LDT/CNL/NGT 5"

CSU

COMPANY: ARCO EXPLORATION COMPANY

WELL: DANZER #34-16

FIELD: MIST-WILDCAT
COUNTY: COLUMBIA
STATE: OREGON
NATION: USA
LOCATION: 90'N & 1992'W OF SE COR

SEC: 16 TWP: 6N RGE: 5W

RECEIVED - PTLD
APR 17 1985
DEPT. OF GEOLOGY & MINERAL INDUS.

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 577.0 F
LOG MEASURED FROM: KB
13.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 590.0 F
DF: 589.0 F
GL: 577.0 F

DATE: 16 APR 85
RUN NO: 1

DEPTH-DRILLER: 4914.0 F
DEPTH-LOGGER: 4902.0 F
BTM. LOG INTERVAL: 4899.0 F
TOP LOG INTERVAL: 964.0 F

CASING-DRILLER: 966 F
CASING-LOGGER: 964 F
CASING: 9 5/8"
WEIGHT: 36.00 LB/F
BIT SIZE: 8 3/4"
DEPTH: 4914 F

OTHER SERVICES-
DIL
DIGITAL SONI
SHDT
WST
CST

API SERIAL NO:
36-009-001

PROGRAM
TAPE NO:
25.008
SERVICE
ORDER NO:
438414

TYPE FLUID IN HOLE: DESCO-DRISPAC
DENSITY: 10.2 LB/G
VISCOSITY: 44.0 S
PH: 9.5
FLUID LOSS: 4.8 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 3.170 OHMM AT 83.0 DEGF
RMF: 2.050 OHMM AT 64.0 DEGF
RMC: 1.070 OHMM AT 67.0 DEGF
SOURCE RMF/RMC: MEAS/MEAS
RM AT BHT: 2.300 OHMM AT 117. DEGF
RMF AT BHT: 1.631 OHMM AT 117. DEGF
RMC AT BHT: .638 OHMM AT 117. DEGF

TIME CIRC. STOPPED: 13:30 4/15
TIME LOGGER ON BTM.: 21:45 4/15

MAX. REC. TEMP: 117.0 DEGF

LOGGING UNIT NO: 8128
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: MAYER
WITNESSED BY: BUIKEMA

REMARKS:

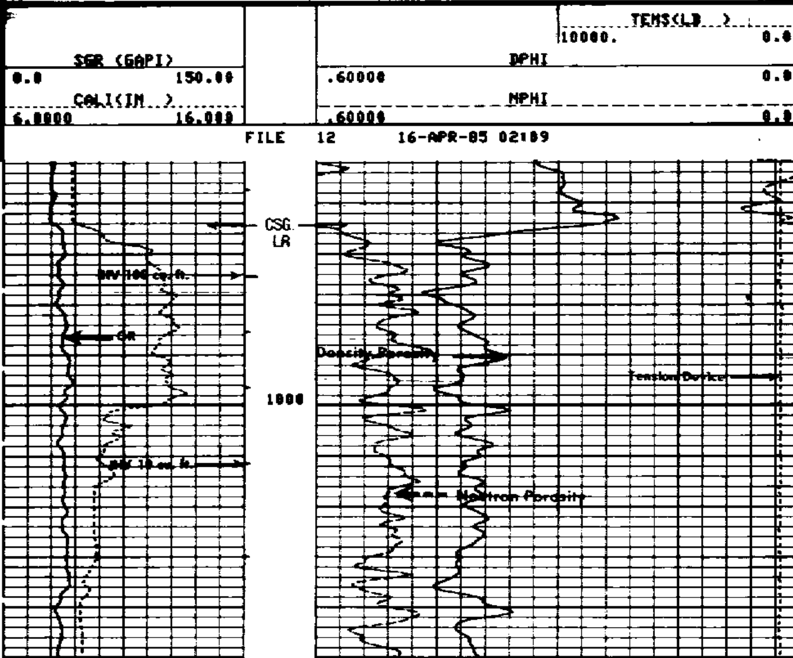
CHLORIDES: 900PPM

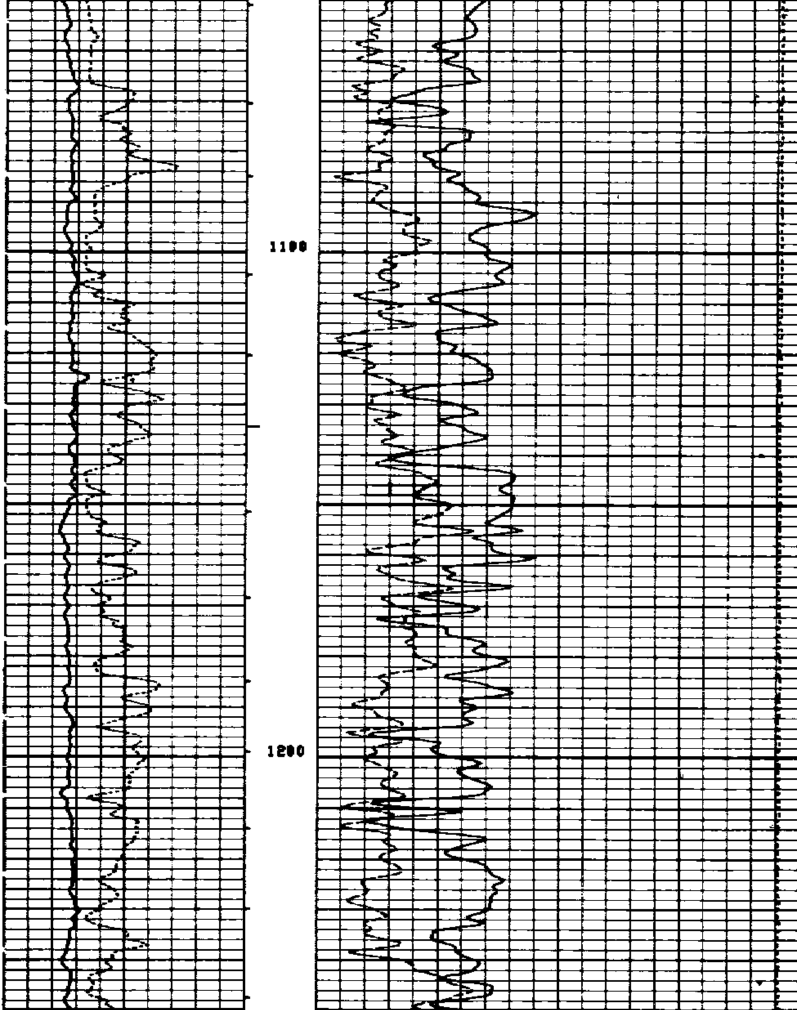
EQUIPMENT NUMBERS-

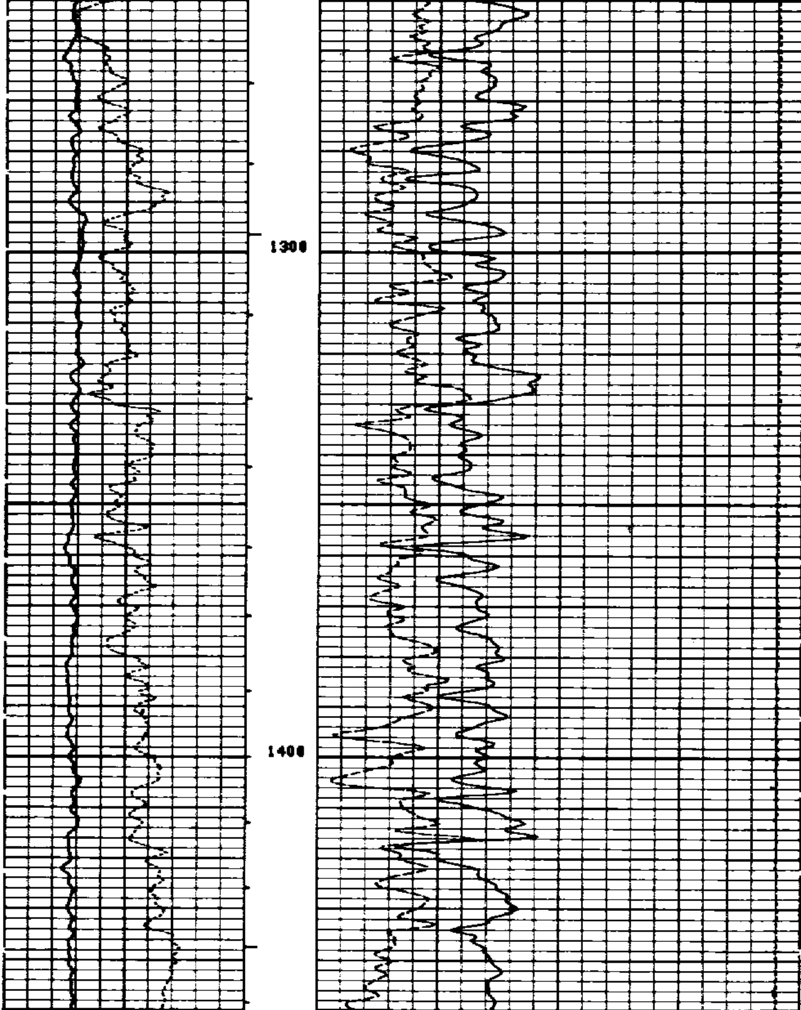
DRS 4775'	MSC 1955	PDH 2942	CNC 38
MGD 1798	MGC 1798	CCCB 2880	CIM 270

