Schlumberger

DUAL INDUCTION-SFL 5"

CSU

COMPANY:	REICHHOLD ENERGY CORPORATION
WELL:	BUSCH #14-15
FIELD:	MIST
COUNTY:	COLUMBIA
STATE:	OREGON
LOCATION:	1187'E & 317'N OF THE SW CORNER OF ...
SEC:	15 TWP: 6N RGE: 5W

OTHER SERVICES-
BHC SONIC
HDT

PERMANENT DATUM:	GL	ELEVATIONS-	
ELEV. OF PERM. DATUM:	529.0 F	KB:	541.0 F
LOG MEASURED FROM:	KB	DF:	
12.0 F	ABOVE PERM. DATUM	GL:	529.0 F
DRLG. MEASURED FROM:	KB		

PROGRAM
TAPE NO:
26.2
SERVICE
ORDER NO:
432222

DATE:	7 AUG 84
RUN NO:	1
DEPTH-DRILLER:	2258.0 F
DEPTH-LOGGER:	2256.0 F
BTM. LOG INTERVAL:	2250.0 F
TOP LOG INTERVAL:	406.0 F
CASING-DRILLER:	406 F
CASING-LOGGER:	406 F
CASING:	8 5/8"
BIT SIZE:	7 7/8"
DEPTH:	2258 F

RECEIVED-PTLD
AUG 23 1984
DEPT OF GEOLOGY

TYPE FLUID IN HOLE:	GEL/LIGNO
DENSITY:	12.1 LB/G
VISCOSITY:	76.0 S
PH:	9.0
FLUID LOSS:	4.4 C3
SOURCE OF SAMPLE:	FLOWLINE
RM:	1.430 OHMM AT 88.0 DEGF
RMF:	1.150 OHMM AT 86.0 DEGF
RMC:	1.750 OHMM AT 85.0 DEGF
SOURCE RMF/RMC:	MEAS/MEAS
RM AT BHT:	1.331 OHMM AT 95.0 DEGF
RMF AT BHT:	1.048 OHMM AT 95.0 DEGF
RMC AT BHT:	1.578 OHMM AT 95.0 DEGF
TIME CIRC. STOPPED:	1700
TIME LOGGER ON BTM.:	
MAX. REC. TEMP:	95.0 DEGF

LOGGING UNIT NO: 8178
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: BENTLEY
WITNESSED BY: ALGER

REMARKS:

SP NOISE APPARENTLY DUE TO SHORT LENGTH OF CABLE. COULD NOT GET GOOD SP WITH DUMMY CABLE.

EQUIPMENT NUMBERS-

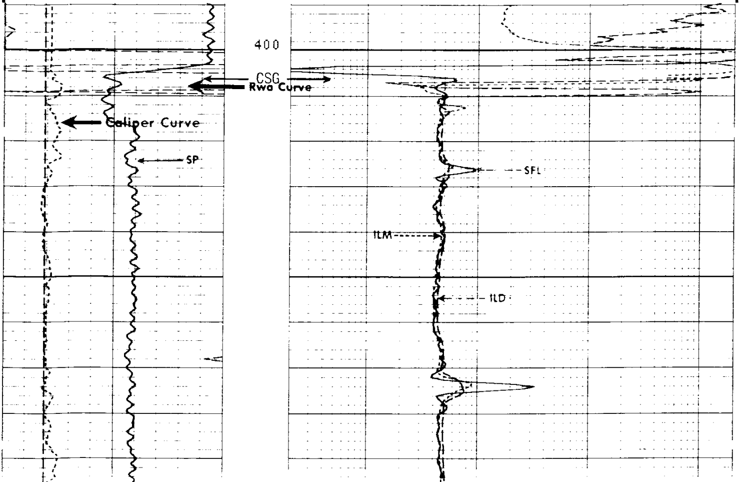
DIS 1422	DIC 47	MCD 1502	SLS RC 236
SLC FA 1589	IEM BD 232	SLM DA 383	

