G02808 duplicate
Permit #30026

RELEASED

Schlumberger

COMPENSATED NEUTRON/LITHODENSITY W/GR

CSU

COMPANY: STONE PETROLEUM

WELL: E.M. MCCARTNEY #1

FIELD: WILDCAT
COUNTY: ATCHISON
STATE: MISSOURI
NATION: USA
LOCATION: 570' FSL & 501' FWL

SEC: 5 TWP: 64N RGE: 39W

RECEIVED
OCT 28 1987
MO Oil & Gas Council
Economic Geology

OTHER SERVICES-
DIL-SFL-GR
CNL-LDT-GR
BHC-GR
EPT-GR
ML-GR
CYBERLOOK

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 1038.7 F
LOG MEASURED FROM: KB
6.5 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 1045.2 F
DF:
GL: 1038.7 F

PROGRAM
TAPE NO:
26.2
SERVICE
ORDER NO:
434779

DATE: 8 MAR 86
RUN NO: 1

DEPTH-DRILLER: 3790.0 F
DEPTH-LOGGER: 3788.0 F
BTM. LOG INTERVAL: 3785.0 F
TOP LOG INTERVAL: 462.0 F

CASING-DRILLER: 463 F
CASING-LOGGER: 462 F
CASING: 9 5/8"

BIT SIZE: 8 3/4"

TYPE FLUID IN HOLE: CHEMICAL
DENSITY: 9.0 LB/G
VISCOSITY: 45.0 S
PH: 8.5
FLUID LOSS: 8.0 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 2.110 OHMM AT 49.0 DEGF
RMF: 1.270 OHMM AT 64.0 DEGF
RMC: 2.220 OHMM AT 64.0 DEGF
SOURCE RMF/RMC: PRESS /PRESS
RM AT BHT: 1.009 OHMM AT 110. DEGF
RMF AT BHT: .770 OHMM AT 110. DEGF
RMC AT BHT: 1.347 OHMM AT 110. DEGF

TIME CIRC. STOPPED: 1900 3/8
TIME LOGGER ON BTM.: 2300 3/8

MAX. REC. TEMP: 110.0 DEGF

LOGGING UNIT NO: 8353
LOGGING UNIT LOC: GREAT BEND
RECORDED BY: INGRAHAM
WITNESSED BY: EBLE

REMARKS:

THANKS FROM THE CREW OF 8353: DAVE, RON, & MIKE
CHLORIDES = 1000 PPM
EPT-ML RAN IN COMBINATION WITH LDT-CNL
SONDE ECCENTERED BOWSPRING USED

EQUIPMENT NUMBERS-

GREEN DITD
BLACK SGTL
SILVER EPTD
GREEN SGTE
BLACK TCCA
ORANGE PCDB
BLACK LDTC
BLUE SPAA
GREEN CSTU
BLACK CNTH
GREEN SLTL
RED CSTU

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 INTERPRETATIONS, 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 AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

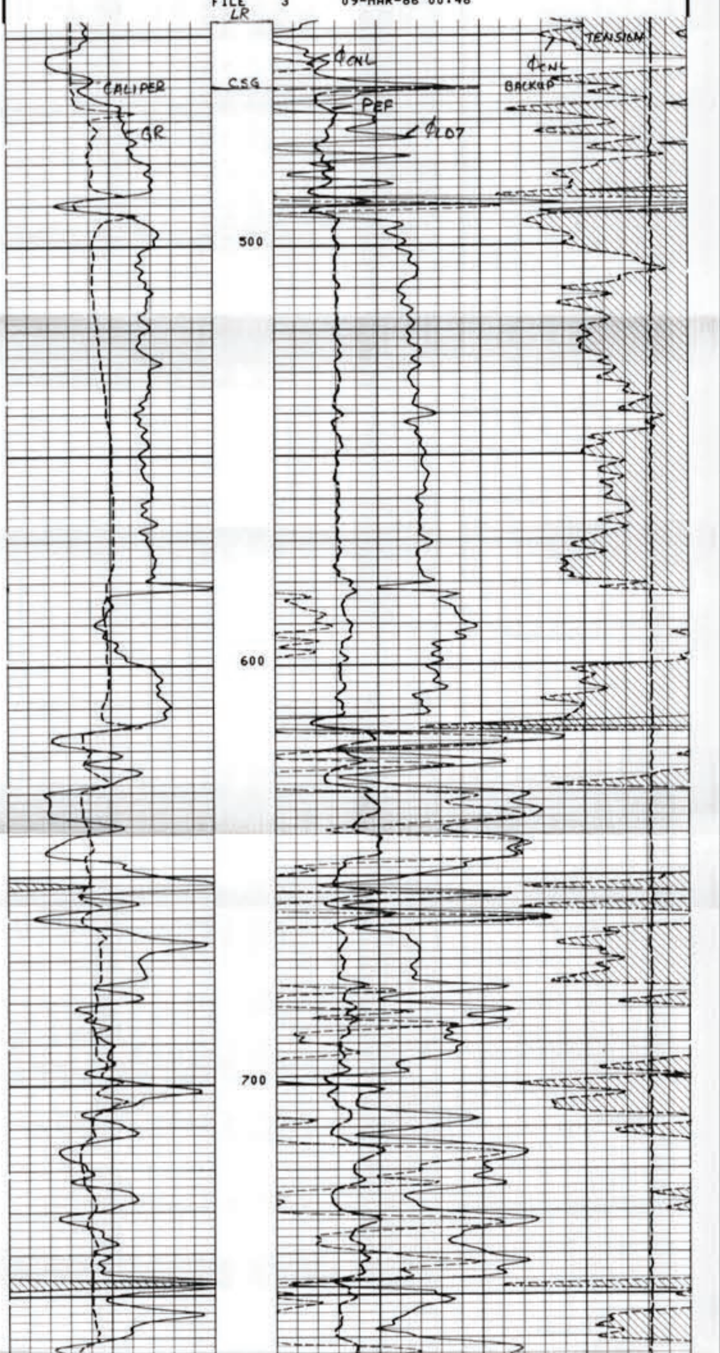
FILE 5 09-MAR-86 00:53
DATA ACQUIRED 00- -00 00:00

