

**Schlumberger**

**CEMENT BOND  
VARIABLE DENSITY LOG**

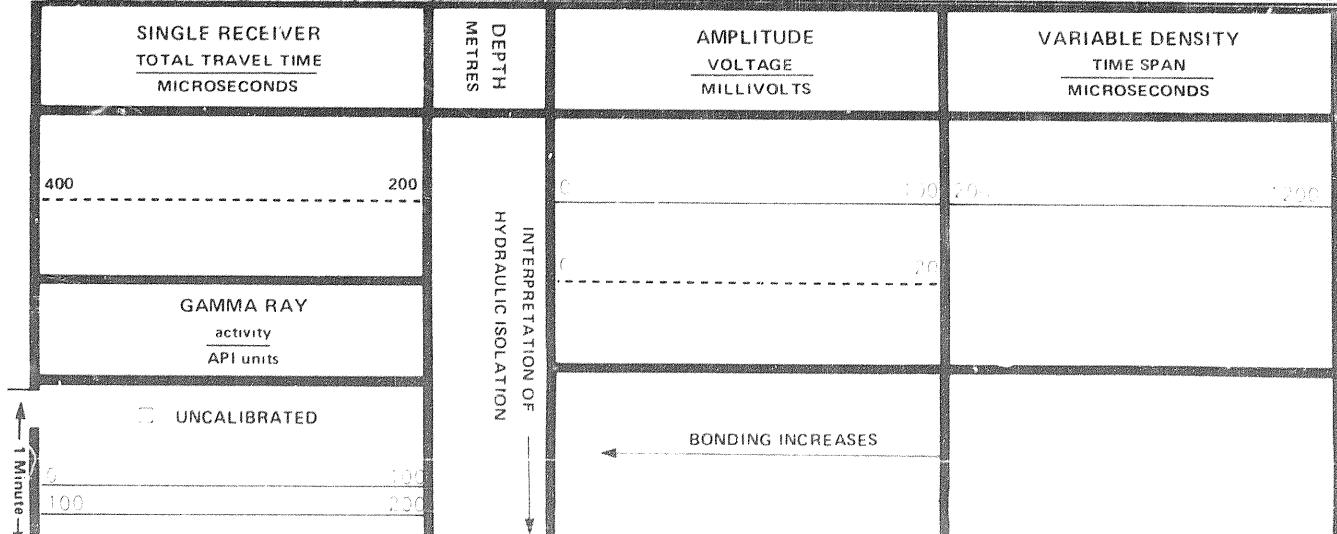
SCHLUMBERGER OF CANADA

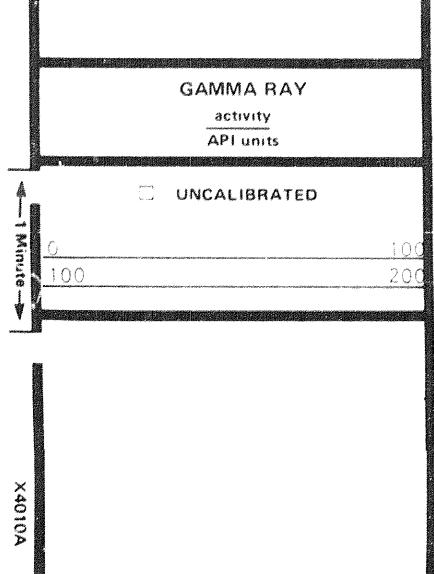
Calgary, Alberta

PROVINCE		YUKON TERRITORY	
FIELD		WILDEBEEST	
WELL		101-1000-00000-00000	
COMPANY		COTTONWOODS DEVELOPMENT LTD.	
WELL		COTTONWOODS FIELD & GAS EXPL. OPERA.	
FIELD		N. N. R. Res. Bl.	
PROVINCE		DEPT. OF MINES & ENERGY & NATURAL RESOURCES	
LOCATION		D 21 1980	
LSD	SEC	TWP	RANGE
Permanent Datum		Elev	2200.34
Log Measured From		m Above Perm. Datum	m
Drilling Measured From			
Date		Elev	2200.34
Run No.		K.B.	2200.34
P.B.T.D. Driller		D.F.	m
Depth-Logger (Schl.)		G.L.	2200.34
Bm Log Interval			m
Top Log Interval			m
Open Hole Size		Unit	m
Bottom Hole Temp.		District	33.4
MAXIMUM WHP			kPa
Casing Fluid Type			BRINE
Casing Fluid Salinity			30.00 PPT
Casing Fluid Level			
Bm Recorded By			JOHN
Fluid Witnessed By			JOHN

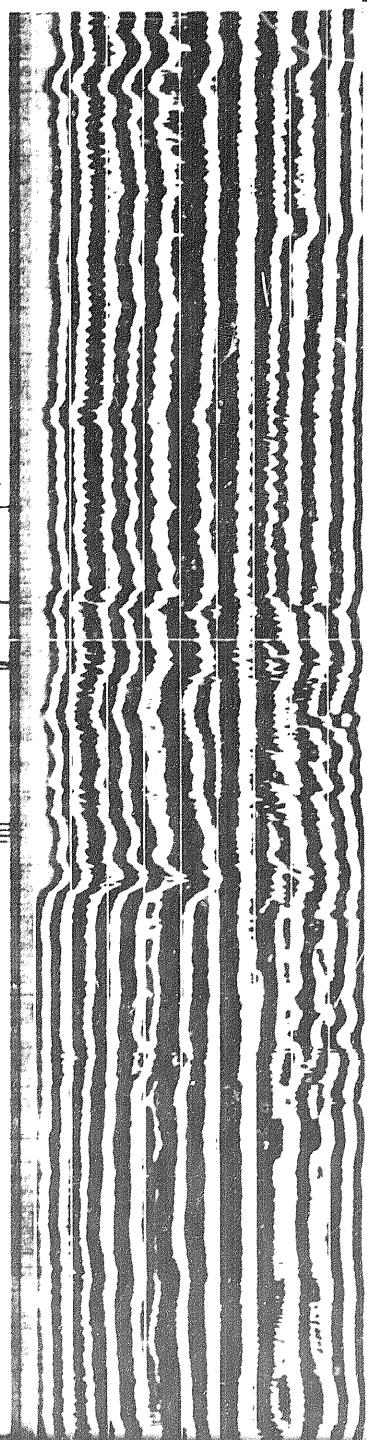
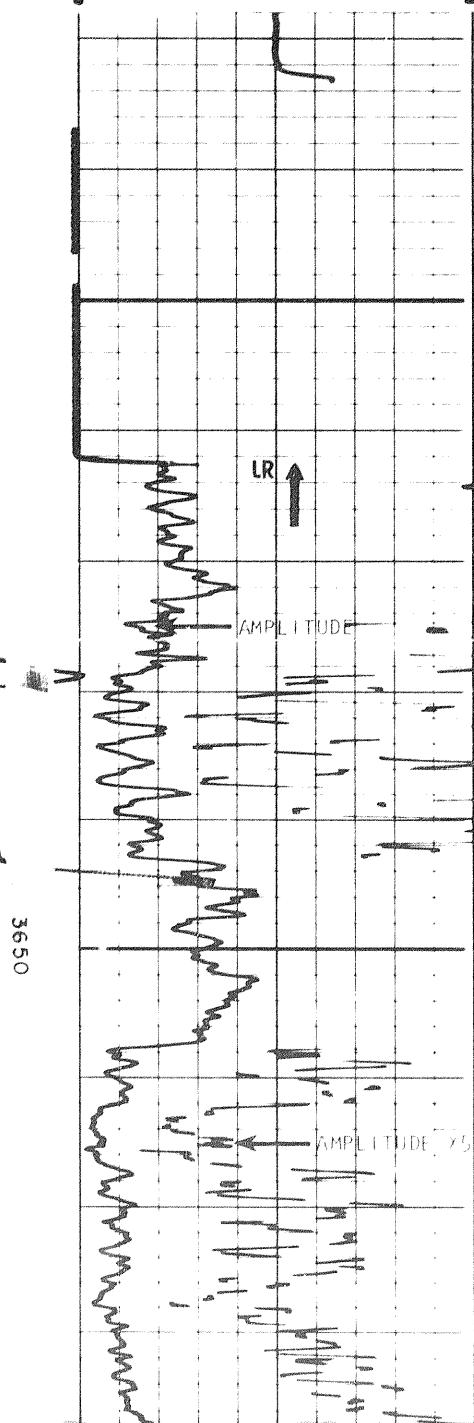
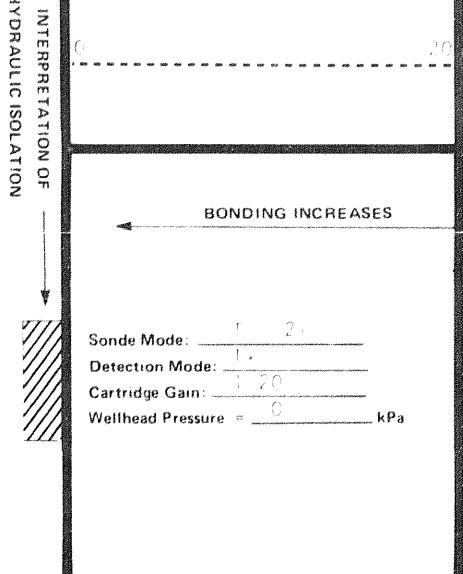
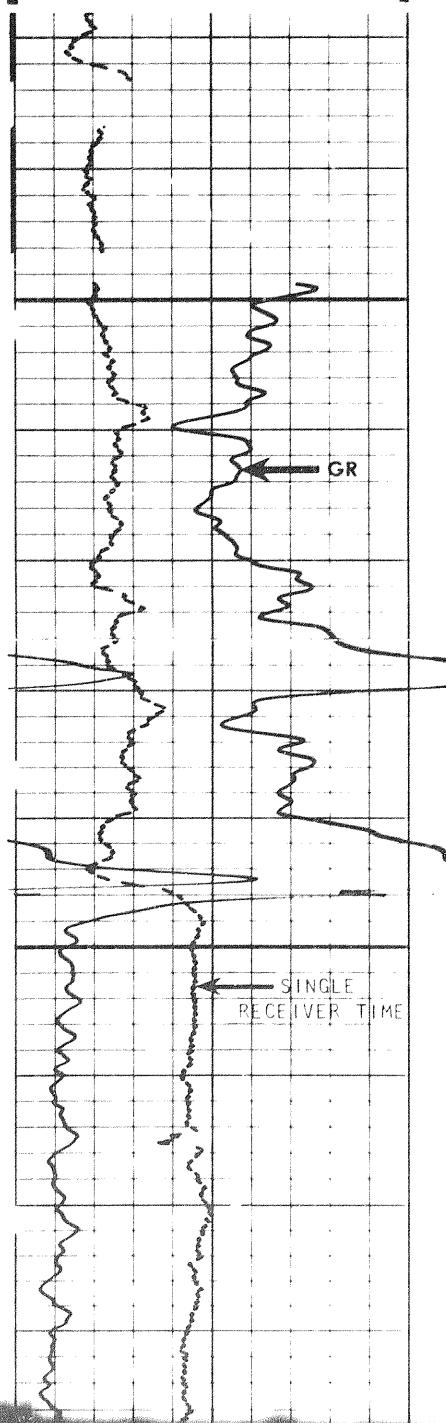
**TUBING & CASING RECORD**

