ATLAS WIRELINE SERVICES [redacted]

BHC ACOUSTILOG®
GAMMA RAY

5" = 100'

COMPANY ARCO OIL & GAS COMPANY
WELL LF 32-20-65 R RD NO. 1
FIELD MIST
COUNTY COLUMBIA STATE OR.

LOCATION:
1561' S & 1334' W FROM
THE NE CORNER OF
SEC 20 TWP 6N RGE 5W

OTHER SERVICES
GR/CN/CDL
DIFL

PERMANENT DATUM GL ELEV. 1023'
LOGGING MEASURED FROM KB 10' FT. ABOVE P.D.
DRILLING MEASURED FROM KB

ELEVATIONS
KB 1033'
DF -
GL 1023

DATE	8/14/88				
RUN	1				
SERVICE ORDER	159039				
DEPTH-DRILLER	3088'				
DEPTH-LOGGER	3078'				
BOTTOM LOGGED INTERVAL	3076'				
TOP LOGGED INTERVAL	1533'				
CASING - DRILLER	7"	@ 1533'	@	@	@
CASING - LOGGER	1533'				
BIT SIZE	6 1/4"				
TYPE FLUID IN HOLE	E Z MUD				
DENSITY / VISCOSITY	10.5	43			
PH / FLUID LOSS	9.5	6.2			
SOURCE OF SAMPLE	FLOWLINE				
RM AT MEAS. TEMP.	2.95	@ 82 F	@	@	@
RMF AT MEAS. TEMP.	1.53	@ 80 F	@	@	@
RMC AT MEAS. TEMP.	3.01	@ 80 F	@	@	@
SOURCE OF RMF / RMC	MEAS	MEAS			
RM AT BHT	2.36	@ 100 F	@	@	@
TIME SINCE CIRCULATION	2 HRS				
MAX. REC. TEMP. DEG. F	100 F				
EQUIP. NO. / LOC.	HL 6406	SAC			
RECORDED BY	B. WELCH				
WITNESSED BY	J. W. THOMPSON				

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	72831	1503	FREE
1	1	AC	79726	1603	CENT
1	1	GR	60484	1309	CENT
1	1	CAL	79090	4209	CENT

