Schlumberger

DUAL INDUCTION-SFL 5"

CSU

COMPANY:	REICHHOLD ENERGY CORPORATION
WELL:	COLUMBIA COUNTY #13-1 RD#1
FIELD:	MIST
COUNTY:	COLUMBIA
STATE:	OREGON
LOCATION:	1393' NORTH & 1252' EAST OF SOUTHWEST CORNER OF
SEC:	1 TWP: 6N RGE: 5W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 1163.2'
LOG MEASURED FROM: KB
11.4' ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 1174.6'
DF:
GL: 1163.2'

OTHER SERVICES-
BHC
HDT

PROGRAM
TAPE NO:
20.2
SERVICE
ORDER NO:
205640

DATE:	9 MAY 82
RUN NO:	1
DEPTH-DRILLER:	3028.0'
DEPTH-LOGGER:	3015.0'
BTM. LOG INTERVAL:	3009.0'
TOP LOG INTERVAL:	437.0'
CASING-DRILLER:	436'
CASING-LOGGER:	437'
CASING:	7"
BIT SIZE:	6.25

RECEIVED-PTL
MAY 17 1982
DEPT OF GEOLOG

TYPE FLUID IN HOLE:	GEL-WATER
DENSITY:	11.5 LB/G
VISCOSITY:	45.0 S
PH:	9.5
FLUID LOSS:	6.5 C3
SOURCE OF SAMPLE:	MUD PIT
RM:	6.550 OHMM AT 58.0 DF
RMF:	6.930 OHMM AT 45.0 DF
RMC:	4.118 OHMM AT 45.0 DF
SOURCE RMF/RMC:	MEASURED/CALCULATED
RM AT BHT:	5.192 OHM AT 75.0 DF
RMF AT BHT:	4.394 OHM AT 75.0 DF
RMC AT BHT:	2.611 OHM AT 75.0 DF
TIME CIRC. STOPPED:	0730
TIME LOGGER ON BTM.:	1030
MAX. REC. TEMP:	75.0 DF

LOGGING UNIT NO: 8216
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: COLLINS
WITNESSED BY: BRUER

REMARKS:

