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**Welex**

5"=100'

COMPANY REICHHOLD ENERGY CORP.
WELL COLUMBIA COUNTY NO. 10
FIELD MIST-NEHALEM BASIN
County COLUMBIA State OREG.

# COMPENSATED DENSITY LOG NEUTRON

COMPANY REICHHOLD ENERGY CORPORATION
WELL COLUMBIA COUNRY NO. 10
FIELD MIST - NEHALEM BASIN
COUNTY COLUMBIA STATE OREGON
Location 1976' NORTH & 1065' EAST OF SOUTHWEST CORNER OF:
Other Services: DIG C/AVL DIP
Sec. 3 Twp 6N Rge 5W
Permanent Datum GL Elev. 1089.22
Log Measured From KB OR 10.5 Ft. Above Perm. Datum
Drilling Measured From KB
Elev.: K.B. 1099.72
D.F. -
G.L. 1089.22

| | | | | |
|---|---|---|---|---|
| Date | 10-5-79 | | | |
| Run No. | ONE | | | |
| Depth Driller | 2983 | | | |
| Depth Welex | 2981 | | | |
| Btm Log Inter. | 2979 | | | |
| Top Log Inter. | 440 | | | |
| Casing Driller | 7 @ 437 | @ | @ | @ |
| Casing Welex | 440 | | | |
| Bit Size | 6 1/4 | | | |
| Type Fluid in Hole | LIGNO SULF | | | |
| | | | | |
| Dens. \| Visc. | 79 \| 39 | \| | \| | \| |
| pH \| Fluid Loss | 9.0 \| 7.0 ml | \| ml | \| ml | \| ml |
| Source of Sample | PIT | | | |
| $R_m$ @ Meas.Temp. | 3.86 @ 60 °F | @ °F | @ °F | @ °F |
| $R_{mf}$ @ Meas.Temp. | 3.57 @ 60 °F | @ °F | @ °F | @ °F |
| $R_{mc}$ @ Meas.Temp. | 3.99 @ 60 °F | @ °F | @ °F | @ °F |
| Source $R_{mf}$ $R_{mc}$ | MEASURED | \| | \| | \| |
| $R_m$ @ BHT | 2.16 @ 109°F | @ °F | @ °F | @ °F |
| Time Since Circ. | 2 HOURS | | | |
| Max Rec. Temp. | 109F @ BHT | °F @ | °F @ | °F @ |
| Equip \| Location | 8586 \| WDLND | \| | \| | \| |
| Recorded By | DOVE | | | |
| Witnessed By | McBURNIE, FRY | | | |

Fold Here

## EQUIPMENT DATA

| GAMMA RAY | | | | GAMMA DENSITY | | | |
|---|---|---|---|---|---|---|---|
| Run No. | ONE | | | Run No. | ONE | | |
| Tool Model No. | 102-A | | | Log Type | COMP.DENS. | | |
| Diameter | 3 5/8" | | | Tool Model No. | 125 | | |
| Detector Model No. | 102-A | | | Diameter | 3 5/8" | | |
| Type | SCINT. | | | Detector Model No. | 127 | | |
| Length | N/A | | | Type | SCINT. | | |
| Distance to Source | 240" | | | Length | N/A | | |
| | | | | Source Model No. | DCS | | |
| GENERAL | | | | Serial No. | DCS-81 | | |
| Hoist Truck No. | [illegible] | | | Spacing | N/A | | |
| Instrument Truck No. | 8586 | | | Type | Cs 137 | | |
| Tool Serial No. | 20088 | | | Strength | 500 mc | | |
| MAND. NO. | 20063 | | | | | | |
| PAD NO. | 20089 | | | | | | |

## LOGGING DATA

| GENERAL | | | | GAMMA RAY | | | | GAMMA DENSITY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run No. | Depths From | Depths To | Speed Ft Min | T.C. Sec. | Sens. Settings | Zero Div. L or R | API G.R. Units per Log Div. | T.C. Sec. | Sens. Settings | Zero Div. L or R | Units per Log Div. |
| ONE | 2981 | 440 | 25 | 1 | 200 | 2-L | 20 | 1 | 165-265 | | 0.05 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Reference Literature:

Service Ticket No. 049048 Remarks:

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.

