

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY K & E PETROLEUM, INC.

LEASE AND WELL NO

#1 PELZ

SEC. 10

TWP 17S

RGE. 19W

TEST NO.

DATE

6/83



Home Office: Wichita, Kansas 67201

P.O. Box 1599

(316) 262-5861

Company K & E Petroleum, Inc.

Lease & Well No. #1 Pelz

Elevation 2142 Kelly Bushing Formation Lansing

Effective Pay ---- Ft. Ticker No. 16930

Date 1/ 6/83 Sec 10 Twp 17S Range 19W County Rush State Kansas

Test Approved by Bob Douglass Western Representative Dan Delaney

Formation Test No. 1 Interval Tested from 3504 ft. to 3527 ft. Total Depth 3527 ft.

Packer Depth 3504 ft. Size 6 5/8 in. Packer Depth ---- ft. Size - in.

Packer Depth 3499 ft. Size 6 5/8 in. Packer Depth ---- ft. Size - in.

Depth of Selective Zone Set ----

Top Recorder Depth (Inside) 3513 ft. Recorder Number 10980 Cap. 4200

Bottom Recorder Depth (Outside) 3517 ft. Recorder Number 6077 Cap. 4700

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

Drilling Contractor Abercrombie Drllg. Rig #8 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 60 Weight Pipe Length 640 I. D. 2.7 in.

Weight 9.8 Water Loss 8.0 cc. Drill Pipe Length 2843 I. D. 3.8 in.

Chlorides 48,000 P.P.M. Test Tool Length 21 ft. Tool or Size 4-1/2 in.

Jars: Make - Serial Number - Anchor Length 23 ft. Size 5 1/2 in.

Did Well Flow? - Reversed Out - 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 in.

Blow: Weak blow building to a strong blow in fourteen minutes on initial flow period. Final flow period strong blow throughout.

Recovered 55 ft. of gas in pipe

Recovered 185 ft. of oil and gas cut watery mud 35% gas;24% water;17% oil;24% mud

Recovered 180 ft. of oil and gas cut muddy water 44% gas;40% water;13% oil;3% mud

Recovered 480 ft. of slightly oil cut water 95% water;5% oil

Recovered ---- ft. of Chlorides 104,000 ppm

Remarks: ----

Time Set Packer(s) 1:45 A.M. Time Started Off Bottom 5:15 P.M. Maximum Temperature 113°

Initial Hydrostatic Pressure 1815 P.S.I.

Initial Flow Period 45 Minutes (B) 96 P.S.I. to (C) 273 P.S.I.

Initial Closed In Period 48 Minutes (D) 1014 P.S.I.

Final Flow Period 60 Minutes (E) 344 P.S.I. to (F) 441 P.S.I.

Final Closed In Period 60 Minutes (G) 1017 P.S.I.

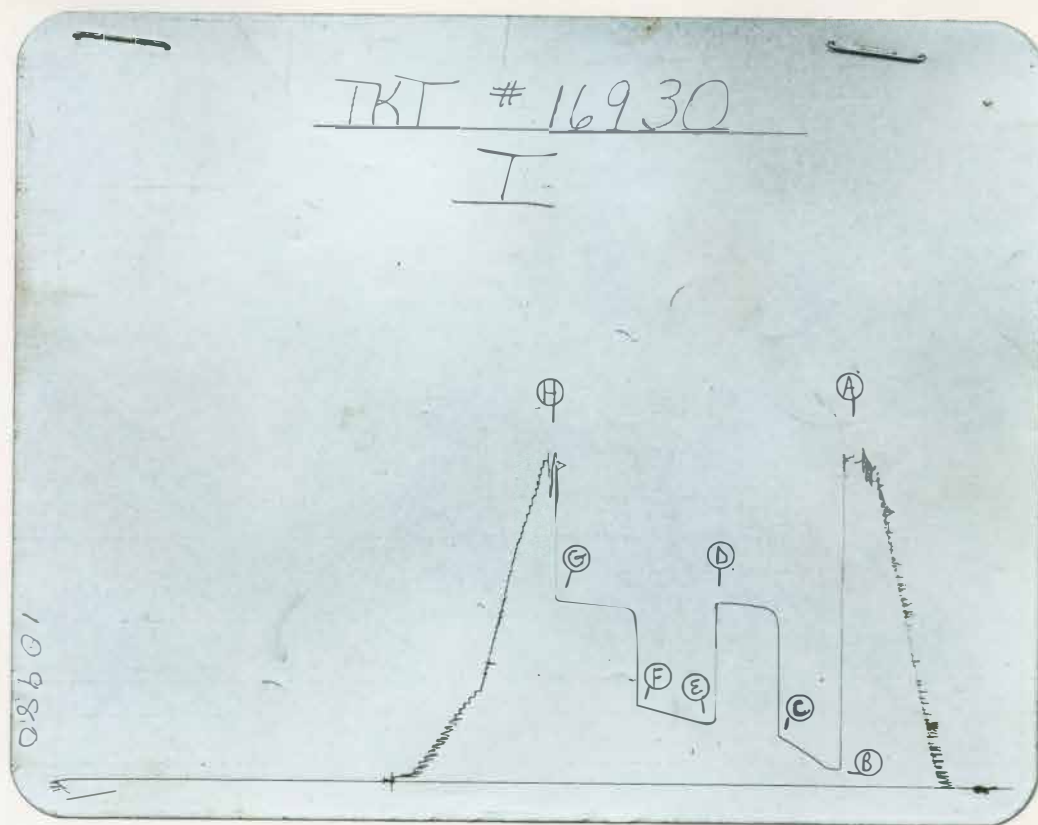
Final Hydrostatic Pressure 1787 P.S.I.

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 1/6/83 Test Ticket No. 16930  
 Recorder No. 10980 Capacity 4200 Location 3513 Ft.   
 Clock No. -- Elevation 2142 Kelly Bushing Well Temperature 113 °F  
 Point \_\_\_\_\_ Pressure \_\_\_\_\_ Time Given \_\_\_\_\_ Time Computed \_\_\_\_\_  
 A. Initial Hydrostatic Mud 1815 P.S.I. Open Tool 1:45P M.  
 B. First Initial Flow Pressure 96 P.S.I. First Flow Pressure 45 Mins. Mins.  
 C. First Final Flow Pressure 273 P.S.I. Initial Closed-in Pressure 45 Mins. Mins.  
 D. Initial Closed-in Pressure 1014 P.S.I. Second Flow Pressure 60 Mins. Mins.  
 E. Second Initial Flow Pressure 344 P.S.I. Final Closed-in Pressure 60 Mins. Mins.  
 F. Second Final Flow Pressure 441 P.S.I.  
 G. Final Closed-in Pressure 1017 P.S.I.  
 H. Final Hydrostatic Mud 1787 P.S.I.

