Schlumberger

HIGH RESOLUTION DIPMETER 5"

CSU

COMPANY: OREGON NATURAL GAS DEVELOPMENT CORP.

WELL: "DESHAZER" 13-22

FIELD: ST. LOUIS
COUNTY: MARION
STATE: OREGON
NATION: USA
LOCATION: 1860'N & 560'E FR SW COR

SEC: 22 TWP: 5S RGE: 2W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 182.1 '
LOG MEASURED FROM: KB
11.1 ' ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 193.2 '
DF:
GL: 182.1 '

DATE: 18 FEB 85
RUN NO: 1

DEPTH-DRILLER: 2511.0 '
DEPTH-LOGGER: 2511.0 '
BTM. LOG INTERVAL: 2466.0 '
TOP LOG INTERVAL: 507.0 '

CASING-DRILLER: 506 '
CASING-LOGGER: 507 '
CASING: 8 5/8"
WEIGHT: 24.00 LB/F
BIT SIZE: 7 7/8"
DEPTH: 2511 '

OTHER SERVICES-
DIL
BHC
CST

PROGRAM
TAPE NO:
24.2
SERVICE
ORDER NO:
432406

TYPE FLUID IN HOLE: GEL/LIGNO
DENSITY: 8.9 LB/G
VISCOSITY: 59.0 S
PH: 8.5
FLUID LOSS: 7.8 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 2.530 OHMM AT 60.0 DEGF
RMF: 3.520 OHMM AT 49.0 DEGF
RMC: 2.690 OHMM AT 55.0 DEGF
SOURCE RMF/RMC: MEASURED/MEASURED
RM AT BHT: 1.862 OHMM AT 84.0 DEGF
RMF AT BHT: 2.166 OHMM AT 84.0 DEGF
RMC AT BHT: 1.832 OHMM AT 84.0 DEGF

TIME CIRC. STOPPED: 11:00 2/18
TIME LOGGER ON BTM.: 15:15 2/18

MAX. REC. TEMP: 84.0 DEGF

LOGGING UNIT NO: 8126
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: MAYER
WITNESSED BY: MEYER/BRUER

REMARKS:

CHLORIDES: 850PPM
HOLE CONDITIONS WOULD NOT ALLOW TOOL TO GO BEYOND 2466'.

EQUIPMENT NUMBERS-

HDS 1906 HDE 2996 DAM 823

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

0

CHANGED PARAMETERS

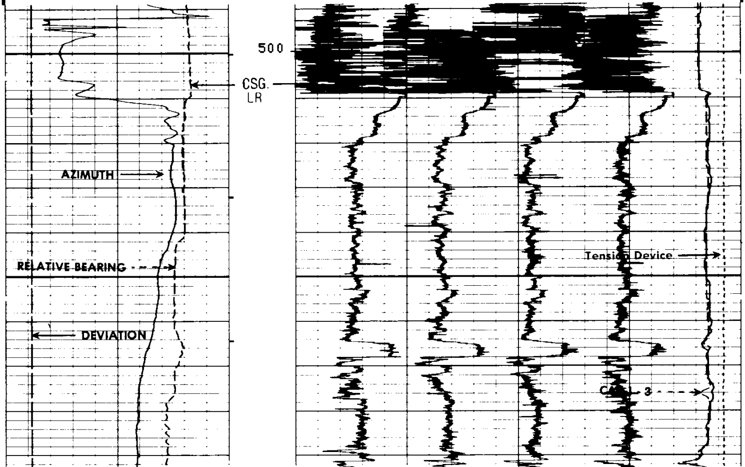
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

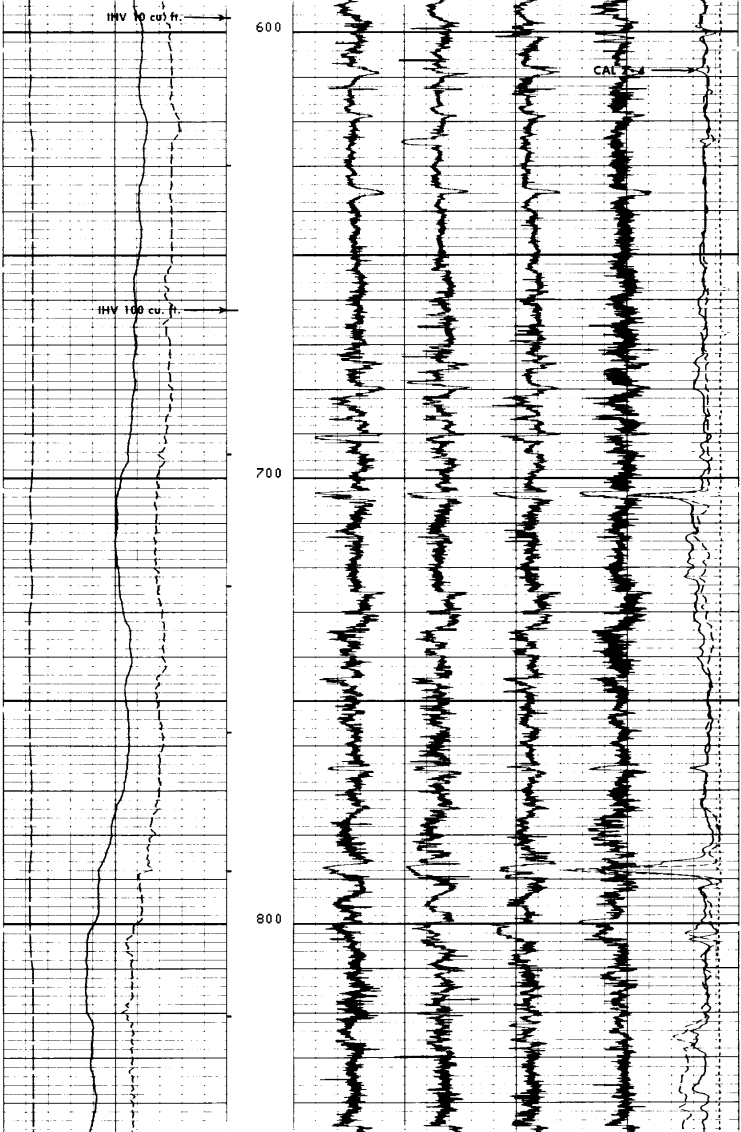
DEVI(DEG)
-1.000 9.0000
RB (DEG)
-40.00 360.00
AZIM(DEG)
-40.00 360.00

