CC 11-34-65

WELEX

OPEN HOLE

DUAL INDUCTION GUARD LOG

COMP. ARCO OIL AND GAS
WELL COLUMBIA COUNTY #11-34-6
FIELD MIST
COUNTY COLUMBIA ST. OREGON

COMPANY	ARCO OIL AND GAS		
WELL	COLUMBIA COUNTY 11-34-65		
FIELD	MIST		
COUNTY	COLUMBIA	STATE	OREGON

API NO. N/A
LOCATION SOUTH 89 DEG. 51 MIN. 19 SEC.
EAST 807.65 FEET
SOUTH 0 DEG. 08 MIN. 41 SEC.
WEST 1030.96 FEET
FROM NW CORNER OF:
SEC. 34 TWP. 6N RGE. 5W

OTHER SERVICES
AVL

PERMANENT DATUM G.L. ELEV. 1020.05
LOG MEASURED FROM K.B. 10.0 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM K.B.

ELEV.: K.B. 1030.05
D.F. --
G.L. 1020.05

CONFIDENTIAL

DATE	AUGUST 11, 1987			
RUN NO.	ONE			
DEPTH-DRILLER	1950			
DEPTH-WELEX	1948			
BTM. LOG INTER.	1945			
TOP LOG INTER.	480			
CASING-DRILLER	9 5/8 @ 482	@	@	@
CASING-WELEX	480			
BIT SIZE	7 7/8			
TYPE FLUID IN HOLE	POLYMER			
DENS. : VISC.	10.0 : 45	:	:	:
PH : FLUID LOSS	10.6 : 4.8 ML	: ML	: ML	: ML
SOURCE OF SAMPLE	CIRCULATED			
RM @ MEAS. TEMP.	2.8 @ 68 F	@ F	@ F	@ F
RMF @ MEAS. TEMP.	2.5 @ 70 F	@ F	@ F	@ F
RMC @ MEAS. TEMP.	5.0 @ 70 F	@ F	@ F	@ F
SOURCE RMF RMC	MEAS. : MEAS.	:	:	:
RM @ BHT	2.0 @ 97 F	@ F	@ F	@ F
TIME CIRC. STOPPED	2:00 PM			
TIME ON BOTTOM	4:00 PM			
MAX. REC. TEMP.	97 F@ BHT	F@	F@	F@
EQUIP. : LOCATION	1888 : WOLD	:	:	:
RECORDED BY	R.E. GREUTERT			
WITNESSED BY	MR. WYDRINSKI			

FOLD HERE

SERVICE TICKET NO.: 25155-9 API SERIAL NO.: N/A PGM VERSION: V1.07 09/06/85

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLES		
DATE : SAMPLE NO.	:	:
DEPTH-DRILLER		
TYPE FLUID IN HOLE		
DENS. : VISC.	:	:
PH : FLUID LOSS	: ML	: ML
SOURCE OF SAMPLE		
RM @ MEAS. TEMP.	@ F	@ F
RMF @ MEAS. TEMP.	@ F	@ F
RMC @ MEAS. TEMP.	@ F	@ F
SOURCE: RMF : RMC	:	:
RM @ BHT	@ F	@ F
RMF @ BHT	1.8 @ 97 F	@ F
RMC @ BHT	@ F	@ F

RESISTIVITY SCALE CHANGES

TYPE LOG	DEPTH	SCALE UP HOLE	SCALE DOWN HOLE

RESISTIVITY EQUIPMENT DATA

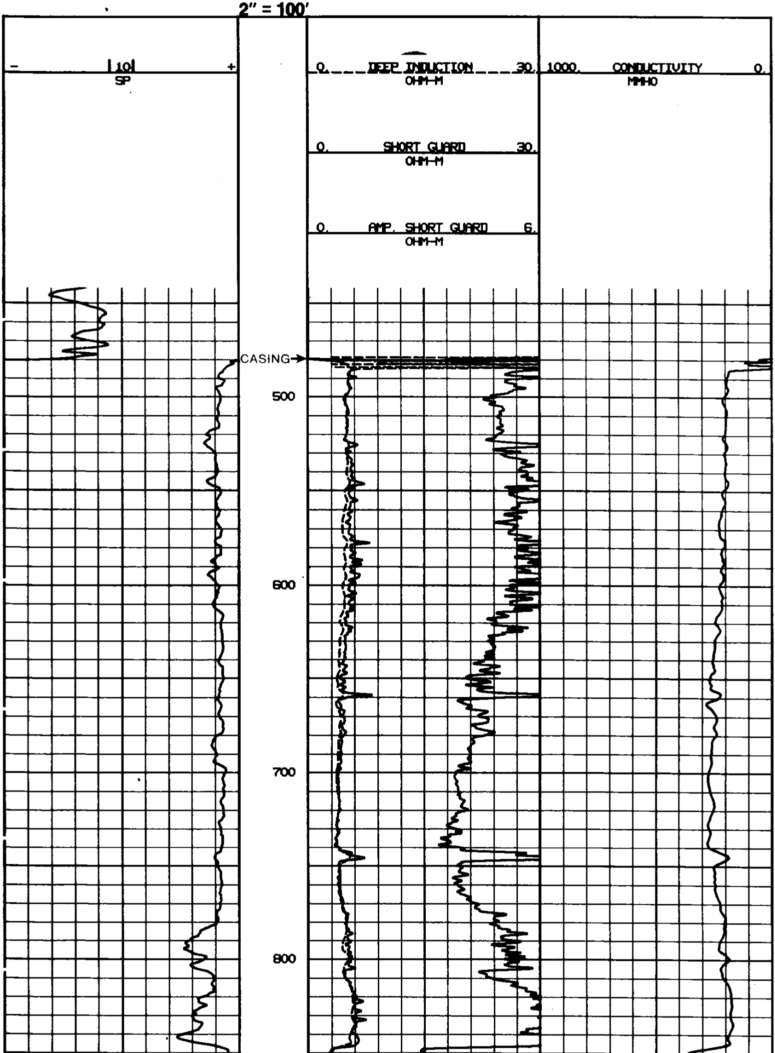
RUN NO.	TOOL TYPE AND NO.	PAD TYPE	TOOL POSITION	OTHER
ONE	DUAL #24405	N/A	FREE	
ONE	SGRD #24019	N/A	FREE	