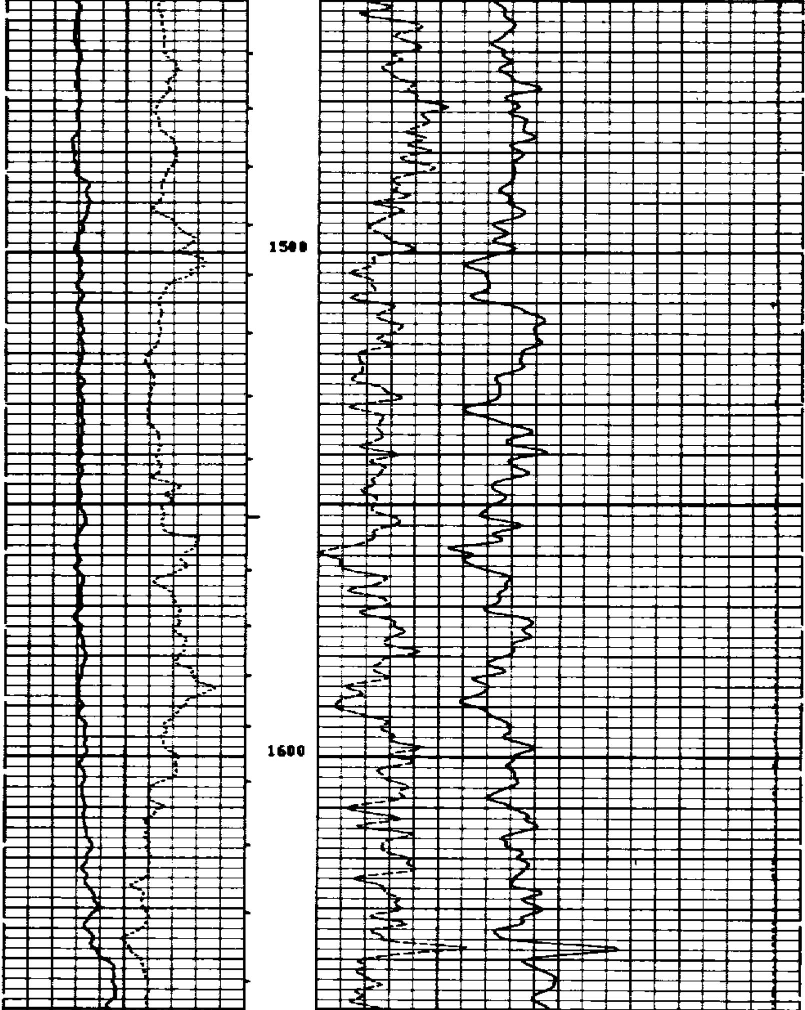
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS,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

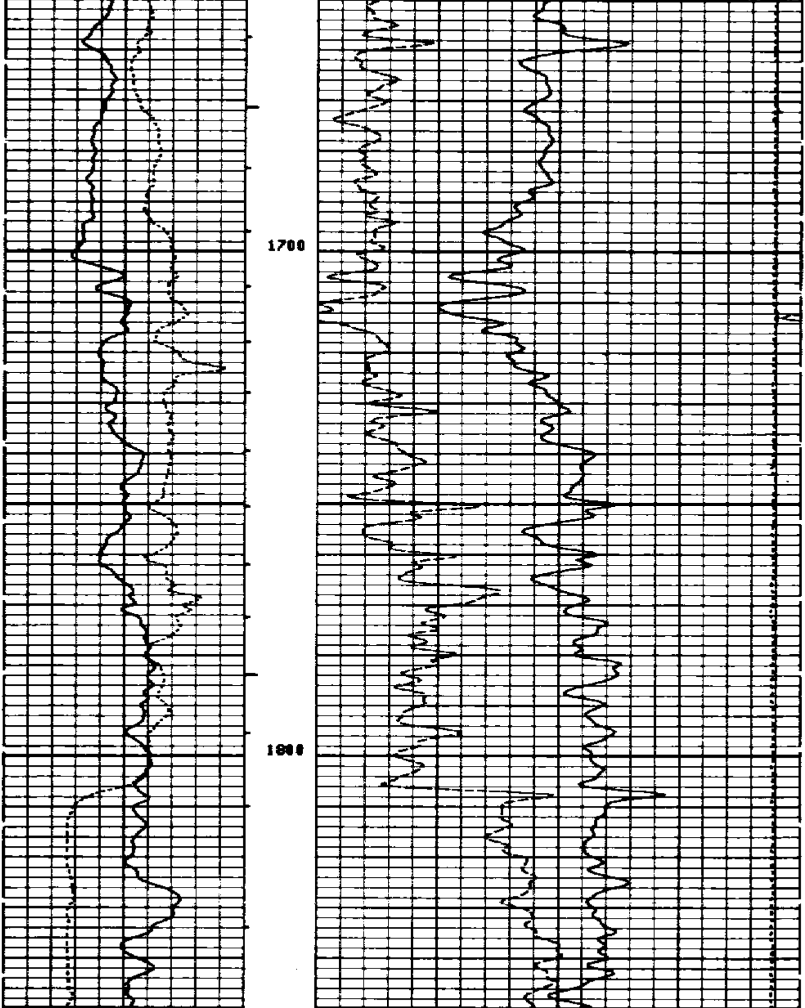
FILE 15 16-APR-85 03:44
DATA ACQUIRED 00- -00 00:00