EQUIPMENT NUMBERS-

DIS 1181 DIC 1149 IEM 232

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

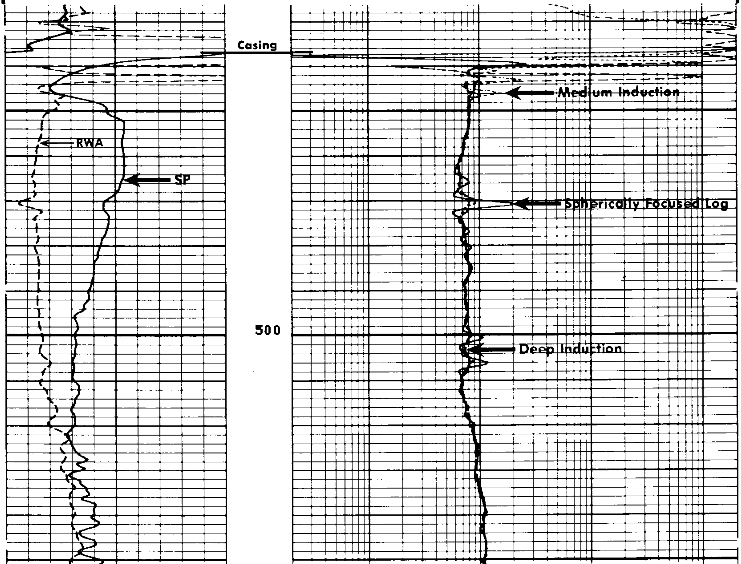
103

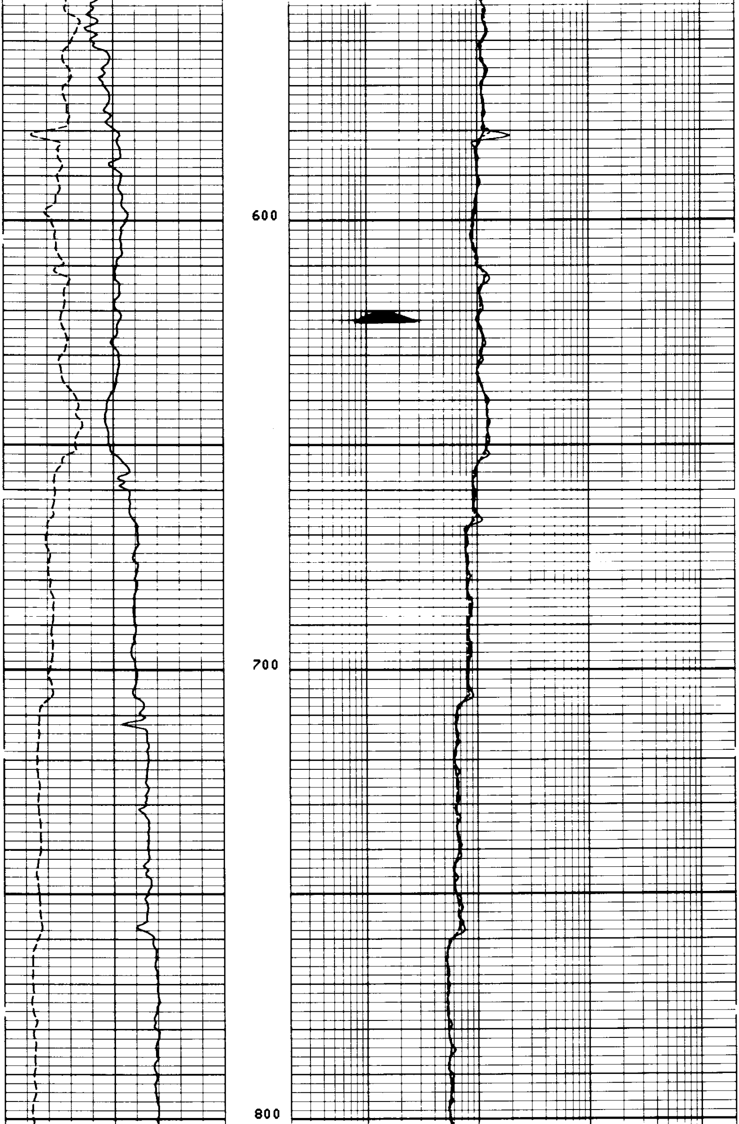
RWA (OHMM)
0.0 10.00
SP (MV)
-100.0 0.0

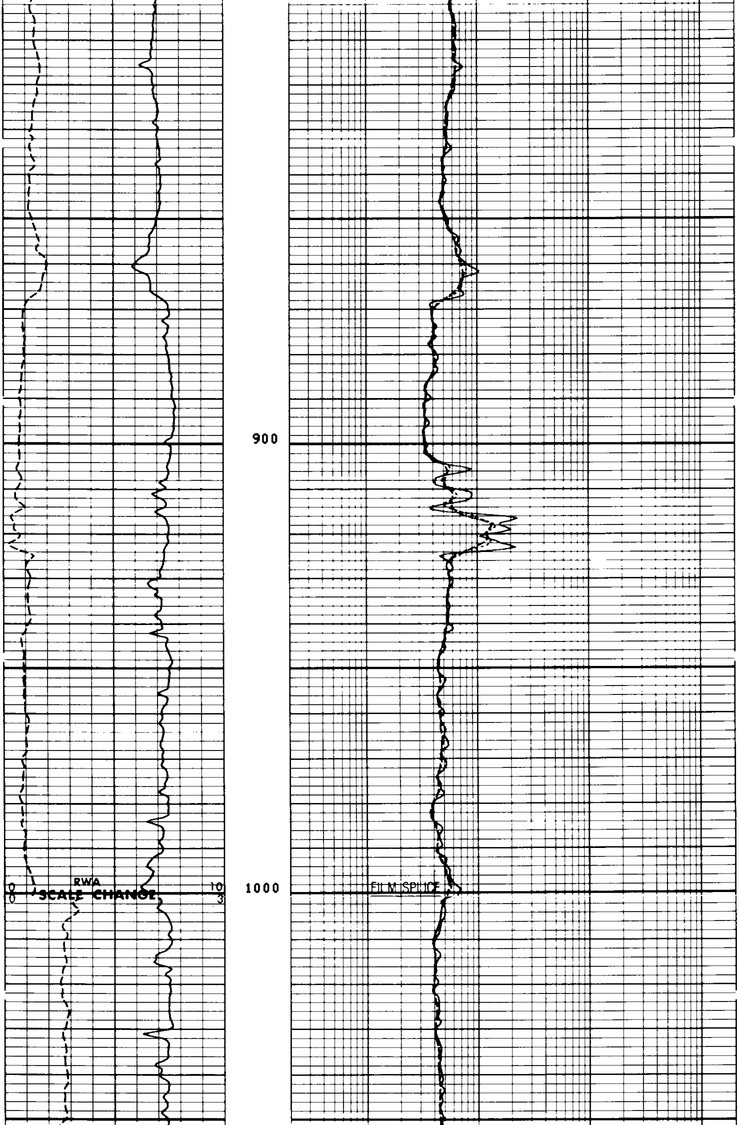
ILD (OHMM)
0.2000 2000.
ILM (OHMM)
0.2000 2000.
SFLU(OHMM)
0.2000 2000.

