



Home Office: Wichita, Kansas 67201  
P.O. Box 1599 (316) 262-5861

Company Rains & Williamson Oil Company, Inc. Lease & Well No. Dennison #1  
Elevation 1284 Kelly Bushing Kansas City Effective Pay - Ft. Ticket No. 6757  
Date 3/30/81 Sec. 10 Twp. 31S Range 2W County Sumner State Kansas  
Test Approved by Mike D. Engelbrecht Western Representative Allen Edgington  
Formation Test No. 1 Interval Tested from 3227 ft. to 3248 ft. Total Depth 3248 ft.  
Packer Depth 3222 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 3227 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 3240 ft. Recorder Number 3354 Cap. 4200  
Bottom Recorder Depth (Outside) 3243 ft. Recorder Number 5666 Cap. 3950  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Silberado Drlg. Rig #10 Drill Collar Length 378 I. D. 2 1/4 in.  
Mud Type chemical Viscosity 40 Weight Pipe Length - I. D. - in.  
Weight 9.3 Water Loss 17.6 cc. Drill Pipe Length 2832 I. D. 3.8 in.  
Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 in.  
Jars: Make WTC Serial Number 407 Anchor Length 21 ft. Size 4 1/2 in.  
Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.  
Blow: Fair (four inches into water) throughout test.

Recovered 15 ft. of slightly oil and gas cut muddy water (5% oil;10% water)  
Recovered 560 ft. of slightly gas cut salt water Resistivity .22  
Recovered - ft. of - Chlorides 140,000 ppm  
Recovered - ft. of -  
Recovered - ft. of -  
Remarks: -

Time Set Packer(s) 8:00 A.M. Time Started Off Bottom 10:30 A.M. Maximum Temperature 112°  
Initial Hydrostatic Pressure (A) 1564 P.S.I.  
Initial Flow Period Minutes 30 (B) 63 P.S.I. to (C) 188 P.S.I.  
Initial Closed In Period Minutes 30 (D) 1059 P.S.I.  
Final Flow Period Minutes 60 (E) 230 P.S.I. to (F) 302 P.S.I.  
Final Closed In Period Minutes 30 (G) 1040 P.S.I.  
Final Hydrostatic Pressure (H) 1519 P.S.I.

