



P. O. BOX 1599      PHONE (316) 262-5861  
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET      No 18531

Elevation 2246 KB      Formation FT. SCOTT      Eff. Pay — Ft.

District GT. Bend      Date 4-5-93      Customer Order No. —

COMPANY NAME Pickrell Drilling Co., Inc.

ADDRESS 110 N. MARKET Suite 205 WICHITA, KS 67202

LEASE AND WELL NO Shramek Trust #1 COUNTY Noss STATE Ks Sec. 24 Twp 19S Rge. 24W

Mail Invoice To SAME #1 Shramek Trust F      No. Copies Requested Reg  
Co. Name      Address

Mail Charts To SAME      No. Copies Requested Reg  
Address

Formation Test No. 1      Interval Tested From 4208 ft. to 4255 ft. Total Depth 4255 ft.

Packer Depth 4203 ft.      Size 6 5/8 in.      Packer Depth — ft.      Size — in.

Packer Depth 4208 ft.      Size 6 5/8 in.      Packer Depth — ft.      Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4212 ft.      Recorder Number 10270      Cap. 4150

Bottom Recorder Depth (Outside) 4215 ft.      Recorder Number 13550      Cap. 4175

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

Drilling Contractor Pickrell rig 10      Drill Collar Length 150      I. D. 2.2 in.

Mud Type STARCH      Viscosity 40      Weight Pipe Length —      I. D. — in.

Weight 9.5      Water Loss 8 cc.      Drill Pipe Length 4038      I. D. 3.8 in.

Chlorides 12000 P.P.M.      Test Tool Length 20 ft.      Tool Size 5 1/2 in.

Jars: Make —      Serial Number —      Anchor Length 47 ft.      Size 5 1/2 in.

Did Well Flow? —      Reversed Out —      Surface Choke Size 34 in.      Bottom Choke Size 34 in.

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

Blow: IF - WPAK Blow throughout 1/4" to 1/2" Blow  
FF - NO Blow Flushed Tool

Recovered 75 ft. of Mud w/show of oil

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Chlorides — P.P.M.      Sample Jars used 1      Remarks: —

APR 12 1993

Time On Location 6:00 A.M.      Time Pick Up Tool 7:30 P.M.      Time Off Location — A.M.

Time Set Packer(s) 9:10 A.M.      Time Started Off Bottom 11:40 P.M.      Maximum Temperature 117°

Initial Hydrostatic Pressure — (A) 2118 P.S.I.

Initial Flow Period — Minutes 30 (B) 41 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period — Minutes 60 (D) 1070 P.S.I.

Final Flow Period — Minutes 30 (E) 52 P.S.I. to (F) 62 P.S.I.

Final Closed In Period — Minutes 30 (G) 956 P.S.I.

Final Hydrostatic Pressure — (H) 2118 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 Bill Klawer  
Signature of Customer or his authorized representative

Western Representative Ray Schwager      Thank you

FIELD INVOICE

Open Hole Test 4  
Misrun \$  
Straddle Test \$  
Jars \$  
Selective Zone \$  
Safety Joint \$  
Standby \$  
Evaluation \$  
Extra Packer \$  
Circ. Sub. \$  
Mileage \$  
Fluid Sampler \$  
Extra Charts \$  
Insurance \$  
Telecopier \$  
TOTAL \$

# WESTERN TESTING CO., INC.

## Pressure Data

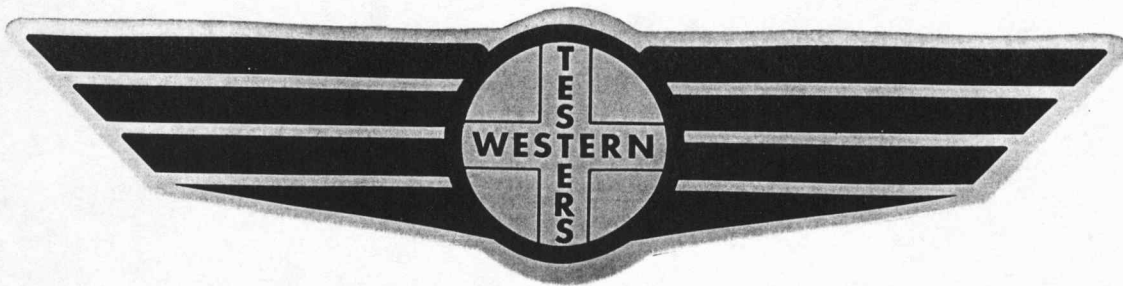
Date 4-5-52 Test Ticket No. 18521  
 Recorder No. 10220 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                          | Pressure           |                            | Time Given      | Time Computed |
|--------------------------------|--------------------|----------------------------|-----------------|---------------|
| A Initial Hydrostatic Mud      | <u>2188</u> P.S.I. | Open Tool                  | M               |               |
| B First Initial Flow Pressure  | <u>41</u> P.S.I.   | First Flow Pressure        | Mins. <u>30</u> | Mins.         |
| C First Final Flow Pressure    | <u>50</u> P.S.I.   | Initial Closed-in Pressure | Mins. <u>60</u> | Mins.         |
| D Initial Closed-in Pressure   | <u>1058</u> P.S.I. | Second Flow Pressure       | Mins. <u>30</u> | Mins.         |
| E Second Initial Flow Pressure | <u>62</u> P.S.I.   | Final Closed-in Pressure   | Mins. <u>30</u> | Mins.         |
| F Second Final Flow Pressure   | <u>70</u> P.S.I.   |                            |                 |               |
| G Final Closed-in Pressure     | <u>969</u> P.S.I.  |                            |                 |               |
| H Final Hydrostatic Mud        | <u>1022</u> 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 Mins.                 | Press.    | Point Minutes               | Press.      | Point Minutes               | Press.       | Point Minutes               | Press.     |
| P 1 0                       | <u>41</u> | 0                           | <u>50</u>   | 0                           | <u>62</u>    | 0                           | <u>70</u>  |
| P 2 5                       | <u>5</u>  | 3                           | <u>109</u>  | 5                           | <u>62</u>    | 3                           | <u>178</u> |
| P 3 10                      | <u>41</u> | 6                           | <u>404</u>  | 10                          | <u>78 FT</u> | 6                           | <u>468</u> |
| P 4 15                      | <u>42</u> | 9                           | <u>643</u>  | 15                          | <u>71</u>    | 9                           | <u>665</u> |
| P 5 20                      | <u>45</u> | 12                          | <u>781</u>  | 20                          | <u>72</u>    | 12                          | <u>780</u> |
| P 6 25                      | <u>47</u> | 15                          | <u>869</u>  | 25                          | <u>5</u>     | 15                          | <u>846</u> |
| P 7 30                      | <u>50</u> | 18                          | <u>916</u>  | 30                          | <u>70</u>    | 18                          | <u>895</u> |
| P 8 35                      |           | 21                          | <u>936</u>  | 35                          |              | 21                          | <u>920</u> |
| P 9 40                      |           | 24                          | <u>966</u>  | 40                          |              | 24                          | <u>941</u> |
| P 10 45                     |           | 27                          | <u>987</u>  | 45                          |              | 27                          | <u>956</u> |
| P 11 50                     |           | 30                          | <u>993</u>  | 50                          |              | 30                          | <u>969</u> |
| P 12 55                     |           | 33                          | <u>1005</u> | 55                          |              | 33                          |            |
| P 13 60                     |           | 36                          | <u>1017</u> | 60                          |              | 36                          |            |
| P 14 65                     |           | 39                          | <u>1025</u> | 65                          |              | 39                          |            |
| P 15 70                     |           | 42                          | <u>1030</u> | 70                          |              | 42                          |            |
| P 16 75                     |           | 45                          | <u>1038</u> | 75                          |              | 45                          |            |
| P 17 80                     |           | 48                          | <u>1041</u> | 80                          |              | 48                          |            |
| P 18 85                     |           | 51                          | <u>1048</u> | 85                          |              | 51                          |            |
| P 19 90                     |           | 54                          | <u>1054</u> | 90                          |              | 54                          |            |
| P 20 95                     |           | 57                          | <u>1056</u> | 95                          |              | 57                          |            |
| 100                         |           | 60                          | <u>1058</u> | 100                         |              | 60                          |            |

