107 2 1

[redacted]

Western Atlas International
Atlas Wireline Services

COMPENSATED DENSILOG®
COMPENSATED NEUTRON
GAMMA RAY

FILE NO.

API NO.

5" = 100'

COMPANY ARCO OIL & GAS COMPANY
WELL CC 24-9-64
FIELD MIST
COUNTY COLUMBIA STATE OR.

LOCATION:
822.64' N & 385.96' W OF THE
SE CORNER OF
SEC 9 TWP 6N RGE 4W

OTHER SERVICES
DIFL/BHC AC

PERMANENT DATUM GL ELEV. 1524.3
LOGGING MEASURED FROM KB 10' FT. ABOVE P.D.
DRILLING MEASURED FROM KB

ELEVATIONS
KB 1534.35'
DF
GL 1524.35'

DATE	9/2/88							
RUN	1							
SERVICE ORDER	159049							
DEPTH-DRILLER	2503'							
DEPTH-LOGGER	2500'							
BOTTOM LOGGED INTERVAL	2498'							
TOP LOGGED INTERVAL	1150'							
CASING - DRILLER	7 "	@ 1150'		@		@		@
CASING - LOGGER	1150'							
BIT SIZE	6 1/4"							
TYPE FLUID IN HOLE	EZ MUD							
DENSITY / VISCOSITY	10.2	45						
PH / FLUID LOSS	8.0	6.8						
SOURCE OF SAMPLE	FLOWLINE							
RM AT MEAS. TEMP.	2.93	@ 82 F		@		@		@
RMF AT MEAS. TEMP.	0.94	@ 75 F		@		@		@
RMC AT MEAS. TEMP.	3.62	@ 75 F		@		@		@
SOURCE OF RMF / RMC	MEAS	MEAS						
RM AT BHT	2.45	@ 98 F		@		@		@
TIME SINCE CIRCULATION	4 HRS							
MAX. REC. TEMP. DEG. F	99 F							
EQUIP. NO. / LOC.	HL 6406	SAC						
RECORDED BY	B. WELCH							
WITNESSED BY	MR. JACKSON							

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	CDL	72541	2212	DECENT
1	1	CAL			
1	1	CN	53264	2435	DECENT
1	1	GR	73467	1309	DECENT

CURVE DELAYS

CURVE	DELAY	UNITS
SSD	0,3	FT,IN
LSD	0	FT,IN
CAL	0,0	FT,IN
SSN	9,9	FT,IN
LSN	10,3	FT,IN
GR	16,6	FT,IN
TTEN	0,0	FT,IN
TEN	0,0	FT,IN
SPD	0,0	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	1578 TO 1141	0.000	
CAL CORR	1578 TO 1141	6.250	INCH
CHI SMTH	1578 TO 1141	ACTIVE	
M	1578 TO 1141	0.000	
MATRIX	1578 TO 1141	SANDSTONE	
O.D.	1578 TO 1141	3.500	INCH
RHO F	1578 TO 1141	0.980	G/CC
RHO M	1578 TO 1141	2.650	G/CC
SALINITY	1578 TO 1141	0.000	PPK

