



P. O. BOX 1599      PHONE (316) 838-0601  
WICHITA, KANSAS 67201

# WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No. 2511

Elevation \_\_\_\_\_ Formation CITEROKEE Eff. Pay \_\_\_\_\_ Ft.

District PRATT

Date 7-5-79

Customer Order No. \_\_\_\_\_

COMPANY NAME PICKRELL DRUG CO

ADDRESS 205 Extension Bldg Wichita Suite 205

LEASE AND WELL NO. SHATUCK A-3 COUNTY CHARK STATE KS Sec. 31 Twp. 30S Rge. 21W

Mail Invoice To \_\_\_\_\_ Co. Name SAME Address \_\_\_\_\_ No. Copies Requested Reg

Mail Charts To \_\_\_\_\_ Address \_\_\_\_\_ No. Copies Requested Reg

Formation Test No. 1 Interval Tested from 5146 ft. to 5242 ft. Total Depth 5242 ft.

Packer Depth 5141 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Packer Depth 5146 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 5166 ft.

Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 5169 ft.

Recorder Number 5673 Cap. 5400

Below Straddle Recorder Depth \_\_\_\_\_ ft.

Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_

Drilling Contractor CC TOLDS

Drill Collar Length 150 I. D. 2 1/4 in.

Mud Type PREMIER Viscosity 46

Weight Pipe Length \_\_\_\_\_ I. D. \_\_\_\_\_ in.

Weight 9.2 Water Loss 13.5 cc.

Drill Pipe Length 4962 I. D. 3.8 in.

Chlorides 0.10 P.P.M.

Test Tool Length 28 in. Tool Size 5 1/2 in.

Jars: Make W.T.C. Serial Number \_\_\_\_\_

Anchor Length 96 ft. Size 5 1/2 in.

Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: WEAK BLOW FOR 10 MINS. IN 1 1/2" OPENING.

Recovered 5 ft. of DRUG MUD

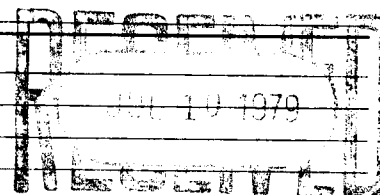
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

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

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

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

Remarks: \_\_\_\_\_



|                              |           |             |           |              |             |              |           |                     |                  |
|------------------------------|-----------|-------------|-----------|--------------|-------------|--------------|-----------|---------------------|------------------|
| Time Set                     | Packer(s) | <u>9140</u> | <u>AM</u> | Time Started | Off Bottom  | <u>10:30</u> | <u>AM</u> | Maximum Temperature | <u>118</u>       |
| Initial Hydrostatic Pressure |           |             |           | (A)          | <u>2540</u> |              | P.S.I.    |                     |                  |
| Initial Flow Period          | Minutes   | <u>30</u>   |           | (B)          | <u>26</u>   |              | P.S.I.    | (C)                 | <u>26</u> P.S.I. |
| Initial Closed In Period     | Minutes   | <u>30</u>   |           | (D)          | <u>39</u>   |              | P.S.I.    |                     |                  |
| Final Flow Period            | Minutes   | <u>10</u>   |           | (E)          | <u>26</u>   |              | P.S.I.    | (F)                 | <u>26</u> P.S.I. |
| Final Closed In Period       | Minutes   | _____       |           | (G)          | _____       |              | P.S.I.    |                     |                  |
| Final Hydrostatic Pressure   |           |             |           | (H)          | <u>2540</u> |              | P.S.I.    |                     |                  |

## COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]  
Signature of Customer or his authorized representative

Western Representative [Signature]

## FIELD INVOICE

|                |                  |
|----------------|------------------|
| Open Hole Test | \$ <u>550.00</u> |
| Misrun         | \$ _____         |
| Straddle Test  | \$ _____         |
| Jars           | \$ <u>250.00</u> |
| Selective Zone | \$ _____         |
| Safety Joint   | \$ <u>35.00</u>  |
| Standby        | \$ _____         |
| Evaluation     | \$ _____         |
| Extra Packer   | \$ _____         |
| Circ. Sub.     | \$ _____         |
| Mileage        | \$ _____         |
| Extra Charts   | \$ _____         |

TOTAL

\$ 835.00

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7-5-79 Test Ticket No. 2511  
 Recorder No. 6246 Capacity 5200 Location 5166 Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 118 °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 2554 P.S.I. Open Tool 9:40 P.M.  
 B First Initial Flow Pressure 40 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 C First Final Flow Pressure 31 P.S.I. Initial Closed-in Pressure 30 Mins. 30 Mins.  
 D Initial Closed-in Pressure 47 P.S.I. Second Flow Pressure 10 Mins. 10 Mins.  
 E Second Initial Flow Pressure 37 P.S.I. Final Closed-in Pressure \_\_\_\_\_ Mins. \_\_\_\_\_ Mins.  
 F Second Final Flow Pressure 31 P.S.I.  
 G Final Closed-in Pressure \_\_\_\_\_ P.S.I.  
 H Final Hydrostatic Mud 2543 P.S.I.

### PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |           | Second Flow Pressure        |           | Final Shut-In               |        |
|-----------------------------|-----------|-----------------------------|-----------|-----------------------------|-----------|-----------------------------|--------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>10</u> Inc.   |           | Breakdown: <u>2</u> Inc.    |           | Breakdown: _____ 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<br>Mins.              | Press.    | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press. |
| P 1 0                       | <u>40</u> | 0                           | <u>31</u> | 0                           | <u>37</u> | 0                           |        |
| P 2 5                       | <u>31</u> | 3                           | <u>34</u> | 5                           | <u>34</u> | 3                           |        |
| P 3 10                      |           | 6                           | <u>37</u> | 10                          | <u>31</u> | 6                           |        |
| P 4 15                      |           | 9                           | <u>39</u> | 15                          |           | 9                           |        |
| P 5 20                      |           | 12                          | <u>41</u> | 20                          |           | 12                          |        |
| P 6 25                      |           | 15                          | <u>42</u> | 25                          |           | 15                          |        |
| P 7 30                      | <u>31</u> | 18                          | <u>43</u> | 30                          |           | 18                          |        |
| P 8 35                      |           | 21                          | <u>44</u> | 35                          |           | 21                          |        |
| P 9 40                      |           | 24                          | <u>45</u> | 40                          |           | 24                          |        |
| P 10 45                     |           | 27                          | <u>46</u> | 45                          |           | 27                          |        |
| P 11 50                     |           | 30                          | <u>47</u> | 50                          |           | 30                          |        |
| P 12 55                     |           | 33                          |           | 55                          |           | 33                          |        |
| P 13 60                     |           | 36                          |           | 60                          |           | 36                          |        |
| P 14                        |           | 39                          |           | 65                          |           | 39                          |        |
| P 15                        |           | 42                          |           | 70                          |           | 42                          |        |
| P 16                        |           | 45                          |           | 75                          |           | 45                          |        |
| P 17                        |           | 48                          |           | 80                          |           | 48                          |        |
| P 18                        |           | 51                          |           | 85                          |           | 51                          |        |
| P 19                        |           | 54                          |           | 90                          |           | 54                          |        |
| P 20                        |           | 57                          |           |                             |           | 57                          |        |
|                             |           | 60                          |           |                             |           | 60                          |        |

Company Pickrell Drilling Company Lease & Well No. Shattuck A-3  
Elevation ----- Formation Cherokee Effective Pay -- Ft. Ticket No. 2511  
Date 7/5/79 Sec. 31 Twp. 30S Range 21W County Clark State Kansas  
Test Approved by Mike G. Russell Western Representative Bill Hager

Formation Test No. 1 Interval Tested from 5146 ft. to 5242 ft. Total Depth 5242 ft.

