Schlumberger

DUAL LATEROLOG

CSU

RECEIVED-PTLD
MAR 10 1983
DEPT OF GEOLOGY

COMPANY: OREGON NATURAL GAS DEVELOPMENT CORP

WELL: PATTON 32-9 RD#1

FIELD: OLNEY
COUNTY: CLATSOP
STATE: OREGON

LOCATION: 2068.78' S & 1380.1' W
FROM THE NE CORNER OF
SEC: 9 TWP: 7N RGE: 8W

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 731.0 '
LOG MEASURED FROM: KB
21.0 ' ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 752.0 '
DF:
GL: 731.0 '

DATE: 17 FEB 1983
RUN NO: 1

DEPTH-DRILLER: 3917.0 '
DEPTH-LOGGER: 3900.0 '
BTM. LOG INTERVAL: 3897.0 '
TOP LOG INTERVAL: 2030.0 '

CASING-DRILLER: 2030 '
CASING-LOGGER: 2030 '
CASING: 9.625

BIT SIZE: 8.75
DEPTH: 3917 '

OTHER SERVICES-
DLL

PROGRAM
TAPE NO:
22.4
SERVICE
ORDER NO:
382921

TYPE FLUID IN HOLE: KCL POLYMER
DENSITY: 9.9 LB/G
VISCOSITY: 40.0 S
PH: 7.5
FLUID LOSS: 7.6 C3
SOURCE OF SAMPLE: CIRC
RM: 0.120 OHMM AT 57.0 DEGF
RMF: 0.097 OHMM AT 57.0 DEGF
RMC: 0.230 OHMM AT 59.0 DEGF
SOURCE RMF/RMC: MEAS./MEAS.
RM AT BHT: 0.065 OHMM AT 110. DEGF
RMF AT BHT: 0.053 OHMM AT 110. DEGF
RMC AT BHT: 0.129 OHMM AT 110. DEGF

TIME CIRC. STOPPED: 1200
TIME LOGGER ON BTM.: 1645

MAX. REC. TEMP: 110.0 DEGF

LOGGING UNIT NO: 8128
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: ANDERSEN
WITNESSED BY: PORTWOOD

REMARKS:

EQUIPMENT NUMBERS-

CNC 409	PGS 426	PDH 079	SGC 466
NLM 158	MRM 864	DLM 782	SRE B 1774
DLCB 849			

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

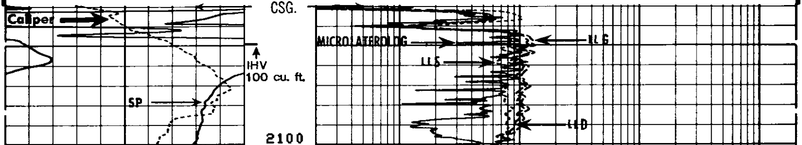
103

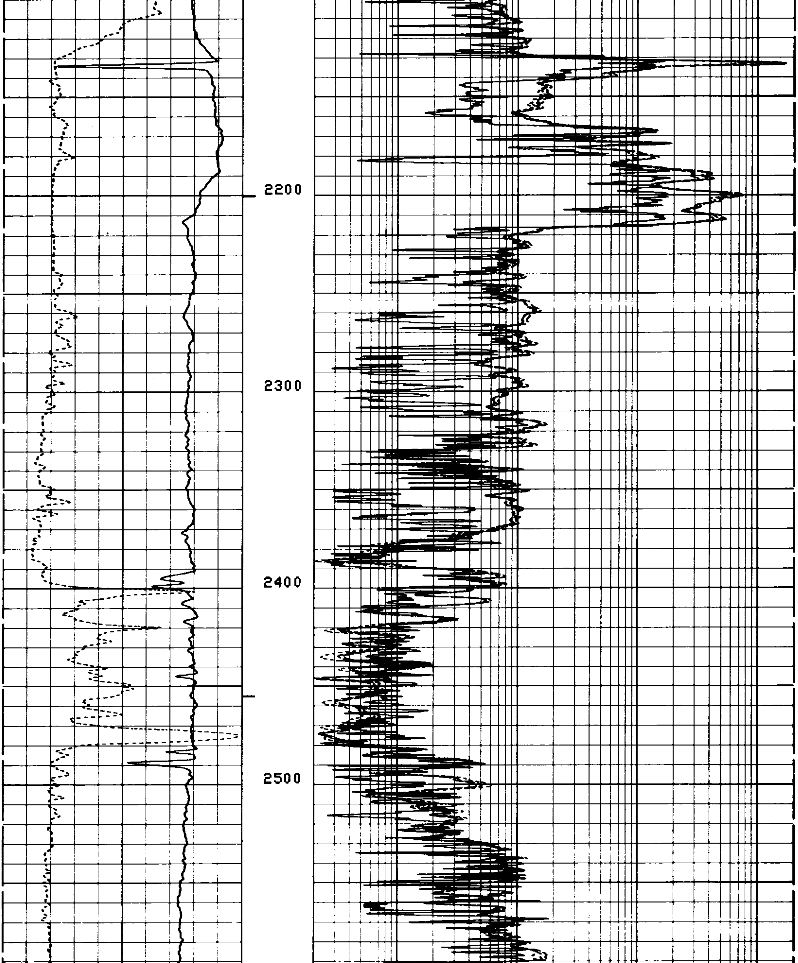
LLS (OHMM)
2000.0 200000
LLG (OHMM)
2000.0 200000
LLD (OHMM)
2000.0 200000
MSFL(OHMM)
0.2000 2000.0
LLS (OHMM)
0.2000 2000.0
LLG (OHMM)
0.2000 2000.0
LLD (OHMM)
0.2000 2000.0

