COMPANY REICHOLD ENERGY CORPORATION
WELL COLUMBIA COUNTY No. 43-22
FIELD MIST
County COLUMBIA State ORE.

Welex

DUAL INDUCTION GUARD LOG

COMPANY REICHHOLD ENERGY CORPORATION
WELL COLUMBIA COUNTY No. 43-22
FIELD MIST
COUNTY COLUMBIA STATE OREGON

Location
S 89° 04' 19''W (879.33)
S 0° 55' 41''W (391.73)
FROM E/4 CORNER:
Sec. 22 Twp. 6N Rge. 5W

Other Services:
C/AVL
DIPMETER

Permanent Datum GL Elev. 697.5
Log Measured From KB 11.40 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 708.90
D.F.
G.L. 697.50

Date	2-25-84			
Run No.	ONE			
Depth—Driller	2252			
Depth—Welex	2250			
Btm. Log Inter.	2243			
Top Log Inter.	377			
Casing—Driller	85/8@ 377	@	@	@
Casing—Welex	377			
Bit Size	7 7/8			
Type Fluid in Hole	LIGNO- SULFONATE			
Dens. I Visc.	10.8 I 22	I	I	I
pH I Fluid Loss	9.5 I 6.2 ml	I ml	I ml	I ml
Source of Sample	CIRCULATED			
R_m @ Meas. Temp.	3.0 @ 64 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	1.5 @ 62 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	2.6 @ 62 °F	@ °F	@ °F	@ °F
Source R_{mf} R_{mc}	MEAS I MEAS	I	I	I
R_m @ BHT	1.9 @ 98 °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HOURS			
Max. Rec. Temp.	98 °F @ BHT	°F @	°F @	°F @
Equip. I Location	2890 I WDLND	I	I	I
Recorded By	PARMELEE			
Witnessed By	ALGER			

Fold Here

Service Ticket No. 154190 Remarks: RAN JTS

Change in Mud Type or Additional Samples

Date | Sample No.	I	I
Depth—Driller		
Type Fluid in Hole		
Dens. | Visc.	I	I
ph | Fluid Loss	I ml	I
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} | R_{mc}	I	I
R_m @ BHT	1.9 @ 98 °F	@ °F
R_{mf} BHT	.94 @ 98 °F	@ °F
R_{mc} BHT	1.6 @ 98 °F	@ °F