Packer Depth 5141 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 5146 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 5166 ft. Recorder Number 6246 Cap 5200

Bottom Recorder Depth (Outside) 5169 ft. Recorder Number 5673 Cap 5400

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

Drilling Contractor Pickrell Drilling Drill Collar Length 150 I. D. 2 1/4 in.

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

Weight 9.2 Water Loss 13.5 cc. Drill Pipe Length 4962 I. D. 3.8 in.

Chlorides -- P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 408 Anchor Length 96 ft. Size 5 1/2 OD & 6 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 for ten minutes in first opening.

Recovered 5 ft. of drilling mud

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 9:40 --AM P.M. Time Started Off Bottom 10:30 --AM P.M. Maximum Temperature 118

Initial Hydrostatic Pressure        (A) 2554 P.S.I.

Initial Flow Period        Minutes 30 (B) 40 P.S.I. to (C) 31 P.S.I.

Initial Closed In Period        Minutes 30 (D) 47 P.S.I.

Final Flow Period        Minutes 10 (E) 37 P.S.I. to (F) 31 P.S.I.

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

Final Hydrostatic Pressure        (H) 2543 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

2511

Test Ticket No. 5166

5166

Ft.

Location

Capacity

5200

6246

Well Temperature 118 °F

118

Elevation

--

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Date 7/5/79

Recorder No. 6246

Clock No. --

| Point                          | Pressure |        | Open Tool                  | Time Given | Time Computed  |
|--------------------------------|----------|--------|----------------------------|------------|----------------|
| A Initial Hydrostatic Mud      | 2554     | P.S.I. |                            | 9:40P      | M              |
| B First Initial Flow Pressure  | 40       | P.S.I. | First Flow Pressure        | 30         | Mins. 30 Mins. |
| C First Final Flow Pressure    | 31       | P.S.I. | Initial Closed-in Pressure | 30         | Mins. 30 Mins. |
| D Initial Closed-in Pressure   | 47       | P.S.I. | Second Flow Pressure       | 10         | Mins. 10 Mins. |
| E Second Initial Flow Pressure | 37       | P.S.I. | Final Closed-in Pressure   | --         | Mins. -- Mins. |
| F Second Final Flow Pressure   | 31       | P.S.I. |                            |            |                |
| G Final Closed-in Pressure     | --       | P.S.I. |                            |            |                |
| H Final Hydrostatic Mud        | 2543     | P.S.I. |                            |            |                |

## PRESSURE BREAKDOWN

First Flow Pressure  
Breakdown: 6 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

Initial Shut-In  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

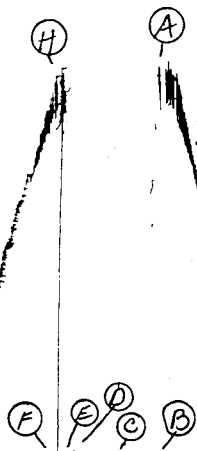
Second Flow Pressure  
Breakdown: 2 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

Final Shut-In  
Breakdown: 0 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1 0       | 40     | 0             | 31     | 0             | 37     |               |        |
| P 2 5       | 31     | 3             | 34     | 5             | 34     |               |        |
| P 3 10      | 31     | 6             | 37     | 10            | 31     |               |        |
| P 4 15      | 31     | 9             | 39     |               |        |               |        |
| P 5 20      | 31     | 12            | 41     |               |        |               |        |
| P 6 25      | 31     | 15            | 42     |               |        |               |        |
| P 7 30      | 31     | 18            | 43     |               |        |               |        |
| P 8         |        | 21            | 44     |               |        |               |        |
| P 9         |        | 24            | 45     |               |        |               |        |
| P10         |        | 27            | 46     |               |        |               |        |
| P11         |        | 30            | 47     |               |        |               |        |
| P12         |        |               |        |               |        |               |        |
| P13         |        |               |        |               |        |               |        |
| P14         |        |               |        |               |        |               |        |
| P15         |        |               |        |               |        |               |        |
| P16         |        |               |        |               |        |               |        |
| P17         |        |               |        |               |        |               |        |
| P18         |        |               |        |               |        |               |        |
| P19         |        |               |        |               |        |               |        |
| P20         |        |               |        |               |        |               |        |

0246

TKT #2511  
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WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 2512

P. O. BOX 1599 PHONE (316) 838-0601

WICHITA, KANSAS 67201

Elevation

Formation

INOMA

Eff. Pay Ft.

District

PRATT

Date

7-6-79

Customer Order No.

COMPANY NAME

PICKRELL DRILLING CO.

ADDRESS

LITWIN BLDG, SUITE 205 N.W. MARKET WICHITA, KS

LEASE AND WELL NO

SHATTUCK A-3

COUNTY

CLARK

STATE

KS

Sec

31

Twp

30S

Rge

21W

Mail Invoice To

Co. Name

Address

No. Copies Requested

Reg

Mail Charts To

Address

No. Copies Requested

Reg

Formation Test No.

2

Interval Tested from

5236

ft. to 5260

Total Depth

5260

ft.

Packer Depth

5231

ft.

Size

6 3/4

in.

Packer Depth

ft.

Size

in.

Packer Depth

5236

ft.

Size

6 3/4

in.

Packer Depth

ft.

Size

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

5252

ft.

Recorder Number

6246

Cap.

5200

Bottom Recorder Depth (Outside)

5255

ft.

Recorder Number

5678

Cap.

5400

Below Straddle Recorder Depth

ft.

Recorder Number

Cap.

Drilling Contractor

Co. Tools

Mud Type

FRESH

Viscosity

54

Weight

9.2

Water Loss

9.4

cc.

Chlorides

20,000

P.P.M.

Jars: Make

WITCO

Serial Number

Did Well Flow?

Reversed Out

Drill Collar Length

270

I. D.

2 1/4 in.

Weight Pipe Length

ft.

I. D.

in.

Drill Pipe Length

4937

I. D.

3.8 in.

Test Tool Length

29

in.

Tool Size

5 1/2 in.

Anchor Length

24

ft.

Size

5 1/2 in.

Surface Choke Size

3/4

in.

Bottom Choke Size

3/4

Main Hole Size

2 3/8

in.

Tool Joint Size

4 1/2 in.

Blow: WEAK BLOW FOR 10 MINS. - DIED 1ST OPENING

Recovered

10

ft. of

DRILLING MUD

Recovered

ft. of

Recovered

ft. of

Recovered

ft. of

Recovered

ft. of

Remarks:

Time Set Packer(s)

11:30

A.M.

P.M.

Time Started Off Bottom

12:40

A.M.

