CC 32-03-65

Schlumberger

DUAL INDUCTION-SFL
WITH LINEAR CORRELATION LOG

COUNTY COLUMBIA
FIELD MIST NEHALEM BASIN
LOCATION 3-6N-5W
WELL COLUMBIA COUNTY 32-3
COMPANY REICHHOLD ENERGY

COMPANY REICHHOLD ENERGY CORPORATION

WELL COLUMBIA COUNTY NO. 32-3

FIELD MIST NEHALEM BASIN

COUNTY COLUMBIA **STATE** OREGON

LOCATION 2488'NORTH & 748'EAST FROM THE SOUTHWEST CORNER OF:

API SERIAL NO.	SEC	TWP	RANGE
	3	6N	5W

Other Services:
BHC
,HDT

Permanent Datum: GL ; Elev.: 1297.37
Log Measured From KB 10 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 1307.87
D.F. --
G.L. 1297.37

Date	5-1-80			
Run No.	ONE			
Depth—Driller	3395			
Depth—Logger (Schl.)	3394			
Btm. Log Interval	3378			
Top Log Interval	444			
Casing—Driller	7" @ 447	@	@	@
Casing—Logger	444			
Bit Size	6¼"			
Type Fluid in Hole	LIGNOSULFONATE			
Dens. | Visc.	72 | 45	|	|	|
pH | Fluid Loss	10.5 | 7 ml	| ml	| ml	| ml
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	1.55 @ 67 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	0.74 @ 76 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	1.98 @ 77 °F	@ °F	@ °F	@ °F
Source: Rmf | Rmc	M | M	|	|	|
Rm @ BHT	1.22 @ 87 °F	@ °F	@ °F	@ °F
TIME Circulation Stopped	0900			
TIME Logger on Bottom	1030			
Max. Rec. Temp.	87 °F	°F	°F	°F
Equip. | Location	8128 | SAC	|	|	|
Recorded By	LINDGREN/BORATKO			
Witnessed By Mr.	BRUER			

RECEIVED-PTLD
JUL 1 1980
DEPT OF GEOLOGY & MINERAL INDUS

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

Run No.	ONE			
Service Order No.	123911			
Fluid Level	FULL			
Salinity ppm. cl	--			
Speed F.P.M.	100			

EQUIPMENT DATA

Panel No.	BB-304			
Cartridge No.	DA-100			
Sonde No.	EA-83			
Mem. Panel No.	--			
G.R. Panel No.	--			
G.R. Cart No.	--			
Tape Recorder - (TTR)	--			
Depth Encoder - (DRE)	--			
Pressure Wheel - (CPM)	--			
Type Centralizers	--			
Stand Off - Inches	--			

CALIBRATION DATA

SBR	1.0			
Sonde Error - ILM	19.2			
Sonde Error - ILD	7.7			
G.R. BKG. - CPS.	--			
G.R. Source - CPS.	--			
S.E. Set In Hole - Depth	--			
S.E. Corr. - Hole Size	--			

LOGGING DATA

SBR	1.0			
Sonde Error Log - ILM	19.2			
Sonde Error Log - ILD	7.7			
G.R. Scale per 100 Div.	--			
G.R. - T.C. Log	--			
	°F	°F	°F	°F
	°F	°F	°F	°F
	°F	°F	°F	°F

SCALE CHANGES

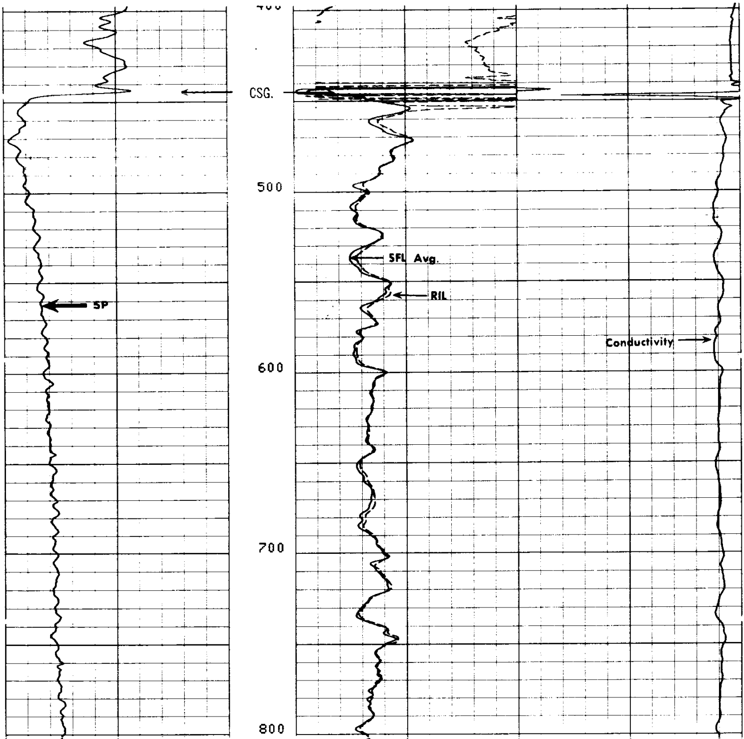
Type Log	Depth	Scale Up Hole	Scale Down Hole

