Western Atlas International
Atlas Wireline Services

DUAL INDUCTION FOCUSED LOG

FILE NO. 2922
API NO.

5" = 100'

COMPANY ARCO OIL & GAS COMPANY
WELL BENSON TIMBER 14- 7-64
FIELD MIST
COUNTY COLUMBIA STATE OR.

LOCATION:
1069' N. & 308' E. FROM SW CORNER.
SEC 7 TWP 6N RGE 4W

OTHER SERVICES
BHC - AC/GR

PERMANENT DATUM GL ELEV. 934'
LOGGING MEASURED FROM KB 10' FT. ABOVE P.D.
DRILLING MEASURED FROM KB

ELEVATIONS
KB 944'
DF --
GL 934'

FINAL PRINT

DATE	10-14-88				
RUN	1				
SERVICE ORDER	159111				
DEPTH-DRILLER	2506'				
DEPTH-LOGGER	2504'				
BOTTOM LOGGED INTERVAL	2502'				
TOP LOGGED INTERVAL	1076'				
CASING - DRILLER	9 5/8"	@ 1082'	@	@	@
CASING - LOGGER	1076'				
BIT SIZE	6 1/4"				
TYPE FLUID IN HOLE	EZ MUD				
DENSITY / VISCOSITY	9.8	40			
PH / FLUID LOSS	9.5	8.2			
SOURCE OF SAMPLE	FLOWLINE				
RM AT MEAS. TEMP.	2.80	@ 50 DEG. F	@	@	@
RMF AT MEAS. TEMP.	2.20	@ 50 DEG. F	@	@	@
RMC AT MEAS. TEMP.	3.25	@ 50 DEG. F	@	@	@
SOURCE OF RMF / RMC	M	M			
RM AT BHT	1.40	@ 100 DEG. F	@	@	@
TIME SINCE CIRCULATION	2 HRS				
MAX. REC. TEMP. DEG. F	100 DEG. F				
EQUIP. NO. / LOC.	6406	SACRAMENTO			
RECORDED BY	M. HINDS				
WITNESSED BY	MS. L. FEDORSIN				

FOLD HERE

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASURMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS RUN (1)

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1	1	DIFL	33304	1503	FREE
1	1	AC	79726	1609-1603	CENT.
1	1	GR	60484	1309	FREE
1	1	CAL	79090	4209	CENT.

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	2164 TO 1501	0.000	
M	2164 TO 1501	0.000	
O.D.	2164 TO 1501	3.500	INCH
DEL-T F	2164 TO 1501	0.000	MI.S FT

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DEL-T M    2164 TO  1501  ***********  MICS FT

DEL-T S    2164 TO  1501  ***********  MICS FT




           DISPLAY SCALE CHANGES

               *** NONE ***
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COMPANY:    ARCO OIL & GAS COMPANY                          RUN:  1