5" = 100'

**GAMMA**
API Gamma Ray Units
40 240

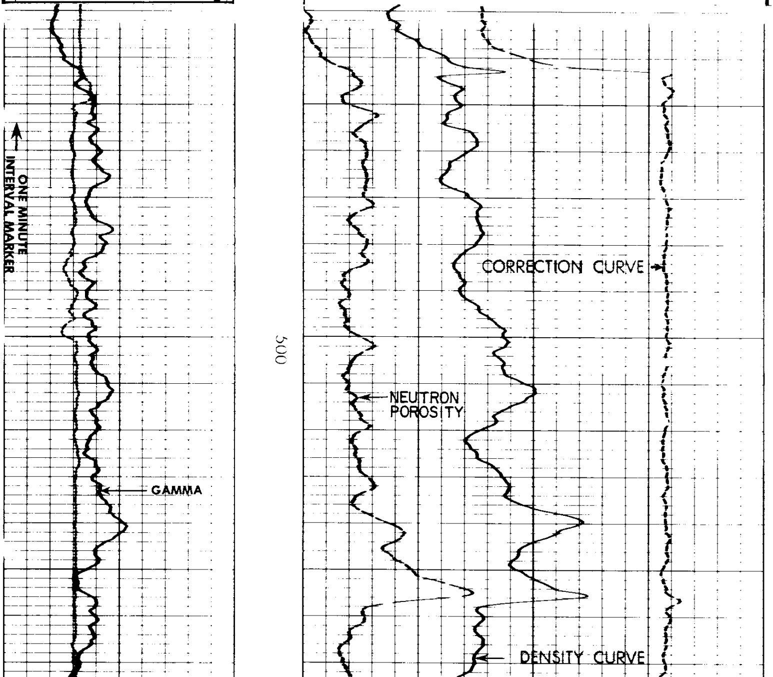
**CALIPER**
Average Diameter Inches
4 14

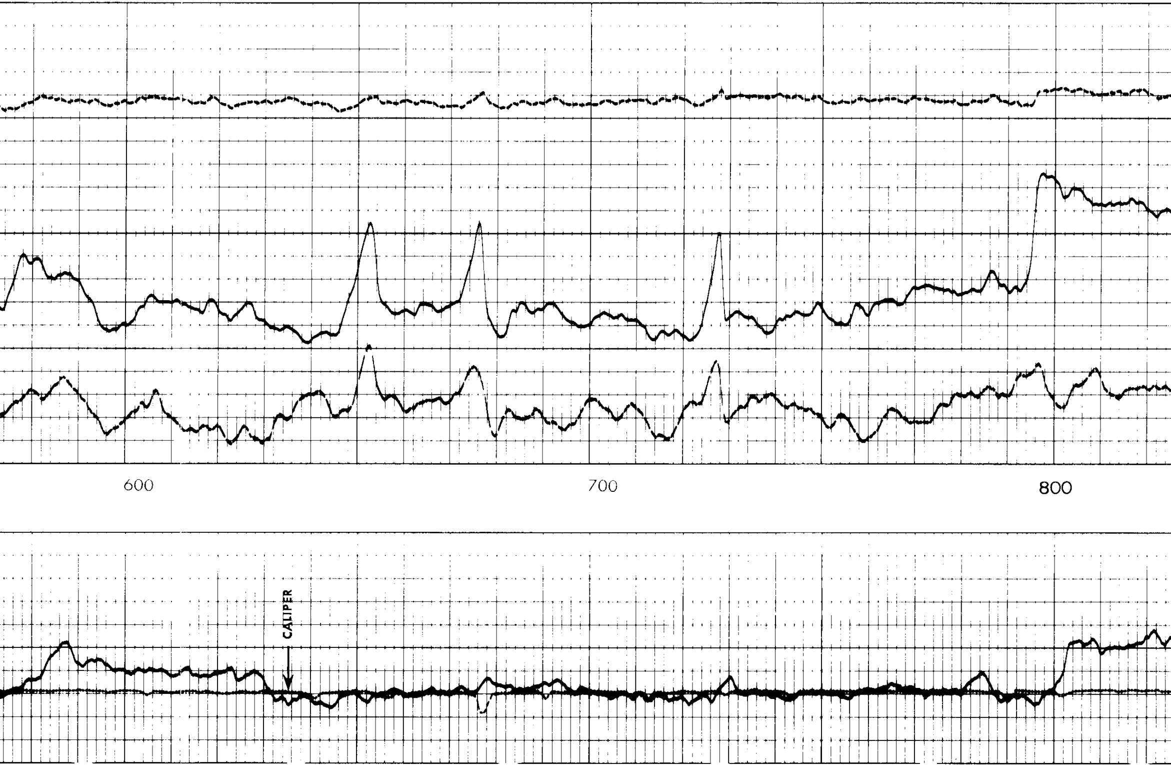
**COMPENSATED GAMMA DENSITY**
*GMS/CC*
1.65 2.65