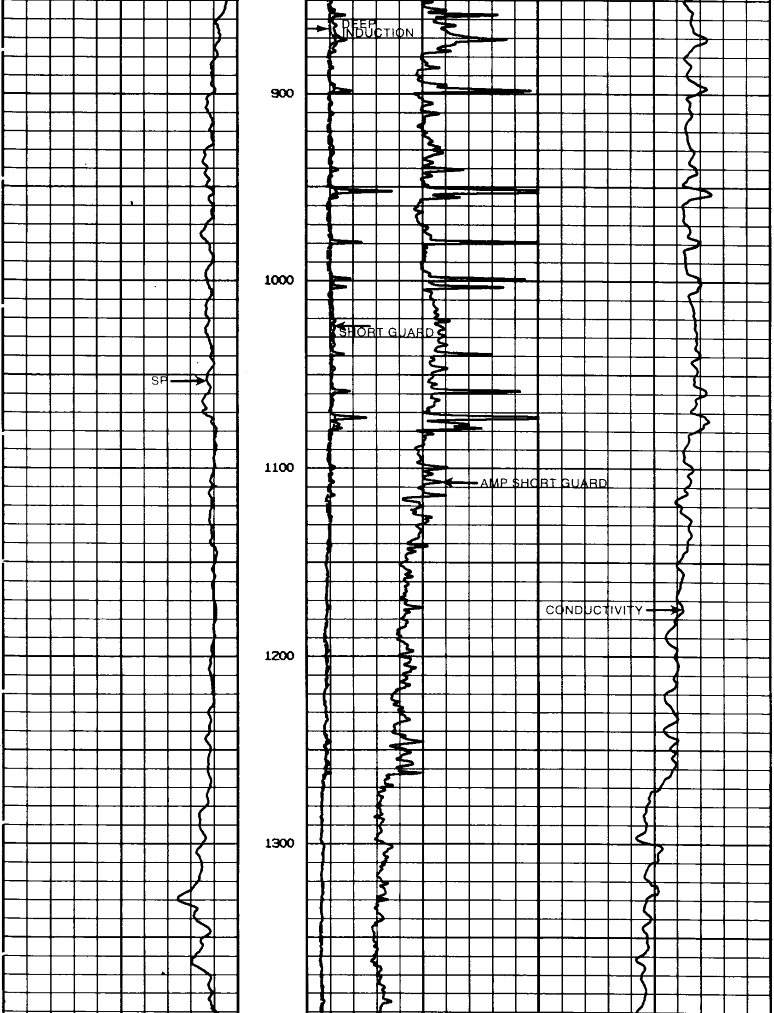
BOREHOLE CORRECTIONS: , SHALLOW. MEDIUM. DEEP.