# WESTERN TESTING CO., INC.

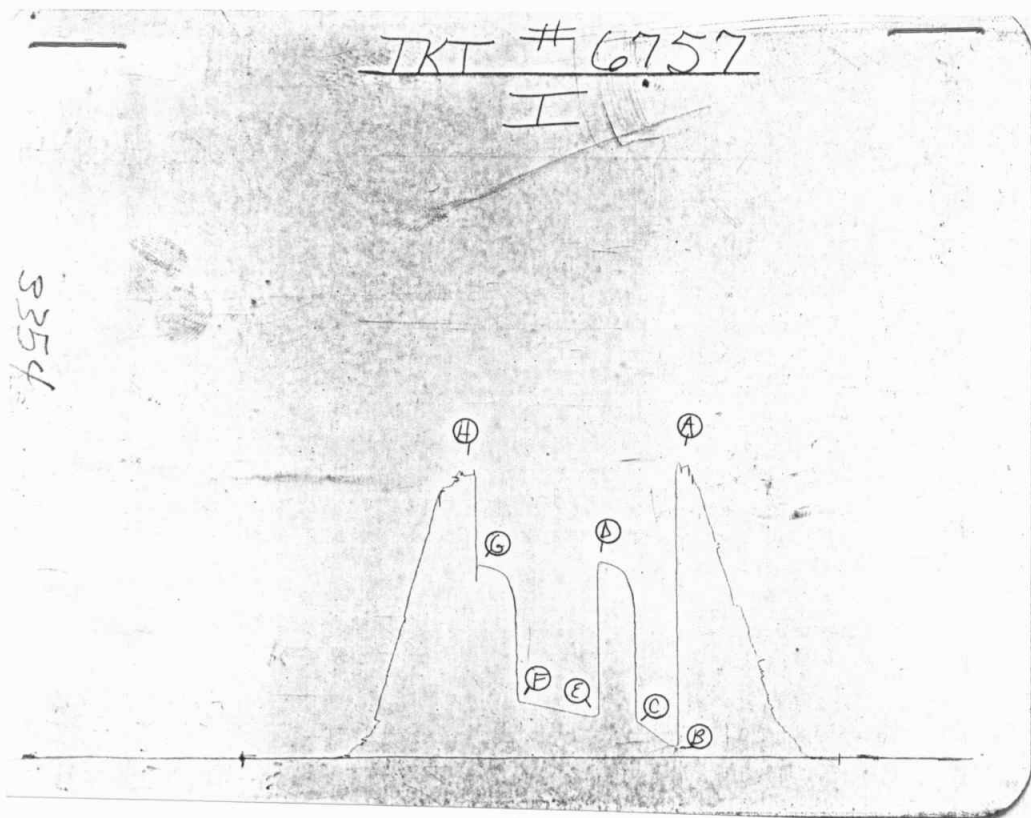
## Pressure Data

Date 3/30/81 Recorder No. 3354 Capacity 4200 Test Ticket No. 6757  
 Clock No. - Elevation 1284 Kelly Bushing Location 3240 Ft. 112 °F

| Point                          | Pressure    | Time Given | Time Computed |
|--------------------------------|-------------|------------|---------------|
| A Initial Hydrostatic Mud      | 1564 P.S.I. | 8:00P      | M             |
| B First Initial Flow Pressure  | 63 P.S.I.   | 30 Mins.   | 30 Mins.      |
| C First Final Flow Pressure    | 188 P.S.I.  | 30 Mins.   | 30 Mins.      |
| D Initial Closed-in Pressure   | 1059 P.S.I. | 60 Mins.   | 60 Mins.      |
| E Second Initial Flow Pressure | 230 P.S.I.  | 30 Mins.   | 30 Mins.      |
| F Second Final Flow Pressure   | 302 P.S.I.  |            |               |
| G Final Closed-in Pressure     | 1040 P.S.I. |            |               |
| H Final Hydrostatic Mud        | 1519 P.S.I. |            |               |

## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>10</u> Inc.   |             | Breakdown: <u>12</u> Inc.   |            | Breakdown: <u>10</u> Inc.   |             |
| of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             |
| final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             |
| Point Mins.                 | Press.     | Point Minutes               | Press.      | Point Minutes               | Press.     | Point Minutes               | Press.      |
| P 1 <u>0</u>                | <u>63</u>  | <u>0</u>                    | <u>188</u>  | <u>0</u>                    | <u>230</u> | <u>0</u>                    | <u>302</u>  |
| P 2 <u>5</u>                | <u>65</u>  | <u>3</u>                    | <u>819</u>  | <u>5</u>                    | <u>224</u> | <u>3</u>                    | <u>842</u>  |
| P 3 <u>10</u>               | <u>89</u>  | <u>6</u>                    | <u>928</u>  | <u>10</u>                   | <u>226</u> | <u>6</u>                    | <u>920</u>  |
| P 4 <u>15</u>               | <u>116</u> | <u>9</u>                    | <u>981</u>  | <u>15</u>                   | <u>234</u> | <u>9</u>                    | <u>973</u>  |
| P 5 <u>20</u>               | <u>143</u> | <u>12</u>                   | <u>1006</u> | <u>20</u>                   | <u>243</u> | <u>12</u>                   | <u>996</u>  |
| P 6 <u>25</u>               | <u>171</u> | <u>15</u>                   | <u>1025</u> | <u>25</u>                   | <u>251</u> | <u>15</u>                   | <u>1011</u> |
| P 7 <u>30</u>               | <u>188</u> | <u>18</u>                   | <u>1038</u> | <u>30</u>                   | <u>259</u> | <u>18</u>                   | <u>1019</u> |
| P 8                         |            | <u>21</u>                   | <u>1046</u> | <u>35</u>                   | <u>268</u> | <u>21</u>                   | <u>1027</u> |
| P 9                         |            | <u>24</u>                   | <u>1052</u> | <u>40</u>                   | <u>276</u> | <u>24</u>                   | <u>1032</u> |
| P10                         |            | <u>27</u>                   | <u>1057</u> | <u>45</u>                   | <u>283</u> | <u>27</u>                   | <u>1038</u> |
| P11                         |            | <u>30</u>                   | <u>1059</u> | <u>50</u>                   | <u>291</u> | <u>30</u>                   | <u>1040</u> |
| P12                         |            |                             |             | <u>55</u>                   | <u>300</u> |                             |             |
| P13                         |            |                             |             | <u>60</u>                   | <u>302</u> |                             |             |
| P14                         |            |                             |             |                             |            |                             |             |
| P15                         |            |                             |             |                             |            |                             |             |
| P16                         |            |                             |             |                             |            |                             |             |
| P17                         |            |                             |             |                             |            |                             |             |
| P18                         |            |                             |             |                             |            |                             |             |
| P19                         |            |                             |             |                             |            |                             |             |
| P20                         |            |                             |             |                             |            |                             |             |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |     |
|----------------------------------------|---------------|----------------|-----|
|                                        | Field Reading | Office Reading |     |
| (A) Initial Hydrostatic Mud .....      | 1560          | 1564           | PSI |
| (B) First Initial Flow Pressure .....  | 50            | 63             | PSI |
| (C) First Final Flow Pressure .....    | 180           | 188            | PSI |
| (D) Initial Closed-in Pressure .....   | 1055          | 1059           | PSI |
| (E) Second Initial Flow Pressure ..... | 220           | 230            | PSI |
| (F) Second Final Flow Pressure .....   | 295           | 302            | PSI |
| (G) Final Closed-in Pressure .....     | 1025          | 1040           | PSI |
| (H) Final Hydrostatic Mud .....        | 1510          | 1519           | PSI |



