

# TEMPERATURE SURVEY

|          |         |                     |       |         |     |    |
|----------|---------|---------------------|-------|---------|-----|----|
| LOCATION | COMPANY | SAN JUAN PRODUCTION |       |         |     |    |
|          | COMPANY |                     | FILE  |         |     |    |
|          | WELL    | HOWELL 1-4          |       |         |     |    |
|          | FIELD   |                     |       |         |     |    |
|          | COUNTY  | SAN JUAN            | STATE | N. MEX. |     |    |
|          | SEC.    | 34                  | TWP   | 30N     | RGE | 8W |
|          | SURVEY  |                     |       |         |     |    |

COMPANY SAN JUAN PRODUCTION  
COUNTY  
WELL HOWELL 1-4  
FIELD  
COUNTY SAN JUAN  
STATE N. MEX.

Type of Survey TEMPERATURE (MECHANICAL)  
Log Measured From R. T. Elevation  
Drilling Measured From Elevation  
Permanent Datum Elevation

Date of Cementing DECEMBER 12, 1951 Time 4:15 P.M.  
Date of Survey DECEMBER 13, 1951 Time 6:00 A.M.  
Amount of Cement 300 SACKS Type BCG.  
Amount of Admix 3 SACKS Type FLOSEAL

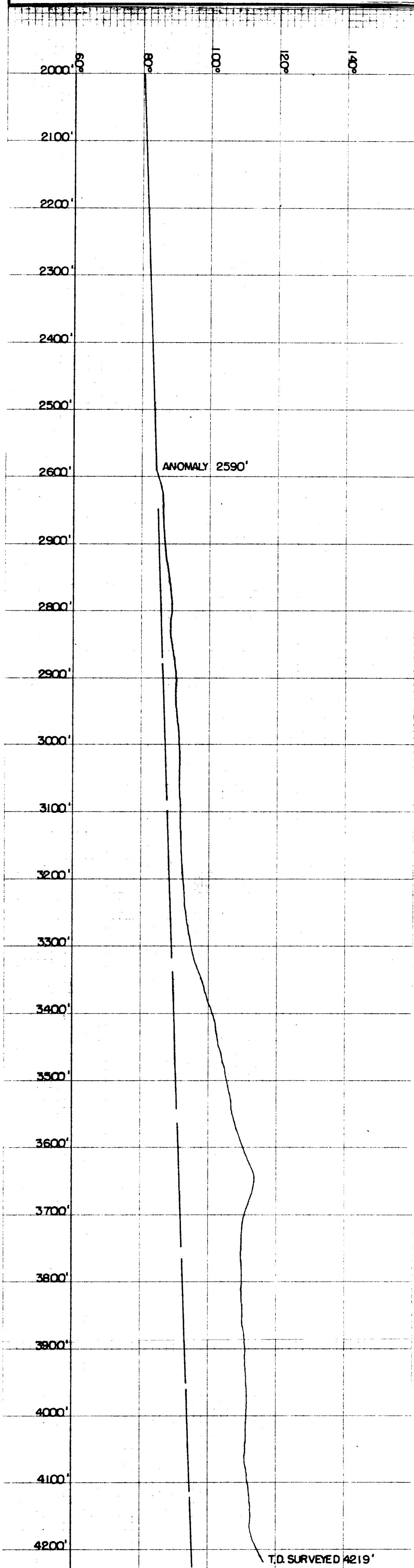
Casing Size 7" from 0' to 4,510' Diam of Hole 8 3/4" from to 4,510'  
from to from to

Survey Begins at 2,000' Ft. Ends at 4,219' Ft.  
Approx. Fill-Up 88% Max. Temp. 115 DEG. @ 4,219' Ft.  
Run No. 71 Approx. Top Cement 2,590' Ft.  
Recorded by ROYALL Witnessed by C. D. SHELD

## REMARKS OR OTHER DATA

Approx. Fill-Up Based on Average of 1.1 cu. ft. per sack of set cement

## TEMPERATURE IN DEGREES FAHRENHEIT



T.D. SURVEYED 4219'

*Line* OIL WELL SERVICE CO.