PRIMARY CEMENTING PROCEDURE		CORRELATION LOG:		Service Order No. 101673
		Type: PHASE	Curve: 12	22 L780 F3M. LPVR
Hour - Date		Collars Recorded		Collars Recorded m Deep
Started pumping cement		OPEN HOLE ID: 10.75"		OPEN HOLE ID: 10.75"
Release pressure		AMPLITUDE: 120		AMPLITUDE: 120
Start Cement Bond Log		Other:		Other:
Finish Cement Bond Log		PRIMARY CEMENTING DATA		Sonde Mode: 2
STRING				Detection Mode: 1X
Volume of Cement				Cartridge Gain: 120
Type of Cement				Spacing: 1.4 m
Additive				Amplitude: 1.4 m
Retarder				Variable Density: 1.5 m
Wt. of Slurry				Preceding fluid: Volume: 1.3
Water loss				Cement pumped @ m <sup>3</sup> /min
Type fluid in csg.				Pipe reciprocated during pumping: Yes <input type="checkbox"/> No <input type="checkbox"/>
Fluid wt.				Pipe reciprocated after plug down: Yes min, No <input type="checkbox"/>

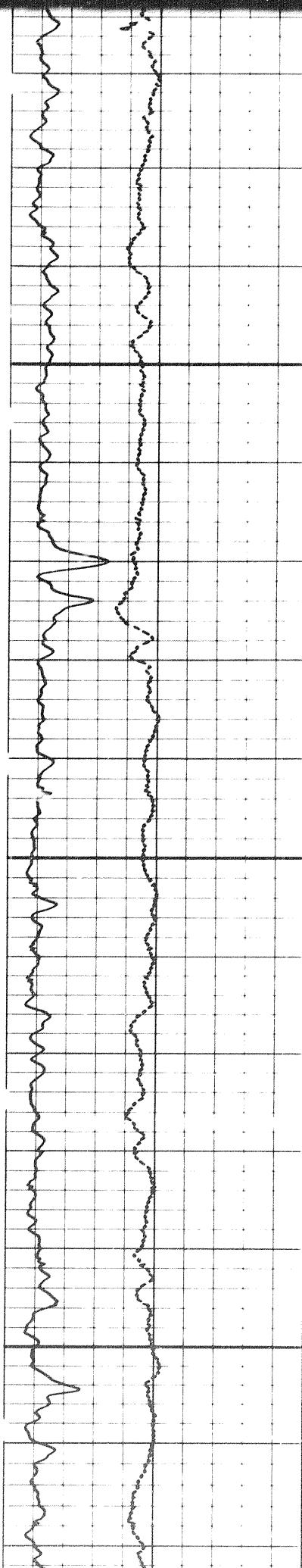




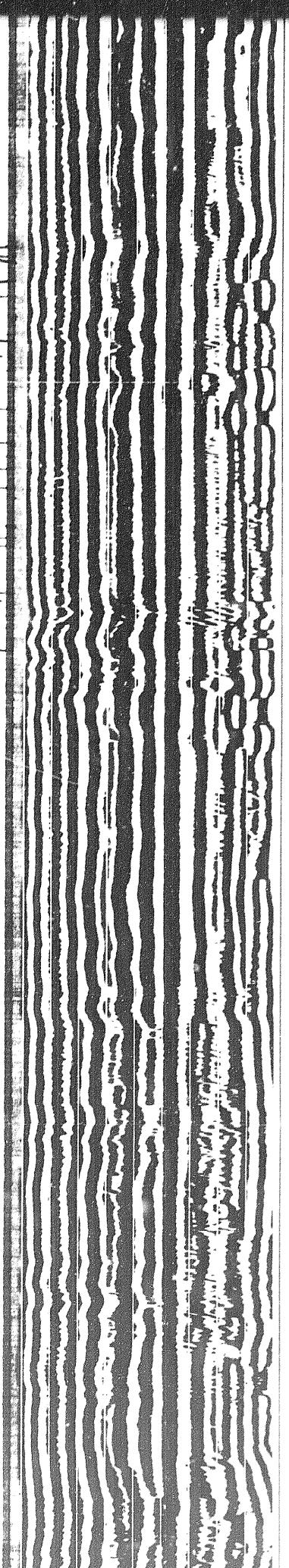
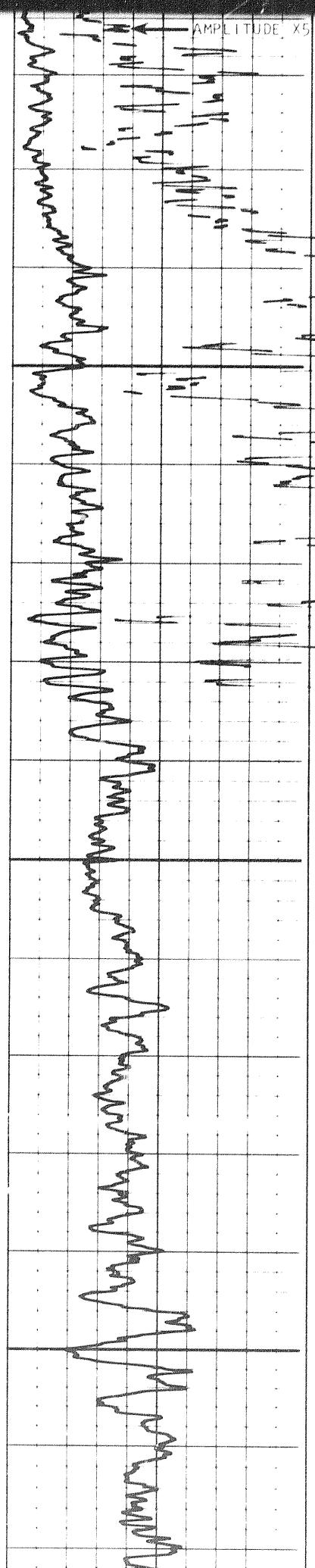
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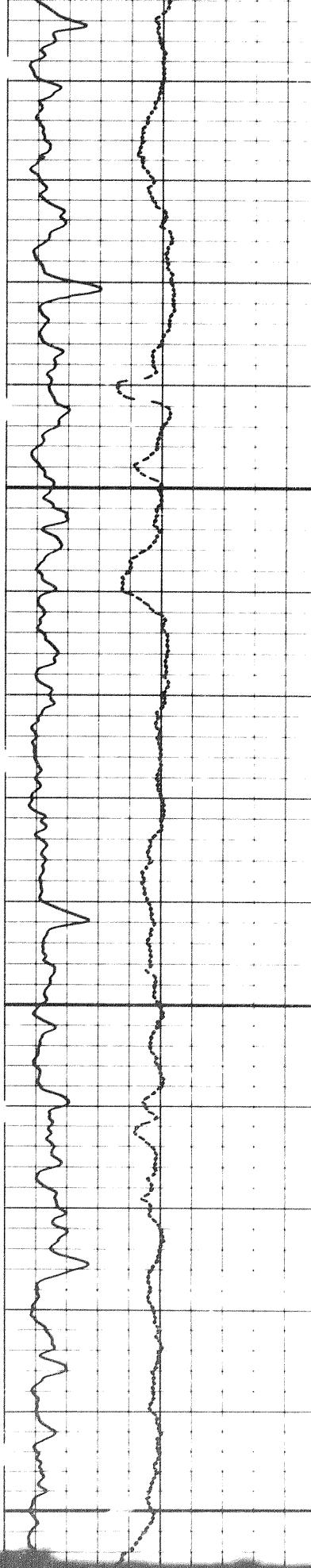
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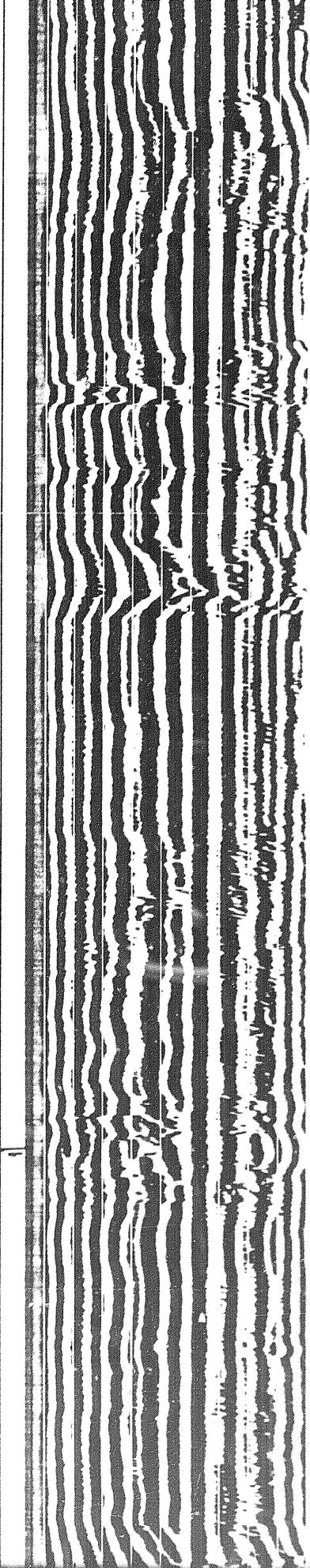
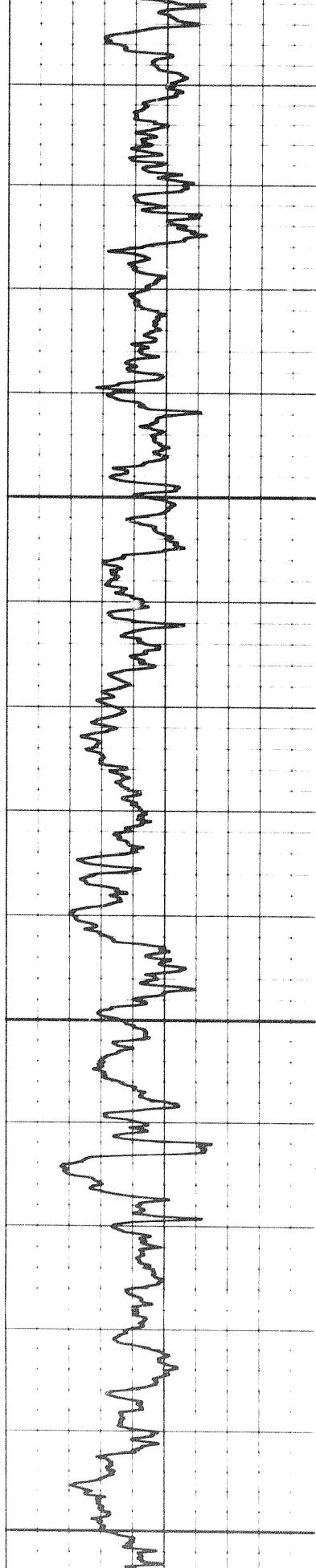


