Welex

# THERMAL MULTIGATE DECAY LOG
# (TMD)
FRESH OPTION

COMPANY PEIC-HOLE ENERGY
WELL C.C. No 23-34
FIELD MIST
COUNTY COLUM. STATE ORE

COMPANY REICHHOLD ENERGY
WELL C.C. No. 13 34
FIELD MIST
COUNTY COLUMBIA STATE OREGON

Location: N/A

Sec. 34 Twp. 17 N Rge. 5 W

Other Services: NONE

RECEIVED - PTLD
AUG 26 1985
DEPT. OF GEOLOGY

Permanent Datum GL Elev. 1254.4
Log Measured From KB 11.4 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 1265.8
D.F.
G.L. 1254.4

| | | | | |
|---|---|---|---|---|
| Date | 10 29 83 | | | |
| Run No. | ONE | | | |
| Depth — Driller | 2715 | | | |
| Depth — Welex | 2715 | | | |
| Btm. Log Inter. | 2714 | | | |
| Top Log Inter. | 2400 | | | |
| Type Fluid in Hole | NONE | | | |
| Salinity ppm NaCl | N/A | | | |
| Density lb./gal. | N/A | | | |
| Level | DRY | | | |
| Max. Rec. Temp. | 140 | | | |
| Opr. Rig Time | 2 HOURS | | | |
| Equip. I Location | 9430 WDLND | I | I | I |
| Recorded by | JORDAN, JACKSON | | | |
| Witnessed by | STINSON | | | |

| Borehole Record | | | Casing & Tubing Record | | | |
|---|---|---|---|---|---|---|
| Bit | From | To | Size | Weight | From | To |
| 7 7/8 | 492 | 2822 | 8 5/8 | 24 | SURFACE | 492 |
| | | | 5 1/2 | 14 | SURFACE | 2800 |
| | | | 2 3/8 | 4.7 | SURFACE | 2698 |

## EQUIPMENT DATA

API NO.

SOFTWARE VERSION NO.

| GAMMA RAY | | | |
|---|---|---|---|
| Run No. | ONE | | |
| Tool Model No. | 395 | | |
| Diameter | 1 11/16 | | |
| Detector Model No. | N/A | | |
| Type | SCINT | | |
| Length | 6'' | | |
| Distance to N. Source | N/A | | |

| GENERAL | | | |
|---|---|---|---|
| Hoist Truck No. | 9430 | | |
| Instrument Truck No. | 3021 | | |
| Tool Serial No. | 106332 | | |

| TMD | | | |
|---|---|---|---|
| Run No. | ONE | | |
| Log Type | TMD | | |
| Tool Model No. | 395 | | |
| Diameter | 1 11/16 | | |
| Detector Model No. | N/A | | |
| Type - SS | SCINT | | |
| Type - LS | SCINT | | |
| Source Model No. | A-320A | | |
| Serial No. | 106332 | | |
| Spacing | N/A | | |
| Type | D-T | | |
| Strength | 1x10$^8$ n/sec | | |

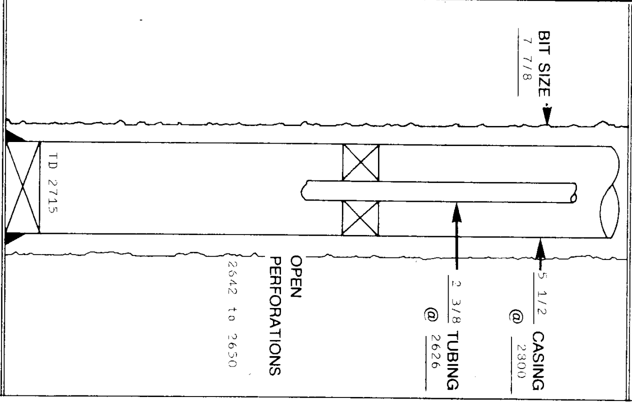
## LOGGING DATA

| GENERAL | | | | GAMMA RAY | | | | TMD | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run No. | Depth From | Depth To | Speed Ft./Min. | Filter Type B or A | Sens. Settings | Zero Div. L or R | API G.R. Units Per Log Div. | Input Filter Type B or A | Output Filter ($\Sigma_{FM}$ only) Y or N | Borehole Option Fresh or Salt | $R_{NF}$ Sensitivity |
| ONE | 2712 | 2400 | 18 | A | .38641 | L | 15 | A | Y | FRESH | 1.0493 |