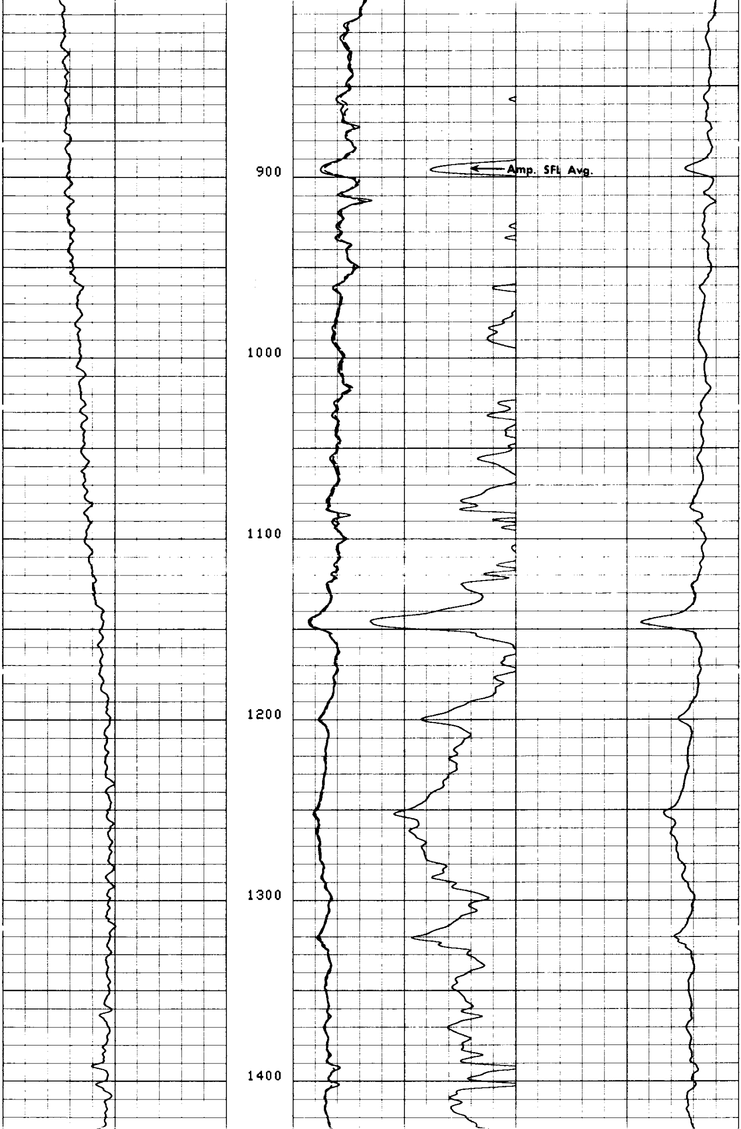
REMARKS

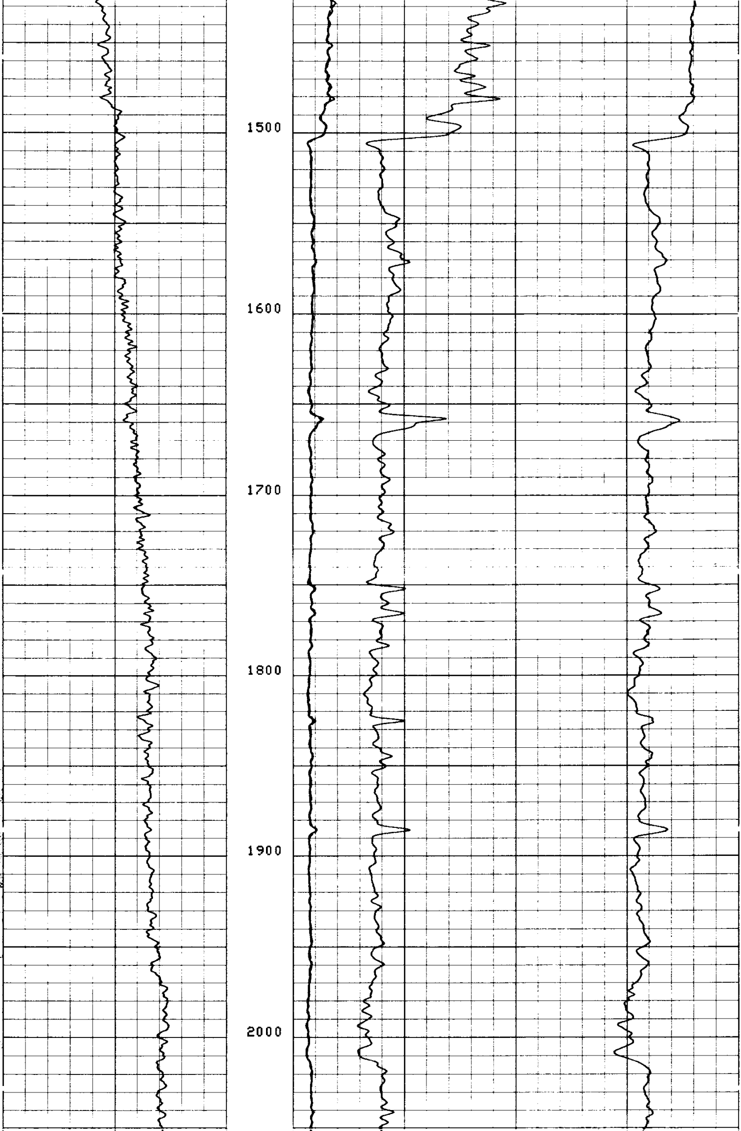
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

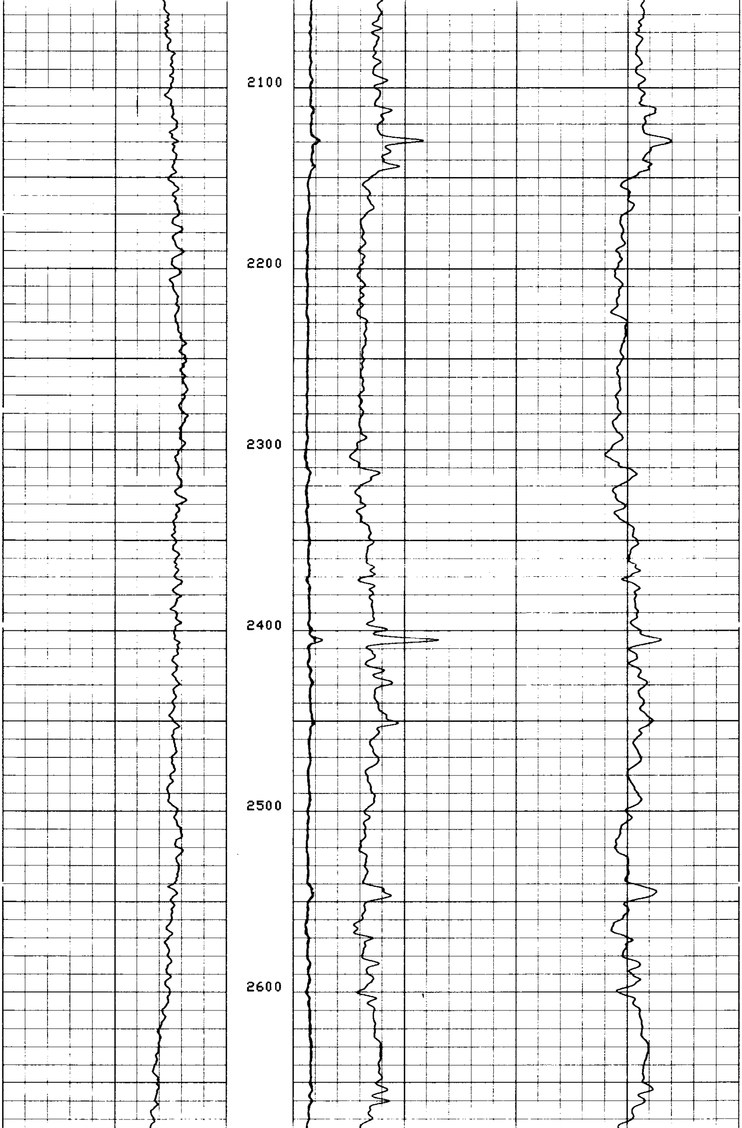
SPONTANEOUS POTENTIAL	DEPTH	RESISTIVITY OHMS. M²/M	CONDUCTIVITY MILLIMHOS/M
— 10 + MILLIVOLTS		DEEP INDUCTION R_{ILD} 0 30 0 300 SPHERICALLY FOCUSED LOG R_{SFL} 0 30 0 300 AMP. SPHERICALLY FOCUSED LOG 0 6	DEEP INDUCTION 1000 0