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

## DST REPORT

### GENERAL INFORMATION

|           |                             |           |                        |
|-----------|-----------------------------|-----------|------------------------|
| DATE      | : 4-5-93                    | TICKET    | : 18531                |
| CUSTOMER  | : PICKRELL DRILLING CO.INC. | LEASE     | : SHRAMEK TRUST F      |
| WELL      | : #1                        | TEST: 1   | GEOLOGIST: BILL KLAVER |
| ELEVATION | : 2246 K.B.                 | FORMATION | : FT. SCOTT            |
| SECTION   | : 24                        | TOWNSHIP  | : 19S                  |
| RANGE     | : 24W                       | STATE     | : KS                   |
| GAUGE SN# | : 10270                     | CLOCK     | : 12                   |
|           | COUNTY: NESS                |           |                        |
|           | RANGE : 4150                |           |                        |

### WELL INFORMATION

|                            |            |                    |            |            |           |
|----------------------------|------------|--------------------|------------|------------|-----------|
| PERFORATION INTERVAL FROM: | 4208.00 ft | TO:                | 4255.00 ft | TVD:       | 4255.0 ft |
| DEPTH OF SELECTIVE ZONE:   |            |                    |            | TEST TYPE: | OIL       |
| DEPTH OF RECORDERS:        | 4212.0 ft  |                    | 4215.0 ft  |            |           |
| TEMPERATURE:               | 117.0      |                    |            |            |           |
| DRILL COLLAR LENGTH:       | 150.0 ft   | I.D.:              | 2.200 in   |            |           |
| WEIGHT PIPE LENGTH :       | 0.0 ft     | I.D.:              | 0.000 in   |            |           |
| DRILL PIPE LENGTH :        | 4038.0 ft  | I.D.:              | 3.800 in   |            |           |
| TEST TOOL LENGTH :         | 20.0 ft    | TOOL SIZE :        | 5.500 in   |            |           |
| ANCHOR LENGTH :            | 47.0 ft    | ANCHOR SIZE:       | 5.500 in   |            |           |
| SURFACE CHOKE SIZE :       | 0.750 in   | BOTTOM CHOKE SIZE: | 0.750 in   |            |           |
| MAIN HOLE SIZE :           | 7.875 in   | TOOL JOINT SIZE :  | 4.5XH      |            |           |
| PACKER DEPTH:              | 4203.0 ft  | SIZE:              | 6.630 in   |            |           |
| PACKER DEPTH:              | 4208.0 ft  | SIZE:              | 6.630 in   |            |           |
| PACKER DEPTH:              | 0.0 ft     | SIZE:              | 0.000 in   |            |           |
| PACKER DEPTH:              | 0.0 ft     | SIZE:              | 0.000 in   |            |           |

### MUD INFORMATION

|                 |              |                |          |
|-----------------|--------------|----------------|----------|
| DRILLING CON. : | PICKRELL #10 | VISCOSITY :    | 40.00 cp |
| MUD TYPE :      | STARCH       | WATER LOSS:    | 8.000 cc |
| WEIGHT :        | 9.500 ppg    |                |          |
| CHLORIDES :     | 12000 ppm    | SERIAL NUMBER: |          |
| JARS-MAKE :     | NO           | REVERSED OUT?: | NO       |
| DID WELL FLOW?: | NO           |                |          |

### COMMENTS

Comment

WEAK BLOW THROUGHOUT 1/4" TO 1/2" BLOW ON INITIAL  
FLOW PERIOD. NO BLOW FLUSHED TOOL ON FINAL FLOW  
FLOW PERIOD.

# DST REPORT (CONTINUED)

## FLUID RECOVERY

| Feet of<br>Fluid | %<br>Oil | %<br>Gas | %<br>Water | %<br>Mud | Comments          |
|------------------|----------|----------|------------|----------|-------------------|
| 75.0             | 0.0      | 0.0      | 0.0        | 100.0    | MUD W/SHOW OF OIL |

## RATE INFORMATION

|               |        |     |                     |         |       |
|---------------|--------|-----|---------------------|---------|-------|
| OIL VOLUME:   | 0.0000 | STB | TOTAL FLOW TIME:    | 60.0000 | min.  |
| GAS VOLUME:   | 0.0000 | SCF | AVERAGE OIL RATE:   | 0.0000  | STB/D |
| MUD VOLUME:   | 0.3526 | STB | AVERAGE WATER RATE: | 0.0000  | STB/D |
| WATER VOLUME: | 0.0000 | STB |                     |         |       |
| TOTAL FLUID : | 0.3526 | STB |                     |         |       |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2118.00

| Description     | Duration | p1    | p End   |
|-----------------|----------|-------|---------|
| INITIAL FLOW    | 30.00    | 41.00 | 41.00   |
| INITIAL SHUT-IN | 60.00    |       | 1070.00 |
| FINAL FLOW      | 30.00    | 52.00 | 62.00   |
| FINAL SHUT-IN   | 30.00    |       | 956.00  |

FINAL HYDROSTATIC PRESSURE: 2118.00

## OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2188.00

| Description     | Duration | p1    | p End   |
|-----------------|----------|-------|---------|
| INITIAL FLOW    | 30.00    | 41.00 | 50.00   |
| INITIAL SHUT-IN | 60.00    |       | 1058.00 |
| FINAL FLOW      | 30.00    | 62.00 | 70.00   |
| FINAL SHUT-IN   | 30.00    |       | 969.00  |

FINAL HYDROSTATIC PRESSURE: 2023.00

# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|                                      |                         |
|--------------------------------------|-------------------------|
| DATE : 4-5-93                        | TICKET : 18531          |
| CUSTOMER : PICKRELL DRILLING CO.INC. | LEASE : SHRAMEK TRUST F |
| WELL : #1                            | GEOLOGIST: BILL KLAVER  |
| ELEVATION: 2246 K.B.                 | FORMATION: FT. SCOTT    |
| SECTION : 24                         | TOWNSHIP : 19S          |
| RANGE : 24W                          | STATE : KS              |
| GAUGE SN#: 10270                     | CLOCK : 12              |
| COUNTY: NESS                         |                         |
| RANGE : 4150                         |                         |

## INITIAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 41.00    | 41.00   |
| 5.00          | 41.00    | 0.00    |
| 10.00         | 41.00    | 0.00    |
| 15.00         | 42.00    | 1.00    |
| 20.00         | 45.00    | 3.00    |
| 25.00         | 47.00    | 2.00    |
| 30.00         | 50.00    | 3.00    |

## INITIAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 109.00   | 109.00  | 16.00    |
| 6.00          | 404.00   | 295.00  | 8.50     |
| 9.00          | 643.00   | 239.00  | 6.00     |
| 12.00         | 781.00   | 138.00  | 4.75     |
| 15.00         | 869.00   | 88.00   | 4.00     |
| 18.00         | 910.00   | 41.00   | 3.50     |
| 21.00         | 936.00   | 26.00   | 3.14     |
| 24.00         | 966.00   | 30.00   | 2.88     |
| 27.00         | 987.00   | 21.00   | 2.67     |
| 30.00         | 993.00   | 6.00    | 2.50     |
| 33.00         | 1005.00  | 12.00   | 2.36     |
| 36.00         | 1017.00  | 12.00   | 2.25     |
| 39.00         | 1025.00  | 8.00    | 2.15     |
| 42.00         | 1030.00  | 5.00    | 2.07     |
| 45.00         | 1038.00  | 8.00    | 2.00     |
| 48.00         | 1041.00  | 3.00    | 1.94     |
| 51.00         | 1048.00  | 7.00    | 1.88     |
| 54.00         | 1054.00  | 6.00    | 1.83     |
| 57.00         | 1056.00  | 2.00    | 1.79     |

**PRESSURE TRANSIENT REPORT (CONTINUED)**

**INITIAL SHUT IN (CONTINUED)**

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 60.00                 | 1058.00         | 2.00           | 1.75            |

**FINAL FLOW**

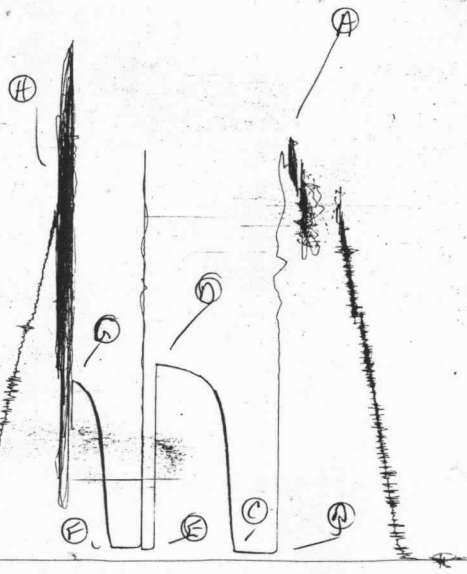
| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> |
|-----------------------|-----------------|----------------|
| 0.00                  | 62.00           | 62.00          |
| 5.00                  | 62.00           | 0.00           |
| 10.00                 | 78.00           | 16.00          |
| 15.00                 | 71.00           | -7.00          |
| 20.00                 | 70.00           | -1.00          |
| 25.00                 | 70.00           | 0.00           |
| 30.00                 | 70.00           | 0.00           |

**FINAL SHUT IN**

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 3.00                  | 178.00          | 178.00         | 16.00           |
| 6.00                  | 468.00          | 290.00         | 8.50            |
| 9.00                  | 665.00          | 197.00         | 6.00            |
| 12.00                 | 780.00          | 115.00         | 4.75            |
| 15.00                 | 846.00          | 66.00          | 4.00            |
| 18.00                 | 895.00          | 49.00          | 3.50            |
| 21.00                 | 920.00          | 25.00          | 3.14            |
| 24.00                 | 941.00          | 21.00          | 2.88            |
| 27.00                 | 956.00          | 15.00          | 2.67            |
| 30.00                 | 969.00          | 13.00          | 2.50            |

JK4 18531

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JK4 18531

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WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET

No 18532

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation 2246 KB Formation Miss Eff. Pay - Ft.

District GT. Bend Date 4-6-93 Customer Order No. -

COMPANY NAME Pickrell Drilling Co., Inc

ADDRESS 110 N. MARKET-Suite 205 WICHITA, KS 67202

LEASE AND WELL NO Shramek Trust #1 COUNTY Ness STATE Ks Sec. 24 Twp 19 Rge 24

Mail Invoice To SAME #1 SHRAMCK TRUST F Co. Name - Address - No. Copies Requested Reg

Mail Charts To SAME Address - No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 4280 ft. to 4323 ft. Total Depth 4323 ft.

Packer Depth 4275 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4280 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4284 ft. Recorder Number 10270 Cap. 4150

Bottom Recorder Depth (Outside) 4287 ft. Recorder Number 13550 Cap. 4175

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

Drilling Contractor Pickrell rig 10 Drill Collar Length 150 I. D. 2.2 in.

Mud Type STARCH Viscosity 40 Weight Pipe Length - I. D. - in.

Weight 9.5 Water Loss 8 cc. Drill Pipe Length 4110 I. D. 3.8 in.

Chlorides 12000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 43 ft. Size 5 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: IF - WEAK Blow Throughout 1" Blow

FF - VERY WEAK Blow died in 10 min Flushed Tool

Recovered 25 ft. of Mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Chlorides - P.P.M. Sample Jars used 1 Remarks: -

APR 12 1993

Time On Location - A.M. P.M. Time Pick Up Tool 2:50 A.M. P.M. Time Off Location 9:00 A.M. P.M.

Time Set Packer(s) 4:30 A.M. P.M. Time Started Off Bottom 6:30 A.M. P.M. Maximum Temperature 114°

Initial Hydrostatic Pressure - (A) 2170 P.S.I.

Initial Flow Period - Minutes 30 (B) 41 P.S.I. to (C) 41 P.S.I.

Initial Closed In Period - Minutes 60 (D) 239 P.S.I.

Final Flow Period - Minutes 30 (E) 41 P.S.I. to (F) 52 P.S.I.

Final Closed In Period - Minutes 30 (G) 83 P.S.I.

Final Hydrostatic Pressure - (H) 2160 P.S.I.

COMPANY TERMS

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

Test Approved By Bill Kauer  
Signature of Customer or his authorized representative

