Schlumberger

# CEMENT BOND LOG

COUNTY LEWIS
Field or LOCATION JACKSON PRAIRIE 17-12N-1W
WELL STORAGE UNIT #901
COMPANY JACKSON PRAIRIE

COMPANY JACKSON PRAIRIE GAS STORAGE COMPANY

WELL STORAGE UNIT #901

FIELD JACKSON PRAIRIE

COUNTY LEWIS STATE WASHINGTON

LOCATION 274'S & 834'E FROM THE N/4 CORNER OF:

Sec. 17 Twp. 12N Rge. 1W

Other Services:
HDT
SNP FDC
IES

Permanent Datum: GL, Elev. 525
Log Measured From KB, 12 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 537
D.F. -
G.L. 525

| | | | |
|---|---|---|---|
| Date | 4/28/72 | Type Drill Fluid | FRESH |
| Run No. | TWO | Fluid Level | 300 |
| Depth — Driller | 2830 | Max. Rec. Temp. | 100 °F |
| Depth — Logger | 2833 | Est. Cement Top | SURFACE |
| Btm. Log Interval | 2825 | Equip. / Location | 5106 / 4401 |
| Top Log Interval | 600 | Recorded By | ANDERSEN |
| Open Hole Size | 12-1/4-2088;9-7/8-TD | Witnessed By | WURDEN |

| CASING REC. | Size | Wt/Ft | Grade | Type Joint | Top | Bottom |
|---|---|---|---|---|---|---|
| Surface String | 13-3/8 | 54 | - | ST & C | 0 | 618 |
| Prot. String | 7 | 23 | | ST & C | 0 | 2840 |
| Prod. String | | | | | | |
| Liner | | | | | | |

PRIMARY CEMENTING DATA

| STRING | Surface | PRODUCTION | | Liner |
|---|---|---|---|---|
| Vol. of cement | | 1150 | | |
| Type of cement | | CLASS A | | |
| Additive | | 4% 6 CL 3% CA | | |
| | | 1/2 CU.FT. PERLITE 25# GILSOUITE | | |
| Retarder | | 2.17#SALT PER SACK (660SKS) | | |
| | | | | |
| Wt. of slurry | | 10.8 | | |
| Water loss | | | | |
| Type fluid in csg. | | FRESH | | |
| Fluid wt. | | 10.6 | | |

FOLD HERE

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

PRIMARY CEMENTING PROCEDURE

| Hour — date | Hours from start of operation |
|---|---|
| Started pumping cement 0500 4/25/72 | 0 |
| Release pressure 0600 4/25/72 | 1 |
| Start Cement Bond Log 1000 4/28/72 | 52 |
| Finish Cement Bond Log 1100 4/28/72 | |

Preceding fluid WATER Volume 50 CU. FT. bbls.
Cement pumped bbls./minute

Pipe reciprocated during Pumping: Yes X No
Pipe reciprocated after plug down: Yes min., No X

Equipment Data

| | |
|---|---|
| Type centralizers | |
| Logging speed | |
| Sonde Type | |
| Cartridge Type | |
| Cartridge No. | |

Centralizer Depths | Scratcher Depths

SQUEEZE JOB DETAIL

| Squeeze number | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Date | | | | |
| Depth interval | | | | |
| Type cement | | | | |
| Volume of cement | | | | |
| Additive | | | | |
| Retarder | | | | |
| Weight of slurry | | | | |

