Schlumberger

DUAL INDUCTION-SFL 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 F
LOG MEASURED FROM: KB
11.1 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

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

DATE: 17 FEB 85
RUN NO: 1

DEPTH-DRILLER: 2511.0 F
DEPTH-LOGGER: 2511.0 F
BTM. LOG INTERVAL: 2505.0 F
TOP LOG INTERVAL: 507.0 F

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

OTHER SERVICES-
BHC
HDT

PROGRAM
TAPE NO:
26.2
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: 1.926 OHMM AT 81.0 DEGF
RMF AT BHT: 2.240 OHMM AT 81.0 DEGF
RMC AT BHT: 1.895 OHMM AT 81.0 DEGF

TIME CIRC. STOPPED: 11:00 2/17
TIME LOGGER ON BTM.: 13:45 2/17

MAX. REC. TEMP: 81.0 DEGF

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

REMARKS:

CHLORIDES: 850PPM
DIL AND SONIC WERE RUN IN COMBINATION.
CMEZ'S AND FINS USED FOR CENTRALIZATION.

EQUIPMENT NUMBERS-

DIS 1342	DIC 1386	SLS 375	SLC 1259
MCD 1186	IEM 162	SLM 443	

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 9 17-FEB-85 15:03
DATA ACQUIRED 17-FEB-85 14:30

