COUNTY LINN
FIELD ALBANY
LOCATION 17-10S-3W
WELL HENSCHELL NO. 17-34
COMPANY AMERICAN QUASAR

**Schlumberger**

SIMULTANEOUS
# COMPENSATED NEUTRON-FORMATION DENSITY

COMPANY AMERICAN QUASAR PETROLEUM COMPANY

RECEIVED-PTLD
JAN 5 1981
DEPT OF GEOLOGY

WELL HENSCHELL NO. 17-34
FIELD ALBANY
COUNTY LINN STATE OREGON

LOCATION 1320'FEL & 990'FSL

| API SERIAL NO. | SEC. | TWP. | RANGE |
|---|---|---|---|
|  | 17 | 10S | 3W |

Other Services:
HDT
DIL
BHC

Permanent Datum: GL ; Elev.: 200
Log Measured From KB , 10.5 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 210.5
D.F. --
G.L. 200.0

| | | | | |
|---|---|---|---|---|
| Date | 12-13-80 | | | |
| Run No. | ONE | | | |
| Depth—Driller | 2856 | | | |
| Depth—Logger | 2856 | | | |
| Btm. Log Interval | 2855 | | | |
| Top Log Interval | 515 | | | |
| Casing—Driller | 7" @515 | @ | @ | @ |
| Casing—Logger | 515 | | | |
| Bit Size | 6¼" | | | |
| Type Fluid in Hole | LIGNOSULFONATE | | | |
| Dens. \| Visc. | 10.6 \| 40 | | | |
| pH \| Fluid Loss | 10 \| 6 ml | ml | ml | ml |
| Source of Sample | CIRCULATION | | | |
| Rm @ Meas. Temp. | 0.4 @ 65 °F | @ °F | @ °F | @ °F |
| Rmf @ Meas. Temp. | 0.36 @ 59 °F | @ °F | @ °F | @ °F |
| Rmc @ Meas. Temp. | 0.59 @ 65 °F | @ °F | @ °F | @ °F |
| Source: Rmf \| Rmc | M \| M | | | |
| Rm @ BHT | 0.3 @ 86 °F | @ °F | @ °F | @ °F |
| TIME Circulation Stopped | 0400 | | | |
| TIME Logger on Bottom | 1030 | | | |
| Max. Rec. Temp. | 86 °F | °F | °F | °F |
| Equip. \| Location | 8126 \| SAC | | | |
| Recorded By | NADERSEN | | | |
| Witnessed By | SMITH/ MANN | | | |

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

| | | | | |
|---|---|---|---|---|
| RUN NO. | ONE | | | |
| Service Order No. | 205765 | | | |
| Fluid Level | FULL | | | |
| Salinity, PPM CL. | - | | | |
| Speed - F.P.M. | 30 | | | |
| **EQUIPMENT DATA** | | | | |
| Dens. Panel | 418 | | | |
| Dens. Cart. | 321 | | | |
| Dens. Skid. | 392 | | | |
| Dens. Sonde | 392 | | | |
| Dens. Source | 5153 | | | |
| Dens. Calibrator | 1177 | | | |
| Neut. Panel | 418 | | | |
| Neut. Cart. | 409 | | | |
| Neut. Source | 708 | | | |
| Neut. Calibrator | 594 | | | |
| GR Cart. | 2697 | | | |
| Memorizer Panel | - | | | |
| Tape Recorder (TTR) | - | | | |
| Depth Encoder (DRE) | - | | | |
| Pressure Wheel (CPW) | - | | | |
| Centralizers: Enter Spring, Standoffs, In-line, or None — Type | - | | | |
| Centralizers: No. | - | | | |
| Centralizers: S. O. — Inches | - | | | |

| Type Log | Depth | | |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**REMARKS:**

CALIPER MUDDED UP AT 1100'
READS 4"
NEUTRON COUNTER READING LOW
MAKING SPIKES ON LOG
SPLICED REPEATS INTO MAIN LOG
500' TO 1170' & 2540 TO TD

## CALIBRATION DATA

| | | | | | | |
|---|---|---|---|---|---|---|
| GR | BKG. CPS | 48 | | | | |
| | Source CPS | 245 | | | | |
| | Sens. - Cal | API | | | | |
| | T. C. - Cal | - | | | | |
| CNL | Short Spacing - Before Log | 2884 | | | | |
| | Long Spacing - Before Log | 1260 | | | | |
| | Short Spacing - After Log | 2854 | | | | |
| | Long Spacing - After Log | 1256 | | | | |
| FDC | $P^1$ — Before Log | 420 | | | | |
| | $P^2$ — Before Log | 708 | | | | |
| | $P^1$ — After Log | 410 | | | | |
| | $P^2$ — After Log | 705 | | | | |

## LOGGING DATA

| DEPTH | | CNP | | | FDC | | | | GR | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Top | Bottom | Porosity Scale | Matrix | Auto Corr. or Hole Size Setting | Porosity Scale | Grain Density | Liquid Density | Hole Fluid | Sens. Logged | T. C. | Zero Div. Left | Scale Per 100 Div. |
| 515 | 2855 | 60-0 | SS-OH | AUTO | 60-0 | 2.65 | 1.0 | LIQ | 150 | CSU | 0 | 150 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

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.

## PARAMETERS

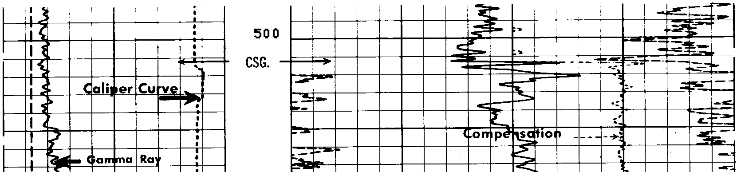
| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

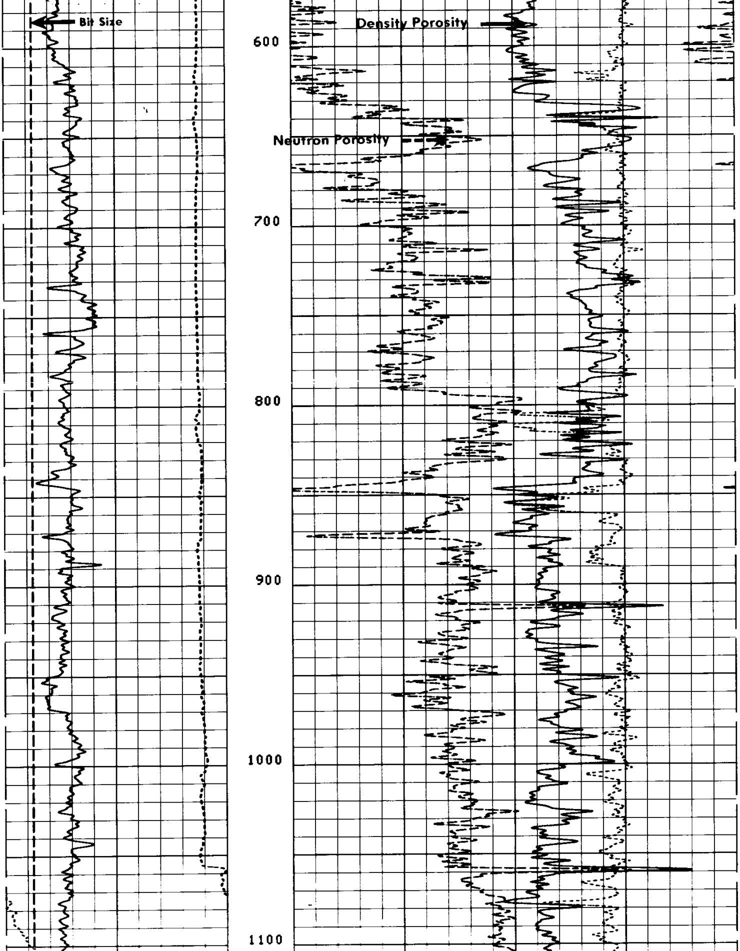
BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