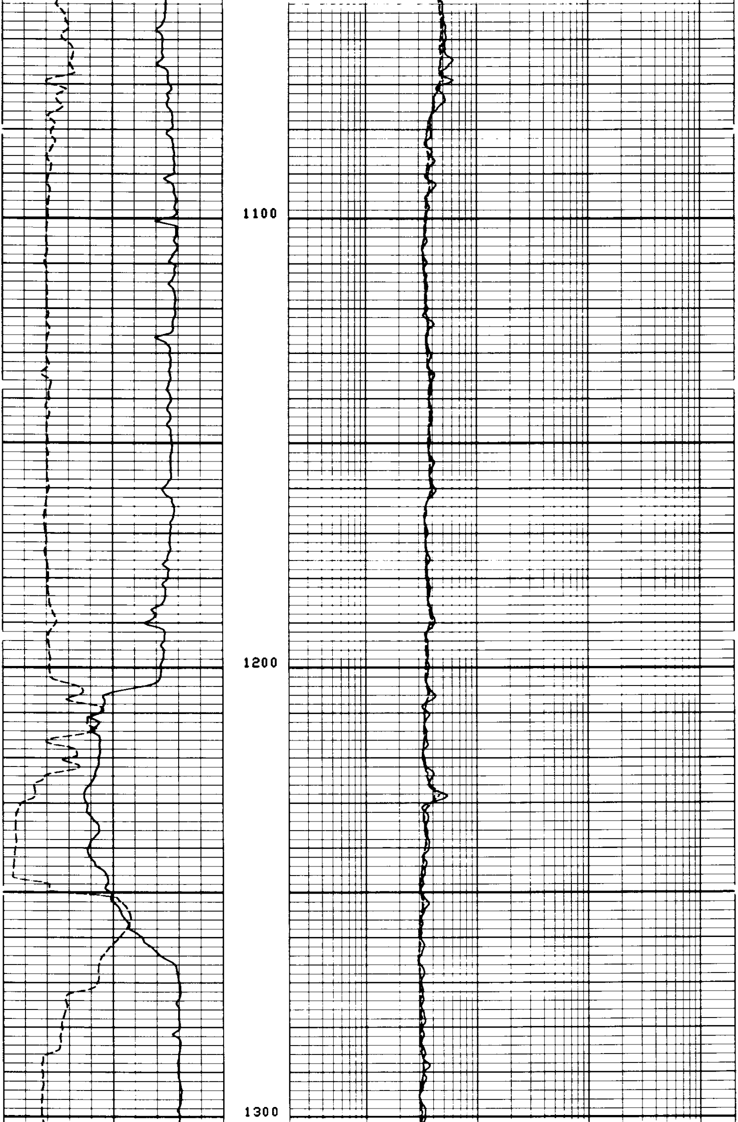
FILE

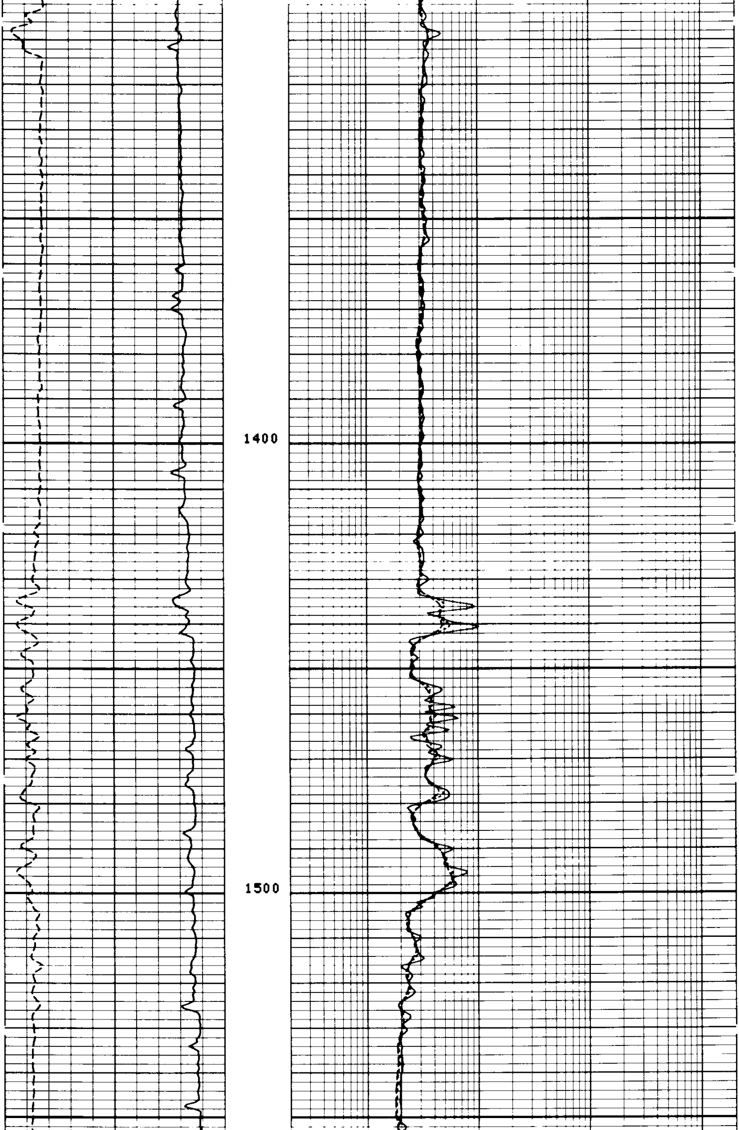
2