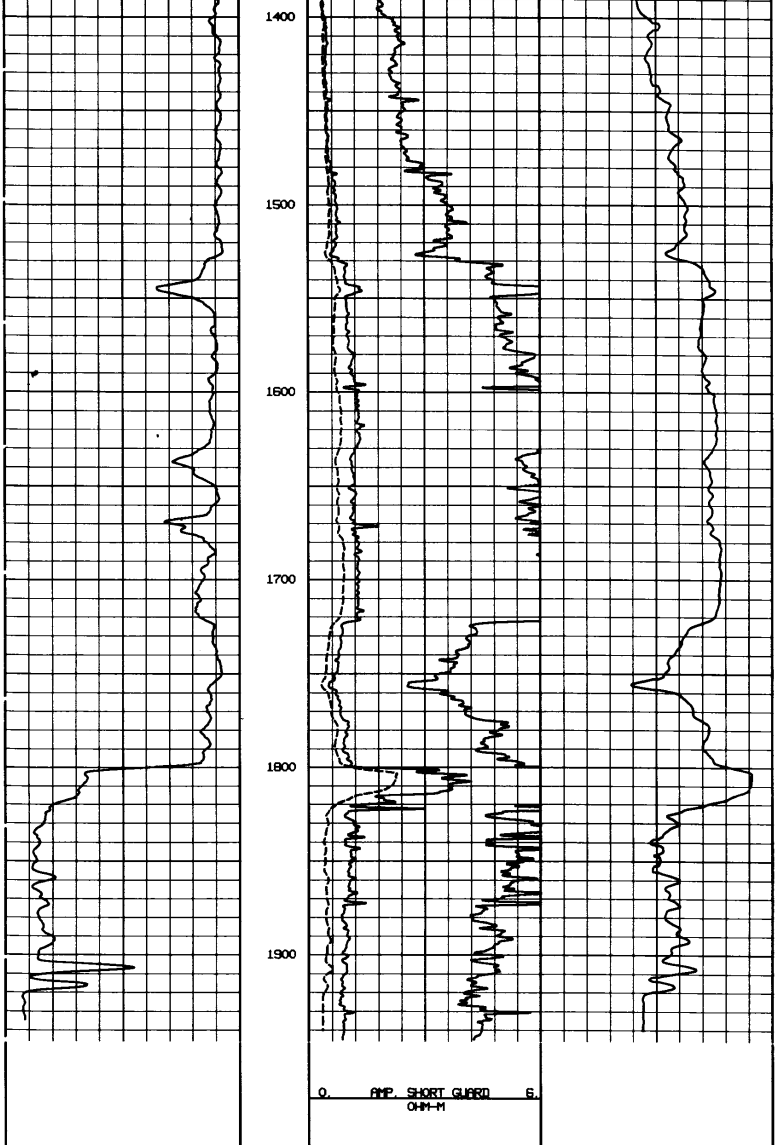
REMARKS: THANKS OPERATORS MIKE EMERSON AND JOHN SNORTMAN.

WELEX DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF LOG DATA. CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS. OR RECOMMENDATIONS WHICH MAY BE GIVEN BY WELEX PERSONNEL OR WHICH MAY APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA. INTERPRETATIONS. OR CONVERSIONS. OR RECOMMENDATIONS AGREES THAT WELEX IS NOT RESPONSIBLE. EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILFULL MISCONDUCT FOR ANY LOSS. DAMAGES. OR EXPENSES RESULTING FROM THE USE THEREOF.

2" = 100'







