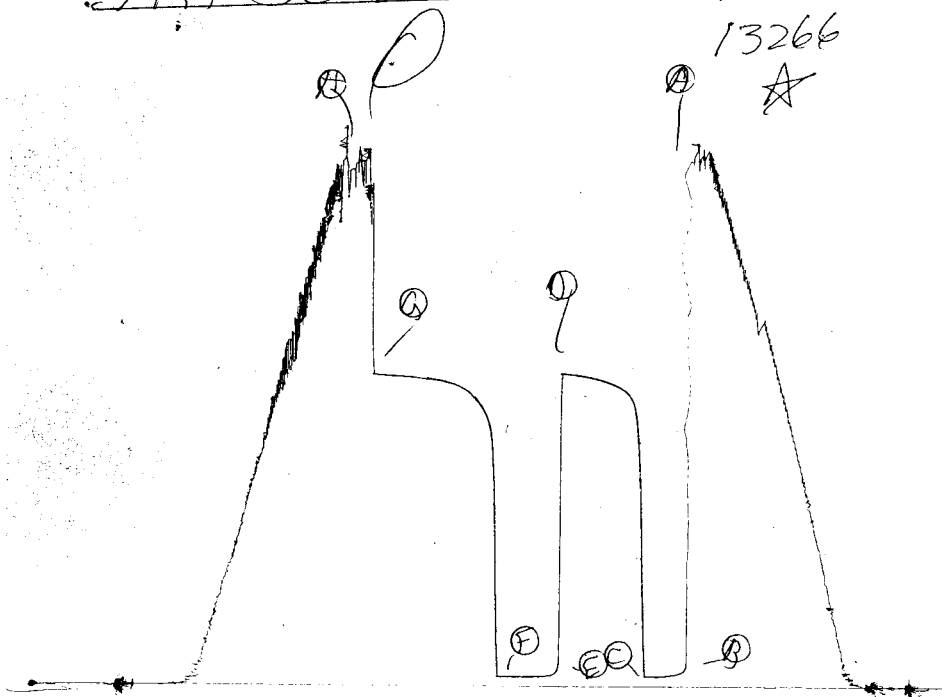


KT 10490

PST#3

13266

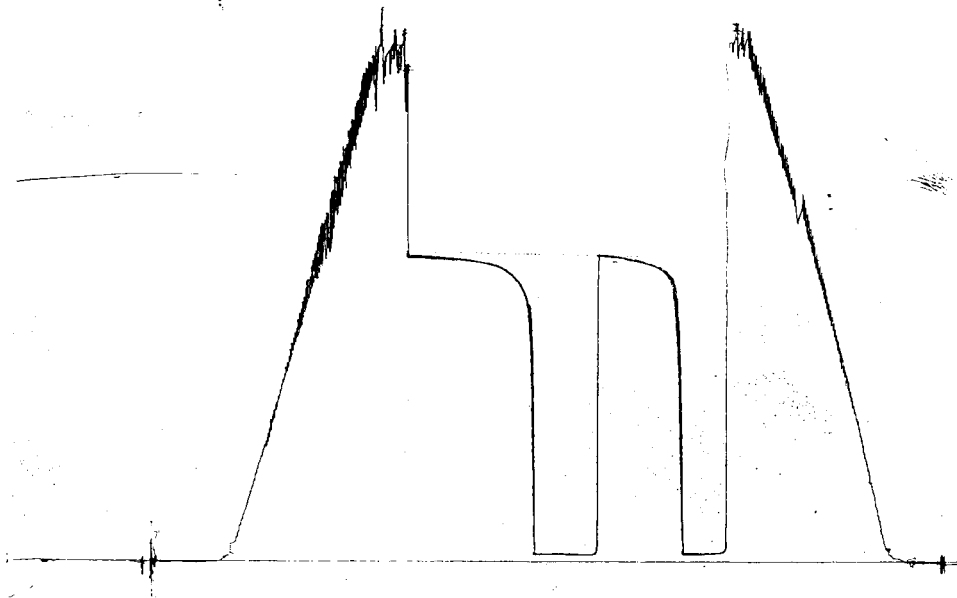


KT 10490

DST#3

10242

I





## WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 20490

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

WICHITA, KANSAS 67201

Elevation 2836

Formation Chester

Eff. Pay Ft.

District Garden City Date 9-3-93 Customer Order No.

COMPANY NAME Hugoton Energy Corp

ADDRESS 229 E. William Suite 500 Wichita KS 67202

LEASE AND WELL NO Home Royalty 1-8 COUNTY Seward STATE KS Sec. 8 Twp. 51S Rge. 34W

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

Mail Charts To Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested From 5555 ft. to 5600 ft. Total Depth 5600 ft.

Packer Depth 5550 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 5555 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 5562 ft. Recorder Number 10242 Cap. 4100

Bottom Recorder Depth (Outside) 5565 ft. Recorder Number 13266 Cap. 4000

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Muf-W 20 Drill Collar Length 312 I. D. 2 1/4 in.

Mud Type Chem Viscosity 45 Weight Pipe Length I. D. in.

Weight 9.2 Water Loss 9.6 cc. Drill Pipe Length 5244-5215 I. D. 3.8 in.

Chlorides 3000 P.P.M. Test Tool Length 28 ft. Tool Size in.

Jars: Make WTC Serial Number 415 Anchor Length 29 1/6 45 ft. Size 6' + 5 1/2 in.

Did Well Flow? YES Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Weak built to B.O.B in 1 min 6 TS 12 min Sec Flow Chart IF.

STRONG B.O.B 1 min Sec Flow Chart FF.

Recovered 140 ft. of gas cut mud 4% gas 96% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of Total Piller 140'

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

Time On Location 7:30 A.M. Time Pick Up Tool 9:00 A.M. Time Off Location A.M.

Time Set Packer(s) 11:28 A.M. Time Started Off Bottom 3:15 A.M. Maximum Temperature 144°F

Initial Hydrostatic Pressure (A) 2797 P.S.I.

Initial Flow Period Minutes 30 (B) 85 P.S.I. to (C) 58 P.S.I.

Initial Closed In Period Minutes 60 (D) 1624 P.S.I.

Final Flow Period Minutes 45 (E) 71 P.S.I. to (F) 52 P.S.I.

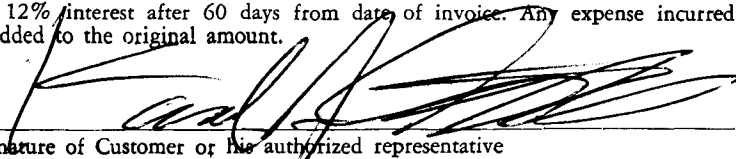
Final Closed In Period Minutes 90 (G) 1620 P.S.I.

Final Hydrostatic Pressure (H) 2791 P.S.I.

## COMPANY TERMS

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

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

Test Approved By   
Signature of Customer or his authorized representative

Western Representative 

## FIELD INVOICE

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

N<sup>o</sup> 1157.

## GAS FLOW REPORT

Date 9-3-93 Ticket 20490 Company Hugoton Energy Corp  
 Well Name and No. Home Royalty 1-8 Dst No. 3 Interval Tested 5555-5600  
 County Seward State KS Sec. 8 Twp. 31S Rg. 34W

| 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               |    |    |  |  |                           |
|------------------------|----|----|--|--|---------------------------|
| <i>Inches of water</i> |    |    |  |  | <i>CFPD GTS 12 min</i>    |
| 15                     | 11 | 1" |  |  | <del>101,000</del> 85,900 |
| 20                     | 14 | 1" |  |  | 97,300                    |
| 25                     | 16 | 1" |  |  | 103,000                   |
| 30                     | 11 | 1" |  |  | " "                       |
|                        |    |    |  |  |                           |
|                        |    |    |  |  |                           |
|                        |    |    |  |  |                           |
|                        |    |    |  |  |                           |
|                        |    |    |  |  |                           |
|                        |    |    |  |  |                           |

| SECOND FLOW |    |    |  |  |                         |
|-------------|----|----|--|--|-------------------------|
|             |    |    |  |  | <i>CFPD</i>             |
| 10          | 22 | 1" |  |  | 121,000                 |
| 15          | 24 |    |  |  | 126,000                 |
| 20          |    |    |  |  | <i>Catch Gas Sample</i> |
| 25          | 24 | 1" |  |  | 126,000                 |
| 30          | 22 | 1" |  |  | 121,000                 |
| 35          | 11 | 1" |  |  | " "                     |
| 40          | 11 | 1" |  |  | " "                     |
| 45          | 11 | 1" |  |  | 121,000                 |
|             |    |    |  |  |                         |
|             |    |    |  |  |                         |
|             |    |    |  |  |                         |
|             |    |    |  |  |                         |
|             |    |    |  |  |                         |