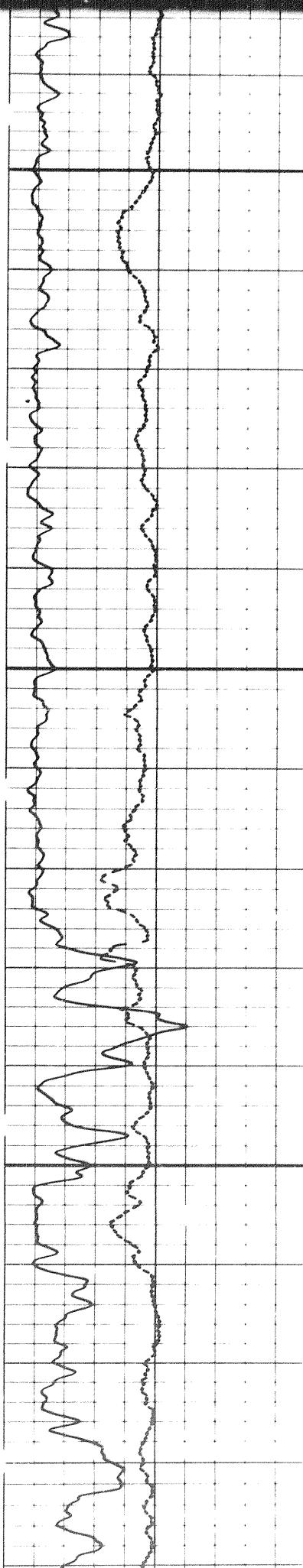
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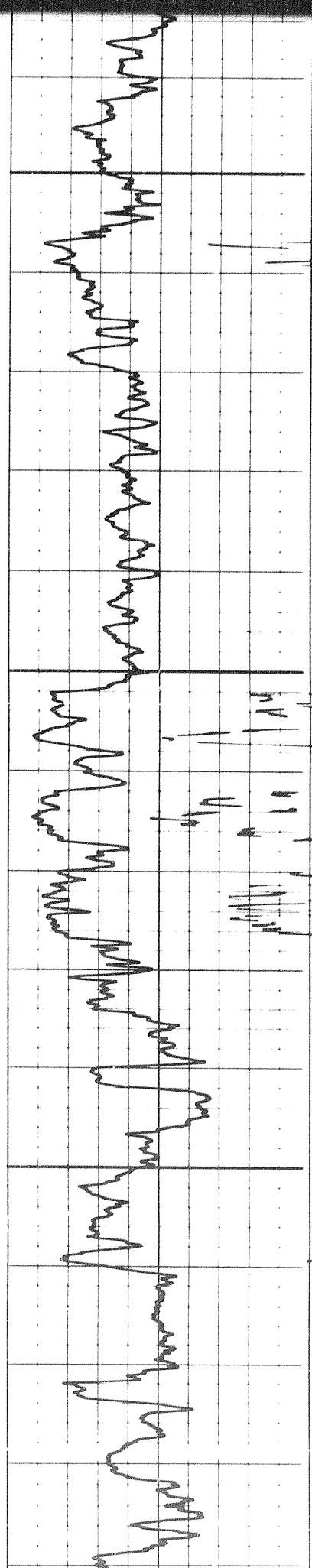
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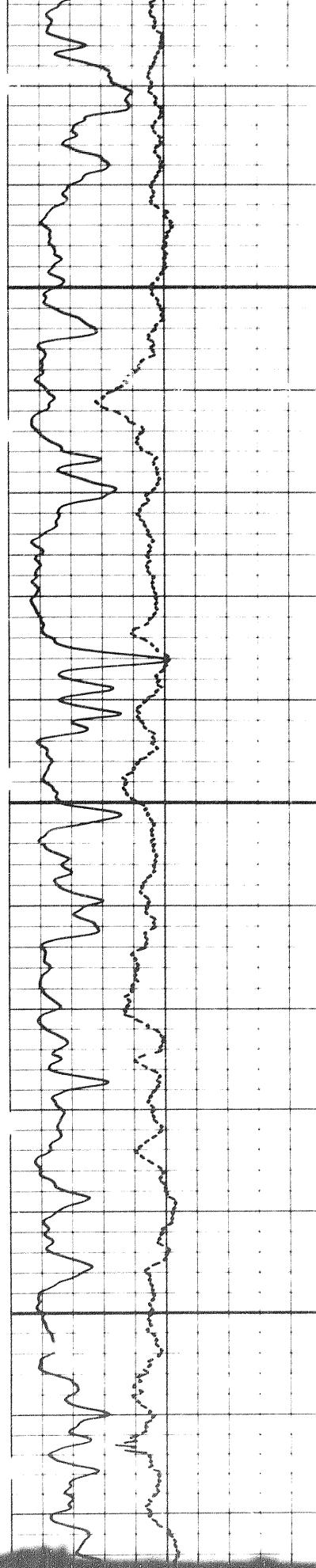
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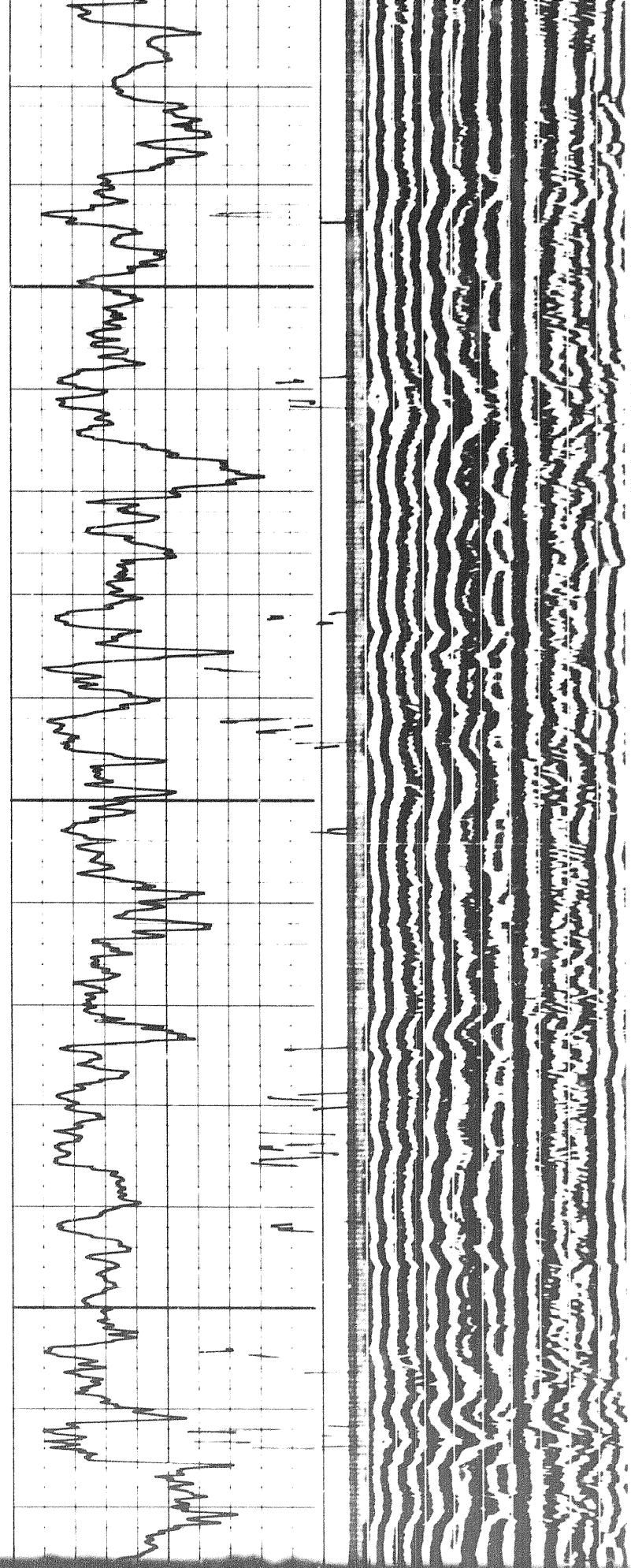
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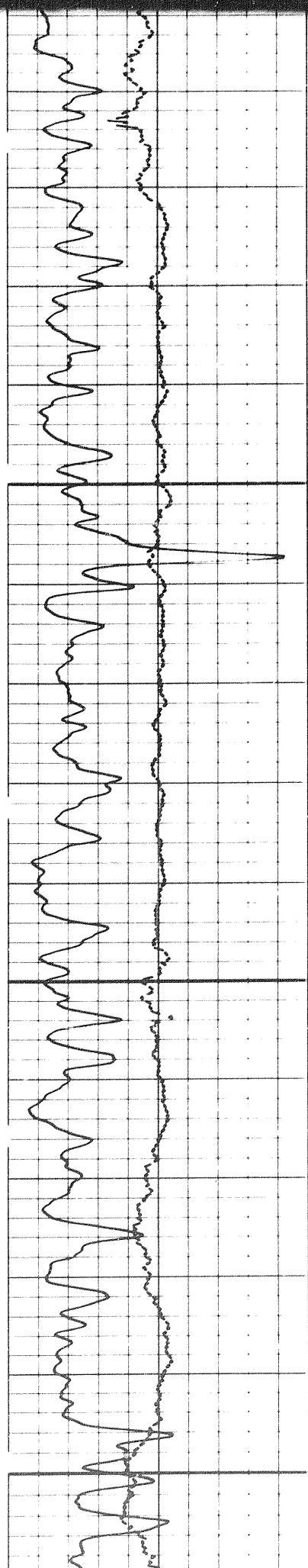


