Schlumberger

DUAL INDUCTION - SFL W/LINEAR CORR.

CSU

COMPANY: ARCO OIL AND GAS

WELL: CAVENHAM FOREST IND. #41-9 RD# 1

FIELD: MIST
COUNTY: COLUMBIA
STATE: OREGON
NATION: USA
LOCATION: 1244.46' SOUTH AND 355.73' WEST
FROM THE NE CORNER OF:
SEC: 9 TWP: 5 NORTH RGE: 4 WEST

OTHER SERVICES-
DIL/BHC

PERMANENT DATUM: GL
ELEV. OF PERM. DATUM: 835.9 F
LOG MEASURED FROM: KB
11.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: KB

ELEVATIONS-
KB: 846.9 F
DF: 845.9 F
GL: 835.9 F

PROGRAM
TAPE NO:
28.4A
SERVICE
ORDER NO:
524312

DATE: 13OCT 86
RUN NO: ONE

DEPTH-DRILLER: 2501.0 F
DEPTH-LOGGER: 2501.0 F
BTM. LOG INTERVAL: 2459.0 F
TOP LOG INTERVAL: 470.0 F

CASING-DRILLER: 470.0 F
CASING-LOGGER: 470.0 F
CASING: 9 5/8"
WEIGHT: 47.0000 LB/F
BIT SIZE: 8 1/2"
DEPTH: 2501.0 F

JAN 23 1987
DOGAMI
Portland

TYPE FLUID IN HOLE: DISPERSED
DENSITY: 9.50 LB/G
VISCOSITY: 41.0 S
PH: 11.3
FLUID LOSS: 5.2 C3
SOURCE OF SAMPLE: FLOWLINE
RM: 2.010 OHMM AT 78.0 DEGF
RMF: 2.320 OHMM AT 68.0 DEGF
RMC: 2.610 OHMM AT 67.0 DEGF
SOURCE RMF/RMC: MEAS/MEAS
RM AT BHT: 1.643 OHMM AT 97.0 DEGF
RMF AT BHT: 1.673 OHMM AT 97.0 DEGF
RMC AT BHT: 1.857 OHMM AT 97.0 DEGF

TIME CIRC. STOPPED: 1530 10/13
TIME LOGGER ON BTM.: 1900 10/13

MAX. REC. TEMP: 97.0 DEGF

LOGGING UNIT NO: 8128
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: BLAZE
WITNESSED BY: JACKSON

REMARKS:

RIG: H&C #5

EQUIPMENT NUMBERS-

DIS 1181	DIC 658	PGS 542	PDH 340
GSR 6608	SFT 1171	CNC 1132	

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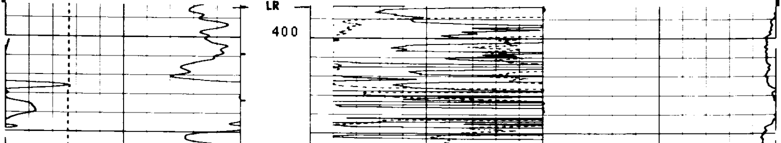
CP 28.4A FILE 2 13-OCT-86 20:07
DATA ACQUIRED 13-OCT-86 19:51

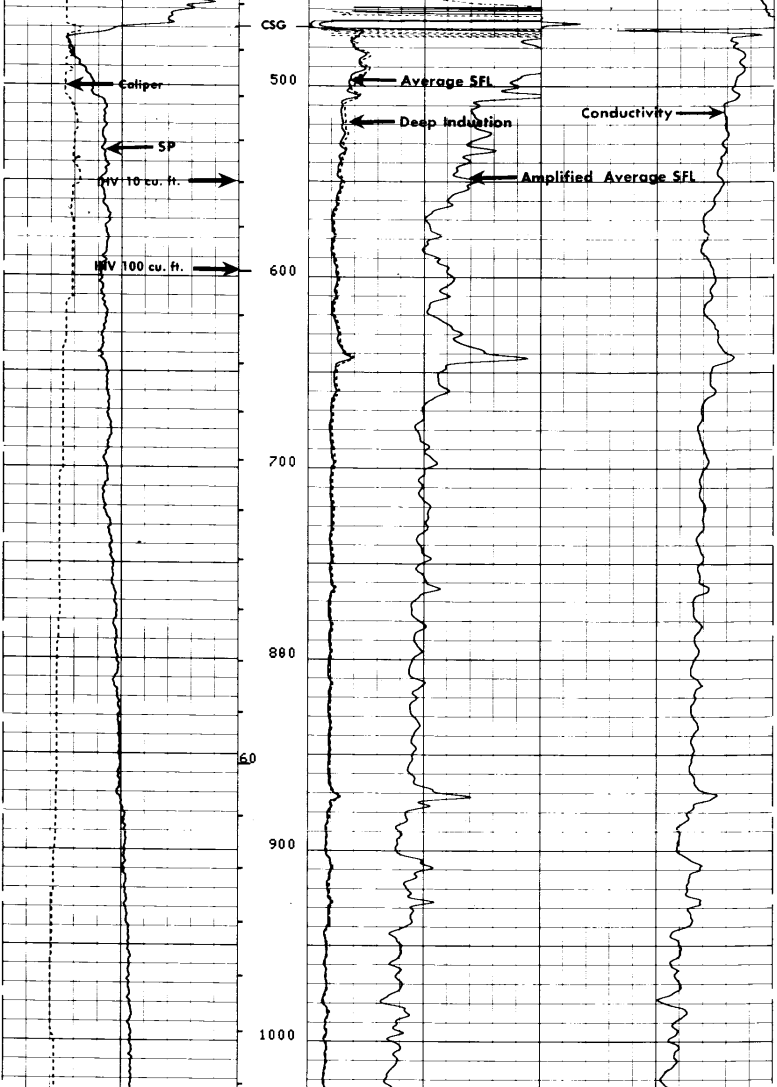
EVENT MARK SUMMARY:

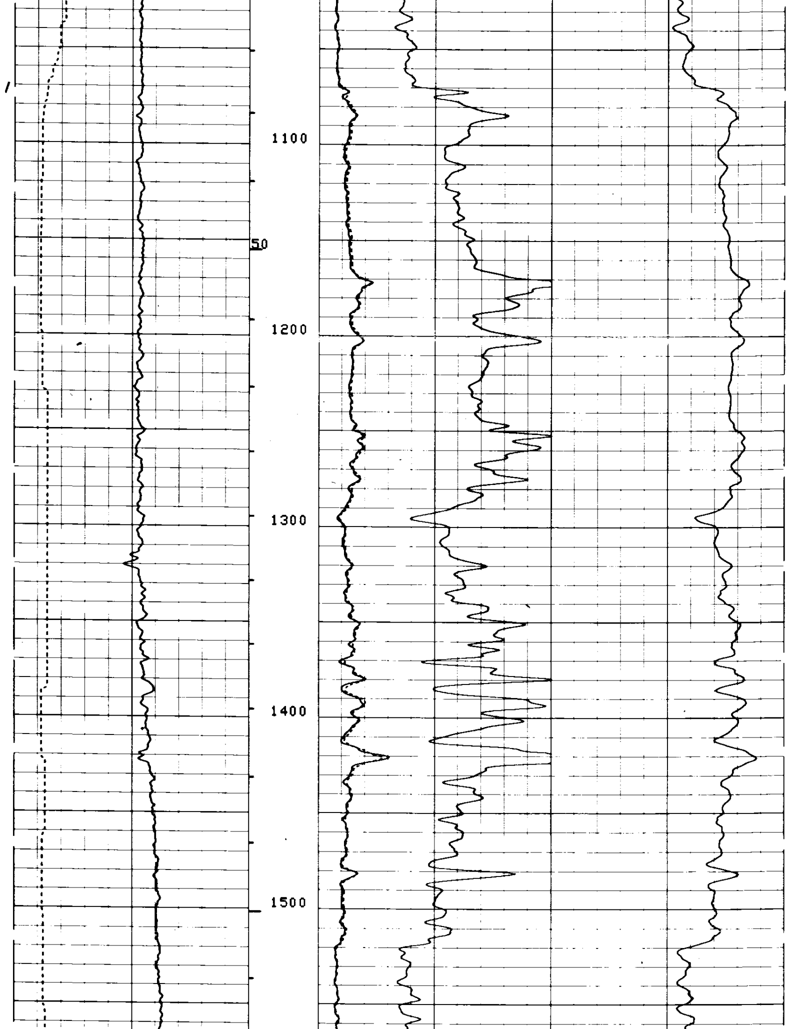
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE

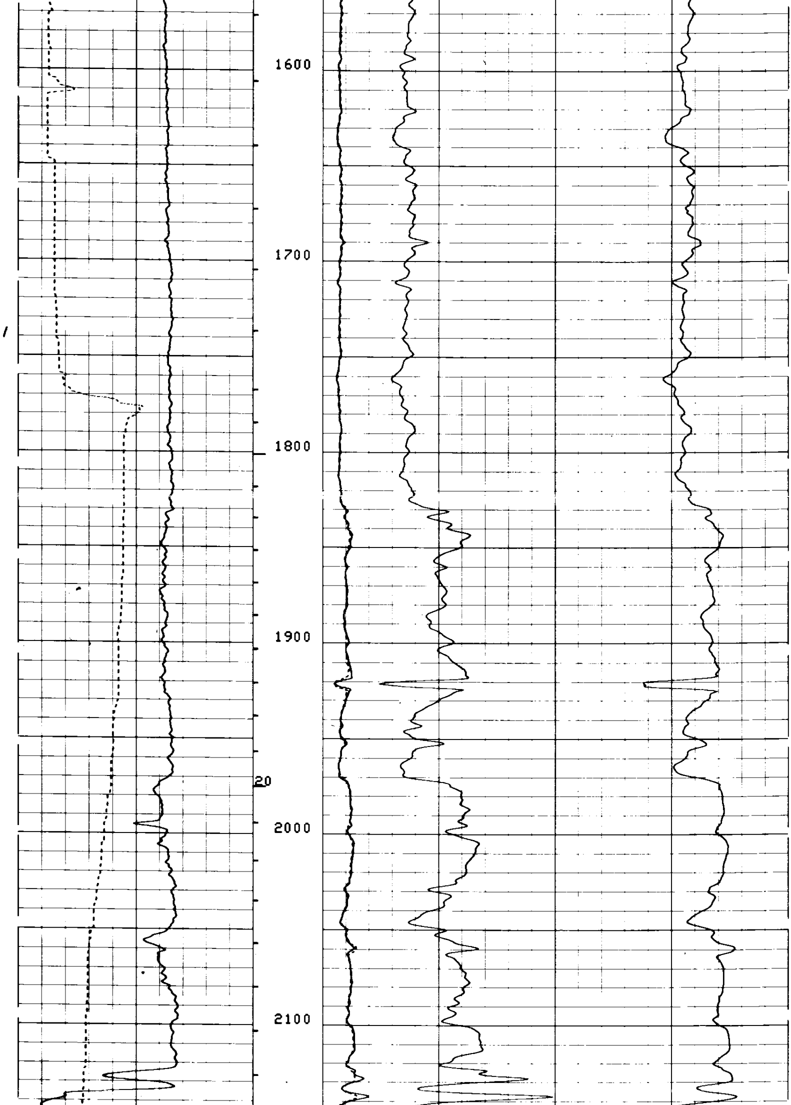
		ILD (OHMM) 0.0 30.000	
CALI(IN) 6.0000 16.000		SFLA(OHMM) 0.0 6.0000	
SP (MV) -100.0 0.0		SFLA(OHMM) 0.0 30.000	CILD(MMHO) 1000.0 0.0