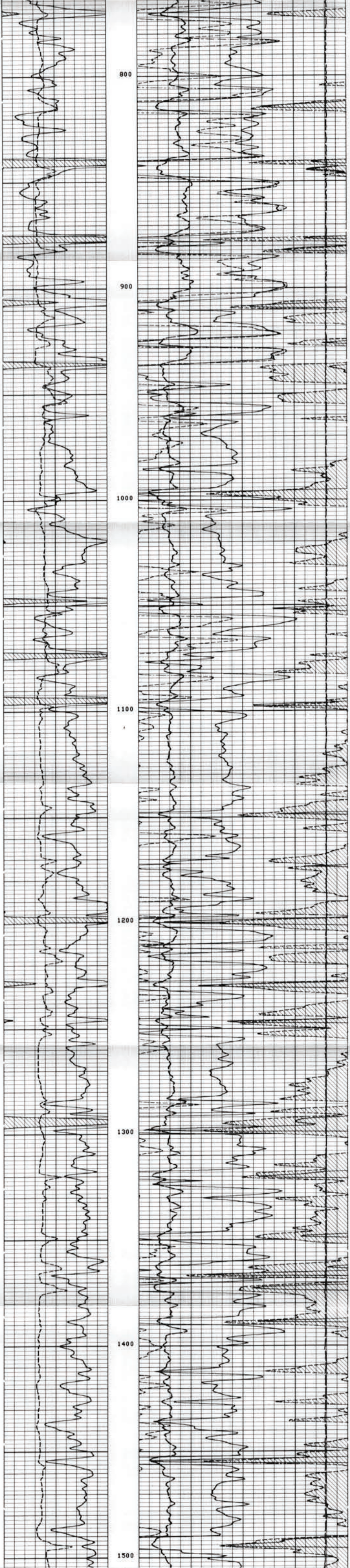
CHANGED PARAMETERS

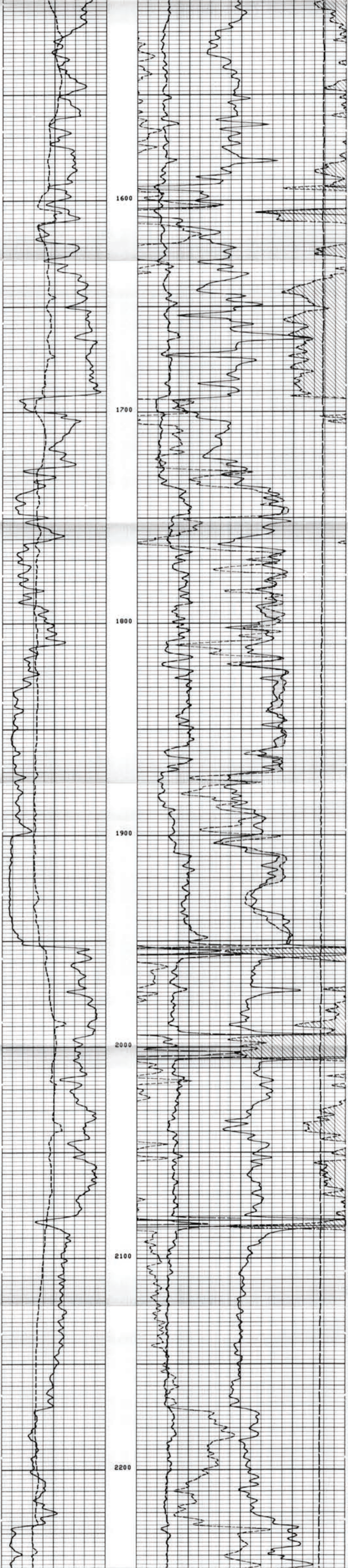
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

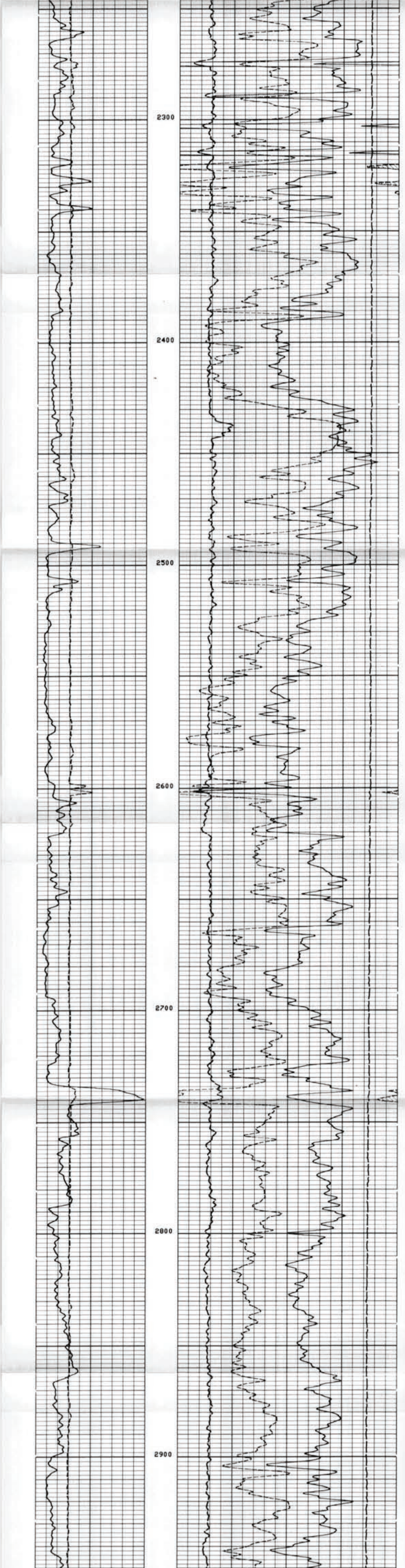
PEF: 0.0 – 10.000
TENS(LB): 10000. – 0.0
GR (GAPI): 150.00 – 300.00
NPHI: .70000 – .30000
CALI(IN): 6.0000 – 16.000
DPHI: .30000 – -.1000
GR (GAPI): 0.0 – 150.00
NPHI: .30000 – -.1000

