

# JOHNSTON TESTERS

## SURFACE INFORMATION

### TOOL, HOLE & MUD DATA

[illegible][illegible]

Company CONTINENTAL OIL COMPANY; BOX 30; LYONS, KANSAS Date 12-28-62  
Well HERTLEIN #2 DST #1 Field BREHM Location -  
Test Interval 3910' TO 3923' Formation Test # 1 Casing Test # 100  
County PRATT State KANSAS Field Report No. 65166 L  
Tester M. D. GLOVER Test Approved By MR. PORTER O'NEAL No. DST Reports Requested 5

### Pressure Breakdown Data

lock No. 1424 Clock travel 0.02101 inches per min. Well Temperature 110 °F.

| Point                   | Pressure |                 | Time Given | Time Computed |
|-------------------------|----------|-----------------|------------|---------------|
| Initial Hydrostatic Mud | 2088     |                 |            |               |
| Initial Shut-in         | 1363     | Opened Tool     | 1725       |               |
| Initial Flow            | 20       | Initial Shut-in | 45 Mins.   | 46 Mins.      |
| Final Flow              | 24       | Flow            | 67 Mins.   | 65 Mins.      |
| Final Shut-in           | 1403     | Final Shut-in   | 45 Mins.   | 46 Mins.      |
| Final Hydrostatic Mud   | 2072     |                 |            |               |

|                    |    |
|--------------------|----|
| C <sub>CHO</sub> 1 | 20 |
| C <sub>CHO</sub> 2 | 13 |

Remarks:

### PRESSURE INCREMENTS

[illegible]

# JOHNSTON TESTERS

Pressure Data

Field Report No. 65166 L

|                              |        |        |  |  |  |
|------------------------------|--------|--------|--|--|--|
| Recorder No.                 | T-505  | INSIDE |  |  |  |
| Capacity (P.S.I.G.)          | 3,000  |        |  |  |  |
| Recorder Depth               | 3,913' |        |  |  |  |
| Pressure Gradient P.S.I./Ft. |        |        |  |  |  |
| Well Temperature °F.         | 110    |        |  |  |  |
| A Initial Hydrostatic Mud    | 2088   |        |  |  |  |
| B Initial Shut-in            | * 1363 |        |  |  |  |
| C Initial Flow               | 20     |        |  |  |  |
| D Final Flow                 | 24     |        |  |  |  |
| E Final Shut-in              | * 1403 |        |  |  |  |
| F Final Hydrostatic Mud      | 2072   |        |  |  |  |
| Remarks:                     | c-1 20 |        |  |  |  |
|                              | c-2 13 |        |  |  |  |

\*Shut in pressure did not reach static reservoir pressure.



**JOHNSTON TESTERS**

FIELD  
REPORT NO.

65166 L

RECORDER NO.