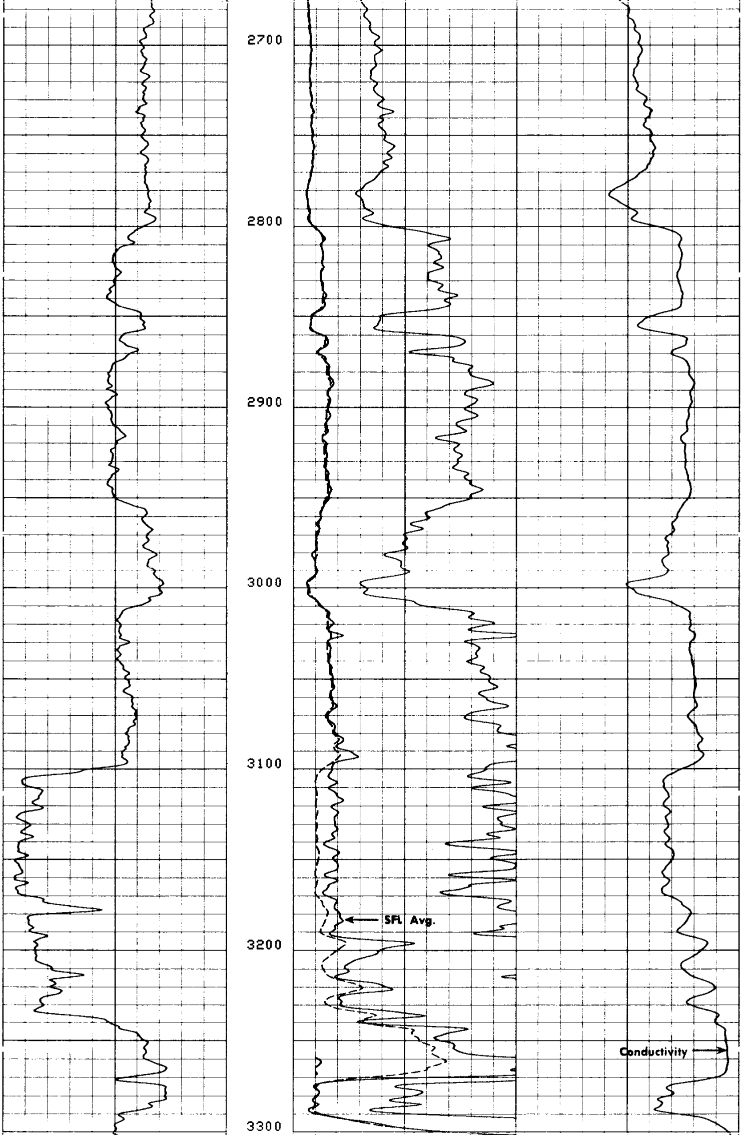
4
4

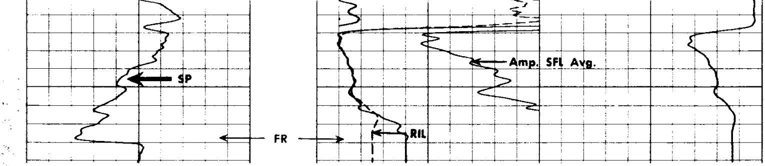












4
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SPONTANEOUS-POTENTIAL

— 10 + MILLIVOLTS

DEPTH

RESISTIVITY OHMS. M^2/M

DEEP INDUCTION
R_{ILD}

0 ———— 30

0 ———— 300

SPHERICALLY FOCUSED LOG
R_{SFL}

0 ———— 30

0 ———— 300

AMP. SPHERICALLY FOCUSED LOG

0 ———— 6

CONDUCTIVITY MILLIMHOS/M

DEEP INDUCTION

1000 ———— 0

COMPANY	REICHHOLD ENERGY CORPORATION	SCHL. FR	3378
		SCHL. TD	3384
WELL	COLUMBIA COUNTY NO. 32-3	DRLR. TD	3395
FIELD	MIST NEHALEM BASIN	Elev: KB	1307.37
		DF	--
COUNTY	COLUMBIA STATE OREGON	GL	1297.37

