CC 41-06-55

Schlumberger

5" DUAL INDUCTION-SFL

CSU

COMPANY:	ARCO EXPLORATION AND TECHNOLOGY COMPANY
WELL:	"COLUMBIA COUNTY" #41-6
FIELD:	MIST GAS
COUNTY:	COLUMBIA
STATE:	OREGON
NATION:	U.S.A.
LOCATION:	S87D14M54SW 306.15' S2D45M 6SE 49.13' FR NE COR
SEC:	6
TWP:	5N
RGE:	5W

RECEIVED - PTLD
APR 1 1986
DEPT. OF GEOLOGY
& MINERAL INDUS

OTHER SERVICES-
BHC
LDT-CNL-GR
HDT
CST
VSP

PERMANENT DATUM:	GL
ELEV. OF PERM. DATUM:	815.3 F
LOG MEASURED FROM:	KB
12.0 F	ABOVE PERM. DATUM
DRLG. MEASURED FROM:	KB

ELEVATIONS-
KB: 827.3 F
DF: 826.3 F
GL: 815.3 F

PROGRAM
TAPE NO:
26.2
SERVICE
ORDER NO:
432117

DATE:	21 JAN 86
RUN NO:	1
DEPTH-DRILLER:	2750.0 F
DEPTH-LOGGER:	2740.0 F
BTM. LOG INTERVAL:	2734.0 F
TOP LOG INTERVAL:	453.0 F
CASING-DRILLER:	454 F
CASING-LOGGER:	453 F
CASING:	9 5/8"
BIT SIZE:	8 3/4"
DEPTH:	2750 F

TYPE FLUID IN HOLE:	GEL/POLYMER
DENSITY:	10.3 LB/G
VISCOSITY:	47.0 S
PH:	9.5
FLUID LOSS:	5.0 C3
SOURCE OF SAMPLE:	FLOWLINE
RM:	2.870 OHMM AT 66.0 DEGF
RMF:	3.040 OHMM AT 42.0 DEGF
RMC:	3.340 OHMM AT 42.0 DEGF
SOURCE RMF/RMC:	MEASURED/MEASURED
RM AT BHT:	1.806 OHMM AT 109. DEGF
RMF AT BHT:	1.284 OHMM AT 109. DEGF
RMC AT BHT:	1.410 OHMM AT 109. DEGF
TIME CIRC. STOPPED:	18:00 1-21
TIME LOGGER ON BTM.:	22:04 1-21
MAX. REC. TEMP:	109.0 DEGF

LOGGING UNIT NO:	8057
LOGGING UNIT LOC:	SACRAMENTO
RECORDED BY:	PILCH
WITNESSED BY:	MCMURRY

REMARKS:

700PPM CHLORIDES.
INDUCTION AND SONIC RUN IN COMBINATION.
58 DEGREES MAXIMUM DEVIATION.
CME-Z AND STANDOFF USED FOR SONIC CENTRALIZATION.

EQUIPMENT NUMBERS-

DIS-EC 1422	DIC-DA 1149	MCD-DA 1237	SLS-RC 252
SLC-FA 1321	IEM-BD 162	SLM-DA 443	NLM-BC 202

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 3 21-JAN-86 23:16
DATA ACQUIRED 21-JAN-86 22:44

