

Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Formation Bern Effective Pay ----- Ft. Ticket No. 6661  
Date 8-21-80 Sec. 10 Twp. 25 S Range 12 W County Stafford State KS  
Test Approved by Kent A. Deutsch Western Representative Rodger Mounts  
Formation Test No. 1 Interval Tested from 2867 ft. to 2885 ft. Total Depth 2885 ft.  
Packer Depth 2862 ft. Size 6 3/4 in. Packer Depth ----- ft. Size --- in.  
Packer Depth 2867 ft. Size 6 3/4 in. Packer Depth ----- ft. Size --- in.  
Depth of Selective Zone Set -----  
Top Recorder Depth (Inside) 2874 ft. Recorder Number 1566 Cap. 4300  
Bottom Recorder Depth (Outside) 2877 ft. Recorder Number 3086 Cap. 4500  
Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. -----  
Drilling Contractor H-30 Drilling Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.  
Mud Type Chemical Viscosity 36 Weight Pipe Length ----- I. D. ----- in.  
Weight 9.2 Water Loss 48 cc. Drill Pipe Length ----- I. D. 3.8 in.  
Chlorides 25,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make NO Serial Number ----- Anchor Length 18 ft. Size 5 1/2 OD 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: Good strong blow initial flow period. Gas to surface in four minutes on final flow period  
See attached sheet for gas measurements.

Recovered 165 ft. of Slightly gas cut mud (chlorides 42,000 ppm).  
Recovered 60 ft. of Slightly gas cut salt water (chlorides 88,000 ppm.)  
Recovered        ft. of         
Recovered        ft. of         
Recovered        ft. of         
Remarks:       

Time Set Packer(s) 7:53 ~~\*\*\*~~ P.M. Time Started Off Bottom 10:53 ~~\*\*\*~~ P.M. Maximum Temperature 96<sup>0</sup> F.  
Initial Hydrostatic Pressure        (A) 1487 P.S.I.  
Initial Flow Period        Minutes 30 (B) 102 P.S.I. to (C) 97 P.S.I.  
Initial Closed In Period        Minutes 60 (D) 1083 P.S.I.  
Final Flow Period        Minutes 30 (E) 99 P.S.I. to (F) 106 P.S.I.  
Final Closed In Period        Minutes 60 (G) 1049 P.S.I.  
Final Hydrostatic Pressure        (H) 1410 P.S.I.

## GAS FLOW REPORT

Date 8/21/80 Ticket 6661 Company W. L. Kirkman, Inc.  
 Well Name and No. McFadden #1 Dst No. 1 Interval Tested 2867'-2885'  
 County Stafford State Kansas Sec. 10 Twp. 25S Rg. 12W

| Time Gauge Pre-Flow | Time Gauge in Min. | P.S.I. on Merla Orifice Well Tester | P.S.I. on Pitot Tester | P.S.I. on Side Static Tester | P.S.I. on U-Tube Tester | Description of Flow |
|---------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| (NO GAS)            |                    |                                     | PRE FLOW               |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |

Gas to surface in four minutes.

### SECOND FLOW

|         |             |              |            |
|---------|-------------|--------------|------------|
| 5 min.  | 6" of water | 1/4" orifice | 1,290 CFPD |
| 10 min. | 1.5 PSIG    | 1/4" orifice | 3,390 CFPD |
| 20 min. | 3 PSIG      | 1/4" orifice | 4,840 CFPD |
| 30 min. | 3 PSIG      | 1/4" orifice | 4,840 CFPD |
|         |             |              |            |
|         |             |              |            |
|         |             |              |            |
|         |             |              |            |
|         |             |              |            |
|         |             |              |            |
|         |             |              |            |

### GAS BOTTLE

Serial No. WTC #109 Date Bottle Filled 8/21/80 Date to be Invoiced 8/21/80

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME W. L. Kirkman, Inc.  
 Authorized by Kent A. Deutsch



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-21-80 Test Ticket No. 6661  
 Recorder No. 1566 Capacity 4300 Location 2874 Ft.  
 Clock No. ----- Elevation 1874 Kelly Bushing Well Temperature 96 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1487</u> P.S.I. | Open Tool                  | <u>7:53 P.</u>  | <u>M</u>        |
| B First Initial Flow Pressure  | <u>102</u> P.S.I.  | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>97</u> P.S.I.   | Initial Closed-in Pressure | <u>60</u> Mins. | <u>60</u> Mins. |
| D Initial Closed-in Pressure   | <u>1083</u> P.S.I. | Second Flow Pressure       | <u>30</u> Mins. | <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>99</u> P.S.I.   | Final Closed-in Pressure   | <u>60</u> Mins. | <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>106</u> P.S.I.  |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1049</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>1410</u> P.S.I. |                            |                 |                 |

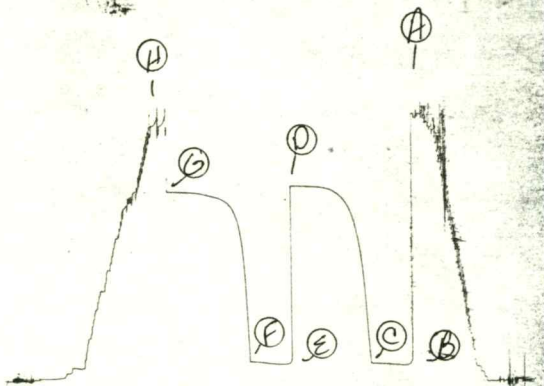
## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</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>102</u> | <u>0</u>                    | <u>97</u>   | <u>0</u>                    | <u>99</u>  | <u>0</u>                    | <u>106</u>  |
| P 2 <u>5</u>                | <u>89</u>  | <u>3</u>                    | <u>363</u>  | <u>5</u>                    | <u>93</u>  | <u>3</u>                    | <u>485</u>  |
| P 3 <u>10</u>               | <u>92</u>  | <u>6</u>                    | <u>558</u>  | <u>10</u>                   | <u>93</u>  | <u>6</u>                    | <u>914</u>  |
| P 4 <u>15</u>               | <u>95</u>  | <u>9</u>                    | <u>727</u>  | <u>15</u>                   | <u>95</u>  | <u>9</u>                    | <u>699</u>  |
| P 5 <u>20</u>               | <u>97</u>  | <u>12</u>                   | <u>834</u>  | <u>20</u>                   | <u>101</u> | <u>12</u>                   | <u>927</u>  |
| P 6 <u>25</u>               | <u>97</u>  | <u>15</u>                   | <u>908</u>  | <u>25</u>                   | <u>105</u> | <u>15</u>                   | <u>968</u>  |
| P 7 <u>30</u>               | <u>97</u>  | <u>18</u>                   | <u>962</u>  | <u>30</u>                   | <u>106</u> | <u>18</u>                   | <u>986</u>  |
| P 8                         |            | <u>21</u>                   | <u>1002</u> |                             |            | <u>21</u>                   | <u>1005</u> |
| P 9                         |            | <u>24</u>                   | <u>1024</u> |                             |            | <u>24</u>                   | <u>1013</u> |
| P10                         |            | <u>27</u>                   | <u>1047</u> |                             |            | <u>27</u>                   | <u>1019</u> |
| P11                         |            | <u>30</u>                   | <u>1060</u> |                             |            | <u>30</u>                   | <u>1026</u> |
| P12                         |            | <u>33</u>                   | <u>1070</u> |                             |            | <u>33</u>                   | <u>1032</u> |
| P13                         |            | <u>36</u>                   | <u>1075</u> |                             |            | <u>36</u>                   | <u>1038</u> |
| P14                         |            | <u>39</u>                   | <u>1079</u> |                             |            | <u>39</u>                   | <u>1041</u> |
| P15                         |            | <u>42</u>                   | <u>1080</u> |                             |            | <u>42</u>                   | <u>1043</u> |
| P16                         |            | <u>45</u>                   | <u>1081</u> |                             |            | <u>45</u>                   | <u>1045</u> |
| P17                         |            | <u>48</u>                   | <u>1081</u> |                             |            | <u>48</u>                   | <u>1046</u> |
| P18                         |            | <u>51</u>                   | <u>1082</u> |                             |            | <u>51</u>                   | <u>1047</u> |
| P19                         |            | <u>54</u>                   | <u>1082</u> |                             |            | <u>54</u>                   | <u>1048</u> |
| P20                         |            | <u>57</u>                   | <u>1083</u> |                             |            | <u>57</u>                   | <u>1049</u> |
|                             |            | <u>60</u>                   | <u>1083</u> |                             |            | <u>60</u>                   | <u>1049</u> |

KT #6661

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Box 180 H. ... 7





Blow: Fair blow building to good in initial flow period. Same blow final flow period. (No gas.)

Recovered 180 ft. of Muddy salt water (chlorides 34,000 ppm.).

Recovered 80 ft. of Salt water (88,000 ppm. Chlorides).