Western Representative Ray Schwager

Thank  
you

FIELD INVOICE

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

# WESTERN TESTING CO., INC.

## Pressure Data

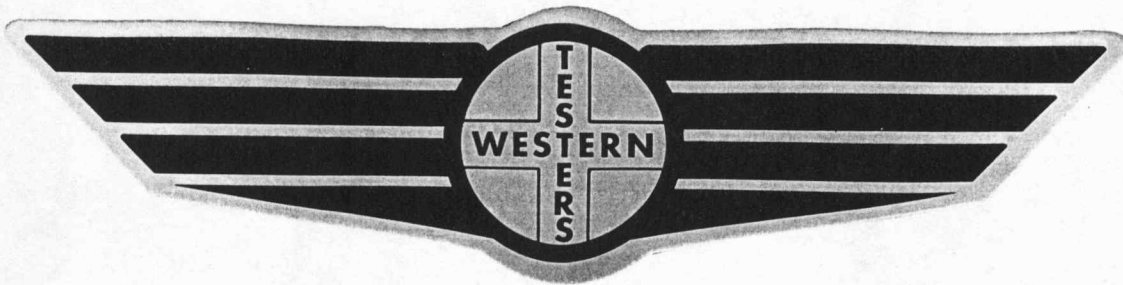
Date 4-6-93 Test Ticket No. 18522  
 Recorder No. 10270 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                          | Pressure           | Time Given                 | Time Computed          |
|--------------------------------|--------------------|----------------------------|------------------------|
| A Initial Hydrostatic Mud      | <u>2172</u> P.S.I. | Open Tool                  | M _____                |
| B First Initial Flow Pressure  | <u>49</u> P.S.I.   | First Flow Pressure        | Mins. <u>10</u> Mins.  |
| C First Final Flow Pressure    | <u>49</u> P.S.I.   | Initial Closed-in Pressure | Mins. <u>100</u> Mins. |
| D Initial Closed-in Pressure   | <u>238</u> P.S.I.  | Second Flow Pressure       | Mins. <u>30</u> Mins.  |
| E Second Initial Flow Pressure | <u>54</u> P.S.I.   | Final Closed-in Pressure   | Mins. <u>30</u> Mins.  |
| F Second Final Flow Pressure   | <u>60</u> P.S.I.   |                            |                        |
| G Final Closed-in Pressure     | <u>92</u> P.S.I.   |                            |                        |
| H Final Hydrostatic Mud        | <u>2168</u> 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 Mins.                 | Press.    | Point Minutes               | Press.     | Point Minutes               | Press.       | Point Minutes               | Press.    |
| P 1 0                       | <u>49</u> | 0                           | <u>49</u>  | 0                           | <u>54</u>    | 0                           | <u>60</u> |
| P 2 5                       |           | 3                           | <u>49</u>  | 5                           |              | 3                           | <u>60</u> |
| P 3 10                      |           | 6                           | <u>49</u>  | 10                          |              | 6                           | <u>62</u> |
| P 4 15                      |           | 9                           | <u>54</u>  | 15                          | <u>54</u> FT | 9                           | <u>64</u> |
| P 5 20                      |           | 12                          | <u>58</u>  | 20                          | <u>60</u>    | 12                          | <u>68</u> |
| P 6 25                      |           | 15                          | <u>67</u>  | 25                          | <u>60</u>    | 15                          | <u>70</u> |
| P 7 30                      | <u>49</u> | 18                          | <u>72</u>  | 30                          | <u>60</u>    | 18                          | <u>76</u> |
| P 8 35                      |           | 21                          | <u>78</u>  | 35                          |              | 21                          | <u>81</u> |
| P 9 40                      |           | 24                          | <u>84</u>  | 40                          |              | 24                          | <u>86</u> |
| P10 45                      |           | 27                          | <u>94</u>  | 45                          |              | 27                          | <u>89</u> |
| P11 50                      |           | 30                          | <u>104</u> | 50                          |              | 30                          | <u>92</u> |
| P12 55                      |           | 33                          | <u>112</u> | 55                          |              | 33                          |           |
| P13 60                      |           | 36                          | <u>123</u> | 60                          |              | 36                          |           |
| P14 65                      |           | 39                          | <u>134</u> | 65                          |              | 39                          |           |
| P15 70                      |           | 42                          | <u>148</u> | 70                          |              | 42                          |           |
| P16 75                      |           | 45                          | <u>162</u> | 75                          |              | 45                          |           |
| P17 80                      |           | 48                          | <u>179</u> | 80                          |              | 48                          |           |
| P18 85                      |           | 51                          | <u>193</u> | 85                          |              | 51                          |           |
| P19 90                      |           | 54                          | <u>207</u> | 90                          |              | 54                          |           |
| P20 95                      |           | 57                          | <u>221</u> | 95                          |              | 57                          |           |
| 100                         |           | 60                          | <u>238</u> | 100                         |              | 60                          |           |

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

## DST REPORT

### GENERAL INFORMATION

DATE : 4-6-93  
CUSTOMER : PICKRELL DRILLING CO. INC.  
WELL : #1 TEST: 2  
ELEVATION: 2246 K.B.  
SECTION : 24  
RANGE : 24W COUNTY: NESS  
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18532  
LEASE : SHRAMEK TRUST F  
GEOLOGIST: BILL KLAVER  
FORMATION: MISSISSIPPI  
TOWNSHIP : 19S  
STATE : KS  
CLOCK : 12

### WELL INFORMATION

PERFORATION INTERVAL FROM: 4280.00 ft TO: 4323.00 ft TVD: 4323.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL

DEPTH OF RECORDERS: 4284.0 ft 4287.0 ft  
TEMPERATURE: 114.0

|                      |           |                    |          |
|----------------------|-----------|--------------------|----------|
| DRILL COLLAR LENGTH: | 150.0 ft  | I.D.:              | 2.200 in |
| WEIGHT PIPE LENGTH : | 0.0 ft    | I.D.:              | 0.000 in |
| DRILL PIPE LENGTH :  | 4110.0 ft | I.D.:              | 3.800 in |
| TEST TOOL LENGTH :   | 20.0 ft   | TOOL SIZE :        | 5.500 in |
| ANCHOR LENGTH :      | 43.0 ft   | ANCHOR SIZE:       | 5.500 in |
| SURFACE CHOKE SIZE : | 0.750 in  | BOTTOM CHOKE SIZE: | 0.750 in |
| MAIN HOLE SIZE :     | 7.875 in  | TOOL JOINT SIZE :  | 4.5XH    |
| PACKER DEPTH:        | 4275.0 ft | SIZE:              | 6.630 in |
| PACKER DEPTH:        | 4280.0 ft | SIZE:              | 6.630 in |
| PACKER DEPTH:        | 0.0 ft    | SIZE:              | 0.000 in |
| PACKER DEPTH:        | 0.0 ft    | SIZE:              | 0.000 in |

### MUD INFORMATION

DRILLING CON. : PICKRELL #10  
MUD TYPE : STARCH  
WEIGHT : 9.500 ppg  
CHLORIDES : 12000 ppm  
JARS-MAKE : NO  
DID WELL FLOW?: NO

VISCOSITY : 40.00 cp  
WATER LOSS: 8.000 cc

SERIAL NUMBER:  
REVERSED OUT?: NO

### COMMENTS

Comment

WEAK BLOW THROUGHOUT 1" BLOW ON INITIAL FLOW  
PERIOD. VERY WEAK BLOW DIED IN 10 MINUTES -  
FLUSHED TOOL ON FINAL FLOW PERIOD.

# DST REPORT (CONTINUED)

## FLUID RECOVERY

| Feet of<br>Fluid | %<br>Oil | %<br>Gas | %<br>Water | %<br>Mud | Comments |
|------------------|----------|----------|------------|----------|----------|
| 25.0             | 0.0      | 0.0      | 0.0        | 100.0    | MUD      |

## RATE INFORMATION

|               |        |     |                     |         |       |
|---------------|--------|-----|---------------------|---------|-------|
| OIL VOLUME:   | 0.0000 | STB | TOTAL FLOW TIME:    | 60.0000 | min.  |
| GAS VOLUME:   | 0.0000 | SCF | AVERAGE OIL RATE:   | 0.0000  | STB/D |
| MUD VOLUME:   | 0.1175 | STB | AVERAGE WATER RATE: | 0.0000  | STB/D |
| WATER VOLUME: | 0.0000 | STB |                     |         |       |
| TOTAL FLUID : | 0.1175 | STB |                     |         |       |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2170.00

| Description     | Duration | p1    | p End  |
|-----------------|----------|-------|--------|
| INITIAL FLOW    | 30.00    | 41.00 | 41.00  |
| INITIAL SHUT-IN | 60.00    |       | 239.00 |
| FINAL FLOW      | 30.00    | 41.00 | 52.00  |
| FINAL SHUT-IN   | 30.00    |       | 83.00  |