DISPLAY SCALE CHANGES

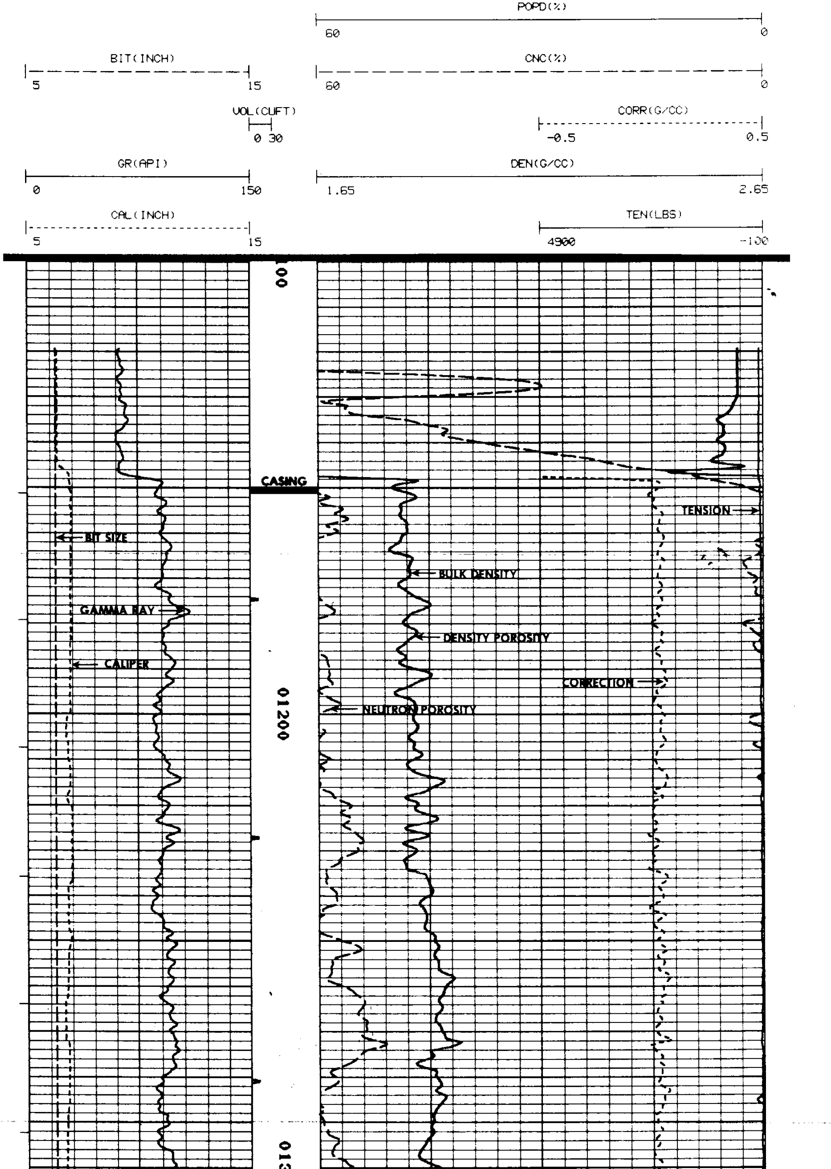
*** NONE ***

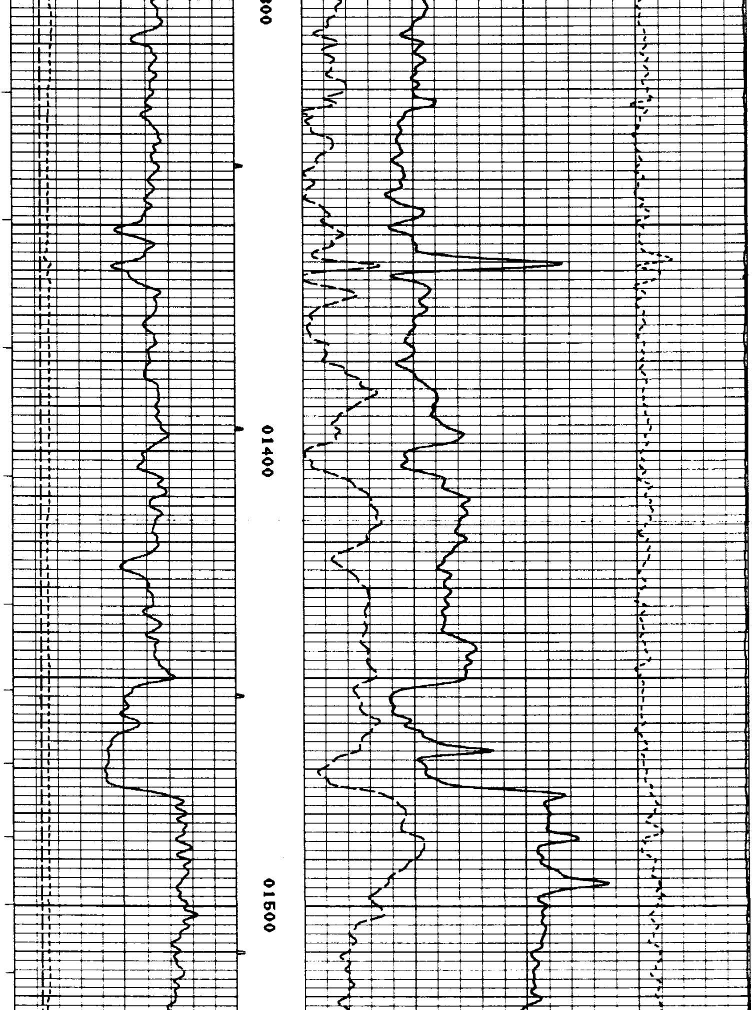