DETAIL LOG

5″ = 100′

SPONTANEOUS-POTENTIAL

— 10 + MILLIVOLTS

DEPTH

RESISTIVITY OHMS. M^2/M

SPHERICALLY FOCUSED LOG

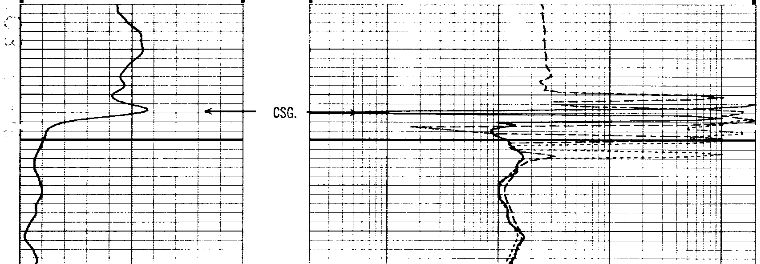
0.2 1.0 10 100 1000 2000

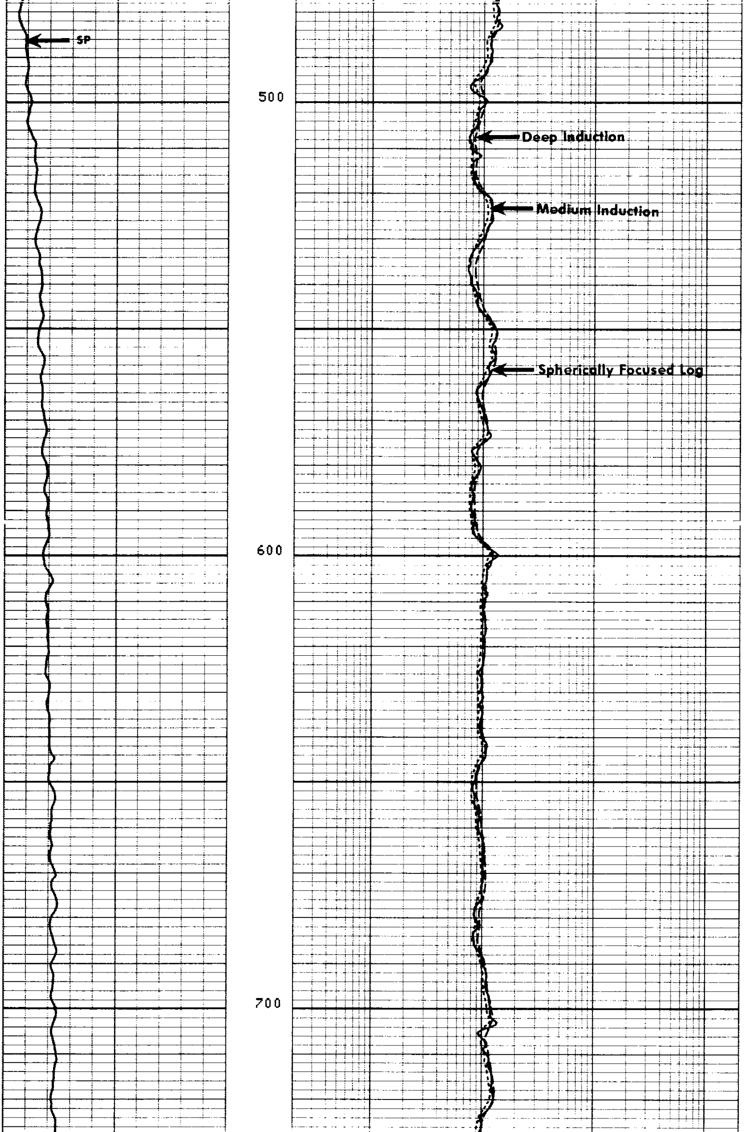
MEDIUM INDUCTION

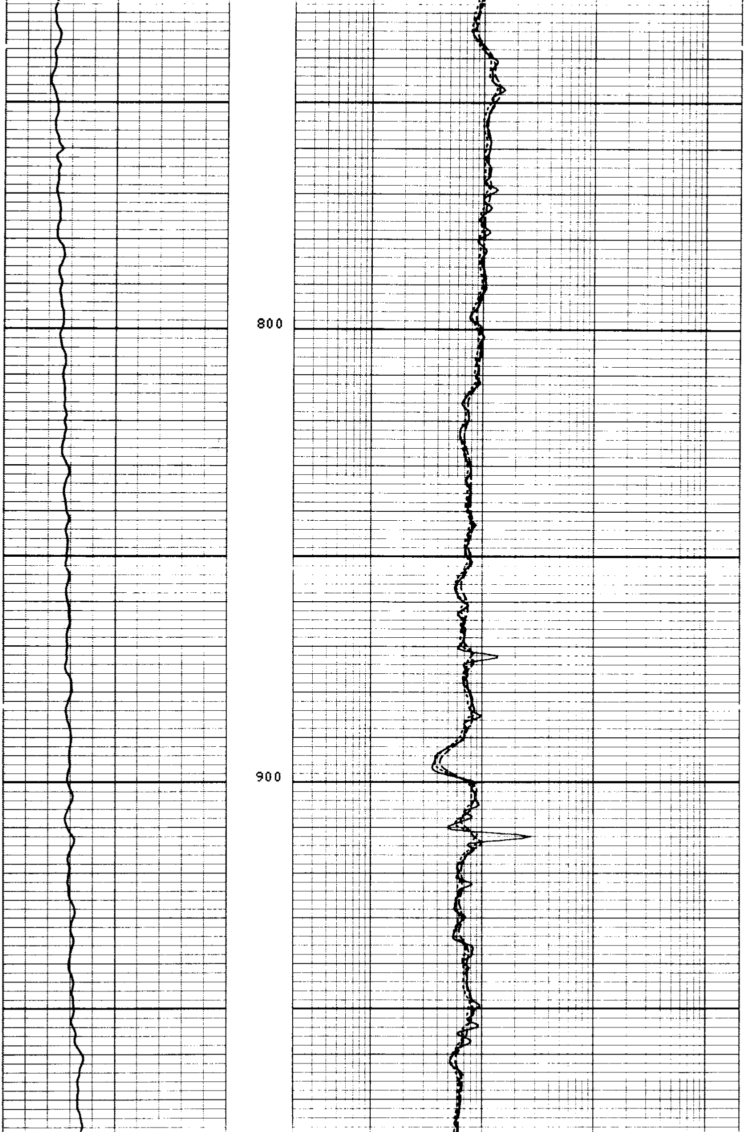
0.2 1.0 10 100 1000 2000

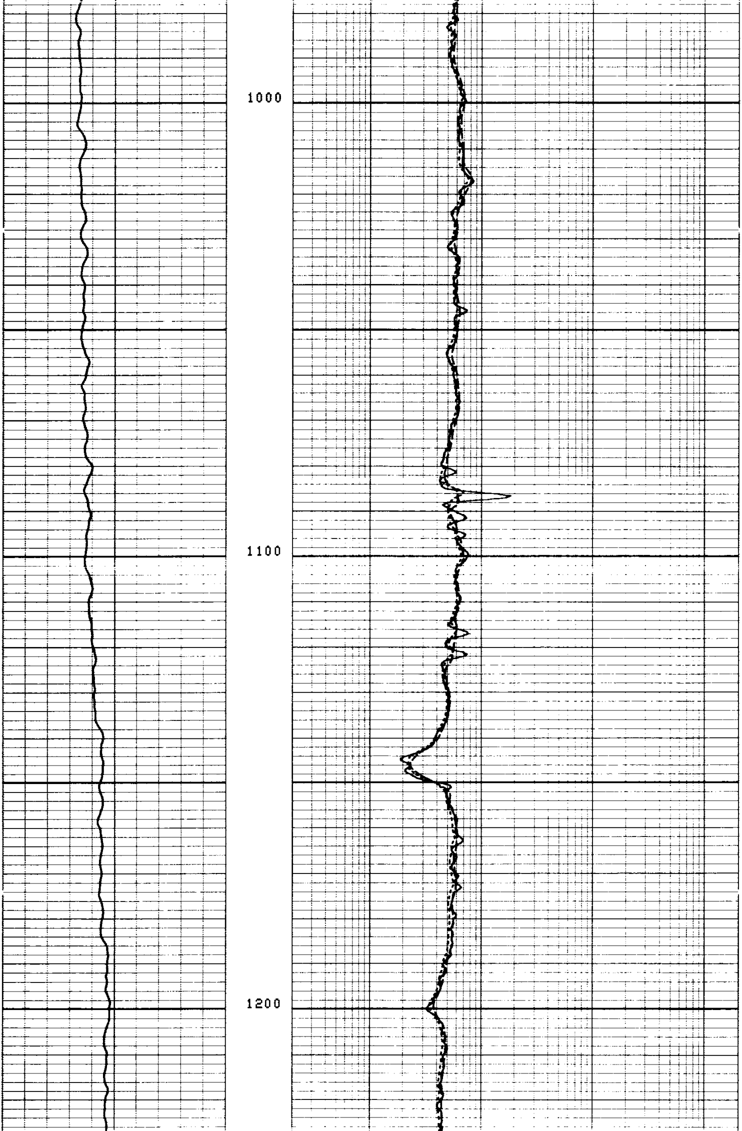
DEEP INDUCTION

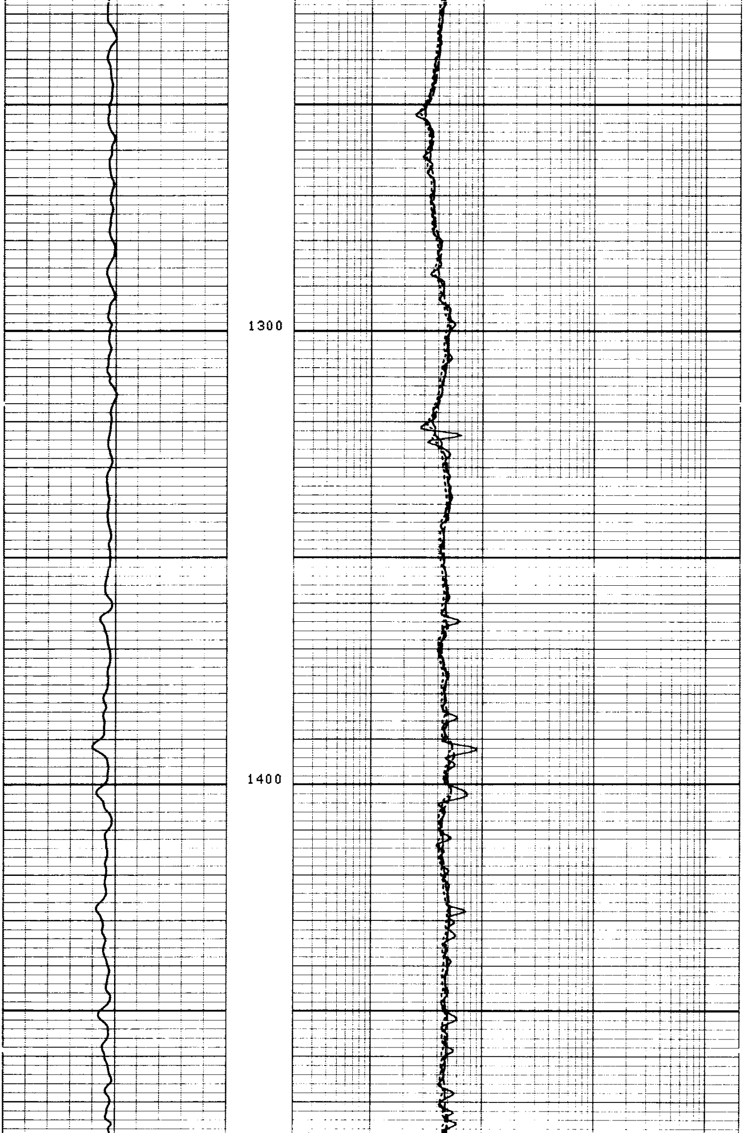
0.2 1.0 10 100 1000 2000

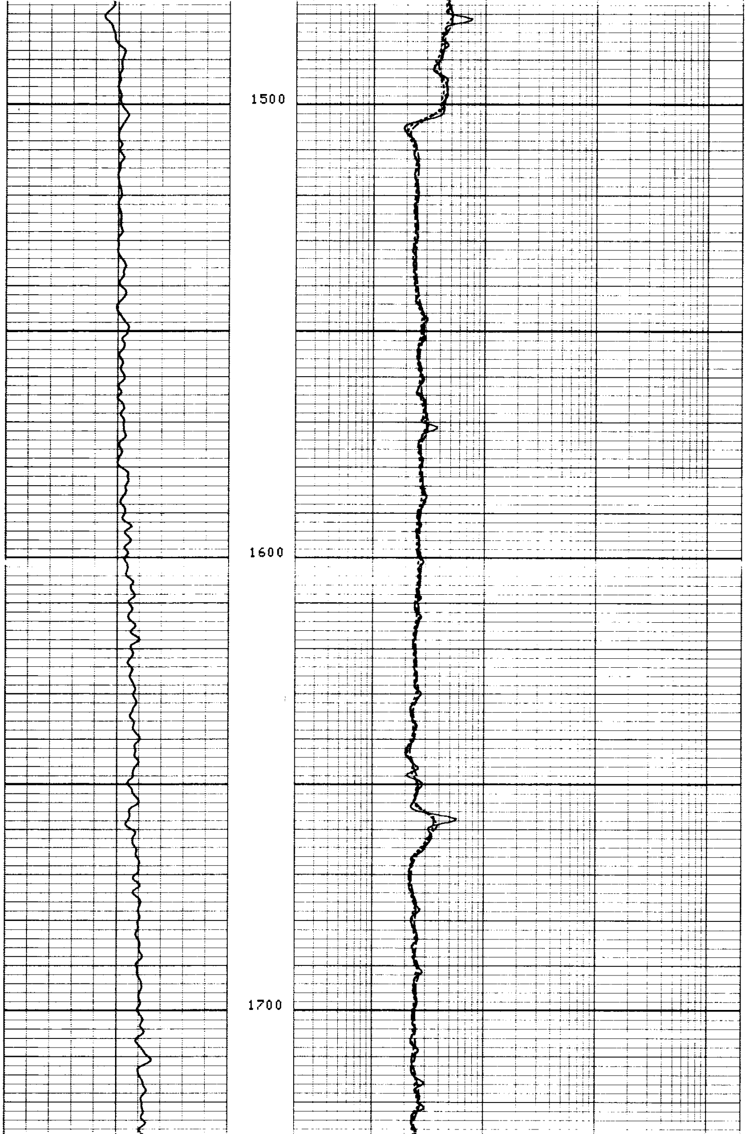


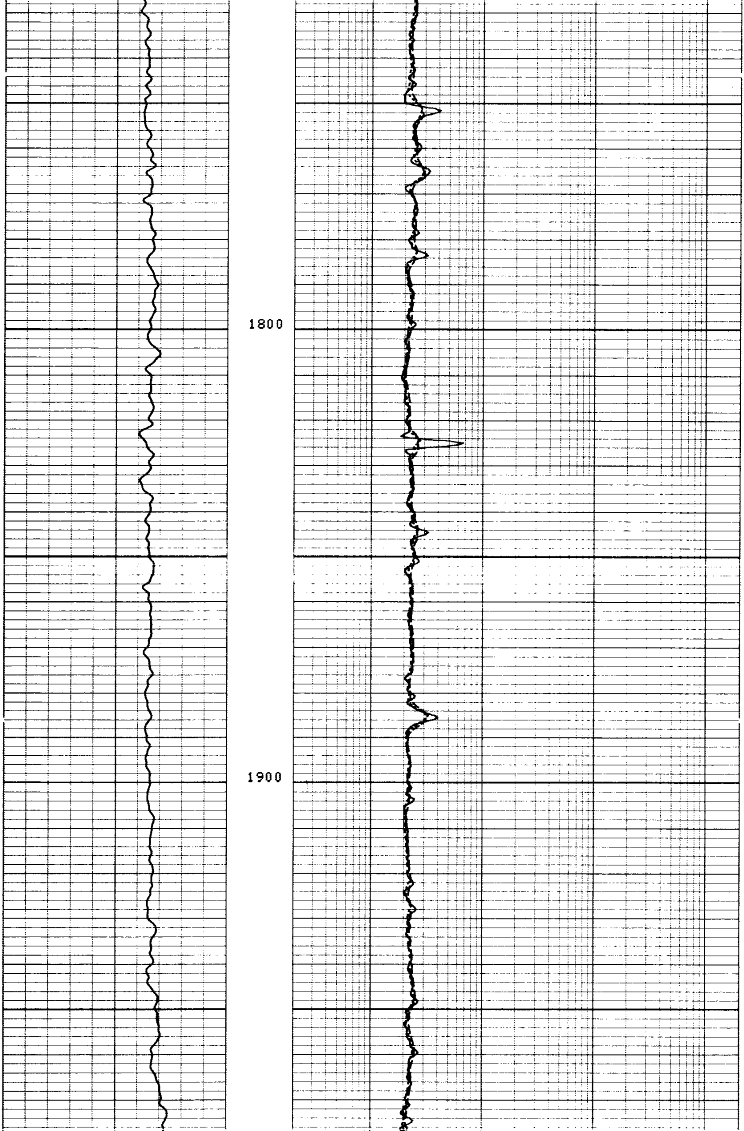


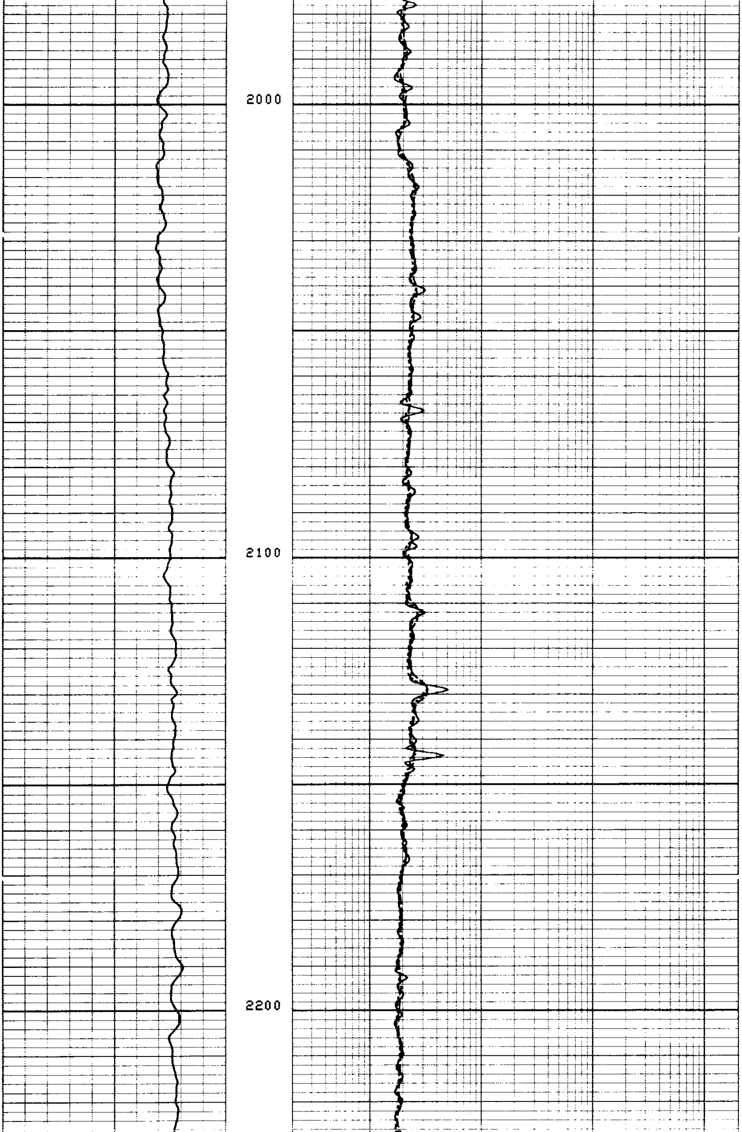


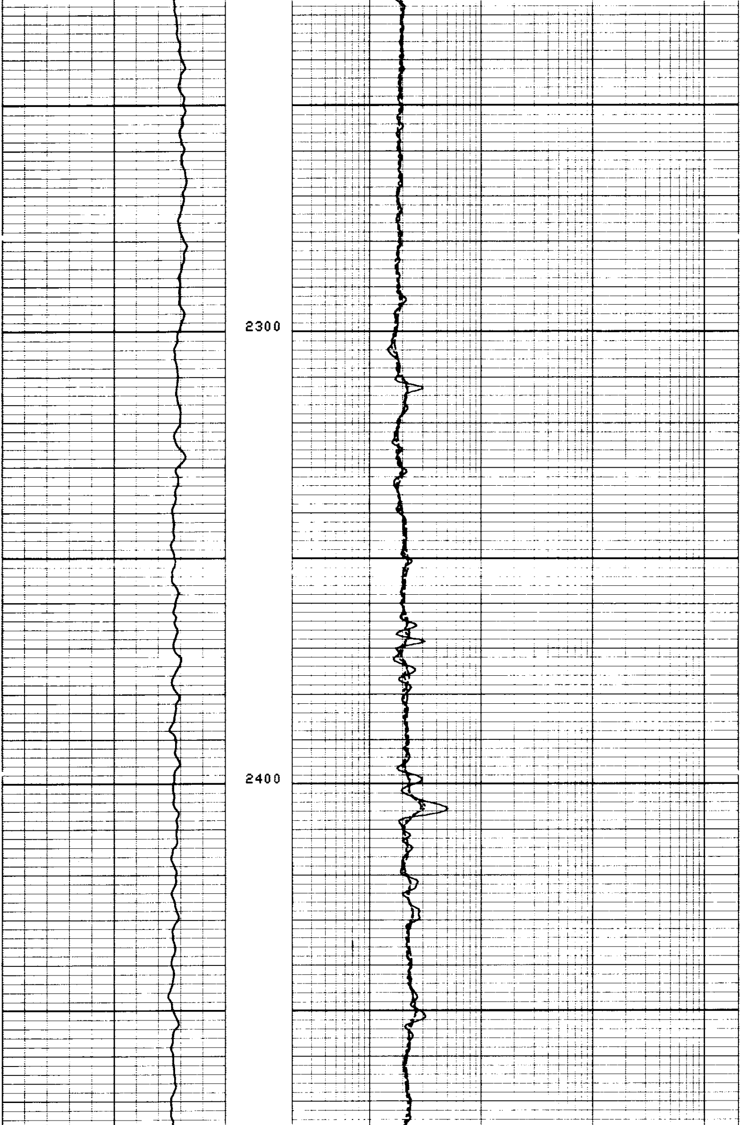


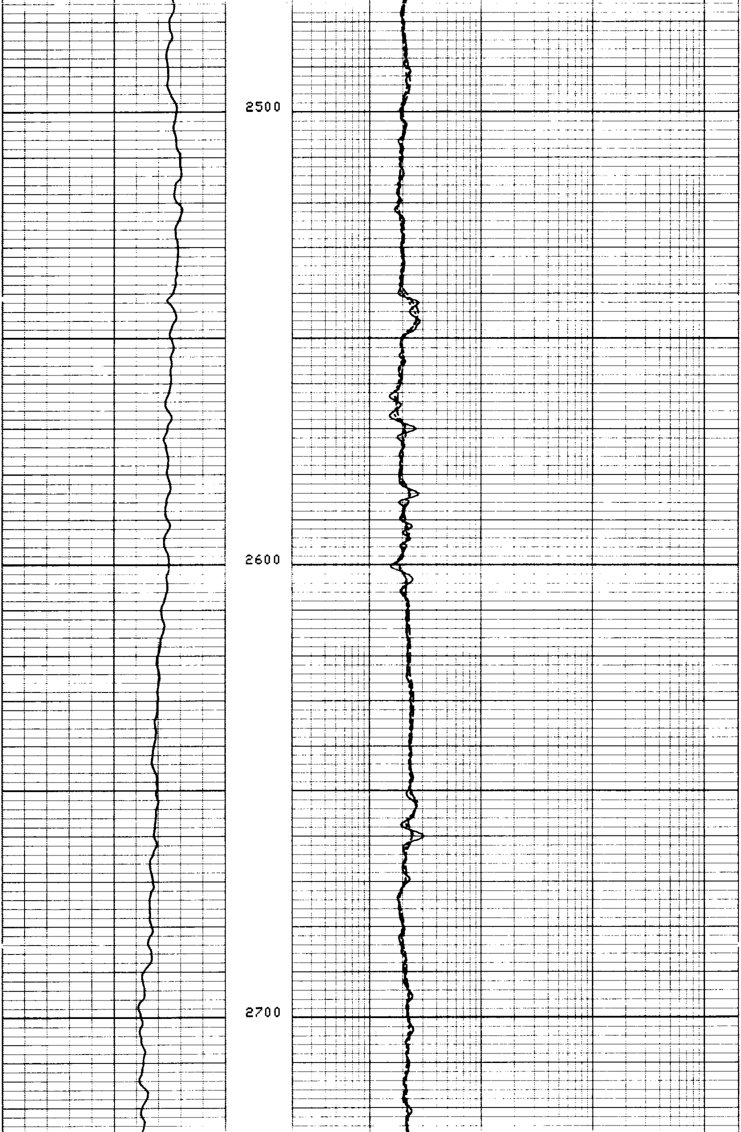


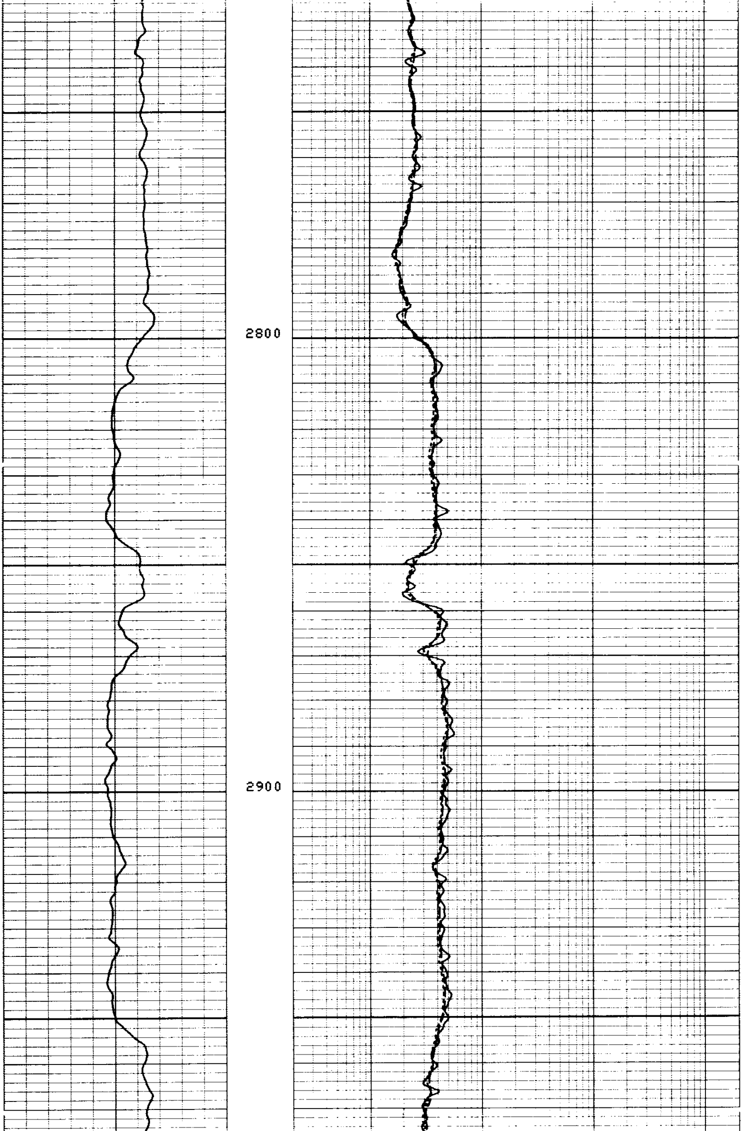


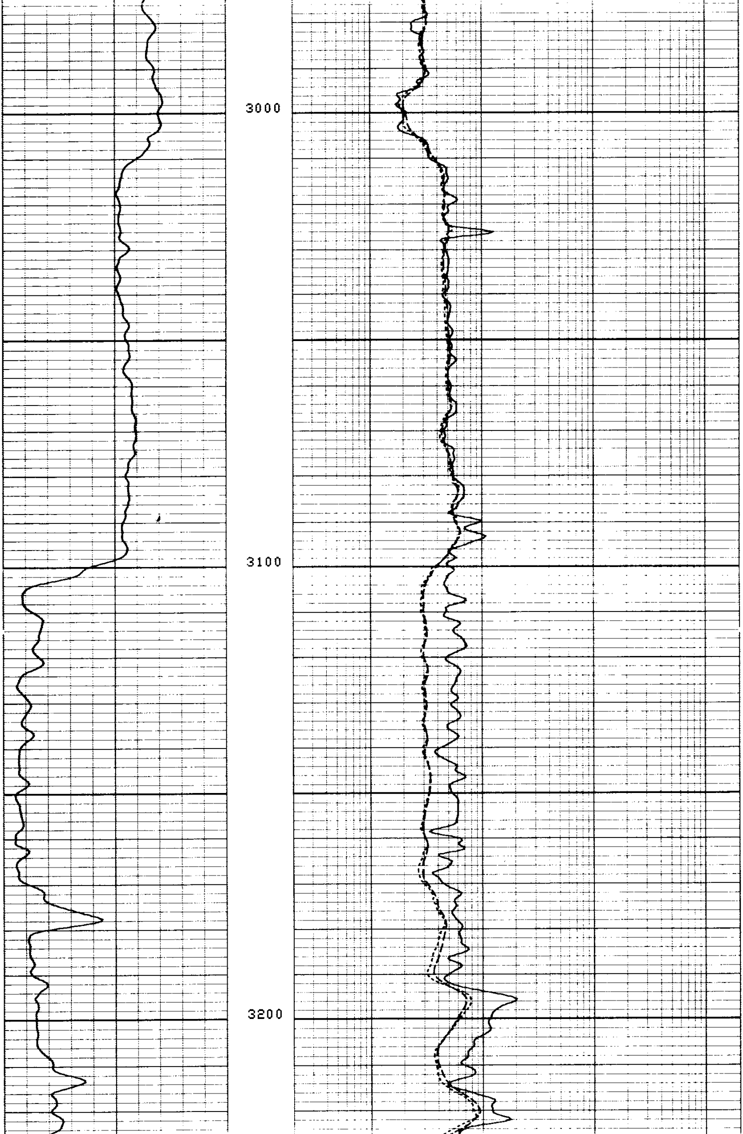


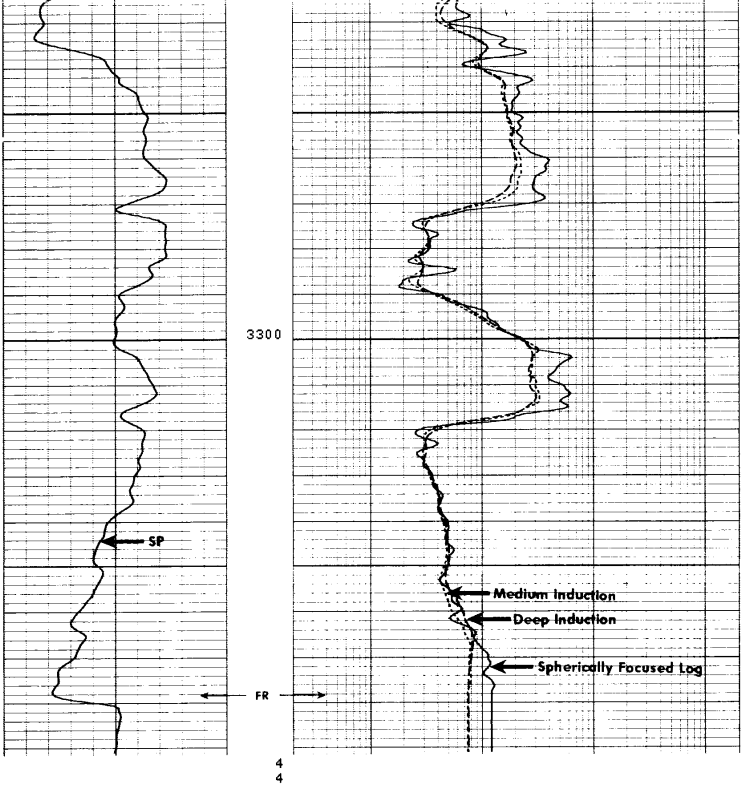




