Schlumberger

5" SONIC

CSU

COMPANY:	ARCO OIL AND GAS
WELL:	COLUMBIA COUNTY 14-23
FIELD:	MIST
COUNTY:	COLUMBIA
STATE:	OREGON
NATION:	USA
LOCATION:	102.97'S& 1099.69' E FR NW COR

SEC: 26 TWP: 6N RGE: 5W

OTHER SERVICES-
LDT CNL
VSP
HDT

PERMANENT DATUM:	GL	ELEVATIONS-	
ELEV. OF PERM. DATUM:	652.7 F	KB:	663.7 F
LOG MEASURED FROM:	KB	DF:	
11.0 F	ABOVE PERM. DATUM	GL:	652.7 F
DRLG. MEASURED FROM:	KB		

PROGRAM
TAPE NO:
28.2A
SERVICE
ORDER NO:
524217

DATE:	11 AUG 86
RUN NO:	1
DEPTH-DRILLER:	2180.0 F
DEPTH-LOGGER:	2180.0 F
BTM. LOG INTERVAL:	2148.0 F
TOP LOG INTERVAL:	432.0 F
CASING-DRILLER:	433.0 F
CASING-LOGGER:	432.0 F
CASING:	9 5/8
WEIGHT:	
BIT SIZE:	8 1/2
DEPTH:	

TYPE FLUID IN HOLE:	LIGNOSULFONATE
DENSITY:	10.50 LB/G
VISCOSITY:	38.0 S
PH:	9.0
FLUID LOSS:	5.8 C3
SOURCE OF SAMPLE:	FLOWLINE
RM:	2.290 OHMM AT 75.0 DEGF
RMF:	3.050 OHMM AT 76.0 DEGF
RMC:	2.290 OHMM AT 76.0 DEGF
SOURCE RMF/RMC:	MEAS/MEAS
RM AT BHT:	1.605 OHMM AT 110. DEGF
RMF AT BHT:	2.164 OHMM AT 110. DEGF
RMC AT BHT:	1.625 OHMM AT 110. DEGF

TIME CIRC. STOPPED: 09:00 8/11
TIME LOGGER ON BTM.: 12*15 8/11

MAX. REC. TEMP: 110.0 DEGF

LOGGING UNIT NO: 8128
LOGGING UNIT LOC: SACRAMENTO
RECORDED BY: HARPER/KUNKLER
WITNESSED BY: SHARP

REMARKS:

CHLORIDES: 1500 MG/L
DIL AND SLT RUN IN COMBINATION.
1.5 INCH STANDOFFS USED ON DIL.
2 CMEZS USED TO CENTRALIZE SONIC.

EQUIPMENT NUMBERS-

SLS 1086	SLC 1259	MCD 305	DIS 1342
DIC 1386	IEM 685	SLM 214	

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 28.2A FILE 9 11-AUG-86 12:59
DATA ACQUIRED 11-AUG-86 12:37

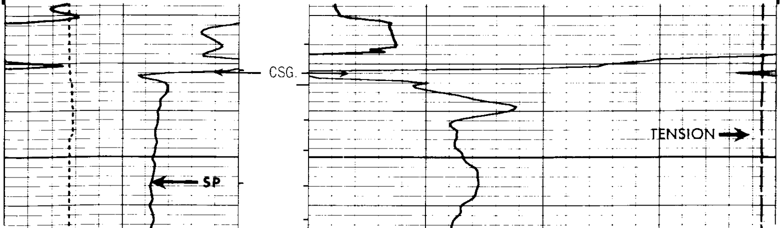
EVENT MARK SUMMARY:

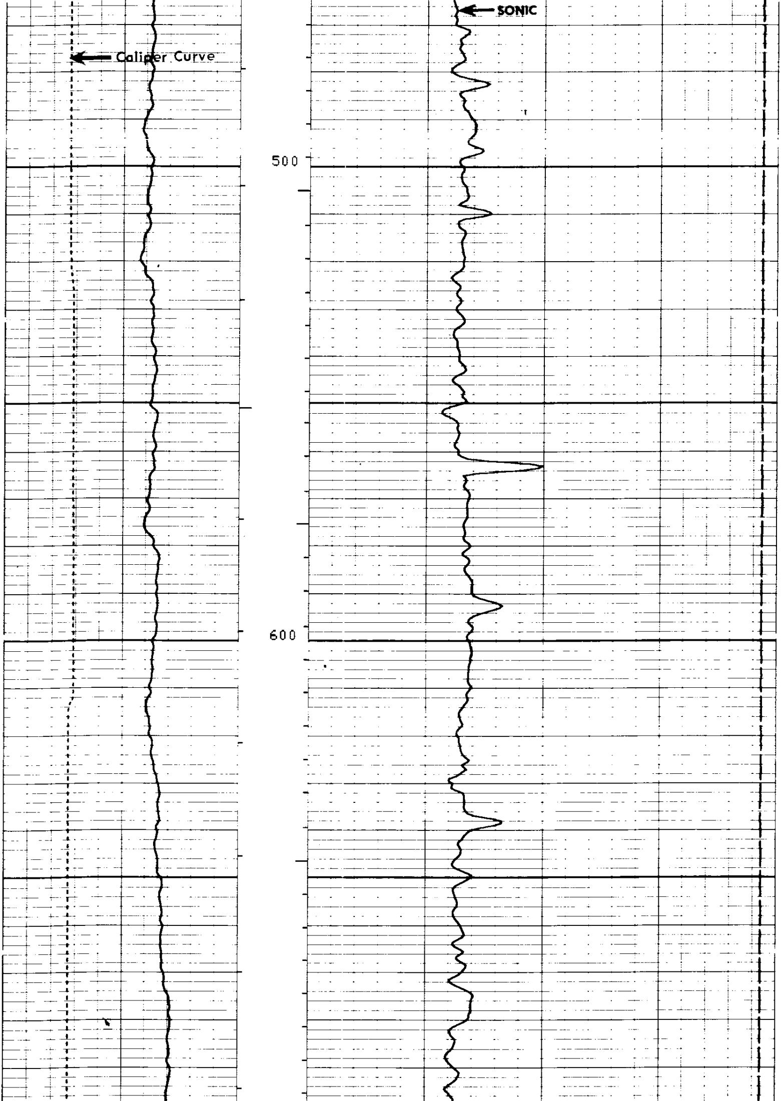
OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
IHV	10.0000 F3	LEFT EDGE
ITT	.00100000 S	RIGHT EDGE

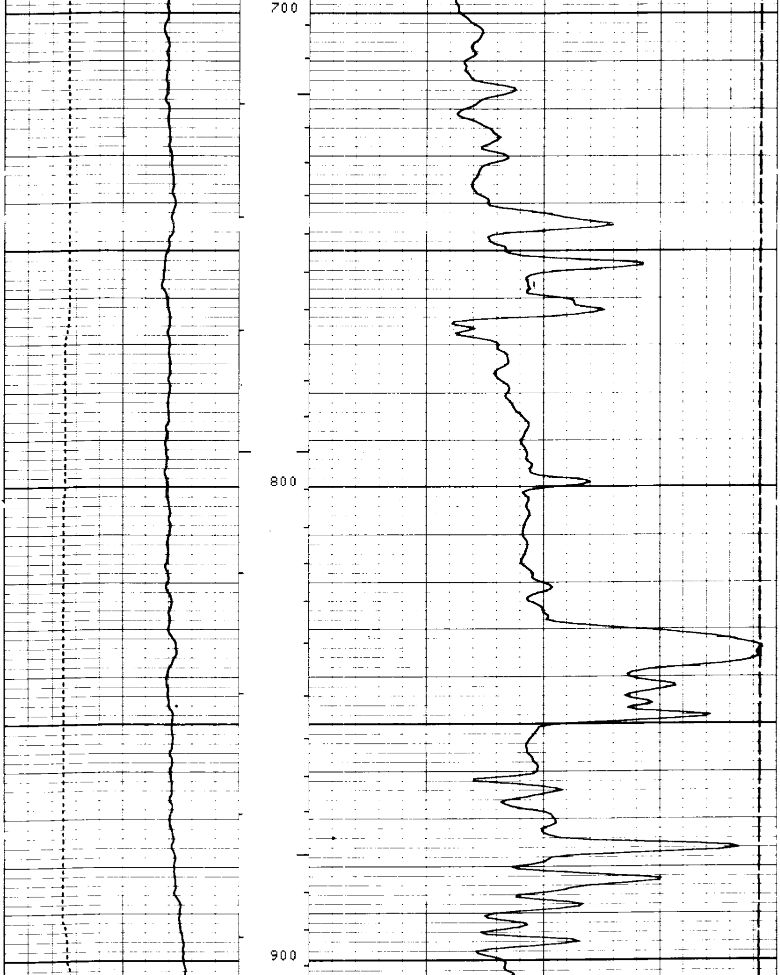
CALI(IN)
6.0000 16.000
SP (MV)
-100.0 0.0