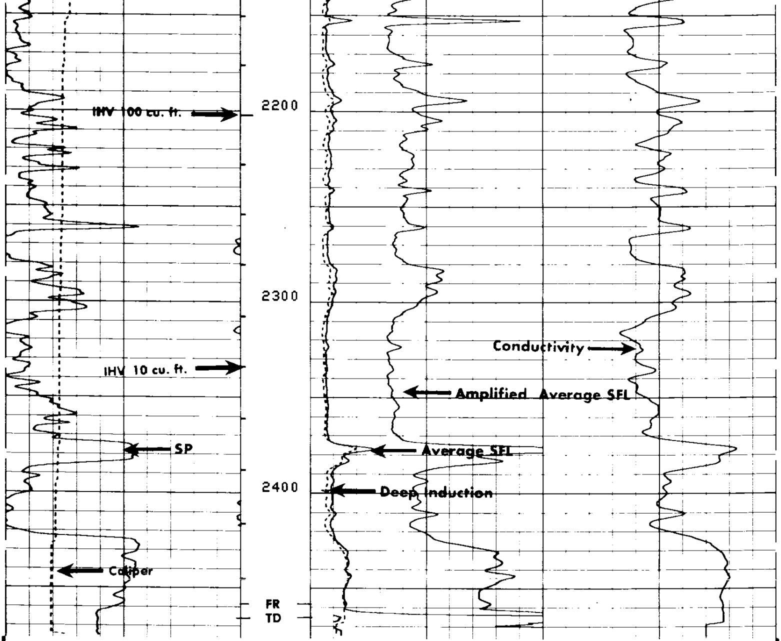
CP 28.4A FILE 2 13-OCT-86 20:02
DATA ACQUIRED 13-OCT-86 19:51











CP 28.4A

FILE 2 13-OCT-86 19:58
DATA ACQUIRED 13-OCT-86 19:05

CALI(IN)
6.0000 16.000
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 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

CDTS	100.000		SPFS	R-H	
DTF	189.000	US/F	DTM	56.0000	US/F
DSIN	5	US	DDEL	200	US
DSEC	9.40000	MMHO	DWCO	512	
MSEC	2.90000	MMHO	SBR	1.00000	OHMM
BHS	OPEN		FPHI	SPHI	
DO	0.0	F	BS	8.50000	IN
PP	NORM				

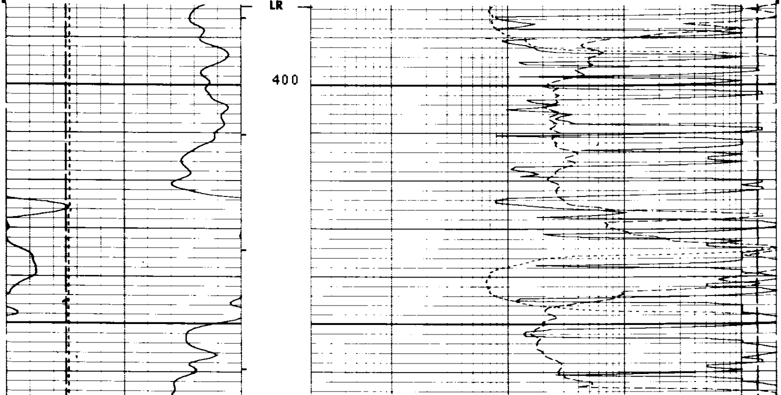
TAPE NOT MADE

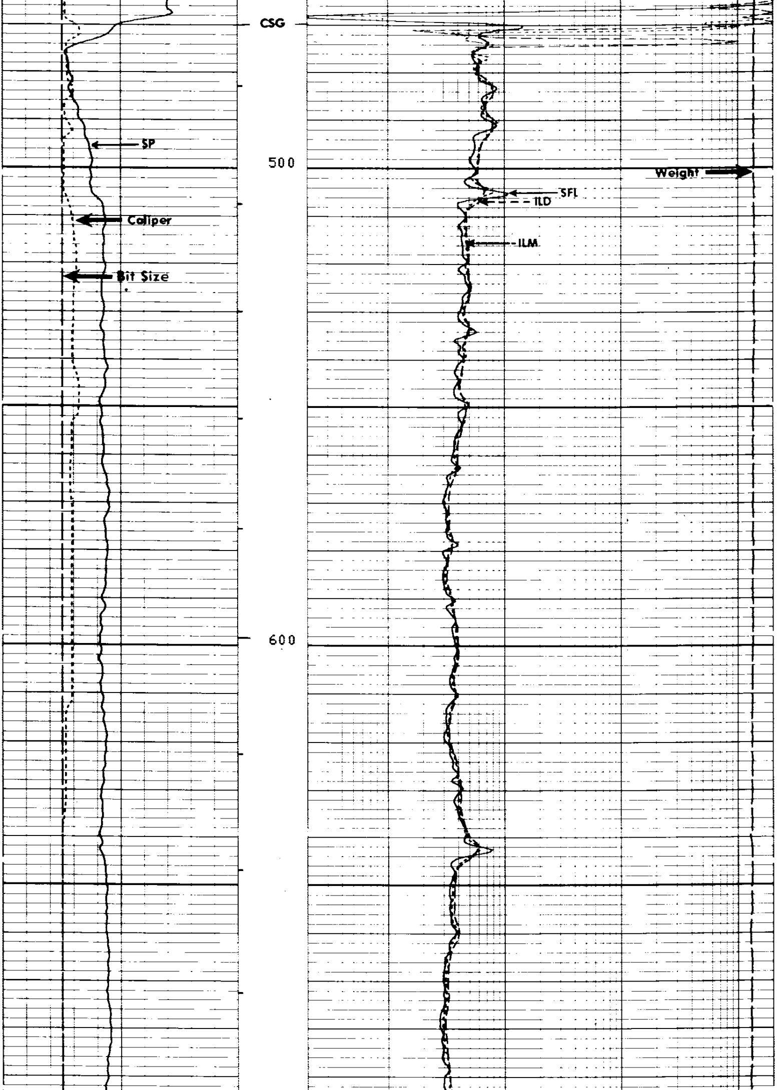
EVENT MARK SUMMARY:

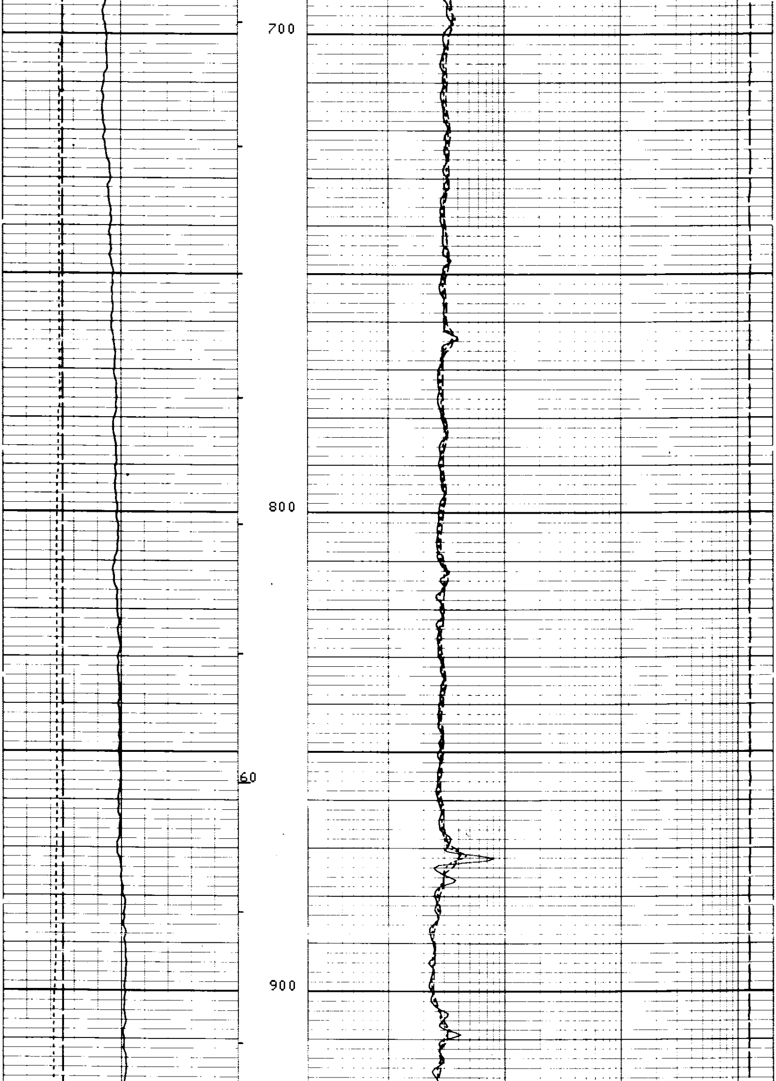
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE

Curve	Left	Right
TENS(LB)	10000.	0.0
BS (IN)	6.0000	16.000
ILD (OHMM)	.20000	2000.0
CALI(IN)	6.0000	16.000
ILM (OHMM)	.20000	2000.0
SP (MV)	-100.0	0.0
SFLU(OHMM)	.20000	2000.0