TENS(LB)
10000. 0.0

ILD (OHMM)
.20000 2000.0

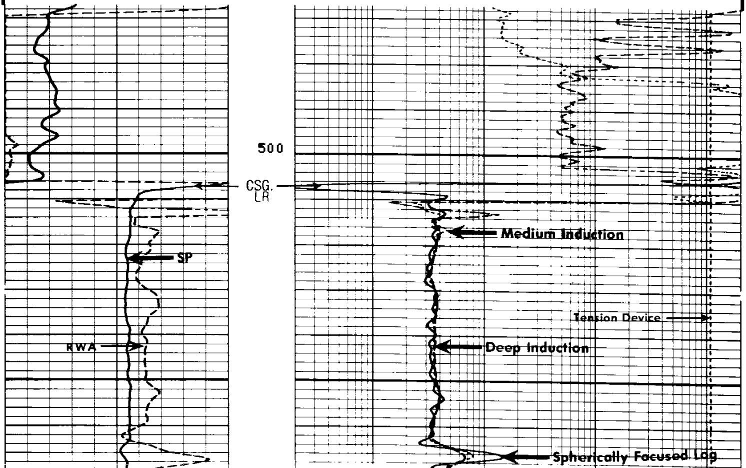
RWA (OHMM)
0.0 3.0000

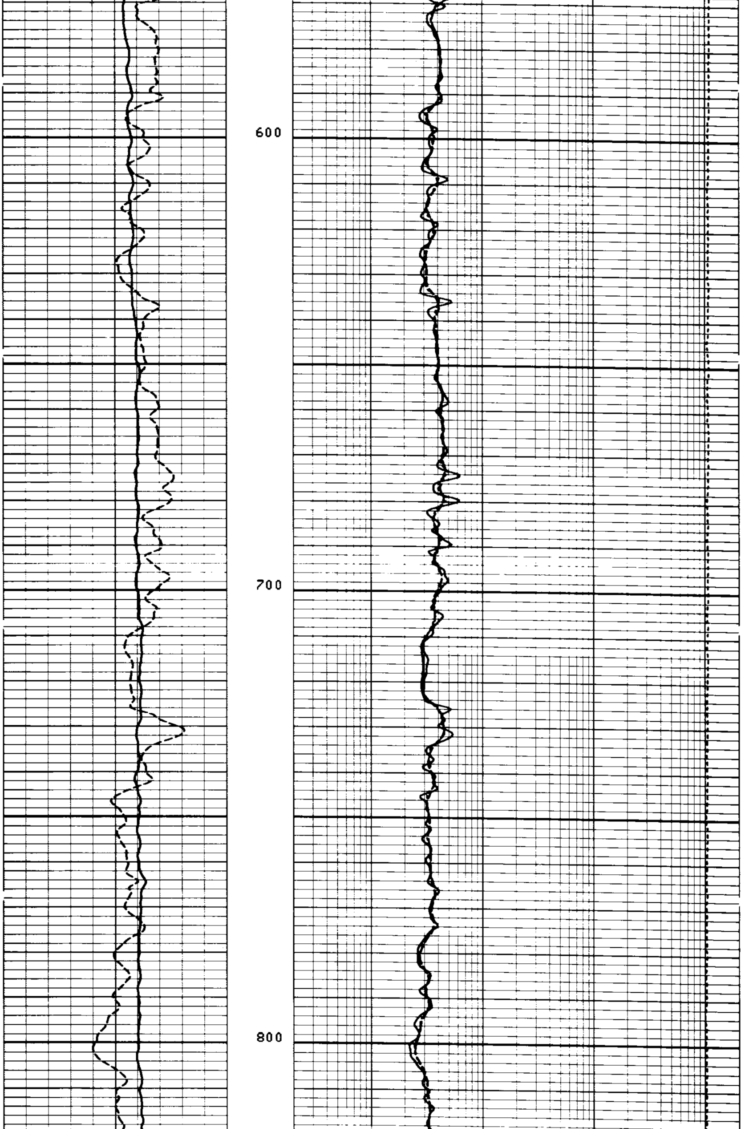