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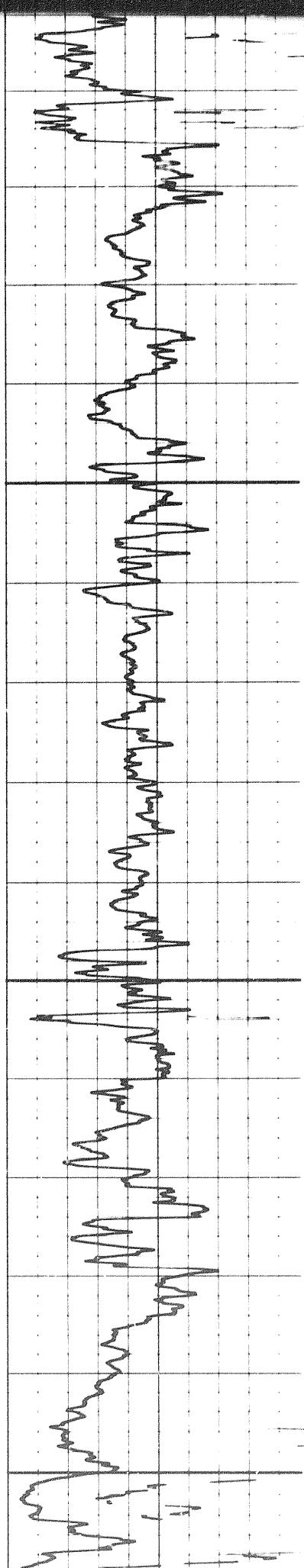


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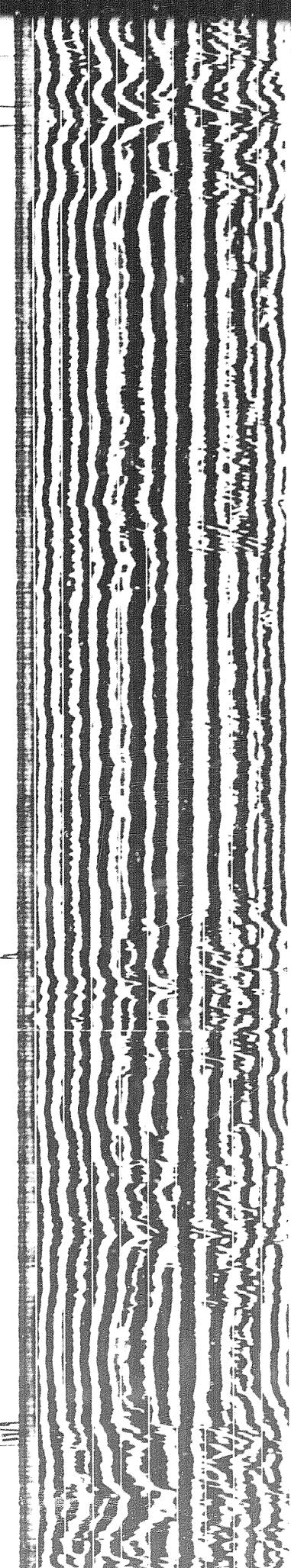




