CC 22-27-65

Schlumberger

## HIGH RESOLUTION DIPMETER

CSU Field Log

COMPANY: ARCO EXPLORATION AND TECHNOLOGY COMPANY

WELL: COLUMBIA COUNTY 22-27

FIELD: MIST GAS FIELD
COUNTY: COLUMBIA
STATE: OREGON
NATION: USA
LOCATION: 2339.07'S 89 6' 27" &
1180.19'S 0 53' 33"W OF NW CORNER
SEC: 27 TWP: 6N RGE: 5W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 850.2 F
LOG MEASURED FROM: KB
12.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 862.2 F
DF:
GL: 850.2 F

DATE: 23 NOV 85
RUN NO: 1

DEPTH-DRILLER: 2532.0 F
DEPTH-LOGGER: 2512.0 F
BTM. LOG INTERVAL: 2511.0 F
TOP LOG INTERVAL: 418.0 F

CASING-DRILLER: 418.0 F
CASING-LOGGER: 418.0 F
CASING: 9.625
WEIGHT:
BIT SIZE: 8.75
DEPTH: 2532.0 F

RECEIVED
DEC 10 1985
DOGAMI
Portland

OTHER SERVICES-
DIL-BHC-GR
FDC-CNL-GR
SAT
SWS

PROGRAM
TAPE NO: 28.2A
SERVICE
ORDER NO: 450595

TYPE FLUID IN HOLE: GEL-POLYMER
DENSITY: 10.20 LB/G
VISCOSITY: 52.0 S
PH: 8.5
FLUID LOSS: 5.2 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 3.830 OHMM AT 45.0 DEGF
RMF: 3.110 OHMM AT 45.0 DEGF
RMC: 3.950 OHMM AT 45.0 DEGF
SOURCE RMF/RMC: MEASURED /MEASURED
RM AT BHT: 1.778 OHMM AT 105. DEGF
RMF AT BHT: 1.444 OHMM AT 105. DEGF
RMC AT BHT: 1.834 OHMM AT 105. DEGF

TIME CIRC. STOPPED: 0900 11-22
TIME LOGGER ON BTM.: 12:27 11-23

MAX. REC. TEMP: 105.0 DEGF

LOGGING UNIT NO: 8126
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: REINIG/PILCH
WITNESSED BY: ANDERSON

REMARKS:

36 DEGREE MECHANICAL UNIT.
REPEAT AT TOP DUE TO TOOL PROBLEMS.

EQUIPMENT NUMBERS-

| | | | |
|---|---|---|---|
| HDS-D 1954 | HDM-F 1726 | HDE-CB 2996 | DAM-A 958 |

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.

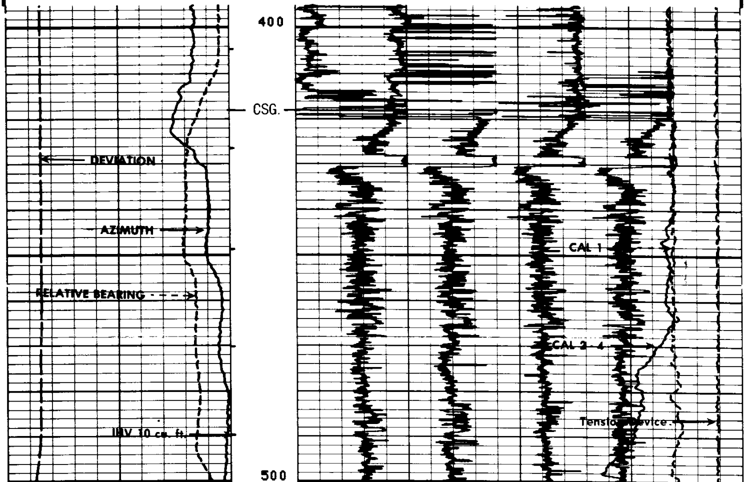
EVENT MARK SUMMARY:

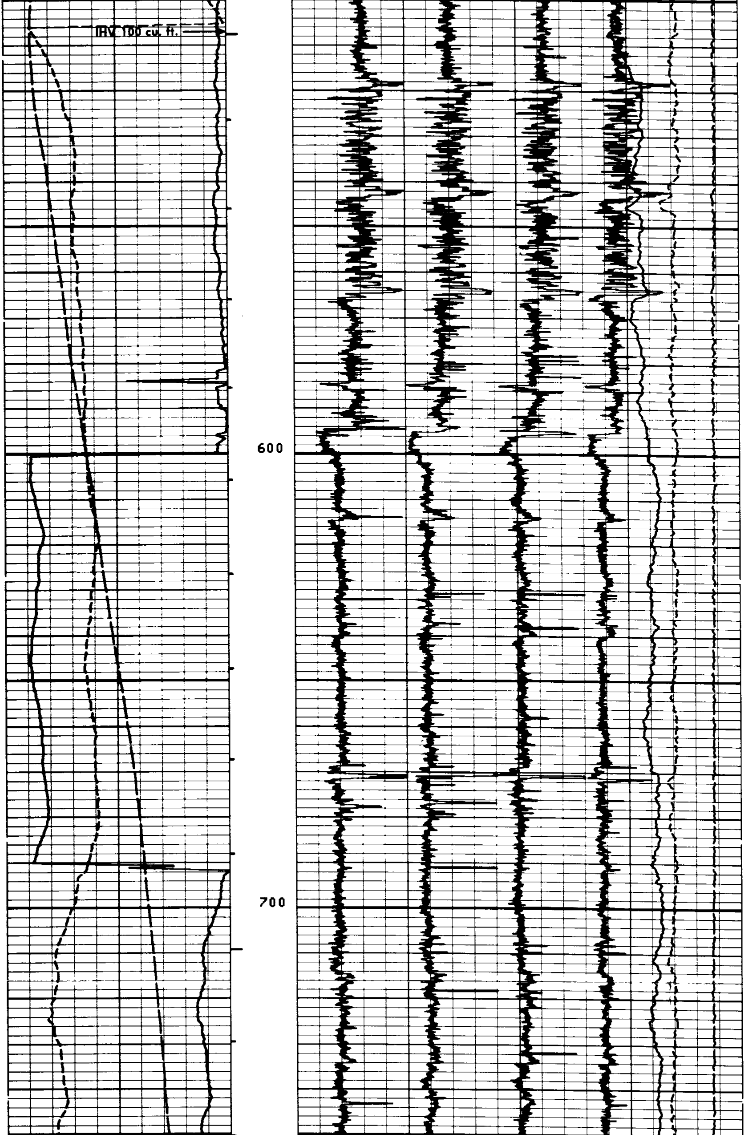
| OUTPUT | INTERVAL BETWEEN PIPS | DEPTH TRACK EDGE |
|---|---|---|
| IHV | 10.0000 F3 | LEFT EDGE |

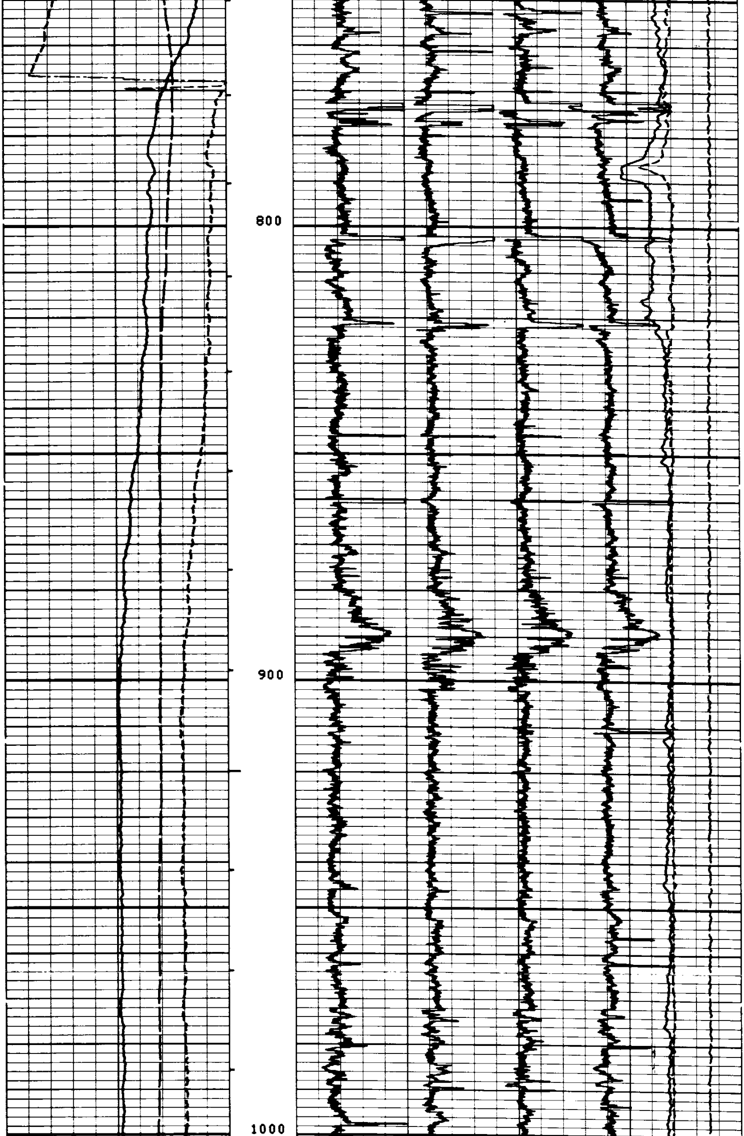
HOLE VOLUME = 942.051 F3
FROM 2512.0 TO 417.9 FEET