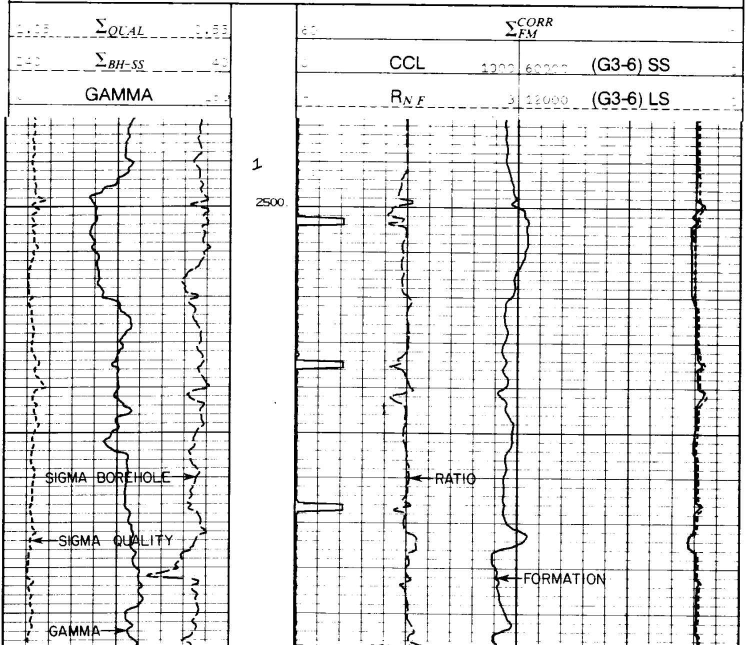
Reference Literature:

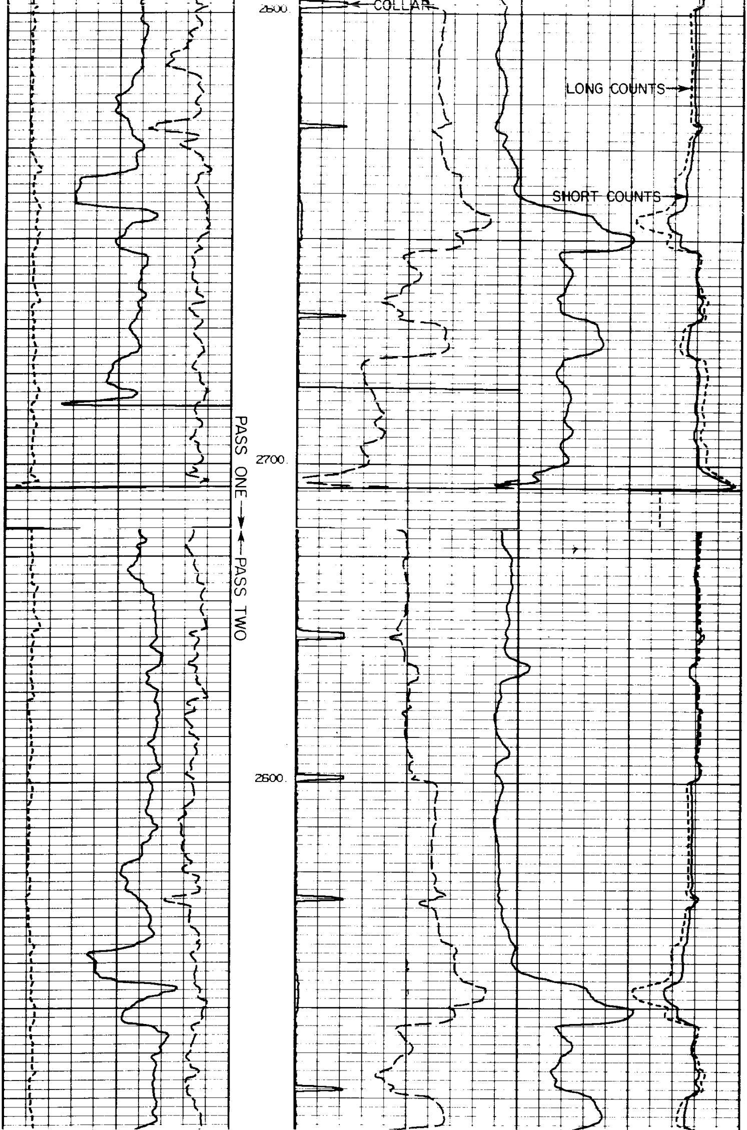
Service Ticket No. 154303 Remarks: Ew-33 Esh-35 Ehc-2.5 Bh- GAS FILLED
DRAFTED BY — JOHN YAECK CALC OPTION 3 AVG 0- 30%