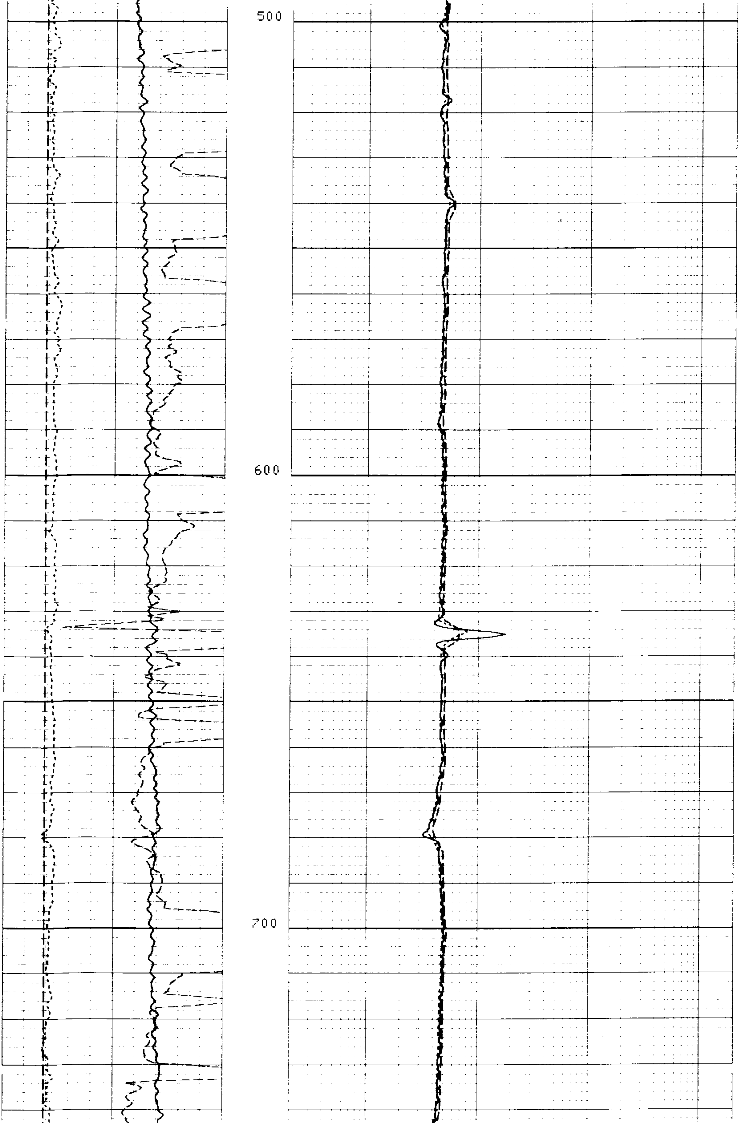
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS,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