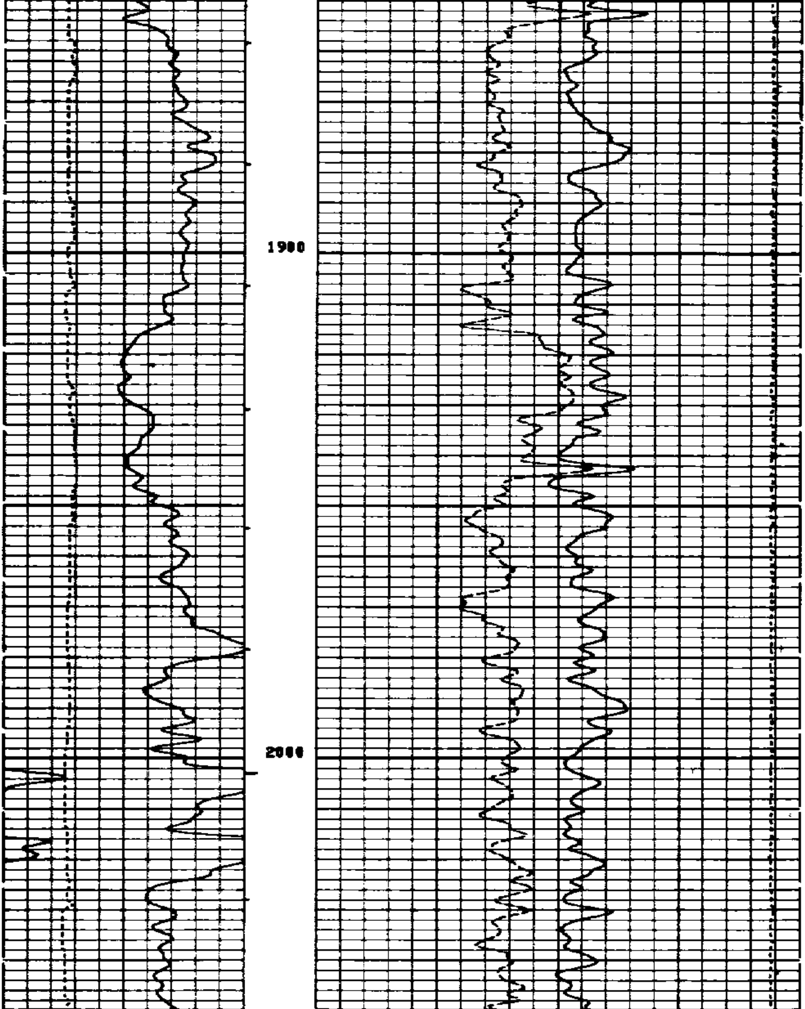


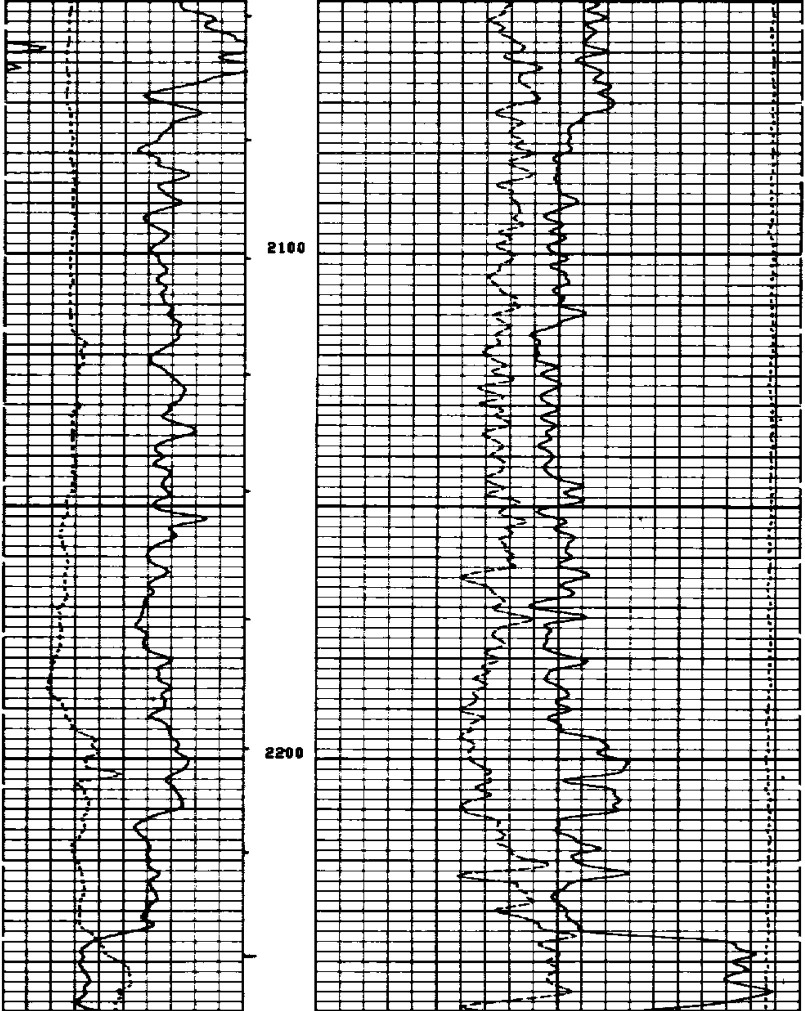


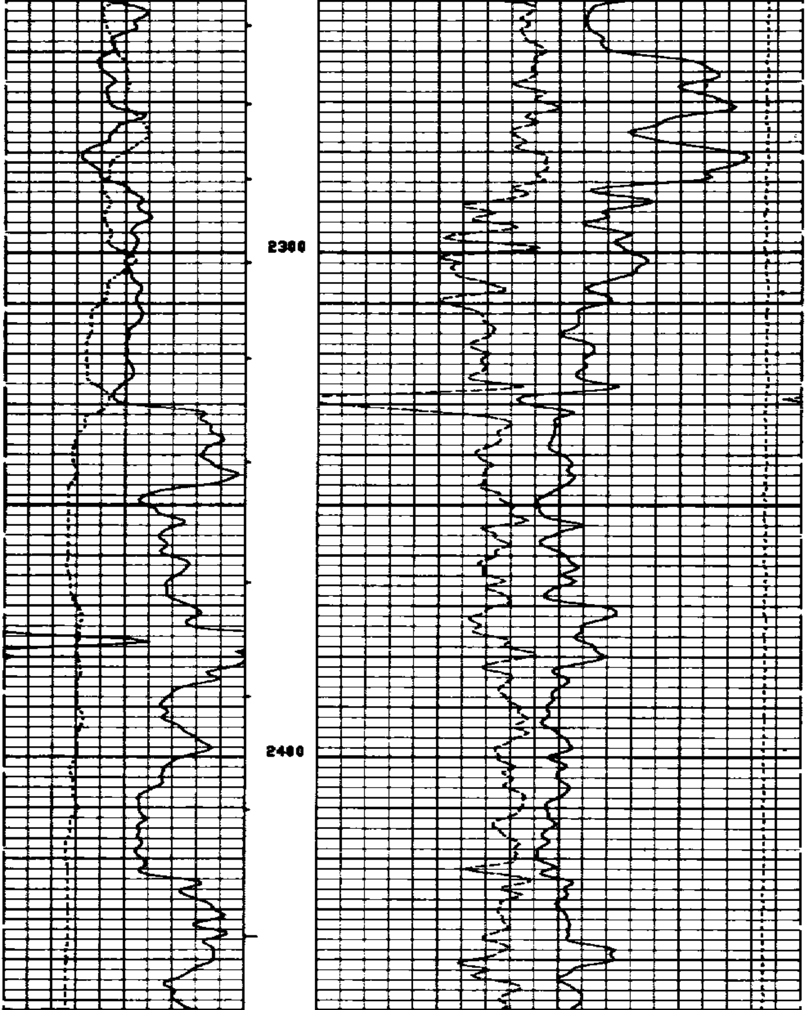


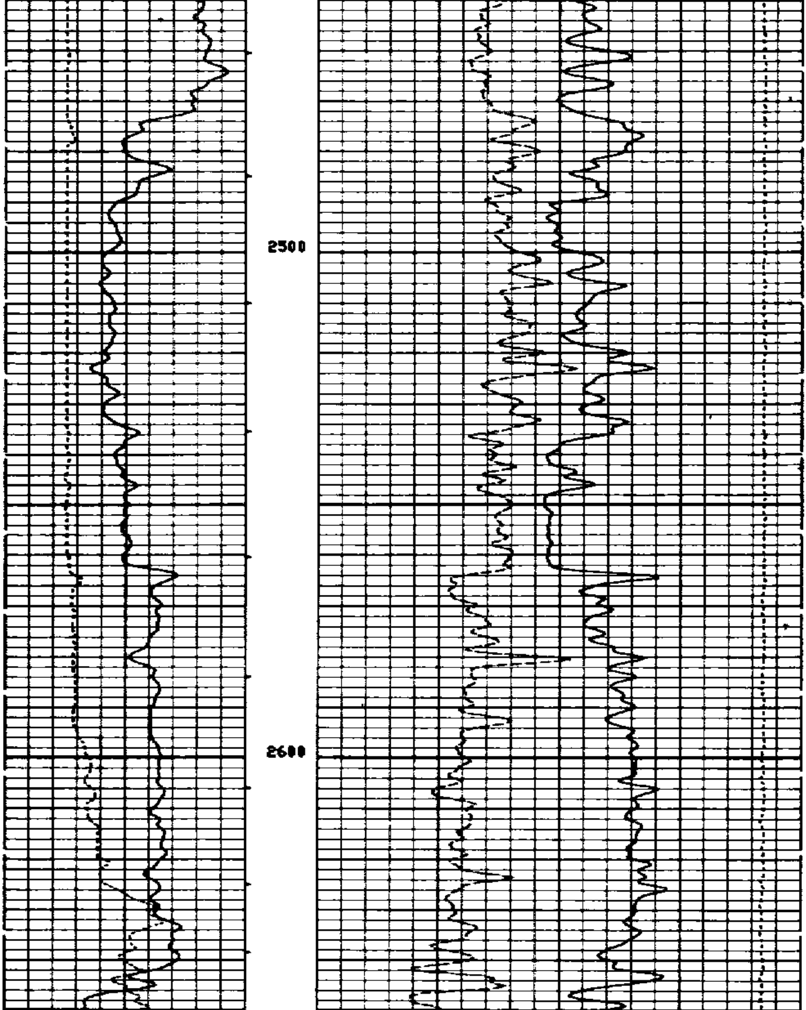


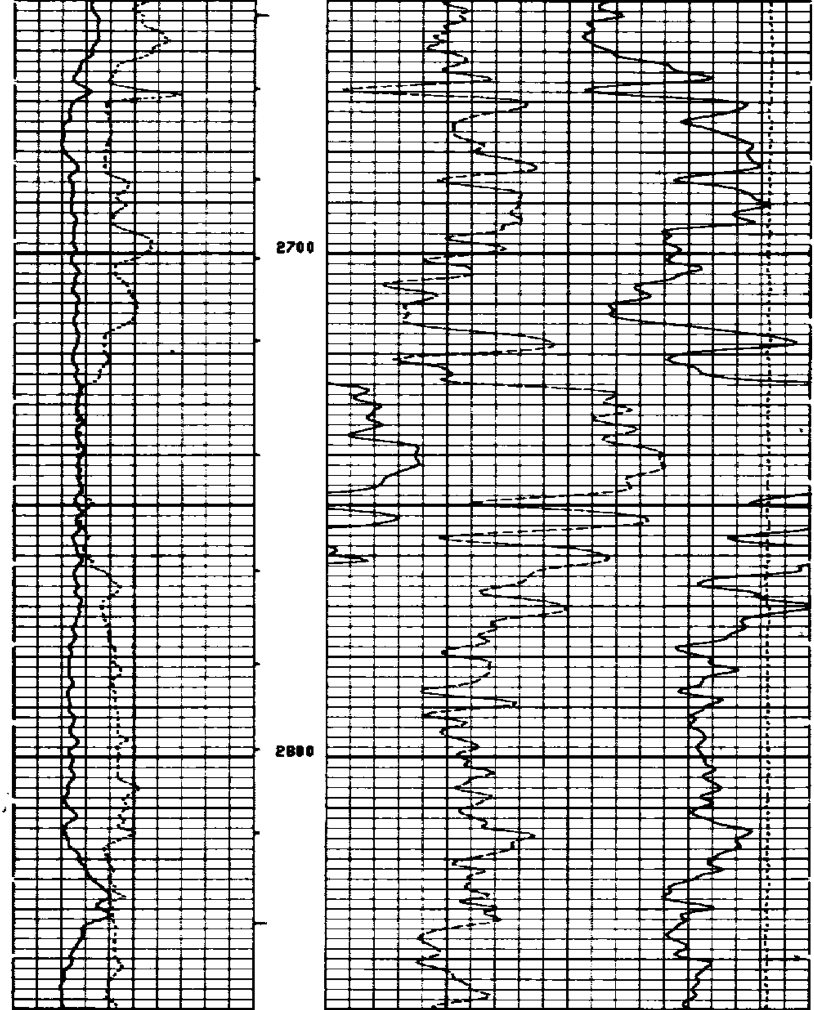


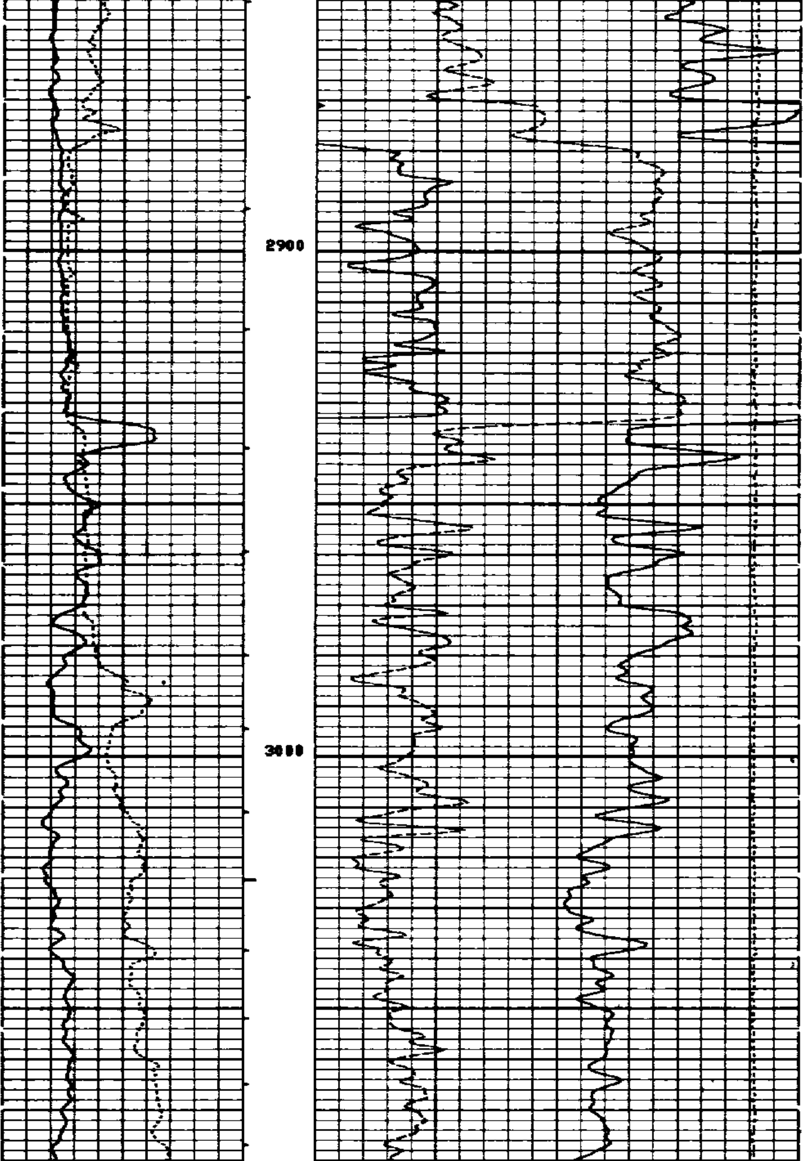


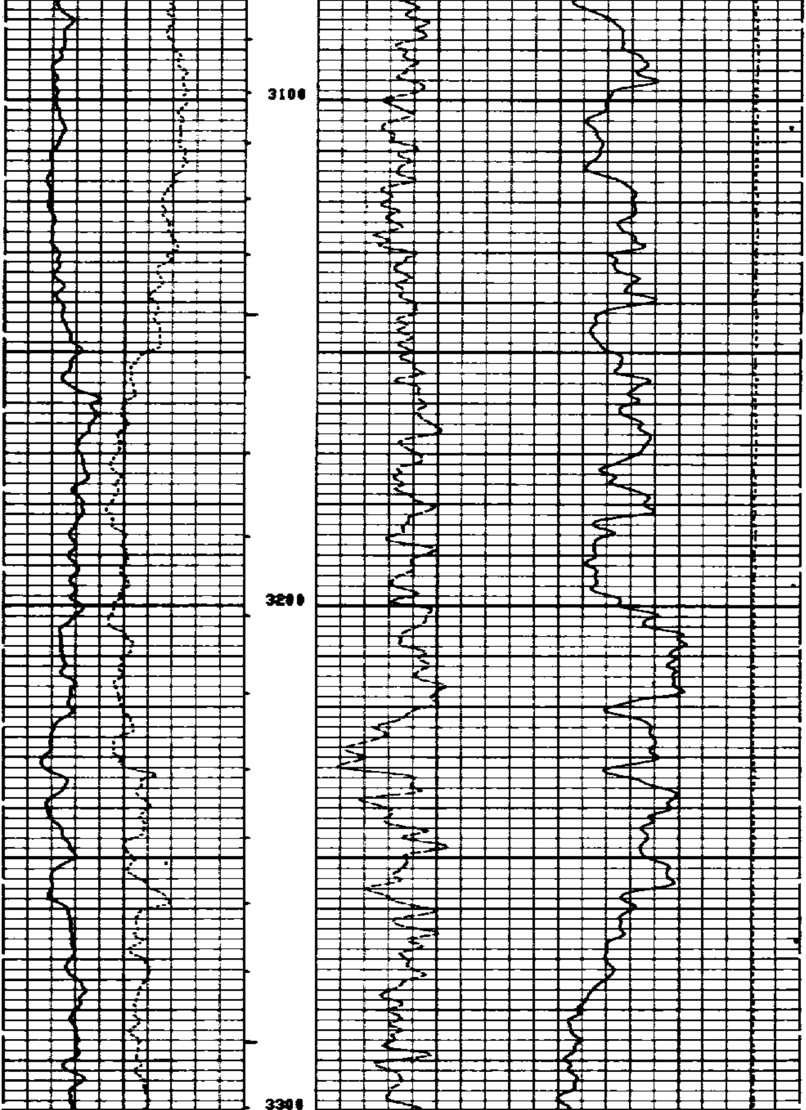