COMPANY: ARCO OIL & GAS COMPANY RUN: 1

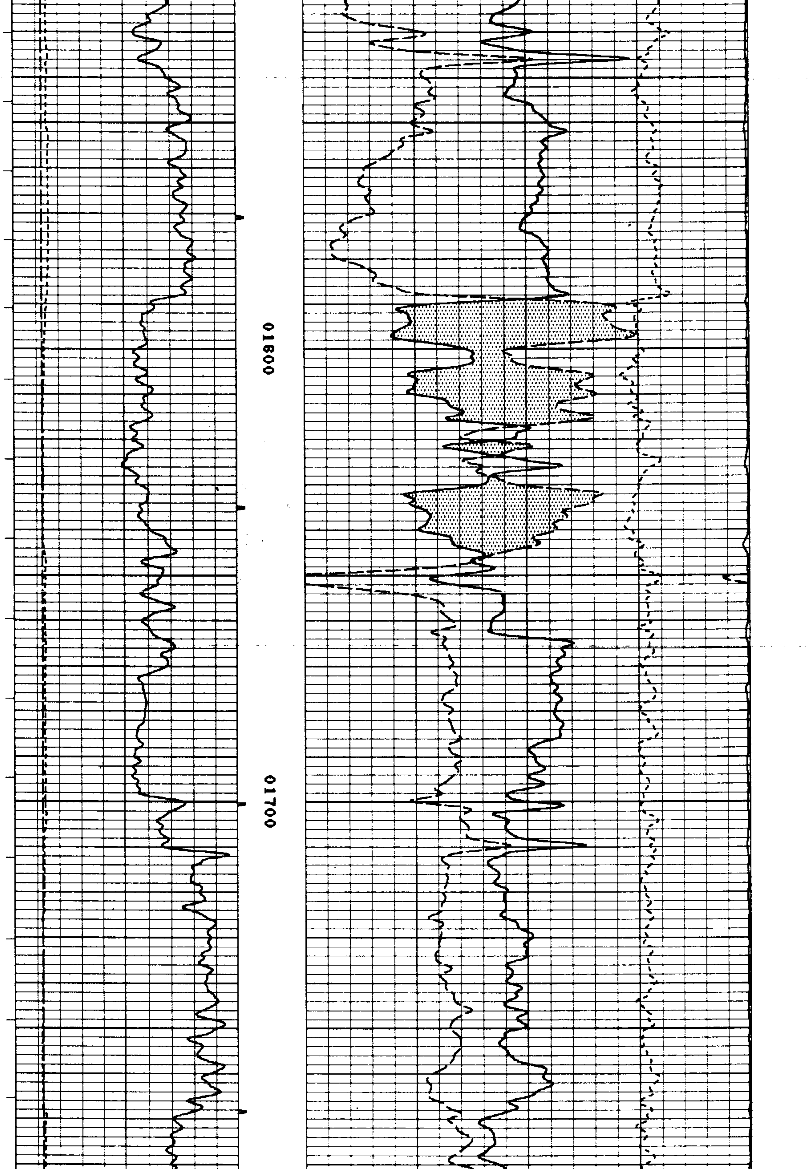
WELL NAME: CC 24-9-64 TRIP: 1

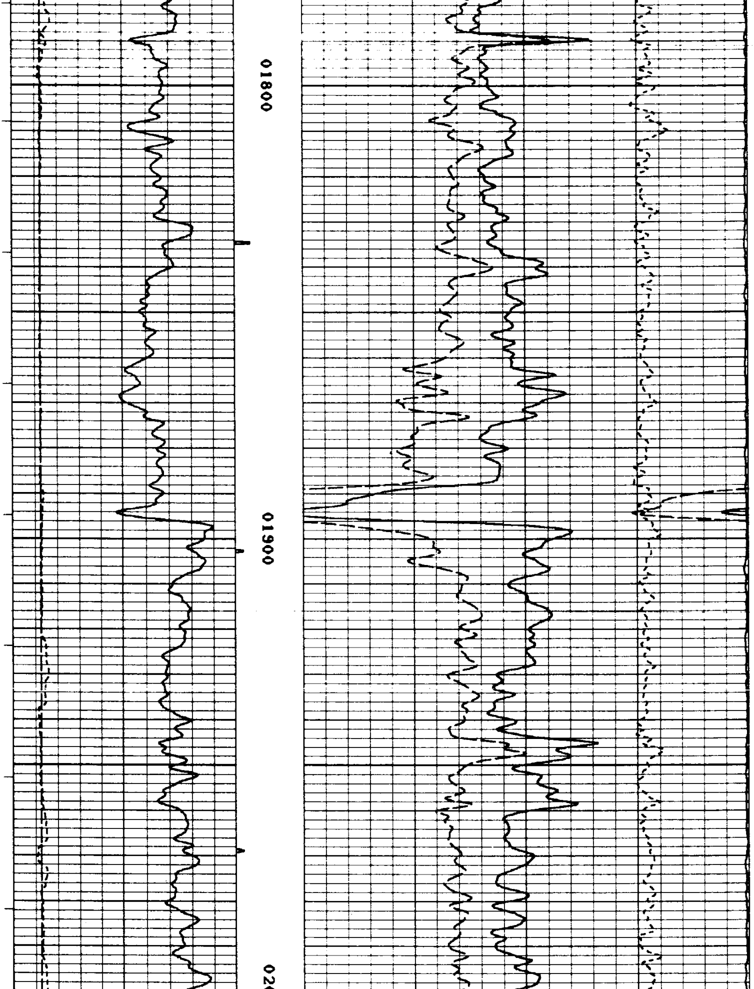
