



ATLAS WIRELINE SERVICES

BOND ATTENUATION LOG

COMPANY UNION OIL OF CALIFORNIA

WELL BUZZARD CREEK 7-13

FIELD BUZZARD CREEK

COUNTY MESA STATE COLORADO

LOCATION:	OTHER SERVICES:

SEC 13 TWP 13S RGE 93W

SECOND LEVEL ELEVATION 7304 FT. ELEVATIONS

LY BUSHING

LET BUSHING

10-JAN.-1997	11-JAN. 1992
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0725 97	0725 97
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91213 7848'

774B	114B
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RUNAL	7734'	7734
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DATE	2670	5590
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WHITE	WHITE
M/O	M/O

10/11	N/A	10/11	N/A
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740'	FULL
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5. F	M/R	M/R
6. F	M/R	M/R

2.3 HRS.	3.3
HI 6307	HI 6307
CASPER	CASPER

P. RASMUSSEN	P. RASMUSSEN
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0.1E6	0.1E6
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BOREHOLE RECORD

1951

BOREHOLE RECORD

FROM	TO
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IN MAKING INTERPRETATIONS OF LOSS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS

LOG CORRELATED TO DEN. /CN LOG RUN ON 22-DEC.-1981
FIRST LOG RUN MADE WITH 0 PSI.
SECOND LOG RUN MADE WITH 1000 PSI.

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1		GR	119138	1853XA	CENTRALIZED

WELL NAME: BUZZARD CREEK NO. 7-13

TRIP: 1

SERVICE: GBALEZ

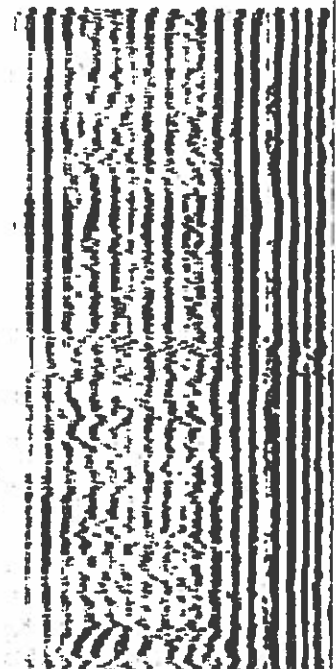
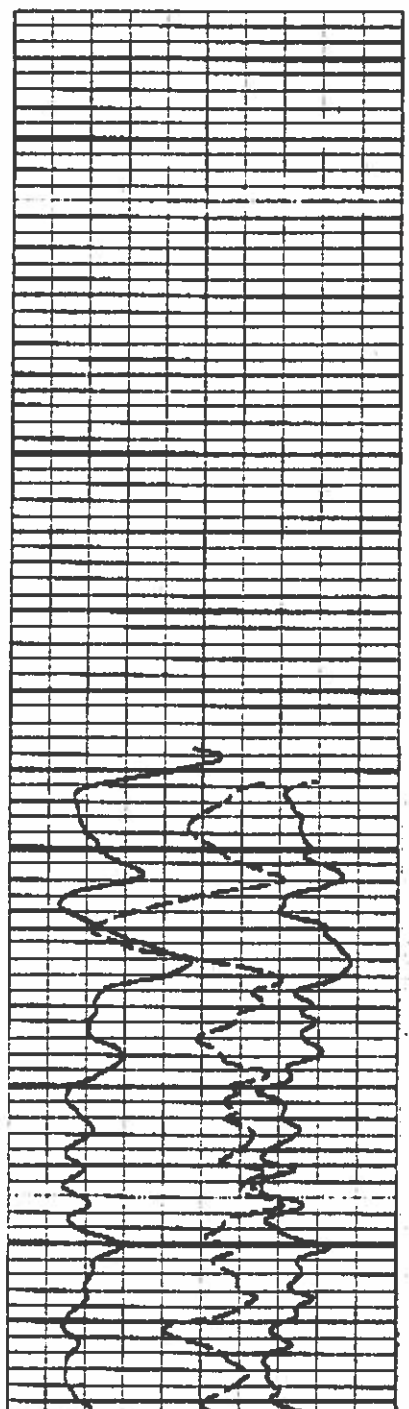
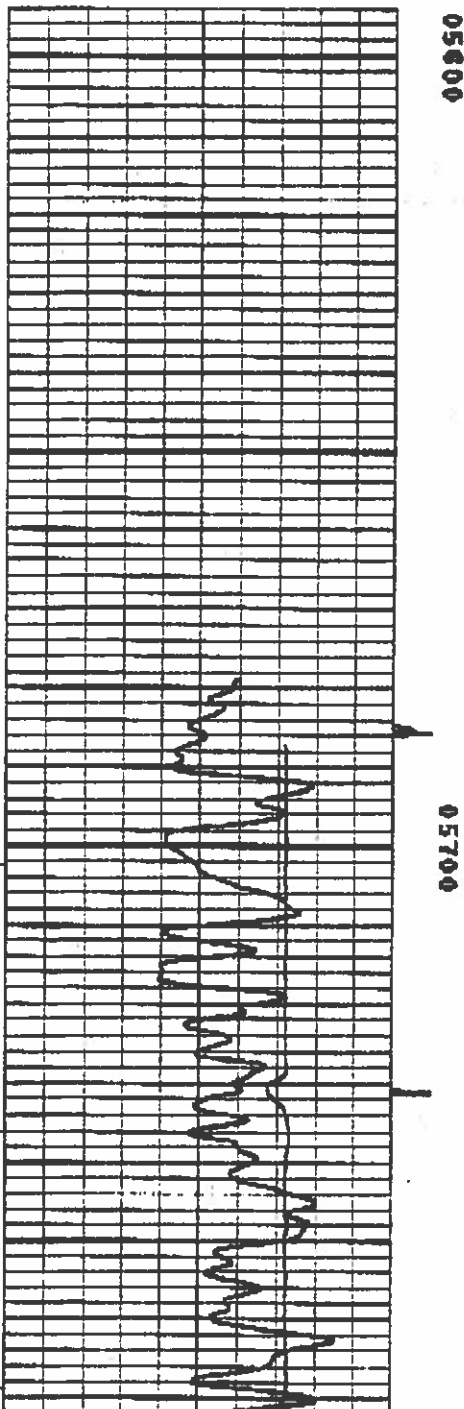
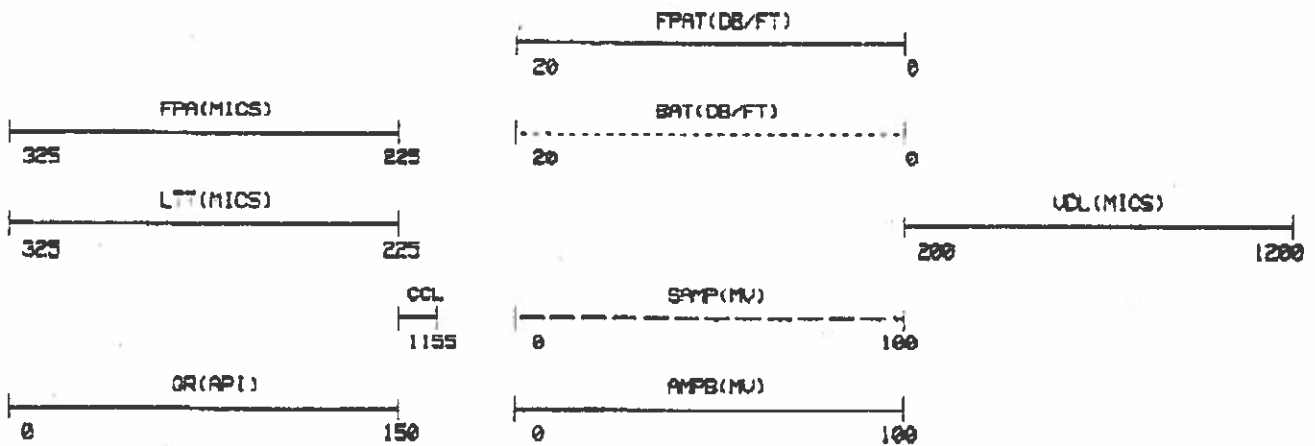
FILE: 5

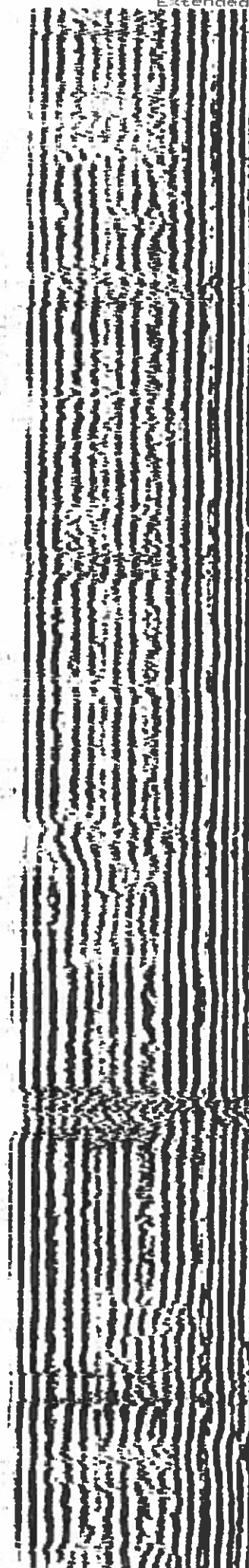
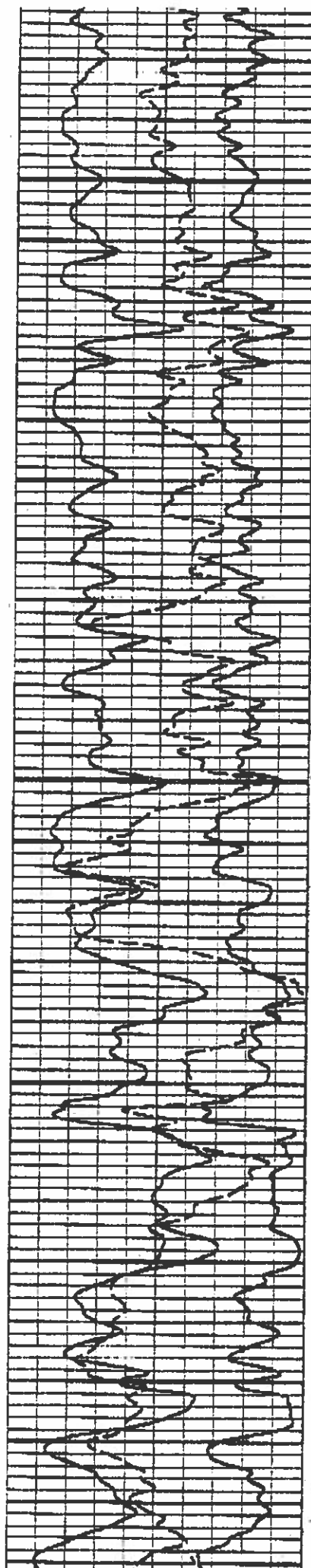
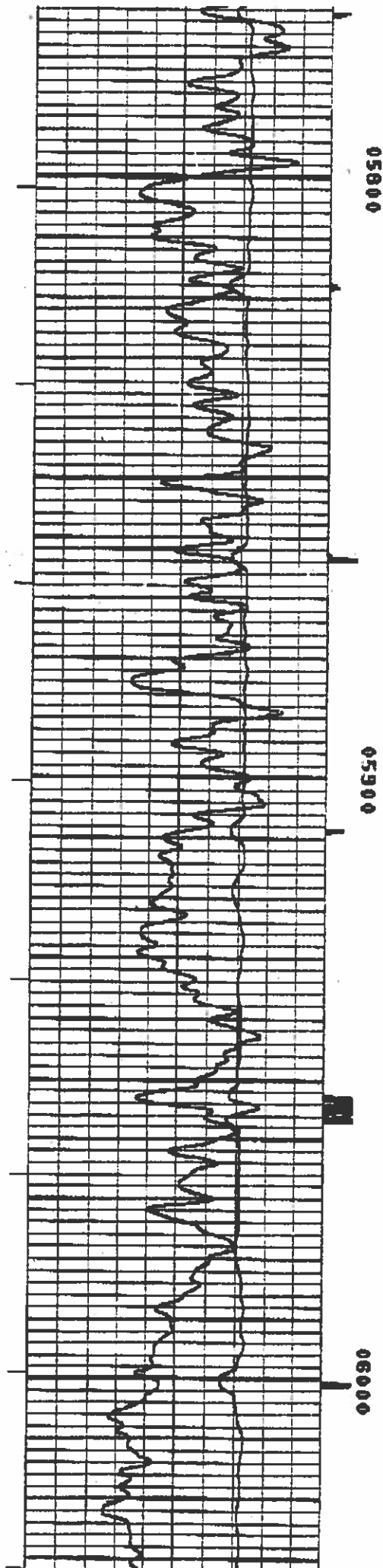
DATE: 01/11/92

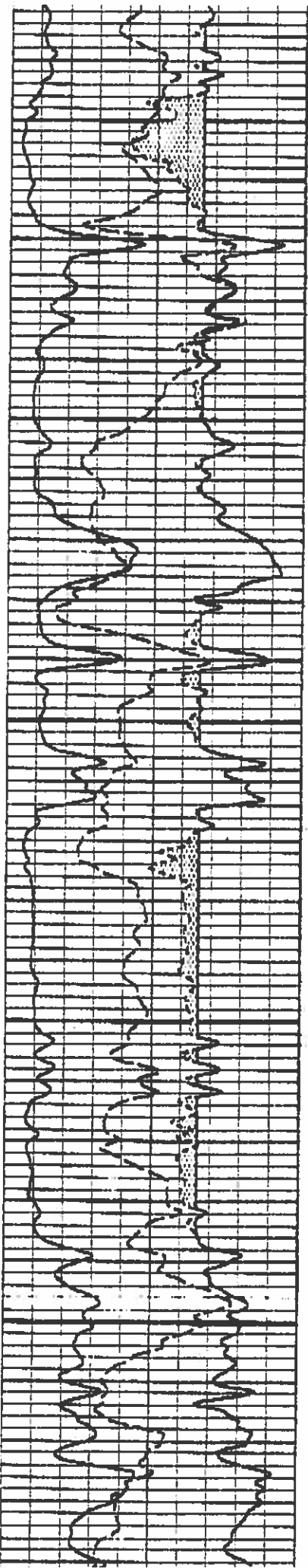
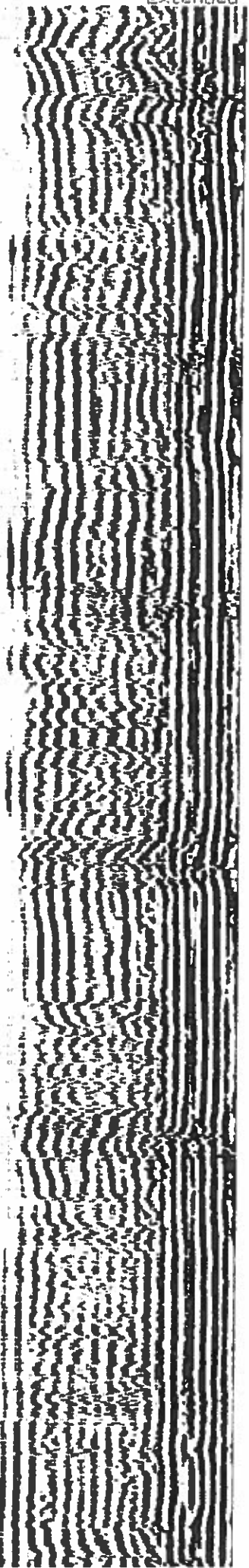
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REVISION: FSY5256 REV:0002 VER:1.1

MODE: RECORD

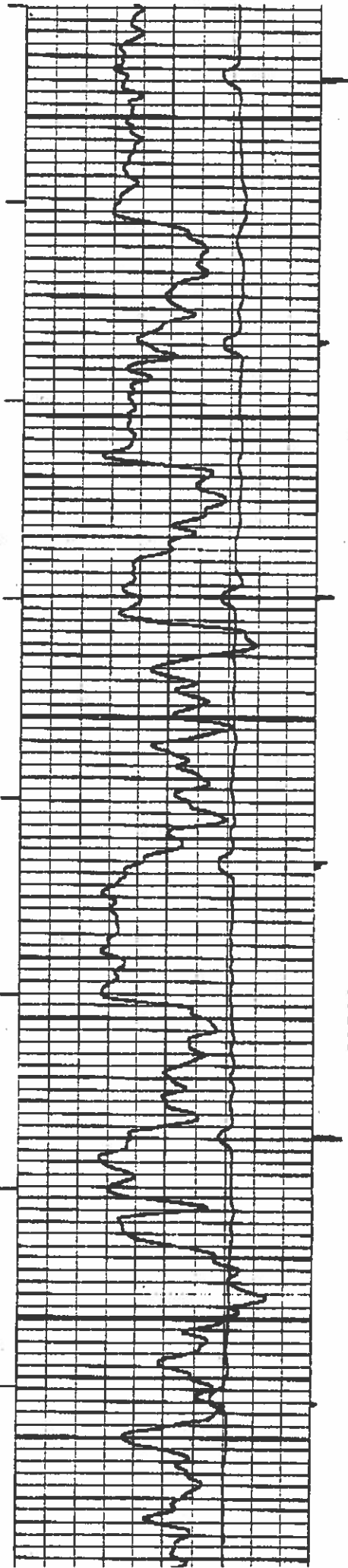


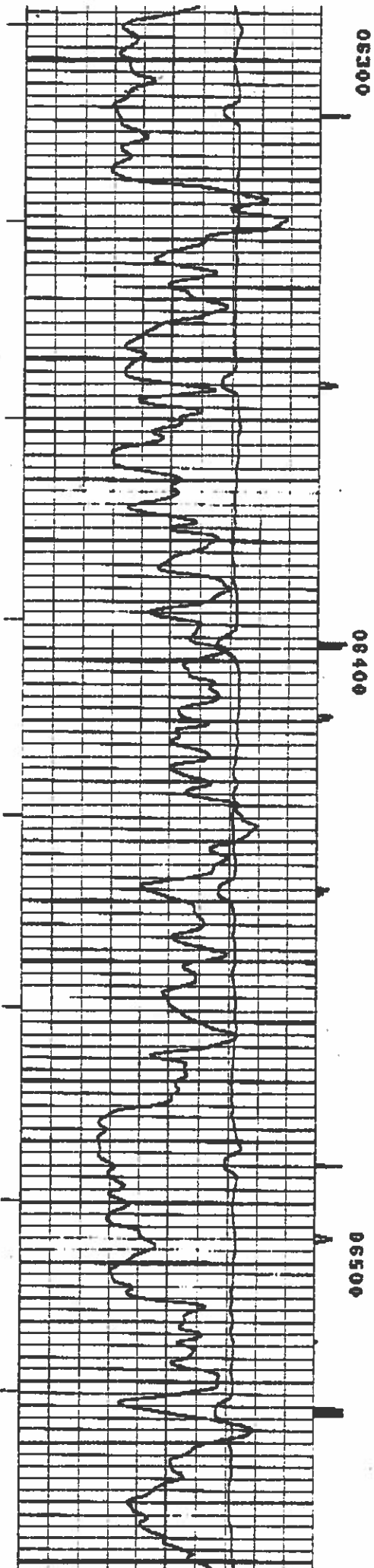
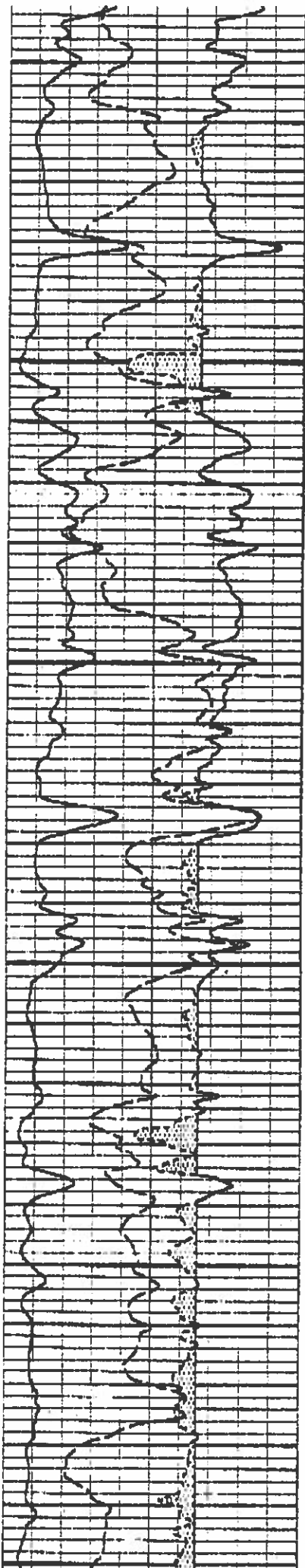
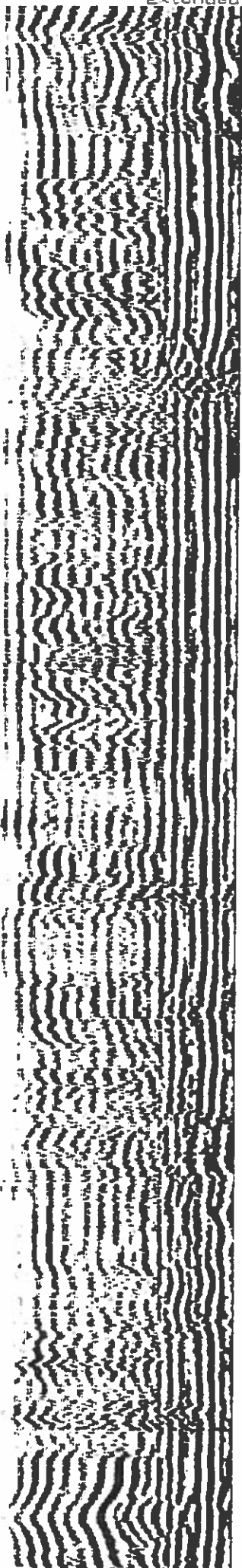