**PRESSURE BREAKDOWN**

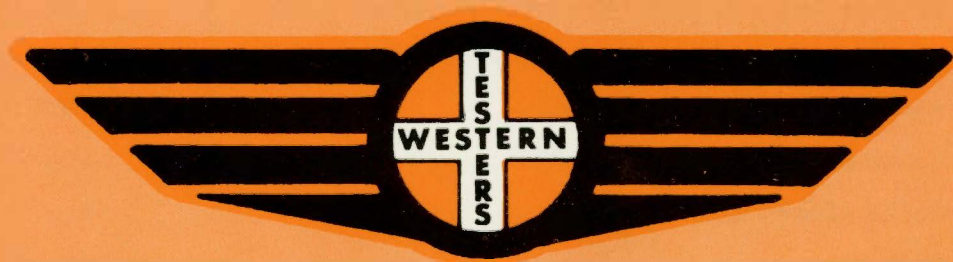
| First Flow Pressure<br>Breakdown: <u>9</u> Inc.<br>or <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |            | Initial Shut-In<br>Breakdown: <u>16</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             | Second Flow Pressure<br>Breakdown: <u>12</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |            | Final Shut-In<br>Breakdown: <u>20</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             |
|-----------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------|-------------|
| Point<br>Mins.                                                                                            | Press.     | Point<br>Minutes                                                                                       | Press.      | Point<br>Minutes                                                                                            | Press.     | Point<br>Minutes                                                                                     | Press.      |
| P 1 <u>0</u>                                                                                              | <u>96</u>  | <u>0</u>                                                                                               | <u>273</u>  | <u>0</u>                                                                                                    | <u>344</u> | <u>0</u>                                                                                             | <u>441</u>  |
| P 2 <u>5</u>                                                                                              | <u>97</u>  | <u>3</u>                                                                                               | <u>923</u>  | <u>5</u>                                                                                                    | <u>344</u> | <u>3</u>                                                                                             | <u>953</u>  |
| P 3 <u>10</u>                                                                                             | <u>105</u> | <u>6</u>                                                                                               | <u>966</u>  | <u>10</u>                                                                                                   | <u>349</u> | <u>6</u>                                                                                             | <u>977</u>  |
| P 4 <u>15</u>                                                                                             | <u>131</u> | <u>9</u>                                                                                               | <u>980</u>  | <u>15</u>                                                                                                   | <u>354</u> | <u>9</u>                                                                                             | <u>987</u>  |
| P 5 <u>20</u>                                                                                             | <u>157</u> | <u>12</u>                                                                                              | <u>988</u>  | <u>20</u>                                                                                                   | <u>366</u> | <u>12</u>                                                                                            | <u>991</u>  |
| P 6 <u>25</u>                                                                                             | <u>182</u> | <u>15</u>                                                                                              | <u>993</u>  | <u>25</u>                                                                                                   | <u>373</u> | <u>15</u>                                                                                            | <u>996</u>  |
| P 7 <u>30</u>                                                                                             | <u>209</u> | <u>18</u>                                                                                              | <u>997</u>  | <u>30</u>                                                                                                   | <u>383</u> | <u>18</u>                                                                                            | <u>1001</u> |
| P 8 <u>35</u>                                                                                             | <u>232</u> | <u>21</u>                                                                                              | <u>1001</u> | <u>35</u>                                                                                                   | <u>395</u> | <u>21</u>                                                                                            | <u>1005</u> |
| P 9 <u>40</u>                                                                                             | <u>253</u> | <u>24</u>                                                                                              | <u>1004</u> | <u>40</u>                                                                                                   | <u>407</u> | <u>24</u>                                                                                            | <u>1006</u> |
| P10 <u>45</u>                                                                                             | <u>273</u> | <u>27</u>                                                                                              | <u>1006</u> | <u>45</u>                                                                                                   | <u>416</u> | <u>27</u>                                                                                            | <u>1007</u> |
| P11                                                                                                       |            | <u>30</u>                                                                                              | <u>1008</u> | <u>50</u>                                                                                                   | <u>427</u> | <u>30</u>                                                                                            | <u>1008</u> |
| P12                                                                                                       |            | <u>33</u>                                                                                              | <u>1009</u> | <u>55</u>                                                                                                   | <u>438</u> | <u>33</u>                                                                                            | <u>1009</u> |
| P13                                                                                                       |            | <u>36</u>                                                                                              | <u>1010</u> | <u>60</u>                                                                                                   | <u>441</u> | <u>36</u>                                                                                            | <u>1010</u> |
| P14                                                                                                       |            | <u>39</u>                                                                                              | <u>1011</u> |                                                                                                             |            | <u>39</u>                                                                                            | <u>1011</u> |
| P15                                                                                                       |            | <u>42</u>                                                                                              | <u>1012</u> |                                                                                                             |            | <u>42</u>                                                                                            | <u>1012</u> |
| P16                                                                                                       |            | <u>45</u>                                                                                              | <u>1013</u> |                                                                                                             |            | <u>45</u>                                                                                            | <u>1013</u> |
| P17                                                                                                       |            | <u>48</u>                                                                                              | <u>1014</u> |                                                                                                             |            | <u>48</u>                                                                                            | <u>1014</u> |
| P18                                                                                                       |            |                                                                                                        |             |                                                                                                             |            | <u>51</u>                                                                                            | <u>1015</u> |
| P19                                                                                                       |            |                                                                                                        |             |                                                                                                             |            | <u>54</u>                                                                                            | <u>1016</u> |
| P20                                                                                                       |            |                                                                                                        |             |                                                                                                             |            | <u>57</u>                                                                                            | <u>1017</u> |
|                                                                                                           |            |                                                                                                        |             |                                                                                                             |            | <u>60</u>                                                                                            | <u>1017</u> |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |
|----------------------------------------|---------------|----------------|
|                                        | Field Reading | Office Reading |
| (A) Initial Hydrostatic Mud .....      | 1827          | 1815           |
| (B) First Initial Flow Pressure .....  | 85            | 96             |
| (C) First Final Flow Pressure .....    | 257           | 273            |
| (D) Initial Closed-in Pressure .....   | 1006          | 1014           |
| (E) Second Initial Flow Pressure ..... | 332           | 344            |
| (F) Second Final Flow Pressure .....   | 429           | 441            |
| (G) Final Closed-in Pressure .....     | 1006          | 1017           |
| (H) Final Hydrostatic Mud .....        | 1817          | 1787           |

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COMPANY K & E PETROLEUM, INC.