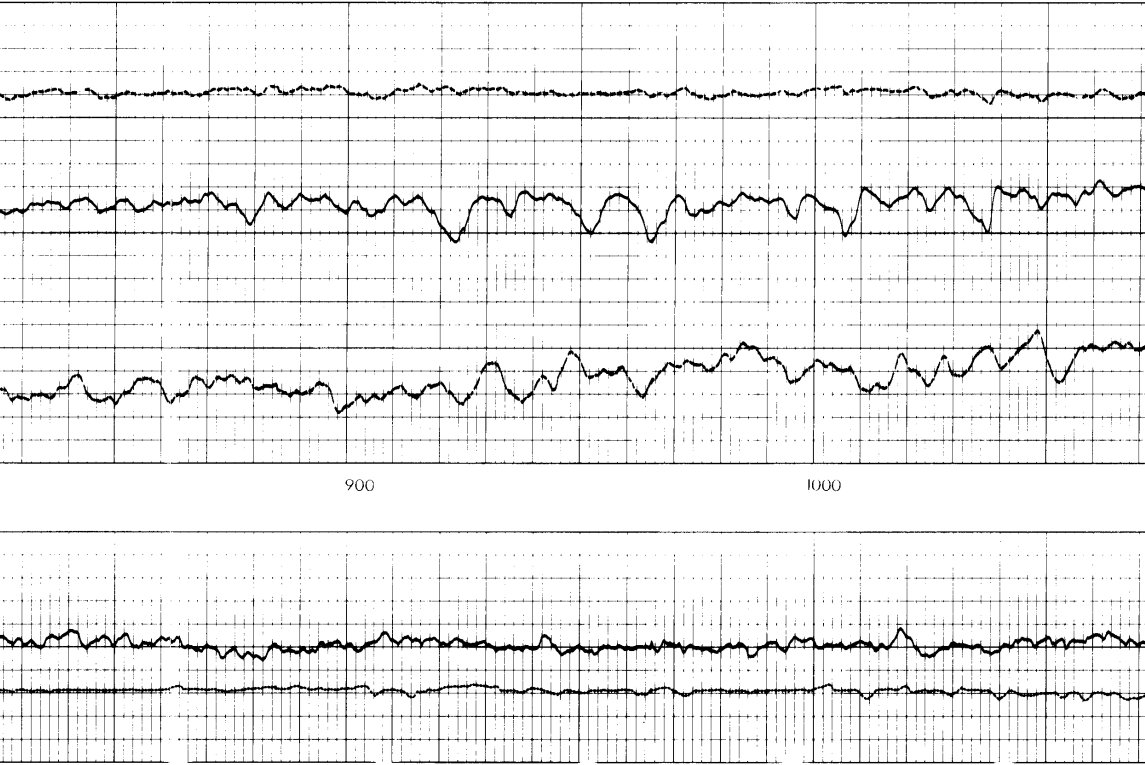
$P_f = 1.0$
POROSITY AT Pg 2.65 G/CC

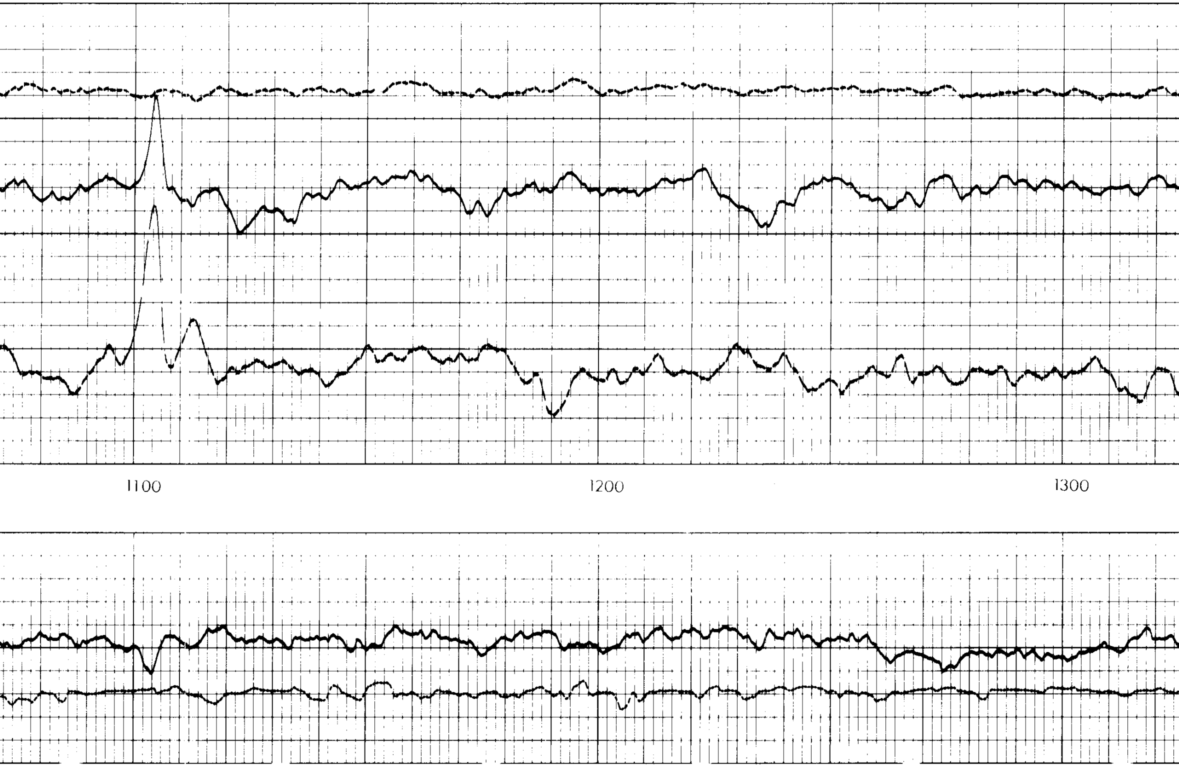