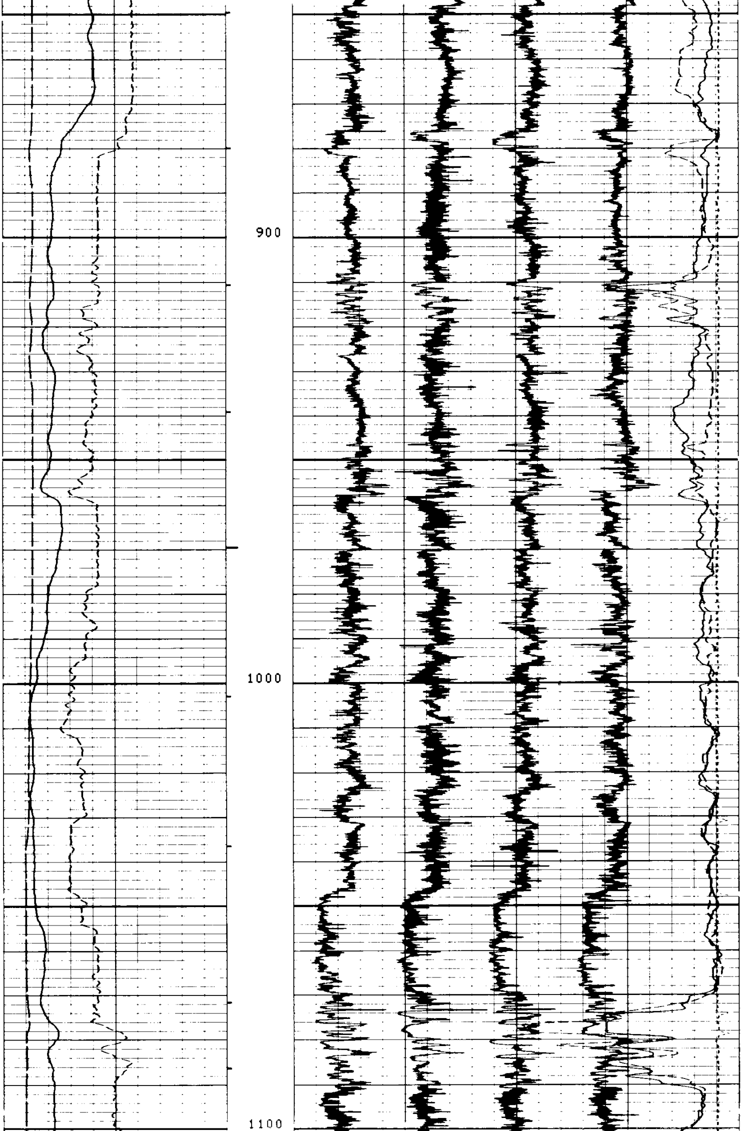
TENS(LB)
10000. 0.0
C2 (IN)
26.000 6.0000
C1 (IN)
26.000 6.0000