TENS(LB)
10000. 0.0

CALI(IN)
6.0000 16.000

ILD (OHMM)
.20000 2000.0

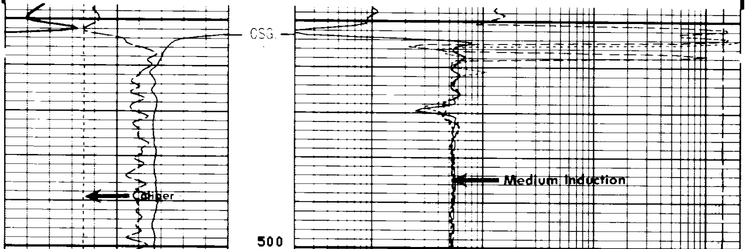
GR (GAPI)
0.0 150.00

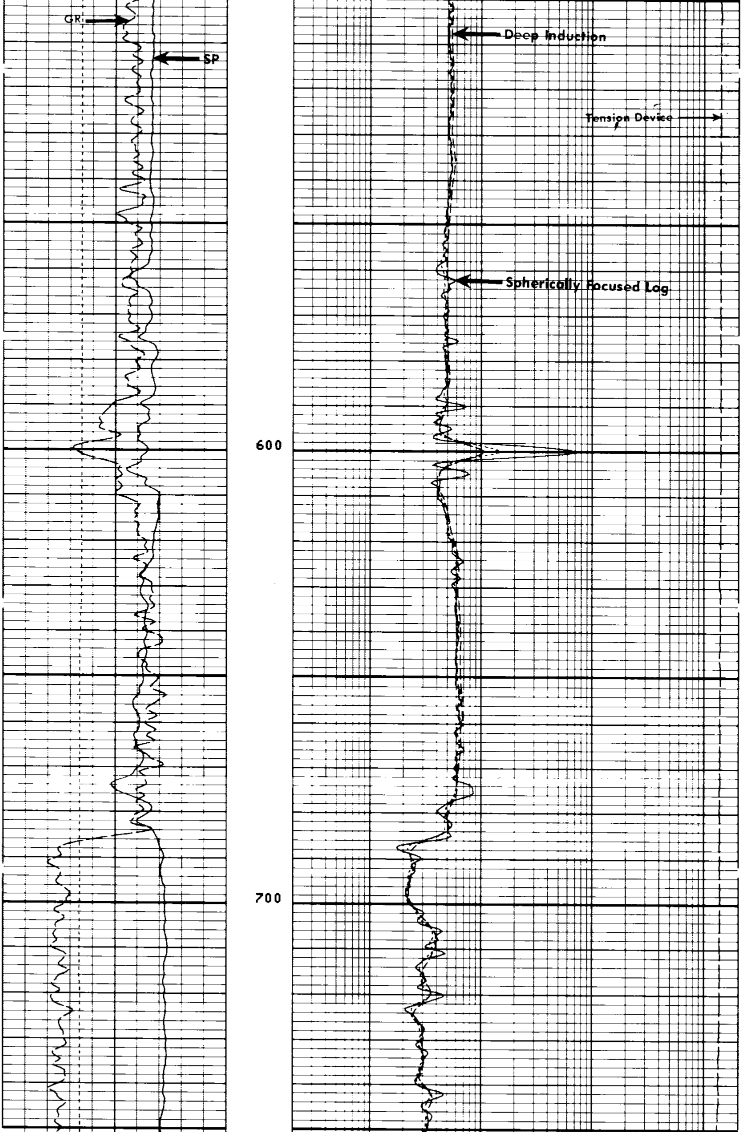
ILM (OHMM)
.20000 2000.0

