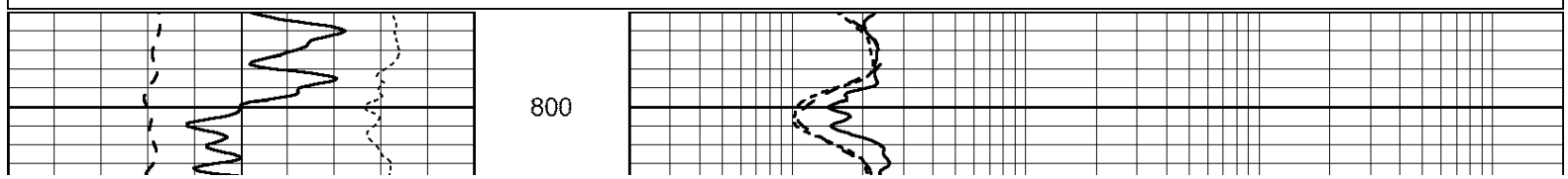


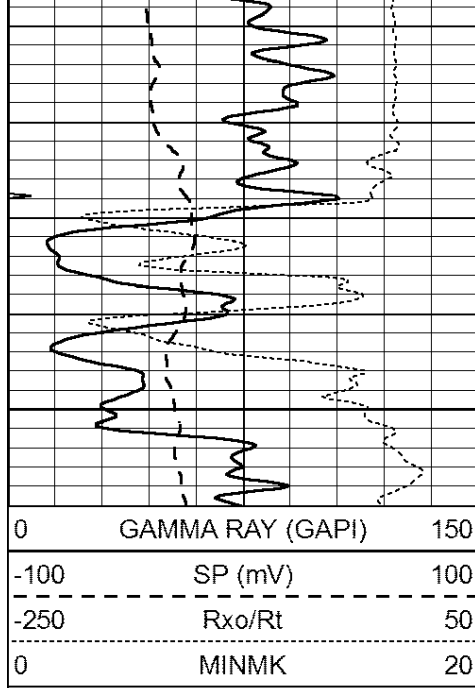


MAIN PASS

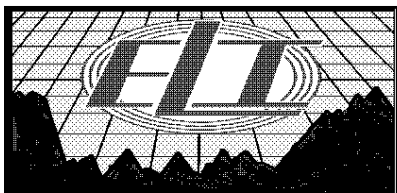
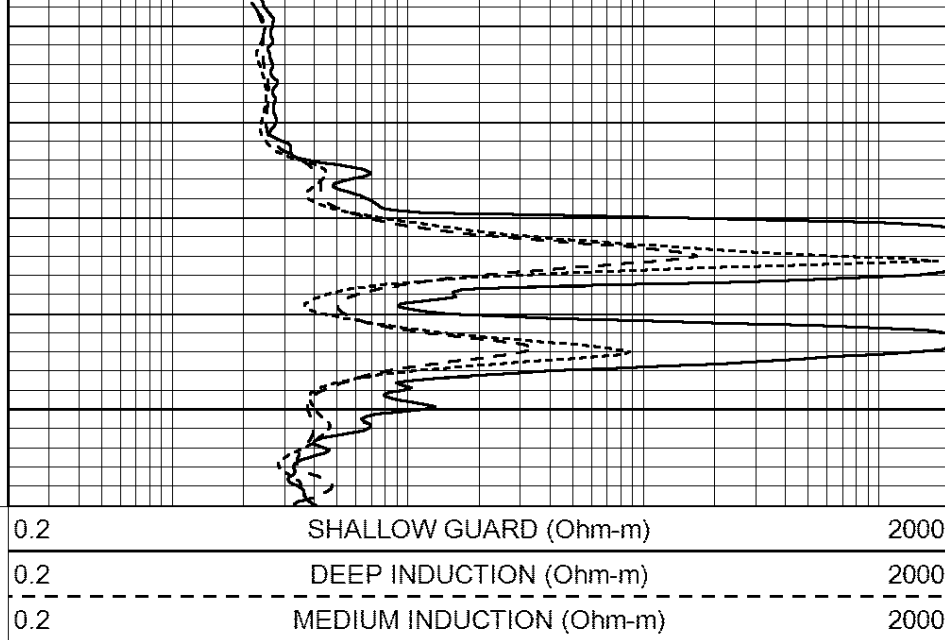
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 Dataset Pathname: pass3.1
 Presentation Format: _dil
 Dataset Creation: Sat Feb 10 19:26:34 2018 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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			



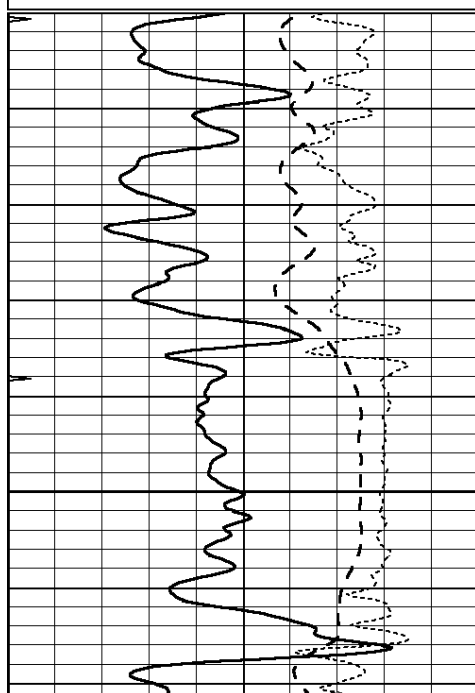
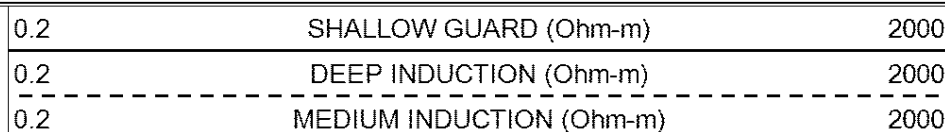
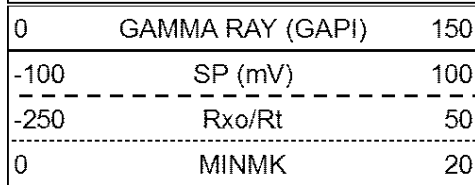