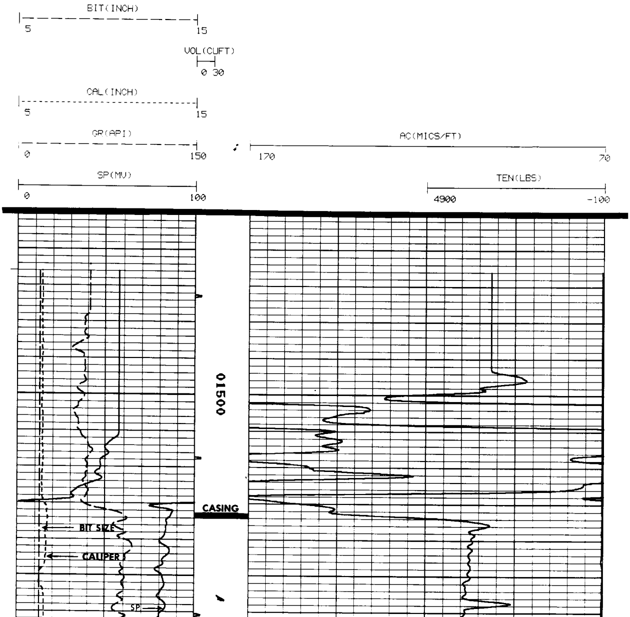
PARAMETERS

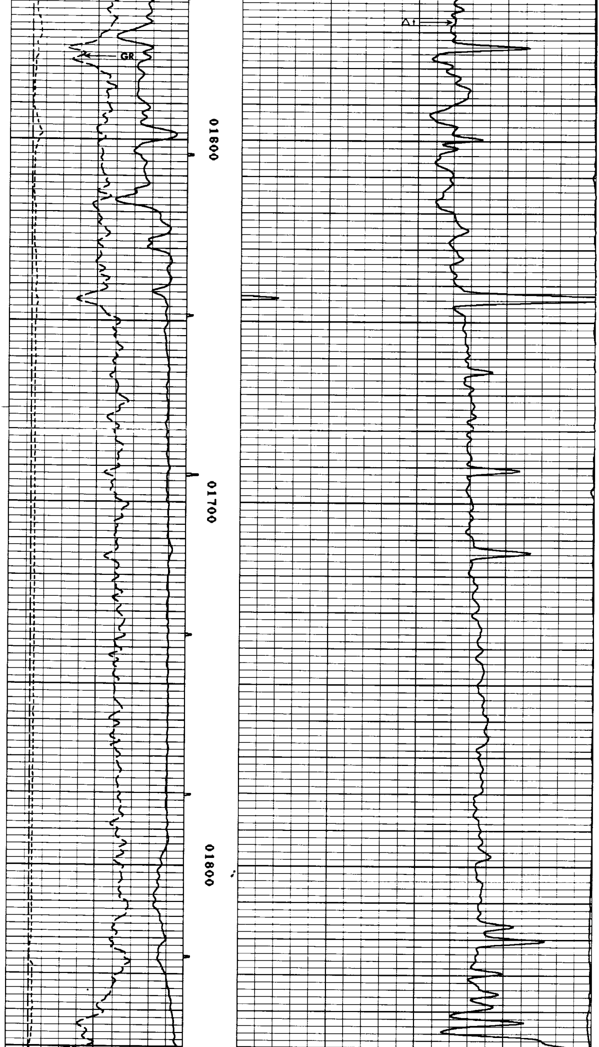
NAME	DEPTH INTERVAL	VALUE	UNITS
A	3090 TO 1467	0.000	
M	3090 TO 1467	0.000	
O.D.	3090 TO 1467	0.000	INCH
DEL-T F	3090 TO 1467	0.000	MICS/FT
DEL-T M	3090 TO 1467	**********	MICS/FT
DEL-T S	3090 TO 1467	0.000	MICS/FT