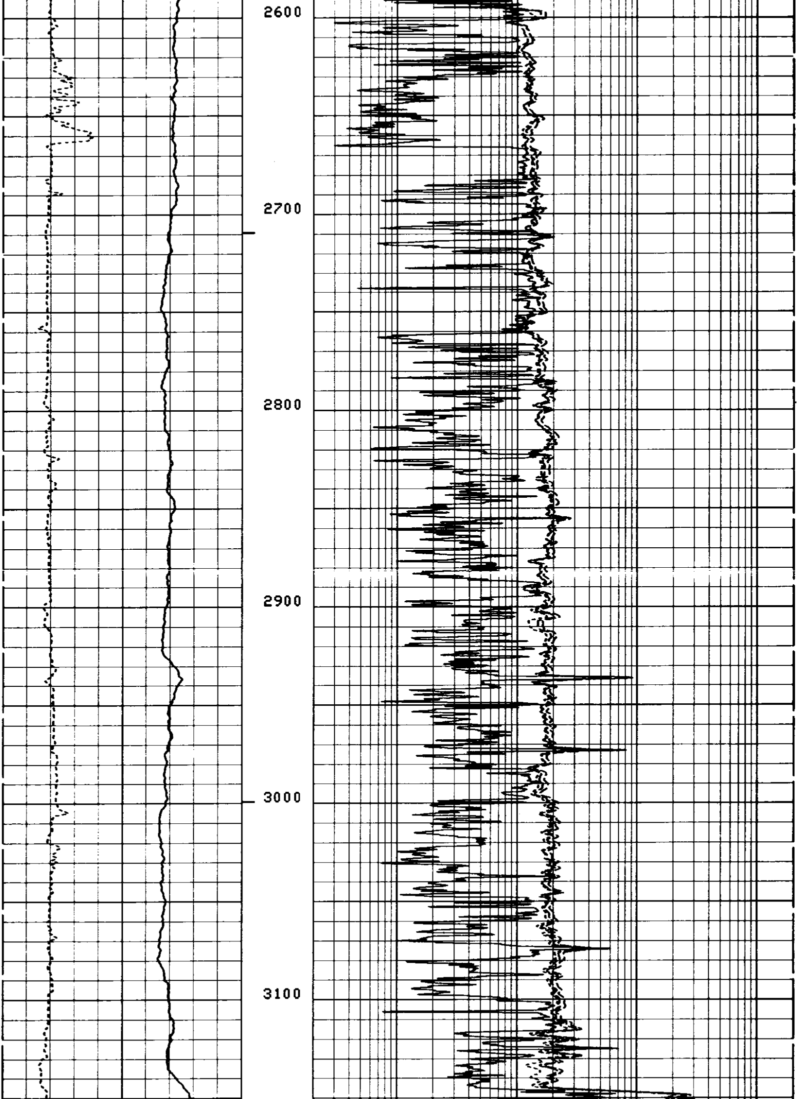
CALI(IN)
6.0000 16.000
SP (MV)
-100.0 100.00

