



GAMMA RAY CCL CEMENT BOND VDL

Company NOBLE ENERGY INC.

Well OSTER 3-10I4

Field WATTENBERG

County WELD

State COLORADO

Location: API #: 0512317789

Other Services

NW/SE

SEC 3 TWP 4N RGE 64W

Elevation

Permanent Datum GL Elevation 4651
Log Measured From KB
Drilling Measured From KB

K.B. 4665
D.F. 4664
G.L. 4651

Date	DECEMBER 2, 2011		
Run Number	ONE		
Depth Driller	6972		
Depth Logger	6926		
Bottom Logged Interval	6925		
Top Log Interval	5884		
Open Hole Size	7-7/8		
Type Fluid	WATER		
Density / Viscosity	N/A		
Max Recorded Temp.	240 DEG. F		
Estimated Cement Top	6062		
Time Well Ready	LEED RIG		
Time Logger on Bottom	1-11/16 RED TOOL		
Equipment Number	3342		
Location	45		
Recorded By	GREG NOLAN		
Witnessed By	BRIAN MURRAY		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record		Size	Wgt/Ft	Top		Bottom	
Surface String		8-5/8					
Prot String							
Production String		3-1/2	7 7#				
Liner							

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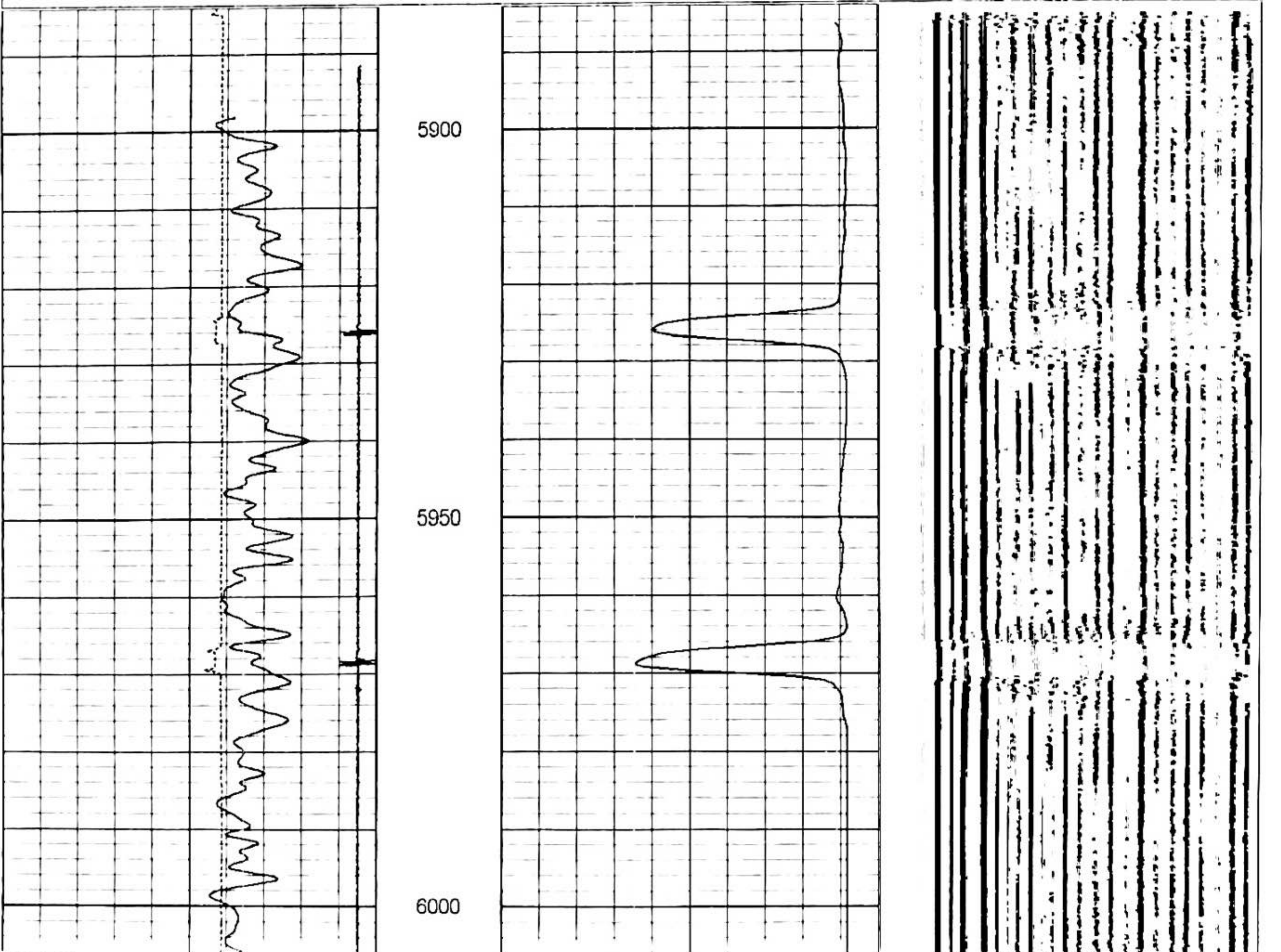
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