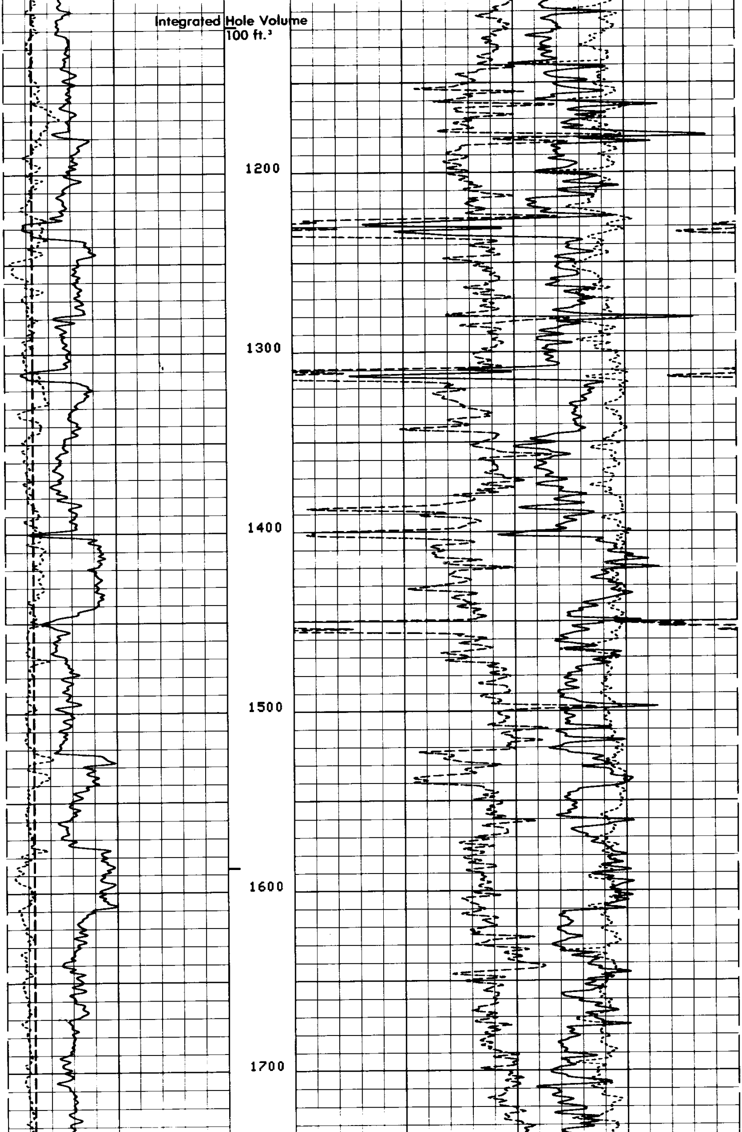
DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