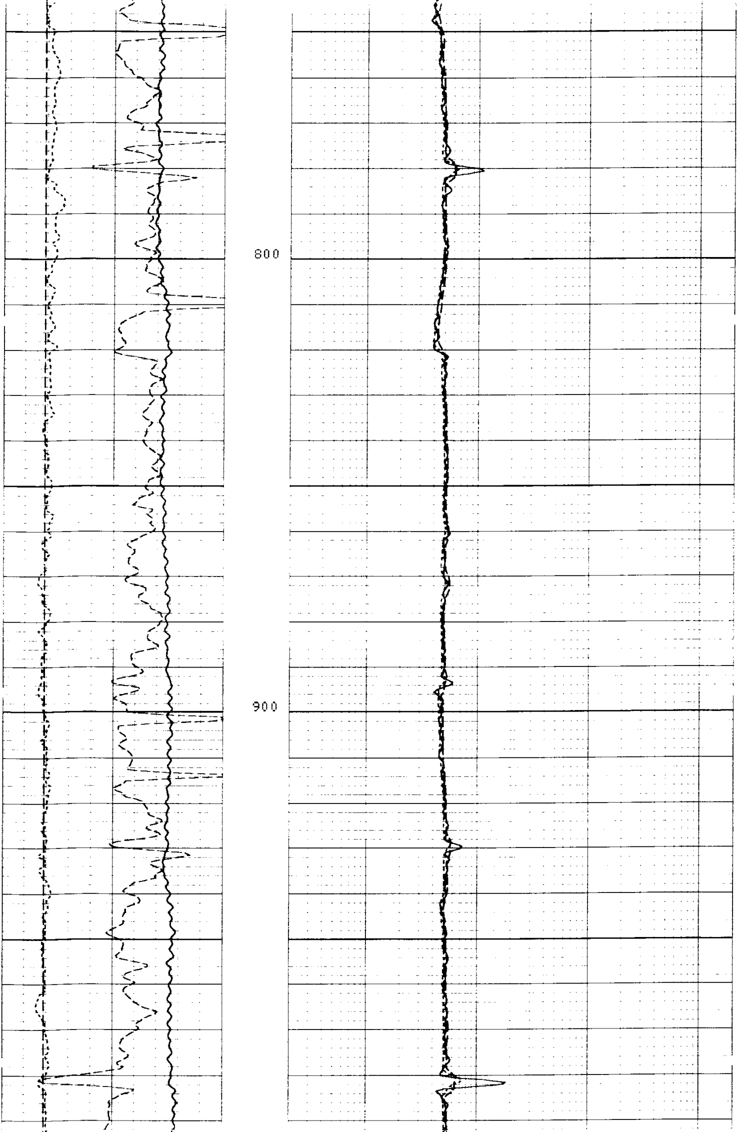
FILE 8 07-AUG-84 22:07
DATA ACQUIRED 07-AUG-84 21:35

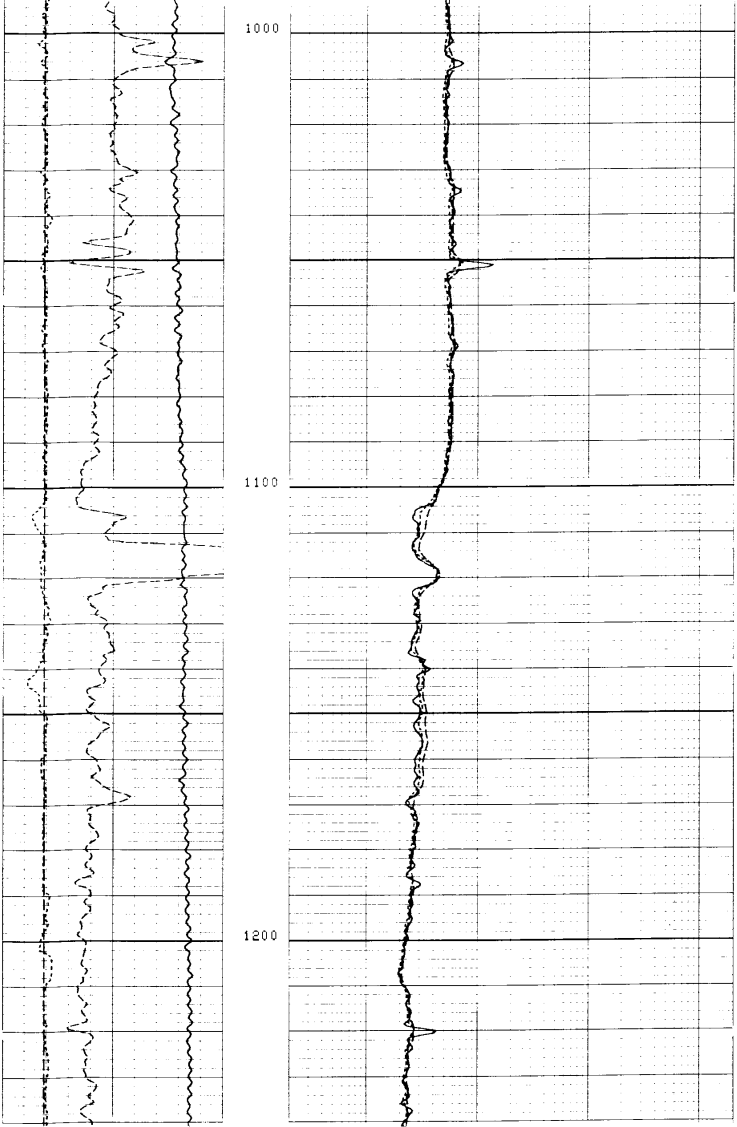
BS (IN)	6.0000	16.000			
RWA (OHMM)	0.0	3.0000	ILD (OHMM)	.20000	2000.0
CALI(IN)	6.0000	16.000	ILM (OHMM)	.20000	2000.0
SP (MV)	-100.0	0.0	SFLU(OHMM)	.20000	2000.0

