



4-ARM CALIPER LOG

FILE NO. _____ COMPANY G.E.O. (MEMBERY)
 WELL N. NO. 1
 FIELD MEMBERY
 COUNTY DESCHUTES STATE OR.
 LOCATION: 3400 FT. WEST & 2150 FT. NORTH
 OF SW CORNER
 SEC 25 T12P 22S RGE 12E
 PERMIT ORIGIN CL ELEV. 5940
 LOGGING MEASURED FROM CL FT. ABOVE P.O. ELEVATIONS
 DRILLING MEASURED FROM CL OF 5940
 OTHER SERVICES CR, LES, AC
 TEMP
 FIELD PRINT.

| | | | |
|------------------------|----------|------------------------|------------|
| DATE | 11/23/85 | RUN | 1 |
| SERVICE ORDER | 33915 | DEPTH-DRILLER | 4530 |
| DEPTH-DRILLER | 4530 | DEPTH-LOGGER | 3429 |
| BOTTOM LOGGED INTERVAL | 3331 | TOP LOGGED INTERVAL | 4162 |
| CHSING - DRILLER | ? | CHSING - LOGGER | 4162 @ 410 |
| BIT SIZE | 3.875 | TYPE FLUID IN HOLE | WATER |
| DENSITY / VISCOSITY | | PH / FLUID LOSS | |
| FM / FLUID LOSS | | FM AT MENS. TEMP. | |
| FM AT MENS. TEMP. | | FM AT MENS. TEMP. | |
| FM AT MENS. TEMP. | | FM AT MENS. TEMP. | |
| SOURCE OF RRF / RMC | | RF AT BHT | |
| RF AT BHT | | RF AT BHT | |
| LINE SINCE CIRCULATION | 27 HRS | REG. REC. TEMP. DEG. F | N/A |
| REG. REC. TEMP. DEG. F | N/A | EQUIP. NO. / LOC. | 6406 |
| EQUIP. NO. / LOC. | 6406 | RECORDED BY | M. HINDS |
| RECORDED BY | M. HINDS | MR. DENSHIRT | |

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGMENT, BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INTERFERENCES FROM ELECTRICITY OR OTHER MEASUREMENTS, WE CANNOT AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS RUN (1)
 INTERVAL BETWEEN 3430 & TO AS WELL AS 1788 TO 1250 WERE NOT LOGGED BECAUSE OF HOLE CONDITION.

| EQUIPMENT DATA | | | | |
|----------------|------|------|------------|------------|
| RUN | TRIP | TOOL | SERIAL NO. | SERIES NO. |
| 1 | 1 | 4CAL | 42342 | 1905 |
| 1 | 1 | CR | | |
| 1 | 1 | TEMP | | |