P.M.

Initial Hydrostatic Pressure

(A)

2553

P.S.I.

Initial Flow Period

Minutes

30

(B)

13

P.S.I. to (C)

13

P.S.I.

Initial Closed In Period

Minutes

30

(D)

26

P.S.I.

Final Flow Period

Minutes

10

(E)

13

P.S.I. to (F)

13

P.S.I.

Final Closed In Period

Minutes

(G)

P.S.I.

Final Hydrostatic Pressure

(H)

2553

P.S.I.

## COMPANY TERMS

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All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By

Signature of Customer or his authorized representative

Western Representative

  
THANK YOU

## FIELD INVOICE

Open Hole Test

\$

1550.00

Misrun

\$

Straddle Test

\$

Jars

\$

Selective Zone

\$

Safety Joint

\$

Standby

\$

Evaluation

\$

Extra Packer

\$

Circ. Sub.

\$

Mileage

\$

Extra Charts

\$

TOTAL

\$

835.00

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7-6-79 Test Ticket No. 2512  
 Recorder No. 6246 Capacity 5200 Location 5252 Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 118 °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 2564 P.S.I. Open Tool 11:30 A.M.  
 B First Initial Flow Pressure 24 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 C First Final Flow Pressure 16 P.S.I. Initial Closed-in Pressure 30 Mins. 30 Mins.  
 D Initial Closed-in Pressure 18 P.S.I. Second Flow Pressure 10 Mins. 10 Mins.  
 E Second Initial Flow Pressure 16 P.S.I. Final Closed-in Pressure \_\_\_\_\_ Mins. \_\_\_\_\_ Mins.  
 F Second Final Flow Pressure 16 P.S.I.  
 G Final Closed-in Pressure \_\_\_\_\_ P.S.I.  
 H Final Hydrostatic Mud 2507 P.S.I.

## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |           | Second Flow Pressure        |           | Final Shut-In               |        |
|-----------------------------|-----------|-----------------------------|-----------|-----------------------------|-----------|-----------------------------|--------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>18</u> Inc.   |           | Breakdown: <u>2</u> Inc.    |           | Breakdown: _____ 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<br>Mins.              | Press.    | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press. |
| P 1 0                       | <u>24</u> | 0                           | <u>16</u> | 0                           | <u>16</u> | 0                           |        |
| P 2 5                       | <u>16</u> | 3                           | <u>16</u> | 5                           | <u>16</u> | 3                           |        |
| P 3 10                      | <u>16</u> | 6                           | <u>16</u> | 10                          | <u>16</u> | 6                           |        |
| P 4 15                      | <u>16</u> | 9                           | <u>18</u> | 15                          |           | 9                           |        |
| P 5 20                      | <u>16</u> | 12                          |           | 20                          |           | 12                          |        |
| P 6 25                      | <u>16</u> | 15                          |           | 25                          |           | 15                          |        |
| P 7 30                      | <u>16</u> | 18                          |           | 30                          |           | 18                          |        |
| P 8 35                      |           | 21                          |           | 35                          |           | 21                          |        |
| P 9 40                      |           | 24                          |           | 40                          |           | 24                          |        |
| P 10 45                     |           | 27                          |           | 45                          |           | 27                          |        |
| P 11 50                     |           | 30                          | <u>18</u> | 50                          |           | 30                          |        |
| P 12 55                     |           | 33                          |           | 55                          |           | 33                          |        |
| P 13 60                     |           | 36                          |           | 60                          |           | 36                          |        |
| P 14                        |           | 39                          |           | 65                          |           | 39                          |        |
| P 15                        |           | 42                          |           | 70                          |           | 42                          |        |
| P 16                        |           | 45                          |           | 75                          |           | 45                          |        |
| P 17                        |           | 48                          |           | 80                          |           | 48                          |        |
| P 18                        |           | 51                          |           | 85                          |           | 51                          |        |
| P 19                        |           | 54                          |           | 90                          |           | 54                          |        |
| P 20                        |           | 57                          |           |                             |           | 57                          |        |
|                             |           | 60                          |           |                             |           | 60                          |        |

Company Pickrell Drilling Company Lease & Well No. Shattuck "A"#3  
Elevation -- Formation Iola Effective Pay -- Ft. Ticket No. 2512  
Date 7/6/79 Sec. 31 Twp. 30S Range 21W County Clark State Kansas  
Test Approved by Mike G. Russell Western Representative Bill Hager

Formation Test No. 2 Interval Tested from 5236' ft. to 5260' ft. Total Depth 5260' ft.

Packer Depth 5231 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 5236 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 5252 ft.

Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 5255 ft.

Recorder Number 5678 Cap. 5400

Below Straddle Recorder Depth -- ft.

Recorder Number -- Cap. --

Drilling Contractor Pickrell Drilling Company

Drill Collar Length 270 I. D. 2 1/4 ID in.

Mud Type premix Viscosity 54

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

Weight 9.2 Water Loss 9.4 cc.

Drill Pipe Length 4937 I. D. 3.8 in.

Chlorides 20,000 P.P.M.

Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 408

Anchor Length 24 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 for ten minutes. Died first opening.

Recovered 10 ft. of drilling mud

Recovered -- ft. of --

Recovered -- ft. of --

Recovered -- ft. of --

Recovered -- ft. of --

Remarks: --

Time Set Packer(s) 11:30 ~~A.M.~~ P.M. Time Started Off Bottom 12:40 ~~A.M.~~ P.M. Maximum Temperature 118

Initial Hydrostatic Pressure (A) 2564 P.S.I.

Initial Flow Period 30 Minutes (B) 24 P.S.I. to (C) 16 P.S.I.

Initial Closed In Period 30 Minutes (D) 18 P.S.I.

Final Flow Period 10 Minutes (E) 16 P.S.I. to (F) 16 P.S.I.

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

Final Hydrostatic Pressure (H) 2507 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7/6/79 Test Ticket No. 2512  
 Recorder No. 6246 Capacity 5200 Location 5252 Ft.  
 Block No. -- Elevation -- Well Temperature 118 °F

| Point                        | Pressure |        | Time Given | Time Computed  |
|------------------------------|----------|--------|------------|----------------|
| Initial Hydrostatic Mud      | 2564     | P.S.I. | 11:30A     | M              |
| First Initial Flow Pressure  | 24       | P.S.I. | 30         | Mins. 3- Mins. |
| First Final Flow Pressure    | 16       | P.S.I. | 30         | Mins. 3- Mins. |
| Initial Closed-in Pressure   | 18       | P.S.I. | 10         | Mins. 10 Mins. |
| Second Initial Flow Pressure | 16       | P.S.I. | --         | Mins. -- Mins. |
| Second Final Flow Pressure   | 16       | P.S.I. |            |                |
| Final Closed-in Pressure     | --       | P.S.I. |            |                |
| Final Hydrostatic Mud        | 2507     | P.S.I. |            |                |

