5" DUAL INDUCTION-SFL

CSU

COMPANY: REICHHOLD ENERGY

WELL: "CROWN ZELLERBACH" #34-26

FIELD: PITTSBURG
COUNTY: COLUMBIA
STATE: OREGON
NATION: U.S.A.
LOCATION: S1D43'W 1253.29F, S88D17E
1631.5' FR CTR OF SECTION
SEC: 26 TWP: 5N RGE: 4W

OTHER SERVICES-
BHC
HDT

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 608.7 F
LOG MEASURED FROM: KB
12.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 620.7 F
DF: 619.7 F
GL: 608.7 F

PROGRAM
TAPE NO:
26.2
SERVICE
ORDER NO:
432439

DATE: 6 MAY 85
RUN NO: 1

DEPTH-DRILLER: 5839.0 F
DEPTH-LOGGER: 5839.0 F
BTM. LOG INTERVAL: 5833.0 F
TOP LOG INTERVAL: 633.0 F

CASING-DRILLER: 633 F
CASING-LOGGER: 633 F
CASING: 9 5/8"

BIT SIZE: 8 3/4"
DEPTH: 5839 F

RECEIVED - PTLD
JUL 8 1985
DEPT. OF GEOLOGY

TYPE FLUID IN HOLE: GEL/LIGNO
DENSITY: 10.1 LB/G
VISCOSITY: 52.0 S
PH: 9.0
FLUID LOSS: 7.2 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 2.390 OHMM AT 71.0 DEGF
RMF: 2.140 OHMM AT 55.0 DEGF
RMC: 2.900 OHMM AT 55.0 DEGF
SOURCE RMF/RMC: MEASURED/MEASURED
RM AT BHT: 1.445 OHMM AT 122. DEGF
RMF AT BHT: 1.028 OHMM AT 122. DEGF
RMC AT BHT: 1.393 OHMM AT 122. DEGF

TIME CIRC. STOPPED: 00:30 5-6
TIME LOGGER ON BTM.: 06:05 5-6

MAX. REC. TEMP: 122.0 DEGF

LOGGING UNIT NO: 8120
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: PILCH
WITNESSED BY: MCWILLIAMS

REMARKS:

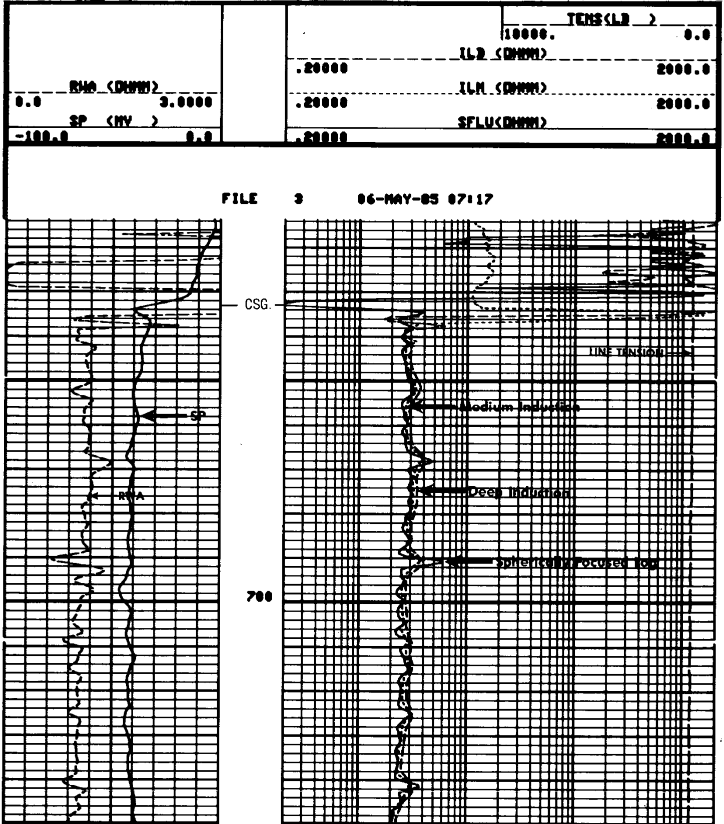
DUAL AND SONIC RUN IN COMBINATION.
900 PPM CHLORIDES
STANDOFFS AND CME-Z USED FOR CENTRALIZATION.