RECEIVED  
DEC 26 1951  
OIL CON. COM.  
DIST. 3

# TEMPERATURE SURVEY

|                        |                          |                     |                |
|------------------------|--------------------------|---------------------|----------------|
| LOCATION               | COMPANY                  | SAN JUAN PRODUCTION |                |
|                        | COMPANY                  | FILE                |                |
|                        | WELL                     | HOWELL 1-4          |                |
|                        | FIELD                    |                     |                |
|                        | COUNTY                   | SAN JUAN            | STATE N. MEX.  |
|                        | SEC.                     | 34                  | TWP 30N RGE 8W |
|                        | SURVEY                   |                     |                |
| Type of Survey         | TEMPERATURE (MECHANICAL) |                     |                |
| Log Measured From      | R. T.                    | Elevation           |                |
| Drilling Measured From |                          | Elevation           |                |
| Permanent Datum        |                          | Elevation           |                |

|                   |                   |      |           |
|-------------------|-------------------|------|-----------|
| Date of Cementing | DECEMBER 12, 1951 | Time | 4:15 P.M. |
| Date of Survey    | DECEMBER 13, 1951 | Time | 6:00 A.M. |
| Amount of Cement  | 300 SACKS         | Type | REG.      |
| Amount of Admix   | 3 SACKS           | Type | FLOEAL    |

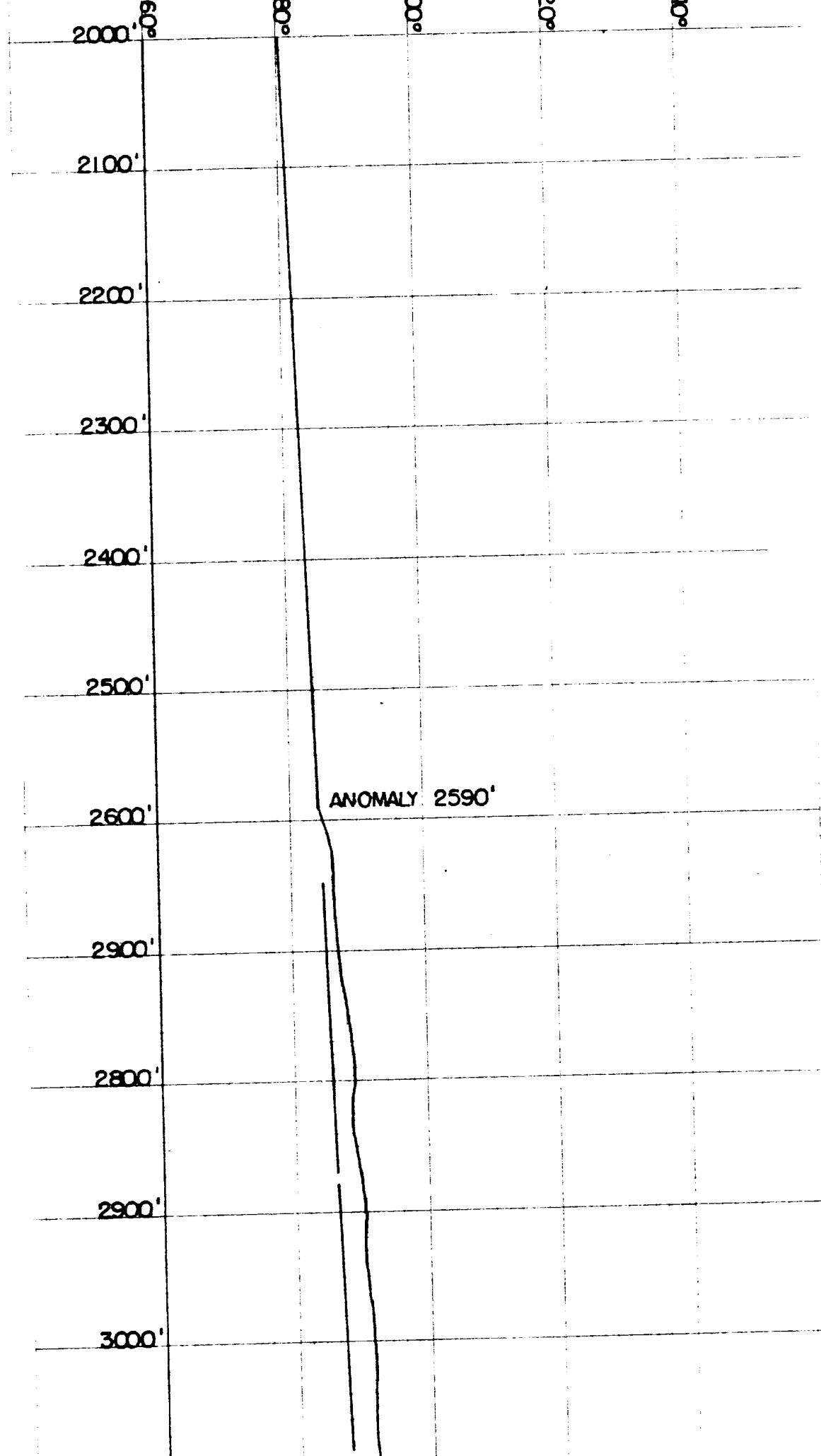
|                      |              |              |       |
|----------------------|--------------|--------------|-------|
| Casing Size          | Casing Depth | Diam of Hole | Depth |
| 7" from 0' to 4,510' | 8 3/4" from  | to 4,510'    |       |
| from                 | to           | from         | to    |