ILM (OHMM)
.20000 2000.0

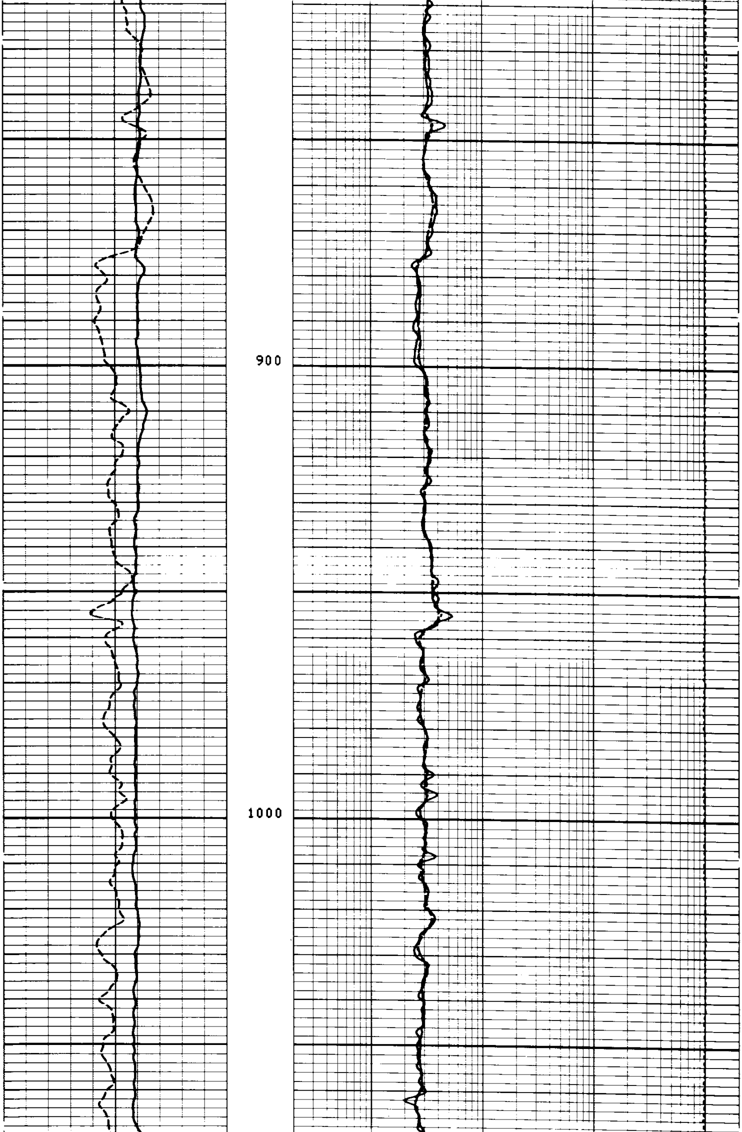
SP (MV)
-100.0 0.0

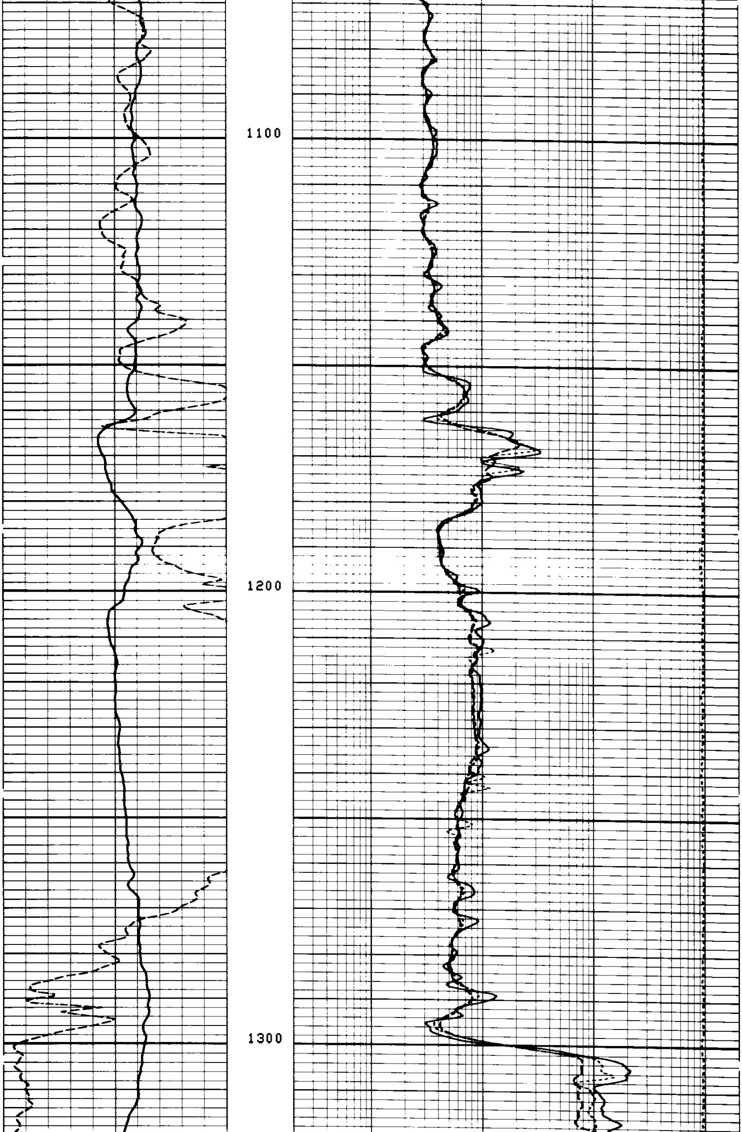