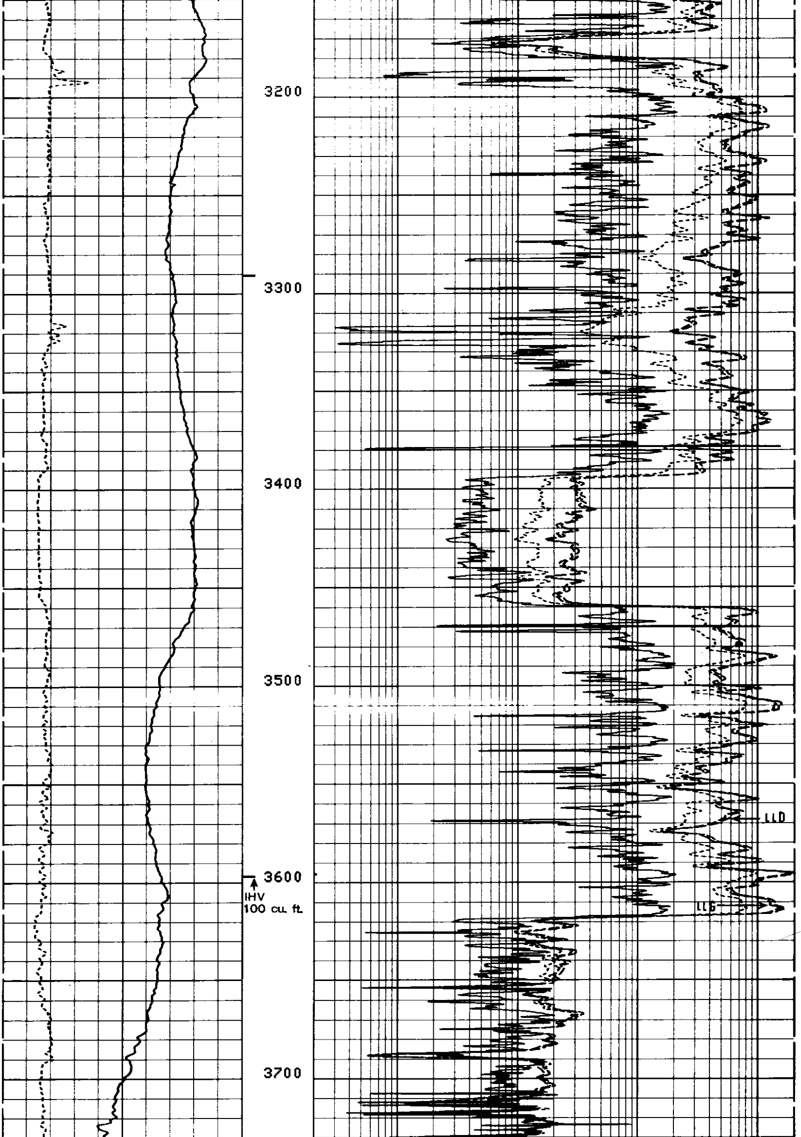
FILE

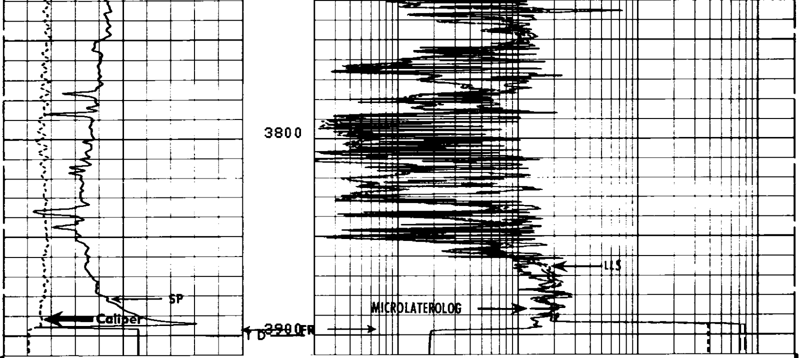
9











FILE

9

LLS (OHMM)
2000.0 200000
LLG (OHMM)
2000.0 200000
LLD (OHMM)
2000.0 200000

MSFL(OHMM)
0.2000 2000.0
LLS (OHMM)
0.2000 2000.0
LLG (OHMM)
0.2000 2000.0
LLD (OHMM)
0.2000 2000.0

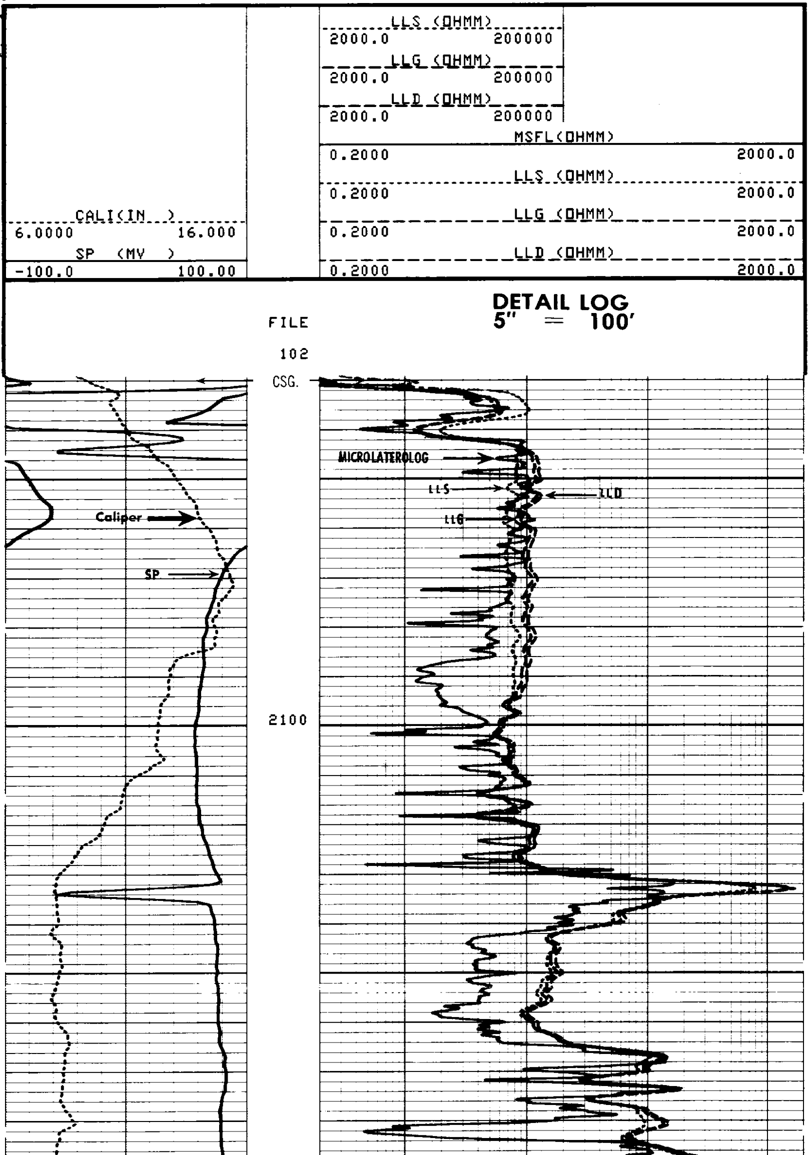
CALI(IN)
6.0000 16.000
SP (MV)
-100.0 100.00