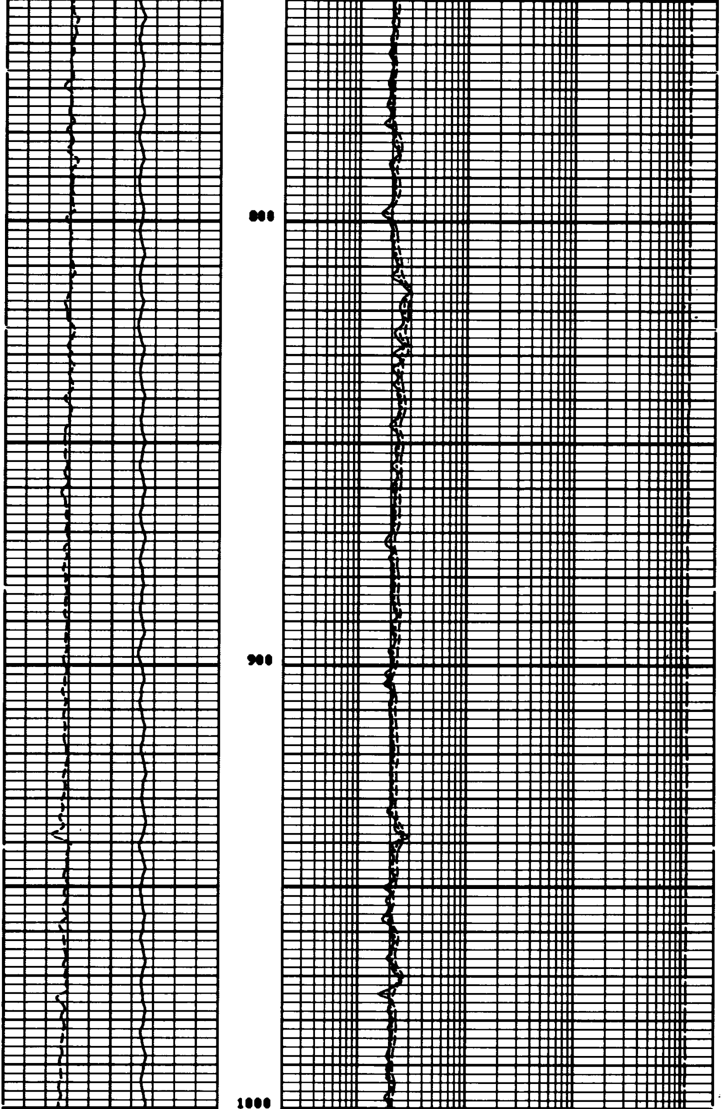
EQUIPMENT NUMBERS-

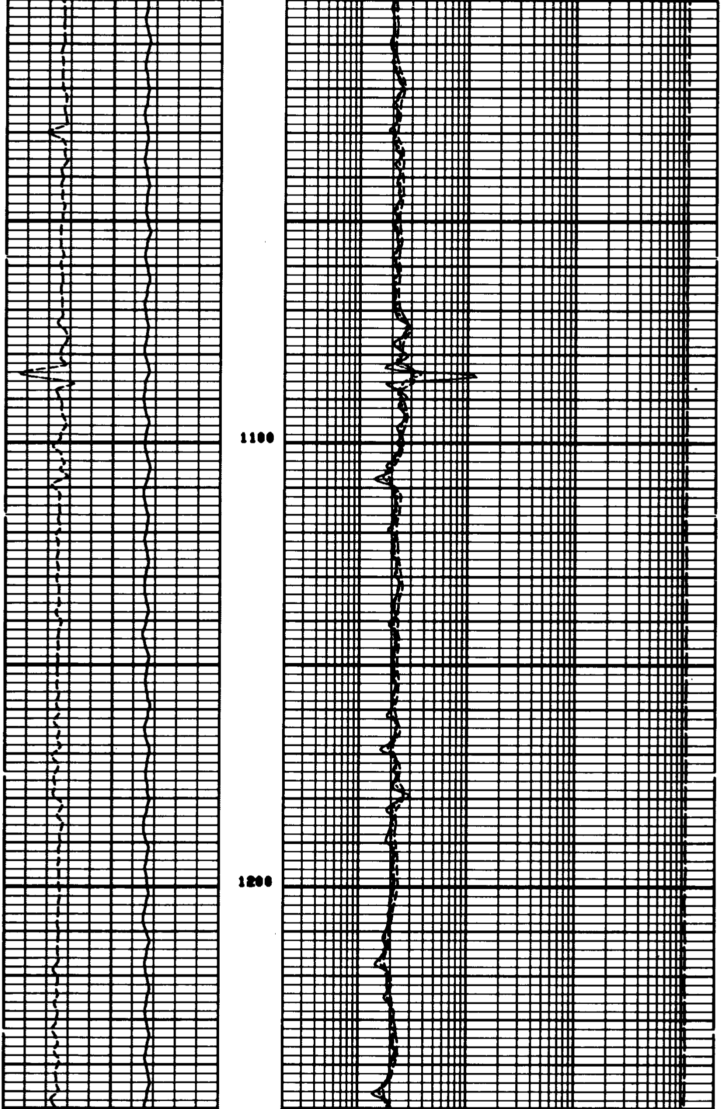
DIS-EC 567
DIC-DA 552
MCD-DA 1237
SLS-RC 252
SLC-FA 1321
SLM-CA 130
IEM-DB 304

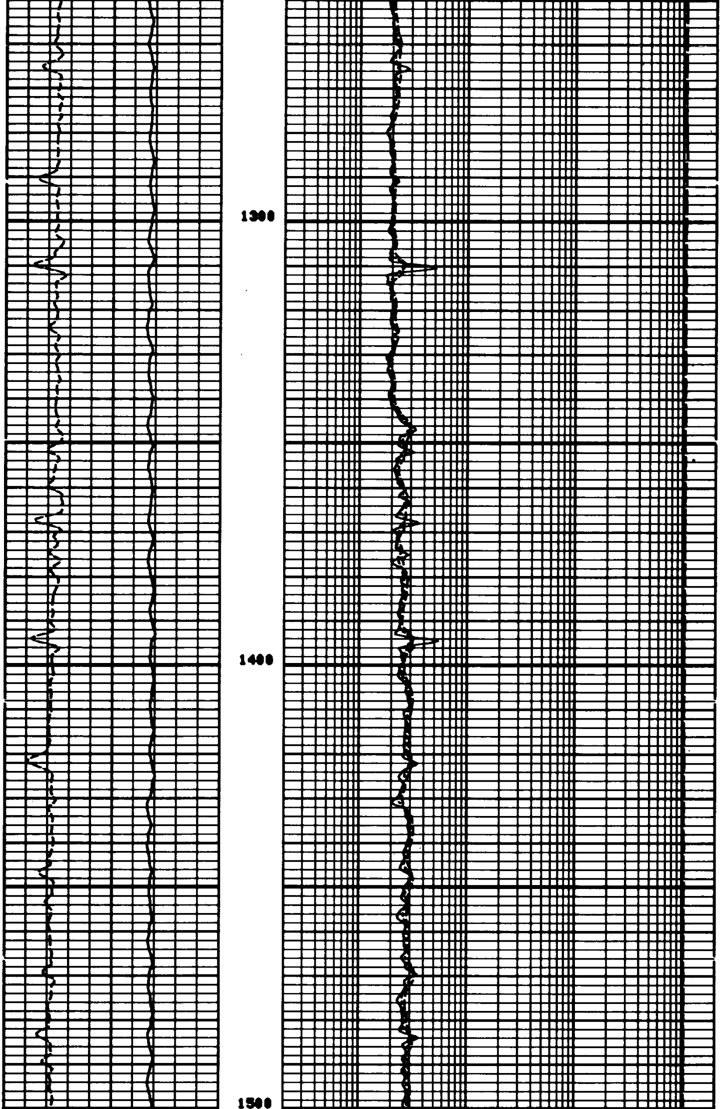
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, 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.

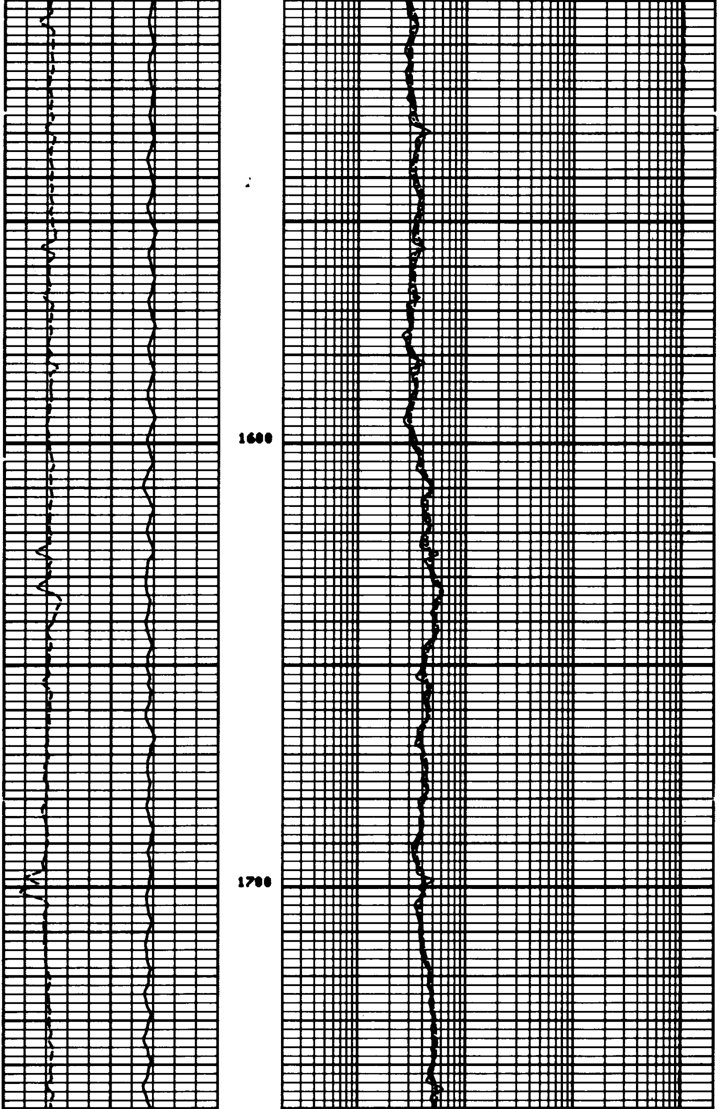
FILE 103 06-MAY-85 07:36
DATA ACQUIRED 06-MAY-85 07:17