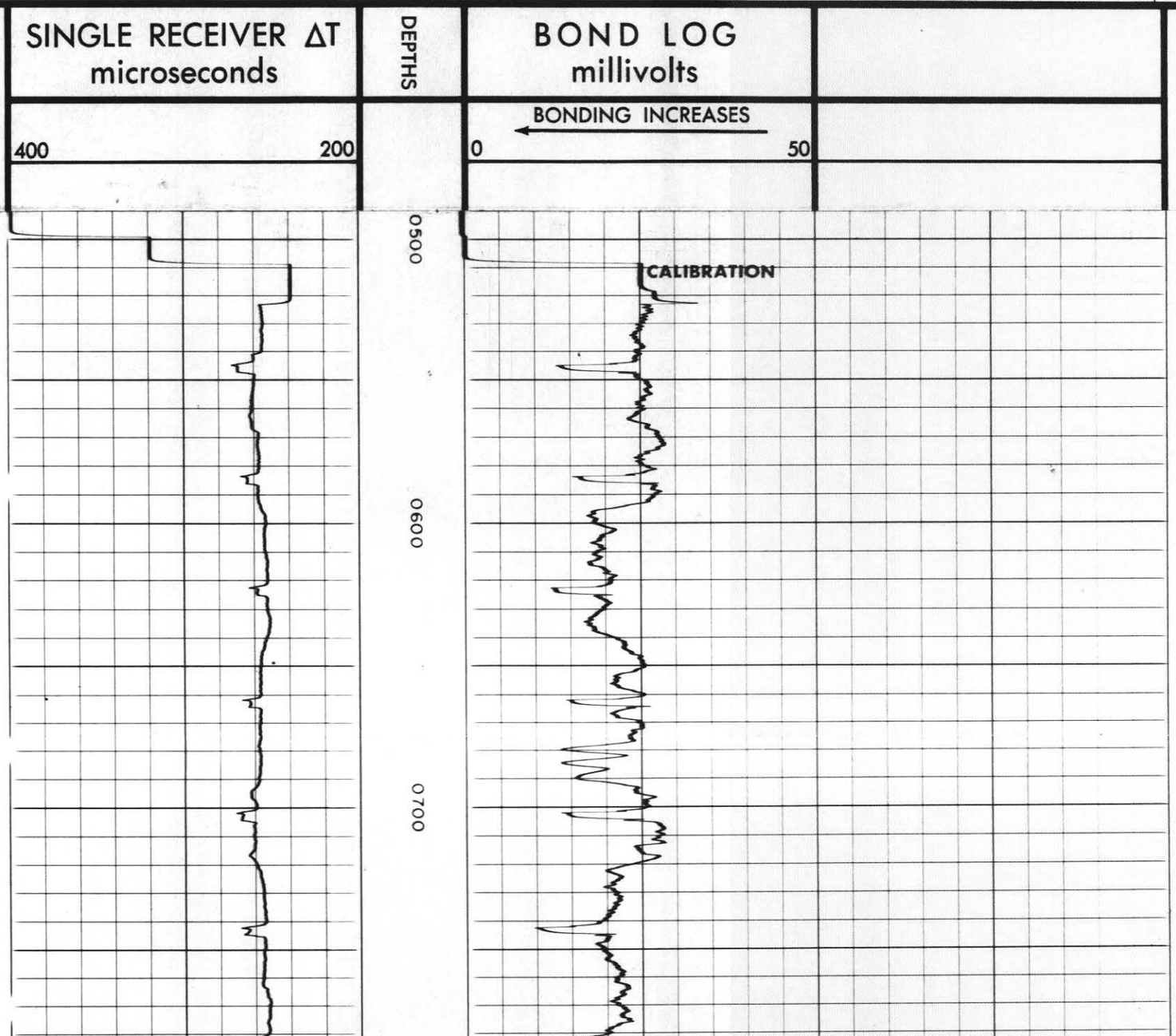
5-1

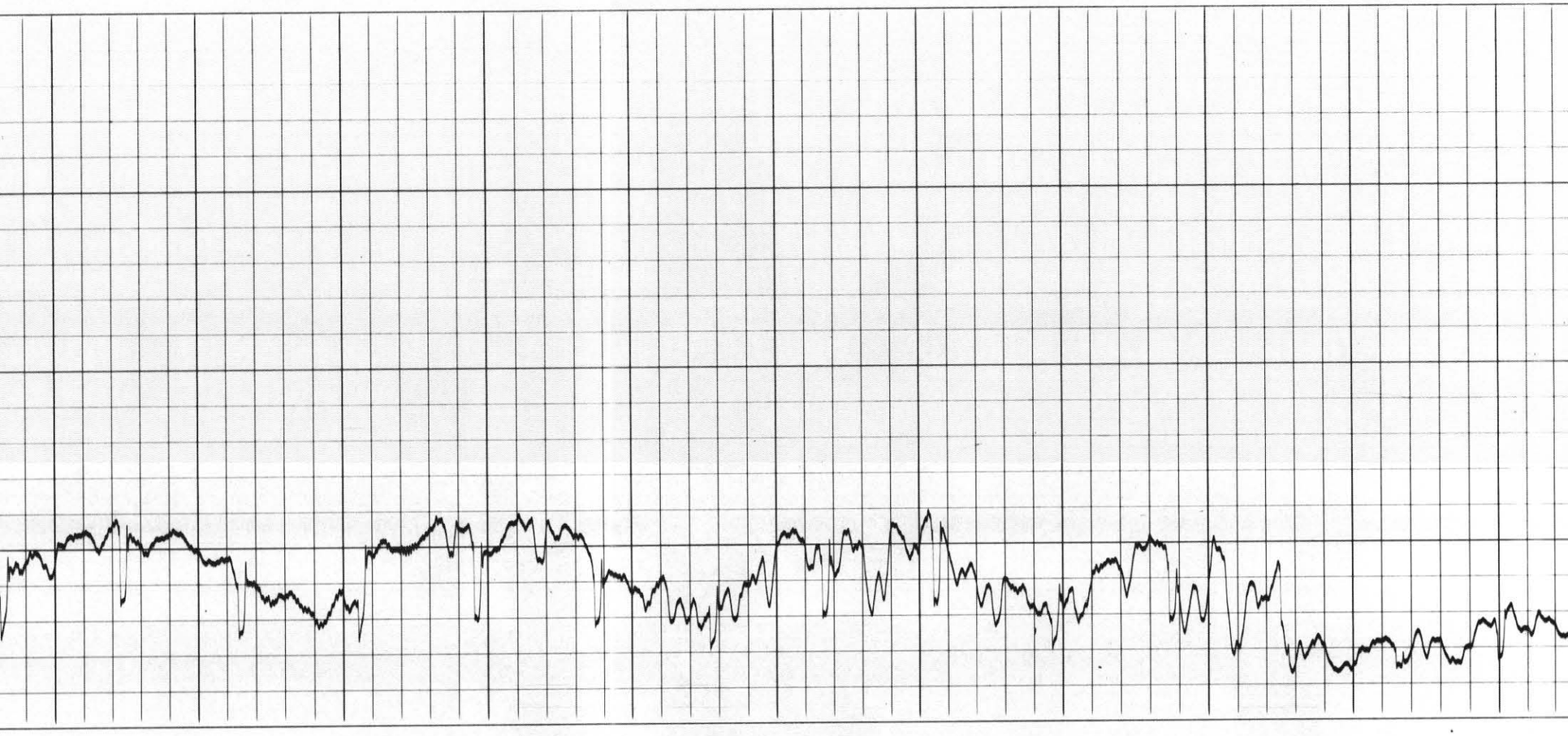
| | | | | |
|---|---|---|---|---|
| Preceding fluid | | | | |
| | | | | |
| Breakdown pressure | | | | |
| Max. pressure-stage 1 | | | | |
| " " " 2 | | | | |
| " " " 3 | | | | |
| Final maximum pressure | | | | |
| | | | | |
| Started pumping cement | | | | |
| Released pressure | | | | |
| Start CBL | | | | |
| Finish CBL | | | | |