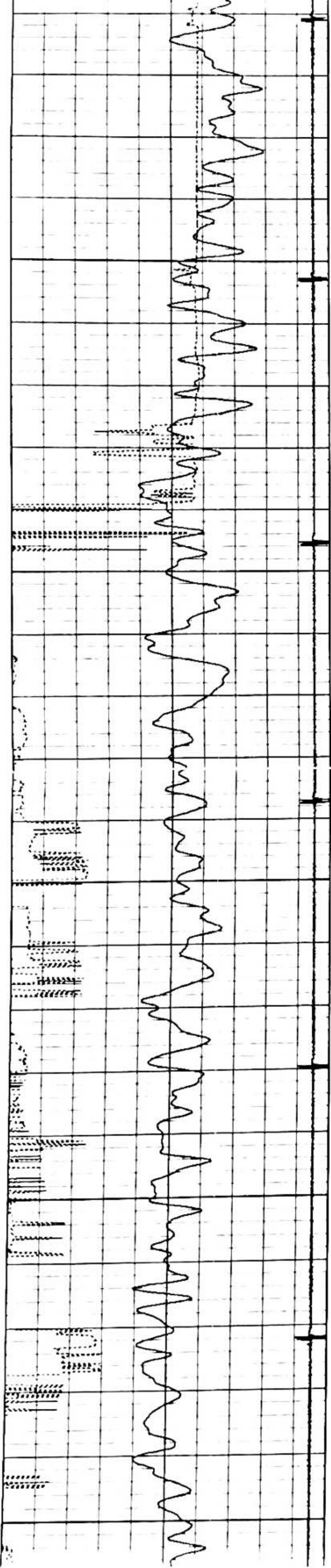
Comments

THANK YOU FOR CHOOSING SUPERIOR WELL SERVICES!!!!
LOG CORRELATED TO ATLAS DUAL INDUCTION, GAMMA RAY, 3 ARM CALIPER
LOG DATED 9 FEBRUARY, 1994

Database File cbl noble oster 3-1014.db
Dataset Pathname pass2
Presentation Format bond
Dataset Creation Fri Dec 02 10 51 48 2011 by Log Std Casedhole 10081
Charted by Depth in Feet scaled 1.240

30	CCL	-1.5	0	Amplitude (mV)	100 200	VDL	1200
0	Gamma Ray (GAPI)	200	0	Amplified Amplitude (mV)	30		
400	TT3 (usec)	100					
200	GR (GAPI)	400					