LEASE AND WELL NO

#1 PELZ

SEC. 10

TWP. 17S

RGE. 19W

TEST NO. 2

DATE 1/



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

Company K & E Petroleum, Inc. Lease & Well No. #1 Pelz  
Elevation 2142 Kelly Bushing Formation Conglomerate Effective Pay ---- Ft. Ticket No. 16931  
Date 1/ 8 /83 Sec 10 Twp 17S Range 19W County Rush State Kansas  
Test Approved by Bob Douglass Western Representative Dan Delaney  
Formation Test No. 2 Interval Tested from 3845 ft. to 3859 ft. Total Depth 3859 ft.  
Packer Depth 3845 ft. Size 6 5/8 in. Packer Depth --- ft. Size - in.  
Packer Depth 3840 ft. Size 6 5/8 in. Packer Depth --- ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 3848 ft. Recorder Number 10980 Cap. 4200  
Bottom Recorder Depth (Outside) 3852 ft. Recorder Number 6077 Cap. 4700  
Below Straddle Recorder Depth -- ft. Recorder Number - Cap. -  
Drilling Contractor Abercrombie Drlg. Rig #8 Drill Collar Length - I. D. - in.  
Mud Type starch Viscosity 38 Weight Pipe Length 640 I. D. 2.7 in.  
Weight 9.8 Water Loss 24.2 cc. Drill Pipe Length 3184 I. D. 3.8 in.  
Chlorides 46,000 P.P.M. Test Tool Length 21 ft. Tool Size 4-1/2 in.  
Jars: Make - Serial Number - Anchor Length 14 ft. Size 5 1/2 in.  
Did Well Flow? - Reversed Out - 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 in.

Blow: Initial flow period weak blow and died in thirteen minutes. Final flow period - no blow flushed tool - no help.

Recovered 30 ft. of slightly oil specked mud ( a scum of oil on gring out)  
Recovered        ft. of         
Recovered        ft. of         
Recovered        ft. of         
Recovered        ft. of       

Remarks:       

| Time Set Packer(s)           | <u>9:25</u> | <u>A.M.</u><br><u>P.M.</u> | Time Started Off Bottom | <u>11:25</u> | <u>A.M.</u><br><u>P.M.</u> | Maximum Temperature | <u>109°</u>      |
|------------------------------|-------------|----------------------------|-------------------------|--------------|----------------------------|---------------------|------------------|
| Initial Hydrostatic Pressure |             |                            | (A)                     | <u>2142</u>  |                            | P.S.I.              |                  |
| Initial Flow Period          |             |                            | Minutes <u>30</u>       | (B)          | <u>75</u>                  | P.S.I. to (C)       | <u>75</u> P.S.I. |
| Initial Closed In Period     |             |                            | Minutes <u>27</u>       | (D)          | <u>321</u>                 | P.S.I.              |                  |
| Final Flow Period            |             |                            | Minutes <u>30</u>       | (E)          | <u>93</u>                  | P.S.I. to (F)       | <u>89</u> P.S.I. |
| Final Closed In Period       |             |                            | Minutes <u>30</u>       | (G)          | <u>144</u>                 | P.S.I.              |                  |
| Final Hydrostatic Pressure   |             |                            | (H)                     | <u>2136</u>  |                            | P.S.I.              |                  |

# WESTERN TESTING CO., INC.

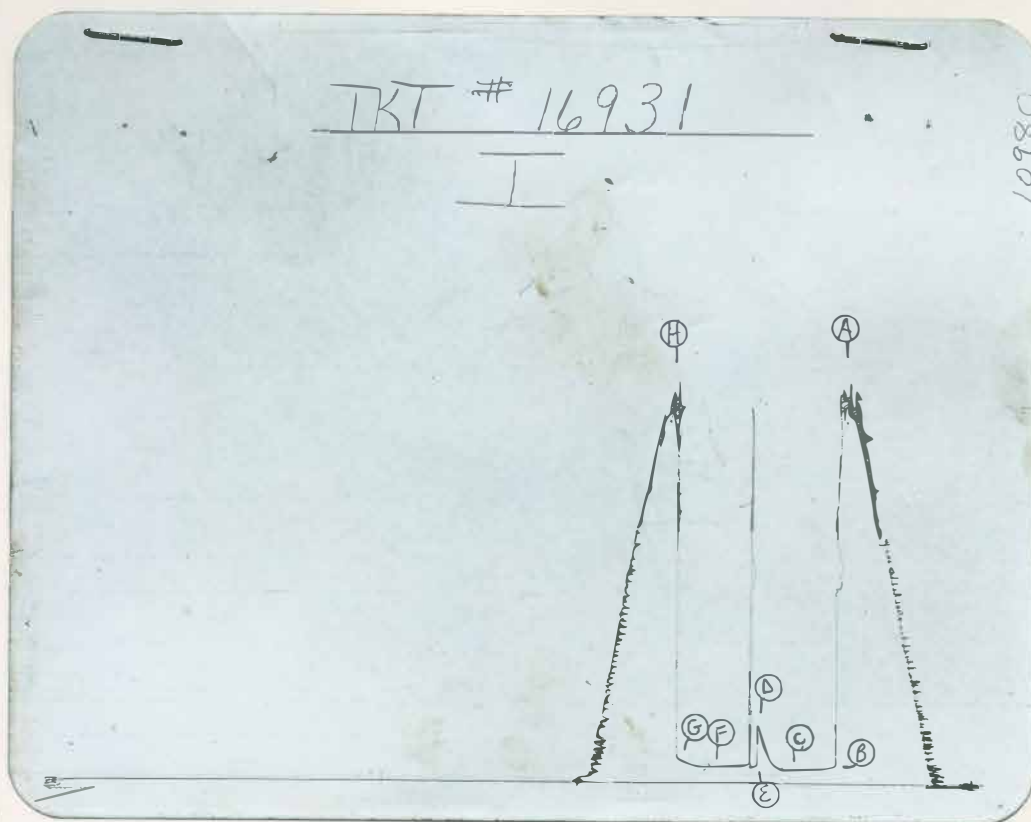
## Pressure Data

Date 1/8/83 Test Ticket No. 16931  
 Recorder No. 10980 Capacity 4200 Location 3 848 Ft.  
 Clock No. -- Elevation 2142 Kelly Bushing Well Temperature 109 °F