CP 28.4A FILE 2 13-OCT-86 19:51







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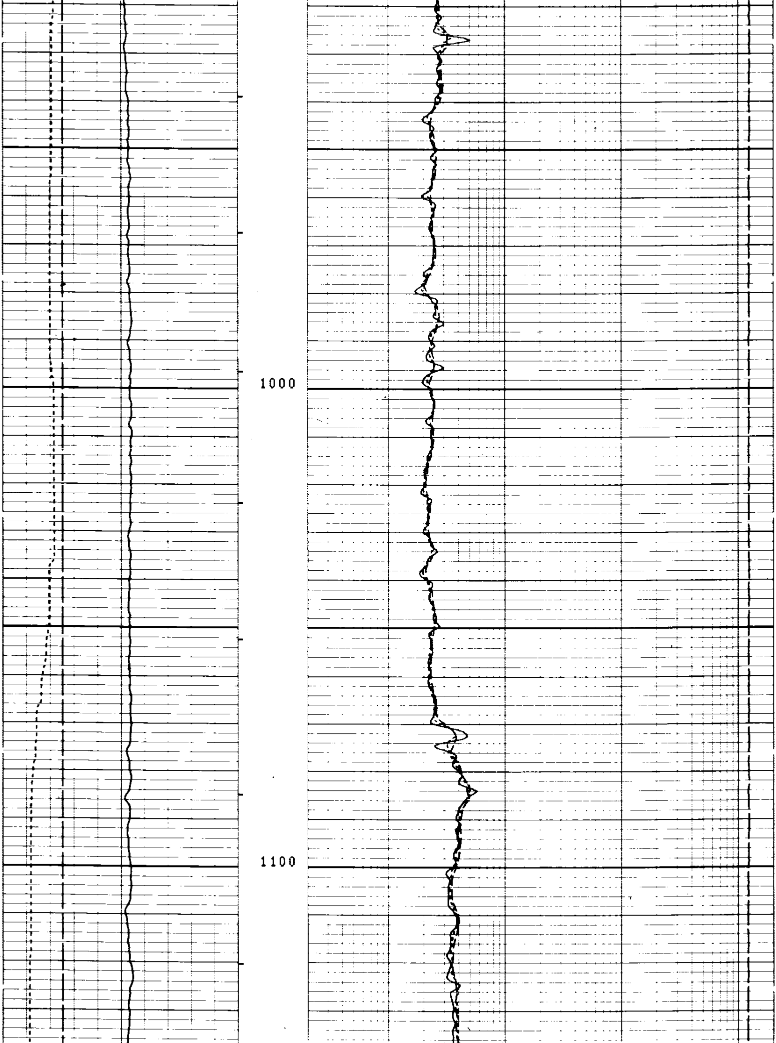
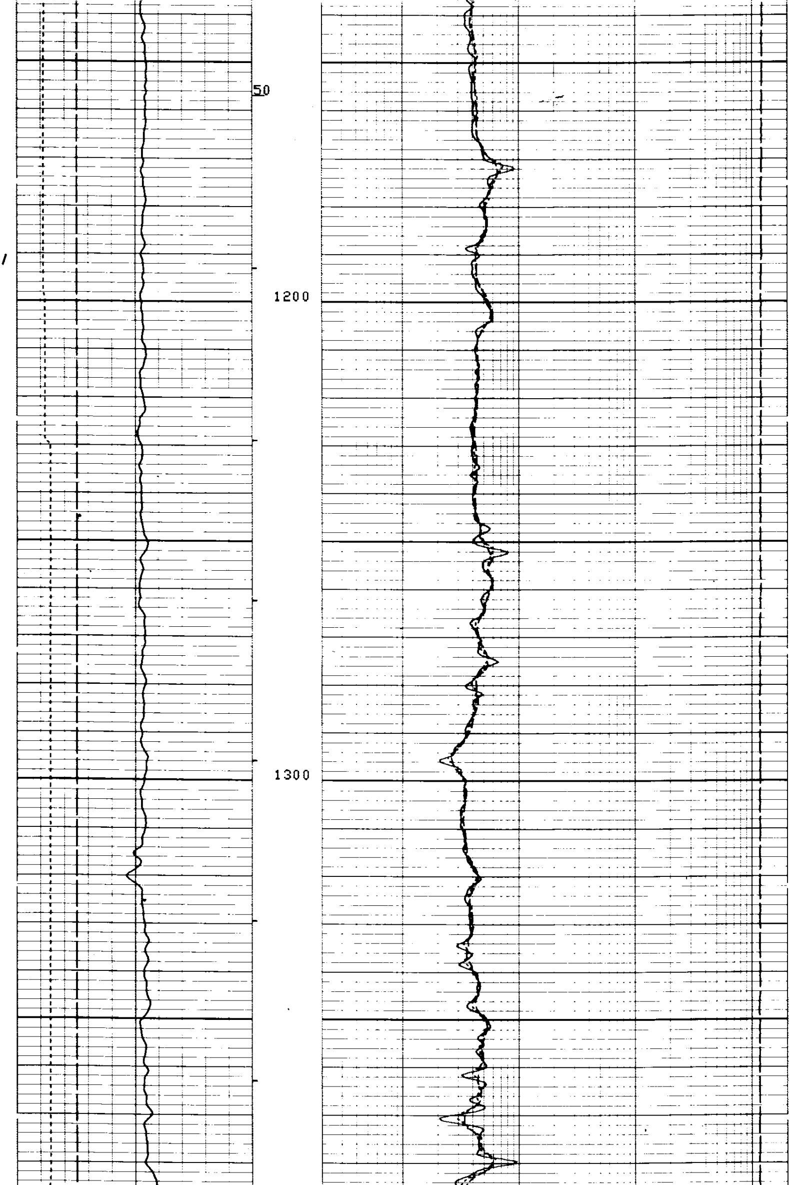