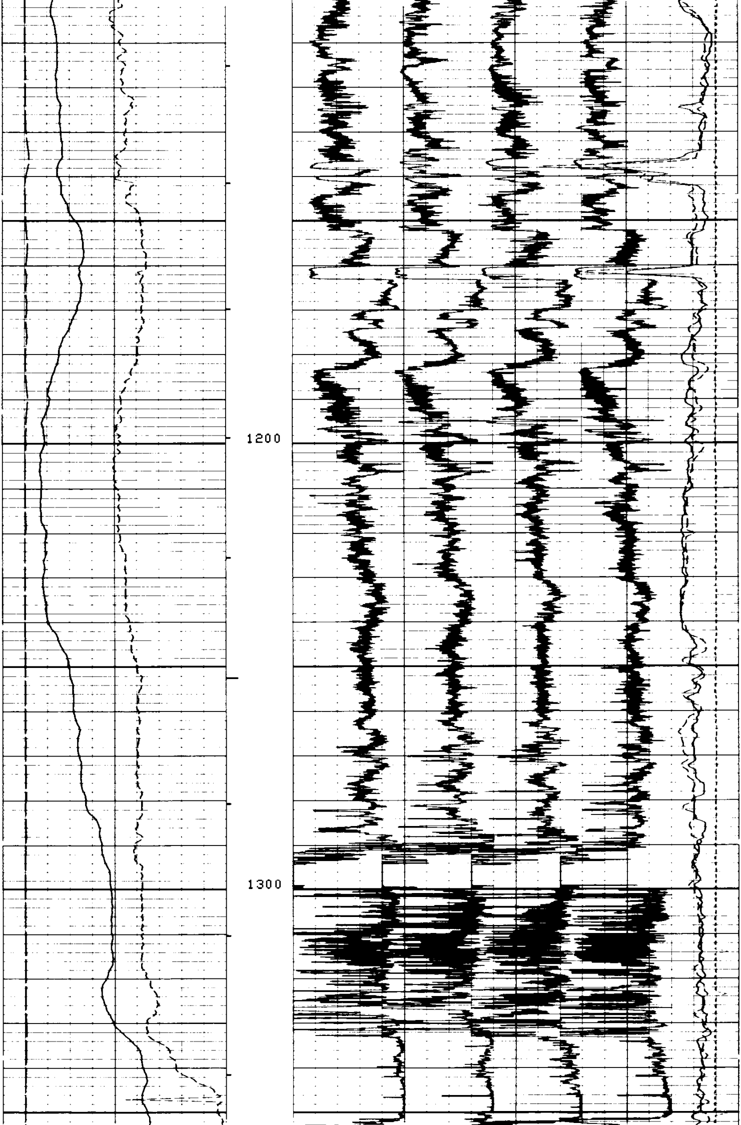
FILE

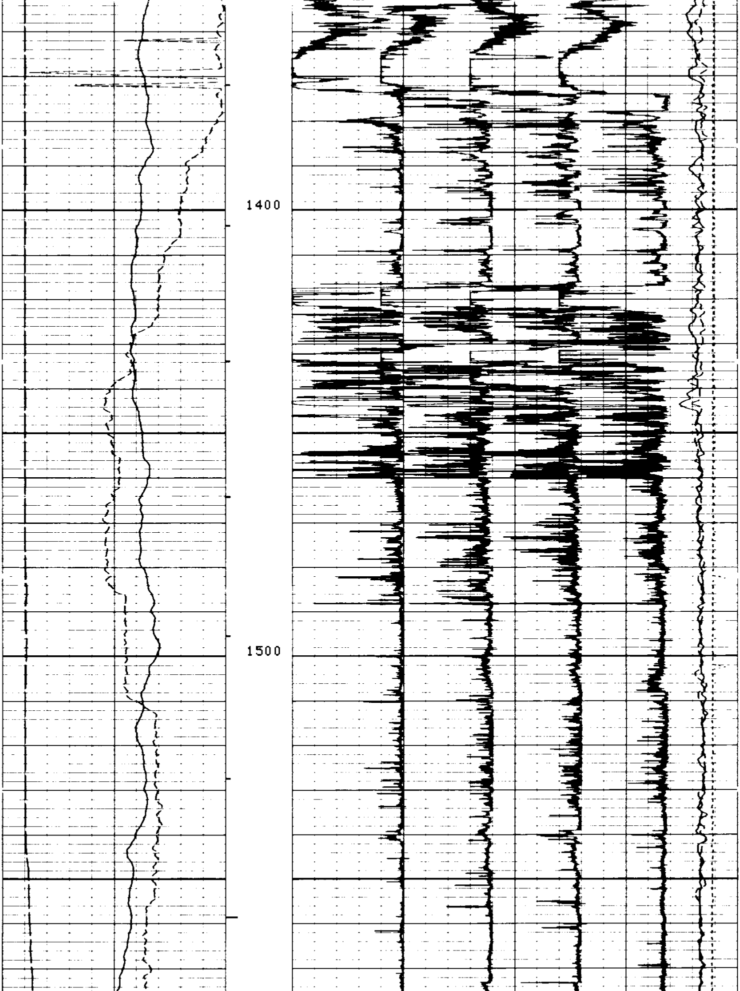
14

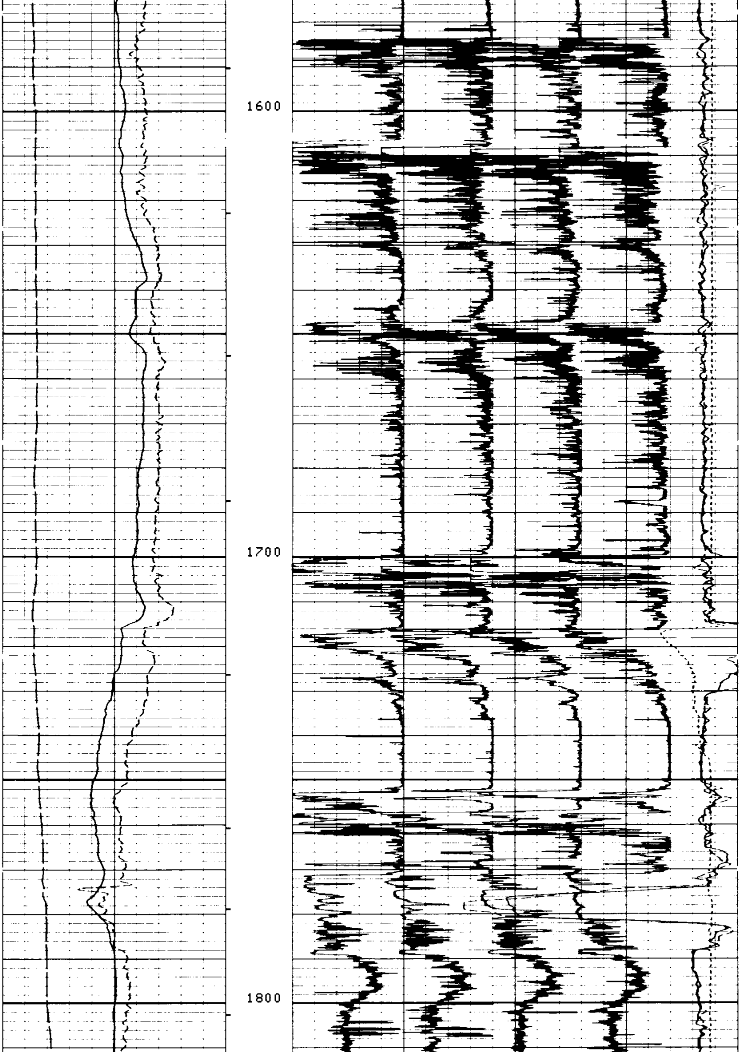


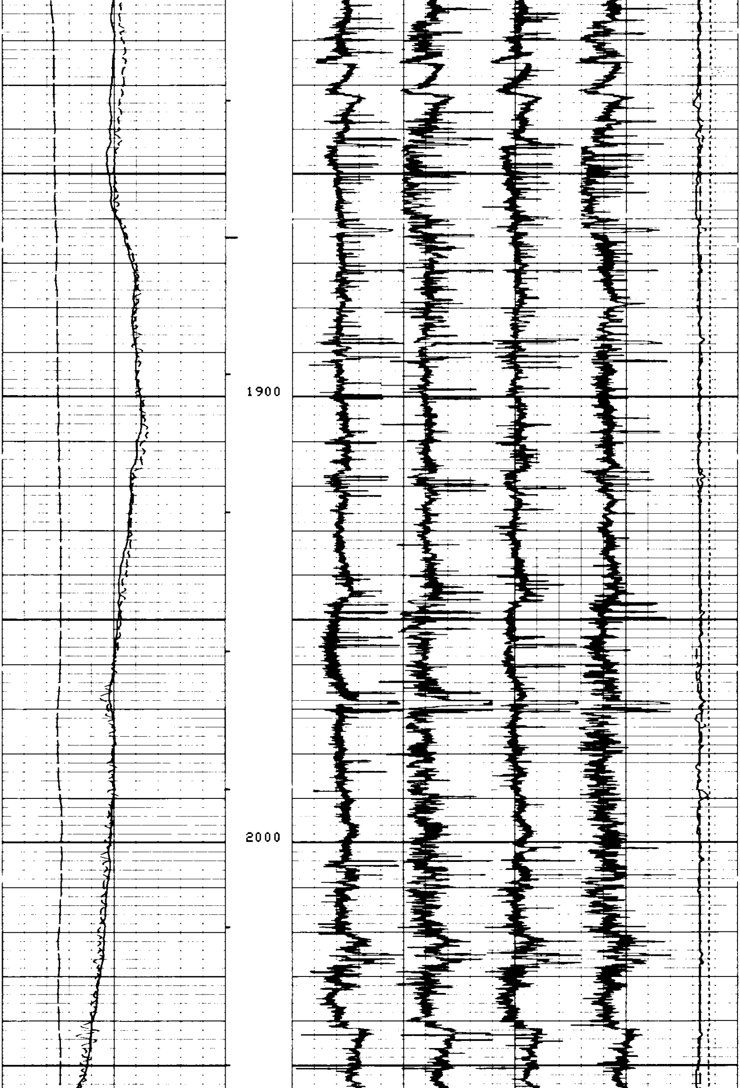


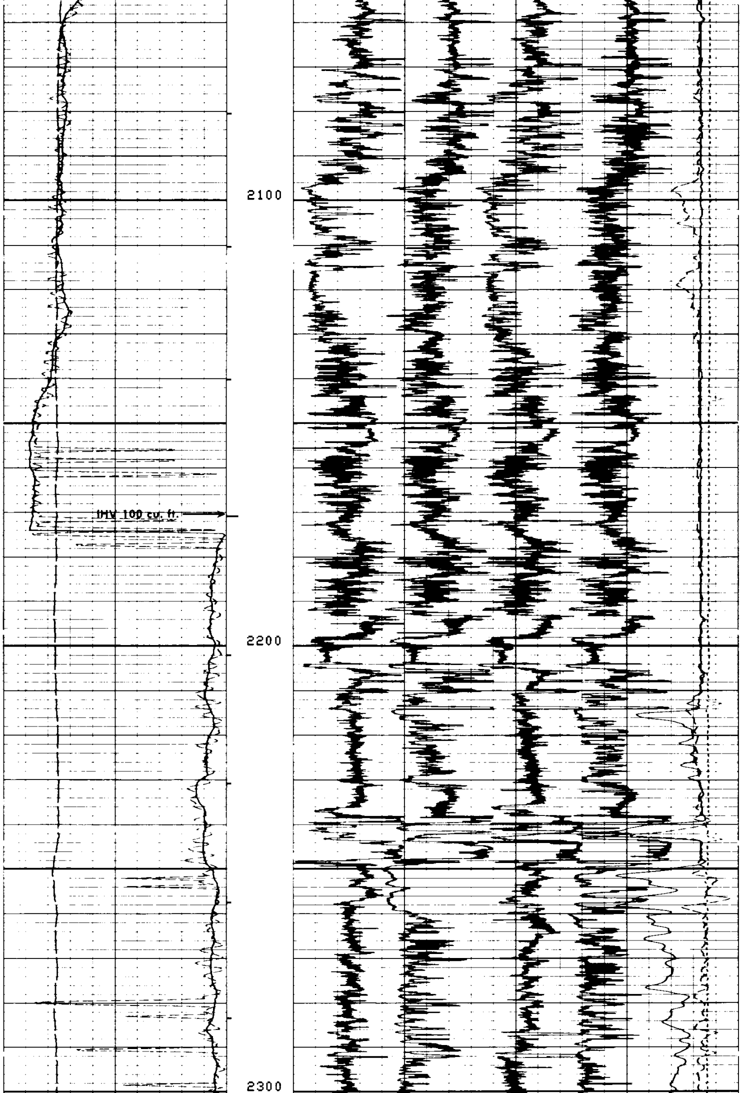