| Point                          | Pressure           |                            | Time Given | Time Computed |
|--------------------------------|--------------------|----------------------------|------------|---------------|
| A Initial Hydrostatic Mud      | <u>2142</u> P.S.I. | Open Tool                  | 9:25A      | M             |
| B First Initial Flow Pressure  | <u>75</u> P.S.I.   | First Flow Pressure        | 30         | 30 Mins.      |
| C First Final Flow Pressure    | <u>75</u> P.S.I.   | Initial Closed-in Pressure | 30         | 27 Mins.      |
| D Initial Closed-in Pressure   | <u>321</u> P.S.I.  | Second Flow Pressure       | 30         | 30 Mins.      |
| E Second Initial Flow Pressure | <u>93</u> P.S.I.   | Final Closed-in Pressure   | 30         | 30 Mins.      |
| F Second Final Flow Pressure   | <u>89</u> P.S.I.   |                            |            |               |
| G Final Closed-in Pressure     | <u>144</u> P.S.I.  |                            |            |               |
| H Final Hydrostatic Mud        | <u>2136</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>9</u> Inc.    |            | Breakdown: <u>6</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>75</u> | <u>0</u>                    | <u>75</u>  | <u>0</u>                    | <u>93</u>    | <u>0</u>                    | <u>89</u>  |
| P 2 <u>5</u>                | <u>75</u> | <u>3</u>                    | <u>76</u>  | <u>5</u>                    | FKUSHED TOOL | <u>3</u>                    | <u>90</u>  |
| P 3 <u>10</u>               | <u>75</u> | <u>6</u>                    | <u>78</u>  | <u>10</u>                   | <u>100</u>   | <u>6</u>                    | <u>91</u>  |
| P 4 <u>15</u>               | <u>75</u> | <u>9</u>                    | <u>81</u>  | <u>15</u>                   | <u>96</u>    | <u>9</u>                    | <u>92</u>  |
| P 5 <u>20</u>               | <u>75</u> | <u>12</u>                   | <u>91</u>  | <u>20</u>                   | <u>93</u>    | <u>12</u>                   | <u>94</u>  |
| P 6 <u>25</u>               | <u>75</u> | <u>15</u>                   | <u>105</u> | <u>25</u>                   | <u>91</u>    | <u>15</u>                   | <u>98</u>  |
| P 7 <u>30</u>               | <u>75</u> | <u>18</u>                   | <u>137</u> | <u>30</u>                   | <u>89</u>    | <u>18</u>                   | <u>103</u> |
| P 8                         |           | <u>21</u>                   | <u>191</u> |                             |              | <u>21</u>                   | <u>112</u> |
| P 9                         |           | <u>24</u>                   | <u>253</u> |                             |              | <u>24</u>                   | <u>120</u> |
| P 10                        |           | <u>27</u>                   | <u>321</u> |                             |              | <u>27</u>                   | <u>132</u> |
| P 11                        |           |                             |            |                             |              | <u>30</u>                   | <u>144</u> |
| P 12                        |           |                             |            |                             |              |                             |            |
| P 13                        |           |                             |            |                             |              |                             |            |
| P 14                        |           |                             |            |                             |              |                             |            |
| P 15                        |           |                             |            |                             |              |                             |            |
| P 16                        |           |                             |            |                             |              |                             |            |
| P 17                        |           |                             |            |                             |              |                             |            |
| P 18                        |           |                             |            |                             |              |                             |            |
| P 19                        |           |                             |            |                             |              |                             |            |
| P 20                        |           |                             |            |                             |              |                             |            |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |     |
|----------------------------------------|---------------|----------------|-----|
|                                        | Field Reading | Office Reading |     |
| (A) Initial Hydrostatic Mud .....      | 2146          | 2142           | PSI |
| (B) First Initial Flow Pressure .....  | 85            | 75             | PSI |
| (C) First Final Flow Pressure .....    | 85            | 75             | PSI |
| (D) Initial Closed-in Pressure .....   | 321           | 321            | PSI |
| (E) Second Initial Flow Pressure ..... | 96            | 93             | PSI |
| (F) Second Final Flow Pressure .....   | 96            | 89             | PSI |
| (G) Final Closed-in Pressure .....     | 139           | 144            | PSI |
| (H) Final Hydrostatic Mud .....        | 2135          | 2136           | PSI |

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COMPANY K & E PETROLEUM, INC.

LEASE AND WELL NO. \_\_\_\_\_

#1 PELZ

SEC. 10

TWP. 17S

RGE. 19W

TEST NO. 3

DATE 1/8



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

Company K & E Petroleum, Inc. 2142 Kelly Bushing Arbuckle #1 Pelz  
Elevation 1/ 8 /83 10 17S 19W Rush Kansas Effective Pay ---- Ft. Ticket No. 16932  
Date 1/ 8 /83 10 17S 19W Rush Kansas  
Test Approved by Bob Douglass Western Representative Dan Delaney  
Formation Test No. 3 Interval Tested from m 3836 ft. to 3872 ft. Total Depth 3872 ft.  
Packer Depth 3836 ft. Size 6 5/8 in. Packer Depth ---- ft. Size - in.  
Packer Depth 3831 ft. Size 6 5/8 in. Packer Depth ---- ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 3839 ft. Recorder Number 10980 Cap. 4200  
Bottom Recorder Depth (Outside) 3843 ft. Recorder Number 6077 Cap. 4700  
Below Straddle Recorder Depth -- ft. Recorder Number - Cap. -  
Drilling Contractor Abercrombie Drlg. Rig #8 Drill Collar Length - I. D. - in.  
Mud Type starch Viscosity 83 Weight Pipe Length 640 I. D. 2.7 in.  
Weight 9.9 Water Loss - cc. Drill Pipe Length 3175 I. D. 3.8 in.  
Chlorides ---- P.P.M. Test Tool Length 21 ft. Tool Size 4-1/2 in.  
Jars: Make - Serial Number - Anchor Length 36 ft. Size 5 1/2 in.  
Did Well Flow? - Reversed Out - 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: Initial flow period weak blow throughout ( one inch)  
Final flow period weak blow throughout (one fourth inch)

Recovered 45 ft. of mud A show of oil in tool

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:45 A.M. P.M. Time Started Off Bottom 4:15 A.M. P.M. Maximum Temperature 109°  
Initial Hydrostatic Pressure ..... (A) 2004 P.S.I.  
Initial Flow Period ..... Minutes 50 (B) 42 P.S.I. to (C) 45 P.S.I.  
Initial Closed In Period ..... Minutes 54 (D) 676 P.S.I.  
Final Flow Period ..... Minutes 85 (E) 52 P.S.I. to (F) 63 P.S.I.  
Final Closed In Period ..... Minutes 84 (G) 538 P.S.I.  
Final Hydrostatic Pressure ..... (H) 1996 P.S.I.