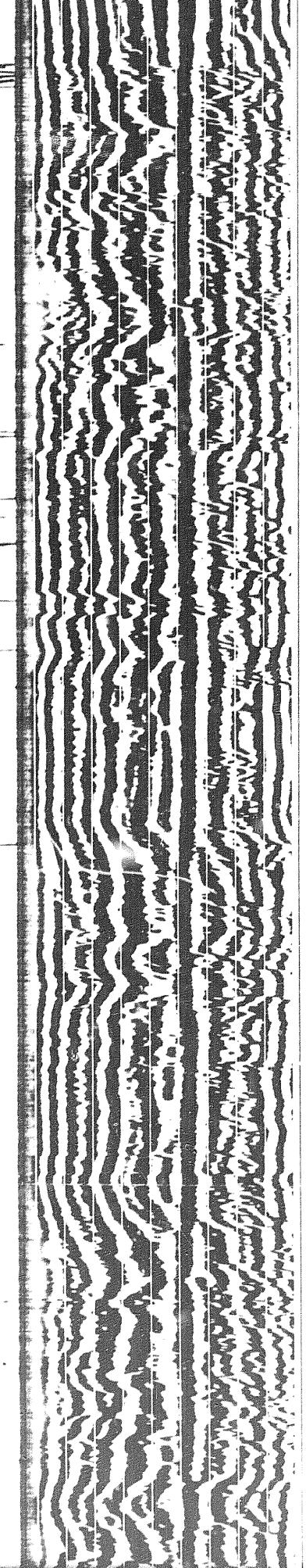
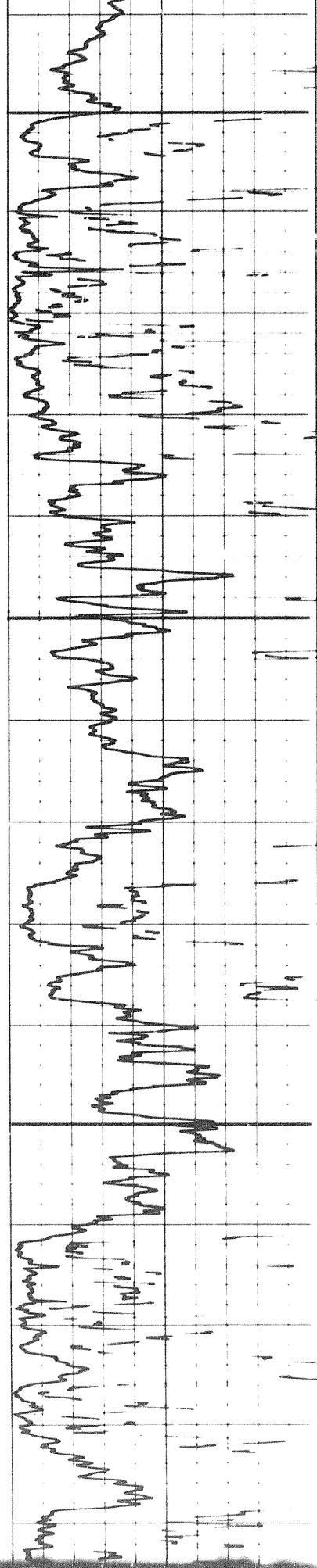
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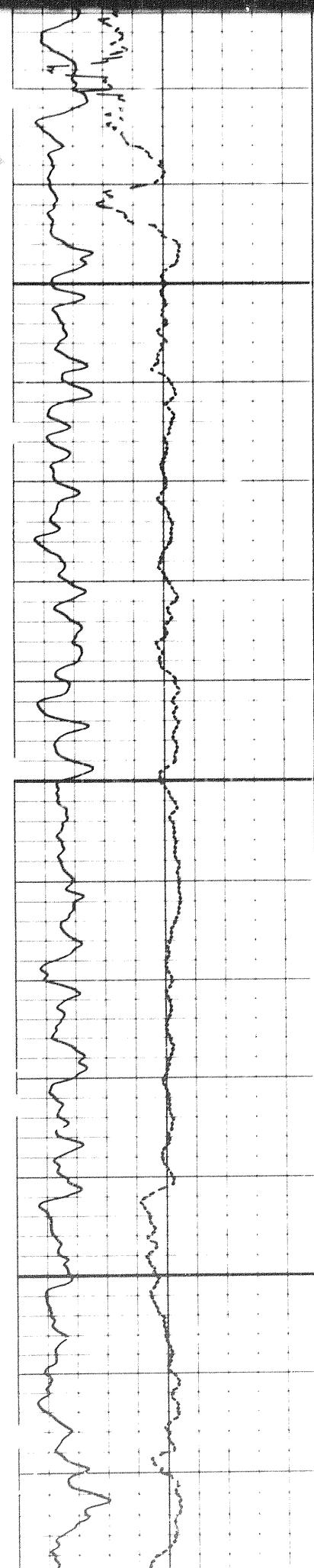
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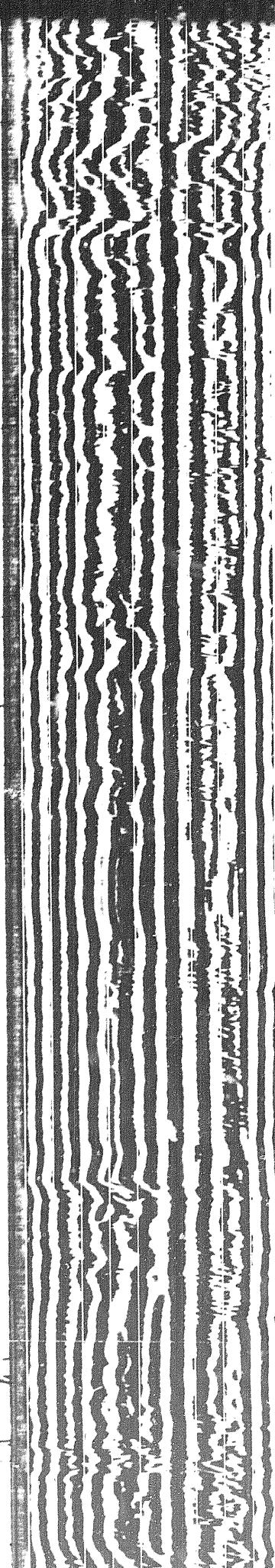
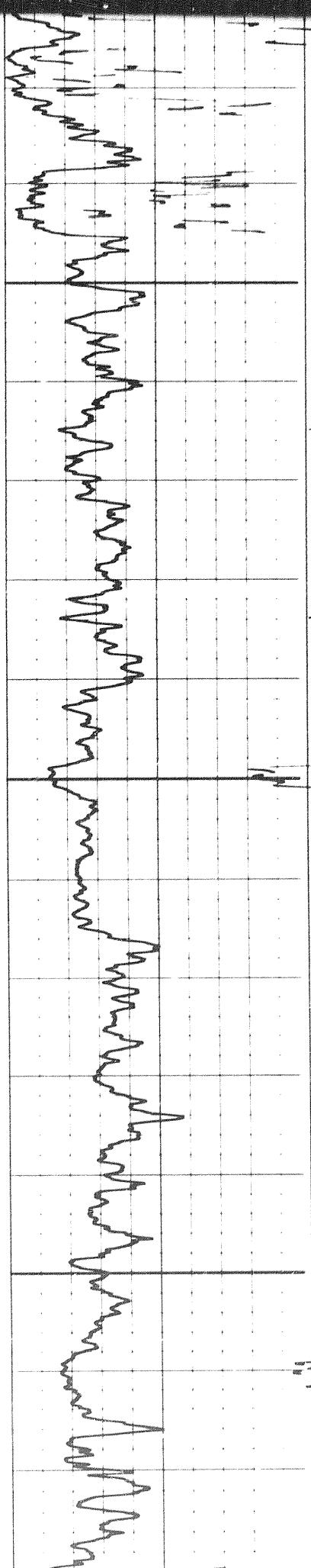
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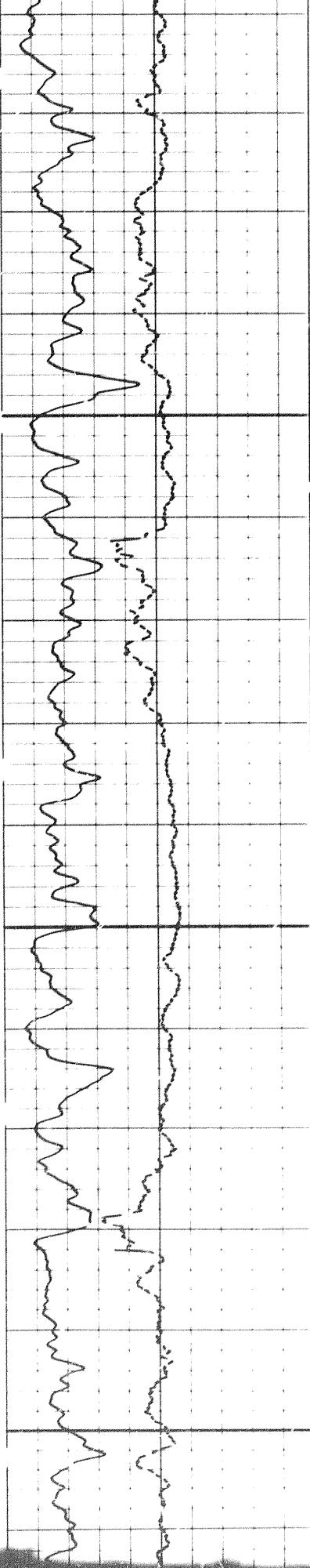


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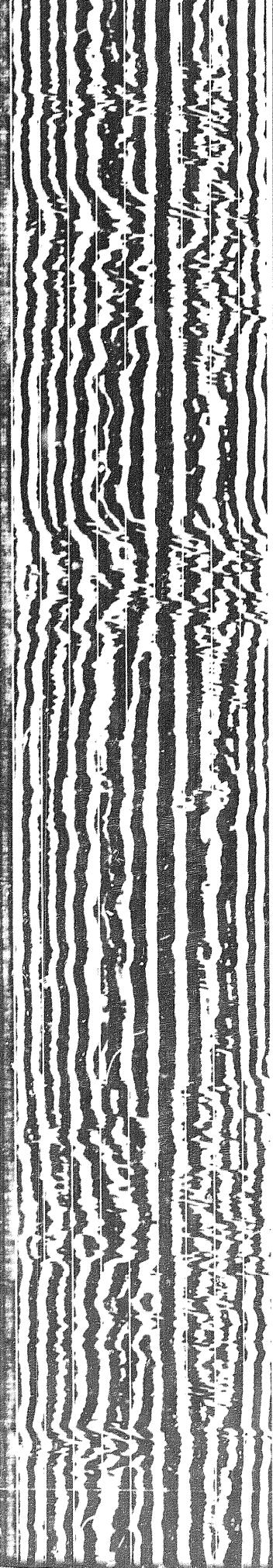
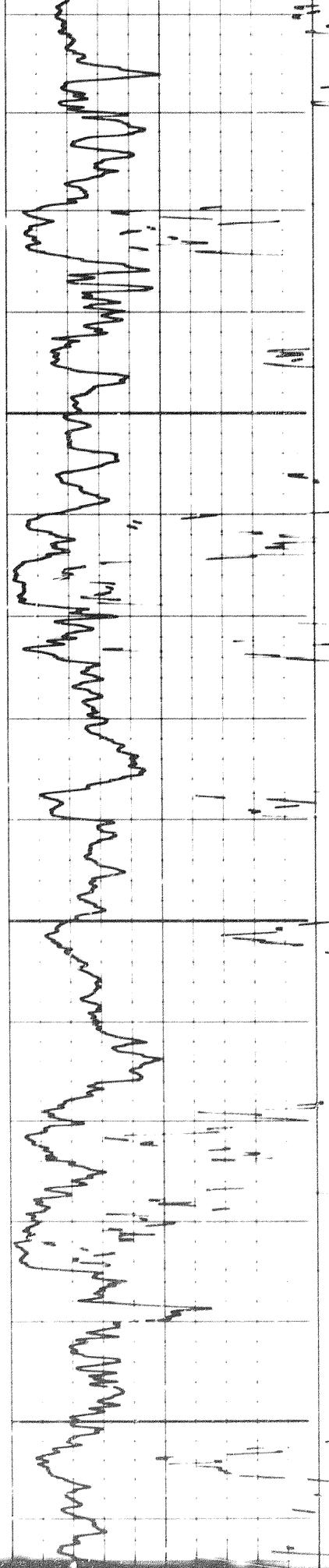
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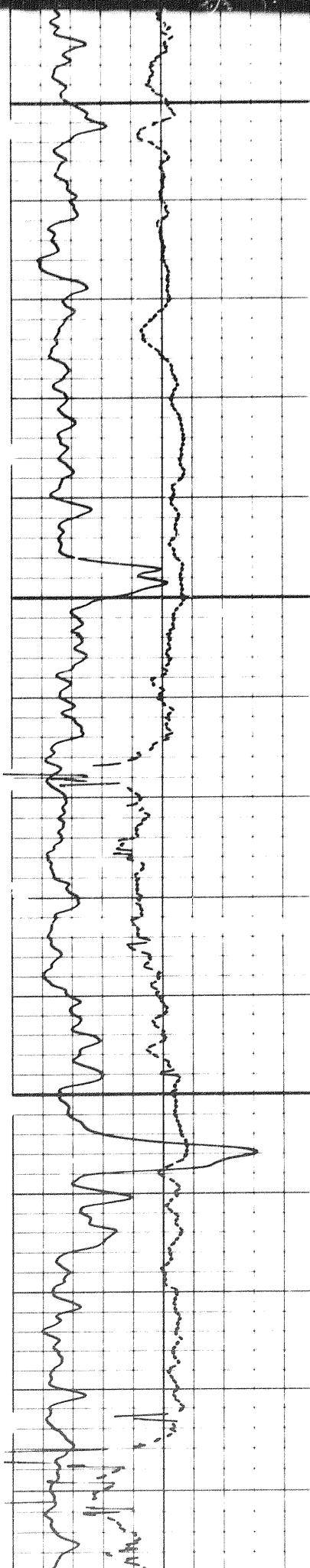