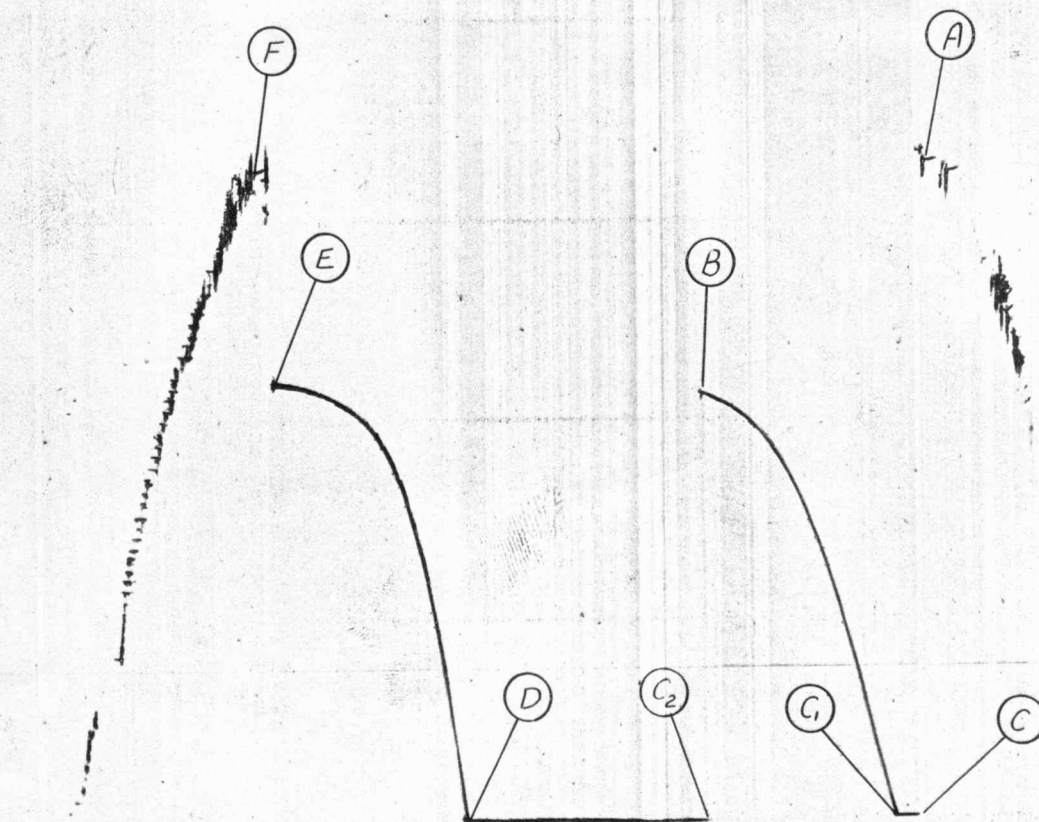
T-505

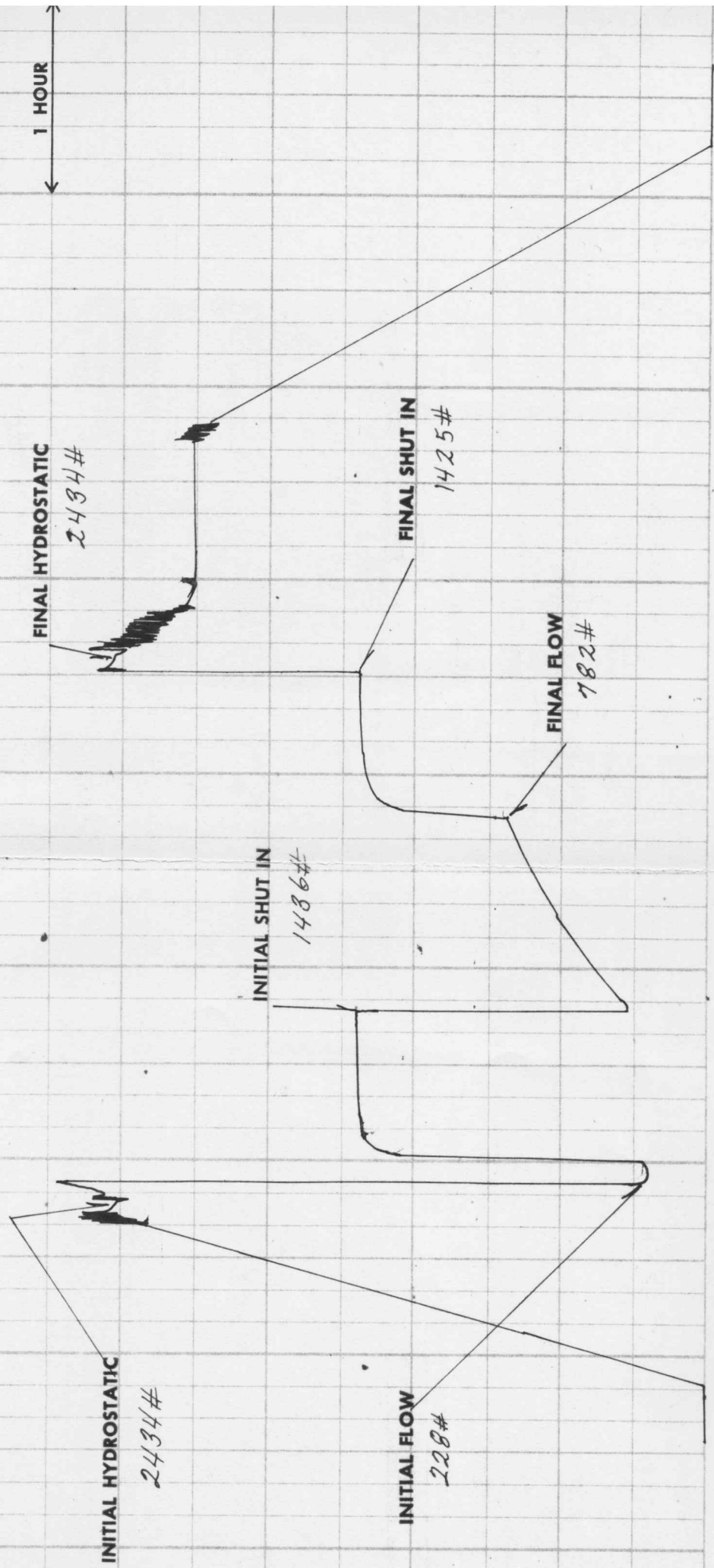
CAPACITY

3,000#

REPORTS  
REQUESTED

5-





TIME →



# JOHNSTON TESTERS, INC.

## SURFACE INFORMATION

## TOOL, HOLE & MUD DATA

[illegible][illegible]