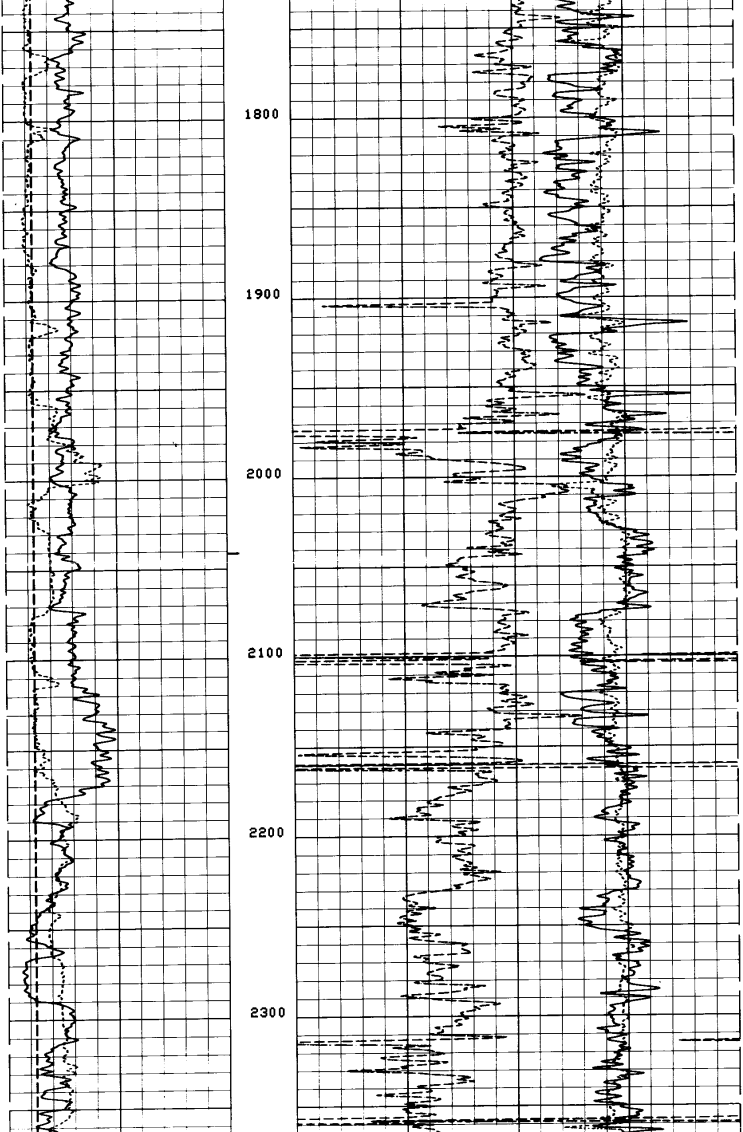
FILE

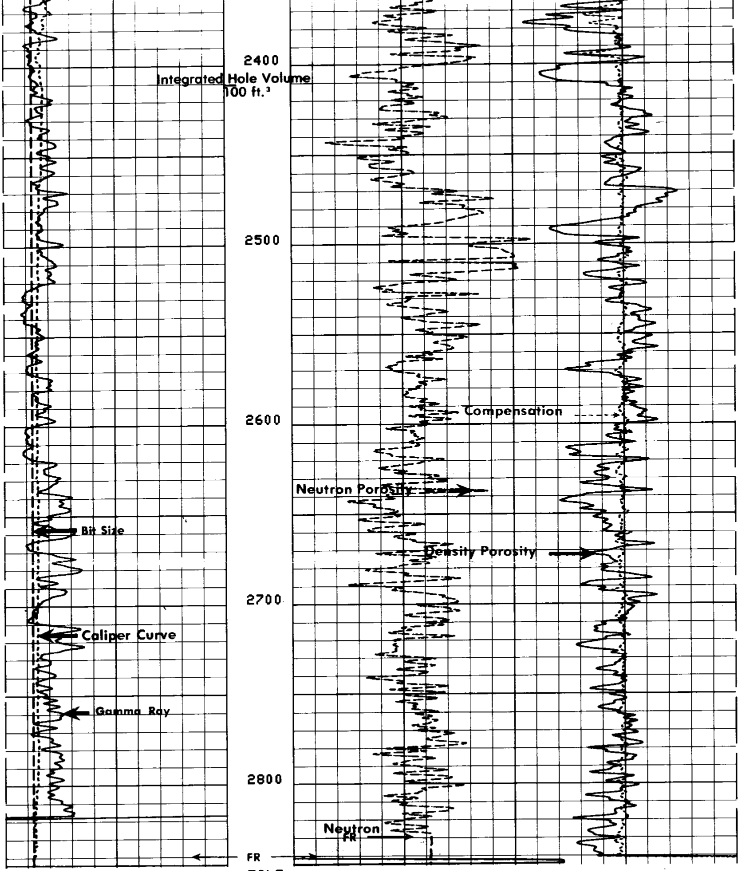
101











FILE

101

BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

PARAMETERS

| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

## PARAMETERS

| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
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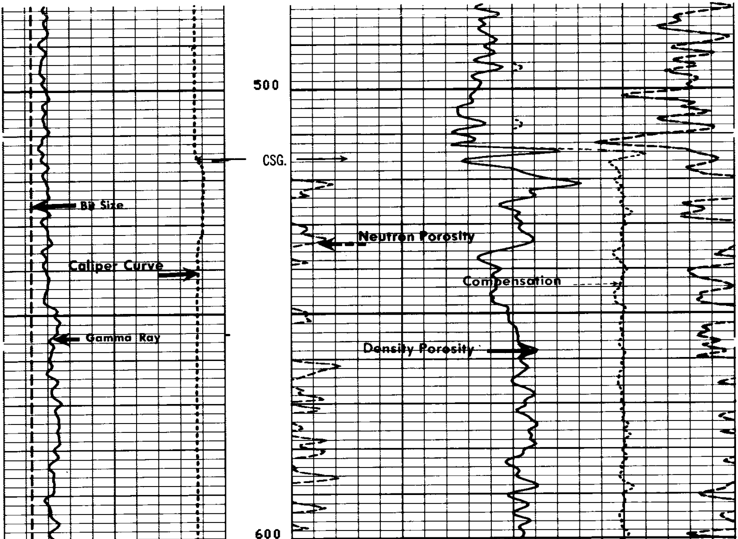
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

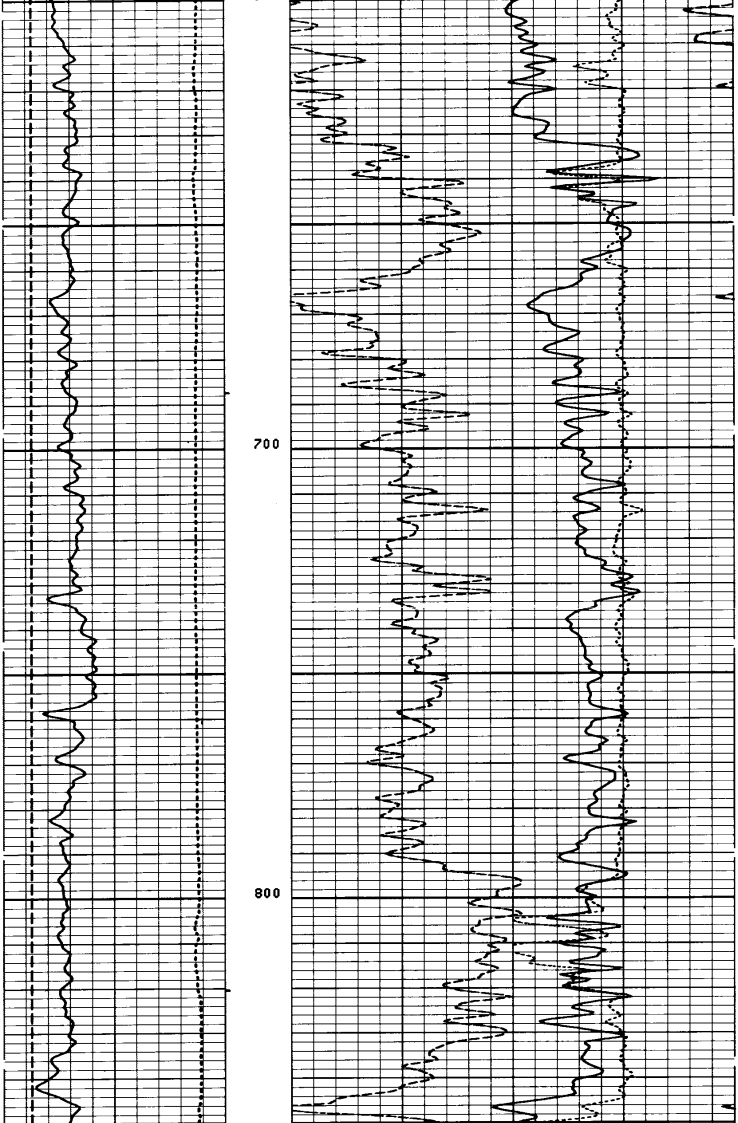
BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