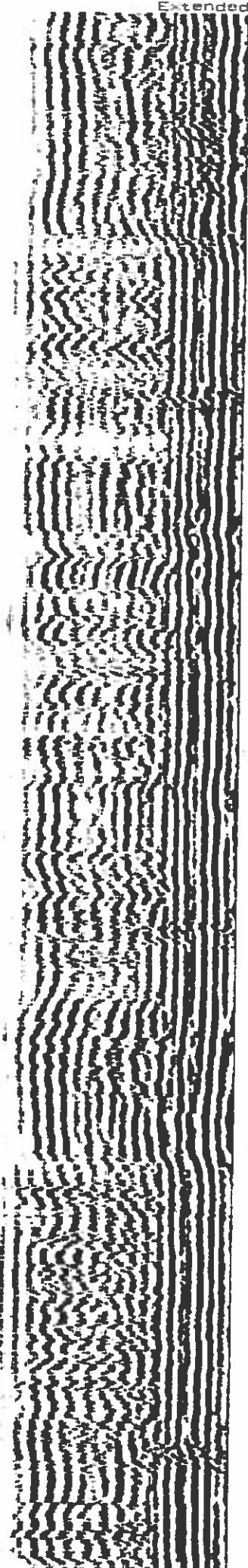
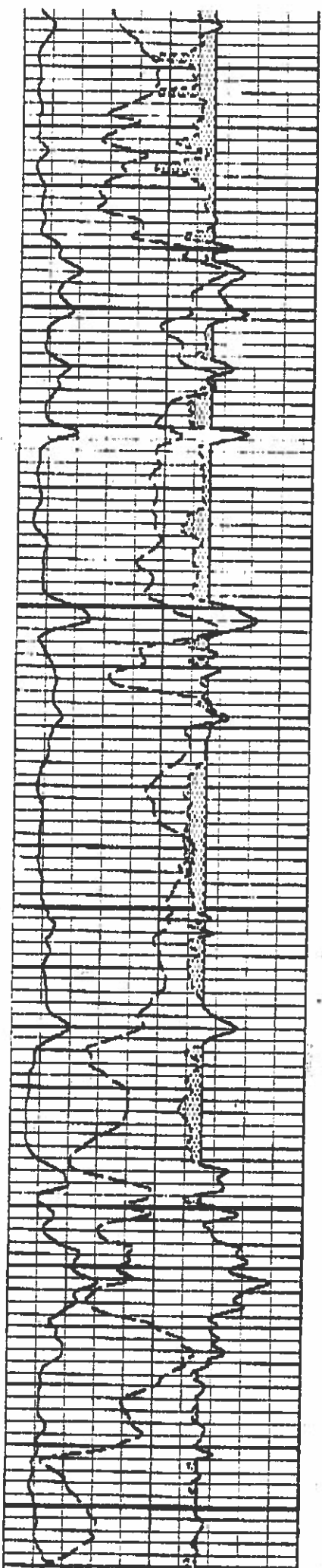
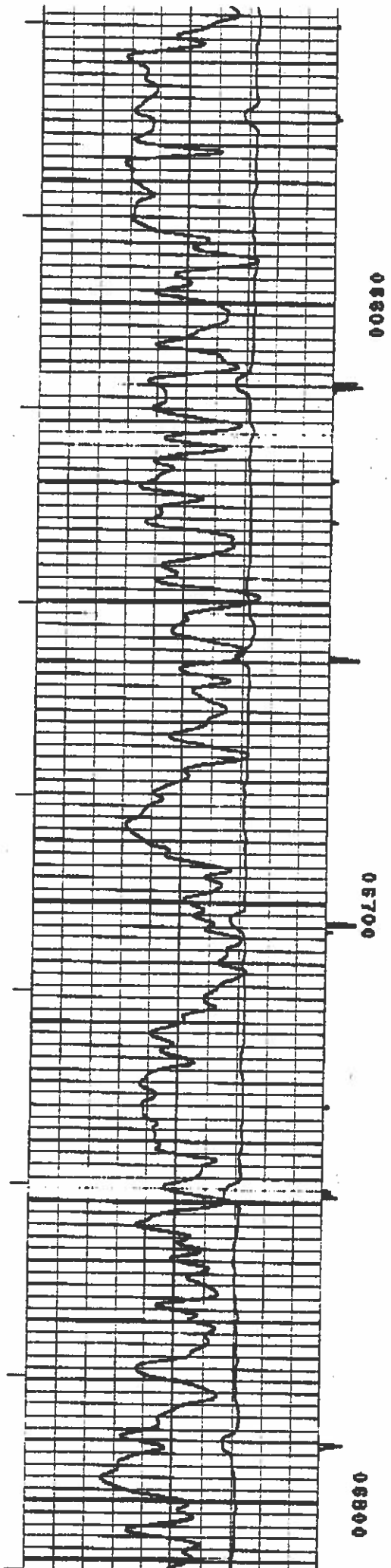


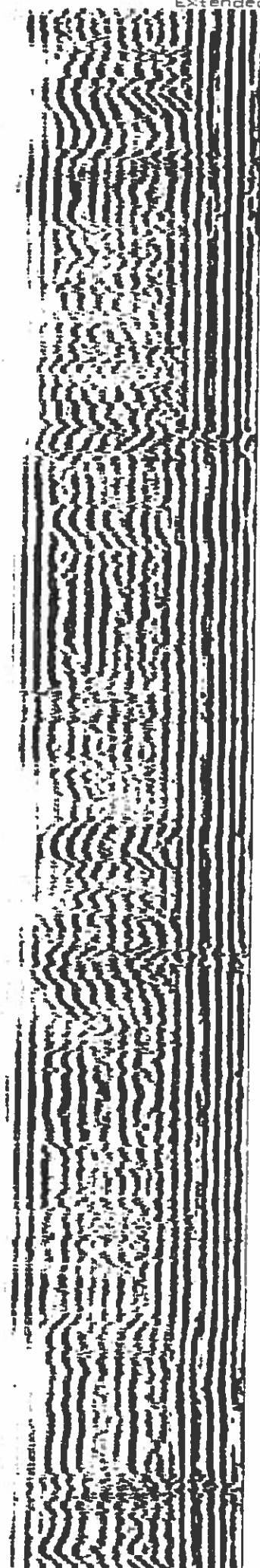
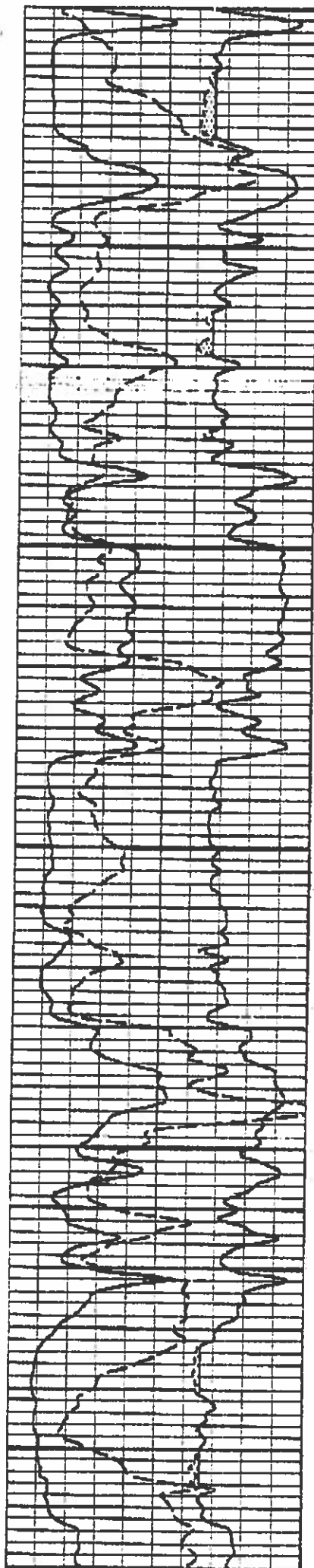
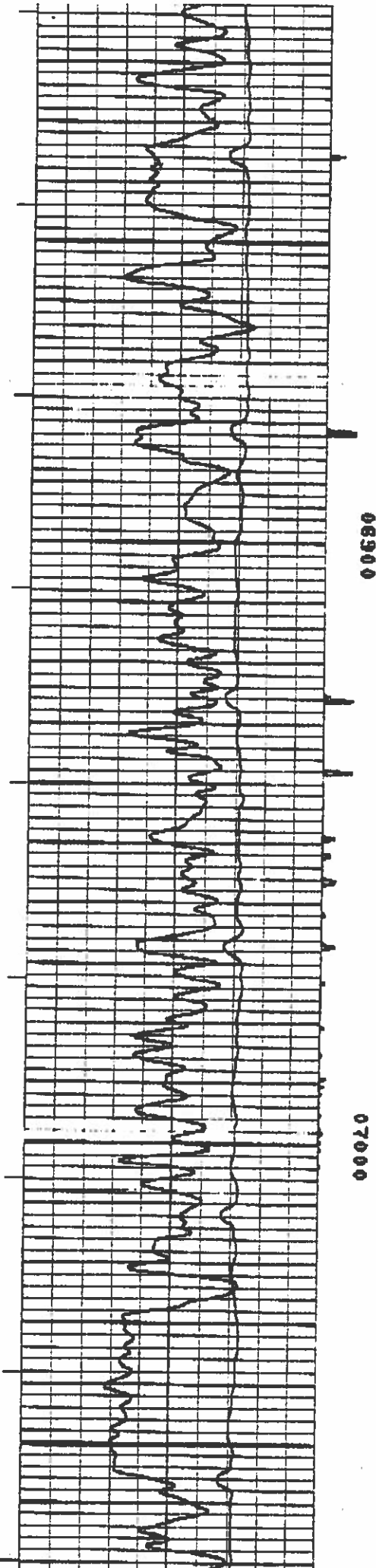
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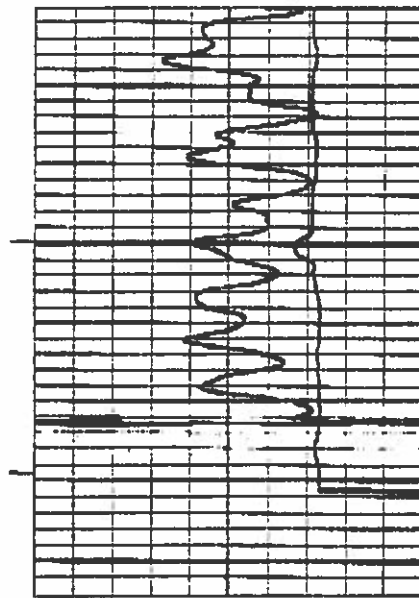
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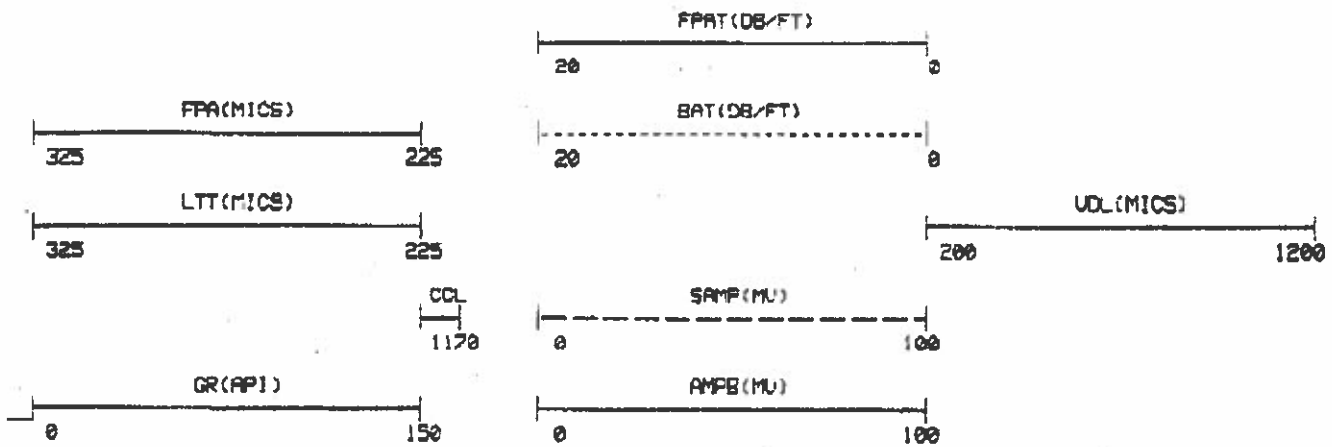
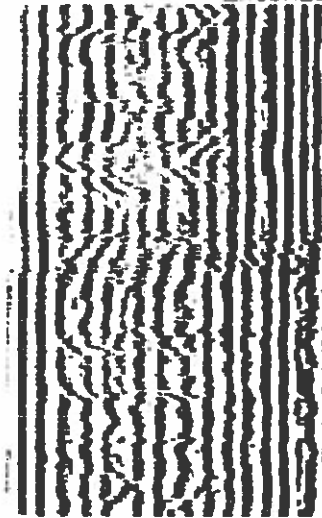
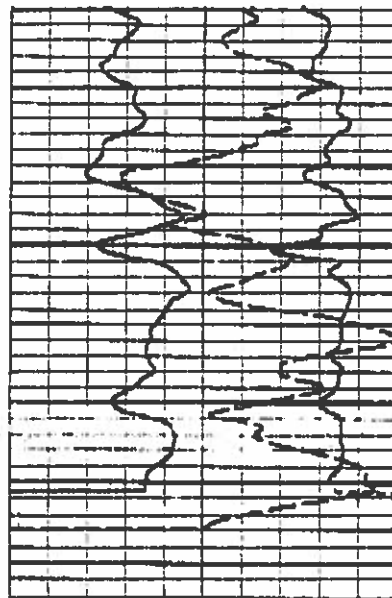








00120



FILE: 5

MAIN PASS
LOGGED UNDER 1000 PSI.
7" 32 LB.

FILE: 3

CURVE DELAY REPORT

<u>CURVE</u>	<u>PHYS.</u> <u>DELAY</u>	<u>UNITS</u>
GR	12,6	FT,IN
CCL	15,0	FT,IN
OCL1	15,0	FT,IN
CCL2	15,0	FT,IN
SGN	38,9	FT,IN
LSN	39,3	FT,IN
AMPB	4,3	FT,IN
FPA1	0	FT,IN
SAMP	0	FT,IN
LTT	0	FT,IN
LTT	4,3	FT,IN
PRT	2	FT,IN

PPAT	0	FT, IN
QBAL	0	FT, IN
ARI	2.6	FT, IN
A111	4.3	FT, IN
A231	0	FT, IN
A121	0	FT, IN
SIG	3.0	FT, IN
UDL	3.0	FT, IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
AFREE	7751 TO 7013	95.000	
ATTFP	7751 TO 7013	0.700	DB/FT
BRAM	7751 TO 7013	0.750	%
CAL COR	7751 TO 7013	7.875	INCH
CASING CNO	7751 TO 7013	NOT ACTIVE	
CEMENT STR	7751 TO 7013	1500.000	PSI
CHISM CN	7751 TO 7013	ACTIVE	
FLUID TIME	7751 TO 7013	189.000	USEC/FT
K1	7751 TO 7013	0.056	
M11	7751 TO 7013	0.025	
M23	7751 TO 7013	0.090	
MATRIX	7751 TO 7013	LIMESTONE	
NSIMX	7751 TO 7013	7.743	DB/FT
PIPE OD	7751 TO 7013	7.000	INCH
PPT	7751 TO 7013	217	USEC
SALINITY	7751 TO 7013	0.000	PPK
SBIMX	7751 TO 7013	7.743	DB/FT