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

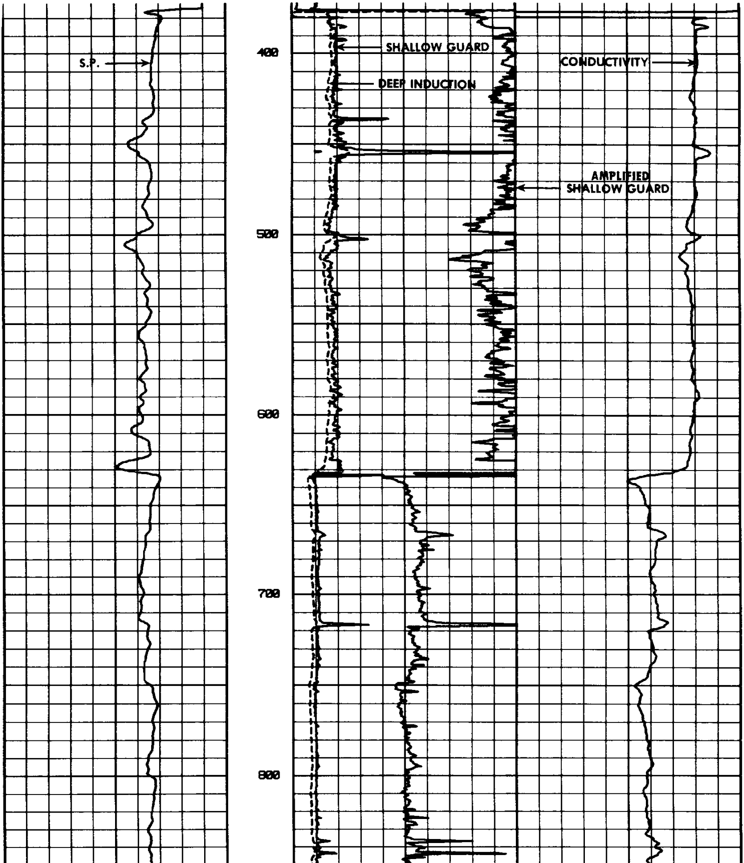
EQUIPMENT DATA

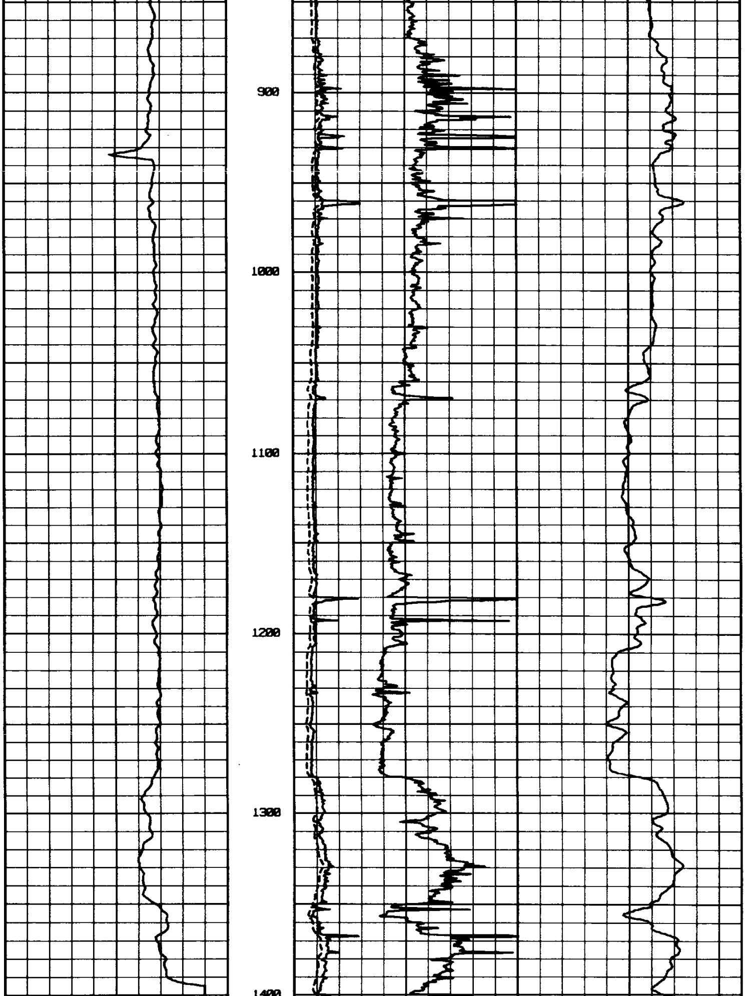
Run No.	Tool Type and No.	Pad Type	Tool Position	Other
ONE	DIL 98853		CENT	
	SG 24019			

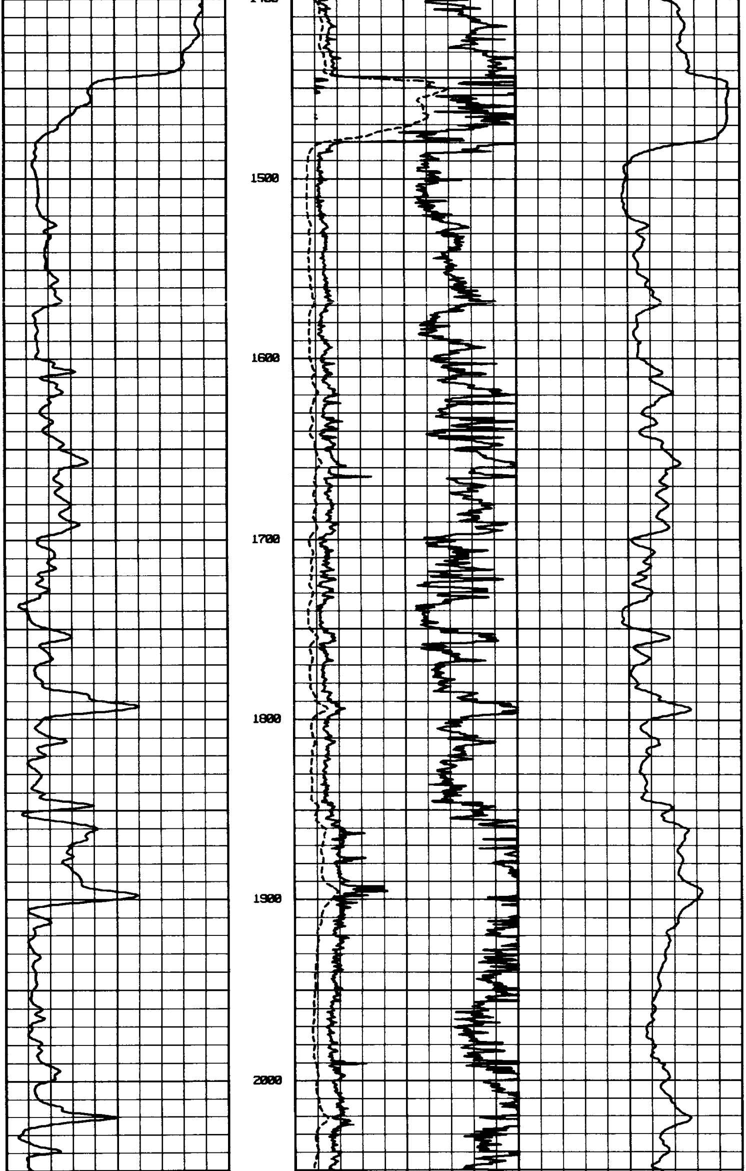
Welex does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters, or recommendations which may be given by Welex personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions, or recommendations agrees that Welex is not responsible, except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.