## GAS BOTTLE

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

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

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

COMPANY'S NAME

Authorized by

# WESTERN TESTING CO., INC.

## Pressure Data

Date 9-2-93 Test Ticket No. 10490  
 Recorder No. 13266 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F  
 Point \_\_\_\_\_ Pressure \_\_\_\_\_ Time Given \_\_\_\_\_ Time Computed \_\_\_\_\_  
 A Initial Hydrostatic Mud 2783 P.S.I. Open Tool \_\_\_\_\_ M \_\_\_\_\_  
 B First Initial Flow Pressure \_\_\_\_\_ P.S.I. First Flow Pressure \_\_\_\_\_ Mins. 50 Mins. 50  
 C First Final Flow Pressure \_\_\_\_\_ P.S.I. Initial Closed-in Pressure \_\_\_\_\_ Mins. 64 Mins. 64  
 D Initial Closed-in Pressure \_\_\_\_\_ P.S.I. Second Flow Pressure \_\_\_\_\_ Mins. 45 Mins. 45  
 E Second Initial Flow Pressure \_\_\_\_\_ P.S.I. Final Closed-in Pressure \_\_\_\_\_ Mins. 93 Mins. 93  
 F Second Final Flow Pressure \_\_\_\_\_ P.S.I.  
 G Final Closed-in Pressure \_\_\_\_\_ P.S.I.  
 H Final Hydrostatic Mud 2760 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>71</u> or | 0                           | <u>688</u>  | 0                           | <u>59</u> | 0                           | <u>614</u>  |
| P 2 5                       | <u>71</u>    | 3                           | <u>589</u>  | 5                           |           | 3                           | <u>614</u>  |
| P 3 10                      | <u>68</u>    | 6                           | <u>850</u>  | 10                          |           | 6                           | <u>1127</u> |
| P 4 15                      | <u>63</u>    | 9                           | <u>1264</u> | 15                          |           | 9                           | <u>1357</u> |
| P 5 20                      | <u>60</u>    | 12                          | <u>1423</u> | 20                          |           | 12                          | <u>1416</u> |
| P 6 25                      | <u>5</u>     | 15                          | <u>1495</u> | 25                          |           | 15                          | <u>1454</u> |
| P 7 30                      | <u>600</u>   | 18                          | <u>1532</u> | 30                          |           | 18                          | <u>1481</u> |
| P 8 35                      |              | 21                          | <u>1543</u> | 35                          |           | 21                          | <u>1500</u> |
| P 9 40                      |              | 24                          | <u>1556</u> | 40                          |           | 24                          | <u>1529</u> |
| P10 45                      |              | 27                          | <u>1566</u> | 45                          | <u>59</u> | 27                          | <u>1542</u> |
| P11 50                      |              | 30                          | <u>1577</u> | 50                          |           | 30                          | <u>1554</u> |
| P12 55                      |              | 33                          | <u>1587</u> | 55                          |           | 33                          | <u>1562</u> |
| P13 60                      |              | 36                          | <u>1595</u> | 60                          |           | 36                          | <u>1571</u> |
| P14 65                      |              | 39                          | <u>1599</u> | 65                          |           | 39                          | <u>1579</u> |
| P15 70                      |              | 42                          | <u>1604</u> | 70                          |           | 42                          | <u>1583</u> |
| P16 75                      |              | 45                          | <u>1609</u> | 75                          |           | 45                          | <u>1590</u> |
| P17 80                      |              | 48                          | <u>1623</u> | 80                          |           | 48                          | <u>1594</u> |
| P18 85                      |              | 51                          | <u>1616</u> | 85                          |           | 51                          | <u>1597</u> |
| P19 90                      |              | 54                          | <u>1619</u> | 90                          |           | 54                          | <u>1599</u> |
| P20 95                      |              | 57                          | <u>1622</u> | 95                          |           | 57                          | <u>1600</u> |
| 100                         |              | 60                          | <u>1625</u> | 100                         |           | 60                          | <u>1601</u> |
|                             |              | <u>63</u>                   | <u>1628</u> |                             |           |                             |             |

# WESTERN TESTING CO., INC.

## Pressure Data

Date: \_\_\_\_\_

Test Ticket No. 10490

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                       | 1602   |
| P 2 110                  |        | 66                       |        | 110                      |        | 66                       | 1603   |
| P 3 115                  |        | 69                       |        | 115                      |        | 69                       | 1605   |
| P 4 120                  |        | 72                       |        | 120                      |        | 72                       | 1607   |
| P 5 125                  |        | 75                       |        | 125                      |        | 75                       | 1609   |
| P 6 130                  |        | 78                       |        | 130                      |        | 78                       | 1614   |
| P 7 135                  |        | 81                       |        | 135                      |        | 81                       | 1613   |
| P 8 140                  |        | 84                       |        | 140                      |        | 84                       | 1615   |
| P 9 145                  |        | 87                       |        | 145                      |        | 87                       | 1617   |
| P10 150                  |        | 90                       |        | 150                      |        | 90                       | 1618   |
| P11 155                  |        | 93                       |        | 155                      |        | 93                       | 1619   |
| 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                      |        |

## DST REPORT

### GENERAL INFORMATION

|           |                       |                |                |
|-----------|-----------------------|----------------|----------------|
| DATE      | : 9/3/93              | TICKET         | : 20490        |
| CUSTOMER  | : HUGOTON ENERGY CORP | LEASE          | : HOME ROYALTY |
| WELL      | : #1-8                | TEST: 3        | GEOLOGIST: ?   |
| ELEVATION | : 2836 KB             | FORMATION      | : CHESTER      |
| SECTION   | : 8                   | TOWNSHIP       | : 31S          |
| RANGE     | : 34W                 | COUNTY: SEWARD | STATE : KS     |
| GAUGE SN# | : 13266               | RANGE : 4000   | CLOCK : 12     |

### WELL INFORMATION

|                            |            |                    |            |            |           |
|----------------------------|------------|--------------------|------------|------------|-----------|
| PERFORATION INTERVAL FROM: | 5555.00 ft | TO:                | 5600.00 ft | TVD:       | 5600.0 ft |
| DEPTH OF SELECTIVE ZONE:   |            |                    |            | TEST TYPE: | GAS       |
| DEPTH OF RECORDERS:        | 5562.0 ft  | 5565.0 ft          |            |            |           |
| TEMPERATURE:               | 144.0      |                    |            |            |           |
| DRILL COLLAR LENGTH:       | 312.0 ft   | I.D.:              | 2.250 in   |            |           |
| WEIGHT PIPE LENGTH :       | 0.0 ft     | I.D.:              | 0.000 in   |            |           |
| DRILL PIPE LENGTH :        | 5215.0 ft  | I.D.:              | 3.800 in   |            |           |
| TEST TOOL LENGTH :         | 28.0 ft    | TOOL SIZE :        | 5.500 in   |            |           |
| ANCHOR LENGTH :            | 45.0 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 :  | 4.5 XH     |            |           |
| PACKER DEPTH:              | 5550.0 ft  | SIZE:              | 6.630 in   |            |           |
| PACKER DEPTH:              | 5555.0 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. : | MURFIN RIG 20 | VISCOSITY :    | 45.00 cp |
| MUD TYPE :      | CHEMICAL      | WATER LOSS:    | 9.600 cc |
| WEIGHT :        | 9.200 ppg     | SERIAL NUMBER: | 415      |
| CHLORIDES :     | 3000 ppm      | REVERSED OUT?: | NO       |
| JARS-MAKE :     | WTC           |                |          |
| DID WELL FLOW?: | YES           |                |          |

### COMMENTS

#### Comment

INITIAL FLOW PERIOD WEAK BLOW BUILT TO BOTTOM OF  
BUCKET IN 1 MINUTE. GAS TO SURFACE IN 12 MINUTES.  
FINAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET

# DST REPORT (CONTINUED)

## COMMENTS (CONTINUED)

Comment

IN 1 MINUTE. SEE GAS SHEET ATTACHED.

