

AGNEW AND SWEET  
EARTH SCIENCE LAB.  
RESEARCH CENTER  
1000 UNIVERSITY  
AVENUE  
BAKERSFIELD, CALIFORNIA 93308

# AGNEW AND SWEET

## WIRELINE SERVICE

PHONE (805) 327-2267

3914 GILMORE AVENUE

BAKERSFIELD, CALIFORNIA 93308

## SUBSURFACE TEMPERATURE SURVEY

*Pay to Co ID  
GN SW, 12 30D*

OWNER PHILLIPS-PETROLEUM COMPANY FIELD CHRESTENSEN WELL NAME #1

### WELL DATA

ZERO POINT DF DEPTH 7998'  
ELEVATION \_\_\_\_\_ ZONE \_\_\_\_\_  
CASING 13-5/8" @ 4510'

LINER DESCRIPTION \_\_\_\_\_

TUBING DETAIL \_\_\_\_\_

### SURVEY CONDITIONS

DATE December 12, 1977  
PURPOSE STATIC TEMPERATURE TRAVERSE SURVEY  
REMARKS 20'/min. 4500' to pick up.

12 HOUR 15 TURN  TUBING  ANNULUS

INSTRUMENT 192-547 & 78-648 °F, SERIAL NUMBER 7075 & 10025

MAX. TEMPERATURE 269.2 °F, AT 7996'

SHUT IN \_\_\_\_\_ STABILIZATION PERIOD \_\_\_\_\_

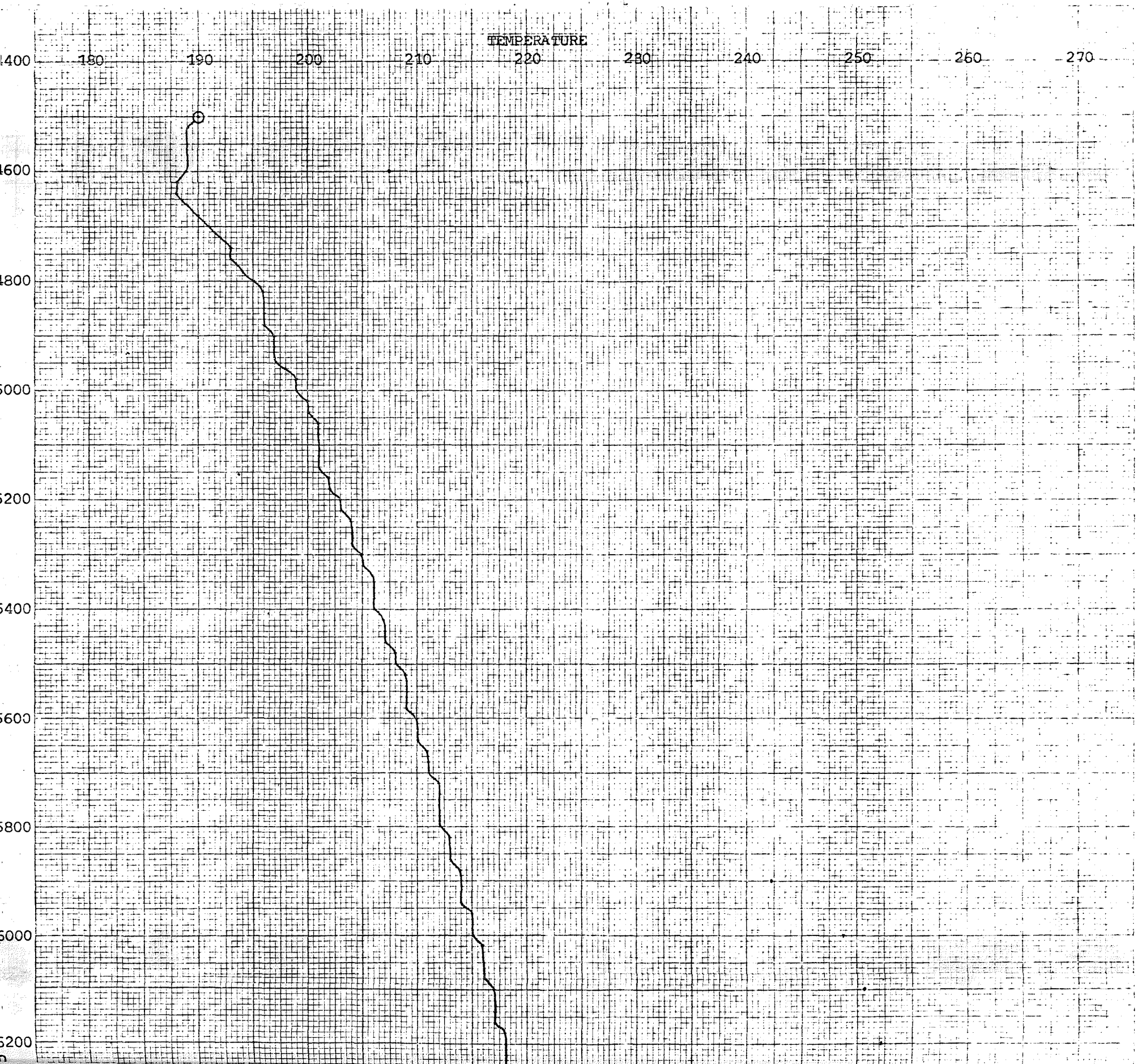
PICK UP 7996' PRESSURE, P SIG \_\_\_\_\_