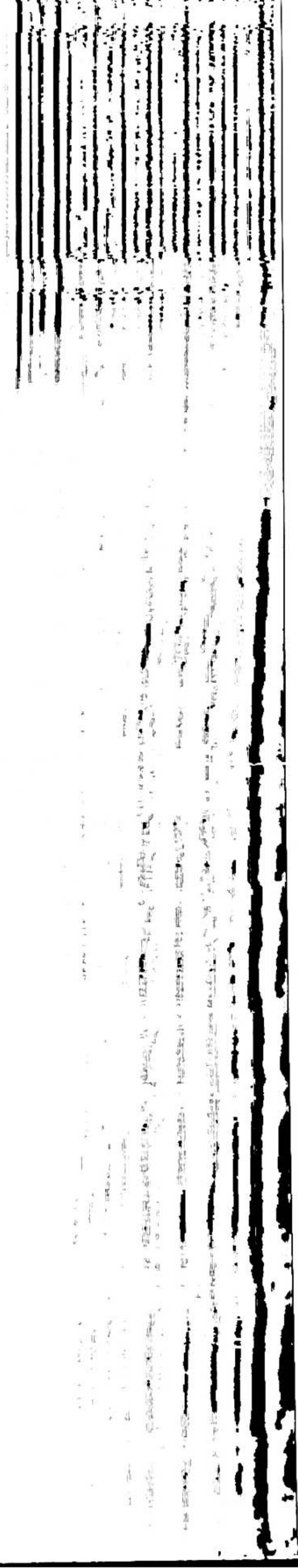
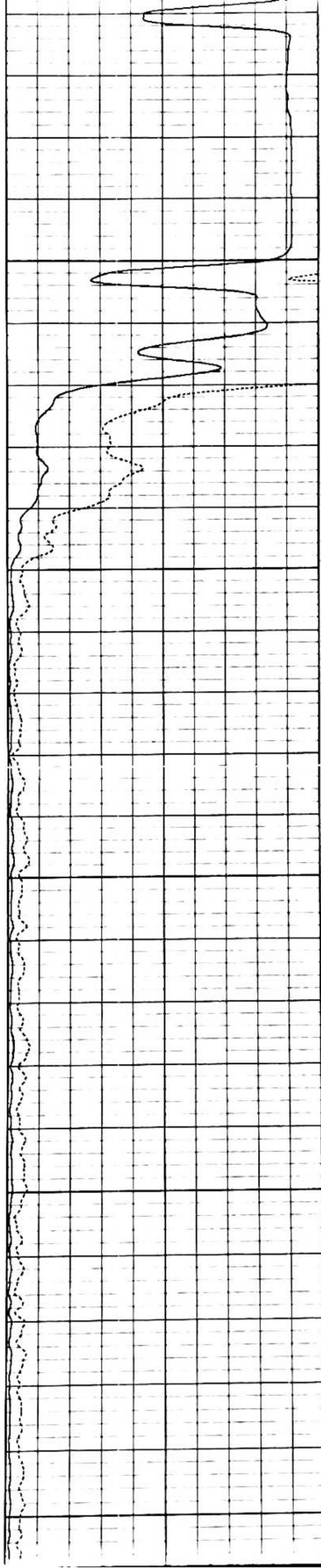
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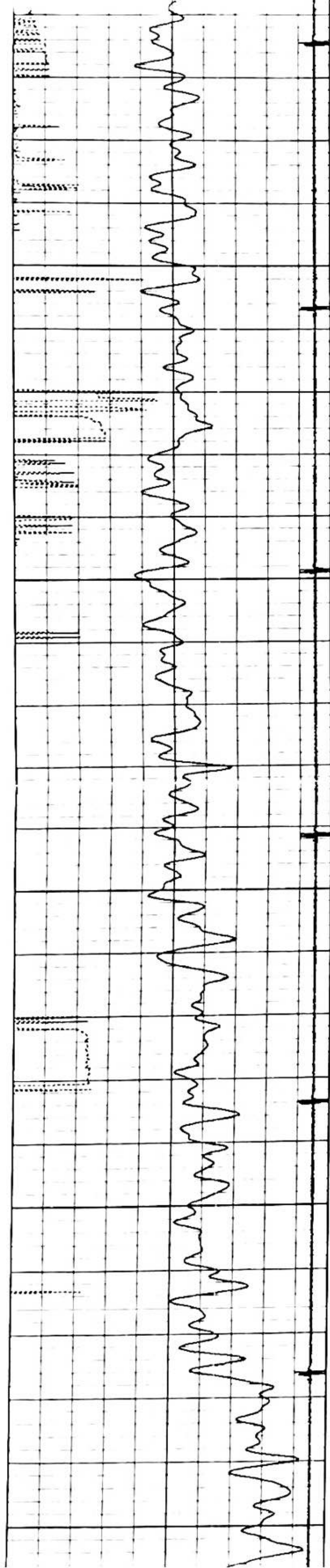
6100