FINAL HYDROSTATIC PRESSURE: 2160.00

## OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2172.00

| Description     | Duration | p1    | p End  |
|-----------------|----------|-------|--------|
| INITIAL FLOW    | 30.00    | 49.00 | 49.00  |
| INITIAL SHUT-IN | 60.00    |       | 228.00 |
| FINAL FLOW      | 30.00    | 54.00 | 60.00  |
| FINAL SHUT-IN   | 30.00    |       | 92.00  |

FINAL HYDROSTATIC PRESSURE: 2168.00

# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|           |                              |           |                   |
|-----------|------------------------------|-----------|-------------------|
| DATE      | : 4-6-93                     | TICKET    | : 18532           |
| CUSTOMER  | : PICKRELL DRILLING CO. INC. | LEASE     | : SHRAMEK TRUST F |
| WELL      | : #1                         | GEOLOGIST | : BILL KLAVER     |
| ELEVATION | : 2246 K.B.                  | FORMATION | : MISSISSIPPI     |
| SECTION   | : 24                         | TOWNSHIP  | : 19S             |
| RANGE     | : 24W                        | STATE     | : KS              |
| GAUGE SN# | : 10270                      | CLOCK     | : 12              |
|           | COUNTY: NESS                 |           |                   |
|           | RANGE : 4150                 |           |                   |

## INITIAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 49.00    | 49.00   |
| 5.00          | 49.00    | 0.00    |
| 10.00         | 49.00    | 0.00    |
| 15.00         | 49.00    | 0.00    |
| 20.00         | 49.00    | 0.00    |
| 25.00         | 49.00    | 0.00    |
| 30.00         | 49.00    | 0.00    |

## INITIAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 49.00    | 49.00   | 16.00    |
| 6.00          | 49.00    | 0.00    | 8.50     |
| 9.00          | 54.00    | 5.00    | 6.00     |
| 12.00         | 58.00    | 4.00    | 4.75     |
| 15.00         | 67.00    | 9.00    | 4.00     |
| 18.00         | 73.00    | 6.00    | 3.50     |
| 21.00         | 78.00    | 5.00    | 3.14     |
| 24.00         | 84.00    | 6.00    | 2.88     |
| 27.00         | 94.00    | 10.00   | 2.67     |
| 30.00         | 104.00   | 10.00   | 2.50     |
| 33.00         | 113.00   | 9.00    | 2.36     |
| 36.00         | 123.00   | 10.00   | 2.25     |
| 39.00         | 134.00   | 11.00   | 2.15     |
| 42.00         | 148.00   | 14.00   | 2.07     |
| 45.00         | 163.00   | 15.00   | 2.00     |
| 48.00         | 179.00   | 16.00   | 1.94     |
| 51.00         | 193.00   | 14.00   | 1.88     |
| 54.00         | 207.00   | 14.00   | 1.83     |
| 57.00         | 221.00   | 14.00   | 1.79     |

# PRESSURE TRANSIENT REPORT (CONTINUED)

## INITIAL SHUT IN (CONTINUED)

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 60.00                 | 228.00          | 7.00           | 1.75            |

## FINAL FLOW

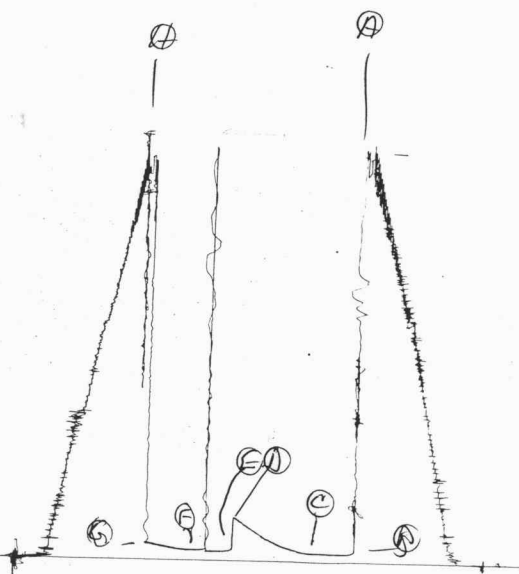
| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> |
|-----------------------|-----------------|----------------|
| 0.00                  | 54.00           | 54.00          |
| 5.00                  | 54.00           | 0.00           |
| 10.00                 | 54.00           | 0.00           |
| 15.00                 | 54.00           | 0.00           |
| 20.00                 | 60.00           | 6.00           |
| 25.00                 | 60.00           | 0.00           |
| 30.00                 | 60.00           | 0.00           |

## FINAL SHUT IN

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 3.00                  | 60.00           | 60.00          | 16.00           |
| 6.00                  | 62.00           | 2.00           | 8.50            |
| 9.00                  | 64.00           | 2.00           | 6.00            |
| 12.00                 | 67.00           | 3.00           | 4.75            |
| 15.00                 | 70.00           | 3.00           | 4.00            |
| 18.00                 | 76.00           | 6.00           | 3.50            |
| 21.00                 | 81.00           | 5.00           | 3.14            |
| 24.00                 | 86.00           | 5.00           | 2.88            |
| 27.00                 | 89.00           | 3.00           | 2.67            |
| 30.00                 | 92.00           | 3.00           | 2.50            |

KT 1853J

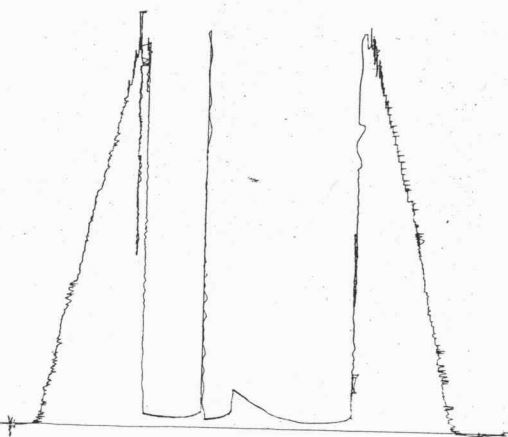
Z



OST#2

KT 1853J

O



OST#2



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

LAST  
No 18533

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation 2246 KB Formation Miss Eff. Pay — Ft.District GT. Bend Date 4-6-93 Customer Order No. —COMPANY NAME Pickrell Drilling Co., Inc.ADDRESS 110 N. MARKET - Suite 205 WICHITA, KS 67202LEASE AND WELL NO SHRAAMEK Trust #1 COUNTY Ness STATE KS Sec 24 Twp 19<sup>s</sup> Rge 24<sup>w</sup>Mail Invoice To SAME Co. Name #1 SHRAAMEK TRUST F Address — No. Copies Requested RegMail Charts To SAME Address — No. Copies Requested RegFormation Test No. 3 Interval Tested From 4282 ft. to 4346 ft. Total Depth 4346 ft.Packer Depth 4277 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.Packer Depth 4282 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.Depth of Selective Zone Set —Top Recorder Depth (Inside) 4307 ft. Recorder Number 10270 Cap. 4150Bottom Recorder Depth (Outside) 4310 ft. Recorder Number 13550 Cap. 4175Below Straddle Recorder Depth — ft. Recorder Number — Cap. —Drilling Contractor Pickrell rig 10 Drill Collar Length 150 I. D. 2.2 in.Mud Type STARCL Viscosity 39 Weight Pipe Length — I. D. — in.Weight 9.5 Water Loss 10.8 cc. Drill Pipe Length 4112 I. D. 3.8 in.Chlorides 12,500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.Jars: Make — Serial Number — Anchor Length 64 ft. Size 5 1/2 in.Did Well Flow? — Reversed Out — Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.Blow IF - WEAR building To A Good Blow 1" To 6" BlowFF - FAIR building To A Good Blow 5" To 8" BlowRecovered 180 ft. of Muddy WATER 20% mud 80% WATERRecovered 300 ft. of WATERRecovered — ft. of —Recovered — ft. of —Recovered — ft. of —Chlorides 25,000 P.P.M. Sample Jars used 3 Remarks: APR 12 1993Time On Location 7:00 A.M. Time Pick Up Tool 8:40 A.M. Time Off Location — A.M.Time Set Packer(s) 10:15 A.M. Time Started Off Bottom 2:45 A.M. Maximum Temperature 130°Initial Hydrostatic Pressure (A) 2139 P.S.I.Initial Flow Period 30 Minutes (B) 52 P.S.I. to (C) 104 P.S.I.Initial Closed In Period 60 Minutes (D) 1319 P.S.I.Final Flow Period 90 Minutes (E) 145 P.S.I. to (F) 239 P.S.I.Final Closed In Period 90 Minutes (G) 1288 P.S.I.Final Hydrostatic Pressure (H) 2139 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 B. Kluwer  
Signature of Customer or his authorized representativeWestern Representative Ray Schwager Thank you