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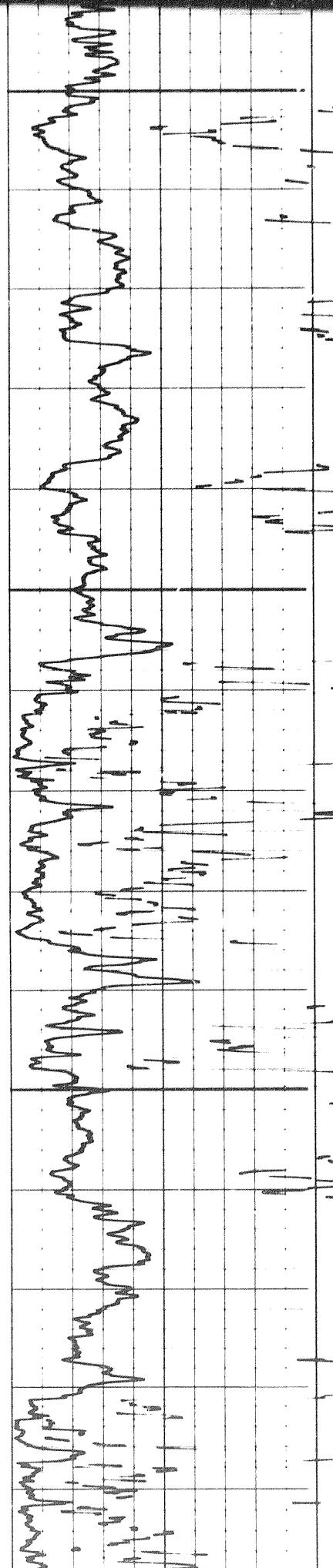
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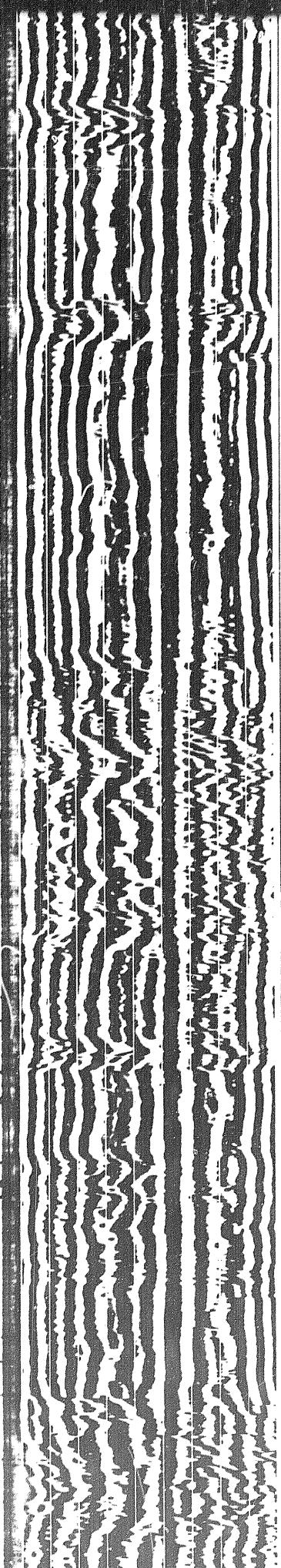
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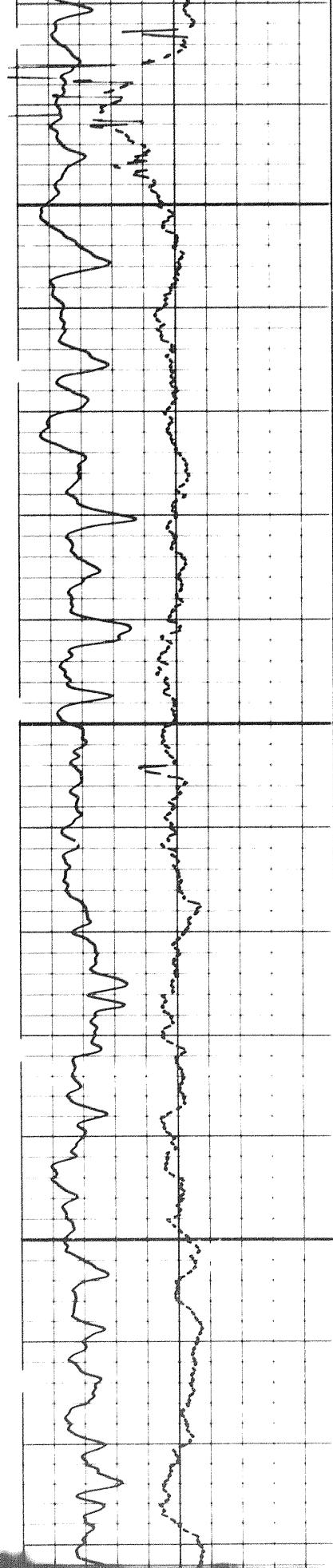
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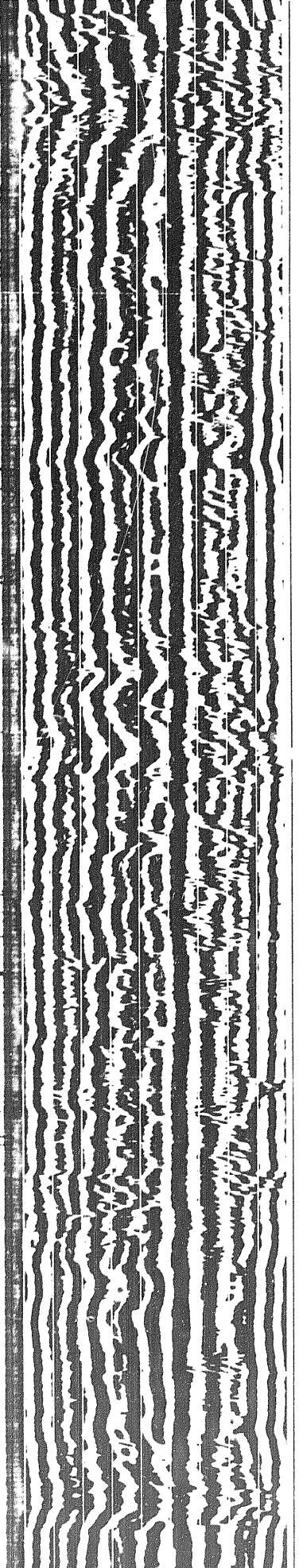
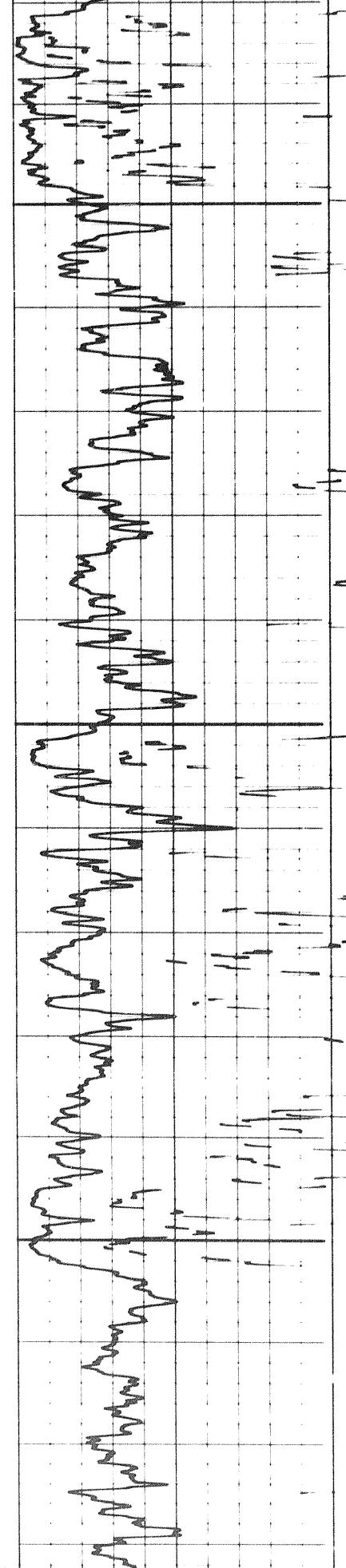
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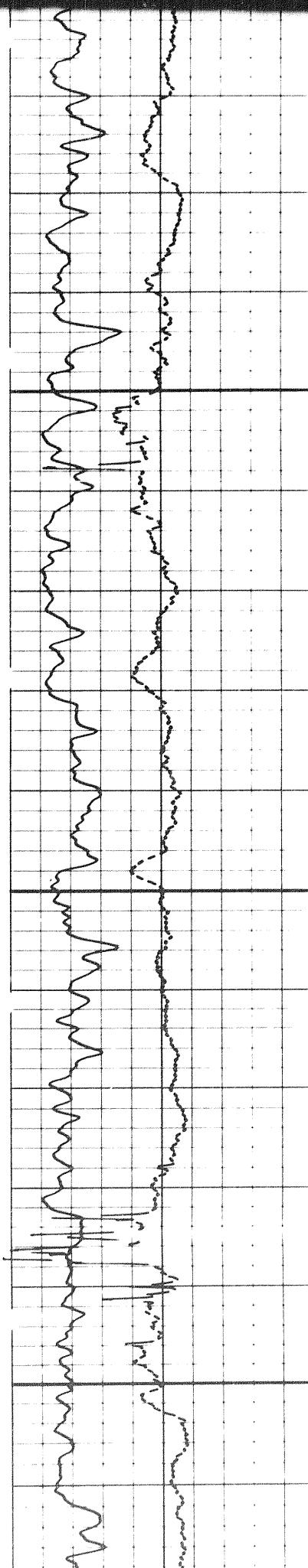


