Schlumberger

2" & 5" DUAL INDUCTION-SFL

CSU

COMPANY: ARCO OIL AND GAS COMPANY

WELL: CAVENAM FOREST INDUSTRIES #41-4

FIELD: MIST
COUNTY: COLUMBIA
STATE: OREGON
NATION: U.S.A
LOCATION: 1,033' SOUTH AND 935' WEST FROM NORTHEAST CORNER OF
SEC: 4 TWP: 5N RGE: 4W

PERMANENT DATUM: G.L
ELEV. OF PERM. DATUM: 886.5 F
LOG MEASURED FROM: K.B
11.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: K.B

ELEVATIONS-
KB: 897.5 F
DF:
GL: 886.5 F

DATE: 14 SEP 86
RUN NO: 1

DEPTH-DRILLER: 2584.0 F
DEPTH-LOGGER: 2581.0 F
BTM. LOG INTERVAL: 2577.0 F
TOP LOG INTERVAL: 440.0 F

CASING-DRILLER: 441.0 F
CASING-LOGGER: 440.0 F
CASING: 9.625
WEIGHT: 47.0000 LB/F
BIT SIZE: 8.5
DEPTH: 2584.0 F

OTHER SERVICES-
FDC-CNL-GR
BHC
WST
HDT
CORES

PROGRAM
TAPE NO:
28.4A
SERVICE
ORDER NO:
524309

RECEIVED
JAN 27 1987
DOGAMI
Portland

TYPE FLUID IN HOLE: LIGNO
DENSITY: 10.30 LB/G
VISCOSITY: 40.0 S
PH: 9.1
FLUID LOSS: 7.6 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 3.150 OHMM AT 72.0 DEGF
RMF: 3.320 OHMM AT 60.0 DEGF
RMC: 3.600 OHMM AT 59.0 DEGF
SOURCE RMF/RMC: M /M
RM AT BHT: 2.393 OHMM AT 97.0 DEGF
RMF AT BHT: 2.139 OHMM AT 97.0 DEGF
RMC AT BHT: 2.285 OHMM AT 97.0 DEGF

TIME CIRC. STOPPED: 21:30
TIME LOGGER ON BTM.: 01:13

MAX. REC. TEMP: 97.0 DEGF

LOGGING UNIT NO: 8128
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: K. HARPER
WITNESSED BY: J. JACKSON

REMARKS:

DITD RUN IN COMBINATION WITH SONIC

EQUIPMENT NUMBERS-

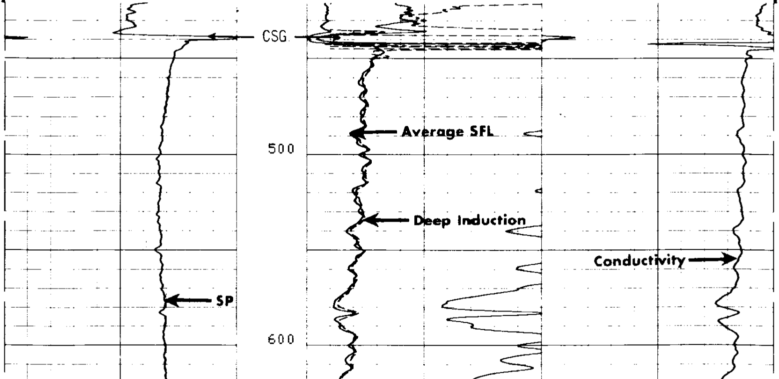
DIS 1342 DIC 1386 SLS RC 480

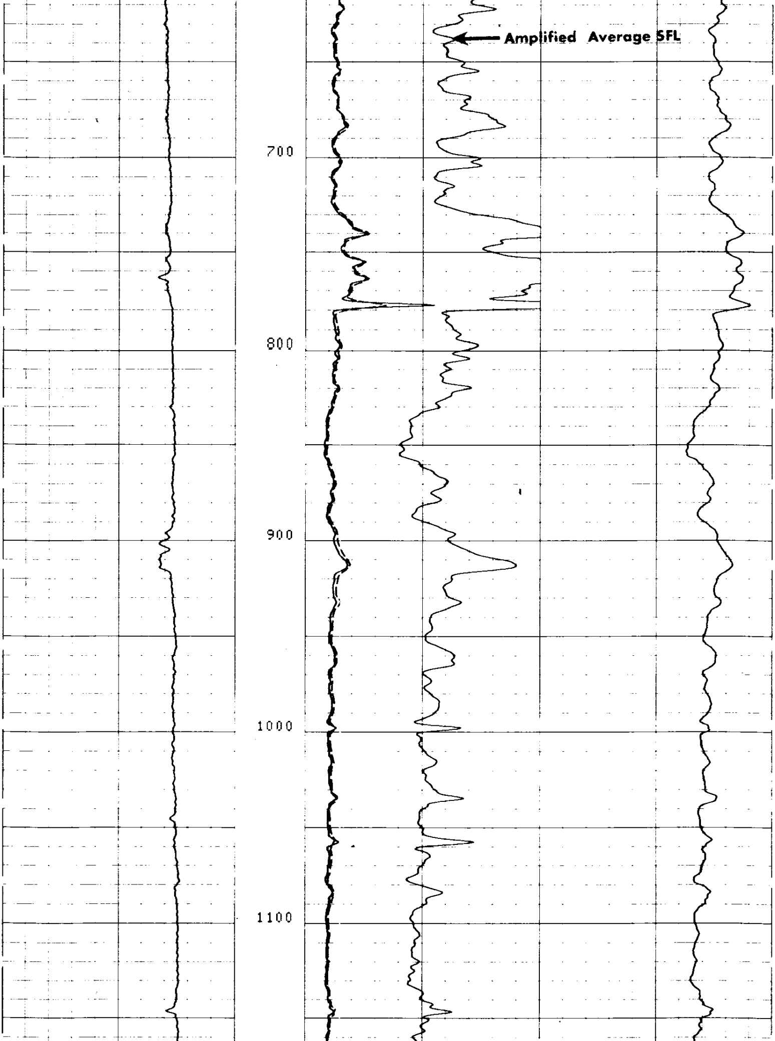
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, 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.

