CC 32-33-75

Schlumberger

DUAL INDUCTION LOG 2" 5"

CSU

COMPANY: REICHHOLD ENERGY CORP.

WELL: COLUMBIA COUNTY 32-33

FIELD: MIST
COUNTY: COLUMBIA
STATE: OREGON
NATION: USA
LOCATION: 244.5'N & 6.77'W OF CENTER

SEC: 33 TWP: 7N RGE: 5W, WB&M

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 1092.8 '
LOG MEASURED FROM: KB
11.4 ' ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 1104.2 '
DF:
GL: 1092.8 '

DATE: 4 AUG 82
RUN NO: 1

OTHER SERVICES-
BHC
HDT

PROGRAM
TAPE NO:
22.2
SERVICE
ORDER NO:
303907

DEPTH-DRILLER: 2614.0 '
DEPTH-LOGGER: 2614.0 '
BTM. LOG INTERVAL: 2608.0 '
TOP LOG INTERVAL: 481.0 '

CASING-DRILLER: 480 '
CASING-LOGGER: 481 '
CASING: 7

BIT SIZE: 6.25
DEPTH: 2614 '

TYPE FLUID IN HOLE: LIGNOSULFONATE(BAROID)
DENSITY: 9.9 LB/G
VISCOSITY: 60.0 S
PH: 9.0
FLUID LOSS: 4.2 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 2.260 OHMM AT 70.0 DEGF
RMF: 1.360 OHMM AT 76.0 DEGF
RMC: 1.120 OHMM AT 71.0 DEGF
SOURCE RMF/RMC: MEASURED/MEASURED
RM AT BHT: 1.689 OHMM AT 96.0 DEGF
RMF AT BHT: 1.095 OHMM AT 96.0 DEGF
RMC AT BHT: 0.848 OHMM AT 96.0 DEGF

TIME CIRC. STOPPED: 1230
TIME LOGGER ON BTM.: 1530

MAX. REC. TEMP:	96.0 DEGF
LOGGING UNIT NO:	8076
LOGGING UNIT LOC:	SACRAMENTO
RECORDED BY:	MAYER
WITNESSED BY:	ALGER

REMARKS:

EQUIPMENT NUMBERS-

DIS 457 DIC 342 IEM 231

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.