## WESTERN TESTING CO., INC.

## Pressure Data

Date 1/8/83 Test Ticket No. 16932  
 Recorder No. 10980 Capacity 4200 Location 3839 Ft.  
 Clock No. -- Elevation 2142 Kelly Bushing Well Temperature 109 °F  
 Point Pressure Time Given Time Computed  
 A. Initial Hydrostatic Mud 2004 P.S.I. Open Tool 11:45P M  
 B First Initial Flow Pressure 42 P.S.I. First Flow Pressure 45 Mins. 50 Mins.  
 C First Final Flow Pressure 45 P.S.I. Initial Closed-in Pressure 60 Mins. 54 Mins.  
 D Initial Closed-in Pressure 676 P.S.I. Second Flow Pressure 75 Mins. 85 Mins.  
 E Second Initial Flow Pressure 52 P.S.I. Final Closed-in Pressure 90 Mins. 84 Mins.  
 F Second Final Flow Pressure 63 P.S.I.  
 G Final Closed-in Pressure 538 P.S.I.  
 H Final Hydrostatic Mud 1996 P.S.I.

## PRESSURE BREAKDOWN

| First Flow Pressure<br>Breakdown: <u>10</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |           | Initial Shut-In<br>Breakdown: <u>18</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |            | Second Flow Pressure<br>Breakdown: <u>17</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |           | Final Shut-In<br>Breakdown: <u>28</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |            |
|------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------|------------|
| Point<br>Mins.                                                                                             | Press.    | Point<br>Minutes                                                                                       | Press.     | Point<br>Minutes                                                                                            | Press.    | Point<br>Minutes                                                                                     | Press.     |
| P 1 <u>0</u>                                                                                               | <u>42</u> | <u>0</u>                                                                                               | <u>45</u>  | <u>0</u>                                                                                                    | <u>52</u> | <u>0</u>                                                                                             | <u>63</u>  |
| P 2 <u>5</u>                                                                                               | <u>42</u> | <u>3</u>                                                                                               | <u>89</u>  | <u>5</u>                                                                                                    | <u>52</u> | <u>3</u>                                                                                             | <u>76</u>  |
| P 3 <u>10</u>                                                                                              | <u>42</u> | <u>6</u>                                                                                               | <u>187</u> | <u>10</u>                                                                                                   | <u>52</u> | <u>6</u>                                                                                             | <u>94</u>  |
| P 4 <u>15</u>                                                                                              | <u>42</u> | <u>9</u>                                                                                               | <u>294</u> | <u>15</u>                                                                                                   | <u>52</u> | <u>9</u>                                                                                             | <u>121</u> |
| P 5 <u>20</u>                                                                                              | <u>42</u> | <u>12</u>                                                                                              | <u>377</u> | <u>20</u>                                                                                                   | <u>52</u> | <u>12</u>                                                                                            | <u>159</u> |
| P 6 <u>25</u>                                                                                              | <u>42</u> | <u>15</u>                                                                                              | <u>440</u> | <u>25</u>                                                                                                   | <u>52</u> | <u>15</u>                                                                                            | <u>199</u> |
| P 7 <u>30</u>                                                                                              | <u>42</u> | <u>18</u>                                                                                              | <u>486</u> | <u>30</u>                                                                                                   | <u>52</u> | <u>18</u>                                                                                            | <u>233</u> |
| P 8 <u>35</u>                                                                                              | <u>42</u> | <u>21</u>                                                                                              | <u>518</u> | <u>35</u>                                                                                                   | <u>52</u> | <u>21</u>                                                                                            | <u>263</u> |
| P 9 <u>40</u>                                                                                              | <u>42</u> | <u>24</u>                                                                                              | <u>545</u> | <u>40</u>                                                                                                   | <u>52</u> | <u>24</u>                                                                                            | <u>291</u> |
| P10 <u>45</u>                                                                                              | <u>43</u> | <u>27</u>                                                                                              | <u>566</u> | <u>45</u>                                                                                                   | <u>52</u> | <u>27</u>                                                                                            | <u>318</u> |
| P11 <u>50</u>                                                                                              | <u>45</u> | <u>30</u>                                                                                              | <u>584</u> | <u>50</u>                                                                                                   | <u>52</u> | <u>30</u>                                                                                            | <u>337</u> |
| P12                                                                                                        |           | <u>33</u>                                                                                              | <u>603</u> | <u>55</u>                                                                                                   | <u>52</u> | <u>33</u>                                                                                            | <u>354</u> |
| P13                                                                                                        |           | <u>36</u>                                                                                              | <u>615</u> | <u>60</u>                                                                                                   | <u>52</u> | <u>36</u>                                                                                            | <u>371</u> |
| P14                                                                                                        |           | <u>39</u>                                                                                              | <u>628</u> | <u>65</u>                                                                                                   | <u>53</u> | <u>39</u>                                                                                            | <u>387</u> |
| P15                                                                                                        |           | <u>42</u>                                                                                              | <u>641</u> | <u>70</u>                                                                                                   | <u>54</u> | <u>42</u>                                                                                            | <u>402</u> |
| P16                                                                                                        |           | <u>45</u>                                                                                              | <u>652</u> | <u>75</u>                                                                                                   | <u>55</u> | <u>45</u>                                                                                            | <u>415</u> |
| P17                                                                                                        |           | <u>48</u>                                                                                              | <u>664</u> | <u>80</u>                                                                                                   | <u>59</u> | <u>48</u>                                                                                            | <u>428</u> |
| P18                                                                                                        |           | <u>51</u>                                                                                              | <u>674</u> | <u>85</u>                                                                                                   | <u>63</u> | <u>51</u>                                                                                            | <u>440</u> |
| P19                                                                                                        |           | <u>54</u>                                                                                              | <u>676</u> |                                                                                                             |           | <u>54</u>                                                                                            | <u>451</u> |
| P20                                                                                                        |           |                                                                                                        |            |                                                                                                             |           | <u>57</u>                                                                                            | <u>461</u> |
|                                                                                                            |           |                                                                                                        |            |                                                                                                             |           | <u>60</u>                                                                                            | <u>472</u> |