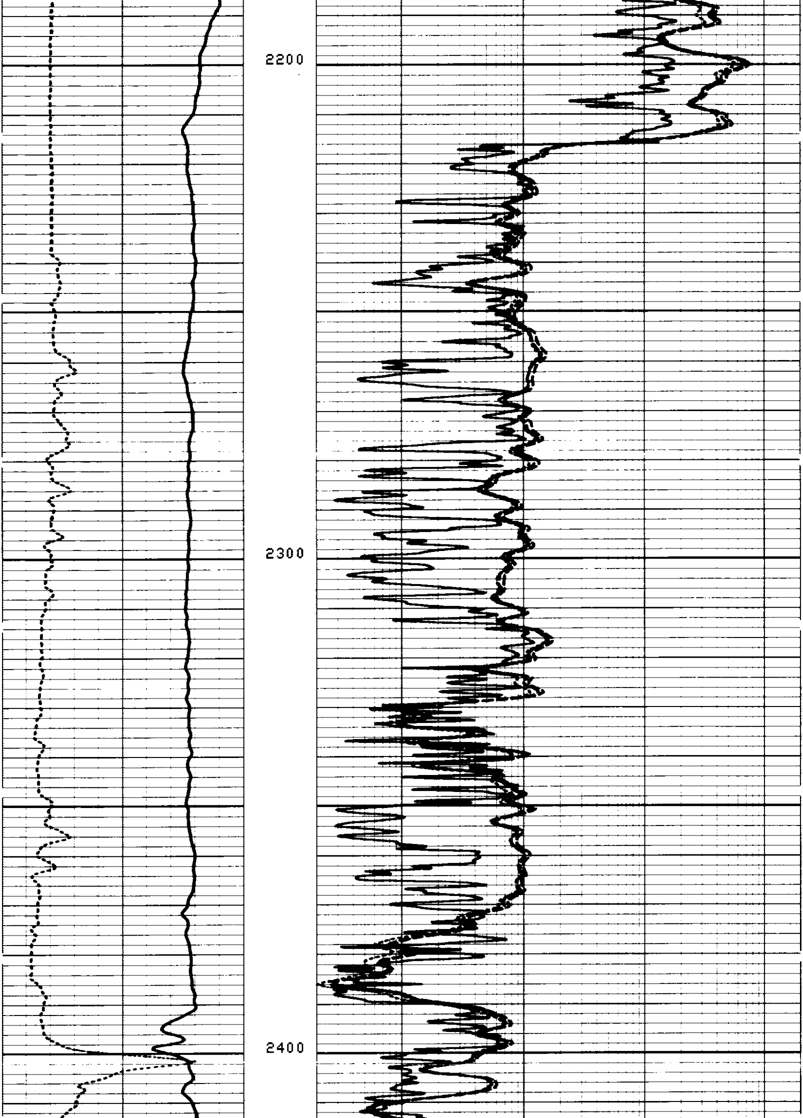
SENSOR MEASURE POINT TO TENSION REFERENCE POINT

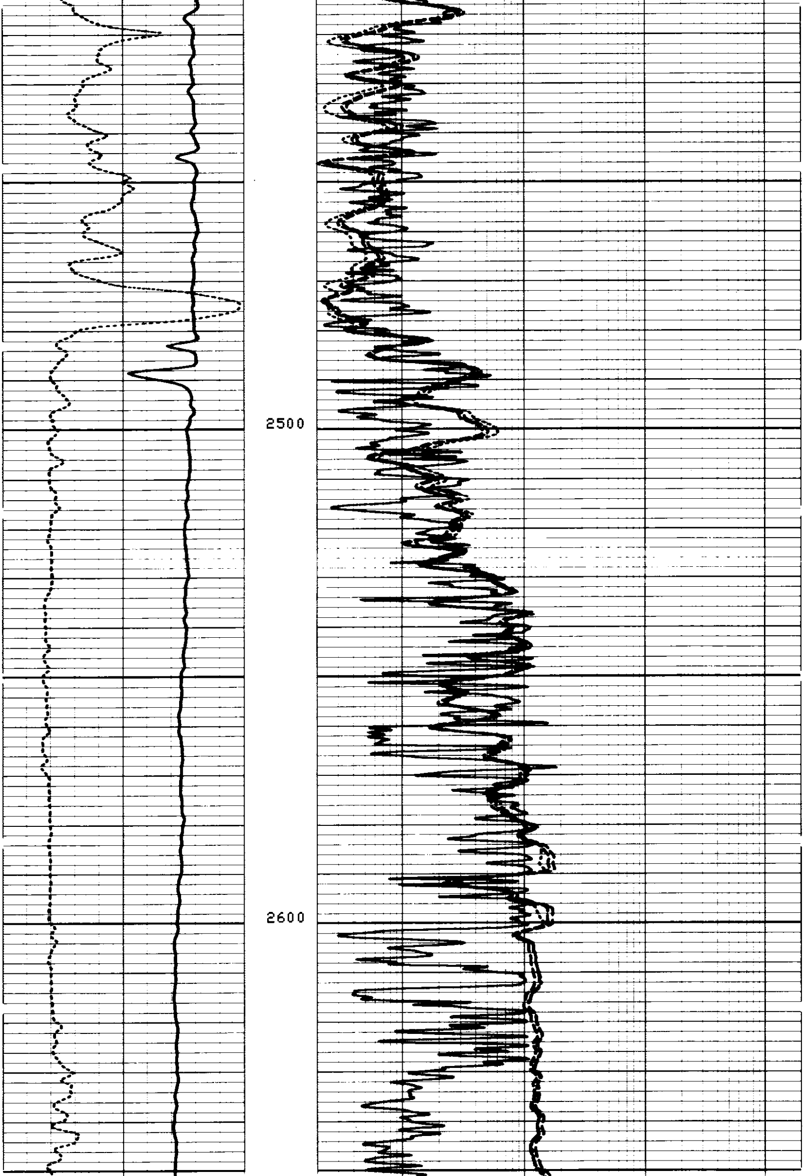
SPAR	12.8	FEET	SP	12.8	FEET
DV90	14.6	FEET	CALI	3.7	FEET
SV90	14.6	FEET	DI90	14.6	FEET
DV0	14.6	FEET	SI90	14.6	FEET
SV0	14.6	FEET	DI0	14.6	FEET
TENS	.0	FEET	SI0	14.6	FEET
LLD	14.6	FEET	LLS	14.6	FEET
I1	1.7	FEET	CMSF	1.7	FEET

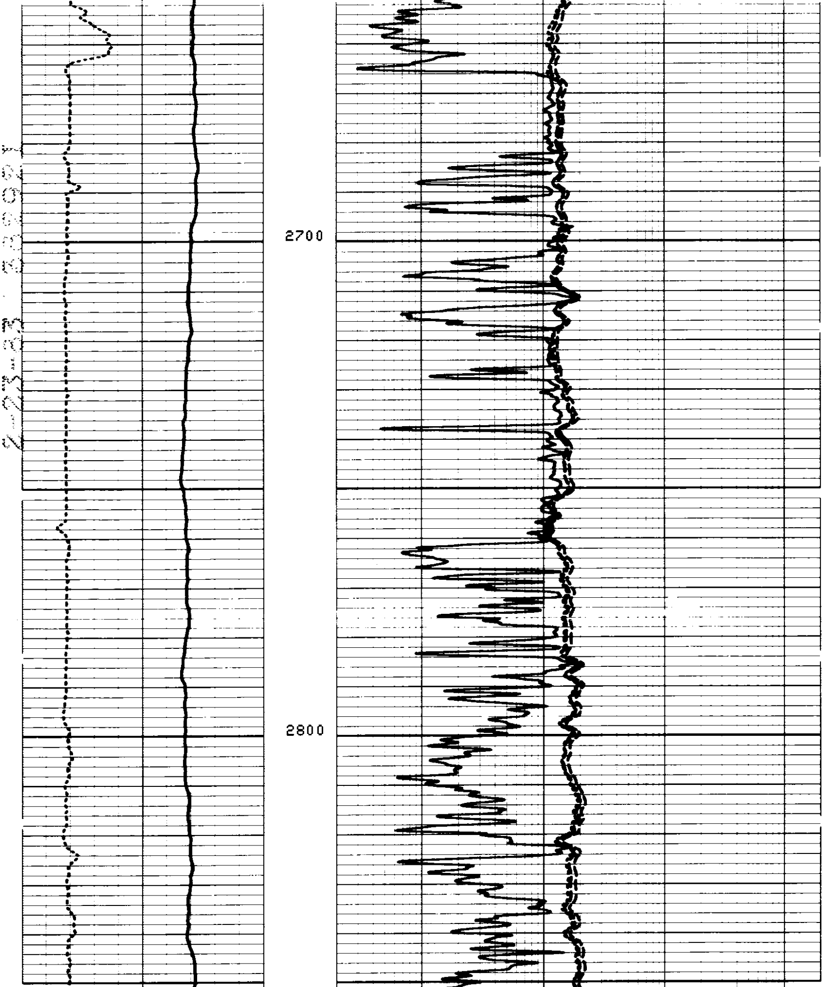
PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPT	STAN		BS	8.75000	IN
BHS	OPEN		RMUD	0.120000	OHMM
DO	0.0	F			