SFLU(OHMM)
.20000 2000.0

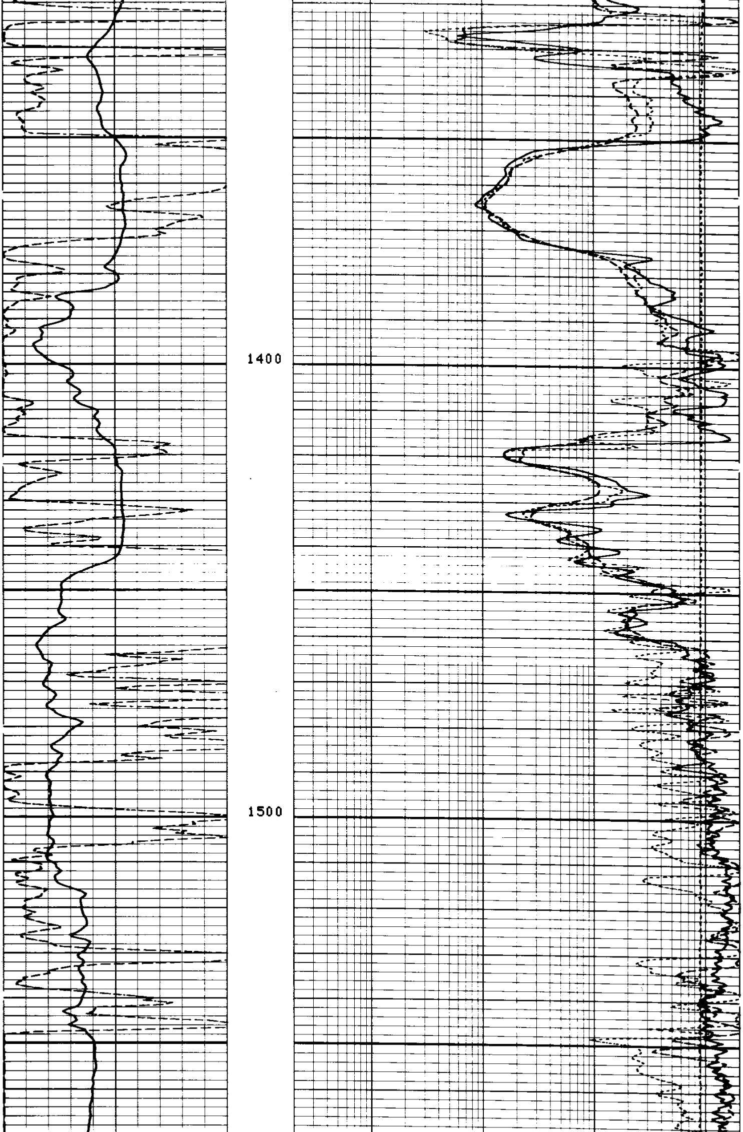
FILE 9 17-FEB-85 14:53
DATA ACQUIRED 17-FEB-85 14:30