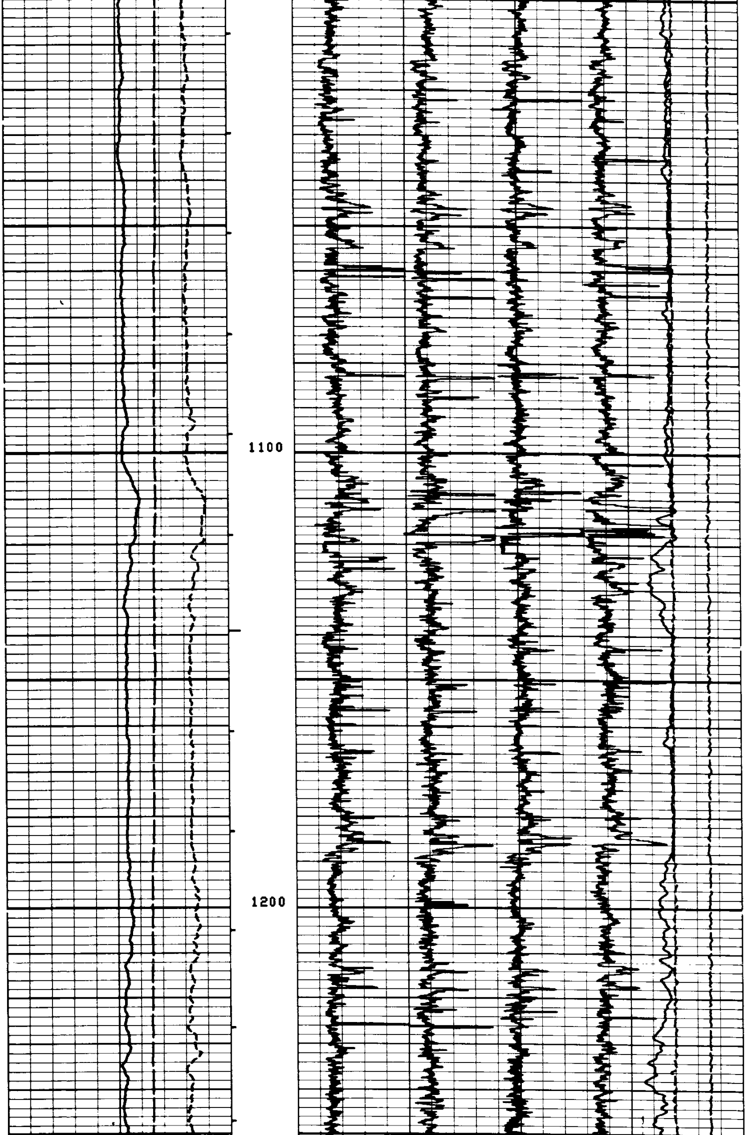
| | | |
|---|---|---|
| DEVI(DEG ) | -2.000 | 18.000 |
| RB (DEG ) | -40.00 | 360.00 |
| AZIM(DEG ) | -40.00 | 360.00 |
| TENS(LB ) | 10000. | 0.0 |
| C2 (IN ) | 26.000 | 6.0000 |
| C1 (IN ) | 26.000 | 6.0000 |