## FIELD INVOICE

|                |           |
|----------------|-----------|
| Open Hole Test | \$        |
| Misrun         | \$        |
| Straddle Test  | \$        |
| Jars           | \$        |
| Selective Zone | \$        |
| Safety Joint   | \$        |
| Standby        | \$        |
| Evaluation     | \$        |
| Extra Packer   | \$        |
| Circ. Sub.     | \$        |
| Mileage        | \$        |
| Fluid Sampler  | \$        |
| Extra Charts   | \$        |
| Insurance      | \$        |
| Telecopier     | \$        |
| TOTAL          | <u>LS</u> |

# WESTERN TESTING CO., INC.

## Pressure Data

Date 4-6-92

Test Ticket No. 18522

Recorder No. 10220

Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.

Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                          | Pressure           | Time Given                 | Time Computed         |
|--------------------------------|--------------------|----------------------------|-----------------------|
| A Initial Hydrostatic Mud      | <u>2169</u> P.S.I. | Open Tool                  | M                     |
| B First Initial Flow Pressure  | <u>71</u> P.S.I.   | First Flow Pressure        | Mins. <u>40</u> Mins. |
| C First Final Flow Pressure    | <u>130</u> P.S.I.  | Initial Closed-in Pressure | Mins. <u>40</u> Mins. |
| D Initial Closed-in Pressure   | <u>1329</u> P.S.I. | Second Flow Pressure       | Mins. <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>159</u> P.S.I.  | Final Closed-in Pressure   | Mins. <u>25</u> Mins. |
| F Second Final Flow Pressure   | <u>252</u> P.S.I.  |                            |                       |
| G Final Closed-in Pressure     | <u>1305</u> P.S.I. |                            |                       |
| H Final Hydrostatic Mud        | <u>2162</u> 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 0                       | <u>71</u>  | 0                           | <u>130</u>  | 0                           | <u>159</u> | 0                           | <u>252</u>  |
| P 2 5                       | <u>73</u>  | 3                           | <u>223</u>  | 5                           | <u>159</u> | 3                           | <u>261</u>  |
| P 3 10                      | <u>92</u>  | 6                           | <u>967</u>  | 10                          | <u>162</u> | 6                           | <u>946</u>  |
| P 4 15                      | <u>108</u> | 9                           | <u>1062</u> | 15                          | <u>168</u> | 9                           | <u>1020</u> |
| P 5 20                      | <u>117</u> | 12                          | <u>1141</u> | 20                          | <u>175</u> | 12                          | <u>1077</u> |
| P 6 25                      | <u>122</u> | 15                          | <u>1165</u> | 25                          | <u>181</u> | 15                          | <u>1107</u> |
| P 7 30                      | <u>130</u> | 18                          | <u>1198</u> | 30                          | <u>188</u> | 18                          | <u>1129</u> |
| P 8 35                      |            | 21                          | <u>1219</u> | 35                          | <u>192</u> | 21                          | <u>1159</u> |
| P 9 40                      |            | 24                          | <u>1238</u> | 40                          | <u>198</u> | 24                          | <u>1178</u> |
| P10 45                      |            | 27                          | <u>1254</u> | 45                          | <u>202</u> | 27                          | <u>1196</u> |
| P11 50                      |            | 30                          | <u>1270</u> | 50                          | <u>206</u> | 30                          | <u>1210</u> |
| P12 55                      |            | 33                          | <u>1276</u> | 55                          | <u>212</u> | 33                          | <u>1222</u> |
| P13 60                      |            | 36                          | <u>1285</u> | 60                          | <u>217</u> | 36                          | <u>1232</u> |
| P14 65                      |            | 39                          | <u>1295</u> | 65                          | <u>226</u> | 39                          | <u>1239</u> |
| P15 70                      |            | 42                          | <u>1300</u> | 70                          | <u>230</u> | 42                          | <u>1249</u> |
| P16 75                      |            | 45                          | <u>1305</u> | 75                          | <u>237</u> | 45                          | <u>1254</u> |
| P17 80                      |            | 48                          | <u>1310</u> | 80                          | <u>243</u> | 48                          | <u>1260</u> |
| P18 85                      |            | 51                          | <u>1316</u> | 85                          | <u>247</u> | 51                          | <u>1266</u> |
| P19 90                      |            | 54                          | <u>1322</u> | 90                          | <u>252</u> | 54                          | <u>1272</u> |
| P20 95                      |            | 57                          | <u>1326</u> | 95                          |            | 57                          | <u>1274</u> |
| 100                         |            | 60                          | <u>1329</u> | 100                         |            | 60                          | <u>1276</u> |

# WESTERN TESTING CO., INC.

## Pressure Data

Date \_\_\_\_\_

Test Ticket No. 18522

Recorder No. \_\_\_\_\_ Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.