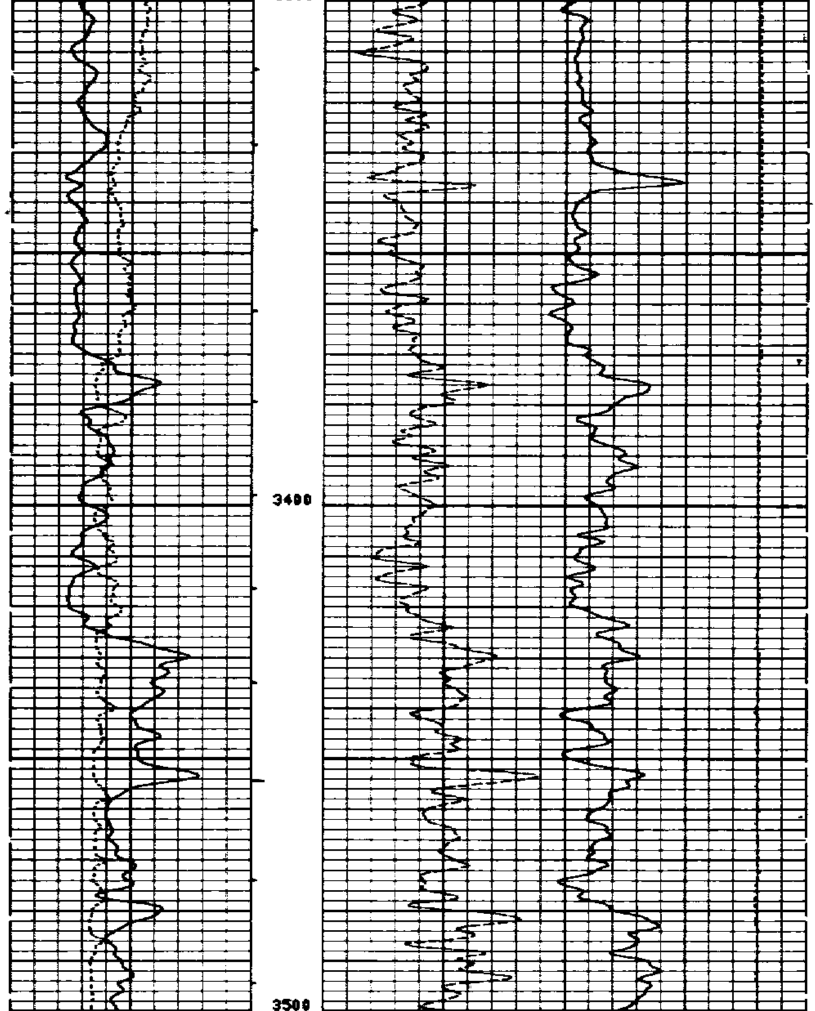


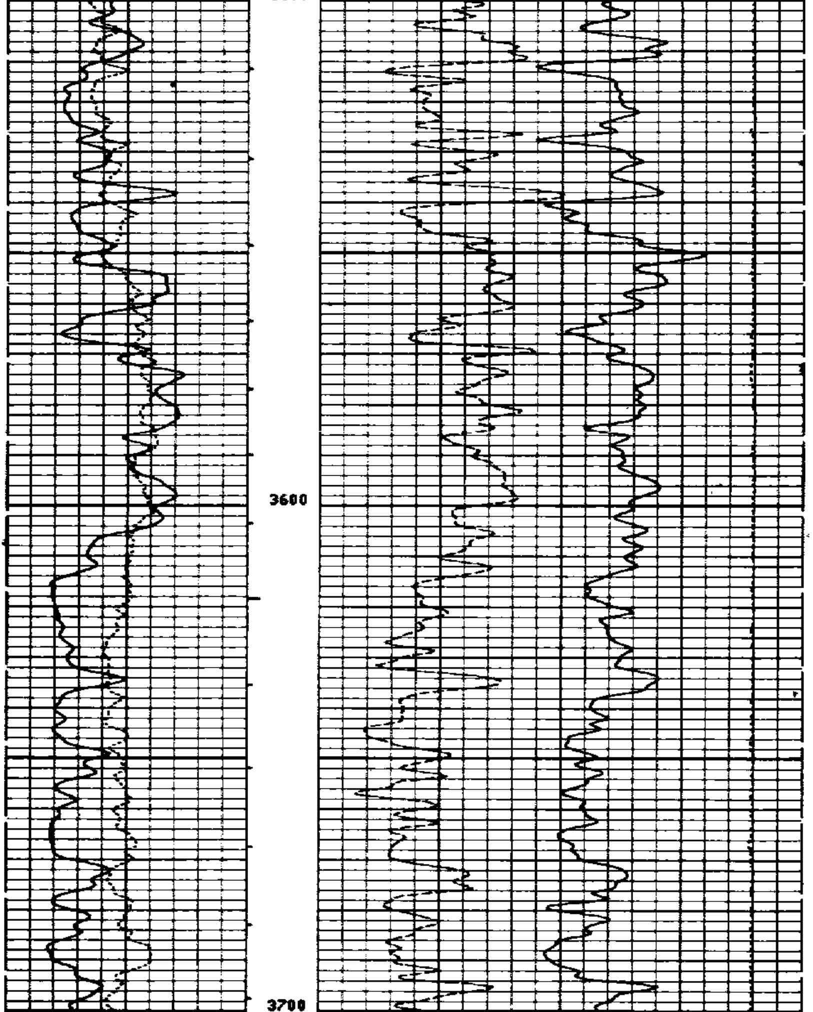


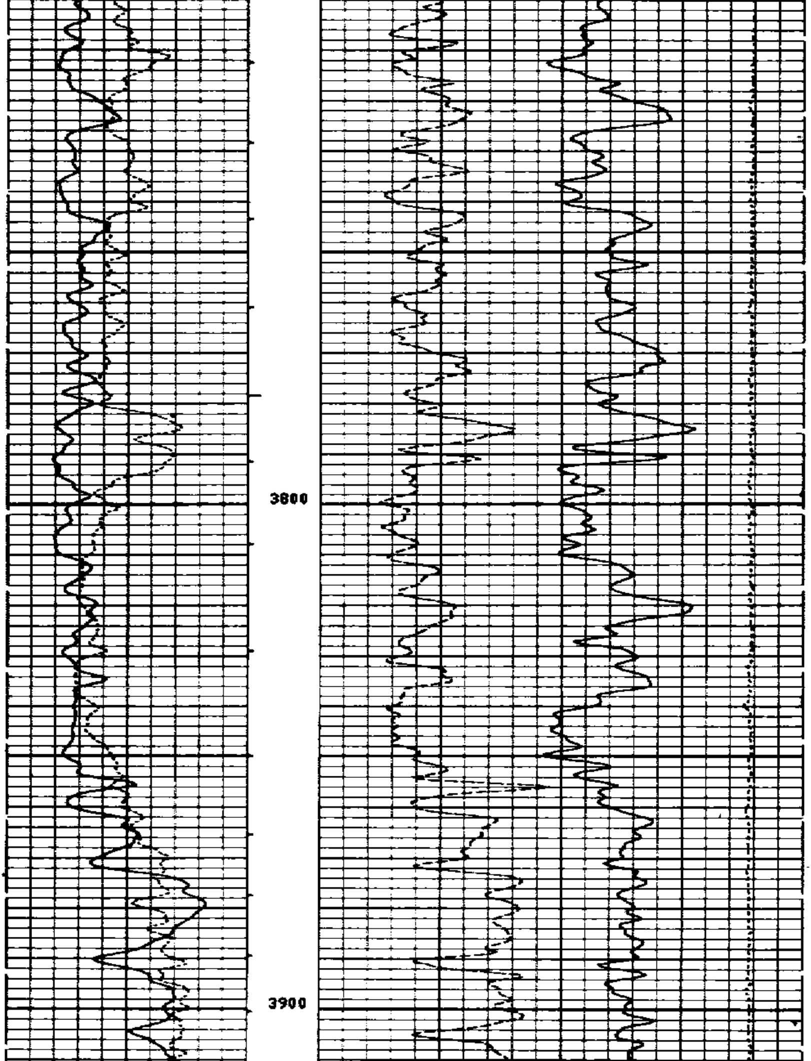


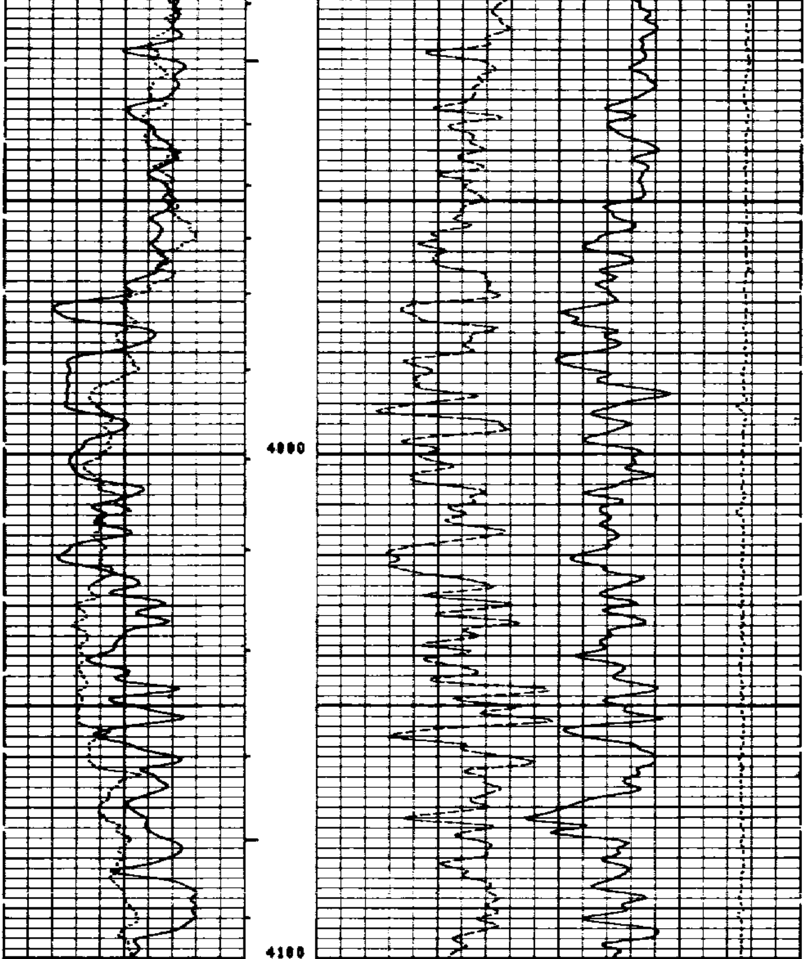


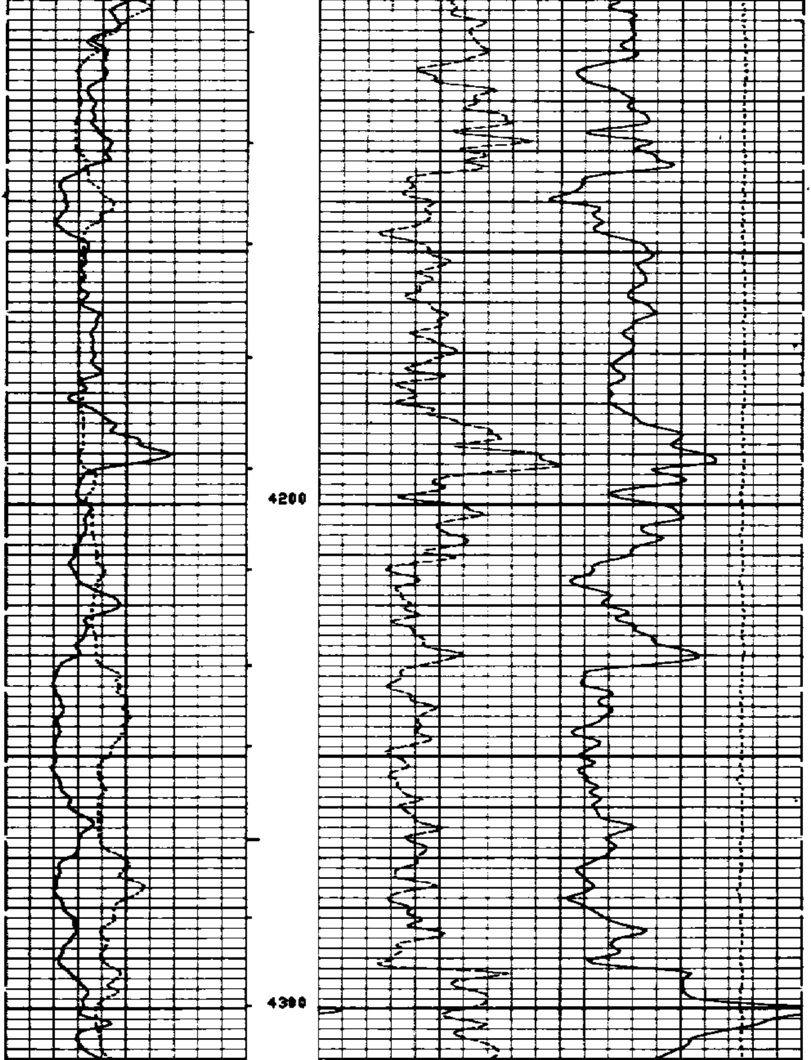


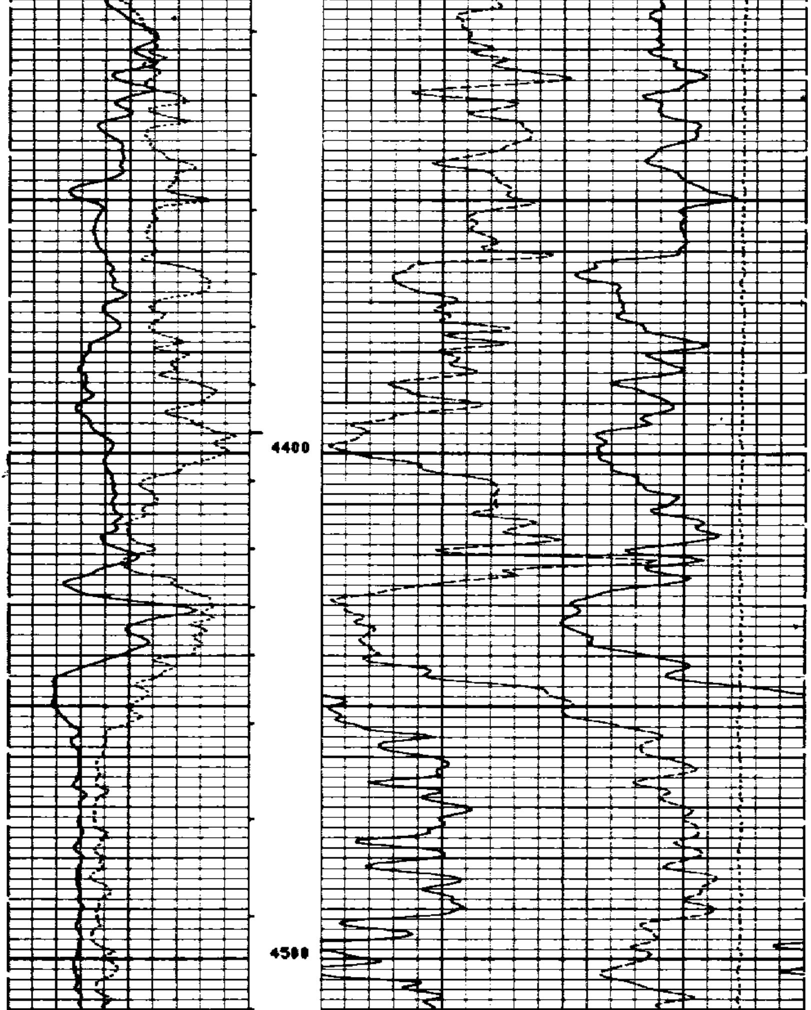


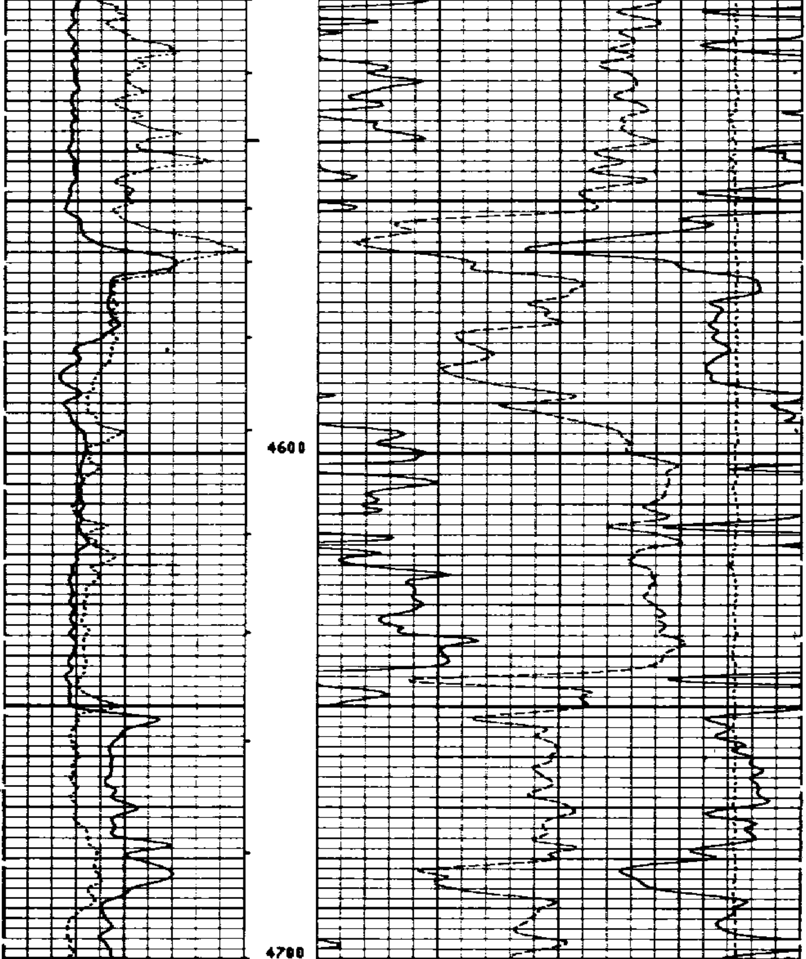


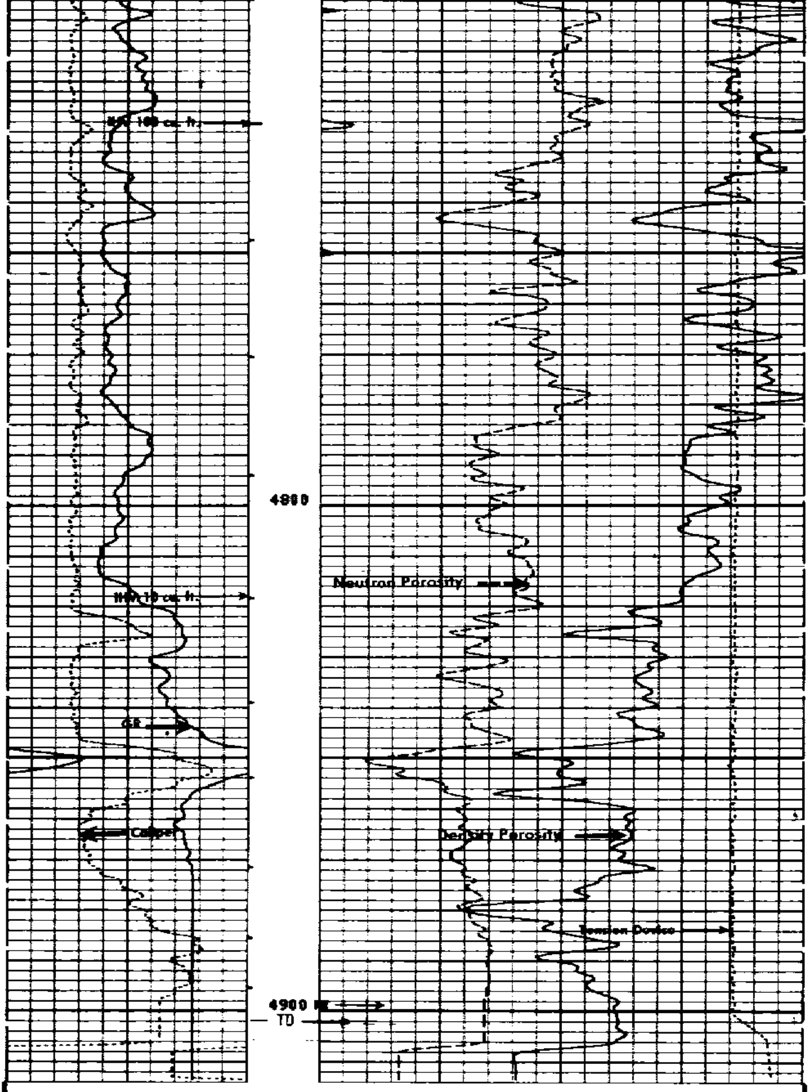