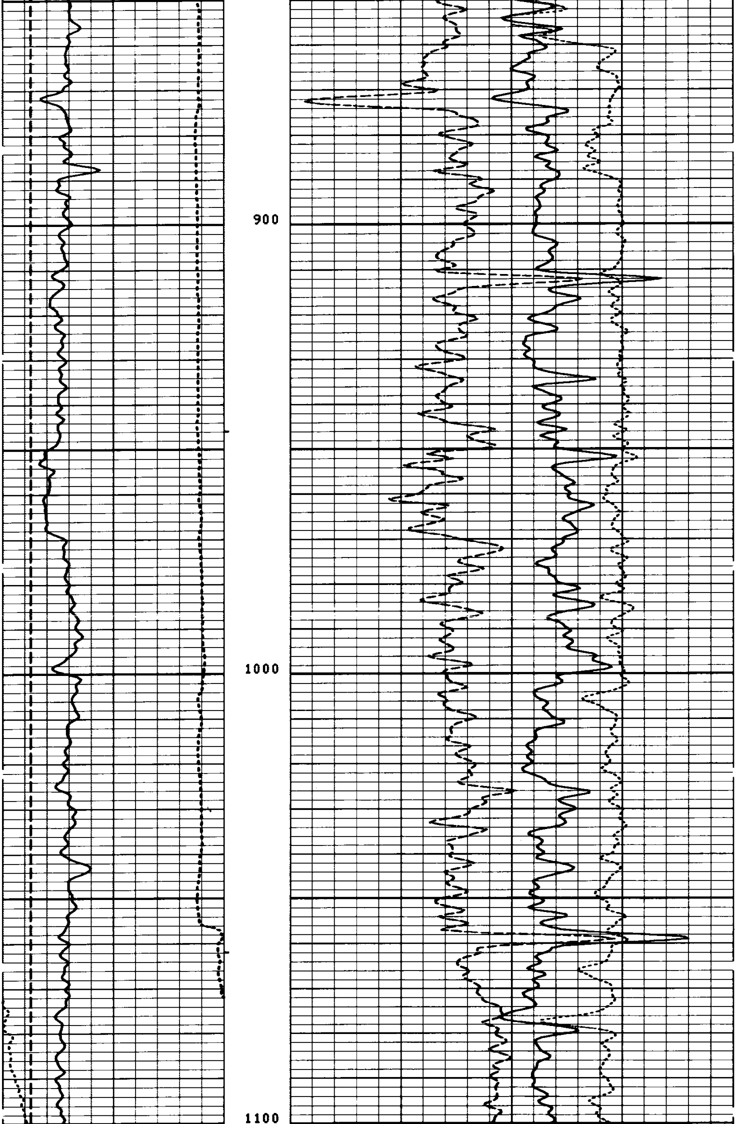
DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