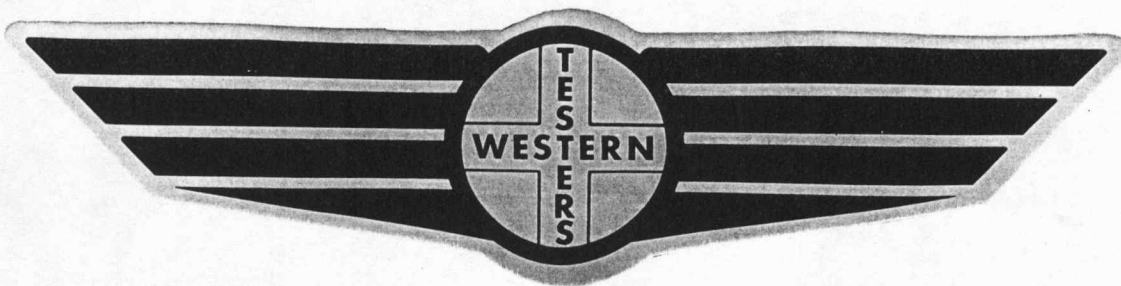
Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                                | Pressure |                                  | Time Given  | Time Computed |
|--------------------------------------|----------|----------------------------------|-------------|---------------|
| A Initial Hydrostatic Mud _____      | P.S.I.   | Open Tool _____                  | M _____     |               |
| B First Initial Flow Pressure _____  | P.S.I.   | First Flow Pressure _____        | Mins. _____ | Mins. _____   |
| C First Final Flow Pressure _____    | P.S.I.   | Initial Closed-in Pressure _____ | Mins. _____ | Mins. _____   |
| D Initial Closed-in Pressure _____   | P.S.I.   | Second Flow Pressure _____       | Mins. _____ | Mins. _____   |
| E Second Initial Flow Pressure _____ | P.S.I.   | Final Closed-in Pressure _____   | Mins. _____ | Mins. _____   |
| F Second Final Flow Pressure _____   | P.S.I.   |                                  |             |               |
| G Final Closed-in Pressure _____     | P.S.I.   |                                  |             |               |
| H 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 _____ mins. and a     |        | of _____ mins. and a     |        | of _____ mins. and a     |        | of _____ mins. and a     |        |
| final inc. of _____ Min. |        | final inc. of _____ Min. |        | final inc. of _____ Min. |        | final inc. of _____ Min. |        |
| Point Mins.              | Press. | Point Minutes            | Press. | Point Minutes            | Press. | Point Minutes            | Press. |
| P 1 105                  |        | 63                       |        | 105                      |        | 63                       | 1280   |
| P 2 110                  |        | 66                       |        | 110                      |        | 66                       | 1282   |
| P 3 115                  |        | 69                       |        | 115                      |        | 69                       | 1286   |
| P 4 120                  |        | 72                       |        | 120                      |        | 72                       | 1289   |
| P 5 125                  |        | 75                       |        | 125                      |        | 75                       | 1292   |
| P 6 130                  |        | 78                       |        | 130                      |        | 78                       | 1295   |
| P 7 135                  |        | 81                       |        | 135                      |        | 81                       | 1297   |
| P 8 140                  |        | 84                       |        | 140                      |        | 84                       | 1299   |
| P 9 145                  |        | 87                       |        | 145                      |        | 87                       | 1304   |
| P10 150                  |        | 90                       |        | 150                      |        | 90                       | 1302   |
| P11 155                  |        | 93                       |        | 155                      |        | 93                       | 1305   |
| P12 160                  |        | 96                       |        | 160                      |        | 96                       |        |
| P13 165                  |        | 99                       |        | 165                      |        | 99                       |        |
| P14 170                  |        | 102                      |        | 170                      |        | 102                      |        |
| P15 175                  |        | 105                      |        | 175                      |        | 105                      |        |
| P16 180                  |        | 108                      |        | 180                      |        | 108                      |        |
| P17 185                  |        | 111                      |        | 185                      |        | 111                      |        |
| P18 190                  |        | 114                      |        | 190                      |        | 114                      |        |
| P19 195                  |        | 117                      |        | 195                      |        | 117                      |        |
| P20 200                  |        | 120                      |        | 200                      |        | 120                      |        |

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

## DST REPORT

### GENERAL INFORMATION

DATE : 4-6-93  
CUSTOMER : PICKRELL DRILLING CO.INC.  
WELL : #1 TEST: 3  
ELEVATION: 2246 K.B.  
SECTION : 24  
RANGE : 24W COUNTY: NESS  
GAUGE SN#: 10270 RANGE : 4150

TICKET : 18533  
LEASE : SHRAMEK TRUST F  
GEOLOGIST: BILL KLAVER  
FORMATION: MISSISSIPPI  
TOWNSHIP : 19S  
STATE : KS  
CLOCK : 12

### WELL INFORMATION

PERFORATION INTERVAL FROM: 4282.00 ft TO: 4346.00 ft TVD: 4346.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL  
DEPTH OF RECORDERS: 4307.0 ft 4310.0 ft  
TEMPERATURE: 130.0

|                      |           |                    |          |
|----------------------|-----------|--------------------|----------|
| DRILL COLLAR LENGTH: | 150.0 ft  | I.D.:              | 2.200 in |
| WEIGHT PIPE LENGTH : | 0.0 ft    | I.D.:              | 0.000 in |
| DRILL PIPE LENGTH :  | 4112.0 ft | I.D.:              | 3.800 in |
| TEST TOOL LENGTH :   | 20.0 ft   | TOOL SIZE :        | 5.500 in |
| ANCHOR LENGTH :      | 64.0 ft   | ANCHOR SIZE:       | 5.500 in |
| SURFACE CHOKE SIZE : | 0.750 in  | BOTTOM CHOKE SIZE: | 0.750 in |
| MAIN HOLE SIZE :     | 7.875 in  | TOOL JOINT SIZE :  | 4.5XH    |
| PACKER DEPTH:        | 4277.0 ft | SIZE:              | 6.630 in |
| PACKER DEPTH:        | 4282.0 ft | SIZE:              | 6.630 in |
| PACKER DEPTH:        | 0.0 ft    | SIZE:              | 0.000 in |
| PACKER DEPTH:        | 0.0 ft    | SIZE:              | 0.000 in |

### MUD INFORMATION

DRILLING CON. : PICKRELL #10  
MUD TYPE : STARCH  
WEIGHT : 9.500 ppg  
CHLORIDES : 12500 ppm  
JARS-MAKE : NO  
DID WELL FLOW?: NO

VISCOSITY : 39.00 cp  
WATER LOSS: 10.800 cc

SERIAL NUMBER:  
REVERSED OUT?: NO

### COMMENTS

#### Comment

WEAK BLOW BUILDING TO A GOOD BLOW 1" TO 6" BLOW ON  
INITIAL FLOW PERIOD. FAIR BLOW BUILDING TO A GOOD  
BLOW 5" TO 8" BLOW ON FINAL FLOW PERIOD.

# DST REPORT (CONTINUED)

## FLUID RECOVERY

| Feet of Fluid | % Oil | % Gas | % Water | % Mud | Comments            |
|---------------|-------|-------|---------|-------|---------------------|
| 180.0         | 0.0   | 0.0   | 80.0    | 20.0  | MUDDY WATER         |
| 300.0         | 0.0   | 0.0   | 100.0   | 0.0   | WATER               |
| 0.0           | 0.0   | 0.0   | 0.0     | 0.0   | CHLORIDES 25000 PPM |

## RATE INFORMATION

|               |        |     |                     |               |
|---------------|--------|-----|---------------------|---------------|
| OIL VOLUME:   | 0.0000 | STB |                     |               |
| GAS VOLUME:   | 0.0000 | SCF |                     |               |
| MUD VOLUME:   | 0.5049 | STB |                     |               |
| WATER VOLUME: | 4.8290 | STB |                     |               |
| TOTAL FLUID : | 5.3339 | STB |                     |               |
|               |        |     | TOTAL FLOW TIME:    | 120.0000 min. |
|               |        |     | AVERAGE OIL RATE:   | 0.0000 STB/D  |
|               |        |     | AVERAGE WATER RATE: | 64.0068 STB/D |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2139.00

| Description     | Duration | p1     | p End   |
|-----------------|----------|--------|---------|
| INITIAL FLOW    | 30.00    | 52.00  | 104.00  |
| INITIAL SHUT-IN | 60.00    |        | 1319.00 |
| FINAL FLOW      | 90.00    | 145.00 | 239.00  |
| FINAL SHUT-IN   | 90.00    |        | 1288.00 |

FINAL HYDROSTATIC PRESSURE: 2139.00

## OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2169.00

| Description     | Duration | p1     | p End   |
|-----------------|----------|--------|---------|
| INITIAL FLOW    | 30.00    | 71.00  | 130.00  |
| INITIAL SHUT-IN | 60.00    |        | 1329.00 |
| FINAL FLOW      | 90.00    | 159.00 | 0.00    |
| FINAL SHUT-IN   | 93.00    |        | 1305.00 |