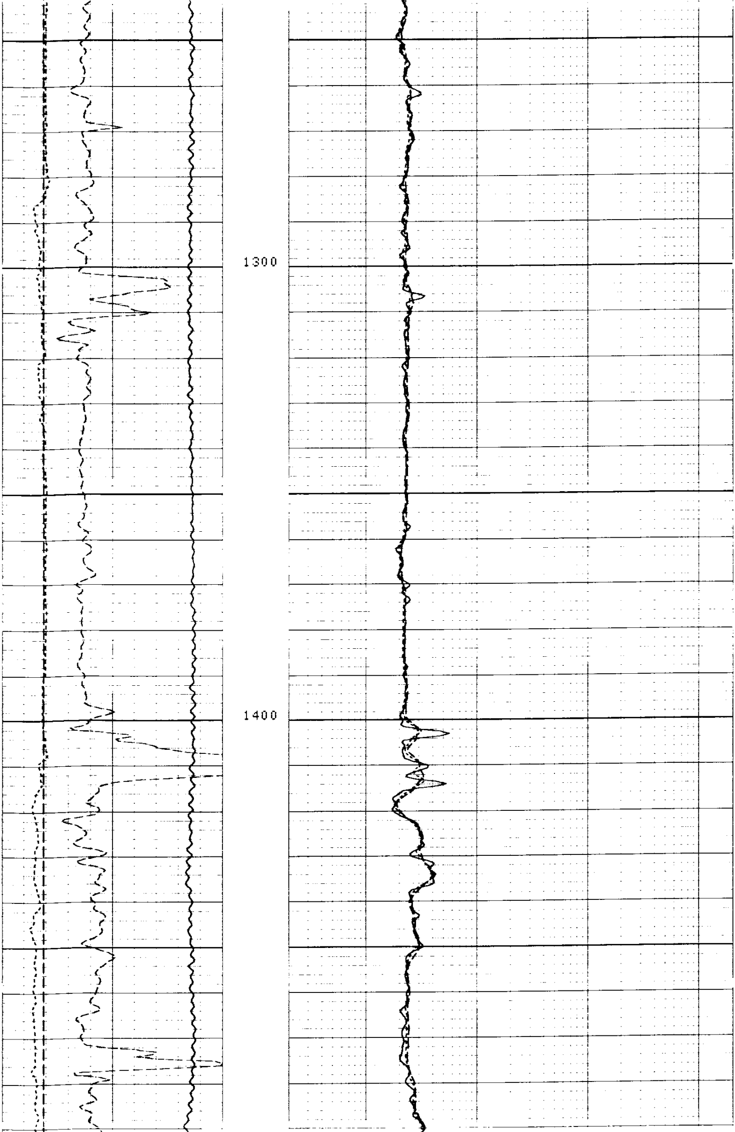
FILE 8 07-AUG-84 22:04
DATA ACQUIRED 07-AUG-84 21:35