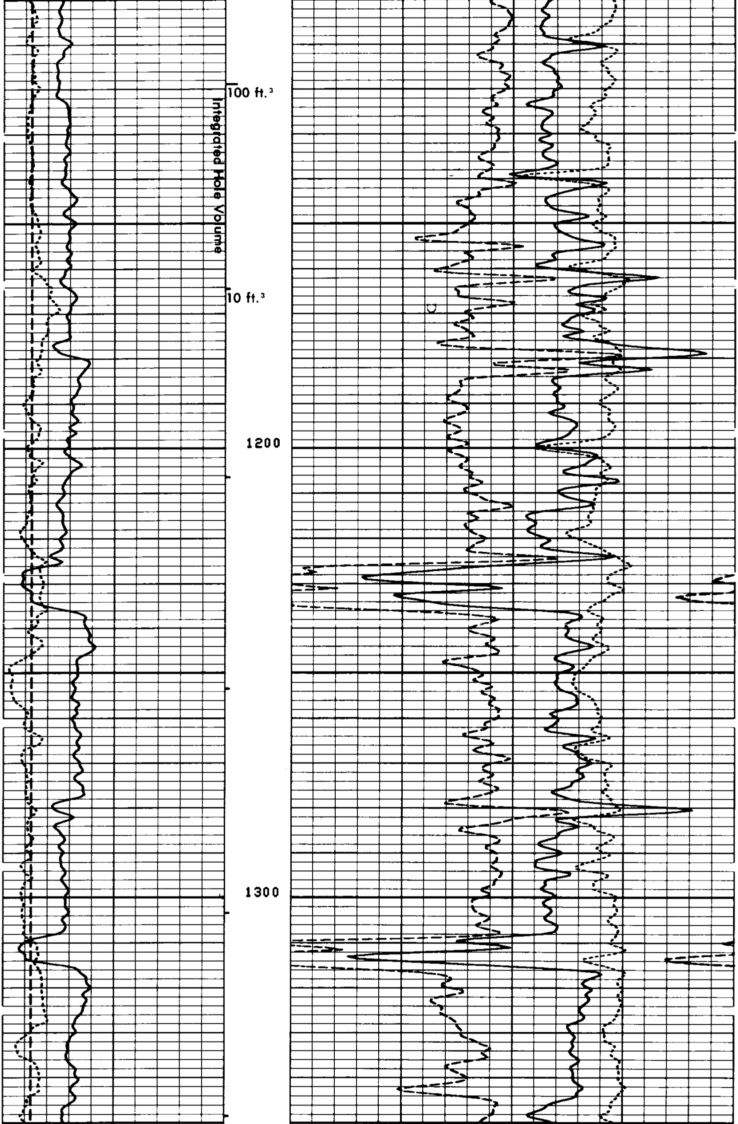
FILE

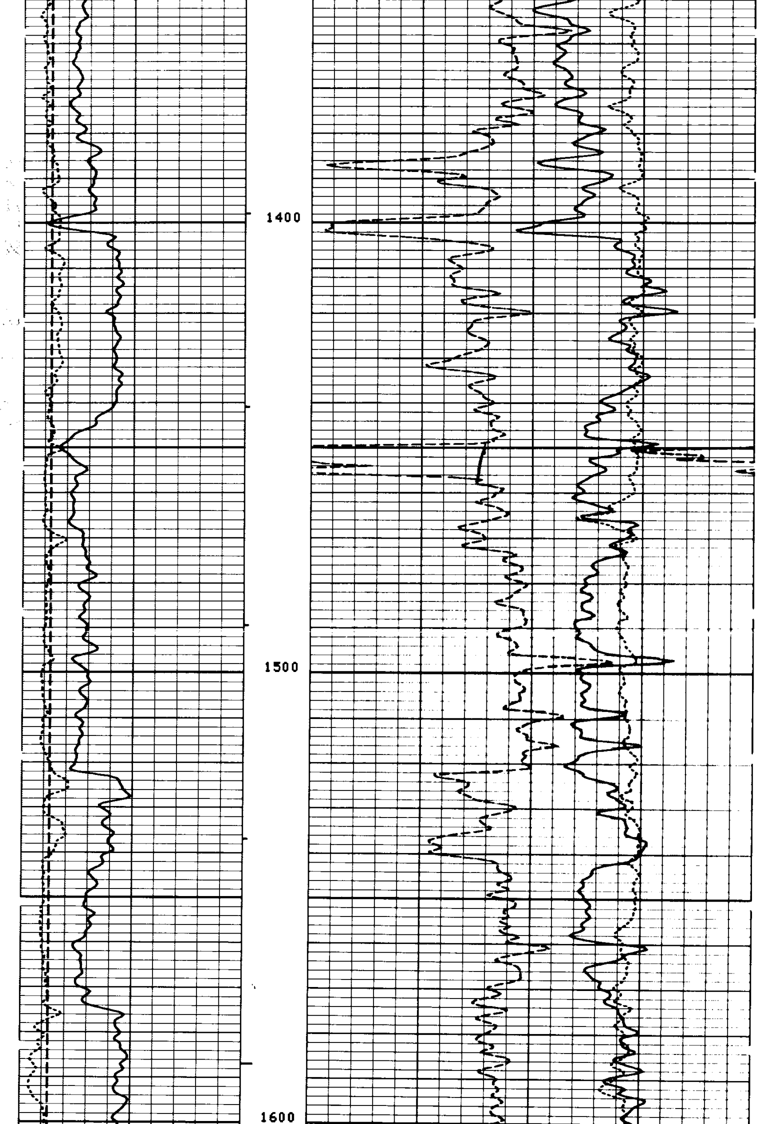
102

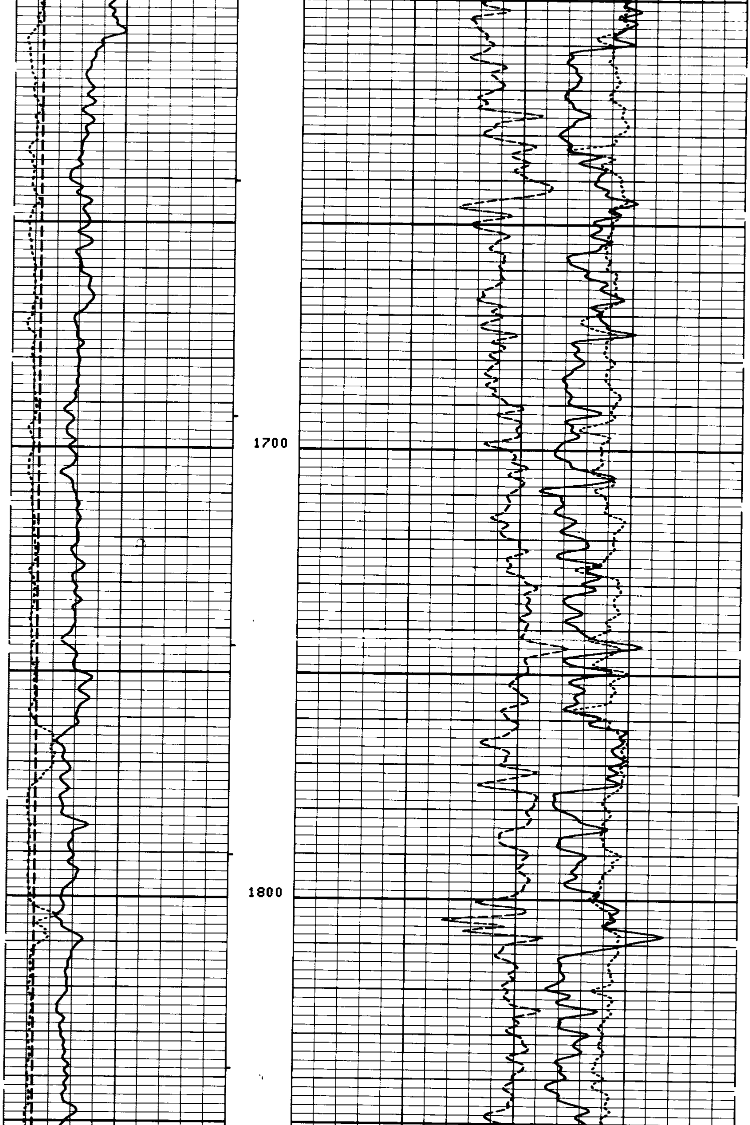


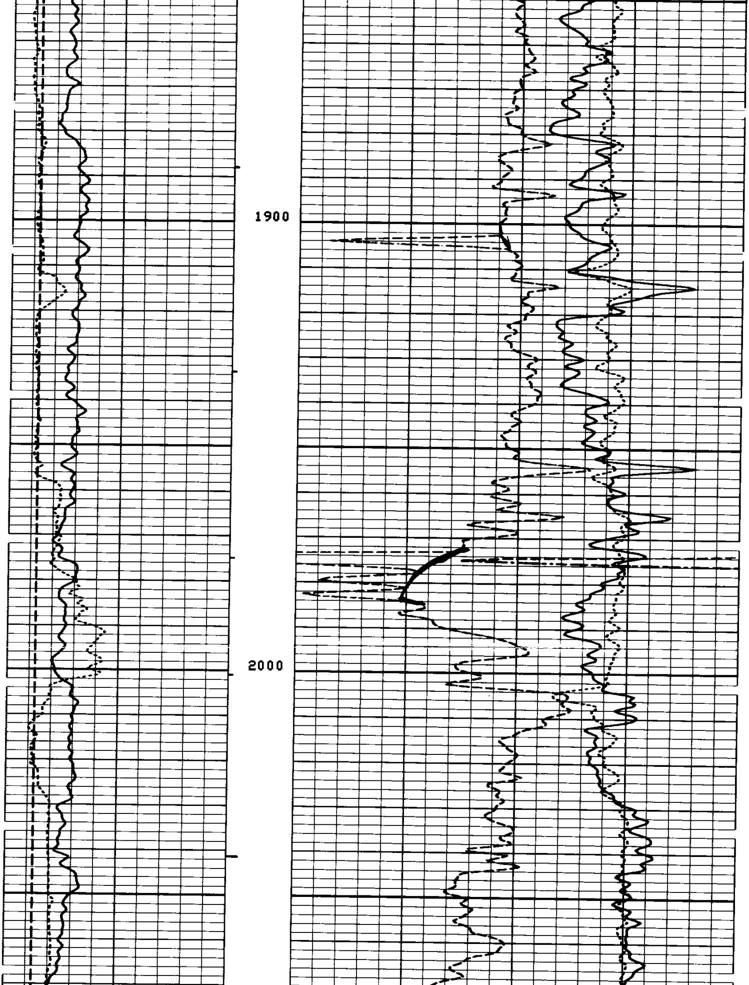