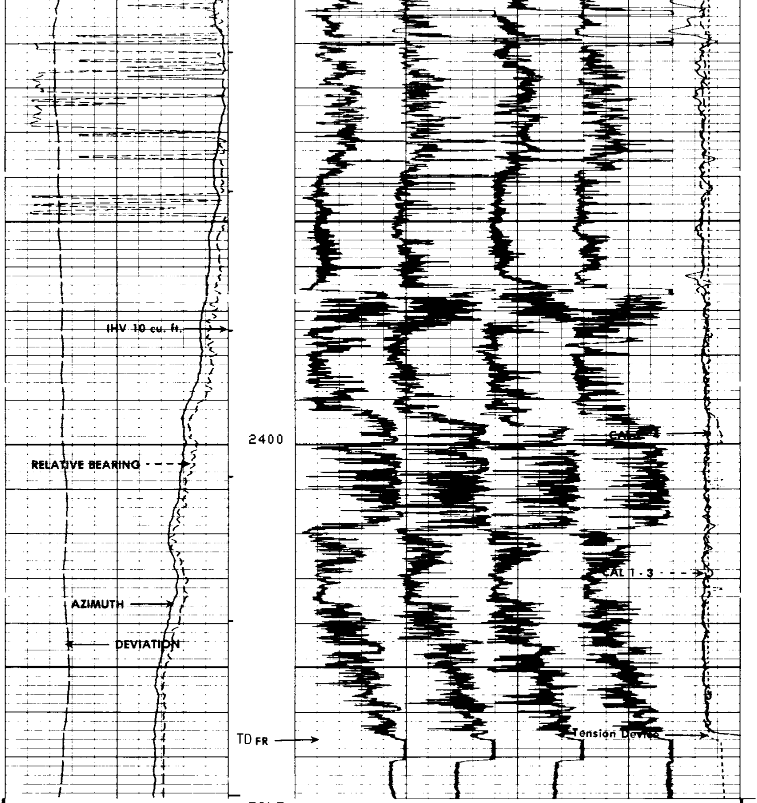












FILE

14

DEVI(DEG) -1.000 9.0000
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 TENSION REFERENCE POINT

RB	.0	FEET	AZIM	.0	FEET
FEP1	.0	FEET	DEVI	.0	FEET
REFE	.0	FEET	FEP2	.0	FEET
EMEX	.0	FEET	RC	.0	FEET
C2	.0	FEET	C1	.0	FEET
RC2	.0	FEET	RC1	.0	FEET
TEMP	.0	FEET	PP	.0	FEET
FC0	.0	FEET	TENS	.0	FEET
FC2	.0	FEET	FC1	.0	FEET
FC4	.0	FEET	FC3	.0	FEET
SHDT	.0	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSD		MCT	36	DEG
DO	0.0	F	BHS	OPEN	