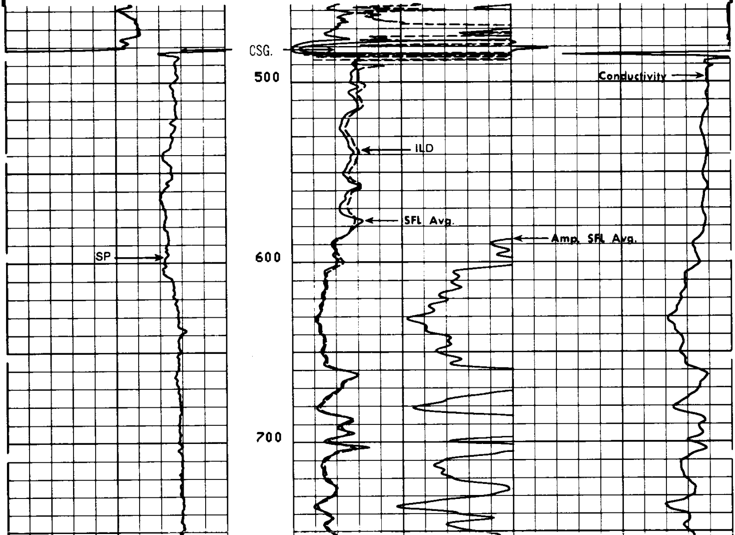
FILE

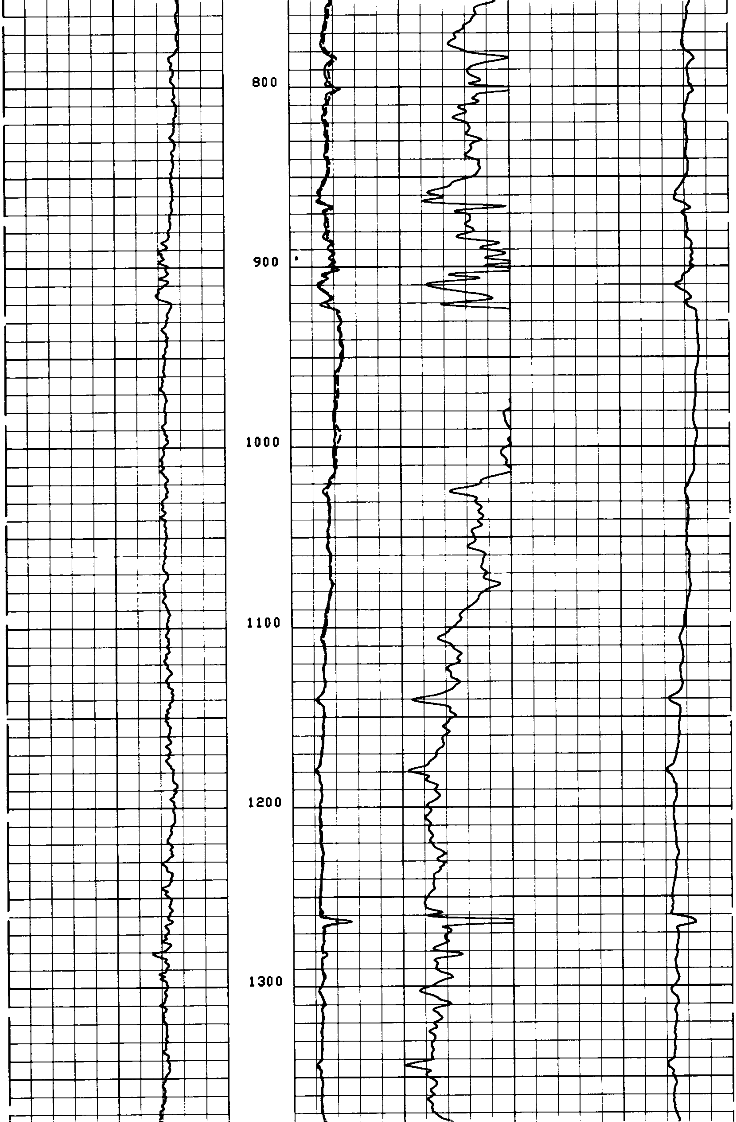
103

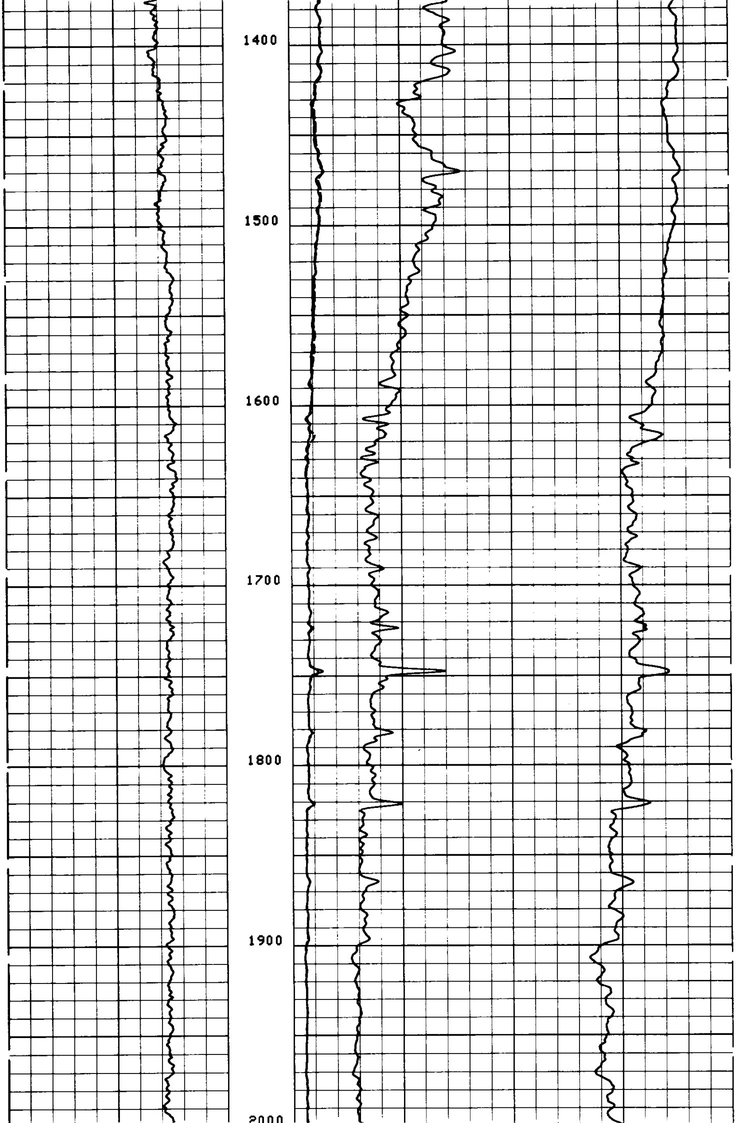
SP (MV)		ILD (OHMM)	CILD(MMHO)
		0.0 30.000	
		SFLA(OHMM)	
		0.0 6.0000	
		SFLA(OHMM)	
-100.0 0.0		0.0 30.000	1000.0 0.0