## FLUID RECOVERY

| Feet of<br>Fluid | %<br>Oil | %<br>Gas | %<br>Water | %<br>Mud | Comments    |
|------------------|----------|----------|------------|----------|-------------|
| 140.0            | 0.0      | 4.0      | 0.0        | 96.0     | GAS CUT MUD |

## RATE INFORMATION

|               |        |     |                     |              |
|---------------|--------|-----|---------------------|--------------|
| OIL VOLUME:   | 0.0000 | STB |                     |              |
| GAS VOLUME:   | 0.1546 | SCF | TOTAL FLOW TIME:    | 75.0000 min. |
| MUD VOLUME:   | 0.6609 | STB | AVERAGE OIL RATE:   | 0.0000 STB/D |
| WATER VOLUME: | 0.0000 | STB | AVERAGE WATER RATE: | 0.0000 STB/D |
| TOTAL FLUID : | 0.6609 | STB |                     |              |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2797.00

| Description     | Duration | p1    | p End   |
|-----------------|----------|-------|---------|
| INITIAL FLOW    | 30.00    | 85.00 | 58.00   |
| INITIAL SHUT-IN | 60.00    |       | 1624.00 |
| FINAL FLOW      | 45.00    | 71.00 | 52.00   |
| FINAL SHUT-IN   | 90.00    |       | 1620.00 |

FINAL HYDROSTATIC PRESSURE: 2791.00



DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2783.00

| Description     | Duration | p1    | p End   |
|-----------------|----------|-------|---------|
| INITIAL FLOW    | 30.00    | 71.00 | 60.00   |
| INITIAL SHUT-IN | 66.00    |       | 1628.00 |
| FINAL FLOW      | 45.00    | 59.00 | 59.00   |
| FINAL SHUT-IN   | 93.00    |       | 1619.00 |

FINAL HYDROSTATIC PRESSURE: 2760.00

# GAS FLOW REPORT

## GENERAL INFORMATION

|                                                    |                      |
|----------------------------------------------------|----------------------|
| DATE : 9/3/93                                      | TICKET : 20490       |
| CUSTOMER : HUGOTON ENERGY CORP                     | LEASE : HOME ROYALTY |
| WELL : #1-8                      TEST: 3           | GEOLOGIST: ?         |
| ELEVATION: 2836 KB                                 | FORMATION: CHESTER   |
| SECTION : 8                                        | TOWNSHIP : 31S       |
| RANGE : 34W                      COUNTY: SEWARD    | STATE : KS           |
| GAUGE SN#: 13266                      RANGE : 4000 | CLOCK : 12           |

## PRE FLOW

| Time Guage<br>(min) | Tester<br>Type | Orifice<br>Size | Pressure  | Flow Desc.   |
|---------------------|----------------|-----------------|-----------|--------------|
| 15 MIN              | MERLA          | 1.000           | 11" WATER | 85900 SCF/D  |
| 20 MIN              | MERLA          | 1.000           | 14" WATER | 97300 SCF/D  |
| 25 MIN              | MERLA          | 1.000           | 16" WATER | 103000 SCF/D |
| 30 MIN              | MERLA          | 1.000           | 16" WATER | 103000 SCF/D |

## SECOND FLOW

| Time Guage<br>(min) | Tester<br>Type | Orifice<br>Size | Pressure  | Flow Desc.   |
|---------------------|----------------|-----------------|-----------|--------------|
| 10 MIN              | MERLA          | 1.000           | 22" WATER | 121000 SCF/D |
| 15 MIN              | MERLA          | 1.000           | 24" WATER | 126000 SCF/D |
| 20 MIN              | MERLA          | 1.000           |           | 0 SCF/D      |
| 25 MIN              | MERLA          | 1.000           | 24" WATER | 126000 SCF/D |
| 30 MIN              | MERLA          | 1.000           | 22" WATER | 121000 SCF/D |
| 35 MIN              | MERLA          | 1.000           | 22" WATER | 121000 SCF/D |
| 40 MIN              | MERLA          | 1.000           | 22" WATER | 121000 SCF/D |
| 45 MIN              | MERLA          | 1.000           | 22" WATER | 121000 SCF/D |

# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|                                    |                      |
|------------------------------------|----------------------|
| DATE : 9/3/93                      | TICKET : 20490       |
| CUSTOMER : HUGOTON ENERGY CORP     | LEASE : HOME ROYALTY |
| WELL : #1-8      TEST: 3           | GEOLOGIST: ?         |
| ELEVATION: 2836 KB                 | FORMATION: CHESTER   |
| SECTION : 8                        | TOWNSHIP : 31S       |
| RANGE : 34W      COUNTY: SEWARD    | STATE : KS           |
| GAUGE SN#: 13266      RANGE : 4000 | CLOCK : 12           |

## INITIAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 71.00    | 71.00   |
| 5.00          | 71.00    | 0.00    |
| 10.00         | 68.00    | -3.00   |
| 15.00         | 63.00    | -5.00   |
| 20.00         | 60.00    | -3.00   |
| 25.00         | 60.00    | 0.00    |
| 30.00         | 60.00    | 0.00    |

## INITIAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 389.00   | 389.00  | 0.00     |
| 6.00          | 850.00   | 461.00  | 0.00     |
| 9.00          | 1264.00  | 414.00  | 0.00     |
| 12.00         | 1423.00  | 159.00  | 0.00     |
| 15.00         | 1495.00  | 72.00   | 0.00     |
| 18.00         | 1532.00  | 37.00   | 0.00     |
| 21.00         | 1543.00  | 11.00   | 0.00     |
| 24.00         | 1556.00  | 13.00   | 0.00     |
| 27.00         | 1566.00  | 10.00   | 0.00     |
| 30.00         | 1577.00  | 11.00   | 0.00     |
| 33.00         | 1587.00  | 10.00   | 0.00     |
| 36.00         | 1595.00  | 8.00    | 0.00     |
| 39.00         | 1599.00  | 4.00    | 0.00     |
| 42.00         | 1604.00  | 5.00    | 0.00     |
| 45.00         | 1609.00  | 5.00    | 0.00     |
| 48.00         | 1613.00  | 4.00    | 0.00     |
| 51.00         | 1616.00  | 3.00    | 0.00     |
| 54.00         | 1619.00  | 3.00    | 0.00     |
| 57.00         | 1622.00  | 3.00    | 0.00     |

# PRESSURE TRANSIENT REPORT (CONTINUED)

## INITIAL SHUT IN (CONTINUED)

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 60.00         | 1625.00  | 3.00    | 0.00     |
| 63.00         | 1627.00  | 2.00    | 0.00     |
| 66.00         | 1628.00  | 1.00    | 0.00     |

## FINAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 59.00    | 59.00   |
| 5.00          | 59.00    | 0.00    |
| 10.00         | 59.00    | 0.00    |
| 15.00         | 59.00    | 0.00    |
| 20.00         | 59.00    | 0.00    |
| 25.00         | 59.00    | 0.00    |
| 30.00         | 59.00    | 0.00    |
| 35.00         | 59.00    | 0.00    |
| 40.00         | 59.00    | 0.00    |
| 45.00         | 59.00    | 0.00    |

## FINAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 614.00   | 614.00  | 0.00     |
| 6.00          | 1137.00  | 523.00  | 0.00     |
| 9.00          | 1357.00  | 220.00  | 0.00     |
| 12.00         | 1416.00  | 59.00   | 0.00     |
| 15.00         | 1454.00  | 38.00   | 0.00     |
| 18.00         | 1481.00  | 27.00   | 0.00     |
| 21.00         | 1500.00  | 19.00   | 0.00     |
| 24.00         | 1529.00  | 29.00   | 0.00     |
| 27.00         | 1543.00  | 14.00   | 0.00     |
| 30.00         | 1554.00  | 11.00   | 0.00     |
| 33.00         | 1563.00  | 9.00    | 0.00     |
| 36.00         | 1571.00  | 8.00    | 0.00     |
| 39.00         | 1579.00  | 8.00    | 0.00     |
| 42.00         | 1583.00  | 4.00    | 0.00     |
| 45.00         | 1590.00  | 7.00    | 0.00     |
| 48.00         | 1594.00  | 4.00    | 0.00     |
| 51.00         | 1597.00  | 3.00    | 0.00     |

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

| <u>Time</u><br><u>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------------|-----------------|----------------|-----------------|
| 54.00                       | 1599.00         | 2.00           | 0.00            |
| 57.00                       | 1600.00         | 1.00           | 0.00            |
| 60.00                       | 1601.00         | 1.00           | 0.00            |
| 63.00                       | 1602.00         | 1.00           | 0.00            |
| 66.00                       | 1603.00         | 1.00           | 0.00            |
| 69.00                       | 1605.00         | 2.00           | 0.00            |
| 72.00                       | 1607.00         | 2.00           | 0.00            |
| 75.00                       | 1609.00         | 2.00           | 0.00            |
| 78.00                       | 1611.00         | 2.00           | 0.00            |
| 81.00                       | 1613.00         | 2.00           | 0.00            |
| 84.00                       | 1615.00         | 2.00           | 0.00            |
| 87.00                       | 1617.00         | 2.00           | 0.00            |
| 90.00                       | 1618.00         | 1.00           | 0.00            |
| 93.00                       | 1619.00         | 1.00           | 0.00            |

KT 20489

DST #2

13266.