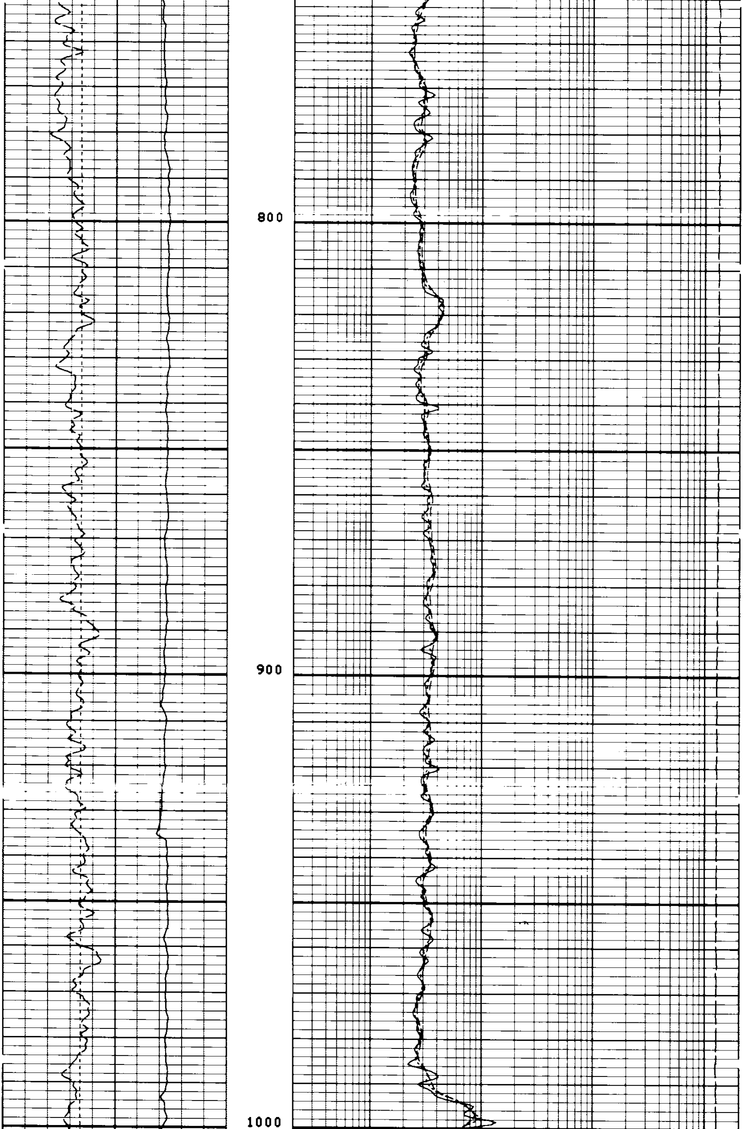
SP (MV)
-100.0 0.0

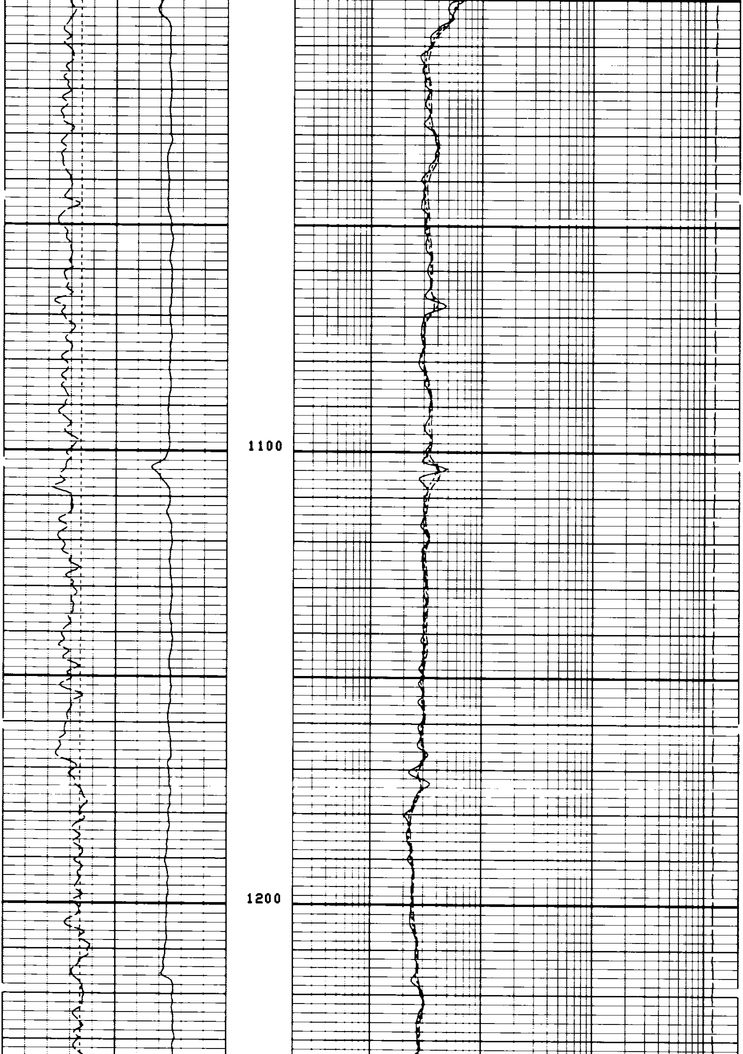
SFLU(OHMM)
.20000 2000.0

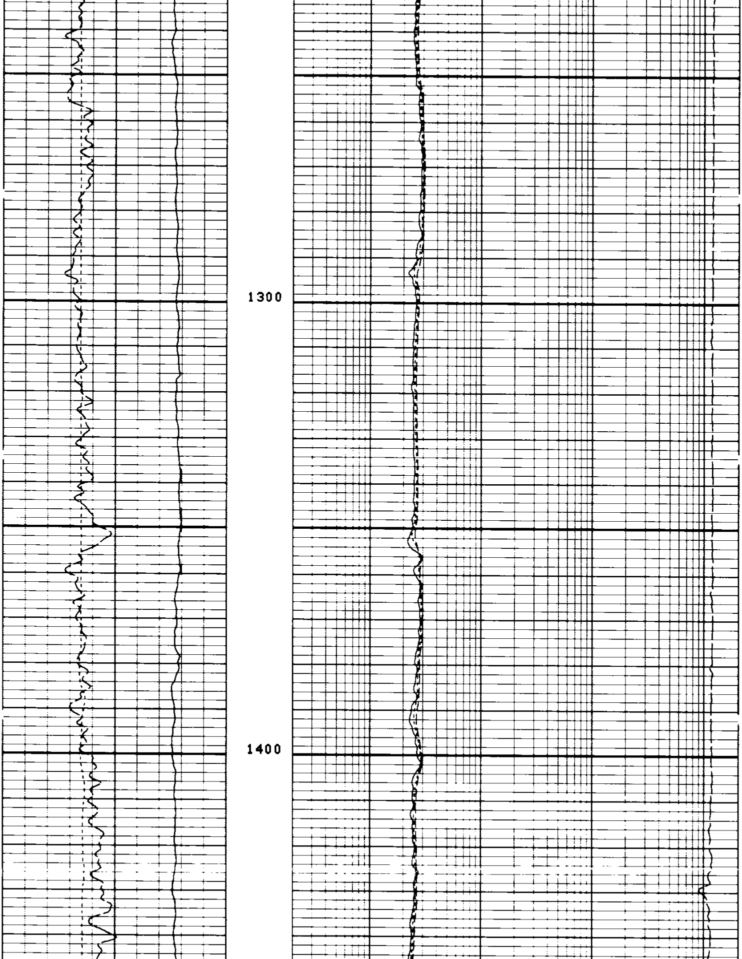
FILE 101 21-JAN-86 23:05
DATA ACQUIRED 21-JAN-86 22:44