0. SHORT GUARD 30.
OHM-M

– |10| +
SP

0. DEEP INDUCTION 30.
OHM-M

1000. CONDUCTIVITY 0.
MMHO

REPEAT SECTION

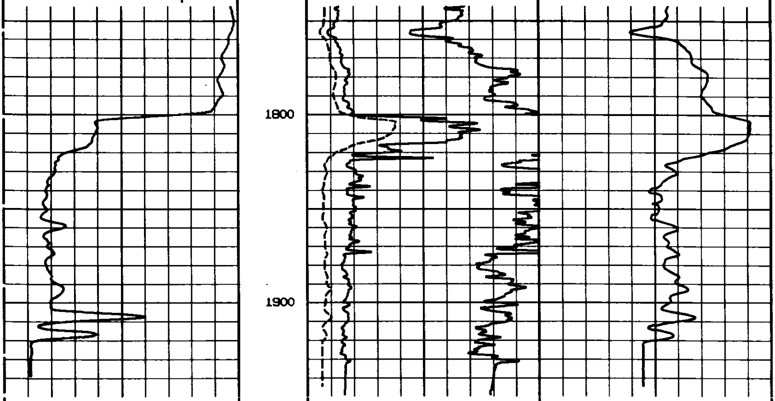
– |10| +
SP

0. DEEP INDUCTION 30.
OHM-M

1000. CONDUCTIVITY 0.
MMHO

0. SHORT GUARD 30.
OHM-M

0. AMP. SHORT GUARD 6.
OHM-M



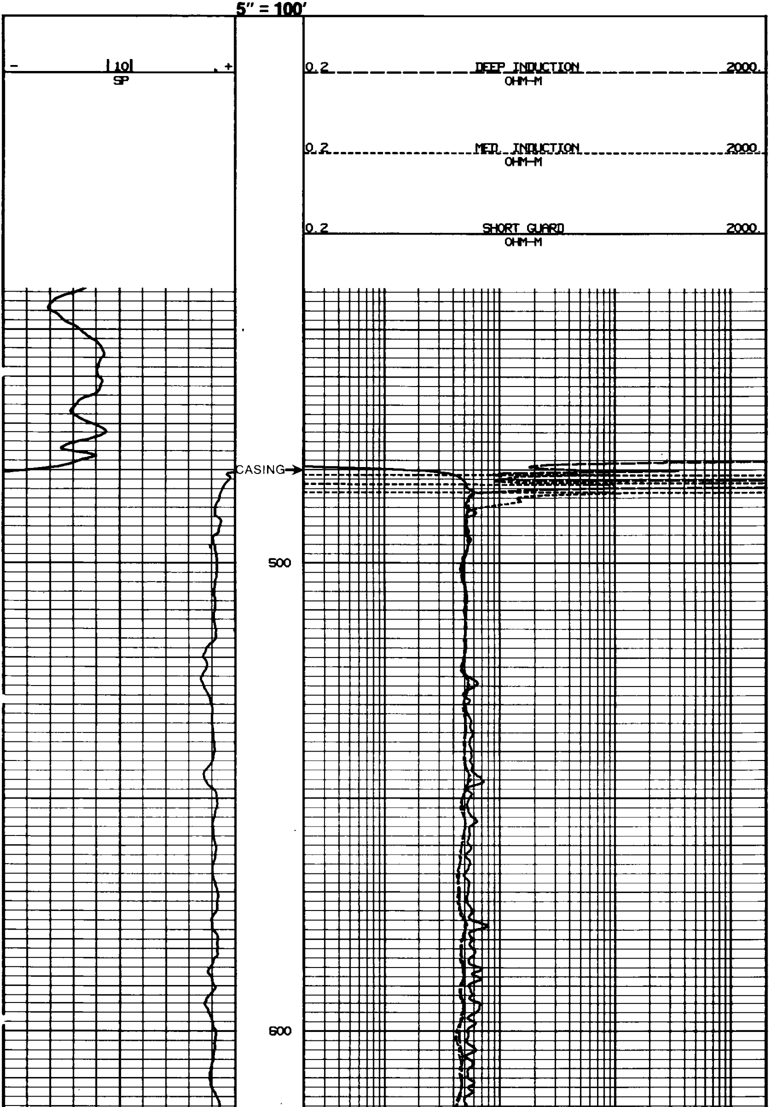
0. AMP. SHORT GUARD 6.
OHM-M

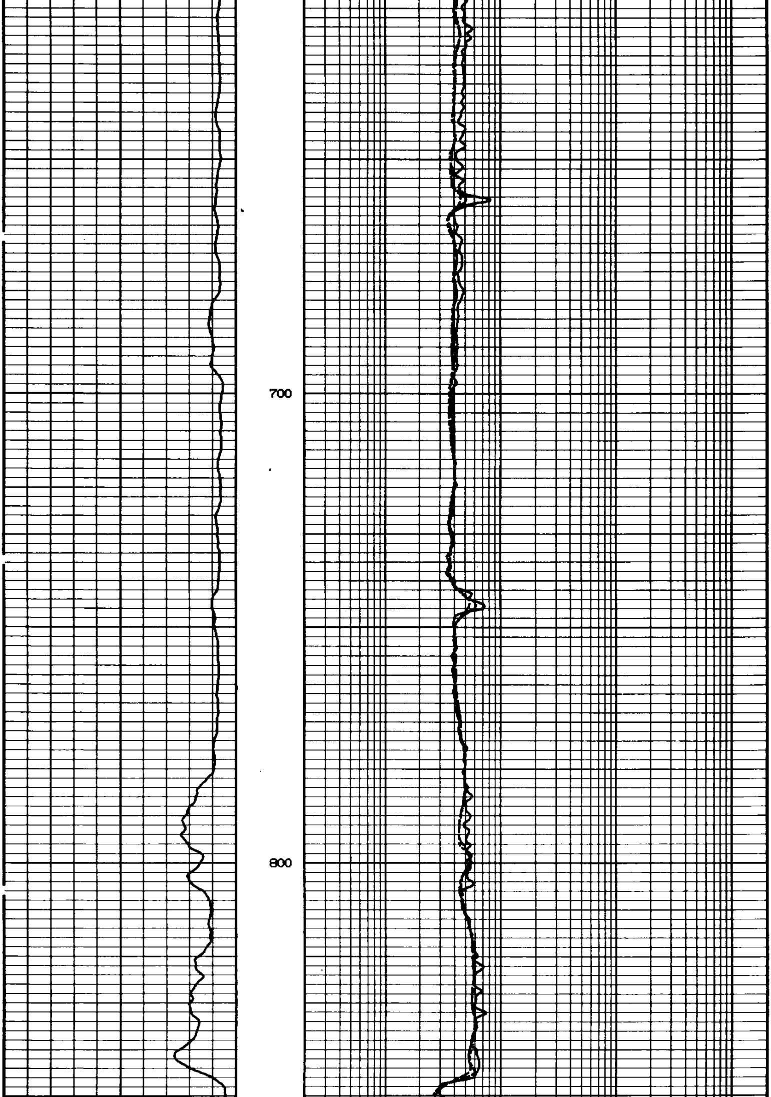
0. SHORT GUARD 30.
OHM-M

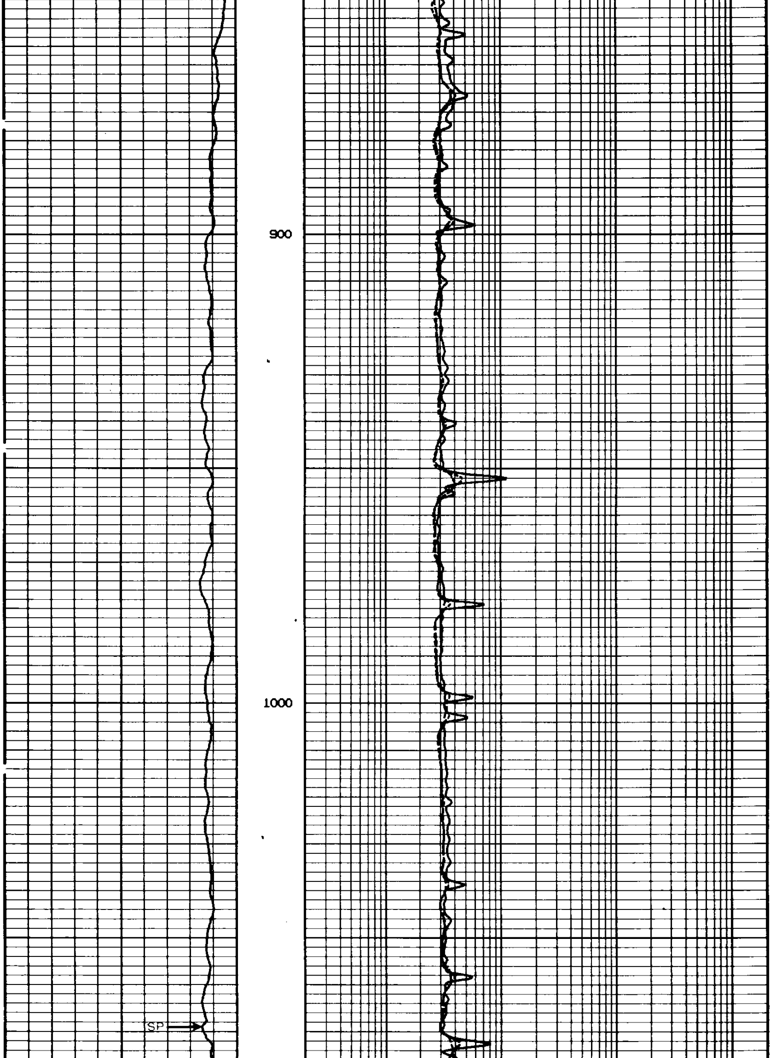
– |10| +
SP

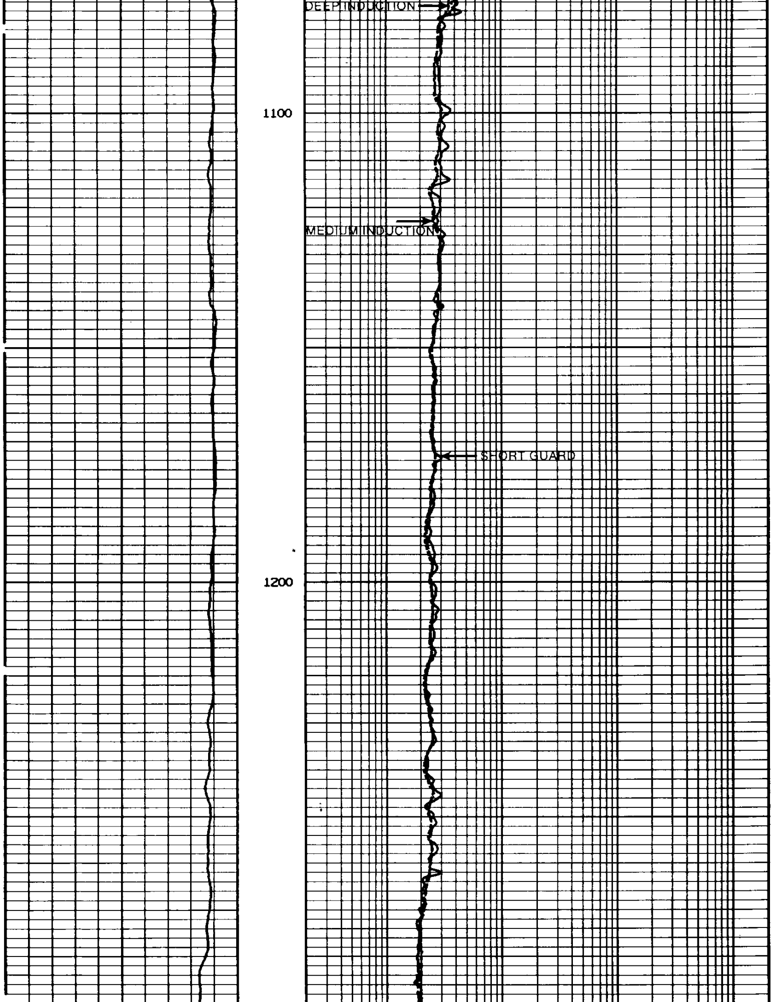
0. DEEP INDUCTION 30.
OHM-M

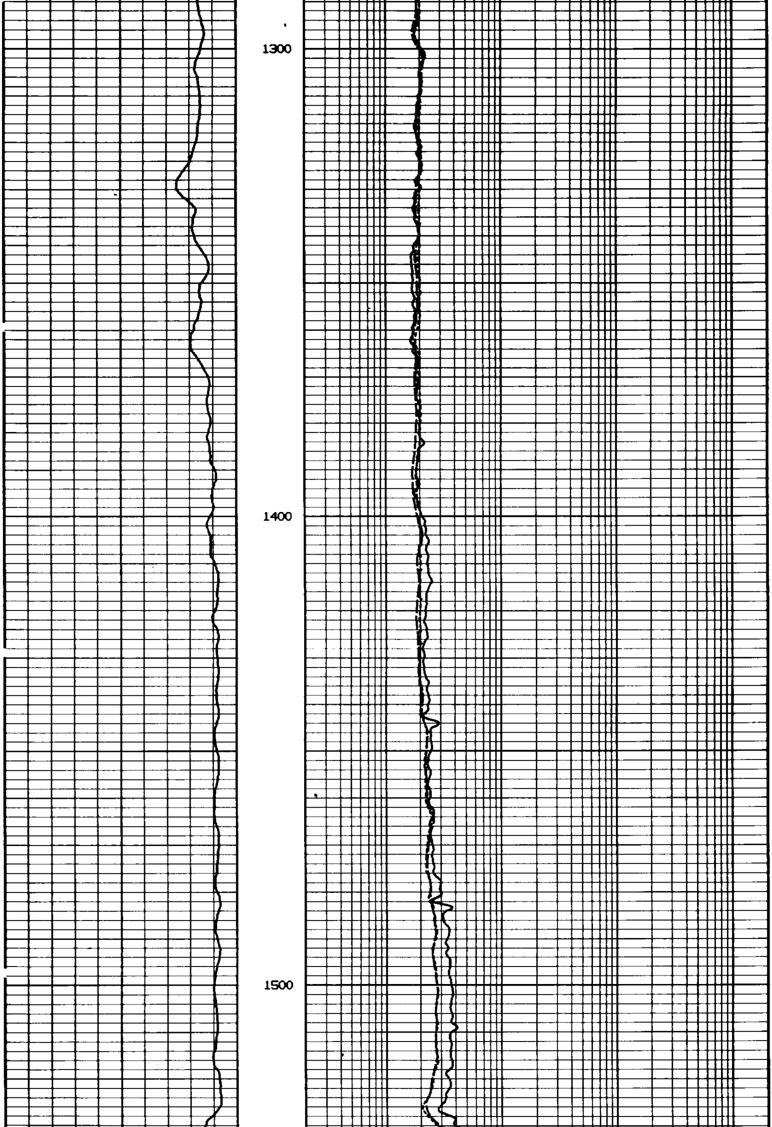
1000. CONDUCTIVITY 0.
MMHO

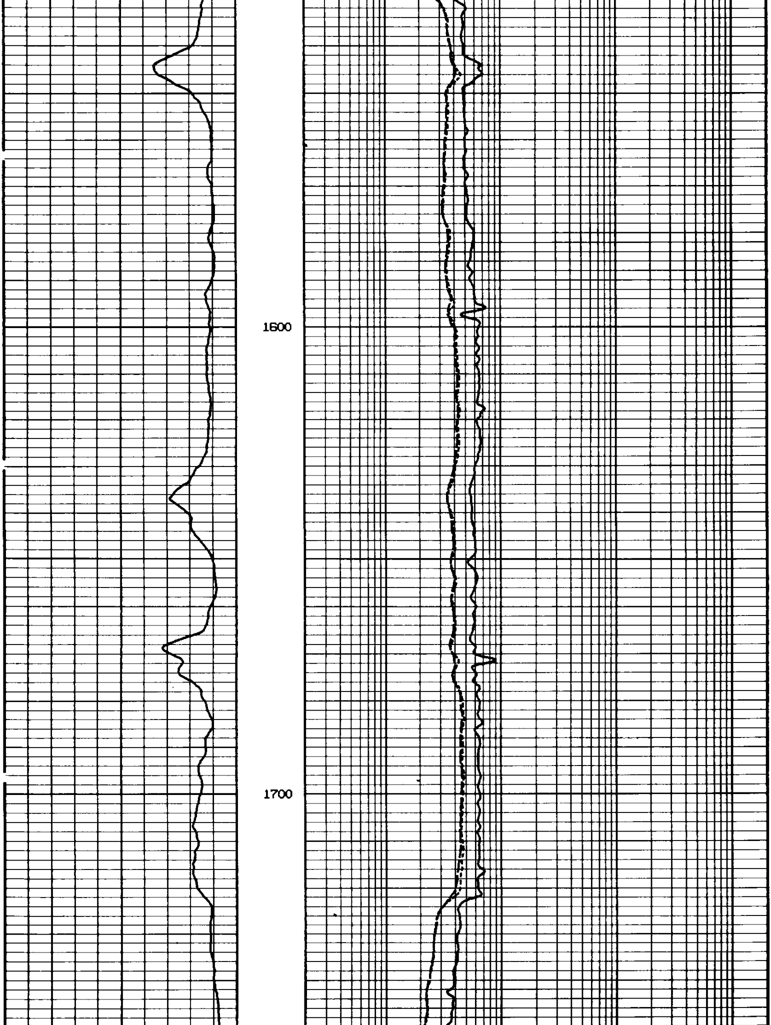