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: UNION OIL OF CALIFORNIA

RUN: 1

WELL NAME: BUZZARD CREEK NO. 7-13

TRIP: 1

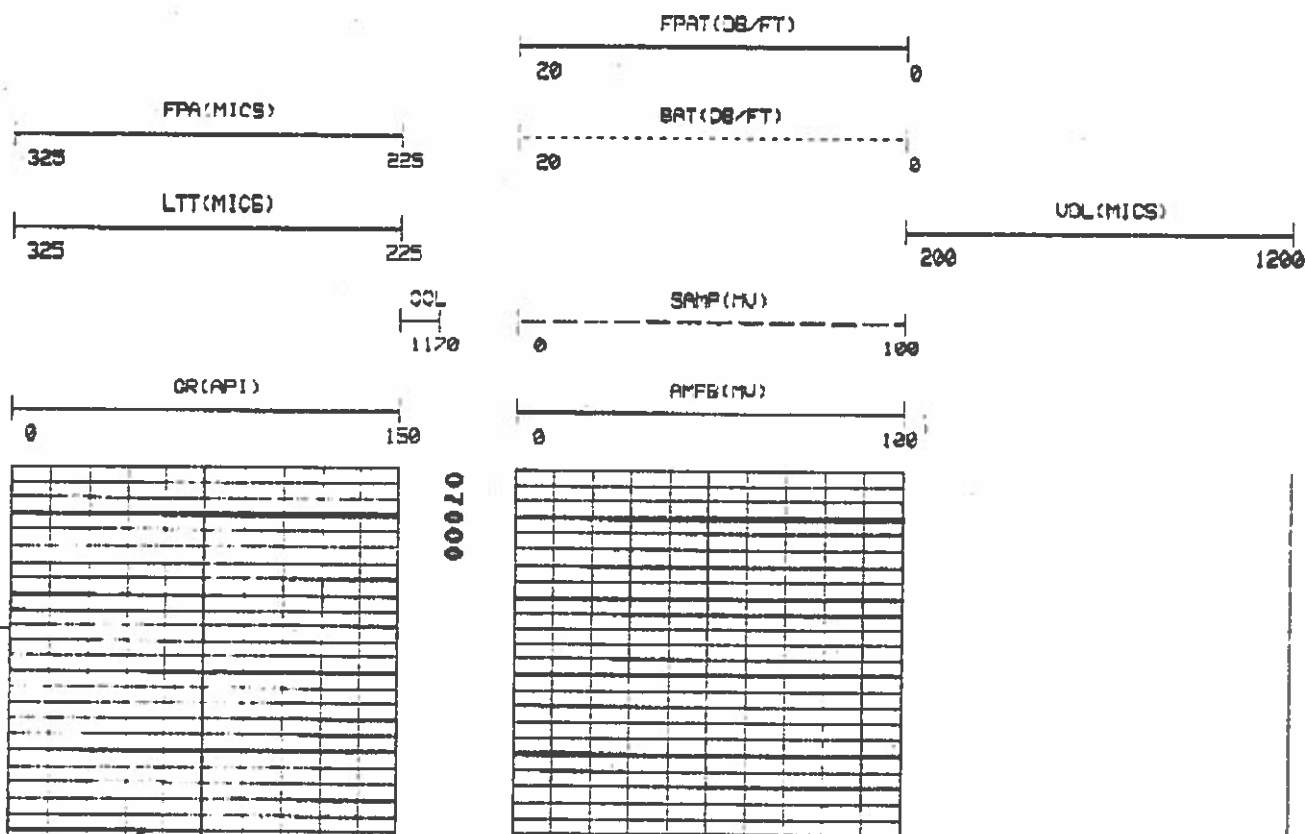
SERVICE: OBALE2 FILE: 3

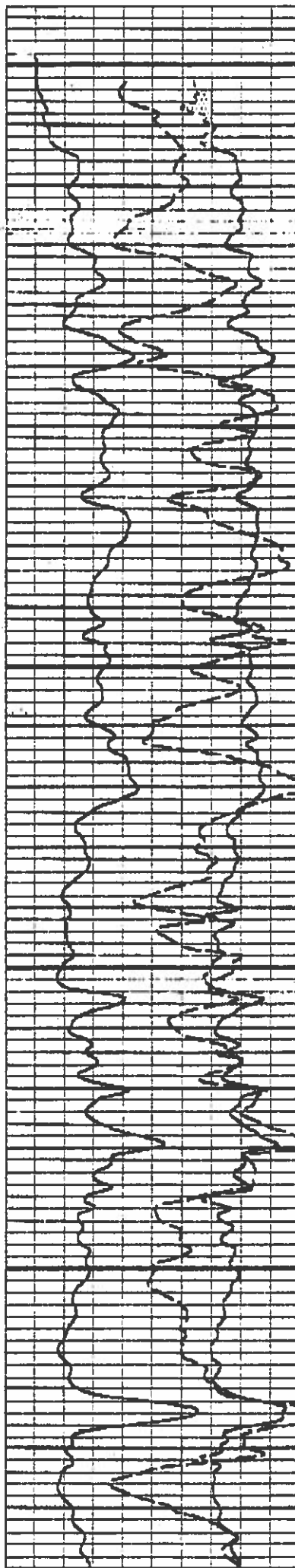
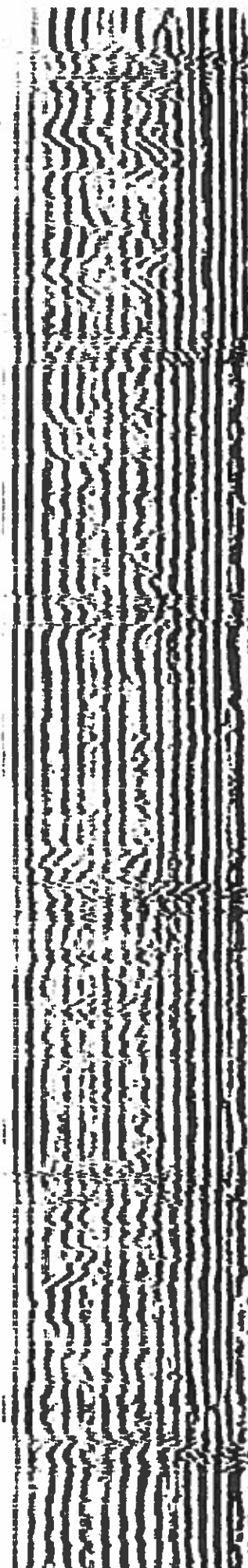
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REVISION: FBYS256 REV:0002 VER:5.1

MODE: RECORD

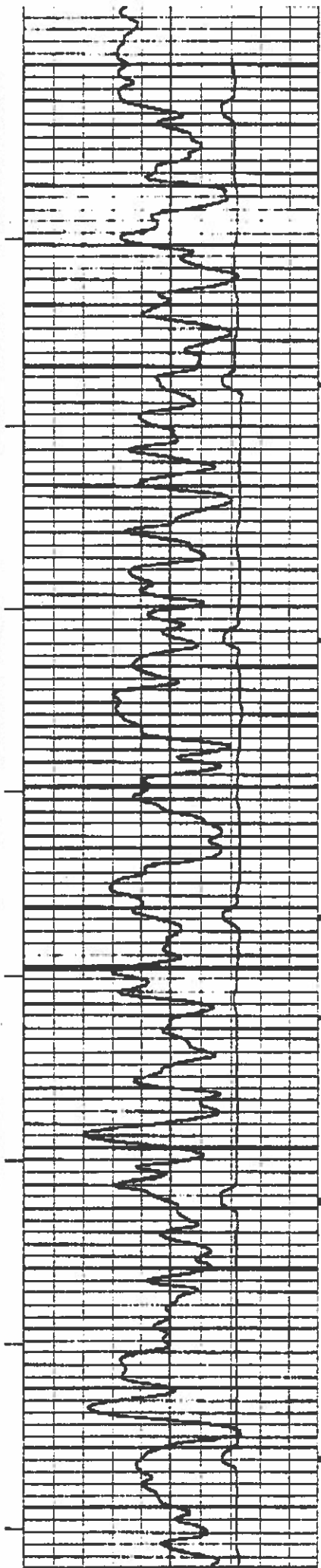


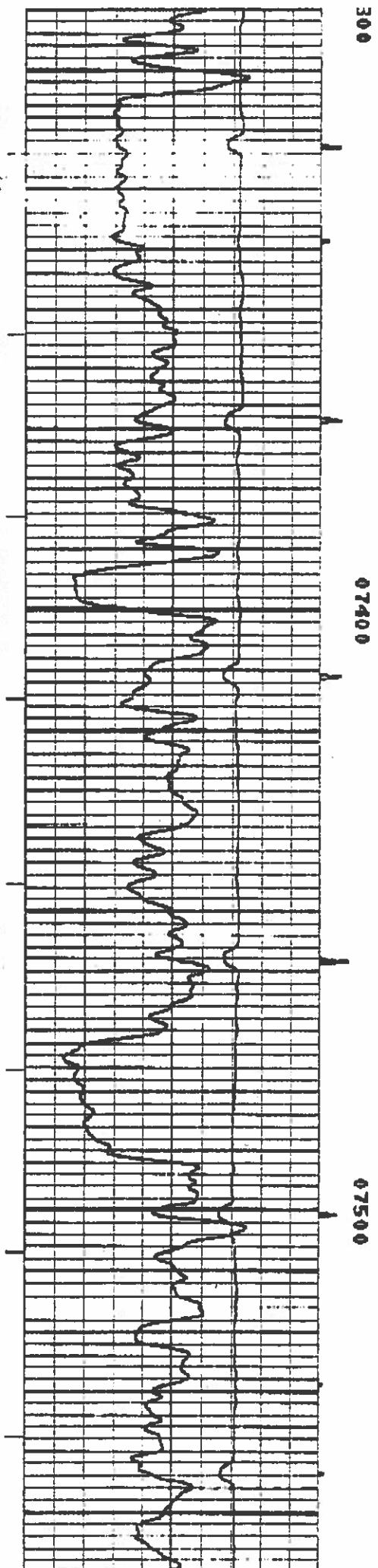
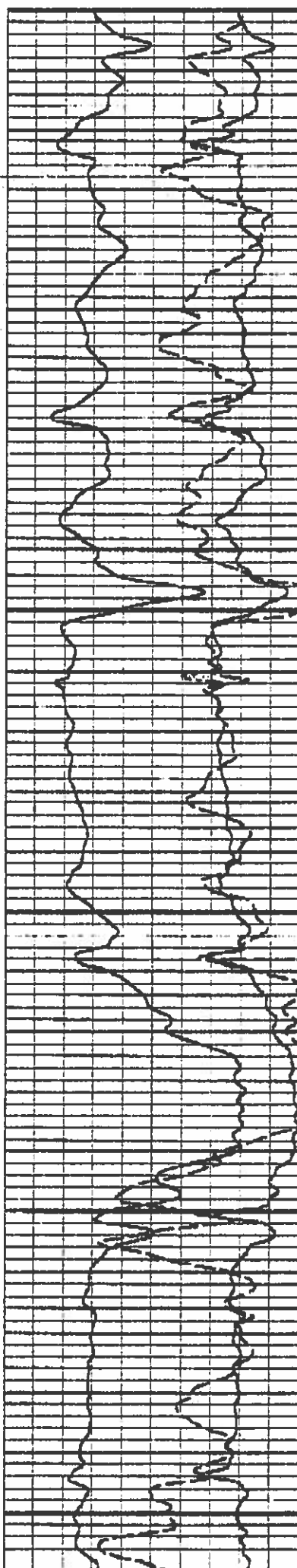
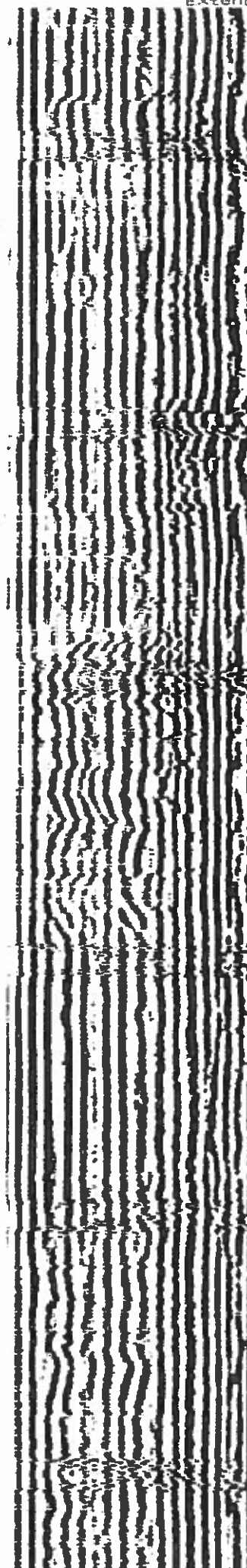


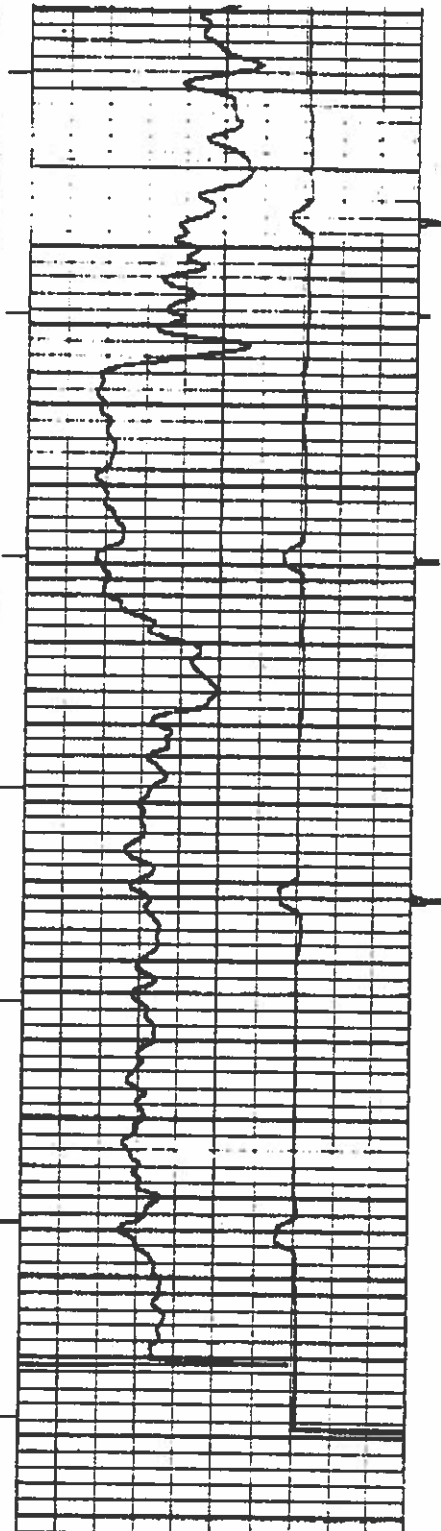
07100

07200

073

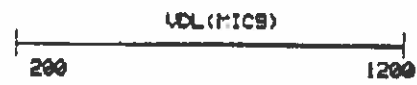
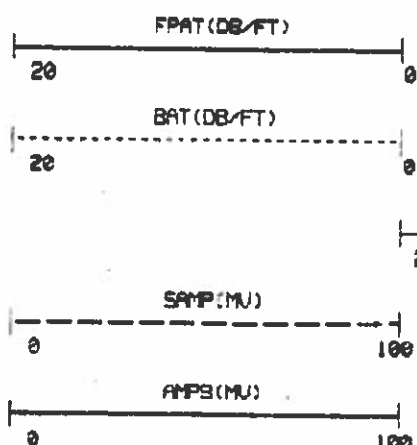
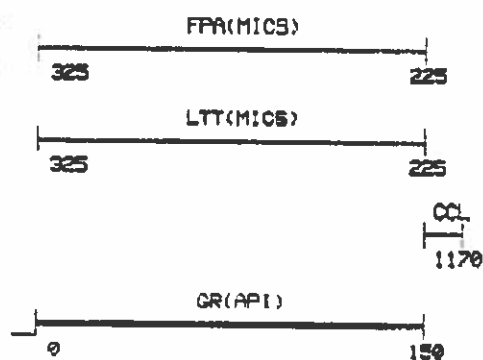
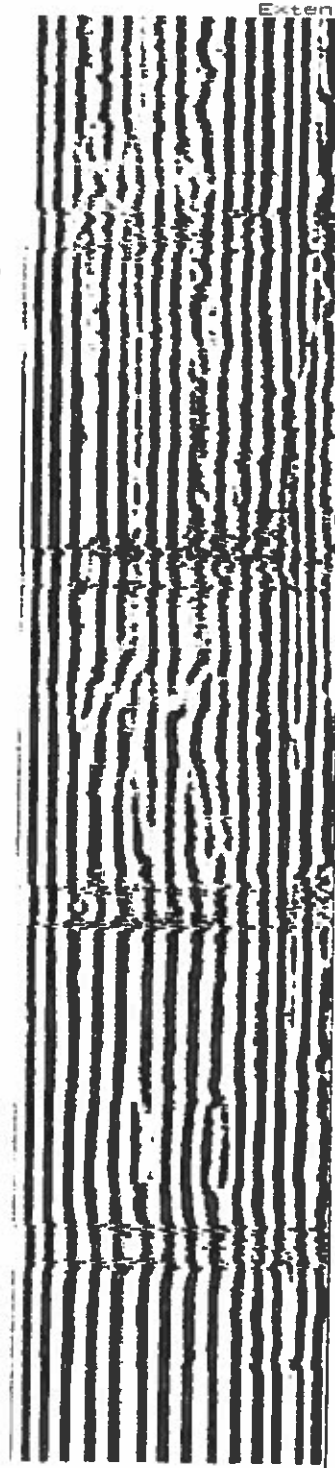
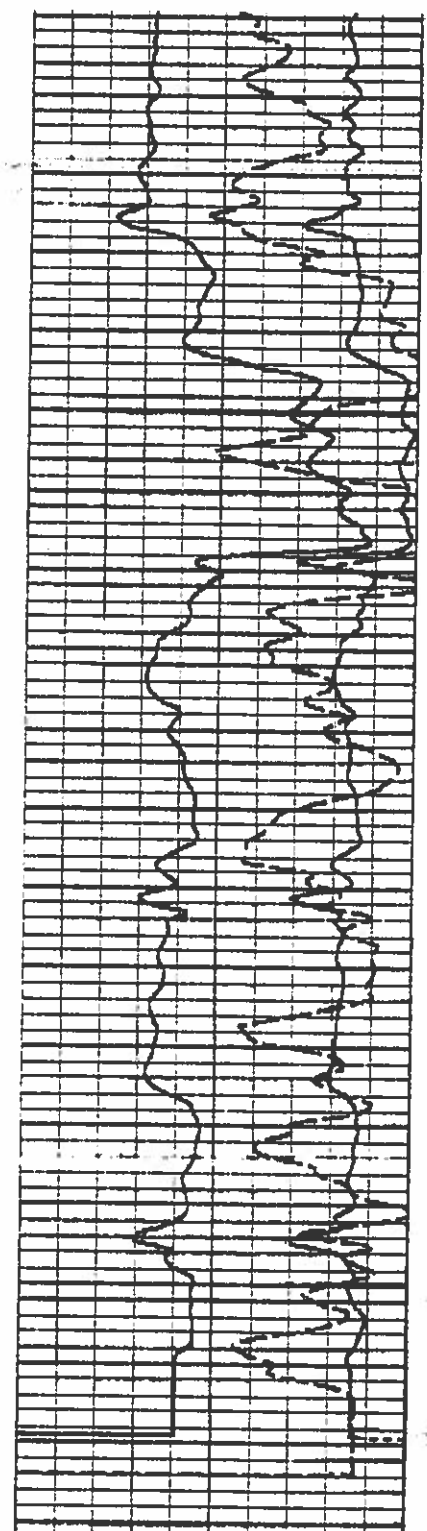






00910

07000



REPEAT SECTION LOGGED UNDER 1000 PSI.

FILE: 2

CURVE DELAY REPORT

CURVE	PHYS. DELAY	UNITS
OR	12.6	FT,IN
OCL	15.0	FT,IN
OCL1	15.0	FT,IN
OCL2	15.0	FT,IN
SSN	38.9	FT,IN
LSN	38.3	FT,IN
AMPB	4.3	FT,IN
FGRI	0	FT,IN
SAMP	0	FT,IN
STT	0	FT,IN
LTT	4.3	FT,IN
PPT	0	FT,IN
PPAT	0	FT,IN
QBAL	0	FT,IN
ARI	2.6	FT,IN
A111	4.3	FT,IN
A231	0	FT,IN
A121	0	FT,IN
SIG	3.0	FT,IN
COL	3.0	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
AFREE	7751 TO 7200	35.000	
ATTFP	7751 TO 7200	0.700	DB/FT
BRAM	7751 TO 7200	0.750	%
CAL COR	7751 TO 7200	7.875	INCH
CASING CNO	7751 TO 7200	NOT ACTIVE	
CEMENT STR	7751 TO 7200	1500.000	PSI
CHISM CN	7751 TO 7200	ACTIVE	
FLUID TIME	7751 TO 7200	189.000	USEC/FT
K1	7751 TO 7200	0.050	
M11	7751 TO 7200	0.028	
M23	7751 TO 7200	0.090	
MATRIX	7751 TO 7200	LIMESTONE	
NSIMX	7751 TO 7200	7.743	DB/FT
PIPE OD	7751 TO 7200	7.000	INCH
PPT	7751 TO 7200	217	USEC
SALINITY	7751 TO 7200	0.000	PPK
SBIMX	7751 TO 7200	7.743	DB/FT