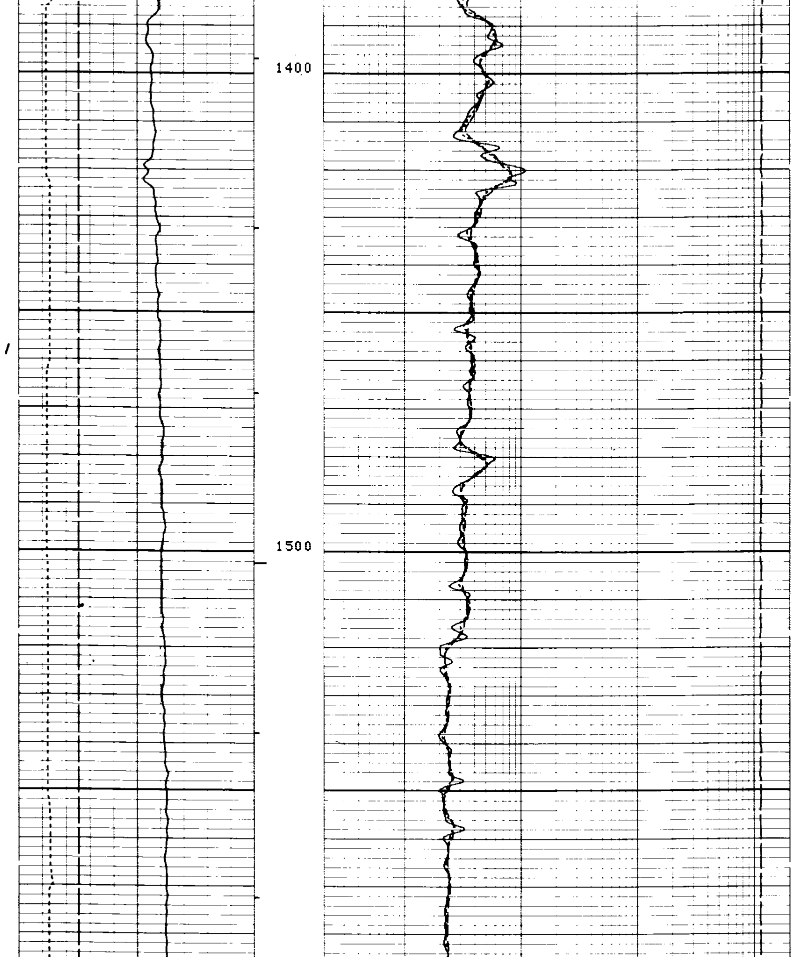
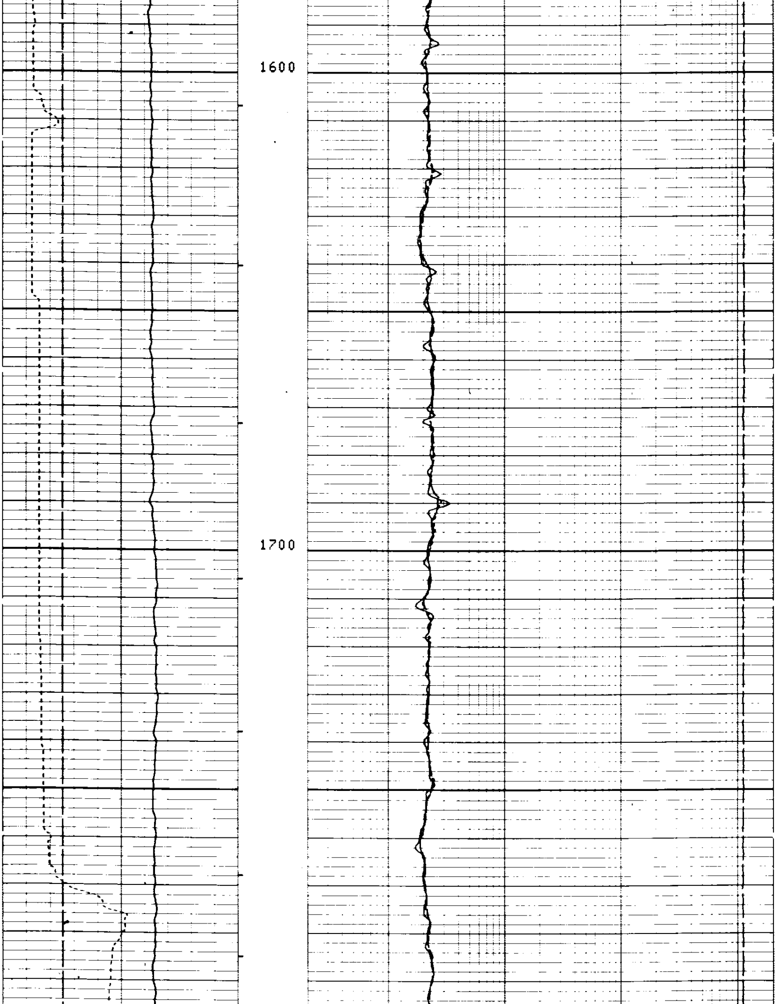
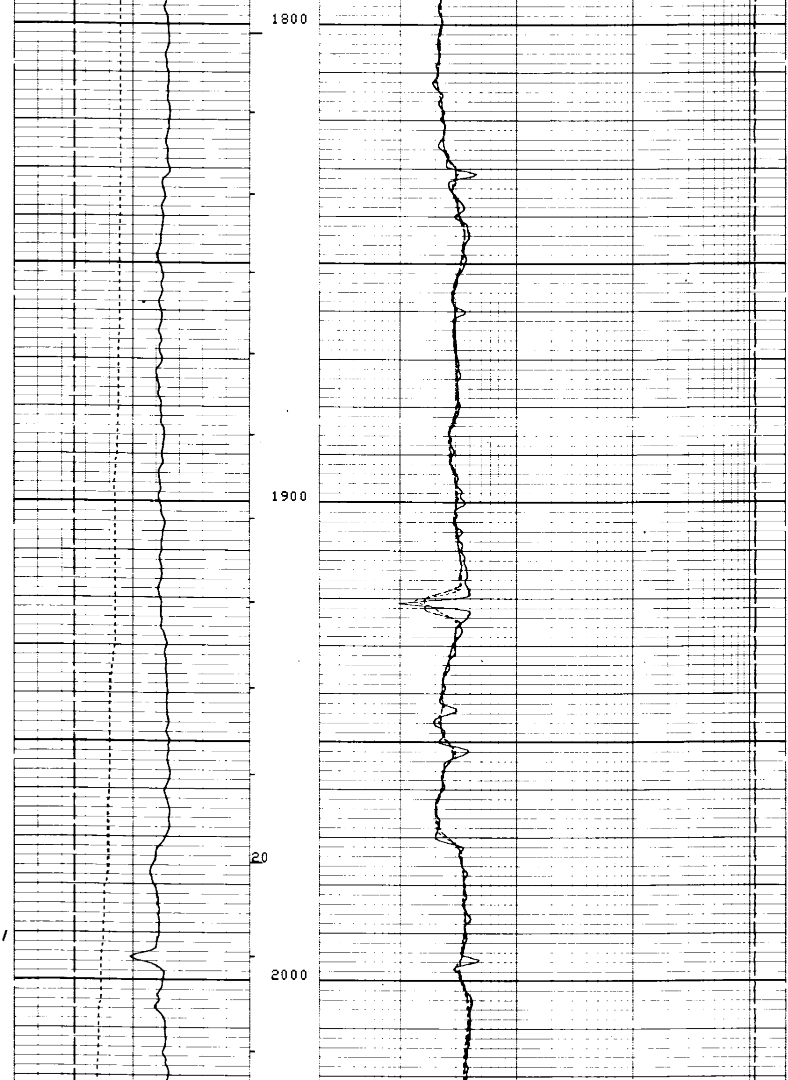
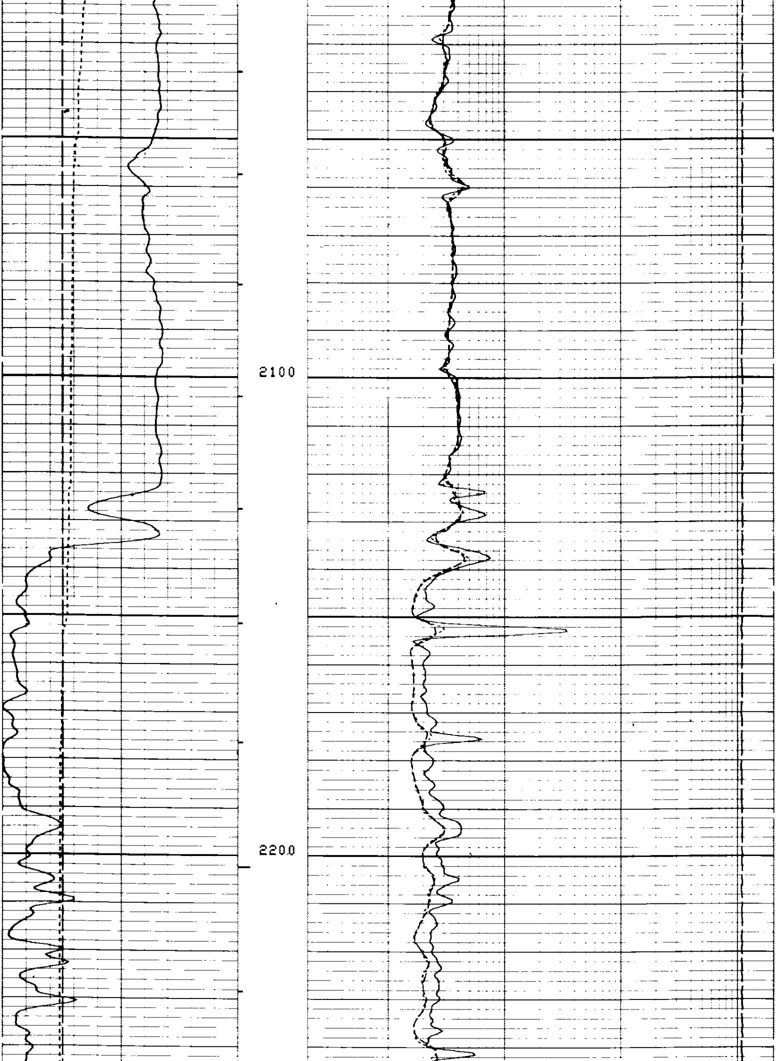