**CORRECTION**
*GMS/CC*
–.25 0 +.25

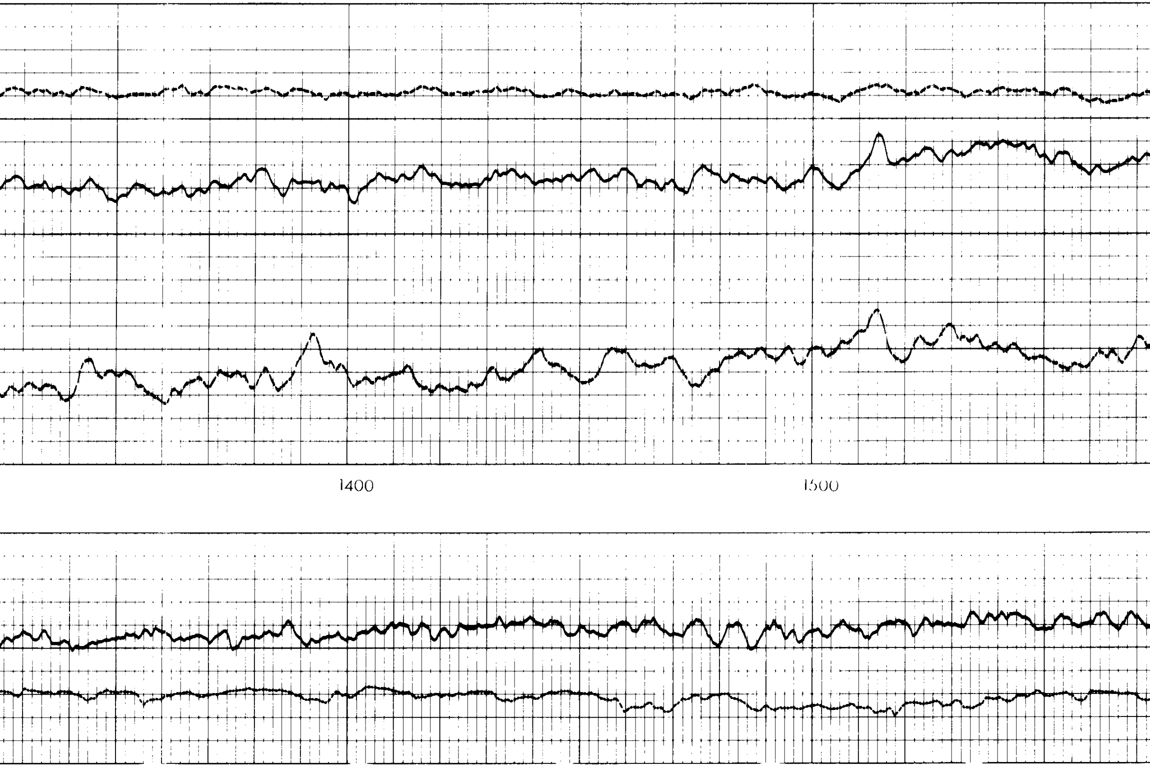
40 30 20 10 0
Sandstone Porosity (DENSITY & NEUTRON)