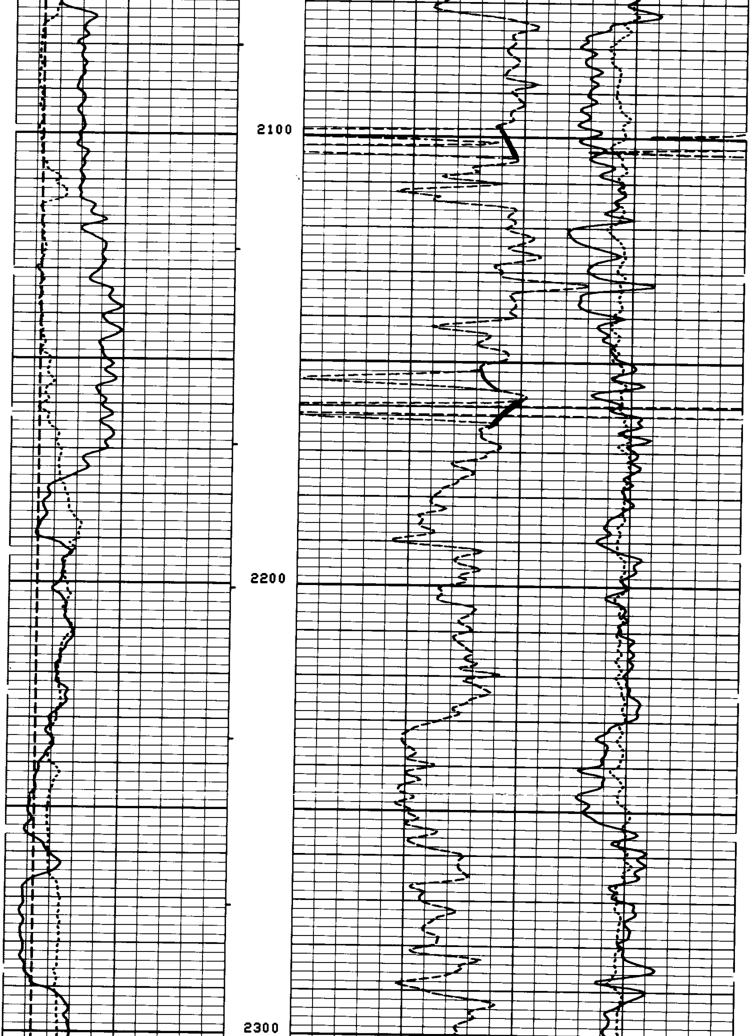


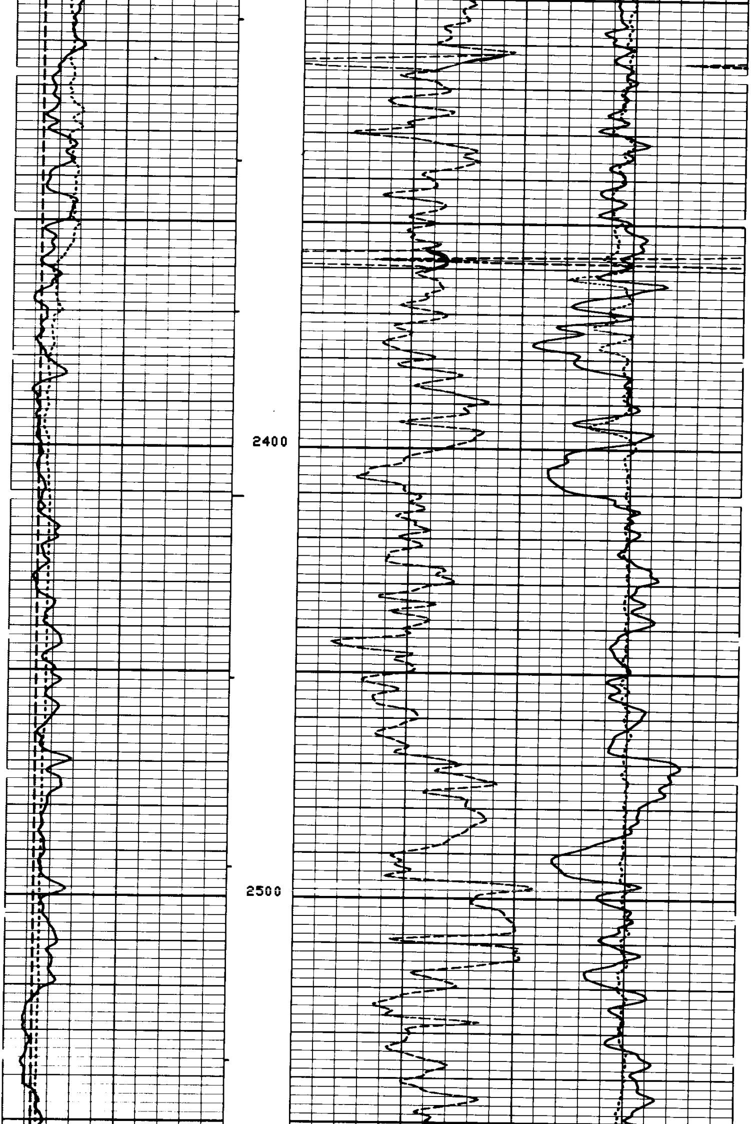


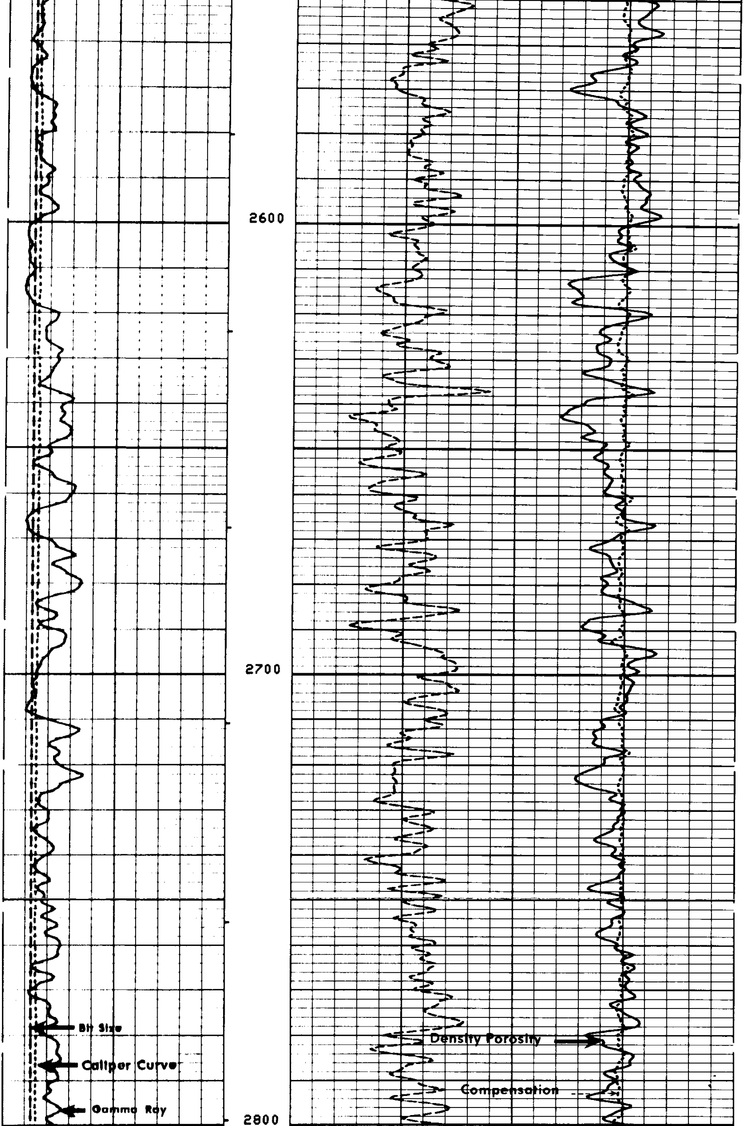


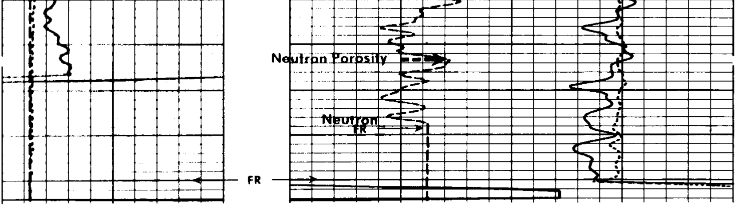












FILE

102