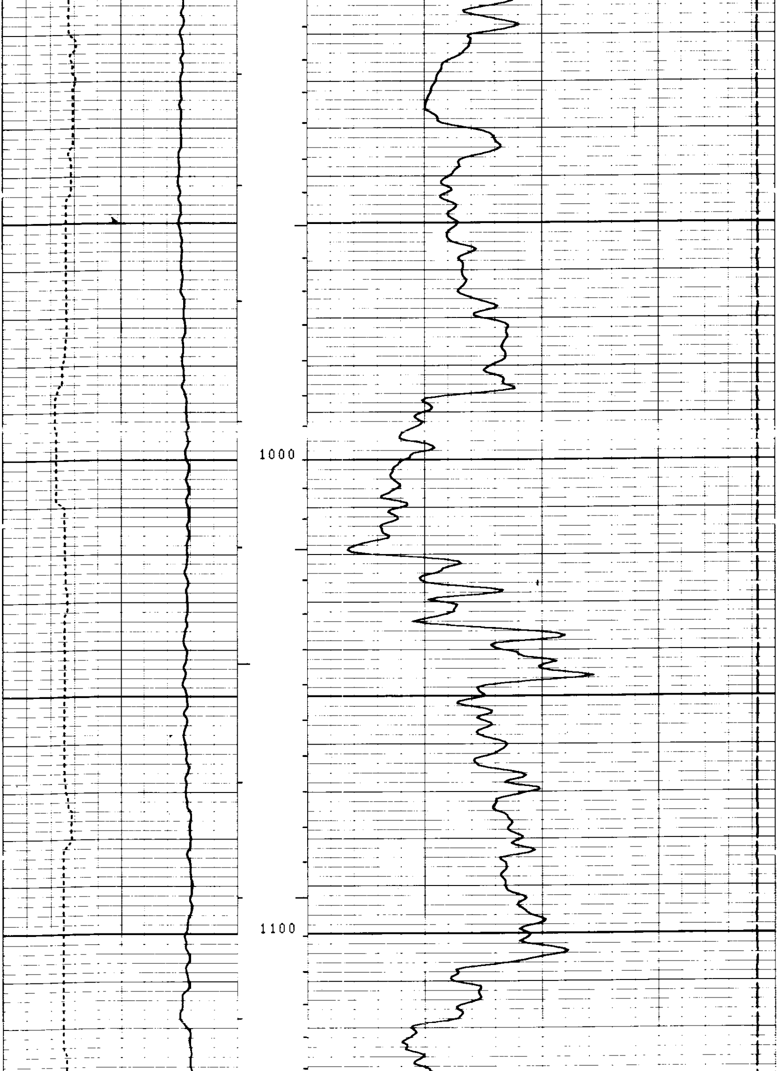
TENS(LB)
10000. 0.0
DT (US/F)
175.00 75.000