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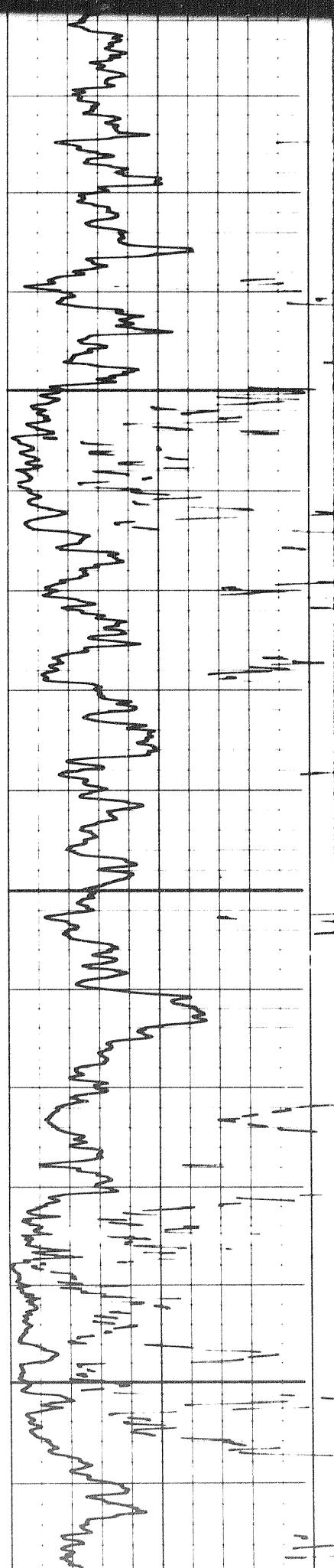


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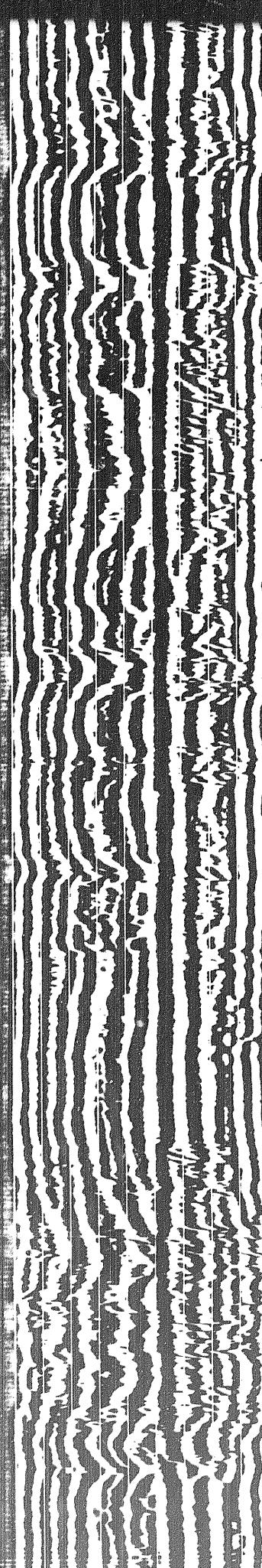


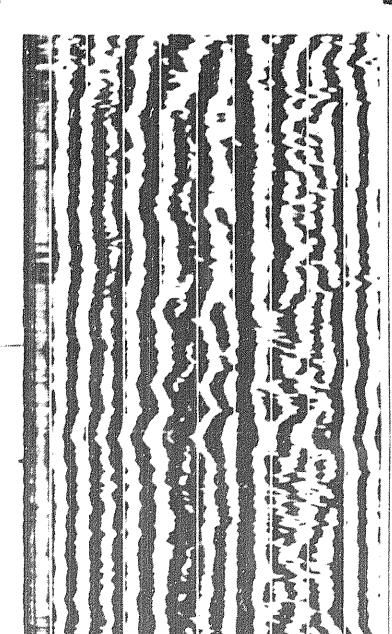
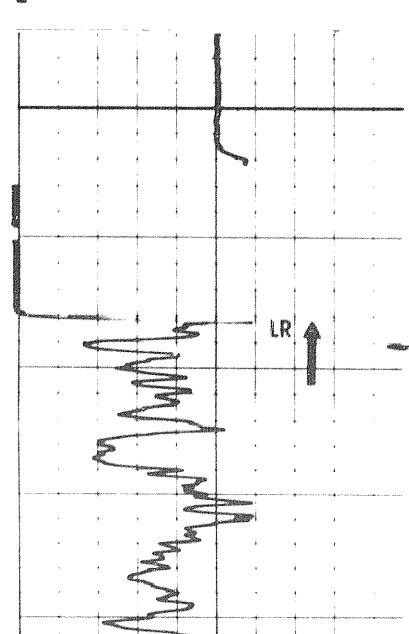
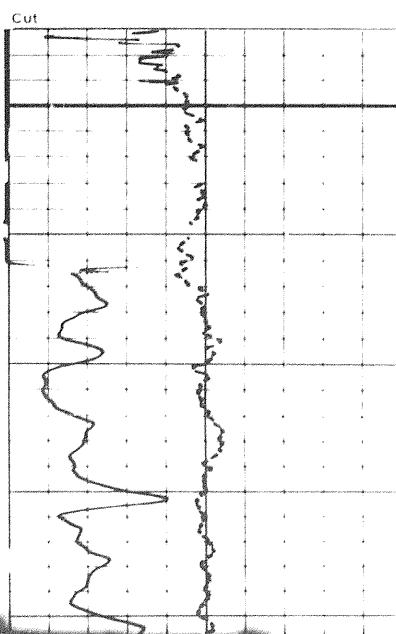
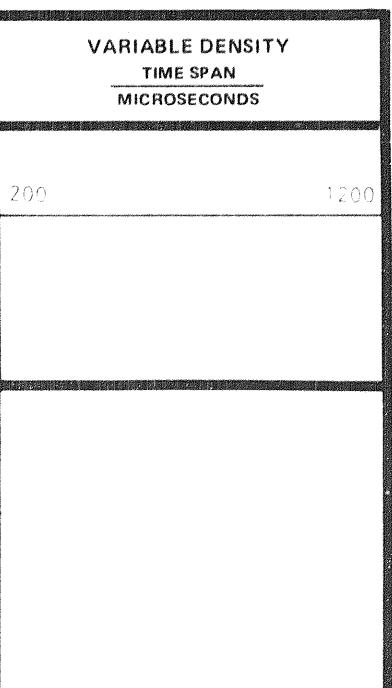
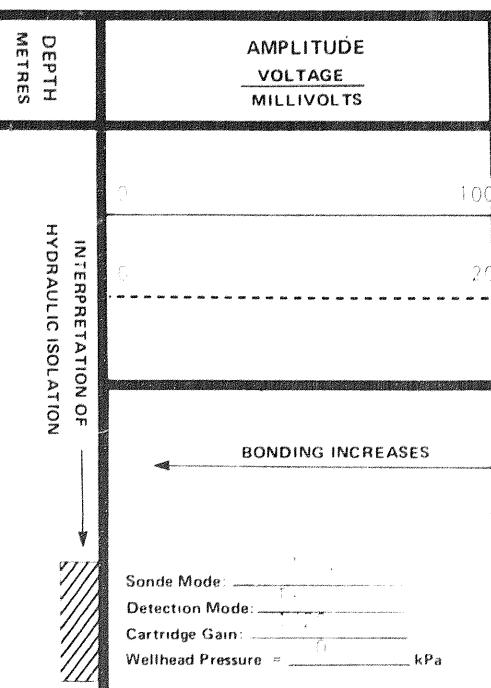
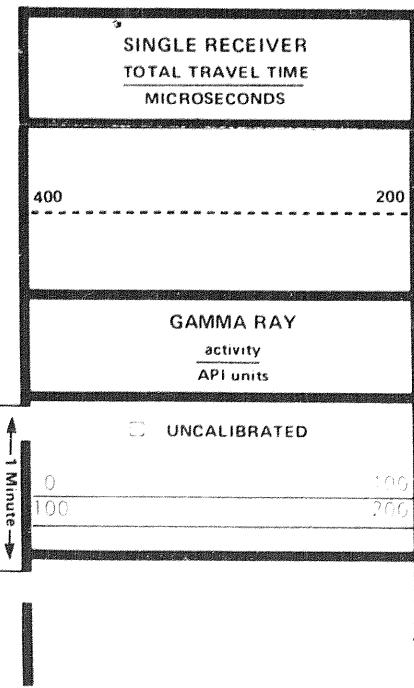
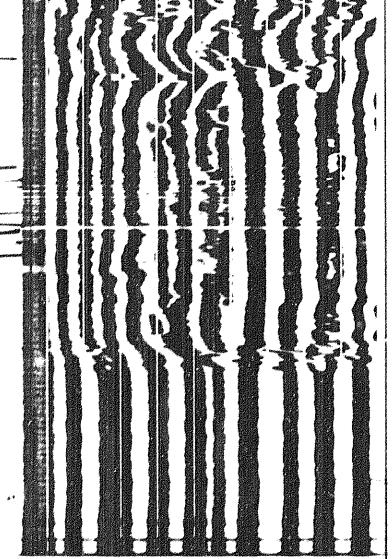
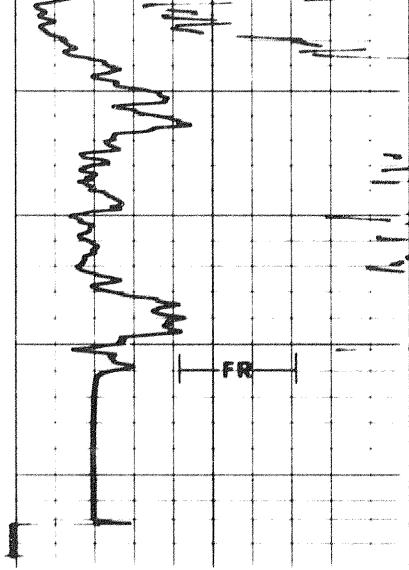
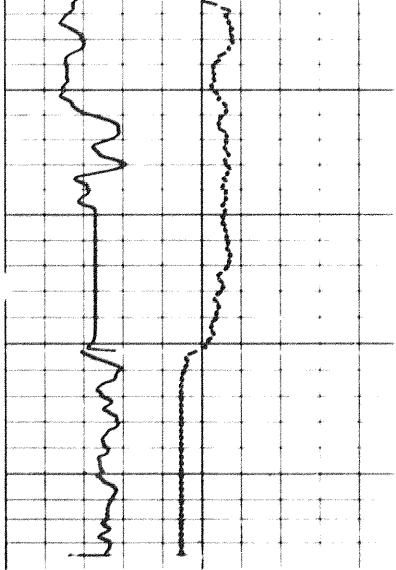