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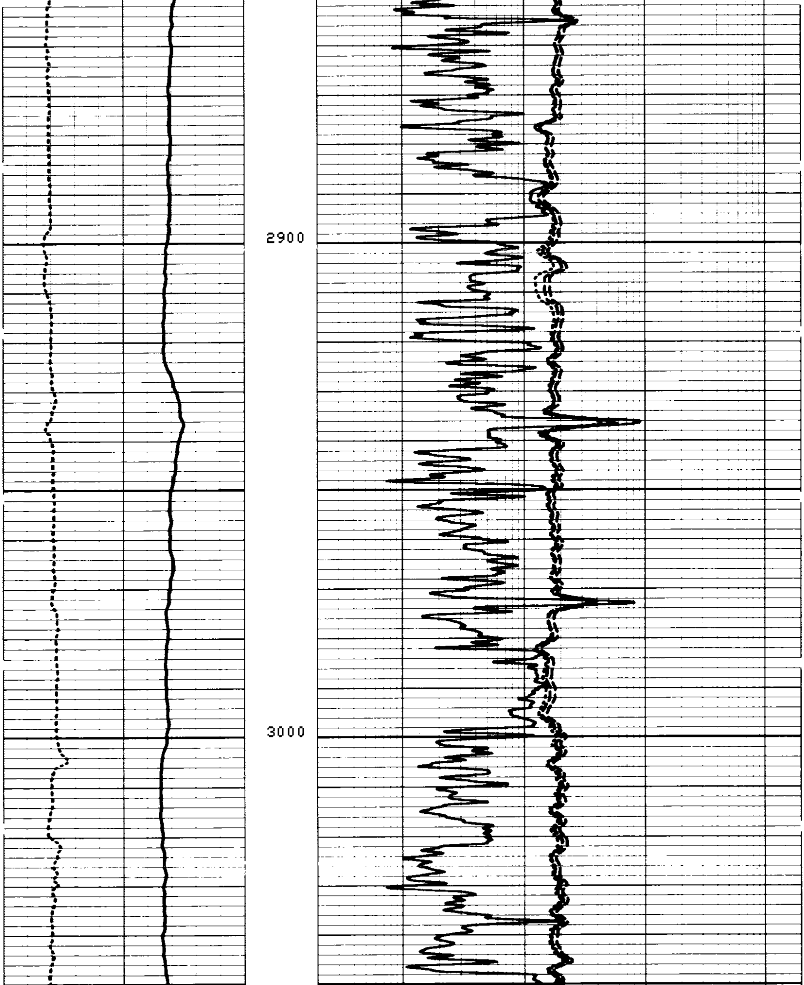
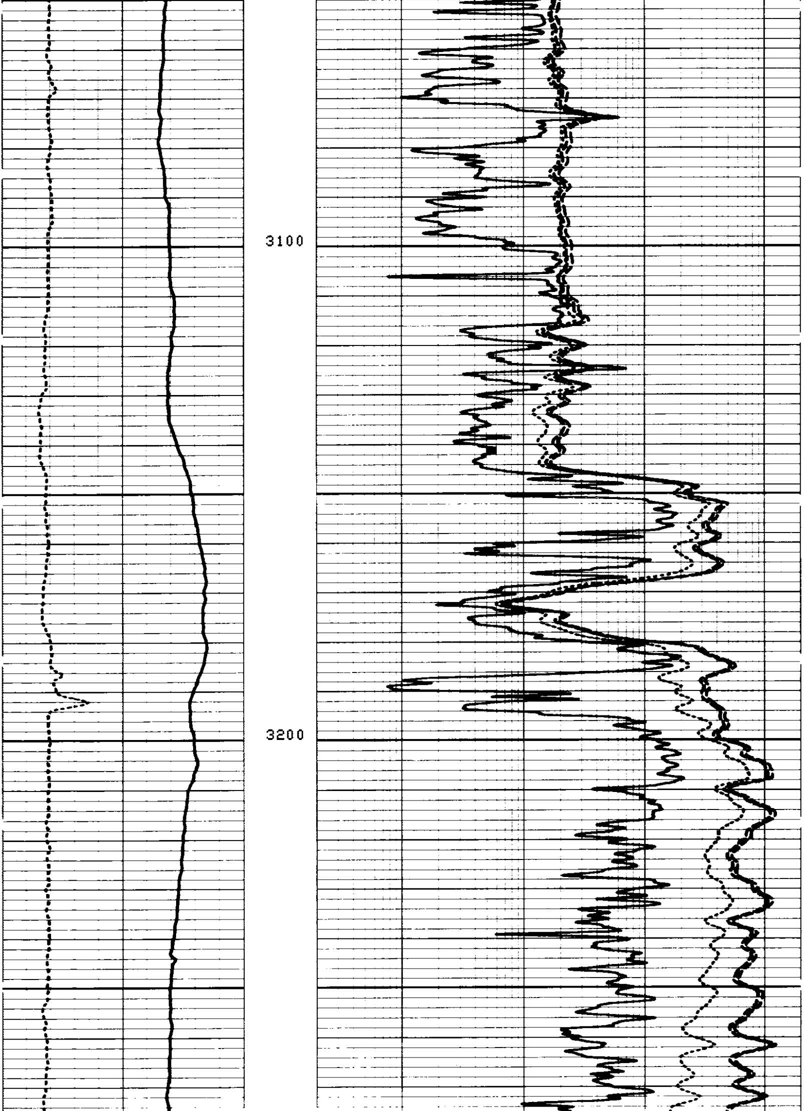