Company CONTINENTAL OIL COMPANY; BOX 30; LYONS, KANSAS Date 1-2-63  
Well HERT LEIN #2 DST #2 Field BREHM Location 22-28s-13w  
Test Interval 4431' TO 4443' Formation Test # 2 Casing Test # -  
County PRATT State KANSAS Field Report No. 03401 A  
Tester M. D. GLOVER Test Approved By MR. J. J. COWDEN No. DST Reports Requested 5

### Pressure Breakdown Data

[illegible]

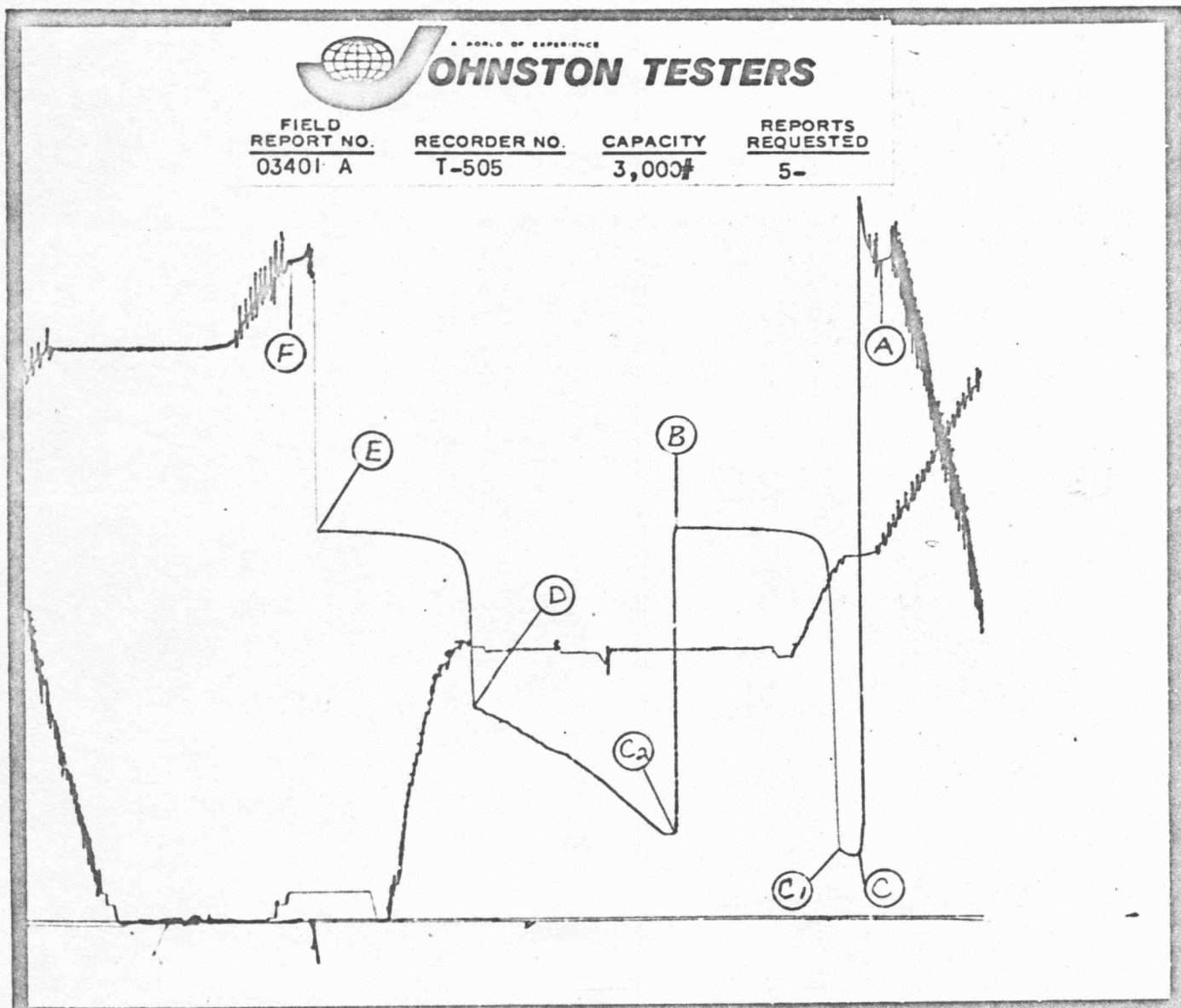
# JOHNSTON TESTERS, INC.