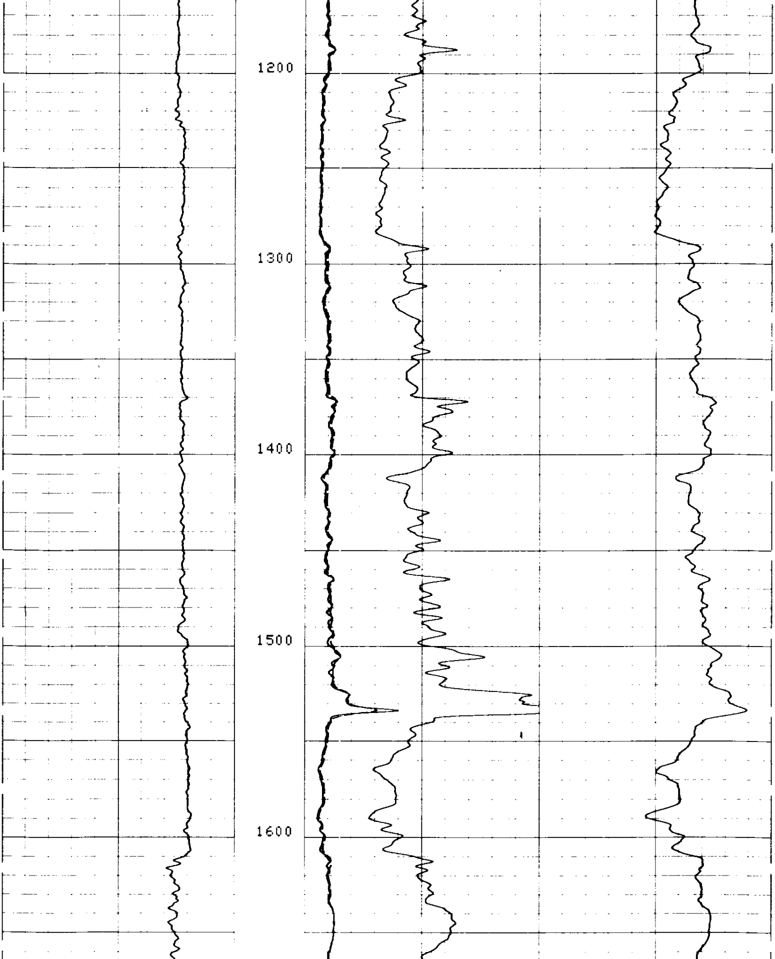
CP 28.4A FILE 5 14-SEP-86 02:37
DATA ACQUIRED 14-SEP-86 01:17

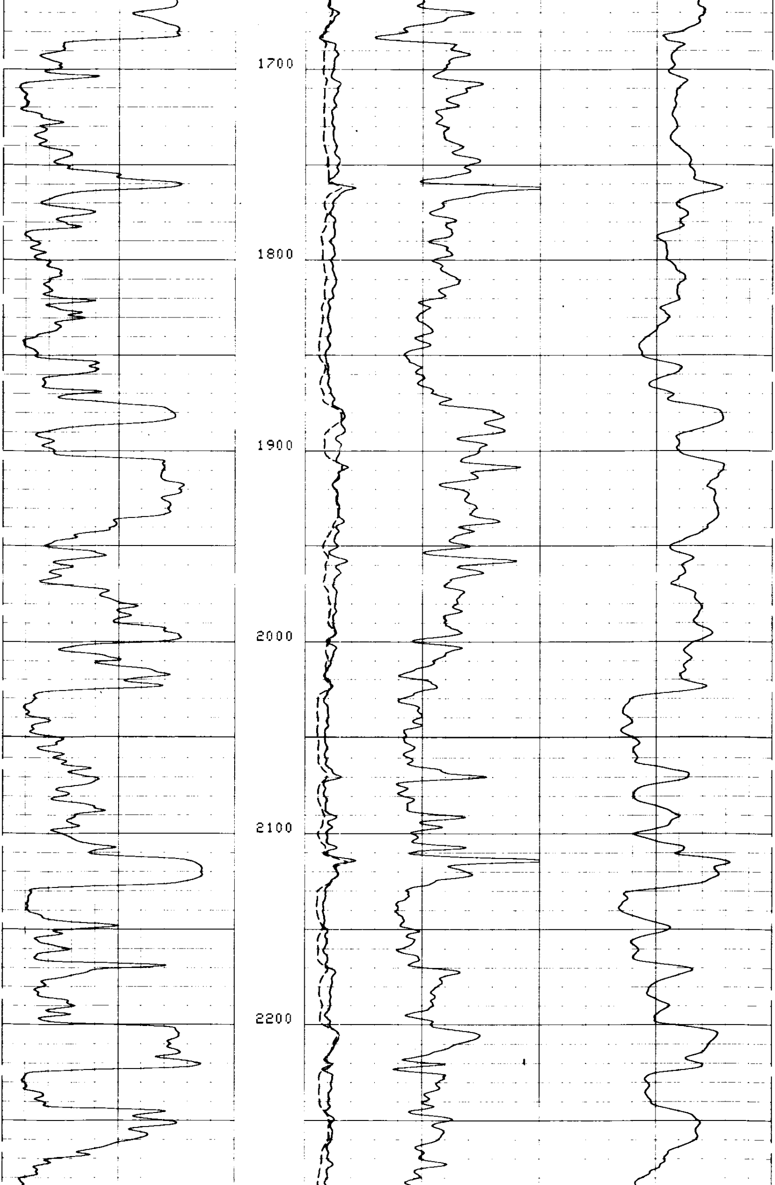
ILD (OHMM)
0.(30.000
SFLA(OHMM)
0.(6.0000
SP (MV) SFLA(OHMM) CILD(MMHO)
-90.00 10.000 0.(30.000 1000.0 0.0

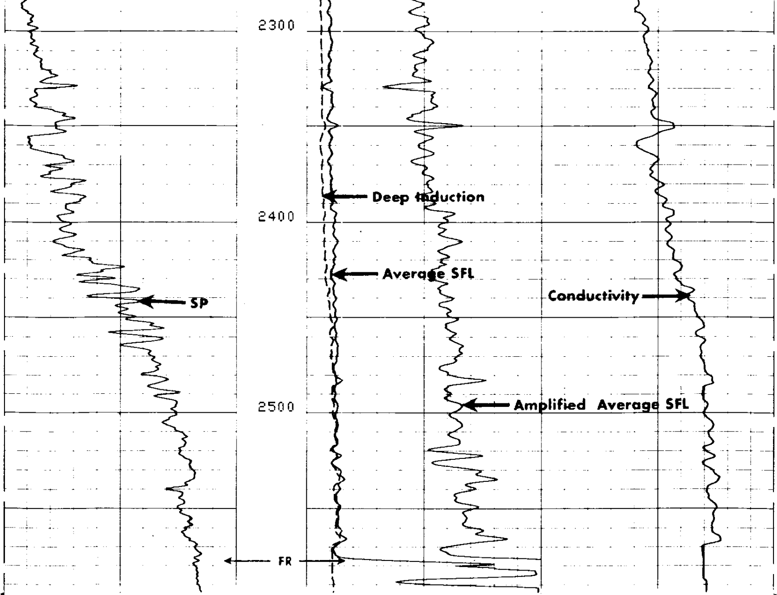
CP 28.4A FILE 5 14-SEP-86 02:59
DATA ACQUIRED 14-SEP-86 02:07