CHANGED PARAMETERS

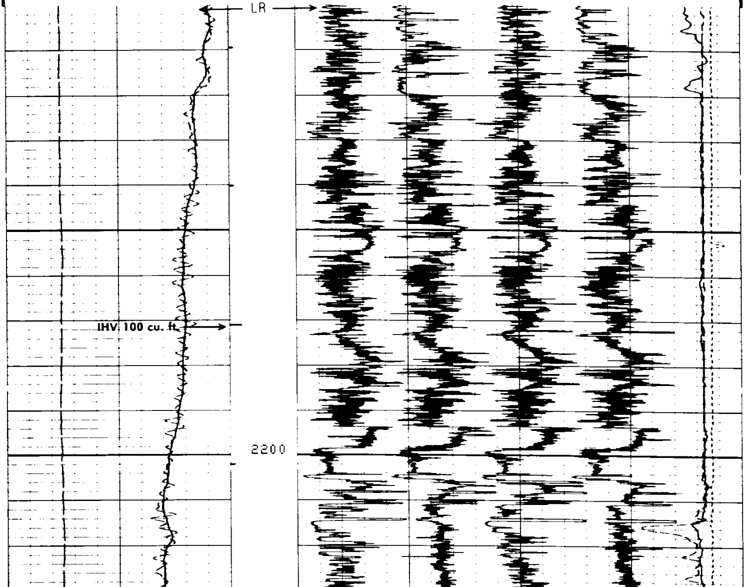
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

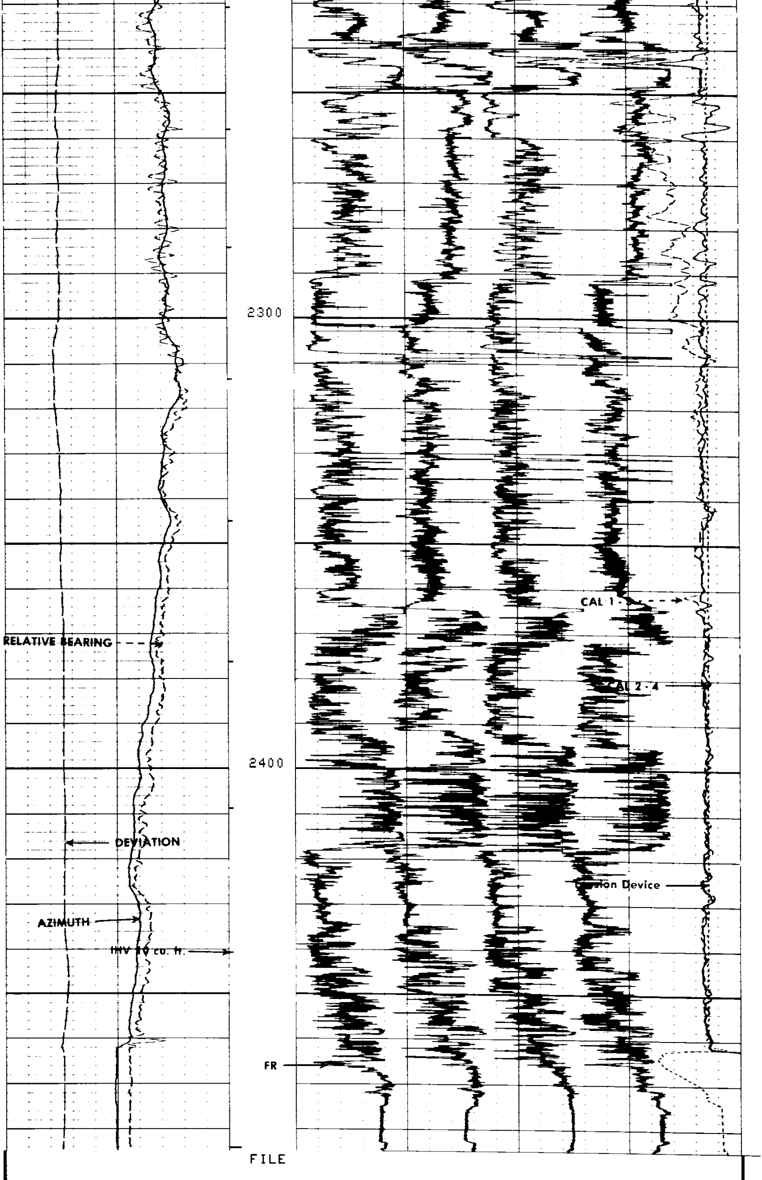
DEVI(DEG)	-1.000	9.0000	TENS(LB)	10000.	0.0
RB (DEG)	-40.00	360.00	C2 (IN)	26.000	6.0000
AZIM(DEG)	-40.00	360.00	C1 (IN)	26.000	6.0000

FILE

11

REPEAT SECTION





11

DEVI(DEG)
-1.000 9.0000
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 TENSION REFERENCE POINT

RB	.0	FEET	AZIM	.0	FEET
FEP1	.0	FEET	DEVI	.0	FEET
REFE	.0	FEET	FEP2	.0	FEET
EMEX	.0	FEET	RC	.0	FEET
C2	.0	FEET	C1	.0	FEET
RC2	.0	FEET	RC1	.0	FEET
TEMP	.0	FEET	PP	.0	FEET
FC0	.0	FEET	TENS	.0	FEET
FC2	.0	FEET	FC1	.0	FEET
FC4	.0	FEET	FC3	.0	FEET
SHDT	.0	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSD		MCT	36	DEG
DO	0.0	F	BHS	OPEN	