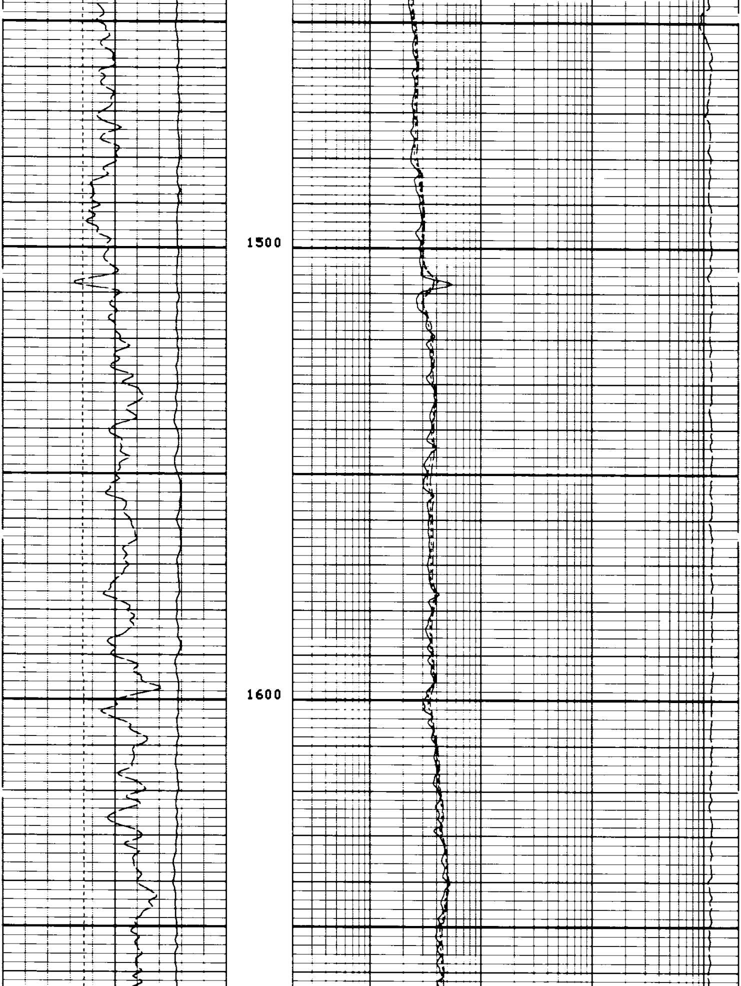


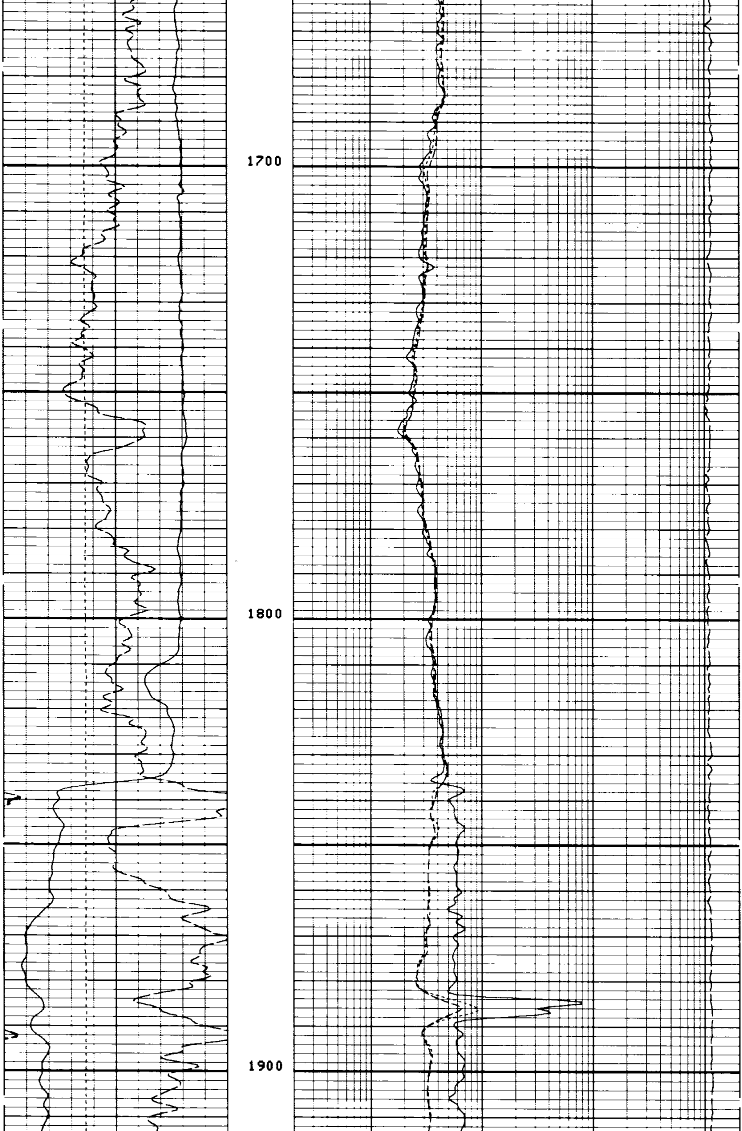


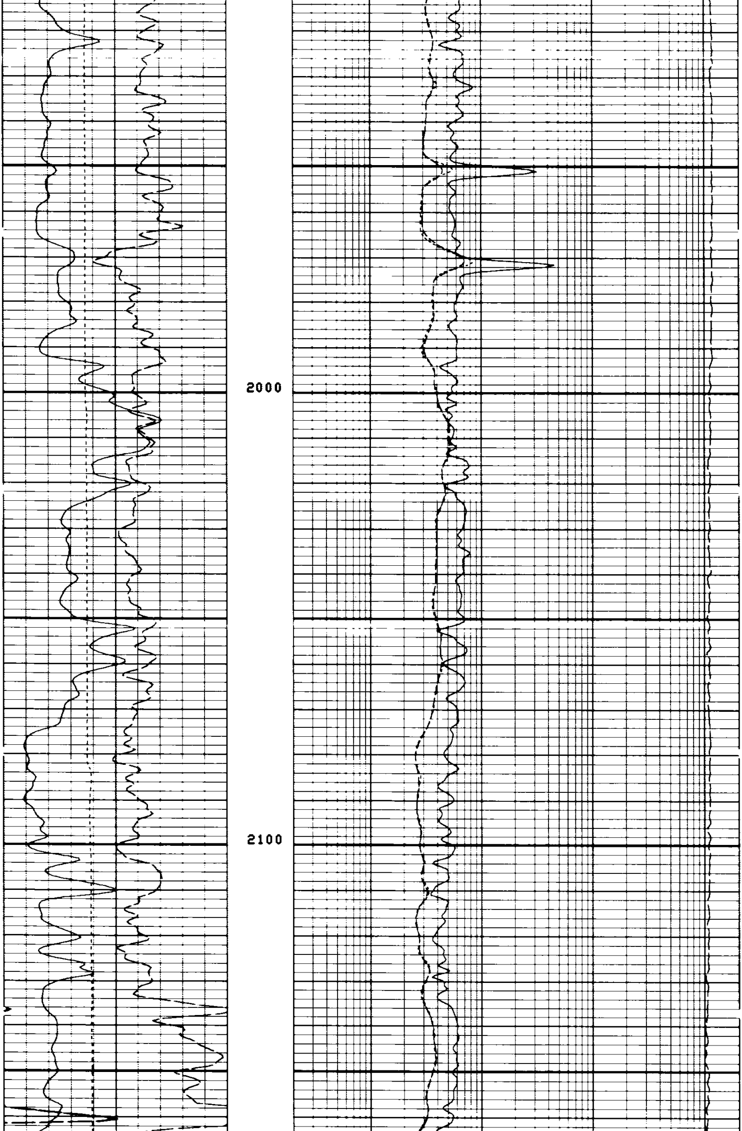


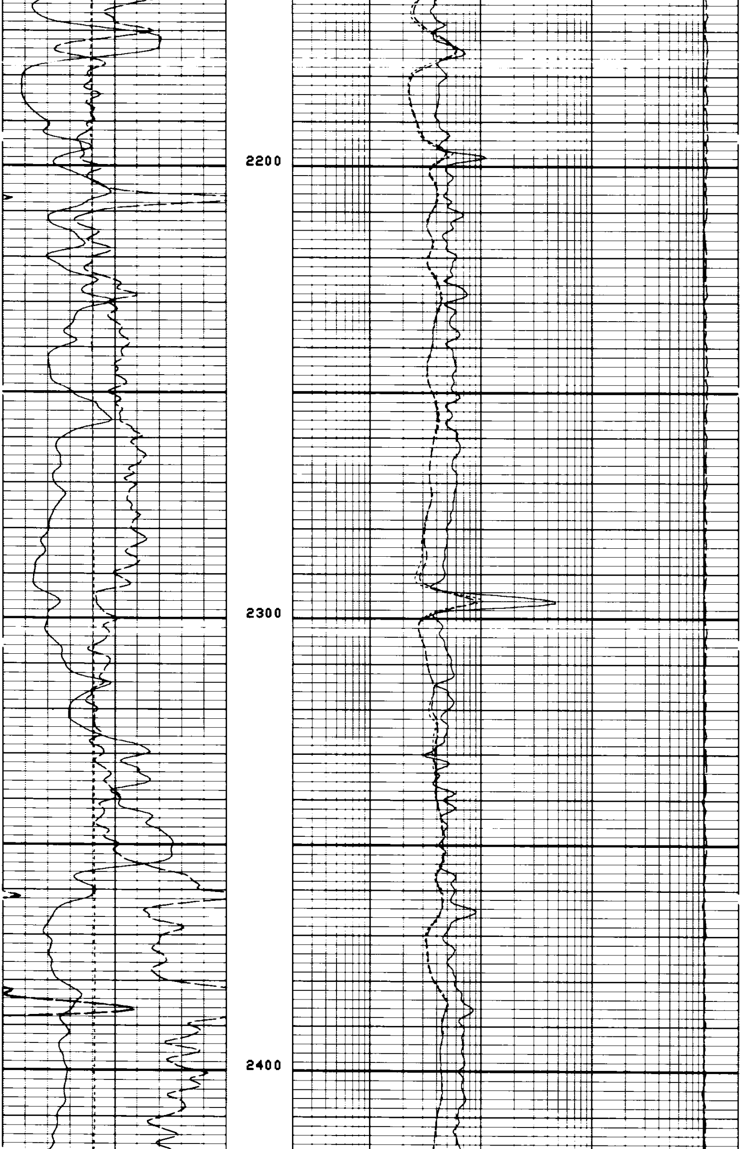


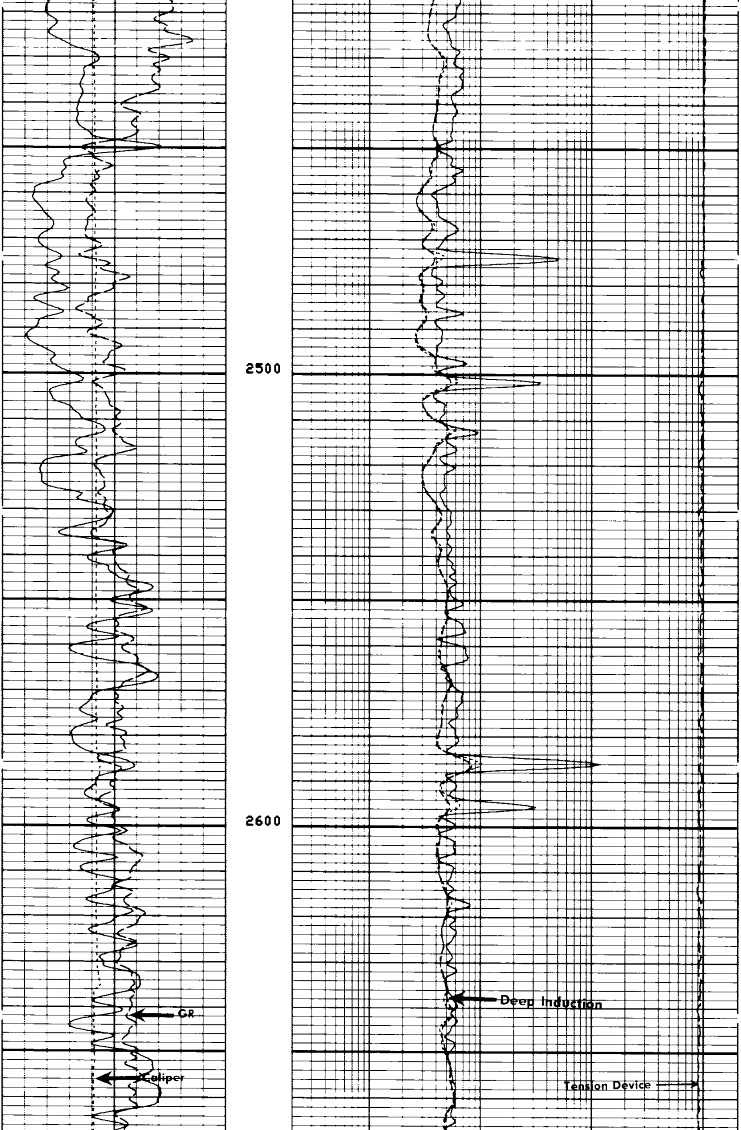


