FORM 925317

Western Atlas International
Atlas Wireline Services

Dual Induction Focused Log

FILE NO.

API NO.

2962

5" = 100'

COMPANY ARCO OIL & GAS COMPANY

WELL STERLING #12 24 66

FIELD MIST

COUNTY CLATSOP STATE OREGON

LOCATION: 528.83' N. & 546.30' E. FROM THE W/4 CORNER OF:

SEC 24 TWP 6N RGE 6W

Other Services
BHC/AL/GR
CDLC/CN/G

Permanent Datum GL Elev 494.83'
Log Measured from KB , 10 Ft. Above Permanent Datum
Drilling Measured from KB

Elev.
KB 504.83'
DF
GL 494.83'

Date	11-11-88			
Run No.	ONE			
Service Order	159116			
Depth — Driller	3144'			
Depth — Logger	3136'			
Bottom Logged Interval	3134'			
Top Logged Interval	437'			
Casing — Driller	7" @ 437'	@	@	@
Casing — Logger	437'			
Bit Size	6 1/4"			
Type Fluid in Hole	EZ MUD			
Density and Viscosity	10.2 | 45			
pH and Fluid Loss	9.0 | 5.4 cc	cc	cc	cc
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	2.30 @ 60 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp	2.05 @ 60 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	2.90 @ 60 °F	@ °F	@ °F	@ °F
Source of Rmf and Rmc	M | M			
Rm @ BHT	1.30 @ 105 °F	@ °F	@ °F	@ °F
Time Since Circ.	3 HRS.			
Max. Rec. Temp. Deg. F	105 °F	°F	°F	°F
Equip. No. and Location	6406 | SAC.			
Recorded By	M. HINDS			
Witnessed By	MR. FEDEWA			

FINAL PRINT

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

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     CURVE DELAYS

CURVE   DELAY  UNITS
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 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
 AC9     27,0  FT,IN
 AC      27,0  FT,IN
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                  PARAMETERS

  NAME     DEPTH INTERVAL    VALUE       UNITS
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 A          3143 TO   413       0.000

 M          3143 TO   413       0.000

 O.D.       3143 TO   413       3.500  INCH

 DEL-T F    3143 TO   413       0.000  MICS FT

 DEL-T M    3143 TO   413 ***********  MICS FT

 DEL-T S    3143 TO   413 ***********  MICS FT
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          DISPLAY SCALE CHANGES

