



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

WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 3359

Elevation 1279 K.B. Formation STAINAKER Eff. Pay      Ft.

District PRATT Date 8-14-79 Customer Order No.       
COMPANY NAME Pickrell DRIG. Co.  
ADDRESS GREAT BEACH, KANS. LITWIN BLDG. - SUITE 205 110 N. MARKET WICHITA, KANS. 67202  
LEASE AND WELL NO. Hoopes #1-B COUNTY HARPER STATE KANS. Sec. 36 Twp. 33 Rge. 6W  
Mail Invoice To SAME Co. Name      Address      No. Copies Requested Reg.  
Mail Charts To SAME Address      No. Copies Requested Reg.

Formation Test No. 1 Interval Tested from 3474 ft. to 3520 ft. Total Depth 3520 ft.  
Packer Depth 3469 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 3474 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set     

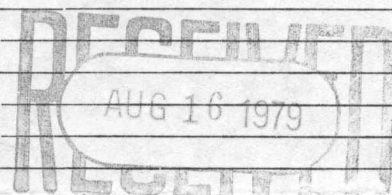
Top Recorder Depth (Inside) 3509 ft. Recorder Number 6246 Cap. 5200  
Bottom Recorder Depth (Outside) 3512 ft. Recorder Number 5673 Cap. 5400  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.     

Drilling Contractor CO-TOOLS Rig 10 Drill Collar Length      I. D.      in.  
Mud Type STARCH Viscosity 45 Weight Pipe Length 566 I. D. 3.2 in.  
Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 2888 I. D. 3.8 in.  
Chlorides 33,500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.  
Jars: Make      Serial Number      Anchor Length 46 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 7/8 in. Tool Joint Size 4 1/2 F.H. in.

Blow: STRONG BLOW THRU-OUT FLOW PERIODS  
GAS TO SURFACE 4 MIN. FINISH FLOW PERIOD - SEE FLOW CHART

Recovered 155 ft. of GAS CUT DRIG. MUD  
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of     

Remarks:     



Time Set Packer(s) 10:40 A.M. P.M. Time Started Off Bottom 3:10 A.M. P.M. Maximum Temperature 121  
Initial Hydrostatic Pressure      (A) 1733 P.S.I.  
Initial Flow Period 30 Minutes (B) 65 P.S.I. to (C) 65 P.S.I.  
Initial Closed In Period 60 Minutes (D) 1461 P.S.I.  
Final Flow Period 120 Minutes (E) 65 P.S.I. to (F) 78 P.S.I.  
Final Closed In Period 60 Minutes (G) 1396 P.S.I.  
Final Hydrostatic Pressure      (H) 1720 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 George R. Dent  
Signature of Customer or his authorized representative

Western Representative David Sloan  
Thank you

FIELD INVOICE

Open Hole Test \$ 440.00  
Misrun \$       
Straddle Test \$       
Jars \$       
Selective Zone \$       
Safety Joint \$       
Standby \$       
Evaluation \$       
Extra Packer \$       
Circ. Sub. \$       
80 Mileage PRATT \$       
Fluid Sampler \$       
Extra Charts \$     

TOTAL

\$ 440.00



## GAS FLOW REPORT

Nº 1934

Date 8-14-79 Ticket 3359 Company Pickrell DR/g. Co.  
 Well Name and No. Hoopes #1-B Dst No. 1 Interval Tested 3474-3520  
 County HARPER State KANS. Sec. 36 Twp. 33 Rg. 6W

| Time<br>Gauge<br>in Min. | P.S.I. on<br>Merla Orifice<br>Well Tester | Size of<br>Orifice | P.S.I. on<br>Pitot<br>Tester | P.S.I. on<br>Side Static<br>Tester | Description of Flow |
|--------------------------|-------------------------------------------|--------------------|------------------------------|------------------------------------|---------------------|
|--------------------------|-------------------------------------------|--------------------|------------------------------|------------------------------------|---------------------|

## PRE FLOW

30 min. Flow - NO GAS  
TO SURFACE

| Inchs of<br>WATER |    |     | SECOND FLOW GAS TO SURFACE 4 MIN. |          |  |
|-------------------|----|-----|-----------------------------------|----------|--|
| 10                | 20 | 1/2 | 38,000                            | C.F.P.D. |  |
| 20                | 22 | 1/2 | 39,400                            | C.F.P.D. |  |
| 30                | 26 | 1/2 | 37,900                            | C.F.P.D. |  |
| 40                | 30 | 1/2 | 34,300                            | C.F.P.D. |  |
| 50                | 34 | 1/2 | 36,500                            | C.F.P.D. |  |
| 60                | 36 | 1/2 | 37,600                            | C.F.P.D. |  |
| 70                | 38 | 1/2 | 38,600                            | C.F.P.D. |  |
| 80                | 40 | 1/2 | 39,600                            | C.F.P.D. |  |
| 90                | 42 | 1/2 | 40,700                            | C.F.P.D. |  |
| 100               | 42 | 1/2 | 40,700                            | C.F.P.D. |  |
| 110               | 44 | 1/2 | 41,600                            | C.F.P.D. |  |
| 120               | 44 | 1/2 | 41,600                            | C.F.P.D. |  |

## GAS BOTTLE

Serial No. 601 Date Bottle Filled 8-14-79 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

*George R. Dent*

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-14-79 Test Ticket No. 3359  
 Recorder No. 6246 Capacity 5200 Location 3509 Ft.  
 Block No. - Elevation 12.79 K.B. Well Temperature 121 °F  
 Point Pressure Time Given Time Computed  
 Initial Hydrostatic Mud 1746 P.S.I. Open Tool 10:40 P. M.  
 First Initial Flow Pressure 71 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 First Final Flow Pressure 58 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 Initial Closed-in Pressure 1474 P.S.I. Second Flow Pressure 120 Mins. 120 Mins.  
 Second Initial Flow Pressure 69 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 Second Final Flow Pressure 81 P.S.I.  
 Final Closed-in Pressure 1415 P.S.I.  
 Final Hydrostatic Mud 1738 P.S.I.

### PRESSURE BREAKDOWN

| First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. |           | Initial Shut-In Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |             | Second Flow Pressure Breakdown: <u>24</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. |           | Final Shut-In Breakdown: <u>21</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |             |
|--------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------|-------------|
| Point Mins.                                                                                      | Press.    | Point Minutes                                                                                 | Press.      | Point Minutes                                                                                      | Press.    | Point Minutes                                                                               | Press.      |
| 1 0                                                                                              | <u>71</u> | 0                                                                                             | <u>58</u>   | 0                                                                                                  | <u>69</u> | 0                                                                                           | <u>81</u>   |
| 2 5                                                                                              | <u>58</u> | 3                                                                                             | <u>120</u>  | 5                                                                                                  | <u>58</u> | 3                                                                                           | <u>243</u>  |
| 3 10                                                                                             |           | 6                                                                                             | <u>217</u>  | 10                                                                                                 | <u>58</u> | 6                                                                                           | <u>429</u>  |
| 4 15                                                                                             |           | 9                                                                                             | <u>343</u>  | 15                                                                                                 | <u>58</u> | 9                                                                                           | <u>618</u>  |
| 5 20                                                                                             |           | 12                                                                                            | <u>461</u>  | 20                                                                                                 | <u>59</u> | 12                                                                                          | <u>778</u>  |
| 6 25                                                                                             |           | 15                                                                                            | <u>639</u>  | 25                                                                                                 | <u>59</u> | 15                                                                                          | <u>911</u>  |
| 7 30                                                                                             | <u>58</u> | 18                                                                                            | <u>791</u>  | 30                                                                                                 | <u>59</u> | 18                                                                                          | <u>1018</u> |
| 8 35                                                                                             |           | 21                                                                                            | <u>940</u>  | 35                                                                                                 | <u>60</u> | 21                                                                                          | <u>1104</u> |
| 9 40                                                                                             |           | 24                                                                                            | <u>1057</u> | 40                                                                                                 | <u>60</u> | 24                                                                                          | <u>1171</u> |
| 10 45                                                                                            |           | 27                                                                                            | <u>1163</u> | 45                                                                                                 | <u>63</u> | 27                                                                                          | <u>1223</u> |
| 11 50                                                                                            |           | 30                                                                                            | <u>1255</u> | 50                                                                                                 | <u>66</u> | 30                                                                                          | <u>1262</u> |
| 12 55                                                                                            |           | 33                                                                                            | <u>1326</u> | 55                                                                                                 | <u>69</u> | 33                                                                                          | <u>1294</u> |
| 13 60                                                                                            |           | 36                                                                                            | <u>1376</u> | 60                                                                                                 | <u>71</u> | 36                                                                                          | <u>1320</u> |
| 14                                                                                               |           | 39                                                                                            | <u>1407</u> | 65                                                                                                 | <u>71</u> | 39                                                                                          | <u>1342</u> |
| 15                                                                                               |           | 42                                                                                            | <u>1427</u> | 70                                                                                                 | <u>71</u> | 42                                                                                          | <u>1356</u> |
| 16                                                                                               |           | 45                                                                                            | <u>1443</u> | 75                                                                                                 | <u>71</u> | 45                                                                                          | <u>1370</u> |
| 17                                                                                               |           | 48                                                                                            | <u>1456</u> | 80                                                                                                 | <u>72</u> | 48                                                                                          | <u>1378</u> |
| 18                                                                                               |           | 51                                                                                            | <u>1461</u> | 85                                                                                                 | <u>73</u> | 51                                                                                          | <u>1389</u> |
| 19                                                                                               |           | 54                                                                                            | <u>1466</u> | 90                                                                                                 | <u>74</u> | 54                                                                                          | <u>1396</u> |
| 20                                                                                               |           | 57                                                                                            | <u>1470</u> | 95                                                                                                 | <u>77</u> | 57                                                                                          | <u>1404</u> |
|                                                                                                  |           | 60                                                                                            | <u>1474</u> |                                                                                                    |           | 60                                                                                          | <u>1409</u> |

Contd on next page 63- 1415

# WESTERN TESTING CO., INC.

## Pressure Data

Test Ticket No. 8359

Date \_\_\_\_\_ Recorder No. \_\_\_\_\_ Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.  
 Lock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                        | Pressure | Open Tool                  | Time Given | Time Computed |
|------------------------------|----------|----------------------------|------------|---------------|
| Initial Hydrostatic Mud      | P.S.I.   |                            | M          |               |
| First Initial Flow Pressure  | P.S.I.   | First Flow Pressure        | Mins.      | Mins.         |
| First Final Flow Pressure    | P.S.I.   | Initial Closed-in Pressure | Mins.      | Mins.         |
| Initial Closed-in Pressure   | P.S.I.   | Second Flow Pressure       | Mins.      | Mins.         |
| Second Initial Flow Pressure | P.S.I.   | Final Closed-in Pressure   | Mins.      | Mins.         |
| Second Final Flow Pressure   | P.S.I.   |                            |            |               |
| Final Closed-in Pressure     | P.S.I.   |                            |            |               |
| Final Hydrostatic Mud        | P.S.I.   |                            |            |               |