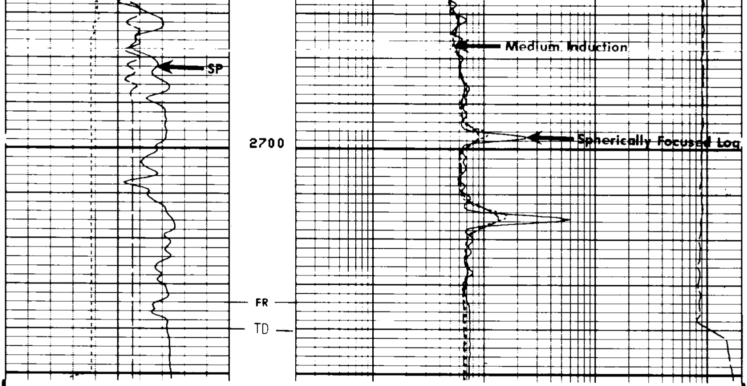












FILE 101 21-JAN-86 23:00
DATA ACQUIRED 21-JAN-86 22:04

TENS(LB)
10000. 0.0
CALI(IN)
6.0000 16.000
ILD (OHMM)
.20000 2000.0
GR (GAPI)
0.0 150.00
ILM (OHMM)
.20000 2000.0
SP (MV)
-100.0 0.0
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
GR	64.0	FEET	SRAT	41.4	FEET
ILD	9.4	FEET	CALI	31.8	FEET
ILM	5.7	FEET	SFL	6.4	FEET
SPAR	2.5	FEET	SP	2.5	FEET