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Rains & Williamson Oil Company, Inc.

Dennison #1

Company 1284 Kelly Bushing Simpson Lease & Well No. - Ticket No. 11329  
Elevation Formation Effective Pay Ft.  
Date 4/4/81 Sec. 10 Twp. 31S Range 2W County Sumner State Kansas  
Test Approved by Mike Engelbrecht Western Representative Dan Delaney

Formation Test No. 2 Interval Tested from 4178 ft. to 4191 ft. Total Depth 4191 ft.

Packer Depth 4178 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4173 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4182 ft. Recorder Number 6234 Cap 4500

Bottom Recorder Depth (Outside) 4185 ft. Recorder Number 6077 Cap 4700

Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Silverado Rig #10 Drill Collar Length 374 I. D. 2.2 in.

Mud Type Chemical Viscosity 46 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 25.2 cc. Drill Pipe Length 3781 I. D. 3.8 in.

Chlorides 12,000 P.P.M. Test Tool Length 22 ft. Tool Size 4 1/2 in.

Jars: Make - Serial Number - Anchor Length 13 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak blow died in 17 minutes on initial flow period. Final flow period no blow - Flushed tool - no help.

Recovered 60 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:45 A.M. P.M. Time Started Off Bottom 7:45 A.M. P.M. Maximum Temperature 112

Initial Hydrostatic Pressure (A) 2092 P.S.I.

Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 36 P.S.I.

Initial Closed In Period Minutes 30 (D) 56 P.S.I.

Final Flow Period Minutes 30 (E) 41 P.S.I. to (F) 50 P.S.I.

Final Closed In Period Minutes 30 (G) 60 P.S.I.

Final Hydrostatic Pressure (H) 2065 P.S.I.