AVERAGE WELL DRIFT:
° from to ; ° from to ; ° from to

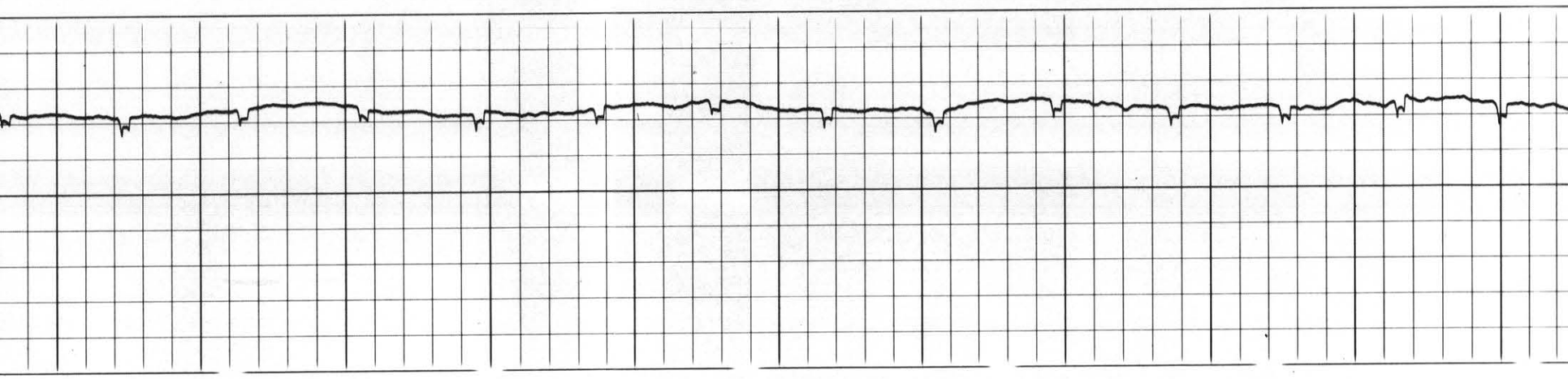
REMARKS

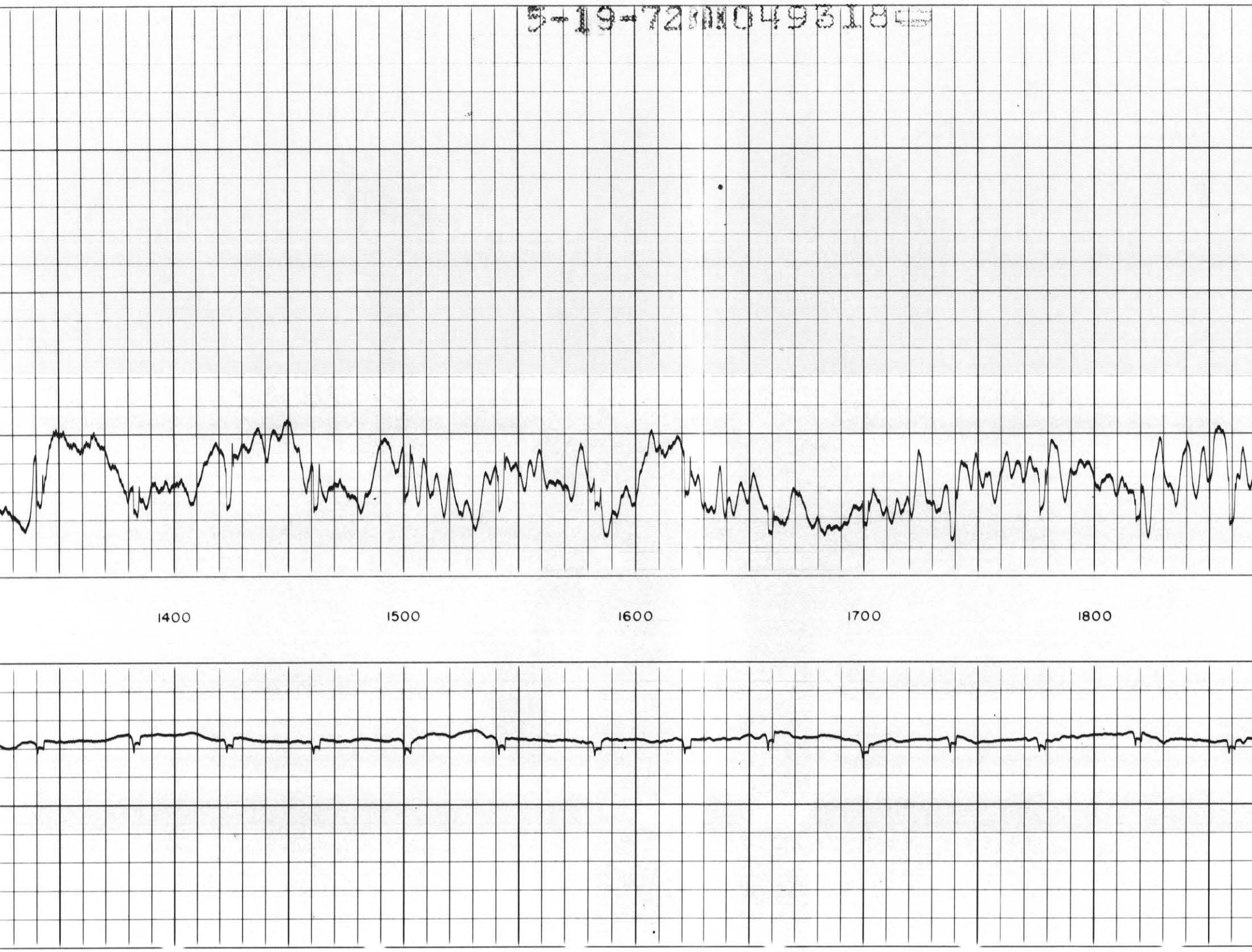
9-72BAK0493 18