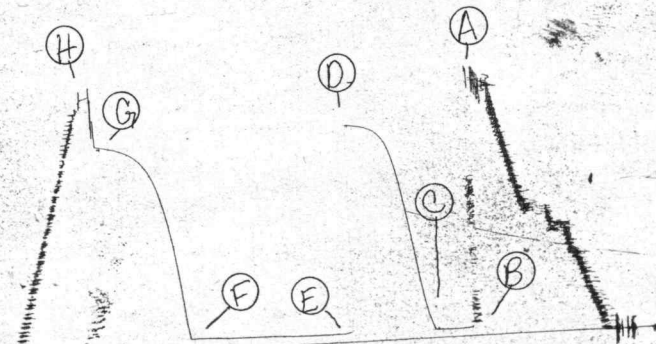
### PRESSURE BREAKDOWN

| First Flow Pressure         |        | Initial Shut-In             |        | Second Flow Pressure        |           | Final Shut-In               |        |
|-----------------------------|--------|-----------------------------|--------|-----------------------------|-----------|-----------------------------|--------|
| Breakdown: _____ Inc.       |        | Breakdown: _____ Inc.       |        | Breakdown: _____ 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                         |        | 63                          |        | <u>100</u>                  | <u>80</u> | 63                          |        |
| P 2                         |        | 66                          |        | <u>105</u>                  | <u>81</u> | 66                          |        |
| P 3                         |        | 69                          |        | <u>110</u>                  | ↓         | 69                          |        |
| P 4                         |        | 72                          |        | <u>115</u>                  |           | 72                          |        |
| P 5                         |        | 75                          |        | <u>120</u>                  | <u>81</u> | 75                          |        |
| P 6                         |        | 78                          |        |                             |           | 78                          |        |
| P 7                         |        | 81                          |        |                             |           | 81                          |        |
| P 8                         |        | 84                          |        |                             |           | 84                          |        |
| P 9                         |        | 87                          |        |                             |           | 87                          |        |
| P 10                        |        | 90                          |        |                             |           | 90                          |        |
| P 11                        |        | 93                          |        |                             |           | 93                          |        |
| P 12                        |        | 96                          |        |                             |           | 96                          |        |
| P 13                        |        | 99                          |        |                             |           | 99                          |        |
| P 14                        |        | 102                         |        |                             |           | 102                         |        |
| P 15                        |        | 105                         |        |                             |           | 105                         |        |
| P 16                        |        | 108                         |        |                             |           | 108                         |        |
| P 17                        |        | 111                         |        |                             |           | 111                         |        |
| P 18                        |        | 114                         |        |                             |           | 114                         |        |
| P 19                        |        | 117                         |        |                             |           | 117                         |        |
| P 20                        |        | 120                         |        |                             |           | 120                         |        |

6246

Pickrell DRlg. Co.  
Hooper #1-B  
DST #1

TR1 #3359  
I



Company Pickrell Drilling Company Lease & Well No. Hoopes #1-B  
Elevation 1279 Kelly Bushing Stalnaker Effective Pay -- Ft. Ticket No. 3359  
Date 8/14/79 Sec. 36 Twp. 33S Range 6W County Harper State Kansas  
Test Approved by George R. Dent Western Representative Dave Sloan

Formation Test No. 1 Interval Tested from 3474 ft. to 3520 ft. Total Depth 3520 ft.

Packer Depth 3469 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3474 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 3509 ft. Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 3512 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 45 Weight Pipe Length 566 I. D. 3.2 in.

Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 2888 I. D. 3.8 in.

Chlorides 33,500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make -- Serial Number -- Anchor Length 46 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 FH in.

Blow: Strong blow throughout flow periods. Gas to surface four minutes on final flow period.

See attached sheet for gas measurements.

Recovered 155 ft. of gas cut drilling mud

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 10:40 ~~AM~~ PM Time Started Off Bottom 3:10 ~~AM~~ PM Maximum Temperature 121

Initial Hydrostatic Pressure        (A) 1746 P.S.I.

Initial Flow Period 30 Minutes (B) 71 P.S.I. to (C) 58 P.S.I.

Initial Closed In Period 60 Minutes (D) 1474 P.S.I.

Final Flow Period 120 Minutes (E) 69 P.S.I. to (F) 81 P.S.I.

Final Closed In Period 60 Minutes (G) 1415 P.S.I.

Final Hydrostatic Pressure        (H) 1738 P.S.I.

Phone 316 262-5861  
316 838-0601



P. O. Box 1599  
WICHITA, KANSAS 67201

## GAS FLOW REPORT

Date 8/14/79 Ticket 3359 Company Pickrell Drilling Company  
Well Name and No. Hoopes #1-B Dst No. 1 Interval Tested 3474'-3520'  
County Harper State Kansas Sec. 36 Twp. 33S Rg. 6W

| Time Gauge Pre-Flow | Time Gauge in Min. | P.S.I. on Meria 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>PRE FLOW</b>     |                    |                                     |                        |                              |                         |                                      |
|                     |                    |                                     |                        |                              |                         | 30 minute flow -- No gas to surface. |
|                     |                    |                                     |                        |                              |                         |                                      |
|                     |                    |                                     |                        |                              |                         |                                      |
|                     |                    |                                     |                        |                              |                         |                                      |
|                     |                    |                                     |                        |                              |                         |                                      |

### SECOND FLOW Gas to surface four minutes.

|  |          |                           |  |             |
|--|----------|---------------------------|--|-------------|
|  | 10 min.  | 20" of water 1/2" orifice |  | 28,000 CFPD |
|  | 20 min.  | 22" of water 1/2" orifice |  | 29,400 CFPD |
|  | 30 min.  | 26" of water 1/2" orifice |  | 31,900 CFPD |
|  | 40 min.  | 30" of water 1/2" orifice |  | 34,300 CFPD |
|  | 50 min.  | 34" of water 1/2" orifice |  | 36,500 CFPD |
|  | 60 min.  | 36" of water 1/2" orifice |  | 37,600 CFPD |
|  | 70 min.  | 38" of water 1/2" orifice |  | 38,600 CFPD |
|  | 80 min.  | 40" of water 1/2" orifice |  | 39,600 CFPD |
|  | 90 min.  | 42" of water 1/2" orifice |  | 40,700 CFPD |
|  | 100 min. | 42" of water 1/2" orifice |  | 40,700 CFPD |
|  | 110 min. | 44" of water 1/2" orifice |  | 41,600 CFPD |
|  | 120 min. | 44" of water 1/2" orifice |  | 41,600 CFPD |

### GAS BOTTLE

Serial No. 601 Date Bottle Filled 8/14/79 Date to be Invoiced 8/14/79

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 George R. Dent

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/14/79 Test Ticket No. 3359  
Recorder No. 6246 Capacity 5200 Location 3509 Ft.  
Clock No. -- Elevation 1279 Kelly Bushing Well Temperature 121 °F

| Point                          | Pressure    | Time Given | Time Computed |
|--------------------------------|-------------|------------|---------------|
| A Initial Hydrostatic Mud      | 1746 P.S.I. | 10:40P M   |               |
| B First Initial Flow Pressure  | 71 P.S.I.   | 30 Mins.   | 30 Mins.      |
| C First Final Flow Pressure    | 58 P.S.I.   | 60 Mins.   | 60 Mins.      |
| D Initial Closed-in Pressure   | 1474 P.S.I. | 120 Mins.  | 120 Mins.     |
| E Second Initial Flow Pressure | 69 P.S.I.   | 60 Mins.   | 60 Mins.      |
| F Second Final Flow Pressure   | 81 P.S.I.   |            |               |
| G Final Closed-in Pressure     | 1415 P.S.I. |            |               |
| H Final Hydrostatic Mud        | 1738 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>24</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>71</u> | <u>0</u>                    | <u>58</u>   | <u>0</u>                    | <u>69</u> | <u>0</u>                    | <u>81</u>   |
| P 2 <u>5</u>                | <u>58</u> | <u>3</u>                    | <u>120</u>  | <u>5</u>                    | <u>58</u> | <u>3</u>                    | <u>243</u>  |
| P 3 <u>10</u>               | <u>58</u> | <u>6</u>                    | <u>217</u>  | <u>10</u>                   | <u>58</u> | <u>6</u>                    | <u>429</u>  |
| P 4 <u>15</u>               | <u>58</u> | <u>9</u>                    | <u>343</u>  | <u>15</u>                   | <u>58</u> | <u>9</u>                    | <u>618</u>  |
| P 5 <u>20</u>               | <u>58</u> | <u>12</u>                   | <u>461</u>  | <u>20</u>                   | <u>59</u> | <u>12</u>                   | <u>778</u>  |
| P 6 <u>25</u>               | <u>58</u> | <u>15</u>                   | <u>639</u>  | <u>25</u>                   | <u>59</u> | <u>15</u>                   | <u>911</u>  |
| P 7 <u>30</u>               | <u>58</u> | <u>18</u>                   | <u>791</u>  | <u>30</u>                   | <u>59</u> | <u>18</u>                   | <u>1018</u> |
| P 8                         |           | <u>21</u>                   | <u>940</u>  | <u>35</u>                   | <u>60</u> | <u>21</u>                   | <u>1104</u> |
| P 9                         |           | <u>24</u>                   | <u>1057</u> | <u>40</u>                   | <u>60</u> | <u>24</u>                   | <u>1171</u> |
| P10                         |           | <u>27</u>                   | <u>1163</u> | <u>45</u>                   | <u>63</u> | <u>27</u>                   | <u>1223</u> |
| P11                         |           | <u>30</u>                   | <u>1255</u> | <u>50</u>                   | <u>66</u> | <u>30</u>                   | <u>1262</u> |
| P12                         |           | <u>33</u>                   | <u>1326</u> | <u>55</u>                   | <u>69</u> | <u>33</u>                   | <u>1294</u> |
| P13                         |           | <u>36</u>                   | <u>1376</u> | <u>60</u>                   | <u>71</u> | <u>36</u>                   | <u>1320</u> |
| P14                         |           | <u>39</u>                   | <u>1407</u> | <u>65</u>                   | <u>71</u> | <u>39</u>                   | <u>1342</u> |
| P15                         |           | <u>42</u>                   | <u>1427</u> | <u>70</u>                   | <u>71</u> | <u>42</u>                   | <u>1356</u> |
| P16                         |           | <u>45</u>                   | <u>1443</u> | <u>75</u>                   | <u>71</u> | <u>45</u>                   | <u>1370</u> |
| P17                         |           | <u>48</u>                   | <u>1456</u> | <u>80</u>                   | <u>72</u> | <u>48</u>                   | <u>1378</u> |
| P18                         |           | <u>51</u>                   | <u>1461</u> | <u>85</u>                   | <u>73</u> | <u>51</u>                   | <u>1389</u> |
| P19                         |           | <u>54</u>                   | <u>1466</u> | <u>90</u>                   | <u>74</u> | <u>54</u>                   | <u>1396</u> |
| P20                         |           | <u>57</u>                   | <u>1470</u> | <u>95</u>                   | <u>77</u> | <u>57</u>                   | <u>1404</u> |
|                             |           | <u>60</u>                   | <u>1474</u> |                             |           | <u>60</u>                   | <u>1409</u> |
|                             |           |                             |             |                             |           | <u>63</u>                   | <u>1415</u> |