SERVICE: KC287B FILE: 3 DATE: 09/03/88 TIME: 00:15:40

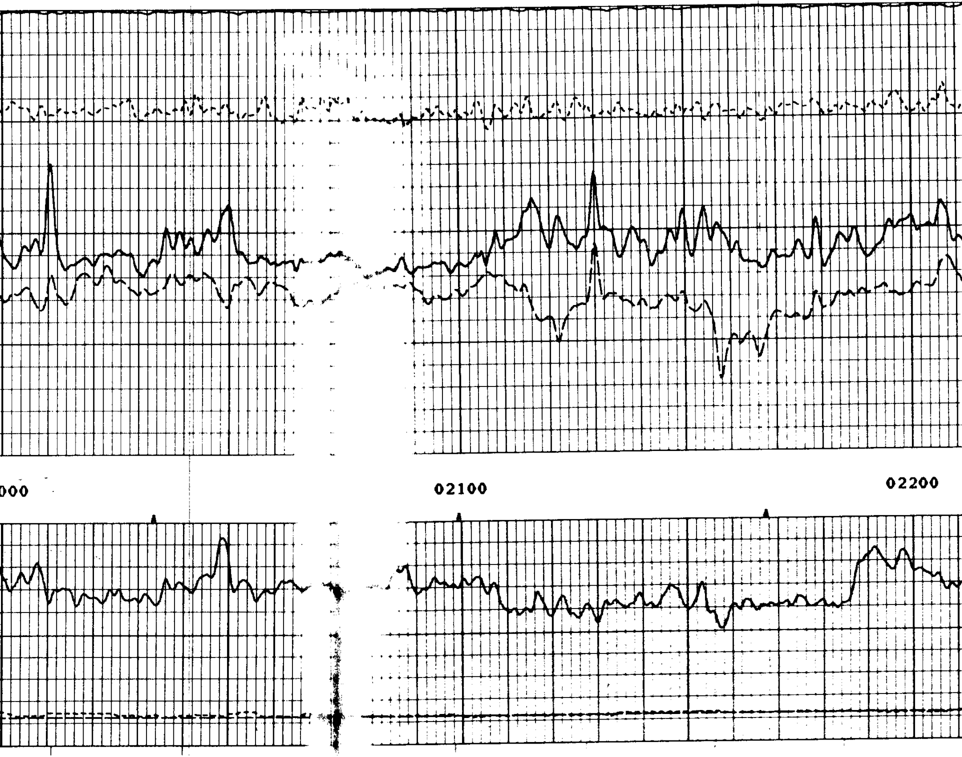
REVISION: FSYSAL REV GS08 VER+2 MODE: RECORD