Recovered        ft. of

Recovered        ft. of

Recovered        ft. of

Remarks:

|                              |           |         |              |              |            |      |               |                     |                     |
|------------------------------|-----------|---------|--------------|--------------|------------|------|---------------|---------------------|---------------------|
| Time Set                     | Packer(s) | 2:26    | A.M.<br>P.M. | Time Started | Off Bottom | 5:26 | A.M.<br>P.M.  | Maximum Temperature | 110 <sup>0</sup> F. |
| Initial Hydrostatic Pressure |           |         |              | (A)          | 1491       |      | P.S.I.        |                     |                     |
| Initial Flow Period          |           | Minutes | 30           | (B)          | 82         |      | P.S.I. to (C) | 117                 | P.S.I.              |
| Initial Closed In Period     |           | Minutes | 60           | (D)          | 1106       |      | P.S.I.        |                     |                     |
| Final Flow Period            |           | Minutes | 30           | (E)          | 162        |      | P.S.I. to (F) | 171                 | P.S.I.              |
| Final Closed In Period       |           | Minutes | 60           | (G)          | 1101       |      | P.S.I.        |                     |                     |
| Final Hydrostatic Pressure   |           |         |              | (H)          | 1463       |      | P.S.I.        |                     |                     |

# WESTERN TESTING CO., INC.

## Pressure Data

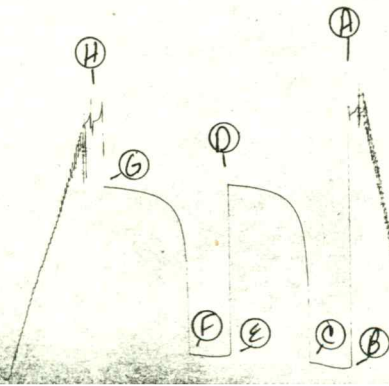
Date 8-22-80 Test Ticket No. 6662  
 Recorder No. 1566 Capacity 4300 Location 2980 Ft.  
 Clock No. --- Elevation 1874 Kelly Bushing Well Temperature 110 °F

| Point                          | Pressure           |                            | Time Given        | Time Computed   |
|--------------------------------|--------------------|----------------------------|-------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1491</u> P.S.I. | Open Tool                  | <u>2:26</u> P. M. |                 |
| B First Initial Flow Pressure  | <u>82</u> P.S.I.   | First Flow Pressure        | <u>30</u> Mins.   | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>117</u> P.S.I.  | Initial Closed-in Pressure | <u>60</u> Mins.   | <u>60</u> Mins. |
| D Initial Closed-in Pressure   | <u>1106</u> P.S.I. | Second Flow Pressure       | <u>30</u> Mins.   | <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>162</u> P.S.I.  | Final Closed-in Pressure   | <u>60</u> Mins.   | <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>171</u> P.S.I.  |                            |                   |                 |
| G Final Closed-in Pressure     | <u>1101</u> P.S.I. |                            |                   |                 |
| H Final Hydrostatic Mud        | <u>1463</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>20</u> Inc.   |             | Breakdown: <u>6</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>82</u>  | <u>0</u>                    | <u>117</u>  | <u>0</u>                    | <u>162</u> | <u>0</u>                    | <u>171</u>  |
| P 2 <u>5</u>                | <u>82</u>  | <u>3</u>                    | <u>667</u>  | <u>5</u>                    | <u>156</u> | <u>3</u>                    | <u>688</u>  |
| P 3 <u>10</u>               | <u>86</u>  | <u>6</u>                    | <u>839</u>  | <u>10</u>                   | <u>156</u> | <u>6</u>                    | <u>834</u>  |
| P 4 <u>15</u>               | <u>93</u>  | <u>9</u>                    | <u>916</u>  | <u>15</u>                   | <u>156</u> | <u>9</u>                    | <u>927</u>  |
| P 5 <u>20</u>               | <u>105</u> | <u>12</u>                   | <u>966</u>  | <u>20</u>                   | <u>160</u> | <u>12</u>                   | <u>965</u>  |
| P 6 <u>25</u>               | <u>112</u> | <u>15</u>                   | <u>996</u>  | <u>25</u>                   | <u>165</u> | <u>15</u>                   | <u>998</u>  |
| P 7 <u>30</u>               | <u>117</u> | <u>18</u>                   | <u>1019</u> | <u>30</u>                   | <u>171</u> | <u>18</u>                   | <u>1013</u> |
| P 8                         |            | <u>21</u>                   | <u>1036</u> |                             |            | <u>21</u>                   | <u>1028</u> |
| P 9                         |            | <u>24</u>                   | <u>1051</u> |                             |            | <u>24</u>                   | <u>1041</u> |
| P10                         |            | <u>27</u>                   | <u>1062</u> |                             |            | <u>27</u>                   | <u>1051</u> |
| P11                         |            | <u>30</u>                   | <u>1071</u> |                             |            | <u>30</u>                   | <u>1060</u> |
| P12                         |            | <u>33</u>                   | <u>1075</u> |                             |            | <u>33</u>                   | <u>1066</u> |
| P13                         |            | <u>36</u>                   | <u>1081</u> |                             |            | <u>36</u>                   | <u>1073</u> |
| P14                         |            | <u>39</u>                   | <u>1086</u> |                             |            | <u>39</u>                   | <u>1079</u> |
| P15                         |            | <u>42</u>                   | <u>1092</u> |                             |            | <u>42</u>                   | <u>1082</u> |
| P16                         |            | <u>45</u>                   | <u>1095</u> |                             |            | <u>45</u>                   | <u>1086</u> |
| P17                         |            | <u>48</u>                   | <u>1098</u> |                             |            | <u>48</u>                   | <u>1090</u> |
| P18                         |            | <u>51</u>                   | <u>1100</u> |                             |            | <u>51</u>                   | <u>1093</u> |
| P19                         |            | <u>54</u>                   | <u>1102</u> |                             |            | <u>54</u>                   | <u>1096</u> |
| P20                         |            | <u>57</u>                   | <u>1104</u> |                             |            | <u>57</u>                   | <u>1099</u> |
|                             |            | <u>60</u>                   | <u>1106</u> |                             |            | <u>60</u>                   | <u>1101</u> |

St # 6662  
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Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
 Elevation 1874 Kelly Bushing Formation Severy Effective Pay ----- Ft. Ticket No. 6663  
 Date 8-23-80 Sec. 10 Twp. 25 S Range 12 W County Stafford State KS  
 Test Approved by Kent A. Deutsch Western Representative Rodger Mounts  
 Formation Test No. 3 Interval Tested from 3002 ft. to 3022 ft. Total Depth 3022 ft.  
 Packer Depth 2997 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.  
 Packer Depth 3002 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.  
 Depth of Selective Zone Set -----  
 Top Recorder Depth (Inside) 3004 ft. Recorder Number 1566 Cap. 4300  
 Bottom Recorder Depth (Outside) 3007 ft. Recorder Number 3086 Cap. 4500  
 Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. -----  
 Drilling Contractor H-30 Drilling Inc. Rig # 3 Drill Collar Length 180 I. D. 2.2 in.  
 Mud Type Chemical Viscosity 39 Weight Pipe Length ----- I. D. ----- in.  
 Weight 9.3 Water Loss 44 cc. Drill Pipe Length 2802 I. D. 3.8 in.  
 Chlorides 21,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
 Jars: Make NO Serial Number --- Anchor Length 20 ft. Size 5 1/2 OD in.  
 Did Well Flow? NO 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: Weak blow building slightly through initial flow period. Weak blow final flow period.

Recovered 60 ft. of Slightly oil and gas cut mud.  
 Recovered 60 ft. of Slightly oil and gas cut muddy water (46,000 ppm Chlorides)  
 Recovered        ft. of         
 Recovered        ft. of         
 Recovered        ft. of         
 Remarks:       

Time Set Packer(s) 3:52 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 6:52 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 102<sup>0</sup> F.  
 Initial Hydrostatic Pressure        (A) 1506 P.S.I.  
 Initial Flow Period        Minutes 30 (B) 58 P.S.I. to (C) 69 P.S.I.  
 Initial Closed In Period        Minutes 60 (D) 1101 P.S.I.  
 Final Flow Period        Minutes 30 (E) 136 P.S.I. to (F) 122 P.S.I.  
 Final Closed In Period        Minutes 60 (G) 1077 P.S.I.  
 Final Hydrostatic Pressure        (H) 1496 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-23-80 Test Ticket No. 6663  
 Recorder No. 1566 Capacity 4300 Location 3004 Ft.  
 Clock No. ----- Elevation 1874 Kelly Bushing Well Temperature 102 °F

| Point                          | Pressure           | Time Given        | Time Computed   |
|--------------------------------|--------------------|-------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1506</u> P.S.I. | <u>3:52</u> A. M. |                 |
| B First Initial Flow Pressure  | <u>58</u> P.S.I.   | <u>30</u> Mins.   | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>69</u> P.S.I.   | <u>60</u> Mins.   | <u>60</u> Mins. |
| D Initial Closed-in Pressure   | <u>1101</u> P.S.I. | <u>30</u> Mins.   | <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>136</u> P.S.I.  | <u>60</u> Mins.   | <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>122</u> P.S.I.  |                   |                 |
| G Final Closed-in Pressure     | <u>1077</u> P.S.I. |                   |                 |
| H Final Hydrostatic Mud        | <u>1496</u> P.S.I. |                   |                 |