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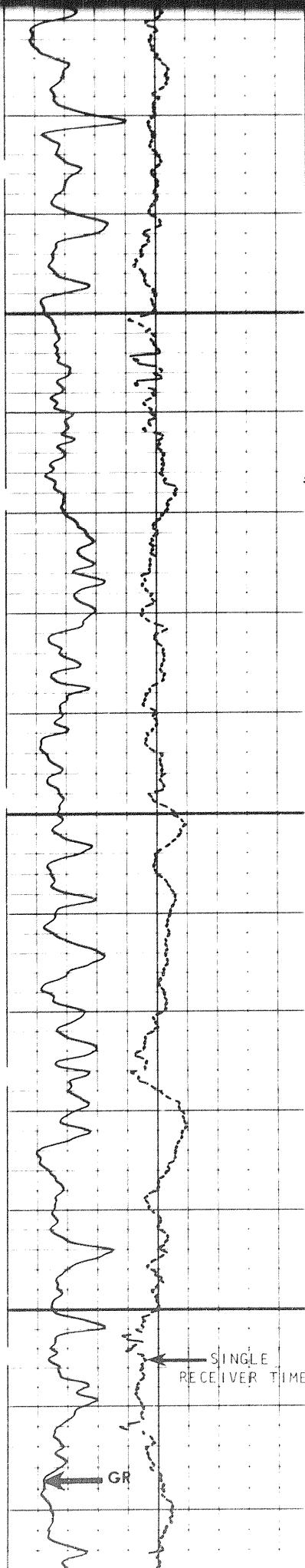


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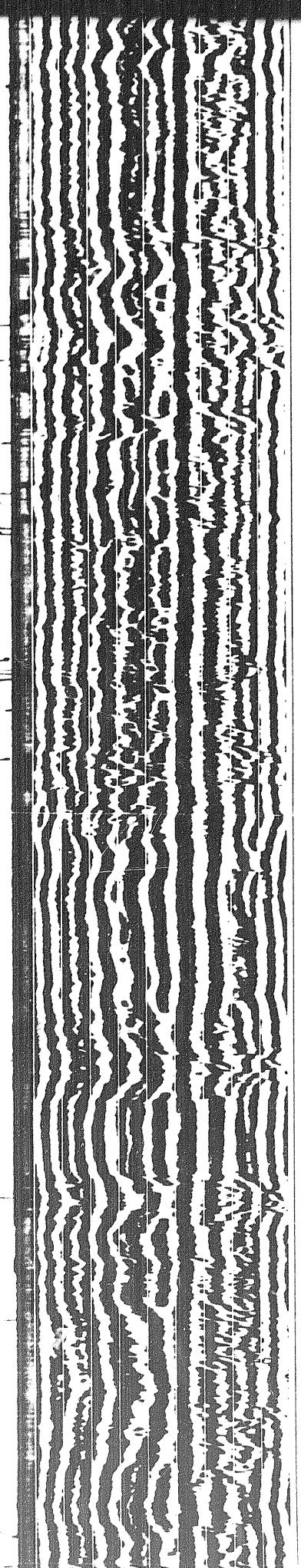
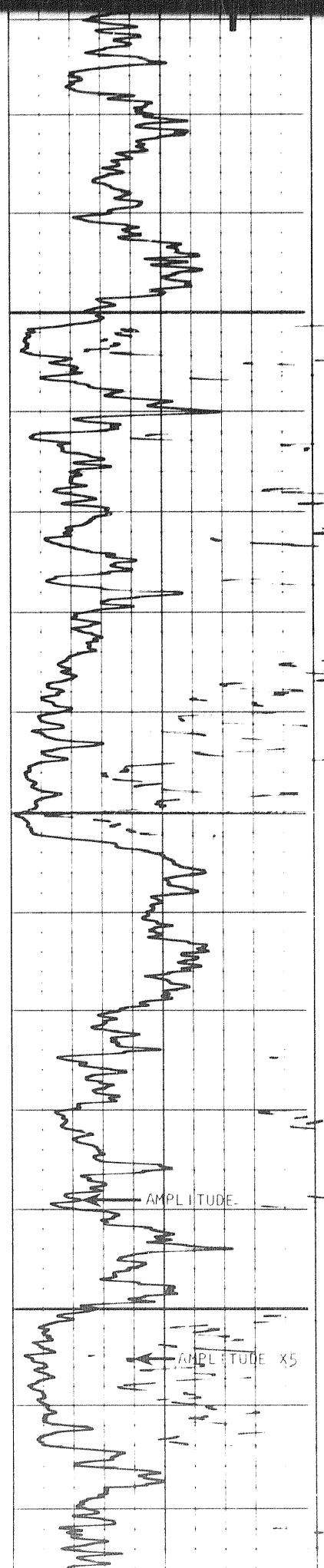


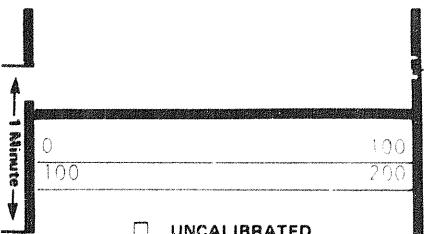
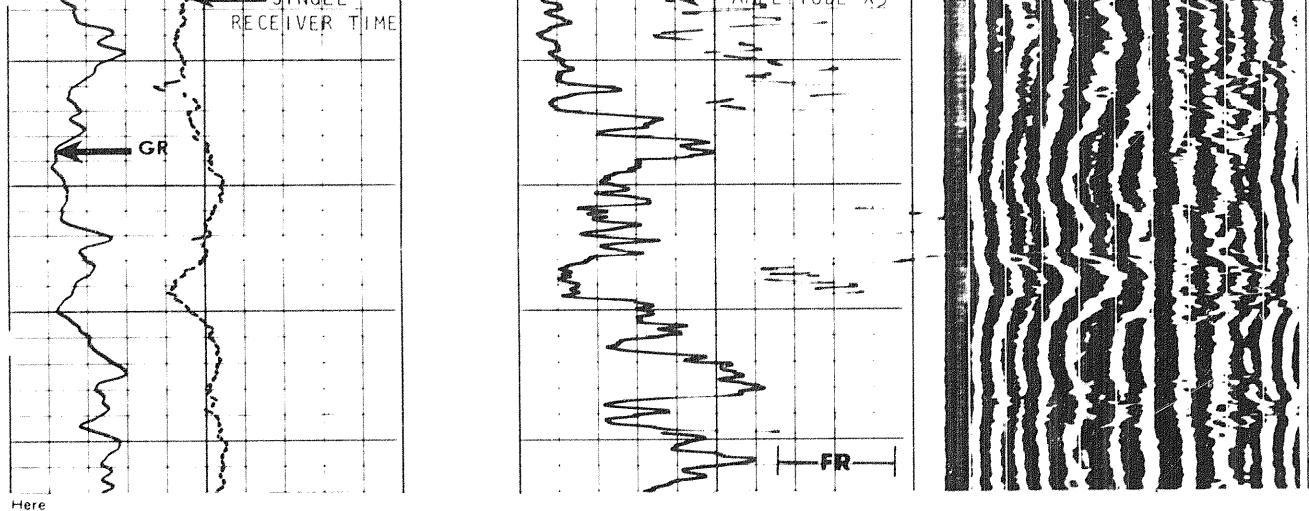
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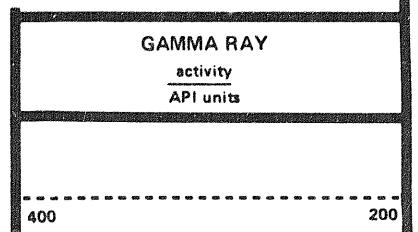
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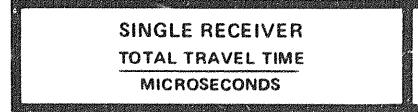
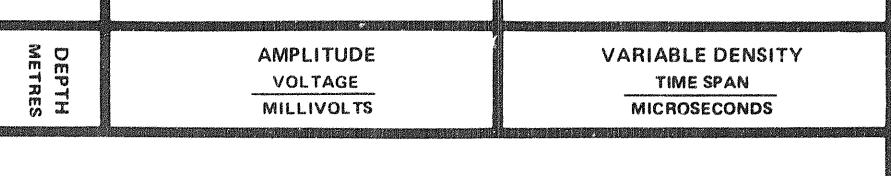




UNCALIBRATED



BONDING INCREASES



DEPTH  
METRES

AMPLITUDE  
VOLTAGE  
MILLIVOLTS

VARIABLE DENSITY  
TIME SPAN  
MICROSECONDS

Cut  
Here

## CALIBRATION RECORD

### CEMENT BOND CALIBRATION CODING

#### TRANSIT TIME AMPLITUDE

- |    |                 |                 |
|----|-----------------|-----------------|
| 1. | MECHANICAL ZERO | MECHANICAL ZERO |
| 2. | 240 $\mu$ s     | ELECTRICAL ZERO |
| 3. | 320 $\mu$ s     | CALIBRATE       |
| 4. | 400 $\mu$ s     |                 |

COMPANY \_\_\_\_\_

SCHL. FR \_\_\_\_\_ m

WELL \_\_\_\_\_

SCHL. TD \_\_\_\_\_ m

FIELD \_\_\_\_\_

DRLR. TD \_\_\_\_\_ m

PROVINCE \_\_\_\_\_

Elev.: KB \_\_\_\_\_ m

DF \_\_\_\_\_ m

GL \_\_\_\_\_ m

X4010B

8/6/88