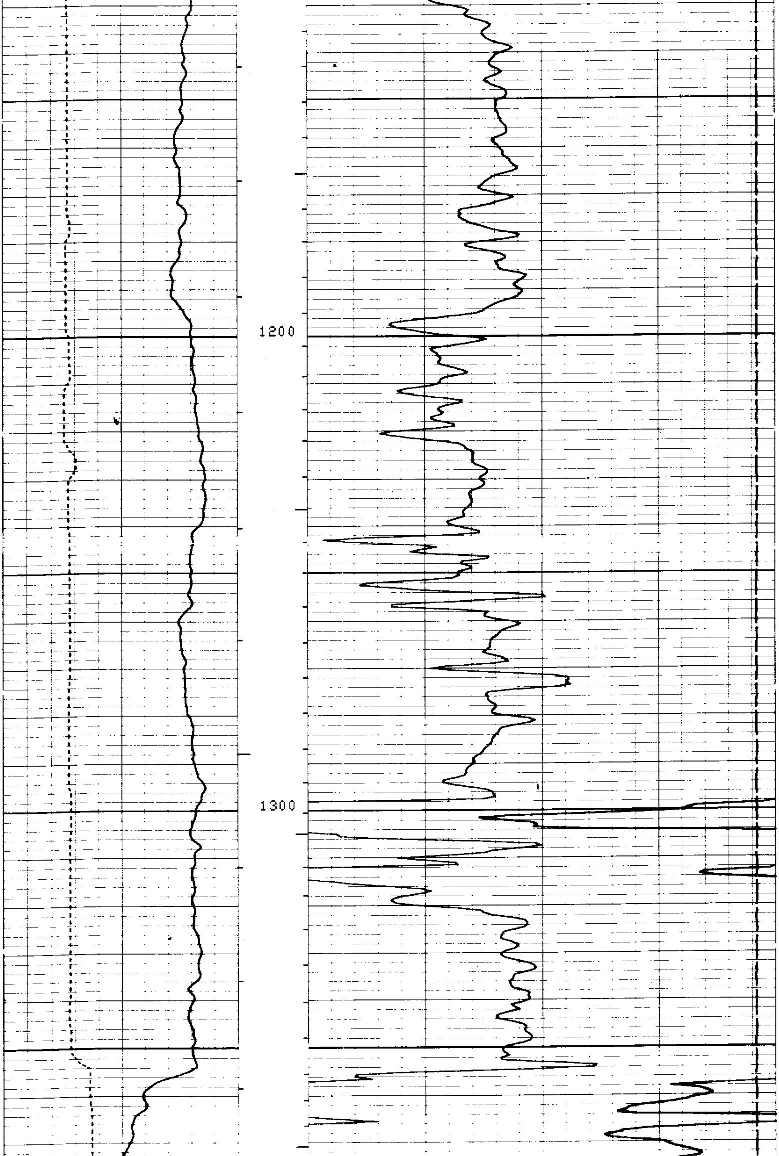
CP 28.2A FILE 9 11-AUG-86 12:37

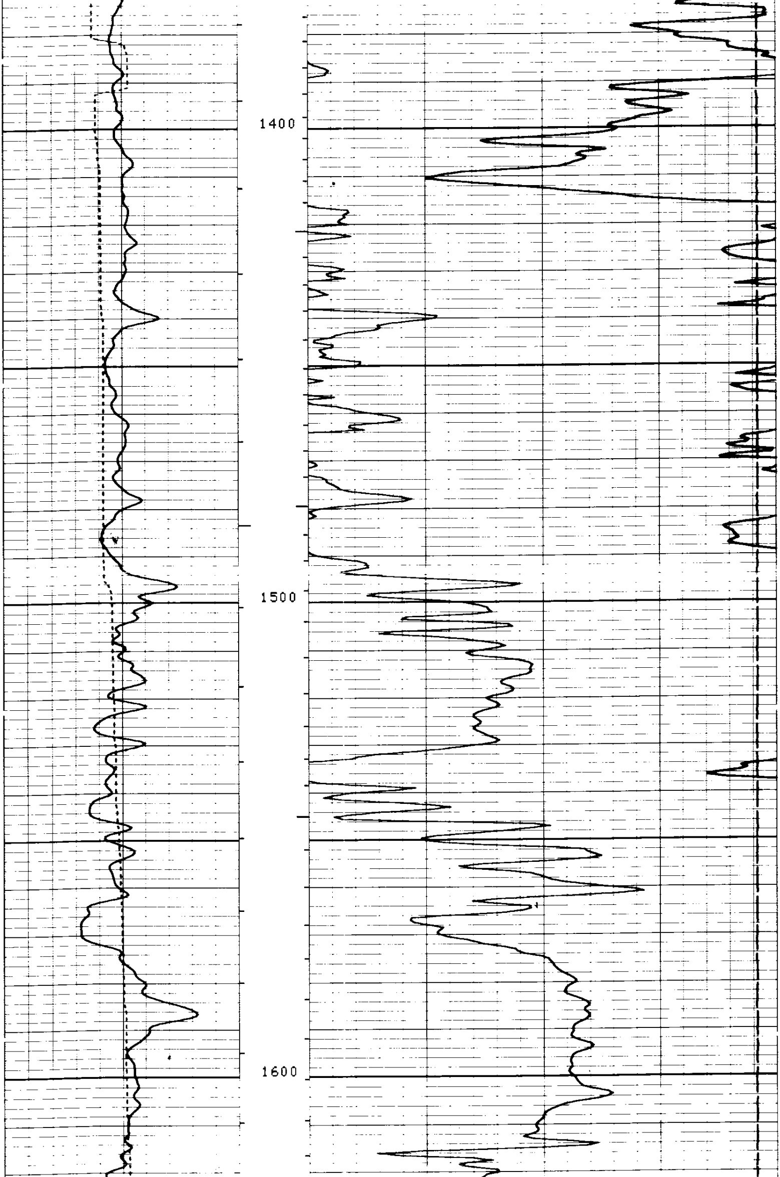


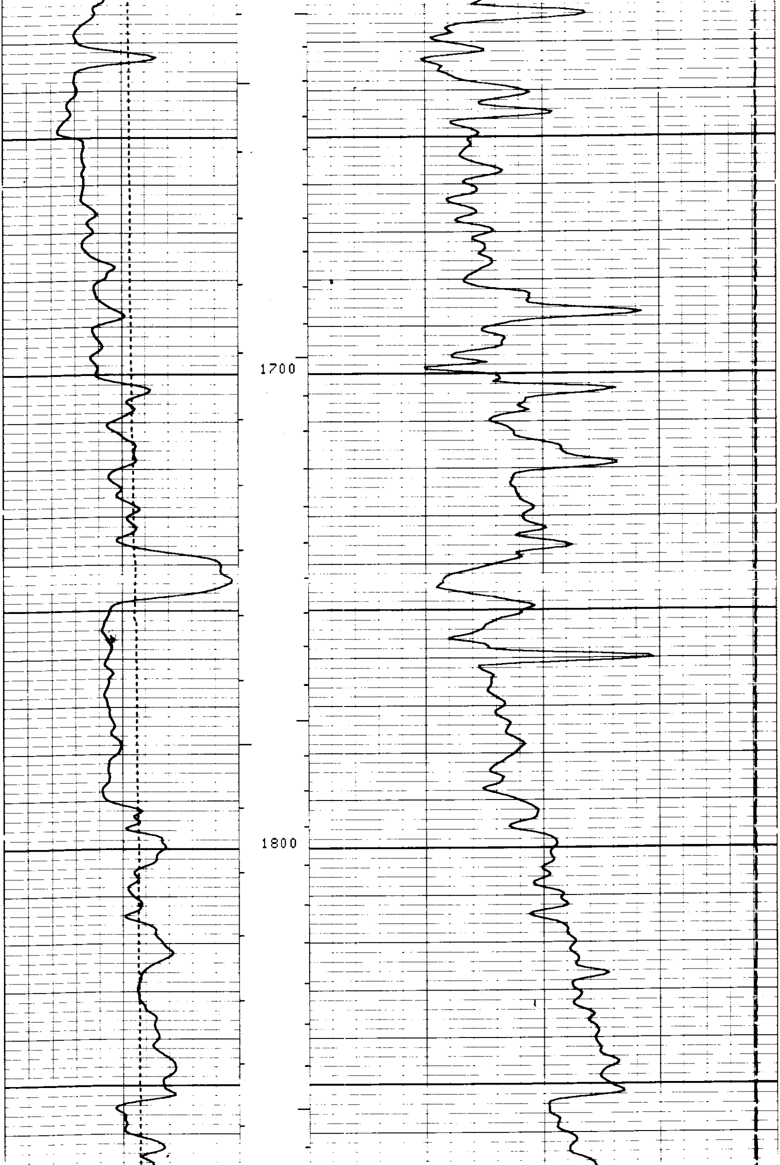


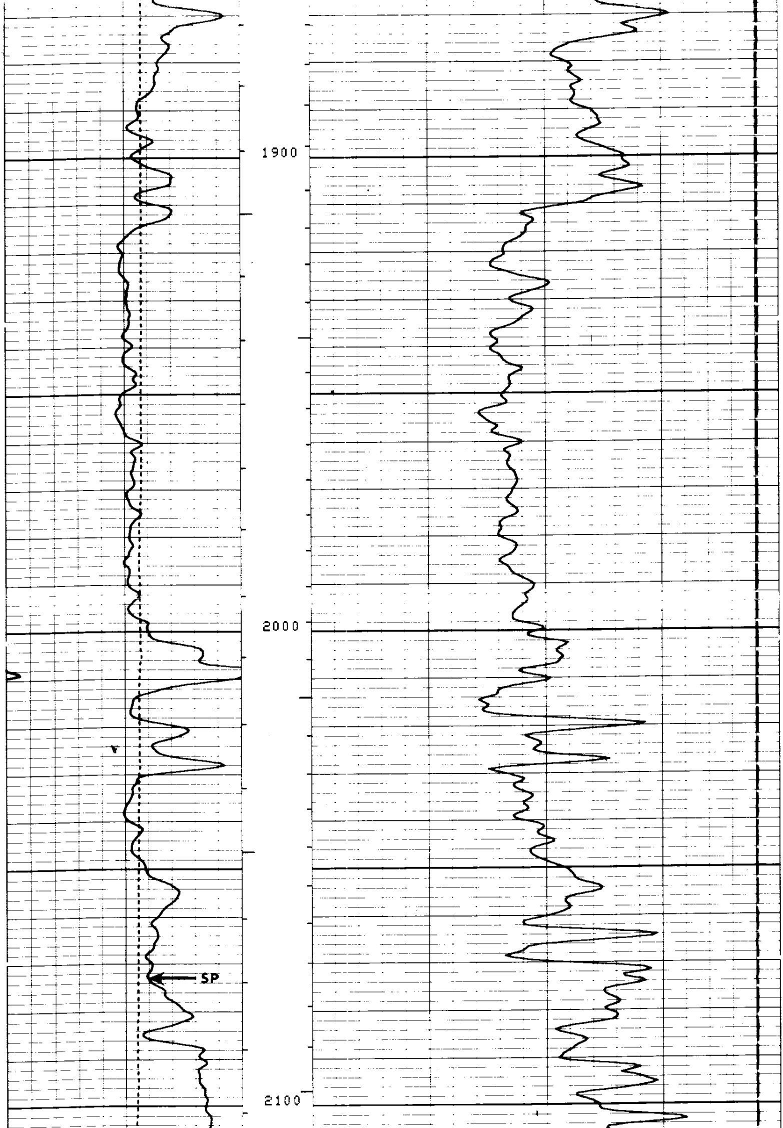


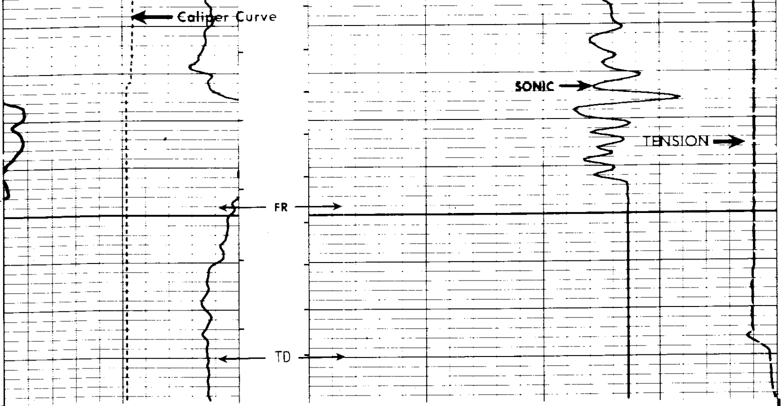












CP 28.2A FILE 9 11-AUG-86 12:10

CALI(IN)	6.0000	16.000	
SP (MV)	-100.0	0.0	