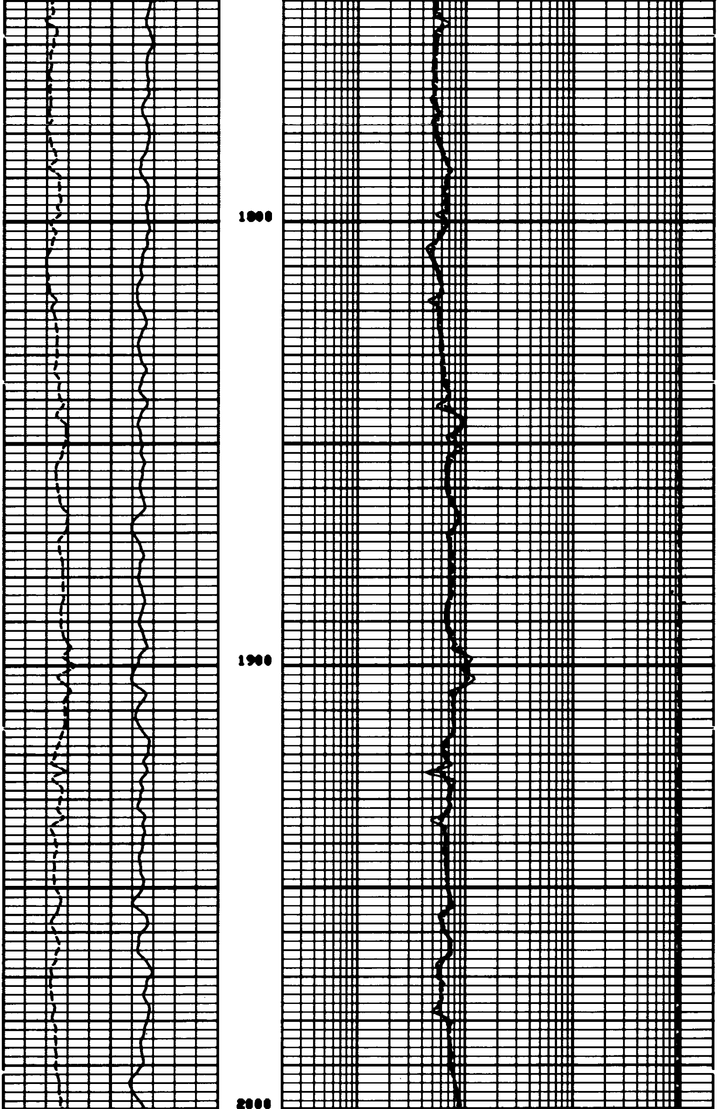


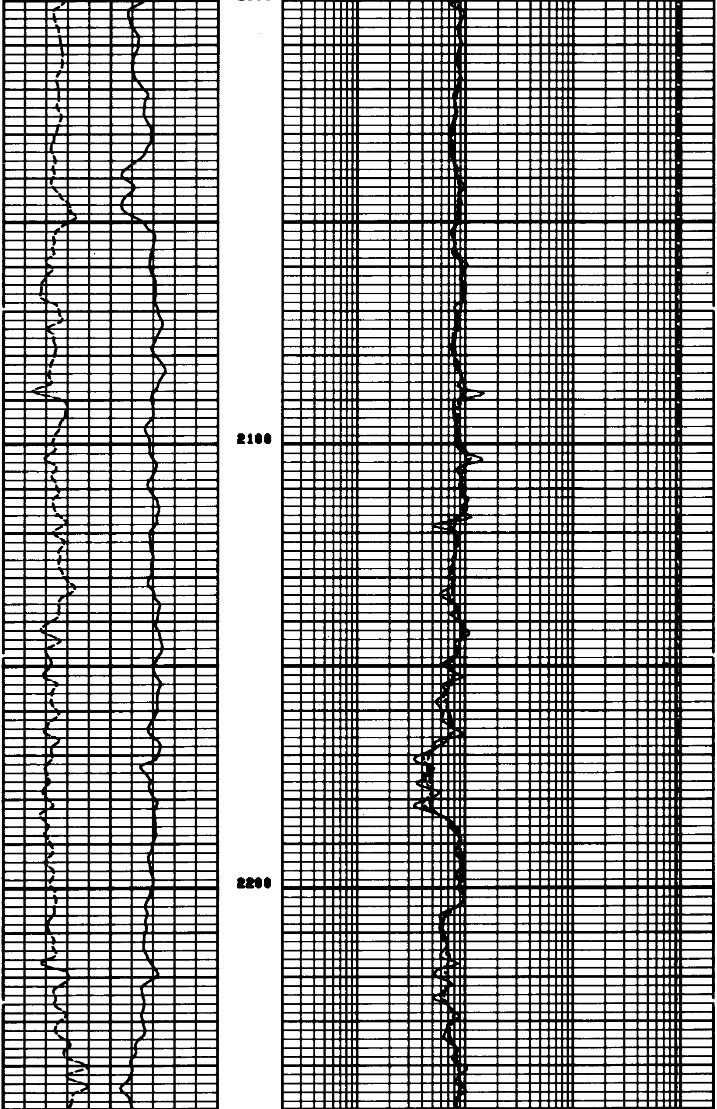


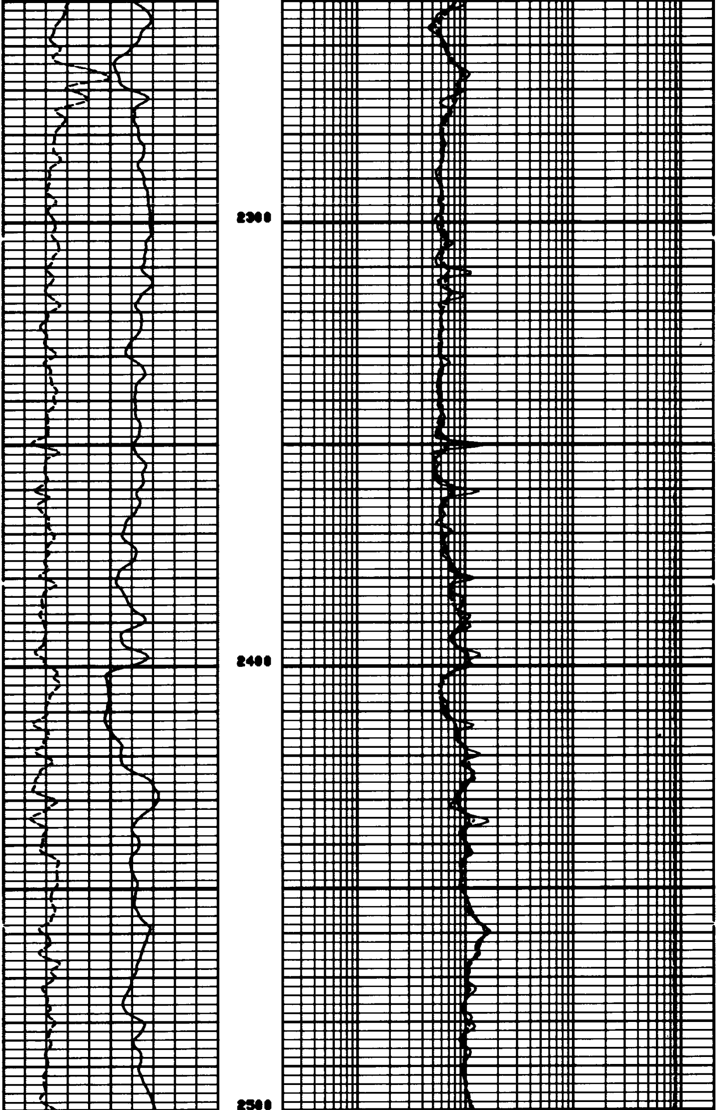


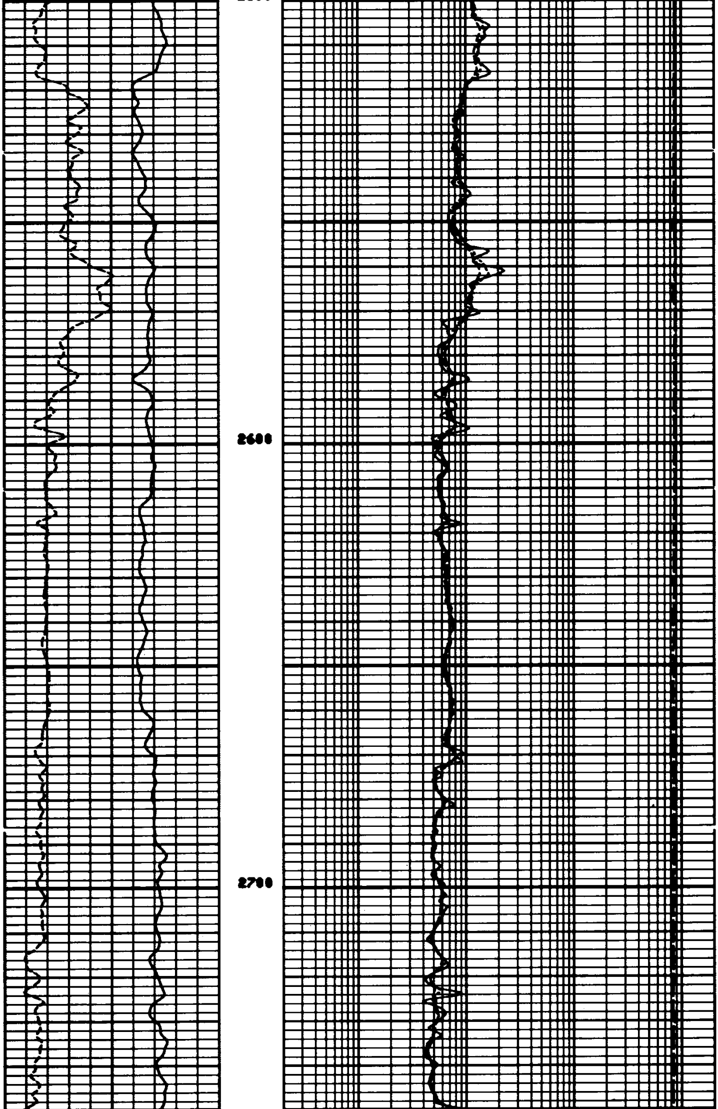


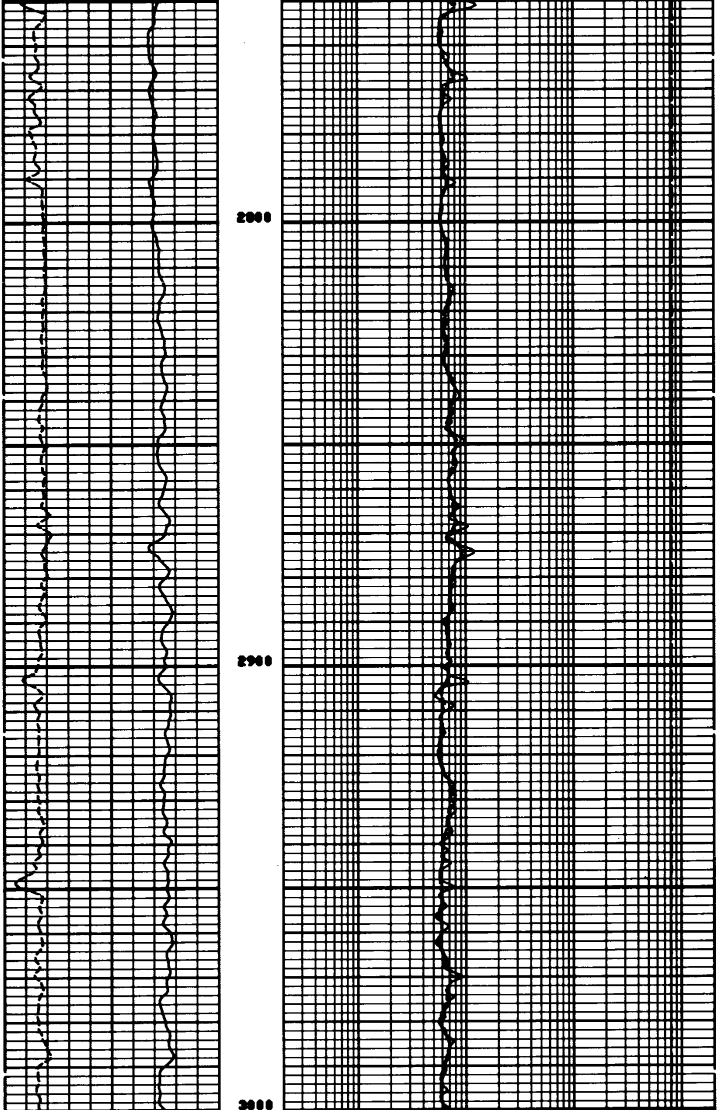


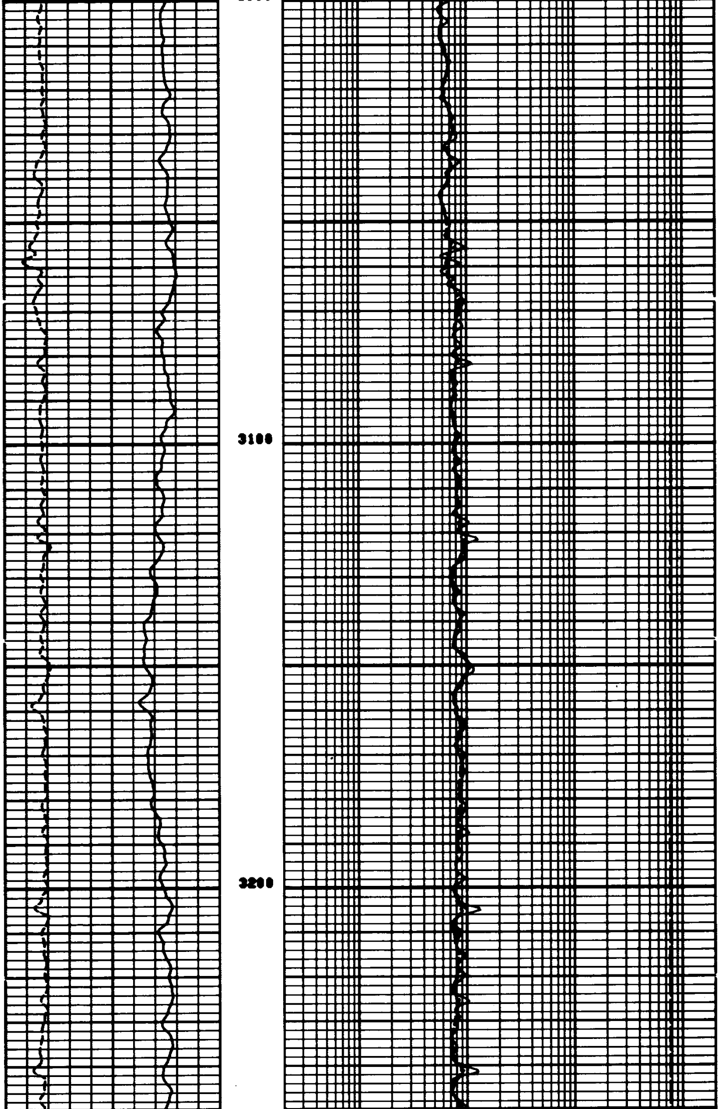