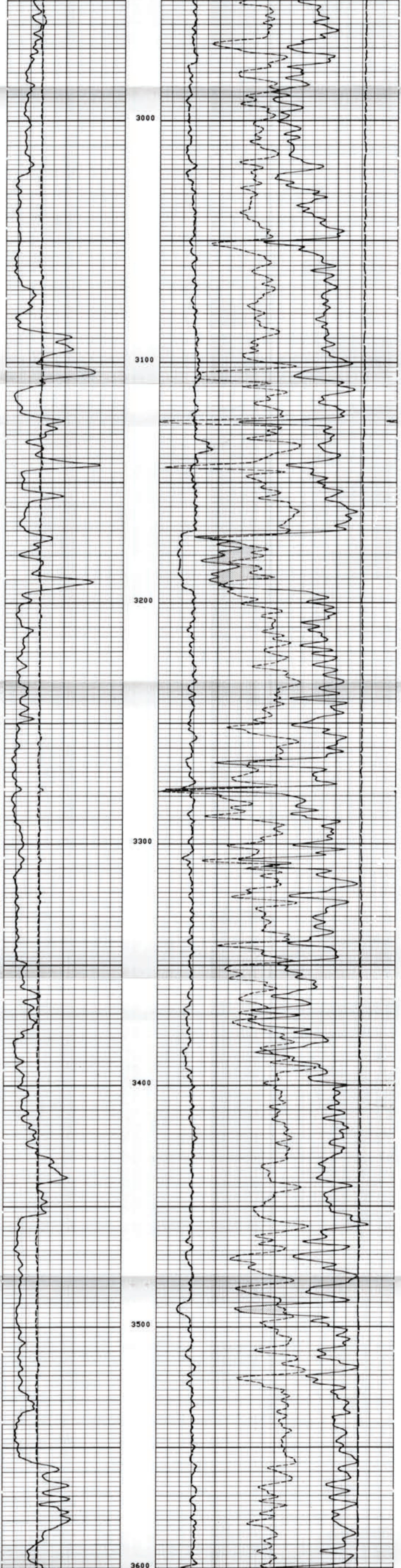
FILE 3 09-MAR-86 00:48

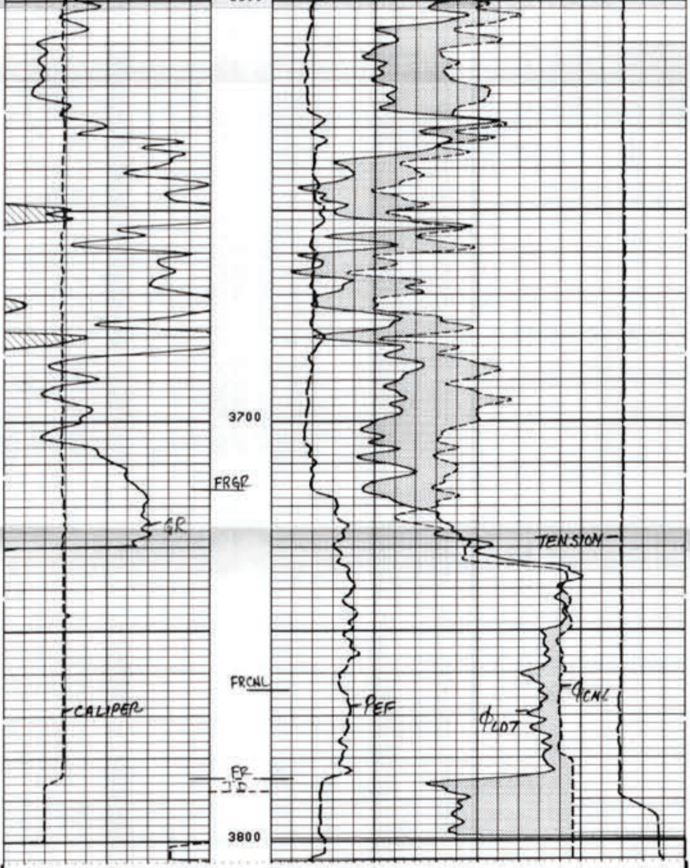












FILE 3 08-MAR-86 22:53

GR (GAPI) 150.00 – 300.00	CALI(IN) 6.0000 – 16.000	GR (GAPI) 0.0 – 150.00	
PEF 0.0 – 10.000	TENS(LB) 10000. – 0.0		
NPHI .70000 – .30000	DPHI .30000 – -.1000	NPHI .30000 – -.1000	

SENSOR MEASURE POINT TO TOOL ZERO

STSG	67.5	FEET	GR	72.1	FEET
NCNL	23.2	FEET	SCNL	23.2	FEET
LA	42.2	FEET	FCNL	23.2	FEET
SPCD	42.2	FEET	SA	42.2	FEET
SS1	2.0	FEET	SS2	2.0	FEET
LS	2.5	FEET	LITH	2.5	FEET
LL	2.5	FEET	LU	2.5	FEET
TENS	-.9	FEET	CALI	2.6	FEET
FVD	46.1	FEET	FVU	46.1	FEET
NVD	46.1	FEET	NVU	46.1	FEET
PSDO	46.1	FEET	PSUP	46.1	FEET
MINV	42.2	FEET	NRAT	23.2	FEET
MNOR	42.2	FEET			