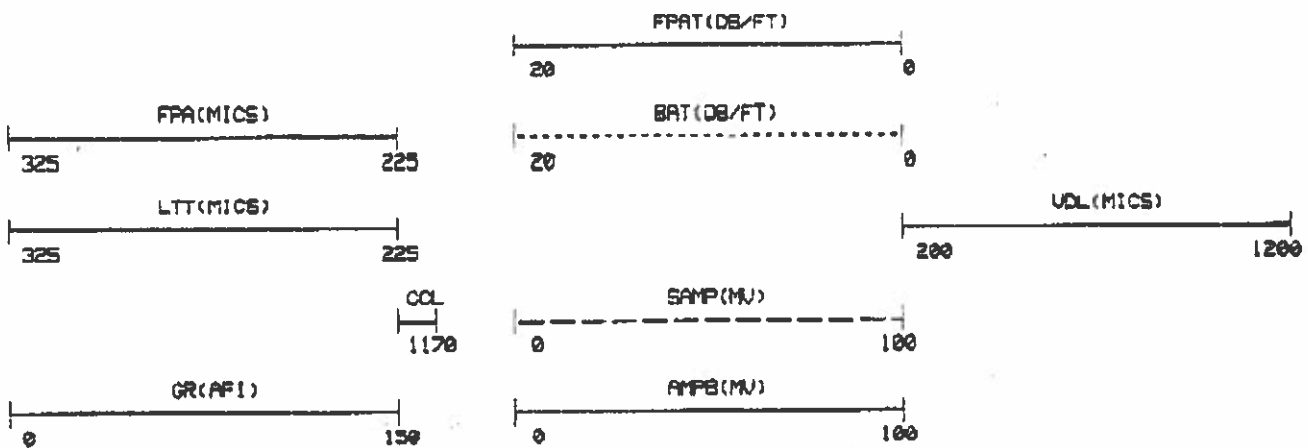
DISPLAY SCALE CHANGES

CURVE	DEPTH INTERVAL	DISPLAY SCALES	
		LOW	HIGH
OCL	7751 TO 7200	145.000	170.000
	7499 TO 7200	155.000	170.000

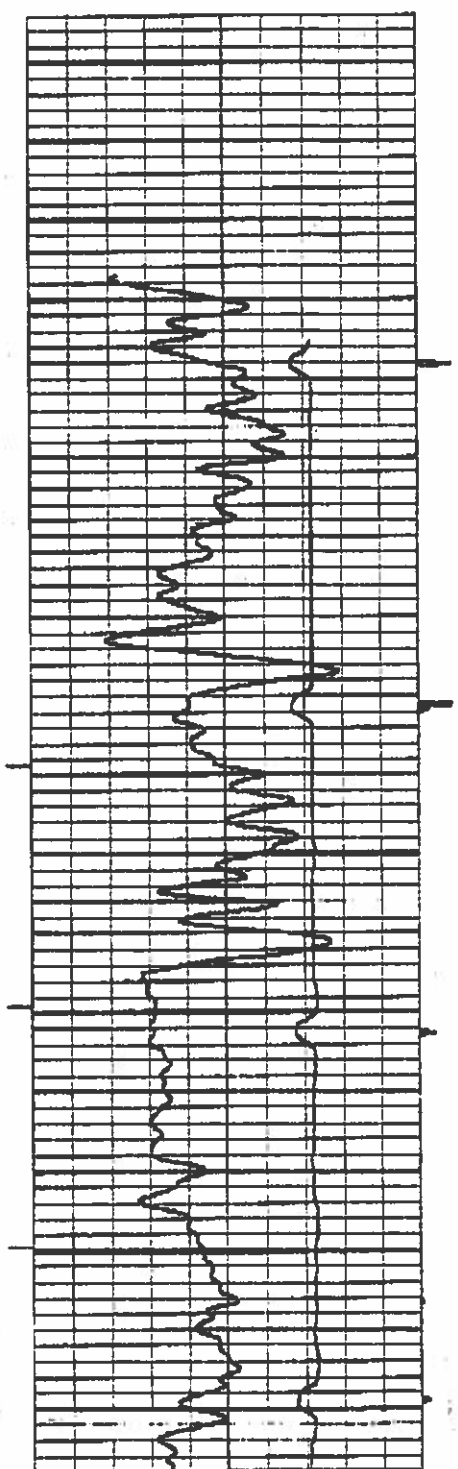
COMPANY: UNION OIL OF CALIFORNIA
WELL NAME: BUZZARD CREEK NO. 7-13

RUN: 1
TRIP: 1

SERVICE: 08ALE2 FILE: 2 DATE: 01/11/92 TIME: 09:45:12
REVISION: F5Y5Z56 REV:0002 VER:5.1 MODE: RECORD

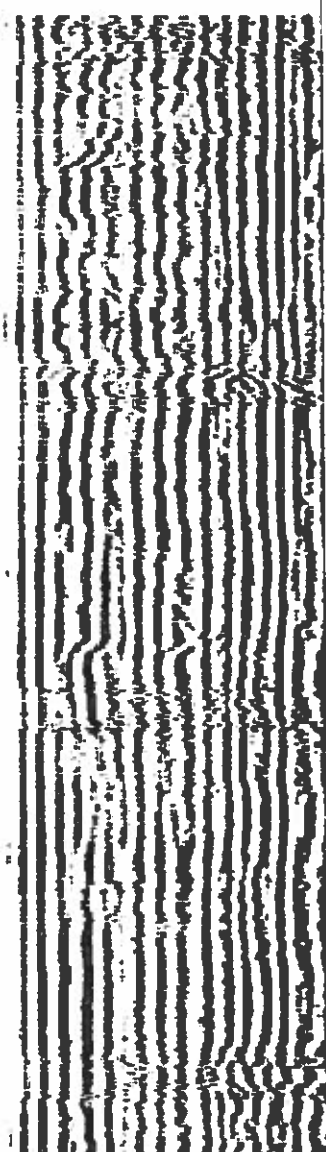
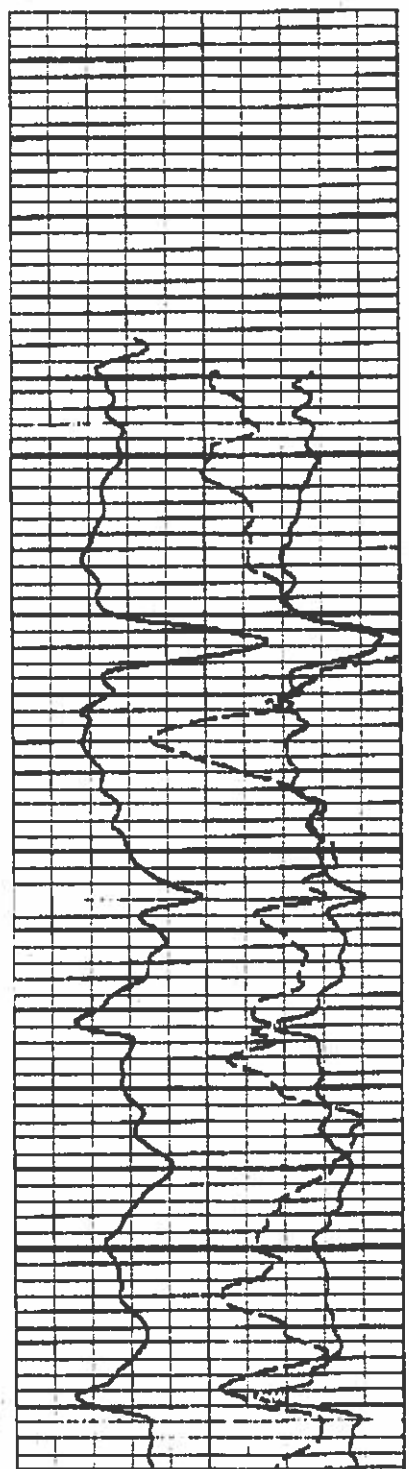


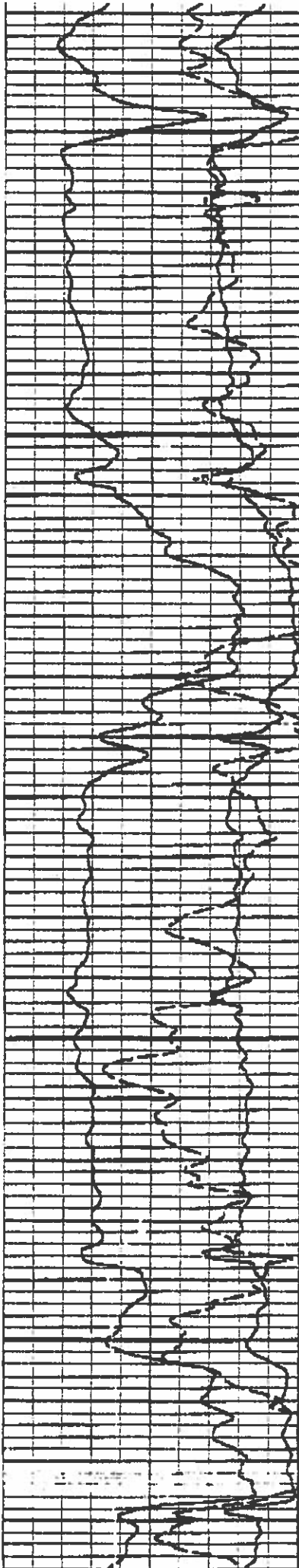
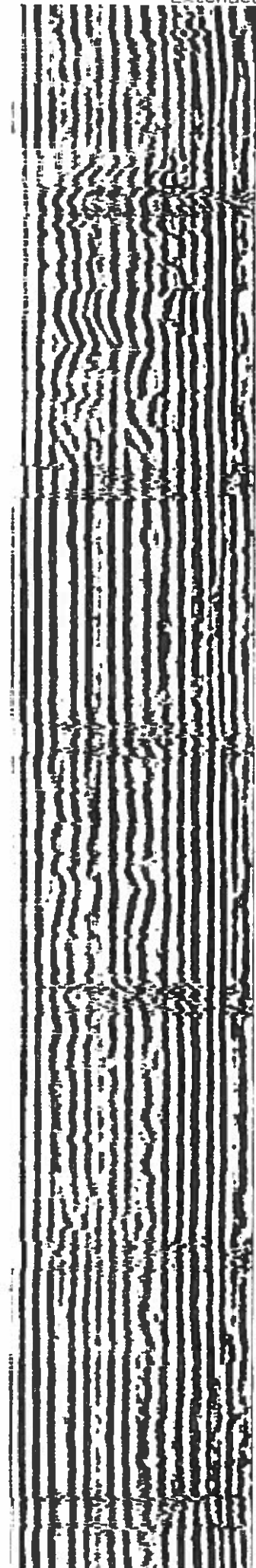
COL
1170



07200

07300

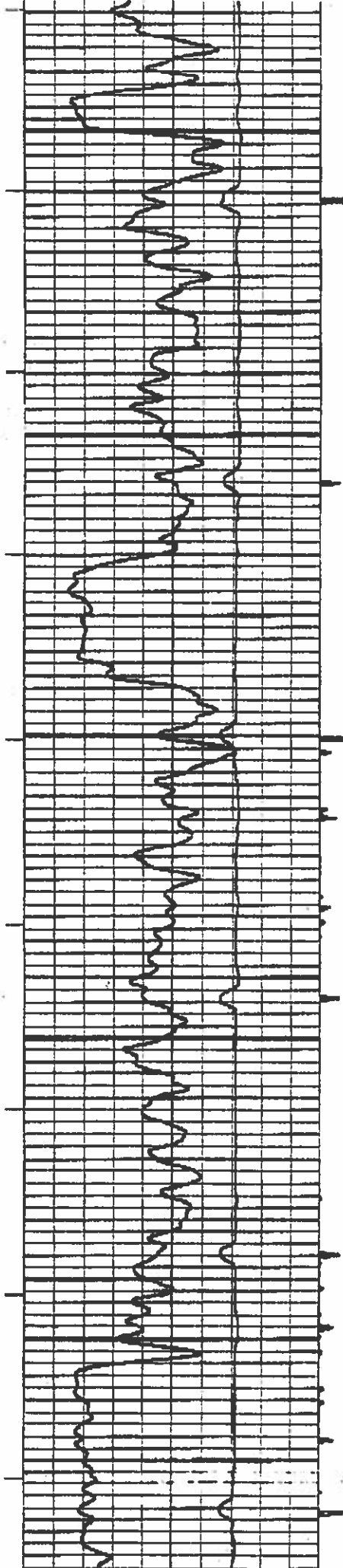


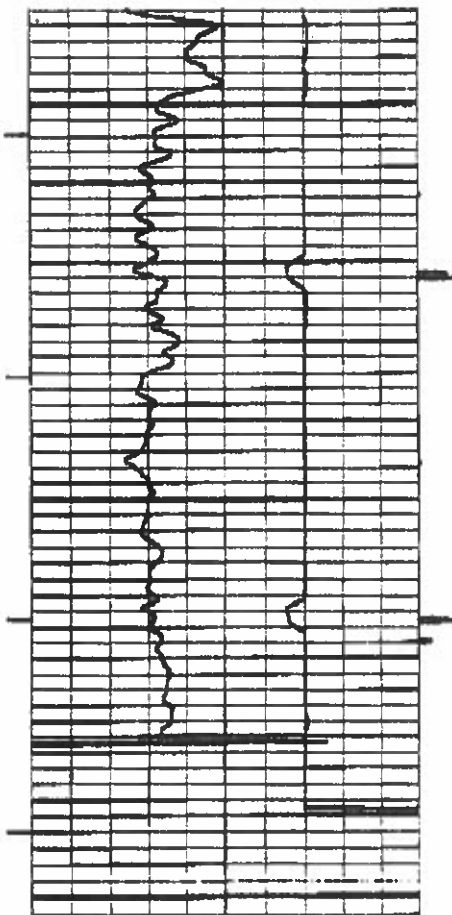


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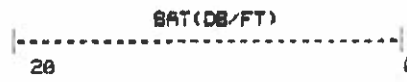
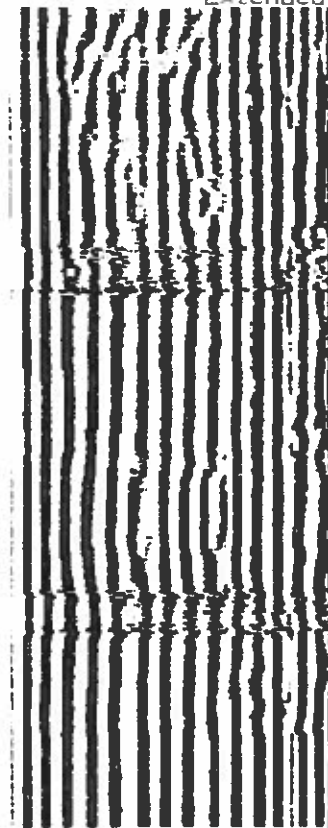
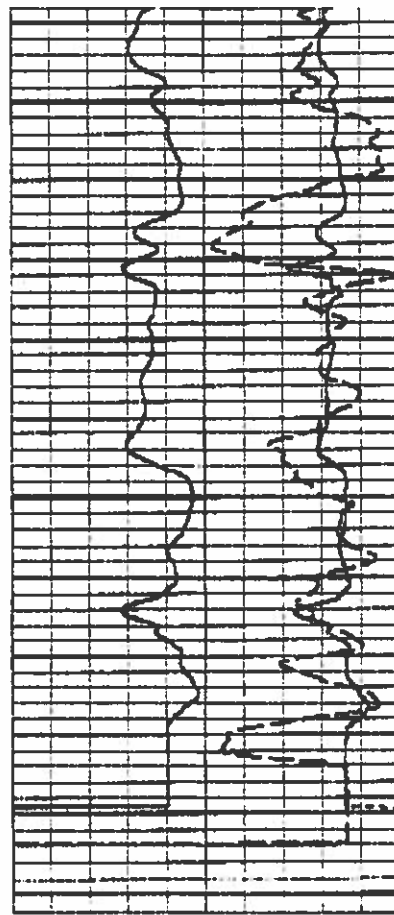
07500

07600





07100



FILE: 2

LOGGED UNDER 0 PSI.
7" 26 & 32 LB.

CURVE DELAY REPORT

CURVE	PHYS. DELAY	UNITS
OR	12.6	FT, IN
CCL	15.0	FT, IN
CCL1	15.0	FT, IN
CCL2	15.0	FT, IN
SSN	36.9	FT, IN
LSN	36.3	FT, IN

HTP	4.3	FT, IN
FOAI	0	FT, IN
SAMP	0	FT, IN
STT	0	FT, IN
LTT	4.3	FT, IN
PPT	0	FT, IN
PPAT	0	FT, IN
GBAL	0	FT, IN
ARI	2.6	FT, IN
A111	4.3	FT, IN
A231	0	FT, IN
A121	0	FT, IN
SIG	3.0	FT, IN
UOL	3.0	FT, IN

PARAMETERS

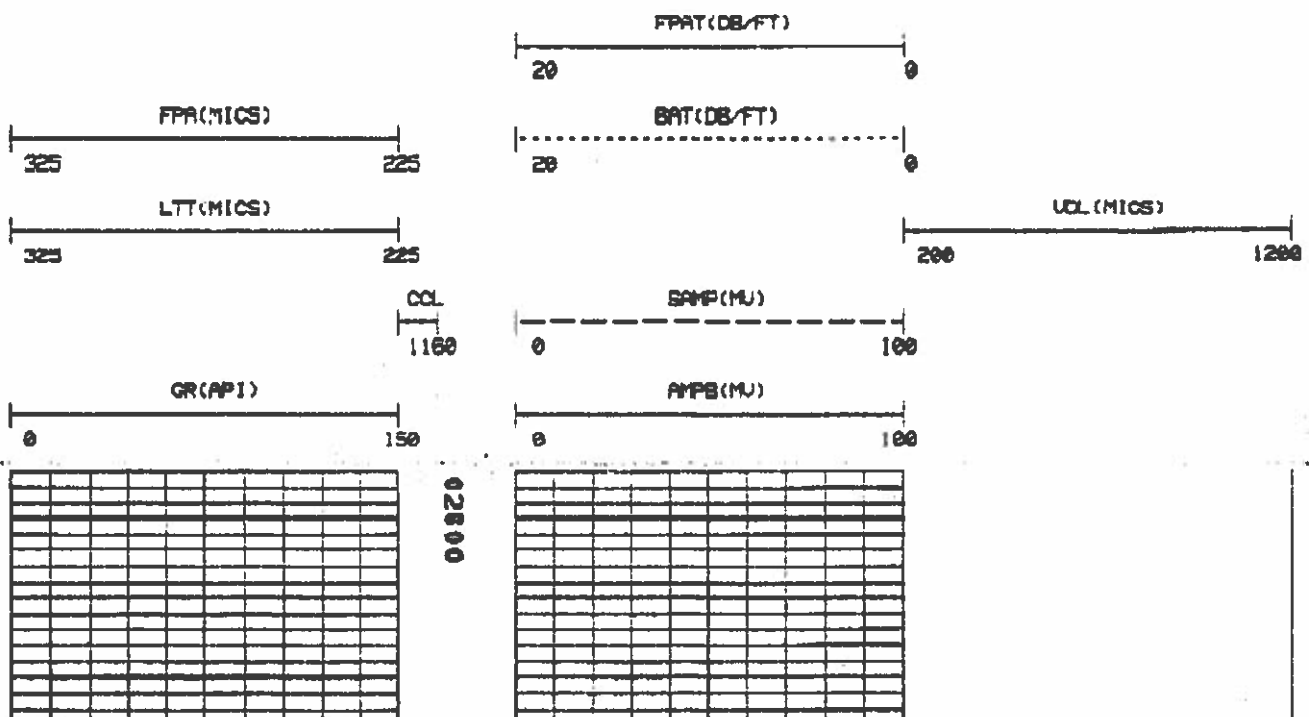
NAME	DEPTH INTERVAL	VALUE	UNITS
AFREE	7012 TO 2635	95.000	
ATTFP	7012 TO 2635	0.700	DB/FT
BRAM	7012 TO 2635	0.750	%
CAL COR	7012 TO 2635	7.875	INCH
CASING CMC	7012 TO 2635	NOT ACTIVE	
CEMENT STR	7012 TO 2635	1500.000	PSI
CHISM CN	7012 TO 2635	ACTIVE	
FLUID TIME	7012 TO 2635	180.000	USEC/FT
K1	7012 TO 2635	0.050	
M11	7012 TO 2635	0.033	
M23	7012 TO 2635	0.075	
MATRIX	7012 TO 2635	LIMESTONE	
NBIMX	7012 TO 2635	8.935	DB/FT
PIPE OD	7012 TO 2635	7.000	INCH
PPT	7012 TO 2635	217	USEC
SALINITY	7012 TO 2635	0.000	PPK
SBIMX	7012 TO 2635	8.935	DB/FT

