ATLAS WIRELINE SERVICES

DUAL INDUCTION FOCUSED LOG

FILE NO. 2953

API NO.

5" = 100'

COMPANY ARCO OIL & GAS COMPANY

WELL LF 24-8-75 RD NO. 1

FIELD MIST

COUNTY COLUMBIA STATE OR.

LOCATION:
1195' N & 93' W FROM THE SE CORNER OF

SEC 8 TWP 7N RGE 5W

OTHER SERVICES
BHC AC/GR

PERMANENT DATUM GL ELEV. 731'
LOGGING MEASURED FROM KB 10' FT. ABOVE P.D.
DRILLING MEASURED FROM KB

ELEVATIONS
KB 741'
DF -
GL 731'

FINAL PRINT

DATE	11/1/88				
RUN	1				
SERVICE ORDER	159115				
DEPTH-DRILLER	3039'				
DEPTH-LOGGER	3039'				
BOTTOM LOGGED INTERVAL	3037'				
TOP LOGGED INTERVAL	854'				
CASING - DRILLER	9 5/8"	@ 855'	@	@	@
CASING - LOGGER	854'				
BIT SIZE	8 1/2"				
TYPE FLUID IN HOLE	E Z MUD				
DENSITY / VISCOSITY	10.3	51			
PH / FLUID LOSS	9.0	5.4			
SOURCE OF SAMPLE	FLOWLINE				
RM AT MEAS. TEMP.	2.86	@ 86 F	@	@	@
RMF AT MEAS. TEMP.	2.11	@ 80 F	@	@	@
RMC AT MEAS. TEMP.	3.3	@ 76 F	@	@	@
SOURCE OF RMF / RMC	MEAS	MEAS			
RM AT BHT	2.46	@ 101 F	@	@	@
TIME SINCE CIRCULATION	2 HRS				
MAX. REC. TEMP. DEG. F	101 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.

Western Atlas International
A Litton/Dresser Company

ATLAS WIRELINE SERVICES

REMARKS RUN (1)

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIAL NO.	SERIES NO.	POSITION
1	1	DIFL	33304	1503	1.5 SO
1	1	AC	79725	1603	CENT
1	1	GR	60484	1309	CENT
1	1	CAL	79090	4209	CENT

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	3050 TO 848	0.000	
M	3050 TO 848	0.000	
O.D.	3050 TO 848	0.000	INCH
DEL-T F	3050 TO 848	**********	MICS/FT
DEL-T M	3050 TO 848	-2.000	MICS/FT
DEL-T S	3050 TO 848	0.000	MICS/FT

DISPLAY SCALE CHANGES

*** NONE ***

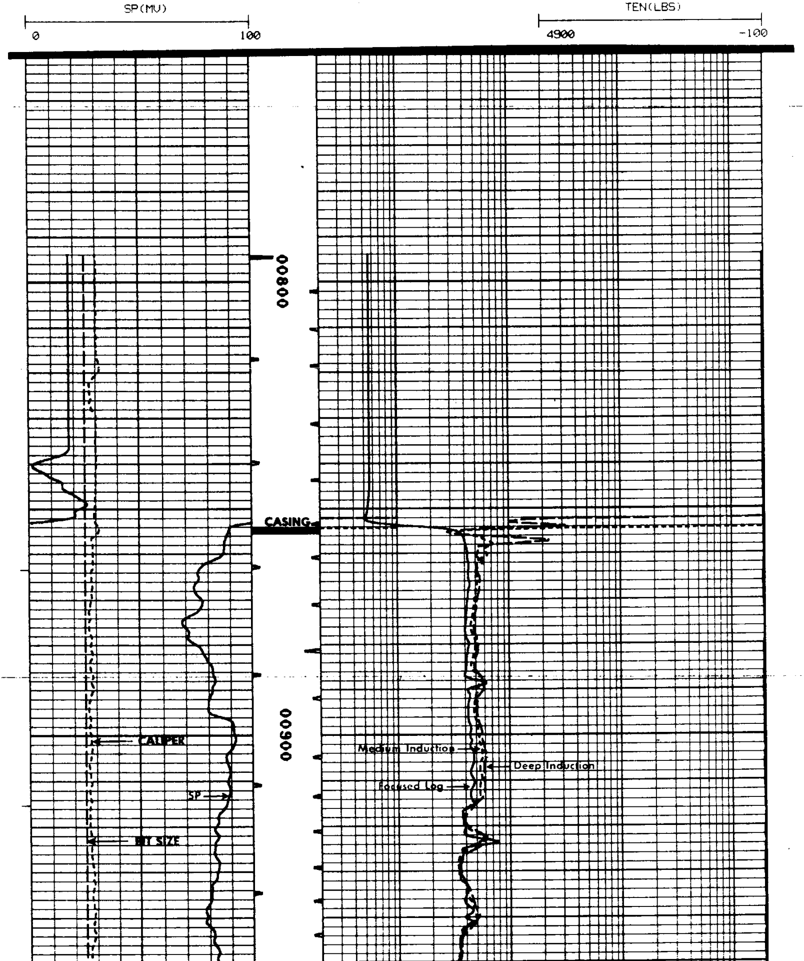
COMPANY: ARCO OIL & GAS COMPANY RUN: 1
WELL NAME: LF 24-8-75 RD1 TRIP: 1
SERVICE: KC214N FILE: 5 DATE: 10/31/88 TIME: 09:29:01
REVISION: FSYSAL REV GS08 VER 2 MODE: RECORD