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④

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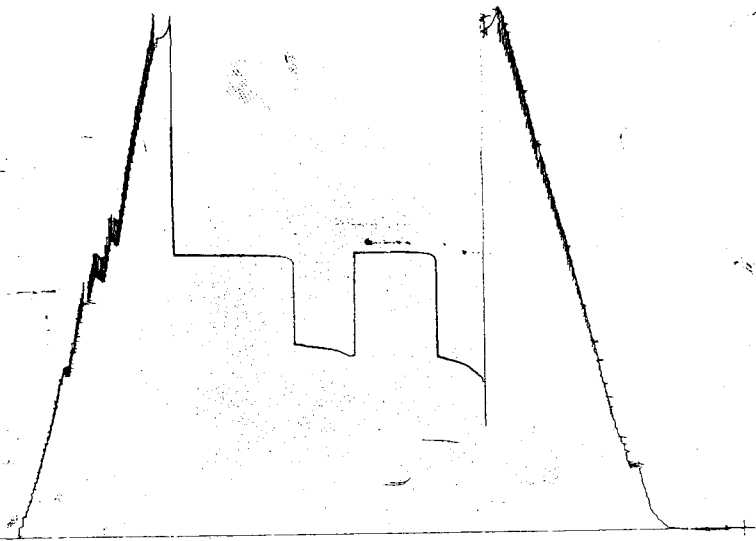
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7KT 20489

7

DST#2  
10242





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

# WESTERN TESTING CO., INC.

## FORMATION TESTING

TICKET N<sup>o</sup> 20489

Elevation 2836      Formation Chester      Eff. Pay \_\_\_\_\_ Ft.

District Garden City      Date 9-3-93      Customer Order No. \_\_\_\_\_

COMPANY NAME Hugoton Energy Corp

ADDRESS 229 E. William Suite 500 Wichita KS 67202

LEASE AND WELL NO Home Royalty 1-9      COUNTY Seward      STATE KS      Sec. 8      Twp 31S      Rge 34W

Mail Invoice To Same      Co. Name          Address          No. Copies Requested Res

Mail Charts To          Co. Name          Address          No. Copies Requested Res

Formation Test No. 2      Interval Tested From 5525 ft. to 5550 ft.      Total Depth 5550 ft.

Packer Depth 5520 ft.      Size 6 5/8 in.      Packer Depth     ft.      Size     in.

Packer Depth 5525 ft.      Size 6 7/8 in.      Packer Depth     ft.      Size     in.

Depth of Selective Zone Set    

Top Recorder Depth (Inside) 5541 ft.      Recorder Number 10242      Cap. 4100

Bottom Recorder Depth (Outside) 5544 ft.      Recorder Number 13266      Cap. 4000

Below Straddle Recorder Depth     ft.      Recorder Number          Cap.    

Drilling Contractor Martin #20      Drill Collar Length 312      I. D. 2 1/4 in.

Mud Type Chem.      Viscosity 51      Weight Pipe Length          I. D.     in.

Weight 9.2      Water Loss 9.6 cc.      Drill Pipe Length 5185      I. D. 3.8 in.

Chlorides 3000 P.P.M.      Test Tool Length 28 ft.      Tool Size 5 1/2 in.

Jars: Make WTC      Serial Number 415      Anchor Length 25 ft.      Size 5 1/2 in.

Did Well Flow? yes      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 x 1 1/4 in.

Blow: STRONG B.O.B. in 1 min GTS. in 2 min See Flow chart F.F.

See Flow chart F.F.

Recovered 10 ft. of mud

Recovered 2 ft. of condensate

Recovered     ft. of    

Recovered     ft. of    

Recovered     ft. of Total F/Rec 12'

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

Time On Location 12:05 AM      Time Pick Up Tool 1:00 AM      Time Off Location     AM

Time Set Packer(s) 2:50 PM      Time Started Off Bottom 6:35 AM      Maximum Temperature 142° F

Initial Hydrostatic Pressure     (A) 2758 P.S.I.

Initial Flow Period     Minutes 30 (B) 828 P.S.I. to (C) 945 P.S.I.

Initial Closed In Period     Minutes 60 (D) 1489 P.S.I.

Final Flow Period     Minutes 45 (E) 987 P.S.I. to (F) 1022 P.S.I.

Final Closed In Period     Minutes 90 (G) 1487 P.S.I.

Final Hydrostatic Pressure     (H) 2755 P.S.I.

### COMPANY TERMS

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

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

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

Western Representative [Signature]

### FIELD INVOICE

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





Nº 1155

## GAS FLOW REPORT

Date 9-3-93 Ticket 20489 Company Hugoton Energy Corp.  
 Well Name and No. Home Royalty 1-8 Dst No. 2 Interval Tested 5525-5550  
 County Seward State KS Sec. 8 Twp. 31S Rg. 34W

| 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>    |                                     |                 |                        |                              |                      |
|                    |                                     |                 |                        |                              | mcfpd      GTS 2 min |
| 5                  | 48                                  | 1 1/2           |                        |                              | 3,633,000            |
| 10                 | 58                                  | "               |                        |                              | 4,230,000            |
| 15                 | 62                                  | "               |                        |                              | 4,468,000            |
| 20                 | 64                                  | "               |                        |                              | 4,588,000            |
| 25                 | "                                   | "               |                        |                              | " "                  |
| 30                 | 66                                  | "               |                        |                              | 4,707,000            |
|                    |                                     |                 |                        |                              |                      |
|                    |                                     |                 |                        |                              |                      |
|                    |                                     |                 |                        |                              |                      |

|                    |    |       |  |  |                  |
|--------------------|----|-------|--|--|------------------|
| <b>SECOND FLOW</b> |    |       |  |  |                  |
|                    |    |       |  |  | mcfpd            |
| 5                  | 40 | 1 1/2 |  |  | 3,155,000        |
| 10                 | 60 | "     |  |  | 4,349,000        |
| 15                 | 68 | "     |  |  | 4,827,000        |
| 20                 | 70 | "     |  |  | 4,946,000        |
| 25                 | "  | "     |  |  | " "              |
| 30                 | 72 | "     |  |  | 5,065,000        |
| 35                 | "  | "     |  |  | " "              |
| 40                 | —  | —     |  |  | CATCH GAS SAMPLE |
| 45                 | 74 | "     |  |  | 5,185,000        |
|                    |    |       |  |  |                  |
|                    |    |       |  |  |                  |
|                    |    |       |  |  |                  |
|                    |    |       |  |  |                  |

## GAS BOTTLE

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

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

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

COMPANY'S NAME

Authorized by

1110

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

Date 9-2-93 Test Ticket No. 20489  
 Recorder No. 5266 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F  
 Point \_\_\_\_\_ Pressure \_\_\_\_\_ Time Given \_\_\_\_\_ Time Computed \_\_\_\_\_  
 A Initial Hydrostatic Mud 2250 P.S.I. Open Tool \_\_\_\_\_ M \_\_\_\_\_  
 B First Initial Flow Pressure \_\_\_\_\_ P.S.I. First Flow Pressure \_\_\_\_\_ Mins. 35 Mins. \_\_\_\_\_  
 C First Final Flow Pressure \_\_\_\_\_ P.S.I. Initial Closed-in Pressure \_\_\_\_\_ Mins. 40 Mins. \_\_\_\_\_  
 D Initial Closed-in Pressure \_\_\_\_\_ P.S.I. Second Flow Pressure \_\_\_\_\_ Mins. 45 Mins. \_\_\_\_\_  
 E Second Initial Flow Pressure \_\_\_\_\_ P.S.I. Final Closed-in Pressure \_\_\_\_\_ Mins. 90 Mins. \_\_\_\_\_  
 F Second Final Flow Pressure \_\_\_\_\_ P.S.I. \_\_\_\_\_  
 G Final Closed-in Pressure \_\_\_\_\_ P.S.I. \_\_\_\_\_  
 H Final Hydrostatic Mud 222 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                       | 820    | 0                           | 937    | 0                           | 928    | 0                           | 1024   |
| P 2 5                       | 847    | 3                           | 1418   | 5                           | 978    | 3                           | 1444   |
| P 3 10                      | 875    | 6                           | 1468   | 10                          | 984    | 6                           | 1462   |
| P 4 15                      | 894    | 9                           | 1476   | 15                          | 992    | 9                           | 1470   |
| P 5 20                      | 912    | 12                          | 1481   | 20                          | 1000   | 12                          | 1475   |
| P 6 25                      | 923    | 15                          | 1484   | 25                          | 1005   | 15                          | 1480   |
| P 7 30                      | 931    | 18                          | 1487   | 30                          | 1011   | 18                          | 1483   |
| P 8 35                      | 937    | 21                          | 1489   | 35                          | 1015   | 21                          | 1485   |
| P 9 40                      |        | 24                          | 1491   | 40                          | 1020   | 24                          | 1485   |
| P10 45                      |        | 27                          | 1492   | 45                          | 1024   | 27                          | 1486   |
| P11 50                      |        | 30                          | 1493   | 50                          |        | 30                          | 1486   |
| P12 55                      |        | 33                          | 1494   | 55                          |        | 33                          | 1487   |
| P13 60                      |        | 36                          | 1494   | 60                          |        | 36                          |        |
| P14 65                      |        | 39                          | 1495   | 65                          |        | 39                          | 1487   |
| P15 70                      |        | 42                          |        | 70                          |        | 42                          | 1488   |
| P16 75                      |        | 45                          | 1495   | 75                          |        | 45                          | 1488   |
| P17 80                      |        | 48                          | 1496   | 80                          |        | 48                          |        |
| P18 85                      |        | 51                          | 1496   | 85                          |        | 51                          |        |
| P19 90                      |        | 54                          | 1497   | 90                          |        | 54                          |        |
| P20 95                      |        | 57                          |        | 95                          |        | 57                          |        |
| 100                         |        | 60                          | 1497   | 100                         |        | 60                          | 1488   |