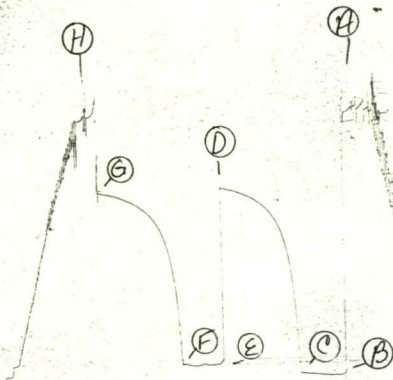
## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</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>58</u> | <u>0</u>                    | <u>69</u>   | <u>0</u>                    | <u>136</u> | <u>0</u>                    | <u>122</u>  |
| P 2 <u>5</u>                | <u>56</u> | <u>3</u>                    | <u>355</u>  | <u>5</u>                    | <u>121</u> | <u>3</u>                    | <u>426</u>  |
| P 3 <u>10</u>               | <u>56</u> | <u>6</u>                    | <u>566</u>  | <u>10</u>                   | <u>118</u> | <u>6</u>                    | <u>594</u>  |
| P 4 <u>15</u>               | <u>56</u> | <u>9</u>                    | <u>712</u>  | <u>15</u>                   | <u>122</u> | <u>9</u>                    | <u>705</u>  |
| P 5 <u>20</u>               | <u>60</u> | <u>12</u>                   | <u>802</u>  | <u>20</u>                   | <u>114</u> | <u>12</u>                   | <u>785</u>  |
| P 6 <u>25</u>               | <u>64</u> | <u>15</u>                   | <u>862</u>  | <u>25</u>                   | <u>119</u> | <u>15</u>                   | <u>852</u>  |
| P 7 <u>30</u>               | <u>69</u> | <u>18</u>                   | <u>908</u>  | <u>30</u>                   | <u>122</u> | <u>18</u>                   | <u>893</u>  |
| P 8                         |           | <u>21</u>                   | <u>944</u>  |                             |            | <u>21</u>                   | <u>927</u>  |
| P 9                         |           | <u>24</u>                   | <u>972</u>  |                             |            | <u>24</u>                   | <u>952</u>  |
| P10                         |           | <u>27</u>                   | <u>994</u>  |                             |            | <u>27</u>                   | <u>973</u>  |
| P11                         |           | <u>30</u>                   | <u>1015</u> |                             |            | <u>30</u>                   | <u>991</u>  |
| P12                         |           | <u>33</u>                   | <u>1030</u> |                             |            | <u>33</u>                   | <u>1009</u> |
| P13                         |           | <u>36</u>                   | <u>1042</u> |                             |            | <u>36</u>                   | <u>1021</u> |
| P14                         |           | <u>39</u>                   | <u>1056</u> |                             |            | <u>39</u>                   | <u>1034</u> |
| P15                         |           | <u>42</u>                   | <u>1063</u> |                             |            | <u>42</u>                   | <u>1042</u> |
| P16                         |           | <u>45</u>                   | <u>1073</u> |                             |            | <u>45</u>                   | <u>1049</u> |
| P17                         |           | <u>48</u>                   | <u>1080</u> |                             |            | <u>48</u>                   | <u>1058</u> |
| P18                         |           | <u>51</u>                   | <u>1086</u> |                             |            | <u>51</u>                   | <u>1063</u> |
| P19                         |           | <u>54</u>                   | <u>1092</u> |                             |            | <u>54</u>                   | <u>1070</u> |
| P20                         |           | <u>57</u>                   | <u>1096</u> |                             |            | <u>57</u>                   | <u>1073</u> |
|                             |           | <u>60</u>                   | <u>1101</u> |                             |            | <u>60</u>                   | <u>1077</u> |

1566

JKT # 6663

I





Company W.L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Formation Severy Effective Pay ----- Ft. Ticker No. 6664  
Date 8-23-80 Sec. 10 Twp. 25 S Range 12 W County Stafford State KS  
Test Approved by Kent A Deutsch Western Representative Rodger Mounts

Formation Test No. 4 Interval Tested from 3024 ft. to 3045 ft. Total Depth 3045 ft.

Packer Depth 3019 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.

Packer Depth 3024 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.

Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3031 ft.

Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 3034 ft.

Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth ----- ft.

Recorder Number ----- Cap. -----

Drilling Contractor H-30 Drilling Inc. Rig # 3

Drill Collar Length 180 I. D. 2.2 in.

Mud Type Chemical Viscosity 39

Weight Pipe Length ----- I. D. ----- in.

Weight 9.3 Water Loss 44 cc.

Drill Pipe Length ----- I. D. 3.8 in.

Chlorides 21,000 P.P.M.

Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make NO Serial Number -----

Anchor Length 21 ft. Size 5 1/2 OD 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: No blow throughout test.

Recovered 130 ft. of Drilling mud (23,000 ppm Chlorides)

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks: Dead test, flushed tool twice on initial flow period. Once on final flow period.

Time Set Packer(s) 4:17 ~~\*\*\*~~ P.M. Time Started Off Bottom 4:47 ~~\*\*\*~~ P.M. Maximum Temperature 102<sup>0</sup> F.

Initial Hydrostatic Pressure        (A) 1560 P.S.I.

Initial Flow Period        Minutes 20 (B) 54 P.S.I. to (C) 69 P.S.I.

Initial Closed In Period        Minutes 15 (D) 1026 P.S.I.

Final Flow Period        Minutes -- (E) ----- P.S.I. to (F) ----- P.S.I.

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

Final Hydrostatic Pressure        (H) 1489 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-23-80 Test Ticket No. 6664  
 Recorder No. 1566 Capacity 4300 Location 3031 Ft.  
 Clock No. ----- Elevation 1874 Kelly Bushing Well Temperature 102 °F

| Point                          | Pressure           |                            | Time Given        | Time Computed   |
|--------------------------------|--------------------|----------------------------|-------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1560</u> P.S.I. | Open Tool                  | <u>4:17</u> P. M. |                 |
| B First Initial Flow Pressure  | <u>54</u> P.S.I.   | First Flow Pressure        | <u>15</u> Mins.   | <u>20</u> Mins. |
| C First Final Flow Pressure    | <u>69</u> P.S.I.   | Initial Closed-in Pressure | <u>15</u> Mins.   | <u>15</u> Mins. |
| D Initial Closed-in Pressure   | <u>1026</u> P.S.I. | Second Flow Pressure       | <u>--</u> Mins.   | <u>--</u> Mins. |
| E Second Initial Flow Pressure | <u>---</u> P.S.I.  | Final Closed-in Pressure   | <u>--</u> Mins.   | <u>--</u> Mins. |
| F Second Final Flow Pressure   | <u>---</u> P.S.I.  |                            |                   |                 |
| G Final Closed-in Pressure     | <u>---</u> P.S.I.  |                            |                   |                 |
| H Final Hydrostatic Mud        | <u>1489</u> P.S.I. |                            |                   |                 |

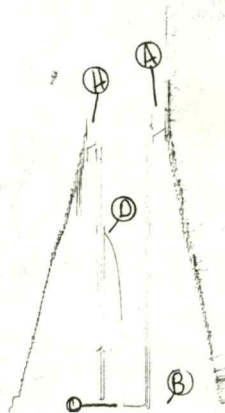
## PRESSURE BREAKDOWN

| First Flow Pressure         |                        | Initial Shut-In             |             | Second Flow Pressure        |        | Final Shut-In               |        |
|-----------------------------|------------------------|-----------------------------|-------------|-----------------------------|--------|-----------------------------|--------|
| Breakdown: <u>4</u> Inc.    |                        | Breakdown: <u>5</u> Inc.    |             | Breakdown: <u>----</u> Inc. |        | Breakdown: <u>---</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>54</u>              | <u>0</u>                    | <u>69</u>   |                             |        |                             |        |
| P 2 <u>5</u>                | <u>73</u> Flushed Tool | <u>3</u>                    | <u>590</u>  |                             |        |                             |        |
| P 3 <u>10</u>               | <u>69</u>              | <u>6</u>                    | <u>815</u>  |                             |        |                             |        |
| P 4 <u>15</u>               | <u>69</u>              | <u>9</u>                    | <u>923</u>  |                             |        |                             |        |
| P 5 <u>20</u>               | <u>69</u>              | <u>12</u>                   | <u>981</u>  |                             |        |                             |        |
| P 6                         |                        | <u>15</u>                   | <u>1026</u> |                             |        |                             |        |
| P 7                         |                        |                             |             |                             |        |                             |        |
| P 8                         |                        |                             |             |                             |        |                             |        |
| P 9                         |                        |                             |             |                             |        |                             |        |
| P10                         |                        |                             |             |                             |        |                             |        |
| P11                         |                        |                             |             |                             |        |                             |        |
| P12                         |                        |                             |             |                             |        |                             |        |
| P13                         |                        |                             |             |                             |        |                             |        |
| P14                         |                        |                             |             |                             |        |                             |        |
| P15                         |                        |                             |             |                             |        |                             |        |
| P16                         |                        |                             |             |                             |        |                             |        |
| P17                         |                        |                             |             |                             |        |                             |        |
| P18                         |                        |                             |             |                             |        |                             |        |
| P19                         |                        |                             |             |                             |        |                             |        |
| P20                         |                        |                             |             |                             |        |                             |        |

1566

JKT # 6664

I





W. L. Kirkman, Inc.

McFadden #1

Company \_\_\_\_\_ Lease & Well No. \_\_\_\_\_  
 Elevation 1874 Kelly Bushing Topeka Formation \_\_\_\_\_ Effective Pay \_\_\_\_\_ Ft. Ticket No. 6665  
 Date 8/24/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
 Test Approved by L. Kristopher Western Representative Roger Mounts

Formation Test No. 5 Interval Tested from 3121 ft. to 3149 ft. Total Depth 3149 ft.

Packer Depth 3116 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3121 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3128 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 3131 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor H-30 Drilling, Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.

Mud Type chemical Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 50 cc. Drill Pipe Length 2921 I. D. 3.8 in.

Chlorides 32,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make No Serial Number - Anchor Length 28 ft. Size 5 1/2 OD in.

Did Well Flow? No 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

Blow: \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: TOOL STOPPED ONE HUNDRED NINETY FEET OFF BOTTOM: COULD NOT GET TO BOTTOM: CAME OUT.

NO PESSIONS AVAILABLE

Time Set Packer(s) \_\_\_\_\_ A.M. \_\_\_\_\_ P.M. Time Started Off Bottom \_\_\_\_\_ A.M. \_\_\_\_\_ P.M. Maximum Temperature \_\_\_\_\_

Initial Hydrostatic Pressure \_\_\_\_\_ (A) \_\_\_\_\_ P.S.I.

Initial Flow Period \_\_\_\_\_ Minutes \_\_\_\_\_ (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.

Initial Closed In Period \_\_\_\_\_ Minutes \_\_\_\_\_ (D) \_\_\_\_\_ P.S.I.

Final Flow Period \_\_\_\_\_ Minutes \_\_\_\_\_ (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.

Final Closed In Period \_\_\_\_\_ Minutes \_\_\_\_\_ (G) \_\_\_\_\_ P.S.I.

Final Hydrostatic Pressure \_\_\_\_\_ (H) \_\_\_\_\_ P.S.I.