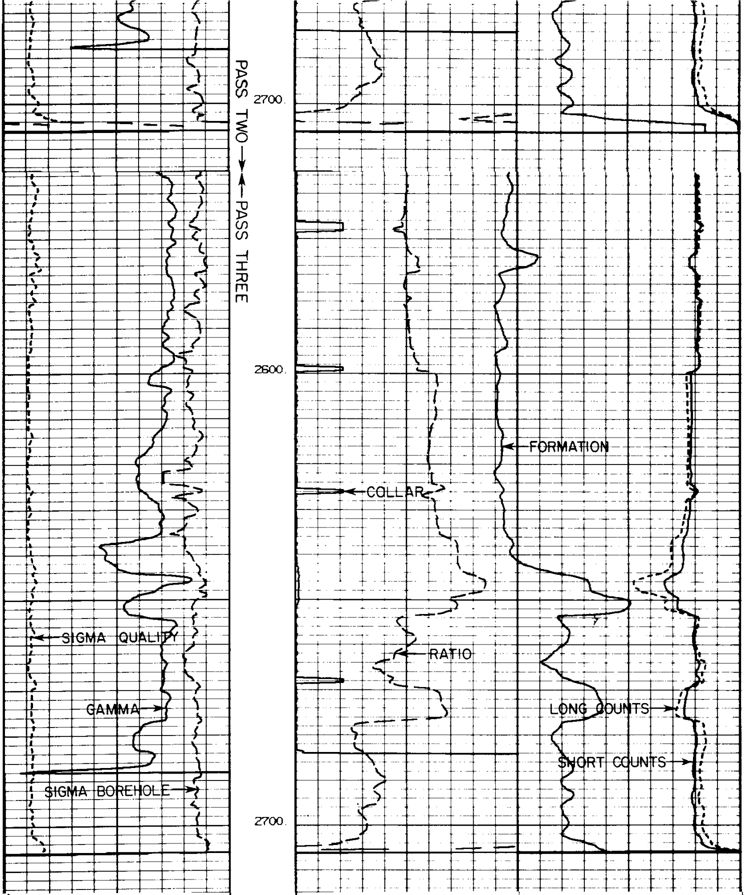
Welex does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters, or recommendations which may be given by Welex personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions, or recommendations 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.