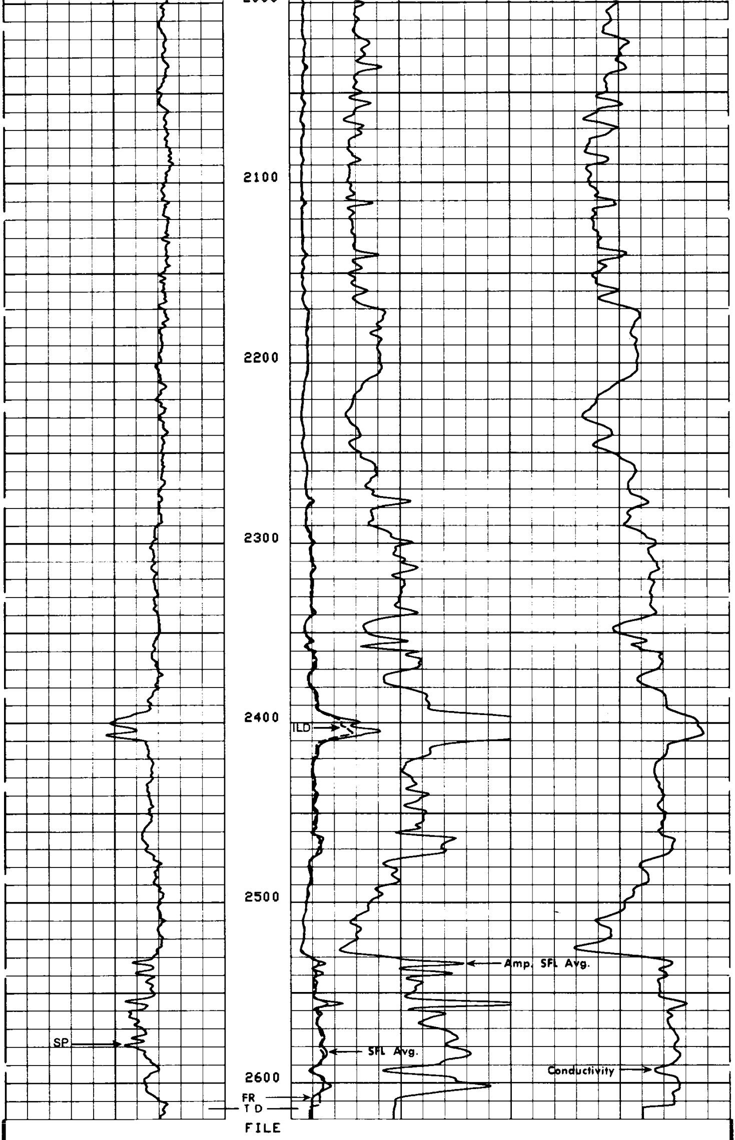
FILE

8









SP (MV)
-100.0 0.0

ILD (OHMM)
0.0 30.000
SFLA(OHMM)
0.0 6.0000
SFLA(OHMM)
0.0 30.000

CILD(MMHO)
1000.0 0.0

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	145.000		BS	6.25000	IN
DTF	189.000	US/F	DTM	55.6000	US/F
SBR	1.00000	OHMM	DSEC	9.60000	MMHO
FPHI	SPHI		MSEC	7.90000	MMHO
DO	0.0	F	BHS	OPEN	

DETAIL LOG

5" = 100

SP (MV)
-100.0 0.0

ILD (OHMM)
0.2000 2000.0
ILM (OHMM)
0.2000 2000.0
SFLU(OHMM)
0.2000 2000.0

FILE

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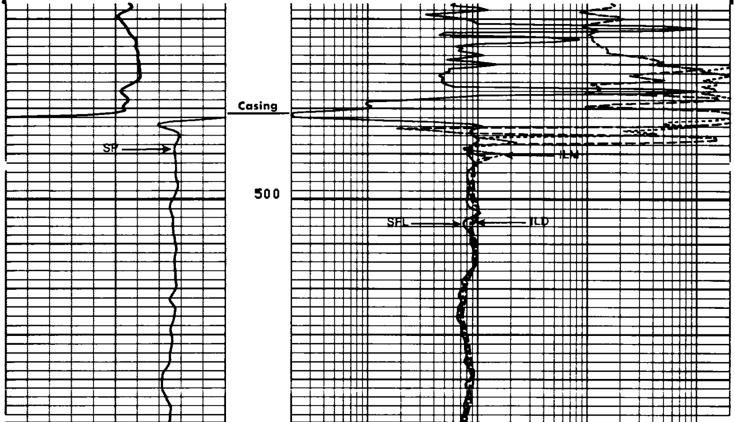