# WESTERN TESTING CO., INC.

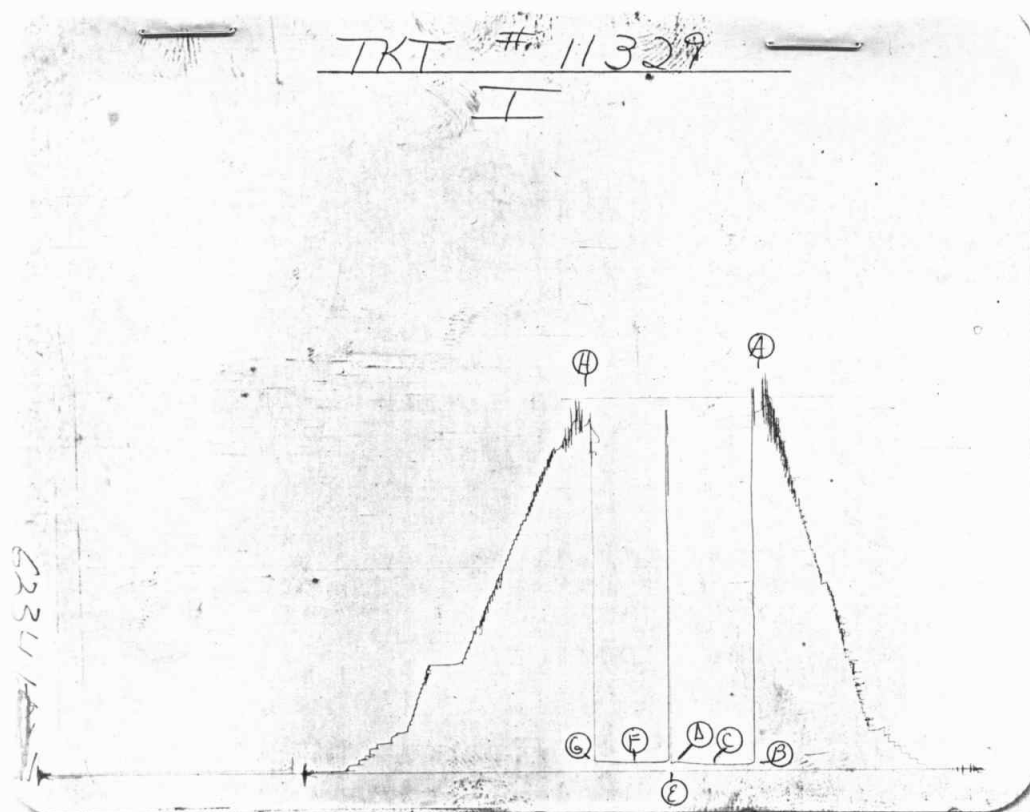
## Pressure Data

Date 4/4/81 Recorder No. 6234 Capacity 4500 Test Ticket No. 11329  
 Clock No. - Elevation 1284 Kelly Bushing Location 4182 Ft. 112 °F

| Point                          | Pressure    | Time Given | Time Computed |
|--------------------------------|-------------|------------|---------------|
| A Initial Hydrostatic Mud      | 2092 P.S.I. | 5:45P      | M             |
| B First Initial Flow Pressure  | 50 P.S.I.   | 30 Mins.   | 30 Mins.      |
| C First Final Flow Pressure    | 36 P.S.I.   | 30 Mins.   | 30 Mins.      |
| D Initial Closed-in Pressure   | 56 P.S.I.   | 30 Mins.   | 30 Mins.      |
| E Second Initial Flow Pressure | 41 P.S.I.   | 30 Mins.   | 30 Mins.      |
| F Second Final Flow Pressure   | 50 P.S.I.   |            |               |
| G Final Closed-in Pressure     | 60 P.S.I.   |            |               |
| H Final Hydrostatic Mud        | 2065 P.S.I. |            |               |