# WESTERN TESTING CO., INC.

## Pressure Data

Date \_\_\_\_\_

Test Ticket No. 10489

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                       |        |
| P 2 110                  |        | 66                       |        | 110                      |        | 66                       |        |
| P 3 115                  |        | 69                       |        | 115                      |        | 69                       |        |
| P 4 120                  |        | 72                       |        | 120                      |        | 72                       |        |
| P 5 125                  |        | 75                       |        | 125                      |        | 75                       |        |
| P 6 130                  |        | 78                       |        | 130                      |        | 78                       |        |
| P 7 135                  |        | 81                       |        | 135                      |        | 81                       |        |
| P 8 140                  |        | 84                       |        | 140                      |        | 84                       |        |
| P 9 145                  |        | 87                       |        | 145                      |        | 87                       |        |
| P10 150                  |        | 90                       |        | 150                      |        | 90                       |        |
| P11 155                  |        | 93                       |        | 155                      |        | 93                       |        |
| 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                      |        |

## DST REPORT

### GENERAL INFORMATION

DATE : 9/3/93  
CUSTOMER : HUGOTON ENERGY CORP  
WELL : #1-8 TEST: 2  
ELEVATION: 2836 KB  
SECTION : 8  
RANGE : 34W COUNTY: SEWARD  
GAUGE SN#: 13266 RANGE : 4000

TICKET : 20489  
LEASE : HOME ROYALTY  
GEOLOGIST: ?  
FORMATION: CHESTER  
TOWNSHIP : 31S  
STATE : KS  
CLOCK : 12

### WELL INFORMATION

PERFORATION INTERVAL FROM: 5525.00 ft TO: 5550.00 ft TVD: 5550.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS  
DEPTH OF RECORDERS: 5541.0 ft 5544.0 ft  
TEMPERATURE: 142.0

|                      |           |                    |          |
|----------------------|-----------|--------------------|----------|
| DRILL COLLAR LENGTH: | 312.0 ft  | I.D.:              | 2.250 in |
| WEIGHT PIPE LENGTH : | 0.0 ft    | I.D.:              | 0.000 in |
| DRILL PIPE LENGTH :  | 5185.0 ft | I.D.:              | 3.800 in |
| TEST TOOL LENGTH :   | 28.0 ft   | TOOL SIZE :        | 5.500 in |
| ANCHOR LENGTH :      | 25.0 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 :  | 4.5 XH   |
| PACKER DEPTH:        | 5520.0 ft | SIZE:              | 6.630 in |
| PACKER DEPTH:        | 5525.0 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. : MURFIN RIG 20  
MUD TYPE : CHEMICAL  
WEIGHT : 9.200 ppq  
CHLORIDES : 3000 ppm  
JARS-MAKE : WTC  
DID WELL FLOW?: YES

VISCOSITY : 51.00 cp  
WATER LOSS: 9.600 cc  
SERIAL NUMBER: 415  
REVERSED OUT?: NO

### COMMENTS

#### Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET  
IN 1 MINUTE. GAS TO SURFACE IN 2 MINUTES. FINAL  
FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET IN 1

# DST REPORT (CONTINUED)

## COMMENTS (CONTINUED)

Comment

MINUTE. SEE GAS SHEET ATTACHED.

## FLUID RECOVERY

| Feet of<br>Fluid | %<br>Oil | %<br>Gas | %<br>Water | %<br>Mud | Comments   |
|------------------|----------|----------|------------|----------|------------|
| 10.0             | 0.0      | 0.0      | 0.0        | 100.0    | MUD        |
| 2.0              | 0.0      | 100.0    | 0.0        | 0.0      | CONDENSATE |

## RATE INFORMATION

|               |        |     |                     |         |       |
|---------------|--------|-----|---------------------|---------|-------|
| OIL VOLUME:   | 0.0000 | STB | TOTAL FLOW TIME:    | 80.0000 | min.  |
| GAS VOLUME:   | 0.0552 | SCF | AVERAGE OIL RATE:   | 0.0000  | STB/D |
| MUD VOLUME:   | 0.0492 | STB | AVERAGE WATER RATE: | 0.0000  | STB/D |
| WATER VOLUME: | 0.0000 | STB |                     |         |       |
| TOTAL FLUID : | 0.0492 | STB |                     |         |       |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2758.00

| Description     | Duration | p1     | p End   |
|-----------------|----------|--------|---------|
| INITIAL FLOW    | 30.00    | 828.00 | 945.00  |
| INITIAL SHUT-IN | 60.00    |        | 1489.00 |
| FINAL FLOW      | 45.00    | 987.00 | 1022.00 |
| FINAL SHUT-IN   | 90.00    |        | 1487.00 |

FINAL HYDROSTATIC PRESSURE: 2755.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2750.00

| Description     | Duration | p1     | p End   |
|-----------------|----------|--------|---------|
| INITIAL FLOW    | 35.00    | 820.00 | 937.00  |
| INITIAL SHUT-IN | 60.00    |        | 1497.00 |
| FINAL FLOW      | 45.00    | 978.00 | 1024.00 |
| FINAL SHUT-IN   | 90.00    |        | 1488.00 |

FINAL HYDROSTATIC PRESSURE: 2732.00

# GAS FLOW REPORT

## GENERAL INFORMATION

|                                    |                      |
|------------------------------------|----------------------|
| DATE : 9/3/93                      | TICKET : 20489       |
| CUSTOMER : HUGOTON ENERGY CORP     | LEASE : HOME ROYALTY |
| WELL : #1-8      TEST: 2           | GEOLOGIST: ?         |
| ELEVATION: 2836 KB                 | FORMATION: CHESTER   |
| SECTION : 8                        | TOWNSHIP : 31S       |
| RANGE : 34W      COUNTY: SEWARD    | STATE : KS           |
| GAUGE SN#: 13266      RANGE : 4000 | CLOCK : 12           |

## PRE FLOW

| Time Guage<br>(min) | Tester<br>Type | Orifice<br>Size | Pressure | Flow Desc.    |
|---------------------|----------------|-----------------|----------|---------------|
| 5 MIN               | MERLA          | 1.500           | 48 PSIG  | 3633000 SCF/D |
| 10 MIN              | MERLA          | 1.500           | 58 PSIG  | 4230000 SCF/D |
| 15 MIN              | MERLA          | 1.500           | 62 PSIG  | 4468000 SCF/D |
| 20 MIN              | MERLA          | 1.500           | 64 PSIG  | 4588000 SCF/D |
| 25 MIN              | MERLA          | 1.500           | 64 PSIG  | 4588000 SCF/D |
| 30 MIN              | MERLA          | 1.500           | 66 PSIG  | 4707000 SCF/D |

## SECOND FLOW

| Time Guage<br>(min) | Tester<br>Type | Orifice<br>Size | Pressure         | Flow Desc.    |
|---------------------|----------------|-----------------|------------------|---------------|
| 5 MIN               | MERLA          | 1.500           | 40 PSIG          | 3155000 SCF/D |
| 10 MIN              | MERLA          | 1.500           | 60 PSIG          | 4349000 SCF/D |
| 15 MIN              | MERLA          | 1.500           | 68 PSIG          | 4827000 SCF/D |
| 20 MIN              | MERLA          | 1.500           | 70 PSIG          | 4946000 SCF/D |
| 25 MIN              | MERLA          | 1.500           | 70 PSIG          | 4946000 SCF/D |
| 30 MIN              | MERLA          | 1.500           | 72 PSIG          | 5065000 SCF/D |
| 35 MIN              | MERLA          | 1.500           | 72 PSIG          | 5065000 SCF/D |
| 40 MIN              | MERLA          | 1.500           | CATCH GAS SAMPLE | 0 SCF/D       |
| 45 MIN              | MERLA          | 1.500           | 74 PSIG          | 5185000 SCF/D |

# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|            |                       |            |                |
|------------|-----------------------|------------|----------------|
| DATE       | : 9/3/93              | TICKET     | : 20489        |
| CUSTOMER   | : HUGOTON ENERGY CORP | LEASE      | : HOME ROYALTY |
| WELL       | : #1-8                | TEST:      | 2              |
| ELEVATION: | 2836 KB               | GEOLOGIST: | ?              |
| SECTION    | : 8                   | FORMATION: | CHESTER        |
| RANGE      | : 34W                 | TOWNSHIP   | : 31S          |
| GAUGE SN#: | 13266                 | STATE      | : KS           |
|            |                       | CLOCK      | : 12           |
|            | COUNTY: SEWARD        |            |                |
|            | RANGE : 4000          |            |                |