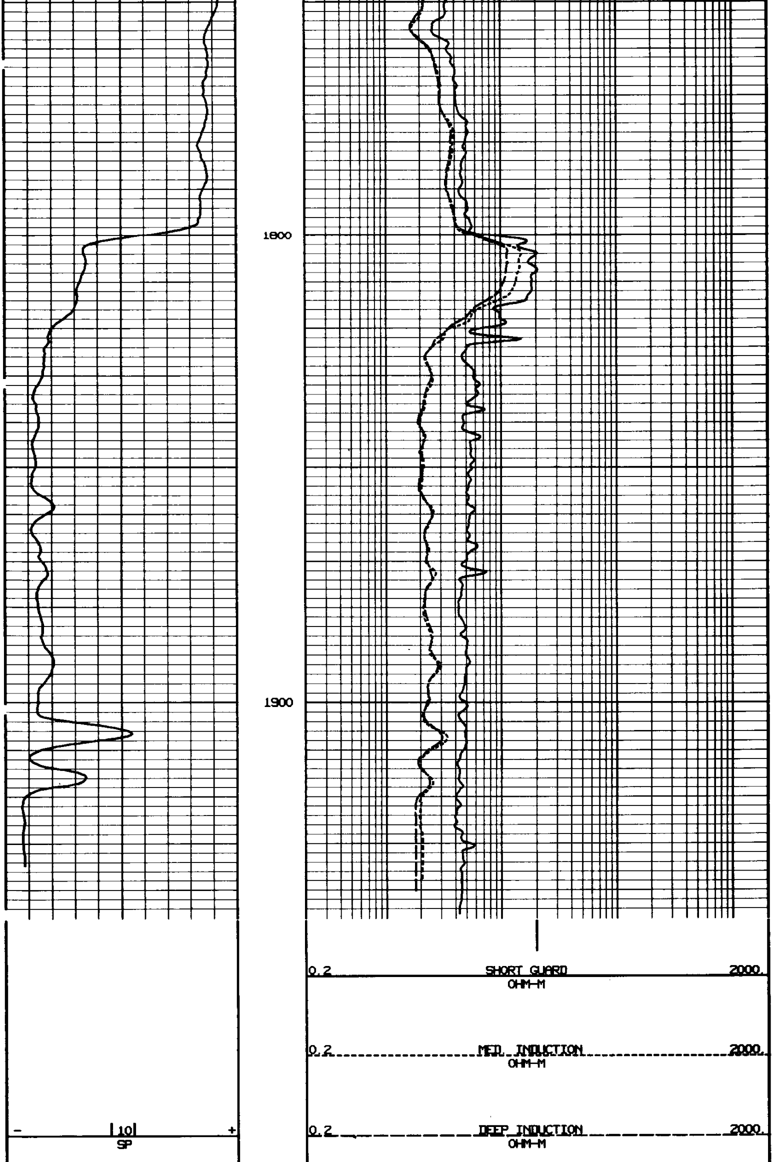




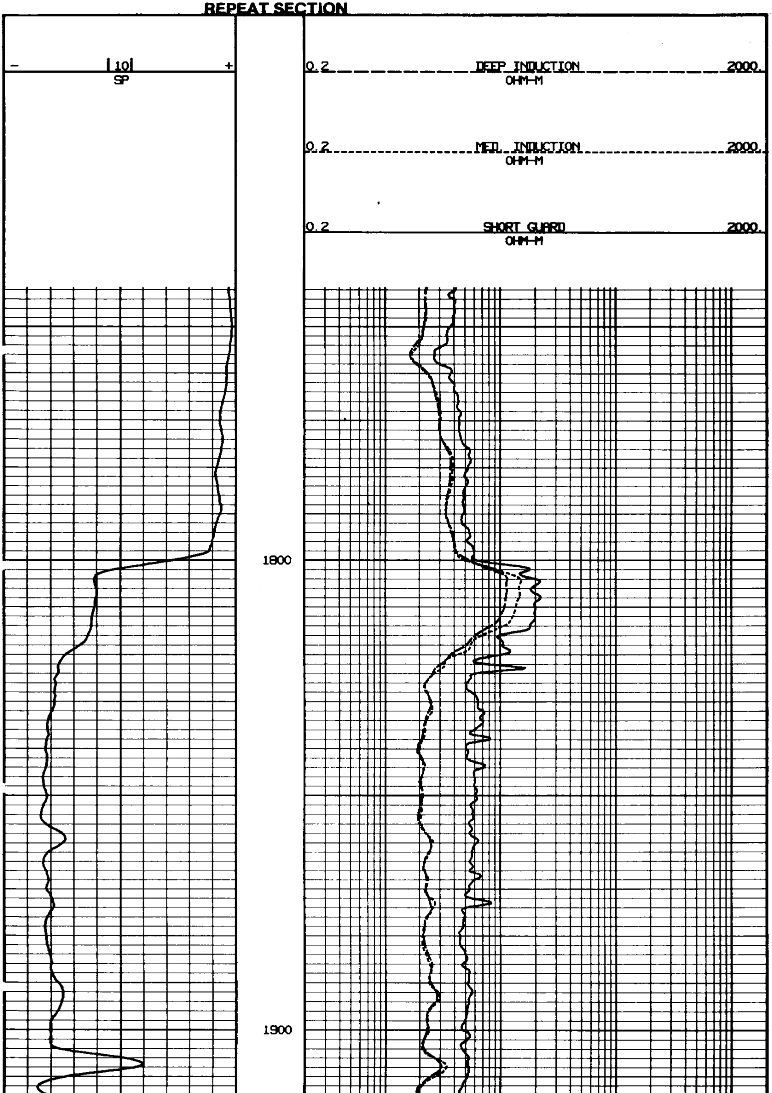


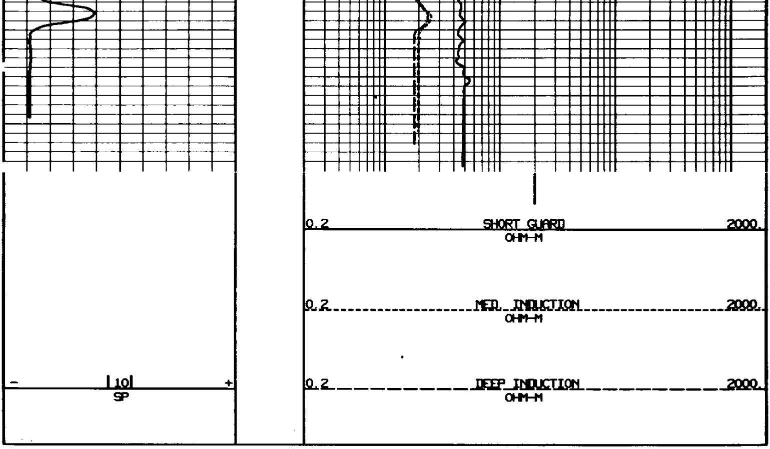






REPEAT SECTION





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                   AFTER LOG CALI CALIBRATION SUMMARY

PERFORMED   08/ 11/ 87     LAST SHOP CALIB    11/ 17/ 86
PROGRAM VERSION V1.87

               BEFORE       AFTER   UNITS
VALUE 1            8.       8.0223   INCH
VALUE 2           16.       16.157   INCH


SER # 123         MOD. # 123     SRC. # 0          FLD CAL. # 0
               AFTER  LOG  FIELD CALIBRATION SUMMARY

PERFORMED   08/ 11/ 87     LAST SHOP CALIB   07/ 31/ 87