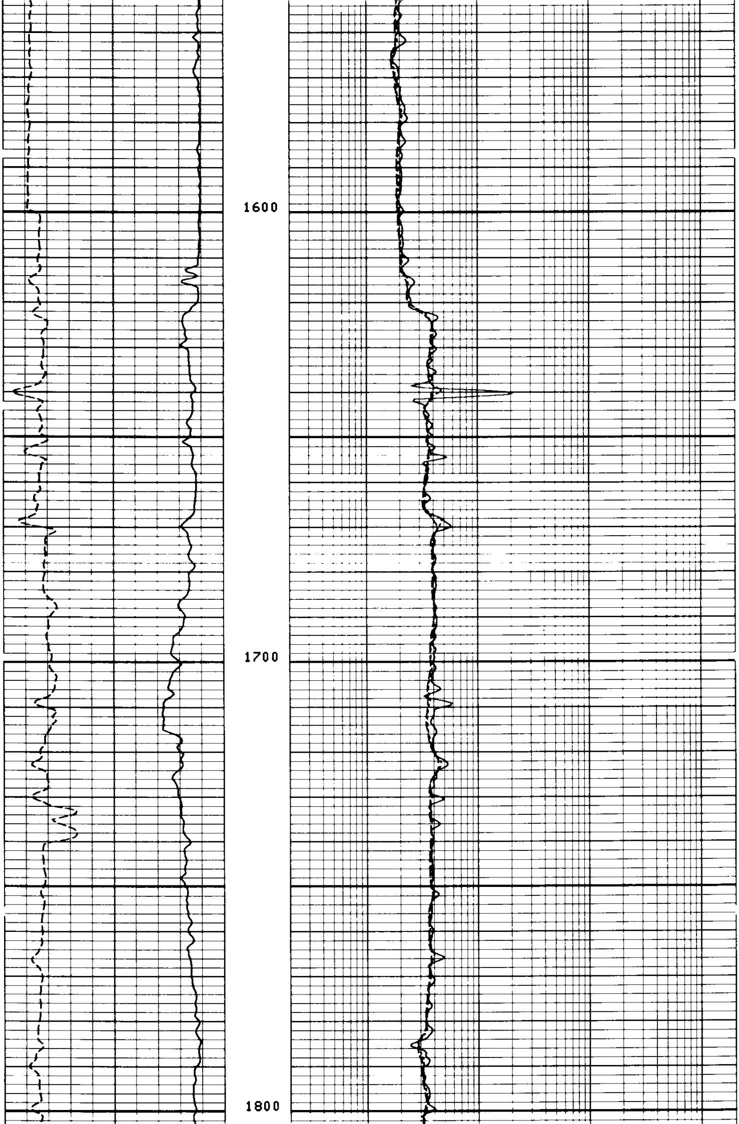


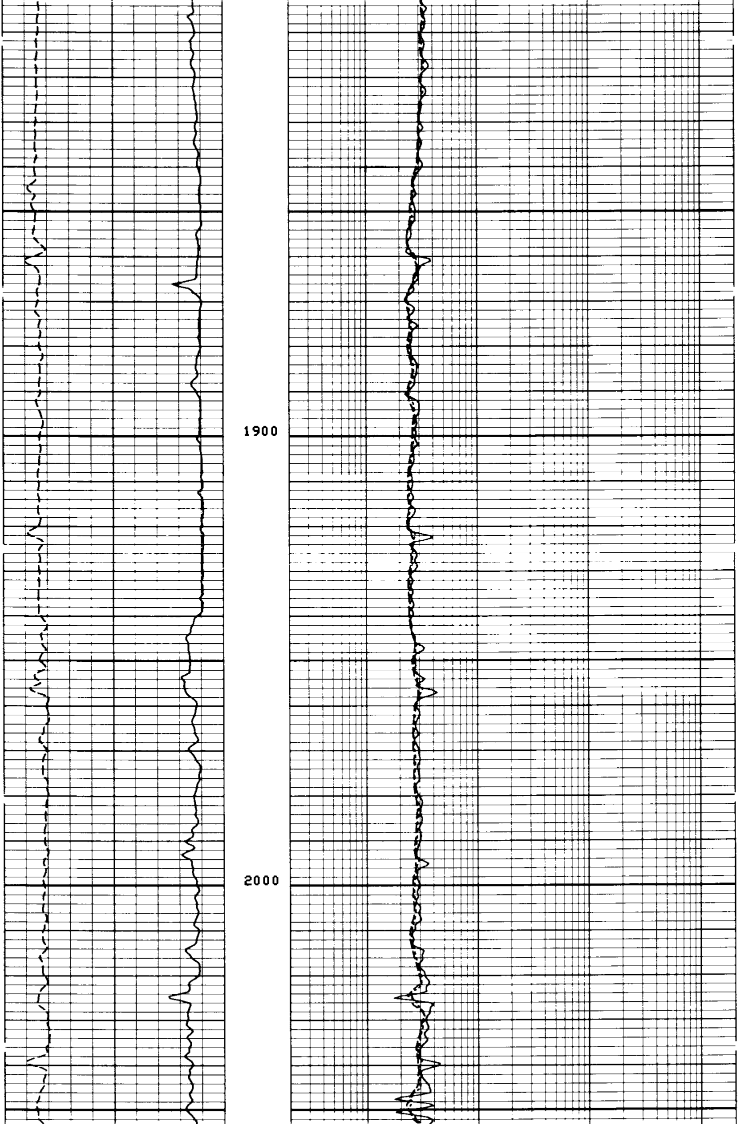