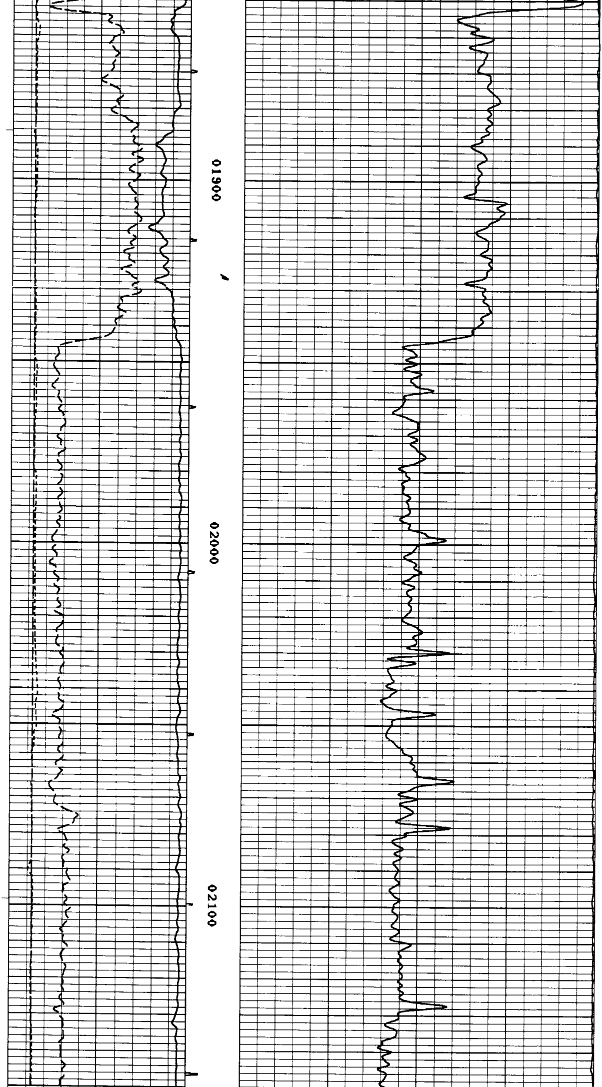
DISPLAY SCALE CHANGES

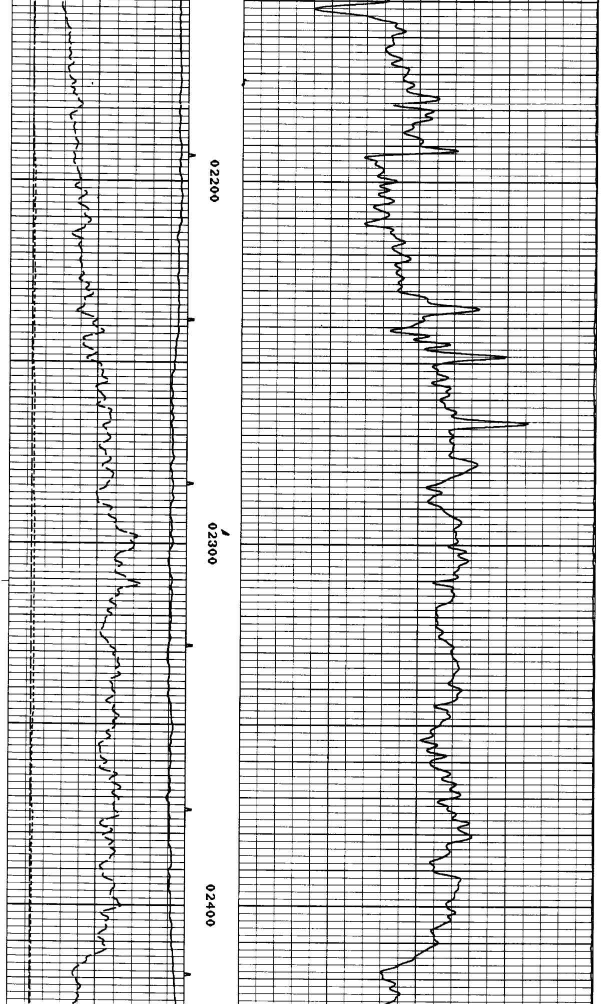
*** NONE ***

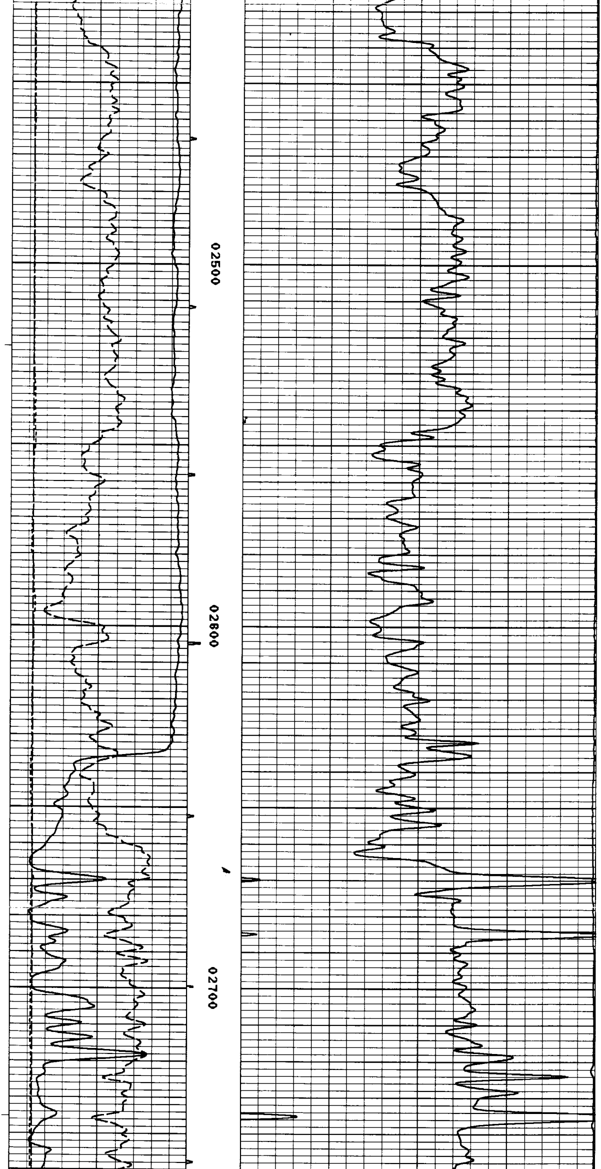
COMPANY: ARCO OIL & GAS COMPANY RUN: 1
WELL NAME: LF 32-20-65-R TRIP: 1
SERVICE: KC214N FILE: 10 DATE: 8/14/88 TIME: 18:36:31
REVISION: FSYSAL REV GS08 VER 2 MODE: PLAYBACK