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/14/79 Recorder No. 6246 Capacity 5200 Test Ticket No. 3359  
 Location 1279 Kelly Bushing Well Temperature 121 °F  
 Clock No. -- Elevation --

| Point                          | Pressure |        | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|---------------|
| A Initial Hydrostatic Mud      | 1746     | P.S.I. | 10:40P M   |               |
| B First Initial Flow Pressure  | 71       | P.S.I. | 30 Mins    | 30 Mins       |
| C First Final Flow Pressure    | 58       | P.S.I. | 60 Mins    | 60 Mins       |
| D Initial Closed-in Pressure   | 1474     | P.S.I. | 120 Mins   | 120 Mins      |
| E Second Initial Flow Pressure | 69       | P.S.I. | 60 Mins    | 60 Mins       |
| F Second Final Flow Pressure   | 81       | P.S.I. |            |               |
| G Final Closed-in Pressure     | 1415     | P.S.I. |            |               |
| H Final Hydrostatic Mud        | 1738     | 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>24</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                         |        |                             |        | 100                         | 80     |                             |        |
| P 2                         |        |                             |        | 105                         | 81     |                             |        |
| P 3                         |        |                             |        | 110                         | 81     |                             |        |
| P 4                         |        |                             |        | 115                         | 81     |                             |        |
| P 5                         |        |                             |        | 120                         | 81     |                             |        |
| P 6                         |        |                             |        |                             |        |                             |        |
| P 7                         |        |                             |        |                             |        |                             |        |
| P 8                         |        |                             |        |                             |        |                             |        |
| P 9                         |        |                             |        |                             |        |                             |        |
| P10                         |        |                             |        |                             |        |                             |        |
| P11                         |        |                             |        |                             |        |                             |        |
| P12                         |        |                             |        |                             |        |                             |        |
| P13                         |        |                             |        |                             |        |                             |        |
| P14                         |        |                             |        |                             |        |                             |        |
| P15                         |        |                             |        |                             |        |                             |        |
| P16                         |        |                             |        |                             |        |                             |        |
| P17                         |        |                             |        |                             |        |                             |        |
| P18                         |        |                             |        |                             |        |                             |        |
| P19                         |        |                             |        |                             |        |                             |        |
| P20                         |        |                             |        |                             |        |                             |        |



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

WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 3360

Elevation 1279 K.B. Formation STA/NAKER Eff. Pay      Ft.

District PRATT Date 8-15-79 Customer Order No.     

COMPANY NAME PICKRELL DRIG. CO.

ADDRESS LITWIN Bld. Suite 205 110 N. MARKET, WICHITA, KANS. 67201

LEASE AND WELL NO. Hoopes #1-B COUNTY HARPER STATE KANS. Sec. 36 Twp 33 Rge 6W

Mail Invoice To SAME No. Copies Requested Reg.

Co. Name SAME Address      No. Copies Requested Reg.

Mail Charts To SAME Address      No. Copies Requested Reg.

Formation Test No. 2 Interval Tested from 3524 ft. to 3540 ft. Total Depth 3540 ft.

Packer Depth 3519 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Packer Depth 3524 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.

Depth of Selective Zone Set     

Top Recorder Depth (Inside) 3531 ft. Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 3534 ft. Recorder Number 5673 Cap. 5400

Below Straddle Recorder Depth      ft. Recorder Number      Cap.     

Drilling Contractor CO. TOOLS RIG Drill Collar Length 120 I. D. 2.2 in.

Mud Type STARCH Viscosity 45 Weight Pipe Length 566 I. D. 3.2 in.

Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 2810 I. D. 3.8 in.

Chlorides 33,500 P.P.M. Test Tool Length 28 ft. Tool Size 5 K.O.D. in.

Jars: Make W.T.C. Serial Number      Anchor Length 16 3/4 ft. Size 5 1/2 O.D. 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 F.I.H. in.

Blow: WEAK Blow - dying 20 min. INITIAL FLOW PERIOD

VERY WEAK Blow - dying 10 min. FINAL FLOW PERIOD

Recovered 12 1/2 ft. of WATER CUT mud - VERY slight spotting of oil

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Recovered      ft. of     

Remarks: Slid Tool 5' TO BOTTOM

Time Set Packer(s) 1:20 A.M. P.M. Time Started Off Bottom 3:20 A.M. P.M. Maximum Temperature 120

Initial Hydrostatic Pressure      (A) 1720 P.S.I.

Initial Flow Period 30 Minutes (B) 39 P.S.I. to (C) 52 P.S.I.

Initial Closed In Period 30 Minutes (D) 1266 P.S.I.

Final Flow Period 30 Minutes (E) 65 P.S.I. to (F) 78 P.S.I.

Final Closed In Period 30 Minutes (G) 1202 P.S.I.

Final Hydrostatic Pressure      (H) 1603 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 David Sloan  
Signature of Customer or his authorized representative

Western Representative David Sloan  
Thank you

FIELD INVOICE

Open Hole Test \$ 440.00  
Misrun \$       
Straddle Test \$ 250.00  
Jars \$       
Selective Zone \$ 35.00  
Safety Joint \$       
Standby \$       
Evaluation \$       
Extra Packer \$       
Circ. Sub. \$       
Mileage \$       
Fluid Sampler \$       
Extra Charts \$     

TOTAL \$ 725.00

## WESTERN TESTING CO., INC.

## Pressure Data

Date 8-15-79 Test Ticket No. 3360  
 Recorder No. 6246 Capacity 5200 Location 3531 Ft.  
 Clock No. — Elevation 1279 K.B. Well Temperature 120 °F  
 Unit  
 Initial Hydrostatic Mud 1775 P.S.I. Open Tool 1:20A M  
 First Initial Flow Pressure 31 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 First Final Flow Pressure 52 P.S.I. Initial Closed-in Pressure 30 Mins. 30 Mins.  
 Initial Closed-in Pressure 1329 P.S.I. Second Flow Pressure 30 Mins. 30 Mins.  
 Second Initial Flow Pressure 65 P.S.I. Final Closed-in Pressure 30 Mins. 30 Mins.  
 Second Final Flow Pressure 73 P.S.I.  
 Final Closed-in Pressure 1283 P.S.I.  
 Final Hydrostatic Mud 1730 P.S.I.

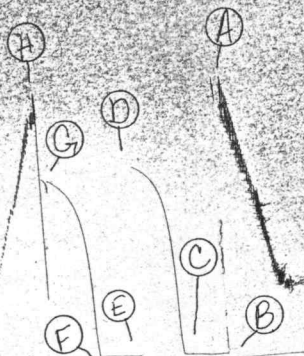
## PRESSURE BREAKDOWN

| First Flow Pressure         |                         | Initial Shut-In             |             | Second Flow Pressure        |           | Final Shut-In               |                           |
|-----------------------------|-------------------------|-----------------------------|-------------|-----------------------------|-----------|-----------------------------|---------------------------|
| Breakdown: <u>6</u> Inc.    |                         | Breakdown: <u>10</u> Inc.   |             | Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>10</u> Inc.   |                           |
| of <u>5</u> mins. and a     |                         | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |           | of <u>3</u> mins. and a     |                           |
| final inc. of <u>0</u> Min. |                         | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |           | final inc. of <u>0</u> Min. |                           |
| Point<br>ins.               | Press.                  | Point<br>Minutes            | Press.      | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press.                    |
| 1 0                         | <u>31</u>               | 0                           | <u>52</u>   | 0                           | <u>65</u> | 0                           | <u>73</u>                 |
| 2 5                         | <u>31</u> <del>31</del> | 3                           | <u>382</u>  | 5                           | <u>58</u> | 3                           | <u>450</u>                |
| 3 10                        | <u>31</u> <del>31</del> | 6                           | <u>783</u>  | 10                          | <u>58</u> | 6                           | <u>801</u>                |
| 4 15                        | <u>39</u>               | 9                           | <u>990</u>  | 15                          | <u>66</u> | 9                           | <u>974</u> <del>704</del> |
| 5 20                        | <u>45</u>               | 12                          | <u>1111</u> | 20                          | <u>72</u> | 12                          | <u>1070</u>               |
| 6 25                        | <u>47</u>               | 15                          | <u>1179</u> | 25                          | <u>73</u> | 15                          | <u>1130</u>               |
| 7 30                        | <u>52</u>               | 18                          | <u>1228</u> | 30                          | <u>73</u> | 18                          | <u>1174</u>               |
| 8 35                        |                         | 21                          | <u>1256</u> | 35                          |           | 21                          | <u>1208</u>               |
| 9 40                        |                         | 24                          | <u>1285</u> | 40                          |           | 24                          | <u>1234</u>               |
| 0 45                        |                         | 27                          | <u>1311</u> | 45                          |           | 27                          | <u>1257</u>               |
| 1 50                        |                         | 30                          | <u>1329</u> | 50                          |           | 30                          | <u>1283</u>               |
| 2 55                        |                         | 33                          |             | 55                          |           | 33                          |                           |
| 3 60                        |                         | 36                          |             | 60                          |           | 36                          |                           |
| 4                           |                         | 39                          |             | 65                          |           | 39                          |                           |
| 5                           |                         | 42                          |             | 70                          |           | 42                          |                           |
| 6                           |                         | 45                          |             | 75                          |           | 45                          |                           |
| 7                           |                         | 48                          |             | 80                          |           | 48                          |                           |
| 8                           |                         | 51                          |             | 85                          |           | 51                          |                           |
| 9                           |                         | 54                          |             | 90                          |           | 54                          |                           |
| 0                           |                         | 57                          |             |                             |           | 57                          |                           |
|                             |                         | 60                          |             |                             |           | 60                          |                           |

6246

PICKROLL DRlg. Co.  
Hoopes #1-B  
DST #2

TKT#3360  
I



Company Pickrell Drilling Company Lease & Well No. Hoopes #1-B  
 Elevation 1279 Kelly Bushing Formation Stalnaker Effective Pay -- Ft. Ticket No. 3360  
 Date 8/15/79 Sec. 36 Twp. 33S Range 6W County Harper State Kansas  
 Test Approved by George R. Dent Western Representative Dave Sloan  
 Formation Test No. 2 Interval Tested from 3524 ft. to 3540 ft. Total Depth 3540 ft.  
 Packer Depth 3519 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 3524 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set --  
 Top Recorder Depth (Inside) 3531 ft. Recorder Number 6246 Cap. 5200  
 Bottom Recorder Depth (Outside) 3534 ft. Recorder Number 5673 Cap. 5400  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
 Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length 120 I. D. 2.2 in.  
 Mud Type starch Viscosity 45 Weight Pipe Length 566 I. D. 3.2 in.  
 Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 2810 I. D. 3.8 in.  
 Chlorides 33,500 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 in.  
 Jars: Make WTC Serial Number 410 Anchor Length 16 ft. Size 5 1/2 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 FH in.

