RAW DIPMETER

CSU

COMPANY: OREGON NATURAL GAS DEVEL.. CORP.

WELL: WERNER 34-21

FIELD: ST. LOUIS
COUNTY: MARION
STATE: OREGON

LOCATION: 389.57' NORTH & 1585.5' WE
FROM SE CORNER
SEC: 21 TWP: 5S RGE: 2W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 181.0 '
LOG MEASURED FROM: KB
12.5 ' ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 193.5 '
DF:
GL: 181.0 '

DATE: 24 NOV 84
RUN NO: 1

DEPTH-DRILLER: 2808.0 '
DEPTH-LOGGER: 2806.0 '
BTM. LOG INTERVAL: 2800.0 '
TOP LOG INTERVAL: 1604.0 '

CASING-DRILLER: 1603 '
CASING-LOGGER: 1604 '
CASING: 8 5/8"

BIT SIZE: 7 7/8"
DEPTH: 2808 '

OTHER SERVICES-
SONIC
FDC/CNL/GR
CST
DIL

PROGRAM
TAPE NO:
24.2
SERVICE
ORDER NO:
432177

TYPE FLUID IN HOLE:	GEL/LIGNO.
DENSITY:	9.3 LB/G
VISCOSITY:	46.0 S
PH:	9.0
FLUID LOSS:	6.6 C3
SOURCE OF SAMPLE:	FLOWLINE
RM:	3.260 OHMM AT 53.0 DEGF
RMF:	3.680 OHMM AT 45.0 DEGF
RMC:	2.790 OHMM AT 47.0 DEGF
SOURCE RMF/RMC:	MEAS/MEAS
RM AT BHT:	1.862 OHMM AT 98.0 DEGF
RMF AT BHT:	1.822 OHMM AT 98.0 DEGF
RMC AT BHT:	1.434 OHMM AT 98.0 DEGF
TIME CIRC. STOPPED:	12:00 11-24
TIME LOGGER ON BTM.:	21:00 11-25
MAX. REC. TEMP:	98.0 DEGF
LOGGING UNIT NO:	8178
LOGGING UNIT LOC:	SACRAMENTO
RECORDED BY:	SUTER
WITNESSED BY:	MEYER

REMARKS:

SALINITY: 350 PPM CL-
CENTRALIZATION: CMEZ AND RUBBER FINS

EQUIPMENT NUMBERS-

DAM 958 HDM 1176 HDS 727

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.

CHANGED PARAMETERS

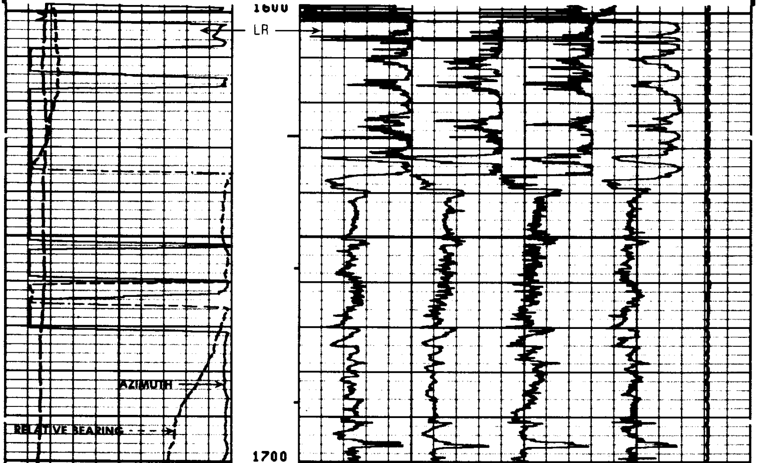
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