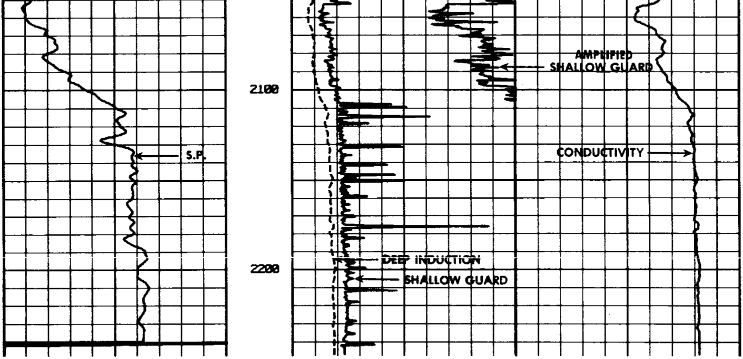
2" = 100'

POTENTIAL MILLIVOLTS		RESISTIVITY OHMS M²/M	CONDUCTIVITY M MHOS/M
– — 10 — +		0 SHALLOW GUARD 30	1000 DEEP INDUCTION 0
Rmf 1.5 at 62 °F		0 O. S. 300	2000 O. S. 1000
		0 AMPLIFIED GUARD 6	
		0 DEEP INDUCTION 30	
		0 O. S. 300	