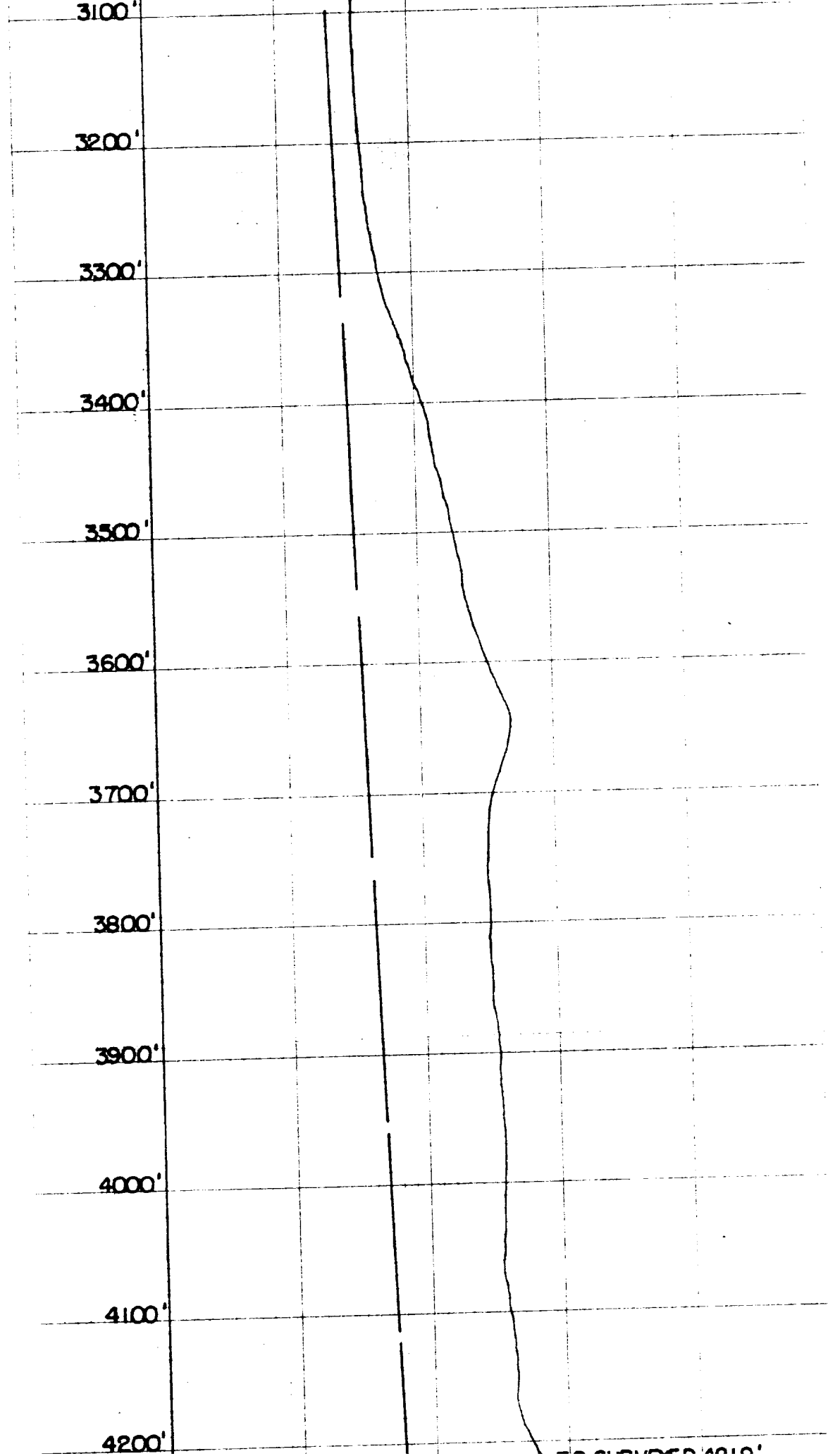
|                  |        |                    |              |        |
|------------------|--------|--------------------|--------------|--------|
| Survey Begins at | 2,000' | Ft. Ends at        | 4,219'       | Ft.    |
| Approx. Fill-Up  | 88%    | Max. Temp.         | 115 DEG. C   | 4,219' |
| Run No.          | 1      | Approx. Top Cement | 2,590'       | Ft.    |
| Recorded by      | ROGILL | Witnessed by       | E. D. SHIELD |        |

## REMARKS OR OTHER DATA

Approx. Fill-Up Based on Average of 1.1 cu. ft. per sack of set cement

TEMPERATURE IN DEGREES FAHRENHEIT





4300'