*** OR NOT CALIBRATED ***

CURVE DELAYS

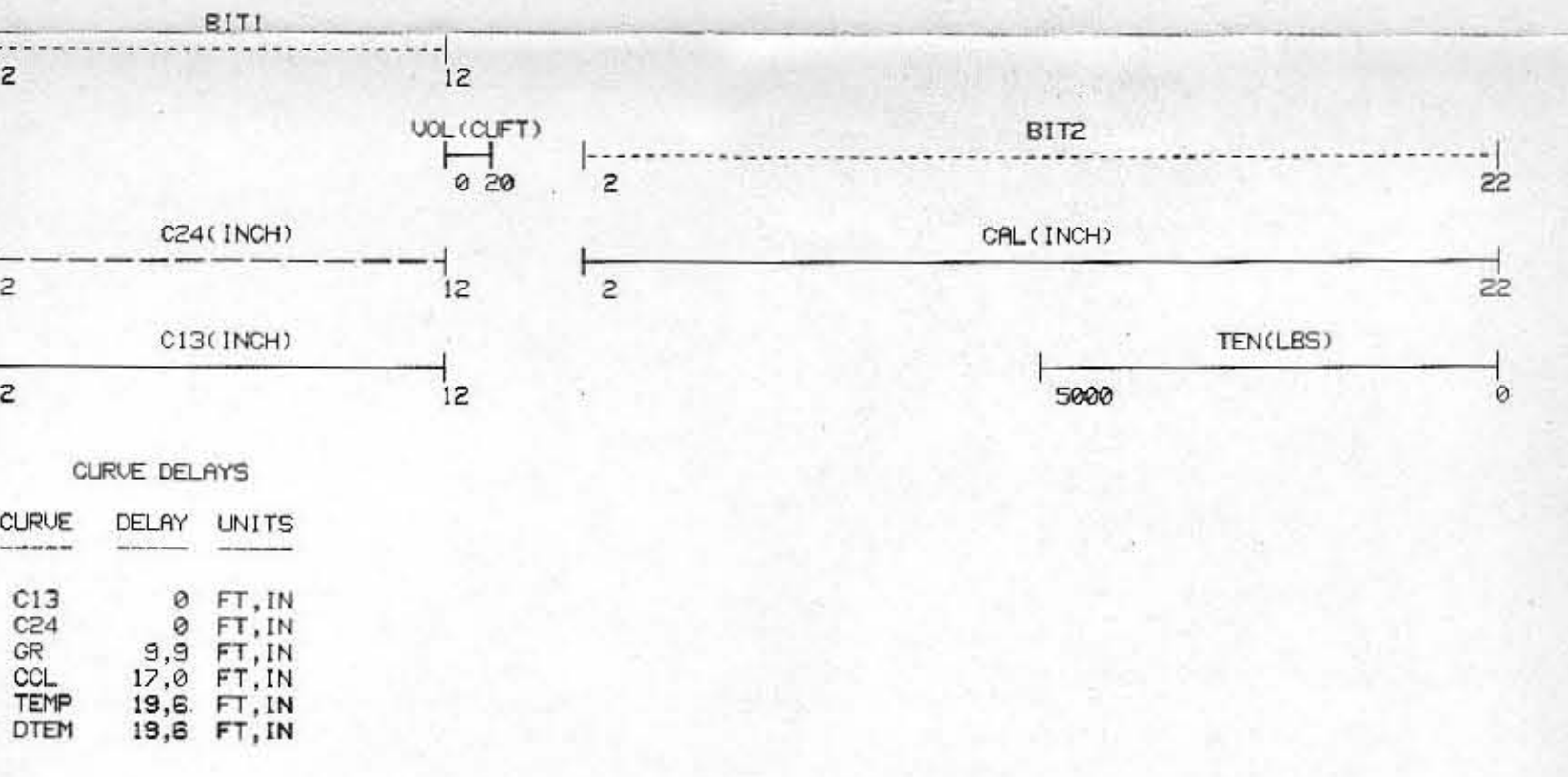
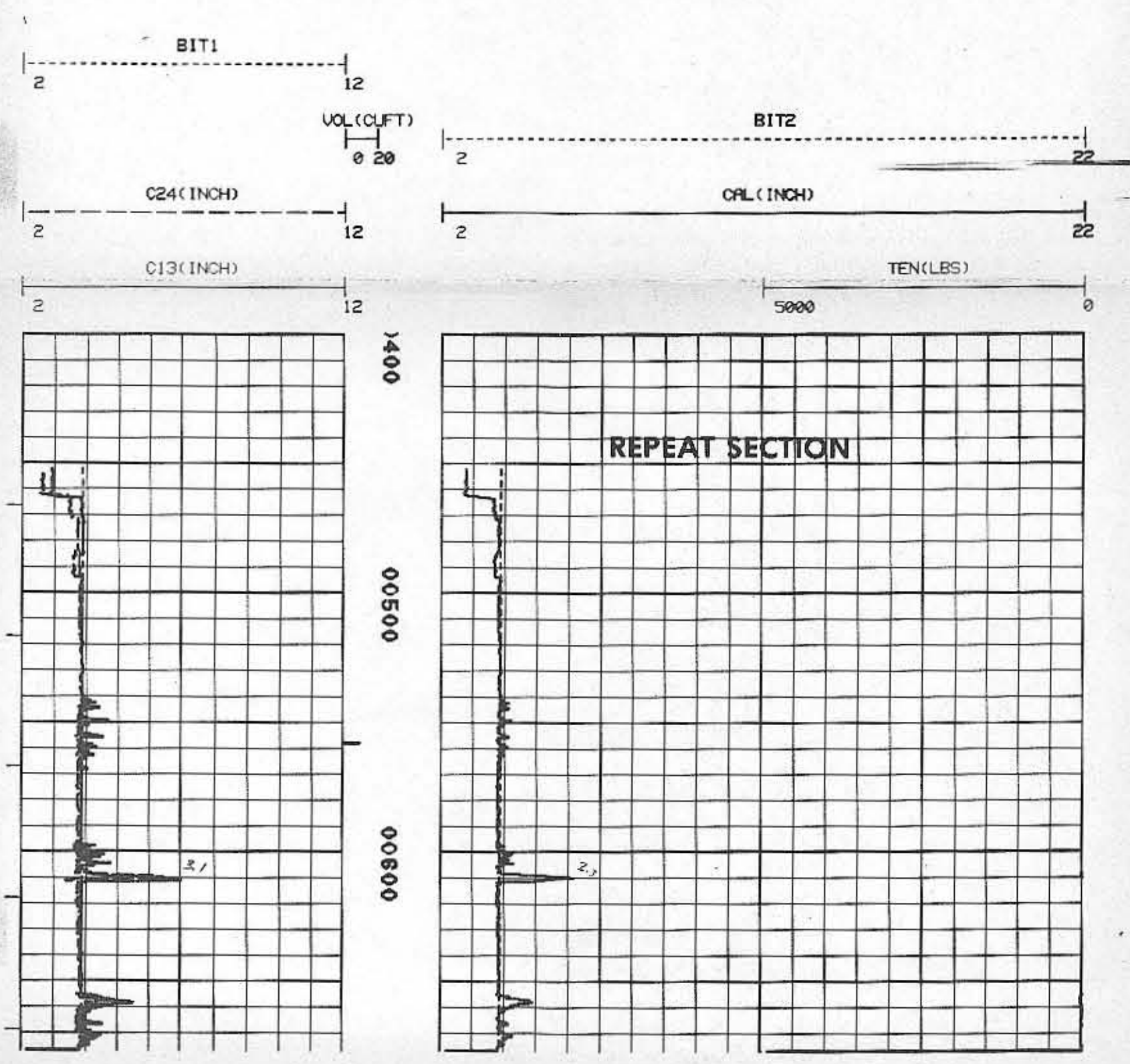
| CURVE | DELAY | UNITS |
|-------|-------|--------|
| C13 | 0 | FT, IN |
| C24 | 0 | FT, IN |
| GR | 9.9 | FT, IN |
| CCL | 17.0 | FT, IN |
| TEMP | 19.6 | FT, IN |
| DTEM | 19.6 | FT, IN |