CP 28.4A   FILE 5   14-SEP-86 02:55
DATA ACQUIRED   14-SEP-86 01:13

ILD (OHMM) 0.(30.000
SFLA(OHMM) 0.(6.0000
SP (MV) -90.00 10.000
SFLA(OHMM) 0.(30.000
CILD(MMHO) 1000.0 0.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	41.4	FEET	AMPL	43.9	FEET
TT1	42.9	FEET	CBL	43.9	FEET
TT3	40.2	FEET	TT2	43.9	FEET
T0	43.9	FEET	TT4	39.2	FEET
SLTT	43.9	FEET	TT	43.9	FEET
CALI	31.8	FEET	SCBL	43.9	FEET
ILM	5.8	FEET	ILD	9.4	FEET
SP	2.5	FEET	SFL	6.4	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	2.5	FEET			

PARAMETERS

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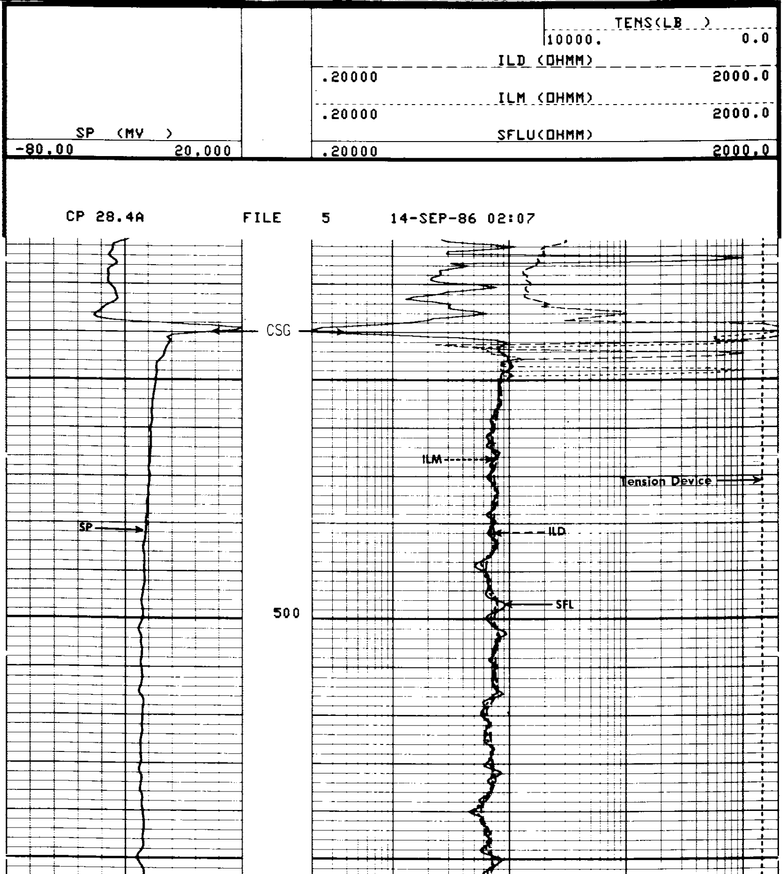
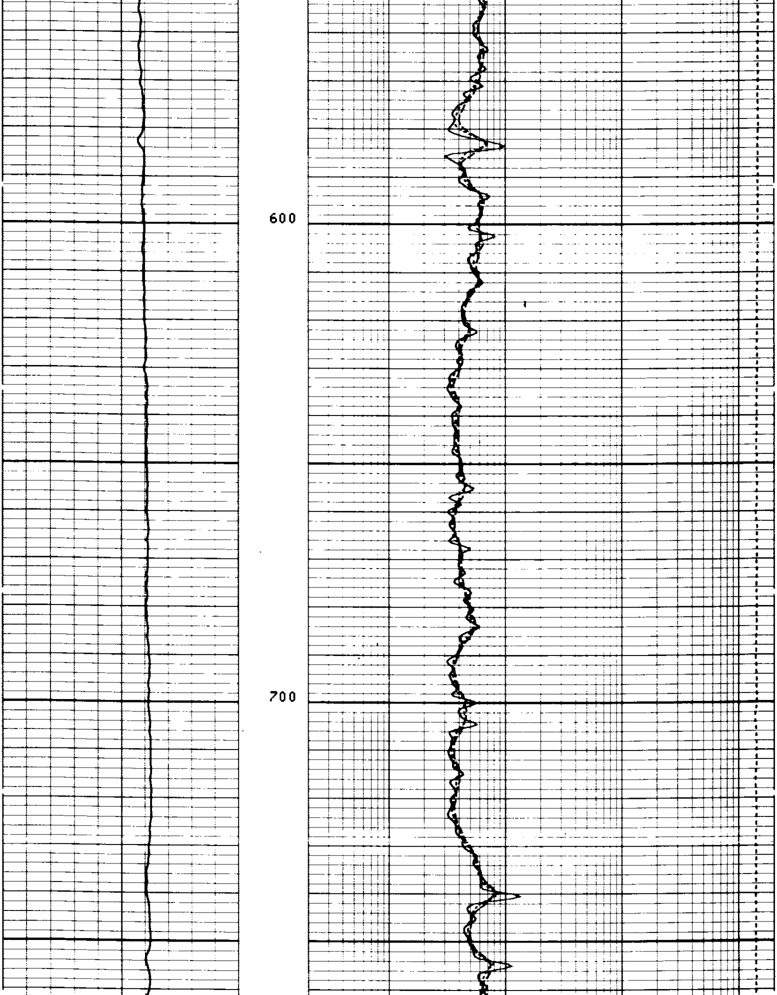
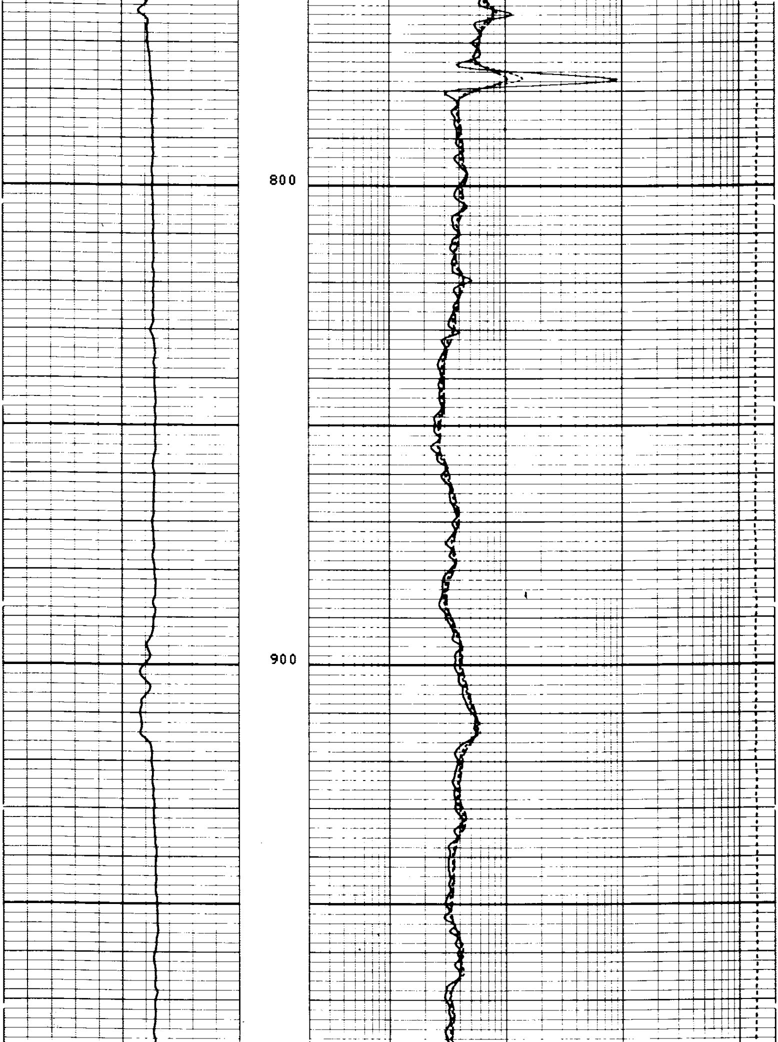
NAME  VALUE       UNIT                 NAME  VALUE       UNIT