FINAL HYDROSTATIC PRESSURE: 2162.00

# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|                                      |                         |
|--------------------------------------|-------------------------|
| DATE : 4-6-93                        | TICKET : 18533          |
| CUSTOMER : PICKRELL DRILLING CO.INC. | LEASE : SHRAMEK TRUST F |
| WELL : #1                            | GEOLOGIST: BILL KLAVER  |
| ELEVATION: 2246 K.B.                 | FORMATION: MISSISSIPPI  |
| SECTION : 24                         | TOWNSHIP : 19S          |
| RANGE : 24W                          | STATE : KS              |
| GAUGE SN#: 10270                     | CLOCK : 12              |
| COUNTY: NESS                         |                         |
| RANGE : 4150                         |                         |

## INITIAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 71.00    | 71.00   |
| 5.00          | 73.00    | 2.00    |
| 10.00         | 92.00    | 19.00   |
| 15.00         | 108.00   | 16.00   |
| 20.00         | 117.00   | 9.00    |
| 25.00         | 123.00   | 6.00    |
| 30.00         | 130.00   | 7.00    |

## INITIAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 723.00   | 723.00  | 16.00    |
| 6.00          | 967.00   | 244.00  | 8.50     |
| 9.00          | 1062.00  | 95.00   | 6.00     |
| 12.00         | 1121.00  | 59.00   | 4.75     |
| 15.00         | 1165.00  | 44.00   | 4.00     |
| 18.00         | 1198.00  | 33.00   | 3.50     |
| 21.00         | 1219.00  | 21.00   | 3.14     |
| 24.00         | 1238.00  | 19.00   | 2.88     |
| 27.00         | 1254.00  | 16.00   | 2.67     |
| 30.00         | 1270.00  | 16.00   | 2.50     |
| 33.00         | 1276.00  | 6.00    | 2.36     |
| 36.00         | 1285.00  | 9.00    | 2.25     |
| 39.00         | 1295.00  | 10.00   | 2.15     |
| 42.00         | 1300.00  | 5.00    | 2.07     |
| 45.00         | 1305.00  | 5.00    | 2.00     |
| 48.00         | 1310.00  | 5.00    | 1.94     |
| 51.00         | 1316.00  | 6.00    | 1.88     |
| 54.00         | 1322.00  | 6.00    | 1.83     |
| 57.00         | 1326.00  | 4.00    | 1.79     |

# PRESSURE TRANSIENT REPORT (CONTINUED)

## INITIAL SHUT IN (CONTINUED)

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 60.00                 | 1329.00         | 3.00           | 1.75            |

## FINAL FLOW

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> |
|-----------------------|-----------------|----------------|
| 0.00                  | 159.00          | 159.00         |
| 5.00                  | 162.00          | 3.00           |
| 10.00                 | 168.00          | 6.00           |
| 15.00                 | 175.00          | 7.00           |
| 20.00                 | 181.00          | 6.00           |
| 25.00                 | 188.00          | 7.00           |
| 30.00                 | 192.00          | 4.00           |
| 35.00                 | 198.00          | 6.00           |
| 40.00                 | 202.00          | 4.00           |
| 45.00                 | 206.00          | 4.00           |
| 50.00                 | 213.00          | 7.00           |
| 55.00                 | 217.00          | 4.00           |
| 60.00                 | 226.00          | 9.00           |
| 65.00                 | 230.00          | 4.00           |
| 70.00                 | 237.00          | 7.00           |
| 75.00                 | 243.00          | 6.00           |
| 80.00                 | 247.00          | 4.00           |
| 85.00                 | 252.00          | 5.00           |
| 90.00                 | 0.00            | -252.00        |

## FINAL SHUT IN

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 3.00                  | 761.00          | 761.00         | 16.00           |
| 6.00                  | 946.00          | 185.00         | 8.50            |
| 9.00                  | 1020.00         | 74.00          | 6.00            |
| 12.00                 | 1077.00         | 57.00          | 4.75            |
| 15.00                 | 1107.00         | 30.00          | 4.00            |
| 18.00                 | 1139.00         | 32.00          | 3.50            |
| 21.00                 | 1159.00         | 20.00          | 3.14            |
| 24.00                 | 1178.00         | 19.00          | 2.88            |
| 27.00                 | 1196.00         | 18.00          | 2.67            |
| 30.00                 | 1210.00         | 14.00          | 2.50            |

# PRESSURE TRANSIENT REPORT (CONTINUED)

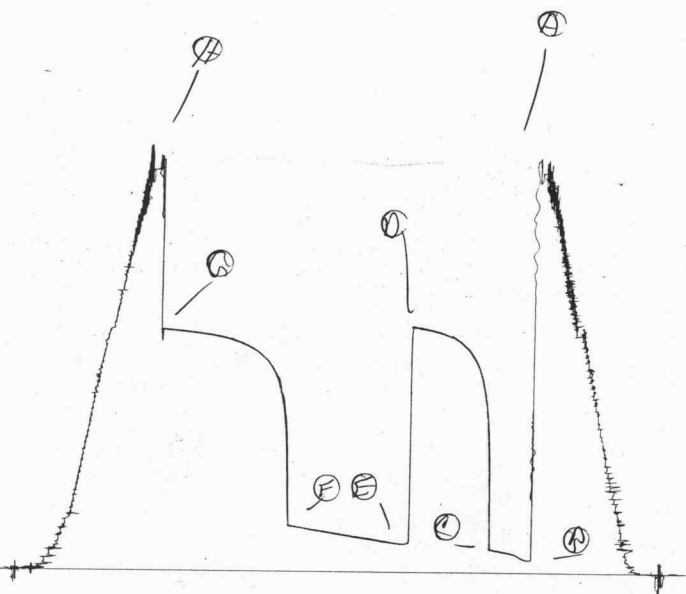
## FINAL SHUT IN (CONTINUED)

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 33.00         | 1223.00  | 13.00   | 2.36     |
| 36.00         | 1232.00  | 9.00    | 2.25     |
| 39.00         | 1239.00  | 7.00    | 2.15     |
| 42.00         | 1249.00  | 10.00   | 2.07     |
| 45.00         | 1254.00  | 5.00    | 2.00     |
| 48.00         | 1260.00  | 6.00    | 1.94     |
| 51.00         | 1266.00  | 6.00    | 1.88     |
| 54.00         | 1272.00  | 6.00    | 1.83     |
| 57.00         | 1274.00  | 2.00    | 1.79     |
| 60.00         | 1276.00  | 2.00    | 1.75     |
| 63.00         | 1280.00  | 4.00    | 0.00     |
| 66.00         | 1283.00  | 3.00    | 0.00     |
| 69.00         | 1286.00  | 3.00    | 0.00     |
| 72.00         | 1289.00  | 3.00    | 0.00     |
| 75.00         | 1292.00  | 3.00    | 0.00     |
| 78.00         | 1295.00  | 3.00    | 0.00     |
| 81.00         | 1297.00  | 2.00    | 0.00     |
| 84.00         | 1299.00  | 2.00    | 0.00     |
| 87.00         | 1301.00  | 2.00    | 0.00     |
| 90.00         | 1303.00  | 2.00    | 0.00     |
| 93.00         | 1305.00  | 2.00    | 0.00     |

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