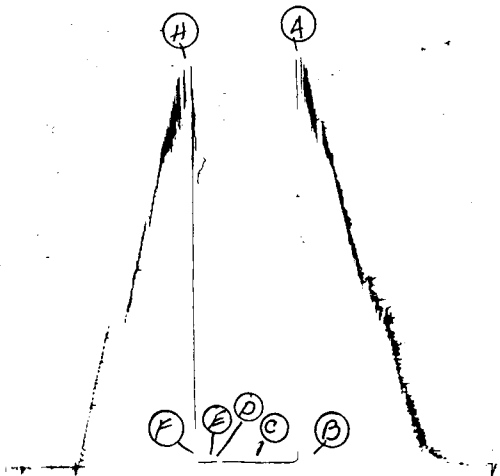
## PRESSURE BREAKDOWN

| First Flow Pressure<br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Initial Shut-In<br>Breakdown: <u>18</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Second Flow Pressure<br>Breakdown: <u>2</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Final Shut-In<br>Breakdown: <u>--</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |        |
|-----------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------|--------|
| Point<br>ins.                                                                                             | Press. | Point<br>Minutes                                                                                       | Press. | Point<br>Minutes                                                                                           | Press. | Point<br>Minutes                                                                                     | Press. |
| 1                                                                                                         | 0      | 24                                                                                                     | 0      | 16                                                                                                         | 0      | 16                                                                                                   |        |
| 2                                                                                                         | 5      | 16                                                                                                     | 3      | 16                                                                                                         | 5      | 16                                                                                                   |        |
| 3                                                                                                         | 10     | 16                                                                                                     | 6      | 16                                                                                                         | 10     | 16                                                                                                   |        |
| 4                                                                                                         | 15     | 16                                                                                                     | 9      | 18                                                                                                         |        |                                                                                                      |        |
| 5                                                                                                         | 20     | 16                                                                                                     | 12     | 18                                                                                                         |        |                                                                                                      |        |
| 6                                                                                                         | 25     | 16                                                                                                     | 15     | 18                                                                                                         |        |                                                                                                      |        |
| 7                                                                                                         | 30     | 16                                                                                                     | 18     | 18                                                                                                         |        |                                                                                                      |        |
| 8                                                                                                         |        |                                                                                                        | 21     | 18                                                                                                         |        |                                                                                                      |        |
| 9                                                                                                         |        |                                                                                                        | 24     | 18                                                                                                         |        |                                                                                                      |        |
| 0                                                                                                         |        |                                                                                                        | 27     | 18                                                                                                         |        |                                                                                                      |        |
| 1                                                                                                         |        |                                                                                                        | 30     | 18                                                                                                         |        |                                                                                                      |        |
| 2                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 3                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 4                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 5                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 6                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 7                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 8                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 9                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |
| 0                                                                                                         |        |                                                                                                        |        |                                                                                                            |        |                                                                                                      |        |

5246

N

Tkt. # 2512  
I





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No

2513

P. O. BOX 1599

PHONE (316) 838-0601

WICHITA, KANSAS 67201

Elevation

Formation

MORROW SAND

Eff. Pay

Ft.

District

PRAM

Date

7-7-79

Customer Order No.

COMPANY NAME

PICURELL DRILLING CO.

ADDRESS

LITWIN BLDG. SUITE 205 - 110 N. MARKET - WICHITA, KS. 67202

LEASE AND WELL NO.

SHATTUCKA-3 COUNTY CLARK

STATE KS

Sec. 31 Twp. 30S Rge. 21W

Mail Invoice To

Co. Name

LAME

Address

No. Copies Requested Reg

Mail Charts To

SAME

Address

No. Copies Requested Reg

Formation Test No.

3

Interval

Tested from

5252

ft. to

5290

ft.

Total Depth

5290

ft.

Packer Depth

5247

ft.

Size

6-3/4 in.

Packer Depth

ft.

Size

in.

Packer Depth

5252

ft.

Size

6-3/4 in.

Packer Depth

ft.

Size

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

5280 ft.

Recorder Number

6246

Cap.

5200

Bottom Recorder Depth (Outside)

5283 ft.

Recorder Number

5673

Cap.

5400

Below Straddle Recorder Depth

ft.

Recorder Number

Cap.

Drilling Contractor

C.O. TOOLS

Mud Type

DRISPAR

Viscosity

54

Weight

9.2

Water Loss

9.4

cc.

Chlorides

20,000

P.P.M.

Jars: Make

W.T.C.

Serial Number

Did Well Flow?

Reversed Out

Drill Collar Length

210

I. D.

2 1/4 in.

Weight Pipe Length

I. D.

in.

Drill Pipe Length

I. D.

3.8 in.

Test Tool Length

29

in.

Tool Size

5400 in.

Anchor Length

38

ft.

Size

5400 in.

Surface Choke Size

3/4

in.

Bottom Choke Size

3/4 in.

Main Hole Size

2 1/8

in.

Tool Joint Size

4 1/2 x 1 1/2 in.

Blow: STRONG BLOW THROUGH TEST - GAS TO SURFACE IN 2 MIN. SEE ATTACH SHEET

Recovered

6.5 ft. of

54.00 ft. of GAS OUT WATER

Recovered

ft. of

Recovered

ft. of

Recovered

ft. of

Recovered

ft. of

Remarks:

Chlorides 43,000 P.P.M.

Time Set Packer(s)

3:20

A.M.  
P.M.

Time Started Off Bottom

6:40

A.M.  
P.M.

Maximum Temperature

120

Initial Hydrostatic Pressure

(A)

2644

P.S.I.

Initial Flow Period

Minutes

30

(B)

955

P.S.I.

to (C)

1059

P.S.I.

Initial Closed In Period

Minutes

60

(D)

1227

P.S.I.

Final Flow Period

Minutes

50

(E)

1020

P.S.I.

to (F)

1059

P.S.I.

Final Closed In Period

Minutes

60

(G)

1202

P.S.I.

Final Hydrostatic Pressure

(H)

2605

P.S.I.

## COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By

Signature of Customer or his authorized representative

Western Representative

## FIELD INVOICE

Open Hole Test

\$

4550

Misrun

\$

Straddle Test

\$

Jars

\$

Selective Zone

\$

Safety Joint

\$

Standby

\$

Evaluation

\$

Extra Packer

\$

Circ. Sub.

\$

Mileage

\$

Extra Charts

\$

TOTAL

\$ 835



## GAS FLOW REPORT

No 1933

Date 7-7-29 Ticket 2513 Company PICKRELL DRILLING CO.  
 Well Name and No. SHATTUCK #A-3 Dst No. 3 Interval Tested 5252-5290  
 County CLARK State KS Sec. 31 Twp. 30 Rg. 21 W

| Time Gauge in Min. | P.S.I. on Merla Orifice Well Tester | Size of Orifice | P.S.I. on Pitot Tester | P.S.I. on Side Static Tester | Description of Flow  |
|--------------------|-------------------------------------|-----------------|------------------------|------------------------------|----------------------|
| <b>PRE FLOW</b>    |                                     |                 |                        |                              |                      |
| T.C. @ 3:20 A.M.   |                                     |                 |                        |                              |                      |
| G.I. 5" 1" 2 mins  |                                     |                 |                        |                              |                      |
| 10                 | {                                   | 2" pipe         | 50 lbs.                |                              | 6,160,000 C.F.F.P.D. |
| 20                 |                                     | 2" pipe         | 55 lbs.                |                              | 6,160,000 C.F.F.P.D. |
| 30                 |                                     | 2" pipe         | 55 lbs.                |                              | 6,640,000 "          |
|                    |                                     |                 |                        |                              | 6,640,000 "          |