850



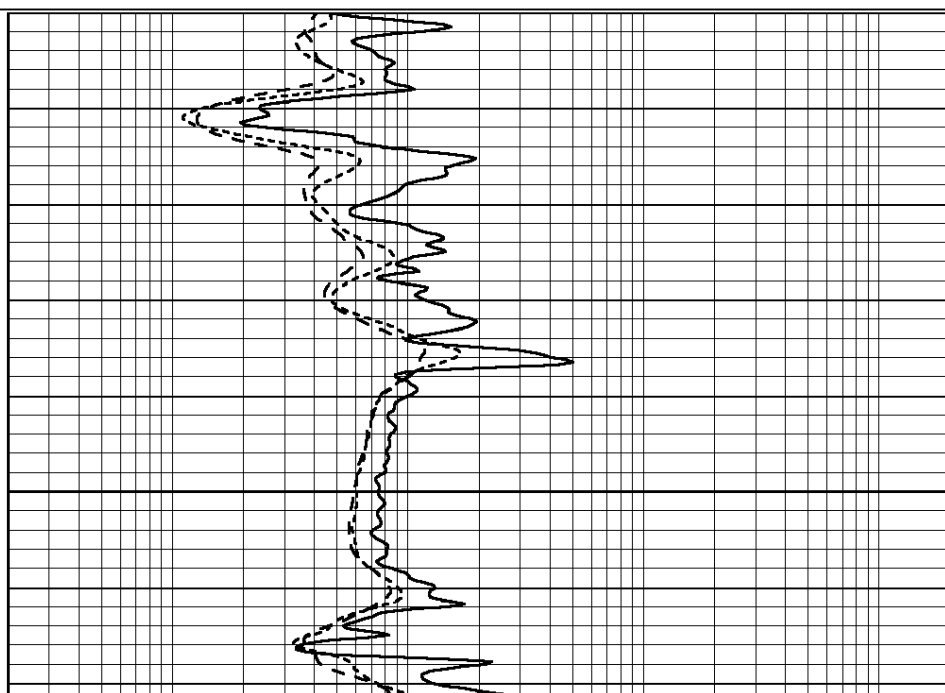
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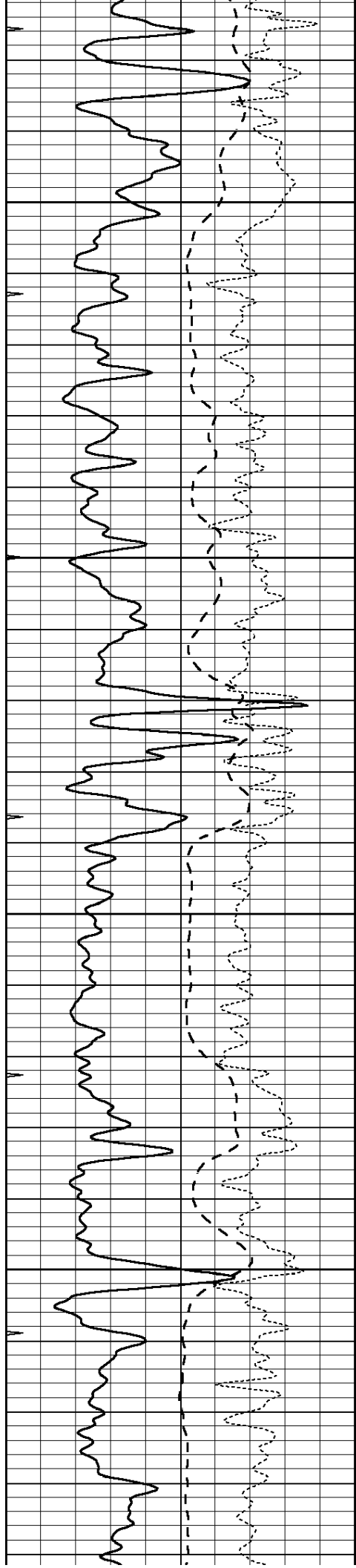
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 Dataset Creation: Sat Feb 10 19:26:34 2018 by Calc Open-Cased 090629
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3000