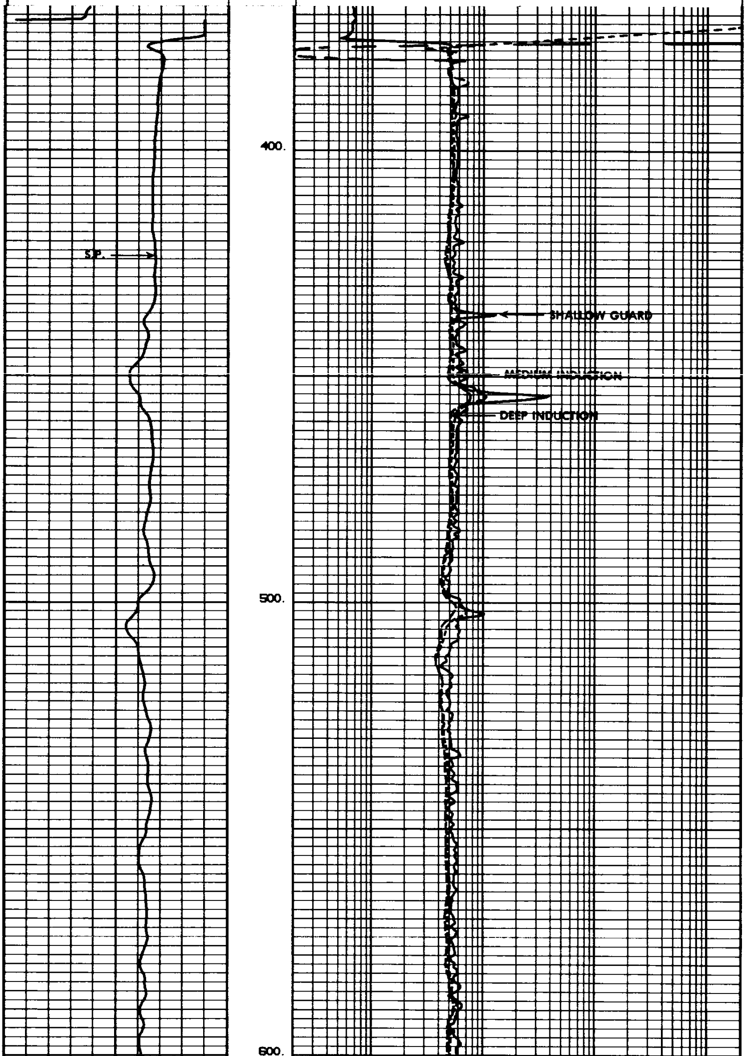


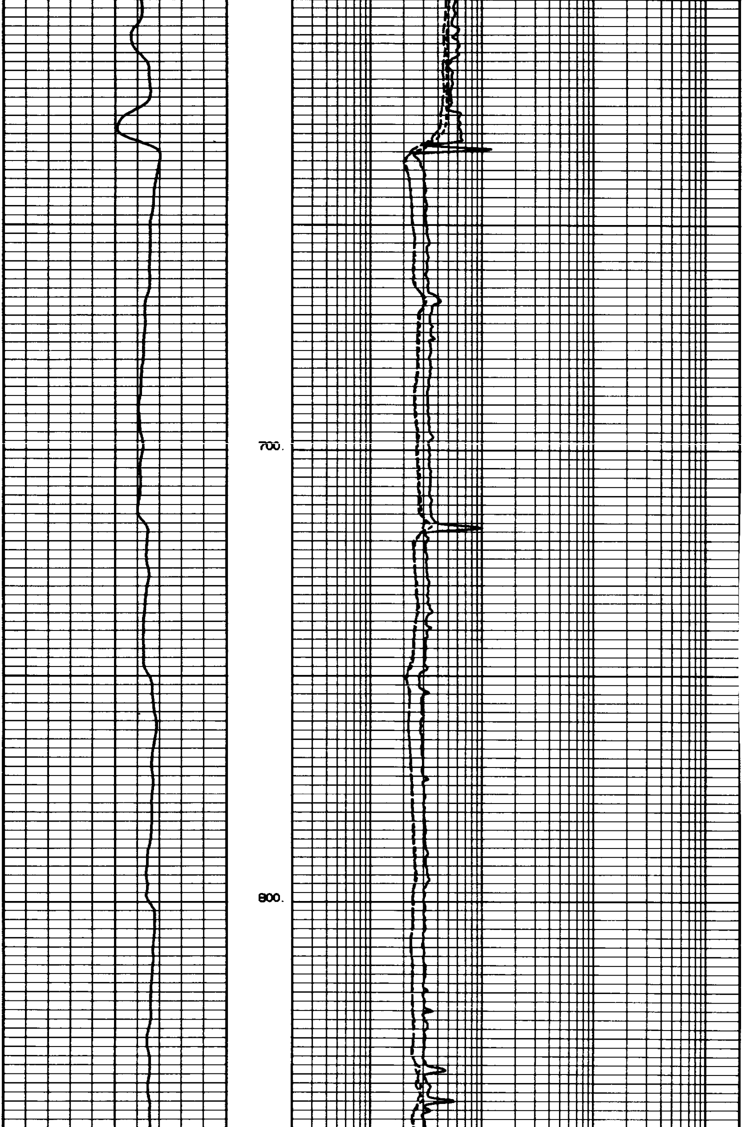


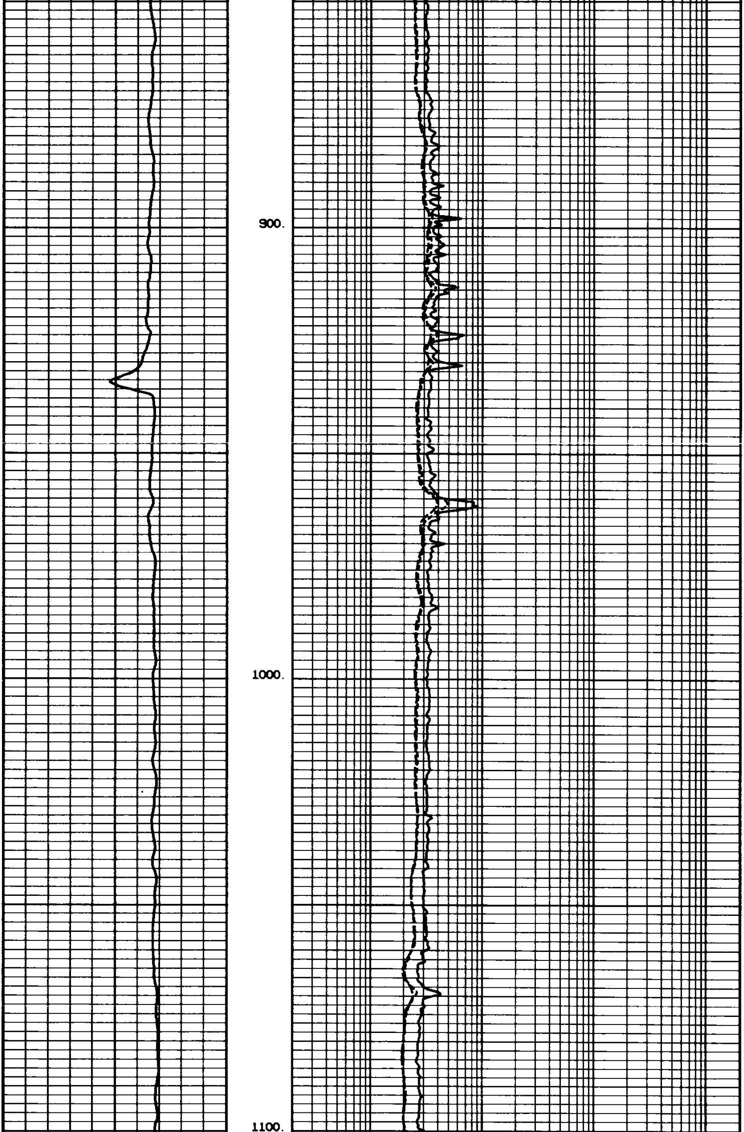
	0 DEEP INDUCTION 30	
	0 O. S. 300	
Rmf .94 at 98 °F		
	0 SHALLOW GUARD 30	
	0 O. S. 300	1000 DEEP INDUCTION 0
— 10 — +	0 AMPLIFIED GUARD 6	2000 O. S. 1000
POTENTIAL MILLIVOLTS	RESISTIVITY OHMS M^2/M	CONDUCTIVITY M MHOS/M