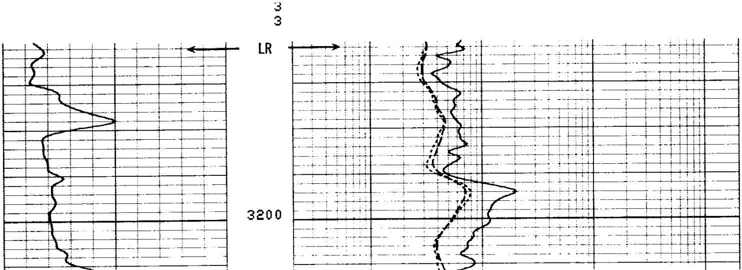


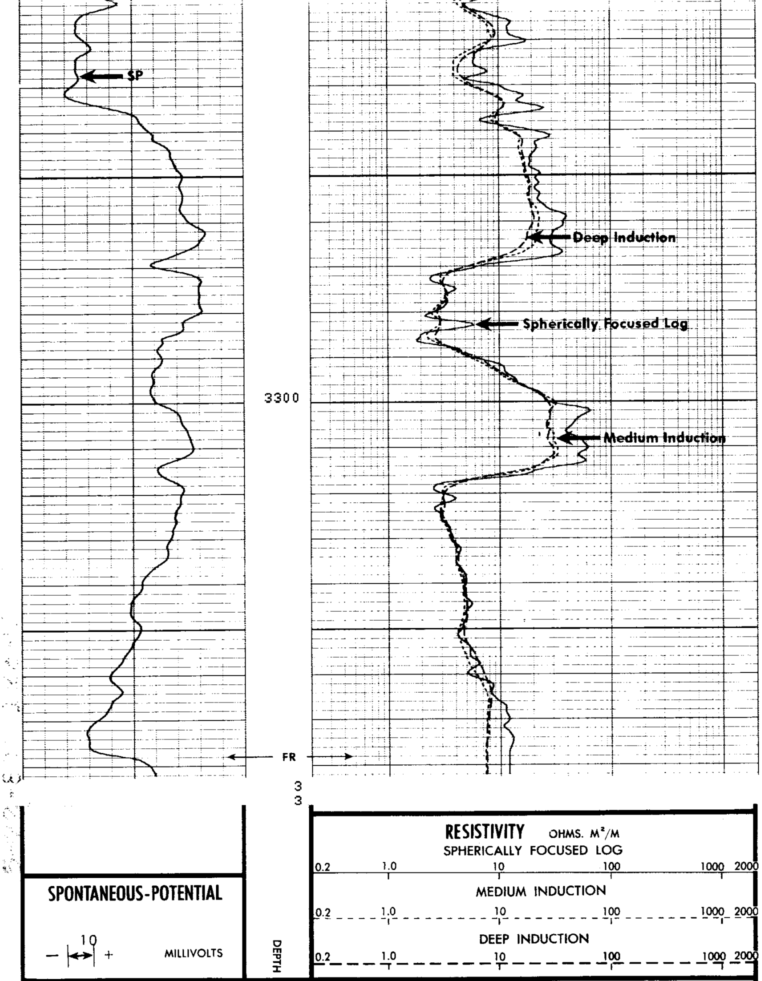






REPEAT SECTION





CALIBRATION RECORD

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                    SHOP SUMMARY


     PERFORMED:     80/05/05
     PROGRAM FILE:  SHOP   (VERSION     14.4     79/09/05)


    DITD                ELECTRONICS CALIBRATION SUMMARY
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                 ELECTRONICS CALIBRATION          SONDE
              MEASURED         CALIBRATED         ERROR      TEST
           ZERO     PLUS      ZERO      PLUS      CORR.      LOOP      UNITS
    ILD     4.1     574.7      0.0      499.8      5.21      542.4     MM/M
    ILM     3.7     629.9      0.0      499.9     15.60      626.0     MM/M

                        (IS:83    , IC:100    )