3050



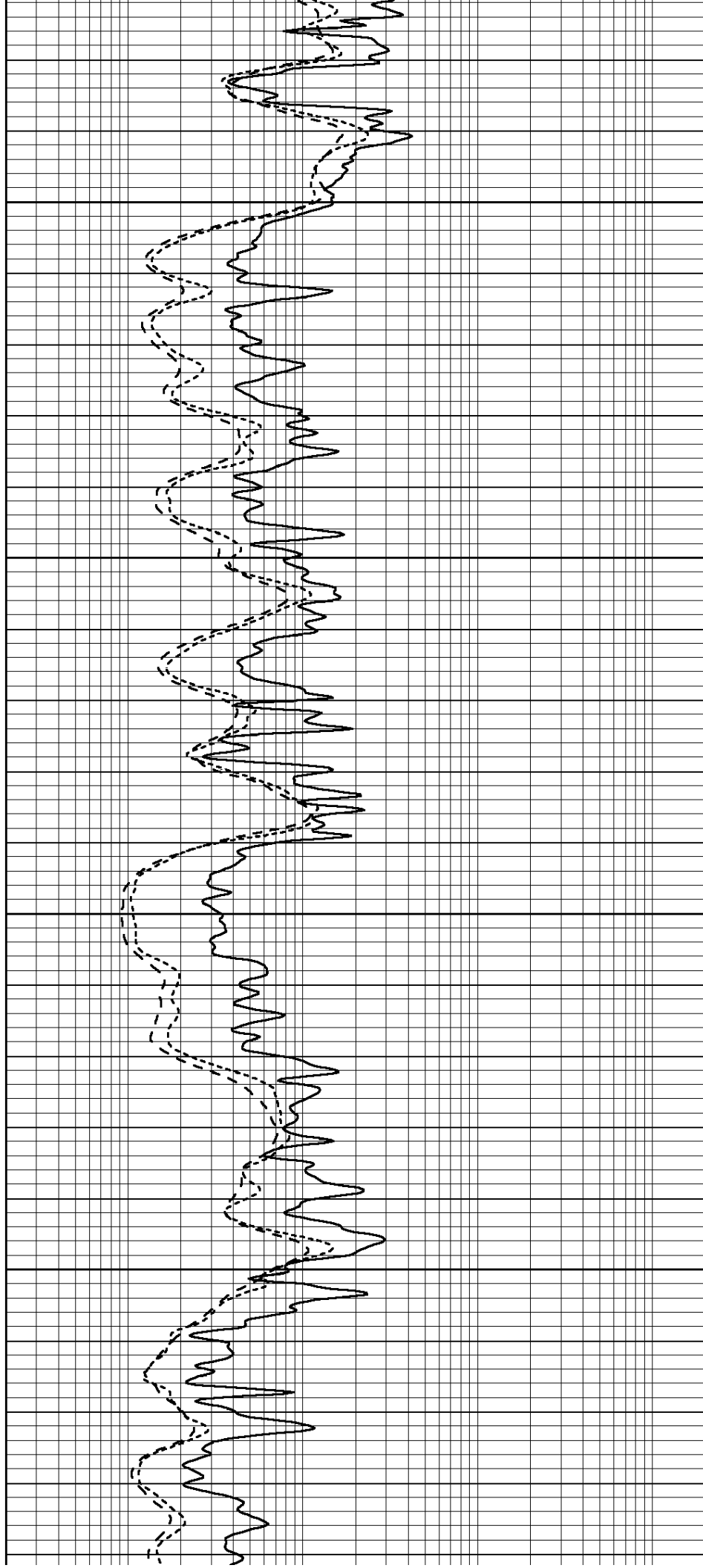


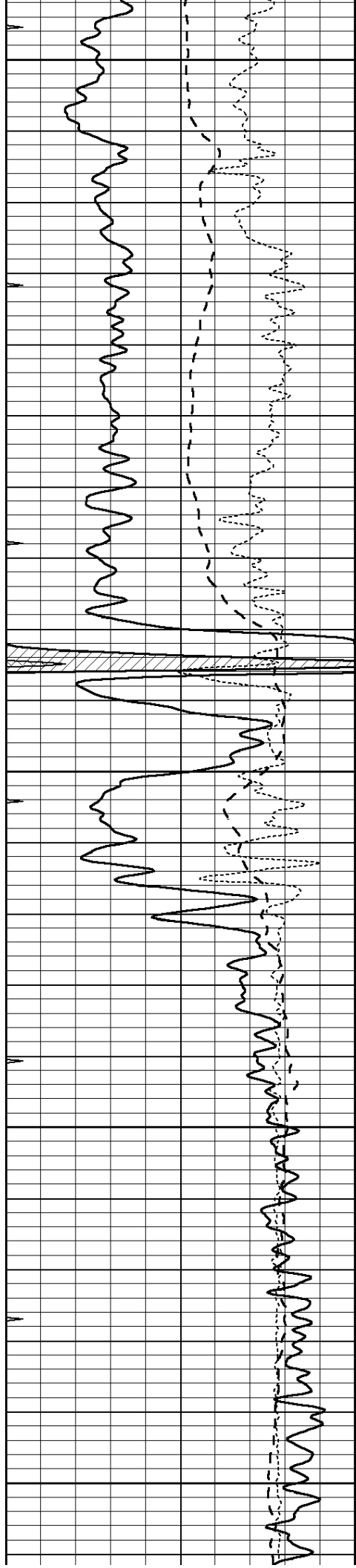
3100

3150

3200

3250





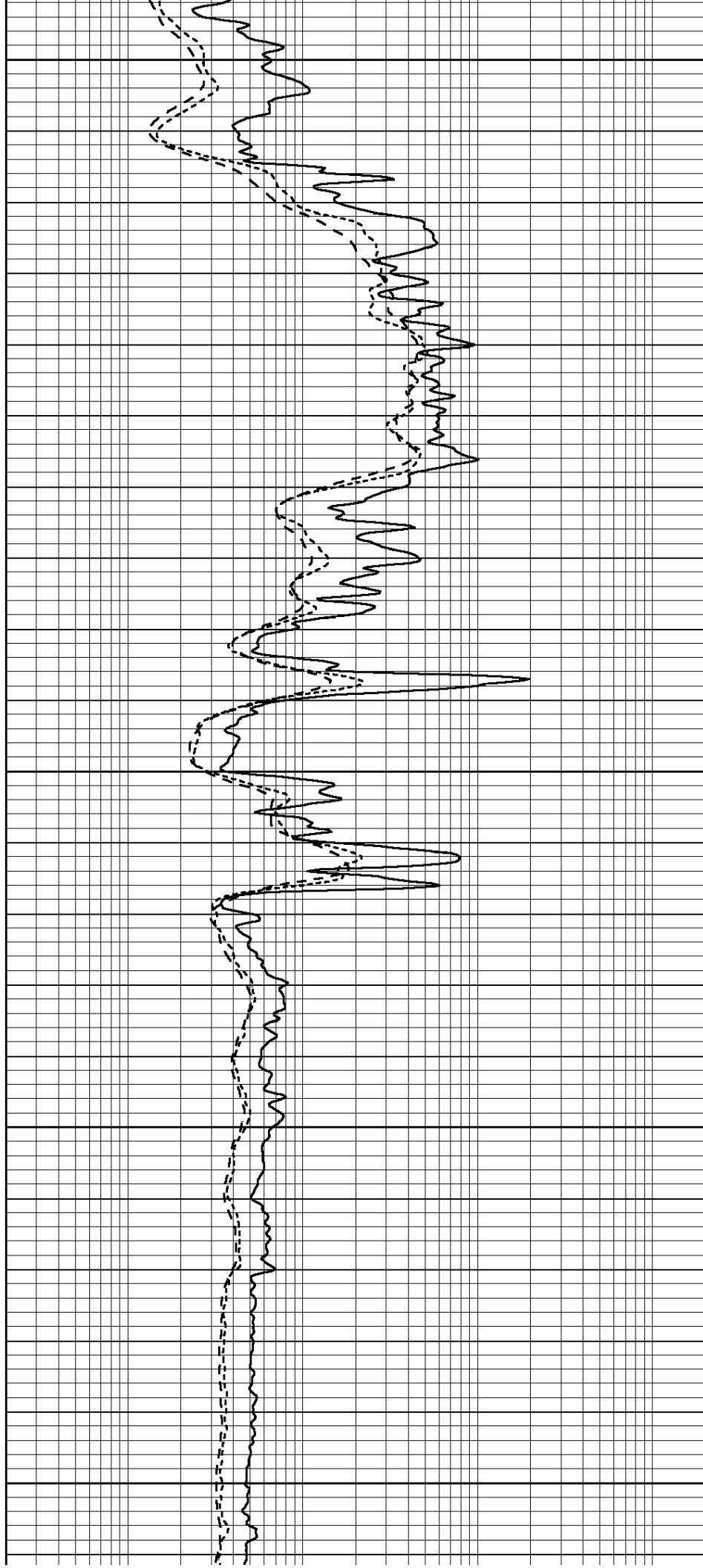