TENS(LB)	10000.	0.0	
DT (US/F)	175.00	75.000	

SENSOR MEASURE POINT TO TOOL ZERO

SRAT	34.6	FEET	AMPL	37.1	FEET
TT1	36.1	FEET	CBL	37.1	FEET
TT3	33.3	FEET	TT2	37.1	FEET
T0	37.1	FEET	TT4	32.3	FEET
SLTT	37.1	FEET	TT	37.1	FEET
CALI	56.2	FEET	SCBL	37.1	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	6.80000	MMHO	DWCO	512	
MSEC	8.40000	MMHO	SBR	1.00000	OHMM
BHS	OPEN		FPHI	SPHI	
BS	8.50000	IN			

```
EVENT MARK SUMMARY:

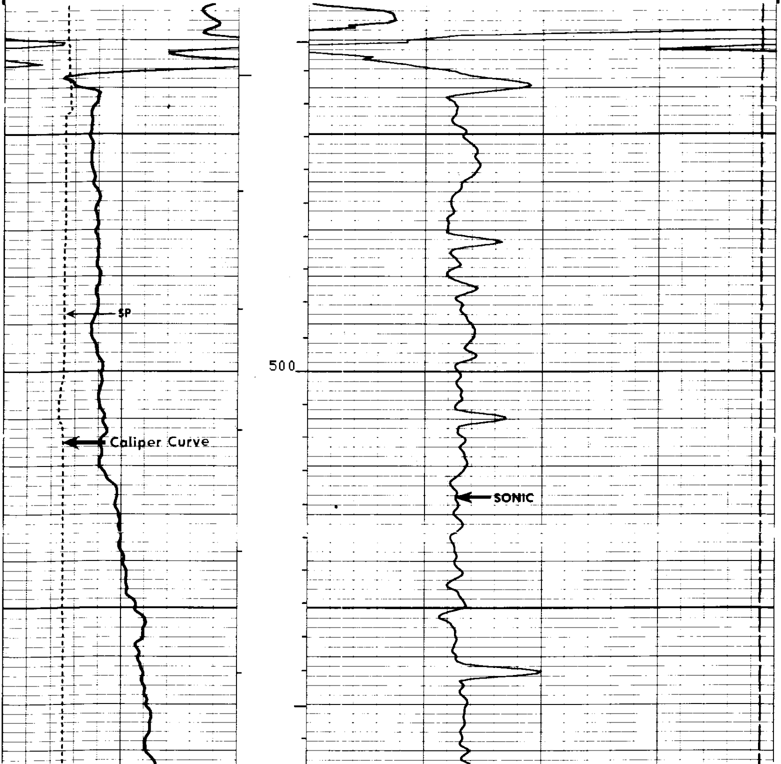
OUTPUT   INTERVAL          DEPTH TRACK
         BETWEEN PIPS      EDGE

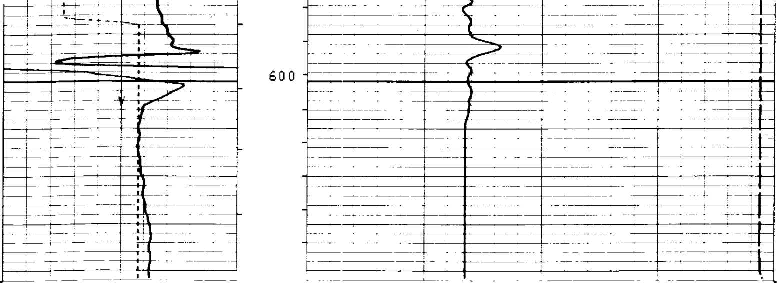
IHV      10.0000 F3        LEFT EDGE
ITT      .00100000 S       RIGHT EDGE
```

```
      CALI(IN  )                                              TENS(LB   )
6.0000              16.000                        10000.                   0.0
      SP   (MV   )                                 DT   (US/F)
-100.0                 0.0     175.00                                   75.000
```