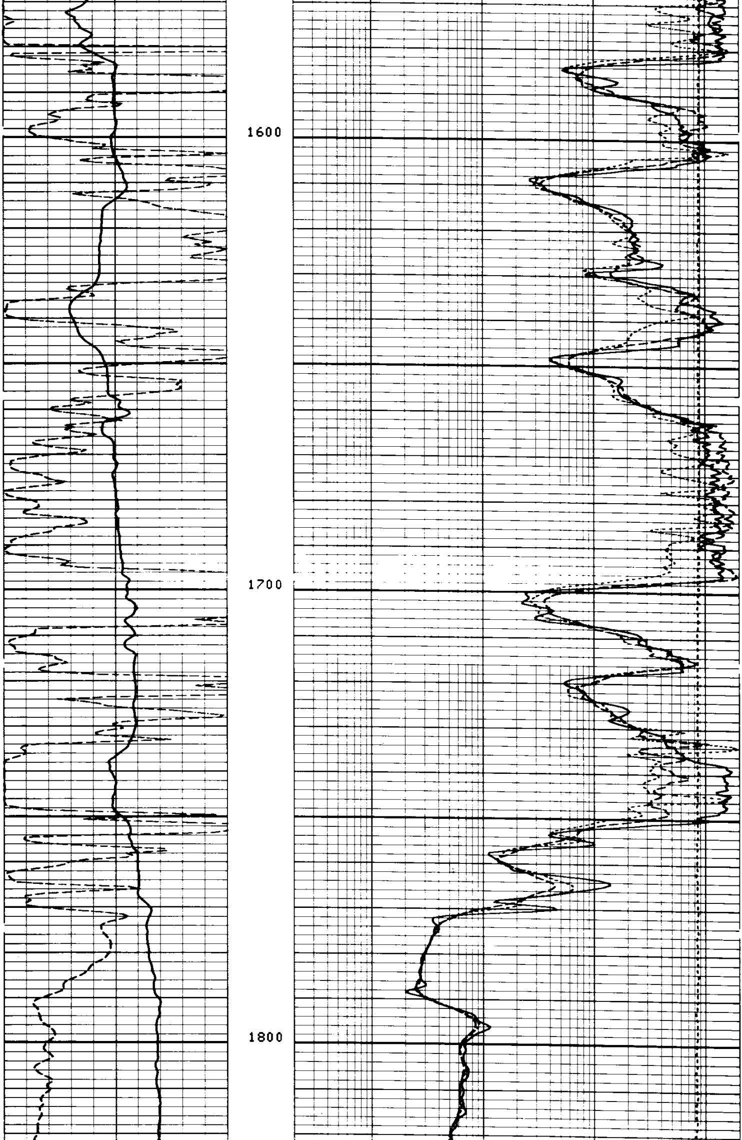


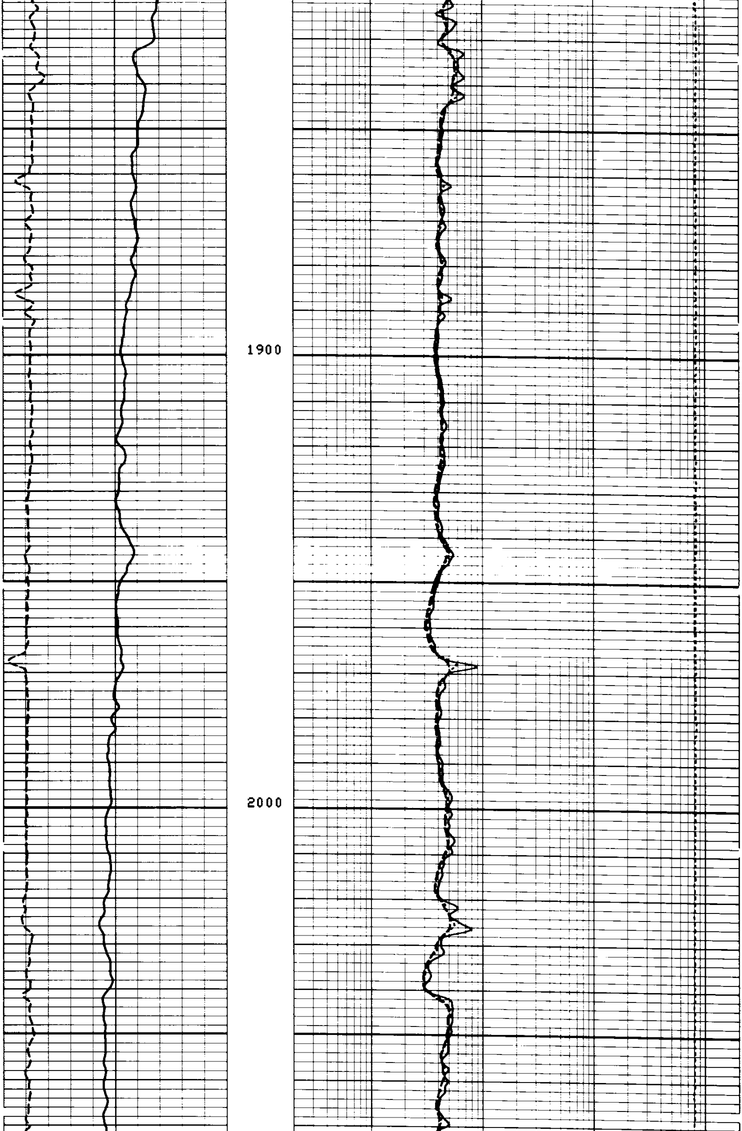


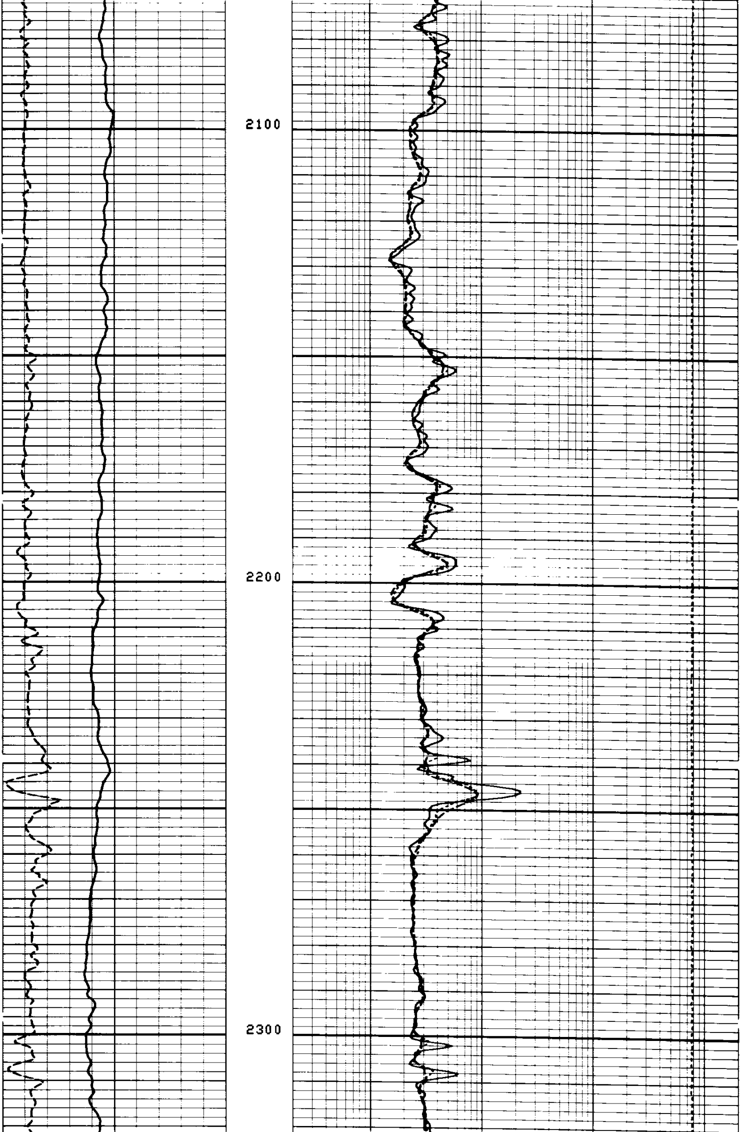


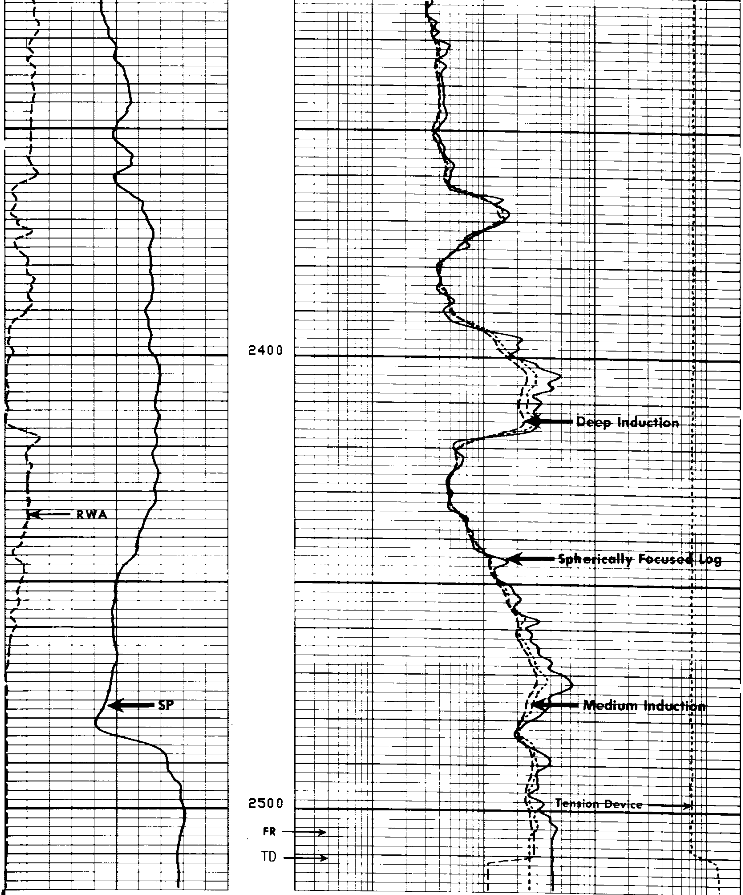












FILE 9 17-FEB-85 14:48
DATA ACQUIRED 17-FEB-85 13:55

TENS(LB)
10000. 0.0
ILD (OHMM)
.20000 2000.0
RWA (OHMM)
0.0 3.0000
ILM (OHMM)
.20000 2000.0
SP (MV)
-100.0 0.0