Weak blow , dying 20 minutes in initial flow period. Very weak blow , dying ten minutes  
 Blow: on final flow period.

Recovered 125 ft. of water cut mud;very slight spotting of oil  
 Recovered        ft. of         
 Recovered        ft. of         
 Recovered        ft. of         
 Recovered        ft. of         
 Remarks: Slid tool 5 feet to bottom.

Time Set Packer(s) 1:20 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 3:20 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 120  
 Initial Hydrostatic Pressure        (A) 1775 P.S.I.  
 Initial Flow Period        Minutes 30 (B) 31 P.S.I. to (C) 52 P.S.I.  
 Initial Closed In Period        Minutes 30 (D) 1329 P.S.I.  
 Final Flow Period        Minutes 30 (E) 65 P.S.I. to (F) 73 P.S.I.  
 Final Closed In Period        Minutes 30 (G) 1283 P.S.I.  
 Final Hydrostatic Pressure        (H) 1730 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/15/79 Test Ticket No. 3360  
 Recorder No. 6246 Capacity 5200 Location 3531 Ft.  
 Clock No. -- Elevation 1297 Kelly Bushing Well Temperature 120 °F

| Point                          | Pressure    | Time Given | Time Computed |
|--------------------------------|-------------|------------|---------------|
| A Initial Hydrostatic Mud      | 1775 P.S.I. | 1:20A M    |               |
| B First Initial Flow Pressure  | 31 P.S.I.   | 30 Mins.   | 30 Mins.      |
| C First Final Flow Pressure    | 52 P.S.I.   | 30 Mins.   | 30 Mins.      |
| D Initial Closed-in Pressure   | 1329 P.S.I. | 30 Mins.   | 30 Mins.      |
| E Second Initial Flow Pressure | 65 P.S.I.   | 30 Mins.   | 30 Mins.      |
| F Second Final Flow Pressure   | 73 P.S.I.   |            |               |
| G Final Closed-in Pressure     | 1283 P.S.I. |            |               |
| H Final Hydrostatic Mud        | 1730 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>10</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             | Second Flow Pressure<br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |           | Final Shut-In<br>Breakdown: <u>10</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |             |
|-----------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------|-------------|
| Point<br>Mins.                                                                                            | Press.    | Point<br>Minutes                                                                                       | Press.      | Point<br>Minutes                                                                                           | Press.    | Point<br>Minutes                                                                                     | Press.      |
| P 1 <u>0</u>                                                                                              | <u>31</u> | <u>0</u>                                                                                               | <u>52</u>   | <u>0</u>                                                                                                   | <u>65</u> | <u>0</u>                                                                                             | <u>73</u>   |
| P 2 <u>5</u>                                                                                              | <u>31</u> | <u>3</u>                                                                                               | <u>382</u>  | <u>5</u>                                                                                                   | <u>58</u> | <u>3</u>                                                                                             | <u>450</u>  |
| P 3 <u>10</u>                                                                                             | <u>31</u> | <u>6</u>                                                                                               | <u>783</u>  | <u>10</u>                                                                                                  | <u>58</u> | <u>6</u>                                                                                             | <u>801</u>  |
| P 4 <u>15</u>                                                                                             | <u>39</u> | <u>9</u>                                                                                               | <u>990</u>  | <u>15</u>                                                                                                  | <u>66</u> | <u>9</u>                                                                                             | <u>974</u>  |
| P 5 <u>20</u>                                                                                             | <u>45</u> | <u>21</u>                                                                                              | <u>1111</u> | <u>20</u>                                                                                                  | <u>72</u> | <u>21</u>                                                                                            | <u>1070</u> |
| P 6 <u>25</u>                                                                                             | <u>47</u> | <u>15</u>                                                                                              | <u>1179</u> | <u>25</u>                                                                                                  | <u>73</u> | <u>15</u>                                                                                            | <u>1130</u> |
| P 7 <u>30</u>                                                                                             | <u>52</u> | <u>18</u>                                                                                              | <u>1228</u> | <u>30</u>                                                                                                  | <u>73</u> | <u>18</u>                                                                                            | <u>1174</u> |
| P 8                                                                                                       |           | <u>21</u>                                                                                              | <u>1256</u> |                                                                                                            |           | <u>21</u>                                                                                            | <u>1208</u> |
| P 9                                                                                                       |           | <u>24</u>                                                                                              | <u>1285</u> |                                                                                                            |           | <u>24</u>                                                                                            | <u>1234</u> |
| P10                                                                                                       |           | <u>27</u>                                                                                              | <u>1311</u> |                                                                                                            |           | <u>27</u>                                                                                            | <u>1257</u> |
| P11                                                                                                       |           | <u>30</u>                                                                                              | <u>1329</u> |                                                                                                            |           | <u>30</u>                                                                                            | <u>1283</u> |
| P12                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P13                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P14                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P15                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P16                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P17                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P18                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P19                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |
| P20                                                                                                       |           |                                                                                                        |             |                                                                                                            |           |                                                                                                      |             |



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

WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET NO 3361

Elevation 1279 K.B. Formation KANSAS CITY Eff. Pay Ft.

District PRATT Date 8-16-79 Customer Order No. \_\_\_\_\_  
COMPANY NAME PICK REIL DRIG. CO. Pickrell Drilling Company  
ADDRESS LITWIN Bld. Suite 205 110 N. MARKET, WICHITA, KANS. 67202  
LEASE AND WELL NO. HOOPES #1-B COUNTY HARPER STATE KANS. Sec. 36 Twp 33 Rge 6W  
Mail Invoice To SAME No. Copies Requested Reg.  
Co. Name \_\_\_\_\_ Address \_\_\_\_\_  
Mail Charts To SAME No. Copies Requested Reg.  
Address \_\_\_\_\_

Formation Test No. 3 Interval Tested from 3768 ft. to 3795 ft. Total Depth 3795 ft.  
Packer Depth 3763 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3768 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 3787 ft. Recorder Number 6246 Cap. 5200  
Bottom Recorder Depth (Outside) 3790 ft. Recorder Number 5673 Cap. 5400  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_  
Drilling Contractor Co-Tools Rig 10 Drill Collar Length \_\_\_\_\_ I. D. \_\_\_\_\_ in.  
Mud Type STARCH Viscosity 44 Weight Pipe Length 566 I. D. 3.2 in.  
Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 3182 I. D. 3.8 in.  
Chlorides 39,000 P.P.M. Test Tool Length 20 ft. Tool Size 55 O.D. in.  
Jars: Make \_\_\_\_\_ Serial Number \_\_\_\_\_ Anchor Length 27 ft. Size 55 O.D. 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 F.H. in.

Blow: WEAK Blow dying in 25 min. INITIAL FLOW PERIOD  
NO BLOW Final Flow PERIOD

Recovered 35' ft. of GAS CUT MUD (gas cut mud)  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: Slid Tool Eight Feet to Bottom

Time Set Packer(s) 10:05 A.M. Time Started Off Bottom 11:45 A.M. Maximum Temperature 125  
Initial Hydrostatic Pressure \_\_\_\_\_ (A) 1940 P.S.I.  
Initial Flow Period \_\_\_\_\_ Minutes 30 (B) 26 P.S.I. to (C) 26 P.S.I.  
Initial Closed In Period \_\_\_\_\_ Minutes 30 (D) 170 P.S.I.  
Final Flow Period \_\_\_\_\_ Minutes 10 (E) 26 P.S.I. to (F) 26 P.S.I.  
Final Closed In Period \_\_\_\_\_ Minutes 30 (G) 91 P.S.I.  
Final Hydrostatic Pressure \_\_\_\_\_ (H) 1927 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 George R. Dault  
Signature of Customer or his authorized representative

Western Representative Dave Sloan  
Thank you

FIELD INVOICE

Open Hole Test \$ 440.00  
Misrun \$ \_\_\_\_\_  
Straddle Test \$ \_\_\_\_\_  
Jars \$ \_\_\_\_\_  
Selective Zone \$ \_\_\_\_\_  
Safety Joint \$ \_\_\_\_\_  
Standby \$ \_\_\_\_\_  
Evaluation \$ \_\_\_\_\_  
Extra Packer \$ \_\_\_\_\_  
Circ. Sub. \$ \_\_\_\_\_  
Mileage PRATT \$ \_\_\_\_\_  
Fluid Sampler \$ \_\_\_\_\_  
Extra Charts \$ \_\_\_\_\_

TOTAL

\$ 440.00

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8-16-79 Test Ticket No. 3361  
 Recorder No. 6246 Capacity 5200 Location 3787 Ft.  
 Block No. - Elevation 1279 K.B Well Temperature 125 °F  
 Point Pressure Time Given Time Computed  
 Initial Hydrostatic Mud 1940 P.S.I. Open Tool 10:05A. M  
 First Initial Flow Pressure 29 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 First Final Flow Pressure 26 P.S.I. Initial Closed-in Pressure 30 Mins. 36 Mins.  
 Initial Closed-in Pressure 168 P.S.I. Second Flow Pressure 10 Mins. 10 Mins.  
 Second Initial Flow Pressure 37 P.S.I. Final Closed-in Pressure 30 Mins. 33 Mins.  
 Second Final Flow Pressure 26 P.S.I.  
 Final Closed-in Pressure 85 P.S.I.  
 Final Hydrostatic Mud 1894 P.S.I.