# PRIMARY

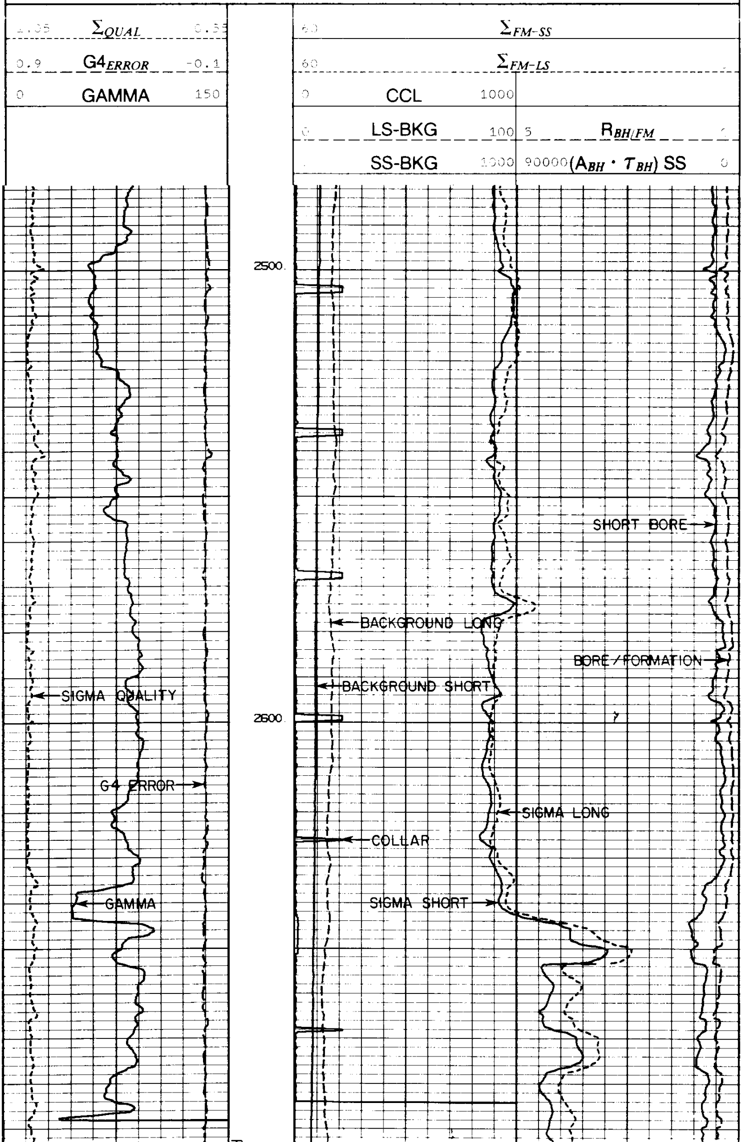


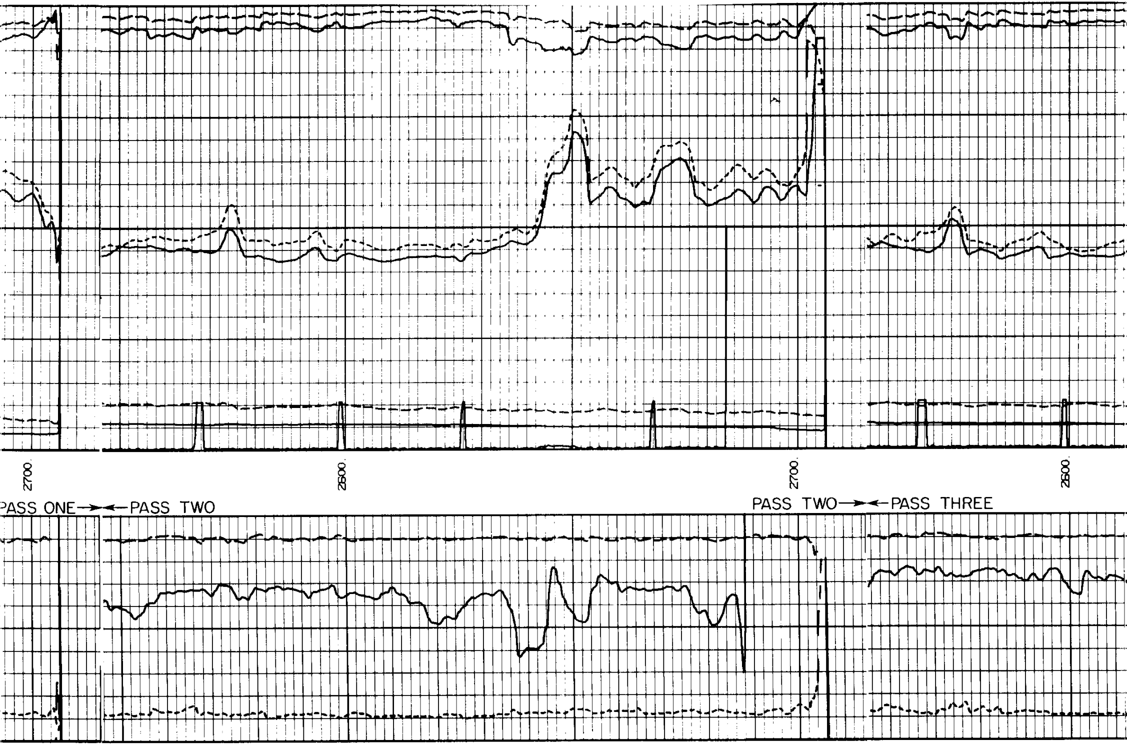


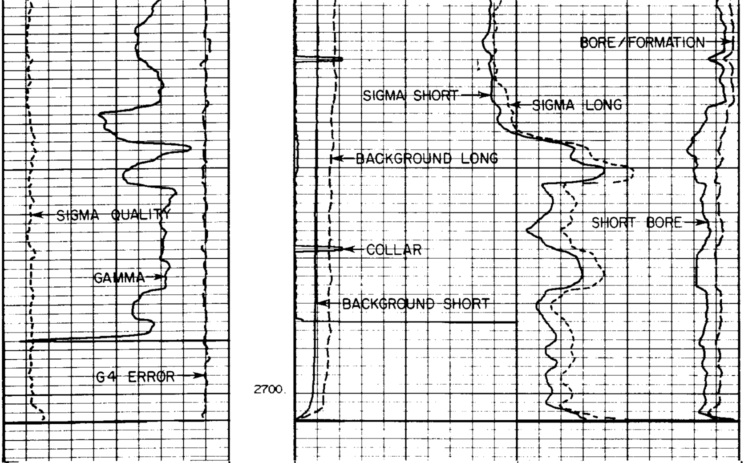


| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | GAMMA | 150 | | | | | | |
| 240 | $\Sigma_{BH-SS}$ | 40 | 8 | $R_{N/F}$ | 3 | 12000 | (G3-6) LS | 0 |
| 1.05 | $\Sigma_{QUAL}$ | 0.55 | 0 | CCL | 1000 | 60000 | (G3-6) SS | 0 |
| | | | 60 | $\Sigma_{FM}^{CORR}$ | | | | 0 |