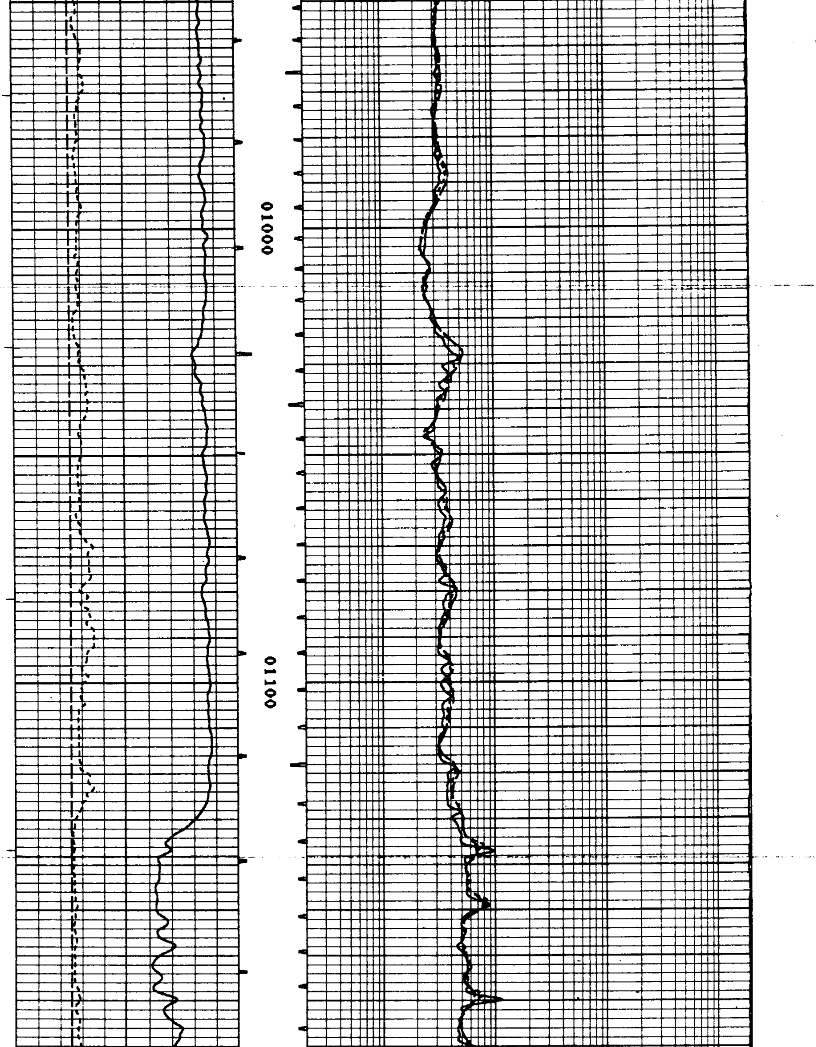
TT(MS) 30 0

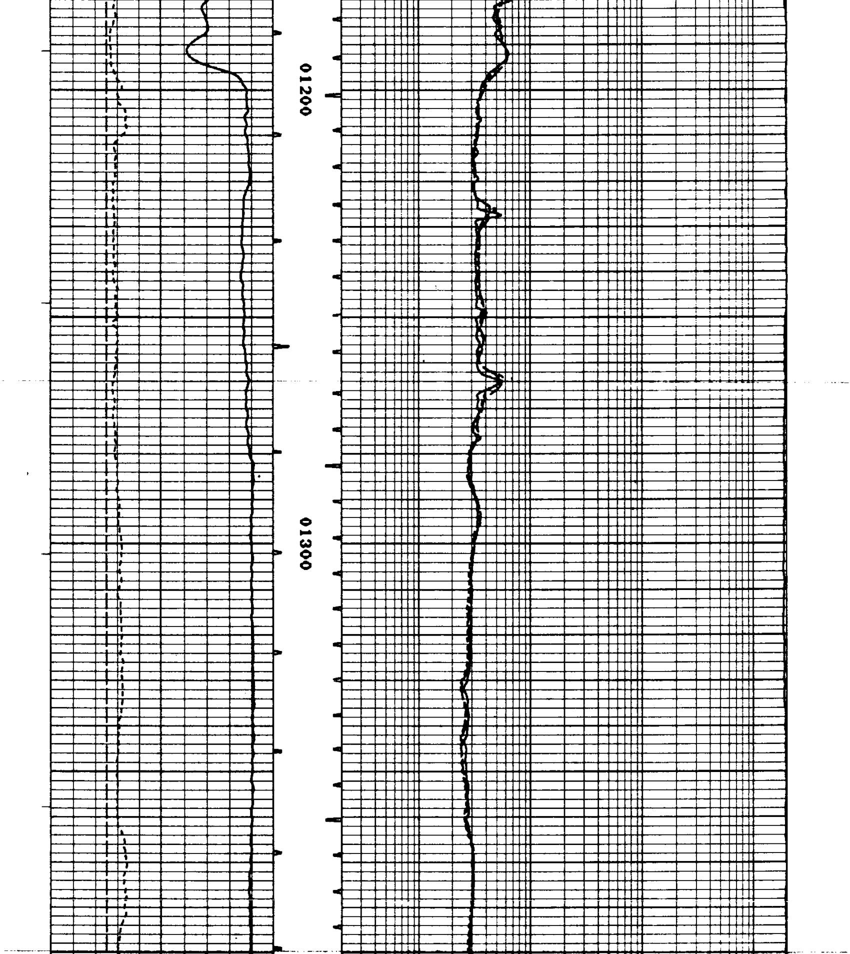
BIT(INCH) 6 16 RILD(OHMM) 0.2 2000

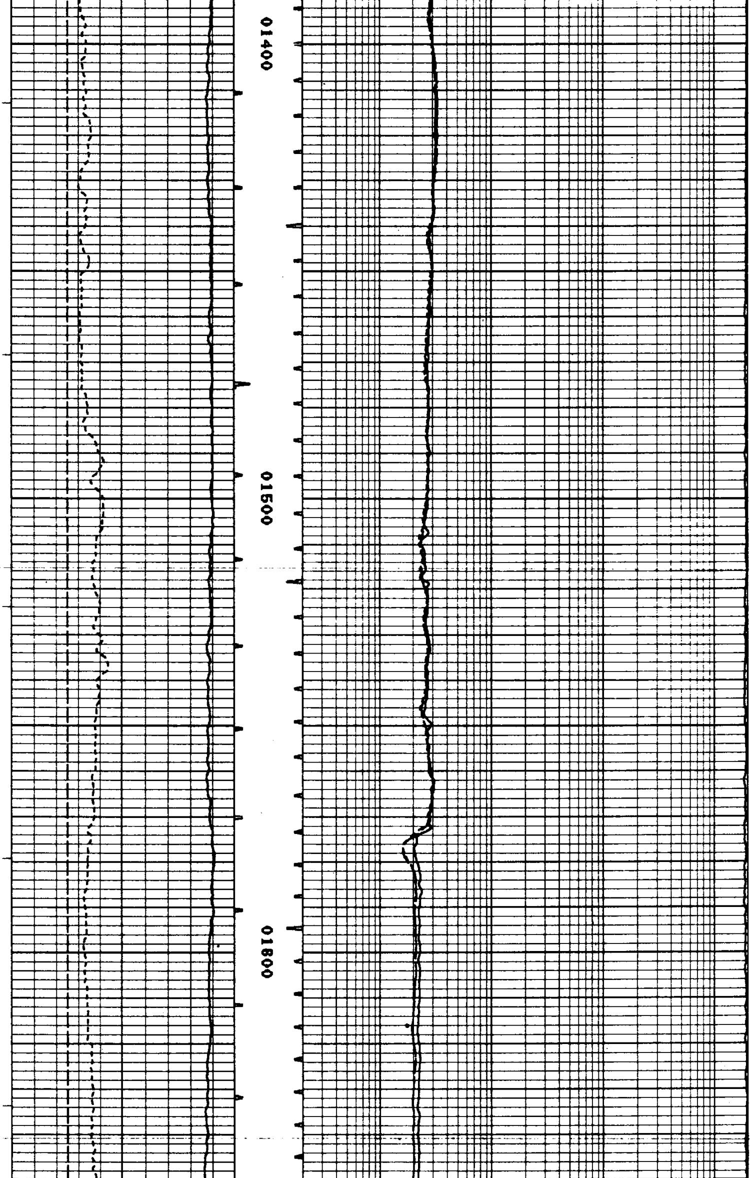