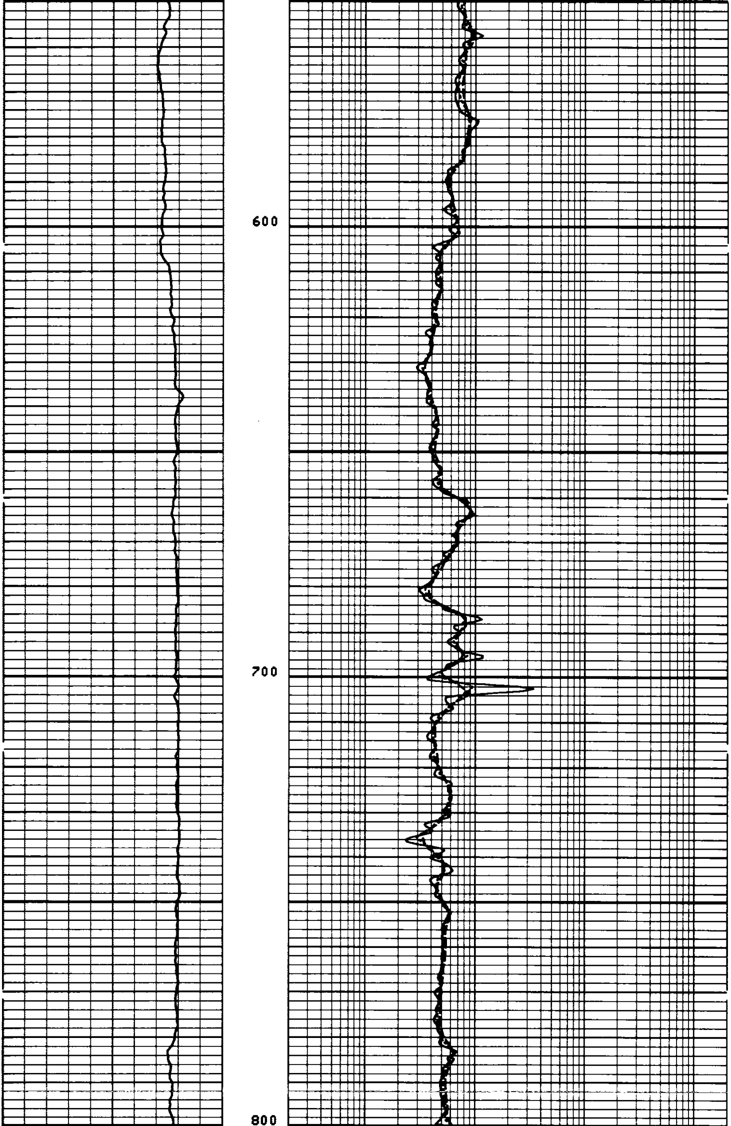

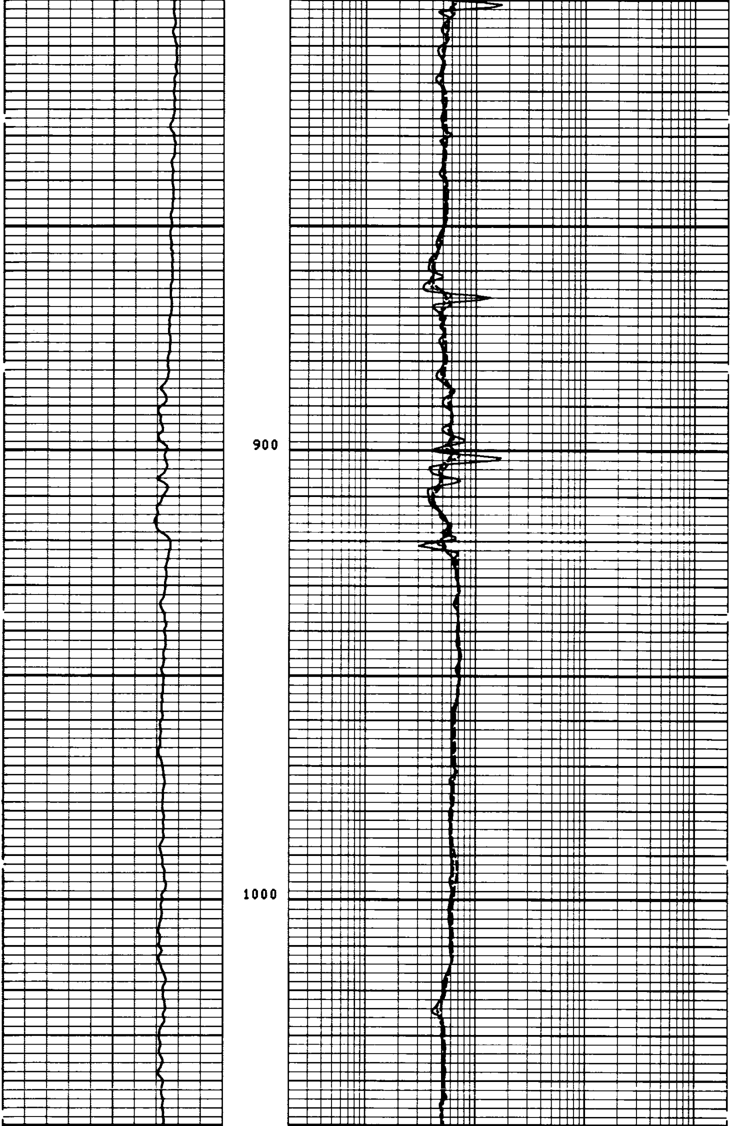

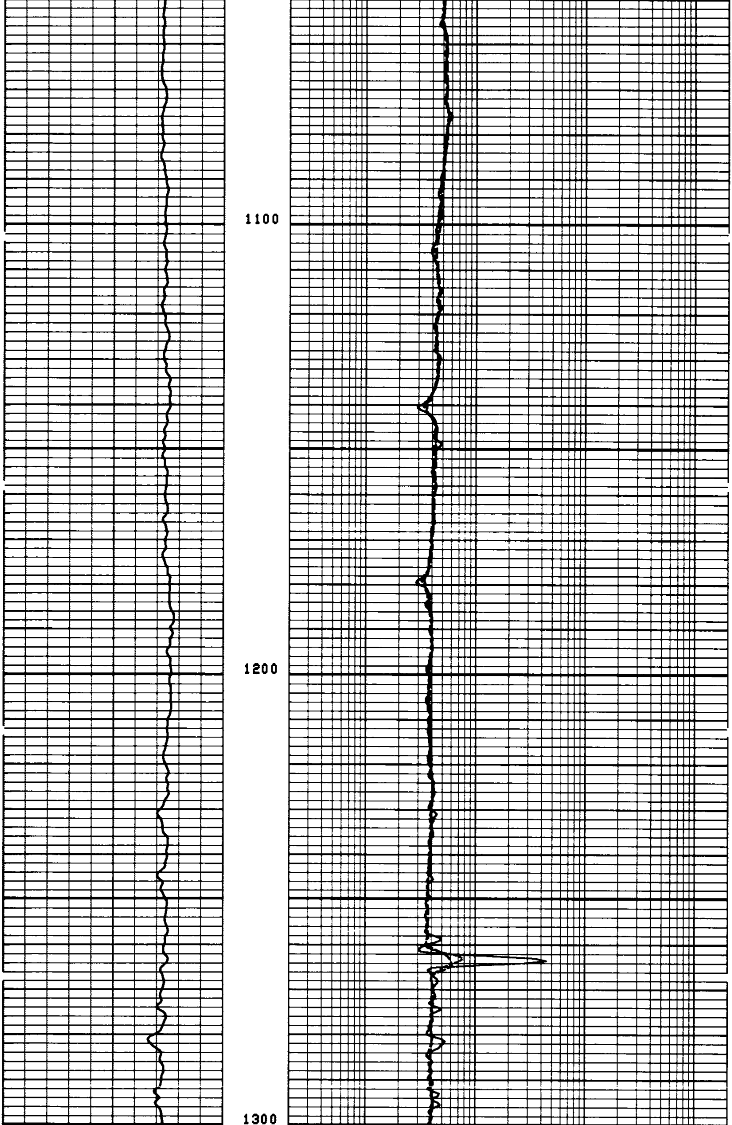