NOIS	35.6	FEET	TENS	2.5	FEET

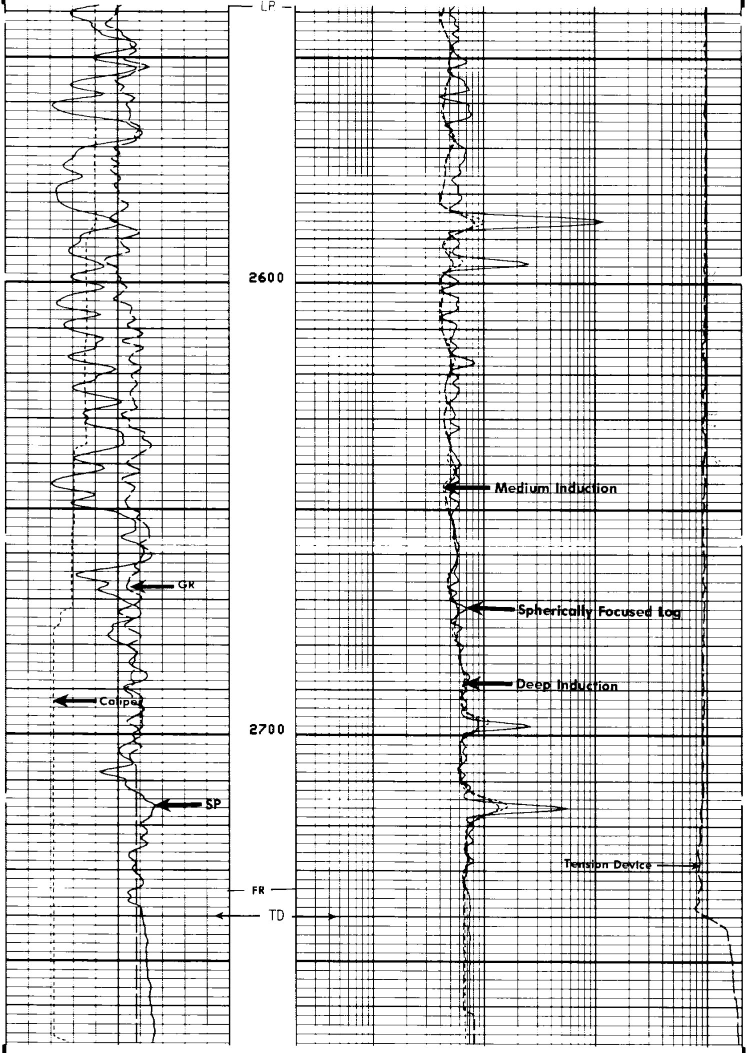
PARAMETERS

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	4.10000	MMHO
FPHI	SPHI		MSEC	6.50000	MMHO
BS	8.75000	IN	BHS	OPEN	
PP	NORM		DO	0.0	F