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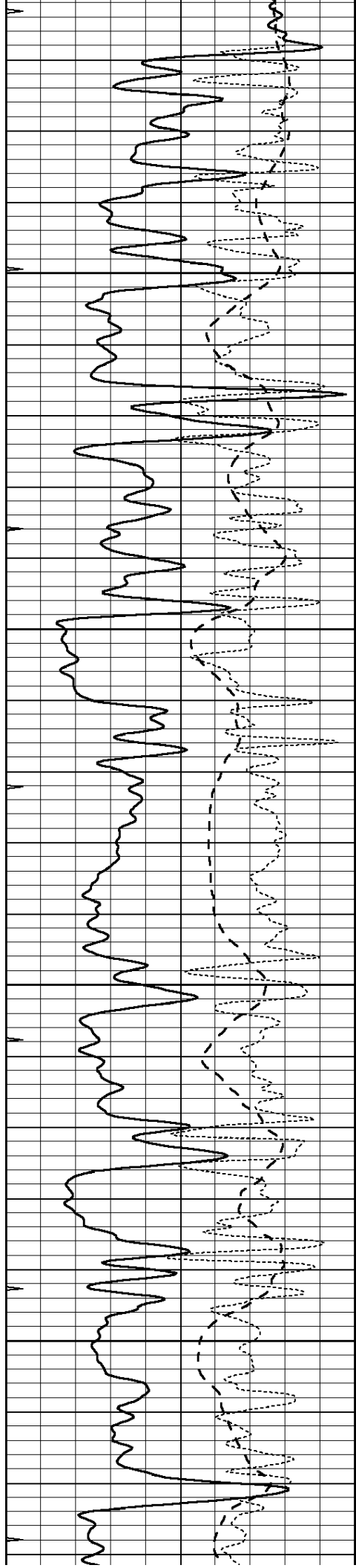
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3400