## PRESSURE BREAKDOWN

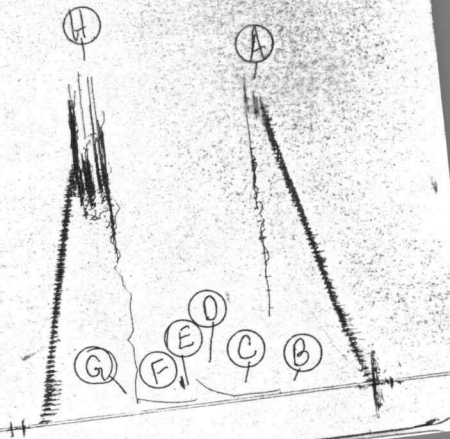
| First Flow Pressure         |           | Initial Shut-In             |            | Second Flow Pressure        |           | Final Shut-In               |           |
|-----------------------------|-----------|-----------------------------|------------|-----------------------------|-----------|-----------------------------|-----------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>11</u> Inc.   |            | Breakdown: <u>2</u> Inc.    |           | Breakdown: <u>11</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.    |
| 1 0                         | <u>29</u> | 0                           | <u>26</u>  | 0                           | <u>37</u> | 0                           | <u>26</u> |
| 2 5                         | <u>25</u> | 3                           | <u>26</u>  | 5                           | <u>26</u> | 3                           | <u>26</u> |
| 3 10                        | <u>25</u> | 6                           | <u>26</u>  | 10                          | <u>26</u> | 6                           | <u>30</u> |
| 4 15                        | <u>25</u> | 9                           | <u>34</u>  | <del>15</del>               |           | 9                           | <u>31</u> |
| 5 20                        | <u>25</u> | 12                          | <u>42</u>  | <del>20</del>               |           | 12                          | <u>39</u> |
| 6 25                        | <u>26</u> | 15                          | <u>50</u>  | <del>25</del>               |           | 15                          | <u>46</u> |
| 7 30                        | <u>26</u> | 18                          | <u>58</u>  | <del>30</del>               |           | 18                          | <u>52</u> |
| 8 35                        |           | 21                          | <u>68</u>  | <del>35</del>               |           | 21                          | <u>56</u> |
| 9 40                        |           | 24                          | <u>82</u>  | <del>40</del>               |           | 24                          | <u>59</u> |
| 10 45                       |           | 27                          | <u>94</u>  | <del>45</del>               |           | 27                          | <u>68</u> |
| 11 50                       |           | 30                          | <u>126</u> | <del>50</del>               |           | 30                          | <u>77</u> |
| 12 55                       |           | 33                          | <u>157</u> | <del>55</del>               |           | 33                          | <u>85</u> |
| 13 60                       |           | 36                          | <u>168</u> | <del>60</del>               |           | 36                          |           |
| 14                          |           | <del>39</del>               |            | <del>65</del>               |           | 39                          |           |
| 15                          |           | <del>42</del>               |            | <del>70</del>               |           | 42                          |           |
| 16                          |           | <del>45</del>               |            | <del>75</del>               |           | 45                          |           |
| 17                          |           | <del>48</del>               |            | <del>80</del>               |           | 48                          |           |
| 18                          |           | <del>51</del>               |            | <del>85</del>               |           | 51                          |           |
| 19                          |           | <del>54</del>               |            | <del>90</del>               |           | 54                          |           |
| 20                          |           | <del>57</del>               |            |                             |           | 57                          |           |
|                             |           | <del>60</del>               |            |                             |           | 60                          |           |

6246

PICKRELL DRUG CO.  
Hoop #1-B  
DST #3

TR # 3361

I



Company Pickrell Drilling Company Lease & Well No. Hoopes #1-B  
Elevation 1279 Kelly Bushing Kansas City Effective Pay --- Ft. Ticket No. 3361  
Date 8/16/79 Sec. 36 Formation 33S Range 6W County Harper State Kansas  
Test Approved by George R. Dent Western Representative Dave Sloan

Formation Test No. 3 Interval Tested from 3768' ft. to 3795' ft. Total Depth 3795' ft.

Packer Depth 3763 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3768 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set ---

Top Recorder Depth (Inside) 3787 ft. Recorder Number 6246 Cap. 5200

Bottom Recorder Depth (Outside) 3790 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor Pickrell Drilling Rig #10 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 44 Weight Pipe Length 566 I. D. 3.2 in.

Weight 9.4 Water Loss 12.4 cc. Drill Pipe Length 3182 I. D. 3.8 in.

Chlorides 39,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make --- Serial Number --- Anchor Length 27 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 FH in.

Blow: Weak blow, dying in 25 minutes on initial flow period. No blow on final flow period.

Recovered 35 ft. of gas cut mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: Slid tool eight feet to bottom.

Time Set Packer(s) 10:05 A.M. Time Started Off Bottom 11:45 A.M. Maximum Temperature 125  
Initial Hydrostatic Pressure 1940 P.S.I.  
Initial Flow Period 30 Minutes (B) 29 P.S.I. to (C) 26 P.S.I.  
Initial Closed In Period 30 Minutes (D) 168 P.S.I.  
Final Flow Period 10 Minutes (E) 37 P.S.I. to (F) 26 P.S.I.  
Final Closed In Period 30 Minutes (G) 85 P.S.I.  
Final Hydrostatic Pressure 1894 P.S.I. (H)

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/16/79 Recorder No. 6246 Capacity 5200 Test Ticket No. 3361  
 Clock No. -- Elevation 1279 Location Kelly Well Temperature 125 °F

| Point                          | Pressure |        | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|---------------|
| A Initial Hydrostatic Mud      | 1940     | P.S.I. | 10:05A     | M             |
| B First Initial Flow Pressure  | 29       | P.S.I. | 30         | Mins.         |
| C First Final Flow Pressure    | 26       | P.S.I. | 30         | Mins.         |
| D Initial Closed-in Pressure   | 168      | P.S.I. | 10         | Mins.         |
| E Second Initial Flow Pressure | 37       | P.S.I. | 30         | Mins.         |
| F Second Final Flow Pressure   | 26       | P.S.I. |            |               |
| G Final Closed-in Pressure     | 85       | P.S.I. |            |               |
| H Final Hydrostatic Mud        | 1894     | P.S.I. |            |               |

## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |            | Second Flow Pressure        |           | Final Shut-In               |           |
|-----------------------------|-----------|-----------------------------|------------|-----------------------------|-----------|-----------------------------|-----------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>11</u> Inc.   |            | Breakdown: <u>2</u> Inc.    |           | Breakdown: <u>11</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>29</u> | <u>0</u>                    | <u>26</u>  | <u>0</u>                    | <u>37</u> | <u>0</u>                    | <u>26</u> |
| P 2 <u>5</u>                | <u>25</u> | <u>3</u>                    | <u>26</u>  | <u>5</u>                    | <u>26</u> | <u>3</u>                    | <u>26</u> |
| P 3 <u>10</u>               | <u>25</u> | <u>6</u>                    | <u>26</u>  | <u>10</u>                   | <u>26</u> | <u>6</u>                    | <u>30</u> |
| P 4 <u>15</u>               | <u>25</u> | <u>9</u>                    | <u>34</u>  |                             |           | <u>9</u>                    | <u>31</u> |
| P 5 <u>20</u>               | <u>25</u> | <u>12</u>                   | <u>42</u>  |                             |           | <u>12</u>                   | <u>39</u> |
| P 6 <u>25</u>               | <u>26</u> | <u>15</u>                   | <u>50</u>  |                             |           | <u>15</u>                   | <u>46</u> |
| P 7 <u>30</u>               | <u>26</u> | <u>18</u>                   | <u>58</u>  |                             |           | <u>18</u>                   | <u>52</u> |
| P 8                         |           | <u>21</u>                   | <u>68</u>  |                             |           | <u>21</u>                   | <u>56</u> |
| P 9                         |           | <u>24</u>                   | <u>82</u>  |                             |           | <u>24</u>                   | <u>59</u> |
| P10                         |           | <u>27</u>                   | <u>94</u>  |                             |           | <u>27</u>                   | <u>68</u> |
| P11                         |           | <u>30</u>                   | <u>126</u> |                             |           | <u>30</u>                   | <u>77</u> |
| P12                         |           | <u>33</u>                   | <u>157</u> |                             |           | <u>33</u>                   | <u>85</u> |
| P13                         |           | <u>36</u>                   | <u>168</u> |                             |           |                             |           |
| P14                         |           |                             |            |                             |           |                             |           |
| P15                         |           |                             |            |                             |           |                             |           |
| P16                         |           |                             |            |                             |           |                             |           |
| P17                         |           |                             |            |                             |           |                             |           |
| P18                         |           |                             |            |                             |           |                             |           |
| P19                         |           |                             |            |                             |           |                             |           |
| P20                         |           |                             |            |                             |           |                             |           |



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

WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 3264

Elevation 1279 KB Formation M. 35.35.00 Eff. Pay      Ft.

District Augusta Date 20 August 79 Customer Order No.       
COMPANY NAME Puckett Drilling Company  
ADDRESS Litwin Bldg Suite 205 110 North Market Wichita Kan  
LEASE AND WELL NO. #1 Hoopes "B" COUNTY Harper STATE Kan Sec. 36 Twp 33 Rge 6W  
Mail Invoice To Same Co. Name      Address      No. Copies Requested 1  
Mail Charts To Same Co. Name      Address      No. Copies Requested 5

Formation Test No. 4 Interval Tested from 4453 ft. to 4470 ft. Total Depth 4470 ft.  
Packer Depth 4448 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 4453 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set     

Top Recorder Depth (Inside) 4458 ft. Recorder Number 1559 Cap. 4200  
Bottom Recorder Depth (Outside) 4461 ft. Recorder Number 1558 Cap. 4200  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.       
Drilling Contractor Puckett Drilling Co #10 Drill Collar Length      I. D.      in.  
Mud Type Starch Viscosity 45 Weight Pipe Length 540' I. D. 2 1/4 in.  
Weight 10 Water Loss 12.8 cc. Drill Pipe Length 3893' I. D. 3.8 in.  
Chlorides 39,500 P.P.M. Test Tool Length 37 ft. Tool Size 5 1/2 in.  
Jars: Make      Serial Number      Anchor Length 17 ft. Size 5 1/2 in.  
Did Well Flow? gas 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 FN in.

Blow: Strong blow with gas to surface in 10 minutes on initial flow  
period. See gas sheet # 1175

Recovered 660 ft. of very gassy oil  
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Remarks:     

Time Set Packer(s) 6:30 P.M. Time Started Off Bottom 10:30 P.M. Maximum Temperature 128°  
Initial Hydrostatic Pressure      (A) 2453 P.S.I.  
Initial Flow Period 30 Minutes (B) 73 P.S.I. to (C) 83 P.S.I.  
Initial Closed In Period 60 Minutes (D) 1263 P.S.I.  
Final Flow Period 90 Minutes (E) 94 P.S.I. to (F) 198 P.S.I.  
Final Closed In Period 60 Minutes (G) 1158 P.S.I.  
Final Hydrostatic Pressure      (H) 2379 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 George R. Dent  
Signature of Customer or his authorized representative

Western Representative WK Hagen Thank You!