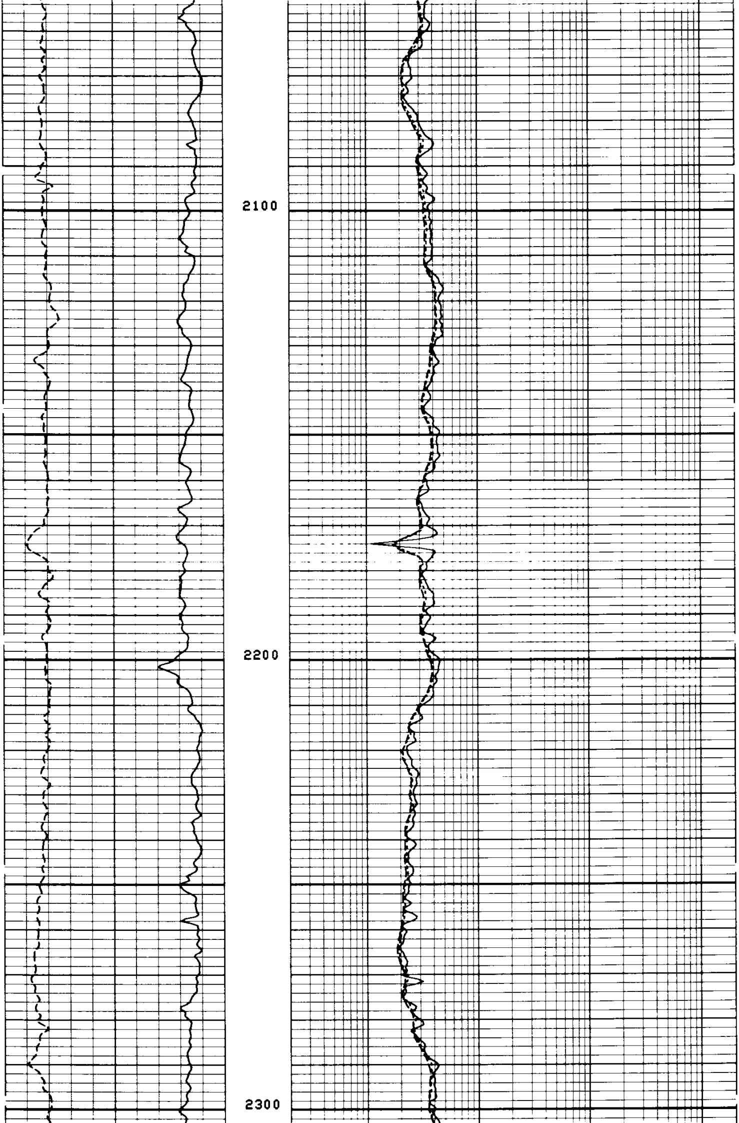


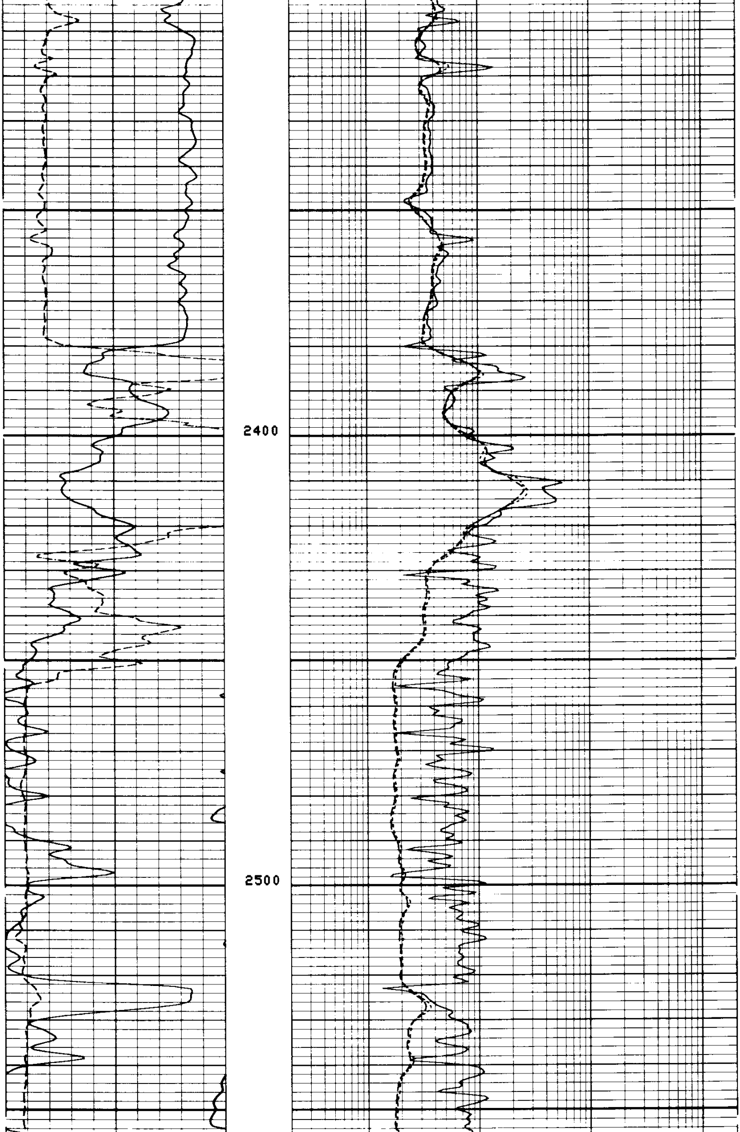


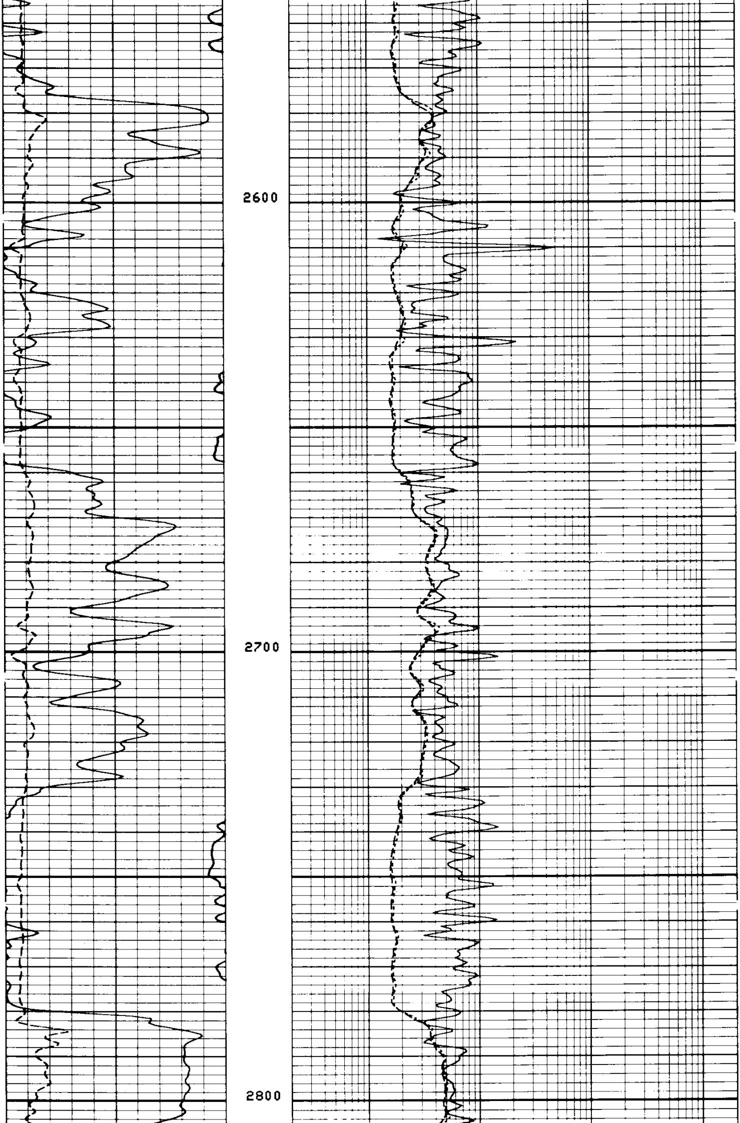