REPEAT SECTION REPEAT SECTION REPEAT SECTION

CP 28.2A FILE 10 11-AUG-86 12:41





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CP 28.2A           FILE   10       11-AUG-86 12:38
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      CALI(IN  )                                                    TENS(LB   )
6.0000             16.000                              10000.                        0.0
      SP   (MV   )                                             DT   (US/F)
-100.0               0.0           175.00                                        75.000
```

```
                       SENSOR MEASURE POINT TO TOOL ZERO

           SRAT 34.6   FEET                             AMPL 37.1  FEET
           TT1  36.1   FEET                             CBL  37.1  FEET
           TT3  33.3   FEET                             TT2  37.1  FEET
           T0   37.1   FEET                             TT4  32.3  FEET
           SLTT 37.1   FEET                             TT   37.1  FEET
           CALI 56.2   FEET                             SCBL 37.1  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 6.80000       MMHO                      DWCO 512
         MSEC 8.40000       MMHO                      SBR  1.00000       OHMM
         BHS  OPEN                                    FPHI SPHI
         BS   8.50000       IN
```

```
   EVENT MARK SUMMARY:

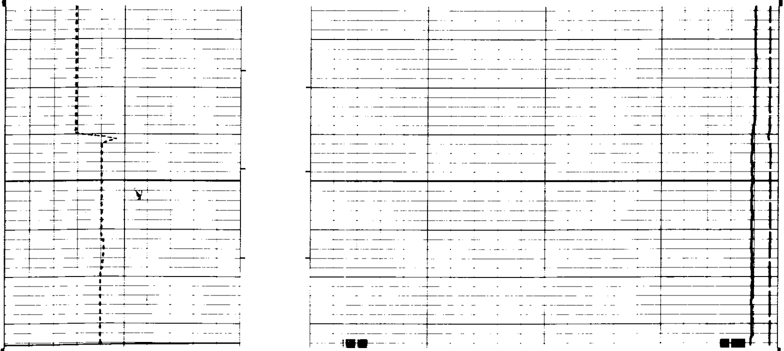
   OUTPUT   INTERVAL         DEPTH TRACK
            BETWEEN PIPS     EDGE
```

IHV 10.0000 F3 LEFT EDGE
ITT .00100000 S RIGHT EDGE

CALI(IN)
6.0000 16.000
SP (MV)
-100.0 0.0

TENS(LB)
10000. 0.0
DT (US/F)
150.00 50.000

CP 28.2A FILE 3 11-AUG-86 11:52



CP 28.2A FILE 3 11-AUG-86 11:51

COMPANY ARCO OIL AND GAS
WELL COLUMBIA COUNTY 14-23
FIELD MIST
COUNTY COLUMBIA STATE OREGON

SCHL. FR 2148
SCHL. TD 2180
DRLR. TD 2180

Elev: KB 663.7
DF
GL 652.7