3450

3500



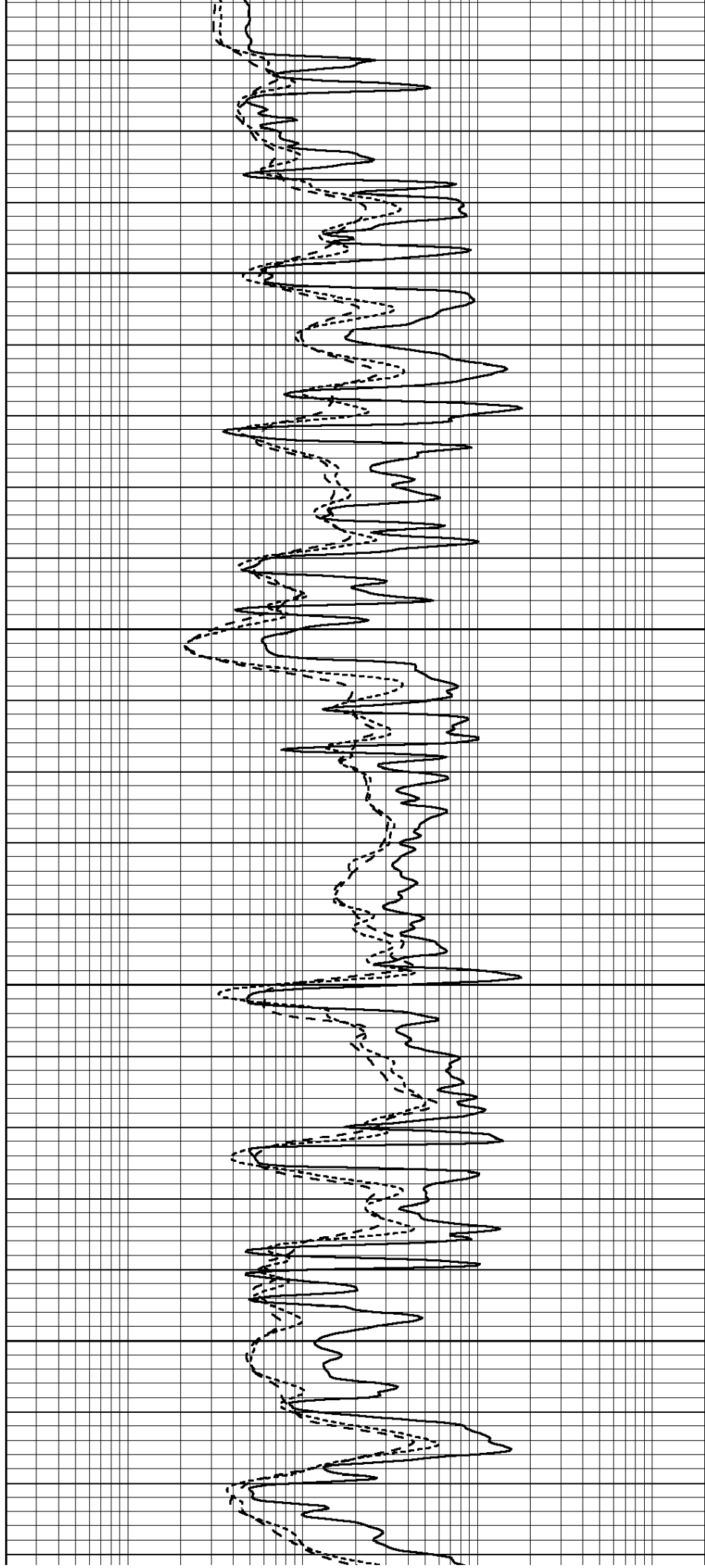


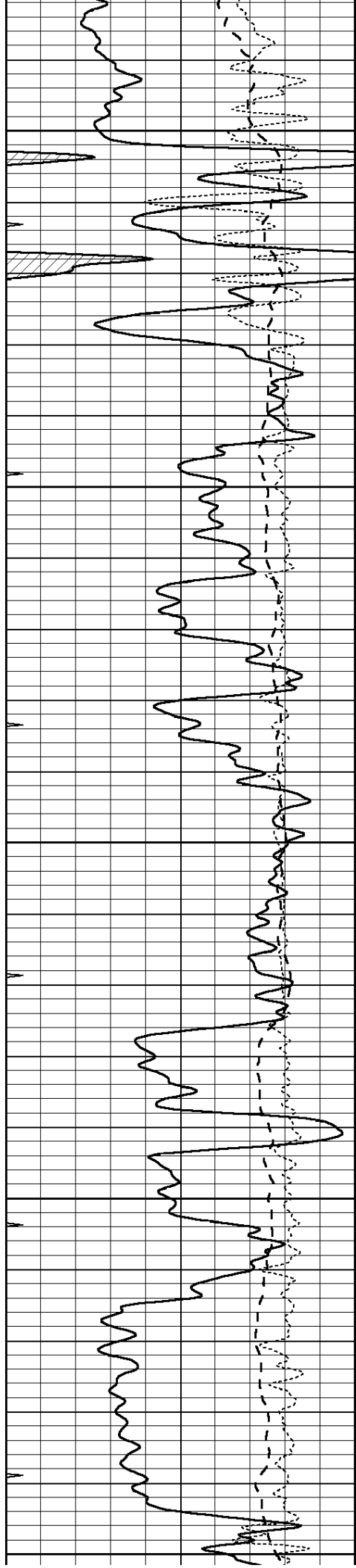
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3600