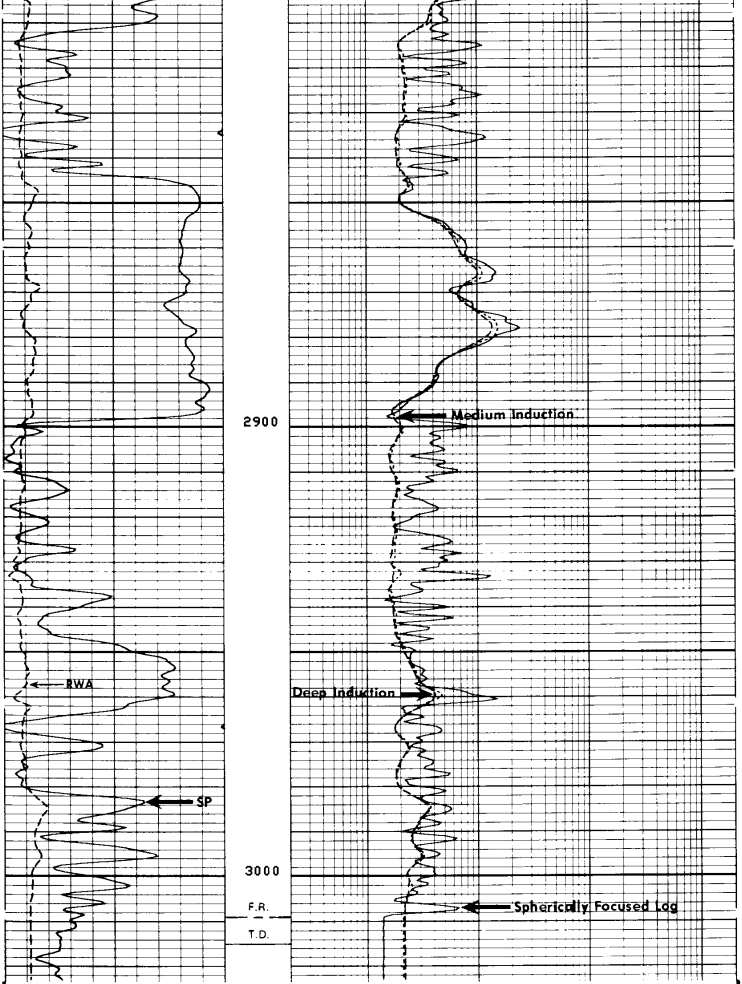












FILE

2

RWA (OHMM) 0.0 3.000 SP (MV) -100.0 0.0	ILD (OHMM) 0.2000 2000. ILM (OHMM) 0.2000 2000. SFLU(OHMM) 0.2000 2000.