FIELD INVOICE

Open Hole Test \$ 460.00  
Misrun \$       
Straddle Test \$       
Jars \$       
Selective Zone \$       
Safety Joint \$       
Standby \$       
Evaluation \$       
Extra Packer \$       
Circ. Sub. \$       
Mileage \$       
Fluid Sampler \$       
Extra Charts \$     

TOTAL \$ 460.00



## GAS FLOW REPORT

N<sup>o</sup> 1175

Date 20 August 79 Ticket 3264 Company Pickrell Drilling Company  
 Well Name and No. #1 Hoopes "B" Dst No. 4 Interval Tested 4453 - 4470  
 County Harper State Kansas Sec. 36 Twp. 33 Rg. 6W

| 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>                     |                                     |                 |                        |                              |                           |
| <u>gas to surface in 10 minutes</u> |                                     |                 |                        |                              |                           |
| 15                                  | 42"                                 | 3/4             |                        |                              | 92,000 cubic feet per day |
| 20                                  | 46"                                 | "               |                        |                              | 96,300 "                  |
| 25                                  | 42"                                 | "               |                        |                              | 92,000 " " " "            |
| 30                                  | 38"                                 | 3/4             |                        |                              | 87,500 cubic feet per day |

## SECOND FLOW

|    |     |     |  |  |                           |
|----|-----|-----|--|--|---------------------------|
| 10 | 26" | 3/4 |  |  | 72,400 cubic feet per day |
| 20 | 38" | "   |  |  | 87,500 " " " "            |
| 30 | 40" | "   |  |  | 89,800 " " " "            |
| 35 | 44" | "   |  |  | 94,100 " " " "            |
| 40 | 62" | "   |  |  | 112,000 " " " "           |
| 50 | 40" | 3/4 |  |  | 89,800 cubic feet per day |
| 60 | 36" | "   |  |  | 85,200 " " " "            |
| 70 | 28" | "   |  |  | 75,100 " " " "            |
| 80 | 26" | "   |  |  | 72,400 " " " "            |
| 90 | 24" | 3/4 |  |  | 69,500 cubic feet per day |

## 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

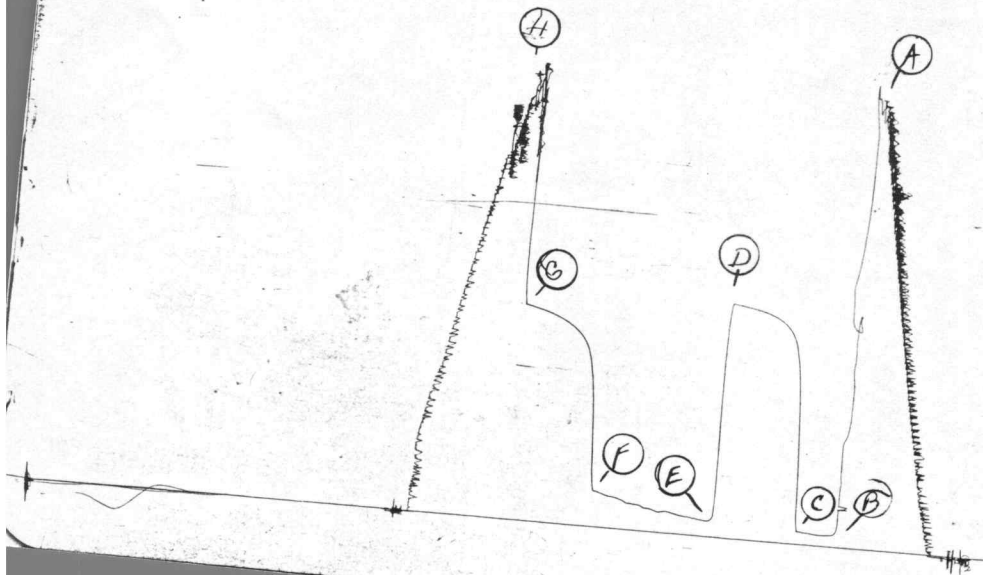
Date 8-20-79 Test Ticket No. 3264  
 Recorder No. 1559 Capacity 4200 Location 4458 Ft.  
 Block No.        Elevation 1279 KB Well Temperature 128 °F  
 Point Pressure Time Given Time Computed  
 Initial Hydrostatic Mud 2437 P.S.I. Open Tool 6:30 PM  
 First Initial Flow Pressure 73 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 First Final Flow Pressure 69 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 Initial Closed-in Pressure 1268 P.S.I. Second Flow Pressure 90 Mins. 90 Mins.  
 Second Initial Flow Pressure 82 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 Second Final Flow Pressure 60 190 P.S.I.  
 Final Closed-in Pressure 1165 P.S.I.  
 Final Hydrostatic Mud 2409 P.S.I.

## PRESSURE BREAKDOWN

| First Flow Pressure Breakdown: <u>6</u> Inc.        |           | Initial Shut-In Breakdown: <u>20</u> Inc.           |             | Second Flow Pressure Breakdown: <u>18</u> Inc.      |            | Final Shut-In Breakdown: <u>20</u> Inc.             |             |
|-----------------------------------------------------|-----------|-----------------------------------------------------|-------------|-----------------------------------------------------|------------|-----------------------------------------------------|-------------|
| of <u>5</u> mins. and a final inc. of <u>0</u> Min. |           | of <u>3</u> mins. and a final inc. of <u>0</u> Min. |             | of <u>5</u> mins. and a final inc. of <u>0</u> Min. |            | of <u>3</u> mins. and a final inc. of <u>0</u> Min. |             |
| Point ins.                                          | Press.    | Point Minutes                                       | Press.      | Point Minutes                                       | Press.     | Point Minutes                                       | Press.      |
| 1                                                   | <u>0</u>  | <u>0</u>                                            | <u>69</u>   | <u>0</u>                                            | <u>82</u>  | <u>0</u>                                            | <u>190</u>  |
| 2                                                   | <u>5</u>  | <u>3</u>                                            | <u>339</u>  | <u>5</u>                                            | <u>82</u>  | <u>3</u>                                            | <u>324</u>  |
| 3                                                   | <u>10</u> | <u>6</u>                                            | <u>720</u>  | <u>10</u>                                           | <u>84</u>  | <u>6</u>                                            | <u>602</u>  |
| 4                                                   | <u>15</u> | <u>9</u>                                            | <u>971</u>  | <u>15</u>                                           | <u>92</u>  | <u>9</u>                                            | <u>814</u>  |
| 5                                                   | <u>20</u> | <u>12</u>                                           | <u>1071</u> | <u>20</u>                                           | <u>98</u>  | <u>12</u>                                           | <u>921</u>  |
| 6                                                   | <u>25</u> | <u>15</u>                                           | <u>1121</u> | <u>25</u>                                           | <u>98</u>  | <u>15</u>                                           | <u>979</u>  |
| 7                                                   | <u>30</u> | <u>18</u>                                           | <u>1150</u> | <u>30</u>                                           | <u>108</u> | <u>18</u>                                           | <u>1010</u> |
| 8                                                   | <u>35</u> | <u>21</u>                                           | <u>1178</u> | <u>35</u>                                           | <u>113</u> | <u>21</u>                                           | <u>1040</u> |
| 9                                                   | <u>40</u> | <u>24</u>                                           | <u>1192</u> | <u>40</u>                                           | <u>107</u> | <u>24</u>                                           | <u>1056</u> |
| 10                                                  | <u>45</u> | <u>27</u>                                           | <u>1207</u> | <u>45</u>                                           | <u>117</u> | <u>27</u>                                           | <u>1072</u> |
| 11                                                  | <u>50</u> | <u>30</u>                                           | <u>1218</u> | <u>50</u>                                           | <u>123</u> | <u>30</u>                                           | <u>1088</u> |
| 12                                                  | <u>55</u> | <u>33</u>                                           | <u>1225</u> | <u>55</u>                                           | <u>138</u> | <u>33</u>                                           | <u>1099</u> |
| 13                                                  | <u>60</u> | <u>36</u>                                           | <u>1231</u> | <u>60</u>                                           | <u>136</u> | <u>36</u>                                           | <u>1109</u> |
| 14                                                  |           | <u>39</u>                                           | <u>1237</u> | <u>65</u>                                           | <u>142</u> | <u>39</u>                                           | <u>1121</u> |
| 15                                                  |           | <u>42</u>                                           | <u>1242</u> | <u>70</u>                                           | <u>157</u> | <u>42</u>                                           | <u>1130</u> |
| 16                                                  |           | <u>45</u>                                           | <u>1249</u> | <u>75</u>                                           | <u>165</u> | <u>45</u>                                           | <u>1140</u> |
| 17                                                  |           | <u>48</u>                                           | <u>1253</u> | <u>80</u>                                           | <u>171</u> | <u>48</u>                                           | <u>1146</u> |
| 18                                                  |           | <u>51</u>                                           | <u>1257</u> | <u>85</u>                                           | <u>186</u> | <u>51</u>                                           | <u>1151</u> |
| 19                                                  |           | <u>54</u>                                           | <u>1260</u> | <u>90</u>                                           | <u>190</u> | <u>54</u>                                           | <u>1155</u> |
| 20                                                  |           | <u>57</u>                                           | <u>1264</u> |                                                     |            | <u>57</u>                                           | <u>1160</u> |
|                                                     |           | <u>60</u>                                           | <u>1268</u> |                                                     |            | <u>60</u>                                           | <u>1165</u> |

*this is crazy but correct*

TKt # 3264  
I



Company Pickrell Drilling Company Lease & Well No. Hoopes "B" #1  
Elevation 1279 Kelly Bushing Mississippi Effective Pay -- Ft. Ticket No. 3264  
Date 8/20/79 Sec. 36 Twp. 33S Range 6W County Harper State Kansas  
Test Approved by George R. Dent Western Representative W. K. Hager

Formation Test No. 4 Interval Tested from 4453 ft. to 4470 ft. Total Depth 4470 ft.  
Packer Depth 4448 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 4453 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4458 ft. Recorder Number 1559 Cap. 4200  
Bottom Recorder Depth (Outside) 4461 ft. Recorder Number 1558 Cap. 4200  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Pickrell Drilling Co. #10 Drill Collar Length - I. D. - in.  
Mud Type starch Viscosity 45 Weight Pipe Length 540 I. D. 2 1/4 in.  
Weight 10 Water Loss 12.8 cc. Drill Pipe Length 3893 I. D. 3.8 in.  
Chlorides 39,500 P.P.M. Test Tool Length 37 ft. Tool Size 5 1/2 in.  
Jars: Make -- Serial Number -- Anchor Length 17 ft. Size 5 1/2 in.  
Did Well Flow? Gas 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 FH in.