WELL NAME:  14 - 17- 64                                     TRIP: 1

SERVICE:    RC214N         FILE:   4       DATE:  10 14 88    TIME:  02:20:53

REVISION:   RSYBAL REV G508 VER 1                           MODE: RECORD
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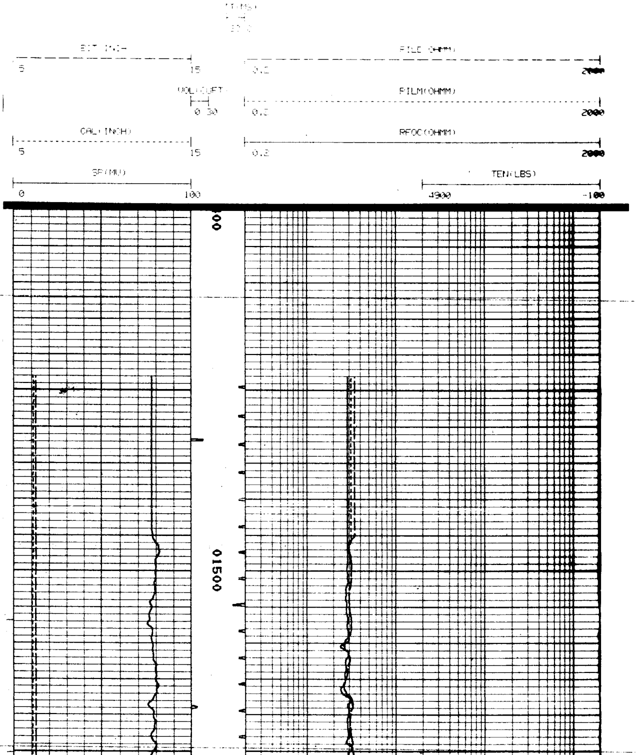
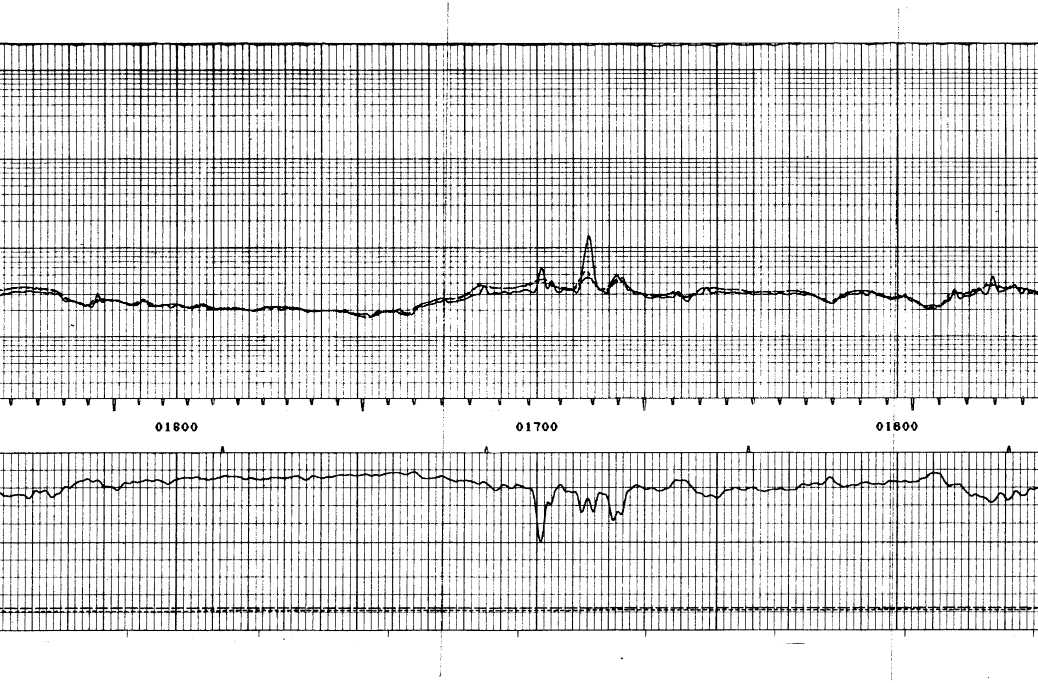
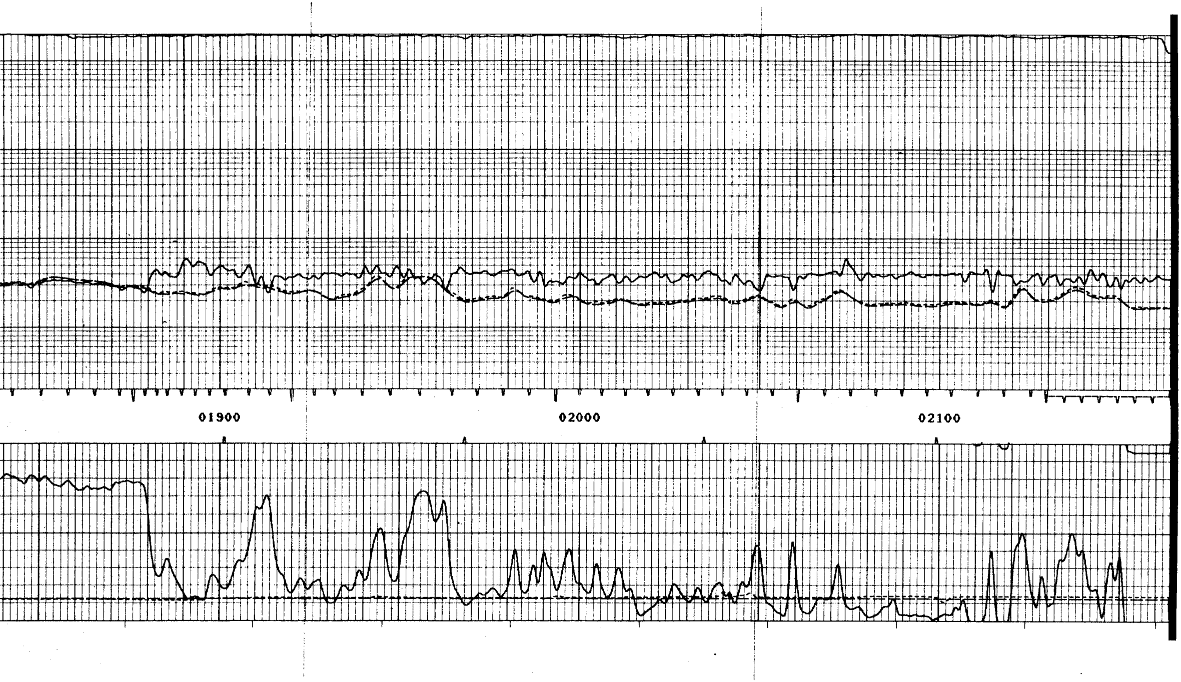
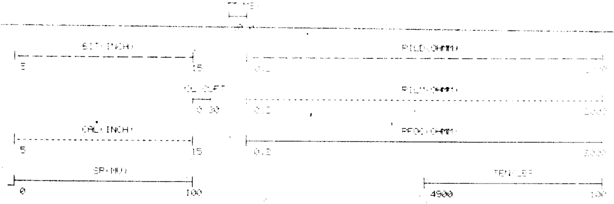
REPEAT SECTION