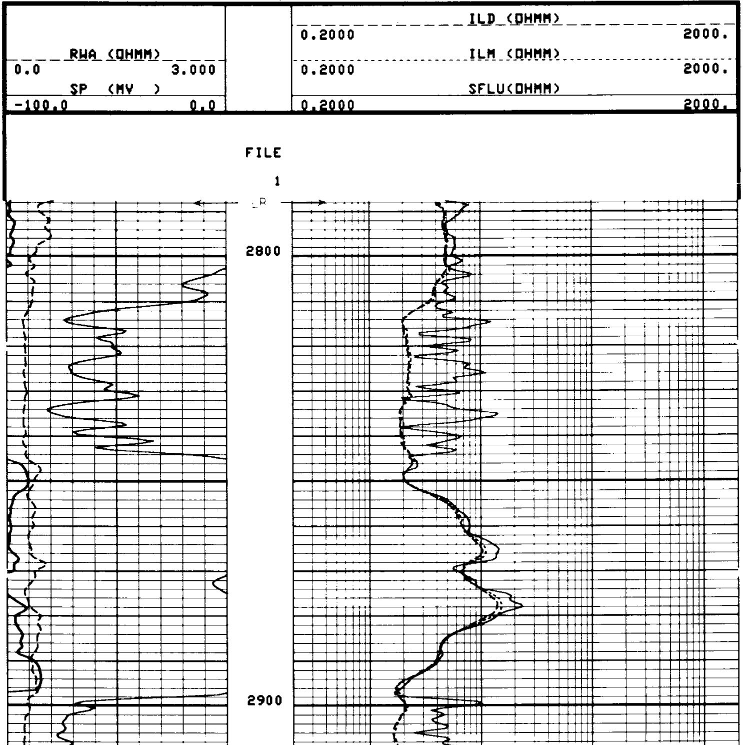
SENSOR MEASURE POINT TO TENSION REFERENCE POINT

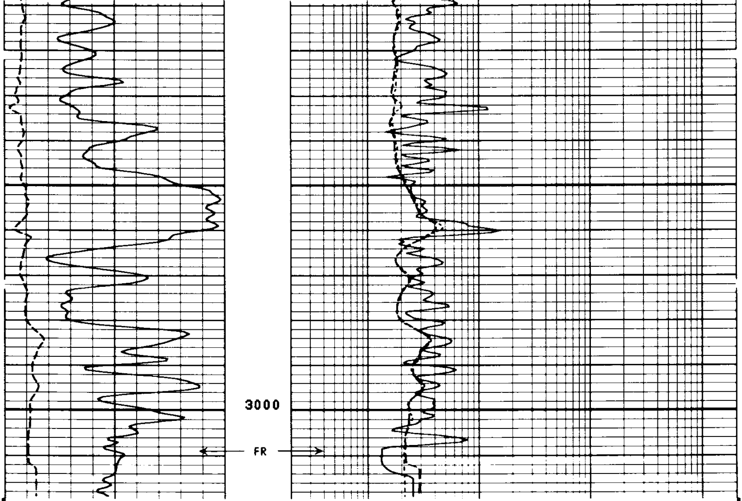
AMPL	41.4	FEET	DT	38.9	FEET
SRAT	38.9	FEET	CBL	41.4	FEET
CALI	29.3	FEET	TT	41.4	FEET
SFL	3.9	FEET	ILD	6.9	FEET
SP	.0	FEET	ILM	3.3	FEET
TENS	.0	FEET	SPAR	.0	FEET
NDIS	33.2	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
CDTS	125.0		BS	6.250	IN
DTF	189.0	US/F	DTM	56.00	US/F
SBR	1.000	OHMM	DSEC	6.600	MMHO
FPHI	SPHI		MSEC	0.3000	MMHO
DO	0.0		BHS	OPEN	

REPEAT SECTION





FILE

1

RWA (OHMM)		ILD (OHMM)	
0.0	3.000	0.2000	2000.
SP (MV)		ILM (OHMM)	
-100.0	0.0	0.2000	2000.
		SFLU(OHMM)	
		0.2000	2000.

SENSOR MEASURE POINT TO TENSION REFERENCE POINT

AMPL	41.4	FEET	DT	38.9	FEET
SRAT	38.9	FEET	CBL	41.4	FEET
CALI	29.3	FEET	TT	41.4	FEET
SFL	3.9	FEET	ILD	6.9	FEET
SP	.0	FEET	ILM	3.3	FEET
TENS	.0	FEET	SPAR	.0	FEET
NOIS	33.2	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
CDTS	125.0		BS	6.250	IN
DTF	189.0	US/F	DTM	56.00	US/F
SBR	1.000	OHMM	DSEC	6.600	MMHO
FPHI	SPHI		MSEC	0.3000	MMHO
DO	0.0		BHS	OPEN	

↓ CALIBRATION

AFTER SURVEY TOOL CHECK SUMMARY

PERFORMED: 82/05/09
PROGRAM FILE: ISN (VERSION 20.2 81/ 1/30)

DITD TOOL CHECK

```
                    ZERO                              PLUS
              BEFORE        AFTER           BEFORE        AFTER       UNITS
      ILD       0.0           0.0           499.8         498.8       MMHO
      ILM       0.0          -0.0           495.2         493.9       MMHO
      SFL       0.0           0.0           500.0         495.1       MMHO

   ILD   SONDE ERROR CORRECTION :          6.6    MMHO
   ILM   SONDE ERROR CORRECTION :          0.3    MMHO
                             FILE

                                4


                  BEFORE SURVEY CALIBRATION SUMMARY


     PERFORMED:        82/05/09
     PROGRAM FILE: ISN     (VERSION     20.2     81/ 1/30)


   DITD                 ELECTRONICS CALIBRATION SUMMARY

                 MEASURED                         CALIBRATED
               ZERO     PLUS                    ZERO        PLUS            UNITS
      ILD      -0.2     535.6                    0.0        499.8            MMHO
      ILM       0.1     517.4                    0.0        495.2            MMHO
      SFL      -0.4     516.0                    0.0        500.0            MMHO

   ILD   SONDE ERROR CORRECTION :          6.6    MMHO
   ILM   SONDE ERROR CORRECTION :          0.3    MMHO


                   SHOP SUMMARY


     PERFORMED:       82/05/04
     PROGRAM FILE: SHOP    (VERSION     20.2     81/ 1/30)


   DITD                 ELECTRONICS CALIBRATION SUMMARY

                  TEST LOOP CALIBRATION                TOOL CHECK
              MEASURED          CALIBRATED             CALIBRATED
            ZERO      PLUS     ZERO       PLUS       ZERO       PLUS      UNITS
     ILD    -4.9      527.7     0.0       500.0       0.0       500.0     MMHO
     ILM    -0.9      521.6     0.0       500.0       0.0       495.5     MMHO
   ILD   SONDE ERROR CORRECTION :          6.6    MMHO
   ILM   SONDE ERROR CORRECTION :          0.3    MMHO

                         (IS:1181 , IC:1149 )
```

CALIBRATION RECORD

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY #13-1 RD#1

FIELD MIST

COUNTY COLUMBIA STATE OREGON

SCHL. FR 3009.0

SCHL. TD 3015.0

DRLR. TD 3028.0

Elev: KB 1174.6

DF ------

GL 1163.2