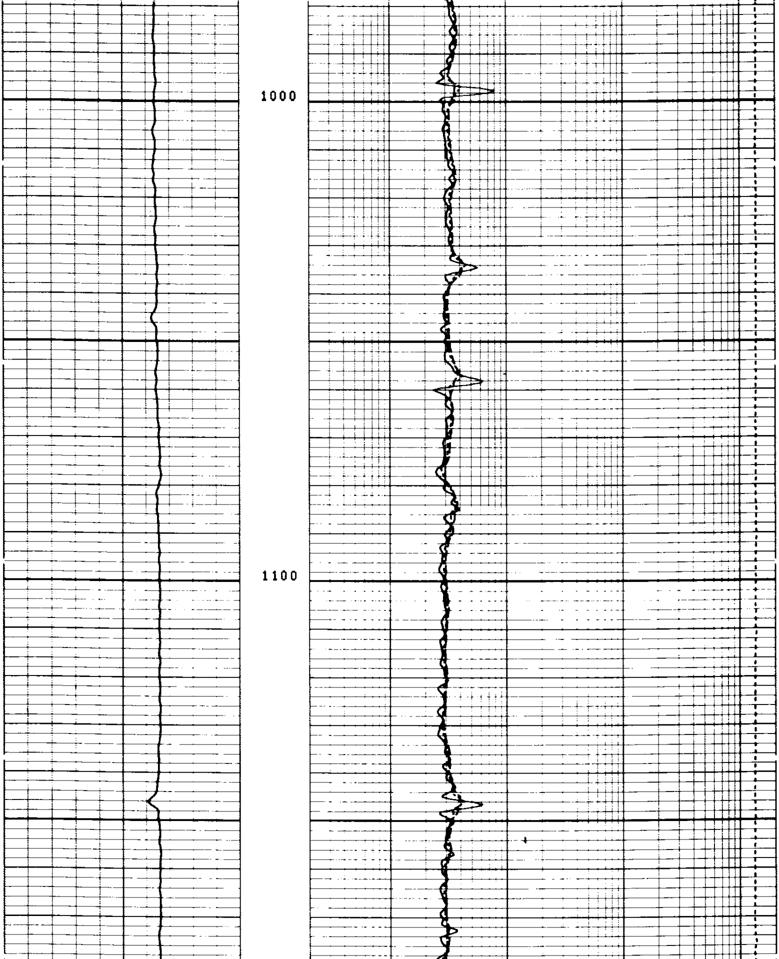
SPFS  R-H                              RMF   3.32000
DTM   56.0000     US/F                 CDTS  100.000
DDEL  200         US                   DTF   189.000     US/F
DWCO  512                              DSIN  5           US
SBR   1.00000     OHMM                 DSEC  7.20000     MMHO
FPHI  SPHI                             MSEC  9.00000     MMHO
BS    8.50000     IN                   BHS   OPEN
SPDR  0.0                              DO    0.0         F
PP    NORM