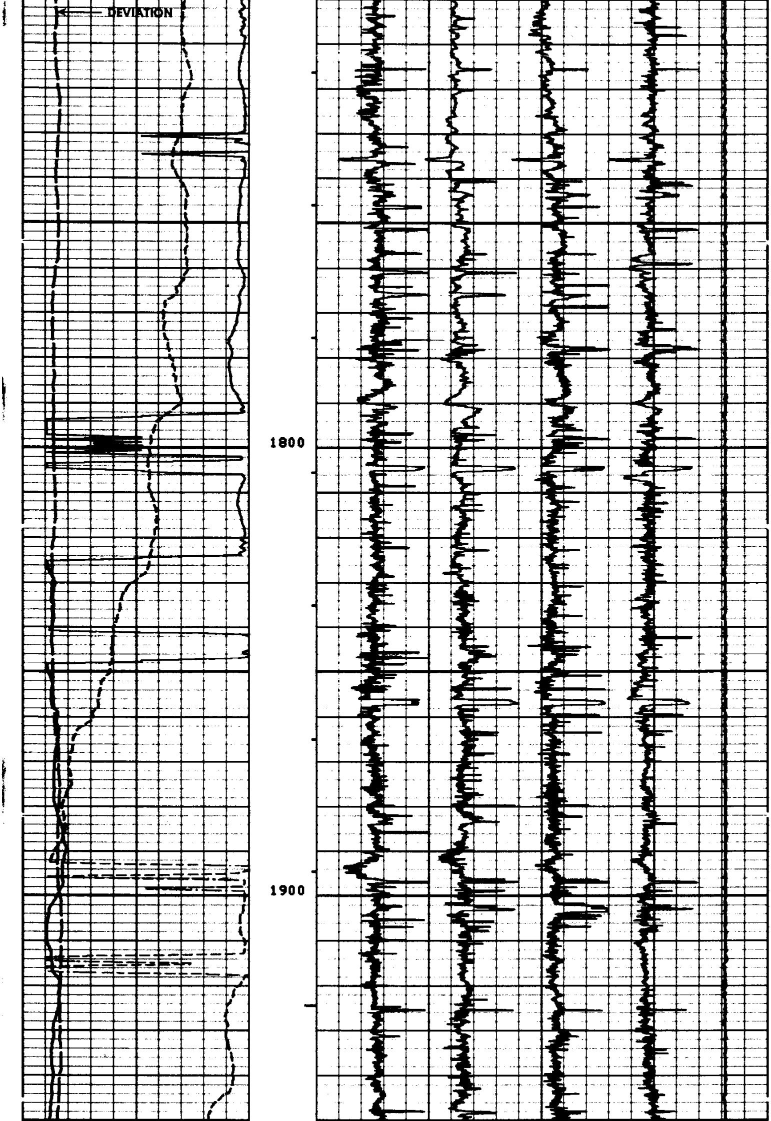
DEVI(DEG)
-1.000 9.0000
RB (DEG)
-40.00 360.00
AZIM(DEG)
-40.00 360.00

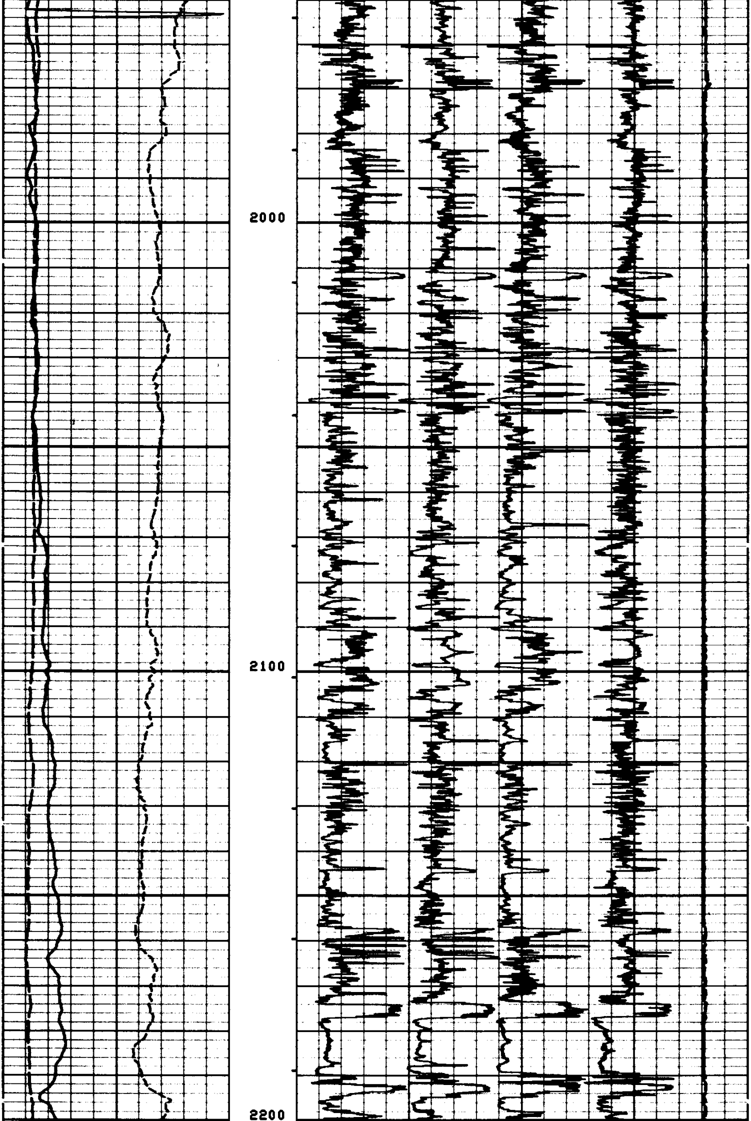
C2 (IN)
26.000 6.0000
C1 (IN)
26.000 6.0000