# QUALITY







SS-BKG — $(A_{BH} \cdot T_{BH})$ SS

LS-BKG — $R_{BH, FM}$

0 GAMMA

CCL

G4 $_{ERROR}$

$\Sigma_{FM-LS}$

$\Sigma_{QUAL}$

60 $\Sigma_{FM-SS}$

COMPANY REICHHOLD ENERGY

WELL C.C. No. 13-34

FIELD MIST

COUNTY COLUMBIA STATE OREGON

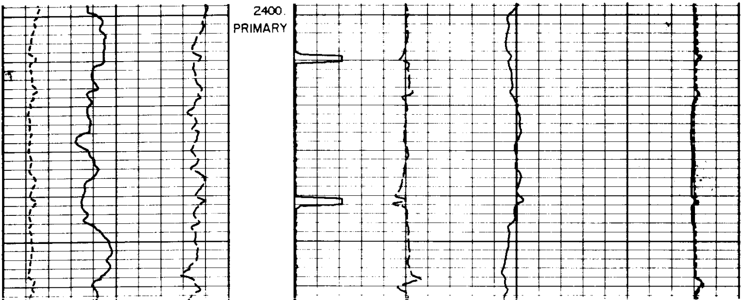
T.D. LOGGED 2714

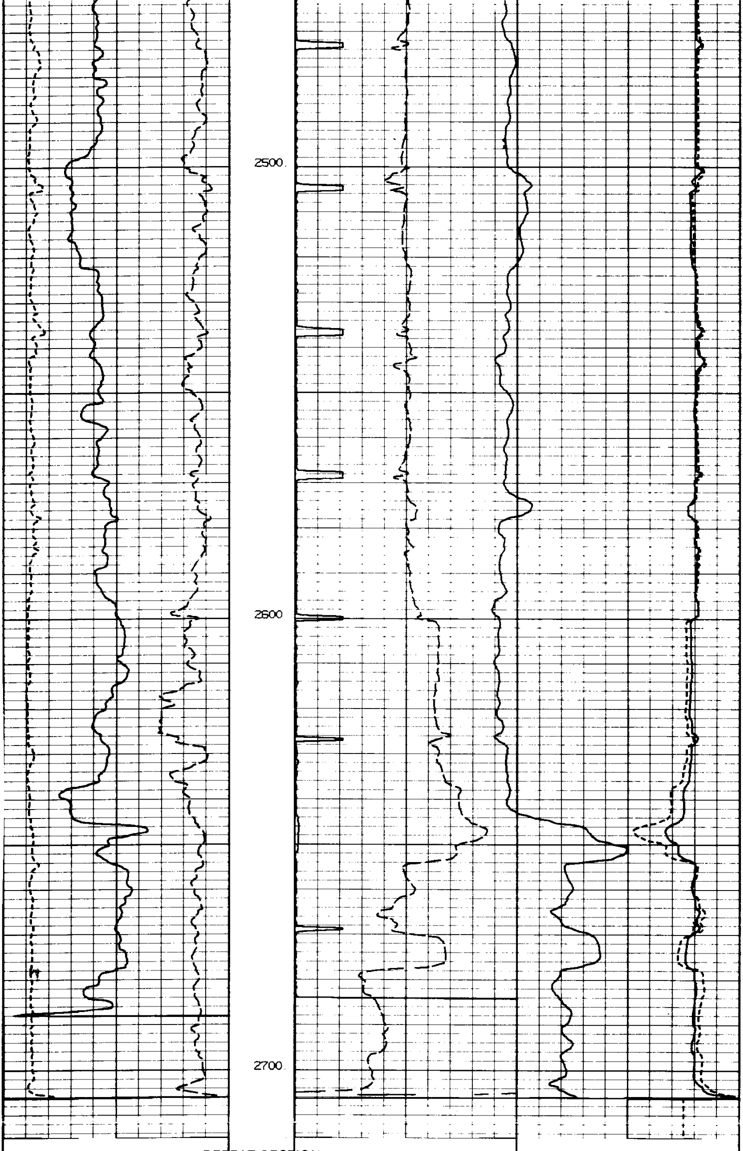
T.D. DRILLER 2715

T.D. WELEX 2715

ITMDQ 19092

REPEAT SECTION