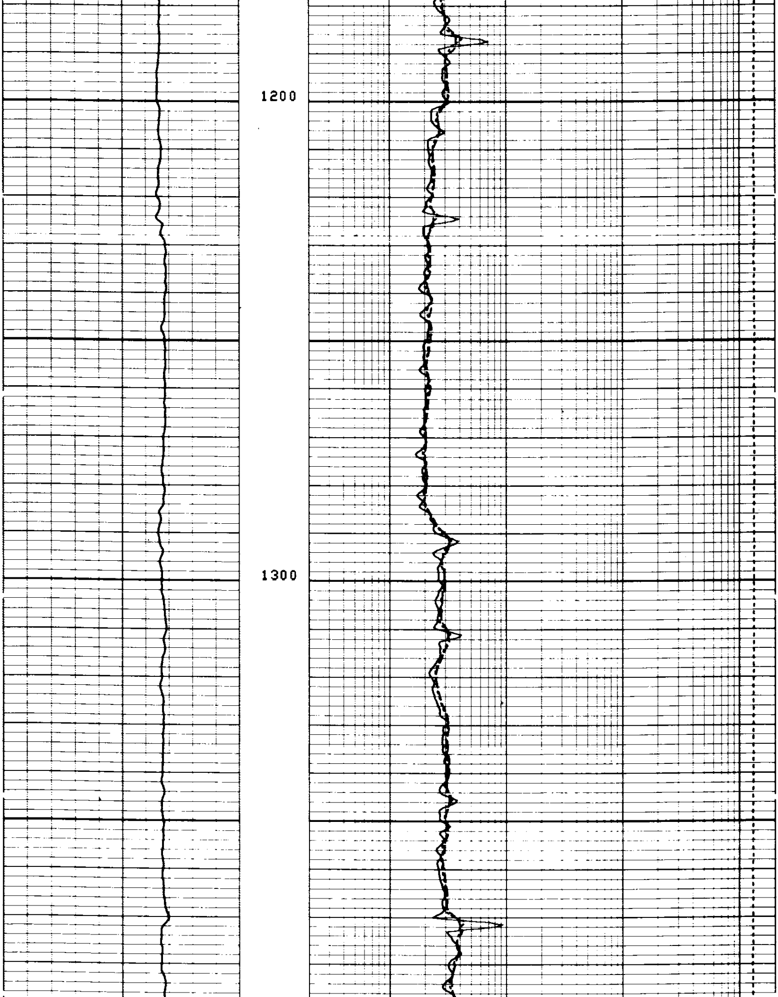
                    TAPE NOT MADE
```

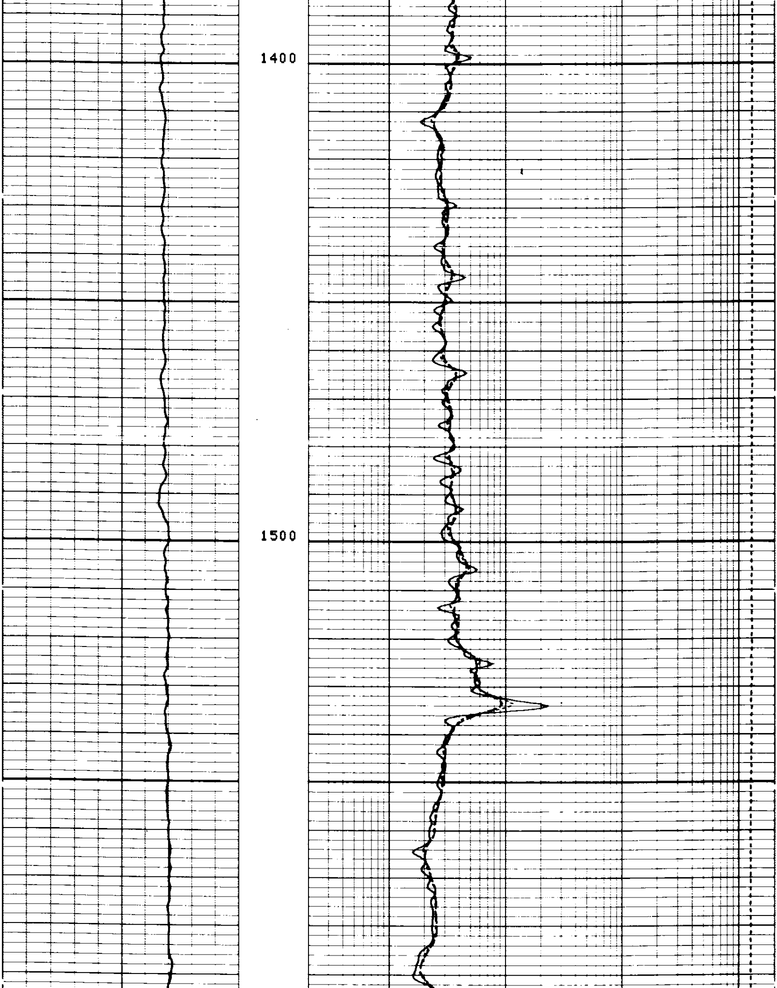


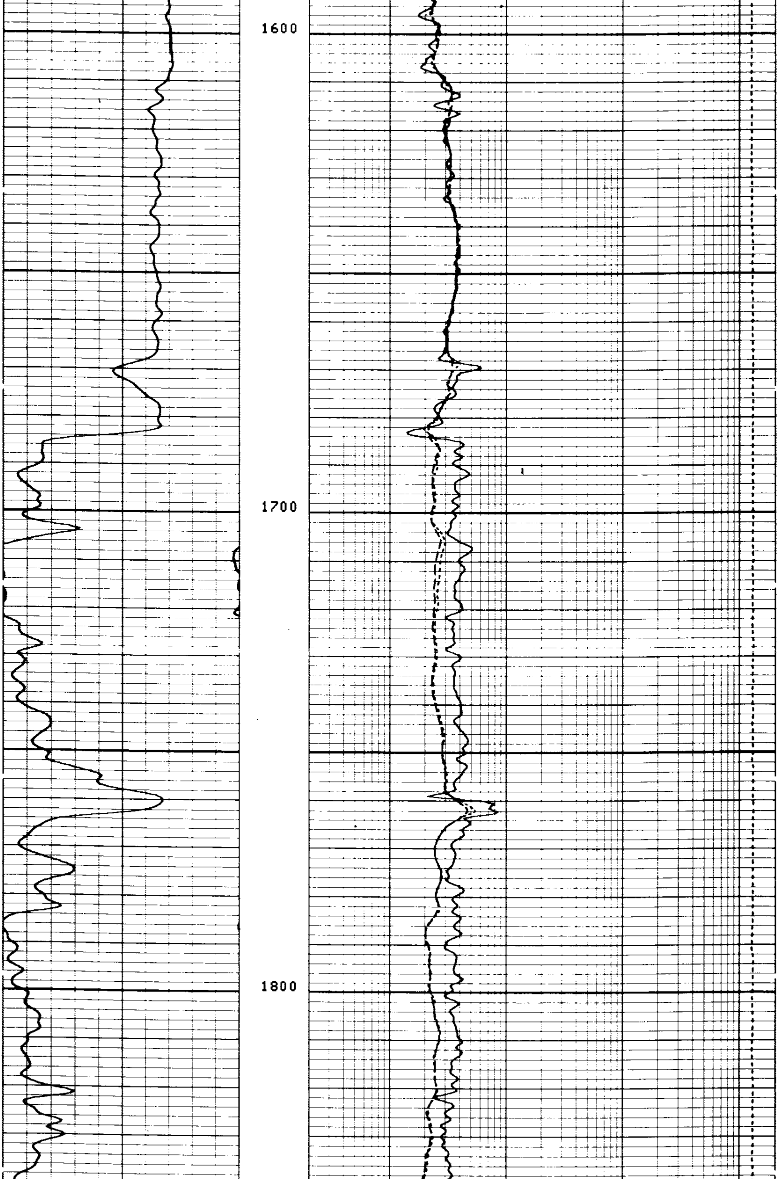


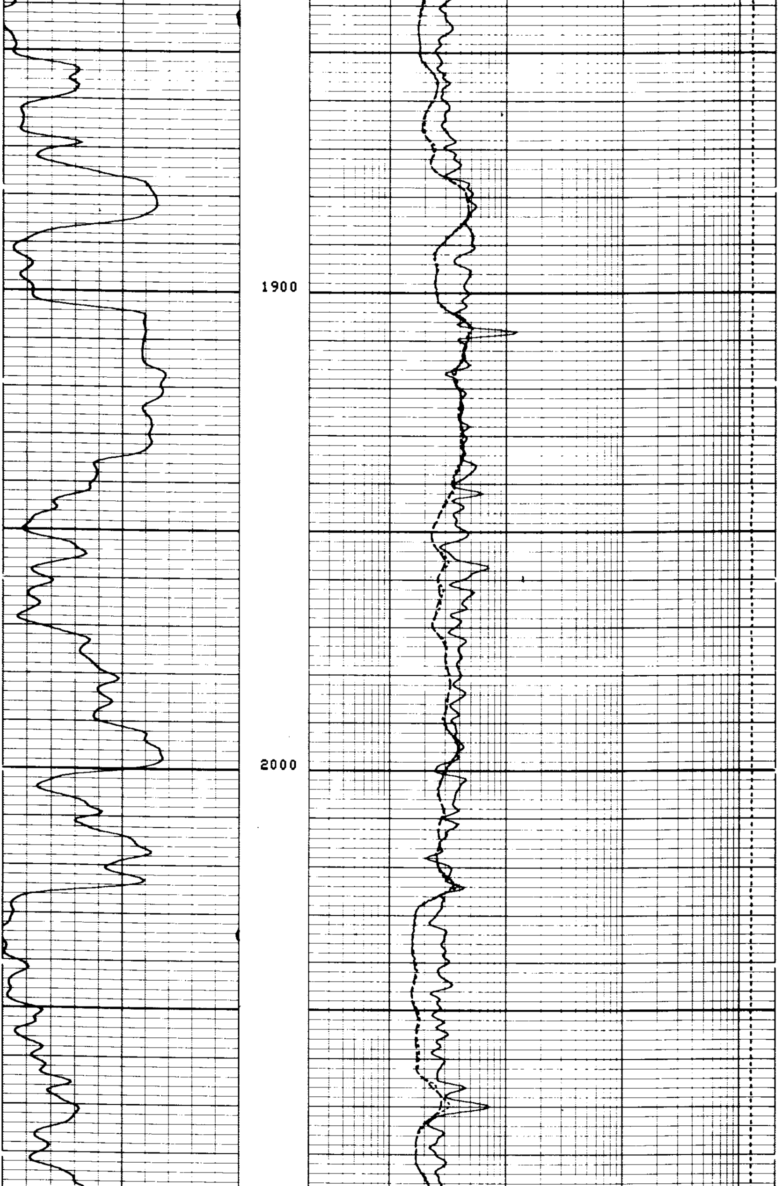


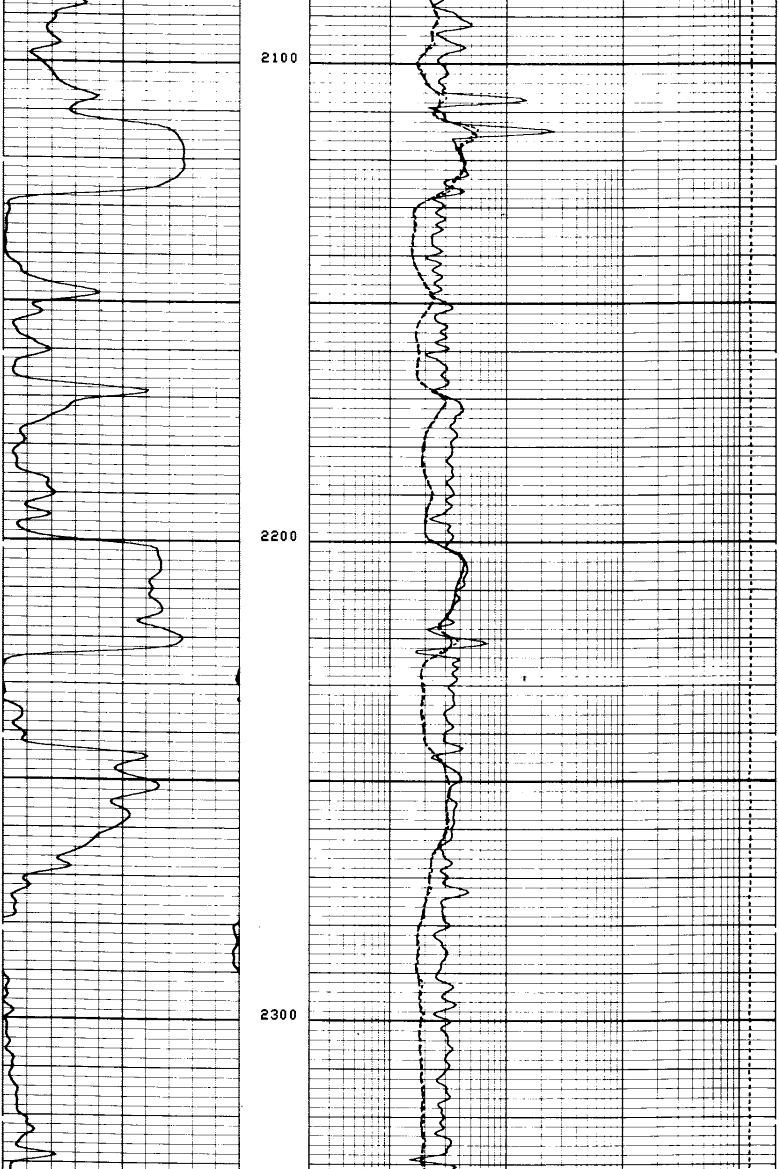


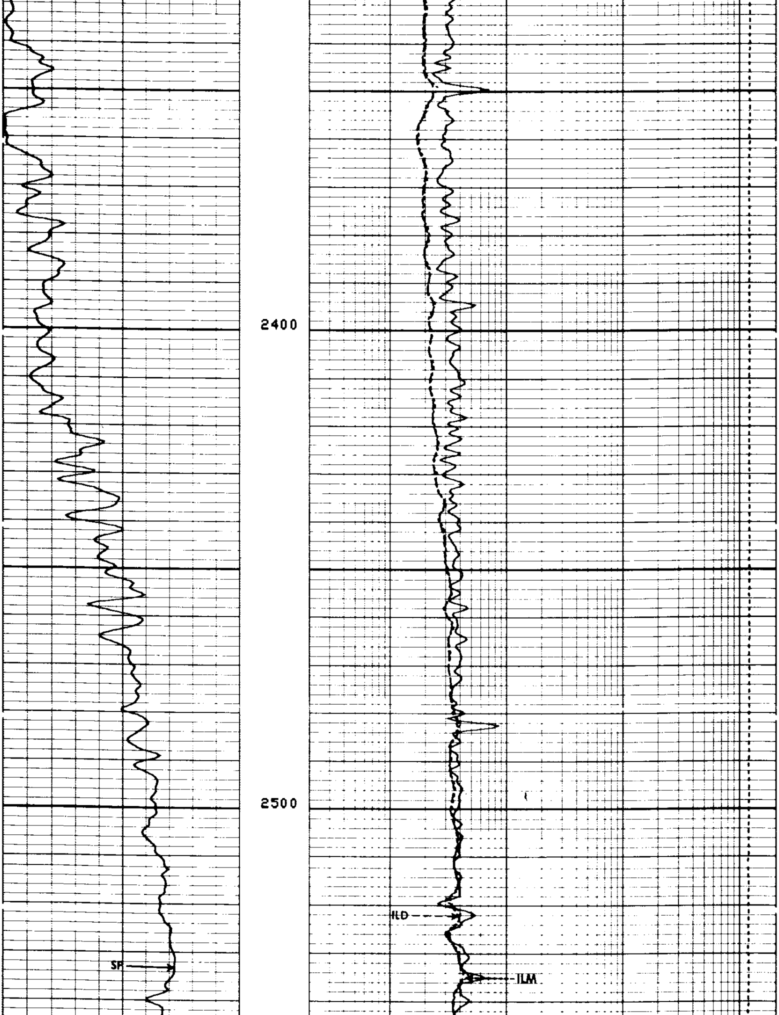


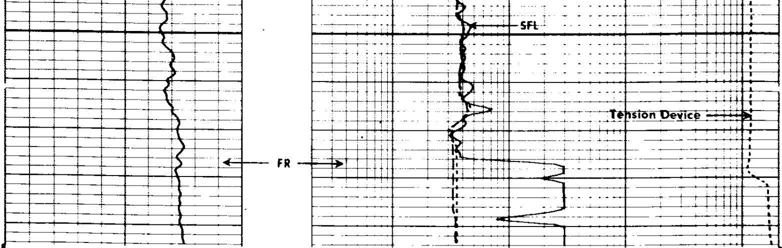












CP 28.4A FILE 5 14-SEP-86 01:13

TENS(LB)
10000. 0.0

ILD (OHMM)
.20000 2000.0

ILM (OHMM)
.20000 2000.0

SP (MV)
-80.00 20.000

SFLU(OHMM)
.20000 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	41.4	FEET	AMPL	43.9	FEET
TT1	42.9	FEET	CBL	43.9	FEET
TT3	40.2	FEET	TT2	43.9	FEET
T0	43.9	FEET	TT4	39.2	FEET