FILE 12 15-APR-85 21:46

SGR (GAPI) 0.0 150.00 CALI(IN) 6.0000 16.000		TENS(LB) 10000. 0.0 DPHI .60000 0.0 NPHI .60000 0.0

SENSOR MEASURE POINT TO TOOL ZERO

W4NG	39.8	FEET	W5NG	39.8	FEET
W2NG	39.8	FEET	W3NG	39.8	FEET
SNGT	39.8	FEET	W1NG	39.8	FEET
TPUW	39.8	FEET	NGPE	39.8	FEET
PPUW	39.8	FEET	TPLW	39.8	FEET
APUW	39.8	FEET	PPLW	39.8	FEET
NTCN	25.7	FEET	APLW	39.8	FEET
FTCN	26.2	FEET	NECN	24.2	FEET
SS2	2.0	FEET	FECN	23.7	FEET
LITH	2.5	FEET	SS1	2.0	FEET
LU	2.5	FEET	LS	2.5	FEET
CALI	2.6	FEET	LL	2.5	FEET
SGR	39.8	FEET	TENS	-.9	FEET
ENRA	23.5	FEET	TNRA	26.5	FEET

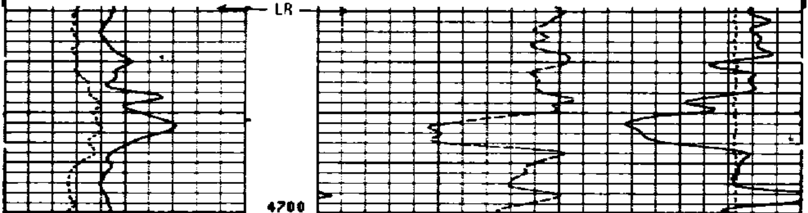
PARAMETERS