# WESTERN TESTING CO., INC.

## Pressure Data

Date 1/8/83 Test Ticket No. J6932

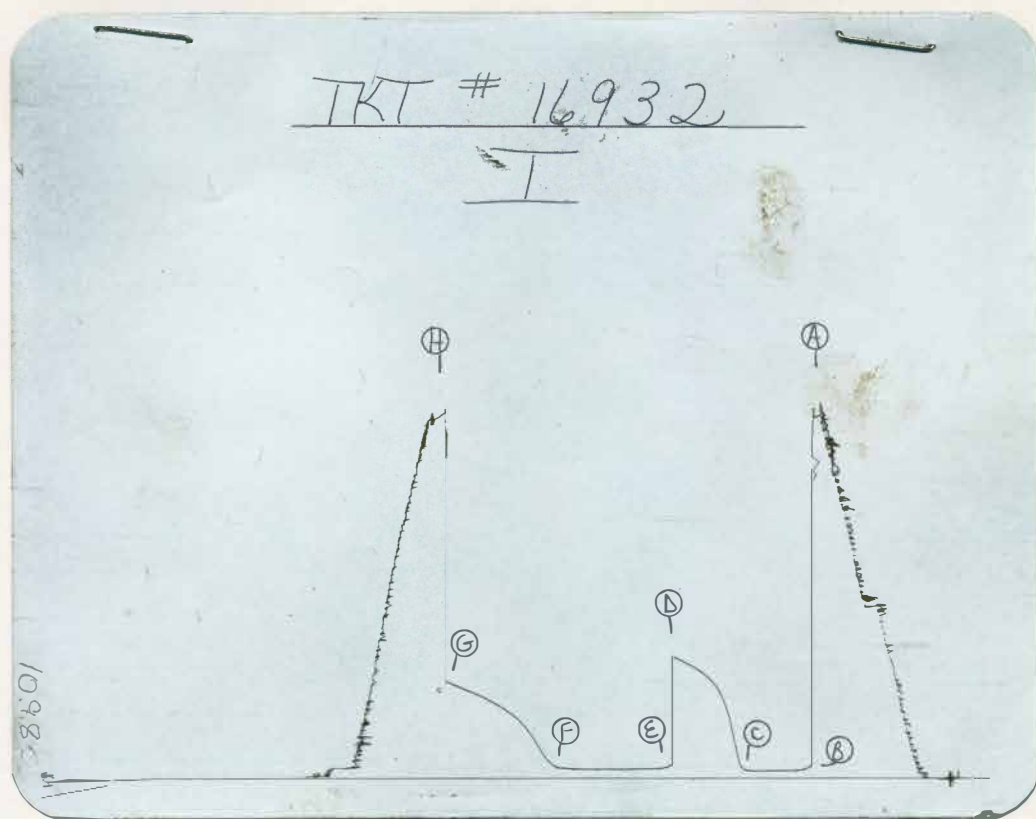
Recorder No. 10980 Capacity 4200 Location 3839 Ft.

Clock No. -- Elevation 2142 Kelly Bushing Well Temperature 109 °F

| Point                          | Pressure    | Time Given | Time Computed |
|--------------------------------|-------------|------------|---------------|
| A Initial Hydrostatic Mud      | 2004 P.S.I. | 11:45P     | M             |
| B First Initial Flow Pressure  | 42 P.S.I.   | 45 Mins    | 50 Mins       |
| C First Final Flow Pressure    | 45 P.S.I.   | 60 Mins    | 54 Mins       |
| D Initial Closed-in Pressure   | 676 P.S.I.  | 75 Mins    | 85 Mins       |
| E Second Initial Flow Pressure | 52 P.S.I.   | 90 Mins    | 84 Mins       |
| F Second Final Flow Pressure   | 63 P.S.I.   |            |               |
| G Final Closed-in Pressure     | 538 P.S.I.  |            |               |
| H Final Hydrostatic Mud        | 1996 P.S.I. |            |               |

## PRESSURE BREAKDOWN

| First Flow Pressure Breakdown: <u>10</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. |        | Initial Shut-In Breakdown: <u>18</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |        | Second Flow Pressure Breakdown: <u>17</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. |        | Final Shut-In Breakdown: <u>28</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |        |
|---------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|--------|
| Point Mins.                                                                                       | Press. | Point Minutes                                                                                 | Press. | Point Minutes                                                                                      | Press. | Point Minutes                                                                               | Press. |
| P 1                                                                                               |        |                                                                                               |        |                                                                                                    |        | 63                                                                                          | 482    |
| P 2                                                                                               |        |                                                                                               |        |                                                                                                    |        | 66                                                                                          | 492    |
| P 3                                                                                               |        |                                                                                               |        |                                                                                                    |        | 69                                                                                          | 502    |
| P 4                                                                                               |        |                                                                                               |        |                                                                                                    |        | 72                                                                                          | 511    |
| P 5                                                                                               |        |                                                                                               |        |                                                                                                    |        | 75                                                                                          | 520    |
| P 6                                                                                               |        |                                                                                               |        |                                                                                                    |        | 78                                                                                          | 526    |
| P 7                                                                                               |        |                                                                                               |        |                                                                                                    |        | 81                                                                                          | 532    |
| P 8                                                                                               |        |                                                                                               |        |                                                                                                    |        | 84                                                                                          | 538    |
| P 9                                                                                               |        |                                                                                               |        |                                                                                                    |        |                                                                                             |        |
| P10                                                                                               |        |                                                                                               |        |                                                                                                    |        |                                                                                             |        |
| P11                                                                                               |        |                                                                                               |        |                                                                                                    |        |                                                                                             |        |
| 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 .....      | 2050          | 2004           | PSI |
| (B) First Initial Flow Pressure .....  | 32            | 42             | PSI |
| (C) First Final Flow Pressure .....    | 32            | 45             | PSI |
| (D) Initial Closed-in Pressure .....   | 675           | 676            | PSI |
| (E) Second Initial Flow Pressure ..... | 32            | 52             | PSI |
| (F) Second Final Flow Pressure .....   | 32            | 63             | PSI |
| (G) Final Closed-in Pressure .....     | 536           | 538            | PSI |
| (H) Final Hydrostatic Mud .....        | 2040          | 1996           | PSI |

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY K. & E. PETROLEUM, INC.

LEASE AND WELL NO

#1 PELZ

SEC

10

TWP

17S

RGE

19W

TEST NO.