SLTT	43.9	FEET	TT	43.9	FEET
CALI	31.8	FEET	SCBL	43.9	FEET
ILM	5.8	FEET	ILD	9.4	FEET
SP	2.5	FEET	SFL	6.4	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	2.5	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SPFS	R-H		RMF	3.32000	
DTM	56.0000	US/F	CDTS	100.000	
DDEL	200	US	DTF	189.000	US/F
DWCO	512		DSIN	5	US
SBR	1.00000	OHMM	DSEC	7.20000	MMHO
FPHI	SPHI		MSEC	9.00000	MMHO
BS	8.50000	IN	BHS	OPEN	
SPDR	.0030000				

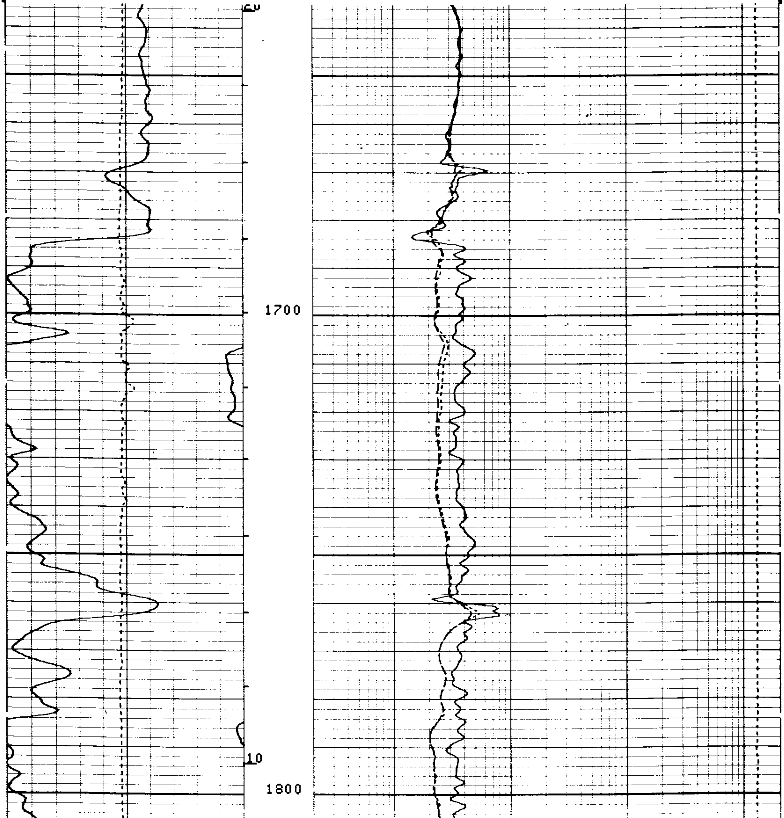
EVENT MARK SUMMARY:

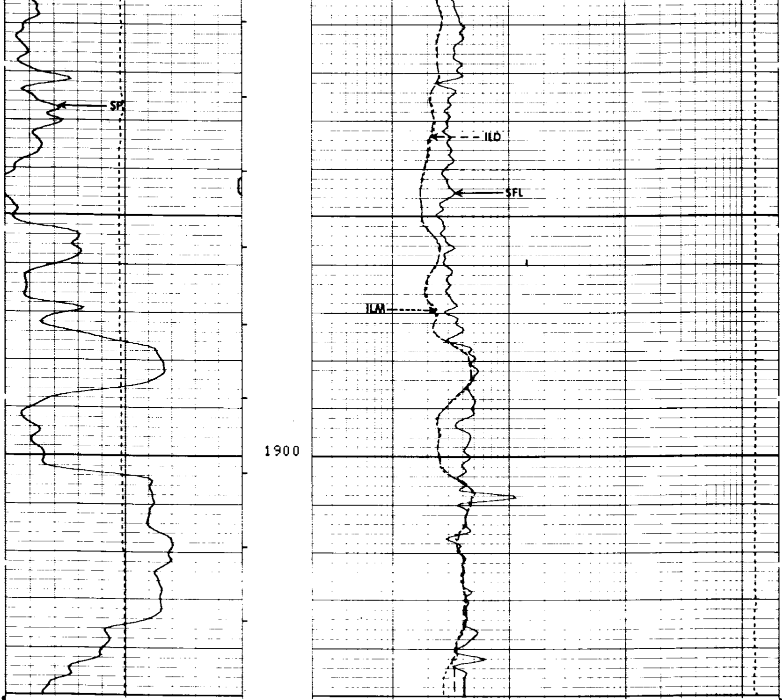
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE

	TENS(LB)
	10000. 0.0
	ILD (OHMM)
	.20000 2000.0
CALI(IN)	ILM (OHMM)
6.0000 16.000	.20000 2000.0
SP (MV)	SFLU(OHMM)
-80.00 20.000	.20000 2000.0

REPEAT SECTION REPEAT SECTION REPEAT SECTION

CP 28.4A FILE 4 14-SEP-86 00:58





CP 28.4A FILE 4 14-SEP-86 00:48

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

CALI(IN)
6.0000 16.000
SP (MV)
-80.00 20.000

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	41.4	FEET	AMPL	43.9	FEET
TT1	42.9	FEET	CBL	43.9	FEET
TT3	40.2	FEET	TT2	43.9	FEET
T0	43.9	FEET	TT4	39.2	FEET
SLTT	43.9	FEET	TT	43.9	FEET
CALI	31.8	FEET	SCBL	43.9	FEET
ILM	5.8	FEET	ILD	9.4	FEET
SP	2.5	FEET	SFL	6.4	FEET
TENS	2.5	FEET	SPAR	2.5	FEET
NOIS	2.5	FEET			

PARAMETERS