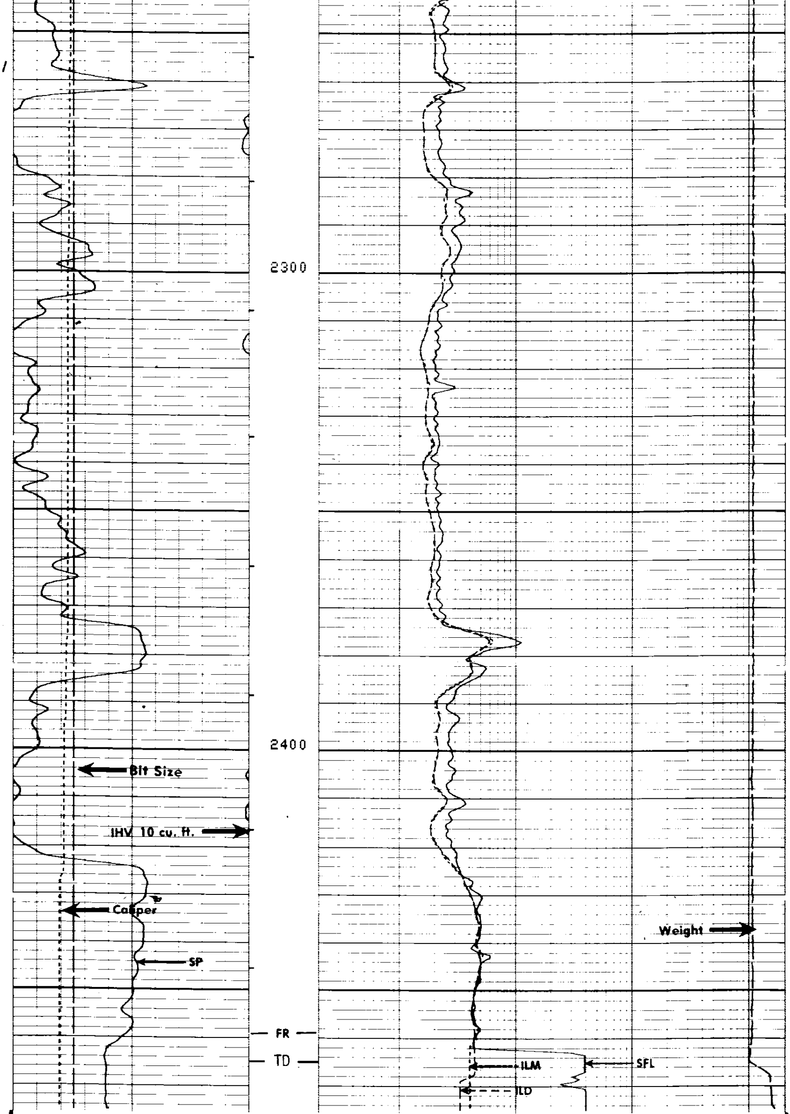












CP 28.4A FILE 2 13-OCT-86 19:05

BS (IN)		TENS(LB)
6.0000 … 16.000		10000. … 0.0
CALI(IN)		ILD (OHMM)
6.0000 … 16.000		.20000 … 2000.0
SP (MV)		ILM (OHMM)
-100.0 … 0.0		.20000 … 2000.0
		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
CDTS	100.000		SPFS	R-H	
DTF	189.000	US/F	DTM	56.0000	US/F
DSIN	5	US	DDEL	200	US
DSEC	9.40000	MMHO	DWCO	512	
MSEC	2.90000	MMHO	SBR	1.00000	OHMM
BHS	OPEN		FPHI	SPHI	
BS	8.50000	IN			