                          0
                          2
                          2
                          2
                          2


               BEFORE SURVEY CALIBRATION SUMMARY


   PERFORMED:      80/05/01
   PROGRAM FILE:   IS      (VERSION     16.4     79/11/20)


  DITD              ELECTRONICS CALIBRATION SUMMARY

             MEASURED                        CALIBRATED
           ZERO    PLUS                    ZERO       PLUS         UNITS
    ILD     4.2    576.6                    0.0       499.7         MM/M
    ILM     4.0    631.6                    0.0       499.9         MM/M
    SFL    -2.7    530.0                    0.0       500.0         MM/M

  ILM   SONDE ERROR CORRECTION :       19.2    MM/M
  ILD   SONDE ERROR CORRECTION :        7.7    MM/M
                                2
                                2
                                2
                                2


               AFTER SURVEY TOOL CHECK SUMMARY


   PERFORMED:      80/05/01
   PROGRAM FILE:   IS      (VERSION     16.4     79/11/20)


  DITD                       TOOL   CHECK

                     ZERO                         PLUS
           BEFORE          AFTER          BEFORE       AFTER      UNITS
    ILD      0.0             0.0          499.7        499.4      MM/M
    ILM      0.0             0.0          499.9        495.4      MM/M
    SFL      0.0             0.1          500.0        501.4      MM/M

  ILM   SONDE ERROR CORRECTION :       19.2    MM/M
  ILD   SONDE ERROR CORRECTION :        7.7    MM/M