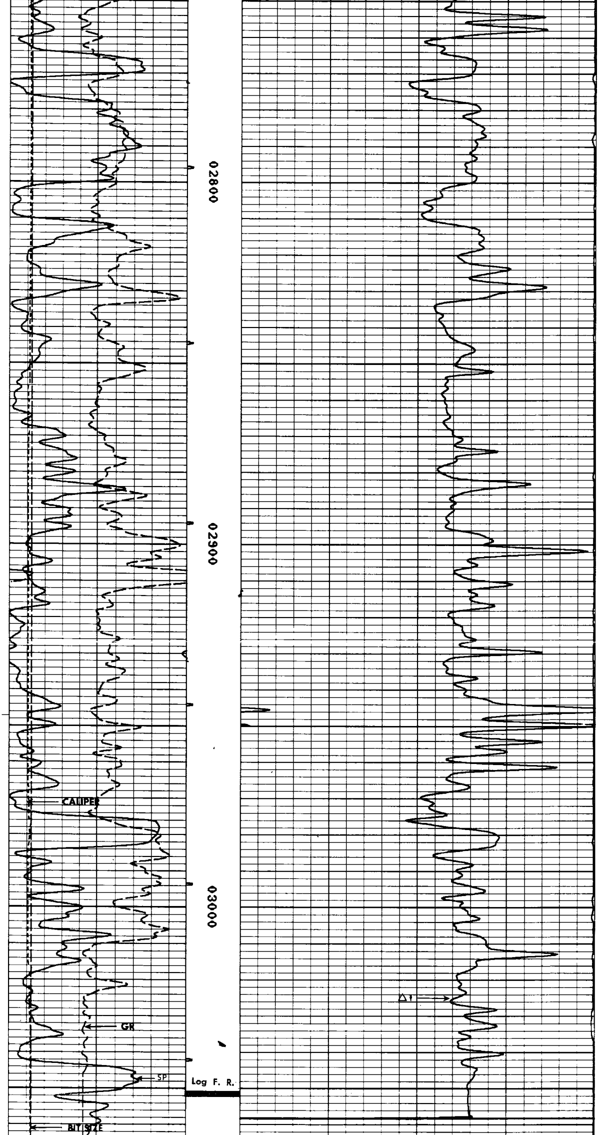


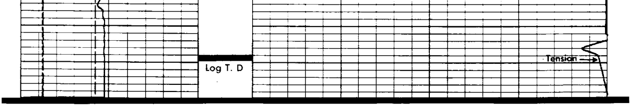












BIT(INCH)
5 15

VOL(CUFT)
0 30

CAL(INCH)
5 15

GR(API)
0 150

AC(MICS/FT)
170 70

SP(MV)
0 100

TEN(LBS)
4900 -100

PARAMETERS

NAME	DEPTH INTERVAL	VALUE	UNITS
A	3085 TO 2542	0.000	
M	3085 TO 2542	0.000	
O.D.	3085 TO 2542	0.000	INCH
DEL-T F	3085 TO 2542	0.000	MICS/FT
DEL-T M	3085 TO 2542	**********	MICS/FT
DEL-T S	3085 TO 2542	0.000	MICS/FT

DISPLAY SCALE CHANGES

*** NONE ***

COMPANY: ARCO OIL & GAS COMPANY RUN: 1
WELL NAME: LF 32-20-65-R TRIP: 1
SERVICE: KC214N FILE: 9 DATE: 8/14/88 TIME: 18:23: 1
REVISION: FSYSAL REV GS08 VER 2 MODE: PLAYBACK