6150

6200

6250





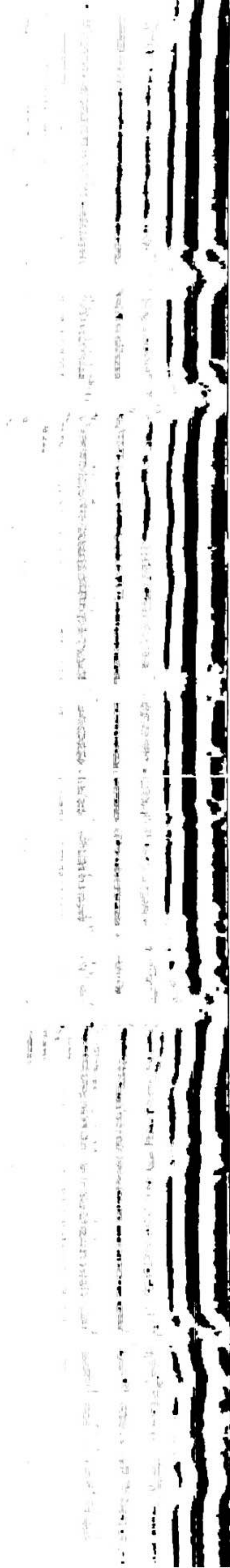
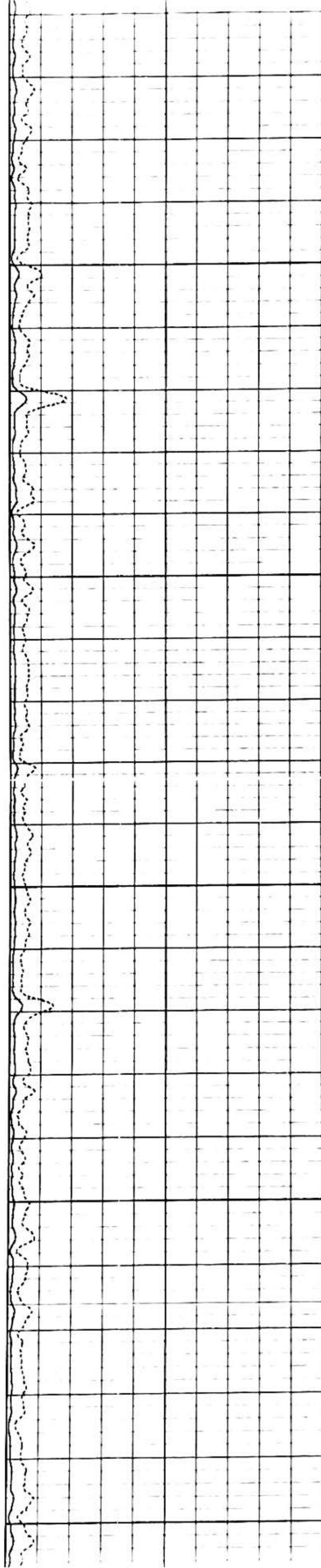
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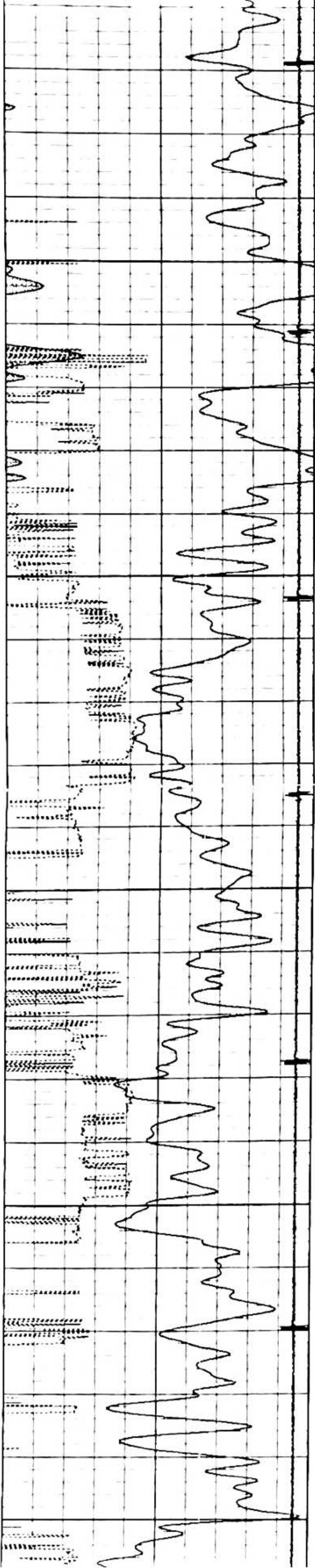