VOL(CUFT) 0 30 RILM(OHMM) 0.2 2000

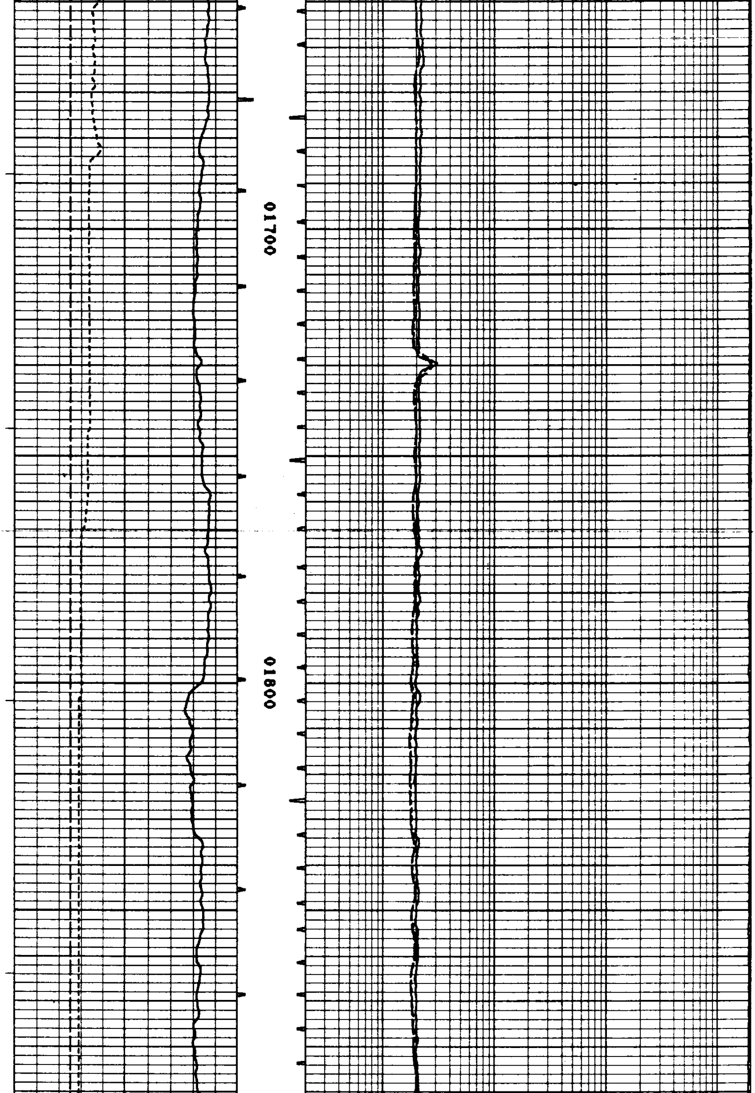
CAL(INCH) 6 16 RFOC(OHMM) 0.2 2000

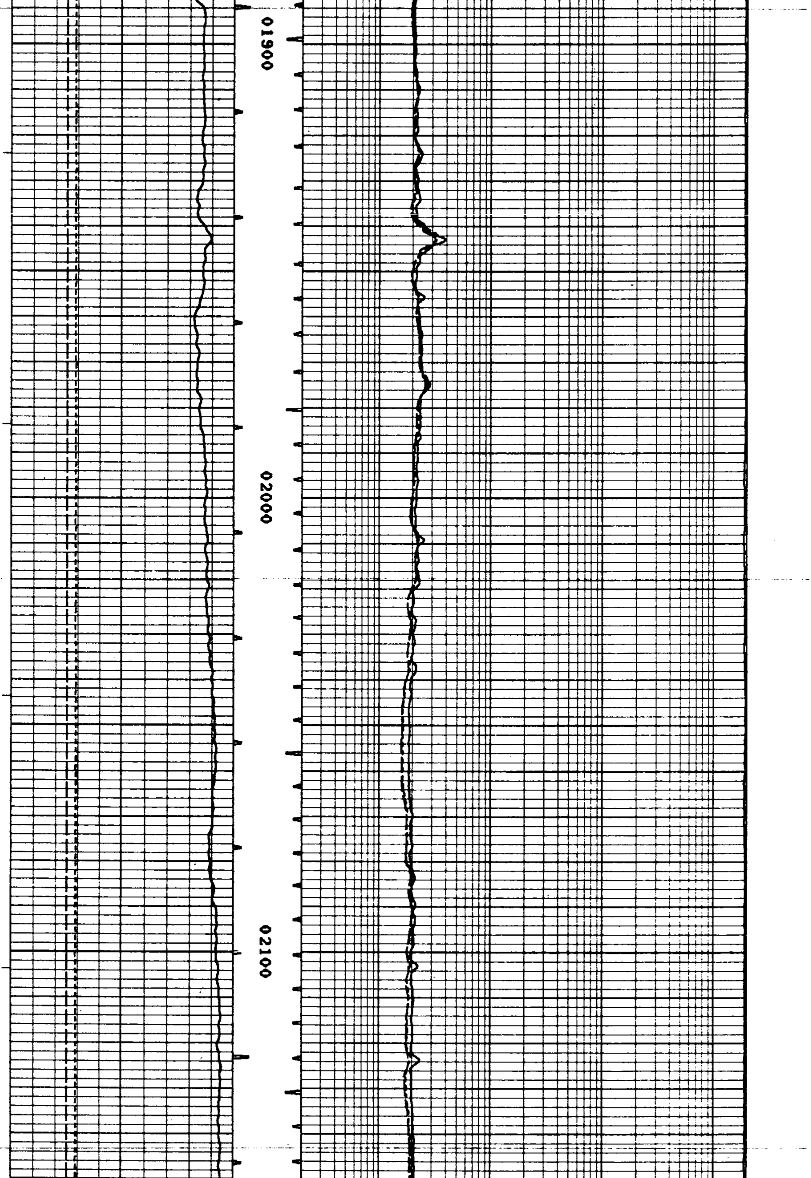