3650

3700





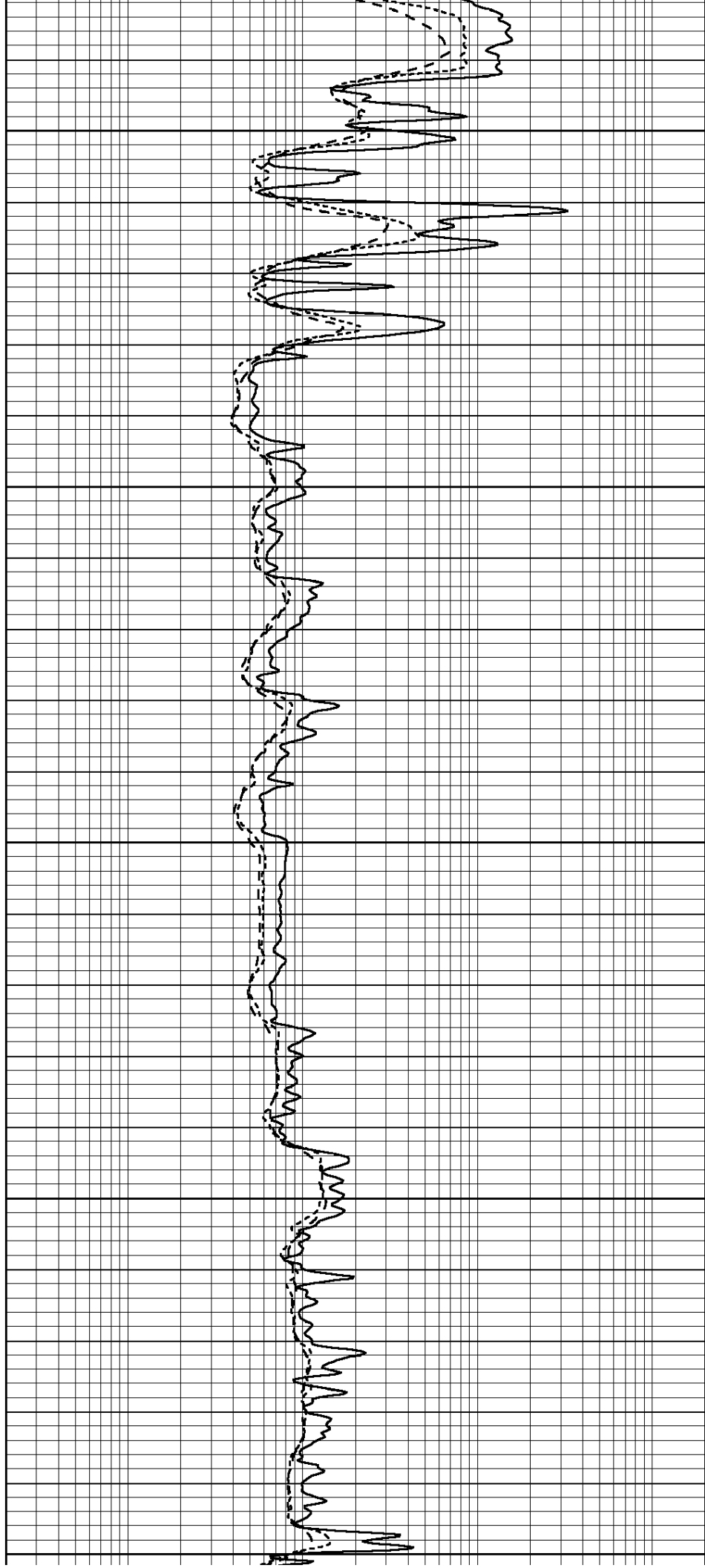
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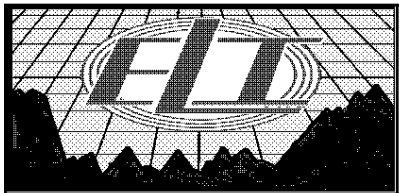
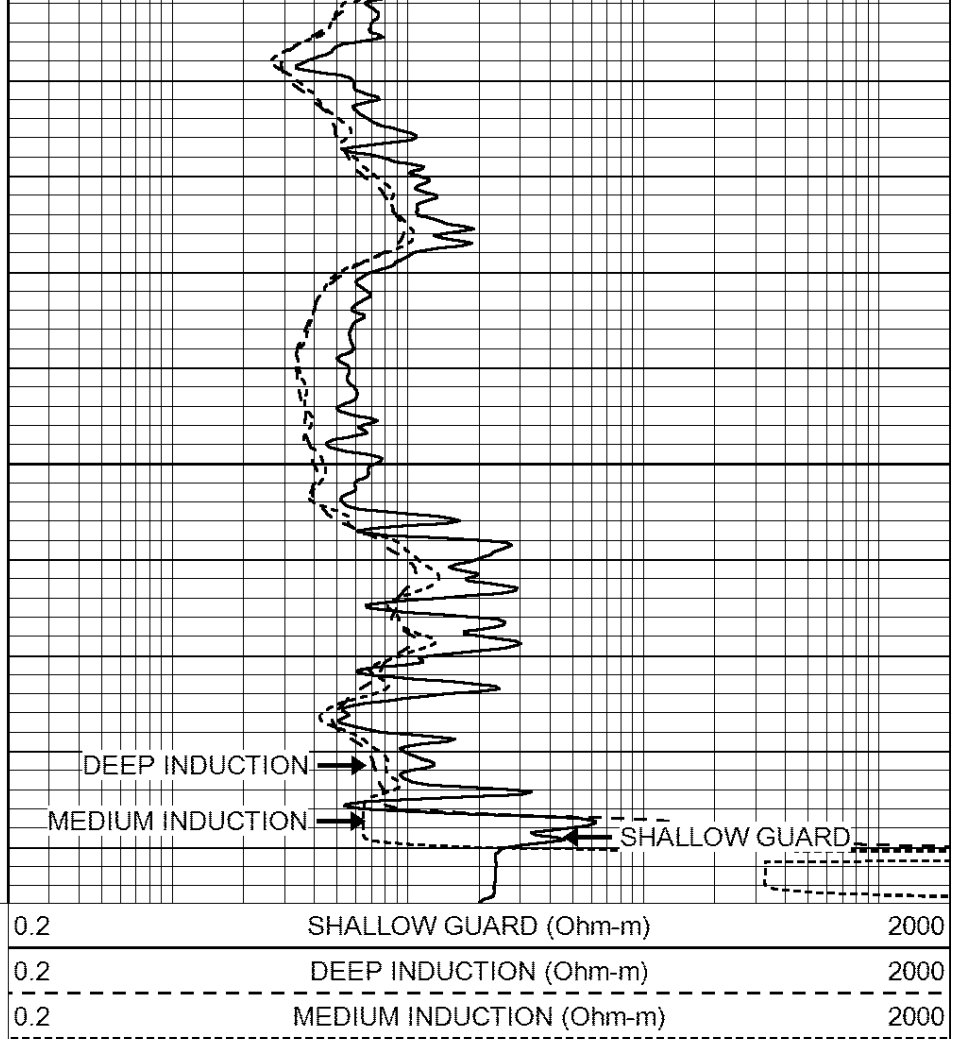
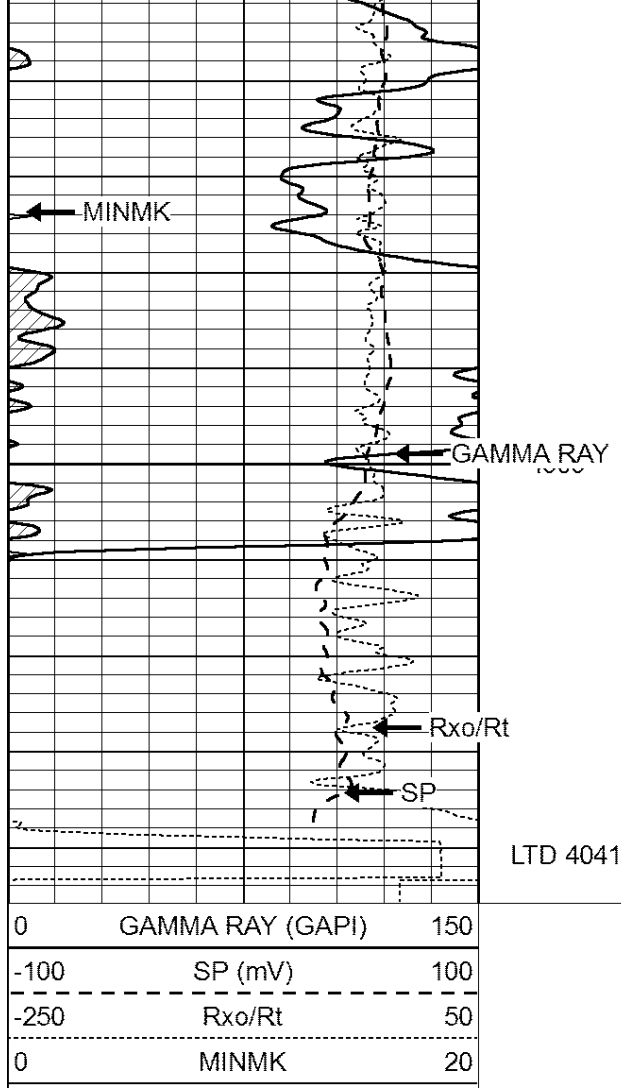
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3850