MISRUN

SKT # 6665

I

Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Formation Topeka Effective Pay ----- Ft. Ticket No. 6666  
Date 8-24-80 Sec. 10 Twp. 25 S Range 12 W County Stafford State KS  
Test Approved by Kent A. Deutsch Western Representative Rodger Mounts  
Formation Test No. 6 Interval Tested from 3121 ft. to 3149 ft. Total Depth 3149 ft.  
Packer Depth 3116 ft. Size 6 3/4 in. Packer Depth ----- ft. Size --- in.  
Packer Depth 3121 ft. Size 6 3/4 in. Packer Depth ----- ft. Size --- in.  
Depth of Selective Zone Set -----  
Top Recorder Depth (Inside) 3128 ft. Recorder Number 1566 Cap. 4300  
Bottom Recorder Depth (Outside) 3131 ft. Recorder Number 3086 Cap. 4500  
Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. ----  
Drilling Contractor H-30 Drilling Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.  
Mud Type Chemical Viscosity 41 Weight Pipe Length ----- I. D. ----- in.  
Weight 9.3 Water Loss 38 cc. Drill Pipe Length 2921 I. D. 3.8 in.  
Chlorides 20,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make NO Serial Number ---- Anchor Length 28 ft. Size 5 1/2 OD in.  
Did Well Flow? NO Reversed Out YES 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: Strong blow throughout both flow periods. (No gas.)

Recovered 1949 ft. of Salt Water (68,000 ppm Chlorides)

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 9:14 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 12:14 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 108<sup>0</sup> F.  
Initial Hydrostatic Pressure        (A) 1580 P.S.I.  
Initial Flow Period        Minutes 30 (B) 411 P.S.I. to (C) 688 P.S.I.  
Initial Closed In Period        Minutes 60 (D) 1332 P.S.I.  
Final Flow Period        Minutes 30 (E) 798 P.S.I. to (F) 909 P.S.I.  
Final Closed In Period        Minutes 60 (G) 1266 P.S.I.  
Final Hydrostatic Pressure        (H) 1522 P.S.I.



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-24-80 Test Ticket No. 6666  
 Recorder No. 1566 Capacity 4300 Location 3128 Ft.  
 Clock No. ----- Elevation 1874 KELLY Bushing Well Temperature 108 °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 1580 P.S.I. Open Tool 9:14 P. M.  
 B First Initial Flow Pressure 411 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 C First Final Flow Pressure 688 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 D Initial Closed-in Pressure 1332 P.S.I. Second Flow Pressure 30 Mins. 30 Mins.  
 E Second Initial Flow Pressure 798 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 F Second Final Flow Pressure 909 P.S.I.  
 G Final Closed-in Pressure 1266 P.S.I.  
 H Final Hydrostatic Mud 1522 P.S.I.

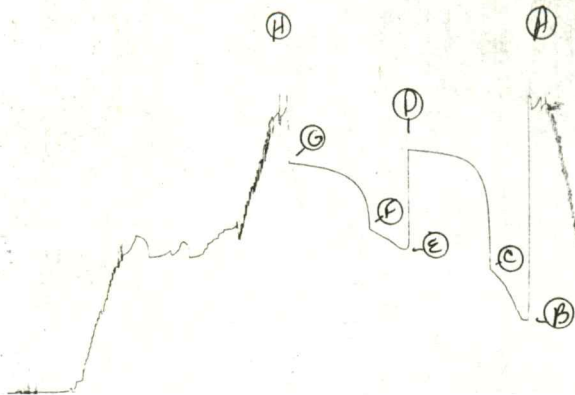
## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</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>411</u> | <u>0</u>                    | <u>688</u>  | <u>0</u>                    | <u>798</u> | <u>0</u>                    | <u>909</u>  |
| P 2 <u>5</u>                | <u>420</u> | <u>3</u>                    | <u>1041</u> | <u>5</u>                    | <u>798</u> | <u>3</u>                    | <u>1068</u> |
| P 3 <u>10</u>               | <u>491</u> | <u>6</u>                    | <u>1146</u> | <u>10</u>                   | <u>825</u> | <u>6</u>                    | <u>1109</u> |
| P 4 <u>15</u>               | <u>568</u> | <u>9</u>                    | <u>1188</u> | <u>15</u>                   | <u>850</u> | <u>9</u>                    | <u>1137</u> |
| P 5 <u>20</u>               | <u>622</u> | <u>12</u>                   | <u>1227</u> | <u>20</u>                   | <u>871</u> | <u>12</u>                   | <u>1163</u> |
| P 6 <u>25</u>               | <u>661</u> | <u>15</u>                   | <u>1251</u> | <u>25</u>                   | <u>890</u> | <u>15</u>                   | <u>1178</u> |
| P 7 <u>30</u>               | <u>688</u> | <u>18</u>                   | <u>1270</u> | <u>30</u>                   | <u>909</u> | <u>18</u>                   | <u>1195</u> |
| P 8                         |            | <u>21</u>                   | <u>1284</u> |                             |            | <u>21</u>                   | <u>1205</u> |
| P 9                         |            | <u>24</u>                   | <u>1291</u> |                             |            | <u>24</u>                   | <u>1214</u> |
| P10                         |            | <u>27</u>                   | <u>1296</u> |                             |            | <u>27</u>                   | <u>1221</u> |
| P11                         |            | <u>30</u>                   | <u>1302</u> |                             |            | <u>30</u>                   | <u>1229</u> |
| P12                         |            | <u>33</u>                   | <u>1309</u> |                             |            | <u>33</u>                   | <u>1237</u> |
| P13                         |            | <u>36</u>                   | <u>1313</u> |                             |            | <u>36</u>                   | <u>1242</u> |
| P14                         |            | <u>39</u>                   | <u>1316</u> |                             |            | <u>39</u>                   | <u>1245</u> |
| P15                         |            | <u>42</u>                   | <u>1319</u> |                             |            | <u>42</u>                   | <u>1248</u> |
| P16                         |            | <u>45</u>                   | <u>1322</u> |                             |            | <u>45</u>                   | <u>1251</u> |
| P17                         |            | <u>48</u>                   | <u>1324</u> |                             |            | <u>48</u>                   | <u>1254</u> |
| P18                         |            | <u>51</u>                   | <u>1326</u> |                             |            | <u>51</u>                   | <u>1257</u> |
| P19                         |            | <u>54</u>                   | <u>1328</u> |                             |            | <u>54</u>                   | <u>1260</u> |
| P20                         |            | <u>57</u>                   | <u>1330</u> |                             |            | <u>57</u>                   | <u>1263</u> |
|                             |            | <u>60</u>                   | <u>1332</u> |                             |            | <u>60</u>                   | <u>1266</u> |

St # 6666

I

1566



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Formation Lansing Effective Pay ---- Ft. Ticket No. 6667  
Date 8/26/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas

Test Approved by Kent Deutsch Western Representative Roger A. Mounts

Formation Test No. 7 Interval Tested from 3572 ft. to 3590 ft. Total Depth 3590 ft.  
Packer Depth 3567 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 3572 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3574 ft. Recorder Number 1566 Cap. 4300  
Bottom Recorder Depth (Outside) 3577 ft. Recorder Number 3086 Cap. 4500  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.  
Mud Type chemical Viscosity 42 Weight Pipe Length - I. D. - in.  
Weight 9.4 Water Loss 44 cc. Drill Pipe Length 3372 I. D. 3.8 in.  
Chlorides 23,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make -- Serial Number - Anchor Length 18 ft. Size 5 1/2 OD 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: Good building blow on initial flow period. Same blow on final flow period. No gas to surface

Recovered 80 ft. of drilling mud slightly oil spotting last one foot.  
Recovered        ft. of         
Recovered        ft. of         
Recovered        ft. of         
Recovered        ft. of       

Remarks:       

Time Set Packer(s) 10:19 A.M. Time Started Off Bottom 2:01 A.M. Maximum Temperature 102°  
P.M. P.M.  
Initial Hydrostatic Pressure        (A) 1796 P.S.I.  
Initial Flow Period 30 Minutes (B) 71 P.S.I. to (C) 54 P.S.I.  
Initial Closed In Period 57 Minutes (D) 260 P.S.I.  
Final Flow Period 45 Minutes (E) 65 P.S.I. to (F) 60 P.S.I.  
Final Closed In Period 87 Minutes (G) 422 P.S.I.  
Final Hydrostatic Pressure        (H) 1763 P.S.I.



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/26/80  
 Recorder No. 1566 Capacity 4300 Test Ticket No. 6667  
 Clock No. ---- Elevation 1874 Kelly Bushing Location 3574 Fr. 102 °F  
 Well Temperature