CURVE DELAYS

CURVE	DELAY	UNITS
CFOC	0	FT.IN
CILM	6.0	FT.IN
CILD	9.3	FT.IN
SP	9.3	FT.IN
GR	42.9	FT.IN
CAL	53.3	FT.IN
ACQ	31.9	FT.IN
AC	31.9	FT.IN

PARAMETERS

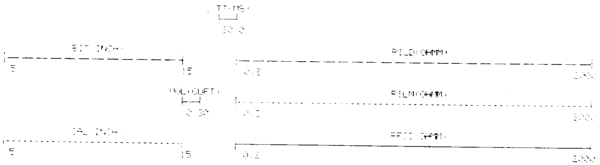
NAME	DEPTH INTERVAL	VALUE	UNITS
A	2514 TO 1075	0.000	
M	2514 TO 1075	0.000	
O.D.	2514 TO 1075	3.500	INCH
DEL-T F	2514 TO 1075	0.000	MICS FT
DEL-T M	2514 TO 1075	***********	MICS FT
DEL-T S	2514 TO 1075	***********	MICS/FT

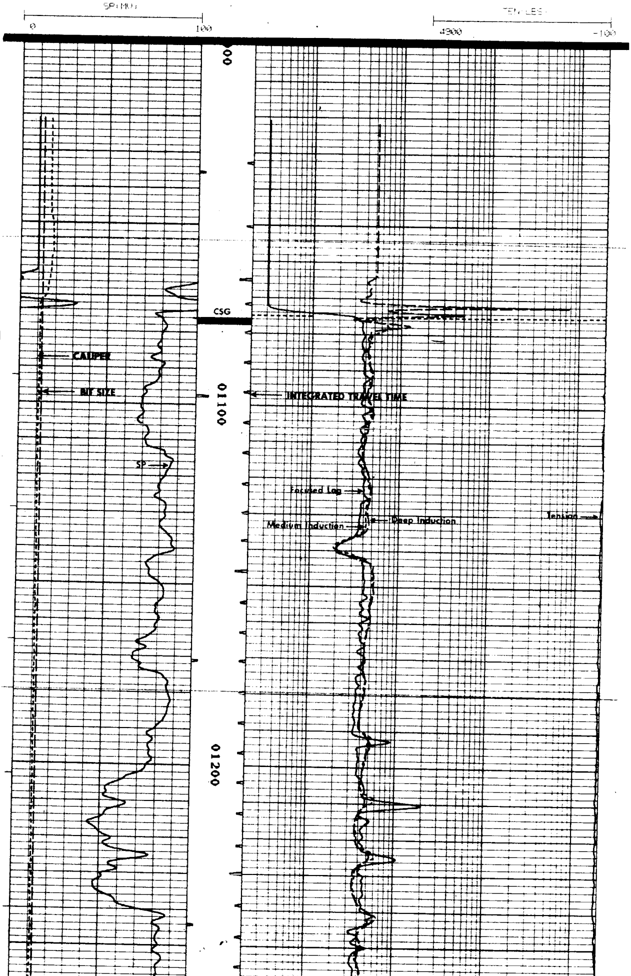
DISPLAY SCALE CHANGES

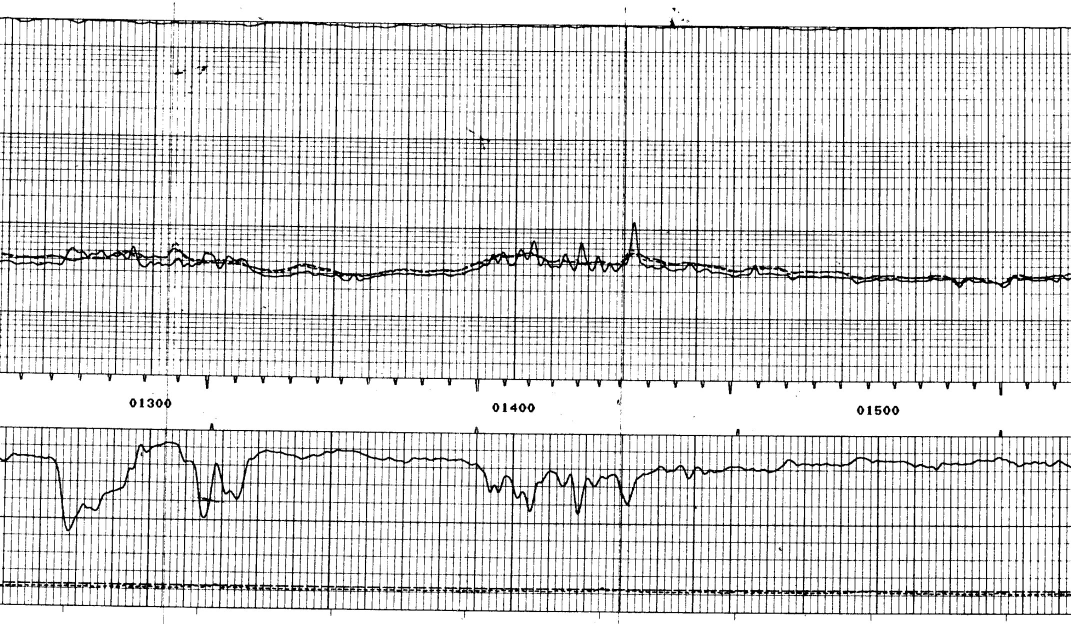
*** NONE ***

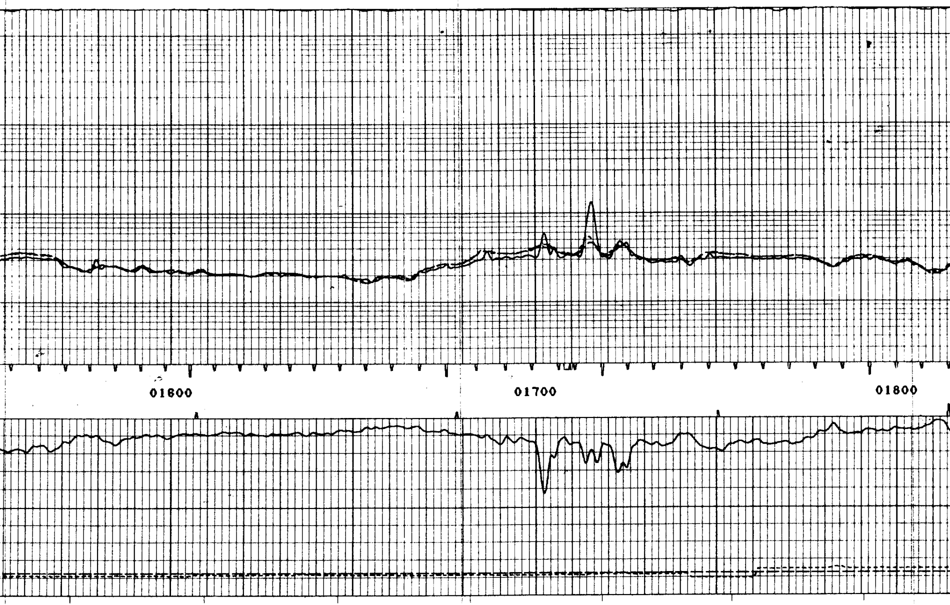
COMPANY: ARCO OIL & GAS COMPANY
WELL NAME: 14 - 17- 64
SERVICE: FCE14N FILE: 3 DATE: 10 14 88
REVISION: FSYSAL REV G508 VER 2

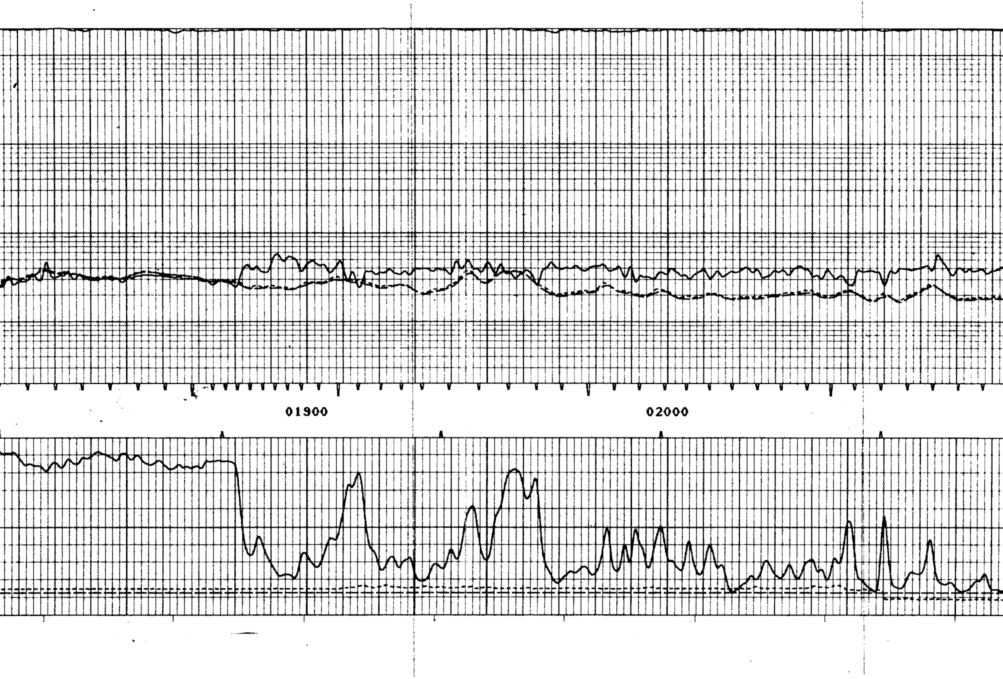
RUN: 1
TRIP: 1
TIME: 01:36:41
MODE: RECORD