**SECOND FLOW**

|    |   |         |         |  |                      |
|----|---|---------|---------|--|----------------------|
| 10 | { | 2" pipe | 50 lbs. |  | 6,160,000 C.F.F.P.D. |
| 20 |   | 2" pipe | 55 lbs. |  | 6,640,000 "          |
| 30 |   | 2" pipe | 55 lbs. |  | 6,640,000 "          |
| 40 |   | 2" pipe | 55 lbs. |  | 6,640,000 "          |
| 50 |   | 2" pipe | 55 lbs. |  | 6,640,000 "          |

**GAS BOTTLE**

Serial No. \_\_\_\_\_ Date Bottle Filled \_\_\_\_\_ Date to be Invoiced \_\_\_\_\_

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% per month, equal to 12% 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 \_\_\_\_\_

Authorized by \_\_\_\_\_

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7-7-79 Test Ticket No. 2513  
 Recorder No. 6246 Capacity 5200 Location 5280 Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 120 °F  
 Point Pressure Time Given Time Computed  
 A. Initial Hydrostatic Mud 2637 P.S.I. Open Tool 3:20 A M  
 B. First Initial Flow Pressure 963 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 C. First Final Flow Pressure 1062 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 D. Initial Closed-in Pressure 1223 P.S.I. Second Flow Pressure 50 Mins. 50 Mins.  
 E. Second Initial Flow Pressure 1010 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 F. Second Final Flow Pressure 1048 P.S.I.  
 G. Final Closed-in Pressure 1187 P.S.I.  
 H. Final Hydrostatic Mud 2548 P.S.I.

## PRESSURE BREAKDOWN

| First Flow Pressure<br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |             | Initial Shut-In<br>Breakdown: <u>20</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             | Second Flow Pressure<br>Breakdown: <u>10</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |                        | Final Shut-In<br>Breakdown: <u>20</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             |
|-----------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------|-------------|
| Point<br>Mins.                                                                                            | Press.      | Point<br>Minutes                                                                                       | Press.      | Point<br>Minutes                                                                                            | Press.                 | Point<br>Minutes                                                                                     | Press.      |
| P 1 0                                                                                                     | <u>963</u>  | 0                                                                                                      | <u>1062</u> | 0                                                                                                           | <u>1010</u>            | 0                                                                                                    | <u>1048</u> |
| P 2 5                                                                                                     | <u>995</u>  | 3                                                                                                      | <u>1202</u> | 5                                                                                                           | <u>1036</u>            | 3                                                                                                    | <u>1163</u> |
| P 3 10                                                                                                    | <u>1028</u> | 6                                                                                                      | <u>1212</u> | 10                                                                                                          | <u>1065</u>            | 6                                                                                                    | <u>1179</u> |
| P 4 15                                                                                                    | <u>1039</u> | 9                                                                                                      | <u>1215</u> | 15                                                                                                          | <u>1073</u>            | 9                                                                                                    | <u>1184</u> |
| P 5 20                                                                                                    | <u>1047</u> | 12                                                                                                     | [Wavy Line] | 20 <u>1073</u>                                                                                              | <del><u>1065</u></del> | 12                                                                                                   | <u>1187</u> |
| P 6 25                                                                                                    | <u>1060</u> | 15                                                                                                     |             | 25                                                                                                          | <u>1065</u>            | 15                                                                                                   | [Wavy Line] |
| P 7 30                                                                                                    | <u>1062</u> | 18                                                                                                     |             | 30                                                                                                          | <u>1062</u>            | 18                                                                                                   |             |
| P 8 35                                                                                                    |             | 21                                                                                                     |             | 35                                                                                                          | <u>1058</u>            | 21                                                                                                   |             |
| P 9 40                                                                                                    |             | 24                                                                                                     |             | 40                                                                                                          | <u>1056</u>            | 24                                                                                                   |             |
| P 10 45                                                                                                   |             | 27                                                                                                     |             | 45                                                                                                          | <u>1052</u>            | 27                                                                                                   |             |
| P 11 50                                                                                                   |             | 30                                                                                                     |             | 50                                                                                                          | <u>1048</u>            | 30                                                                                                   |             |
| P 12 55                                                                                                   |             | 33                                                                                                     |             | 55                                                                                                          |                        | 33                                                                                                   |             |
| P 13 60                                                                                                   |             | 36                                                                                                     |             | 60                                                                                                          |                        | 36                                                                                                   |             |
| P 14                                                                                                      |             | 39                                                                                                     |             | 65                                                                                                          |                        | 39                                                                                                   |             |
| P 15                                                                                                      |             | 42                                                                                                     | 70          |                                                                                                             | 42                     |                                                                                                      |             |
| P 16                                                                                                      |             | 45                                                                                                     | 75          |                                                                                                             | 45                     |                                                                                                      |             |
| P 17                                                                                                      |             | 48                                                                                                     | 80          |                                                                                                             | 48                     |                                                                                                      |             |
| P 18                                                                                                      |             | 51                                                                                                     | 85          |                                                                                                             | 51                     |                                                                                                      |             |
| P 19                                                                                                      |             | 54                                                                                                     | 90          |                                                                                                             | 54                     |                                                                                                      |             |
| P 20                                                                                                      |             | 57                                                                                                     |             |                                                                                                             | 57                     |                                                                                                      |             |
|                                                                                                           |             | 60                                                                                                     | <u>1223</u> |                                                                                                             |                        | 60                                                                                                   | <u>1187</u> |

Company Pickrell Drilling Company Lease & Well No. Shattuck "A" #3  
Elevation -- Formation Morrow Sand Effective Pay -- Ft. Ticket No. 2513  
Date 7/7/79 Sec. 31 Twp. 30S Range 21W County Clark State Kansas  
Test Approved by Mike G. Russell Western Representative Bill Hager

Formation Test No. 3 Interval Tested from 5252 ft. to 5290 ft. Total Depth 5290 ft.

Packer Depth 5247 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 5252 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 5280 ft. Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 5283 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor Pickrell Drilling Drill Collar Length 210 I. D. 2 1/4 in.

Mud Type drispac Viscosity 54 Weight Pipe Length --- I. D. --- in.

Weight 9.2 Water Loss 9.4 cc. Drill Pipe Length --- I. D. 3 8 in.

Chlorides 20,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 408 Anchor Length 38 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: Strong blow throughout test. Gas to surface in two minutes. See attached sheet for gas measurements.

Recovered 65 ft. of slightly oil and gas cut water

Recovered --- ft. of ---

Recovered --- ft. of ---

Recovered --- ft. of chlorides 43,000 ppm

Recovered --- ft. of ---

Remarks: ---

Time Set Packer(s) 3:20 ~~P.M.~~ A.M. Time Started Off Bottom 6:40 ~~P.M.~~ A.M. Maximum Temperature 120

Initial Hydrostatic Pressure --- (A) 2637 P.S.I.

Initial Flow Period --- Minutes 30 (B) 963 P.S.I. to (C) 1062 P.S.I.