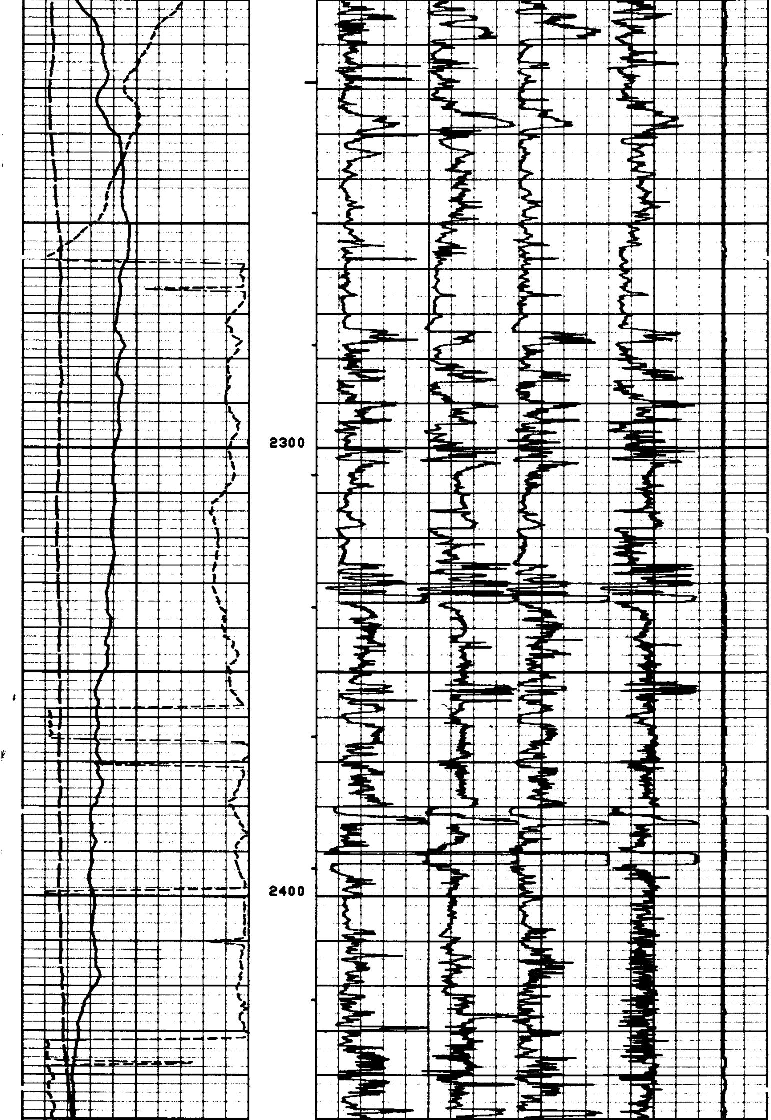
FILE

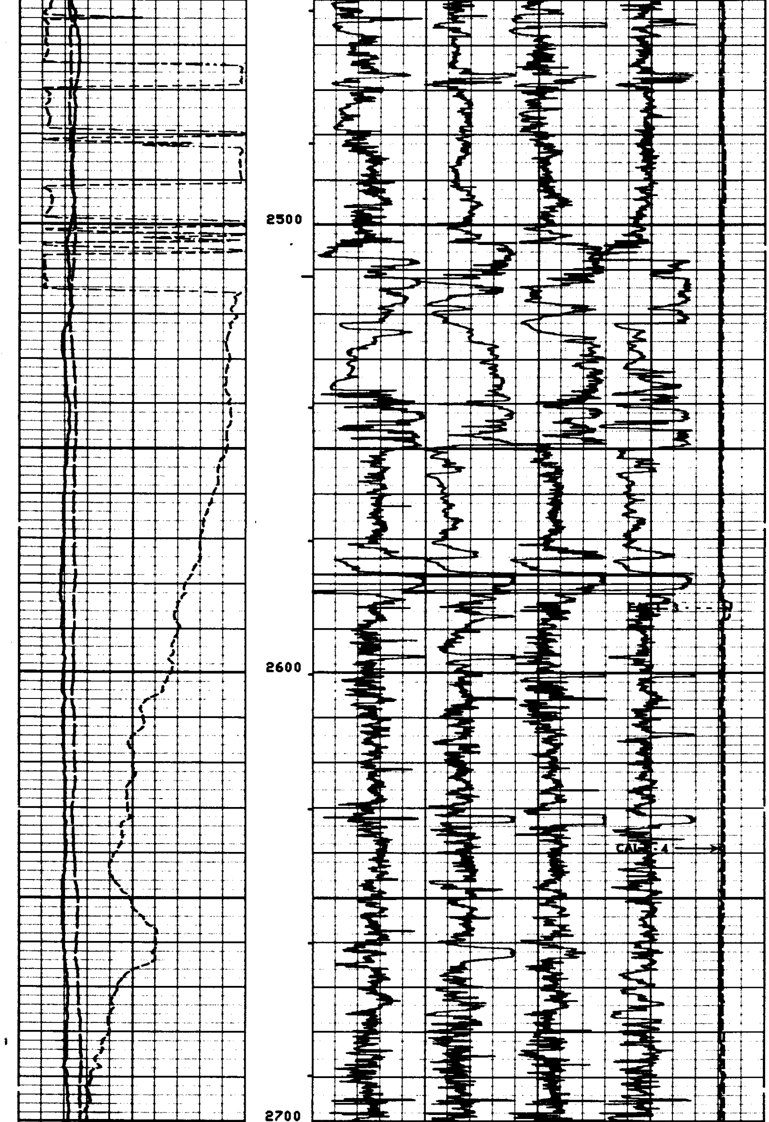
1

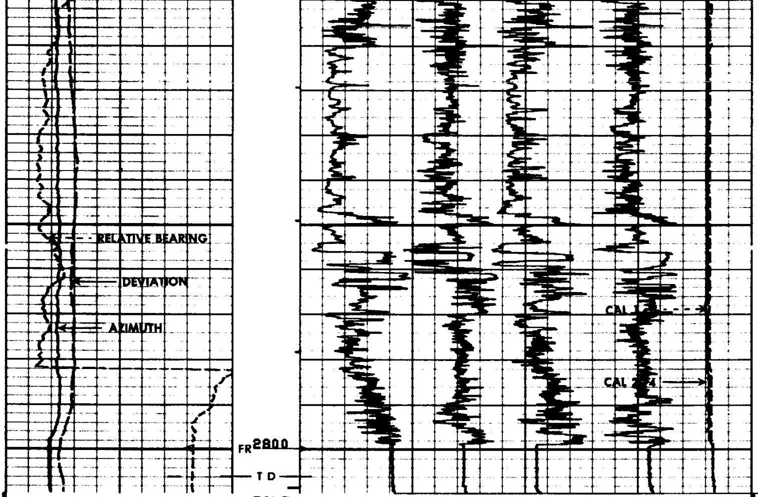












FILE

1

DEVI(DEG)
-1.000 9.0000
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 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	HDSF		MCT	72	DEG
DO	0.0	F	BHS	OPEN	