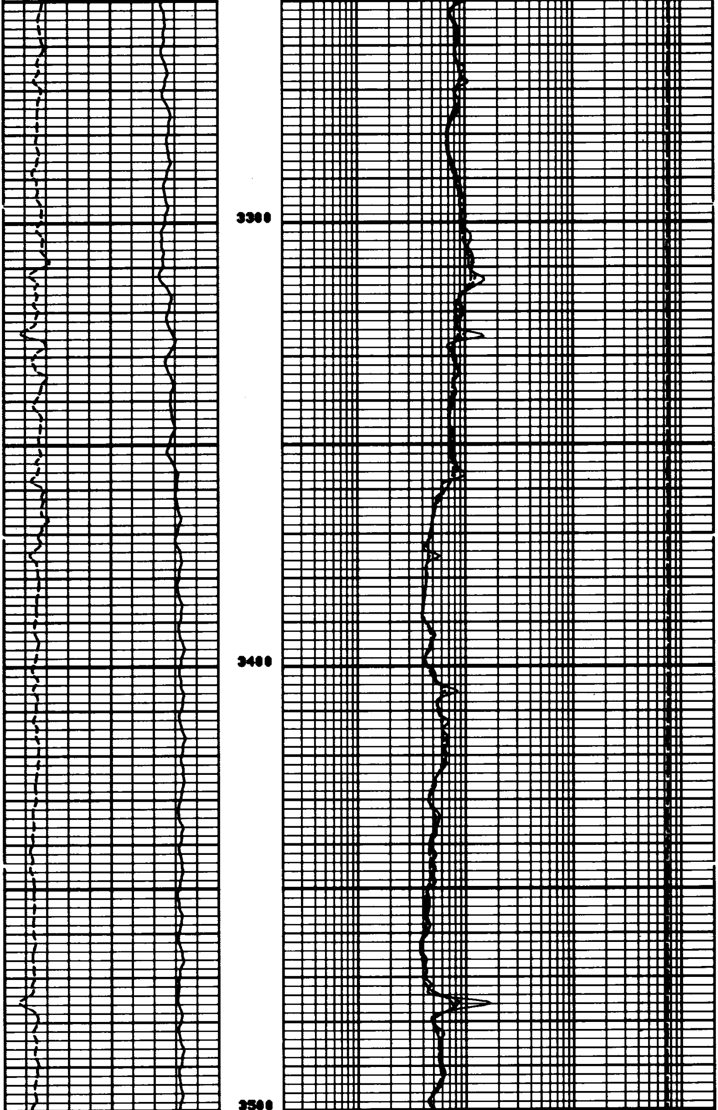


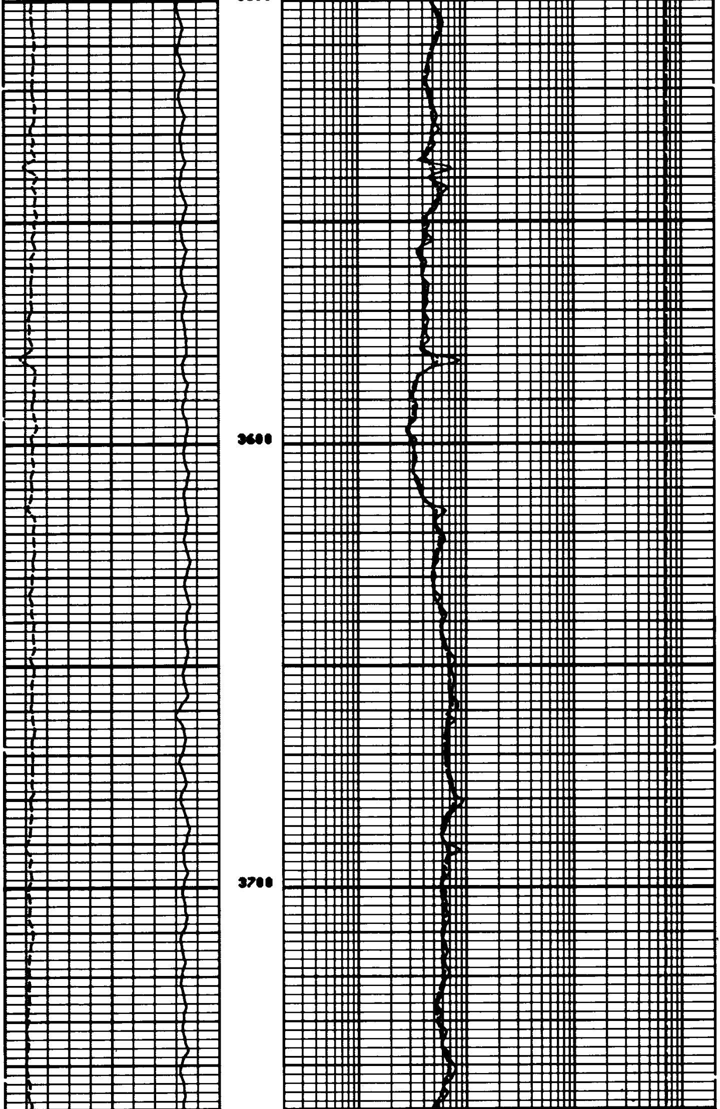


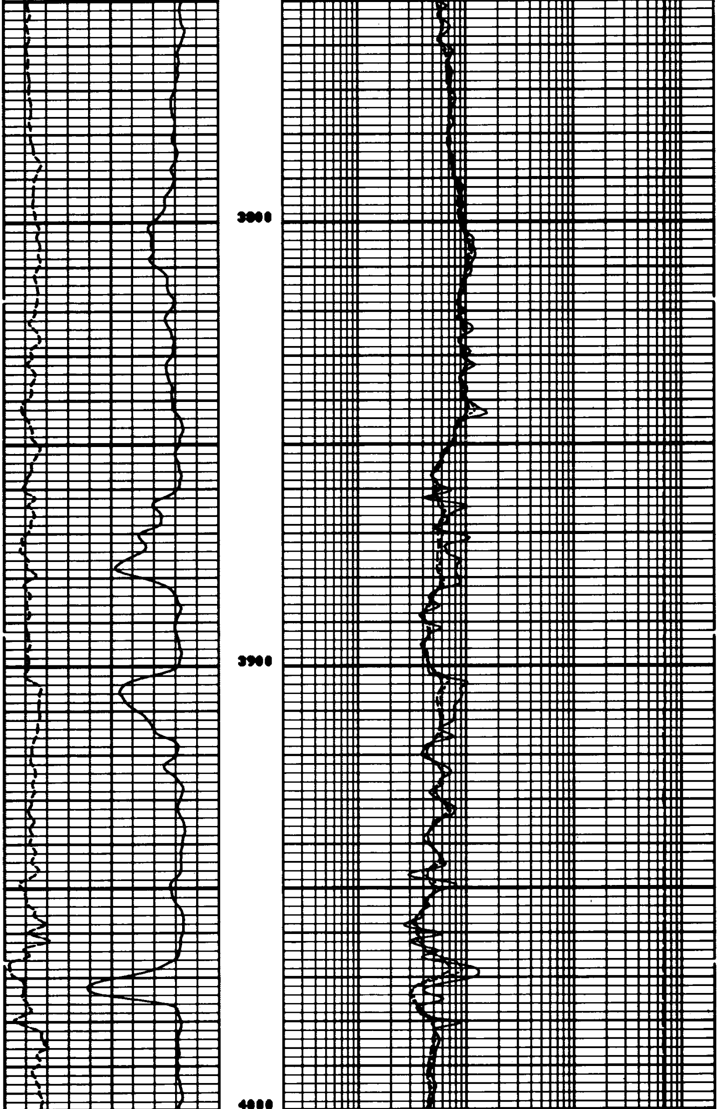


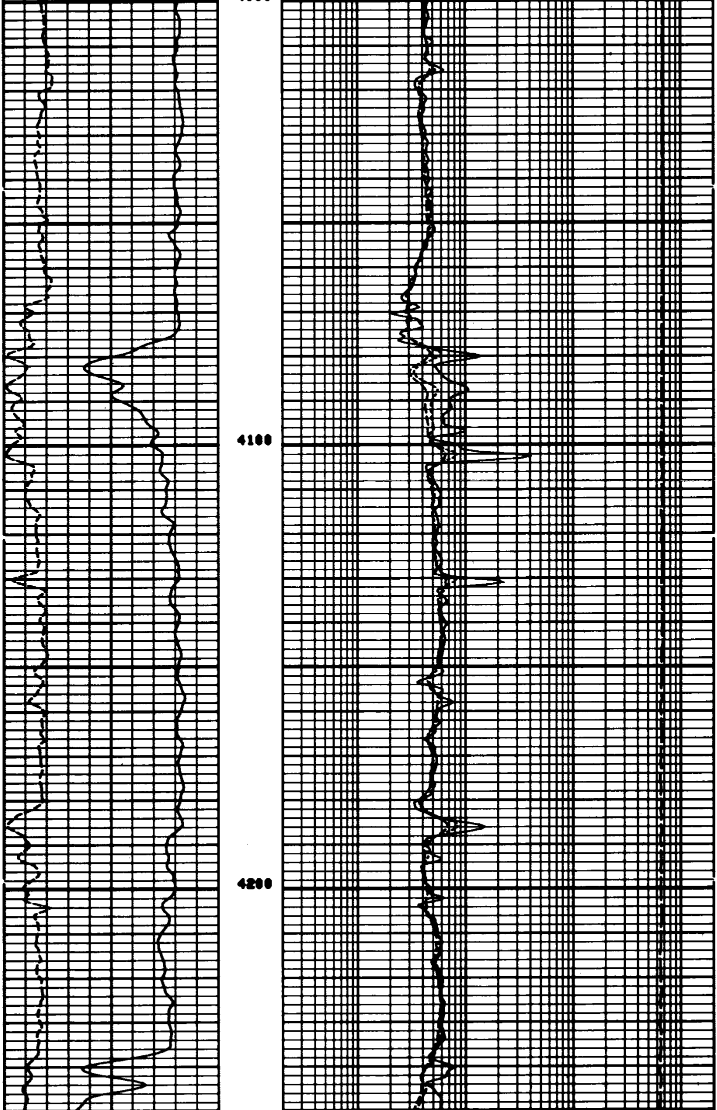


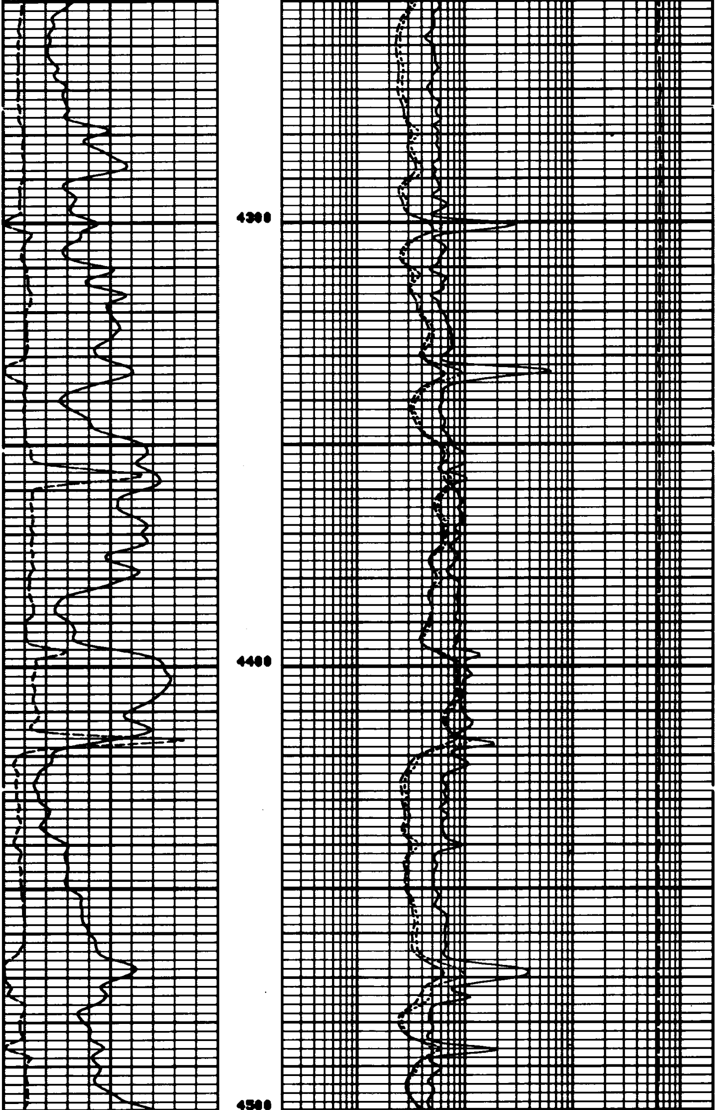