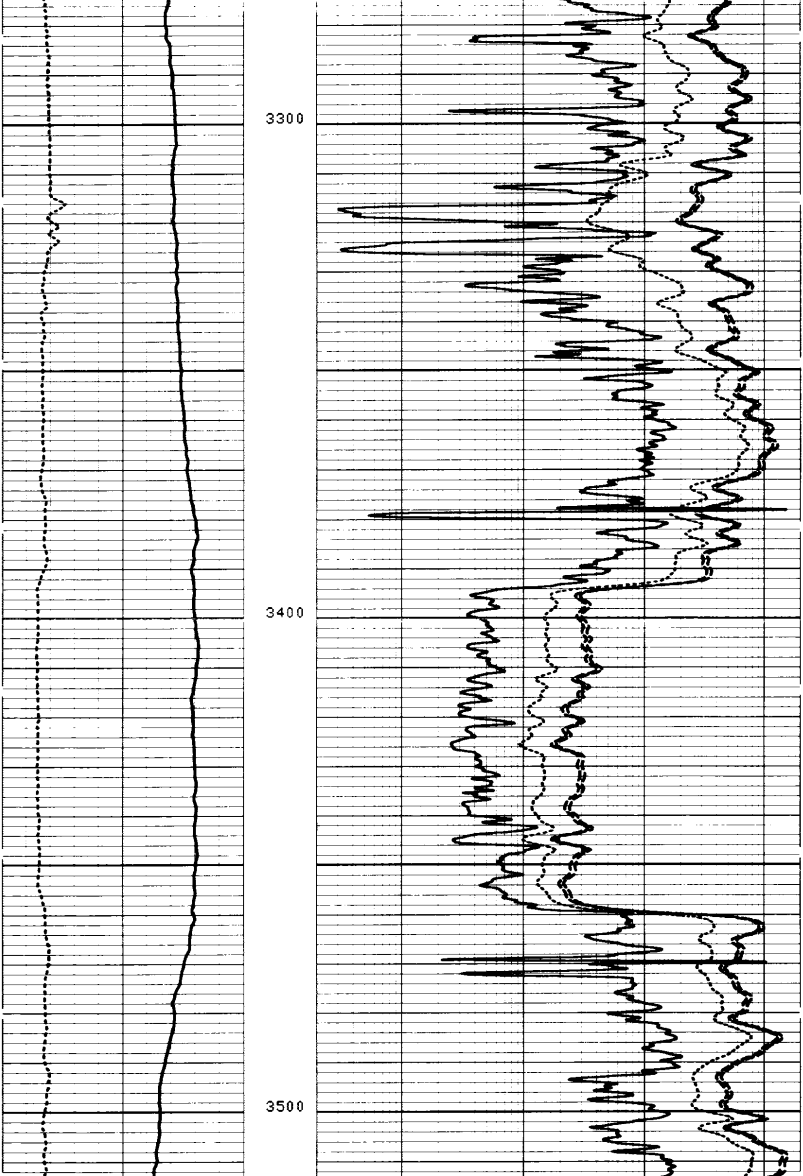
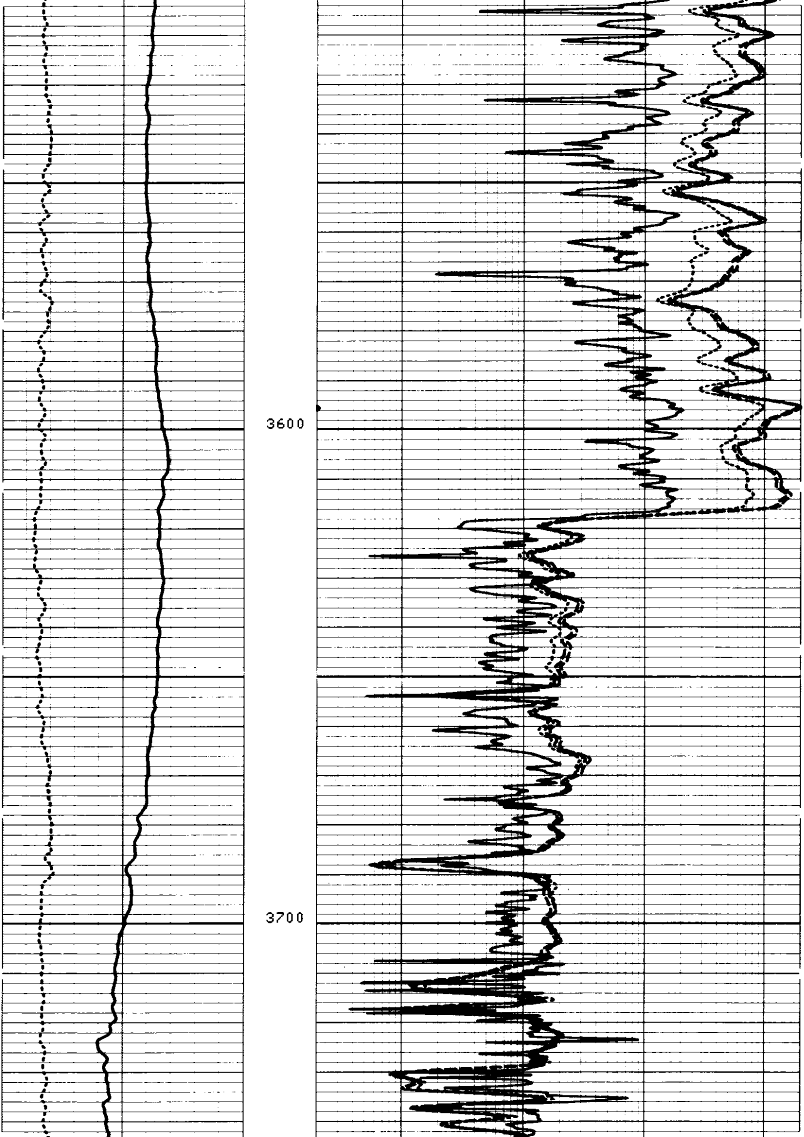
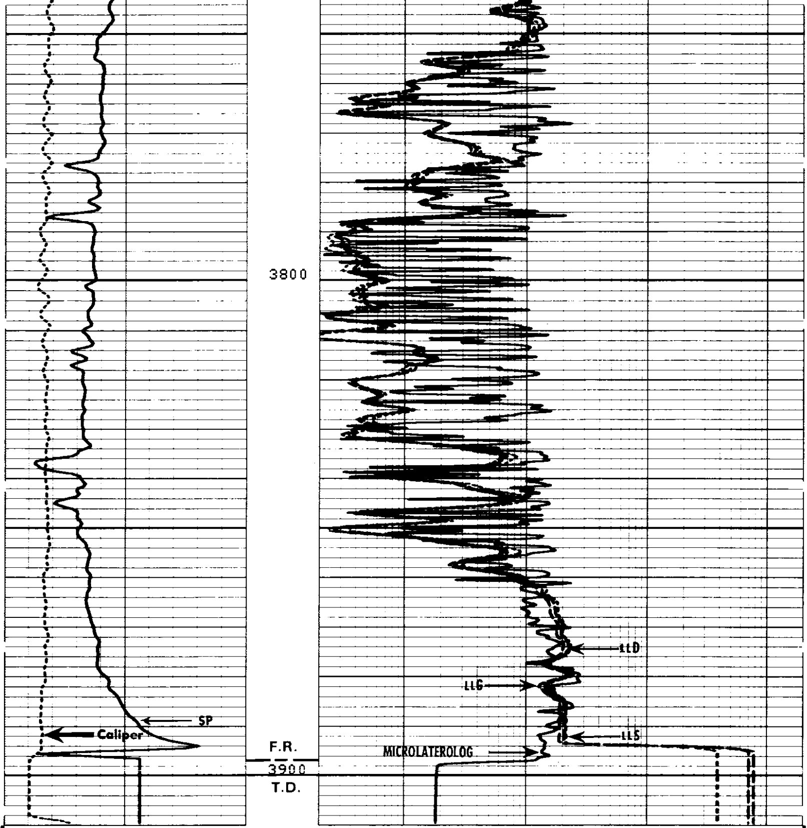