## PRESSURE BREAKDOWN

| First Flow Pressure |        | Initial Shut-In |        | Second Flow Pressure |        | Final Shut-In |        |
|---------------------|--------|-----------------|--------|----------------------|--------|---------------|--------|
| Point Mins.         | Press. | Point Minutes   | Press. | Point Minutes        | Press. | Point Minutes | Press. |
| P 1 0               | 50     | 0               | 36     | 0                    | 41     | 0             | 50     |
| P 2 5               | 36     | 3               | 37     | 5                    | 61     | 3             | 50     |
| P 3 10              | 35     | 6               | 38     | 10                   | 50     | 6             | 51     |
| P 4 15              | 33     | 9               | 39     | 15                   | 50     | 9             | 52     |
| P 5 20              | 34     | 12              | 40     | 20                   | 50     | 12            | 53     |
| P 6 25              | 35     | 15              | 41     | 25                   | 50     | 15            | 54     |
| P 7 30              | 36     | 18              | 44     | 30                   | 50     | 18            | 55     |
| P 8                 |        | 21              | 46     |                      |        | 21            | 56     |
| P 9                 |        | 24              | 48     |                      |        | 24            | 57     |
| P10                 |        | 27              | 51     |                      |        | 27            | 58     |
| P11                 |        | 30              | 56     |                      |        | 30            | 60     |
| P12                 |        |                 |        |                      |        |               |        |
| P13                 |        |                 |        |                      |        |               |        |
| P14                 |        |                 |        |                      |        |               |        |
| P15                 |        |                 |        |                      |        |               |        |
| P16                 |        |                 |        |                      |        |               |        |
| P17                 |        |                 |        |                      |        |               |        |
| P18                 |        |                 |        |                      |        |               |        |
| P19                 |        |                 |        |                      |        |               |        |
| P20                 |        |                 |        |                      |        |               |        |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |
|----------------------------------------|---------------|----------------|
|                                        | Field Reading | Office Reading |
| (A) Initial Hydrostatic Mud .....      | 2097          | 2092 PSI       |
| (B) First Initial Flow Pressure .....  | 45            | 50 PSI         |
| (C) First Final Flow Pressure .....    | 45            | 36 PSI         |
| (D) Initial Closed-in Pressure .....   | 57            | 56 PSI         |
| (E) Second Initial Flow Pressure ..... | 45            | 41 PSI         |
| (F) Second Final Flow Pressure .....   | 45            | 50 PSI         |
| (G) Final Closed-in Pressure .....     | 57            | 60 PSI         |
| (H) Final Hydrostatic Mud .....        | 2085          | 2065 PSI       |



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Company Rains & Williamson Oil Company, Inc. Lease & Well No. Dermison #1  
Elevation 1284 Kelly Bushing Formation Simpson Effective Pay - Ft. Ticket No. 11330  
Date 4/5/81 Sec. 10 Twp. 31S Range 2W County Sumner State Kansas  
Test Approved by Mike Engelbrecht Western Representative Dan Delaney  
Formation Test No. 3 Interval Tested from 4168 ft. to 4196 ft. Total Depth 4196 ft.  
Packer Depth 4168 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
Packer Depth 4163 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 4177 ft. Recorder Number 6234 Cap. 4500  
Bottom Recorder Depth (Outside) 4180 ft. Recorder Number 6077 Cap. 4700  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Silverado Rig #10 Drill Collar Length 374 I. D. 2.2 in.  
Mud Type Chemical Viscosity 46 Weight Pipe Length - I. D. - in.  
Weight 9.6 Water Loss 14.0 cc. Drill Pipe Length 3772 I. D. 3.8 in.  
Chlorides 12,000 P.P.M. Test Tool Length 22 ft. Tool Size 4 1/2 in.  
Jars: Make - Serial Number - Anchor Length 28 ft. Size 5 1/2 in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Initial flow period weak blow increasing to a strong blow. Strong blow throughout final flow period.

Recovered 660 ft. of water & gas cut mud - 5% gas; 13% water; 82% mud

Recovered 540 ft. of water

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks:

Time Set Packer(s) 9:25 A.M. Time Started Off Bottom 12:25 A.M. Maximum Temperature 119  
Initial Hydrostatic Pressure (A) 2176 P.S.I.  
Initial Flow Period Minutes 30 (B) 80 P.S.I. to (C) 311 P.S.I.  
Initial Closed In Period Minutes 30 (D) 1486 P.S.I.  
Final Flow Period Minutes 60 (E) 353 P.S.I. to (F) 600 P.S.I.  
Final Closed In Period Minutes 60 (G) 1479 P.S.I.  
Final Hydrostatic Pressure (H) 2144 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 4/5/81

Test Ticket No. 11330

Recorder No. 6234

Capacity 4500

Location 4177 Ft.