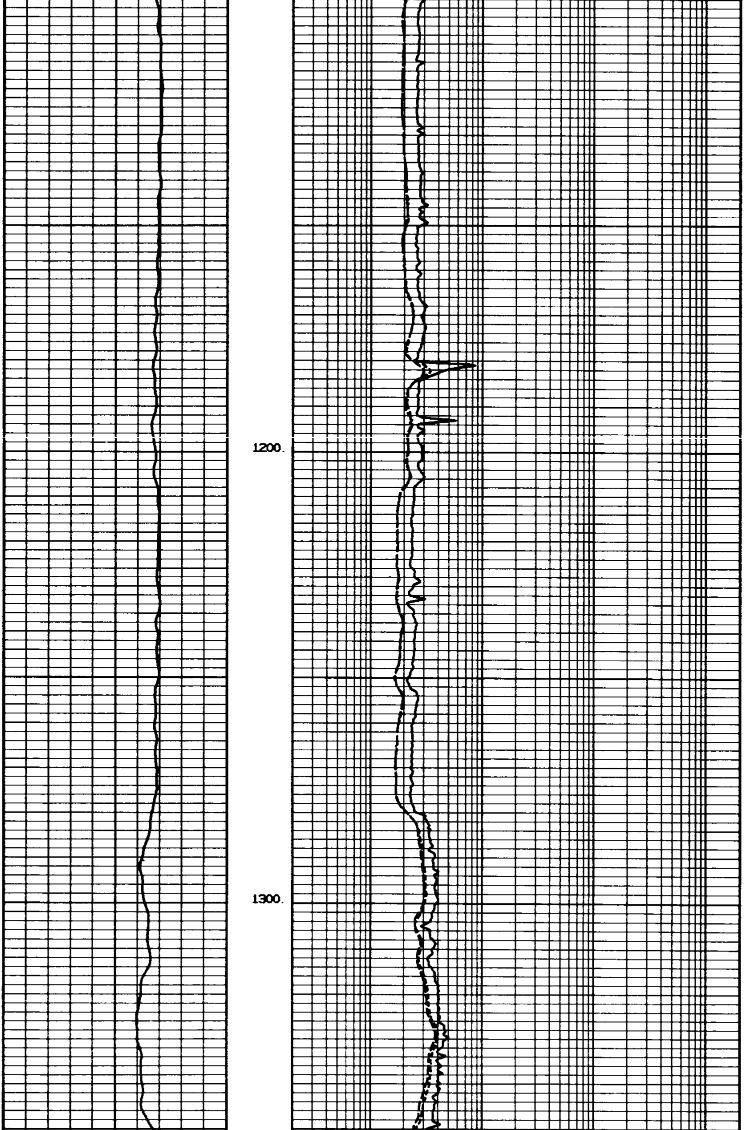
5" = 100'

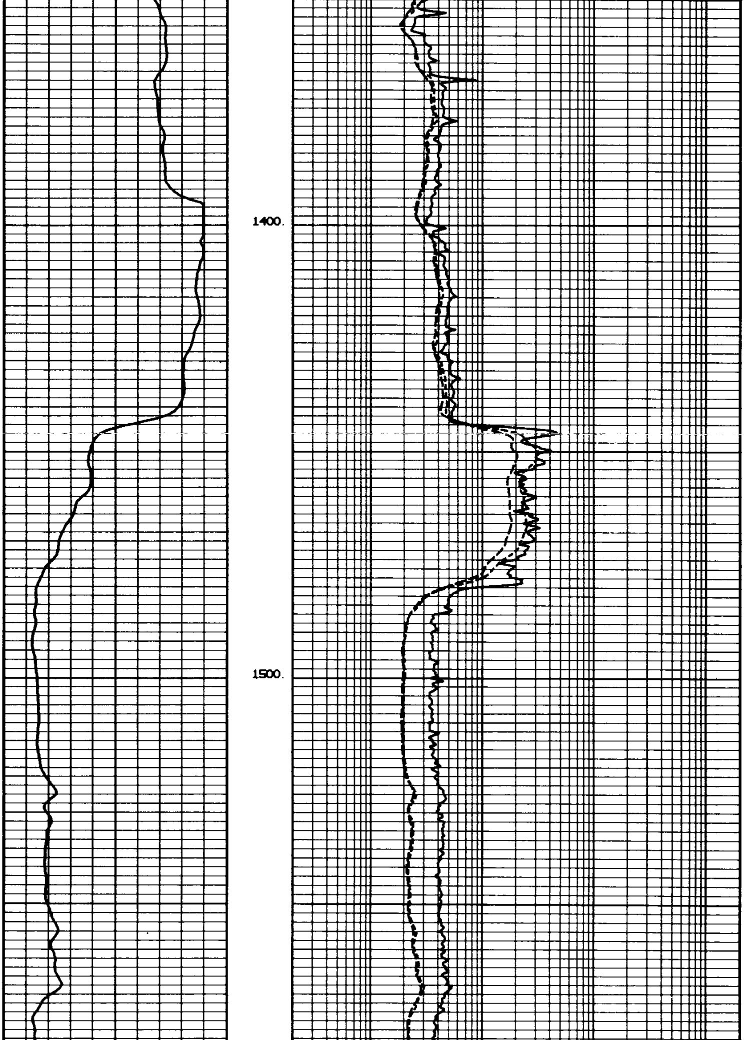
POTENTIAL MILLIVOLTS	**RESISTIVITY OHMS M^2/M**
– → 10 ← +	**DEEP INDUCTION**
GAMMA API Gamma Ray Units	**MEDIUM INDUCTION**
CALIPER Average Diameter In.	**SHALLOW GUARD**
Rmf at °F.	.2 .5 1 2 5 10 20 50 100 200 500 1000 2000