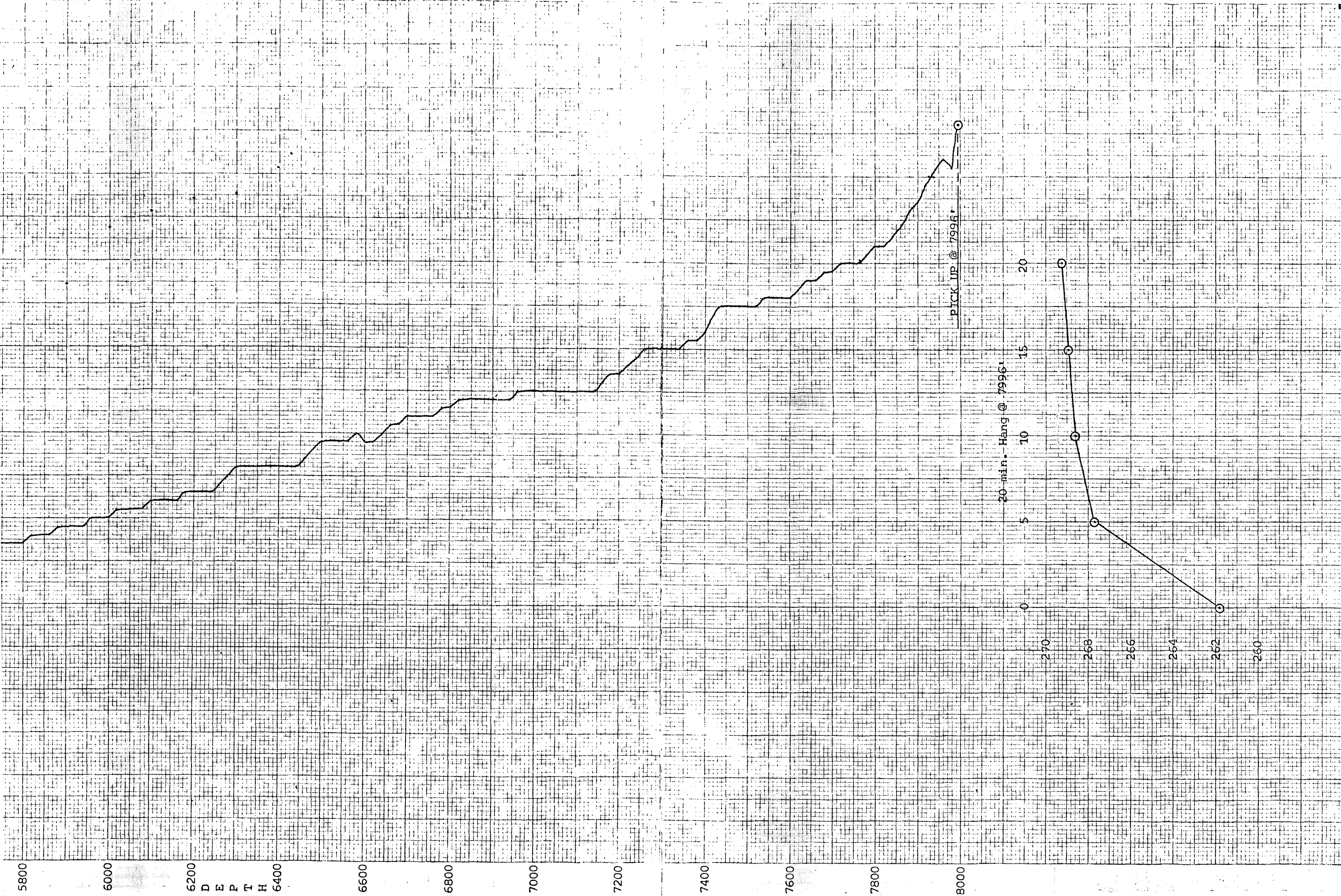
STATUS Open hole

TIME ON BOTTOM 2:26 pm CASING \_\_\_\_\_

TIME OFF BOTTOM 2:46 pm TUBING \_\_\_\_\_

INSTRUMENT HUNG AT 7996' BY Sundberg & Thomas

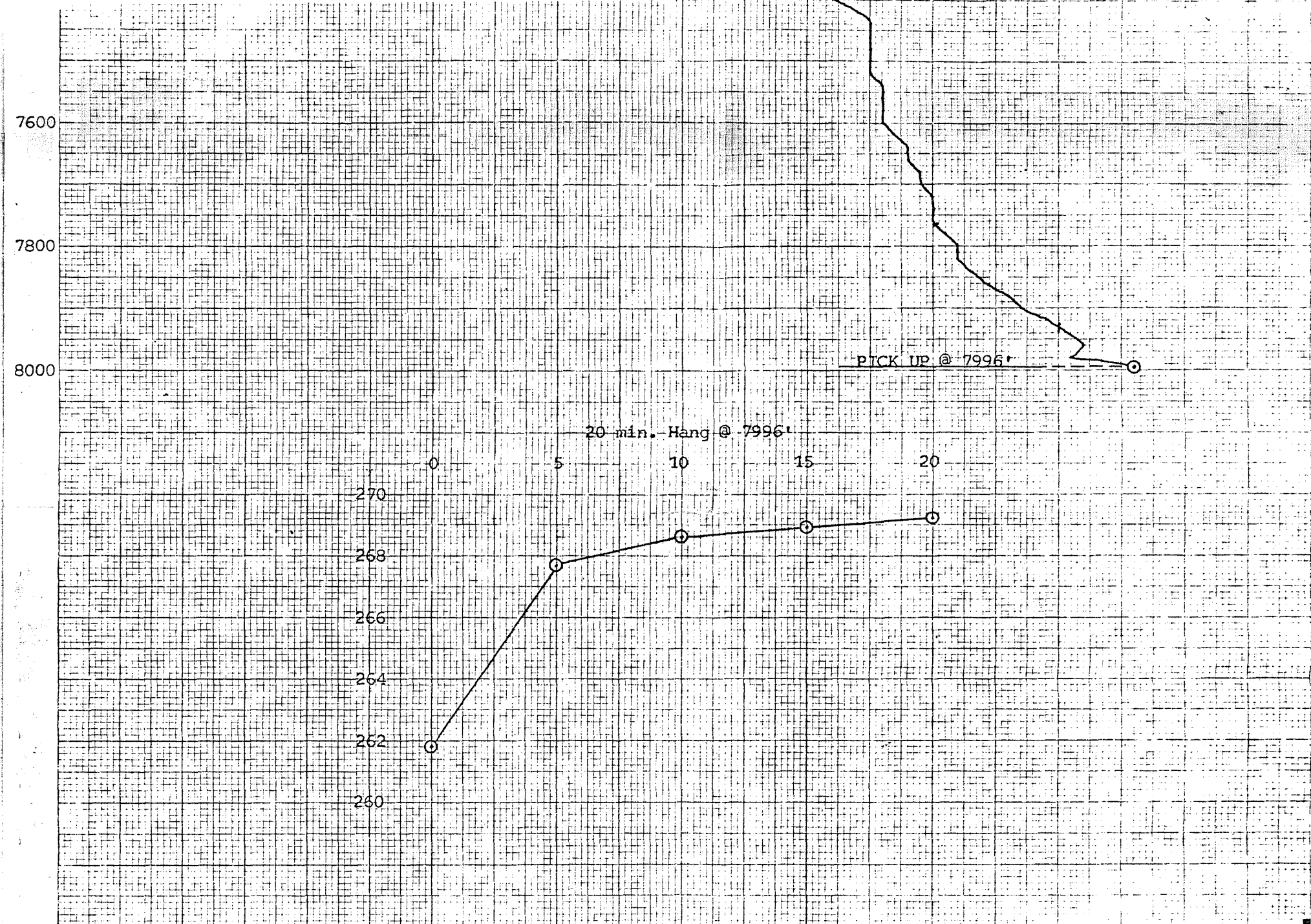




SUB-SURFACE TEMPERATURE DATA

DEPTH TEMP. OF DEPTH TEMP. OF DEPTH TEMP. OF DEPTH TEMP. OF





**SUB-SURFACE TEMPERATURE DATA**

| DEPTH | TEMP. °F | DEPTH | TEMP. °F | DEPTH | TEMP. °F | DEPTH | TEMP. °F | DEPTH | TEMP. °F | DEPTH                | TEMP. °F |
|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|----------------------|----------|
| 4500  | 190.0    | 5120  | 201.6    | 5740  | 212.6    | 6360  | 221.9    | 6960  | 230.0    | 7560                 | 241.5    |
| 4520  | 189.7    | 5140  | 201.9    | 5760  | 212.9    | 6380  | 221.9    | 6980  | 230.0    | 7580                 | 241.8    |
| 4540  | 189.7    | 5160  | 202.6    | 5780  | 212.9    | 6400  | 221.9    | 7000  | 230.0    | 7600                 | 241.8    |
| 4560  | 189.3    | 5180  | 202.6    | 5800  | 212.9    | 6420  | 221.6    | 7020  | 230.0    | 7620                 | 242.5    |
| 4580  | 189.3    | 5200  | 203.5    | 5820  | 213.2    | 6440  | 221.6    | 7040  | 230.0    | 7640                 | 243.5    |
| 4600  | 189.0    | 5220  | 203.8    | 5840  | 213.5    | 6460  | 222.8    | 7060  | 230.0    | 7660                 | 243.1    |
| 4620  | 188.7    | 5240  | 204.1    | 5860  | 213.8    | 6480  | 223.8    | 7080  | 230.0    | 7680                 | 244.3    |