PARAMETERS

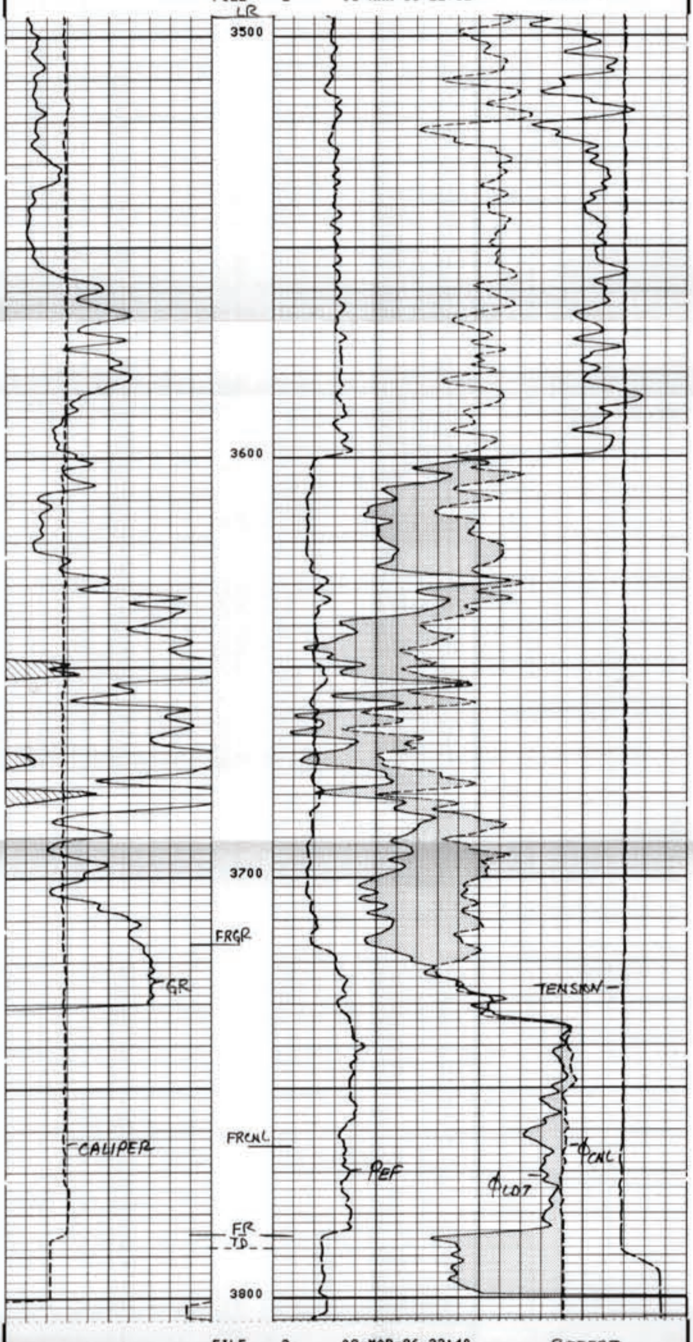
NAME	VALUE	UNIT	NAME	VALUE	UNIT
BHT	110.000	DEGF	TD	6000.00	F
PC	90.0000	DEG	SHT	65.0000	DEGF
PSNR	2.20600		TPM	9.80000	MS/M
MATR	LIME		HC	BS	
MDEN	2.71000	G/C3	FD	1.00000	G/C3
LPCS	TWIN		WMUD	9.00000	LB/G
BHS	OPEN		DHC	NONE	
BS	8.75000	IN			

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

GR (GAPI) 150.00 – 300.00	CALI(IN) 6.0000 – 16.000	GR (GAPI) 0.0 – 150.00	
PEF 0.0 – 10.000	TENS(LB) 10000. – 0.0		
NPHI .70000 – .30000	DPHI .30000 – -.1000	NPHI .30000 – -.1000	

FILE 2 08-MAR-86 22:52 REPEAT



FILE 2 08-MAR-86 22:40 REPEAT

GR (GAPI) 150.00 – 300.00	CALI(IN) 6.0000 – 16.000	GR (GAPI) 0.0 – 150.00	
PEF 0.0 – 10.000	TENS(LB) 10000. – 0.0		
NPHI .70000 – .30000	DPHI .30000 – -.1000	NPHI .30000 – -.1000	

SENSOR MEASURE POINT TO TOOL ZERO

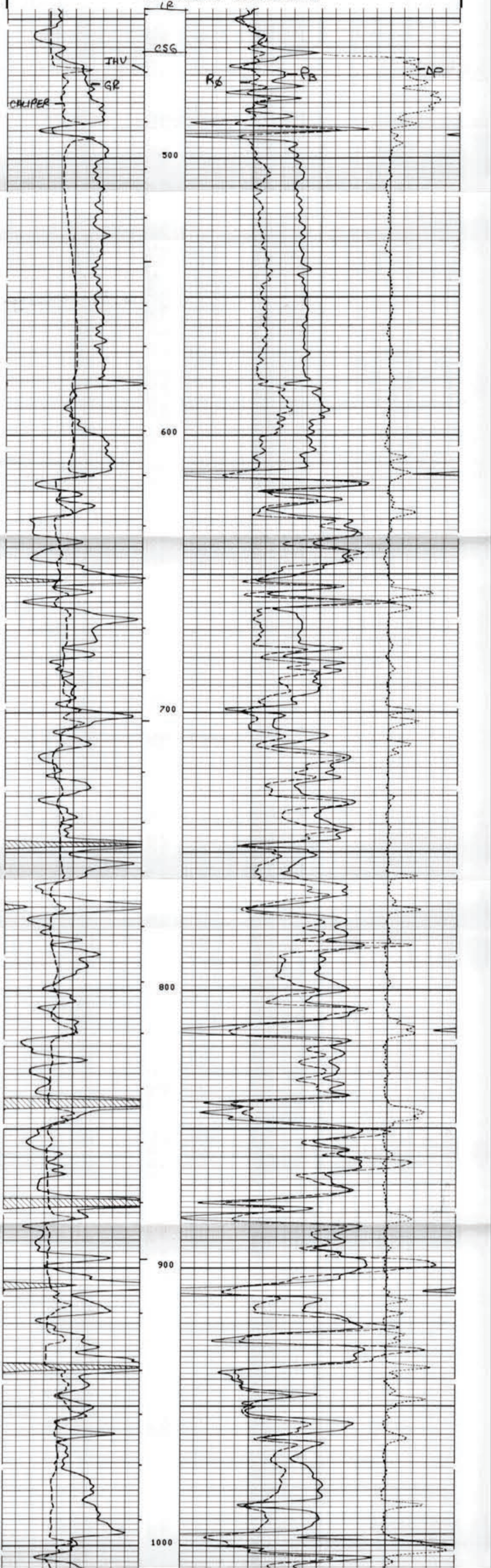
STSG	67.5	FEET	GR	72.1	FEET
NCNL	23.2	FEET	SCNL	23.2	FEET
LA	42.2	FEET	FCNL	23.2	FEET
SPCD	42.2	FEET	SA	42.2	FEET
SS1	2.0	FEET	SS2	2.0	FEET
LS	2.5	FEET	LITH	2.5	FEET
LL	2.5	FEET	LU	2.5	FEET
TENS	-.9	FEET	CALI	2.6	FEET
FVD	46.1	FEET	FVU	46.1	FEET
NVD	46.1	FEET	NVU	46.1	FEET
PSDO	46.1	FEET	PSUP	46.1	FEET
MINV	42.2	FEET	NRAT	23.2	FEET
MNOR	42.2	FEET			