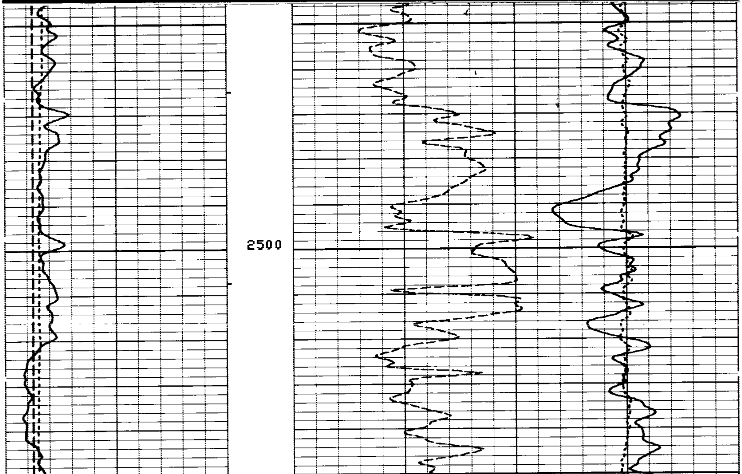
BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

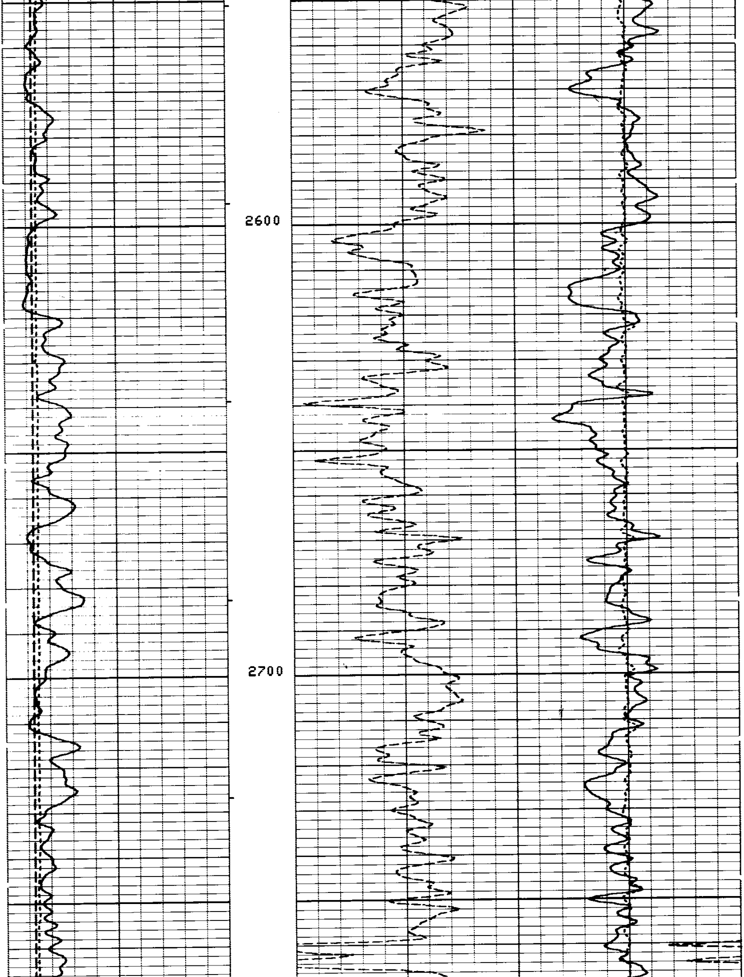
DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