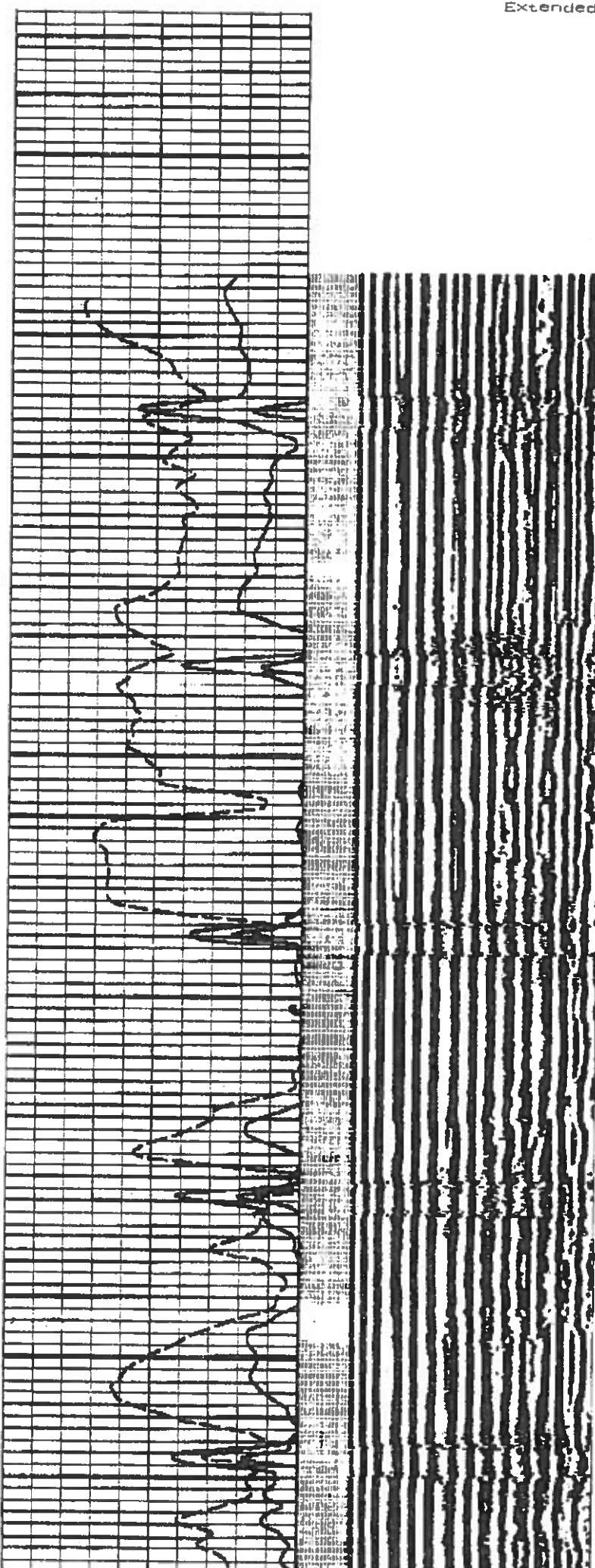
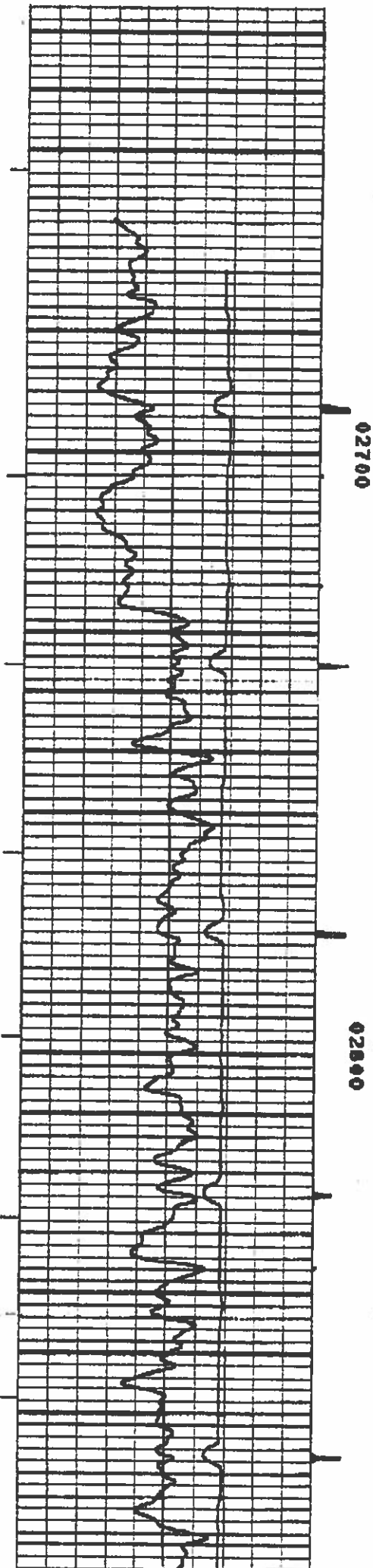
DISPLAY SCALE CHANGES

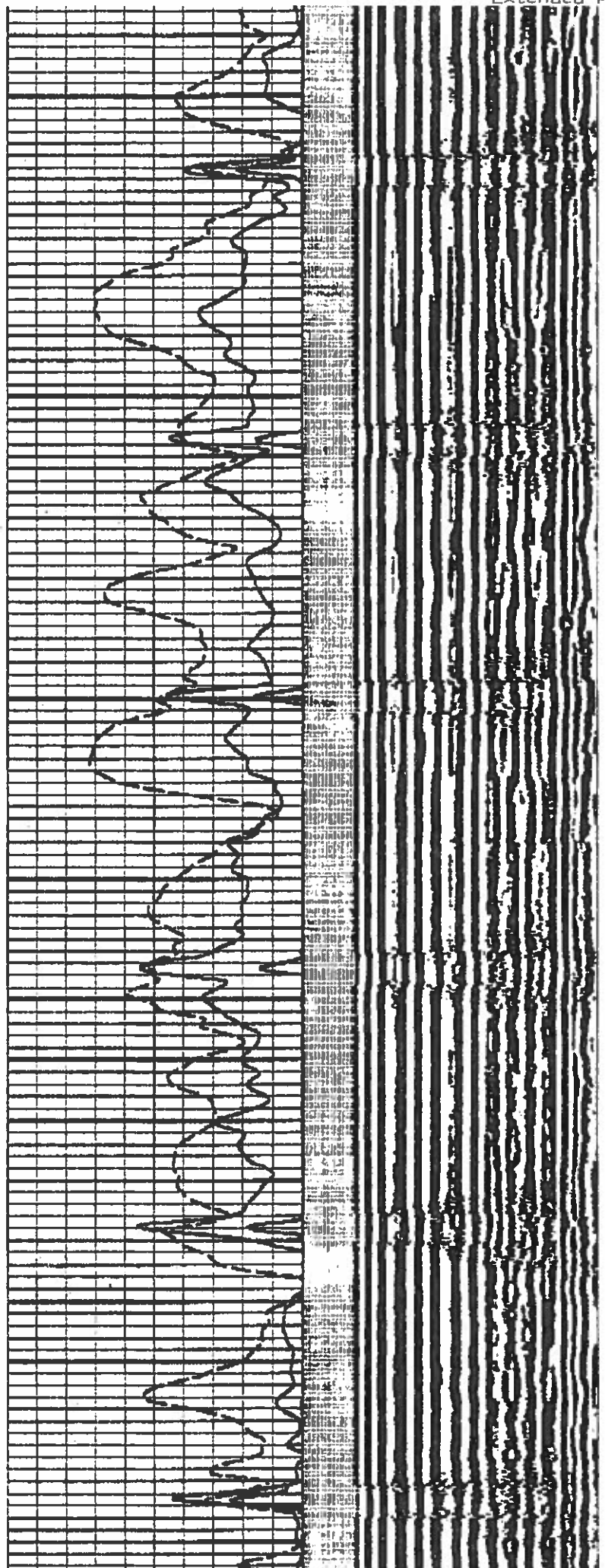
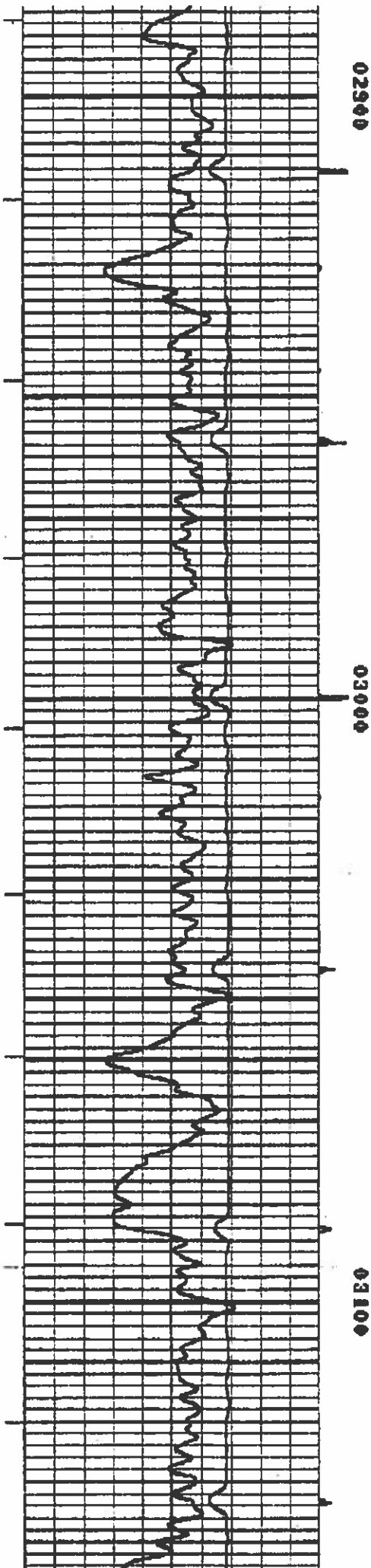
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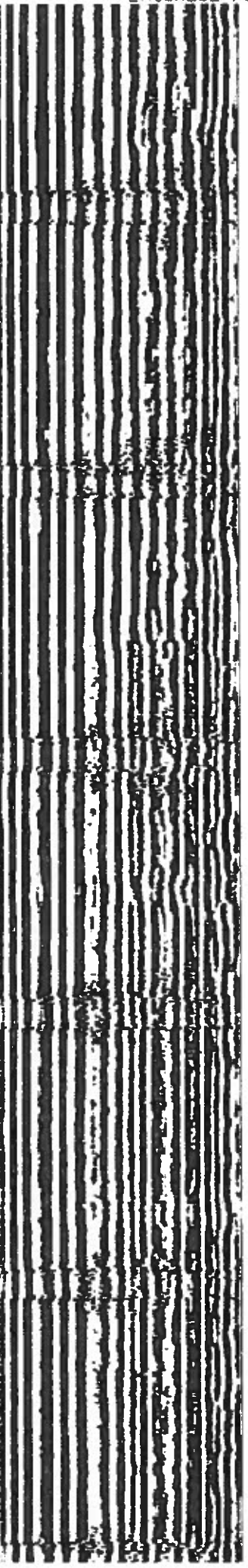
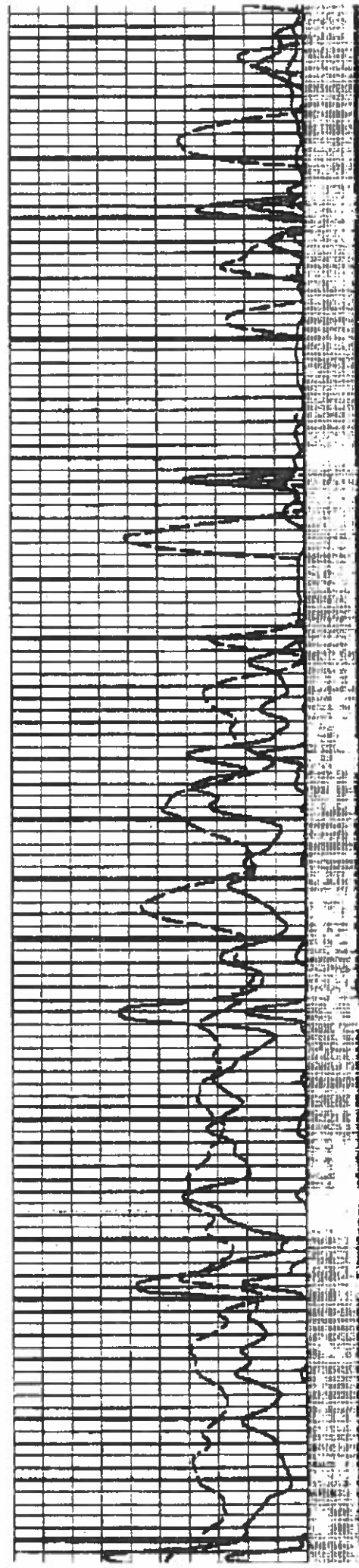
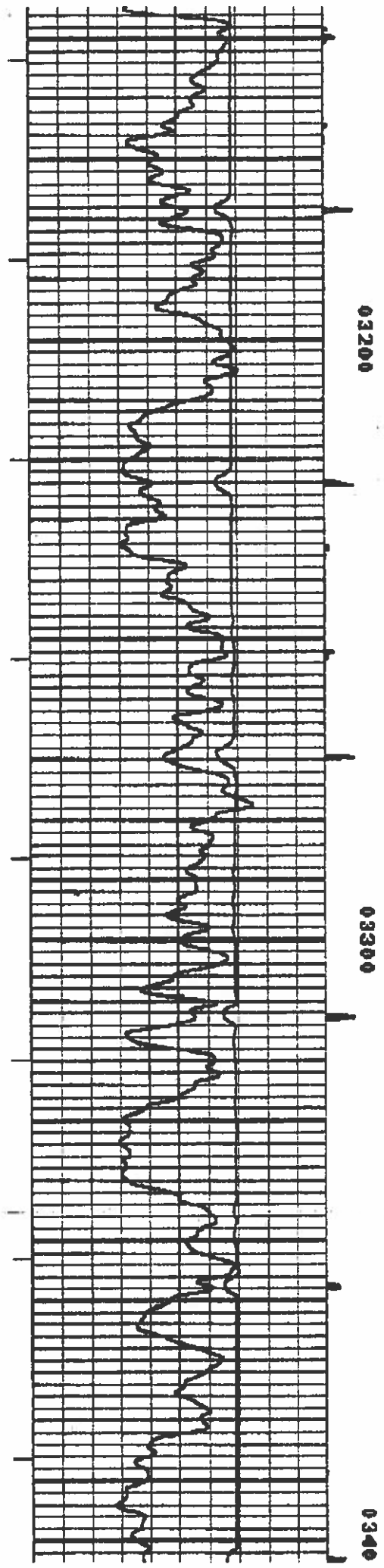
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 WELL NAME: BUZZARD CREEK NO. 7-13
 SERVICE: GBALE2 FILE: 8
 REVISION: F5YS236 REV:0002 VER:5.1

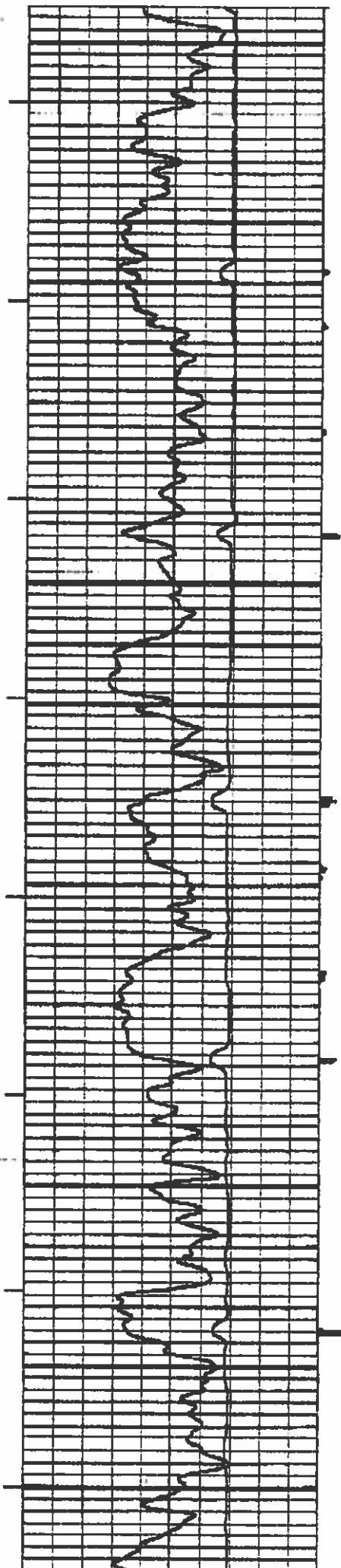
RUN: 1
 TRIP: 1
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 MODE: RECORD





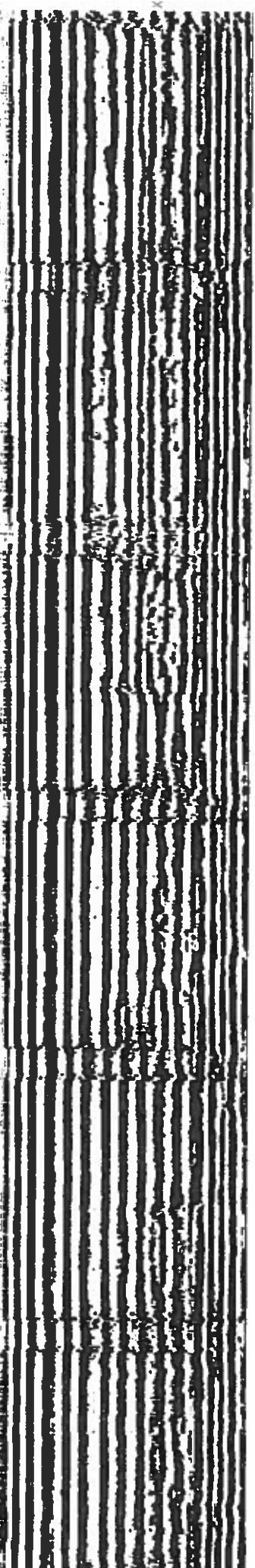
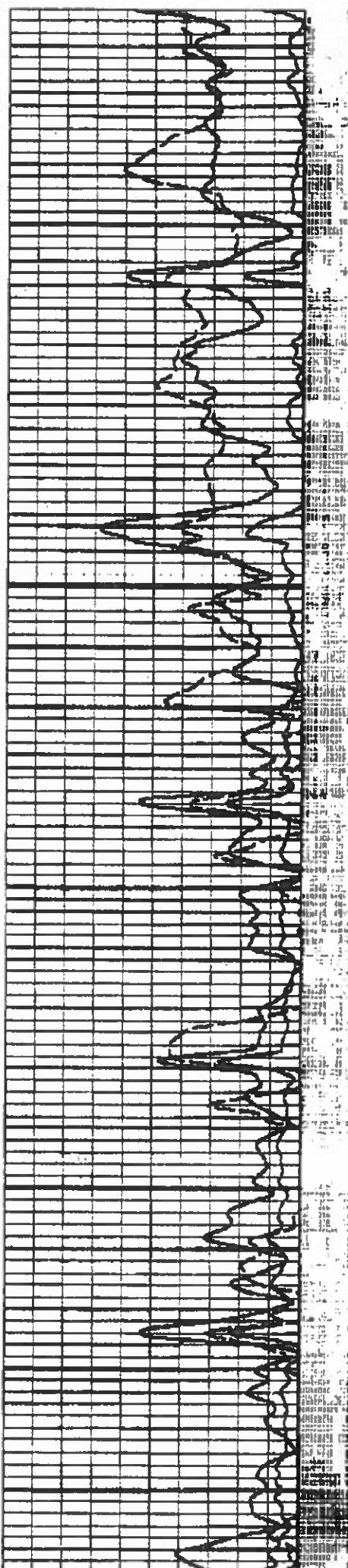