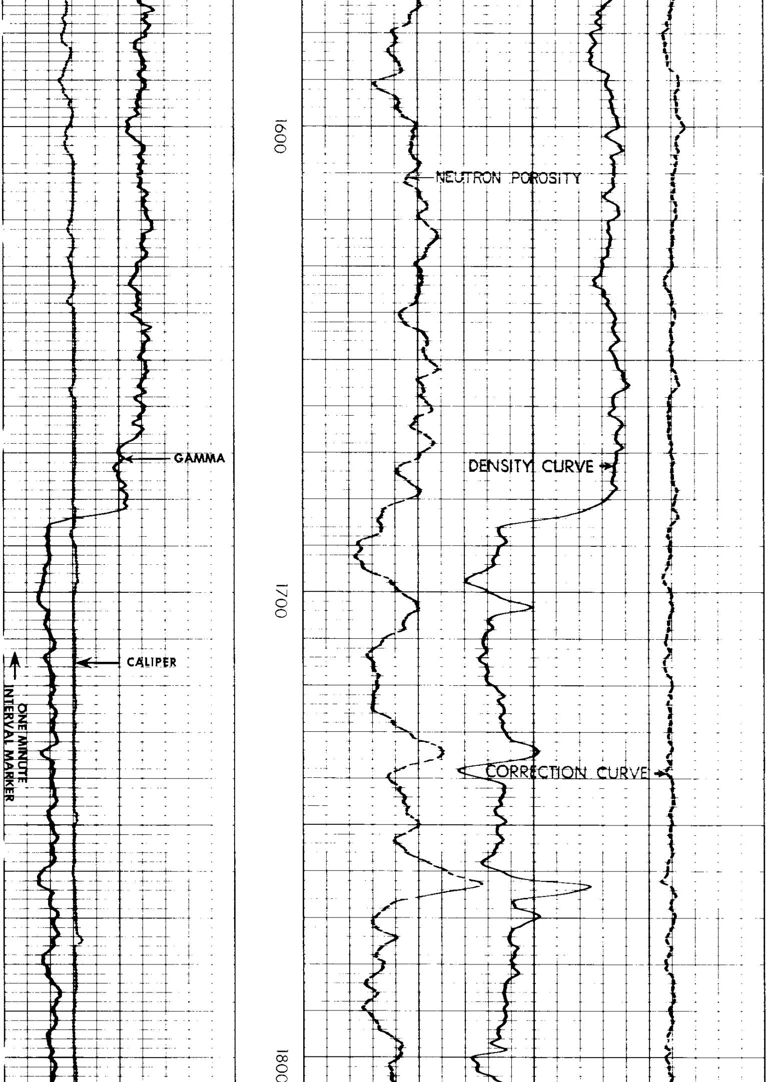


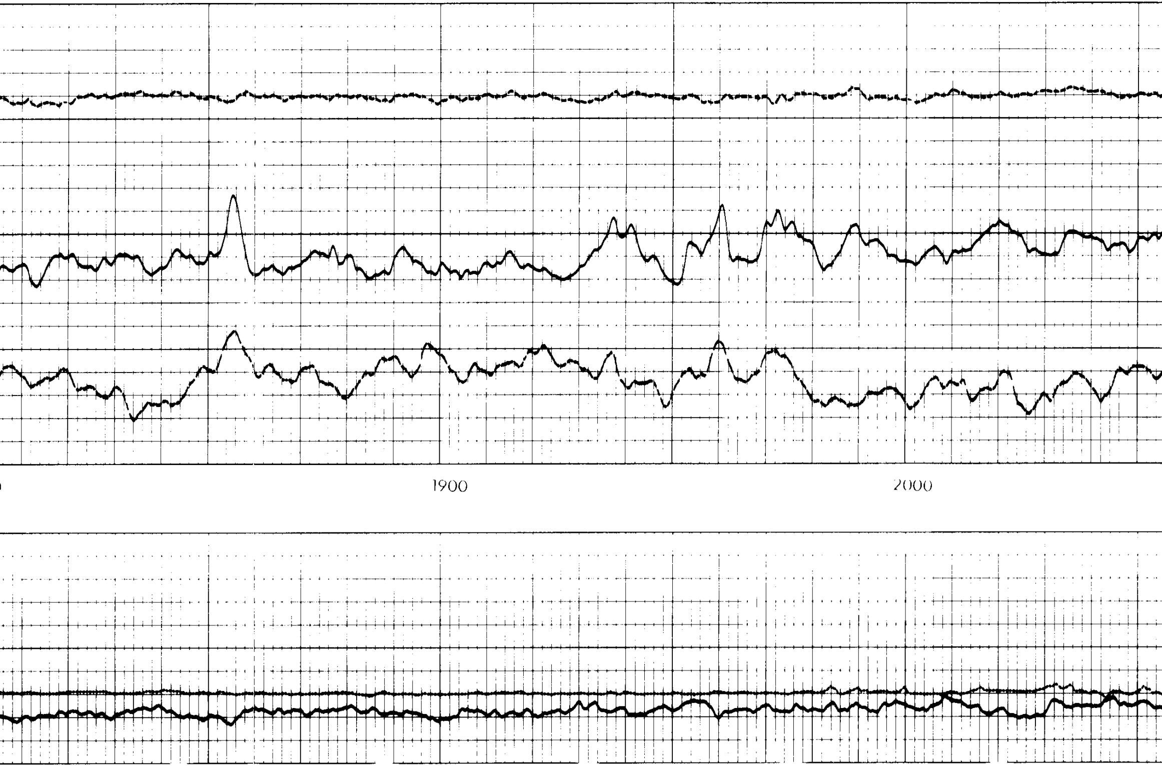


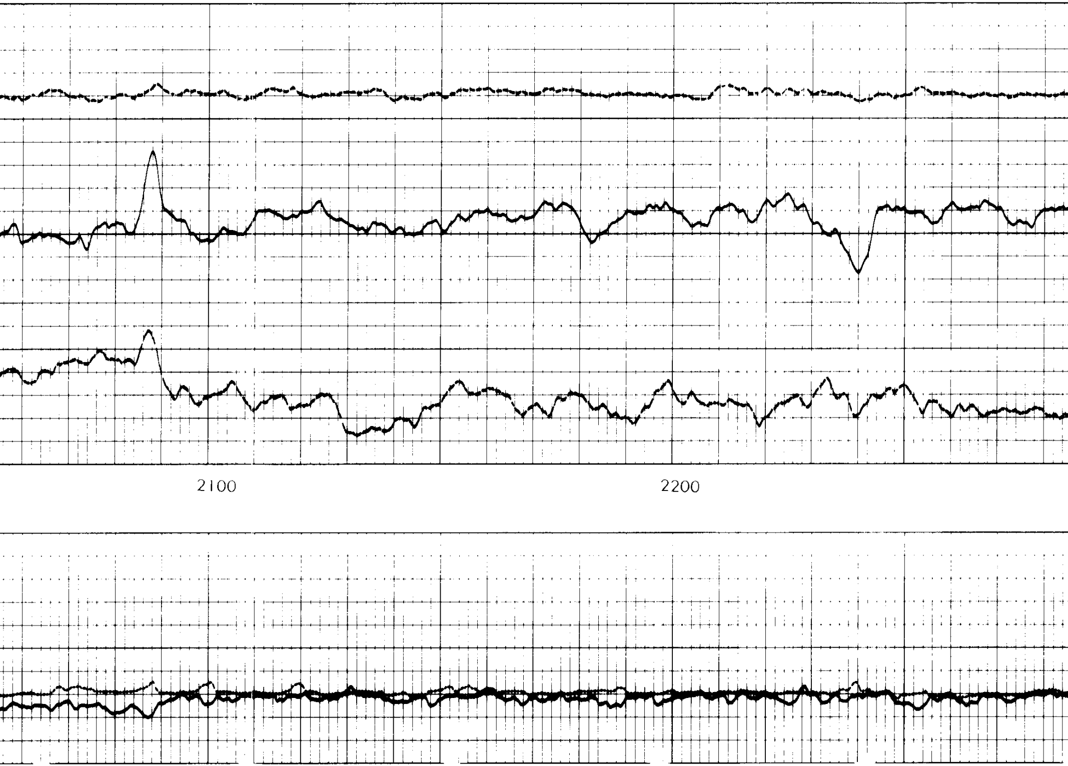


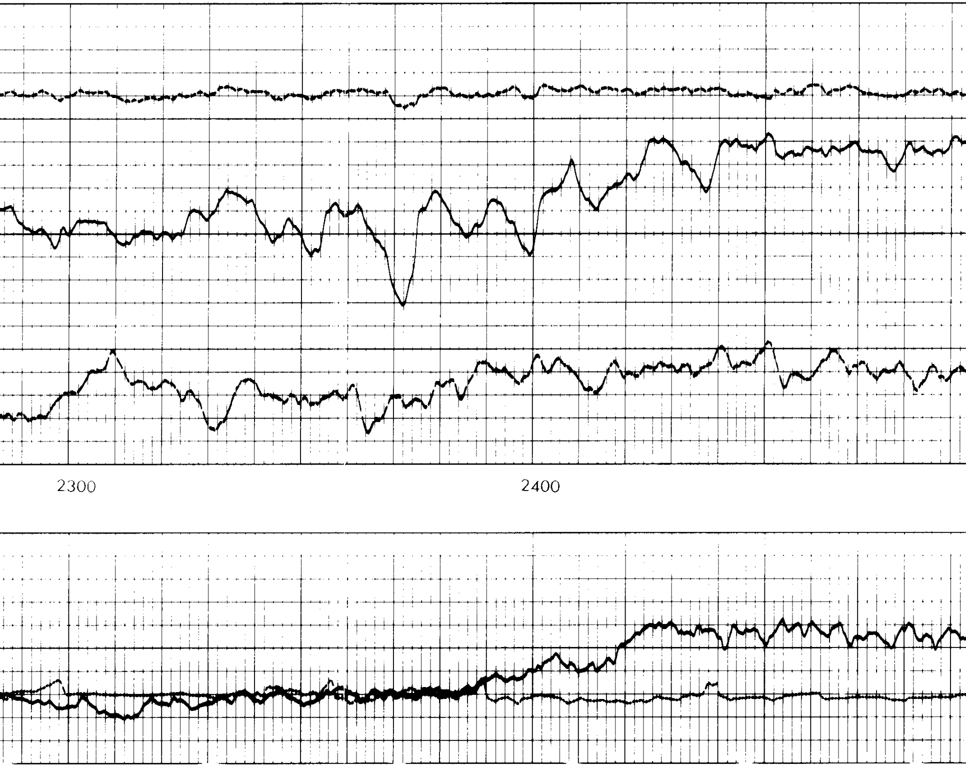


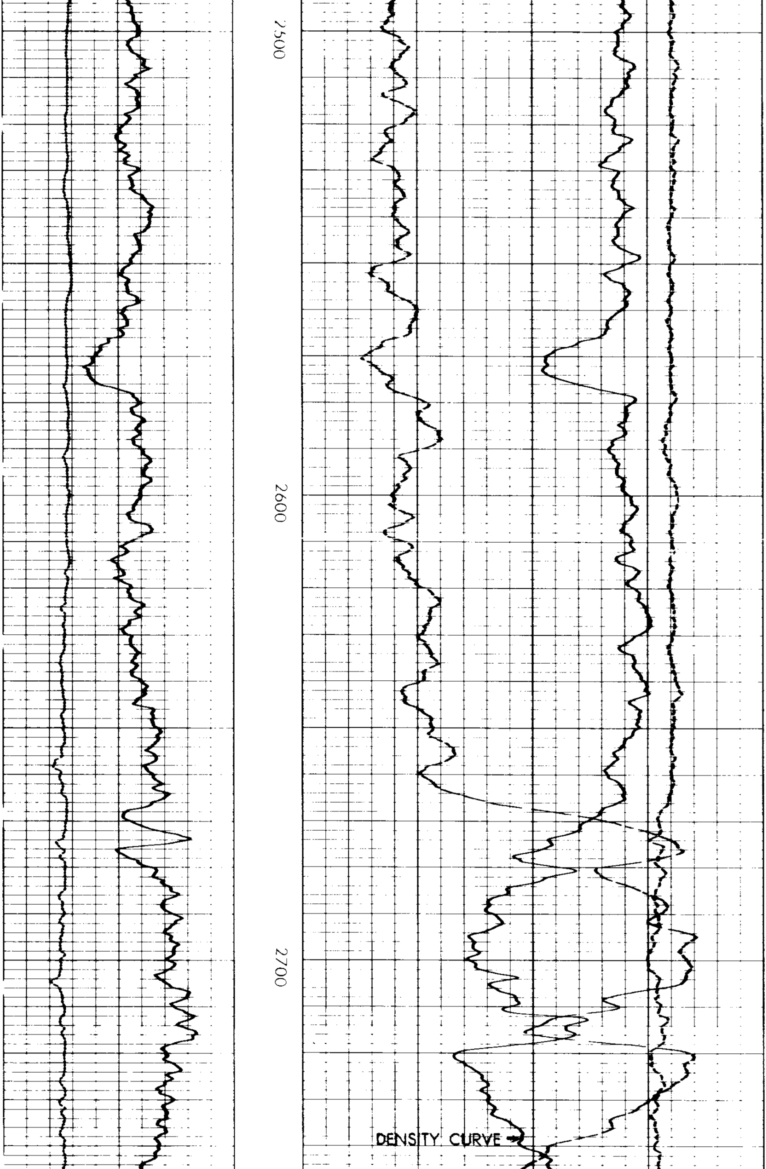