FILE

102

DETAIL LOG
5" = 100'

LLS (OHMM)
2000.0 200000
LLG (OHMM)
2000.0 200000
LLD (OHMM)
2000.0 200000

MSFL(OHMM)
0.2000 2000.0
LLS (OHMM)
0.2000 2000.0
LLG (OHMM)
0.2000 2000.0
LLD (OHMM)
0.2000 2000.0

CALI(IN)
6.0000 16.000
SP (MV)
-100.0 100.00

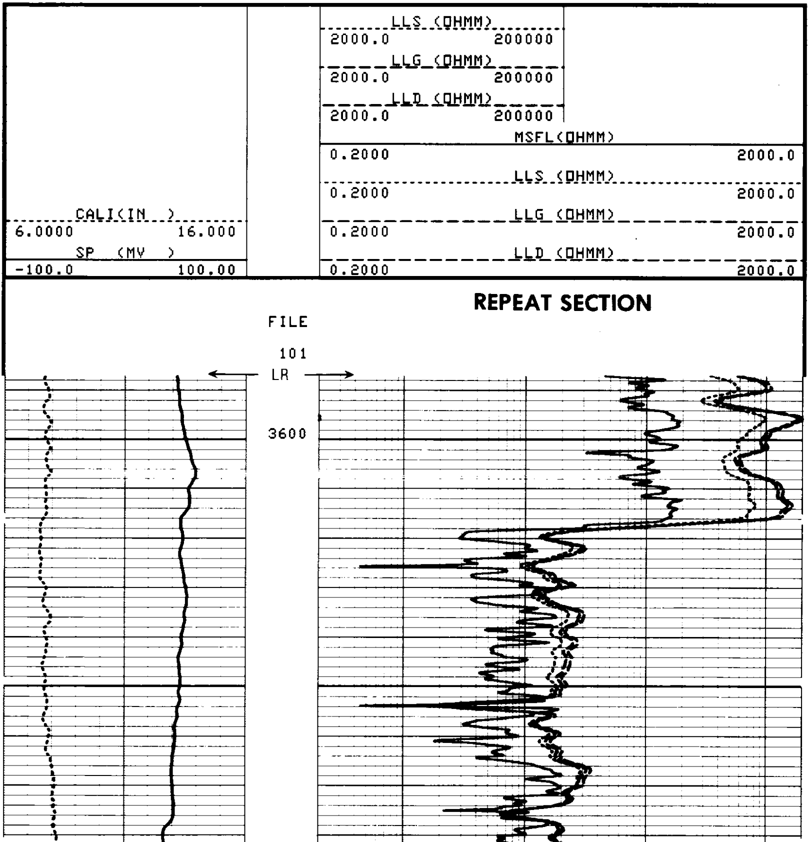
SENSOR MEASURE POINT TO TENSION REFERENCE POINT

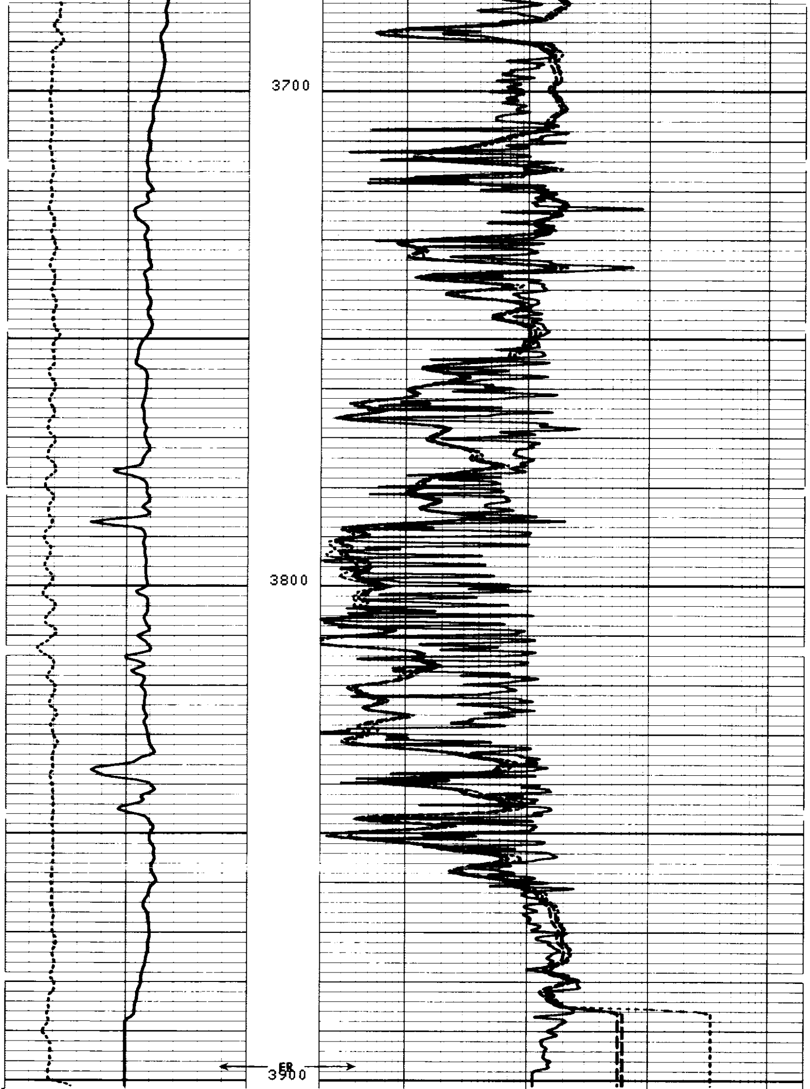
SPAR	42.1	FEET	SP	42.1	FEET
DV90	14.6	FEET	CALI	3.7	FEET
SV90	14.6	FEET	DI90	14.6	FEET
DV0	14.6	FEET	SI90	14.6	FEET
SV0	14.6	FEET	DI0	14.6	FEET
TENS	.0	FEET	SI0	14.6	FEET
LLD	14.6	FEET	LLS	14.6	FEET
I1	1.7	FEET	CMSF	1.7	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPT	STAN		BS	8.75000	IN
DO	0.0	F	BHS	OPEN	

REPEAT SECTION





FILE

101

REPEAT SECTION

```
                                        LLS (OHMM)
                                  2000.0          200000
                                        LLG (OHMM)
                                  2000.0          200000
                                        LLD (OHMM)
                                  2000.0          200000
                                                    MSFL(OHMM)
                                  0.2000                                  2000.0
                                                    LLS (OHMM)
                                  0.2000                                  2000.0
        CALI(IN  )
6.0000          16.000                              LLG (OHMM)
                                  0.2000                                  2000.0
        SP   (MV   )                                LLD (OHMM)
-100.0          100.00            0.2000                                  2000.0

            SENSOR MEASURE POINT TO TENSION REFERENCE POINT

      SPAR 42.1   FEET                              SP    42.1   FEET
      DV90 14.6   FEET                              CALI   3.7   FEET
      SV90 14.6   FEET                              DI90  14.6   FEET
      DV0  14.6   FEET                              SI90  14.6   FEET
      SV0  14.6   FEET                              DI0   14.6   FEET
      TENS   .0   FEET                              SI0   14.6   FEET
      LLD  14.6   FEET                              LLS   14.6   FEET
      I1    1.7   FEET                              CMSF   1.7   FEET

                                PARAMETERS