| Point                          | Pressure    |        | Time Given    | Time Computed |
|--------------------------------|-------------|--------|---------------|---------------|
| A Initial Hydrostatic Mud      | <u>1796</u> | P.S.I. | <u>10:19A</u> | <u>M</u>      |
| B First Initial Flow Pressure  | <u>71</u>   | P.S.I. | <u>30</u>     | <u>30</u>     |
| C First Final Flow Pressure    | <u>54</u>   | P.S.I. | <u>60</u>     | <u>57</u>     |
| D Initial Closed-in Pressure   | <u>260</u>  | P.S.I. | <u>45</u>     | <u>45</u>     |
| E Second Initial Flow Pressure | <u>65</u>   | P.S.I. | <u>90</u>     | <u>87</u>     |
| F Second Final Flow Pressure   | <u>60</u>   | P.S.I. |               |               |
| G Final Closed-in Pressure     | <u>422</u>  | P.S.I. |               |               |
| H Final Hydrostatic Mud        | <u>1763</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>19</u> Inc.   |            | Breakdown: <u>9</u> Inc.    |           | Breakdown: <u>29</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>71</u> | <u>0</u>                    | <u>54</u>  | <u>0</u>                    | <u>65</u> | <u>0</u>                    | <u>60</u>  |
| P 2 <u>5</u>                | <u>61</u> | <u>3</u>                    | <u>59</u>  | <u>5</u>                    | <u>60</u> | <u>3</u>                    | <u>65</u>  |
| P 3 <u>10</u>               | <u>58</u> | <u>6</u>                    | <u>71</u>  | <u>10</u>                   | <u>60</u> | <u>6</u>                    | <u>76</u>  |
| P 4 <u>15</u>               | <u>56</u> | <u>9</u>                    | <u>84</u>  | <u>15</u>                   | <u>60</u> | <u>9</u>                    | <u>91</u>  |
| P 5 <u>20</u>               | <u>56</u> | <u>12</u>                   | <u>97</u>  | <u>20</u>                   | <u>60</u> | <u>12</u>                   | <u>104</u> |
| P 6 <u>25</u>               | <u>54</u> | <u>15</u>                   | <u>106</u> | <u>25</u>                   | <u>60</u> | <u>15</u>                   | <u>117</u> |
| P 7 <u>30</u>               | <u>54</u> | <u>18</u>                   | <u>114</u> | <u>30</u>                   | <u>60</u> | <u>18</u>                   | <u>130</u> |
| P 8                         |           | <u>21</u>                   | <u>127</u> | <u>35</u>                   | <u>60</u> | <u>21</u>                   | <u>144</u> |
| P 9                         |           | <u>24</u>                   | <u>137</u> | <u>40</u>                   | <u>60</u> | <u>24</u>                   | <u>157</u> |
| P10                         |           | <u>27</u>                   | <u>149</u> | <u>45</u>                   | <u>60</u> | <u>27</u>                   | <u>167</u> |
| P11                         |           | <u>30</u>                   | <u>162</u> |                             |           | <u>30</u>                   | <u>181</u> |
| P12                         |           | <u>33</u>                   | <u>173</u> |                             |           | <u>33</u>                   | <u>193</u> |
| P13                         |           | <u>36</u>                   | <u>186</u> |                             |           | <u>36</u>                   | <u>207</u> |
| P14                         |           | <u>39</u>                   | <u>195</u> |                             |           | <u>39</u>                   | <u>220</u> |
| P15                         |           | <u>42</u>                   | <u>206</u> |                             |           | <u>42</u>                   | <u>233</u> |
| P16                         |           | <u>45</u>                   | <u>216</u> |                             |           | <u>45</u>                   | <u>248</u> |
| P17                         |           | <u>48</u>                   | <u>225</u> |                             |           | <u>48</u>                   | <u>260</u> |
| P18                         |           | <u>51</u>                   | <u>239</u> |                             |           | <u>51</u>                   | <u>272</u> |
| P19                         |           | <u>54</u>                   | <u>249</u> |                             |           | <u>54</u>                   | <u>284</u> |
| P20                         |           | <u>57</u>                   | <u>260</u> |                             |           | <u>57</u>                   | <u>298</u> |
|                             |           |                             |            |                             |           | <u>60</u>                   | <u>313</u> |

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

Date 8/26/80 Test Ticket No. 6667  
Recorder No. 1566 Capacity 4300 Location 3574 Ft.  
Clock No. ---- Elevation 1874 Kelly Bushing Well Temperature 102 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1796</u> P.S.I. | Open Tool                  | <u>10:19A</u> M |                 |
| B First Initial Flow Pressure  | <u>71</u> P.S.I.   | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>54</u> P.S.I.   | Initial Closed-in Pressure | <u>60</u> Mins. | <u>57</u> Mins. |
| D Initial Closed-in Pressure   | <u>260</u> P.S.I.  | Second Flow Pressure       | <u>45</u> Mins. | <u>45</u> Mins. |
| E Second Initial Flow Pressure | <u>65</u> P.S.I.   | Final Closed-in Pressure   | <u>90</u> Mins. | <u>87</u> Mins. |
| F Second Final Flow Pressure   | <u>60</u> P.S.I.   |                            |                 |                 |
| G Final Closed-in Pressure     | <u>422</u> P.S.I.  |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>1763</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>19</u> Inc.   |        | Breakdown: <u>9</u> Inc.    |        | Breakdown: <u>29</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                         |        |                             |        |                             |        | 63                          | 322    |
| P 2                         |        |                             |        |                             |        | 66                          | 337    |
| P 3                         |        |                             |        |                             |        | 69                          | 348    |
| P 4                         |        |                             |        |                             |        | 72                          | 361    |
| P 5                         |        |                             |        |                             |        | 75                          | 372    |
| P 6                         |        |                             |        |                             |        | 78                          | 383    |
| P 7                         |        |                             |        |                             |        | 81                          | 396    |
| P 8                         |        |                             |        |                             |        | 84                          | 409    |
| P 9                         |        |                             |        |                             |        | 87                          | 422    |
| P10                         |        |                             |        |                             |        |                             |        |
| P11                         |        |                             |        |                             |        |                             |        |
| P12                         |        |                             |        |                             |        |                             |        |
| P13                         |        |                             |        |                             |        |                             |        |
| P14                         |        |                             |        |                             |        |                             |        |
| P15                         |        |                             |        |                             |        |                             |        |
| P16                         |        |                             |        |                             |        |                             |        |
| P17                         |        |                             |        |                             |        |                             |        |
| P18                         |        |                             |        |                             |        |                             |        |
| P19                         |        |                             |        |                             |        |                             |        |
| P20                         |        |                             |        |                             |        |                             |        |

Plot # 6667

I

(H)

(A)

(G)

(D)

(F)

(E)

(C)

(B)



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
 Elevation 1874 Kelly Bushing Lansing Formation 8 Effective Pay ---- Ft. Ticket No. 6668  
 Date 8/27/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
 Test Approved by Kent A. Deutsch Western Representative Roger Mounts  
 Formation Test No. 8 Interval Tested from 3640 ft. to 3683 ft. Total Depth 3683 ft.  
 Packer Depth 3635 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 3640 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 3642 ft. Recorder Number 1566 Cap. 4300  
 Bottom Recorder Depth (Outside) 3645 ft. Recorder Number 3086 Cap. 4500  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
 Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.  
 Mud Type chemical Viscosity 40 Weight Pipe Length - I. D. - in.  
 Weight 9.1 Water Loss 36.4 cc. Drill Pipe Length 3440 I. D. 3.8 in.  
 Chlorides 17,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
 Jars: Make No Serial Number - Anchor Length 43 ft. Size 5 1/2 OD in.  
 Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.

Blow: Weak blow building initial flow period (off bottom seven inches) Same  
blow final flow period. (No gas)  
 Recovered 66 ft. of drilling mud  
 Recovered 120 ft. of muddy salt water (52,000 ppm chlorides)  
 Recovered 60 ft. of salt water (68,000 ppm chlorides)  
 Recovered        ft. of         
 Recovered        ft. of         
 Remarks:       

Time Set Packer(s) 6:15 ~~P.M.~~ A.M. Time Started Off Bottom 9:15 ~~P.M.~~ A.M. Maximum Temperature 112°  
 Initial Hydrostatic Pressure 1917 (A) P.S.I.  
 Initial Flow Period 30 Minutes (B) 56 P.S.I. to (C) 93 P.S.I.  
 Initial Closed In Period 60 Minutes (D) 1302 P.S.I.  
 Final Flow Period 30 Minutes (E) 138 P.S.I. to (F) 144 P.S.I.  
 Final Closed In Period 63 Minutes (G) 1282 P.S.I.  
 Final Hydrostatic Pressure 1824 (H) P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/27/80 Test Ticket No. 6668  
 Recorder No. 1566 Capacity 4300 Location 3642 Ft.  
 Clock No. ---- Elevation 1874 Kelly Bushing Well Temperature 112 °F

| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 1917     | P.S.I. | 6:15A      | M              |
| B First Initial Flow Pressure  | 56       | P.S.I. | 30         | Mins. 30 Mins. |
| C First Final Flow Pressure    | 93       | P.S.I. | 60         | Mins. 60 Mins. |
| D Initial Closed-in Pressure   | 1302     | P.S.I. | 30         | Mins. 30 Mins. |
| E Second Initial Flow Pressure | 138      | P.S.I. | 60         | Mins. 63 Mins. |
| F Second Final Flow Pressure   | 144      | P.S.I. |            |                |
| G Final Closed-in Pressure     | 1282     | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 1824     | P.S.I. |            |                |