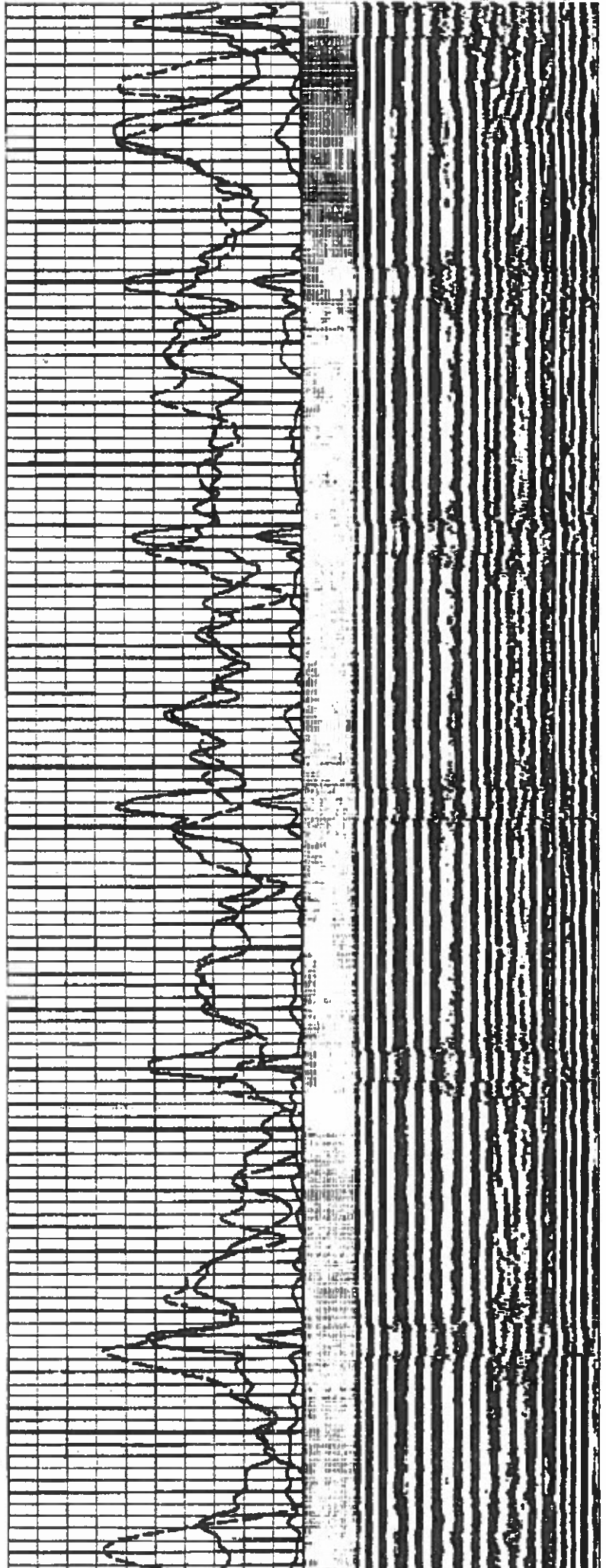
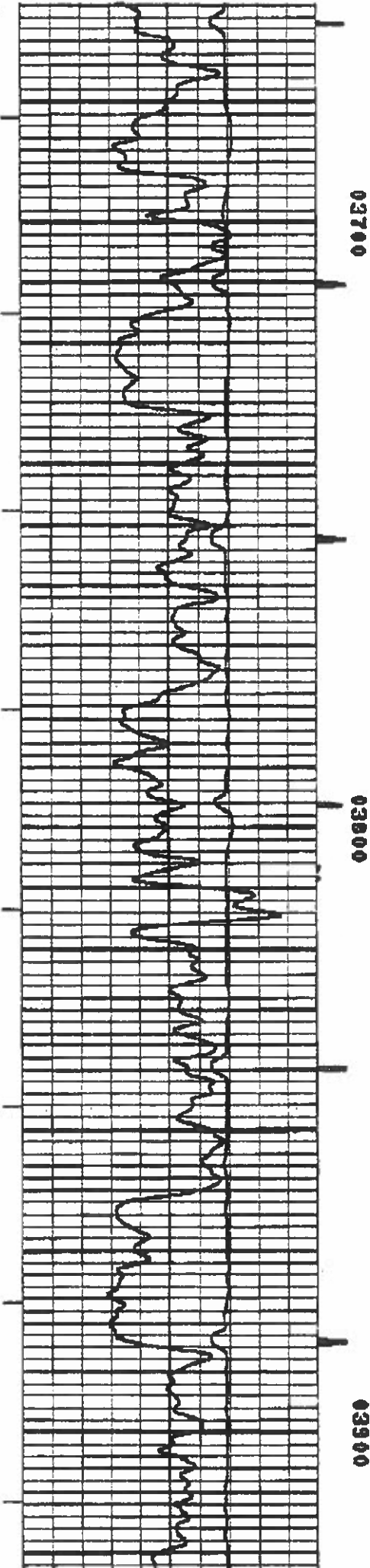


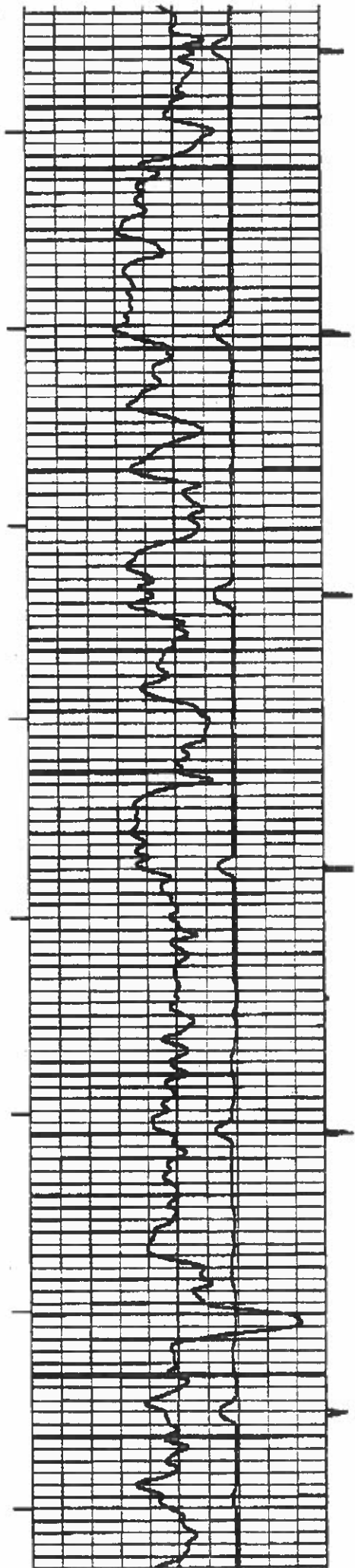


03500

03600

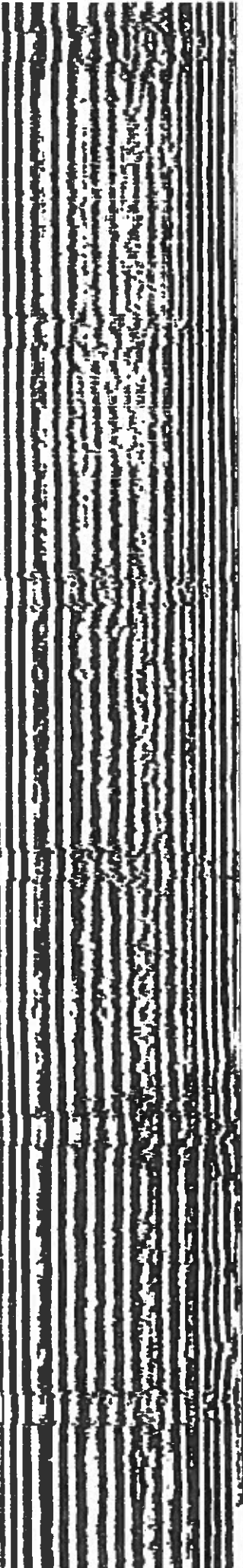
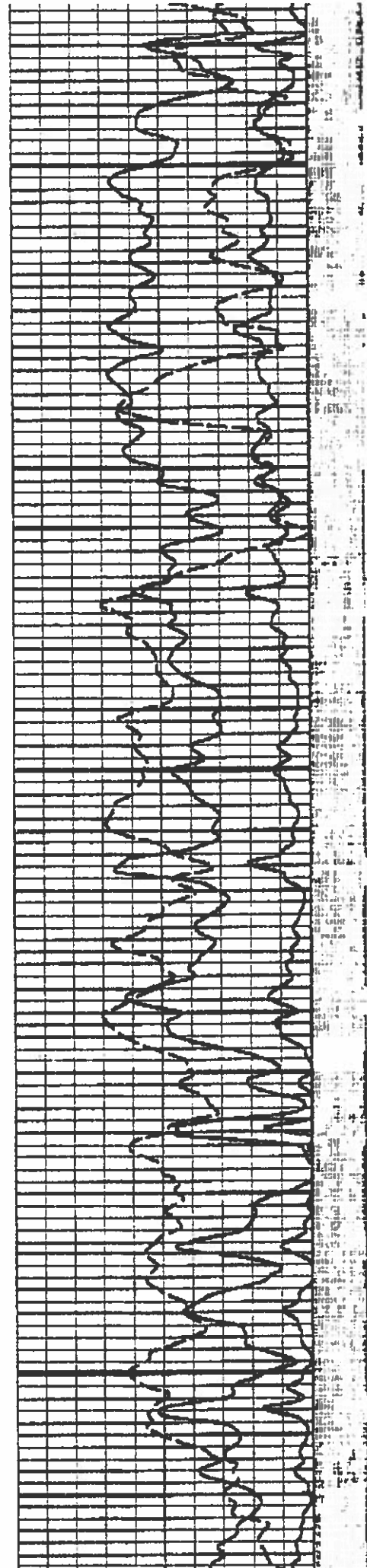


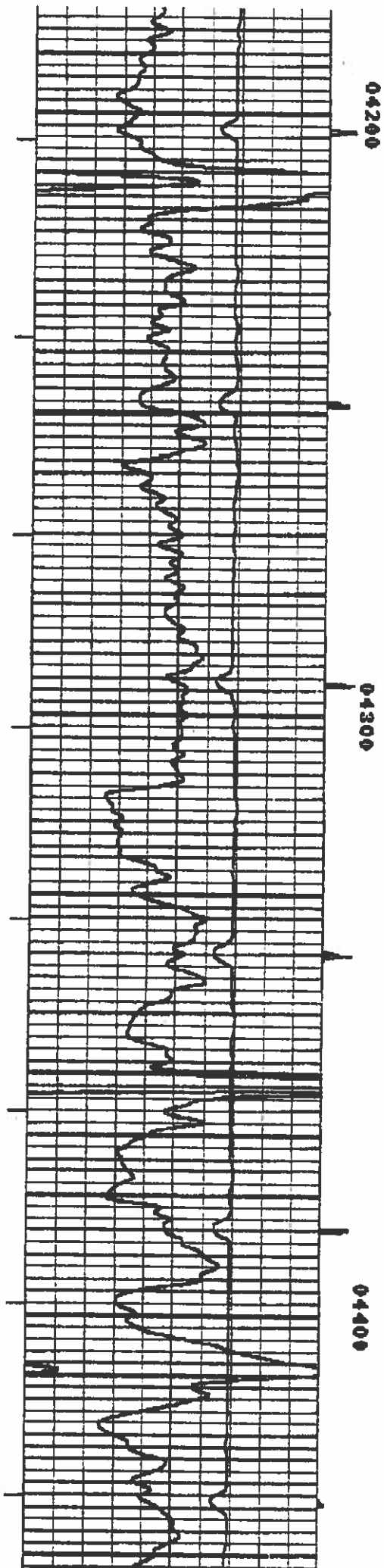
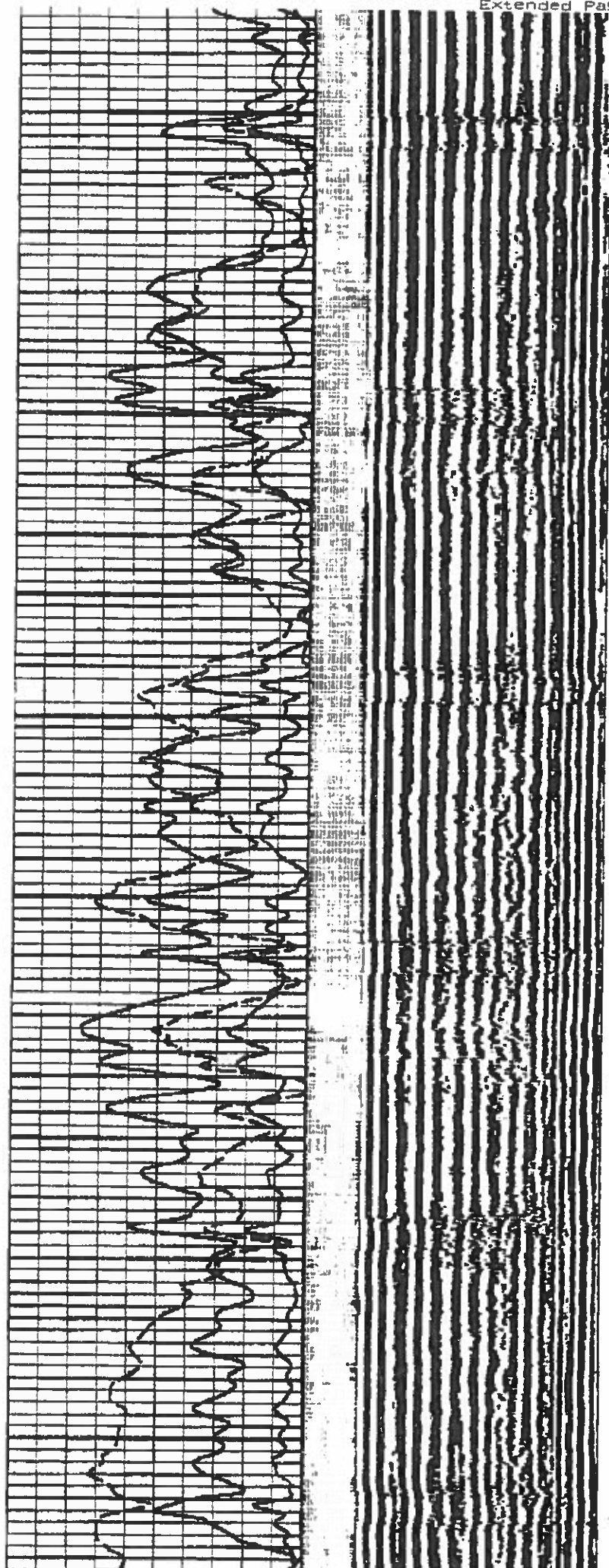


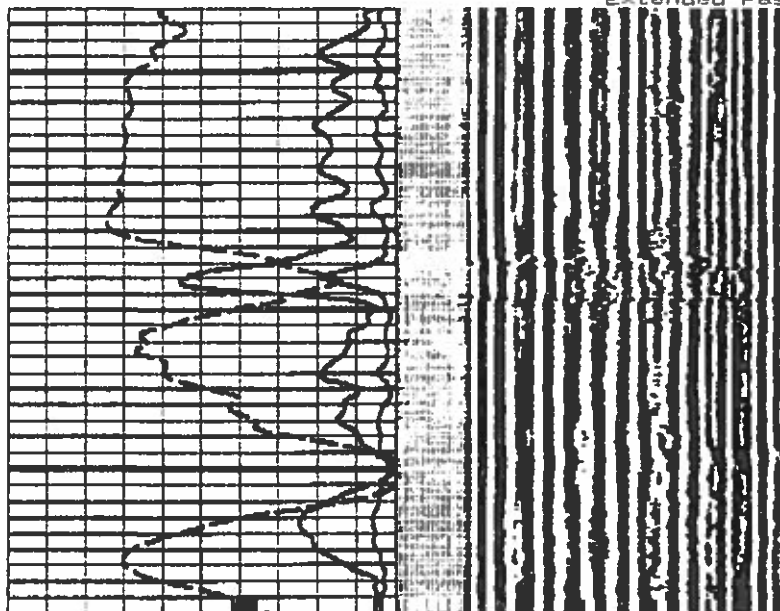


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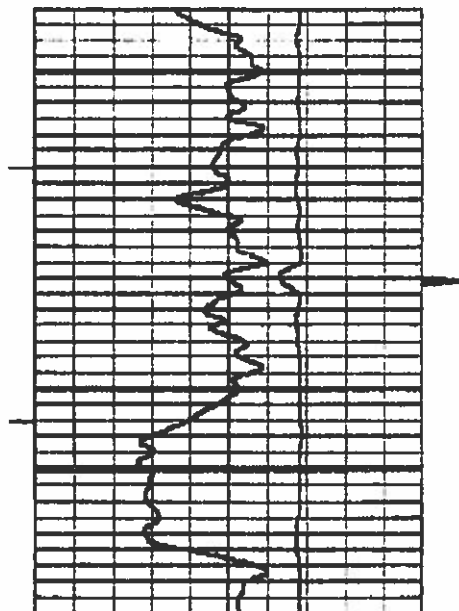
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04500




**ATLAS
WIRELINE
SERVICES**
**BOND ATTENUATION LOG
GAMMA RAY CASING COLLAR**

FILE NO.

COMPANY **UNION OIL OF CALIFORNIA**WELL **BUZZARD CREEK # 7-13**FIELD **BUZZARD CREEK**COUNTY **MESA** STATE **COLORADO**

THANK YOU!

LOCATION:

164' FNL. & 775' FEL

OTHER SERVICES
PERF.

SEC 13 TWP 13S RGE 93M

PERMANENT DATUM GROUND LEVEL ELEVATION 7384 FT.

ELEVATIONS

AS MEASURED FROM KELLY BURNING 28 FT. ABOVE PERMANENT DATUM
WELL. MESS. FROM KELLY BURNINGKB 748.4'
DL 748.2'
GL 738.4'DATE **10-JAN-1992** **11-JAN-1992**SERVICE ORDER **97273** **97273**DEPTH-DRILLER **7840'** **7840'**DEPTH-LOGGER **7740'** **7740'**BOTTOM LOGGED INTERVAL **7734'** **7734'**TOP LOGGED INTERVAL **2670'** **5690'**TYPE FLUID IN HOLE **WATER** **WATER**SALINITY PPM CL. **N/A** **N/A**DENSITY LB/GAL. **N/A** **N/A**LEVEL **740'** **FULL 1800 PSI.**MAX. REC. TEMP. DEG. F **N/R** **N/R**MFR. RIG TIME **5.5 HRS.** **3.5 HRS.**EQUIP. NO. / LOCATION **HL 6307 CASPER** **HL 6307 CASPER**RECORDED BY **P. RASHNUSSEN** **P. RASHNUSSEN**WITNESSED BY **D. LEEK** **D. LEEK**

BOREHOLE RECORD

NUMBER

BIT

FROM

TO

10

FOLD HERE

IN MAKING INTERPRETATIONS OF LOGS OUR
EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT
OF THEIR BEST JUDGEMENT, BUT SINCE
ALL INTERPRETATIONS ARE OPINIONS BASED
ON INFERENCES FROM ELECTRICAL OR OTHER
MEASUREMENTS, WE CANNOT, AND WE DO
NOT GUARANTEE THE ACCURACY OR CORRECT-
NESS OF ANY INTERPRETATION. WE SHALL
NOT BE LIABLE OR RESPONSIBLE FOR ANY
LOSS, COST, DAMAGES, OR EXPENSES WHAT-
SOEVER INCURRED OR SUSTAINED BY THE
CUSTOMER RESULTING FROM ANY INTERPRE-
TATION MADE BY ANY OF OUR EMPLOYEES.

CASING RECORD

SIZE

WEIGHT

FROM

SURF.

TO

7"

26/32

SURF.

7618'

REMARKS

LOG CORRELATED TO DEN./CN LOG RAN ON 20-DEC.-1991
FIRST LOG RUN MADE WITH 0 PSI.
SECOND LOG RUN MADE WITH 1800 PSI.