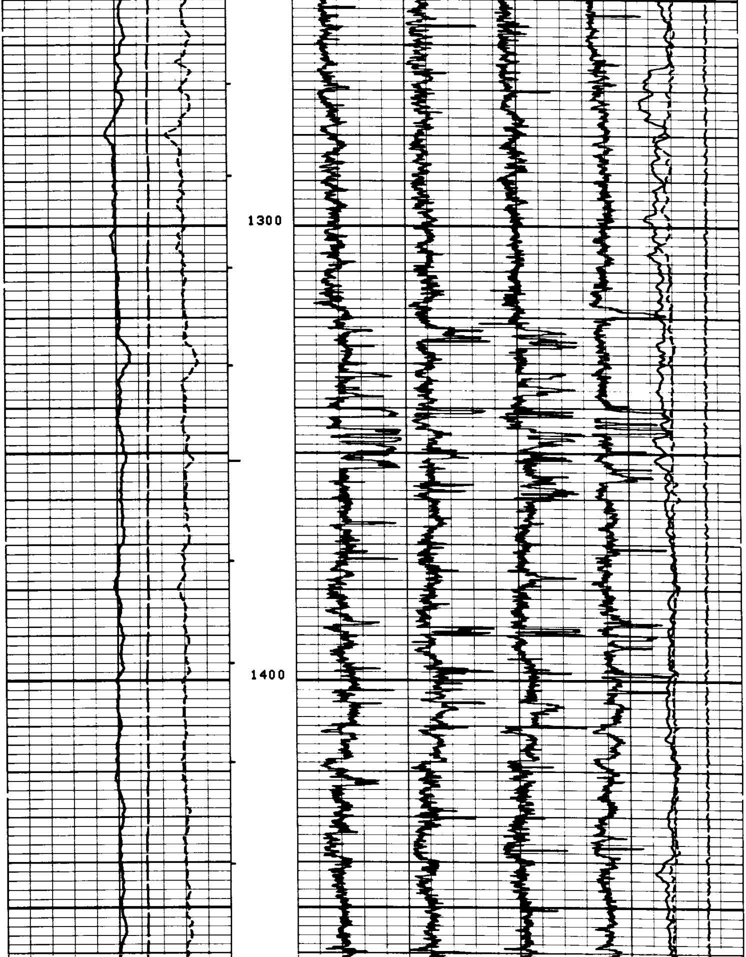
CP 28.2A FILE 1 23-NOV-85 13:04

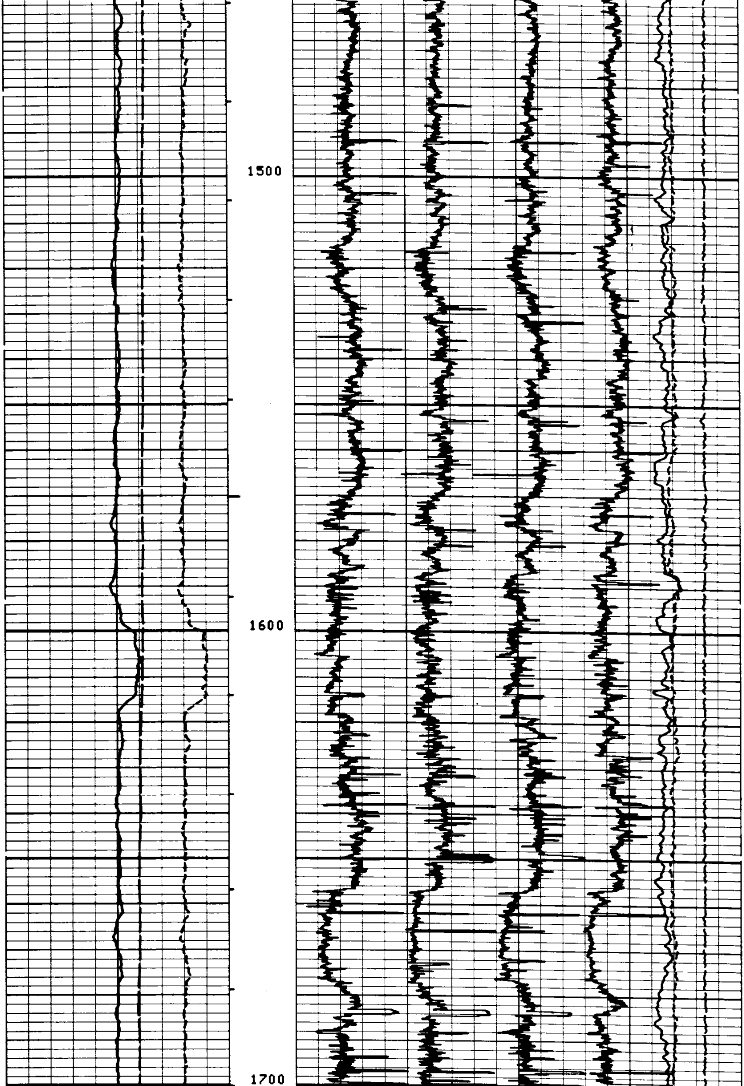


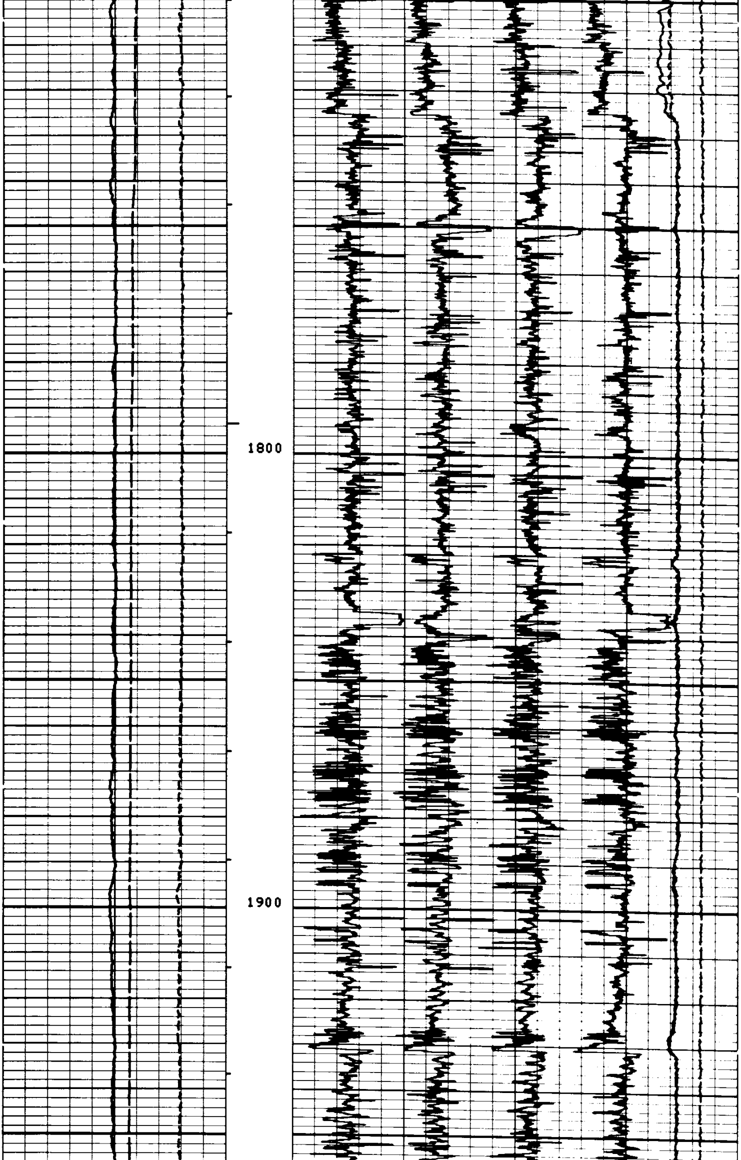


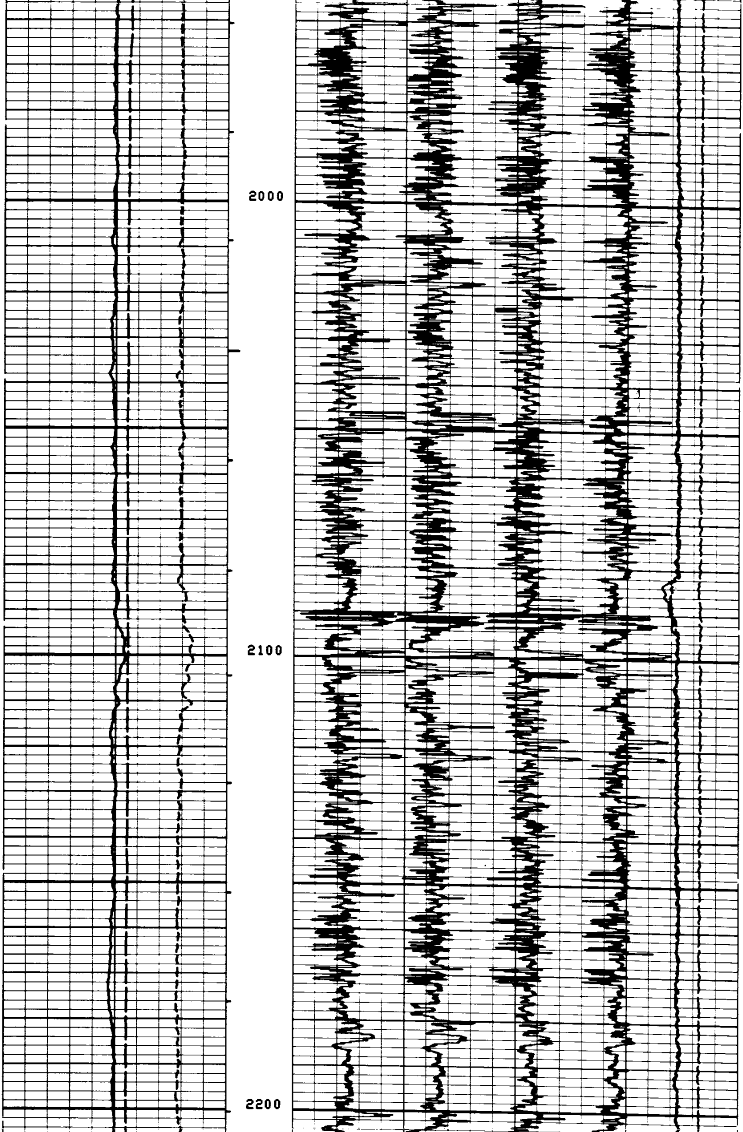


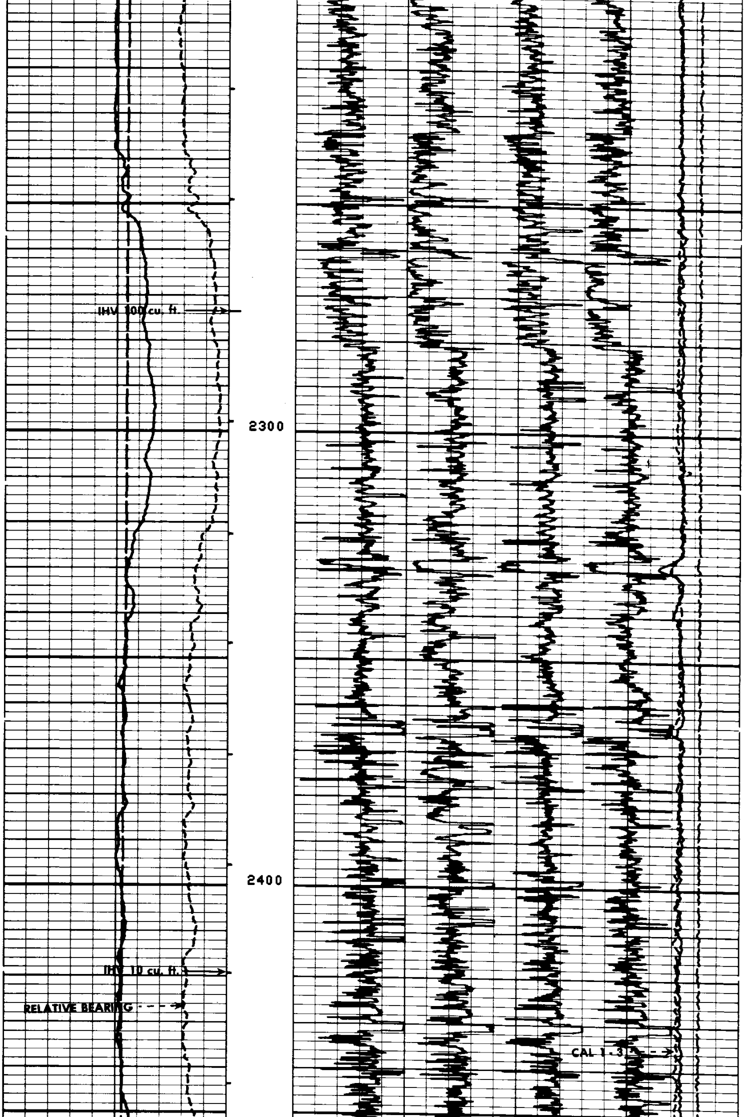


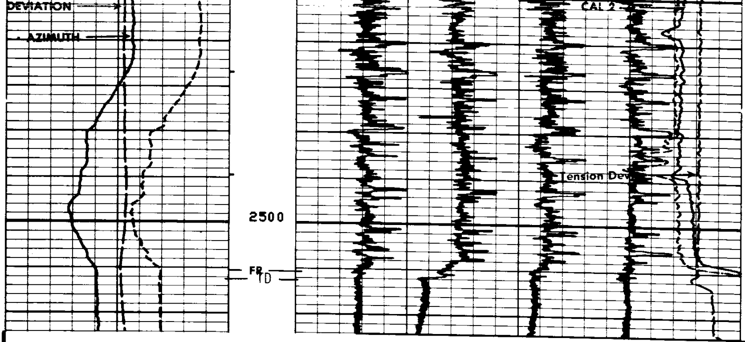












CP 28.2A FILE 1 23-NOV-85 12:25

DEVI(DEG )
-2.000 18.000
RB (DEG )
-40.00 360.00
AZIM(DEG )
-40.00 360.00