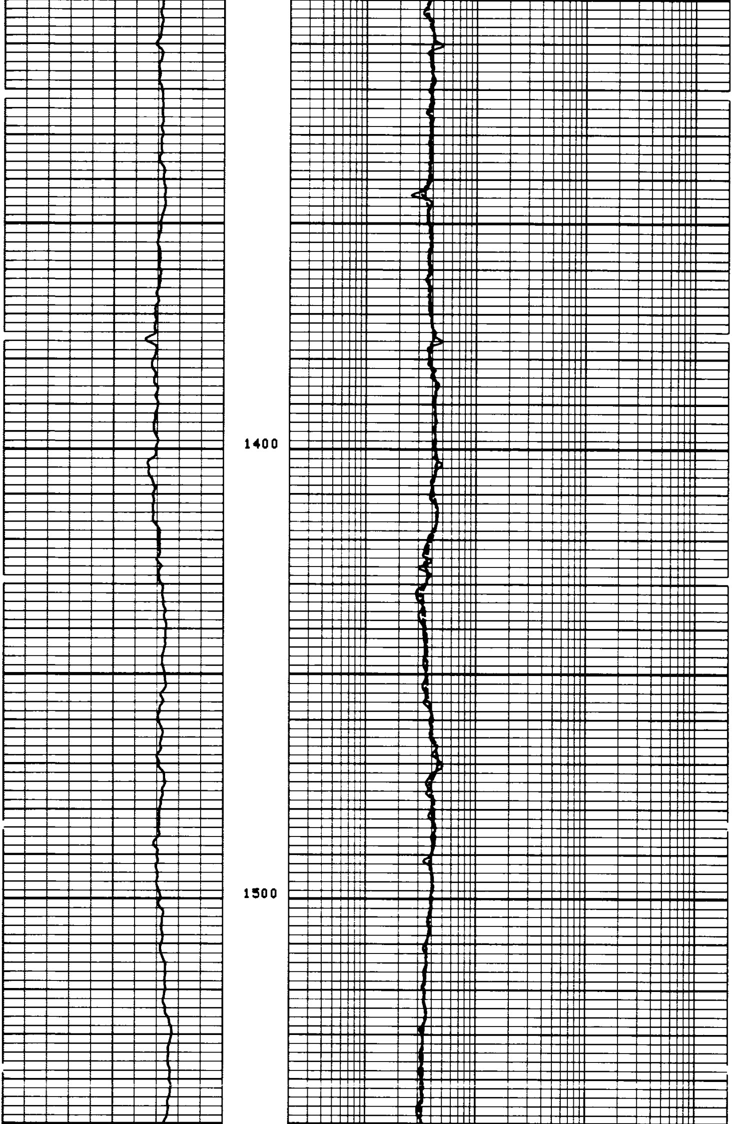

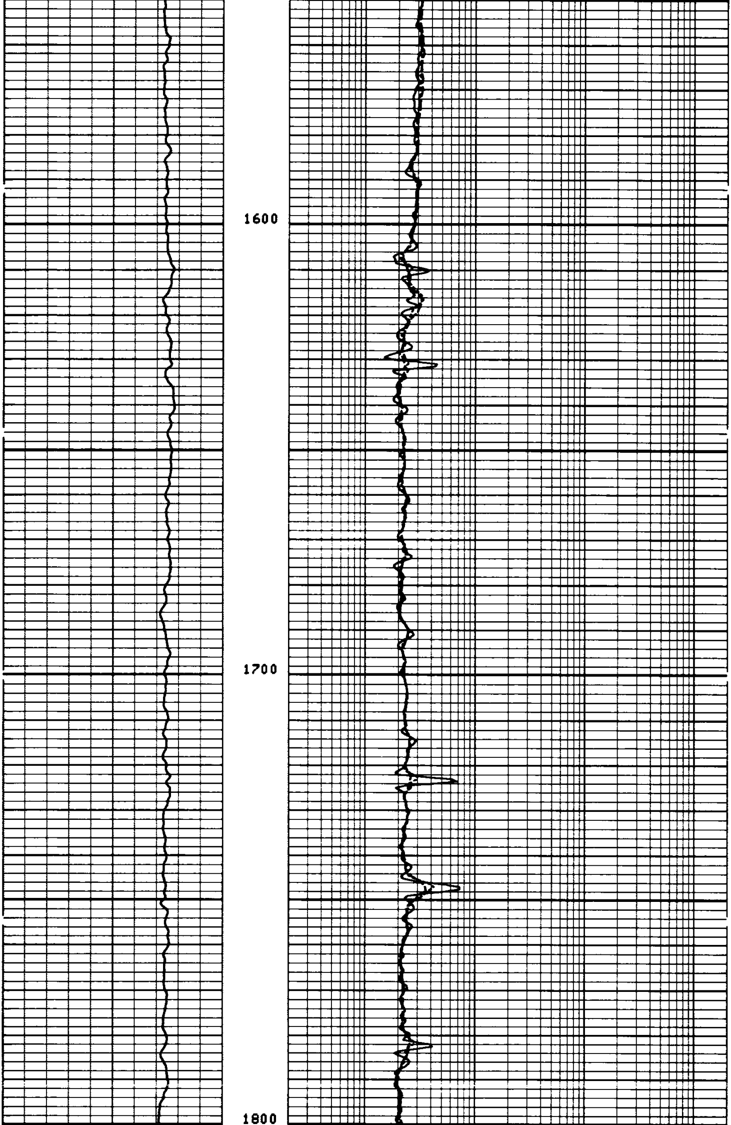

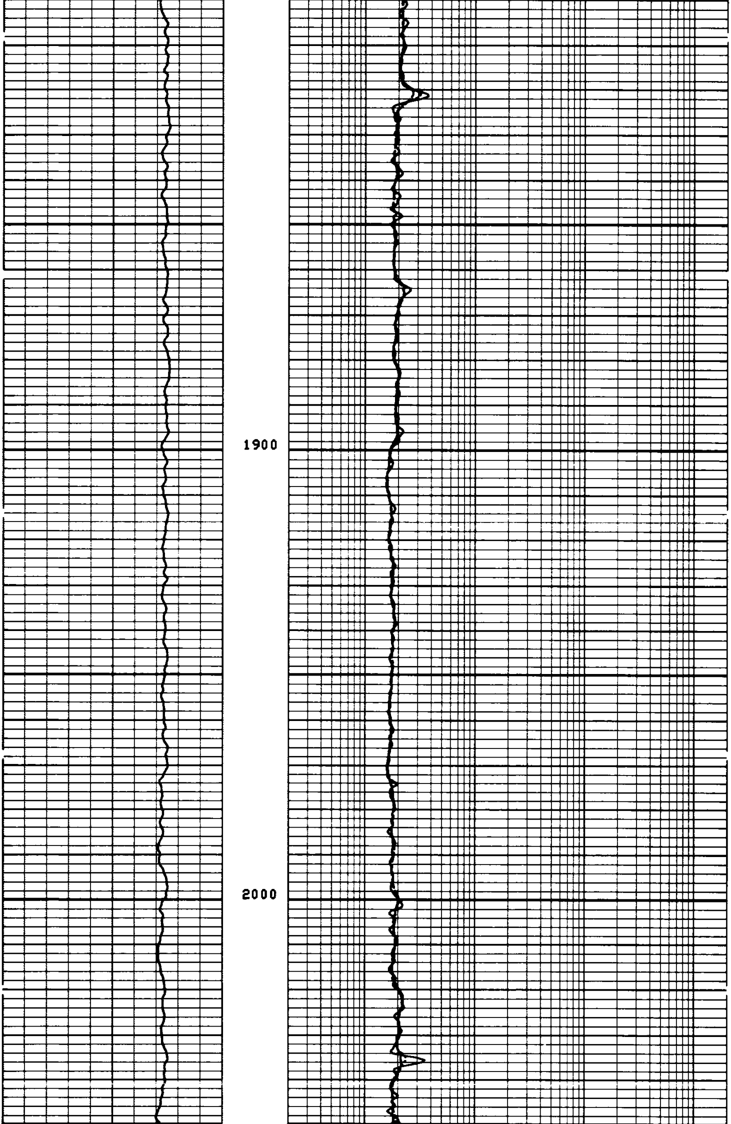