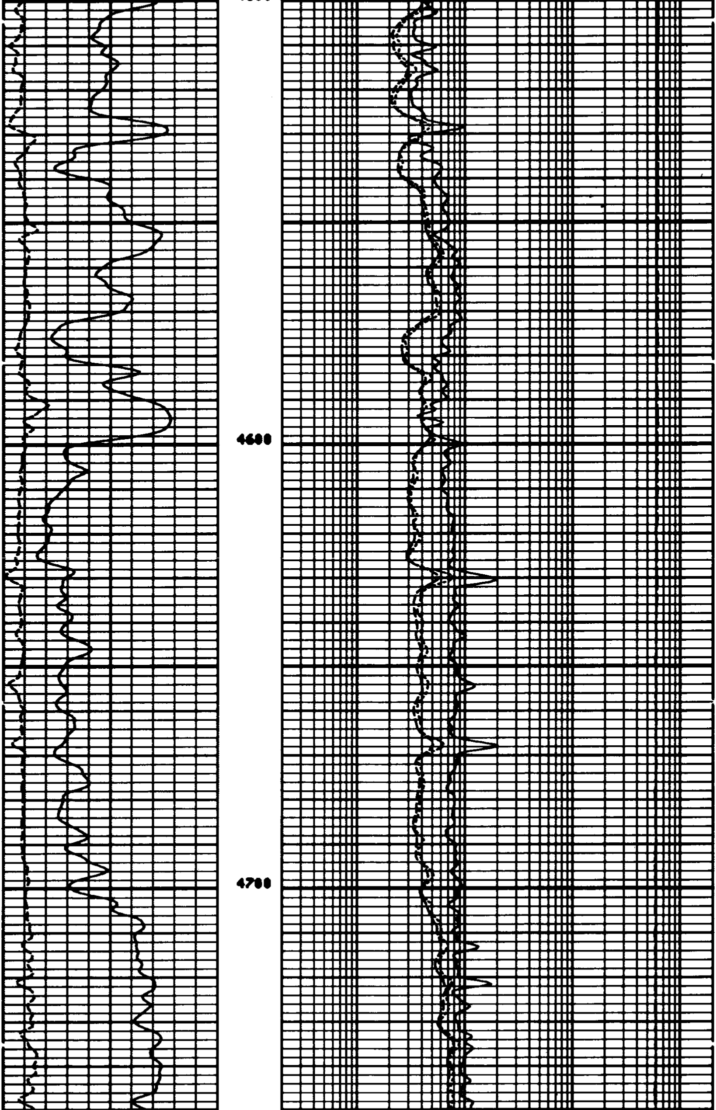


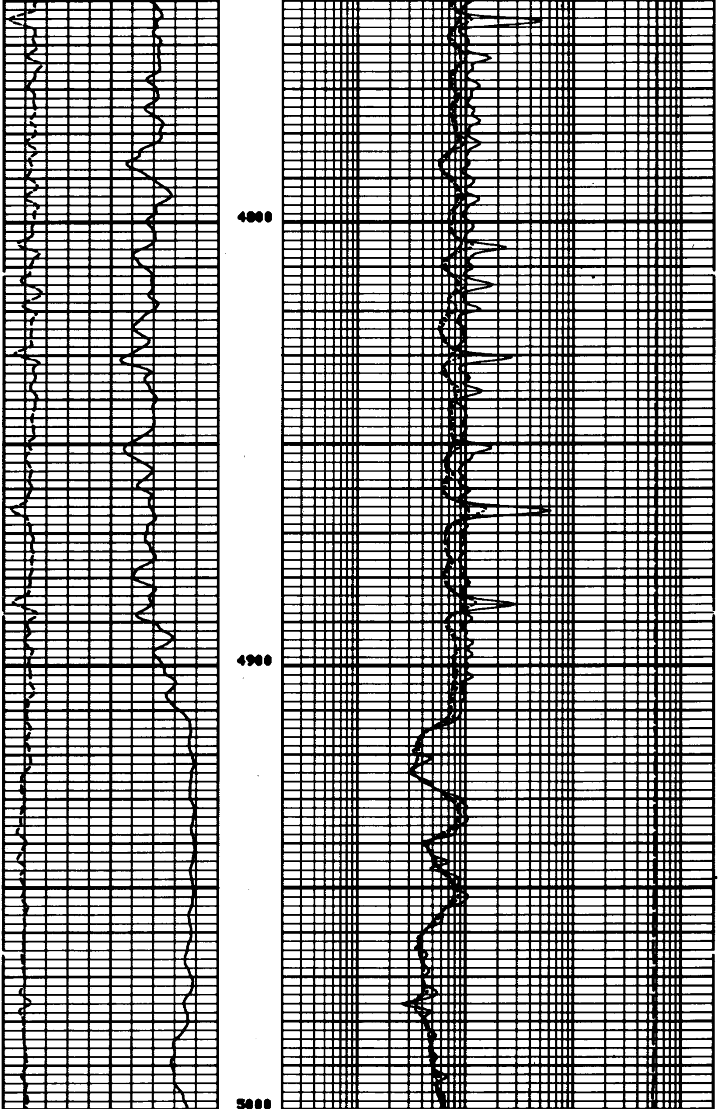


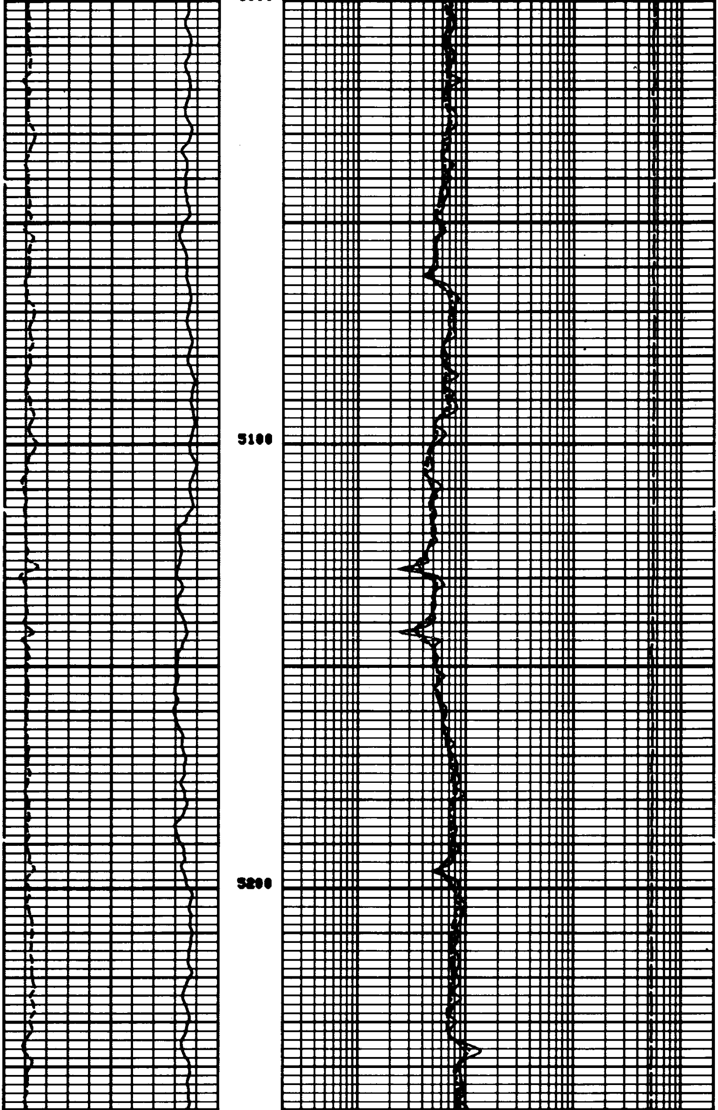


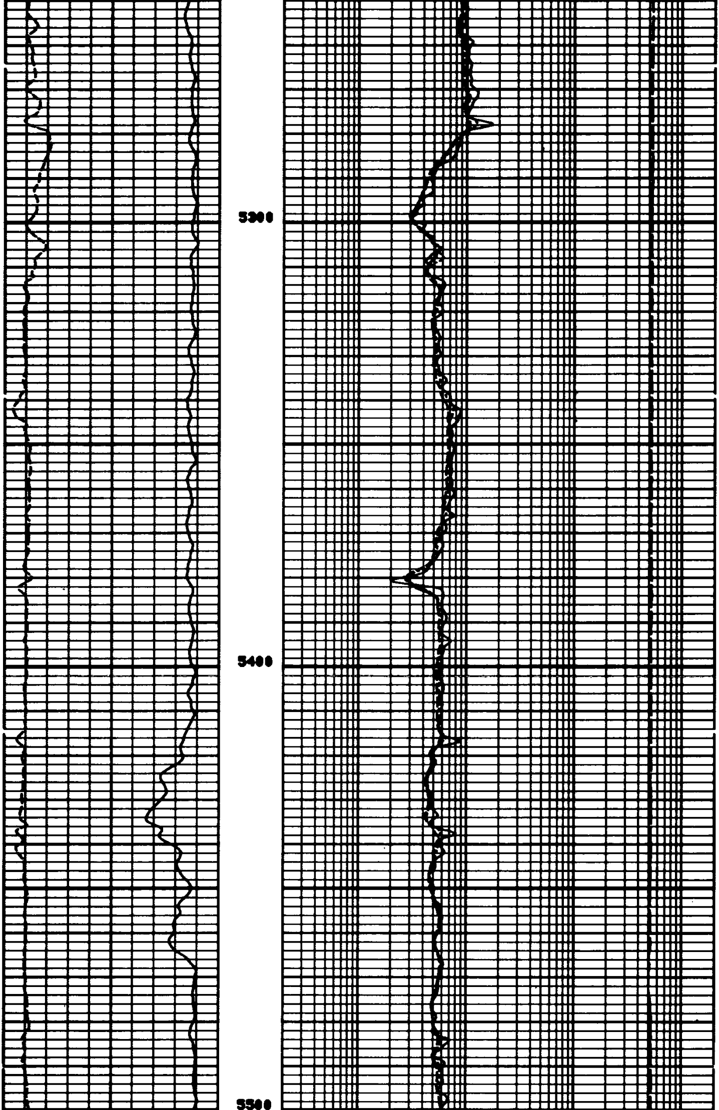


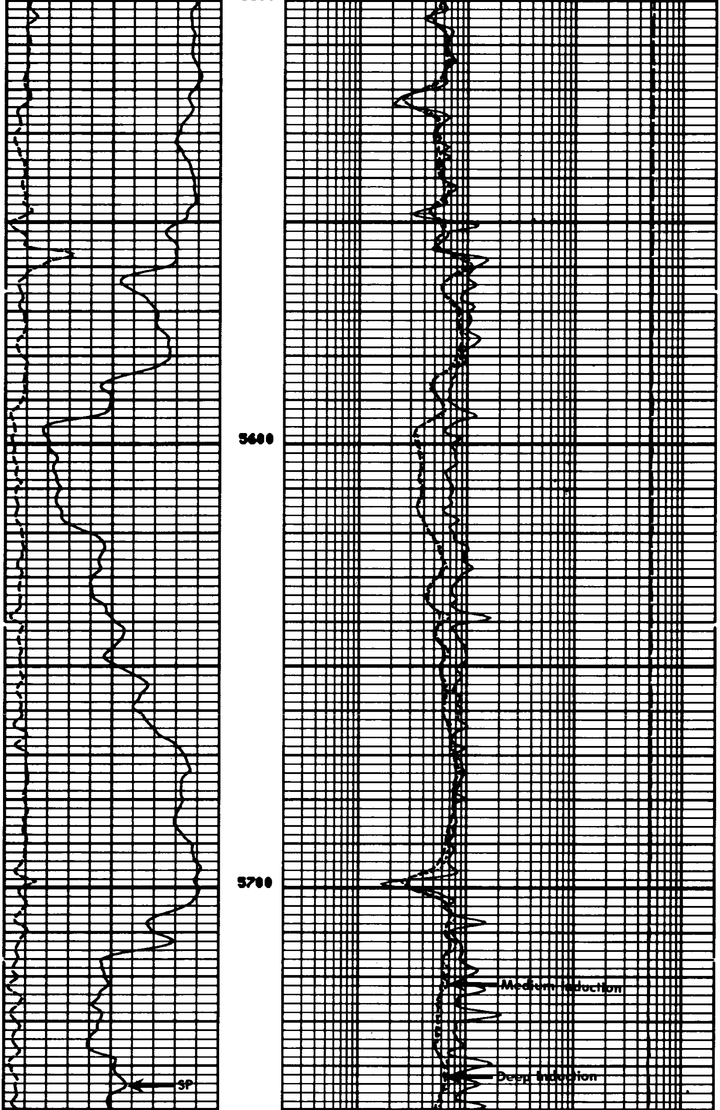


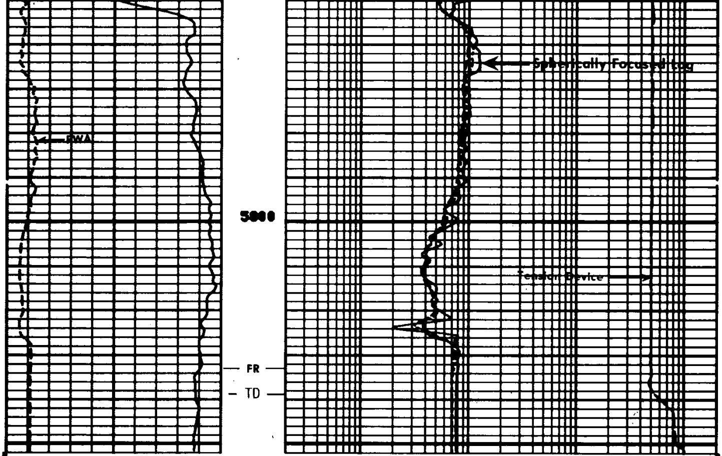












FILE 3 06-MAY-85 06:04

```
                                      TENS(LB  )
                                      10000.                0.0
                          ILD (OHMM)
              .20000                                     2000.0
    RWA (OHMM)                ILM (OHMM)
0.0        3.0000     .20000                             2000.0
   SP   (MV  )                SFLU(OHMM)
-100.0        0.0     .20000                             2000.0
```