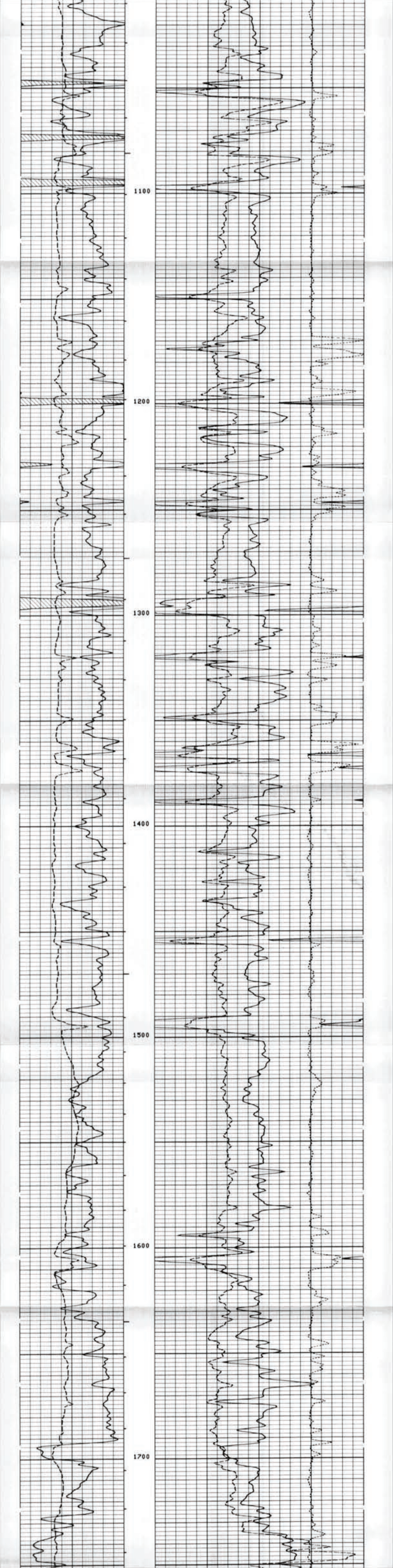
PARAMETERS

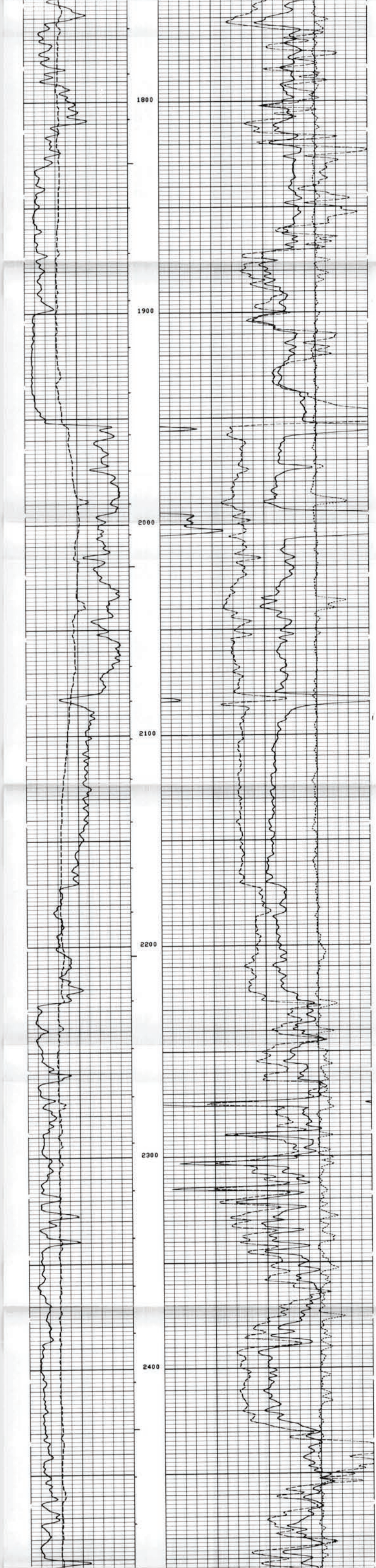
NAME	VALUE	UNIT	NAME	VALUE	UNIT
BHT	110.000	DEGF	TD	6000.00	F
PC	90.0000	DEG	SHT	65.0000	DEGF
PSNR	2.20600		TPM	9.80000	NS/M
MATR	LIME		HC	BS	
MDEN	2.71000	G/C3	FD	1.00000	G/C3
LPCS	TWIN		WMUD	9.00000	LB/G
BHS	CASE		DHC	NONE	
BS	8.75000	IN			