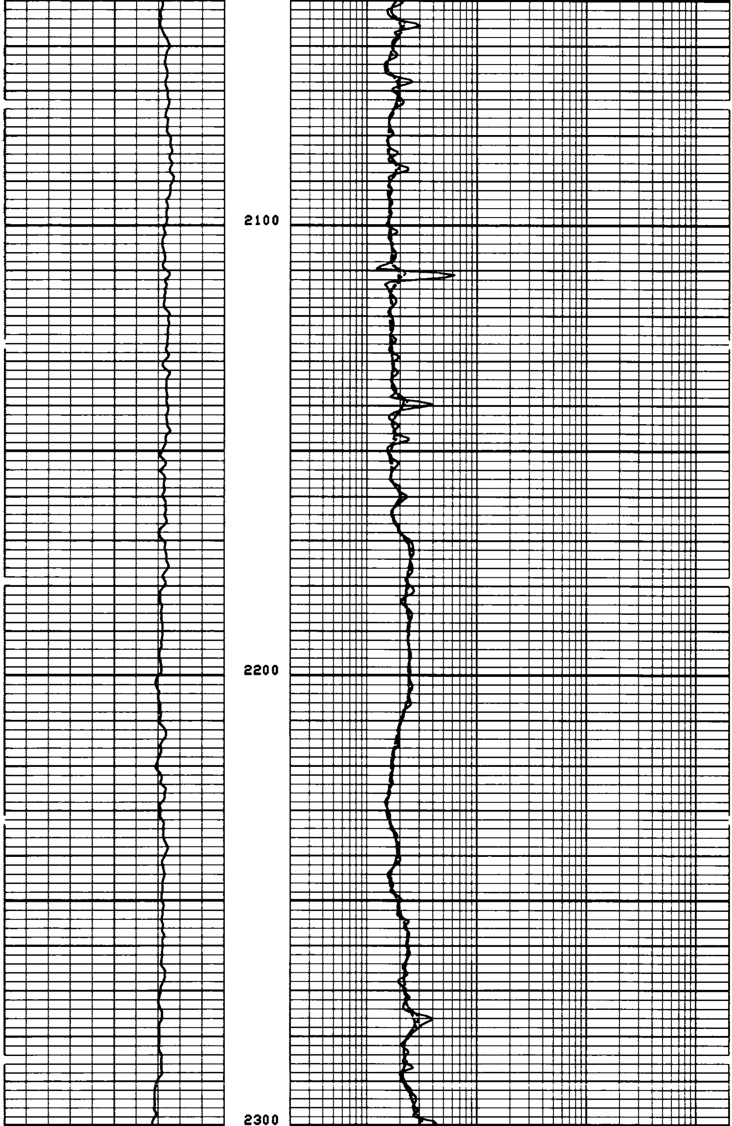

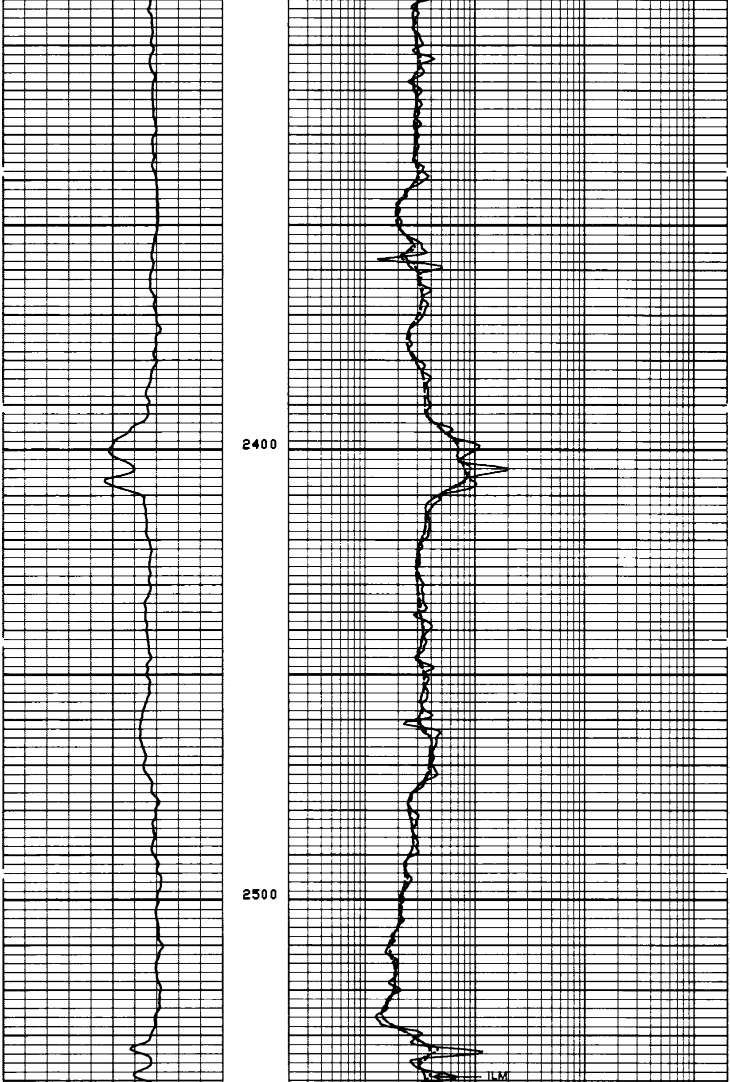

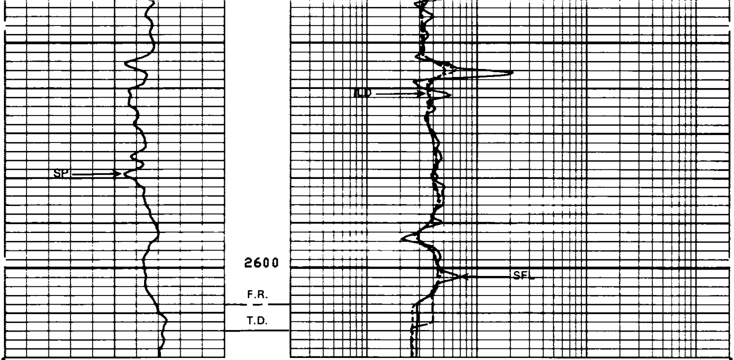

FILE

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SP (MV)		ILD (OHMM)	
-100.0	0.0	0.2000	2000.0
		ILM (OHMM)	
		0.2000	2000.0
		SFLU(OHMM)	
		0.2000	2000.0