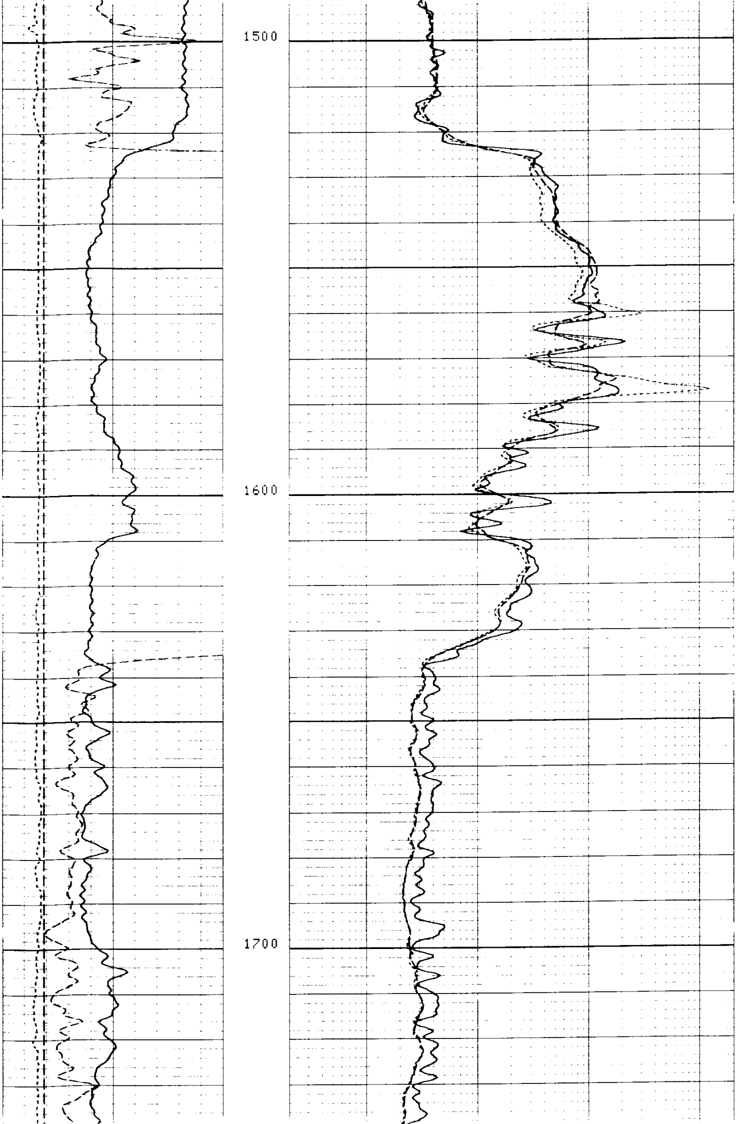


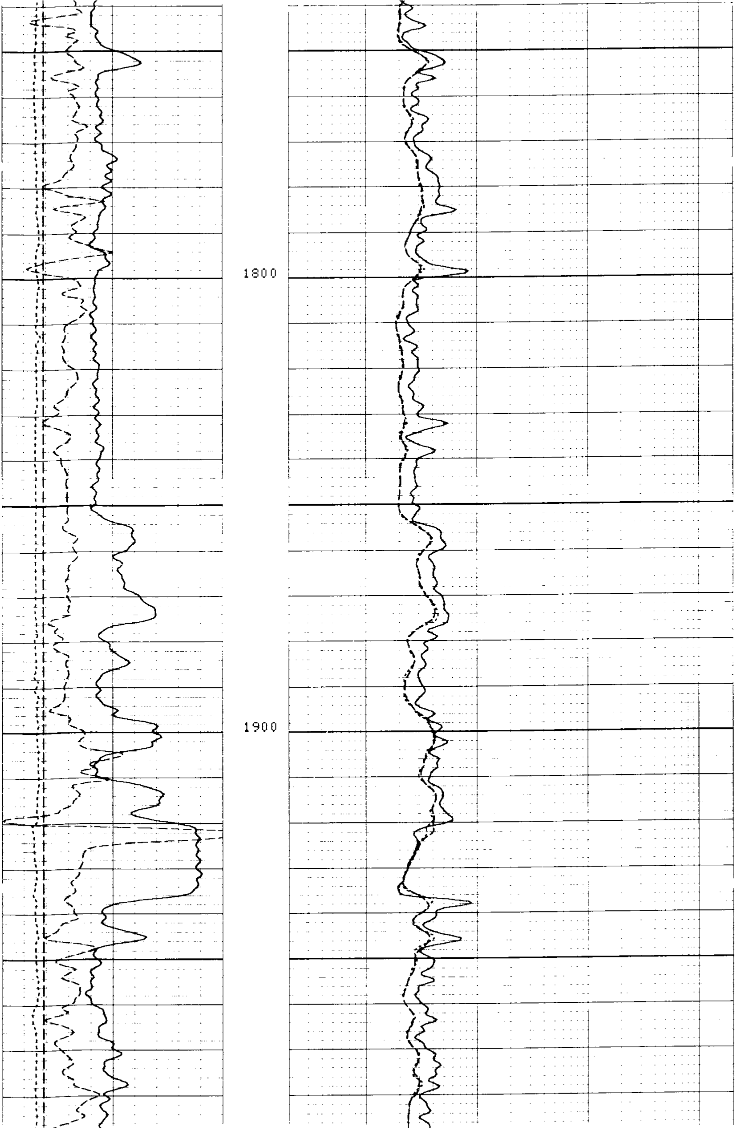


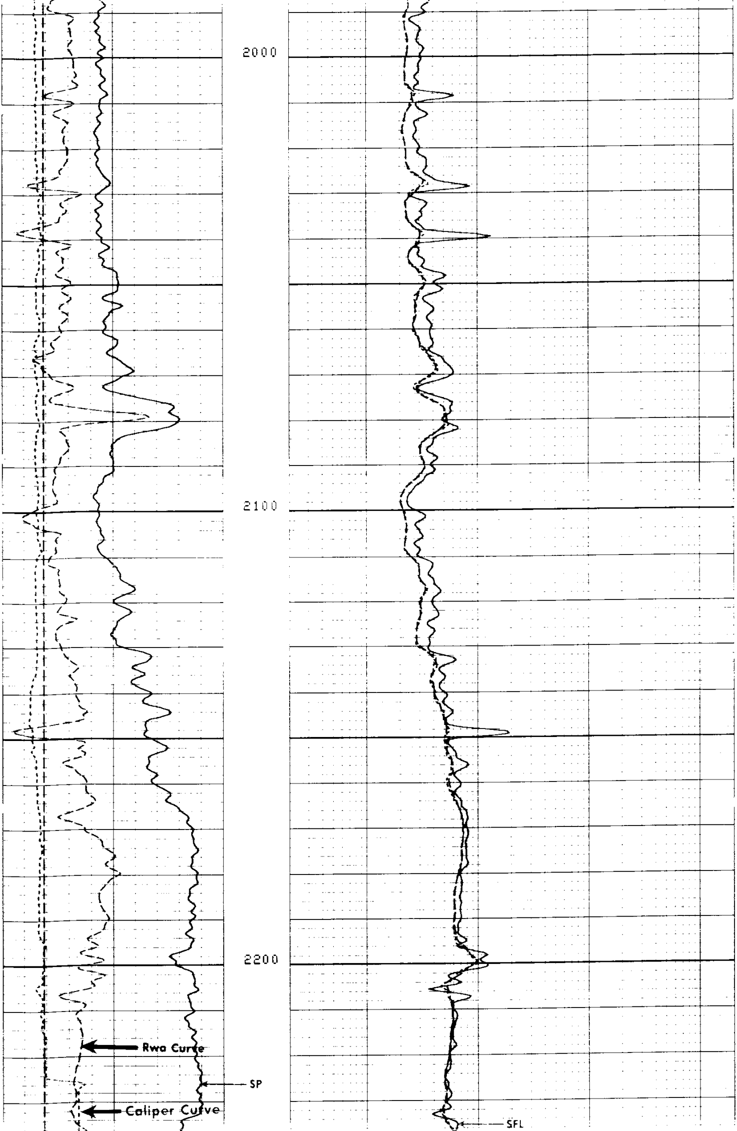


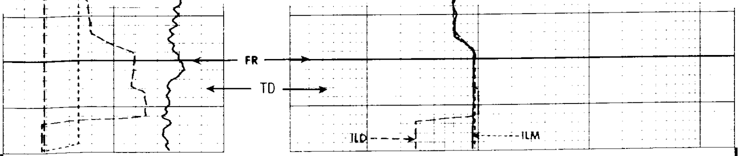












FILE 8 07-AUG-84 22:00
DATA ACQUIRED 07-AUG-84 21:11

BS (IN)
6.0000 16.000
RWA (OHMM)
0.0 3.0000
CALI(IN)
6.0000 16.000
SP (MV)
-100.0 0.0

ILD (OHMM)
.20000 2000.0
ILM (OHMM)
.20000 2000.0
SFLU(OHMM)
.20000 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