Initial Closed In Period --- Minutes 60 (D) 1223 P.S.I.

Final Flow Period --- Minutes 50 (E) 1010 P.S.I. to (F) 1048 P.S.I.

Final Closed In Period --- Minutes 60 (G) 1187 P.S.I.

Final Hydrostatic Pressure --- (H) 2548 P.S.I.

Phone 316 262-5861

316 838-0601

P. O. Box 1599  
WICHITA, KANSAS 67201**GAS FLOW REPORT**

Date 7/7/79 Ticket 2513 Company Pickrell Drilling Company  
 Well Name and No. Shattuck "A" #3 Dst No. 3 Interval Tested 5252' - 5290'  
 County Clark State Kansas Sec. 31 Twp. 30S Rg. 21W

| Time Gauge<br>Pre-Flow            | Time Gauge<br>in Min. | P.S.I. on<br>Merla Orifice<br>Well Tester | P.S.I. on<br>Pitot<br>Tester | P.S.I. on<br>Side Static<br>Tester | P.S.I. on<br>U-Tube<br>Tester | Description of Flow |
|-----------------------------------|-----------------------|-------------------------------------------|------------------------------|------------------------------------|-------------------------------|---------------------|
| Tool open 3:20 AM <b>PRE FLOW</b> |                       |                                           |                              |                                    |                               |                     |
| Gas to surface in two minutes     |                       |                                           |                              |                                    |                               | 6,160,000 CFPD      |
|                                   | 10 min.               | 50 lbs. 2" orifice                        |                              |                                    |                               | 6,160,000 CFPD      |
|                                   | 20 min.               | 55 lbs. 2" orifice                        |                              |                                    |                               | 6,640,000 CFPD      |
|                                   | 30 min.               | 55 lbs. 2" orifice                        |                              |                                    |                               | 6,640,000 CFPD      |
|                                   |                       |                                           |                              |                                    |                               |                     |
|                                   |                       |                                           |                              |                                    |                               |                     |

**SECOND FLOW**

|  |         |                    |  |  |  |                |
|--|---------|--------------------|--|--|--|----------------|
|  | 10 min. | 50 lbs. 2" orifice |  |  |  | 6,160,000 CFPD |
|  | 20 min. | 55 lbs. 2" orifice |  |  |  | 6,640,000 CFPD |
|  | 30 min. | 55 lbs. 2" orifice |  |  |  | 6,640,000 CFPD |
|  | 40 min. | 55 lbs. 2" orifice |  |  |  | 6,640,000 CFPD |
|  | 50 min. | 55 lbs. 2" orifice |  |  |  | 6,640,000 CFPD |
|  |         |                    |  |  |  |                |
|  |         |                    |  |  |  |                |
|  |         |                    |  |  |  |                |
|  |         |                    |  |  |  |                |
|  |         |                    |  |  |  |                |

**GAS BOTTLE**

Serial No. -- Date Bottle Filled -- Date to be Invoiced 7/7/79

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% per month, equal to 12% 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 Pickrell Drilling Company

Authorized by Mike G. Russell

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7/7/79  
 Recorder No. 6246 Capacity 5200 Test Ticket No. 2513  
 Clock No. -- Elevation -- Location 5280 Ft.  
 Well Temperature 120 °F

| Point                          | Pressure |        | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|---------------|
| A Initial Hydrostatic Mud      | 2637     | P.S.I. | 3:20A      | M             |
| B First Initial Flow Pressure  | 963      | P.S.I. | 30         | 30            |
| C First Final Flow Pressure    | 1062     | P.S.I. | 60         | 60            |
| D Initial Closed-in Pressure   | 1223     | P.S.I. | 50         | 50            |
| E Second Initial Flow Pressure | 1010     | P.S.I. | 60         | 60            |
| F Second Final Flow Pressure   | 1048     | P.S.I. |            |               |
| G Final Closed-in Pressure     | 1187     | P.S.I. |            |               |
| H Final Hydrostatic Mud        | 2548     | P.S.I. |            |               |

### PRESSURE BREAKDOWN

First Flow Pressure  
 Breakdown: 6 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

Initial Shut-In  
 Breakdown: 20 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

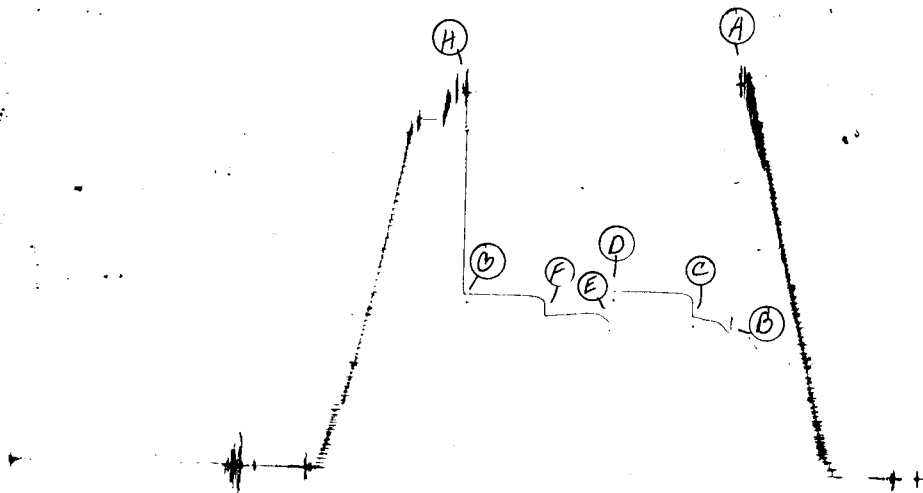
Second Flow Pressure  
 Breakdown: 10 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

Final Shut-In  
 Breakdown: 20 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