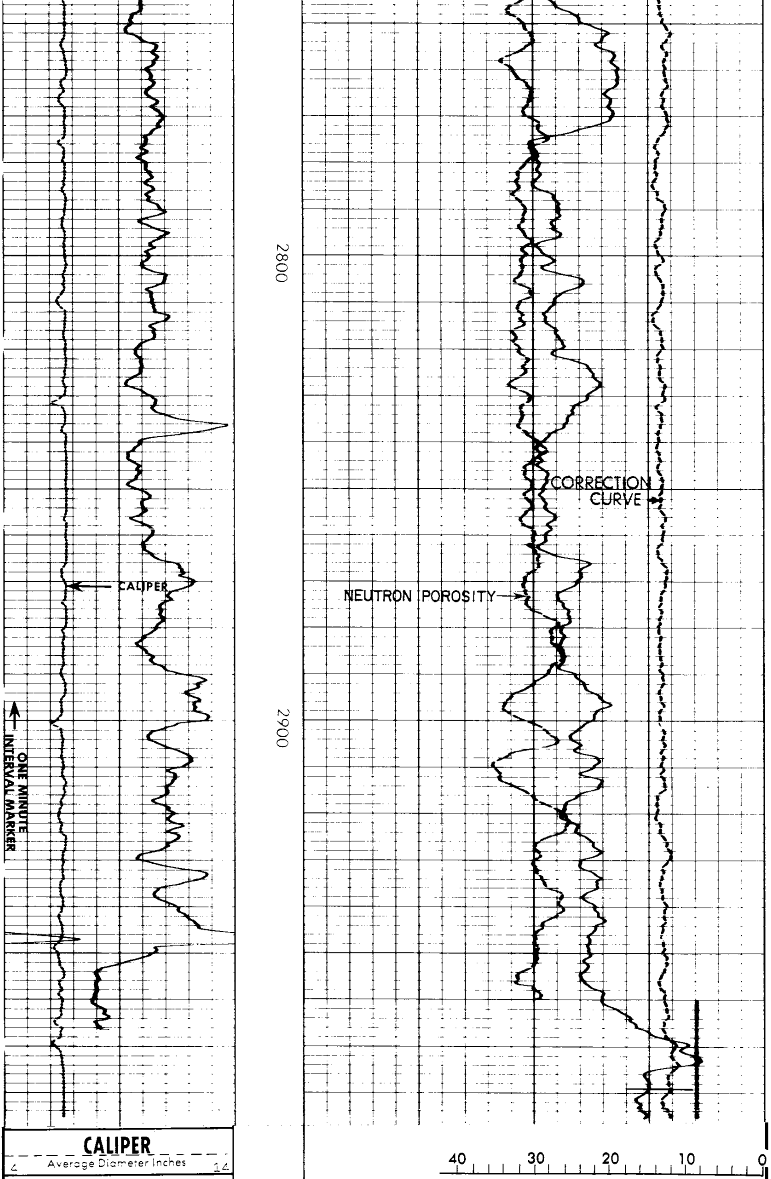












**GAMMA**
40 API Gamma Ray Units 240

Sandstone Porosity(DENSITY & NEUTRON)

POROSITY AT Pg 2.65 G CC

$P_f$ =1.0

−.25 0 +.25

*GMS/CC*