CHANGED PARAMETERS

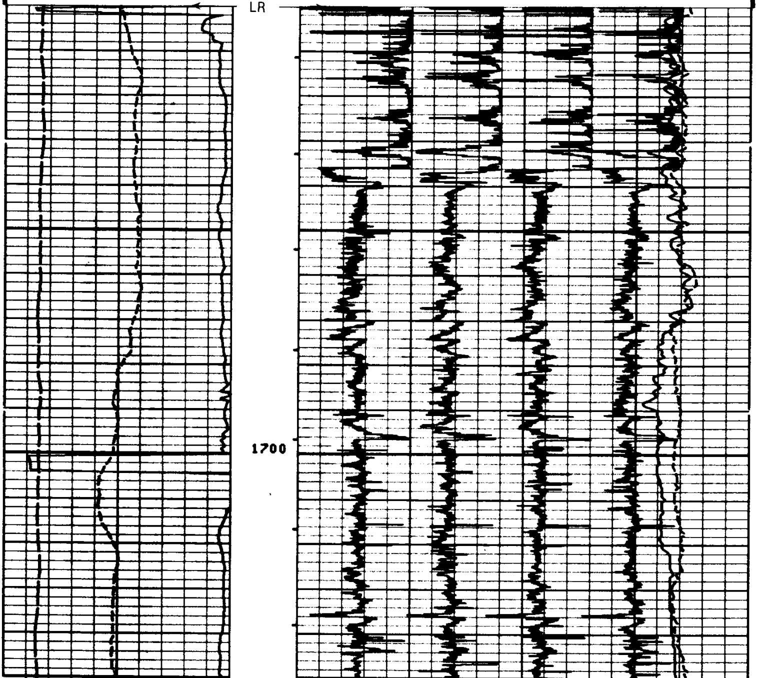
NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)

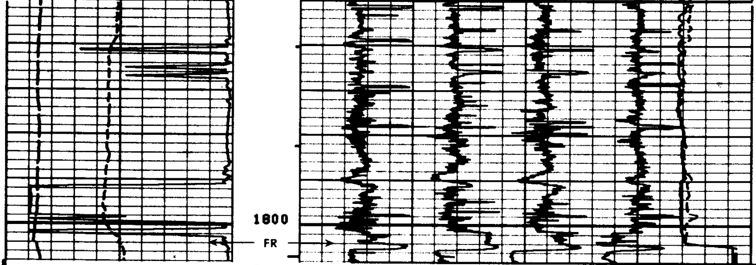
DEVI(DEG)
-1.000 9.0000
RB (DEG)
-40.00 360.00
AZIM(DEG)
-40.00 360.00

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

FILE
2

REPEAT SECTION





FILE

REPEAT SECTION

2

DEVI(DEG)
-1.000 9.0000
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 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