## INITIAL FLOW

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> |
|-----------------------|-----------------|----------------|
| 0.00                  | 820.00          | 820.00         |
| 5.00                  | 847.00          | 27.00          |
| 10.00                 | 875.00          | 28.00          |
| 15.00                 | 894.00          | 19.00          |
| 20.00                 | 912.00          | 18.00          |
| 25.00                 | 923.00          | 11.00          |
| 30.00                 | 931.00          | 8.00           |
| 35.00                 | 937.00          | 6.00           |

## INITIAL SHUT IN

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 3.00                  | 1448.00         | 1448.00        | 0.00            |
| 6.00                  | 1468.00         | 20.00          | 0.00            |
| 9.00                  | 1476.00         | 8.00           | 0.00            |
| 12.00                 | 1481.00         | 5.00           | 0.00            |
| 15.00                 | 1484.00         | 3.00           | 0.00            |
| 18.00                 | 1487.00         | 3.00           | 0.00            |
| 21.00                 | 1489.00         | 2.00           | 0.00            |
| 24.00                 | 1491.00         | 2.00           | 0.00            |
| 27.00                 | 1492.00         | 1.00           | 0.00            |
| 30.00                 | 1493.00         | 1.00           | 0.00            |
| 33.00                 | 1494.00         | 1.00           | 0.00            |
| 36.00                 | 1494.00         | 0.00           | 0.00            |
| 39.00                 | 1495.00         | 1.00           | 0.00            |
| 42.00                 | 1495.00         | 0.00           | 0.00            |
| 45.00                 | 1495.00         | 0.00           | 0.00            |
| 48.00                 | 1496.00         | 1.00           | 0.00            |
| 51.00                 | 1496.00         | 0.00           | 0.00            |
| 54.00                 | 1497.00         | 1.00           | 0.00            |



# PRESSURE TRANSIENT REPORT (CONTINUED)

## INITIAL SHUT IN (CONTINUED)

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 57.00         | 1497.00  | 0.00    | 0.00     |
| 60.00         | 1497.00  | 0.00    | 0.00     |

## FINAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 978.00   | 978.00  |
| 5.00          | 978.00   | 0.00    |
| 10.00         | 984.00   | 6.00    |
| 15.00         | 992.00   | 8.00    |
| 20.00         | 1000.00  | 8.00    |
| 25.00         | 1005.00  | 5.00    |
| 30.00         | 1011.00  | 6.00    |
| 35.00         | 1015.00  | 4.00    |
| 40.00         | 1020.00  | 5.00    |
| 45.00         | 1024.00  | 4.00    |

## FINAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 1444.00  | 1444.00 | 0.00     |
| 6.00          | 1463.00  | 19.00   | 0.00     |
| 9.00          | 1470.00  | 7.00    | 0.00     |
| 12.00         | 1475.00  | 5.00    | 0.00     |
| 15.00         | 1480.00  | 5.00    | 0.00     |
| 18.00         | 1483.00  | 3.00    | 0.00     |
| 21.00         | 1485.00  | 2.00    | 0.00     |
| 24.00         | 1485.00  | 0.00    | 0.00     |
| 27.00         | 1486.00  | 1.00    | 0.00     |
| 30.00         | 1486.00  | 0.00    | 0.00     |
| 33.00         | 1487.00  | 1.00    | 0.00     |
| 36.00         | 1487.00  | 0.00    | 0.00     |
| 39.00         | 1487.00  | 0.00    | 0.00     |
| 42.00         | 1488.00  | 1.00    | 0.00     |
| 45.00         | 1488.00  | 0.00    | 0.00     |
| 48.00         | 1488.00  | 0.00    | 0.00     |
| 51.00         | 1488.00  | 0.00    | 0.00     |
| 54.00         | 1488.00  | 0.00    | 0.00     |

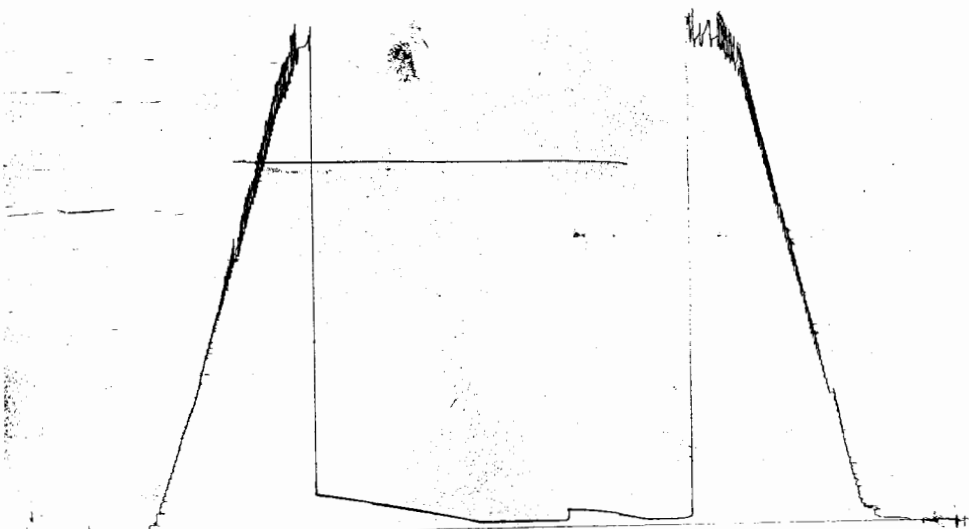
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 57.00                 | 1488.00         | 0.00           | 0.00            |
| 60.00                 | 1488.00         | 0.00           | 0.00            |
| 63.00                 | 1488.00         | 0.00           | 0.00            |
| 66.00                 | 1488.00         | 0.00           | 0.00            |
| 69.00                 | 1488.00         | 0.00           | 0.00            |
| 72.00                 | 1488.00         | 0.00           | 0.00            |
| 75.00                 | 1488.00         | 0.00           | 0.00            |
| 78.00                 | 1488.00         | 0.00           | 0.00            |
| 81.00                 | 1488.00         | 0.00           | 0.00            |
| 84.00                 | 1488.00         | 0.00           | 0.00            |
| 87.00                 | 1488.00         | 0.00           | 0.00            |
| 90.00                 | 1488.00         | 0.00           | 0.00            |

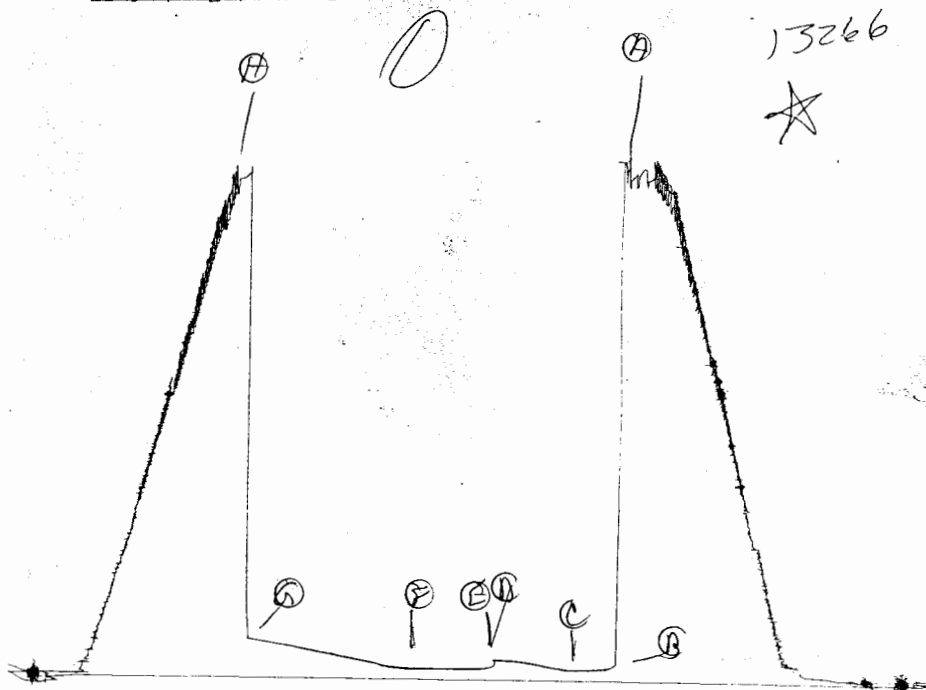
KT 20488  
I

DST#1  
10242



KT 20488

DST#1  
13266





## WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 20488

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

Elevation 2836 Formation Morrow Eff. Pay Ft.

District Garden City Date 9-1-93 Customer Order No.

COMPANY NAME Hugoton Energy Corp

ADDRESS 229 E William Suite 560 Wichita KS 67202

LEASE AND WELL NO. Home Royalty 1-8 COUNTY Seward STATE KS Sec. 8 Twp. 31S Rge. 34W

Mail Invoice To Hugoton Energy Corp SAME No. Copies Requested Ref

Mail Charts To SAME #1-8 Home Royalty No. Copies Requested Ref

Formation Test No. 1 Interval Tested From 5359 ft. to 5388 ft. Total Depth 5388 ft.