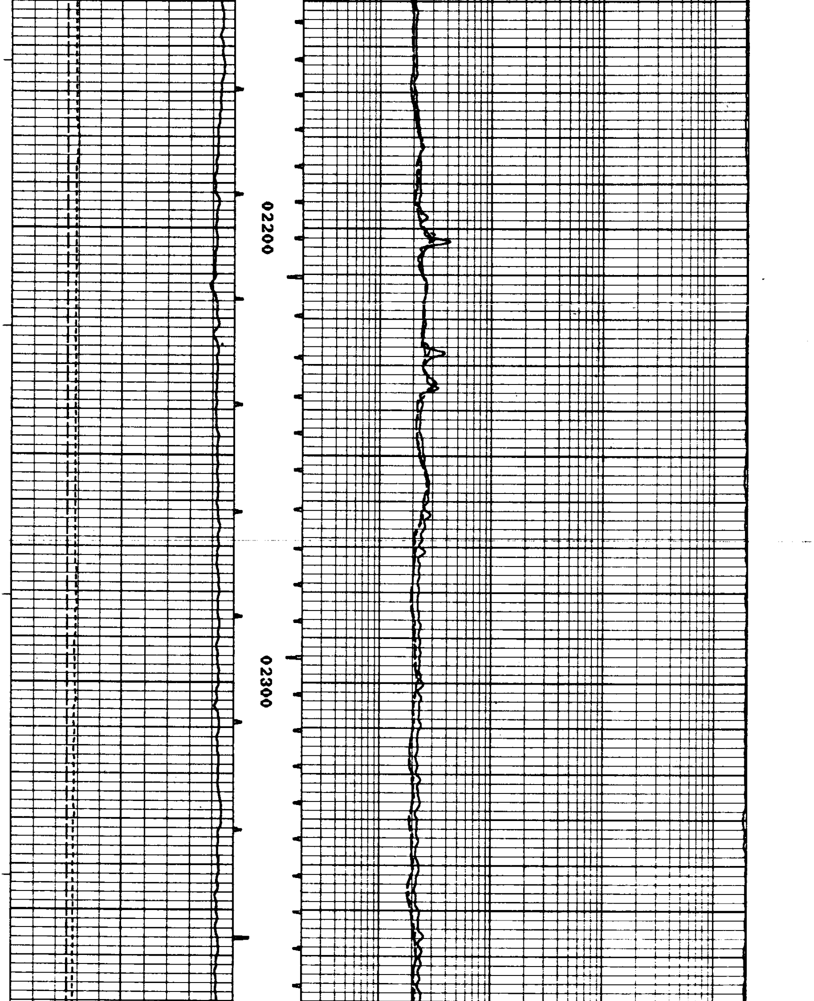


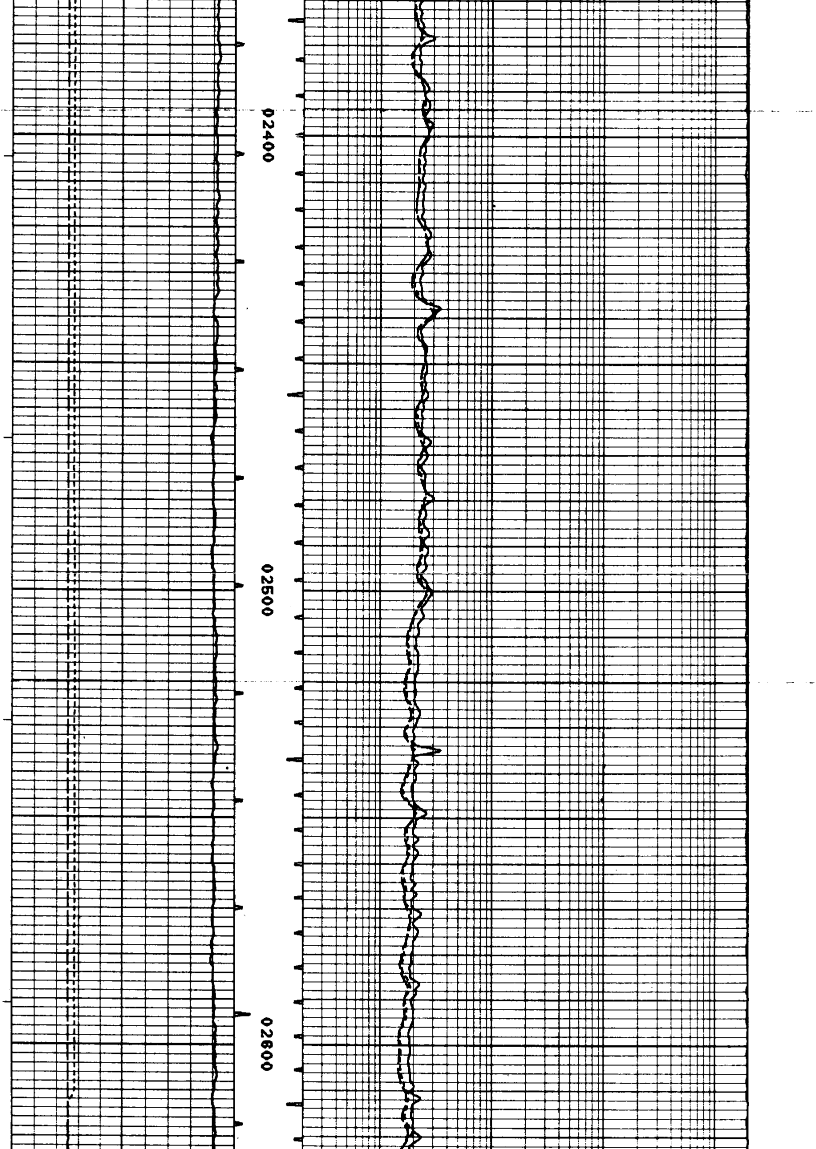


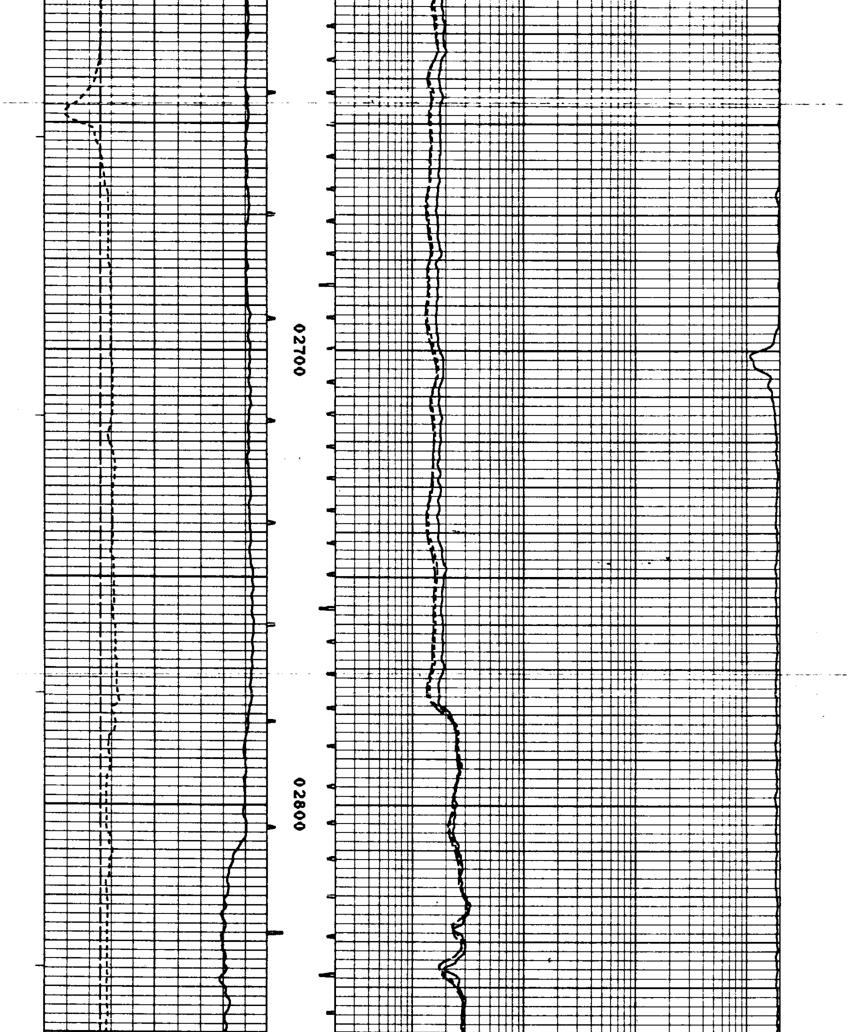


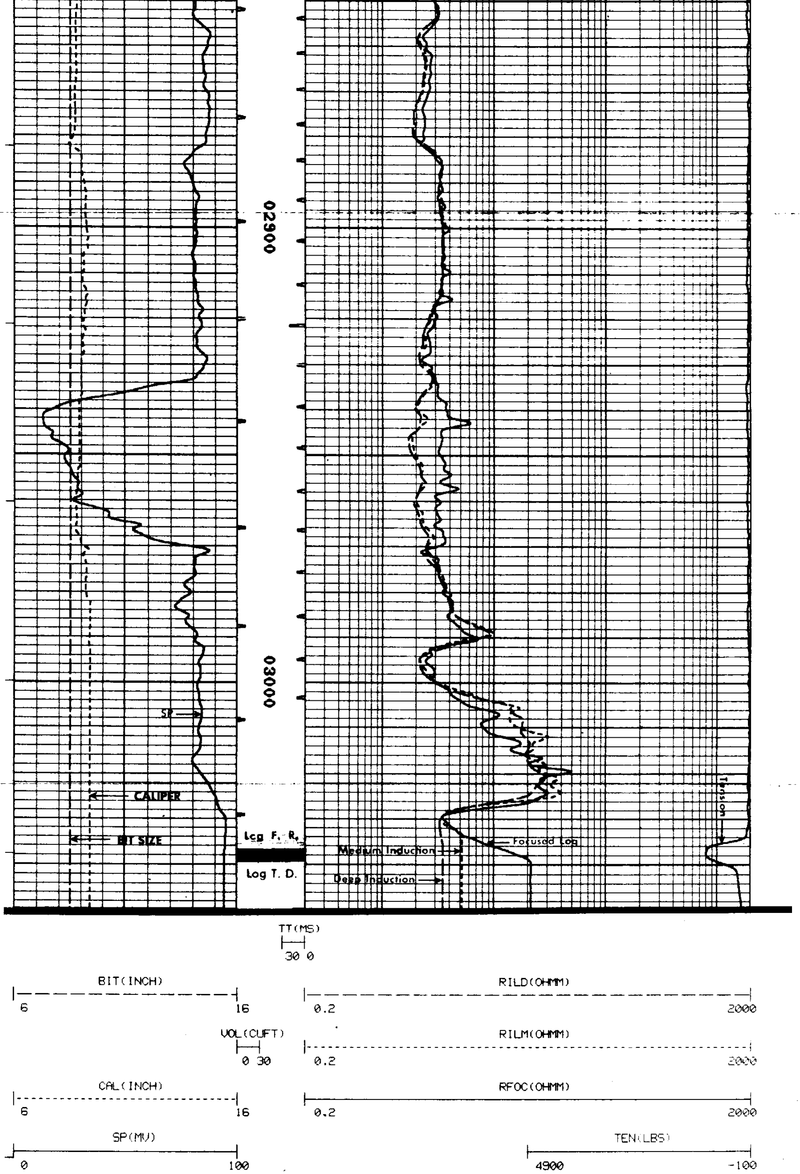












CURVE DELAYS

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	27,0	FT,IN
AC	27,0	FT,IN

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	3046 TO 2835	0.000	
M	3046 TO 2835	0.000	
O.D.	3046 TO 2835	0.000	INCH
DEL-T F	3046 TO 2835	***********	MICS/FT
DEL-T M	3046 TO 2835	-2.000	MICS/FT
DEL-T S	3046 TO 2835	0.000	MICS/FT