3900

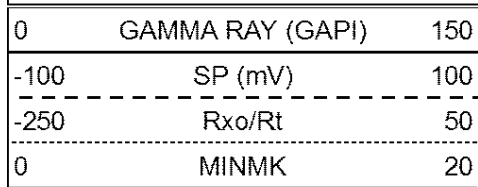
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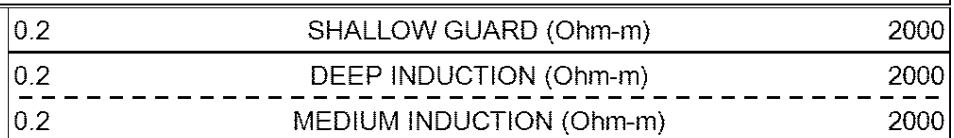


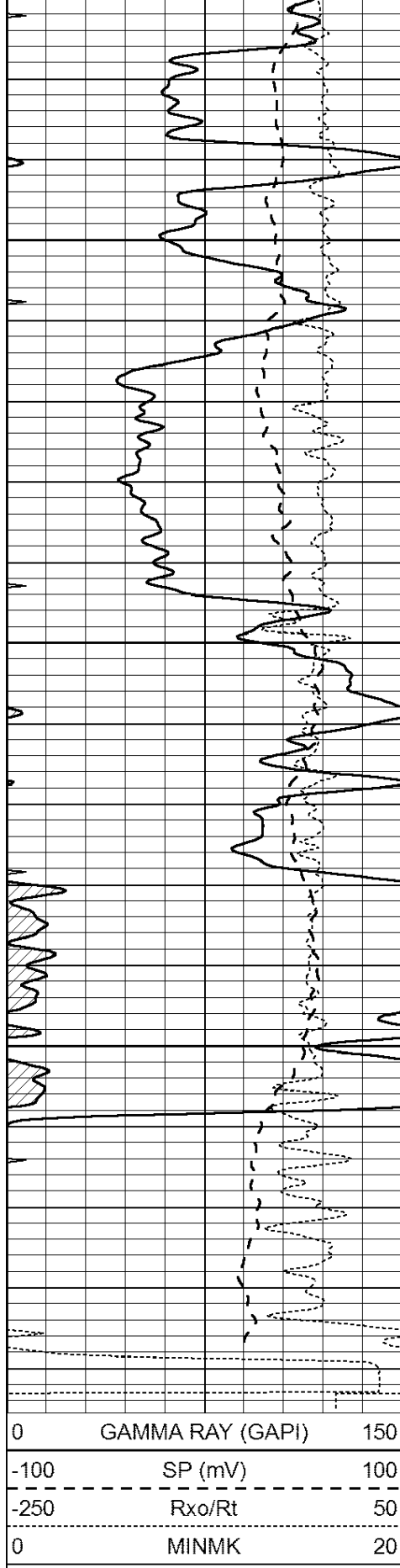
REPEAT SECTION

Database File: 2408ddn.db
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 Presentation Format: _dil
 Dataset Creation: Sat Feb 10 19:37:25 2018 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240