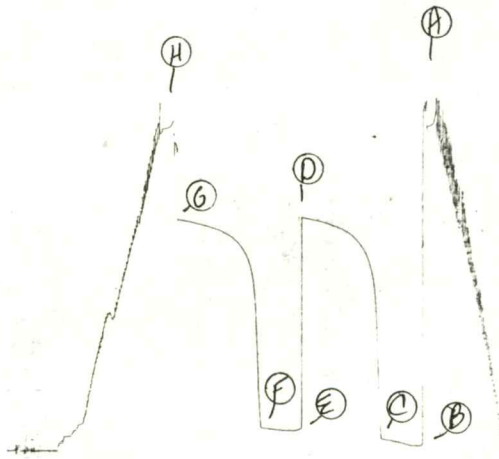
## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>21</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>56</u> | <u>0</u>                    | <u>93</u>   | <u>0</u>                    | <u>138</u> | <u>0</u>                    | <u>144</u>  |
| P 2 <u>5</u>                | <u>56</u> | <u>3</u>                    | <u>463</u>  | <u>5</u>                    | <u>134</u> | <u>3</u>                    | <u>497</u>  |
| P 3 <u>10</u>               | <u>60</u> | <u>6</u>                    | <u>858</u>  | <u>10</u>                   | <u>134</u> | <u>6</u>                    | <u>808</u>  |
| P 4 <u>15</u>               | <u>71</u> | <u>9</u>                    | <u>1004</u> | <u>15</u>                   | <u>134</u> | <u>9</u>                    | <u>998</u>  |
| P 5 <u>20</u>               | <u>80</u> | <u>12</u>                   | <u>1070</u> | <u>20</u>                   | <u>138</u> | <u>12</u>                   | <u>1070</u> |
| P 6 <u>25</u>               | <u>86</u> | <u>15</u>                   | <u>1124</u> | <u>25</u>                   | <u>141</u> | <u>15</u>                   | <u>1111</u> |
| P 7 <u>30</u>               | <u>93</u> | <u>18</u>                   | <u>1158</u> | <u>30</u>                   | <u>144</u> | <u>18</u>                   | <u>1145</u> |
| P 8 _____                   |           | <u>21</u>                   | <u>1182</u> |                             |            | <u>21</u>                   | <u>1169</u> |
| P 9 _____                   |           | <u>24</u>                   | <u>1203</u> |                             |            | <u>24</u>                   | <u>1188</u> |
| P10 _____                   |           | <u>27</u>                   | <u>1218</u> |                             |            | <u>27</u>                   | <u>1202</u> |
| P11 _____                   |           | <u>30</u>                   | <u>1231</u> |                             |            | <u>30</u>                   | <u>1216</u> |
| P12 _____                   |           | <u>33</u>                   | <u>1245</u> |                             |            | <u>33</u>                   | <u>1226</u> |
| P13 _____                   |           | <u>36</u>                   | <u>1253</u> |                             |            | <u>36</u>                   | <u>1236</u> |
| P14 _____                   |           | <u>39</u>                   | <u>1261</u> |                             |            | <u>39</u>                   | <u>1241</u> |
| P15 _____                   |           | <u>42</u>                   | <u>1268</u> |                             |            | <u>42</u>                   | <u>1248</u> |
| P16 _____                   |           | <u>45</u>                   | <u>1277</u> |                             |            | <u>45</u>                   | <u>1256</u> |
| P17 _____                   |           | <u>48</u>                   | <u>1284</u> |                             |            | <u>48</u>                   | <u>1261</u> |
| P18 _____                   |           | <u>51</u>                   | <u>1287</u> |                             |            | <u>51</u>                   | <u>1266</u> |
| P19 _____                   |           | <u>54</u>                   | <u>1290</u> |                             |            | <u>54</u>                   | <u>1270</u> |
| P20 _____                   |           | <u>57</u>                   | <u>1298</u> |                             |            | <u>57</u>                   | <u>1274</u> |
|                             |           | <u>60</u>                   | <u>1302</u> |                             |            | <u>60</u>                   | <u>1278</u> |
|                             |           |                             |             |                             |            | <u>63</u>                   | <u>1282</u> |

Jkt # 6668

I

1566





Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Viola Formation Effective Pay ---- Ft. Ticket No. 6669  
Date 8/28/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
Test Approved by Kent A. Deutsch Western Representative Roger Mounts

Formation Test No. 9 Interval Tested from 3937 ft. to 3971 ft. Total Depth 3971 ft.

Packer Depth 3952 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3965 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 3968 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.

Mud Type chemical Viscosity 43 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 19.6 cc. Drill Pipe Length 3757 I. D. 3.8 in.

Chlorides 13,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD

Jars: Make No Serial Number - Anchor Length 14 ft. Size 5 1/2 OD

Did Well Flow? No 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: Weak blow dying in eight minutes.

Recovered 3821 ft. of drilling mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: Pulled three stands and hit fluid

### NO PRESSURES AVAILABLE

Time Set Packer(s) 7:23 AM P.M. Time Started Off Bottom 8:08 AM P.M. Maximum Temperature 106°

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

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

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

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

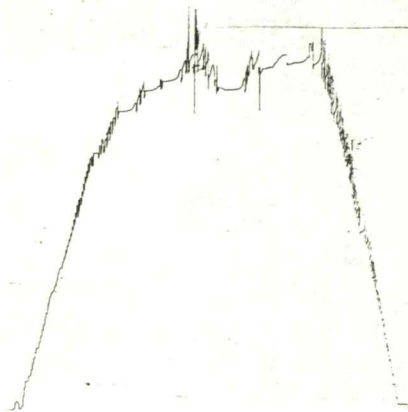
Final Closed In Period ..... Minutes ..... (G) ..... P.S.I.

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

1566

DKT # 6669

I



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Formation Simpson Effective Pay ---- Ft. Ticket No. 6670  
Date 8/29/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas

Test Approved by Kent Deutsch Western Representative Roger A. Mounts

Formation Test No. 10 Interval Tested from 4128 ft. to 4146 ft. Total Depth 4146 ft.

Packer Depth 4123 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4128 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4135 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4138 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.

Mud Type chemical Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 23.2 cc. Drill Pipe Length 3828 I. D. 3.8 in.

Chlorides 13,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make No Serial Number - Anchor Length 18 ft. Size 5 1/2 OD in.

Did Well Flow? No 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: Weak blow with building on initial flow period. Same blow on final flow period. (No Gas)

Recovered 30 ft. of slightly oil cut mud and three hundred feet gas in pipe

Recovered 60 ft. of slightly oil cut muddy water 18,000 ppm chlorides

Recovered 180 ft. of salt water 22,000 ppm chlorides

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 9:32 A.M. Time Started Off Bottom 12:32 P.M. Maximum Temperature 126°

Initial Hydrostatic Pressure 2137 P.S.I.

Initial Flow Period 30 Minutes (A) 50 P.S.I. to (C) 86 P.S.I.

Initial Closed In Period 60 Minutes (D) 1285 P.S.I.

Final Flow Period 30 Minutes (E) 134 P.S.I. to (F) 138 P.S.I.

Final Closed In Period 60 Minutes (G) 1279 P.S.I.

Final Hydrostatic Pressure 2009 P.S.I.



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/29/80  
 Recorder No. 1566 Capacity 4300 Test Ticket No. 6670  
 Clock No. --- Elevation 1874 Kelly Bushing Location 4135 Ft. 126 °F

| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 2137     | P.S.I. | 9:32P      | M              |
| B First Initial Flow Pressure  | 50       | P.S.I. | 30         | Mins. 30 Mins. |
| C First Final Flow Pressure    | 86       | P.S.I. | 60         | Mins. 60 Mins. |
| D Initial Closed-in Pressure   | 1285     | P.S.I. | 30         | Mins. 30 Mins. |
| E Second Initial Flow Pressure | 134      | P.S.I. | 60         | Mins. 60 Mins. |
| F Second Final Flow Pressure   | 138      | P.S.I. |            |                |
| G Final Closed-in Pressure     | 1279     | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 2009     | P.S.I. |            |                |

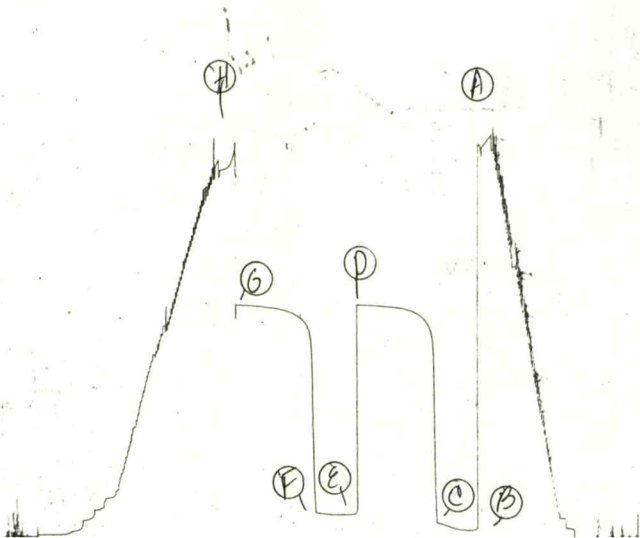
### PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</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>50</u> | <u>0</u>                    | <u>86</u>   | <u>0</u>                    | <u>134</u> | <u>0</u>                    | <u>138</u>  |
| P 2 <u>5</u>                | <u>45</u> | <u>3</u>                    | <u>824</u>  | <u>5</u>                    | <u>313</u> | <u>3</u>                    | <u>766</u>  |
| P 3 <u>10</u>               | <u>45</u> | <u>6</u>                    | <u>1128</u> | <u>10</u>                   | <u>131</u> | <u>6</u>                    | <u>1122</u> |
| P 4 <u>15</u>               | <u>54</u> | <u>9</u>                    | <u>1177</u> | <u>15</u>                   | <u>131</u> | <u>9</u>                    | <u>1171</u> |
| P 5 <u>20</u>               | <u>65</u> | <u>12</u>                   | <u>1208</u> | <u>20</u>                   | <u>131</u> | <u>12</u>                   | <u>1199</u> |
| P 6 <u>25</u>               | <u>76</u> | <u>15</u>                   | <u>1227</u> | <u>25</u>                   | <u>134</u> | <u>15</u>                   | <u>1216</u> |
| P 7 <u>30</u>               | <u>86</u> | <u>18</u>                   | <u>1241</u> | <u>30</u>                   | <u>138</u> | <u>18</u>                   | <u>1229</u> |
| P 8                         |           | <u>21</u>                   | <u>1252</u> |                             |            | <u>21</u>                   | <u>1240</u> |
| P 9                         |           | <u>24</u>                   | <u>1258</u> |                             |            | <u>24</u>                   | <u>1248</u> |
| P10                         |           | <u>27</u>                   | <u>1264</u> |                             |            | <u>27</u>                   | <u>1254</u> |
| P11                         |           | <u>30</u>                   | <u>1268</u> |                             |            | <u>30</u>                   | <u>1259</u> |
| P12                         |           | <u>33</u>                   | <u>1271</u> |                             |            | <u>33</u>                   | <u>1262</u> |
| P13                         |           | <u>36</u>                   | <u>1273</u> |                             |            | <u>36</u>                   | <u>1265</u> |
| P14                         |           | <u>39</u>                   | <u>1275</u> |                             |            | <u>39</u>                   | <u>1268</u> |
| P15                         |           | <u>42</u>                   | <u>1277</u> |                             |            | <u>42</u>                   | <u>1271</u> |
| P16                         |           | <u>45</u>                   | <u>1279</u> |                             |            | <u>45</u>                   | <u>1274</u> |
| P17                         |           | <u>48</u>                   | <u>1281</u> |                             |            | <u>48</u>                   | <u>1275</u> |
| P18                         |           | <u>51</u>                   | <u>1282</u> |                             |            | <u>51</u>                   | <u>1276</u> |
| P19                         |           | <u>54</u>                   | <u>1283</u> |                             |            | <u>54</u>                   | <u>1277</u> |
| P20                         |           | <u>57</u>                   | <u>1284</u> |                             |            | <u>57</u>                   | <u>1278</u> |
|                             |           | <u>60</u>                   | <u>1285</u> |                             |            | <u>60</u>                   | <u>1279</u> |

1566

Set # 6670

I



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 KellyBushing Formation Simpson Sand Effective Pay - Ft. Ticket No. 6671  
Date 8/30/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
Test Approved by Kent A. Deutsch Western Representative Roger Mounts  
Formation Test No. 11 Interval Tested from 4147 ft. to 4165 ft. Total Depth 4165 ft.  
Packer Depth 4142 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 4147 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 4152 ft. Recorder Number 1566 Cap. 4300  
Bottom Recorder Depth (Outside) 4155 ft. Recorder Number 3086 Cap. 4500  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor H-30 Drlg., Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.  
Mud Type chemical Viscosity 44 Weight Pipe Length - I. D. - in.  
Weight 9.2 Water Loss 23.2 cc. Drill Pipe Length - I. D. 3.8 in.  
Chlorides 13,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make No Serial Number - Anchor Length 18 ft. Size 5 1/2 OD 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: Weak blow building throughout test.