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

WELL NAME:  STERLING NO. 12-24-16                           TRIP: 1

SERVICE:    KC214N         FILE:   3       DATE:  11/03/88    TIME:  01:01:13

REVISION:   FSYSAL REV GS08 VER 2                           MODE: RECORD
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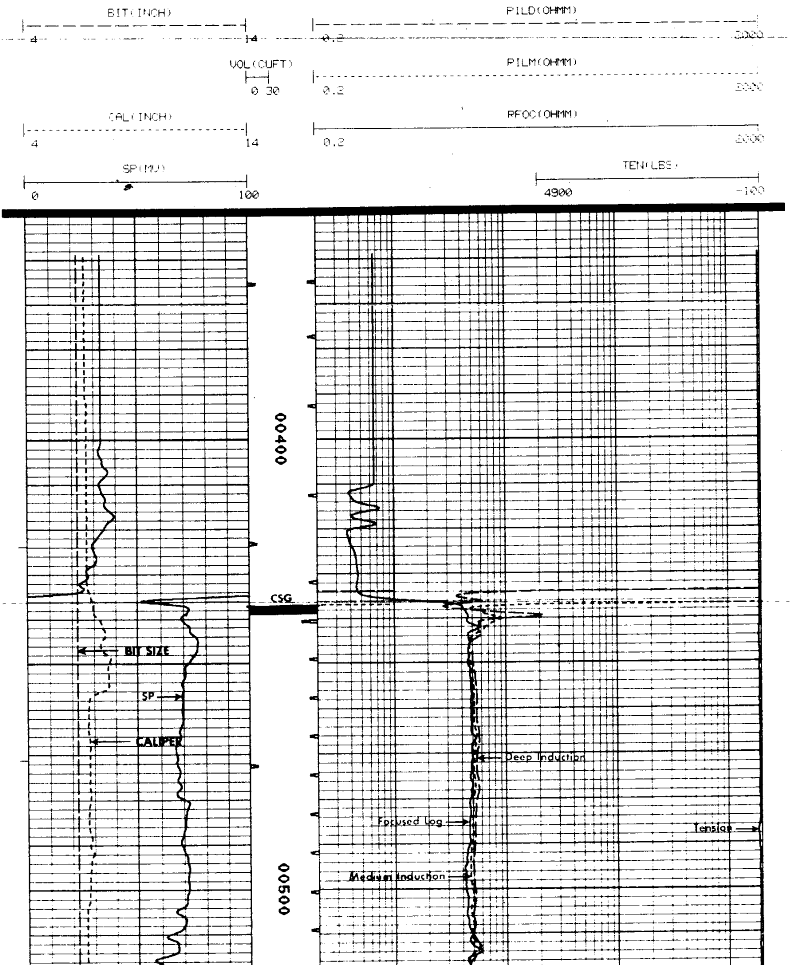
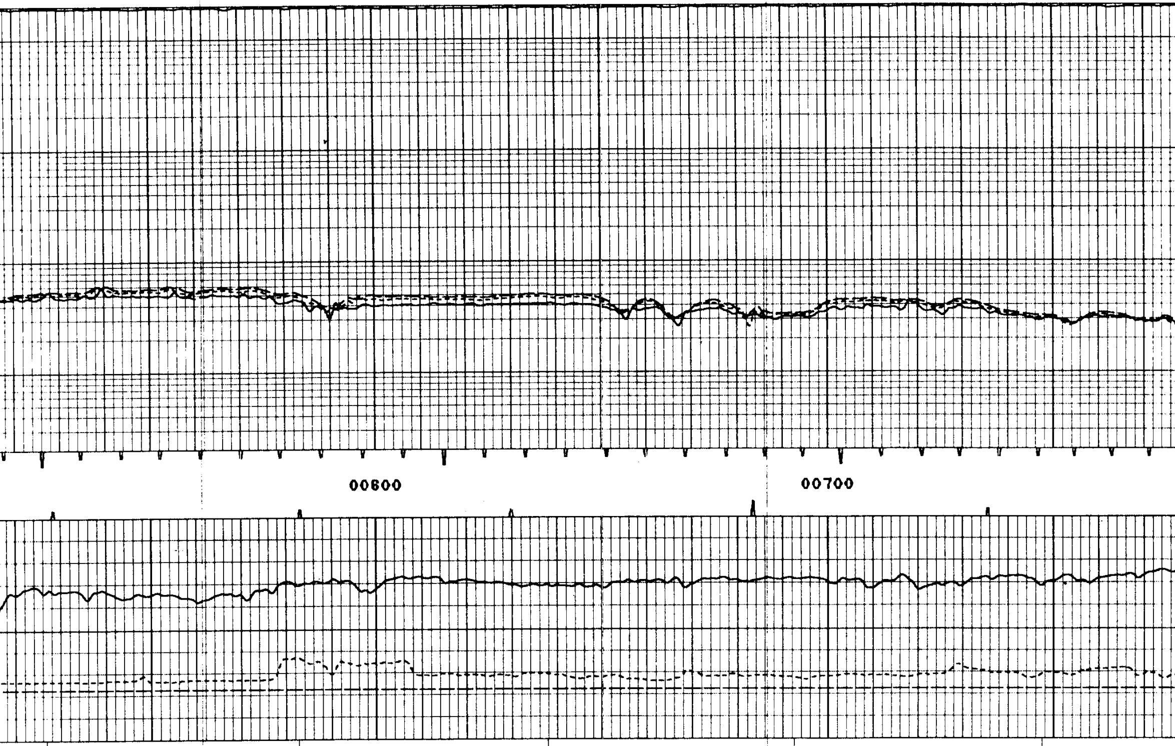
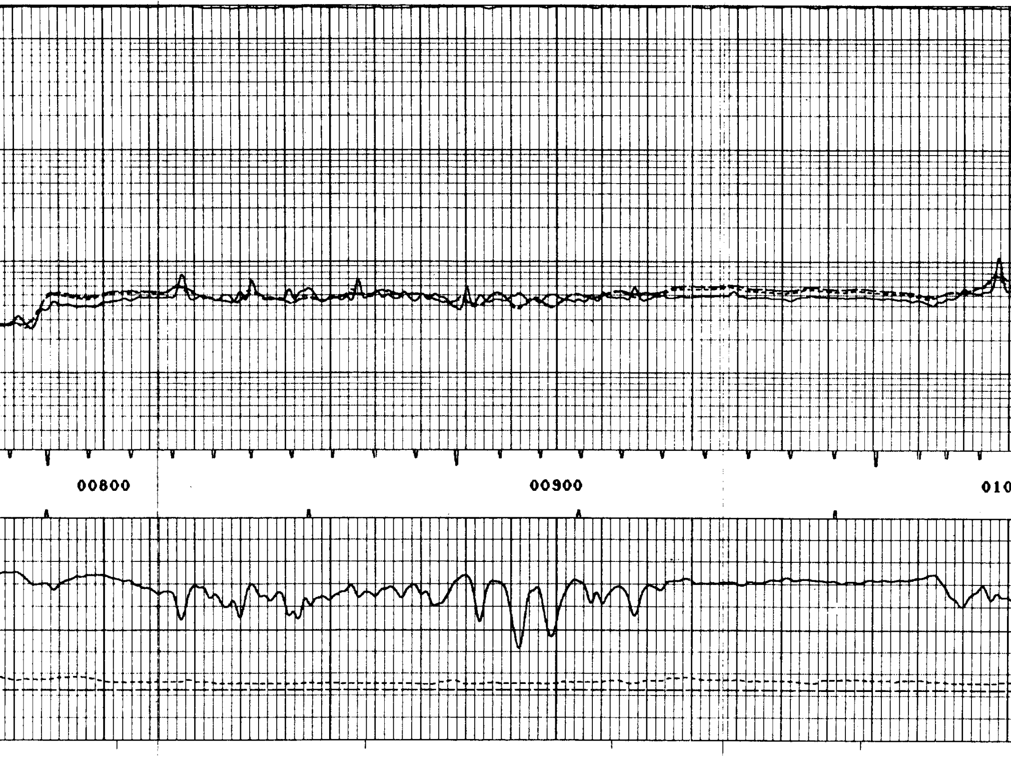
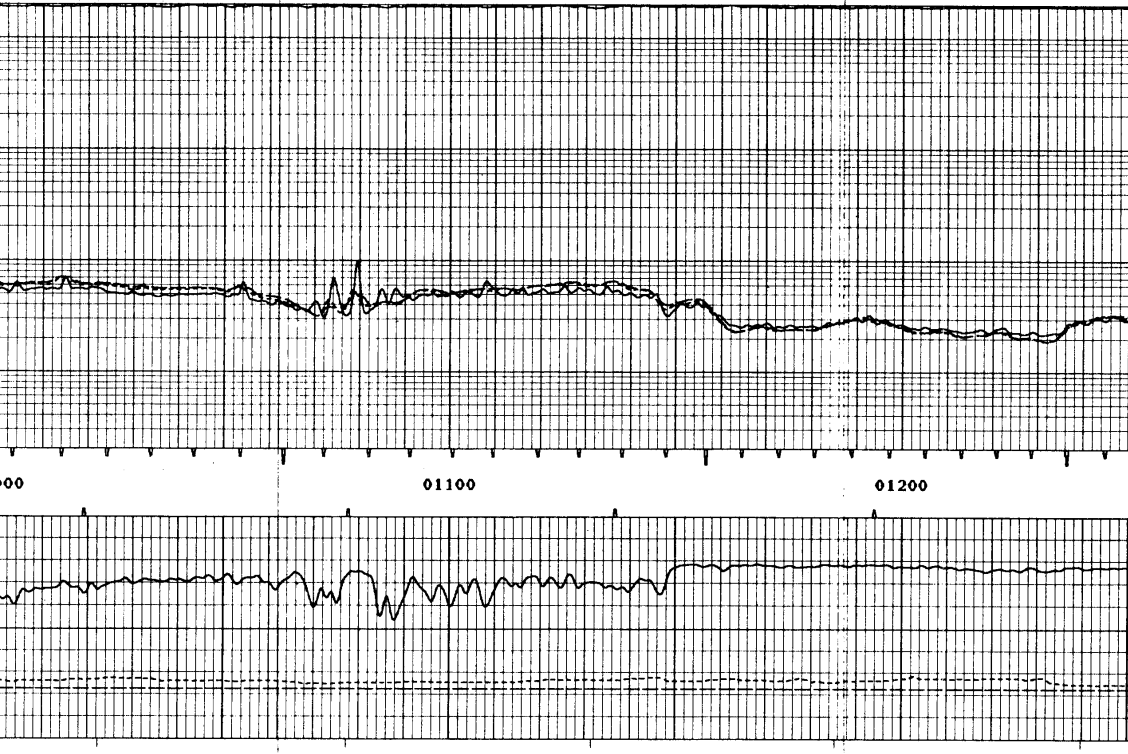
TT(MS)