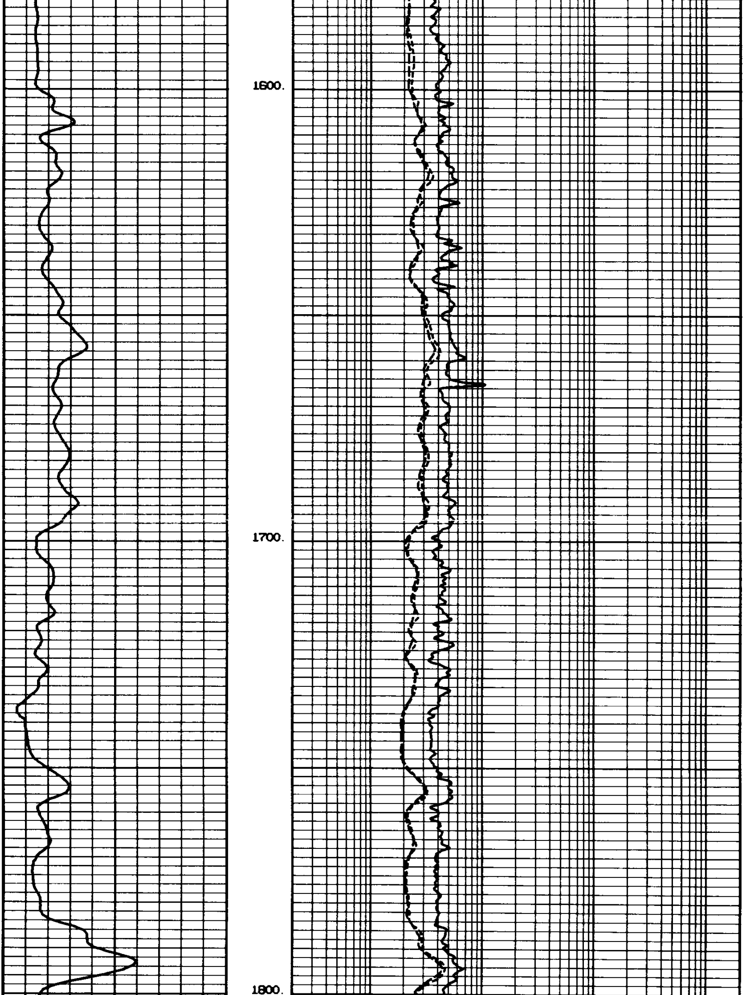


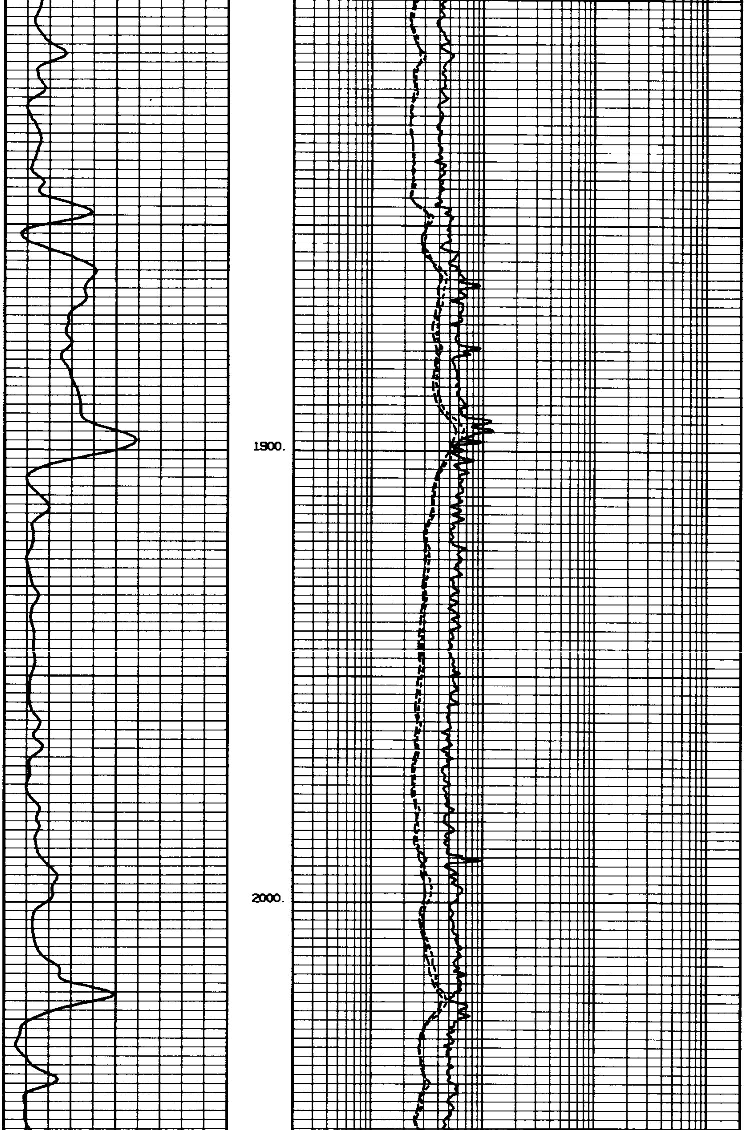


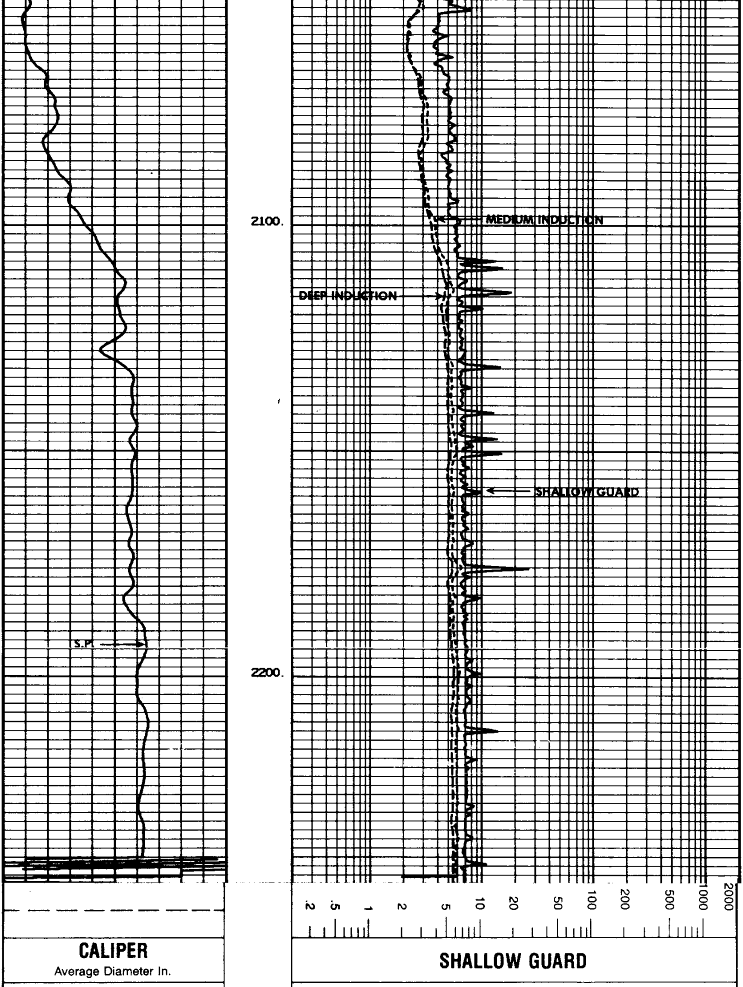












GAMMA
API Gamma Ray Units

MEDIUM INDUCTION

→ 10 ←

DEEP INDUCTION

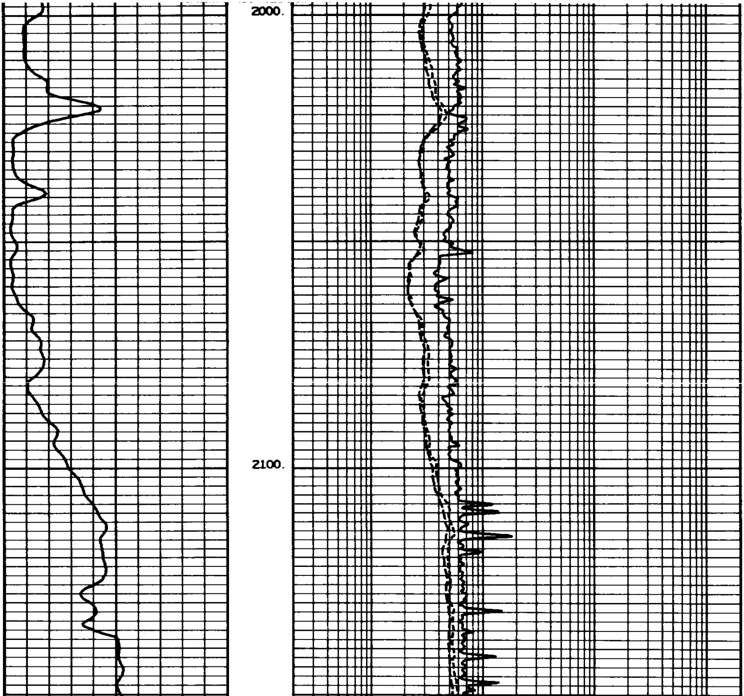
POTENTIAL MILLIVOLTS

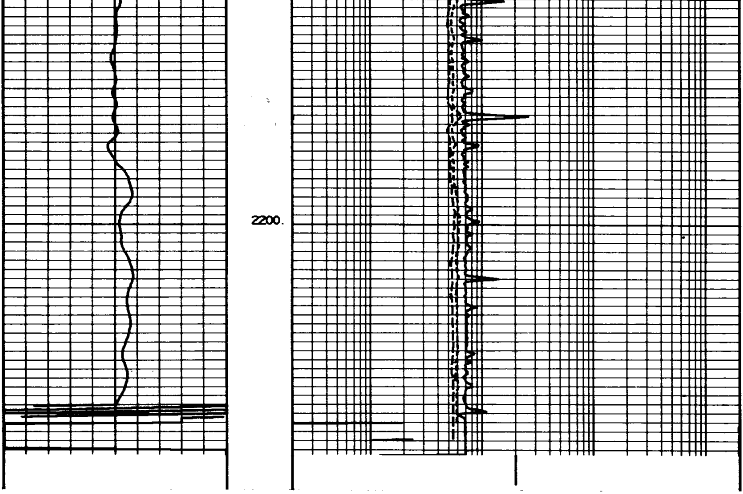
RESISTIVITY OHMS M²/M

Rmf .94 at 95 °F.
REICHOLD ENERGY CORPORATION
COLUMBIA COUNTY No. 43-22
MIST
COLUMBIA, OREGON

T.D. LOGGED	2243
T.D. DRILLER	2252
T.D. WELEX	2250

REPEAT SECTION





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                  BEFORE LOG  FIELD CALIBRATION SUMMARY

PERFORMED   02/ 25/ 84     LAST SHOP CALIB    02/ 03/ 84
PROGRAM VERSION V1.5

                              DEEP INDUCTION            MEDIUM INDUCTION
     ITEM                  FIELD          SHOP        FIELD            SHOP
 TOOL ZERO                -0.259           0.        -0.064             0.
 INT. CALIB.              500.26         492.98      508.98           509.7
 MANDREL ERROR            -6.319                     6.3034


PAD # 98853       MOD. # 280     SRC. # 0           FLD CAL. # 0


                        SHOP CALIBRATION SUMMARY