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
-----	------	------	------------	------------	----------

GR	15.38	353XA	CENTRALIZED
BAL	9.39	453XA	CENTRALIZED
CCL	9.46	3520XA	CENTRALIZED

Extended Page

MAIN PASS
LOGGED UNDER 1000 PSI.
7" 26 LB

FILE: 5

CURVE DELAY REPORT

CURVE	PHYS. DELAY	UNITS
GR	12.6	FT,IN
CCL	15.0	FT,IN
CCL1	15.0	FT,IN
CCL2	15.0	FT,IN
SSN	38.9	FT,IN
LSN	39.3	FT,IN
PMFB	4.3	FT,IN
FOAI	0	FT,IN
SAPP	0	FT,IN
STT	0	FT,IN
TT	4.3	FT,IN
PPT	0	FT,IN
PPAT	0	FT,IN
QBAL	0	FT,IN
ARI	2.6	FT,IN
A111	4.3	FT,IN
A231	0	FT,IN
A121	0	FT,IN
SIG	3.0	FT,IN
UDL	3.0	FT,IN

PARAMETERS

NAME	DEPTH	INTERVAL	VALUE	UNITS
AFREE	7143	TO 5652	95.000	
ATTFP	7143	TO 5652	0.700	DB/FT
BRAM	7143	TO 5652	0.750	%
CAL COR	7143	TO 5652	7.875	INCH
CASING CNO	7143	TO 5652	NOT ACTIVE	
CEMENT STR	7143	TO 5652	1500.000	PSI
CHISM CN	7143	TO 5652	ACTIVE	
FLUID TIME	7143	TO 5652	189.000	USEC/FT
K1	7143	TO 5652	0.056	
M11	7143	TO 5652	0.028	
M23	7143	TO 5652	0.030	
MATRIX	7143	TO 5652	LIMESTONE	
NBIMX	7143	TO 5652	8.935	DB/FT
PIPE OD	7143	TO 5652	7.000	INCH
PPT	7143	TO 5652	217	USEC
SALINITY	7143	TO 5652	0.000	PPK
SBIMX	7143	TO 5652	8.935	DB/FT

DISPLAY SCALE CHANGES

CURVE	DEPTH	INTERVAL	--- DISPLAY SCALES ---	
			LOW	HIGH
CCL	7143	TO 7000	155.000	170.000
	7000	TO 6948	140.000	155.000
	6947	TO 5652	145.000	155.000

WELL NAME: BUZZARD CREEK NO. 7-13

TRIP: 1

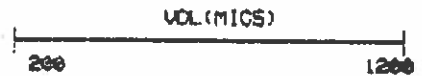
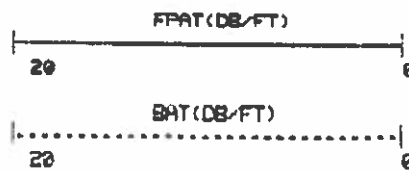
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DATE: 01/11/92

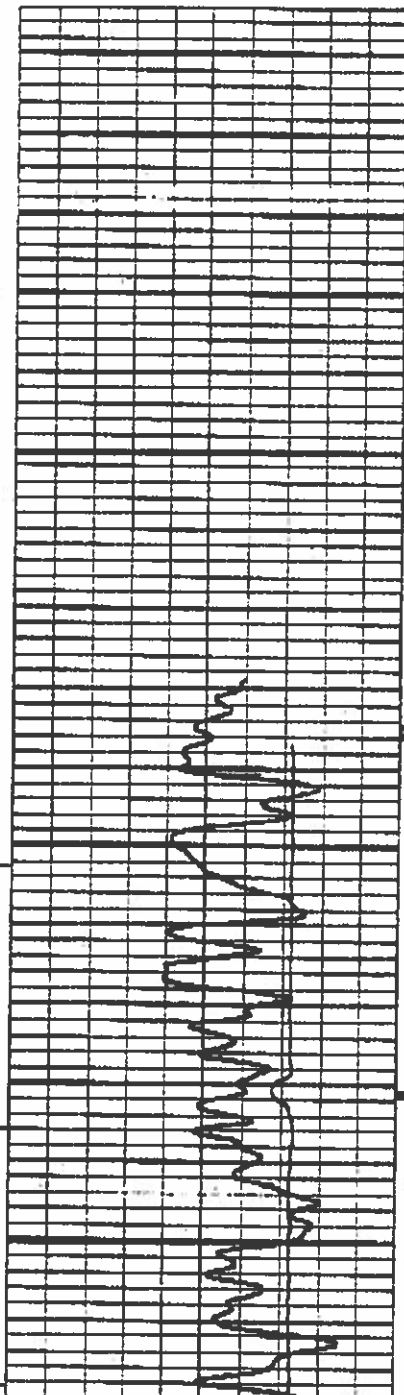
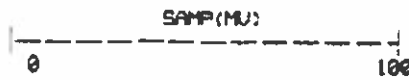
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REVISION: FSYS256 REV:0002 UER:5.1

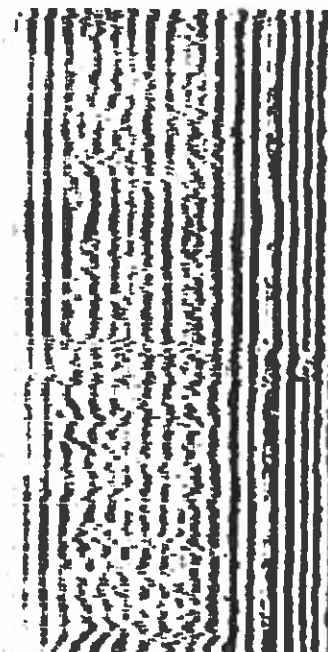
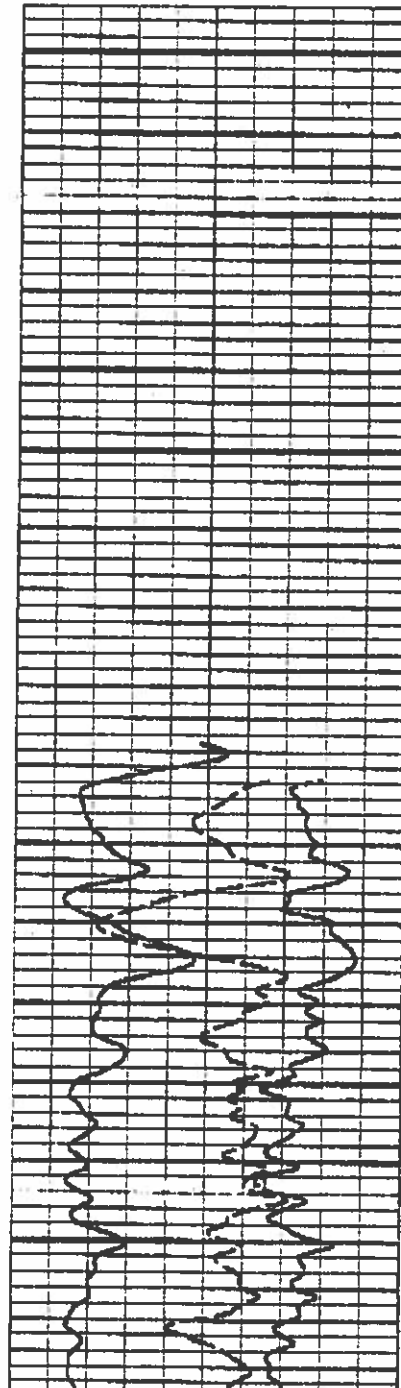
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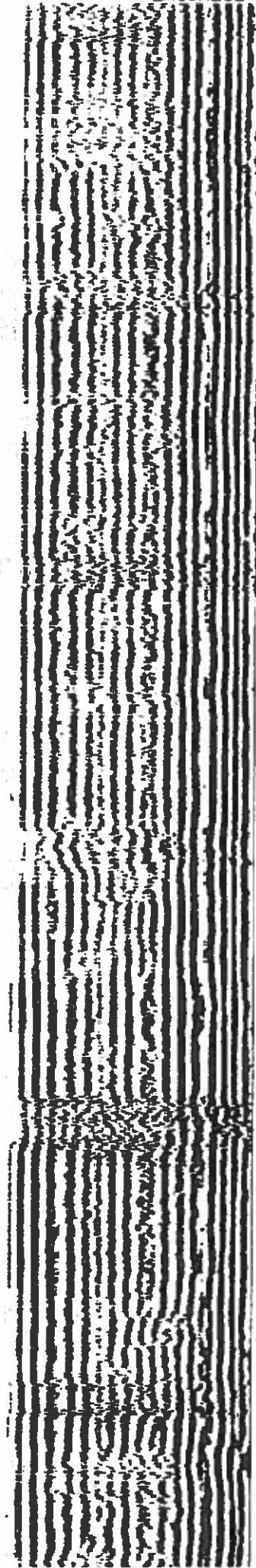
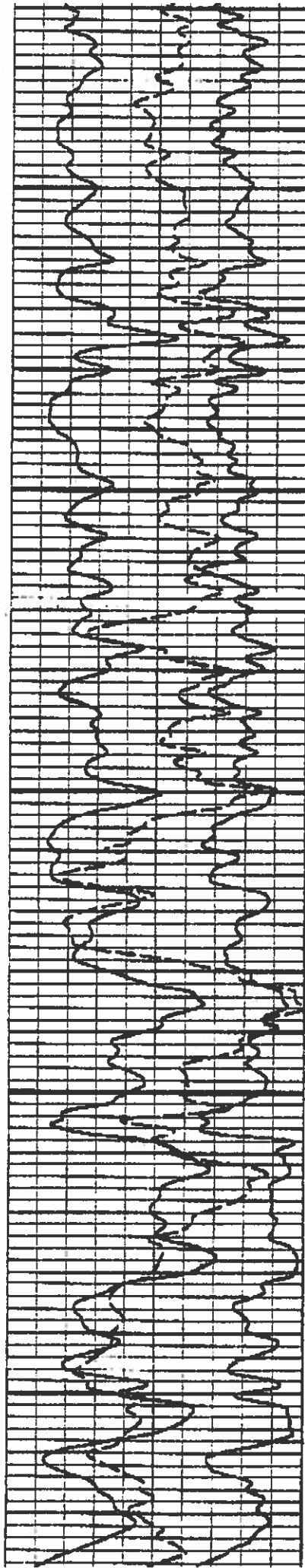
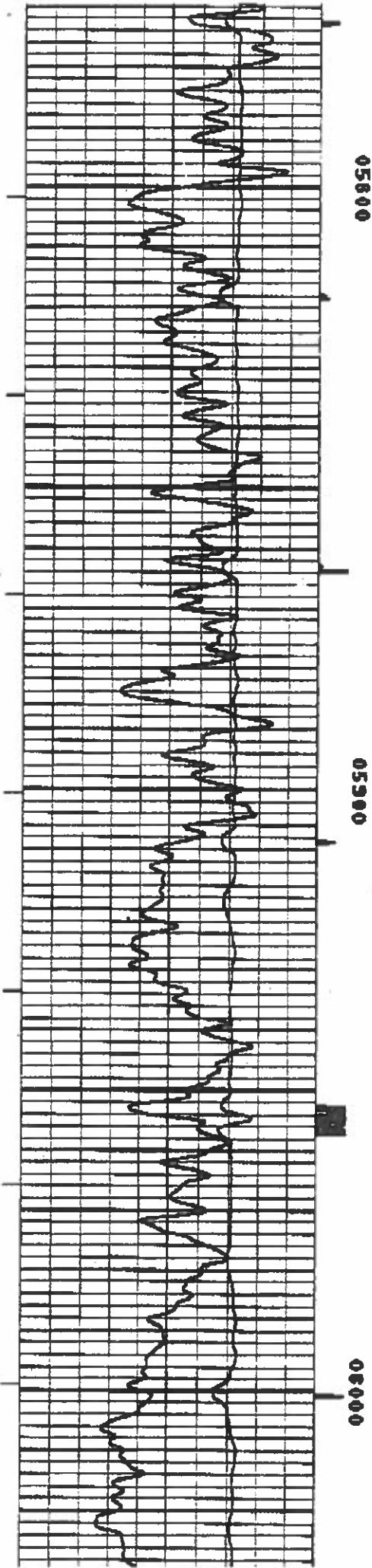


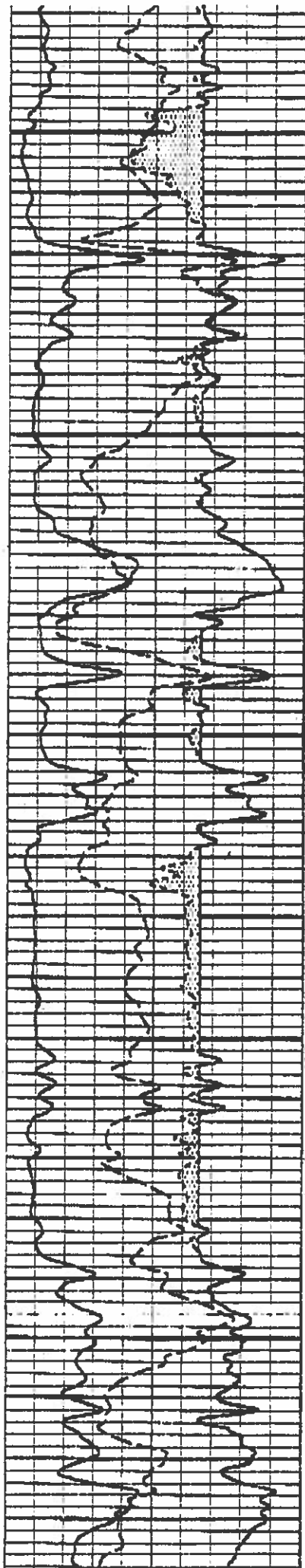
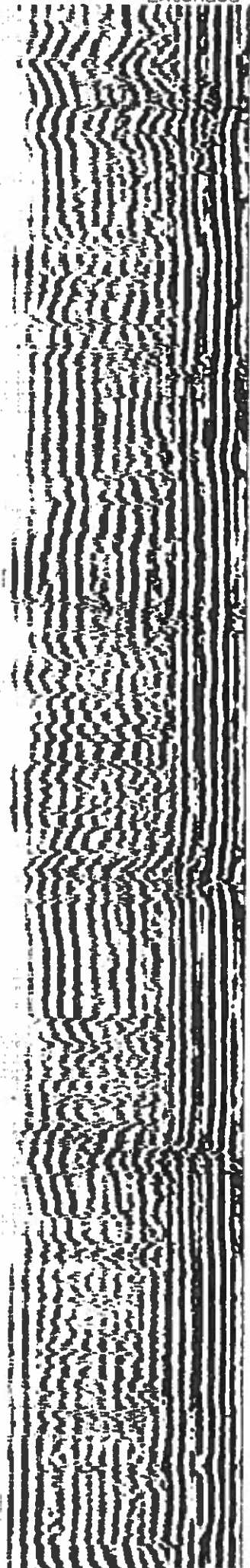
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1155



05800

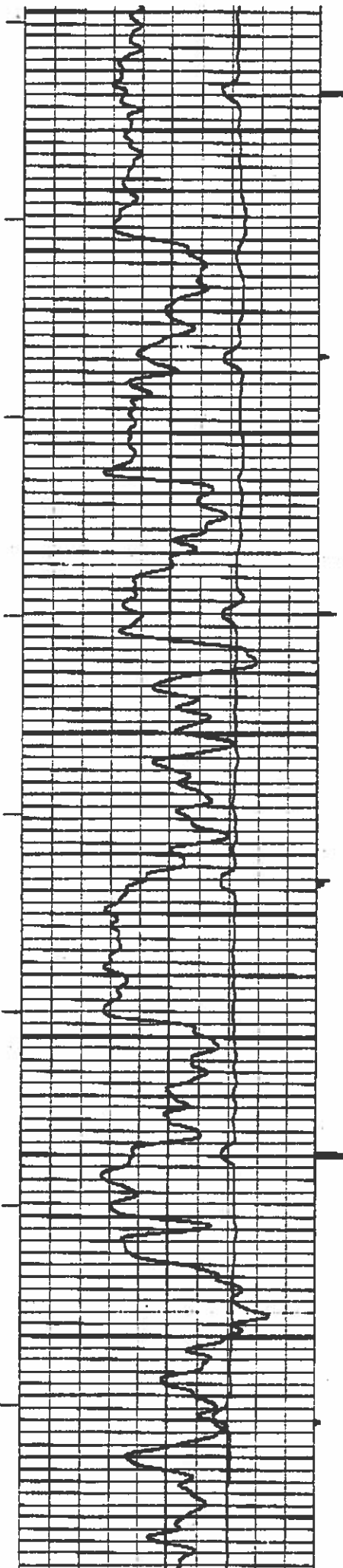


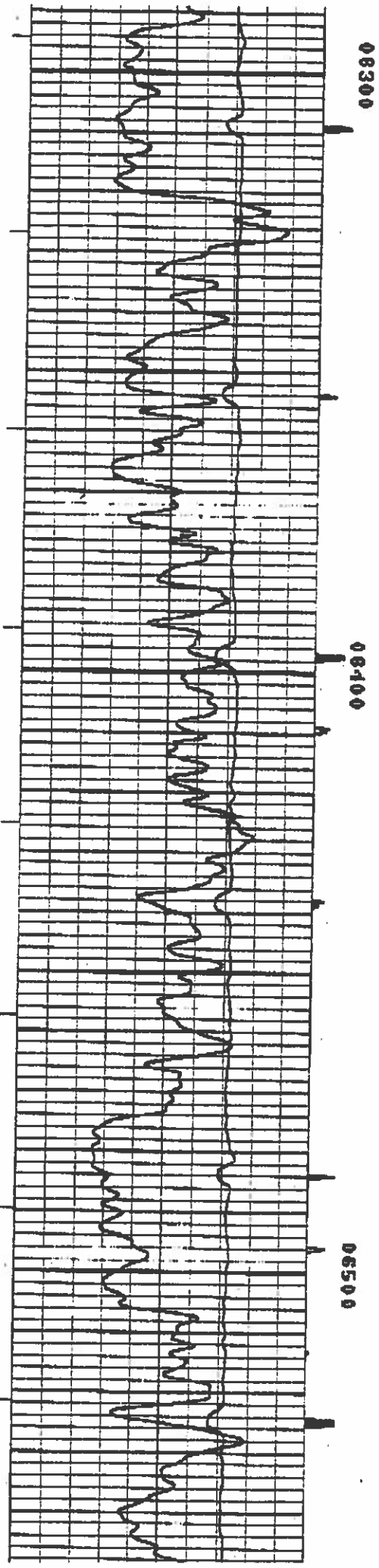
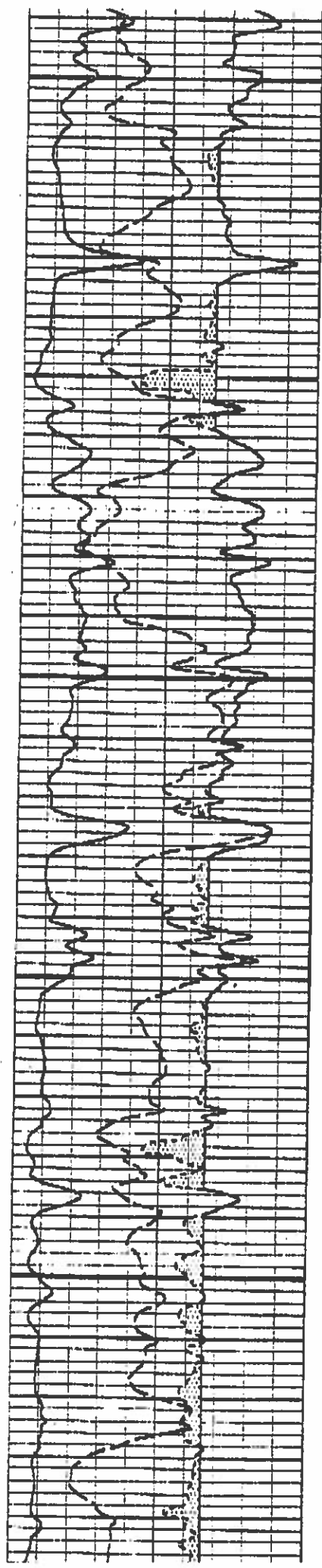
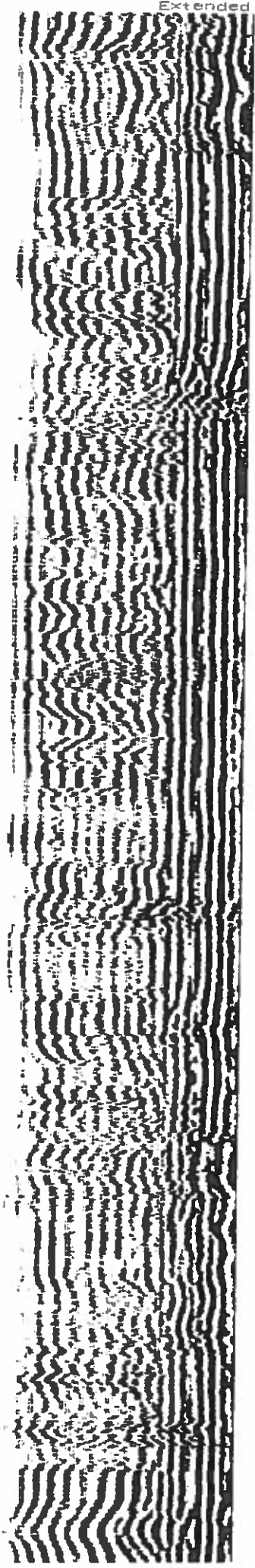