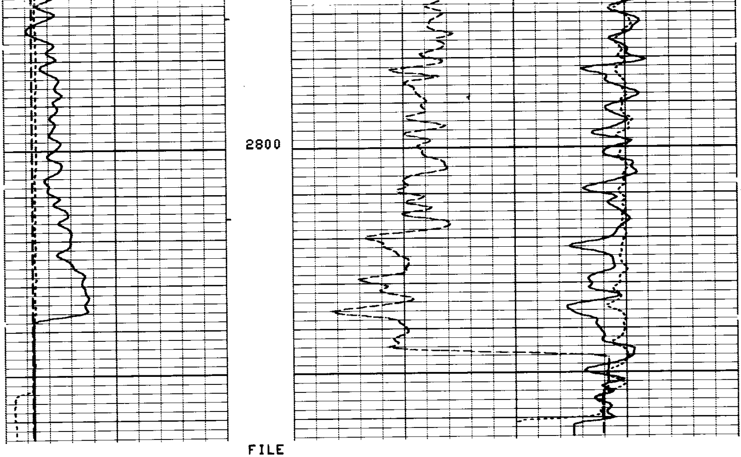
PARAMETERS

| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

REPEAT SECTION REPEAT SECTION REPEAT SECTION REPEAT SECTION







FILE

14

BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

PARAMETERS

| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

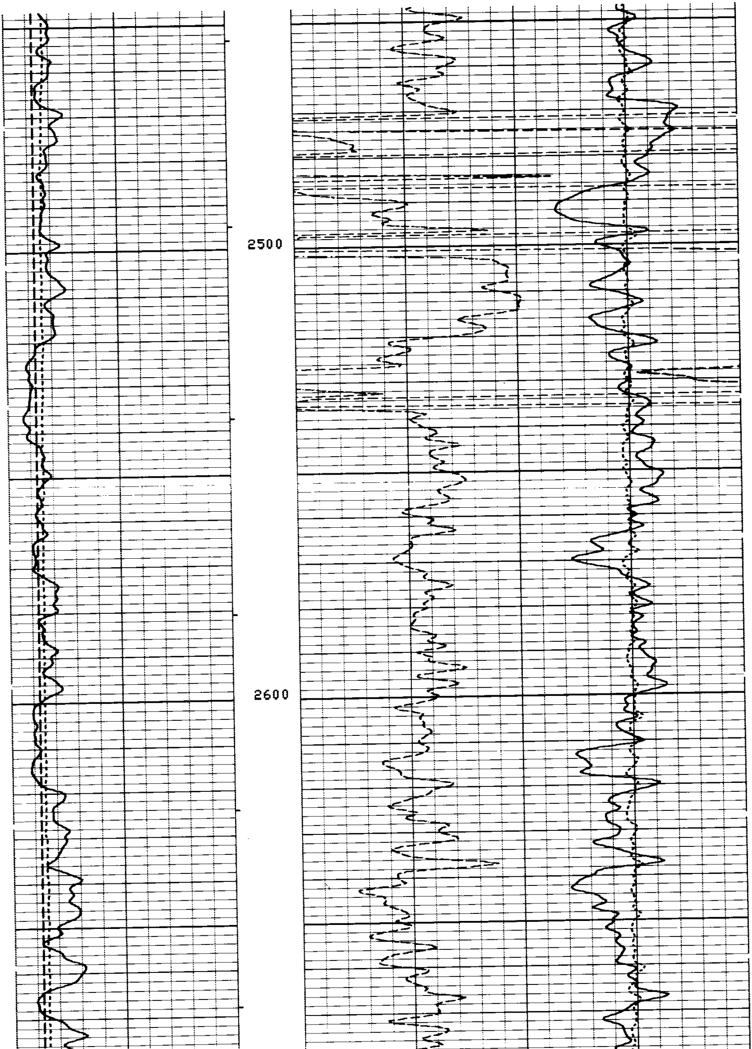
PARAMETERS

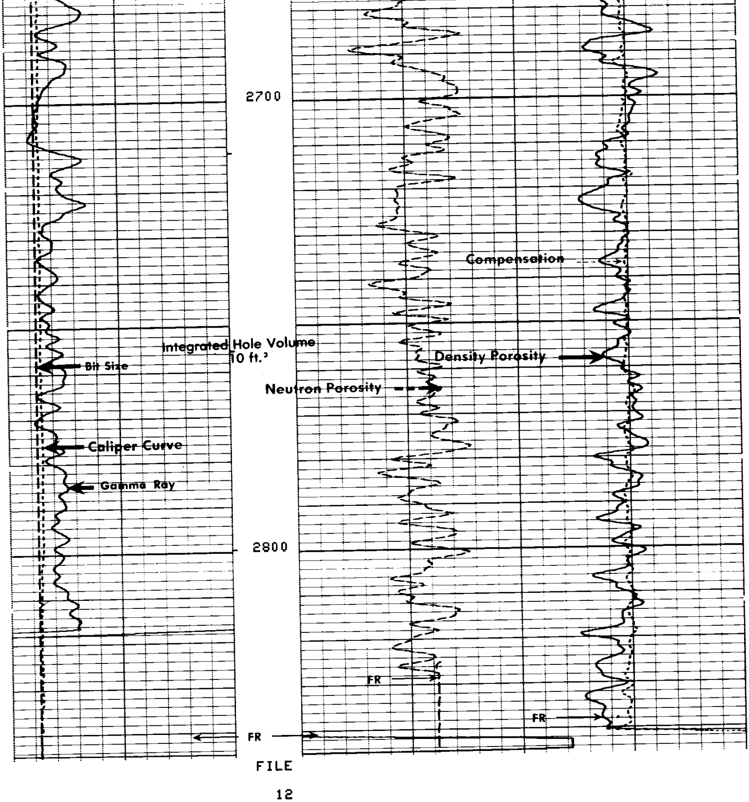
| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

BS (IN )
5.000 15.00
CALI(IN )
5.000 15.00
GR (GAPI)
0.0 150.0

DRHO(G/C3)
-0.250 0.2500
NPHI( )
0.6000 0.0
DPHI( )
0.6000 0.0

FILE





| | | | |
|---|---|---|---|
| BS (IN ) | | DRHO(G/C3) | |
| 5.000 | 15.00 | -0.250 | 0.2500 |
| CALI(IN ) | | NPHI( ) | |
| 5.000 | 15.00 | 0.6000 | 0.0 |
| GR (GAPI) | | DPHI( ) | |
| 0.0 | 150.0 | 0.6000 | 0.0 |

PARAMETERS

| NAME | UNIT | VALUE | NAME | UNIT | VALUE | NAME | UNIT | VALUE |
|---|---|---|---|---|---|---|---|---|
| HC | | CALI | PSNR | | 2.282 | BS | INCH | 6.250 |
| MDEN | G/C3 | 2.650 | FD | G/C3 | 1.000 | MATR | | SAND |
| BHF | | WATE | | | | | | |
| DO | | 0.0 | BHS | | OPEN | FPHI | | PHIX |

## CALIBRATION RECORD

# CALIBRATION AFTER SURVEY

AFTER SURVEY TOOL CHECK SUMMARY

```
  PERFORMED:       80/12/11
  PROGRAM FILE: ISN     (VERSION     18.2      80/ 4/29)


CNTA                         TOOL   CHECK

                         JIG
               BEFORE          AFTER
  NRAT         2.165           2.148

  POROSITY CHANGE  (LIME): -0.001


PGTE                         TOOL   CHECK

                         JIG
               BEFORE          AFTER       UNITS
  FFDC          322             314         CPS
  NFDC          468             466         CPS
                         FILE

                          18
```

# CALIBRATION BEFORE SURVEY

```
                  BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:       80/12/11
  PROGRAM FILE: ISN     (VERSION     18.2      80/ 4/29)


SGTE                    DETECTOR CALIBRATION SUMMARY

               MEASURED
            BKGD     JIG           CALIBRATED            UNITS
    GR       48      250              165                GAPI


CNTA                    DETECTOR CALIBRATION SUMMARY

              TANK                                 JIG
          INPUT   CALIBRATED           MEASURED    CALIBRATED
  NRAT    2.282     2.158                2.289       2.165


PGTE                    DETECTOR CALIBRATION SUMMARY

              BLOCK                                JIG
          INPUT   CALIBRATED           MEASURED    CALIBRATED     UNITS
  FFDC     439       337                  420         322          CPS
  NFDC     798       528                  708         468          CPS


PGTE                    CALIPER CALIBRATION SUMMARY

            MEASURED                         CALIBRATED
          SMALL    LARGE                  SMALL      LARGE        UNITS
  CALI     5.7     10.2                    6.0       12.0          IN
                         FILE

                          2
```

```
                  SHOP SUMMARY


  PERFORMED:       80/12/01
  PROGRAM FILE: SHOP    (VERSION     18.2      80/ 4/29)


PGTE                    DETECTOR CALIBRATION SUMMARY

                BLOCK                              JIG
        MEASURED    CALIBRATED     MEASURED    CALIBRATED     UNITS

  FFDC    439          337            419          321          CPS
  NFDC    798          528            697          461          CPS
```

```
          (PGS:392   , PDH:321   , GSR:5153 ; SFT   :1177 )

                    SHOP SUMMARY

      PERFORMED:       80/10/22
      PROGRAM FILE: SHOP    (VERSION     18.2     80/ 4/29)

   CNTA                    DETECTOR CALIBRATION SUMMARY

                      TANK                               JIG
             MEASURED  CALIBRATED        MEASURED   CALIBRATED

      NRAT     2.282       2.158            2.291        2.166

                             (CNC:409   , CNB:594   )
```

## CALIBRATION RECORD

COMPANY AMERICAN QUASAR PETROLEUM COMPANY

WELL HENSCHELL NO. 17-34

FIELD ALBANY

COUNTY LINN STATE OREGON

SCHL. FR 2855

SCHL. TD 2856

DRLR. TD 2856

Elev: KB 210.5

DF --

GL 200.0

SWS 2517