Recovered 230 ft. of salt water 19,000 ppm chlorides

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 1:32 =A.M. Time Started Off Bottom 4:32 =A.M. Maximum Temperature 126°  
Initial Hydrostatic Pressure 2124 P.S.I.  
Initial Flow Period 30 Minutes (B) 60 P.S.I. to (C) 101 P.S.I.  
Initial Closed In Period 60 Minutes (D) 1266 P.S.I.  
Final Flow Period 30 Minutes (E) 147 P.S.I. to (F) 160 P.S.I.  
Final Closed In Period 60 Minutes (G) 1242 P.S.I.  
Final Hydrostatic Pressure 2046 P.S.I.



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/30/80

Recorder No. 1566

Capacity 4300

Test Ticket No. 6671

Clock No. - Elevation 1874 Kelly Bushing

Location 4152 Ft.

Well Temperature 126 °F

| Point                          | Pressure           |                            | Time Given      | Time Computed   |
|--------------------------------|--------------------|----------------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2124</u> P.S.I. | Open Tool                  | <u>1:32P</u> M  |                 |
| B First Initial Flow Pressure  | <u>60</u> P.S.I.   | First Flow Pressure        | <u>30</u> Mins. | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>101</u> P.S.I.  | Initial Closed-in Pressure | <u>60</u> Mins. | <u>60</u> Mins. |
| D Initial Closed-in Pressure   | <u>1266</u> P.S.I. | Second Flow Pressure       | <u>30</u> Mins. | <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>147</u> P.S.I.  | Final Closed-in Pressure   | <u>60</u> Mins. | <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>160</u> P.S.I.  |                            |                 |                 |
| G Final Closed-in Pressure     | <u>1242</u> P.S.I. |                            |                 |                 |
| H Final Hydrostatic Mud        | <u>2046</u> P.S.I. |                            |                 |                 |

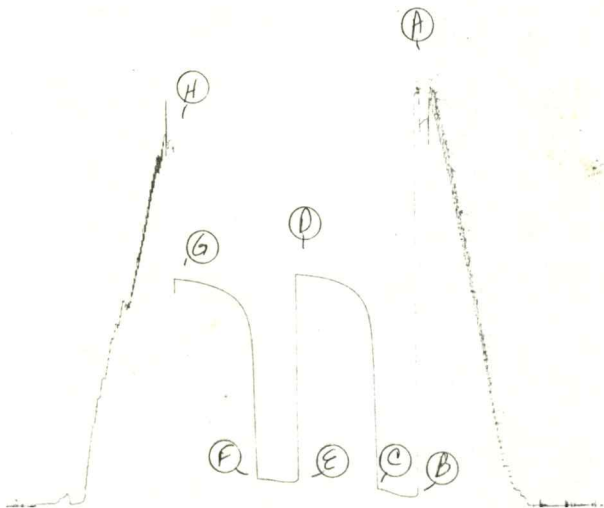
## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>20</u> Inc.   |             | Breakdown: <u>6</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>60</u>  | <u>0</u>                    | <u>101</u>  | <u>0</u>                    | <u>147</u> | <u>0</u>                    | <u>160</u>  |
| P 2 <u>5</u>                | <u>58</u>  | <u>3</u>                    | <u>794</u>  | <u>5</u>                    | <u>142</u> | <u>3</u>                    | <u>819</u>  |
| P 3 <u>10</u>               | <u>59</u>  | <u>6</u>                    | <u>1013</u> | <u>10</u>                   | <u>142</u> | <u>6</u>                    | <u>1005</u> |
| P 4 <u>15</u>               | <u>69</u>  | <u>9</u>                    | <u>1083</u> | <u>15</u>                   | <u>148</u> | <u>9</u>                    | <u>1060</u> |
| P 5 <u>20</u>               | <u>82</u>  | <u>12</u>                   | <u>1127</u> | <u>20</u>                   | <u>156</u> | <u>12</u>                   | <u>1098</u> |
| P 6 <u>25</u>               | <u>97</u>  | <u>15</u>                   | <u>1158</u> | <u>25</u>                   | <u>158</u> | <u>15</u>                   | <u>1126</u> |
| P 7 <u>30</u>               | <u>101</u> | <u>18</u>                   | <u>1179</u> | <u>30</u>                   | <u>160</u> | <u>18</u>                   | <u>1145</u> |
| P 8                         |            | <u>21</u>                   | <u>1193</u> |                             |            | <u>21</u>                   | <u>1163</u> |
| P 9                         |            | <u>24</u>                   | <u>1205</u> |                             |            | <u>24</u>                   | <u>1173</u> |
| P10                         |            | <u>27</u>                   | <u>1216</u> |                             |            | <u>27</u>                   | <u>1184</u> |
| P11                         |            | <u>30</u>                   | <u>1225</u> |                             |            | <u>30</u>                   | <u>1195</u> |
| P12                         |            | <u>33</u>                   | <u>1231</u> |                             |            | <u>33</u>                   | <u>1203</u> |
| P13                         |            | <u>36</u>                   | <u>1240</u> |                             |            | <u>36</u>                   | <u>1210</u> |
| P14                         |            | <u>39</u>                   | <u>1246</u> |                             |            | <u>39</u>                   | <u>1218</u> |
| P15                         |            | <u>42</u>                   | <u>1251</u> |                             |            | <u>42</u>                   | <u>1223</u> |
| P16                         |            | <u>45</u>                   | <u>1255</u> |                             |            | <u>45</u>                   | <u>1227</u> |
| P17                         |            | <u>48</u>                   | <u>1258</u> |                             |            | <u>48</u>                   | <u>1230</u> |
| P18                         |            | <u>51</u>                   | <u>1260</u> |                             |            | <u>51</u>                   | <u>1233</u> |
| P19                         |            | <u>54</u>                   | <u>1262</u> |                             |            | <u>54</u>                   | <u>1236</u> |
| P20                         |            | <u>57</u>                   | <u>1264</u> |                             |            | <u>57</u>                   | <u>1239</u> |
|                             |            | <u>60</u>                   | <u>1266</u> |                             |            | <u>60</u>                   | <u>1242</u> |

1566

JKH #6671

I



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
 Elevation 1874 Kelly Bushing Formation Viola Effective Pay - Ft. Ticket No. 6673  
 Date 8/31/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
 Test Approved by Kent A. Deutsch Western Representative Roger A. Mounts  
 Formation Test No. 12 Interval Tested from 3930 ft. to 3972 ft. Total Depth 4245 ft.  
 Packer Depth 3925 ft. Size 6 3/4 in. Packer Depth 3972 ft. Size 6 3/4 in.  
 Packer Depth 3930 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set 3982  
 Top Recorder Depth (Inside) 3942 ft. Recorder Number 1566 Cap. 4300  
 Bottom Recorder Depth (Outside) 3945 ft. Recorder Number 3086 Cap. 4500  
 Below Straddle Recorder Depth 3985 ft. Recorder Number - Cap. -  
 Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 120 I. D. 2.2 in.  
 Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.  
 Weight 9.3 Water Loss 13.8 cc. Drill Pipe Length 3730 I. D. 3.8 in.  
 Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
 Jars: Make No Serial Number - Anchor Length 42 ft. Size 5 1/2 OD in.  
 Did Well Flow? No 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: \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_ MISRUN

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: COULD NOT SET HOOK TRIP OUT WITH TOOLS

### NO PRESSURES AVAILABLE

Time Set Packer(s) \_\_\_\_\_ A.M. P.M. Time Started Off Bottom \_\_\_\_\_ A.M. P.M. Maximum Temperature \_\_\_\_\_

Initial Hydrostatic Pressure ..... (A) \_\_\_\_\_ P.S.I.

Initial Flow Period ..... Minutes ..... (B) \_\_\_\_\_ P.S.I. to (C) \_\_\_\_\_ P.S.I.

Initial Closed In Period ..... Minutes ..... (D) \_\_\_\_\_ P.S.I.

Final Flow Period ..... Minutes ..... (E) \_\_\_\_\_ P.S.I. to (F) \_\_\_\_\_ P.S.I.

Final Closed In Period ..... Minutes ..... (G) \_\_\_\_\_ P.S.I.

Final Hydrostatic Pressure ..... (H) \_\_\_\_\_ P.S.I.