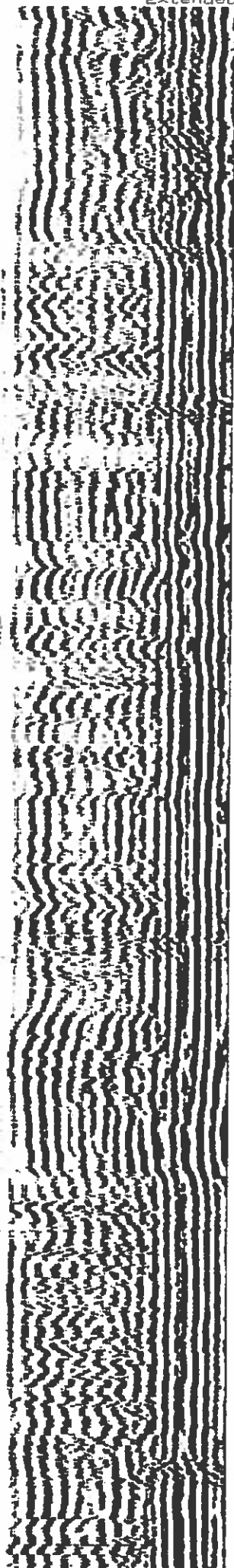
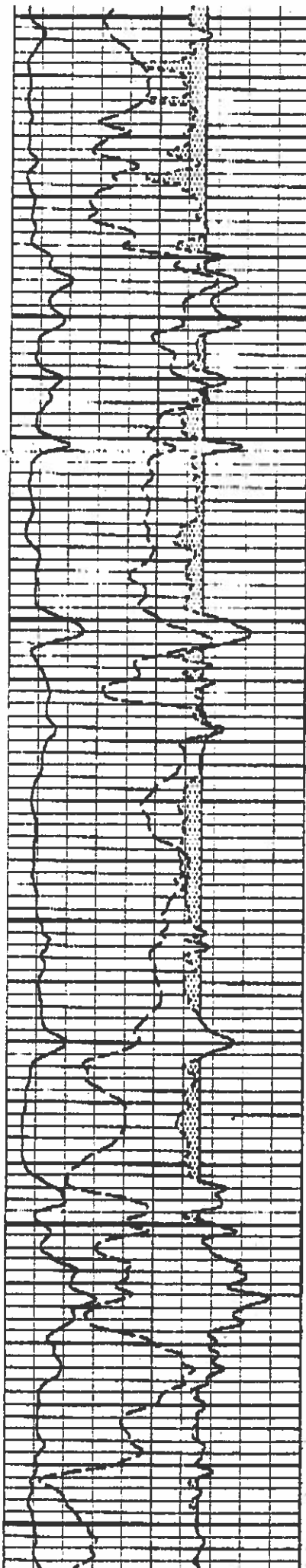
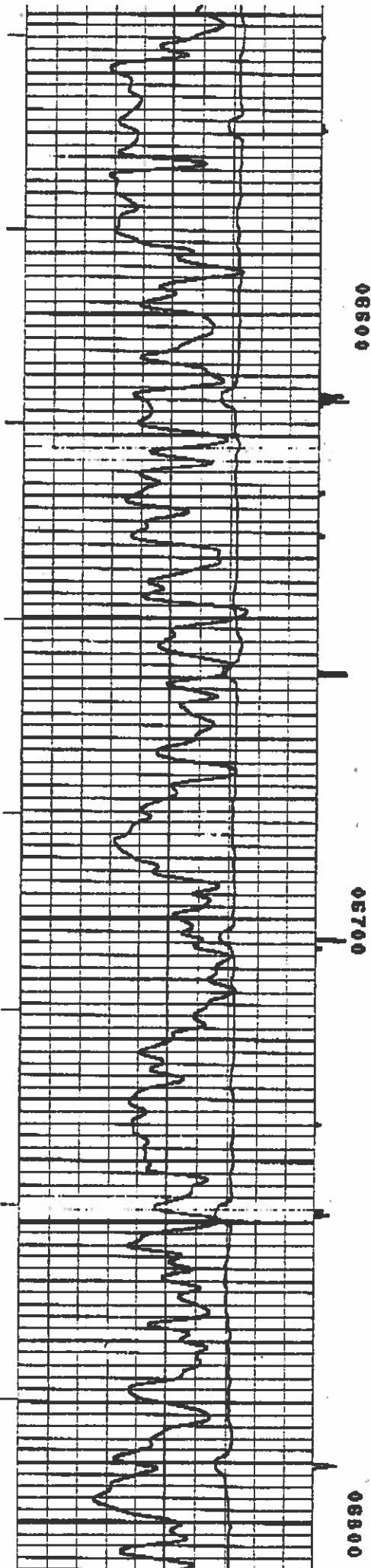


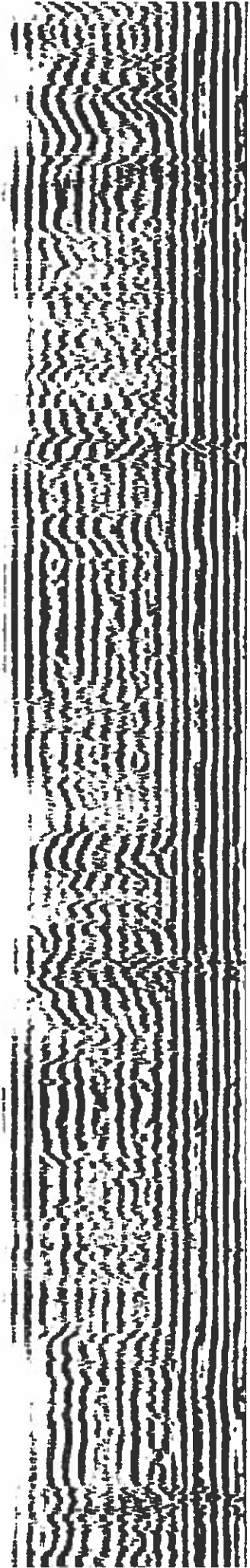
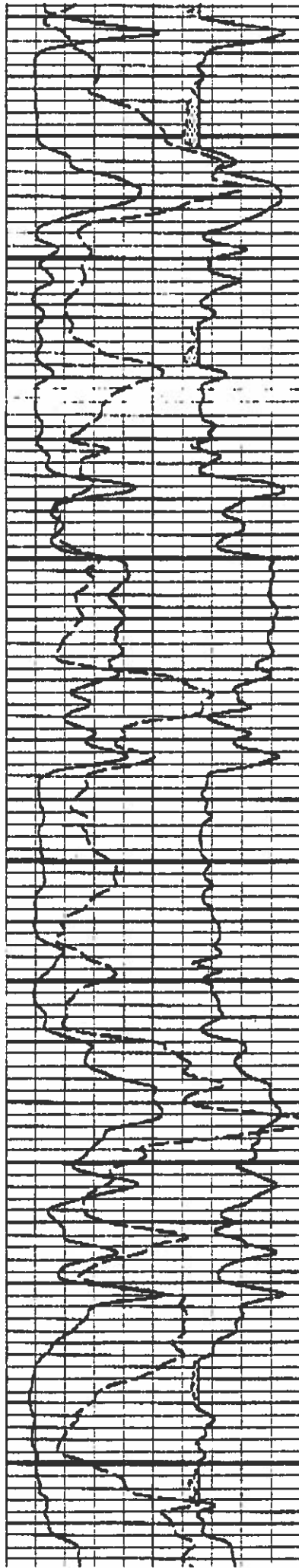
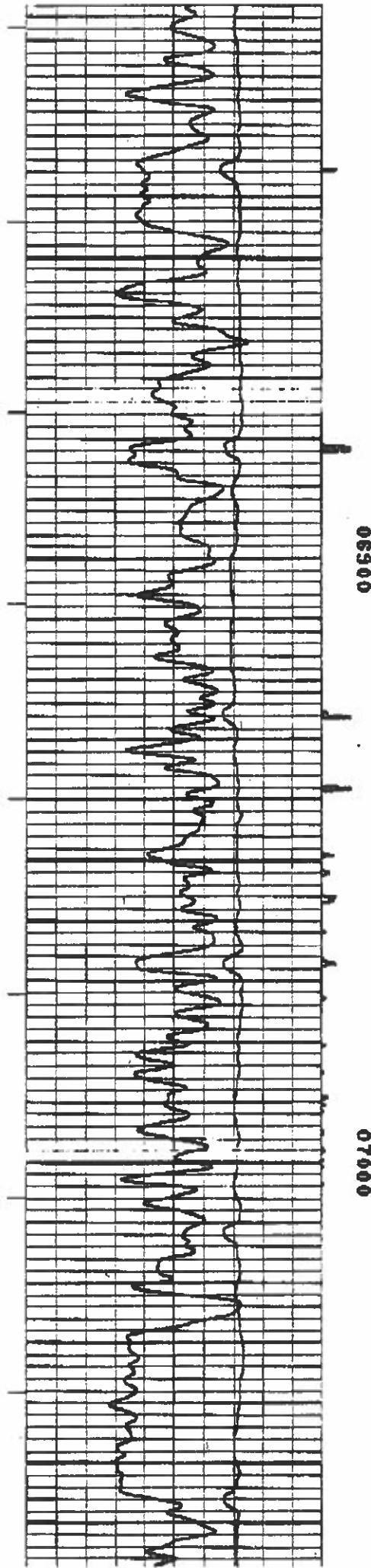
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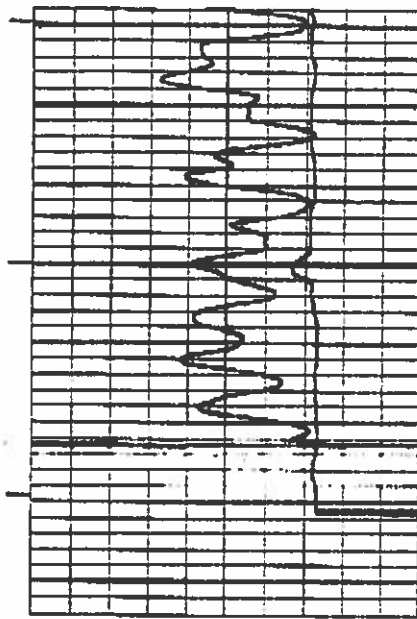
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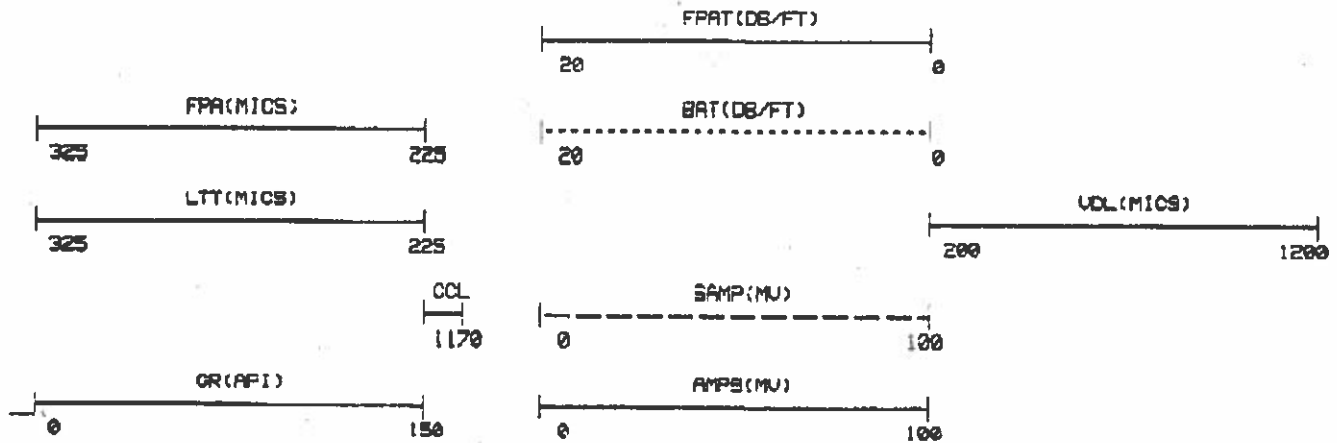
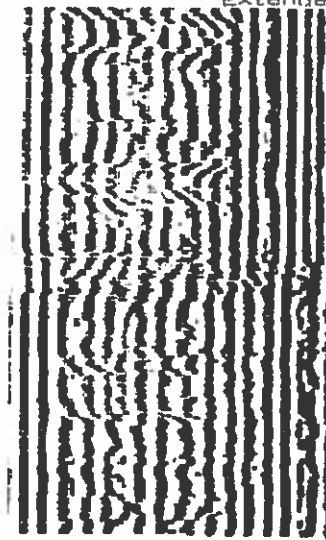
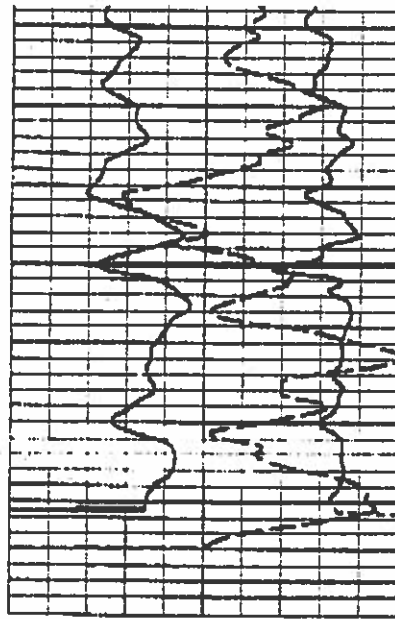








07100



FILE: .5

MAIN PASS
LOGGED UNDER 1000 PSI.
7" 32 LB.

FILE: 3

CURVE DELAY REPORT

CURVE	PHYS. DELAY	UNITS
GR	12.6	FT, IN
CCL	15.0	FT, IN
CCL1	15.0	FT, IN
CCL2	15.0	FT, IN
SSN	38.9	FT, IN
LSN	39.3	FT, IN
AMPS	4.3	FT, IN
FOR1	0	FT, IN
SAMP	0	FT, IN
STT	0	FT, IN
LTT	4.2	FT, IN

PPT	7.0	FT,IN
PPAT	0	FT,IN
QBAL	0	FT,IN
ARI	2.6	FT,IN
A111	4.3	FT,IN
A231	0	FT,IN
A121	0	FT,IN
SIG	3.0	FT,IN
UDL	3.0	FT,IN

PARAMETERS

NAME	DEPTH	INTERVAL	UNIT	UNITS
------	-------	----------	------	-------

AFREE	7751 TO 7013	95.000	
ATTFP	7751 TO 7013	0.700	DB/FT
BRAM	7751 TO 7013	0.750	%
CAL COR	7751 TO 7013	7.875	INCH
CASING CNO	7751 TO 7013	NOT ACTIVE	
CEMENT STR	7751 TO 7013	1500.000	PSI
CHISM CN	7751 TO 7013	ACTIVE	
FLUID TIME	7751 TO 7013	189.000	USEC/FT
K1	7751 TO 7013	0.056	
M11	7751 TO 7013	0.028	
M23	7751 TO 7013	0.090	
MATRIX	7751 TO 7013	LIMESTONE	
NBIMX	7751 TO 7013	7.743	DB/FT
PIPE OD	7751 TO 7013	7.000	INCH
PPT	7751 TO 7013	217	USEC
SALINITY	7751 TO 7013	0.000	PPK
SBIMX	7751 TO 7013	7.743	DB/FT

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: UNION OIL OF CALIFORNIA

RUN: 1

WELL NAME: BLIZZARD CREEK NO. 7-13

TRIP: 1

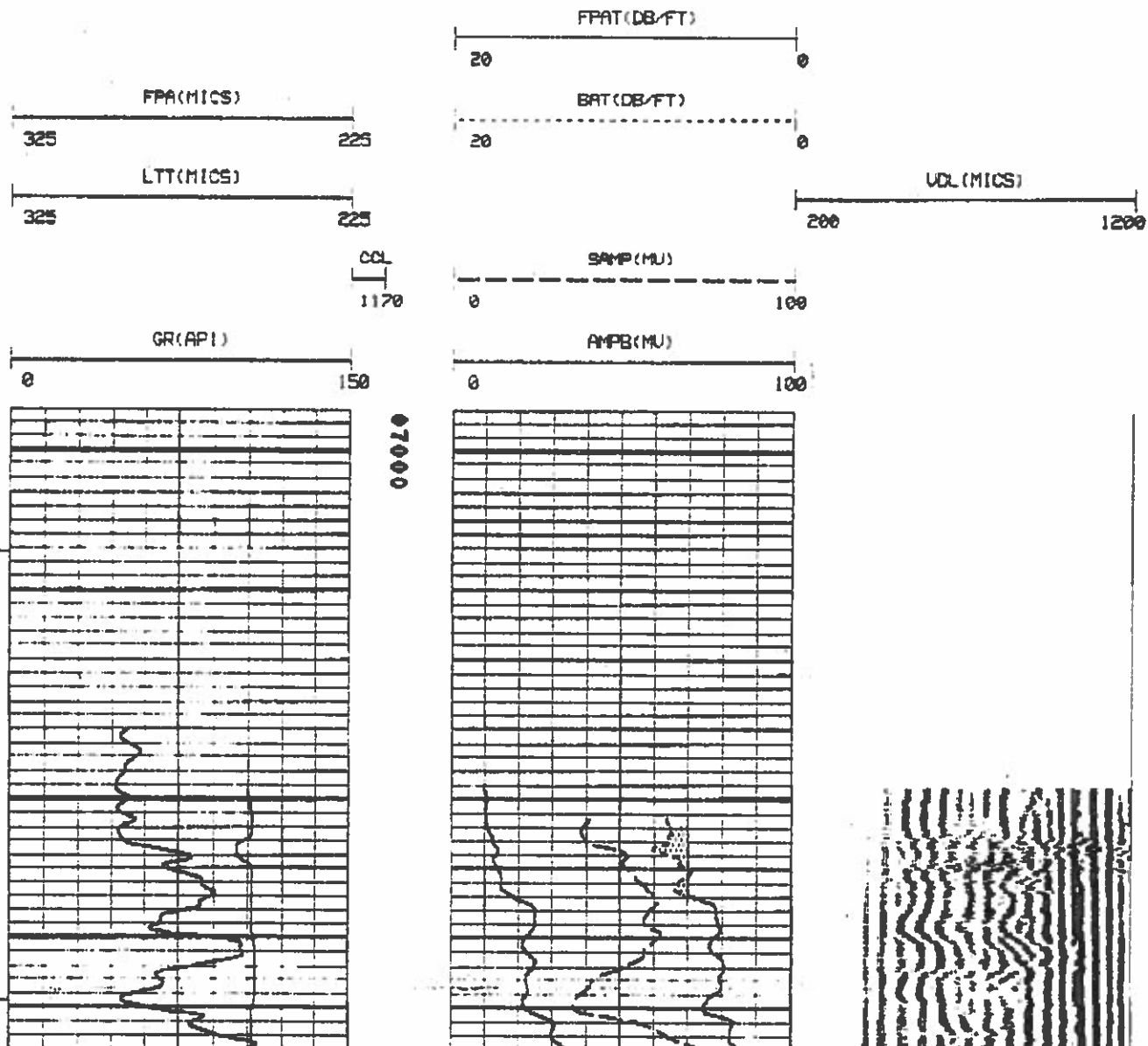
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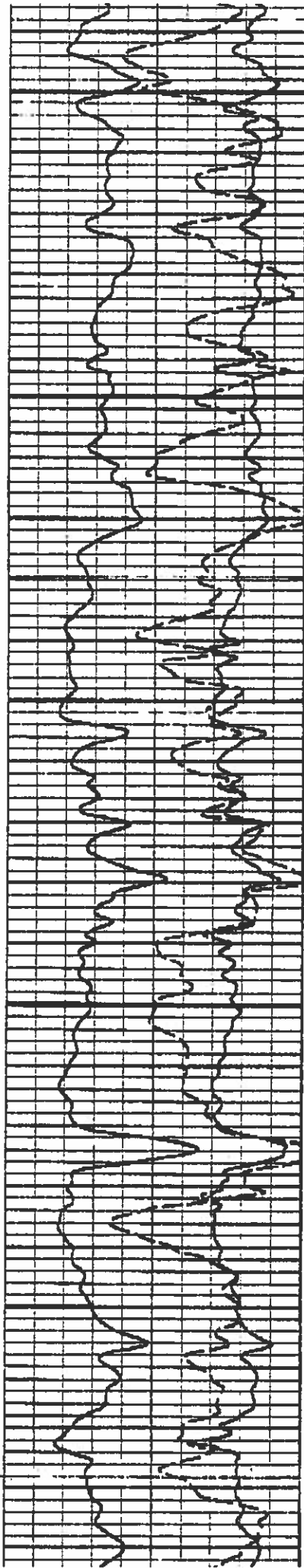
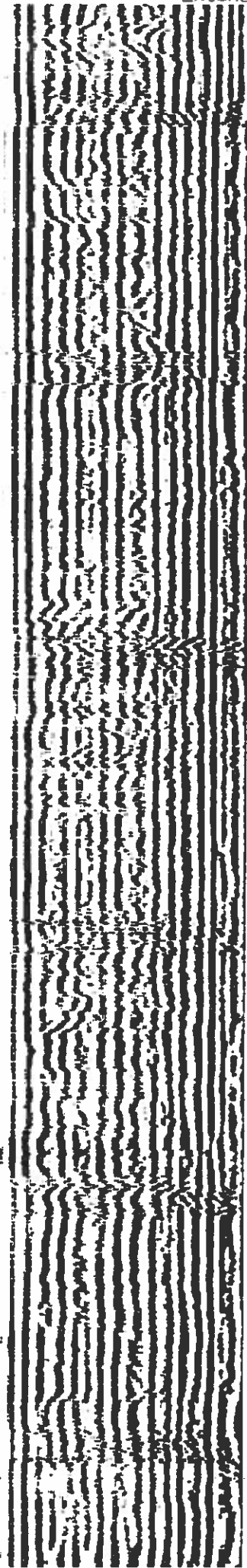
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07300