**CORRECTION**

*GMS/CC*

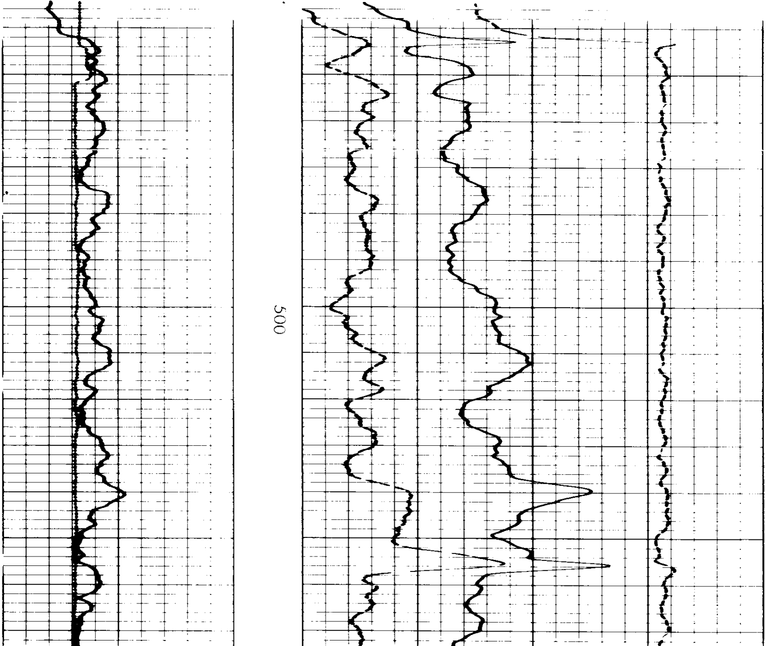
**COMPENSATED GAMMA DENSITY**

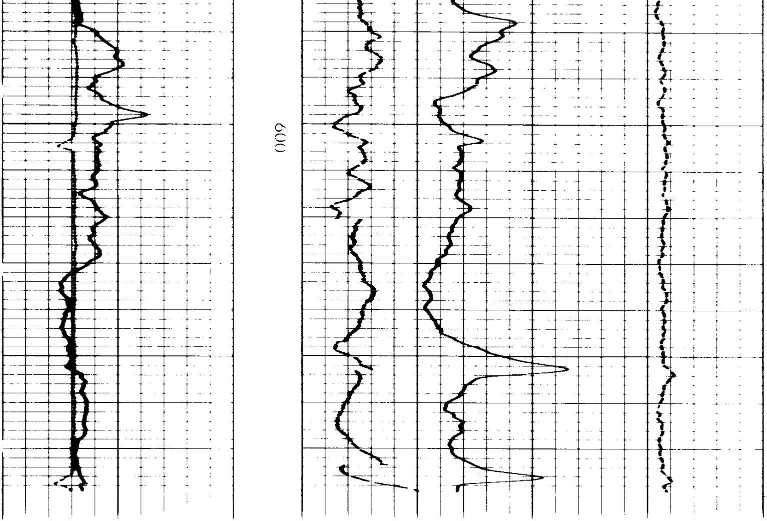
1.65 2.65

REICHHOLD ENERGY CORPORATION
COLUMBIA COUNTY NO. 10
MIST – NEHALEM BASIN
COLUMBIA COUNTY, OREGON

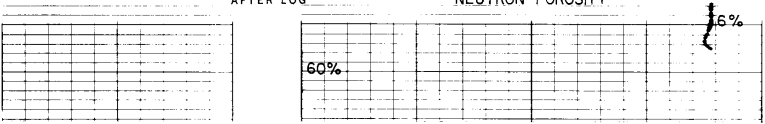
T.D. LOGGED 2979
T.D. DRILLER 2983
T.D. WELEX 2981
ELEV: KB 1099.72 GL 1089.22

REPEAT SECTION





AFTER LOG

NEUTRON POROSITY