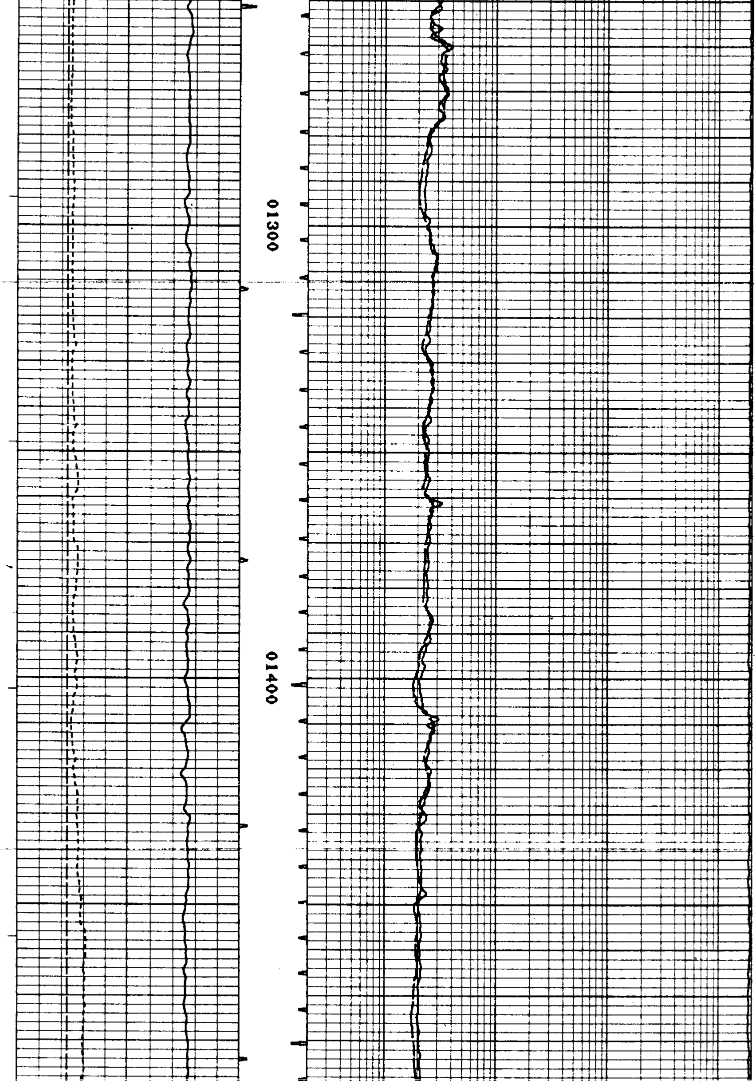
30 0

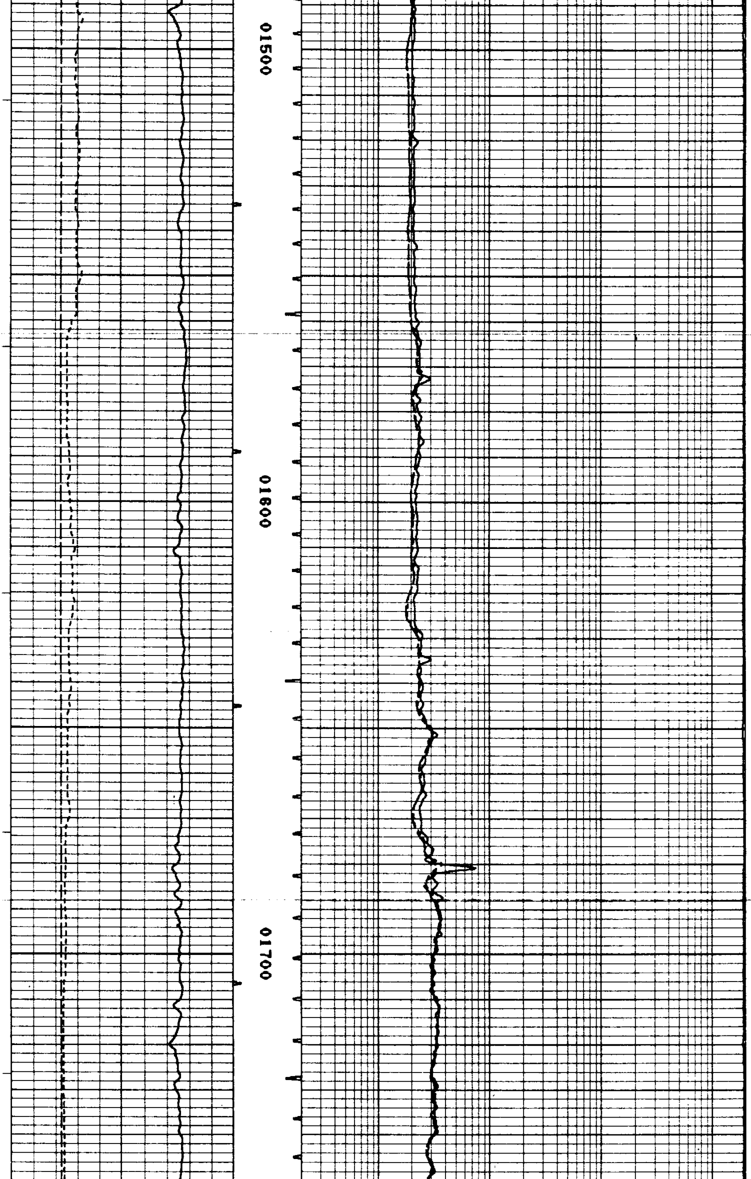


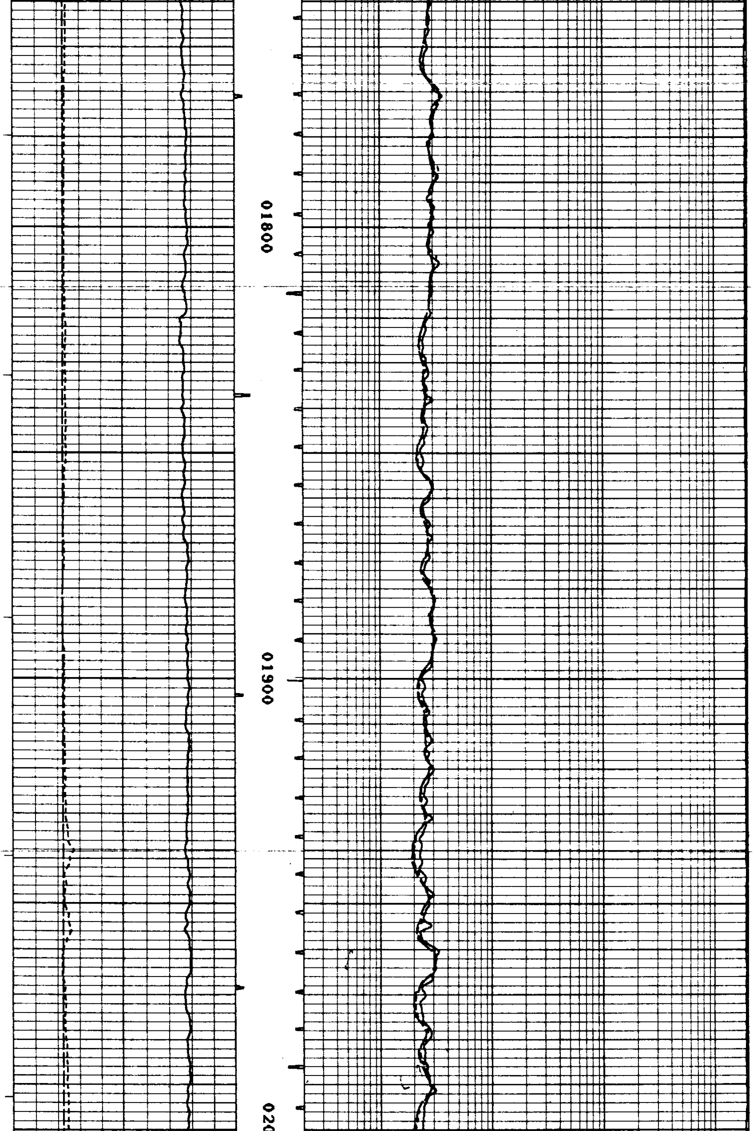