Blow: Strong blow with gas to surface in ten minutes on initial flow period. See attached  
sheet for gas measurements.

Recovered 660 ft. of very gassy oil

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 6:30 ~~A.M.~~ P.M. Time Started Off Bottom 10:30 ~~A.M.~~ P.M. Maximum Temperature 128  
Initial Hydrostatic Pressure 2437 (A) - P.S.I.  
Initial Flow Period 30 Minutes (B) 73 P.S.I. to (C) 69 P.S.I.  
Initial Closed In Period 60 Minutes (D) 1268 P.S.I.  
Final Flow Period 90 Minutes (E) 82 P.S.I. to (F) 190 P.S.I.  
Final Closed In Period 60 Minutes (G) 1165 P.S.I.  
Final Hydrostatic Pressure 2409 (H) - P.S.I.

Phone 316 262-5861  
316 838-0601



P. O. Box 1599  
WICHITA, KANSAS 67201

## GAS FLOW REPORT

Date 8/20/79 Ticket 3264 Company Pickrell Drilling Company  
Well Name and No. Hoopes "B" #1 Dst No. 4 Interval Tested 4453'-4470'  
County Harper State Kansas Sec. 36 Twp. 33 Rg. 6W

| 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 |
|------------------------------------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| Gas to surface in ten minutes. <b>PRE FLOW</b> |                    |                                     |                        |                              |                         |                     |
|                                                | 15 min.            | 42" of water                        | 3/4" orifice           |                              |                         | 92,000 CFPD         |
|                                                | 20 min.            | 46" of water                        | 3/4" orifice           |                              |                         | 96,300 CFPD         |
|                                                | 25 min.            | 42" of water                        | 3/4" orifice           |                              |                         | 92,000 CFPD         |
|                                                | 30 min.            | 38" of water                        | 3/4" orifice           |                              |                         | 87,500 CFPD         |
|                                                |                    |                                     |                        |                              |                         |                     |
|                                                |                    |                                     |                        |                              |                         |                     |

|                    |         |              |              |  |  |              |
|--------------------|---------|--------------|--------------|--|--|--------------|
| <b>SECOND FLOW</b> |         |              |              |  |  |              |
|                    | 10 min. | 26" of water | 3/4" orifice |  |  | 72,400 CFPD  |
|                    | 20 min. | 38" of water | 3/4" orifice |  |  | 87,500 CFPD  |
|                    | 30 min. | 40" of water | 3/4" orifice |  |  | 89,800 CFPD  |
|                    | 35 min. | 44" of water | 3/4" orifice |  |  | 94,100 CFPD  |
|                    | 40 min. | 62" of water | 3/4" orifice |  |  | 112,000 CFPD |
|                    | 50 min. | 40" of water | 3/4" orifice |  |  | 89,800 CFPD  |
|                    | 60 min. | 36" of water | 3/4" orifice |  |  | 85,200 CFPD  |
|                    | 70 min. | 28" of water | 3/4" orifice |  |  | 75,100 CFPD  |
|                    | 80 min. | 26" of water | 3/4" orifice |  |  | 72,400 CFPD  |
|                    | 90 min. | 24" of water | 3/4" orifice |  |  | 69,500 CFPD  |
|                    |         |              |              |  |  |              |
|                    |         |              |              |  |  |              |

## GAS BOTTLE

Serial No. -- Date Bottle Filled -- Date to be Invoiced 8/20/79

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 George R. Dent

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/20/79 Test Ticket No. 3264  
 Recorder No. 1559 Capacity 4200 Location 4458 Ft.  
 Clock No. -- Elevation 1279 Kelly Bushing Well Temperature 128 °F

| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 2437     | P.S.I. | 6:30P      | M              |
| B First Initial Flow Pressure  | 73       | P.S.I. | 30         | Mins. 30 Mins. |
| C First Final Flow Pressure    | 69       | P.S.I. | 60         | Mins. 60 Mins. |
| D Initial Closed-in Pressure   | 1268     | P.S.I. | 90         | Mins. 90 Mins. |
| E Second Initial Flow Pressure | 82       | P.S.I. | 60         | Mins. 60 Mins. |
| F Second Final Flow Pressure   | 190      | P.S.I. |            |                |
| G Final Closed-in Pressure     | 1165     | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 2409     | 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 <u>0</u>  | <u>73</u> | <u>0</u>      | <u>69</u>   | <u>0</u>      | <u>82</u>  | <u>0</u>      | <u>190</u>  |
| P 2 <u>5</u>  | <u>59</u> | <u>3</u>      | <u>339</u>  | <u>5</u>      | <u>82</u>  | <u>3</u>      | <u>324</u>  |
| P 3 <u>10</u> | <u>58</u> | <u>6</u>      | <u>720</u>  | <u>10</u>     | <u>84</u>  | <u>6</u>      | <u>602</u>  |
| P 4 <u>15</u> | <u>58</u> | <u>9</u>      | <u>971</u>  | <u>15</u>     | <u>92</u>  | <u>9</u>      | <u>814</u>  |
| P 5 <u>20</u> | <u>61</u> | <u>12</u>     | <u>1071</u> | <u>20</u>     | <u>96</u>  | <u>12</u>     | <u>921</u>  |
| P 6 <u>25</u> | <u>65</u> | <u>15</u>     | <u>1121</u> | <u>25</u>     | <u>98</u>  | <u>15</u>     | <u>979</u>  |
| P 7 <u>30</u> | <u>69</u> | <u>18</u>     | <u>1150</u> | <u>30</u>     | <u>108</u> | <u>18</u>     | <u>1010</u> |
| P 8           |           | <u>21</u>     | <u>1178</u> | <u>35</u>     | <u>113</u> | <u>21</u>     | <u>1040</u> |
| P 9           |           | <u>24</u>     | <u>1192</u> | <u>40</u>     | <u>107</u> | <u>24</u>     | <u>1056</u> |
| P10           |           | <u>27</u>     | <u>1207</u> | <u>45</u>     | <u>117</u> | <u>27</u>     | <u>1072</u> |
| P11           |           | <u>30</u>     | <u>1218</u> | <u>50</u>     | <u>123</u> | <u>30</u>     | <u>1088</u> |
| P12           |           | <u>33</u>     | <u>1225</u> | <u>55</u>     | <u>138</u> | <u>33</u>     | <u>1099</u> |
| P13           |           | <u>36</u>     | <u>1231</u> | <u>60</u>     | <u>136</u> | <u>36</u>     | <u>1109</u> |
| P14           |           | <u>39</u>     | <u>1237</u> | <u>65</u>     | <u>142</u> | <u>39</u>     | <u>1121</u> |
| P15           |           | <u>42</u>     | <u>1242</u> | <u>70</u>     | <u>157</u> | <u>42</u>     | <u>1130</u> |
| P16           |           | <u>45</u>     | <u>1249</u> | <u>75</u>     | <u>165</u> | <u>45</u>     | <u>1140</u> |
| P17           |           | <u>48</u>     | <u>1253</u> | <u>80</u>     | <u>171</u> | <u>48</u>     | <u>1146</u> |
| P18           |           | <u>51</u>     | <u>1257</u> | <u>85</u>     | <u>186</u> | <u>51</u>     | <u>1151</u> |
| P19           |           | <u>54</u>     | <u>1260</u> | <u>90</u>     | <u>190</u> | <u>54</u>     | <u>1155</u> |
| P20           |           | <u>57</u>     | <u>1264</u> |               |            | <u>57</u>     | <u>1160</u> |
|               |           | <u>60</u>     | <u>1268</u> |               |            | <u>60</u>     | <u>1165</u> |



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N° 3265

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

WICHITA, KANSAS 67201

Elevation 1279 KB Formation Mississippi Eff. Pay      Ft.District Augusta Date 21 August 79 Customer Order No.     COMPANY NAME Packrell Drilling CompanyADDRESS Litwin Bldg Suite 205 110 North Market Wichita KanLEASE AND WELL NO. #1 Harper "B" COUNTY Harper STATE Kan Sec. 36 Twp 33 Rge 6WMail Invoice To Same Co. Name      Address      No. Copies Requested 1Mail Charts To Same Address      No. Copies Requested 5Formation Test No. 5 Interval Tested from 4475 ft. to 4491 ft. Total Depth 4491 ft.Packer Depth 4470 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.Packer Depth 4475 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.Depth of Selective Zone Set     Top Recorder Depth (Inside) 4480 ft. Recorder Number 1559 Cap. 4200Bottom Recorder Depth (Outside) 4483 ft. Recorder Number 1558 Cap. 4200Below Straddle Recorder Depth      ft. Recorder Number      Cap.     Drilling Contractor Packrell Drilling Co #10 Drill Collar Length      I. D.      in.Mud Type Starch Viscosity 44 Weight Pipe Length 540' I. D. 2 1/4 in.Weight 9.9 Water Loss 14.4 cc. Drill Pipe Length 2903' I. D. 3.8 in.Chlorides 39,000 P.P.M. Test Tool Length 36 ft. Tool Size 5 1/2 in.Jars: Make      Serial Number      Anchor Length 16 ft. Size 5 1/2 in.Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.Blow: Weak ungreasing tooth on initial flow period / strong blow on final flow periodRecovered 120 ft. of gas in pipeRecovered 100 ft. of oil + gas cut mudRecovered 120 ft. of muddy salt water gas cutRecovered      ft. of     Recovered      ft. of     Remarks:     Time Set Packer(s) 10:35 A.M. Time Started Off Bottom 2:35 P.M. Maximum Temperature 128°Initial Hydrostatic Pressure 2316 P.S.I. (A) 73 P.S.I. to (C) 73 P.S.I.Initial Flow Period 30 Minutes (B) 1200 P.S.I. to (F) 114 P.S.I.Initial Closed In Period 60 Minutes (D) 104 P.S.I. to (H) 2274 P.S.I.Final Flow Period 90 Minutes (E) 1179 P.S.I.Final Closed In Period 60 Minutes (G) 2274 P.S.I.Final Hydrostatic Pressure 2274 P.S.I. (H)

## 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 George R. Dent  
Signature of Customer or his authorized representativeWestern Representative WK Hager Thank You!