| 4640  | 188.7    | 5260  | 204.5    | 5880  | 214.1    | 6500  | 224.1    | 7100  | 230.3    | 7700                 | 244.6    |
| 4660  | 189.3    | 5280  | 204.8    | 5900  | 214.4    | 6520  | 224.7    | 7120  | 230.6    | 7720                 | 245.3    |
| 4680  | 190.6    | 5300  | 205.1    | 5920  | 214.4    | 6540  | 224.4    | 7140  | 230.9    | 7740                 | 245.3    |
| 4700  | 191.9    | 5320  | 205.7    | 5940  | 214.4    | 6560  | 224.7    | 7160  | 231.3    | 7760                 | 245.9    |
| 4720  | 192.8    | 5340  | 206.0    | 5960  | 215.1    | 6580  | 225.0    | 7180  | 232.2    | 7780                 | 246.2    |
| 4740  | 193.4    | 5360  | 206.0    | 5980  | 215.4    | 6600  | 224.7    | 7200  | 232.5    | 7800                 | 247.1    |
| 4760  | 193.7    | 5380  | 206.3    | 6000  | 215.7    | 6620  | 224.7    | 7220  | 233.4    | 7820                 | 247.5    |
| 4780  | 194.4    | 5400  | 206.6    | 6020  | 216.0    | 6640  | 225.3    | 7240  | 234.0    | 7840                 | 248.7    |
| 4800  | 195.3    | 5420  | 207.0    | 6040  | 216.3    | 6660  | 226.0    | 7260  | 235.0    | 7860                 | 249.6    |
| 4820  | 196.0    | 5440  | 207.3    | 6060  | 216.6    | 6680  | 226.6    | 7280  | 235.6    | 7880                 | 251.2    |
| 4840  | 196.3    | 5460  | 207.3    | 6080  | 216.9    | 6700  | 227.2    | 7300  | 235.6    | 7900                 | 252.4    |
| 4860  | 196.9    | 5480  | 208.2    | 6100  | 217.2    | 6720  | 227.8    | 7320  | 235.9    | 7920                 | 254.6    |