CBL	43.9	FEET	AMPL	43.9	FEET
TT3	40.1	FEET	TT4	39.1	FEET
TT1	42.9	FEET	TT2	43.9	FEET
CALI	31.8	FEET	SRAT	41.4	FEET
SFL	6.4	FEET	ILD	9.4	FEET
SP	2.5	FEET	ILM	5.7	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	35.6	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WSV1	WF1		DWS	16	
DSIN	5	US	DDEL	200	US
CDTS	100.000		DWCO	512	
DTF	189.000	US/F	DTM	56.0000	US/F
SBR	1.00000	OHMM	DSEC	4.00000	MMHO
FPHI	SPHI		MSEC	6.20000	MMHO
FNUM	.620000		FEXP	2.15000	
BS	7.87500	IN	BHS	OPEN	
PP	NORM		DO	0.0	F

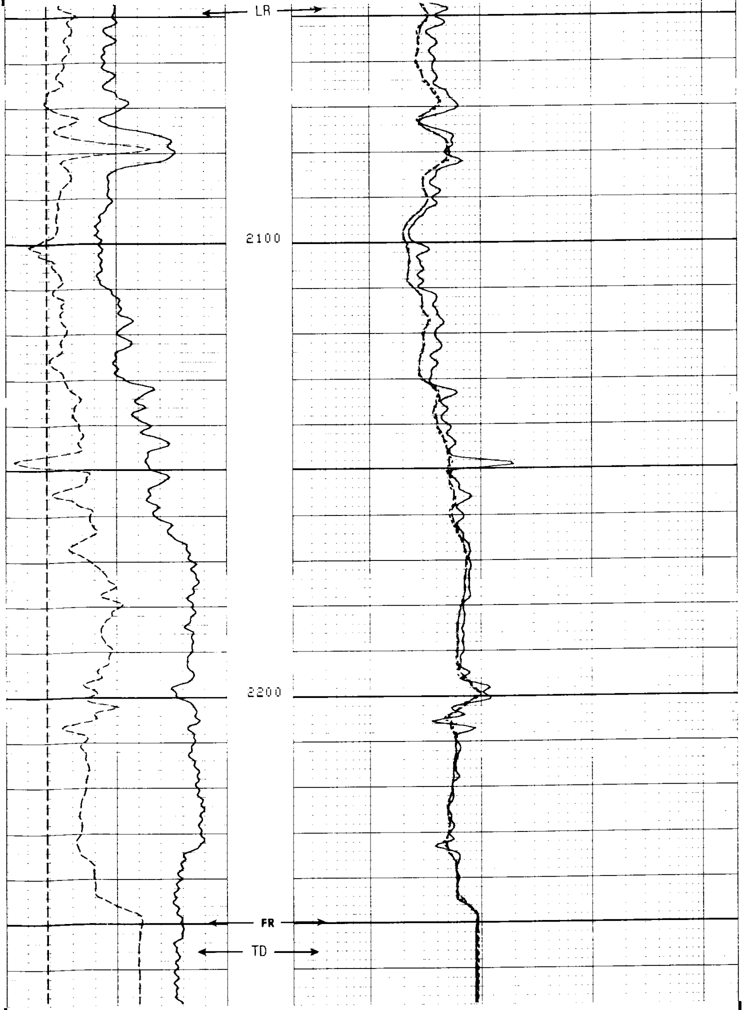
TAPE NOT MADE

BS (IN)
6.0000 16.000
RWA (OHMM)
0.0 3.0000
SP (MV)
-100.0 0.0

ILD (OHMM)
.20000 2000.0
ILM (OHMM)
.20000 2000.0
SFLU(OHMM)
.20000 2000.0

REPEAT SECTION

FILE 7 07-AUG-84 22:00
DATA ACQUIRED 07-AUG-84 21:09



FILE 7 07-AUG-84 21:59
DATA ACQUIRED 07-AUG-84 21:06

```
           BS  (IN  )                                         ILD (OHMM)
6.0000              16.000      .20000                                                2000.0
          RWA (OHMM)                                          ILM (OHMM)
0.0                 3.0000      .20000                                                2000.0
          SP   (MV   )                                        SFLU(OHMM)
-100.0                 0.0      .20000                                                2000.0
```

```
                     SENSOR MEASURE POINT TO TOOL ZERO

          CBL   43.9  FEET                        HMFL  43.9  FEET
          TT3   40.1  FEET                        TT4   39.1  FEET
          TT1   42.9  FEET                        TT2   43.9  FEET
          CALI  31.8  FEET                        SRAT  41.4  FEET
          SFL    6.4  FEET                        ILD    9.4  FEET
          SP     2.5  FEET                        ILM    5.7  FEET
          TENS   2.5  FEET                        SPAR   2.5  FEET
          NOIS  35.6  FEET
```

```
                                PARAMETERS

          NAME  VALUE     UNIT                      NAME  VALUE     UNIT

          WSV1  WF1                                 DWS   16
          DSIN  5         US                        DDEL  200       US
          CDTS  100.000                             DWCO  512
          DTF   189.000   US/F                      DTM   56.0000   US/F
          SBR   1.00000   OHMM                      DSEC  4.00000   MMHO