1300  
JKT #6673

I



Company W. L. Kirkman, Inc. Lease & Well No. McFadden #1  
Elevation 1874 Kelly Bushing Viola Effective Pay --- Ft. Ticket No. 6674  
Date 8/31/80 Sec. 10 Twp. 25S Range 12W County Stafford State Kansas  
Test Approved by Kent A. Deutsch Western Representative Roger Mounts

Formation Test No. 13 Interval Tested from 3928 ft. to 3972 ft. Total Depth 4230 ft.

Packer Depth 3923 ft. Size 6 3/4 in. Packer Depth 3972 ft. Size 6 3/4 in.

Packer Depth 3928 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3935 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 3938 ft. Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth 3985 ft. Recorder Number 6246 Cap. 5200

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 180 I. D. 2.2 in.

Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 13.8 cc. Drill Pipe Length 3728 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make No Serial Number - Anchor Length 44 ft. Size 5 1/2 OD in.

Did Well Flow? Yes 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: Gas to surface three minutes. See attached sheet for gas measurements.

Recovered 80 ft. of drilling mud

Recovered 180 ft. of slightly gas cut mud

Recovered 60 ft. of water and gas cut mud 19,000 ppm chlorides

Recovered     ft. of    

Recovered     ft. of    

Remarks: Slipping in hole throughout test.

Time Set Packer(s) 4:44 A.M. PM = Time Started Off Bottom 7:44 A.M. PM Maximum Temperature 106°  
Initial Hydrostatic Pressure 2022 (A) 240 P.S.I.  
Initial Flow Period 25 Minutes (B) 1660\* P.S.I. to (C) 226 P.S.I.  
Initial Closed In Period 60 Minutes (D) 222 P.S.I.  
Final Flow Period 30 Minutes (E) 854 P.S.I. to (F) 229 P.S.I.  
Final Closed In Period 63 Minutes (G) 1925 P.S.I.  
Final Hydrostatic Pressure (H)     P.S.I.

## GAS FLOW REPORT

Date 8/31/80 Ticket 6674 Company W. L. Kirkman, Inc.  
 Well Name and No. McFadden #1 Dst No. 13 Interval Tested 3928'-3972'  
 County Stafford State Kansas Sec. 10 Twp. 25S Rg. 12W

| Time Gauge Pre-Flow                           | Time Gauge in Min. | P.S.I. on Merla Orifice Well Tester | P.S.I. on Pitot Tester | P.S.I. on Side Static Tester | P.S.I. on U-Tube Tester | Description of Flow |
|-----------------------------------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| <b>Gas to surface three minutes. PRE FLOW</b> |                    |                                     |                        |                              |                         |                     |
| 4:44AM                                        |                    |                                     |                        |                              |                         |                     |
|                                               | 10 min.            | 9.5 PSIG                            |                        | 1¼" orifice                  |                         | 777,000CFPD         |
|                                               | 15 min.            | 9.0 PSIG                            |                        | 1¼" orifice                  |                         | 754,000CFPD         |
|                                               | 20 min.            | 11.0PSIG                            |                        | 1¼" orifice                  |                         | 847,000CFPD         |
|                                               | 30 min.            | 12.0 PSIG                           |                        | 1¼" orifice                  |                         | 893,000CFPD         |

### SECOND FLOW

|  |         |          |  |             |  |              |
|--|---------|----------|--|-------------|--|--------------|
|  | 5 min.  | 5.0PSIG  |  | 1¼" orifice |  | 842,000 CFPD |
|  | 10 min. | 8.0PSIG  |  | 1¼" orifice |  | 700,000 CFPD |
|  | 15 min. | 9.0PSIG  |  | 1¼" orifice |  | 754,000 CFPD |
|  | 20 min. | 10.0PSIG |  | 1¼" orifice |  | 802,000 CFPD |
|  | 25 min. | 11.0PSIG |  | 1¼" orifice |  | 847,000 CFPD |
|  | 30 min. | 11.0PSIG |  | 1¼" orifice |  | 847,000 CFPD |
|  |         |          |  |             |  |              |
|  |         |          |  |             |  |              |
|  |         |          |  |             |  |              |
|  |         |          |  |             |  |              |
|  |         |          |  |             |  |              |
|  |         |          |  |             |  |              |

### GAS BOTTLE

Serial No. WTC #51 Date Bottle Filled 8/31/80 Date to be Invoiced 8/31/80

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME W. L. Kirkman, Inc.  
 Authorized by Kent A. Deutsch



# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/31/80 Test Ticket No. 6674  
 Recorder No. 1566 Capacity 4300 Location 3935 Ft.  
 Clock No. --- Elevation 1874 Kelly Bushing Well Temperature 106 °F

| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 2022     | P.S.I. | 4:44A      | M              |
| B First Initial Flow Pressure  | 240      | P.S.I. | 30         | Mins. 25 Mins. |
| C First Final Flow Pressure    | 226      | P.S.I. | 60         | Mins. 60 Mins. |
| D Initial Closed-in Pressure   | 1660 *   | P.S.I. | 30         | Mins. 30 Mins. |
| E Second Initial Flow Pressure | 222      | P.S.I. | 60         | Mins. 63 Mins. |
| F Second Final Flow Pressure   | 229      | P.S.I. |            |                |
| G Final Closed-in Pressure     | 854      | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 1925     | P.S.I. |            |                |

\* Pressures questionable due to tool movement.

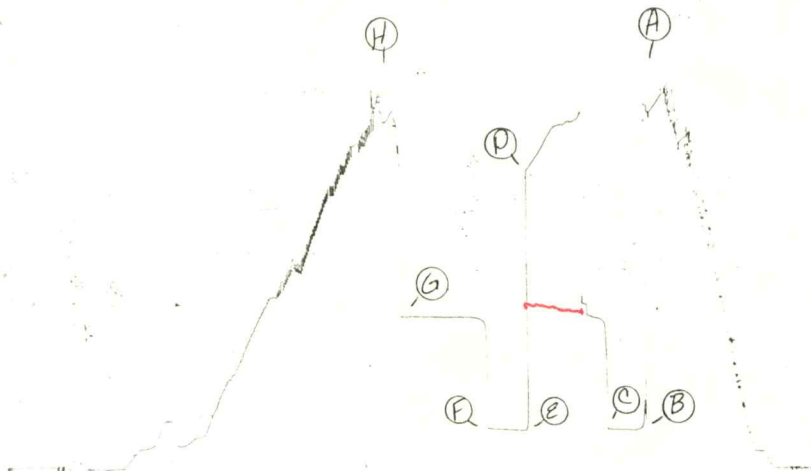
## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |              | Second Flow Pressure        |            | Final Shut-In               |            |
|-----------------------------|------------|-----------------------------|--------------|-----------------------------|------------|-----------------------------|------------|
| Breakdown: <u>5</u> Inc.    |            | Breakdown: <u>20</u> Inc.   |              | Breakdown: <u>6</u> Inc.    |            | Breakdown: <u>21</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>240</u> | <u>0</u>                    | <u>226</u>   | <u>0</u>                    | <u>222</u> | <u>0</u>                    | <u>229</u> |
| P 2 <u>5</u>                | <u>225</u> | <u>3</u>                    | <u>785</u>   | <u>5</u>                    | <u>220</u> | <u>3</u>                    | <u>802</u> |
| P 3 <u>10</u>               | <u>222</u> | <u>6</u>                    | <u>832</u>   | <u>10</u>                   | <u>222</u> | <u>6</u>                    | <u>833</u> |
| P 4 <u>15</u>               | <u>224</u> | <u>9</u>                    | <u>841</u>   | <u>15</u>                   | <u>225</u> | <u>9</u>                    | <u>843</u> |
| P 5 <u>20</u>               | <u>225</u> | <u>12</u>                   | <u>847</u>   | <u>20</u>                   | <u>227</u> | <u>12</u>                   | <u>847</u> |
| P 6 <u>25</u>               | <u>226</u> | <u>15</u>                   | <u>856 *</u> | <u>25</u>                   | <u>229</u> | <u>15</u>                   | <u>848</u> |
| P 7                         |            | <u>18</u>                   | <u>918 *</u> | <u>30</u>                   | <u>229</u> | <u>18</u>                   | <u>849</u> |
| P 8                         |            | <u>21</u>                   | <u>1371*</u> |                             |            | <u>21</u>                   | <u>850</u> |
| P 9                         |            | <u>24</u>                   | <u>1944*</u> |                             |            | <u>24</u>                   | <u>851</u> |
| P10                         |            | <u>27</u>                   | <u>1935*</u> |                             |            | <u>27</u>                   | <u>851</u> |
| P11                         |            | <u>30</u>                   | <u>1935*</u> |                             |            | <u>30</u>                   | <u>852</u> |
| P12                         |            | <u>33</u>                   | <u>1920*</u> |                             |            | <u>33</u>                   | <u>852</u> |
| P13                         |            | <u>36</u>                   | <u>1918*</u> |                             |            | <u>36</u>                   | <u>853</u> |
| P14                         |            | <u>39</u>                   | <u>1913*</u> |                             |            | <u>39</u>                   | <u>853</u> |
| P15                         |            | <u>42</u>                   | <u>1904*</u> |                             |            | <u>42</u>                   | <u>854</u> |
| P16                         |            | <u>45</u>                   | <u>1868*</u> |                             |            | <u>45</u>                   | <u>854</u> |
| P17                         |            | <u>48</u>                   | <u>1824*</u> |                             |            | <u>48</u>                   | <u>854</u> |
| P18                         |            | <u>51</u>                   | <u>1775*</u> |                             |            | <u>51</u>                   | <u>854</u> |
| P19                         |            | <u>54</u>                   | <u>1741*</u> |                             |            | <u>54</u>                   | <u>854</u> |
| P20                         |            | <u>57</u>                   | <u>1702*</u> |                             |            | <u>57</u>                   | <u>854</u> |
|                             |            | <u>60</u>                   | <u>1660*</u> |                             |            | <u>60</u>                   | <u>854</u> |
|                             |            |                             |              |                             |            | <u>63</u>                   | <u>854</u> |

1566

JRT # 6674

I



SKT # 6674  
Below Straddle