4

DATE

1



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

Company K. & E. Petroleum, Inc. Lease & Well No. #1 Pelz  
Elevation 2142 Kelly Bushing Formation Arbuckle Effective Pay -- Ft. Ticket No. 16933  
Date 1/9/83 Sec 10 Twp 17S Range 19W County Rush State Kansas  
Test Approved by Bob Douglass Western Representative Dan Delaney

Formation Test No. 4 Interval Tested from 3868 ft. to 3877 ft. Total Depth 3877 ft.  
Packer Depth 3868 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
Packer Depth 3863 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 3870 ft. Recorder Number 10980 Cap. 4200  
Bottom Recorder Depth (Outside) 3874 ft. Recorder Number 6077 Cap. 4700  
Below Straddle Recorder Depth --- ft. Recorder Number - Cap. -  
Drilling Contractor Abercrombie Drlg. Rig #8 Drill Collar Length - I. D. - in.  
Mud Type starch Viscosity 45 Weight Pipe Length 640 I. D. 2.7 in.  
Weight 9.5 Water Loss 13.6 cc Drill Pipe Length 3207 I. D. 3.8 in.  
Chlorides 47,000 P.P.M. Test Tool Length 21 ft. Tool Size 4-1/2 in.  
Jars: Make - Serial Number - Anchor Length 9 ft. Size 5 1/2 in.  
Did Well Flow? - Reversed Out - 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 in.

Blow: Initial flow period weak blow increasing to a fair blow (one half inch to five inches)  
Final flow period fair blow throughout. ( five inches)

Recovered 135 ft. of muddy water  
Recovered 180 ft. of salt water Chlorides 27,000 ppm  
Recovered - ft. of -  
Recovered - ft. of -  
Recovered - ft. of -

Remarks: -

| Time Set                     | Packer(s) | 4:00 | A.M.   | Time Started | Off Bottom    | 8:30 | A.M.   | Maximum Temperature | 117° |
|------------------------------|-----------|------|--------|--------------|---------------|------|--------|---------------------|------|
| Initial Hydrostatic Pressure | (A)       | 2016 | P.S.I. |              |               |      |        |                     |      |
| Initial Flow Period          | Minutes   | 45   | (B)    | 88           | P.S.I. to (C) | 118  | P.S.I. |                     |      |
| Initial Closed In Period     | Minutes   | 60   | (D)    | 912          | P.S.I.        |      |        |                     |      |
| Final Flow Period            | Minutes   | 75   | (E)    | 191          | P.S.I. to (F) | 232  | P.S.I. |                     |      |
| Final Closed In Period       | Minutes   | 90   | (G)    | 928          | P.S.I.        |      |        |                     |      |
| Final Hydrostatic Pressure   | (H)       | 2016 | P.S.I. |              |               |      |        |                     |      |

# WESTERN TESTING CO., INC.

## Pressure Data

Date 1/9/83 Test Ticket No. 16933  
 Recorder No. 10980 Capacity 4200 Location 3870 Ft.  
 Clock No. -- Elevation 2142 Kelly Bushing Well Temperature 117 °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 2016 P.S.I. Open Tool 4:00P M  
 B First Initial Flow Pressure 88 P.S.I. First Flow Pressure 45 Mins. 45 Mins.  
 C First Final Flow Pressure 118 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 D Initial Closed-in Pressure 912 P.S.I. Second Flow Pressure 75 Mins. 75 Mins.  
 E Second Initial Flow Pressure 191 P.S.I. Final Closed-in Pressure 90 Mins. 90 Mins.  
 F Second Final Flow Pressure 232 P.S.I.  
 G Final Closed-in Pressure 928 P.S.I.  
 H Final Hydrostatic Mud 2016 P.S.I.

## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |            | Second Flow Pressure        |            | Final Shut-In               |            |
|-----------------------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|------------|
| Breakdown: <u>9</u> Inc.    |            | Breakdown: <u>20</u> Inc.   |            | Breakdown: <u>15</u> Inc.   |            | Breakdown: <u>31</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>88</u>  | <u>0</u>                    | <u>118</u> | <u>0</u>                    | <u>191</u> | <u>0</u>                    | <u>232</u> |
| P 2 <u>5</u>                | <u>88</u>  | <u>3</u>                    | <u>240</u> | <u>5</u>                    | <u>191</u> | <u>3</u>                    | <u>288</u> |
| P 3 <u>10</u>               | <u>88</u>  | <u>6</u>                    | <u>337</u> | <u>10</u>                   | <u>193</u> | <u>6</u>                    | <u>356</u> |
| P 4 <u>15</u>               | <u>90</u>  | <u>9</u>                    | <u>416</u> | <u>15</u>                   | <u>195</u> | <u>9</u>                    | <u>410</u> |
| P 5 <u>20</u>               | <u>93</u>  | <u>12</u>                   | <u>483</u> | <u>20</u>                   | <u>197</u> | <u>12</u>                   | <u>461</u> |
| P 6 <u>25</u>               | <u>97</u>  | <u>15</u>                   | <u>544</u> | <u>25</u>                   | <u>200</u> | <u>15</u>                   | <u>506</u> |
| P 7 <u>30</u>               | <u>105</u> | <u>18</u>                   | <u>590</u> | <u>30</u>                   | <u>203</u> | <u>18</u>                   | <u>547</u> |
| P 8 <u>35</u>               | <u>112</u> | <u>21</u>                   | <u>632</u> | <u>35</u>                   | <u>207</u> | <u>21</u>                   | <u>581</u> |
| P 9 <u>40</u>               | <u>116</u> | <u>24</u>                   | <u>672</u> | <u>40</u>                   | <u>211</u> | <u>24</u>                   | <u>613</u> |
| P10 <u>45</u>               | <u>118</u> | <u>27</u>                   | <u>707</u> | <u>45</u>                   | <u>215</u> | <u>27</u>                   | <u>643</u> |
| P11                         |            | <u>30</u>                   | <u>736</u> | <u>50</u>                   | <u>218</u> | <u>30</u>                   | <u>669</u> |
| P12                         |            | <u>33</u>                   | <u>763</u> | <u>55</u>                   | <u>221</u> | <u>33</u>                   | <u>692</u> |
| P13                         |            | <u>36</u>                   | <u>786</u> | <u>60</u>                   | <u>223</u> | <u>36</u>                   | <u>715</u> |
| P14                         |            | <u>39</u>                   | <u>809</u> | <u>65</u>                   | <u>226</u> | <u>39</u>                   | <u>738</u> |
| P15                         |            | <u>42</u>                   | <u>829</u> | <u>70</u>                   | <u>229</u> | <u>42</u>                   | <u>760</u> |
| P16                         |            | <u>45</u>                   | <u>846</u> | <u>75</u>                   | <u>232</u> | <u>45</u>                   | <u>778</u> |
| P17                         |            | <u>48</u>                   | <u>863</u> |                             |            | <u>48</u>                   | <u>792</u> |
| P18                         |            | <u>51</u>                   | <u>879</u> |                             |            | <u>51</u>                   | <u>806</u> |
| P19                         |            | <u>54</u>                   | <u>891</u> |                             |            | <u>54</u>                   | <u>821</u> |
| P20                         |            | <u>57</u>                   | <u>905</u> |                             |            | <u>57</u>                   | <u>832</u> |
| WTC - 4                     |            | <u>60</u>                   | <u>912</u> |                             |            | <u>60</u>                   | <u>844</u> |

CONTINUED NEXT PAGE

**WESTERN TESTING CO., INC.**  
**Pressure Data**

1/9/83

Date \_\_\_\_\_

Test Ticket No. 16933

Recorder No. 10980

Capacity 4200

Location 3870

Ft.