Pressure Data

Field Report No. 03401 A

|                              |        |        |  |  |  |
|------------------------------|--------|--------|--|--|--|
| Recorder No.                 | T-505  | INSIDE |  |  |  |
| Capacity (P.S.I.G.)          | 3,000  |        |  |  |  |
| Recorder Depth               | 4,439' |        |  |  |  |
| Pressure Gradient P.S.I./Ft. |        |        |  |  |  |
| Well Temperature °F.         | 130    |        |  |  |  |
| A Initial Hydrostatic Mud    | 2434   |        |  |  |  |
| B Initial Shut-in            | 1436   |        |  |  |  |
| C Initial Flow               | 228    |        |  |  |  |
| D Final Flow                 | 782    |        |  |  |  |
| E Final Shut-in              | 1425   |        |  |  |  |
| F Final Hydrostatic Mud      | 2434   |        |  |  |  |
| Remarks:                     | c-1    | 249    |  |  |  |
|                              | c-2    | 309    |  |  |  |

\*Shut in pressure did not reach static reservoir pressure.



1 HOUR

INITIAL HYDROSTATIC  
2088#

FINAL HYDROSTATIC  
2092#

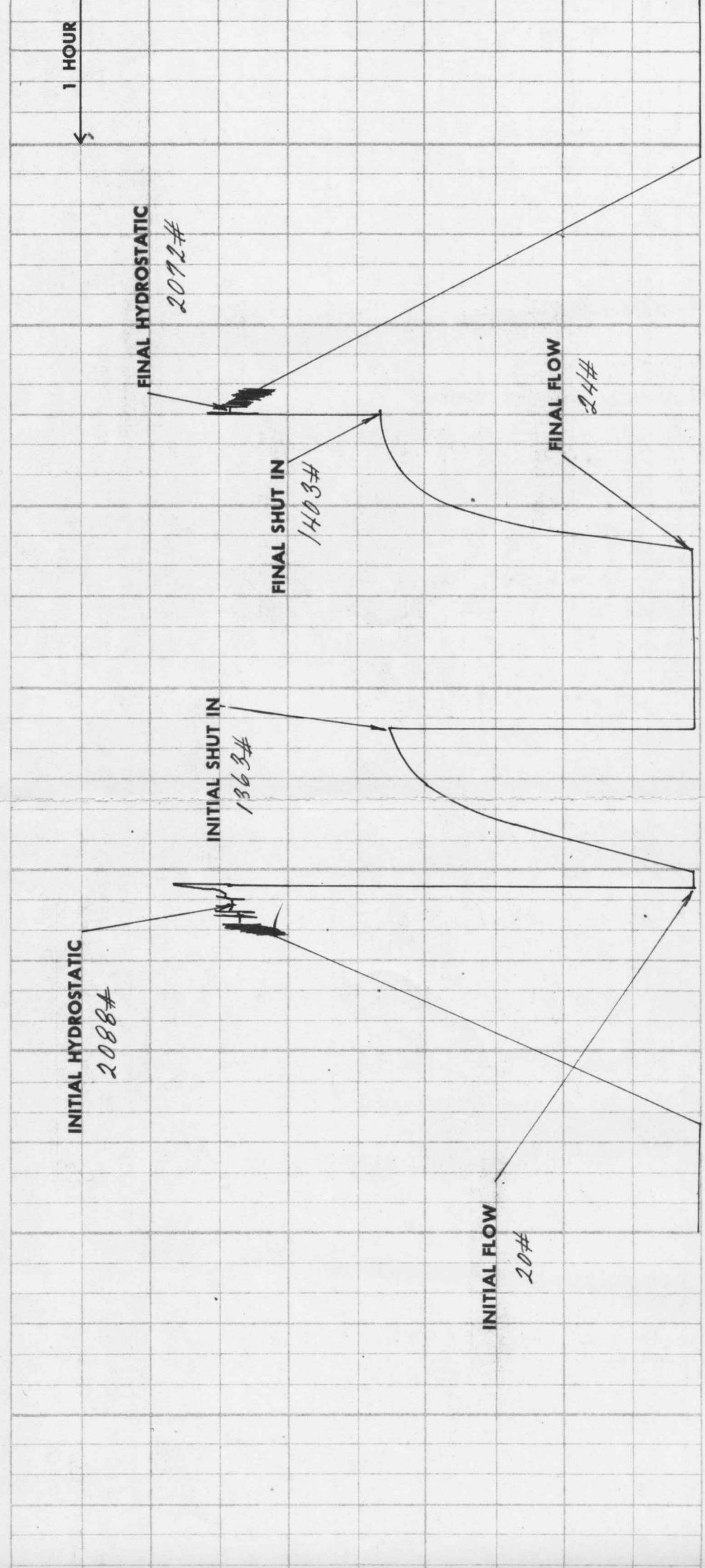
INITIAL SHUT IN  
1363#

FINAL SHUT IN  
1403#

INITIAL FLOW  
20#

FINAL FLOW  
24#

TIME





# JOHNSTON TESTERS, INC.

## SURFACE INFORMATION

## TOOL, HOLE & MUD DATA

| Well Flowed                                              | Amount            |                        |                  |
|----------------------------------------------------------|-------------------|------------------------|------------------|
| NO                                                       |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
| Reversed Out                                             | Amount            |                        |                  |
| SALT WATER                                               | 2160' (30.67BBLs) |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
| Recovered                                                | Amount            |                        |                  |
| SALT WATER                                               | 780' (11.08BBLs)  |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
| Blow -                                                   |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
| Maximum Surface Pressure                                 |                   |                        |                  |
| Description (Rate of Flow)                               | Time              | Pressure<br>(P.S.I.G.) | Surface<br>Choke |
| Opened Tool                                              | 1124              |                        |                  |
| CLOSED FOR INITIAL SHUT-IN                               | 1129              |                        |                  |
| RE-OPENED TOOL                                           | 1214              |                        |                  |
| CLOSED TOOL                                              | 1314              |                        |                  |
| PULLED PACKER LOOSE                                      | 1359              |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
| Remarks: TOP SAMPLE: CHLORIDE CONTENT OF WATER=35,000PPM |                   |                        |                  |
| BOTTOM SAMPLE: CHLORIDE CONTENT OF WATER=45,000PPM       |                   |                        |                  |
| WATER LOSS=14c.c.                                        |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |
|                                                          |                   |                        |                  |