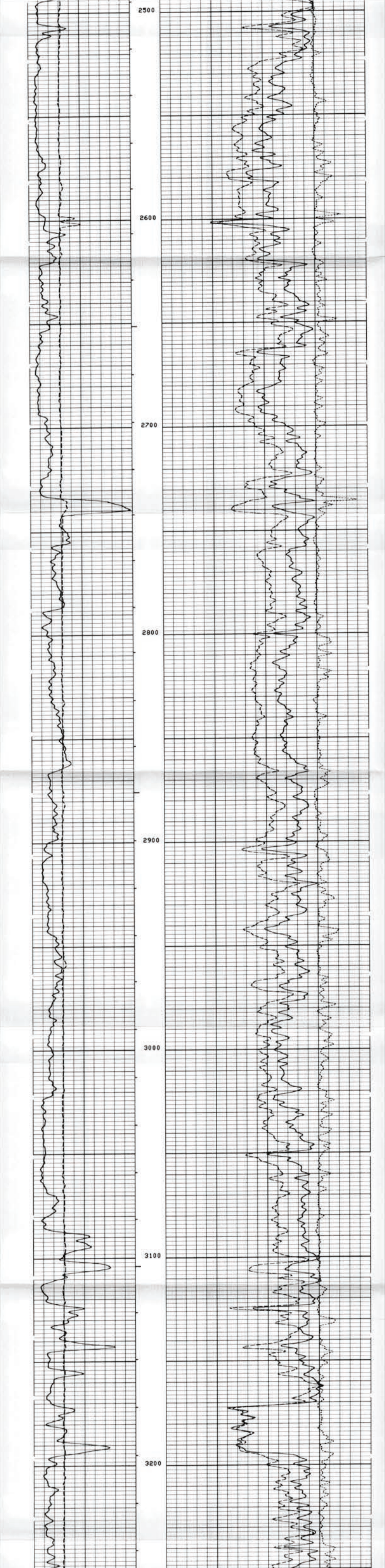
GR (GAPI)			DRHO(G/C3)
150.00 300.00			-.2500 .25000
CALI(IN)		RO (OHMM)	
6.0000 16.000		1.0000 10000.	
GR (GAPI)		RHOB(G/C3)	
0.0 150.00		2.0000 3.0000	

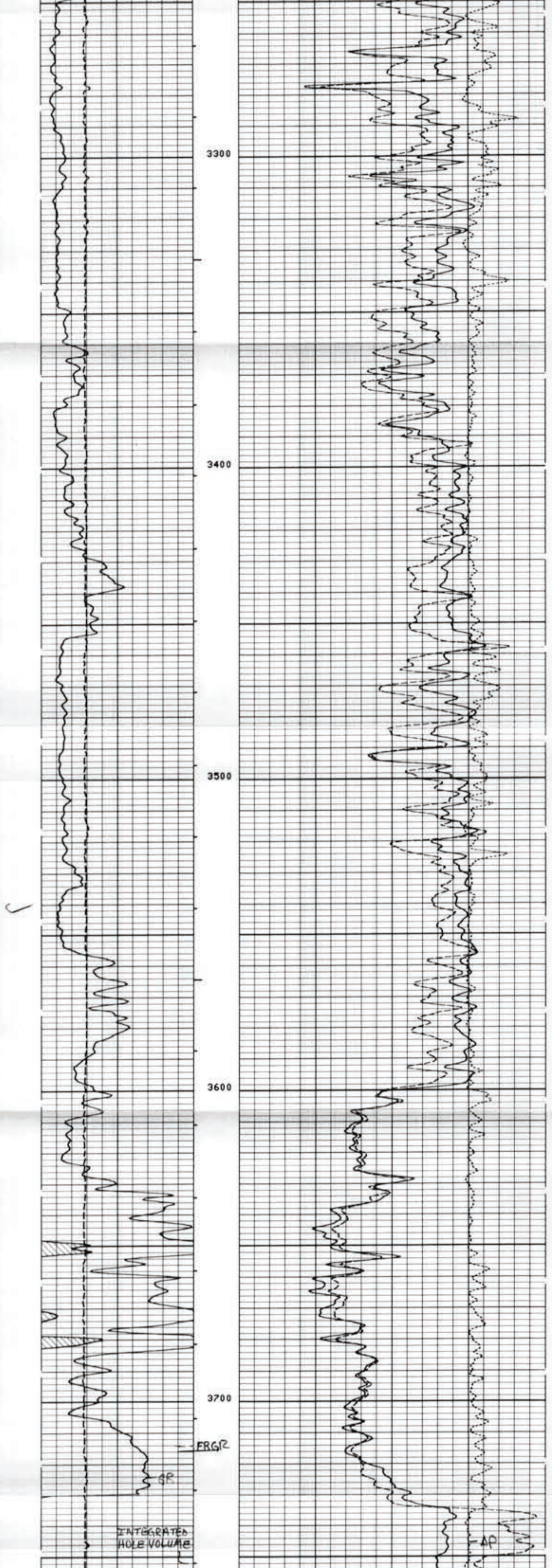
FILE 3 09-MAR-86 01:13
DATA ACQUIRED 09-MAR-86 00:48