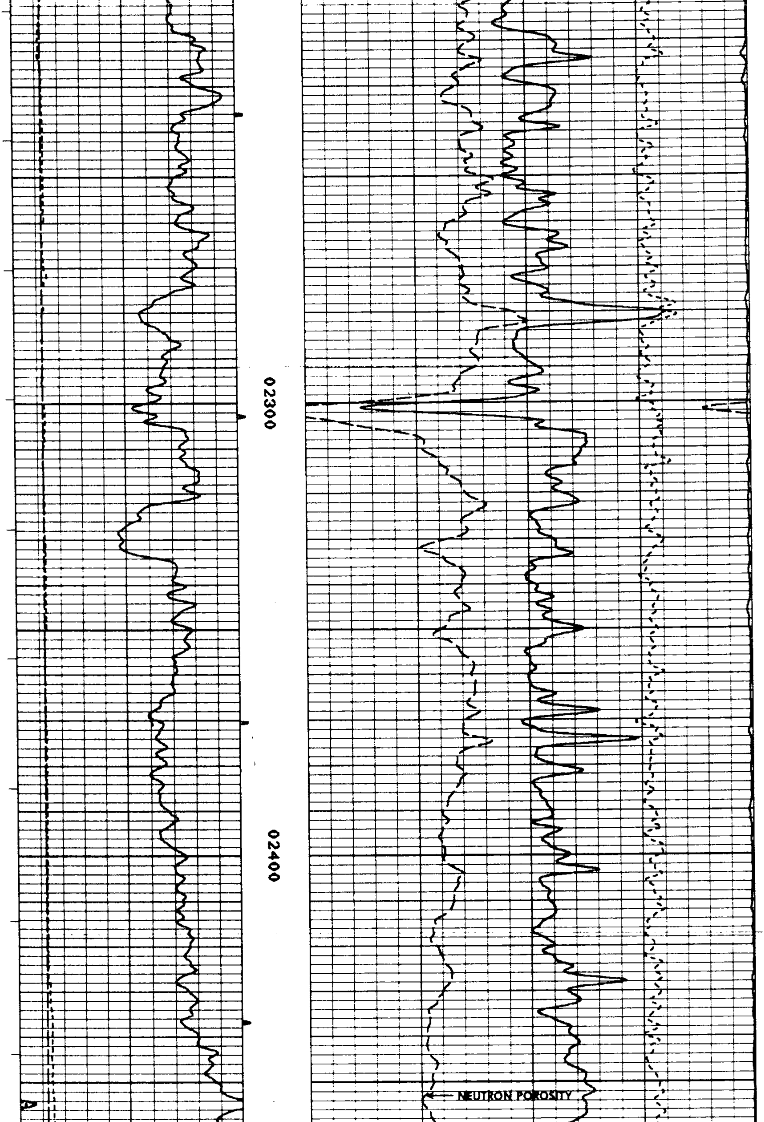


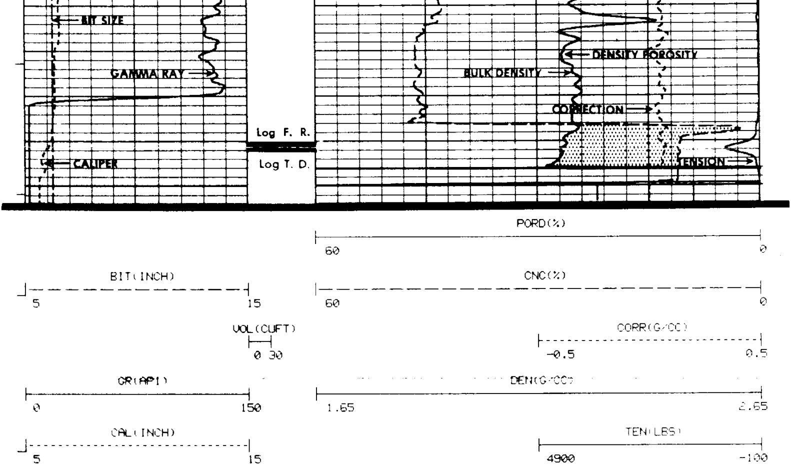












CURVE DELAYS

CURVE	DELAY	UNITS
SSD	0,3	FT,IN
LSD	0	FT,IN
CAL	0,0	FT,IN
SSN	9,9	FT,IN
LSN	10,3	FT,IN
GR	16,6	FT,IN
TTEN	0.0	FT,IN
TEN	0.0	FT,IN
SPD	0.0	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	1774 TO 1445	0.000	
CAL CORR	1774 TO 1445	6.250	INCH
CHI SMTH	1774 TO 1445	ACTIVE	
M	1774 TO 1445	0.000	
MATRIX	1774 TO 1445	SANDSTONE	
O.D.	1774 TO 1445	3.500	INCH
RHO F	1774 TO 1445	0.980	G/CC
RHO M	1774 TO 1445	2.650	G/CC
SALINITY	1774 TO 1445	0.000	PPK