| Type Test                   | <b>CONVENTIONAL</b>                 |      |                                    |     |      |  |
|-----------------------------|-------------------------------------|------|------------------------------------|-----|------|--|
| Formation Tested            | <b>SIMPSON</b>                      |      |                                    |     |      |  |
| Elevation                   |                                     |      |                                    |     |      |  |
| All Depths Measured From    | <b>KELLY BUSHING</b>                |      |                                    |     |      |  |
| <b>TOOL SEQUENCE</b>        |                                     |      |                                    |     |      |  |
| Tool                        | Size/Type                           |      | Depth/Length<br>I.D.               |     |      |  |
| DRILL PIPE                  | 4 <sup>1</sup> / <sub>2"</sub> FH   |      | 4335'3.8'                          |     |      |  |
| CIRCULATING SUB             | 4 <sup>1</sup> / <sub>2"</sub> PLUG |      |                                    |     |      |  |
| DRILL COLLARS               | 4" <sup>H-90</sup>                  |      | 80' <sup>2 1</sup> / <sub>4"</sub> |     |      |  |
| CROSS-OVER SUB              | 4 <sup>1</sup> / <sub>2"</sub> FH   |      |                                    |     |      |  |
| 4-STAGE SHUT-IN             | 3 <sup>1</sup> / <sub>2"</sub> FH   |      |                                    |     |      |  |
| HYDRAULIC TOOL JARS         | 3 <sup>1</sup> / <sub>2"</sub> FH   |      |                                    |     |      |  |
| GROSS-OVER SUB SAFETY JOINT | 4 <sup>1</sup> / <sub>2"</sub> R    |      |                                    |     |      |  |
| PACKER-BOB TAIL             | 6 <sup>5</sup> / <sub>8"</sub>      |      | 4444'                              |     |      |  |
| PERF. ANCHOR                | 3 <sup>1</sup> / <sub>2"</sub>      |      | 2'                                 |     |      |  |
| RECORDER CARRIER            | 4 <sup>7</sup> / <sub>8"</sub> T    |      | 6'                                 |     |      |  |
| RECORDER CARRIER            | 4 <sup>7</sup> / <sub>8"</sub> L    |      | 4'                                 |     |      |  |
|                             |                                     |      |                                    |     |      |  |
| Total Depth                 | 445'                                |      |                                    |     |      |  |
| Main Hole Size              | 7 <sup>7</sup> / <sub>8"</sub>      |      | Rat Hole Size                      |     | -    |  |
| Casing Size                 | 8 <sup>5</sup> / <sub>8"</sub>      |      | Liner Size                         |     | -    |  |
| Bottom Choke Size           | 3/ <sub>4"</sub>                    |      | Mud Type                           |     | SALT |  |
| Mud. Wt.                    | 10.0                                |      | Mud Viscosity                      |     | 44   |  |
| Air Chamber Length          |                                     |      | Fr.                                |     | 1.1  |  |
| Cushion Type                | Amount                              |      | Pressure                           |     |      |  |
| -                           | -                                   |      | -                                  |     |      |  |
|                             |                                     |      |                                    |     |      |  |
| <b>TIME DATA</b>            |                                     |      |                                    |     |      |  |
| Initial Shut-in             | -                                   | Hrs. | 45                                 | Min |      |  |
| Flow Period                 | 1                                   | Hrs. | 5                                  | Min |      |  |
| Final Shut-in               | -                                   | Hrs. | 45                                 | Min |      |  |

Company CONTINENTAL OIL CO.; BOX 30; LYONS, KANSAS Date 1-3-63  
Well HURTLEIN #2 DST #3 Field BREHM Location 22-28s-13w  
Test Interval 4444' TO 4457' Formation Test # 3 Casing Test # -  
County PRATT State KANSAS Field Report No. 03402 A  
Tester M.D. GLOVER Test Approved By MR. J. J. COWDEN No. DST Reports Requested 5