## FIELD INVOICE

|                |           |
|----------------|-----------|
| Open Hole Test | \$ 460.00 |
| Misrun         | \$        |
| Straddle Test  | \$        |
| Jars           | \$        |
| Selective Zone | \$        |
| Safety Joint   | \$        |
| Standby        | \$        |
| Evaluation     | \$        |
| Extra Packer   | \$        |
| Circ. Sub.     | \$        |
| Mileage        | \$        |
| Fluid Sampler  | \$        |
| Extra Charts   | \$        |

TOTAL \$ 460

# WESTERN TESTING CO., INC.

## Pressure Data

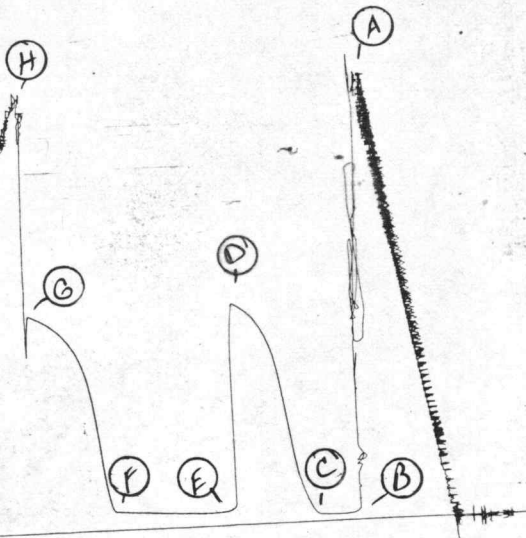
Date 8-21-79 Test Ticket No. 3265  
 Recorder No. 1559 Capacity 4200 Location 4480 Ft.  
 Block No.        Elevation 1279 KB Well Temperature 128 °F  
 Point Pressure Time Given Time Computed  
 Initial Hydrostatic Mud 2325 P.S.I. Open Tool 10:35 A M  
 First Initial Flow Pressure 59 P.S.I. First Flow Pressure 30 Mins. 30 Mins.  
 First Final Flow Pressure 38 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.  
 Initial Closed-in Pressure 1192 P.S.I. Second Flow Pressure 90 Mins. 90 Mins.  
 Second Initial Flow Pressure 98 P.S.I. Final Closed-in Pressure 60 Mins. 60 Mins.  
 Second Final Flow Pressure 102 P.S.I.  
 Final Closed-in Pressure 1169 P.S.I.  
 Final Hydrostatic Mud 2270 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. |
| 1 0                         | 59     | 0                           | 38     | 0                           | 98     | 0                           | 102    |
| 2 5                         | 46     | 3                           | 52     | 5                           | 82     | 3                           | 165    |
| 3 10                        | 38     | 6                           | 73     | 10                          | 73     | 6                           | 291    |
| 4 15                        |        | 9                           | 115    | 15                          | 75     | 9                           | 416    |
| 5 20                        |        | 12                          | 163    | 20                          |        | 12                          | 575    |
| 6 25                        |        | 15                          | 234    | 25                          |        | 15                          | 710    |
| 7 30                        | 38     | 18                          | 330    | 30                          | 75     | 18                          | 809    |
| 8 35                        |        | 21                          | 479    | 35                          | 76     | 21                          | 885    |
| 9 40                        |        | 24                          | 596    | 40                          | 79     | 24                          | 923    |
| 10 45                       |        | 27                          | 729    | 45                          | 82     | 27                          | 975    |
| 11 50                       |        | 30                          | 837    | 50                          | 84     | 30                          | 996    |
| 12 55                       |        | 33                          | 927    | 55                          | 86     | 33                          | 1031   |
| 13 60                       |        | 36                          | 983    | 60                          | 88     | 36                          | 1052   |
| 14                          |        | 39                          | 1027   | 65                          | 90     | 39                          | 1074   |
| 15                          |        | 42                          | 1069   | 70                          | 91     | 42                          | 1096   |
| 16                          |        | 45                          | 1092   | 75                          | 92     | 45                          | 1117   |
| 17                          |        | 48                          | 1109   | 80                          | 95     | 48                          | 1128   |
| 18                          |        | 51                          | 1130   | 85                          | 98     | 51                          | 1139   |
| 19                          |        | 54                          | 1151   | 90                          | 102    | 54                          | 1158   |
| 20                          |        | 57                          | 1173   |                             |        | 57                          | 1169   |
|                             |        | 60                          | 1192   |                             |        | 60                          | 1169   |

51  
TKT # 3265

I



Company Pickrell Drilling Company Lease & Well No. Hoopes "B"#1  
Elevation 1279 Kelly Bushing Mississippi Effective Pay -- Ft. Ticket No. 3265  
Date 8/21/79 Sec. 36 Twp. 33S Range 6W County Harper State Kansas  
Test Approved by George R. Dent Western Representative W. K. Hager

Formation Test No. 5 Interval Tested from 4475 ft. to 4491 ft. Total Depth 4491 ft.  
Packer Depth 4470 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 4475 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4480 ft. Recorder Number 1559 Cap. 4200  
Bottom Recorder Depth (Outside) 4483 ft. Recorder Number 1558 Cap. 4200  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Pickrell Drilling Co. #10 Drill Collar Length -- I. D. -- in.  
Mud Type starch Viscosity 44 Weight Pipe Length 540 I. D. 2 1/4 in.  
Weight 9.9 Water Loss 14.4 cc. Drill Pipe Length 2903 I. D. 3.8 in.  
Chlorides 39,000 P.P.M. Test Tool Length 36 ft. Tool Size 5 1/2 in.  
Jars: Make -- Serial Number -- Anchor Length 16 ft. Size 5 1/2 in.  
Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak increasing to strong on initial flow period/strong blow on final flow period.

Recovered 120 ft. of gas in pipe  
Recovered 100 ft. of oil and gas cut mud  
Recovered 120 ft. of muddy salt water gas cut

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 10:35 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 2:35 ~~A.M.~~ <sup>P.M.</sup> Maximum Temperature 128  
Initial Hydrostatic Pressure 2325 P.S.I. (A)  
Initial Flow Period 30 Minutes (B) 59 P.S.I. to (C) 38 P.S.I.  
Initial Closed In Period 60 Minutes (D) 1192 P.S.I.  
Final Flow Period 90 Minutes (E) 98 P.S.I. to (F) 102 P.S.I.  
Final Closed In Period 60 Minutes (G) 1169 P.S.I.  
Final Hydrostatic Pressure 2270 P.S.I. (H)

# WESTERN TESTING CO., INC.

## Pressure Data

Date 8/21/79

Recorder No. 1559

Test Ticket No. 3265

Capacity 4200

Location 4480 Ft.

Clock No. -- Elevation 1279 Kelly Bushing

Well Temperature 128 °F

| Point                          | Pressure |        | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|---------------|
| A Initial Hydrostatic Mud      | 2325     | P.S.I. | 10:35A     | M             |
| B First Initial Flow Pressure  | 59       | P.S.I. | 30         | Mins.         |
| C First Final Flow Pressure    | 38       | P.S.I. | 60         | Mins.         |
| D Initial Closed-in Pressure   | 1192     | P.S.I. | 90         | Mins.         |
| E Second Initial Flow Pressure | 98       | P.S.I. | 60         | Mins.         |
| F Second Final Flow Pressure   | 102      | P.S.I. |            |               |
| G Final Closed-in Pressure     | 1169     | P.S.I. |            |               |
| H Final Hydrostatic Mud        | 2270     | 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 <u>0</u>  | <u>59</u> | <u>0</u>      | <u>38</u>   | <u>0</u>      | <u>98</u>  | <u>0</u>      | <u>102</u>  |
| P 2 <u>5</u>  | <u>46</u> | <u>3</u>      | <u>52</u>   | <u>5</u>      | <u>82</u>  | <u>3</u>      | <u>165</u>  |
| P 3 <u>10</u> | <u>38</u> | <u>6</u>      | <u>73</u>   | <u>10</u>     | <u>73</u>  | <u>6</u>      | <u>291</u>  |
| P 4 <u>15</u> | <u>38</u> | <u>9</u>      | <u>115</u>  | <u>15</u>     | <u>75</u>  | <u>9</u>      | <u>416</u>  |
| P 5 <u>20</u> | <u>38</u> | <u>12</u>     | <u>163</u>  | <u>20</u>     | <u>75</u>  | <u>12</u>     | <u>575</u>  |
| P 6 <u>25</u> | <u>38</u> | <u>15</u>     | <u>234</u>  | <u>25</u>     | <u>75</u>  | <u>15</u>     | <u>710</u>  |
| P 7 <u>30</u> | <u>38</u> | <u>18</u>     | <u>330</u>  | <u>30</u>     | <u>75</u>  | <u>18</u>     | <u>809</u>  |
| P 8 <u></u>   | <u></u>   | <u>21</u>     | <u>479</u>  | <u>35</u>     | <u>76</u>  | <u>21</u>     | <u>885</u>  |
| P 9 <u></u>   | <u></u>   | <u>24</u>     | <u>596</u>  | <u>40</u>     | <u>79</u>  | <u>24</u>     | <u>923</u>  |
| P 10 <u></u>  | <u></u>   | <u>27</u>     | <u>729</u>  | <u>45</u>     | <u>82</u>  | <u>27</u>     | <u>975</u>  |
| P 11 <u></u>  | <u></u>   | <u>30</u>     | <u>837</u>  | <u>50</u>     | <u>84</u>  | <u>30</u>     | <u>996</u>  |
| P 12 <u></u>  | <u></u>   | <u>33</u>     | <u>927</u>  | <u>55</u>     | <u>86</u>  | <u>33</u>     | <u>1031</u> |
| P 13 <u></u>  | <u></u>   | <u>36</u>     | <u>983</u>  | <u>60</u>     | <u>88</u>  | <u>36</u>     | <u>1052</u> |
| P 14 <u></u>  | <u></u>   | <u>39</u>     | <u>1027</u> | <u>65</u>     | <u>90</u>  | <u>39</u>     | <u>1074</u> |
| P 15 <u></u>  | <u></u>   | <u>42</u>     | <u>1069</u> | <u>70</u>     | <u>91</u>  | <u>42</u>     | <u>1096</u> |
| P 16 <u></u>  | <u></u>   | <u>45</u>     | <u>1092</u> | <u>75</u>     | <u>92</u>  | <u>45</u>     | <u>1117</u> |
| P 17 <u></u>  | <u></u>   | <u>48</u>     | <u>1109</u> | <u>80</u>     | <u>95</u>  | <u>48</u>     | <u>1128</u> |
| P 18 <u></u>  | <u></u>   | <u>51</u>     | <u>1130</u> | <u>85</u>     | <u>98</u>  | <u>51</u>     | <u>1139</u> |
| P 19 <u></u>  | <u></u>   | <u>54</u>     | <u>1151</u> | <u>90</u>     | <u>102</u> | <u>54</u>     | <u>1147</u> |
| P 20 <u></u>  | <u></u>   | <u>57</u>     | <u>1173</u> | <u></u>       | <u></u>    | <u>57</u>     | <u>1158</u> |
| WTC - 4       |           | <u>60</u>     | <u>1192</u> | <u></u>       | <u></u>    | <u>60</u>     | <u>1169</u> |