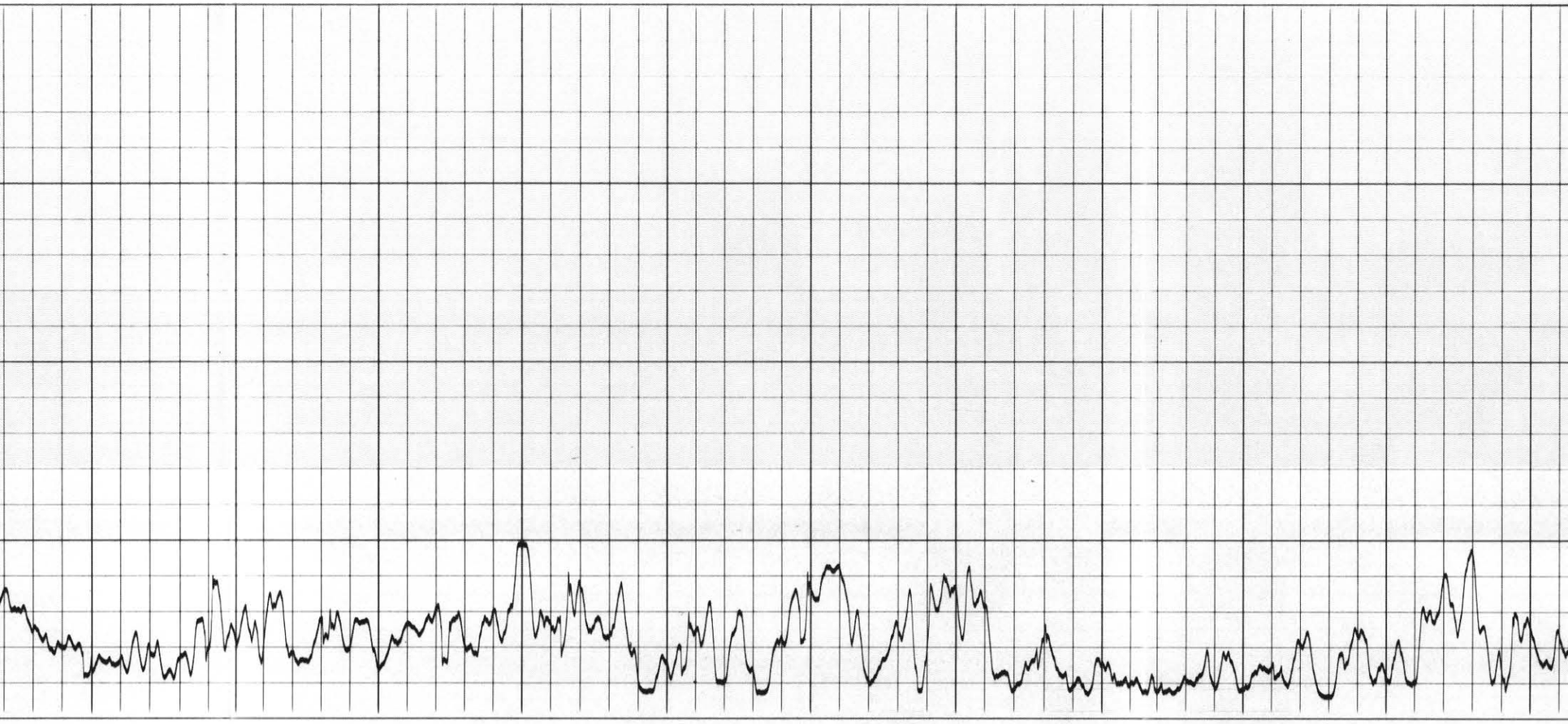




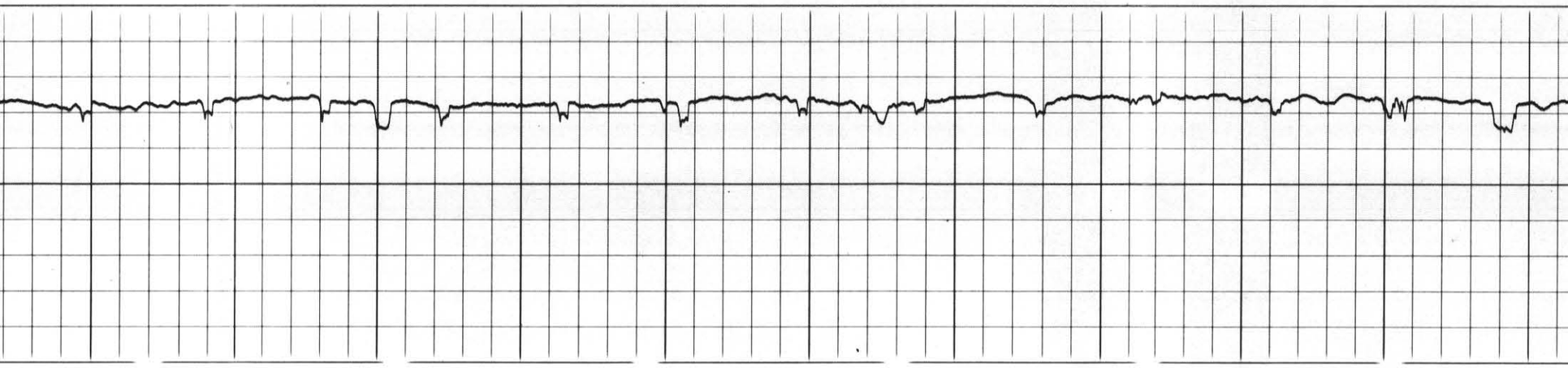
0800 0900 1000 1100 1200 1300

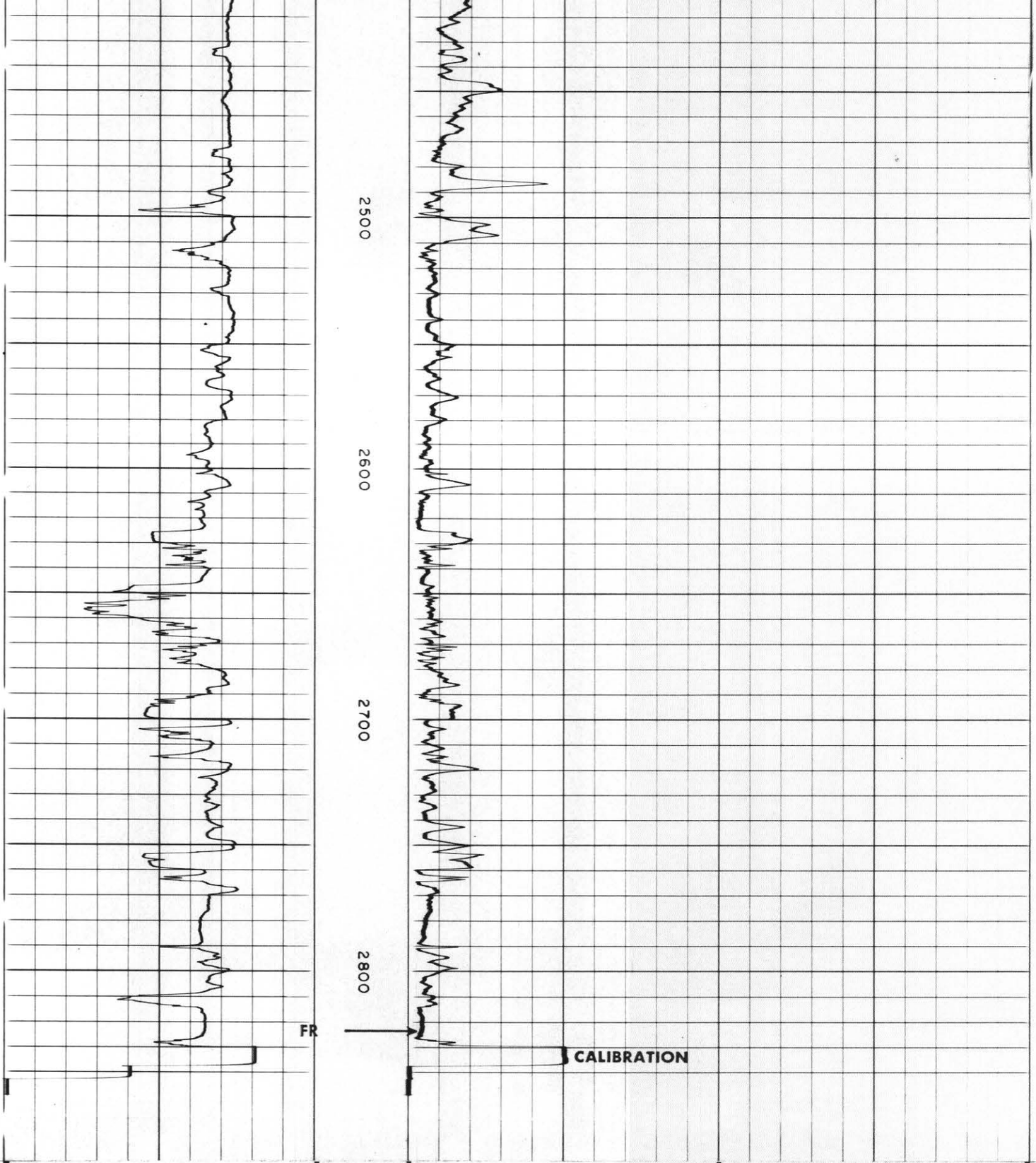



5-19-72 0498185
1400
1500
1600
1700
1800



1900 2000 2100 2200 2300 2400




2500
2600
2700
2800
FR
CALIBRATION
BONDING INCREASES
400
200
0
50
TRANSIT TIME
microseconds
DEPTHS
BOND LOG
millivolts

COMPANY JACKSON PRAIRIE GAS STORAGE COMPANY

WELL STORAGE UNIT #901

FIELD JACKSON PRAIRIE

COUNTY LEWIS STATE WASHINGTON

SCHL FR 2825
SCHL TD 2833
DRLR TD 2830
Elev:
KB 537
DF -
GL 525