Packer Depth 5354 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 5359 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 5379 ft. Recorder Number 10242 Cap. 4100

Bottom Recorder Depth (Outside) 5382 ft. Recorder Number 13266 Cap. 4000

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

Drilling Contractor Martin #20 Drill Collar Length 312 I. D. 2 1/4 in.

Mud Type Chem Viscosity 50 Weight Pipe Length — I. D. — in.

Weight 9.2 Water Loss 9.6 cc. Drill Pipe Length 5019 I. D. 3.8 in.

Chlorides 3000 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 in.

Jars: Make WTC Serial Number 415 Anchor Length 29 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 1/8 in. Tool Joint Size 4 1/2 XH in.

Blow: STRONG BOB in 1 min I.F.

WEAK slowly built to 8' F.F.

Recovered 30 ft. of mud

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of Total f' Rec 30'

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

Time On Location 5:00 A.M. Time Pick Up Tool 7:00 A.M. Time Off Location — A.M.

Time Set Packer(s) 9:36 A.M. Time Started Off Bottom 2:06 A.M. Maximum Temperature 138°F

Initial Hydrostatic Pressure (A) 2658 P.S.I.

Initial Flow Period Minutes 30 (B) 73 P.S.I. to (C) 48 P.S.I.

Initial Closed In Period Minutes 60 (D) 101 P.S.I.

Final Flow Period Minutes 60 (E) 63 P.S.I. to (F) 48 P.S.I.

Final Closed In Period Minutes 120 (G) 193 P.S.I.

Final Hydrostatic Pressure (H) 2658 P.S.I.

## COMPANY TERMS

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

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

Test Approved By [Signature]  
Signature of Customer or his authorized representativeWestern Representative [Signature]

## 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 9-1-92 Test Ticket No. 20488  
 Recorder No. 152104 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft. \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 2658 P.S.I. Open Tool \_\_\_\_\_ M \_\_\_\_\_  
 B First Initial Flow Pressure \_\_\_\_\_ P.S.I. First Flow Pressure \_\_\_\_\_ Mins. 50 Mins. 50  
 C First Final Flow Pressure \_\_\_\_\_ P.S.I. Initial Closed-in Pressure \_\_\_\_\_ Mins. 60 Mins. 60  
 D Initial Closed-in Pressure \_\_\_\_\_ P.S.I. Second Flow Pressure \_\_\_\_\_ Mins. 60 Mins. 60  
 E Second Initial Flow Pressure \_\_\_\_\_ P.S.I. Final Closed-in Pressure \_\_\_\_\_ Mins. 120 Mins. 120  
 F Second Final Flow Pressure \_\_\_\_\_ P.S.I.  
 G Final Closed-in Pressure \_\_\_\_\_ P.S.I.  
 H Final Hydrostatic Mud 2614 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>58</u> | 0                           | <u>58</u>  | 0                           | <u>57</u> | 0                           | <u>57</u>  |
| P 2 5                       |           | 3                           | <u>58</u>  | 5                           |           | 3                           | <u>57</u>  |
| P 3 10                      |           | 6                           | <u>58</u>  | 10                          |           | 6                           | <u>58</u>  |
| P 4 15                      |           | 9                           | <u>59</u>  | 15                          |           | 9                           | <u>59</u>  |
| P 5 20                      |           | 12                          | <u>61</u>  | 20                          |           | 12                          | <u>60</u>  |
| P 6 25                      |           | 15                          | <u>62</u>  | 25                          |           | 15                          | <u>62</u>  |
| P 7 30                      | <u>58</u> | 18                          | <u>65</u>  | 30                          |           | 18                          | <u>65</u>  |
| P 8 35                      |           | 21                          | <u>69</u>  | 35                          |           | 21                          | <u>69</u>  |
| P 9 40                      |           | 24                          | <u>74</u>  | 40                          |           | 24                          | <u>73</u>  |
| P10 45                      |           | 27                          | <u>79</u>  | 45                          |           | 27                          | <u>77</u>  |
| P11 50                      |           | 30                          | <u>83</u>  | 50                          |           | 30                          | <u>81</u>  |
| P12 55                      |           | 33                          | <u>87</u>  | 55                          |           | 33                          | <u>85</u>  |
| P13 60                      |           | 36                          | <u>91</u>  | 60                          | <u>57</u> | 36                          | <u>89</u>  |
| P14 65                      |           | 39                          | <u>94</u>  | 65                          |           | 39                          | <u>93</u>  |
| P15 70                      |           | 42                          | <u>97</u>  | 70                          |           | 42                          | <u>97</u>  |
| P16 75                      |           | 45                          | <u>100</u> | 75                          |           | 45                          | <u>105</u> |
| P17 80                      |           | 48                          | <u>102</u> | 80                          |           | 48                          | <u>107</u> |
| P18 85                      |           | 51                          | <u>103</u> | 85                          |           | 51                          | <u>112</u> |
| P19 90                      |           | 54                          | <u>104</u> | 90                          |           | 54                          | <u>116</u> |
| P20 95                      |           | 57                          | <u>105</u> | 95                          |           | 57                          | <u>120</u> |
| 100                         |           | 60                          | <u>105</u> | 100                         |           | 60                          | <u>123</u> |

# WESTERN TESTING CO., INC.

## Pressure Data

Date \_\_\_\_\_

Test Ticket No. 20488

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                       | 127    |
| P 2 110                  |        | 66                       |        | 110                      |        | 66                       | 131    |
| P 3 115                  |        | 69                       |        | 115                      |        | 69                       | 135    |
| P 4 120                  |        | 72                       |        | 120                      |        | 72                       | 139    |
| P 5 125                  |        | 75                       |        | 125                      |        | 75                       | 142    |
| P 6 130                  |        | 78                       |        | 130                      |        | 78                       | 146    |
| P 7 135                  |        | 81                       |        | 135                      |        | 81                       | 150    |
| P 8 140                  |        | 84                       |        | 140                      |        | 84                       | 154    |
| P 9 145                  |        | 87                       |        | 145                      |        | 87                       | 158    |
| P10 150                  |        | 90                       |        | 150                      |        | 90                       | 162    |
| P11 155                  |        | 93                       |        | 155                      |        | 93                       | 168    |
| P12 160                  |        | 96                       |        | 160                      |        | 96                       | 171    |
| P13 165                  |        | 99                       |        | 165                      |        | 99                       | 174    |
| P14 170                  |        | 102                      |        | 170                      |        | 102                      | 177    |
| P15 175                  |        | 105                      |        | 175                      |        | 105                      | 179    |
| P16 180                  |        | 108                      |        | 180                      |        | 108                      | 182    |
| P17 185                  |        | 111                      |        | 185                      |        | 111                      | 186    |
| P18 190                  |        | 114                      |        | 190                      |        | 114                      | 189    |
| P19 195                  |        | 117                      |        | 195                      |        | 117                      | 192    |
| P20 200                  |        | 120                      |        | 200                      |        | 120                      | 195    |

## DST REPORT

### GENERAL INFORMATION

|           |                       |           |                |
|-----------|-----------------------|-----------|----------------|
| DATE      | : 9/1/93              | TICKET    | : 20488        |
| CUSTOMER  | : HUGOTON ENERGY CORP | LEASE     | : HOME ROYALTY |
| WELL      | : #1-8                | TEST:     | 1              |
| ELEVATION | : 2836 KB             | GEOLOGIST | : ?            |
| SECTION   | : 8                   | FORMATION | : MORROW       |
| RANGE     | : 34W                 | TOWNSHIP  | : 31S          |
| COUNTY    | : SEWARD              | STATE     | : KS           |
| GAUGE SN# | : 13266               | RANGE     | : 4000         |
|           |                       | CLOCK     | : 12           |

### WELL INFORMATION

|                            |            |                    |            |            |           |
|----------------------------|------------|--------------------|------------|------------|-----------|
| PERFORATION INTERVAL FROM: | 5359.00 ft | TO:                | 5388.00 ft | TVD:       | 5388.0 ft |
| DEPTH OF SELECTIVE ZONE:   |            |                    |            | TEST TYPE: | OIL       |
| DEPTH OF RECORDERS:        | 5379.0 ft  |                    | 5382.0 ft  |            |           |
| TEMPERATURE:               | 138.0      |                    |            |            |           |
| DRILL COLLAR LENGTH:       | 312.0 ft   | I.D.:              |            | 2.250 in   |           |
| WEIGHT PIPE LENGTH :       | 0.0 ft     | I.D.:              |            | 0.000 in   |           |
| DRILL PIPE LENGTH :        | 5019.0 ft  | I.D.:              |            | 3.800 in   |           |
| TEST TOOL LENGTH :         | 28.0 ft    | TOOL SIZE :        |            | 5.500 in   |           |
| ANCHOR LENGTH :            | 29.0 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 :  |            | 4.5 XH     |           |
| PACKER DEPTH:              | 5354.0 ft  | SIZE:              |            | 6.630 in   |           |
| PACKER DEPTH:              | 5359.0 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. : | MURFIN RIG 20 | VISCOSITY :    | 50.00 cp |
| MUD TYPE :      | CHEMICAL      | WATER LOSS:    | 9.600 cc |
| WEIGHT :        | 9.200 ppg     |                |          |
| CHLORIDES :     | 3000 ppm      | SERIAL NUMBER: | 415      |
| JARS-MAKE :     | WTC           | REVERSED OUT?: | NO       |
| DID WELL FLOW?: | NO            |                |          |

### COMMENTS

#### Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET  
IN 1 MINUTE. FINAL FLOW PERIOD WEAK BLOW SLOWLY  
BUILT TO 8 INCHES.