FILE 3 09-MAR-86 01:00
DATA ACQUIRED 08-MAR-86 22:55

GR (GAPI)
150.00 300.00
CALI(IN)
6.0000 16.000
GR (GAPI)
0.0 150.00

DRHO(G/C3)
-.2500 .25000
RO (OHMM)
1.0000 10000.
RHOB(G/C3)
2.0000 3.0000

SENSOR MEASURE POINT TO TOOL ZERO

STSG	67.5	FEET	GR	72.1	FEET
NCNL	23.2	FEET	SCNL	23.2	FEET
LA	42.2	FEET	FCNL	23.2	FEET
SPCD	42.2	FEET	SA	42.2	FEET
SS1	2.0	FEET	SS2	2.0	FEET
LS	2.5	FEET	LITH	2.5	FEET
LL	2.5	FEET	LU	2.5	FEET
TENS	-.9	FEET	CALI	2.6	FEET
FVD	46.1	FEET	FVU	46.1	FEET
NVD	46.1	FEET	NVU	46.1	FEET
PSDO	46.1	FEET	PSUP	46.1	FEET
MINV	42.2	FEET	NRAT	23.2	FEET
MNOR	42.2	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
BHT	110.000	DEGF	TD	6000.00	F
PC	90.0000	DEG	SHT	65.0000	DEGF
PSNR	2.20600		TPM	9.80000	NS/M
MATR	LIME		HC	CALI	
MDEN	2.71000	G/C3	FD	1.00000	G/C3
LPCS	TWIN		WMUD	9.00000	LB/G
BHS	OPEN		DHC	NONE	
DO	0.0	F	BS	8.75000	IN
PP	NORM				

TAPE NOT MADE

```
        GR  (GAPI)                                                    DRHO(G/C3)
150.00          300.00                                        -.2500          .25000
        CALI(IN  )                                  RO  (OHMM)
6.0000          16.000          1.0000                                        10000.
        GR  (GAPI)                                  RHOB(G/C3)
0.0             150.00          2.0000                                        3.0000
```

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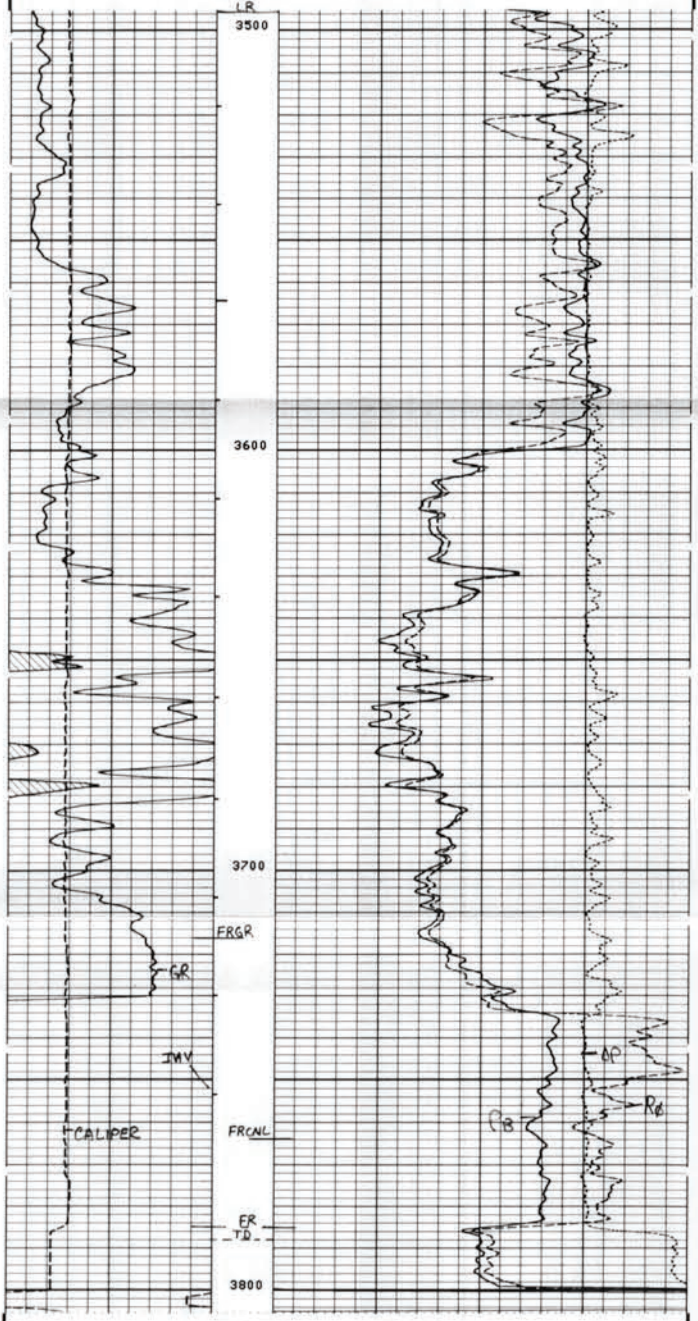
                        FILE    2         09-MAR-86 00:59
                        DATA ACQUIRED     08-MAR-86 22:52
```

REPEAT



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                        FILE    2         09-MAR-86 00:58
                        DATA ACQUIRED     08-MAR-86 22:41
```