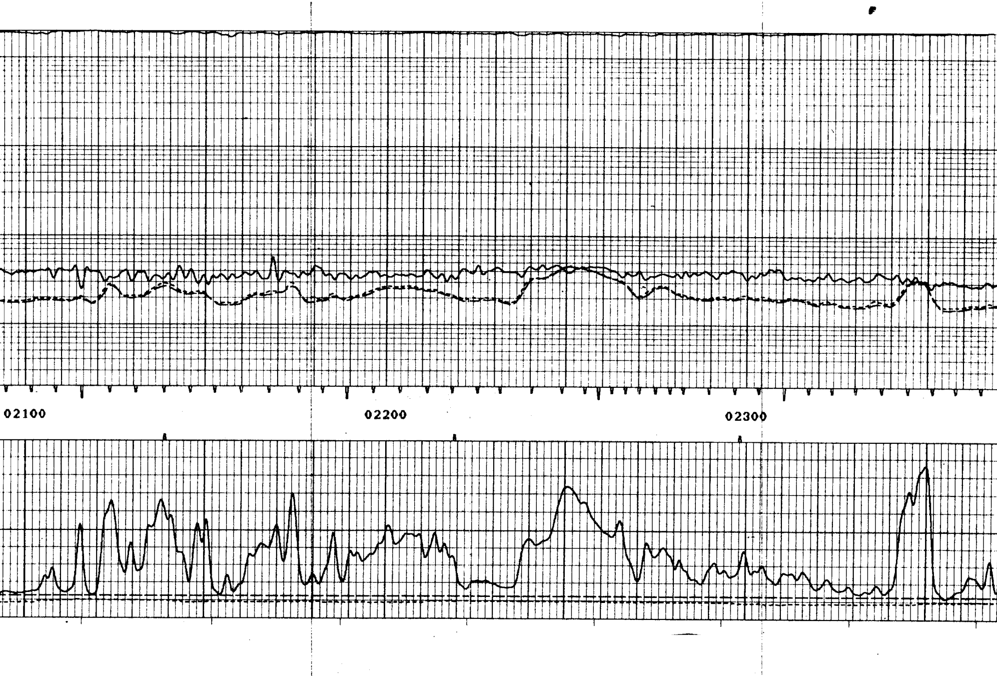


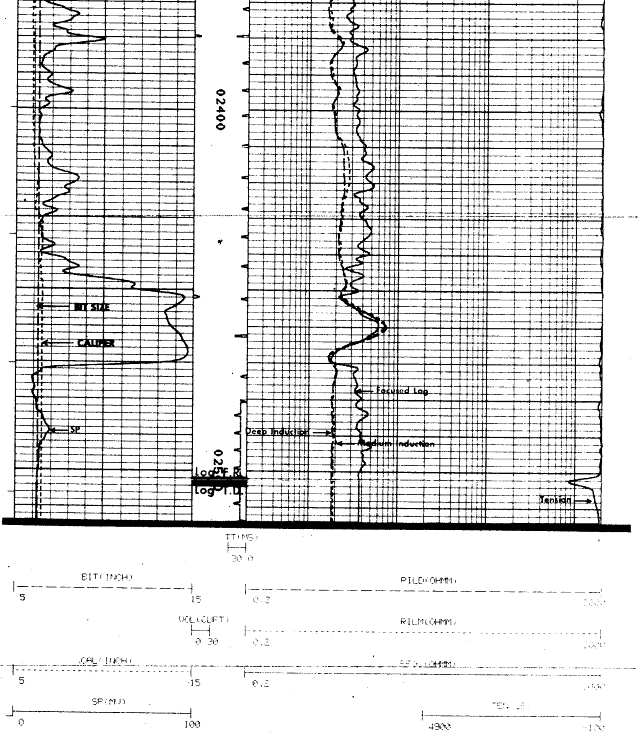












CURVE DELAYS

CURVE	DELAY	UNITS
CFOC	0	FT,IN
CILM	6.0	FT,IN
CILD	9.3	FT,IN
SP	9.3	FT,IN
GR	42,9	FT,IN
CAL	53.3	FT,IN
ACQ	31,9	FT,IN
AC	31,9	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	2513 TO 2306	0.000	
M	2513 TO 2306	0.000	
O.D.	2513 TO 2306	3.500	INCH
DEL-T F	2513 TO 2306	0.000	MICS/FT
DEL-T M	2513 TO 2306	***********	MICS/FT
DEL-T S	2513 TO 2306	***********	MICS/FT

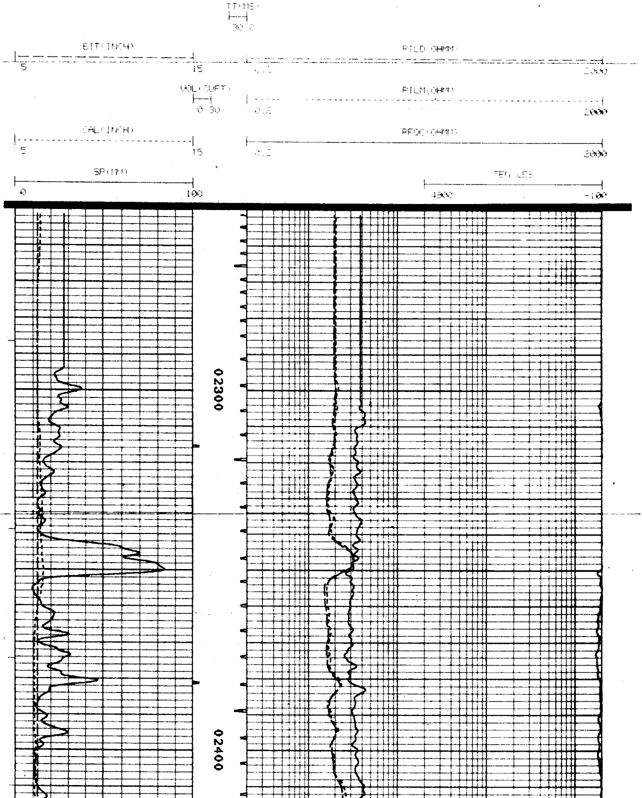
DISPLAY SCALE CHANGES

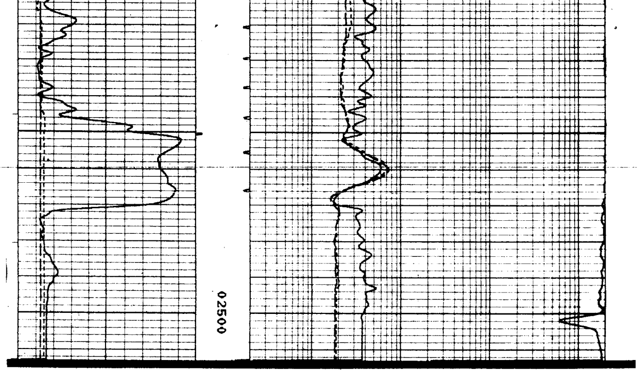
*** NONE ***

COMPANY: APCO OIL & GAS COMPANY
WELL NAME: 14 - 17- 64
SERVICE: KC214N FILE: 2 DATE: 10/14/85
REVISION: FSYSAL REV GS08 VER 2

RUN: 1
TRIP: 1
TIME: 01:23:00
MODE: RECORD

REPEAT SECTION





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TT(MS)
 30 0

     BIT(INCH)                              RILD(OHMM)
 5                        15     0.2                                   2000

                    VOL(CUFT)               RILM(OHMM)
                       0 30      0.2                                   2000

     CAL(INCH)                              RFOC(OHMM)
 5                        15     0.2                                   2000