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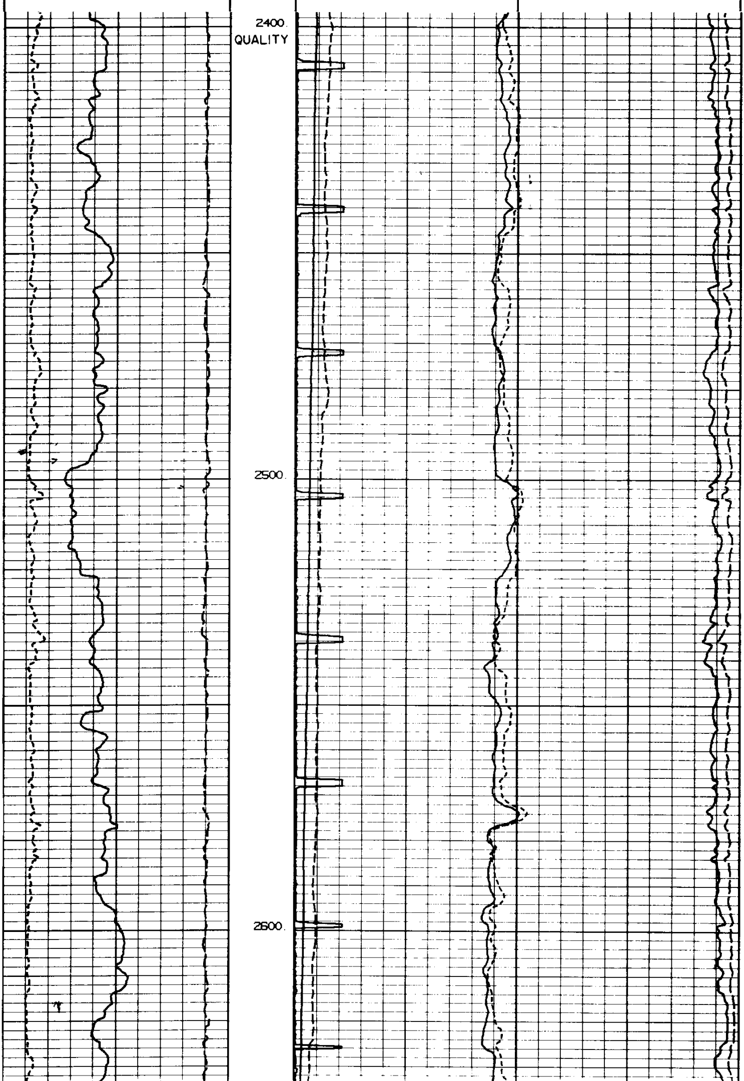
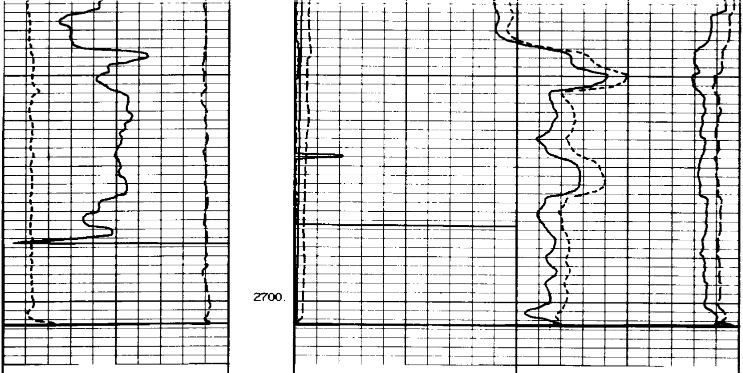
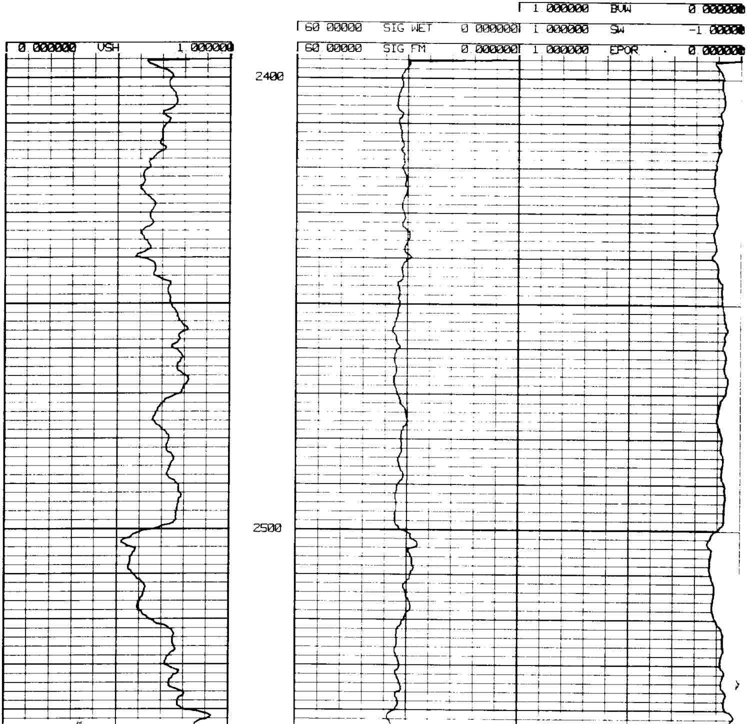
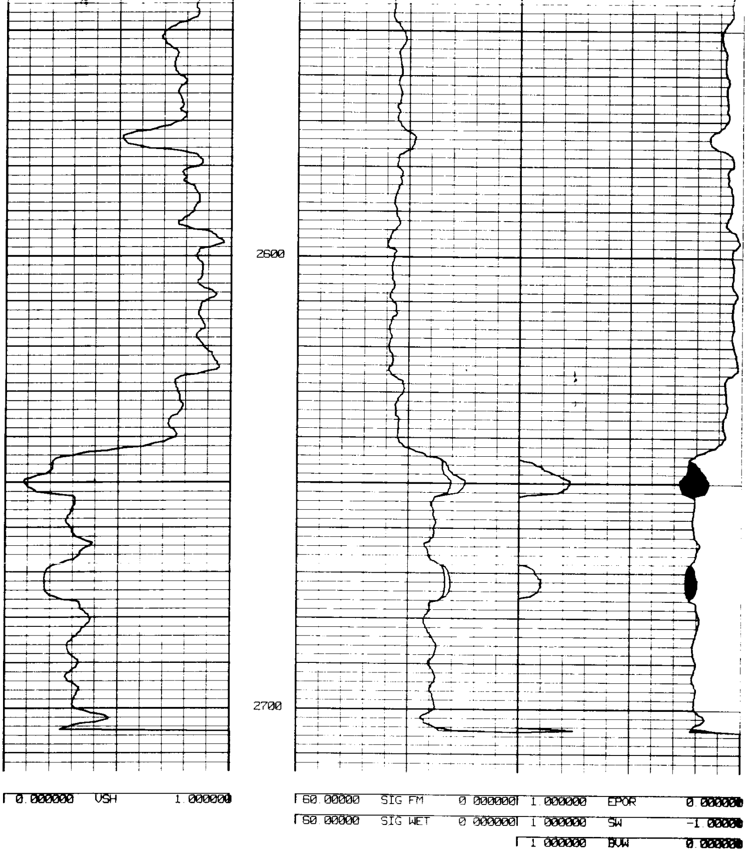