SFLU(OHMM)
.20000 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

CBL	37.0	FEET	AMPL	37.0	FEET
TT3	33.3	FEET	TT4	32.3	FEET
TT1	36.0	FEET	TT2	37.0	FEET
CALI	56.1	FEET	SRAT	34.5	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	28.8	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WSV1	WF1		DWS	16	
DSIN	5	US	DDEL	200	US
CDTS	140.000		DWCO	512	
DTF	189.000	US/F	DTM	56.0000	US/F
SBR	1.00000	OHMM	DSEC	6.20000	MMHO
FPHI	SPHI		MSEC	7.30000	MMHO
BS	7.87500	IN	BHS	OPEN	
SPDR	0.0		DO	0.0	F
PP	NORM				

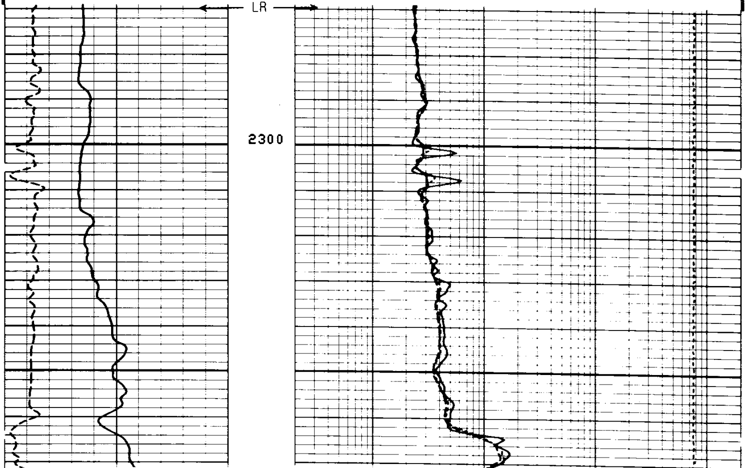
TAPE NOT MADE

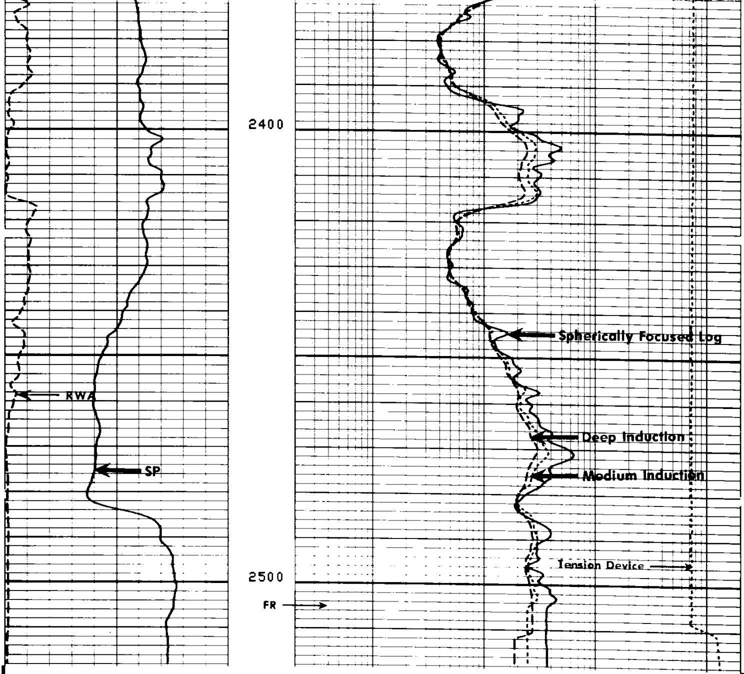
TENS(LB)
10000. 0.0
ILD (OHMM)
.20000 2000.0
ILM (OHMM)
.20000 2000.0
SFLU(OHMM)
.20000 2000.0