| 4880  | 196.9    | 5500  | 208.5    | 6120  | 217.2    | 6740  | 227.5    | 7340  | 235.9    | 7940                 | 256.1    |
| 4900  | 197.5    | 5520  | 209.1    | 6140  | 217.5    | 6760  | 227.8    | 7360  | 236.2    | 7960                 | 257.7    |
| 4920  | 197.5    | 5540  | 209.4    | 6160  | 217.9    | 6780  | 228.1    | 7380  | 236.9    | 7980                 | 256.2    |
| 4940  | 197.8    | 5560  | 209.4    | 6180  | 218.2    | 6800  | 228.8    | 7400  | 237.8    | 7996                 | 261.8    |
| 4960  | 198.5    | 5580  | 209.8    | 6200  | 218.2    | 6820  | 229.1    | 7420  | 239.0    |                      |          |
| 4980  | 199.1    | 5600  | 210.1    | 6220  | 218.2    | 6840  | 229.1    | 7440  | 240.0    | 20/min. Hang @ 7996' |          |
| 5000  | 199.7    | 5620  | 210.4    | 6240  | 218.5    | 6860  | 229.1    | 7460  | 240.3    | 0                    | 261.8    |
| 5020  | 200.0    | 5640  | 210.7    | 6260  | 219.4    | 6880  | 229.4    | 7480  | 240.3    | 5 min                | 268.6    |
| 5040  | 200.7    | 5660  | 211.0    | 6280  | 220.4    | 6900  | 229.7    | 7500  | 240.6    | 10                   | 268.6    |
| 5060  | 201.0    | 5680  | 211.3    | 6300  | 221.0    | 6920  | 229.7    | 7520  | 240.9    | 15                   | 268.9    |
| 5080  | 201.0    | 5700  | 211.6    | 6320  | 221.3    | 6940  | 229.7    | 7540  | 241.2    | 20                   | 269.2    |
| 5100  | 201.3    | 5720  | 212.3    | 6340  | 221.6    |       |          |       |          |                      |          |