PERFORMED   02/ 25/ 84     LAST SHOP CALIB    02/ 03/ 84
PROGRAM VERSION V1.5

                              DEEP INDUCTION             MEDIUM INDUCTION
     ITEM                MEASURED      CALIBRATED     MEASURED     CALIBRATED
 TOOL ZERO               -0.332             0.        -0.322             0.
 INT. CALIB.             492.66          492.98       509.55          509.7
 WHEEL                   499.83          500.15       500.19         500.33
 MANDREL ERROR                           -6.319                      6.3034


PAD # 98853       MOD. # 280     SRC. # 0           FLD CAL. # 0


                  AFTER  LOG  FIELD CALIBRATION SUMMARY

PERFORMED   02/ 25/ 84     LAST SHOP CALIB    02/ 03/ 84
PROGRAM VERSION V1.5

                              DEEP INDUCTION            MEDIUM INDUCTION
     ITEM                  AFTER         BEFORE        AFTER          BEFORE
 TOOL ZERO                -0.259           0.        -0.257             0.
 INT. CALIB.              485.01         492.98      505.59           509.7
 MANDREL ERROR             -15.3                       21.3


PAD # 98853       MOD. # 280     SRC. # 0           FLD CAL. # 0
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             SHORT GUARD(NORMAL) BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED   02/ 25/ 84    LAST SHOP CALIB   02/ 14/ 84
PROGRAM VERSION V1.5

                MEASURED CALIBRATED UNITS
LOW INT CAL       1.8735  1.8819    OHMM
HIGH INT CAL      229.97  227.74    OHMM

PAD # 24019      MOD. # 141     SRC. # 0          FLD CAL. # 0


                SHORT GUARD(NORMAL) SHOP CALIBRATION

PERFORMED   02/ 14/ 84    LAST SHOP CALIB   02/ 03/ 84
PROGRAM VERSION V1.5

                    MEASURED    CALIBRATED    UNITS
SHOP CAL LOW         2.0253         2.        OHMM
SHOP CAL HIGH        202.52        200.       OHMM
INTERNAL CAL LOW     1.9057       1.8819      OHMM
INTERNAL CAL HIGH    230.62       227.74      OHMM

PAD # 24019      MOD. # 141     SRC. # 0          FLD CAL. # 0


             SHORT GUARD(NORMAL) AFTER SURVEY CALIBRATION

PERFORMED   02/ 25/ 84    LAST SHOP CALIB   02/ 14/ 84
PROGRAM VERSION V1.5

                BEFORE     AFTER    UNITS
LOW INT CAL      1.8735   2.3302    OHMM
HIGH INT CAL     229.97   228.67    OHMM

PAD # 24019      MOD. # 141     SRC. # 0          FLD CAL. # 0
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