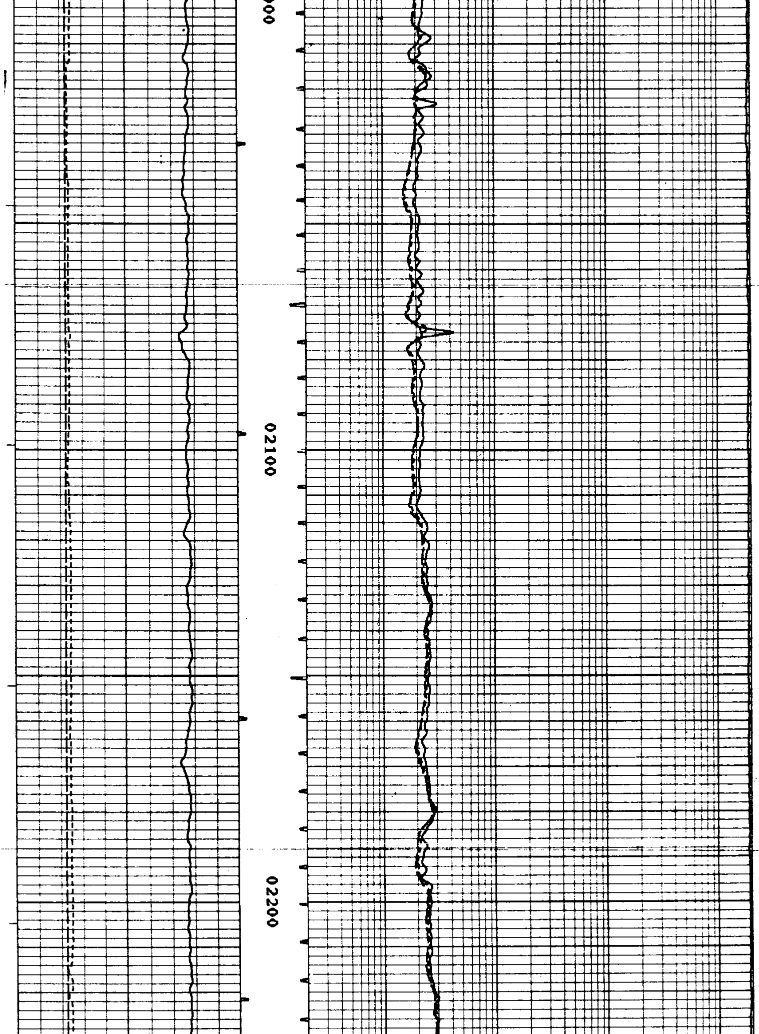


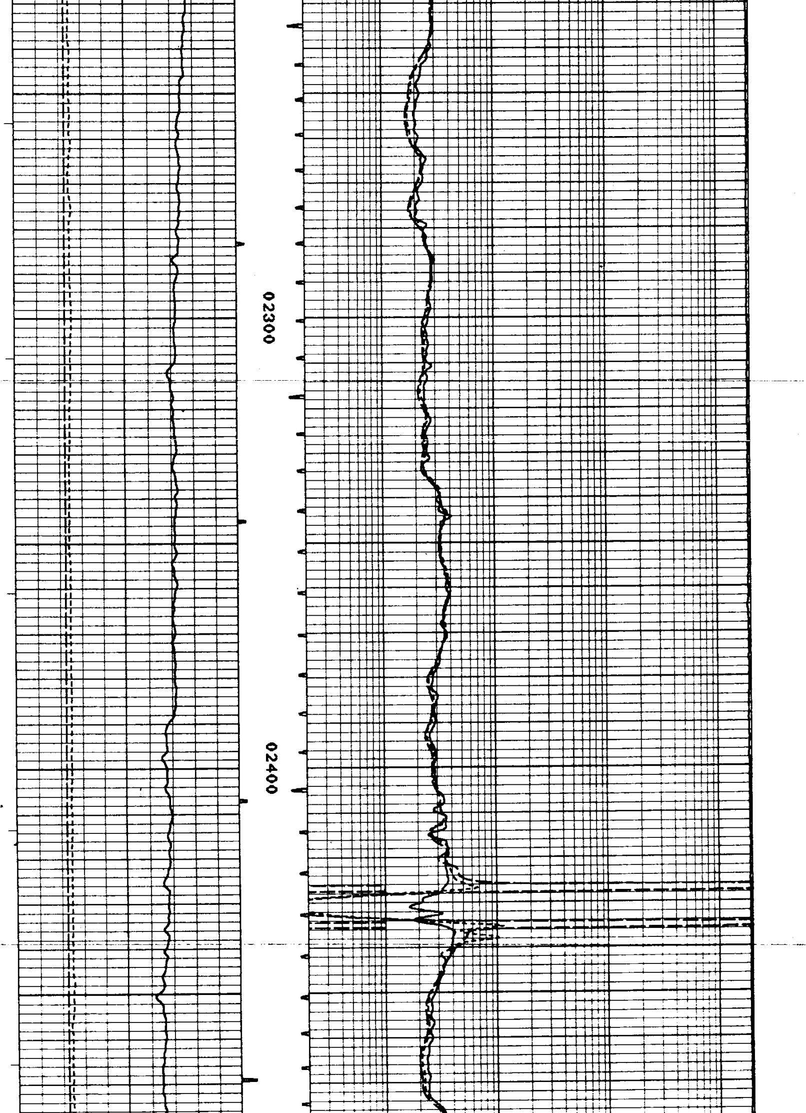