```
NAME  VALUE        UNIT                      NAME  VALUE        UNIT

SPFS  R-H                                    RMF   3.32000
DTM   56.0000      US/F                      CDTS  100.000
DDEL  200          US                        DTF   189.000      US/F
DWCO  512                                    DSIN  5            US
SBR   1.00000      OHMM                      DSEC  7.20000      MMHO
FPHI  SPHI                                   MSEC  9.00000      MMHO
BS    8.50000      IN                        BHS   OPEN
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                  BEFORE SURVEY CALIBRATION SUMMARY


  PERFORMED:     14-SEP-86 02:38
  PROGRAM FILE: ISN     (VERSION    28.4A   85/11/11)


DITD                 ELECTRONICS CALIBRATION SUMMARY

              MEASURED                          CALIBRATED
            ZERO     PLUS                    ZERO        PLUS         UNITS
   ILD      -.82     551.5                   0.0         499.9         MMHO
   ILM     -2.55     534.8                   0.0         500.0         MMHO
   SFL     -4.54     523.0                   0.0         500.0         MMHO

ILD SONDE ERROR CORRECTION :            7.2 MMHO
ILM SONDE ERROR CORRECTION :            9.0 MMHO


MCDB                 CALIPER CALIBRATION SUMMARY

              MEASURED                          CALIBRATED
            SMALL    LARGE                   SMALL       LARGE        UNITS
  CALI      7.39     10.5                    8.00        12.0          IN

   CP 28.4A            FILE     8        14-SEP-86 02:38
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                   AFTER SURVEY TOOL CHECK SUMMARY


  PERFORMED:     14-SEP-86 02:10
  PROGRAM FILE: ISN     (VERSION    28.4A   85/11/11)


DITD                          TOOL   CHECK

                       ZERO                        PLUS
               BEFORE          AFTER        BEFORE       AFTER     UNITS
   ILD          0.0             .7          499.9        496.6     MMHO
   ILM          0.0             .9          500.0        497.9     MMHO
   SFL          0.0            1.6          500.0        487.2     MMHO

ILD SONDE ERROR CORRECTION :            7.2 MMHO
ILM SONDE ERROR CORRECTION :            9.0 MMHO

   CP 28.4A            FILE     7        14-SEP-86 02:10
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                   SHOP SUMMARY


  PERFORMED:     08-SEP-86 14:32
  PROGRAM FILE: SHOP    (VERSION    28.4    85/11/11)


DITD                 ELECTRONICS CALIBRATION SUMMARY

               TEST LOOP CALIBRATION                  TOOL CHECK
           MEASURED           CALIBRATED              CALIBRATED
         ZERO     PLUS      ZERO       PLUS       ZERO        PLUS     UNITS
   ILD   -7.6     542.5     0.0        500.0      0.0         495.5    MMHO
   ILM   -9.9     523.3     0.0        500.0      0.0         499.0    MMHO
ILD  SONDE ERROR CORRECTION :           7.2 MMHO
ILM  SONDE ERROR CORRECTION :           9.0 MMHO

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

COMPANY ARCO OIL AND GAS COMPANY

WELL CAVENAM FOREST INDUSTRIES NO. 41-4

FIELD MIST

COUNTY COLUMBIA STATE OREGON

SCHL. FR 2577
SCHL. TD 2581
DRLR. TD 2584

Elev: KB 897.5
DF 896.5
GL 886.5