PARAMETERS

| NAME | DEPTH INTERVAL | VALUE | UNITS |
|------|----------------|-------|-------|
| O.D. | 677 TO 453 | 0.000 | INCH |

DISPLAY SCALE CHANGES
 *** NONE ***

COMPANY: G.E.O. RUN: 1
 WELL NAME: N NO.1 TRIP: 1
 SERVICE: KC202A FILE: 5 DATE: 11/02/85 TIME: 08:54:44
 REVISION: FSYCAL REV D007 VER 5 MODE: RECORD



CURVE DELAYS

| CURVE | DELAY | UNITS |
|-------|-------|--------|
| C13 | 0 | FT, IN |
| C24 | 0 | FT, IN |
| GR | 9.9 | FT, IN |
| CCL | 17.0 | FT, IN |
| TEMP | 19.6 | FT, IN |
| DTEM | 19.6 | FT, IN |

PARAMETERS

| NAME | DEPTH INTERVAL | VALUE | UNITS |
|------|----------------|-------|-------|
| O.D. | 1249 TO 454 | 0.000 | INCH |

DISPLAY SCALE CHANGES
 *** NONE ***

COMPANY: G.E.O. RUN: 1
 WELL NAME: N NO.1 TRIP: 1
 SERVICE: KC202A FILE: 4 DATE: 11/02/85 TIME: 08:35:56
 REVISION: FSYCAL REV D007 VER 5 MODE: RECORD