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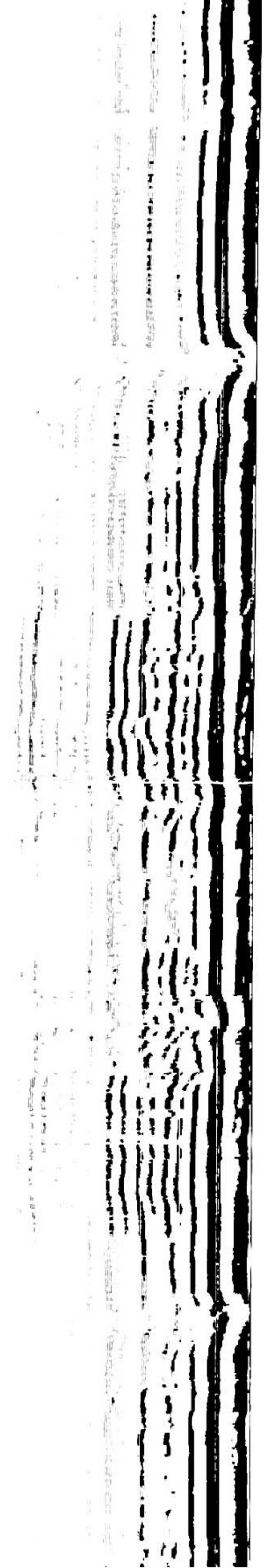
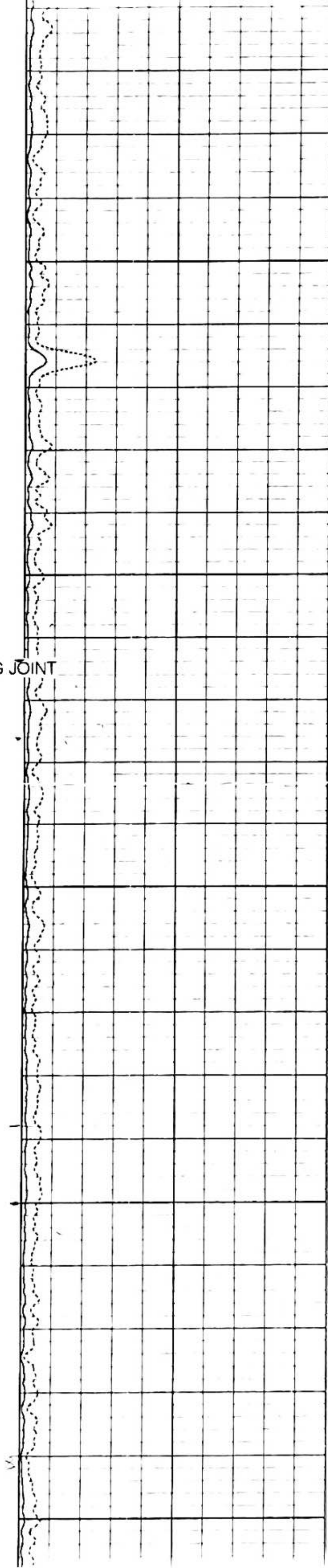
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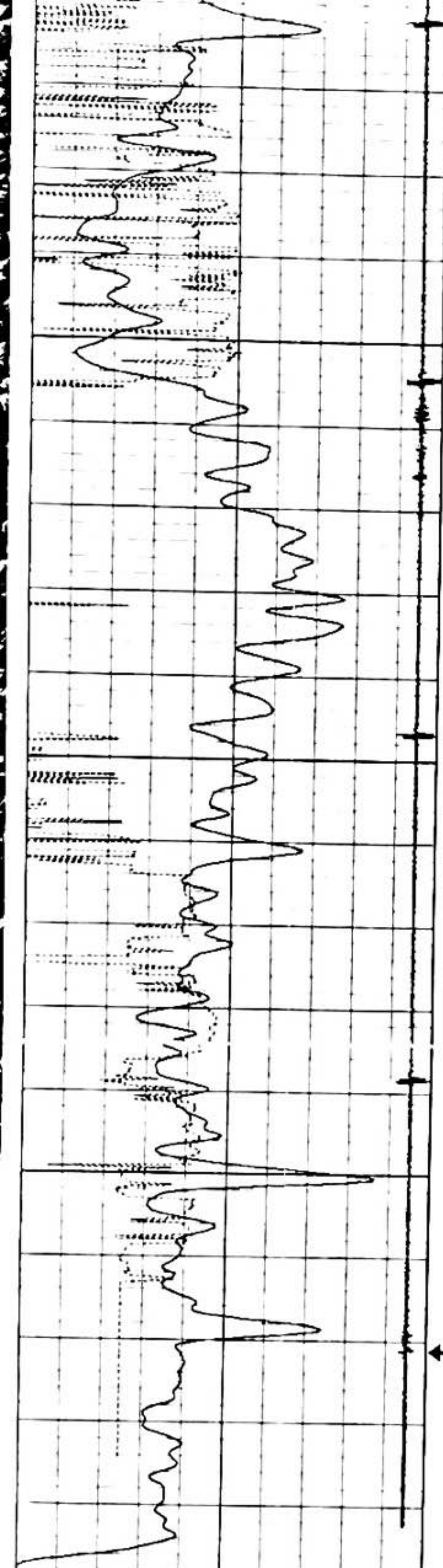
← FLAG JOINT