TENS(LB)
10000. 0.0
CALI(IN)
6.0000 16.000
ILD (OHMM)
.20000 2000.0
GR (GAPI)
0.0 150.00
ILM (OHMM)
.20000 2000.0
SP (MV)
-100.0 0.0
SFLU(OHMM)
.20000 2000.0

REPEAT SECTION

FILE 2 21-JAN-86 22:49
DATA ACQUIRED 21-JAN-86 21:58



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                    FILE    2        21-JAN-86 22:49
                    DATA ACQUIRED    21-JAN-86 21:54
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```
                                                        TENS(LB  )
                                                   10000.              0.0
        CALI(IN  )                                         ILD (OHMM)
6.0000             16.000      .20000                                2000.0
        GR   (GAPI)                                        ILM (OHMM)
0.0                150.00      .20000                                2000.0
        SP   (MV   )                                       SFLU(OHMM)
-100.0                0.0      .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
          GR    64.0   FEET                     SRAT  41.4   FEET
          ILD    9.4   FEET                     CALI  31.8   FEET
          ILM    5.7   FEET                     SFL    6.4   FEET
          SPAR   2.5   FEET                     SP     2.5   FEET
          NOIS  35.6   FEET                     TENS   2.5   FEET
```

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                              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  4.10000    MMHO
          FPHI  SPHI                             MSEC  6.50000    MMHO
          BS    8.75000    IN                    BHS   OPEN
          PP    NORM                             DO    0.0        F

                             TAPE NOT MADE
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              BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:     86/01/21
  PROGRAM FILE: ISN    (VERSION    26.2    83/11/17)


DITD               ELECTRONICS CALIBRATION SUMMARY

              MEASURED                      CALIBRATED
            ZERO    PLUS                  ZERO      PLUS         UNITS
   ILD        .1    542.8                  0.0      502.7         MMHO
   ILM        .2    518.8                  0.0      498.6         MMHO
   SFL        .3    517.5                  0.0      500.0         MMHO

ILD  SONDE ERROR CORRECTION :        4.1 MMHO
ILM  SONDE ERROR CORRECTION :        6.5 MMHO


SGTE               DETECTOR CALIBRATION SUMMARY

              MEASURED
            BKGD    JIG        CALIBRATED         UNITS
   GR        48     193           165             GAPI


MCDB               CALIPER CALIBRATION SUMMARY

              MEASURED                      CALIBRATED
            SMALL   LARGE                 SMALL     LARGE        UNITS
  CALI        7.3    10.5                  8.0      12.0          IN

                   FILE    1       21-JAN-86 21:42
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                AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:      86/01/21
   PROGRAM FILE: ISN    (VERSION    26.2    83/11/17)


 DITD                        TOOL  CHECK

                        ZERO                     PLUS
                  BEFORE      AFTER        BEFORE      AFTER      UNITS
      ILD          0.0          .0         502.7       502.3      MMHO
      ILM          0.0          .0         498.6       497.5      MMHO
      SFL          0.0         -.0         500.0       492.7      MMHO

 ILD  SONDE ERROR CORRECTION :          4.1 MMHO
 ILM  SONDE ERROR CORRECTION :          6.5 MMHO

                          FILE    5       21-JAN-86 22:47
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                 SHOP SUMMARY


   PERFORMED:      23-DEC-85 14:48
   PROGRAM FILE: SHOP    (VERSION    28.2A    85/07/10)


 DITD                 ELECTRONICS CALIBRATION SUMMARY

                    TEST LOOP CALIBRATION               TOOL CHECK
                 MEASURED            CALIBRATED          CALIBRATED
               ZERO      PLUS       ZERO       PLUS      ZERO      PLUS     UNITS
      ILD      -4.9      539.6       0.0       500.0      0.0      502.5    MMHO
      ILM      -7.2      517.4       0.0       500.0      0.0      498.7    MMHO
 ILD  SONDE ERROR CORRECTION :              4.1 MMHO
 ILM  SONDE ERROR CORRECTION :              6.5 MMHO

                           (IS:1422, IC:1149)
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-end-