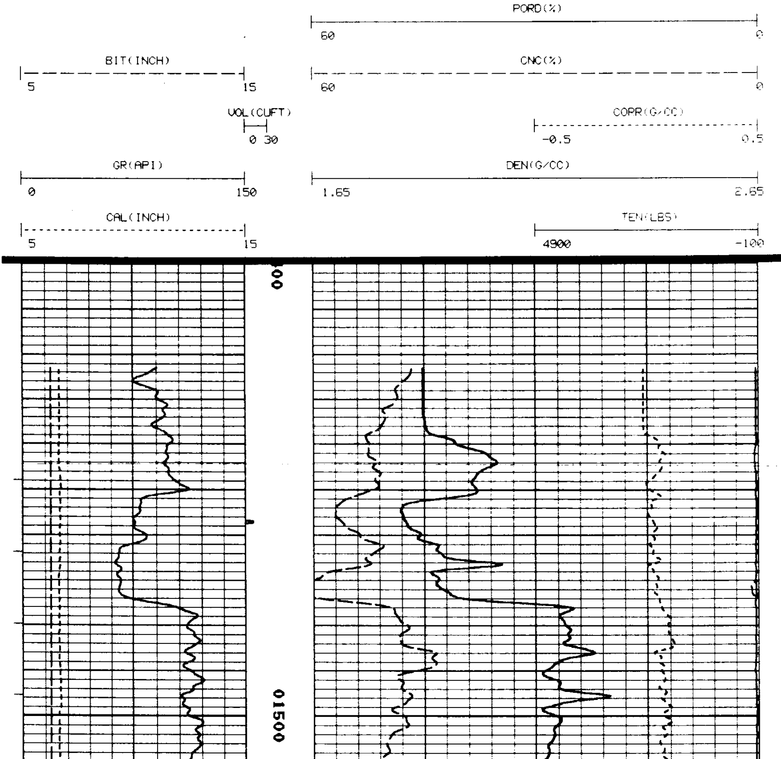
DISPLAY SCALE CHANGES

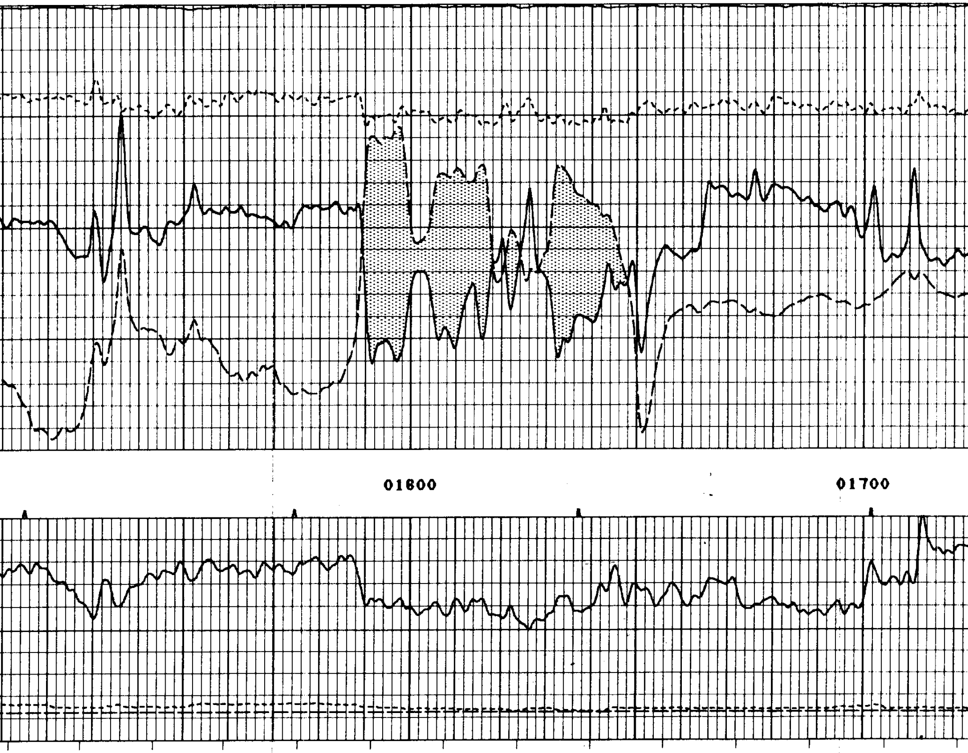
*** NONE ***

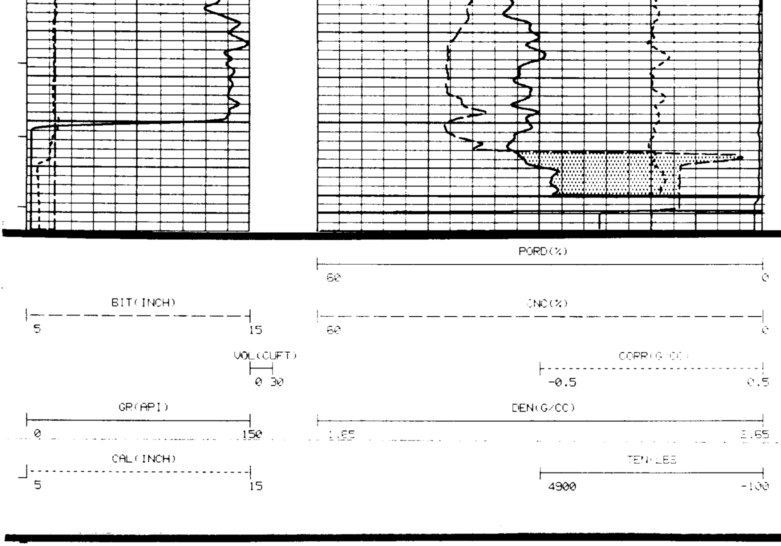
COMPANY: ARCO OIL & GAS COMPANY
RUN: 1
WELL NAME: CC 24-9-64
TRIP: 1
SERVICE: KC287B
FILE: 1
DATE: 03.02.88
TIME: 22:51:38
REVISION: FSYSAL REV GS08 VER+2

REPEAT SECTION

MODE: RECORD







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****************************************
*                                      *
*  CALIBRATION/VERIFICATION SUMMARIES  *
*  DATE 09/03/88        TIME 01:25:53  *
*  RUN  1               TRIP 1         *
*                                      *
****************************************


      LOG NAME CDL     ASSET NO. 72541    UNIT NO. HL 6406
  CALIBRATION ENTERED ON  09/02/88 AT 22:01:50       LARGE TOOL
                         SOURCE NUMBER 845

CURVE   COUNTS/SEC.     SCALING FACTORS    RATIO    ENG. VALUE  UNITS
         BLOCK  VALUE   ADD.     MULT.     MG/AL
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     DATE 08/16/88         CALIBRATION         TIME 13:11:34

LSD     MG        346.4
SSD               463.5
DEN                                                     2.200  G/CC
CORR                                                    0.000  G/CC
LSD     AL        118.3   0.000     1.0000   2.9277
SSD               298.3   0.000     1.0000   1.5538
DEN                                                     2.800  G/CC
CORR                                                    0.000  G/CC
LSD     MGRV      320.4
SSD               503.3
DEN                                                     2.430  G/CC
CORR                                                    0.235  G/CC