SENSOR MEASURE POINT TO TENSION REFERENCE POINT

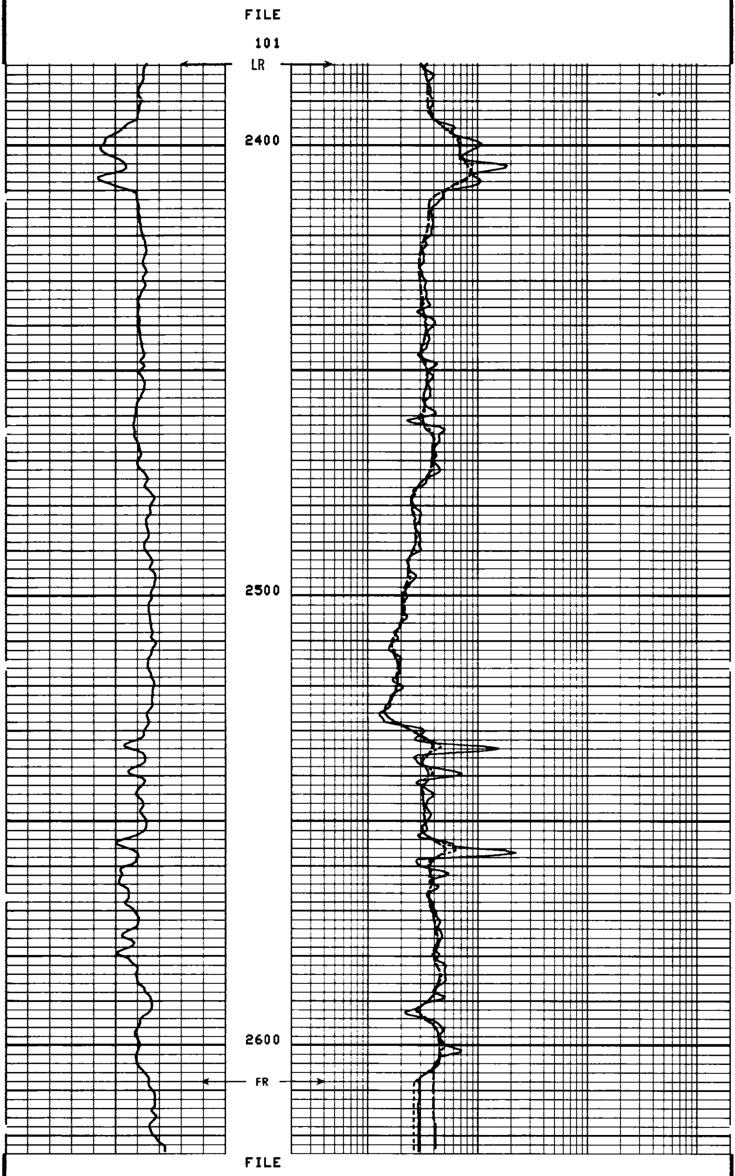
AMPL	41.4	FEET	DT	38.9	FEET
SRAT	38.9	FEET	CBL	41.4	FEET
CALI	29.3	FEET	TT	41.4	FEET
SFL	3.9	FEET	ILD	6.9	FEET
SP	.0	FEET	ILM	3.3	FEET
TENS	.0	FEET	SPAR	.0	FEET
NOIS	33.2	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
CDTS	145.000		BS	6.25000	IN
DTF	189.000	US/F	DTM	55.6000	US/F
SBR	1.00000	OHMM	DSEC	9.60000	MMHO
FPHI	SPHI		MSEC	7.90000	MMHO
DO	0.0	F	BHS	OPEN	

REPEAT SECTION

SP (MV)		ILD (OHMM)	
-100.0	0.0	0.2000	2000.0
		ILM (OHMM)	
		0.2000	2000.0
		SFLU(OHMM)	
		0.2000	2000.0



```
                                        ---------------ILD (OHMM)---------------
                                        0.2000                            2000.0
                                        ...............ILM (OHMM)...............
                                        0.2000                            2000.0
      SP  (MV  )                                       SFLU(OHMM)
-100.0                 0.0              0.2000                            2000.0
```

```
           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 145.000                          BS    6.25000   IN
      DTF  189.000    US/F                  DTM   55.6000   US/F
      SBR  1.00000    OHMM                  DSEC  9.60000   MMHO
      FPHI SPHI                             MSEC  7.90000   MMHO
      DO   0.0        F                     BHS   OPEN
```

CALIBRATION RECORD

```
               AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:     82/08/04
   PROGRAM FILE: ISN    (VERSION    22.2    82/06/24)


 DITD                     TOOL  CHECK

                 ZERO                         PLUS
           BEFORE        AFTER          BEFORE      AFTER      UNITS
    ILD       0.0          0.2          506.6       507.2      MMHO
    ILM       0.0          0.1          503.0       503.3      MMHO
    SFL       0.0          0.4          500.0       500.0      MMHO

 ILD  SONDE ERROR CORRECTION :         9.6 MMHO
 ILM  SONDE ERROR CORRECTION :         7.9 MMHO

               BEFORE SURVEY CALIBRATION SUMMARY


   PERFORMED:     82/08/04
   PROGRAM FILE: ISN    (VERSION    22.2    82/06/24)


 DITD                ELECTRONICS CALIBRATION SUMMARY

             MEASURED                        CALIBRATED
          ZERO     PLUS                  ZERO       PLUS            UNITS
    ILD    3.2    551.5                   0.0      506.6             MMHO
    ILM    4.3    524.9                   0.0      503.0             MMHO
    SFL    0.8    484.0                   0.0      500.0             MMHO

 ILD  SONDE ERROR CORRECTION :         9.6 MMHO
 ILM  SONDE ERROR CORRECTION :         7.9 MMHO
```

```
                SHOP SUMMARY


  PERFORMED:      82/07/02
  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     -8.1     529.1    0.0       500.0    0.0        506.5  MMHO
   ILM     -6.1     511.2    0.0       500.0    0.0        503.0  MMHO
 ILD  SONDE ERROR CORRECTION :          9.6   MMHO
 ILM  SONDE ERROR CORRECTION :          7.9   MMHO

                  (IS:457   , IC:342   )
```

CALIBRATION RECORD

COMPANY REICHHOLD ENERGY CORP.

WELL COLUMBIA COUNTY 32-33

FIELD MIST

COUNTY COLUMBIA STATE OREGON

SCHL. FR 2608.0'
SCHL. TD 2614.0'
DRLR. TD 2614.0'

Elev: KB 1104.2'
DF N/A
GL 1092.8'