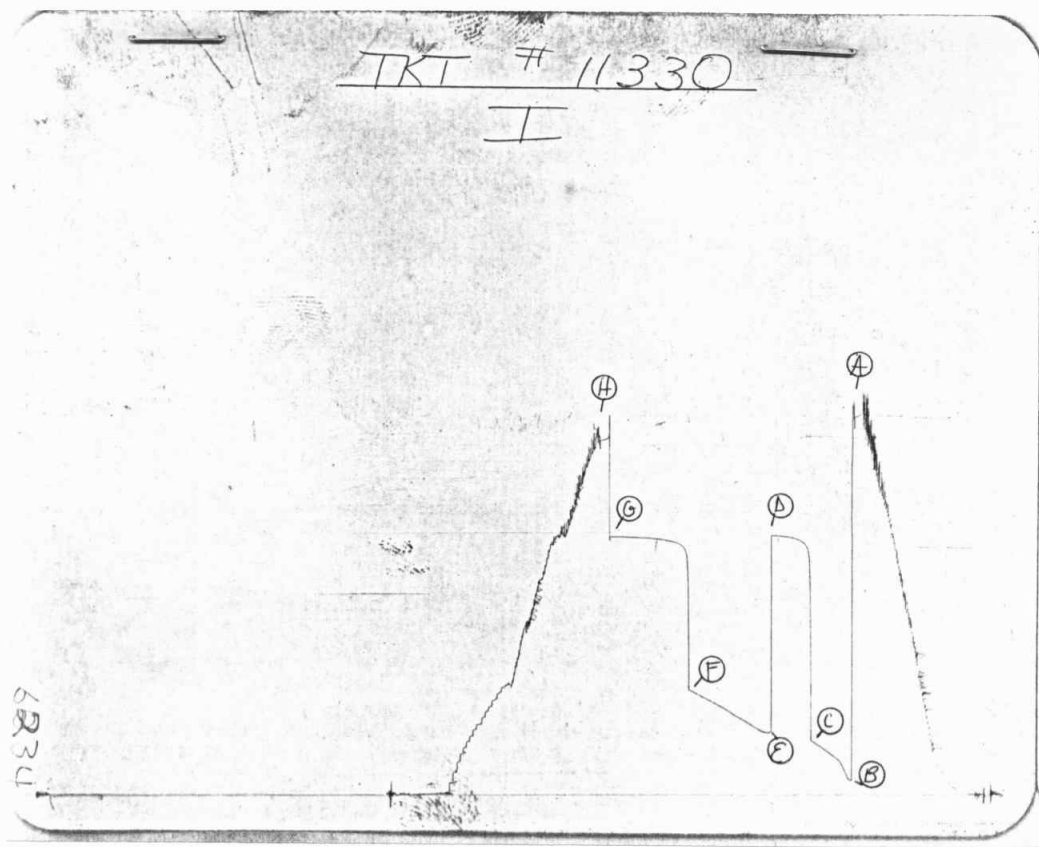
Clock No. - Elevation 1284 Kelly Bushing

Well Temperature 119 °F

| Point                          | Pressure    |        | Time Given   | Time Computed         |
|--------------------------------|-------------|--------|--------------|-----------------------|
| A Initial Hydrostatic Mud      | <u>2176</u> | P.S.I. | <u>9:25A</u> | <u>M</u>              |
| B First Initial Flow Pressure  | <u>80</u>   | P.S.I. | <u>30</u>    | Mins. <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>311</u>  | P.S.I. | <u>30</u>    | Mins. <u>30</u> Mins. |
| D Initial Closed-in Pressure   | <u>1486</u> | P.S.I. | <u>60</u>    | Mins. <u>60</u> Mins. |
| E Second Initial Flow Pressure | <u>353</u>  | P.S.I. | <u>60</u>    | Mins. <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>600</u>  | P.S.I. |              |                       |
| G Final Closed-in Pressure     | <u>1479</u> | P.S.I. |              |                       |
| H Final Hydrostatic Mud        | <u>2144</u> | P.S.I. |              |                       |

## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>10</u> Inc.   |             | Breakdown: <u>12</u> Inc.   |            | Breakdown: <u>20</u> Inc.   |             |
| of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             |
| final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             |
| Point Mins.                 | Press.     | Point Minutes               | Press.      | Point Minutes               | Press.     | Point Minutes               | Press.      |
| P 1 <u>0</u>                | <u>80</u>  | <u>0</u>                    | <u>311</u>  | <u>0</u>                    | <u>353</u> | <u>0</u>                    | <u>600</u>  |
| P 2 <u>5</u>                | <u>140</u> | <u>3</u>                    | <u>1412</u> | <u>5</u>                    | <u>359</u> | <u>3</u>                    | <u>1405</u> |
| P 3 <u>10</u>               | <u>203</u> | <u>6</u>                    | <u>1446</u> | <u>10</u>                   | <u>378</u> | <u>6</u>                    | <u>1431</u> |
| P 4 <u>15</u>               | <u>232</u> | <u>9</u>                    | <u>1459</u> | <u>15</u>                   | <u>402</u> | <u>9</u>                    | <u>1442</u> |
| P 5 <u>20</u>               | <u>260</u> | <u>12</u>                   | <u>1468</u> | <u>20</u>                   | <u>427</u> | <u>12</u>                   | <u>1450</u> |
| P 6 <u>25</u>               | <u>289</u> | <u>15</u>                   | <u>1474</u> | <u>25</u>                   | <u>447</u> | <u>15</u>                   | <u>1455</u> |
| P 7 <u>30</u>               | <u>311</u> | <u>18</u>                   | <u>1478</u> | <u>30</u>                   | <u>472</u> | <u>18</u>                   | <u>1460</u> |
| P 8                         |            | <u>21</u>                   | <u>1480</u> | <u>35</u>                   | <u>499</u> | <u>21</u>                   | <u>1464</u> |
| P 9                         |            | <u>24</u>                   | <u>1483</u> | <u>40</u>                   | <u>522</u> | <u>24</u>                   | <u>1467</u> |
| P10                         |            | <u>27</u>                   | <u>1485</u> | <u>45</u>                   | <u>542</u> | <u>27</u>                   | <u>1469</u> |
| P11                         |            | <u>30</u>                   | <u>1486</u> | <u>50</u>                   | <u>561</u> | <u>30</u>                   | <u>1472</u> |
| P12                         |            |                             |             | <u>55</u>                   | <u>581</u> | <u>33</u>                   | <u>1472</u> |
| P13                         |            |                             |             | <u>60</u>                   | <u>600</u> | <u>36</u>                   | <u>1473</u> |
| P14                         |            |                             |             |                             |            | <u>39</u>                   | <u>1474</u> |
| P15                         |            |                             |             |                             |            | <u>42</u>                   | <u>1475</u> |
| P16                         |            |                             |             |                             |            | <u>45</u>                   | <u>1476</u> |
| P17                         |            |                             |             |                             |            | <u>48</u>                   | <u>1476</u> |
| P18                         |            |                             |             |                             |            | <u>51</u>                   | <u>1477</u> |
| P19                         |            |                             |             |                             |            | <u>54</u>                   | <u>1478</u> |
| P20                         |            |                             |             |                             |            | <u>57</u>                   | <u>1479</u> |
|                             |            |                             |             |                             |            | <u>60</u>                   | <u>1479</u> |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |
|----------------------------------------|---------------|----------------|
|                                        | Field Reading | Office Reading |
| (A) Initial Hydrostatic Mud .....      | 2176          | 2176 PSI       |
| (B) First Initial Flow Pressure .....  | 68            | 80 PSI         |
| (C) First Final Flow Pressure .....    | 298           | 311 PSI        |
| (D) Initial Closed-in Pressure .....   | 1486          | 1486 PSI       |
| (E) Second Initial Flow Pressure ..... | 344           | 353 PSI        |
| (F) Second Final Flow Pressure .....   | 594           | 600 PSI        |
| (G) Final Closed-in Pressure .....     | 1486          | 1479 PSI       |
| (H) Final Hydrostatic Mud .....        | 2165          | 2144 PSI       |