| Point<br>Mins. | Press.      | Point<br>Minutes | Press.      | Point<br>Minutes | Press.      | Point<br>Minutes | Press.      |
|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| P 1 <u>0</u>   | <u>963</u>  | <u>0</u>         | <u>1062</u> | <u>0</u>         | <u>1010</u> | <u>0</u>         | <u>1048</u> |
| P 2 <u>5</u>   | <u>995</u>  | <u>3</u>         | <u>1202</u> | <u>5</u>         | <u>1036</u> | <u>3</u>         | <u>1163</u> |
| P 3 <u>10</u>  | <u>1028</u> | <u>6</u>         | <u>1212</u> | <u>10</u>        | <u>1065</u> | <u>6</u>         | <u>1179</u> |
| P 4 <u>15</u>  | <u>1039</u> | <u>9</u>         | <u>1215</u> | <u>15</u>        | <u>1073</u> | <u>9</u>         | <u>1184</u> |
| P 5 <u>20</u>  | <u>1047</u> | <u>12</u>        | <u>1215</u> | <u>20</u>        | <u>1073</u> | <u>12</u>        | <u>1187</u> |
| P 6 <u>25</u>  | <u>1060</u> | <u>15</u>        | <u>1215</u> | <u>25</u>        | <u>1065</u> | <u>15</u>        | <u>1187</u> |
| P 7 <u>30</u>  | <u>1062</u> | <u>18</u>        | <u>1215</u> | <u>30</u>        | <u>1062</u> | <u>18</u>        | <u>1187</u> |
| P 8            |             | <u>21</u>        | <u>1215</u> | <u>35</u>        | <u>1058</u> | <u>21</u>        | <u>1187</u> |
| P 9            |             | <u>24</u>        | <u>1215</u> | <u>40</u>        | <u>1056</u> | <u>24</u>        | <u>1187</u> |
| P10            |             | <u>27</u>        | <u>1215</u> | <u>45</u>        | <u>1052</u> | <u>27</u>        | <u>1187</u> |
| P11            |             | <u>30</u>        | <u>1215</u> | <u>50</u>        | <u>1048</u> | <u>30</u>        | <u>1187</u> |
| P12            |             | <u>33</u>        | <u>1215</u> |                  |             | <u>33</u>        | <u>1187</u> |
| P13            |             | <u>36</u>        | <u>1219</u> |                  |             | <u>36</u>        | <u>1187</u> |
| P14            |             | <u>39</u>        | <u>1223</u> |                  |             | <u>39</u>        | <u>1187</u> |
| P15            |             | <u>42</u>        | <u>1223</u> |                  |             | <u>42</u>        | <u>1187</u> |
| P16            |             | <u>45</u>        | <u>1223</u> |                  |             | <u>45</u>        | <u>1187</u> |
| P17            |             | <u>48</u>        | <u>1223</u> |                  |             | <u>48</u>        | <u>1187</u> |
| P18            |             | <u>51</u>        | <u>1223</u> |                  |             | <u>51</u>        | <u>1187</u> |
| P19            |             | <u>54</u>        | <u>1223</u> |                  |             | <u>54</u>        | <u>1187</u> |
| P20            |             | <u>57</u>        | <u>1223</u> |                  |             | <u>57</u>        | <u>1187</u> |
| WTC - 4        |             | <u>60</u>        | <u>1223</u> |                  |             | <u>60</u>        | <u>1187</u> |

6240

TKL #2513  
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WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 2514

P. O. BOX 1599 PHONE (316) 838-0601  
WICHITA, KANSAS 67201

Elevation \_\_\_\_\_ Formation M155 Eff. Pay \_\_\_\_\_ Ft.

District PRATT

Date 7-8-79

Customer Order No. \_\_\_\_\_

COMPANY NAME PICKRELL DRUG CO.

ADDRESS \_\_\_\_\_

LEASE AND WELL NO. SHADOCK A-3 COUNTY CLARK STATE KS Sec. 31 Twp. 30S Rge. 21W

Mail Invoice To SAME Co. Name \_\_\_\_\_ Address \_\_\_\_\_ No. Copies Requested Reg

Mail Charts To SAME Address \_\_\_\_\_ No. Copies Requested Reg

Formation Test No. 4 Interval Tested from 5300 ft. to 5334 ft. Total Depth 5334 ft.

Packer Depth 5295 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Packer Depth 5300 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 5324 ft.

Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 5327 ft.

Recorder Number 5673 Cap. 5400

Below Straddle Recorder Depth \_\_\_\_\_ ft.

Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_

Drilling Contractor W. TOOLS

Drill Collar Length 210 I. D. 2 1/4 in.

Mud Type DRY Viscosity 54

Weight Pipe Length \_\_\_\_\_ I. D. \_\_\_\_\_ in.

Weight 9.2 Water Loss 9.4 cc.

Drill Pipe Length \_\_\_\_\_ I. D. 3.8 in.

Chlorides 20,000 P.P.M.

Test Tool Length 29 in. Tool Size 5 1/2 in.

Jars: Make W.T.C. Serial Number \_\_\_\_\_

Anchor Length 34 ft. Size 5 1/2 in.

Did Well Flow? \_\_\_\_\_ Reversed Out \_\_\_\_\_

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: VERY WEAK BLOW THRO-OUT TEST

Recovered 1 ft. of Free Oil

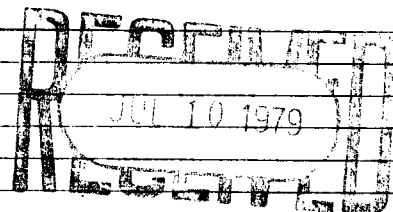
Recovered 6.5 ft. of Oil cut mud

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

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

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

Remarks: \_\_\_\_\_



Time Set Packer(s) 12:55 A.M. Time Started Off Bottom 4:55 A.M. Maximum Temperature 120

Initial Hydrostatic Pressure \_\_\_\_\_ (A) 2605 P.S.I.

Initial Flow Period \_\_\_\_\_ Minutes 30 (B) 2605 P.S.I. to (C) 52 P.S.I.

Initial Closed In Period \_\_\_\_\_ Minutes 60 (D) 1007 P.S.I.

Final Flow Period \_\_\_\_\_ Minutes 90 (E) 65 P.S.I. to (F) 65 P.S.I.

Final Closed In Period \_\_\_\_\_ Minutes 60 (G) 667 P.S.I.

Final Hydrostatic Pressure \_\_\_\_\_ (H) 2605 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]  
Signature of Customer or his authorized representative

Western Representative Bill Dager

FIELD INVOICE

Open Hole Test \$ 2550.00  
Misrun \$ \_\_\_\_\_  
Straddle Test \$ 250.00  
Jars \$ \_\_\_\_\_  
Selective Zone \$ \_\_\_\_\_  
Safety Joint \$ 35.00  
Standby \$ \_\_\_\_\_  
Evaluation \$ \_\_\_\_\_  
Extra Packer \$ \_\_\_\_\_  
Circ. Sub. \$ \_\_\_\_\_  
Mileage \$ \_\_\_\_\_  
Extra Charts \$ \_\_\_\_\_