TENS(LB )
10000. 0.0
C2 (IN )
26.000 6.0000
C1 (IN )
26.000 6.0000

## SENSOR MEASURE POINT TO TOOL ZERO

| | | | | | |
|---|---|---|---|---|---|
| C1 | 0.0 | FEET | C2 | 0.0 | FEET |
| PP | 0.0 | FEET | TEMP | 0.0 | FEET |
| RC | 0.0 | FEET | EMEX | 0.0 | FEET |
| FEP2 | 0.0 | FEET | REFE | 0.0 | FEET |
| DEVI | 0.0 | FEET | FEP1 | 0.0 | FEET |
| AZIM | 0.0 | FEET | RB | 0.0 | FEET |
| RC1 | 0.0 | FEET | RC2 | 0.0 | FEET |
| SHDT | 0.0 | FEET | TENS | 0.0 | FEET |
| FC3 | 0.0 | FEET | FC4 | 0.0 | FEET |
| FC1 | 0.0 | FEET | FC2 | 0.0 | FEET |
| FC0 | 0.0 | FEET | | | |

## PARAMETERS

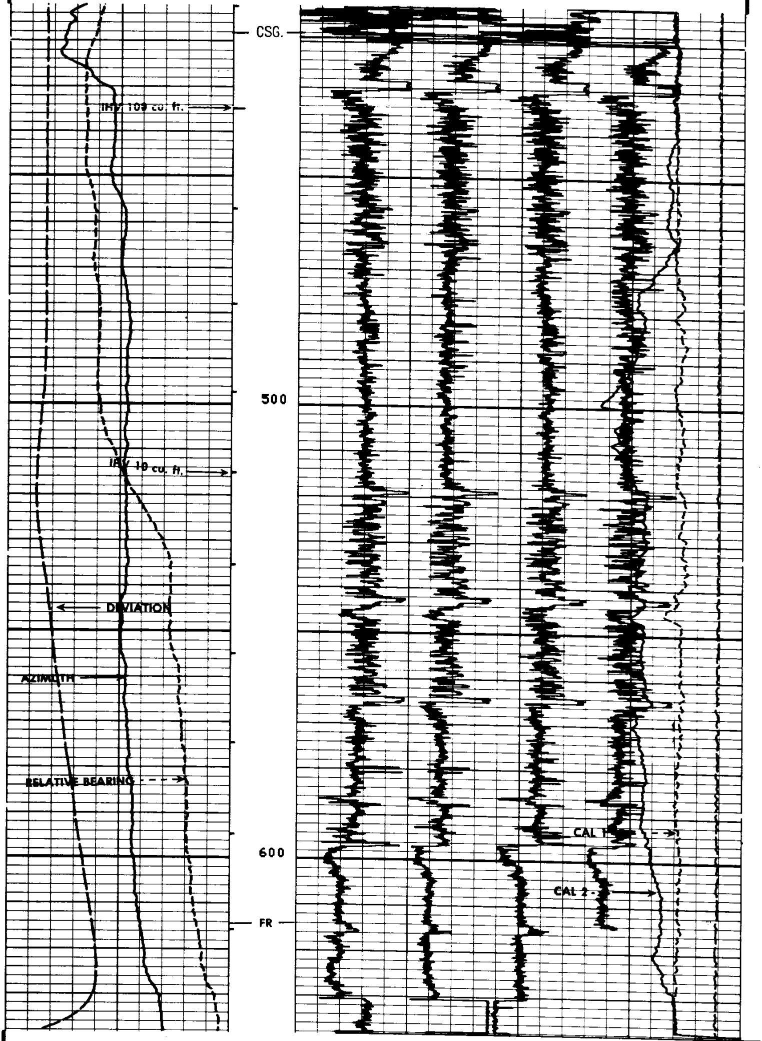
| NAME | VALUE | UNIT | NAME | VALUE | UNIT |
|---|---|---|---|---|---|
| MCT | 36 | | MDEC | 20 | DEG |
| BHS | OPEN | | STYP | HDSD | |
| BS | 8.75000 | IN | | | |