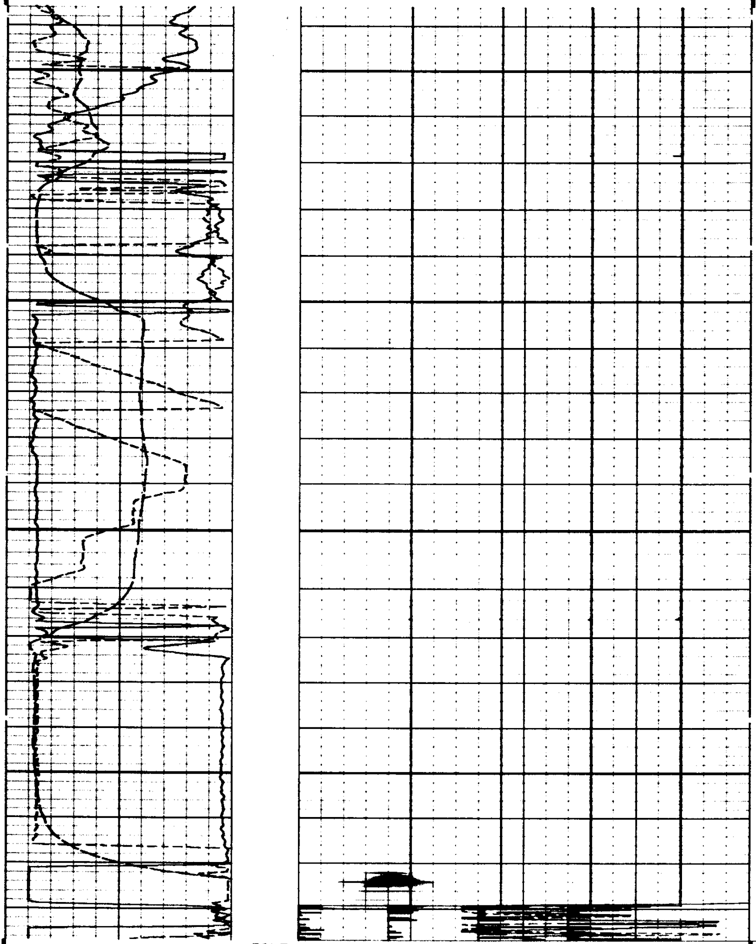
NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSF		MCT	72	DEG
DO	0.0	F	BHS	OPEN	

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

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

FILE

3



FILE

3

DEVI(DEG)			
-1.000	9.0000		
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 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			

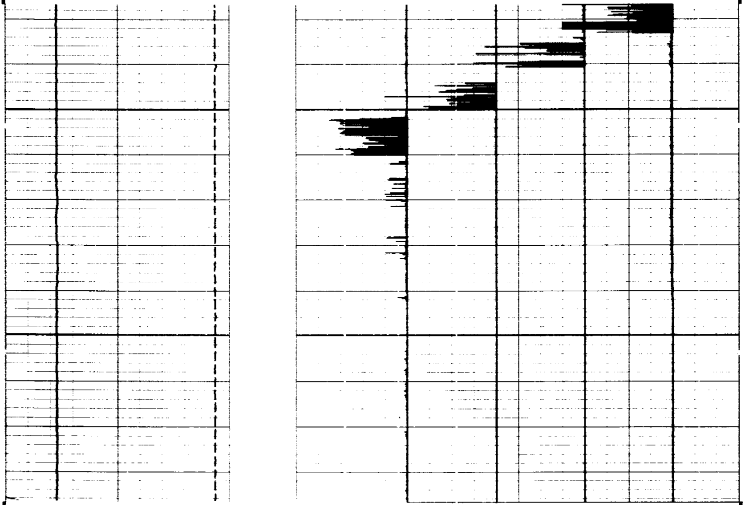
PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
PVUM	1.00000		BS	7.87500	IN
STYP	HDSF		MCT	72	DEG
DO	0.0	F	BHS	OPEN	

DEVI(DEG)			
-1.000	9.0000		
RB (DEG)		C2 (IN)	
-40.00	360.00	26.000	6.0000
AZIM(DEG)		C1 (IN)	
-40.00	360.00	26.000	6.0000

FILE

3



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                                FILE

                                   3

      DEVI(DEG )
 -1.000          9.0000

      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 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 HDSF                                   MCT   72        DEG
                DO   0.0       F                            BHS   OPEN



                      BEFORE SURVEY CALIBRATION SUMMARY


           PERFORMED:     84/11/24
           PROGRAM FILE: HDT    (VERSION    24.2    83/03/29)


         HDTD                CALIPER CALIBRATION SUMMARY

                     MEASURED                        CALIBRATED
                   SMALL   LARGE                   SMALL      LARGE        UNITS
            C1      8.8    14.6                     8.0        12.0         IN
            C2      8.9    14.7                     8.0        12.0         IN
                                FILE

                                   2
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