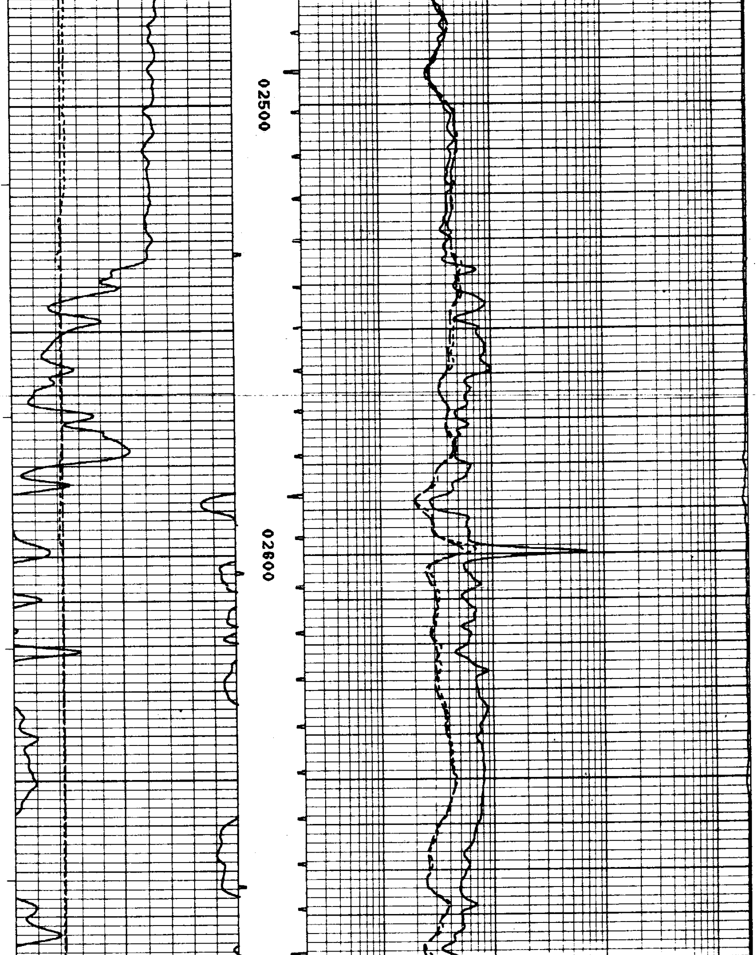


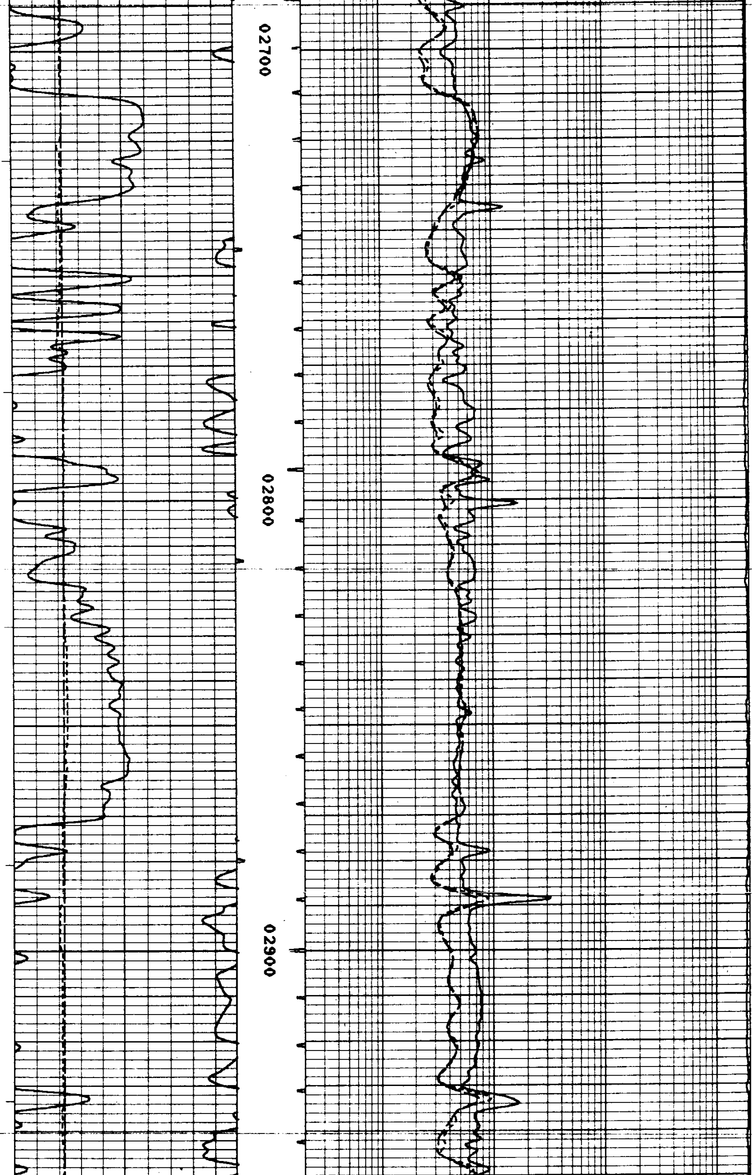


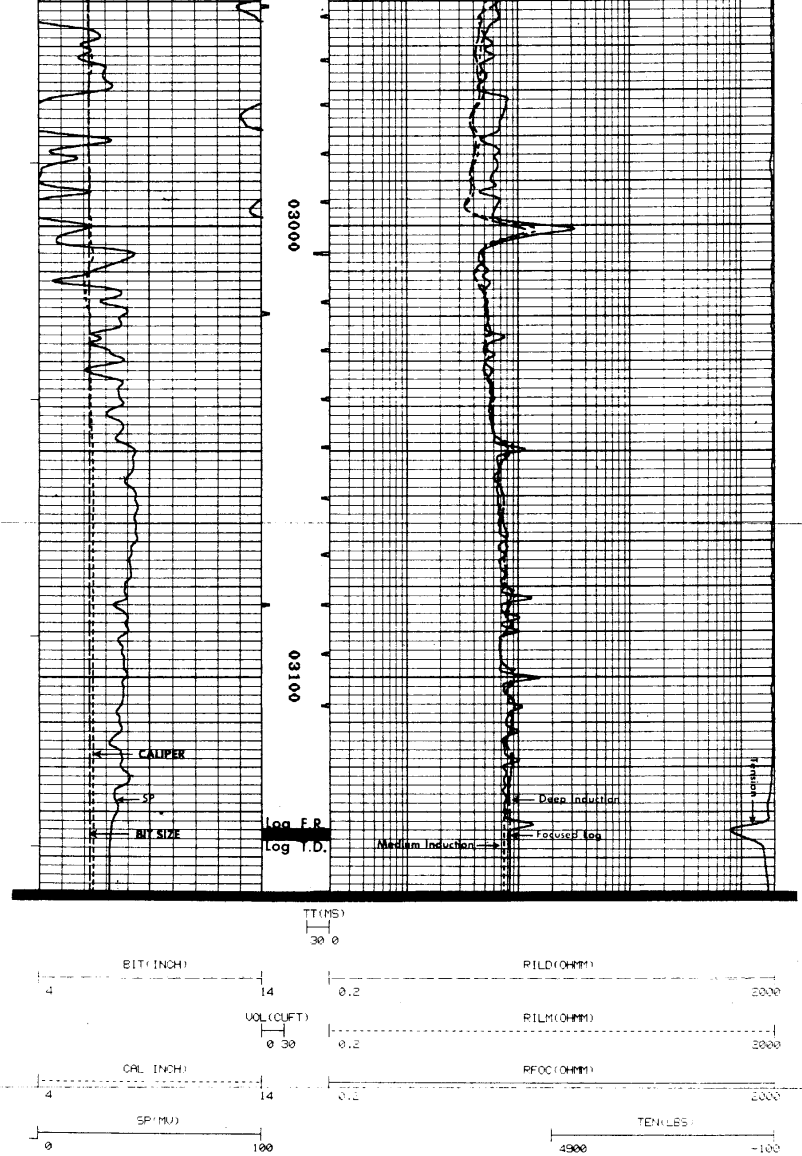