DEVI(DEG )
-2.000 18.000
RB (DEG )
-40.00 360.00
AZIM(DEG )
-40.00 360.00

TENS(LB )
10000. 0.0
C2 (IN )
26.000 6.0000
C1 (IN )
26.000 6.0000

## REPEAT SECTION

CP 28.2A FILE 2 23-NOV-85 13:11



CP 28.2A FILE 2 23-NOV-85 13:06

DEVI(DEG )
-2.000 18.000
RB (DEG )
-40.00 360.00
AZIM(DEG )
-40.00 360.00

TENS(LB )
10000. 0.0
C2 (IN )
26.000 6.0000
C1 (IN )
26.000 6.0000

## SENSOR MEASURE POINT TO TOOL ZERO

| | | | | | |
|---|---|---|---|---|---|
| C1 | 0.0 | FEET | C2 | 0.0 | FEET |
| PP | 0.0 | FEET | TEMP | 0.0 | FEET |
| RC | 0.0 | FEET | EMEX | 0.0 | FEET |
| FEP2 | 0.0 | FEET | REFE | 0.0 | FEET |
| DEVI | 0.0 | FEET | FEP1 | 0.0 | FEET |
| AZIM | 0.0 | FEET | RB | 0.0 | FEET |
| RC1 | 0.0 | FEET | RC2 | 0.0 | FEET |
| SHDT | 0.0 | FEET | TENS | 0.0 | FEET |
| FC3 | 0.0 | FEET | FC4 | 0.0 | FEET |
| FC1 | 0.0 | FEET | FC2 | 0.0 | FEET |
| FC0 | 0.0 | FEET | | | |

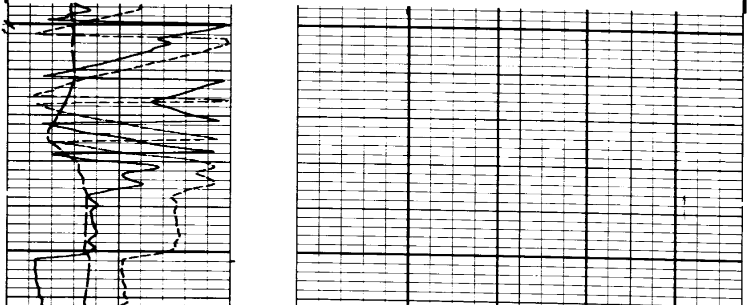
## PARAMETERS

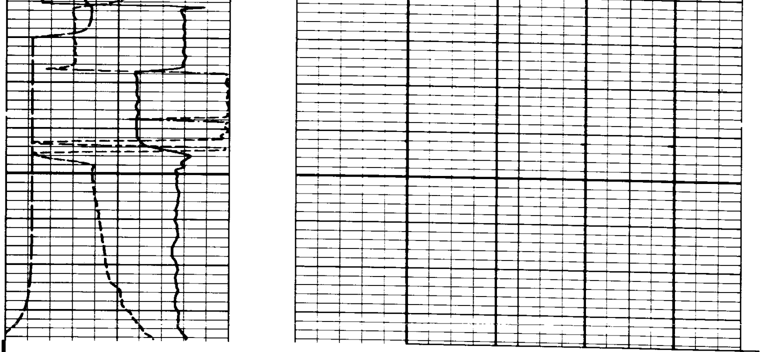
| NAME | VALUE | UNIT | NAME | VALUE | UNIT |
|---|---|---|---|---|---|
| MCT | 36 | | MDEC | 20 | DEG |
| BHS | OPEN | | STYP | HDSD | |
| BS | 8.75000 | IN | | | |