TMD CAL LOG





## CALIBRATION BEFORE SURVEY

### SUMMARY

| TRACE SURVEY | GALVO | TRK | SCALE L | R | INT CAL | NORM OR MATRIX | INTCP | (NORM*) OFFSET | (INTCP*) T.C. | DELAY | PLOTS C1VC2 | DIG CHAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIGMA SHORT | 4 | 4 | 60., | 0. | 0. | 0. | 3 | 0. | 1. | 0. | NNY | 1 |
| SIGMA LONG | 5 | 4 | 60., | 0. | 0. | 0. | 0 | 0. | 0. | 0. | NNM | 2 |
| SIGMA BORE | 3 | 1 | 240., | 40. | 0. | 0. | 0 | 0. | 0. | 0. | SSN | 7 |
| BACKG SHORT | 6 | 2 | 0., | 1000. | 0. | 0.10008 | 0 | 0. | 1. | 0. | NNY | 3 |
| BACKGR LONG | 12 | 2 | 0., | 100. | 0. | 0.10008 | 0 | 0. | 0. | 0. | NNS | 4 |
| SHORT COUNT | 9 | 3 | 30000, | 0. | 0. | 0.80064 | 0 | 0. | 0. | 9.1 | YYN | 9 |
| LONG COUNTS | 10 | 3 | 5000., | 0. | 0. | 0.20016 | 0 | 0. | 0. | 9.35 | SSN | 8 |
| RATIO | 8 | 2 | 8., | 3. | 0. | 1.0498 | 0 | 0. | 0. | 0. | SSN | 5 |
| GAMMA | 2 | 1 | 0., | 150. | 0. | 0.38641 | 0 | 0. | 1. | 27.169 | YYY | 6 |
| CCL | 1 | 2 | 0., | 1000. | 0. | 0.0125 | 0 | 0. | 0. | 31. | YYY | 10 |
| L. TENSION | 16 | 3 | 4095., | 0. | 0. | 1. | 0 | 0. | 0. | 0. | NNN | 11 |
| SIGMA FORM | 7 | 4 | 60., | 0. | 0. | 0. | 0 | 0. | 0. | 0. | YYN | 14 |
| SIGMA QUAL | 11 | 1 | 1.05, | 0.55 | 0. | 0. | 0 | 0. | 0. | 0. | FFF | 12 |
| QUALITY 1 | 13 | 1 | 0.9, | -0.1 | 0. | 0. | 0 | 0. | 0. | 0. | NNS | 13 |
| B/F | 14 | 3 | 5., | 0. | 0. | 0. | 0 | 0. | 0 | 0. | NNM | 15 |
| SHORT BORE | 15 | 3 | 90000, | 0 | 0. | 0 | 0 | 0 | 0 | 0 | NNY | 16 |