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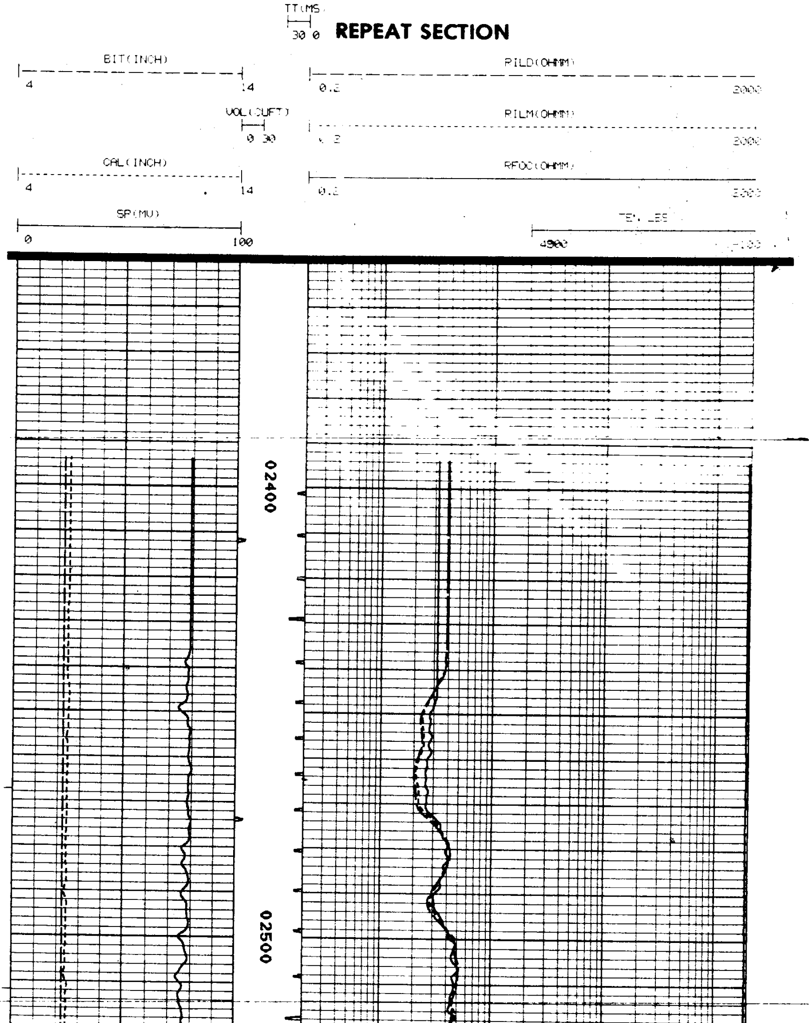