          FPHI  SPHI                                MSEC  6.20000   MMHO
          FNUM  .620000                             FEXP  2.15000
          BS    7.87500   IN                        BHS   OPEN
          PP    NORM                                DO    0.0       F

                              TAPE NOT MADE
```

```
                 AFTER SURVEY TOOL CHECK SUMMARY


    PERFORMED:       84/08/07
    PROGRAM FILE: ISN     (VERSION     26.2     00/00/00)


 DITD                        TOOL  CHECK

                      ZERO                          PLUS
               BEFORE           AFTER         BEFORE       AFTER       UNITS
     ILD         0.0               .0         494.9        495.3       MMHO
     ILM         0.0              -.0         503.6        503.3       MMHO
     SFL         0.0               .0         500.0        500.0       MMHO

 ILD   SONDE ERROR CORRECTION :         4.0 MMHO
 ILM   SONDE ERROR CORRECTION :         6.2 MMHO

                        FILE    10        07-AUG-84 21:39
```

```
                 BEFORE SURVEY CALIBRATION SUMMARY


    PERFORMED:       84/08/07
    PROGRAM FILE: ISN     (VERSION     26.2     00/00/00)


 DITD               ELECTRONICS CALIBRATION SUMMARY

                MEASURED                      CALIBRATED
              ZERO     PLUS                 ZERO        PLUS           UNITS
     ILD       3.8     431.8                 0.0        494.9           MMHO
     ILM       5.0     505.6                 0.0        503.6           MMHO
     SFL        .6     500.5                 0.0        500.0           MMHO
```

```
ILD  SONDE ERROR CORRECTION :       4.0 MMHO
ILM  SONDE ERROR CORRECTION :       6.2 MMHO


                 SHOP SUMMARY


   PERFORMED:      84/07/06
   PROGRAM FILE: SHOP   (VERSION    26.2    83/11/17)


DITD                ELECTRONICS CALIBRATION SUMMARY

                   TEST LOOP CALIBRATION             TOOL CHECK
               MEASURED            CALIBRATED        CALIBRATED
            ZERO      PLUS      ZERO       PLUS     ZERO      PLUS    UNITS
     ILD     1.0     440.1      0.0       500.0      0.0      495.2   MMHO
     ILM    -2.1     501.4      0.0       500.0      0.0      503.5   MMHO
ILD  SONDE ERROR CORRECTION :          4.0 MMHO
ILM  SONDE ERROR CORRECTION :          6.2 MMHO

                         (IS:1422, IC:47  )
```