PROGRAM VERSION V1.87

                          DEEP INDUCTION           MEDIUM INDUCTION
      ITEM               AFTER        BEFORE        AFTER      BEFORE
 TOOL ZERO               0.042          0.           3.068        0.
 INT. CALIB.            501.24       504.66        511.08      510.51
 MANDREL ERROR          -5.803                      7.1091
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               SHORT GUARD(NORMAL) AFTER SURVEY CALIBRATION
PERFORMED   08/ 11/ 87     LAST SHOP CALIB   07/ 31/ 87
PROGRAM VERSION V1.87

                 BEFORE     AFTER    UNITS
LOW INT CAL      2.0213    2.0188    OHMM
HIGH INT CAL     197.43    197.11    OHMM

SER # 24019       MOD. # 478     SRC. # 0          FLD CAL. # 0


                       SHOP CALIBRATION SUMMARY


PERFORMED   08/ 11/ 87     LAST SHOP CALIB   07/ 31/ 87
PROGRAM VERSION V1.87

                          DEEP INDUCTION           MEDIUM INDUCTION
      ITEM           MEASURED     CALIBRATED    MEASURED    CALIBRATED
 TOOL ZERO           -0.125          0.         2.6055          0.
 INT. CALIB.         505.19        508.18       529.36        532.19
 WHEEL                497.2        500.15       497.67        500.33
 MANDREL ERROR                      4.5803                     7.1091

SER # 24405       MOD. # 311     SRC. # 0          FLD CAL. # 0
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                SHORT GUARD(NORMAL) SHOP CALIBRATION
PERFORMED   07/ 31/ 87     LAST SHOP CALIB   07/ 15/ 87
PROGRAM VERSION V1.87

                      MEASURED    CALIBRATED    UNITS
SHOP CAL LOW            1.979         2.         OHMM
SHOP CAL HIGH           197.9       200.         OHMM
INTERNAL CAL LOW       2.0019       2.0231       OHMM
INTERNAL CAL HIGH      195.56       197.64       OHMM

SER # 24019       MOD. # 478     SRC. # 0          FLD CAL. # 0
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