6650

6700

6750





6800

6850

6900

← FLAG JOINT

LOGGERS TD @6926

30	CCL	-1.5
0	Gamma Ray (GAPI)	200
400	TT3 (usec)	100
200	GR (GAPI)	400

0	Amplitude (mV)	100 200
0	Amplified Amplitude (mV)	30

VDL 1200

Database File cbl noble oster 3-1014 db
 Dataset Pathname pass2
 Dataset Creation Fri Dec 02 10 51 48 2011 by Log Std Casedhole 10081

Calibration Report

Gamma Ray Calibration Report

Serial Number 1-11/16T
 Tool Model T1 11/16

Performed	Tue Aug 16 14 56 34 2011	
Calibrator Value	1 0	GAPI
Background Reading	0 0	cps
Calibrator Reading	1 0	cps
Sensitivity	1 2000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number	TEKCO-01		
Tool Model	TEKCO-1x2		
Performed	Fri Dec 02 10 45 58 2011		
Depth	840 317	ft	
Casing Diameter	3 5	in	
	3' Spacing	5' Spacing	
Signal Zero	1 2	0	mV
Calibrated Amplitude	91 5169	91 5169	mV
Reading at Signal Zero	0 0078125	0 00771484	V
Reading in Free Pipe	2 49202	2 49878	V
Gain	36 3564	36 7381	
Offset	0 915965	-0 283428	