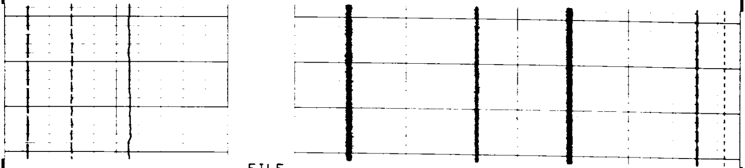
PARAMETERS

DEVI(DEG)
-1.000 9.0000
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

FILE

7



FILE

7

DEVI(DEG)
-1.000 9.0000
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 TENSION REFERENCE POINT

RB	.0	FEET	AZIM	.0	FEET
FEP1	.0	FEET	DEVI	.0	FEET
REFE	.0	FEET	FEP2	.0	FEET
EMEX	.0	FEET	RC	.0	FEET
C2	.0	FEET	C1	.0	FEET
RC2	.0	FEET	RC1	.0	FEET
TEMP	.0	FEET	PP	.0	FEET
FC0	.0	FEET	TENS	.0	FEET
FC2	.0	FEET	FC1	.0	FEET
FC4	.0	FEET	FC3	.0	FEET
SHDT	.0	FEET			

PARAMETERS

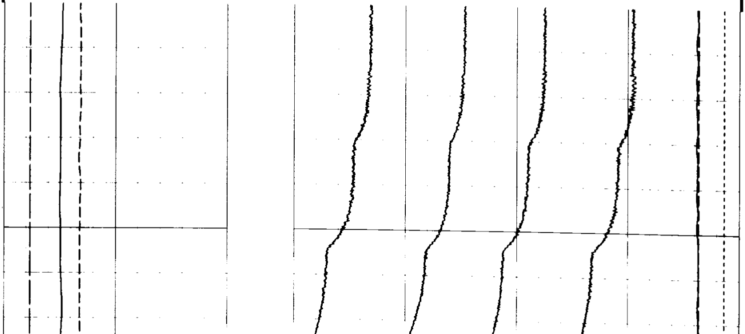
NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSD		MCT	36	DEG
DO	0.0	F	BHS	OPEN	

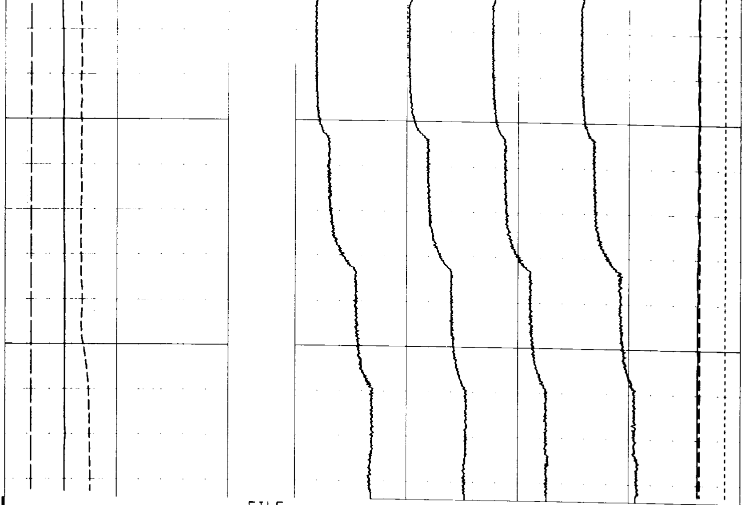
DEVI(DEG)
-1.000 9.0000
RB (DEG)
-40.00 360.00
AZIM(DEG)
-40.00 360.00

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

FILE

6





FILE

6

DEVI(DEG)
-1.000 9.0000
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 TENSION REFERENCE POINT

RB	.0	FEET	AZIM	.0	FEET
FEP1	.0	FEET	DEVI	.0	FEET
REFE	.0	FEET	FEP2	.0	FEET
EMEX	.0	FEET	RC	.0	FEET
C2	.0	FEET	C1	.0	FEET
RC2	.0	FEET	RC1	.0	FEET
TEMP	.0	FEET	PP	.0	FEET
FC0	.0	FEET	TENS	.0	FEET
FC2	.0	FEET	FC1	.0	FEET
FC4	.0	FEET	FC3	.0	FEET
SHDT	.0	FEET			