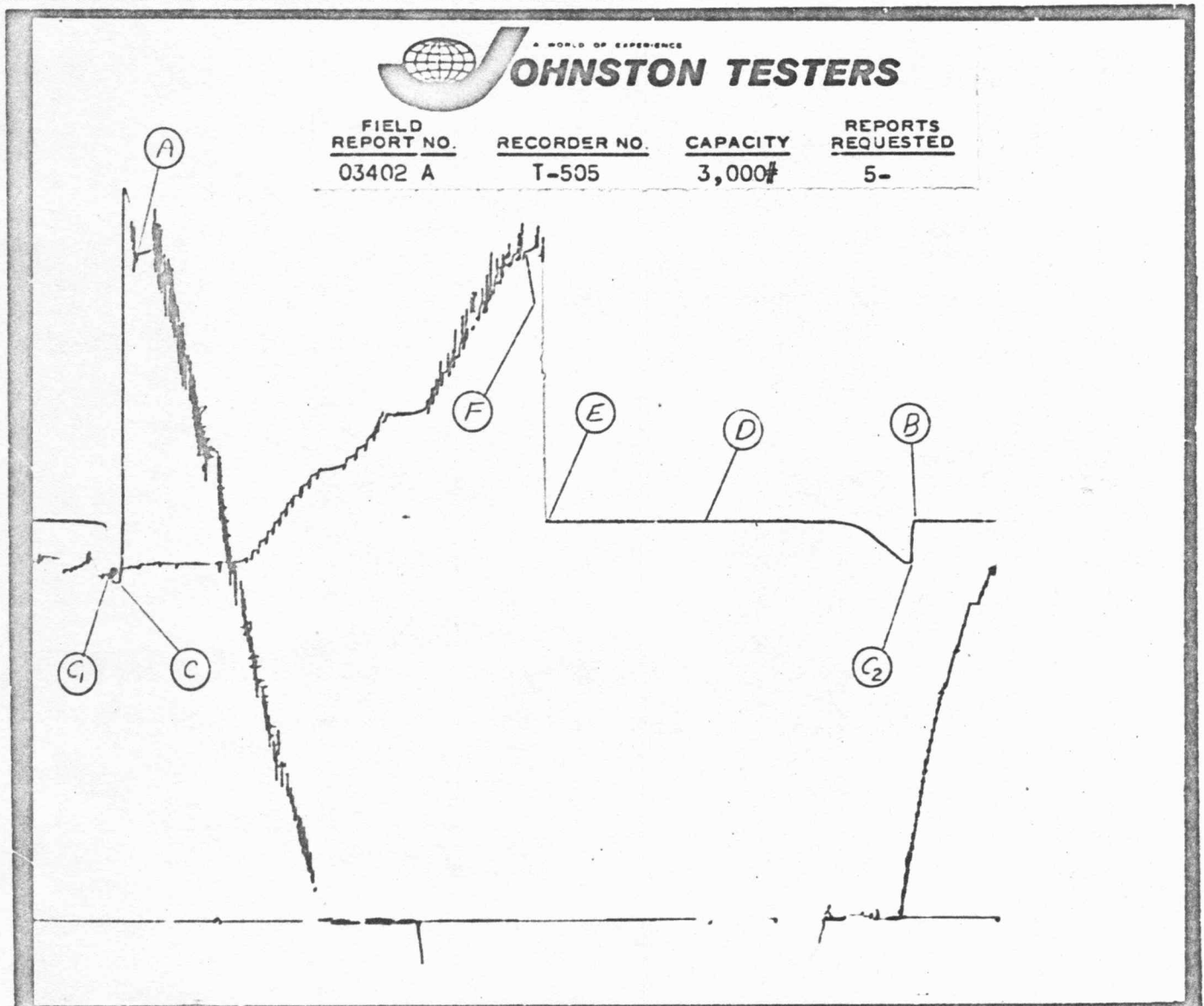
# JOHNSTON TESTERS, INC.

## Pressure Data

Field Report No. 03402 A

|                              |       |        |  |  |  |
|------------------------------|-------|--------|--|--|--|
| Recorder No.                 | T-505 | INSIDE |  |  |  |
| Capacity (P.S.I.G.)          | 3000  |        |  |  |  |
| Recorder Depth               | 4447' |        |  |  |  |
| Pressure Gradient P.S.I./Ft. |       |        |  |  |  |
| Well Temperature °F.         | 131   |        |  |  |  |
| A Initial Hydrostatic Mud    | 2437  |        |  |  |  |
| B Initial Shut-in            | 1453  |        |  |  |  |
| C Initial Flow               | 1223  |        |  |  |  |
| D Final Flow                 | 1451  |        |  |  |  |
| E Final Shut-in              | 1451  |        |  |  |  |
| F Final Hydrostatic Mud      | 2450  |        |  |  |  |
| Remarks:                     | c-1   | 1239   |  |  |  |
|                              | c-2   | 1298   |  |  |  |

\*Shut in pressure did not reach static reservoir pressure.



1 HOUR

FINAL HYDROSTATIC

2450#

FINAL SHUT IN

1451#

INITIAL SHUT IN

1453#

FINAL FLOW

1451#

INITIAL HYDROSTATIC

2431#

INITIAL FLOW

1228#

TIME

14