Clock No. --

Elevation 2142 Kelly Bushing

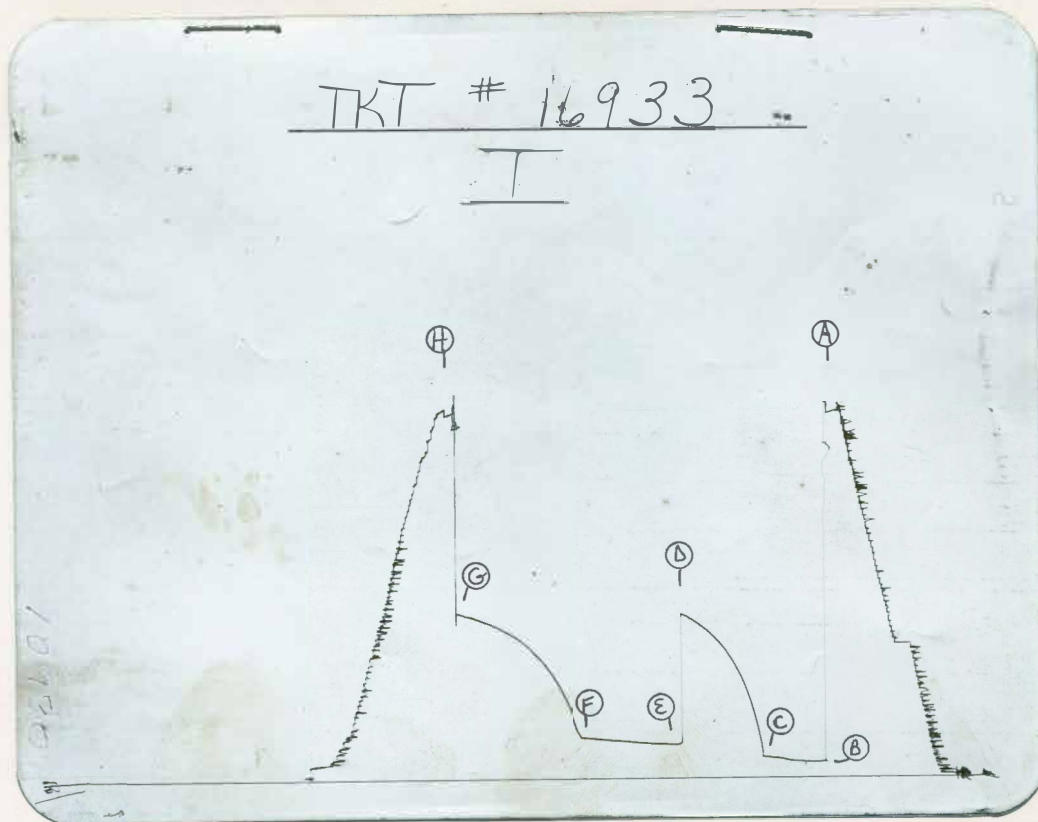
Well Temperature 117

°F

| Point                          | Pressure           |                            | Time Given<br>4:00P | Time Computed   |
|--------------------------------|--------------------|----------------------------|---------------------|-----------------|
| A. Initial Hydrostatic Mud     | <u>2016</u> P.S.I. | Open Tool                  | <u>45</u> M         | <u>45</u> Mins. |
| B First Initial Flow Pressure  | <u>88</u> P.S.I.   | First Flow Pressure        | <u>60</u> Mins      | <u>60</u> Mins. |
| C First Final Flow Pressure    | <u>118</u> P.S.I.  | Initial Closed-in Pressure | <u>75</u> Mins      | <u>75</u> Mins. |
| D Initial Closed-in Pressure   | <u>912</u> P.S.I.  | Second Flow Pressure       | <u>90</u> Mins      | <u>90</u> Mins. |
| E Second Initial Flow Pressure | <u>191</u> P.S.I.  | Final Closed-in Pressure   |                     |                 |
| F Second Final Flow Pressure   | <u>232</u> P.S.I.  |                            |                     |                 |
| G Final Closed-in Pressure     | <u>928</u> P.S.I.  |                            |                     |                 |
| H Final Hydrostatic Mud        | <u>2016</u> P.S.I. |                            |                     |                 |

**PRESSURE BREAKDOWN**

| First Flow Pressure<br>Breakdown: <u>9</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Initial Shut-In<br>Breakdown: <u>20</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Second Flow Pressure<br>Breakdown: <u>15</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Final Shut-In<br>Breakdown: <u>31</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |            |
|-----------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------|------------|
| Point<br>Mins.                                                                                            | Press. | Point<br>Minutes                                                                                       | Press. | Point<br>Minutes                                                                                            | Press. | Point<br>Minutes                                                                                     | Press.     |
| P 1                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>63</u>                                                                                            | <u>854</u> |
| P 2                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>66</u>                                                                                            | <u>863</u> |
| P 3                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>69</u>                                                                                            | <u>872</u> |
| P 4                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>72</u>                                                                                            | <u>881</u> |
| P 5                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>75</u>                                                                                            | <u>890</u> |
| P 6                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>78</u>                                                                                            | <u>900</u> |
| P 7                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>81</u>                                                                                            | <u>907</u> |
| P 8                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>84</u>                                                                                            | <u>910</u> |
| P 9                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>87</u>                                                                                            | <u>918</u> |
| P10                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>90</u>                                                                                            | <u>924</u> |
| P11                                                                                                       |        |                                                                                                        |        |                                                                                                             |        | <u>93</u>                                                                                            | <u>928</u> |
| 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 .....      | 2040          | 2016           | PSI |
| (B) First Initial Flow Pressure .....  | 75            | 88             | PSI |
| (C) First Final Flow Pressure .....    | 107           | 118            | PSI |
| (D) Initial Closed-in Pressure .....   | 910           | 912            | PSI |
| (E) Second Initial Flow Pressure ..... | 171           | 191            | PSI |
| (F) Second Final Flow Pressure .....   | 214           | 232            | PSI |
| (G) Final Closed-in Pressure .....     | 910           | 928            | PSI |
| (H) Final Hydrostatic Mud .....        | 2029          | 2016           | PSI |