SENSOR MEASURE POINT TO TOOL ZERO

```
CBL   43.9   FEET                  AMPL  43.9   FEET
TT3   40.1   FEET                  TT4   39.1   FEET
TT1   42.9   FEET                  TT2   43.9   FEET
CALI  31.0   FEET                  SRAT  41.4   FEET
SFL    6.4   FEET                  ILD    9.4   FEET
SP     2.5   FEET                  ILM    5.7   FEET
TENS   2.5   FEET                  SPAR   2.5   FEET
NOIS  35.6   FEET
```

PARAMETERS

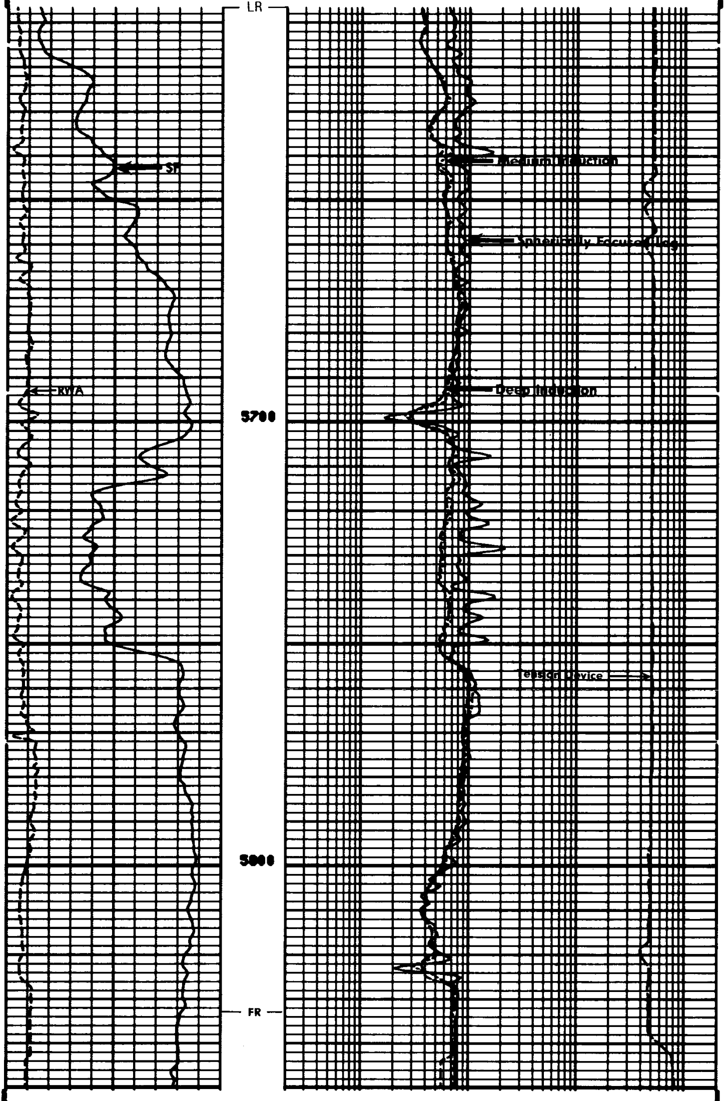
```
NAME  VALUE     UNIT                NAME  VALUE     UNIT

WSV1  WF1                           DWS   16
DSIN  5         US                  DDEL  200       US
CDTS  100.000                       DWCD  512
DTF   189.000   US/F                DTM   56.0000   US/F
SDR   1.00000   OHMM                DSEC  6.60000   MMHO
FPHI  SPHI                          MSEC  7.20000   MMHO
BS    8.75000   IN                  BHS   OPEN
```

```
                                      TENS(LB  )
                                      10000.                0.0
                          ILD (OHMM)
              .20000                                     2000.0
    RWA (OHMM)                ILM (OHMM)
0.0        3.0000     .20000                             2000.0
   SP   (MV  )                SFLU(OHMM)
-100.0        0.0     .20000                             2000.0
```

REPEAT SECTION

FILE 2 06-MAY-85 05:58



```
                         FILE    2       06-MAY-85 05:53

                                                      _______TENS(LB  )_____
                                                      |10000.            0.0
                                     ________________ILD (OHMM)_____________
                                     .20000                          2000.0
      ____RWA (OHMM)____             .............ILM (OHMM)................
0.0               3.0000             .20000                          2000.0
     SP   (MV  )                                SFLU(OHMM)
-100.0              0.0              .20000                          2000.0
```

```
                     SENSOR MEASURE POINT TO TOOL ZERO

           CBL  43.9  FEET                    AMPL 43.9  FEET
           TT3  40.1  FEET                    TT4  39.1  FEET
           TT1  42.9  FEET                    TT2  43.9  FEET
           CALI 31.8  FEET                    SRAT 41.4  FEET
           SFL   6.4  FEET                    ILD   9.4  FEET
           SP    2.5  FEET                    ILM   5.7  FEET
           TENS  2.5  FEET                    SPAR  2.5  FEET
           NOIS 35.6  FEET
```

```
                                PARAMETERS

           NAME  VALUE     UNIT                NAME  VALUE     UNIT

           WSV1 WF1                            DWS  16
           DSIN 5          US                  DDEL 200        US
           CBTS 100.000                        DWCO 512
           DTF  189.000    US/F                DTM  56.0000    US/F
           SDR  1.00000    OHMM                DSEC 6.60000    MMHO
           FPHI SPHI                           MSEC 7.20000    MMHO
           BS   8.75000    IN                  BHS  OPEN
```

```
                  BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:      85/05/06
  PROGRAM FILE: ISN    (VERSION    26.2    83/11/17)


DITD              ELECTRONICS CALIBRATION SUMMARY

              MEASURED                    CALIBRATED
            ZERO    PLUS                ZERO      PLUS         UNITS
   ILD        .0    554.4                0.0      499.5        MMHO
   ILM        .0    556.5                0.0      499.7        MMHO
   SFL        .5    526.5                0.0      500.0        MMHO

ILD  SONDE ERROR CORRECTION :      6.6 MMHO
ILM  SONDE ERROR CORRECTION :      7.2 MMHO


MCDD              CALIPER CALIBRATION SUMMARY

              MEASURED                    CALIBRATED
            SMALL   LARGE               SMALL     LARGE        UNITS
  CALI       7.0    12.1                 8.0      12.0         IN

                  FILE    1       06-MAY-85 05:42
```

```
              AFTER SURVEY TOOL CHECK SUMMARY

   PERFORMED:     85/05/06
   PROGRAM FILE: ISM    (VERSION    26.2    83/11/17)


 DITD                     TOOL  CHECK

                     ZERO                          PLUS
            BEFORE          AFTER          BEFORE      AFTER      UNITS
    ILD       0.0            .0            499.5       495.6      MMHO
    ILM       0.0            .0            499.7       494.9      MMHO
    SFL       0.0           -.1            500.0       495.2      MMHO

 ILD  SONDE ERROR CORRECTION :           6.6 MMHO
 ILM  SONDE ERROR CORRECTION :           7.2 MMHO

                        FILE     5       06-MAY-85 07:19
```

```
               SHOP SUMMARY


   PERFORMED:     85/05/03
   PROGRAM FILE: SHOP   (VERSION    26.2    83/11/17)


 DITD              ELECTRONICS CALIBRATION SUMMARY

               TEST LOOP CALIBRATION             TOOL CHECK
            MEASURED          CALIBRATED          CALIBRATED
          ZERO     PLUS      ZERO      PLUS      ZERO       PLUS    UNITS
    ILD   -7.5     549.6     0.0       500.0     0.0        499.5   MMHO
    ILM   -8.6     550.3     0.0       500.0     0.0        499.5   MMHO
 ILD  SONDE ERROR CORRECTION :           6.6 MMHO
 ILM  SONDE ERROR CORRECTION :           7.2 MMHO

                        (IS:567 , IC:552 )
```