                                6
                                6
```

DUAL INDUCTION CALIBRATION FILM CODING

1. MECHANICAL ZERO
2. 1 OHM-M
3. 100 OHM-M
4. ELECTRICAL ZERO (500 OHM-M)
5. 2 OHM-M
6. SONDE ERRORS (+2 MMHO)
7. ZERO SIGNAL IN AIR
8. ILd TEST LOOP (2 OHM SIGNAL)
9. ILm TEST LOOP (2 OHM SIGNAL)
10. Rxo/Rt UNITY
11. Rxo/Rt CALIBRATE

DIC DA 175
DIS EA 83

SONDE ERROR
ILD 7.7
ILM 19.2

3-25-80

GAMMA RAY CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO

3. RECORDER SENSITIVITY
4. MEMORIZER ADJUSTMENT
5. BACKGROUND
6. CALIBRATE - SOURCE IN PLACE

CALIBRATION RECORD

COMPANY	REICHHOLD ENERGY CORPORATION	SCHL. FR	3378
		SCHL. TD	3384
WELL	COLUMBIA COUNTY NO. 32-3	DRLR. TD	3395
FIELD	MIST NEHALEM BASIN	Elev: KB	1307.87
		DF	--
COUNTY	COLUMBIA STATE OREGON	GL	1297.37

SWS-2517