REPEAT

```
        GR  (GAPI)                                                    DRHO(G/C3)
150.00          300.00                                        -.2500          .25000
        CALI(IN  )                                  RO  (OHMM)
6.0000          16.000          1.0000                                        10000.
        GR  (GAPI)                                  RHOB(G/C3)
0.0             150.00          2.0000                                        3.0000
```

```
                  SENSOR MEASURE POINT TO TOOL ZERO

        STSG 67.5  FEET                        GR   72.1  FEET
        NCNL 23.2  FEET                        SCNL 23.2  FEET
        LA   42.2  FEET                        FCNL 23.2  FEET
        SPCD 42.2  FEET                        SA   42.2  FEET
        SS1   2.0  FEET                        SS2   2.0  FEET
        LS    2.5  FEET                        LITH  2.5  FEET
        LL    2.5  FEET                        LU    2.5  FEET
        TENS  -.9  FEET                        CALI  2.6  FEET
        FVD  46.1  FEET                        FVU  46.1  FEET
        NVD  46.1  FEET                        NVU  46.1  FEET
        PSDO 46.1  FEET                        PSUP 46.1  FEET
        MINV 42.2  FEET                        NRAT 23.2  FEET
        MNOR 42.2  FEET
```

```
                            PARAMETERS

        NAME  VALUE     UNIT                    NAME  VALUE     UNIT

        BHT   110.000   DEGF                    TD    6000.00   F
        PC    90.0000   DEG                     SHT   65.0000   DEGF
        PSNR 2.20600                            TPM   9.80000   NS/M
        MATR LIME                               HC    CALI
        MDEN 2.71000    G/C3                    FD    1.00000   G/C3
        LPCS TWIN                               WMUD 9.00000    LB/G
        BHS   OPEN                              DHC   NONE
        DO    0.0       F                       BS    8.75000   IN
        PP    NORM

                          TAPE NOT MADE
```

```
                  BEFORE SURVEY CALIBRATION SUMMARY

   PERFORMED:      86/03/08
   PROGRAM FILE: LEP     (VERSION    26.2    85/04/17)

SGTL               DETECTOR CALIBRATION SUMMARY

             MEASURED
           BKGD    JIG          CALIBRATED          UNITS
     GR     52     203             165              GAPI

CNTH               DETECTOR CALIBRATION SUMMARY

              TANK                               JIG
          INPUT  CALIBRATED          MEASURED   CALIBRATED
   NRAT   2.20600  2.158              2.167       2.120

PCDB               ELECTRONICS CALIBRATION SUMMARY

             MEASURED                          CALIBRATED
           ZERO     PLUS                    ZERO      PLUS          UNITS
   MINV     0.0      4.2                     0.0       5.0          OHMM
   MNOR     0.0      3.1                     0.0       5.0          OHMM

PCDB               CALIPER CALIBRATION SUMMARY

             MEASURED                          CALIBRATED
           SMALL    LARGE                   SMALL     LARGE         UNITS
     LA     2.8      7.8                     8.0      12.0           IN
     SA     3.8      9.0                     -.0       5.3           IN

LDTC               DETECTOR CALIBRATION SUMMARY

        DRS SONDE NUMBER                          :   3701
        NUCLEAR SERVICE CARTRIDGE NUMBER          :   878
        POWERED DETECTOR HOUSING NUMBER           :   1986
        POWERED GAMMA-GAMMA DETECTOR NUMBER :   2745
        LDT LOGGING SOURCE NUMBER                 :   6959
        LDT CALIBRATION MODE                      :   WATE
        MUD DENSITY                               :   9.00000

             M E A S U R E D
          BKGD   AL+FE     AL   UNITS
     LL   20.3    86.1    96.6   CPS
     LU   76.4   130.2   145.1   CPS
     LS   58.5   151.2   169.2   CPS
   LITH    5.8    33.8    52.2   CPS
    SS1   15.7   176.7   198.6   CPS
    SS2   10.7   245.6   271.5   CPS

LDTC               CALIPER CALIBRATION SUMMARY

             MEASURED                          CALIBRATED
           SMALL    LARGE                   SMALL     LARGE         UNITS
   CALI     7.4     12.1                     8.0      12.0           IN

                   FILE    1       08-MAR-86 22:30


                  AFTER SURVEY TOOL CHECK SUMMARY

   PERFORMED:      86/03/08
   PROGRAM FILE: LEP     (VERSION    26.2    85/04/17)
```

```
CNTH                    TOOL  CHECK

                      JIG
               BEFORE      AFTER
  NRAT         2.120       2.126

  POROSITY CHANGE  (LIME):   .001


PCDB                    TOOL  CHECK

                   ZERO                    PLUS
            BEFORE      AFTER        BEFORE     AFTER    UNITS
  MINV        0.0         0.0          5.0        5.0    OHMM
  MNOR        0.0         0.0          5.0        5.0    OHMM


LDTC                    TOOL  CHECK

        DRS SONDE NUMBER                     :   3701
        NUCLEAR SERVICE CARTRIDGE NUMBER     :   878
        POWERED DETECTOR HOUSING NUMBER      :   1986
        POWERED GAMMA-GAMMA DETECTOR NUMBER :   2745
        LDT LOGGING SOURCE NUMBER            :   6959
        LDT CALIBRATION MODE                 :   WATE
        MUD DENSITY                          :   9.00000

            BACKGROUND MEASURED
            BEFORE       AFTER        UNITS
     LL     20.31        20.07         CPS
     LU     76.43        76.75         CPS
     LS     58.53        58.43         CPS
   LITH      5.855        5.85         CPS
    SS1     15.70        15.96         CPS
    SS2     10.71        10.67         CPS


                SHOP SUMMARY


 PERFORMED:       86/03/03
 PROGRAM FILE: CCSHOP (VERSION    26.2    83/11/17)

CNTH                  DETECTOR CALIBRATION SUMMARY

            TANK                       JIG
     MEASURED  CALIBRATED      MEASURED   CALIBRATED

 NRAT    2.206       2.158         2.240        2.191

                     (CNC:345 , CNB:2634)

LDTC                  DETECTOR CALIBRATION SUMMARY

        DRS SONDE NUMBER                     :   3701
        NUCLEAR SERVICE CARTRIDGE NUMBER     :   878
        POWERED DETECTOR HOUSING NUMBER      :   1986
        POWERED GAMMA-GAMMA DETECTOR NUMBER :   2745
        LDT LOGGING SOURCE NUMBER            :   6959
        LDT CALIBRATION MODE                 :   WATE
        MUD DENSITY                          :   8.00000

          MASTER  CALIBRATED
          BKGD  AL+FE     AL  UNITS
     LL   20.3   86.2   96.7   CPS
     LU   76.4  130.3  145.2   CPS
     LS   58.5  151.3  169.3   CPS
   LITH    5.9   33.9   52.3   CPS
    SS1   15.8  176.8  198.7   CPS
    SS2   10.7  245.7  271.7   CPS
```