PARAMETERS

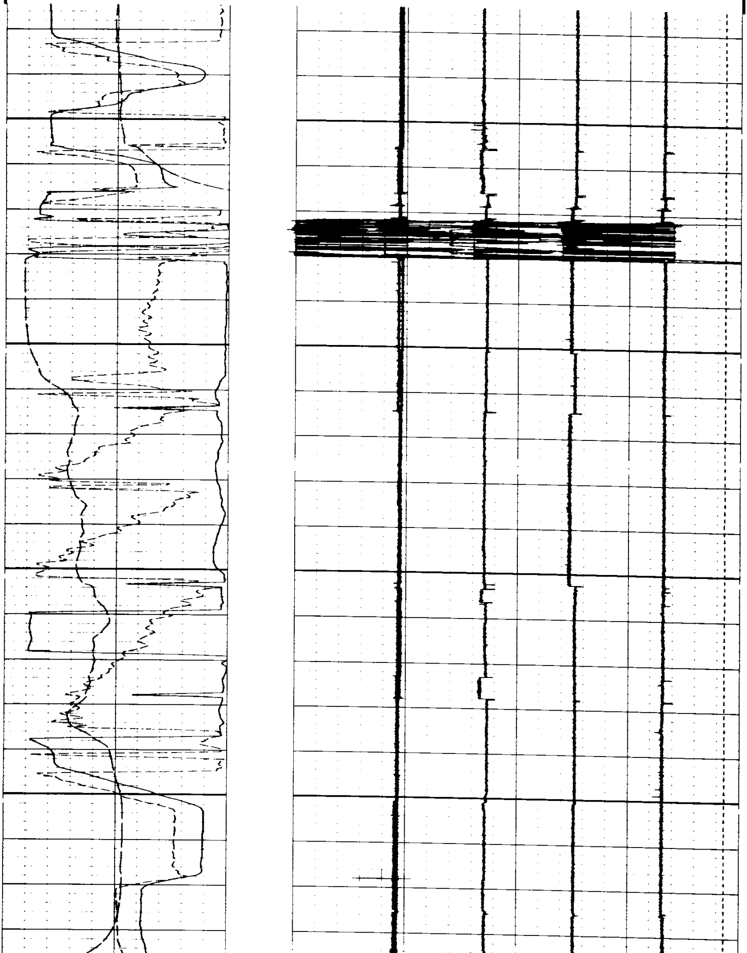
NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSD		MCT	36	DEG
DO	0.0	F	BHS	OPEN	

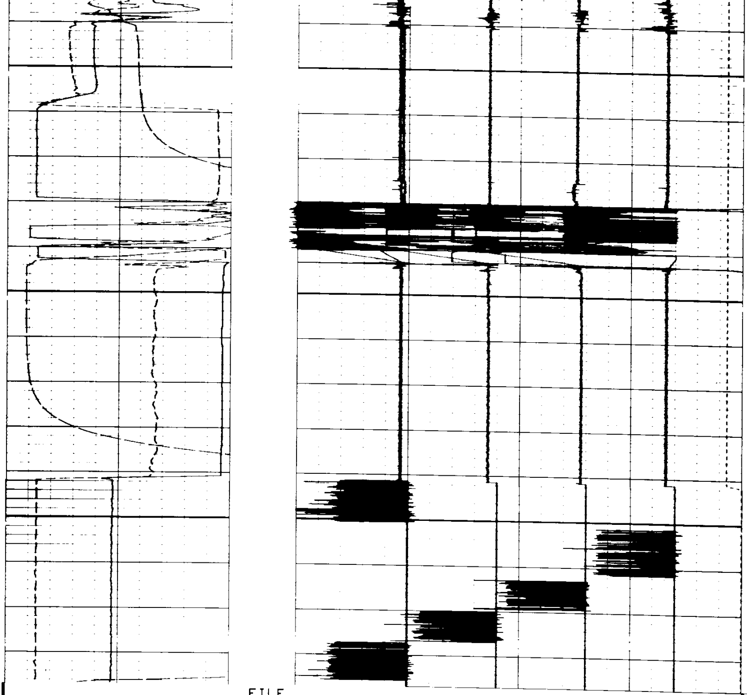
DEVI(DEG)
-1.000 9.0000
RB (DEG)
-40.00 360.00
AZIM(DEG)
-40.00 360.00

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

FILE

3





FILE

3

DEVI(DEG)	
-1.000	9.0000
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 TENSION REFERENCE POINT

RB	.0	FEET
FEP1	.0	FEET
REFE	.0	FEET
EMEX	.0	FEET
C2	.0	FEET
RC2	.0	FEET
TEMP	.0	FEET
FC0	.0	FEET
FC2	.0	FEET
FC4	.0	FEET
SHDT	.0	FEET

AZIM	.0	FEET
DEVI	.0	FEET
FEP2	.0	FEET
RC	.0	FEET
C1	.0	FEET
RC1	.0	FEET
PP	.0	FEET
TENS	.0	FEET
FC1	.0	FEET
FC3	.0	FEET

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                          PARAMETERS

     NAME  VALUE    UNIT                   NAME  VALUE     UNIT

     PVUM 1.00000                          BS    7.87500   IN
     STYP HDSD                             MCT   36        DEG
     DD   0.0       F                      BHS   OPEN
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           BEFORE SURVEY CALIBRATION SUMMARY

  PERFORMED:      85/02/18
  PROGRAM FILE: HDT    (VERSION    24.2    83/03/29)

HDTD             CALIPER CALIBRATION SUMMARY

             MEASURED                 CALIBRATED
          SMALL    LARGE            SMALL      LARGE        UNITS
    C1     7.1     13.8              6.0        12.0         IN
    C2     7.3     13.8              6.0        12.0         IN
                    FILE

                      2
```