     SP(MV)                                               TEN(LB)
 0                       100                    4900                    100

     CURVE DELAYS

CURVE  DELAY  UNITS
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[illegible]     0  FT.IN
CILM     8.0  FT.IN
CILD     8.3  FT.IN
SP       8.3  FT.IN
TT      43.8  FT.IN
CAL     53.3  FT.IN
MCG     31.8  FT.IN
AC      31.9  FT.IN
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*******************************************
*                                         *
*  CALIBRATION VERIFICATION SUMMARIES     *
*  DATE 10 14 8[illegible]       TIME 10:44:[illegible]       *
*  RUN 1                 TRIP 1           *
*                                         *
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        LOG NAME DIFL   ASSET NO. [illegible]     [illegible]NO. [illegible]
    CALIBRATION ENTERED ON  10 13 88 AT [illegible]

CURVE   FIELD UNITS     SCALING FACTORS    ENGINEERING VALUES    UNITS
         LOW   HIGH      ZERO     MULT.       LOW       HIGH
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      DATE 10 06 88          CALIBRATION          TIME [illegible]

CILD      1.3   464.5    -0.384    2.0108     0.500    500.000 MMHO
CILM     -2.0   505.5     2.540    1.2100     0.500    500.000 MMHO
CFOC      [illegible]   457.8     2.[illegible]    1.4822     [illegible]    [illegible]

      DATE 10 06 88     PRIMARY VERIFICATION      TIME [illegible]

CILD      [illegible]   [illegible]    -1.384    [illegible]    [illegible]    [illegible]
CILM      0.0   504.5     2.548    1.2188     2.450    497.872 MMHO
CFOC      4.7   500.0    -2.240    1.4877     2.5[illegible]    [illegible]

      DATE 10 14 88   BEFORE LOG VERIFICATION     TIME [illegible]

CILD      [illegible]   [illegible]     [illegible]    [illegible]    [illegible]    [illegible] MMHO
CILM      0.9   505.2     [illegible].385    2.1906     2.400    497.078 MMHO
CFOC      4.    496.8    -2.568    2.5015     2.[illegible]    506.402 MMHO

      DATE 10 14 88    AFTER LOG VERIFICATION     TIME 10:41:45

CILD      [illegible]   [illegible]    [illegible]    [illegible]    [illegible]    [illegible]
CILM      [illegible]   505.2     [illegible]    [illegible]    2.395    495.252 MMHO
CFOC      4.7   496.5    -2.560    2.5019     2.754    507.163 MMHO
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    [illegible]
  CALIBRATION ENTERED ON 10 14 88 AT [illegible]

CURVE   COUNTS SEC.      SCALING FACTORS     ENGINEERING VALUES   UNITS
          LOW    HIGH     ADD.    MULT.         LOW       HIGH
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*     DATE 10-14 88           CALIBRATION             TIME 01:03:05

GR         [illegible]  [illegible]  [illegible]  [illegible]  [illegible]  [illegible]

                       PRIMARY VERIFICATION              NOT DONE

                      BEFORE LOG VERIFICATION            NOT DONE

      DATE 10 14 88    AFTER LOG VERIFICATION     TIME [illegible]

GR          77.9    282.4     0.000     0.[illegible]     [illegible]    [illegible] API


    [illegible]
  CALIBRATION ENTERED ON [illegible]

CURVE   MILLIVOLTS       SCALING FACTORS     ENGINEERING VALUES   UNITS
          LOW    HIGH     ADD.    MULT.         LOW       HIGH
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      DATE 10-13 88           CALIBRATION             TIME [illegible]

CAL     [illegible]  [illegible]  [illegible]  [illegible]  [illegible]  [illegible]

                       PRIMARY VERIFICATION              NOT DONE

      DATE 10-14 88    BEFORE LOG VERIFICATION     TIME [illegible]

CAL        [illegible]    2041.4    [illegible]    [illegible]    [illegible]    [illegible]
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