RWA (OHMM)
0.0 3.0000
SP (MV)
-100.0 0.0

REPEAT SECTION

FILE 8 17-FEB-85 14:47
DATA ACQUIRED 17-FEB-85 13:51





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FILE     8        17-FEB-85 14:47
DATA ACQUIRED     17-FEB-85 13:47
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```
                                                     TENS(LB  )
                                             10000.               0.0
                                         ILD (OHMM)
                            .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   37.0   FEET                 AMPL  37.0   FEET
       TT3   33.3   FEET                 TT4   32.3   FEET
       TT1   36.0   FEET                 TT2   37.0   FEET
       CALI  56.1   FEET                 SRAT  34.5   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  28.8   FEET
```

PARAMETERS

```
      NAME  VALUE     UNIT                    NAME  VALUE     UNIT

      WSV1  WF1                               DWS   16
      DSIN  5         US                      DDEL  200       US
      CDTS  140.000                           DWCO  512
      DTF   189.000   US/F                    DTM   56.0000   US/F
      SBR   1.00000   OHMM                    DSEC  6.20000   MMHO
      FPHI  SPHI                              MSEC  7.30000   MMHO
      BS    7.87500   IN                      BHS   OPEN
      SPDR  0.0                               DO    0.0       F
      PP    NORM

                            TAPE NOT MADE
```

```
                 BEFORE SURVEY CALIBRATION SUMMARY


   PERFORMED:      85/02/17
   PROGRAM FILE: ISN     (VERSION    26.2    83/11/17)


 DITD                  ELECTRONICS CALIBRATION SUMMARY

              MEASURED                      CALIBRATED
            ZERO     PLUS                ZERO        PLUS           UNITS
    ILD      .1     543.1                0.0        497.4           MMHO
    ILM      .0     528.6                0.0        495.2           MMHO
    SFL      .4     532.0                0.0        500.0           MMHO

 ILD   SONDE ERROR CORRECTION :          6.2 MMHO
 ILM   SONDE ERROR CORRECTION :          7.3 MMHO
```

```
                 AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:      85/02/17
   PROGRAM FILE: ISN     (VERSION    26.2    83/11/17)


 DITD                         TOOL   CHECK

                     ZERO                          PLUS
           BEFORE          AFTER           BEFORE      AFTER      UNITS
    ILD      0.0             .0            497.4       496.4      MMHO
    ILM      0.0             .0            495.2       494.2      MMHO
    SFL      0.0           -.0             500.0       496.7      MMHO

 ILD   SONDE ERROR CORRECTION :          6.2 MMHO
 ILM   SONDE ERROR CORRECTION :          7.3 MMHO

                          FILE    11       17-FEB-85 14:33
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```
                  SHOP SUMMARY


   PERFORMED:      85/01/31
   PROGRAM FILE: SHOP    (VERSION    24.2    83/03/29)


  DITD                 ELECTRONICS CALIBRATION SUMMARY

                  TEST LOOP CALIBRATION             TOOL CHECK
              MEASURED          CALIBRATED          CALIBRATED
            ZERO     PLUS      ZERO      PLUS      ZERO       PLUS     UNITS
     ILD   -19.2    521.6      0.0      500.0      0.0       497.2     MMHO
     ILM    -8.6    524.9      0.0      500.0      0.0       495.5     MMHO
  ILD   SONDE ERROR CORRECTION :          6.2 MMHO
  ILM   SONDE ERROR CORRECTION :          7.3 MMHO

                          (IS:1342, IC:1386)
```