3850

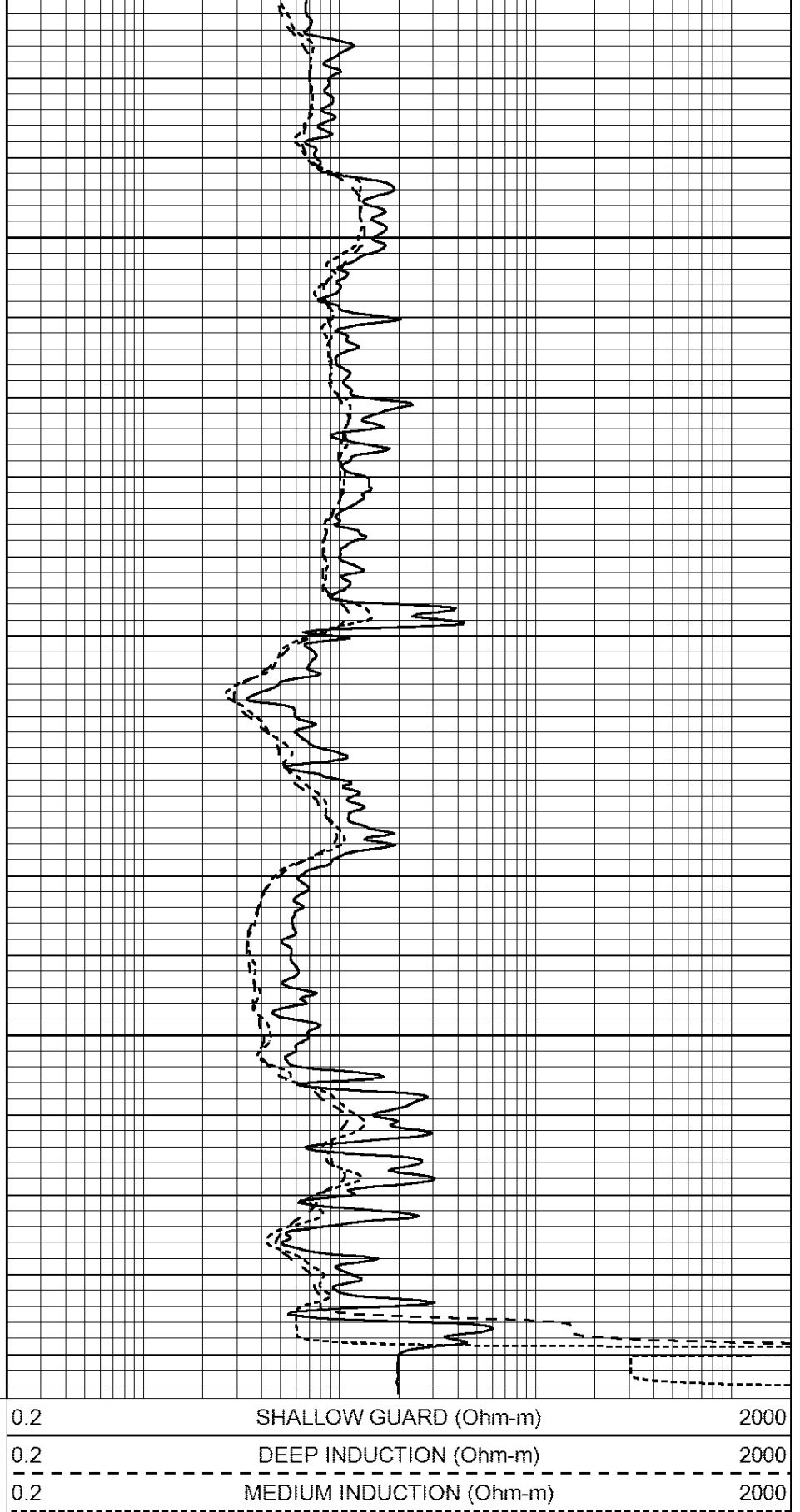




3900

3950

4000



Calibration Report

Database File: pe2.db
 Dataset Pathname: pass2
 Dataset Creation: Mon Aug 21 11:58:02 2017 by Log Open-Cased 090629

Dual Induction Calibration Report								
Serial-Model:			PROBE8-DILG					
Surface Cal Performed:			Mon Aug 21 11:58:18 2017					
Downhole Cal Performed:			Mon Aug 21 11:58:21 2017					
After Survey Verification Performed:			Mon Aug 21 11:58:23 2017					
Surface Calibration								
Readings			References			Results		
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739
Downhole Calibration								
Readings			References			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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 11:56:41 2017								
	Background	Magnesium		Aluminum		Sandstone		
Window 1	833.6	7394.2		2287.3		8111.8		cps
Window 2	768.9	6322.3		1995.6		6800.0		cps
Window 3	621.5	3261.9		1186.4		3380.9		cps
Window 4	184.2	185.7		184.9		184.8		cps
Long Space	0.0	5553.4		1226.6		6031.1		cps
Short Space	1.2	1307.5		903.9		1387.7		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 46.3	Rib Slope	: 1.045	Density/Spine Ratio		: 0.566		
Spine Angle	: 76.3	Spine Slope	: 4.090	Spine Intercept		: -20.7		
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 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:	6I
Tool Model:	G

CALIBRATION						
	Detector	Readings		Target		Normalization
	Short Space	1.00	cps	1.00	cps	1.0000
	Long Space	1.00	cps	1.00	cps	1.0000

PRE-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		
3)	Short Space		cps			
	Long Space		cps	pu		

POST-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		pu
3)	Short Space		cps			
	Long Space		cps	pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6
Tool Model:	OPEN
Performed:	Mon Aug 21 11:59:01 2017
Calibrator Value:	150.0
	GAPI

Background Reading:

0.0

cps

Calibrator Reading:

276.0

cps

Sensitivity:

0.5500

GAPI/cps