# DST REPORT (CONTINUED)

## FLUID RECOVERY

| Feet of<br>Fluid | %<br>Oil | %<br>Gas | %<br>Water | %<br>Mud | Comments |
|------------------|----------|----------|------------|----------|----------|
| 30.0             | 0.0      | 0.0      | 0.0        | 100.0    | MUD      |

## RATE INFORMATION

|               |        |     |                     |         |       |
|---------------|--------|-----|---------------------|---------|-------|
| OIL VOLUME:   | 0.0000 | STB | TOTAL FLOW TIME:    | 90.0000 | min.  |
| GAS VOLUME:   | 0.0000 | SCF | AVERAGE OIL RATE:   | 0.0000  | STB/D |
| MUD VOLUME:   | 0.1475 | STB | AVERAGE WATER RATE: | 0.0000  | STB/D |
| WATER VOLUME: | 0.0000 | STB |                     |         |       |
| TOTAL FLUID : | 0.1475 | STB |                     |         |       |

## FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2658.00

| Description     | Duration | p1    | p End  |
|-----------------|----------|-------|--------|
| INITIAL FLOW    | 30.00    | 73.00 | 48.00  |
| INITIAL SHUT-IN | 60.00    |       | 101.00 |
| FINAL FLOW      | 60.00    | 63.00 | 48.00  |
| FINAL SHUT-IN   | 120.00   |       | 193.00 |

FINAL HYDROSTATIC PRESSURE: 2658.00

## OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2658.00

| Description     | Duration | p1    | p End  |
|-----------------|----------|-------|--------|
| INITIAL FLOW    | 30.00    | 58.00 | 58.00  |
| INITIAL SHUT-IN | 60.00    |       | 105.00 |
| FINAL FLOW      | 60.00    | 57.00 | 57.00  |
| FINAL SHUT-IN   | 120.00   |       | 195.00 |

FINAL HYDROSTATIC PRESSURE: 2614.00



# PRESSURE TRANSIENT REPORT

## GENERAL INFORMATION

|                                |                      |
|--------------------------------|----------------------|
| DATE : 9/1/93                  | TICKET : 20488       |
| CUSTOMER : HUGOTON ENERGY CORP | LEASE : HOME ROYALTY |
| WELL : #1-8                    | GEOLOGIST: ?         |
| ELEVATION: 2836 KB             | FORMATION: MORROW    |
| SECTION : 8                    | TOWNSHIP : 31S       |
| RANGE : 34W                    | STATE : KS           |
| GAUGE SN#: 13266               | CLOCK : 12           |
| COUNTY: SEWARD                 |                      |
| RANGE : 4000                   |                      |

## INITIAL FLOW

| Time<br>(min) | Pressure | Delta P |
|---------------|----------|---------|
| 0.00          | 58.00    | 58.00   |
| 5.00          | 58.00    | 0.00    |
| 10.00         | 58.00    | 0.00    |
| 15.00         | 58.00    | 0.00    |
| 20.00         | 58.00    | 0.00    |
| 25.00         | 58.00    | 0.00    |
| 30.00         | 58.00    | 0.00    |

## INITIAL SHUT IN

| Time<br>(min) | Pressure | Delta P | Horner T |
|---------------|----------|---------|----------|
| 3.00          | 58.00    | 58.00   | 0.00     |
| 6.00          | 58.00    | 0.00    | 0.00     |
| 9.00          | 59.00    | 1.00    | 0.00     |
| 12.00         | 61.00    | 2.00    | 0.00     |
| 15.00         | 62.00    | 1.00    | 0.00     |
| 18.00         | 65.00    | 3.00    | 0.00     |
| 21.00         | 69.00    | 4.00    | 0.00     |
| 24.00         | 74.00    | 5.00    | 0.00     |
| 27.00         | 79.00    | 5.00    | 0.00     |
| 30.00         | 83.00    | 4.00    | 0.00     |
| 33.00         | 87.00    | 4.00    | 0.00     |
| 36.00         | 91.00    | 4.00    | 0.00     |
| 39.00         | 94.00    | 3.00    | 0.00     |
| 42.00         | 97.00    | 3.00    | 0.00     |
| 45.00         | 100.00   | 3.00    | 0.00     |
| 48.00         | 102.00   | 2.00    | 0.00     |
| 51.00         | 103.00   | 1.00    | 0.00     |
| 54.00         | 104.00   | 1.00    | 0.00     |
| 57.00         | 105.00   | 1.00    | 0.00     |

**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                 | 105.00          | 0.00           | 0.00            |

**FINAL FLOW**

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> |
|-----------------------|-----------------|----------------|
| 0.00                  | 57.00           | 57.00          |
| 5.00                  | 57.00           | 0.00           |
| 10.00                 | 57.00           | 0.00           |
| 15.00                 | 57.00           | 0.00           |
| 20.00                 | 57.00           | 0.00           |
| 25.00                 | 57.00           | 0.00           |
| 30.00                 | 57.00           | 0.00           |
| 35.00                 | 57.00           | 0.00           |
| 40.00                 | 57.00           | 0.00           |
| 45.00                 | 57.00           | 0.00           |
| 50.00                 | 57.00           | 0.00           |
| 55.00                 | 57.00           | 0.00           |
| 60.00                 | 57.00           | 0.00           |

**FINAL SHUT IN**

| <u>Time<br/>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------|-----------------|----------------|-----------------|
| 3.00                  | 57.00           | 57.00          | 0.00            |
| 6.00                  | 58.00           | 1.00           | 0.00            |
| 9.00                  | 59.00           | 1.00           | 0.00            |
| 12.00                 | 60.00           | 1.00           | 0.00            |
| 15.00                 | 62.00           | 2.00           | 0.00            |
| 18.00                 | 65.00           | 3.00           | 0.00            |
| 21.00                 | 69.00           | 4.00           | 0.00            |
| 24.00                 | 73.00           | 4.00           | 0.00            |
| 27.00                 | 77.00           | 4.00           | 0.00            |
| 30.00                 | 81.00           | 4.00           | 0.00            |
| 33.00                 | 85.00           | 4.00           | 0.00            |
| 36.00                 | 89.00           | 4.00           | 0.00            |
| 39.00                 | 93.00           | 4.00           | 0.00            |
| 42.00                 | 97.00           | 4.00           | 0.00            |
| 45.00                 | 102.00          | 5.00           | 0.00            |
| 48.00                 | 107.00          | 5.00           | 0.00            |

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

| <u>Time</u><br><u>(min)</u> | <u>Pressure</u> | <u>Delta P</u> | <u>Horner T</u> |
|-----------------------------|-----------------|----------------|-----------------|
| 51.00                       | 112.00          | 5.00           | 0.00            |
| 54.00                       | 116.00          | 4.00           | 0.00            |
| 57.00                       | 120.00          | 4.00           | 0.00            |
| 60.00                       | 123.00          | 3.00           | 0.00            |
| 63.00                       | 127.00          | 4.00           | 0.00            |
| 66.00                       | 131.00          | 4.00           | 0.00            |
| 69.00                       | 135.00          | 4.00           | 0.00            |
| 72.00                       | 139.00          | 4.00           | 0.00            |
| 75.00                       | 142.00          | 3.00           | 0.00            |
| 78.00                       | 146.00          | 4.00           | 0.00            |
| 81.00                       | 150.00          | 4.00           | 0.00            |
| 84.00                       | 154.00          | 4.00           | 0.00            |
| 87.00                       | 158.00          | 4.00           | 0.00            |
| 90.00                       | 163.00          | 5.00           | 0.00            |
| 93.00                       | 168.00          | 5.00           | 0.00            |
| 96.00                       | 171.00          | 3.00           | 0.00            |
| 99.00                       | 174.00          | 3.00           | 0.00            |
| 102.00                      | 177.00          | 3.00           | 0.00            |
| 105.00                      | 179.00          | 2.00           | 0.00            |
| 108.00                      | 182.00          | 3.00           | 0.00            |
| 111.00                      | 186.00          | 4.00           | 0.00            |
| 114.00                      | 189.00          | 3.00           | 0.00            |
| 117.00                      | 192.00          | 3.00           | 0.00            |
| 120.00                      | 195.00          | 3.00           | 0.00            |