REPEAT SECTION

BIT(INCH)
5 15

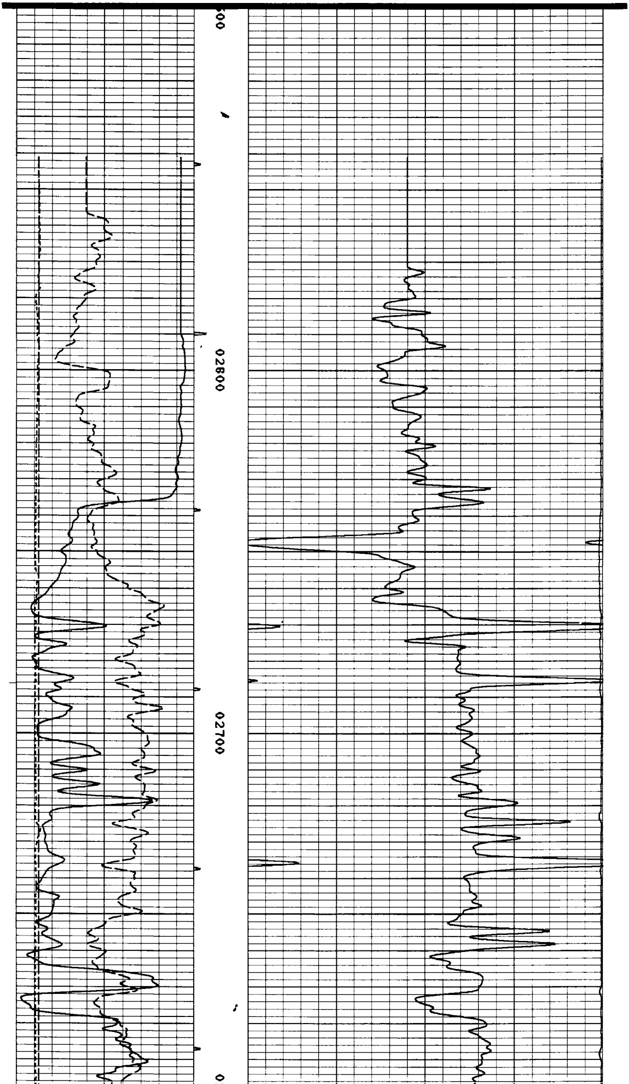
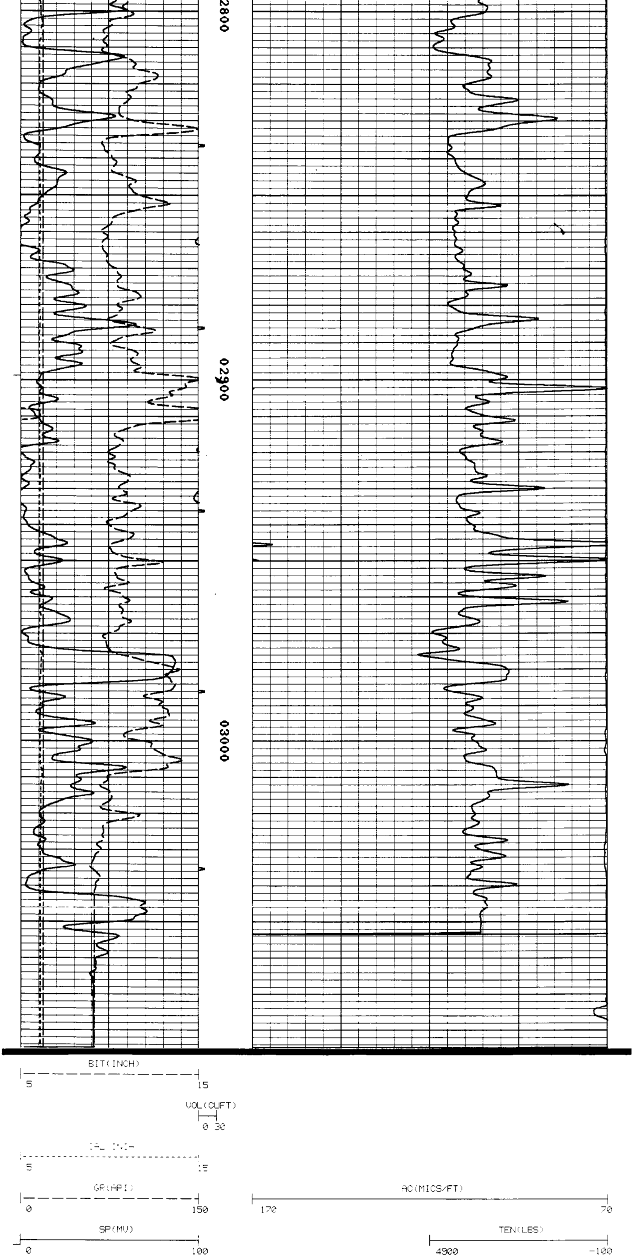
VOL(CUFT)
0 30

CAL(INCH)
5 15

GR(API)
0 150

AC(MICS/FT)
170 70

SP(MV)
0 100

TEN(LBS)
4900 -100