DEVI(DEG )
-2.000 18.000
RB (DEG )
-40.00 360.00
AZIM(DEG )
-40.00 360.00

C2 (IN )
26.000 6.0000
C1 (IN )
26.000 6.0000

CP 28.2A FILE 0 23-NOV-85 10:19





CP 28.2A FILE 0 23-NOV-85 10:15

| | | |
|---|---|---|
| DEVI(DEG ) | | |
| -2.000 | | 18.000 |
| RB (DEG ) | | |
| -40.00 | | 360.00 |
| AZIM(DEG ) | | |
| -40.00 | | 360.00 |

| | | |
|---|---|---|
| C2 (IN ) | | |
| 26.000 | | 6.0000 |
| C1 (IN ) | | |
| 26.000 | | 6.0000 |

SENSOR MEASURE POINT TO TOOL ZERO

| | | | | | |
|---|---|---|---|---|---|
| C1 | 0.0 | FEET | C2 | 0.0 | FEET |
| PP | 0.0 | FEET | TEMP | 0.0 | FEET |
| RC | 0.0 | FEET | EMEX | 0.0 | FEET |
| FEP2 | 0.0 | FEET | REFE | 0.0 | FEET |
| DEVI | 0.0 | FEET | FEP1 | 0.0 | FEET |
| AZIM | 0.0 | FEET | RB | 0.0 | FEET |
| RC1 | 0.0 | FEET | RC2 | 0.0 | FEET |
| SHDT | 0.0 | FEET | TENS | 0.0 | FEET |
| FC3 | 0.0 | FEET | FC4 | 0.0 | FEET |
| FC1 | 0.0 | FEET | FC2 | 0.0 | FEET |
| FC0 | 0.0 | FEET | | | |

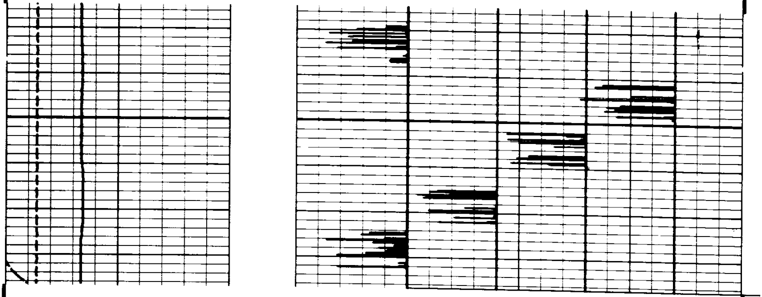
PARAMETERS

| NAME | VALUE | UNIT | NAME | VALUE | UNIT |
|---|---|---|---|---|---|
| MCT | 36 | | MDEC | 20 | DEG |
| BHS | OPEN | | STYP | HDSD | |
| BS | 8.75000 | IN | | | |

| | | |
|---|---|---|
| DEVI(DEG ) | | |
| -2.000 | | 18.000 |
| RB (DEG ) | | |
| -40.00 | | 360.00 |
| AZIM(DEG ) | | |
| -40.00 | | 360.00 |

| | | |
|---|---|---|
| C2 (IN ) | | |
| 26.000 | | 6.0000 |
| C1 (IN ) | | |
| 26.000 | | 6.0000 |

CP 28.2A FILE 0 23-NOV-85 10:14



```
     CP 28.2A              FILE     0       23-NOV-85 10:13
```

```
 _____DEVI(DEG )______
 -2.000          18.000
 _____RB  (DEG )______                          C2  (IN  )
 -40.00          360.00        26.000
                                                                    6.0000
      AZIM(DEG )                                C1  (IN  )
 -40.00          360.00        26.000                               6.0000
```

```
                    SENSOR MEASURE POINT TO TOOL ZERO

             C1      0.0   FEET                      C2      0.0   FEET
             PP      0.0   FEET                      TEMP    0.0   FEET
             RC      0.0   FEET                      EMEX    0.0   FEET
             FEP2    0.0   FEET                      REFE    0.0   FEET
             DEVI    0.0   FEET                      FEP1    0.0   FEET
             AZIM    0.0   FEET                      RB      0.0   FEET
             RC1     0.0   FEET                      RC2     0.0   FEET
             SHDT    0.0   FEET                      TENS    0.0   FEET
             FC3     0.0   FEET                      FC4     0.0   FEET
             FC1     0.0   FEET                      FC2     0.0   FEET
             FC0     0.0   FEET
```

```
                              PARAMETERS

           NAME   VALUE       UNIT                  NAME   VALUE       UNIT

           MCT    36                                MDEC 20            DEG
           BHS    OPEN                              STYP HDSD
           BS     8.75000     IN
```

```
                  BEFORE SURVEY CALIBRATION SUMMARY


        PERFORMED:     23-NOV-85 10:11
        PROGRAM FILE: HDT     (VERSION     28.2A    85/10/26)


      HDTD                CALIPER CALIBRATION SUMMARY

                     MEASURED                     CALIBRATED
                  SMALL    LARGE              SMALL       LARGE          UNITS
          C1      6.27     13.2               6.00        12.0            IN
          C2      6.66     13.2               6.00        12.0            IN
```