     DATE 09/02/88    PRIMARY VERIFICATION     TIME 22:05:27

LSD     JIG       167.9   0.000     1.0000
SSD               329.9   0.000     1.0000
DEN                                                     2.523  G/CC
CORR                                                   -0.085  G/CC

     DATE 09/02/88   BEFORE LOG VERIFICATION   TIME 22:09:35
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LSD     JIG      168.2    0.000    1.0000
SSD              329.5    0.000    1.0000
DEN                                                     2.519   G/CC
CORR                                                   -0.088   G/CC

     DATE 09/03/88    AFTER LOG VERIFICATION    TIME 01:15:26

LSD     JIG      168.4    0.000    1.0000
SSD              330.2    0.000    1.0000
DEN                                                     2.521   G/CC
CORR                                                   -0.086   G/CC



      LOG NAME CAL     ASSET NO. 72541     UNIT NO. HL 6406
  CALIBRATION ENTERED ON  09/02/88 AT 22:45:58

CURVE   MILLIVOLTS      SCALING FACTORS    ENGINEERING VALUES   UNITS
         LOW    HIGH     ADD.     MULT.       LOW        HIGH
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     DATE 07/23/88          CALIBRATION          TIME 17:22:02

CAL     2326.7  4215.4   -1.392    0.0233      6.000      12.000 INCH

     DATE 07/23/88    PRIMARY VERIFICATION      TIME 17:22:46

CAL       E      4214.6   -1.392    0.0233      E          11.998 INCH

     DATE 09/02/88   BEFORE LOG VERIFICATION    TIME 22:47:05

CAL       E      2634.4   -1.992    0.0233      E           6.378 INCH

     DATE 09/03/88    AFTER LOG VERIFICATION    TIME 00:33:53

CAL       E      2598.5   -1.992    0.0233      E           6.263 INCH



      LOG NAME CN      ASSET NO. 53264A   UNIT NO. 6406
  CALIBRATION ENTERED ON  09/02/88 AT 21:47:07             2435
                         SOURCE NUMBER S17S20

CURVE   COUNTS/SEC.     SCALING FACTORS    RATIO     ENG. VALUE  UNITS
                         ADD.     MULT.  LSN/(SSN*4)
----    --------       ------------------ --------   ----------  ----

     DATE 08/28/88          CALIBRATION          TIME 19:27:34

LSN           85.0      0.000    1.0000
SSN          165.4      0.000    1.0000
CN                                        0.1285       24.558  %

     DATE 08/28/88    PRIMARY VERIFICATION      TIME 19:38:49

LSN           82.1      0.000    1.0000
SSN          122.7      0.000    1.0000
CN                                        0.1674       15.374  %

     DATE 09/02/88   BEFORE LOG VERIFICATION    TIME 21:57:01

LSN           82.1      0.000    1.0000
SSN          120.7      0.000    1.0000
CN                                        0.1701       14.924  %

     DATE 09/03/88    AFTER LOG VERIFICATION    TIME 01:21:34

LSN           81.4      0.000    1.0000
SSN          120.7      0.000    1.0000
CN                                        0.1686       15.145  %



      LOG NAME GR      ASSET NO. 73467D   UNIT NO. 6406
  CALIBRATION ENTERED ON 09/02/88 AT 22:14:45

CURVE   MILLIVOLTS      SCALING FACTORS    ENGINEERING VALUES   UNITS
         LOW    HIGH     ADD.     MULT.       LOW        HIGH
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     DATE 08/28/88          CALIBRATION          TIME 19:46:18

GR      3197.6  6939.2   0.000    0.0978      0.000     150.000 API

                       PRIMARY VERIFICATION           NOT DONE

     DATE 09/02/88   BEFORE LOG VERIFICATION    TIME 22:24:53

GR      2727.6  6646.5   0.000    0.0978    109.350     266.459 API

     DATE 09/03/88    AFTER LOG VERIFICATION    TIME 01:07:41

GR      2787.5  6609.6   0.000    0.0978    111.752     264.978 API
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