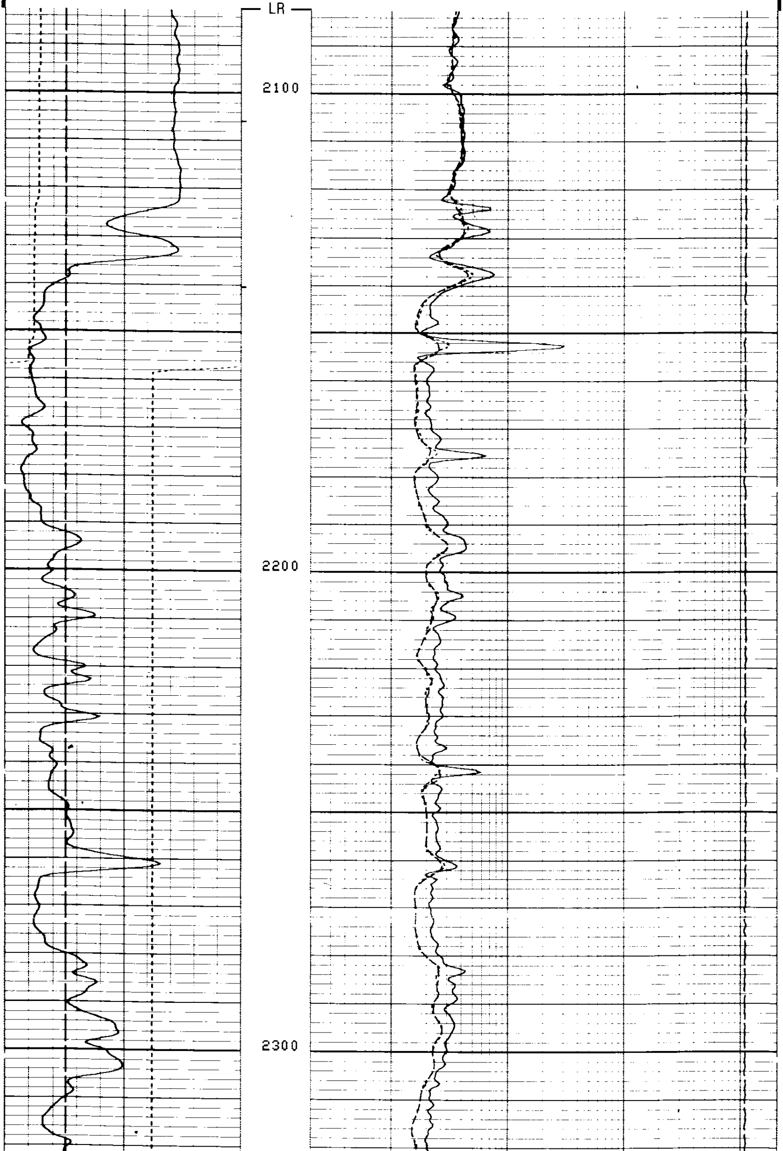
EVENT MARK SUMMARY:

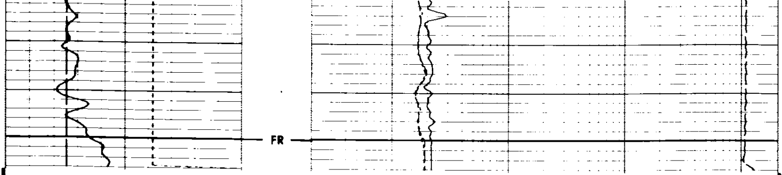
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE

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

REPEAT SECTION

CP 28.4A FILE 1 13-OCT-86 18:54





CP 28.4A FILE 1 13-OCT-86 18:49 **REPEAT SECTION**

Curve	Left	Right
BS (IN)	6.0000	16.000
CALI(IN)	6.0000	16.000
SP (MV)	-100.0	0.0
TENS(LB)	10000.	0.0
ILD (OHMM)	.20000	2000.0
ILM (OHMM)	.20000	2000.0
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
CDTS	100.000		SPFS	R-H	
DTF	189.000	US/F	DTM	56.0000	US/F
DSIN	5	US	DDEL	200	US
DSEC	9.40000	MMHO	DWCO	512	
MSEC	2.90000	MMHO	SBR	1.00000	OHMM
BHS	OPEN		FPHI	SPHI	
BS	8.50000	IN			

BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED: 13-OCT-86 18:43
PROGRAM FILE: MISN (VERSION 28.4A 86/04/03)

DITD

ELECTRONICS CALIBRATION SUMMARY

	MEASURED		CALIBRATED		
	ZERO	PLUS	ZERO	PLUS	UNITS
ILD	.52	516.6	0.0	494.6	MMHO
ILM	-1.16	495.5	0.0	499.7	MMHO
SFL	-1.40	522.5	0.0	500.0	MMHO

ILD SONDE ERROR CORRECTION : 9.4 MMHO
ILM SONDE ERROR CORRECTION : 2.9 MMHO

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MCDB                      CALIPER CALIBRATION SUMMARY

               MEASURED                              CALIBRATED
            SMALL    LARGE                      SMALL      LARGE         UNITS
  CALI      7.52     10.7                       8.00       12.0           IN

   CP 28.4A             FILE    0         13-OCT-86 18:43
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                    AFTER SURVEY TOOL CHECK SUMMARY


  PERFORMED:      13-OCT-86 19:53
  PROGRAM FILE: MISN   (VERSION    28.4A   86/04/03)


DITD                         TOOL  CHECK

                    ZERO                              PLUS
             BEFORE          AFTER           BEFORE        AFTER       UNITS
   ILD         0.0              .1           494.6         494.2       MMHO
   ILM         0.0            -.0            499.7         502.6       MMHO
   SFL         0.0            -.1            500.0         499.0       MMHO

ILD SONDE ERROR CORRECTION :           9.4 MMHO
ILM SONDE ERROR CORRECTION :           2.9 MMHO

   CP 28.4A             FILE    4         13-OCT-86 19:53
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                    SHOP SUMMARY


  PERFORMED:      08-SEP-86 14:15
  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    -8.8      512.7      0.0        500.0      0.0         494.5    MMHO
   ILM    -1.6      504.8      0.0        500.0      0.0         499.5    MMHO
ILD  SONDE ERROR CORRECTION :          9.4 MMHO
ILM  SONDE ERROR CORRECTION :          2.9 MMHO

                        (IS:1181, IC:658 )
```

COMPANY ARCO OIL AND GAS

WELL CAVENHAM FOREST IND. #41-9 RD #1

FIELD MIST

COUNTY COLUMBIA STATE OREGON

SCHL. FR 2459
SCHL. TD 2501
DRLR. TD 2501

Elev: KB 846.9
DF 845.9
GL 835.9