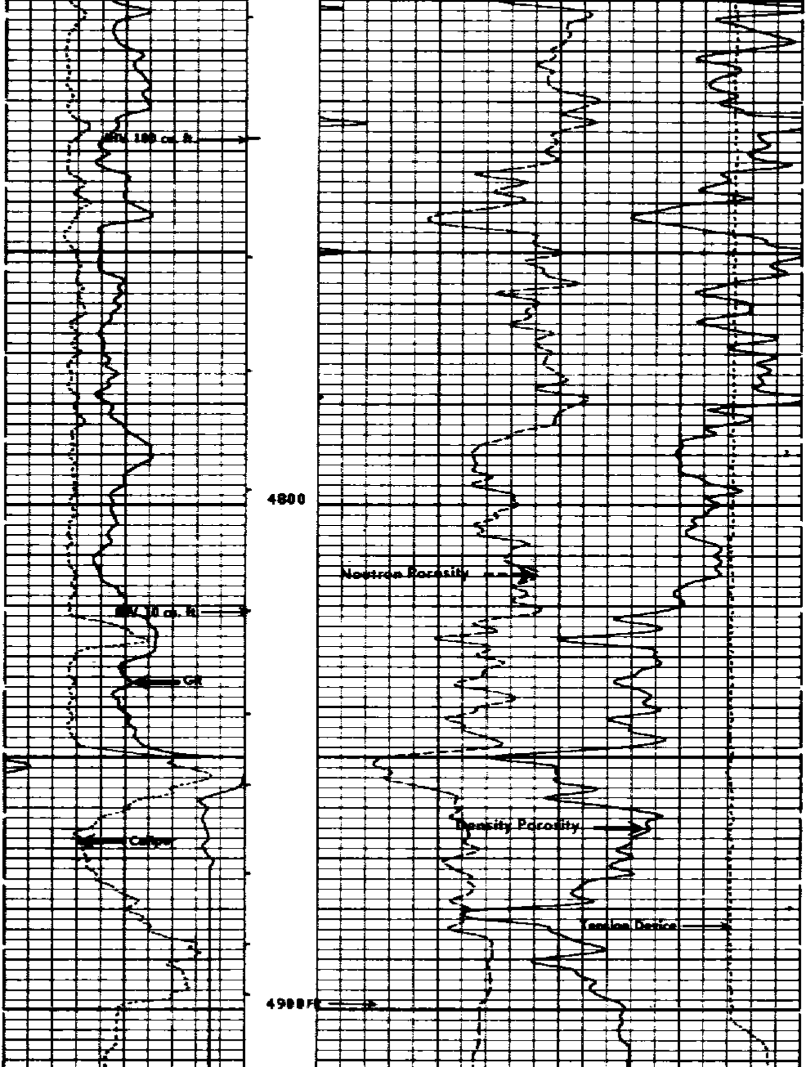
NAME	VALUE	UNIT	NAME	VALUE	UNIT
BHT	145.000	DEGF	TD	4914.00	F
MFT	0.0	DEGF	SHT	80.0000	DEGF
MW	10.2000	LB	RMFS	0.0	OHMM
EMPS	ERAT		NSSN	0	
TMPS	NORM		PDIF	THEN	
MATR	SAND		HC	CALI	
MDEN	2.65000	G/C3	FD	1.00008	G/C3
LPCS	THIN		WMUD	10.2000	LB/G
BHS	OPEN		DHC	CALI	
BS	0.75000	IN			