      NAME   VALUE     UNIT                          NAME   VALUE     UNIT

      SPT    STAN                                    BS     8.75000   IN
      DO     0.0       F                             BHS    OPEN

           AFTER SURVEY TOOL CHECK SUMMARY


  PERFORMED:      83/02/17
  PROGRAM FILE: MILL    (VERSION    22.4    82/09/01)


 DSTB                       TOOL  CHECK

                          PLUS
                BEFORE         AFTER      UNITS
    LLS          31.60        31.6939      OHM
    LLD          31.60        31.7213      OHM


 DST                        TOOL  CHECK

                      ZERO                            PLUS
            BEFORE         AFTER         BEFORE        AFTER      UNITS
  CMSF        0.0            1.1         1000.0        997.4      MMHO
    I1        0.0           -0.5          200.0        207.2      MMHO
                          FILE

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           BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:      83/02/17
  PROGRAM FILE: MILL    (VERSION    22.4    82/09/01)


 DSTB                   ELECTRONICS CALIBRATION SUMMARY
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2-23-83 832021

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              MEASURED                          CALIBRATED      UNITS
     LLS        35.03                              31.6094      OHM
     LLD        35.28                              31.6094      OHM


  DST               ELECTRONICS CALIBRATION SUMMARY

              MEASURED                        CALIBRATED
            ZERO     PLUS                  ZERO        PLUS      UNITS
    CMSF     0.0    983.5                   0.0      1000.0      MMHO
      I1    -0.3     69.8                   0.0       200.0      MMHO


  DST               CALIPER CALIBRATION SUMMARY

              MEASURED                        CALIBRATED
            SMALL    LARGE                 SMALL       LARGE     UNITS
    CALI     7.6     11.4                   8.0        12.0       IN
                          FILE

                            6
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CALIBRATION RECORD

COMPANY OREGON NATURAL GAS DEVELOPMENT CORP.

WELL PATTON 32-9 RD#1

FIELD OLNEY

COUNTY CLATSOP STATE OREGON

SCHL. FR 3897.0'

SCHL. TD 3900.0'

DRLR. TD 3917.0'

Elev: KB 752.0'

DF N/A

GL 731.0'