DISPLAY SCALE CHANGES

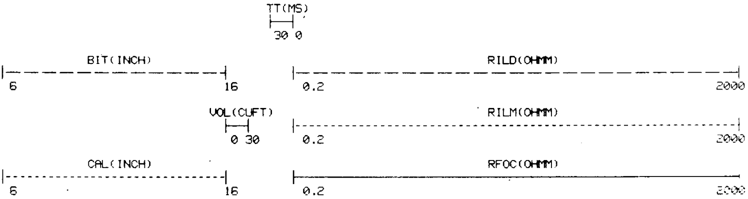
*** NONE ***

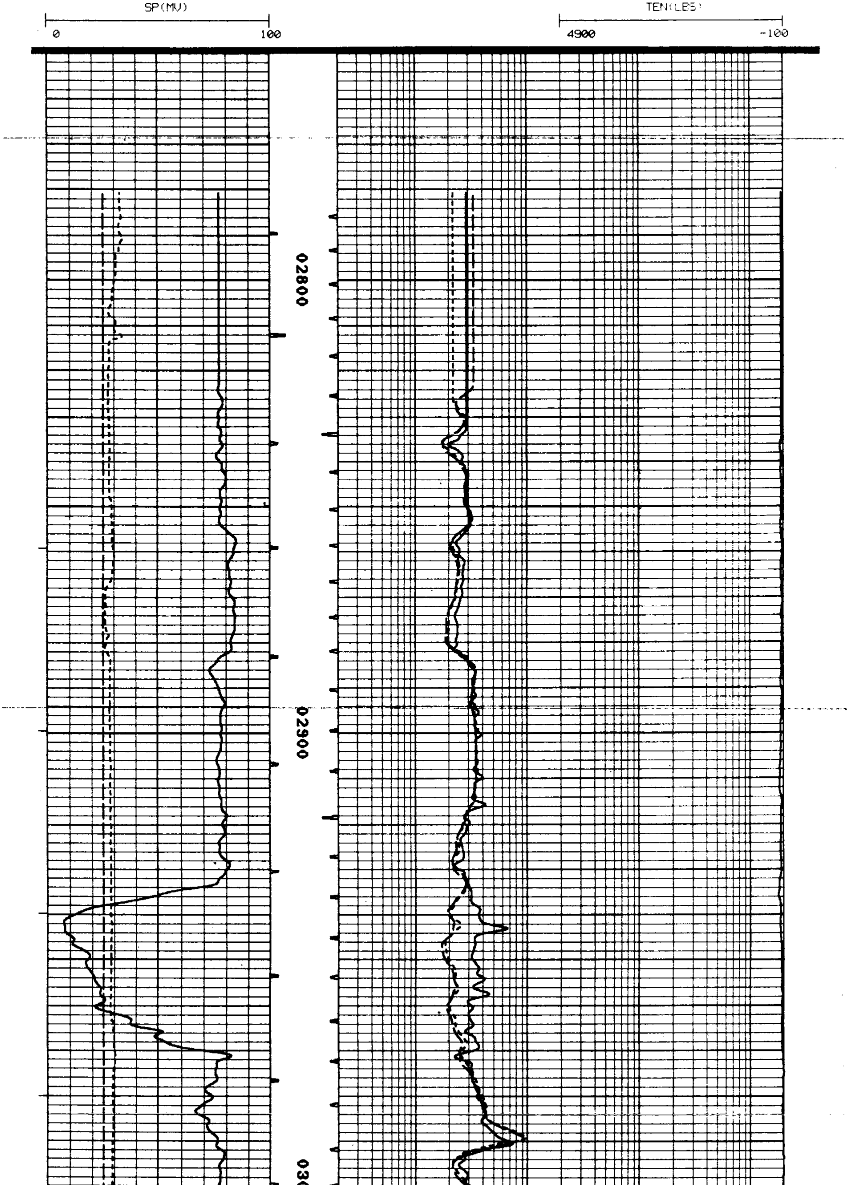
COMPANY: ARCO OIL & GAS COMPANY RUN: 1

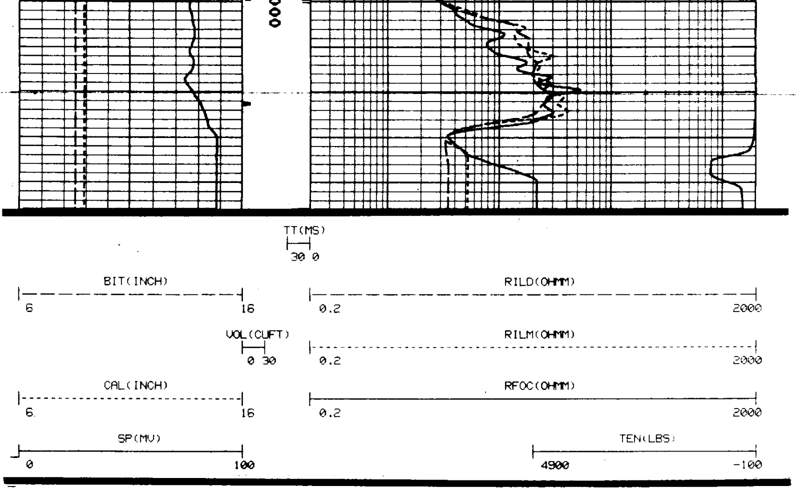
WELL NAME: LF 24-8-75 RD1 TRIP: 1

SERVICE: KC214N FILE: 4 DATE: 10/31/88 TIME: 09:20:43

REVISION: FSYSAL REV GS08 VER 2 **REPEAT SECTION** MODE: RECORD







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***************************************
*                                     *
*  CALIBRATION/VERIFICATION SUMMARIES *
*  DATE 10/31/88          TIME 10:40:38 *
*  RUN  1                 TRIP 1      *
*                                     *
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      LOG NAME DIFL    ASSET NO. 33304     UNIT NO. HL 6406
   CALIBRATION ENTERED ON  10/25/88 AT 15:05:21

CURVE   MILLIVOLTS      SCALING FACTORS    ENGINEERING VALUES   UNITS
         LOW    HIGH    ADD.      MULT.       LOW        HIGH
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     DATE 10/06/88         CALIBRATION          TIME 12:07:06

CILD      1.8   484.5   -0.964     2.0192      0.500    500.000 MMHO
CILM     -2.0   506.8    2.349     2.2159      0.500    500.000 MMHO
CFOC      3.2   497.6   -2.240     2.4626      1.000    500.000 MMHO

     DATE 10/06/88    PRIMARY VERIFICATION      TIME 12:09:42

CILD     -0.2   486.4   -0.964     2.0192     -1.131    501.525 MMHO
CILM      0.0   504.5    2.349     2.2159      2.420    497.678 MMHO
CFOC      4.5   504.0   -2.240     2.4626      2.331    506.403 MMHO

     DATE 10/31/88   BEFORE LOG VERIFICATION    TIME 08:57:55

CILD      0.1   494.8   -1.203     1.9860     -1.131    501.525 MMHO
CILM     -0.0   506.8    2.383     2.2054      2.420    497.678 MMHO
CFOC      4.6   488.1   -2.470     2.5437      2.331    506.403 MMHO