TOTAL \$ 835.00

# WESTERN TESTING CO., INC.

## Pressure Data

Date 7-8-79 Test Ticket No. 2514  
 Recorder No. 6246 Capacity 5200 Location 5324 Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 120 °F  
 Point 2653 Pressure \_\_\_\_\_ Time Given 12:55 Time Computed 4 M  
 A Initial Hydrostatic Mud 2653 P.S.I. Open Tool  
 B First Initial Flow Pressure 42 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 C First Final Flow Pressure 45 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 D Initial Closed-in Pressure 1010 P.S.I. Second Flow Pressure 90 Mins. 90 Mins.  
 E Second Initial Flow Pressure 52 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 F Second Final Flow Pressure 60 P.S.I.  
 G Final Closed-in Pressure 673 P.S.I.  
 H Final Hydrostatic Mud 2611 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>18</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<br>Mins.              | Press. | Point<br>Minutes            | Press. | Point<br>Minutes            | Press. | Point<br>Minutes            | Press. |
| P 1 0                       | 42     | 0                           | 45     | 0                           | 52     | 0                           | 60     |
| P 2 5                       | 37     | 3                           | 50     | 5                           | 50     | 3                           | 65     |
| P 3 10                      |        | 6                           | 58     | 10                          |        | 6                           | 73     |
| P 4 15                      |        | 9                           | 71     | 15                          |        | 9                           | 79     |
| P 5 20                      | 37     | 12                          | 79     | 20                          |        | 12                          | 86     |
| P 6 25                      | 41     | 15                          | 92     | 25                          |        | 15                          | 94     |
| P 7 30                      | 45     | 18                          | 107    | 30                          |        | 18                          | 107    |
| P 8 35                      |        | 21                          | 120    | 35                          |        | 21                          | 120    |
| P 9 40                      |        | 24                          | 136    | 40                          |        | 24                          | 134    |
| P 10 45                     |        | 27                          | 165    | 45                          |        | 27                          | 149    |
| P 11 50                     |        | 30                          | 202    | 50                          |        | 30                          | 170    |
| P 12 55                     |        | 33                          | 246    | 55                          |        | 33                          | 194    |
| P 13 60                     |        | 36                          | 301    | 60                          |        | 36                          | 223    |
| P 14                        |        | 39                          | 372    | 65                          |        | 39                          | 254    |
| P 15                        |        | 42                          | 469    | 70                          |        | 42                          | 296    |
| P 16                        |        | 45                          | 576    | 75                          | 50     | 45                          | 343    |
| P 17                        |        | 48                          | 688    | 80                          | 52     | 48                          | 406    |
| P 18                        |        | 51                          | 780    | 85                          | 56     | 51                          | 469    |
| P 19                        |        | 54                          | 861    | 90                          | 60     | 54                          | 529    |
| P 20                        |        | 57                          | 942    |                             |        | 57                          | 594    |
|                             |        | 60                          | 1010   |                             |        | 60                          | 673    |

(673)

Company Pickrell Drilling Company Lease & Well No. Shattuck "A" #3  
 Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 2514  
 Date 7/8/79 Sec. 31 Twp. 30S Range 21W County Clark State Kansas  
 Test Approved by Mike G. Russell Western Representative Bill Hager  
 Formation Test No. 4 Interval Tested from 5300 ft. to 5334 ft. Total Depth 5334 ft.  
 Packer Depth 5295 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 5300 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set --  
 Top Recorder Depth (Inside) 5324 ft. Recorder Number 6246 Cap. 5200  
 Bottom Recorder Depth (Outside) 5327 ft. Recorder Number 5673 Cap. 5400  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
 Drilling Contractor Pickrell Drilling Drill Collar Length 210 I. D. 2 1/4 in.  
 Mud Type drispac Viscosity 54 Weight Pipe Length - I. D. - in.  
 Weight 9.2 Water Loss 9.4 cc. Drill Pipe Length - I. D. 3.8 in.  
 Chlorides 20,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 408 Anchor Length 34 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: Very weak blow throughout test.

Recovered 1 ft. of free oil  
 Recovered 65 ft. of slightly oil cut mud  
 Recovered - ft. of -  
 Recovered - ft. of -  
 Recovered - ft. of -

Remarks: \_\_\_\_\_

|                              |              |                 |              |             |                 |                     |            |
|------------------------------|--------------|-----------------|--------------|-------------|-----------------|---------------------|------------|
| Time Set                     | <u>12:55</u> | <u>A.M.</u>     | Time Started | <u>4:55</u> | <u>A.M.</u>     | Maximum Temperature | <u>120</u> |
|                              |              | <del>P.M.</del> | Off Bottom   |             | <del>P.M.</del> |                     |            |
| Initial Hydrostatic Pressure |              |                 | (A)          | <u>2653</u> | P.S.I.          |                     |            |
| Initial Flow Period          | <u>30</u>    | Minutes         | (B)          | <u>42</u>   | P.S.I. to (C)   | <u>45</u>           | P.S.I.     |
| Initial Closed In Period     | <u>60</u>    | Minutes         | (D)          | <u>1010</u> | P.S.I.          |                     |            |
| Final Flow Period            | <u>90</u>    | Minutes         | (E)          | <u>52</u>   | P.S.I. to (F)   | <u>60</u>           | P.S.I.     |
| Final Closed In Period       | <u>60</u>    | Minutes         | (G)          | <u>673</u>  | P.S.I.          |                     |            |
| Final Hydrostatic Pressure   |              |                 | (H)          | <u>2611</u> | P.S.I.          |                     |            |

# WESTERN TESTING CO., INC.

## Pressure Data

2514

Date 7/8/79 Test Ticket No. 5324  
 Recorder No. 6246 Capacity 5200 Location 120 Ft.  
 Clock No. -- Elevation -- Well Temperature      °F

| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 2653     | P.S.I. | 12:55A     | M              |
| B First Initial Flow Pressure  | 42       | P.S.I. | 30         | Mins. 30 Mins. |
| C First Final Flow Pressure    | 45       | P.S.I. | 60         | Mins. 60 Mins. |
| D Initial Closed-in Pressure   | 1010     | P.S.I. | 90         | Mins. 90 Mins. |
| E Second Initial Flow Pressure | 52       | P.S.I. | 60         | Mins. 60 Mins. |
| F Second Final Flow Pressure   | 60       | P.S.I. |            |                |
| G Final Closed-in Pressure     | 673      | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 2611     | P.S.I. |            |                |

### PRESSURE BREAKDOWN

**First Flow Pressure**  
 Breakdown: 6 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Initial Shut-In**  
 Breakdown: 20 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

**Second Flow Pressure**  
 Breakdown: 18 Inc.  
 of 5 mins. and a  
 final inc. of 0 Min.

**Final Shut-In**  
 Breakdown: 20 Inc.  
 of 3 mins. and a  
 final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1 0       | 42     | 0             | 45     | 0             | 52     | 0             | 60     |
| P 2 5       | 37     | 3             | 50     | 5             | 50     | 3             | 65     |
| P 3 10      | 37     | 6             | 58     | 10            | 50     | 6             | 73     |
| P 4 15      | 37     | 9             | 71     | 15            | 50     | 9             | 79     |
| P 5 20      | 37     | 12            | 79     | 20            | 50     | 12            | 86     |
| P 6 25      | 41     | 15            | 92     | 25            | 50     | 15            | 94     |
| P 7 30      | 45     | 18            | 107    | 30            | 50     | 18            | 107    |
| P 8         |        | 21            | 120    | 35            | 50     | 21            | 120    |
| P 9         |        | 24            | 136    | 40            | 50     | 24            | 134    |
| P10         |        | 27            | 165    | 45            | 50     | 27            | 149    |
| P11         |        | 30            | 202    | 50            | 50     | 30            | 170    |
| P12         |        | 33            | 246    | 55            | 50     | 33            | 194    |
| P13         |        | 36            | 301    | 60            | 50     | 36            | 223    |
| P14         |        | 39            | 372    | 65            | 50     | 39            | 254    |
| P15         |        | 42            | 469    | 70            | 50     | 42            | 296    |
| P16         |        | 45            | 576    | 75            | 50     | 45            | 343    |
| P17         |        | 48            | 688    | 80            | 52     | 48            | 406    |
| P18         |        | 51            | 780    | 85            | 56     | 51            | 469    |
| P19         |        | 54            | 861    | 90            | 60     | 54            | 529    |
| P20         |        | 57            | 942    |               |        | 57            | 594    |
|             |        | 60            | 1010   |               |        | 60            | 673    |

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TK# 2514  
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