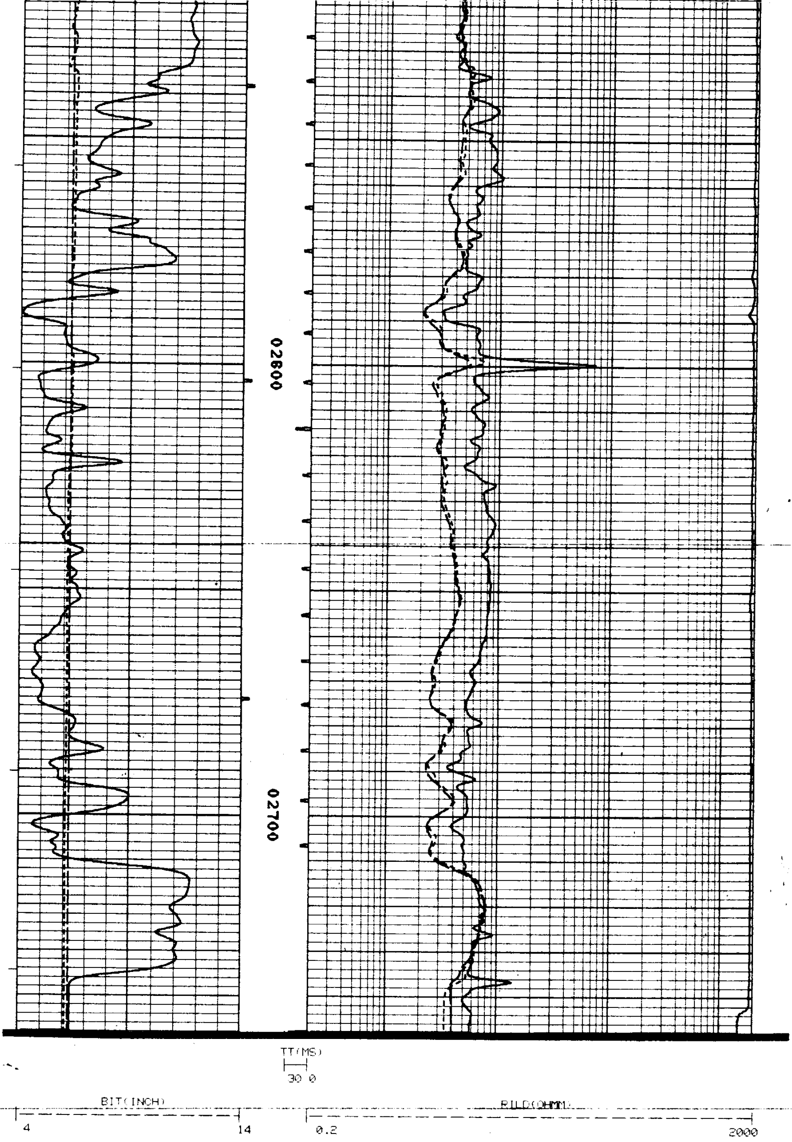

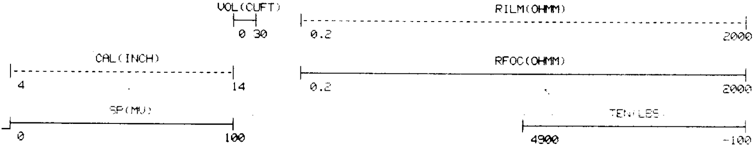

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          ****************************************
          *                                      *
          *  CALIBRATION/VERIFICATION SUMMARIES  *
          *  DATE 11/08/88          TIME 02:02:21 *
          *  RUN  1                 TRIP 1       *
          *                                      *
          ****************************************


       LOG NAME DIFL    ASSET NO. 33304    UNIT NO. 6406
    CALIBRATION ENTERED ON  11/07/88 AT 20:27:10

  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 11/03/88   BEFORE LOG VERIFICATION     TIME 00:34:01

  CILD       0.0   498.8   -1.159    1.9698      -1.131    501.525 MMHO
  CILM      -0.1   512.2    2.441    2.1820       2.420    497.678 MMHO
  CFOC       4.5   480.4   -2.421    2.5842       2.331    506.403 MMHO

        DATE 11/03/88    AFTER LOG VERIFICATION     TIME 01:56:18

  CILD       0.0   497.5   -1.159    1.9698      -1.134    499.303 MMHO
  CILM      -0.1   509.0    2.441    2.1820       2.373    494.450 MMHO
  CFOC       4.5   480.1   -2.421    2.5842       2.343    506.015 MMHO


       LOG NAME GR      ASSET NO. 60434P   UNIT NO. 6406
    CALIBRATION ENTERED ON  11/03/88 AT 00:18:22

  CURVE   COUNTS SEC.    SCALING FACTORS    ENGINEERING VALUES    UNITS
            LOW    HIGH   ADD.      MULT.      LOW        HIGH
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        DATE 11/03/88          CALIBRATION          TIME 00:18:22

  GR        33.7   250.4    0.000    0.6921       0.000    150.000 API

                          PRIMARY VERIFICATION            NOT DONE

                        BEFORE LOG VERIFICATION           NOT DONE

        DATE 11/03/88    AFTER LOG VERIFICATION     TIME 02:00:04

  GR        66.1   290.2    0.000    0.6921      45.715    200.338 API


       LOG NAME CAL     ASSET NO. 79090    UNIT NO. 6406
    CALIBRATION ENTERED ON  11/07/88 AT 20:56:28

  CURVE   MILLIVOLTS     SCALING FACTORS    ENGINEERING VALUES    UNITS
            LOW    HIGH   ADD.      MULT.      LOW        HIGH
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        DATE 11/07/88          CALIBRATION          TIME 20:56:28

  CAL     3423.6  7391.6    1.391    0.0098       6.000     12.000 INCH

                          PRIMARY VERIFICATION            NOT DONE

        DATE 11/03/88   BEFORE LOG VERIFICATION     TIME 00:27:07

  CAL     3717.9     E      1.391    0.0098       6.339        E     INCH

        DATE 11/03/88    AFTER LOG VERIFICATION     TIME 01:54:44

  CAL     3868.9     E      1.391    0.0098       6.592        E     INCH
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