     DATE 10/31/88    AFTER LOG VERIFICATION    TIME 10:12:38

CILD      0.1   497.1   -1.203     1.9860     -1.094    504.364 MMHO
CILM     -0.0   505.9    2.383     2.2054      2.406    496.705 MMHO
CFOC      4.6   491.9   -2.470     2.5437      2.307    510.346 MMHO


      LOG NAME GR      ASSET NO. 60484P    UNIT NO. HL 6406
   CALIBRATION ENTERED ON  10/31/88 AT 04:00:24
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CURVE  COUNTS/SEC.    SCALING FACTORS   ENGINEERING VALUES  UNITS
         LOW   HIGH   ADD.   MULT.         LOW      HIGH
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     DATE 10/31/88         CALIBRATION          TIME 03:56:14

GR        89.2  294.4   0.000   0.7310      0.000    150.000 API

                     PRIMARY VERIFICATION          NOT DONE

     DATE 10/31/88  BEFORE LOG VERIFICATION    TIME 04:02:12

GR        90.1  298.2   0.000   0.7310     65.826    218.001 API

     DATE 10/31/88   AFTER LOG VERIFICATION    TIME 10:37:08

GR        90.9  295.6   0.000   0.7310     66.447    216.118 API




      LOG NAME CAL    ASSET NO. 79090    UNIT NO. HL 6406
    CALIBRATION ENTERED ON  10/25/88 AT 15:07:26

CURVE  MILLIVOLTS     SCALING FACTORS   ENGINEERING VALUES  UNITS
         LOW   HIGH   ADD.   MULT.         LOW      HIGH
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     DATE 09/02/88         CALIBRATION          TIME 17:17:18

CAL    3437.4 8268.9   1.731   0.0091      6.000     12.000 INCH

                     PRIMARY VERIFICATION          NOT DONE

     DATE 10/31/88  BEFORE LOG VERIFICATION    TIME 08:51:58

CAL      E     5827.1  1.731   0.0091     E           8.968 INCH

     DATE 10/31/88   AFTER LOG VERIFICATION    TIME 10:16:55

CAL      E     5708.4  1.731   0.0091     E           8.820 INCH
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