SGR (GAPI) 0.0 150.00 CALI(IN) 6.0000 16.000		TENS(LB) 10000. 0.0 DPHI .60000 0.0 NPHI .60000 0.0

REPEAT SECTION

FILE 11 15-APR-85 21:41





FILE 11 15-APR-85 21:23

TENS(LB)
10000. 0.0

SGR (GAPI)
0.0 150.00

CALI(IN)
6.0000 16.000

DPHI
.60000 0.0

NPHI
.60000 0.0

SENSOR MEASURE POINT TO TOOL ZERO

W4NG	39.8	FEET	W5NG	39.8	FEET
W2NG	39.8	FEET	W3NG	39.8	FEET
SNGT	39.8	FEET	W1NG	39.8	FEET
TPUW	39.8	FEET	NGPE	39.8	FEET
PPUW	39.8	FEET	TPLW	39.8	FEET
APUW	39.8	FEET	PPLW	39.8	FEET
NTCN	25.7	FEET	APLW	39.8	FEET
FTCN	26.2	FEET	NECN	24.2	FEET
SS2	2.0	FEET	FECN	23.7	FEET
LITH	2.5	FEET	SS1	2.0	FEET
LU	2.5	FEET	LS	2.5	FEET
CALI	2.6	FEET	LL	2.5	FEET
SGR	39.8	FEET	TENS	-.9	FEET
ENRA	23.5	FEET	TNRA	26.5	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
BHT	145.000	DEGF	TD	4914.00	F
MFT	0.0	DEGF	SHT	80.0000	DEGF
MW	10.2000	LB	RMFS	0.0	OHMM
ENPS	ERAT		MSSM	0	
TNPS	NORM		PDIF	TNEN	
MATR	SAND		HC	CALI	
MDEN	2.65000	G/C3	FD	1.00000	G/C3
LPCS	THIN		WMUD	10.2000	LB/G
BHS	OPEN		DHC	CALI	
BS	8.75000	IN			

TENS(LB)
10000. 0.0

DRHO(G/C3)
-.2500 .25000

PEF
0.0 10.000

SGR (GAPI)
0.0 150.00

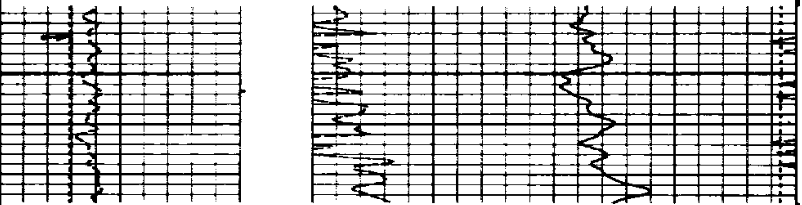
CALI(IN)
6.0000 16.000

DPHI
.60000 0.0

NPHI
.60000 0.0

CALIPER CHECK

FILE 10 15-APR-85 20:52



FILE 10 15-APR-85 20:50

			TENS(LB) 10000. 0.0
			DRHO(G/C3) -.2500 .25000
		PEF 0.0 10.000	
SGR (GAPI) 0.0 150.00		DPHI .60000 0.0	
CALI(IN) 6.0000 16.000		NPHI .60000 0.0	

```
                     BEFORE SURVEY CALIBRATION SUMMARY


    PERFORMED:      85/04/15
    PROGRAM FILE: LEM     (VERSION     25.802  83/12/14)


  MGTC                    DETECTOR CALIBRATION SUMMARY

                MEASURED
             BKGD     JIG          CALIBRATED            UNITS
      SGR     36      193             168                GAPI
              MEASURED BEFORE SURVEY
             BKG       JIG       UNITS
   W1NG     91.3     463.2       CPS
   W2NG     31.3     200.3       CPS
   W3NG     10.6      32.8       CPS
   W4NG      2.4      16.3       CPS
   W5NG      2.6      24.9       CPS


  CNTG                    CALIBRATION SUMMARY


                TANK                         JIG
         MEASURED  CALIBRATED       MEASURED   CALIBRATED

    TNRA    2.318       2.158          2.214       2.061


  LDTC                    DETECTOR CALIBRATION SUMMARY

          DRS SONDE NUMBER                          :   4775
          NUCLEAR SERVICE CARTRIDGE NUMBER          :   1955
          POWERED DETECTOR HOUSING NUMBER           :   2942
          POWERED GAMMA-GAMMA DETECTOR NUMBER :     2710
          LDT LOGGING SOURCE NUMBER                 :   7137
          LDT CALIBRATION MODE                      :   WATE
          MUD DENSITY                               :   10.2000

              M E A S U R E D
           BKGD   AL+FE     AL  UNITS
      LL   19.3    90.6  101.9    CPS
      LU   72.3   139.3  157.7    CPS
      LS   55.5   160.2  180.7    CPS
    LITH    5.4    34.0   52.1    CPS
     SS1   14.0   199.0  225.2    CPS
     SS2    9.6   267.5  298.0    CPS


  LDTC                    CALIPER CALIBRATION SUMMARY

               MEASURED                           CALIBRATED
            SMALL    LARGE                    SMALL       LARGE          UNITS
    CALI     6.8     11.1                      8.0        12.0            IN
```

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                        FILE    8      15-APR-85 13:37


                 AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:      85/04/16
   PROGRAM FILE: LEM    (VERSION     25.002  83/12/14)


 MGTC                        TOOL  CHECK

                 BEFORE          AFTER       UNITS
     SGR           168            177        GAPI
                MEASURED AFTER SURVEY
                 BKG       JIG       UNITS
  W1NG          87.8      476.7       CPS
  W2NG          30,4      206.3       CPS
  W3NG           7.4       30.4       CPS
  W4NG           2.5       10.0       CPS
  W5NG           2.9       26.4       CPS


 CMTG                         TOOL  CHECK

                         JIG
                 BEFORE        AFTER  POROSITY+CHANGE (LIME)

   TNRA          2.061         2.070    .001


 LDTC                         TOOL  CHECK

          DRS SONDE NUMBER                          :    4775
          NUCLEAR SERVICE CARTRIDGE NUMBER          :    1955
          POWERED DETECTOR HOUSING NUMBER           :    2942
          POWERED GAMMA-GAMMA DETECTOR NUMBER :          2710
          LDT LOGGING SOURCE NUMBER                 :    7137
          LDT CALIBRATION MODE                      :    WATE
          MUD DENSITY                               :    10.2000

              BACKGROUND MEASURED
              BEFORE         AFTER          UNITS
      LL      19.31          19.32           CPS
      LU      72.37          72.62           CPS
      LS      55.50          55.65           CPS
    LITH       5.468          5.39           CPS
     SS1      14.03          14.14           CPS
     SS2       9.609          9.58           CPS
                        FILE   14       16-APR-85 03:32
                  SHOP SUMMARY


    PERFORMED:    23-MAR-85 14:03
    PROGRAM FILE: CCSHOP (VERSION     20.15   85/01/03)


 LDTC               DETECTOR CALIBRATION SUMMARY

           DRS SONDE NUMBER                          :    4775
           NUCLEAR SERVICE CARTRIDGE NUMBER          :    1955
           POWERED DETECTOR HOUSING NUMBER           :    2942
           POWERED GAMMA-GAMMA DETECTOR NUMBER :          2710
           LDT LOGGING SOURCE NUMBER                 :    7137
           LDT CALIBRATION MODE                      :    WATE
           MUD DENSITY                               :    8.00000    LB/G
```

```
        MASTER  CALIBRATED
        BKGD   AL+FE     AL   UNITS
  LL    19.4    90.6   101.9   CPS
  LU    72.6   139.3   157.7   CPS
  LS    55.7   160.2   180.7   CPS
 LITH    5.5    34.0    52.1   CPS
 SS1    14.1   199.0   225.2   CPS
 SS2     9.6   267.5   298.0   CPS

        SPECTRUM QUALITY RATIOS
  QRLS       .6461
  QRSS       .7558
  QRLI       .2887
  QLIR      1.3608
  QR         .9964
```

LSHV 2071
SSHV 1401

```
              SHOP SUMMARY


  PERFORMED:     23-MAR-85 16:34
  PROGRAM FILE: CCSHOP (VERSION    28.15   85/01/03)


CNTG                 CALIBRATION SUMMARY

CNH (CNTG HOUSING #):                45
CNC (CNTG CARTRIDGE #):              38
CNB-AB (CNT JIG #):                  2124
NSSN (NEUTRON SOURCE SERIAL #):      2321

             TANK                          JIG
      MEASURED  CALIBRATED       MEASURED   CALIBRATED

  THRA   2.318      2.158         2.216       2.063
```

ENRH 2.392

[illegible]

```
             SHOP SUMMARY


  PERFORMED:      84/12/14
  PROGRAM FILE: NGSHOP (VERSION    26.2    83/11/17)


NGTC                  DETECTOR CALIBRATION SUMMARY

             MEASURED
          BKGD     JIG          CALIBRATED          UNITS
   SGR     45      197             153               GAPI
              SHOP        MEASURED
          BKG       JIG       UNITS
W1NG     114.3     476.0      CPS
W2NG      41.2     202.3      CPS
W3NG      13.6      36.0      CPS
W4NG       2.3      15.7      CPS
W5NG       2.4      24.0      CPS

PCSL    13          KEY OFFSET

                        FILE     0        14-DEC-84 11:24
```

NGD-A 798
NGC-C 798
DHUC-3
SSC-