

15-095-21389-00-00

STATE OF KANSAS - CORPORATION COMMISSION  
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division  
 TYPE TEST: Initial Annual Workover Reclassification TEST DATE: 8-8-89  
 Company BHP Petroleum Lease Hufford Well No. 5  
 County Kingman Location 14 Township 30 Range 7 Acres  
 Field S.G. Basil Reservoir \_\_\_\_\_ Pipeline Connection Cities Service  
 Completion Date \_\_\_\_\_ Type Completion(Describe) \_\_\_\_\_ Plug Back T.D. \_\_\_\_\_ Packer Set At \_\_\_\_\_

Production Method: \_\_\_\_\_ Type Fluid Production \_\_\_\_\_ API Gravity of Liquid/Oil \_\_\_\_\_  
 Flowing Pumping Gas Lift \_\_\_\_\_  
 Casing Size \_\_\_\_\_ Weight \_\_\_\_\_ I.D. \_\_\_\_\_ Set At \_\_\_\_\_ Perforations \_\_\_\_\_ To \_\_\_\_\_  
 Tubing Size 2 7/8 Weight \_\_\_\_\_ I.D. \_\_\_\_\_ Set At \_\_\_\_\_ Perforations \_\_\_\_\_ To \_\_\_\_\_

Pretest: \_\_\_\_\_ Duration Hrs. \_\_\_\_\_  
 Starting Date \_\_\_\_\_ Time \_\_\_\_\_ Ending Date \_\_\_\_\_ Time \_\_\_\_\_  
 Test: \_\_\_\_\_ Duration Hrs. \_\_\_\_\_  
 Starting Date 8-7-89 Time 9:00 Ending Date 8-8-89 Time 9:00 Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

| Producing Wellhead Pressure |            |              |          | Separator Pressure |              |              |          | Choke Size      |           |           |
|-----------------------------|------------|--------------|----------|--------------------|--------------|--------------|----------|-----------------|-----------|-----------|
| Casing:                     |            | Tubing:      |          | Starting Gauge     |              | Ending Gauge |          | Net Prod. Bbls. |           |           |
| Bbls./In.                   | Size       | Number       | Feet     | Inches             | Barrels      | Feet         | Inches   | Barrels         | Water     | Oil       |
| <u>1.67</u>                 |            |              |          |                    |              |              |          |                 |           |           |
| Pretest:                    |            |              |          |                    |              |              |          |                 |           |           |
| Test:                       | <u>200</u> | <u>15298</u> | <u>2</u> | <u>2 3/4</u>       | <u>44.31</u> | <u>2</u>     | <u>9</u> | <u>5517</u>     | <u>80</u> | <u>11</u> |
| Test:                       |            |              |          |                    |              |              |          |                 |           |           |

GAS PRODUCTION OBSERVED DATA

| Orifice Meter Connections |                        |               | Orifice Meter Range          |          |                           |                  |                   |
|---------------------------|------------------------|---------------|------------------------------|----------|---------------------------|------------------|-------------------|
| Pipe Taps:                | Flange Taps:           | Differential: | Static Pressure:             |          |                           |                  |                   |
| Measuring Device          | Run-Prover-Tester Size | Orifice Size  | Meter-Prover-Tester Pressure |          | Diff. Press. (hw) or (hd) | Gravity Gas (Gg) | Flowing Temp. (t) |
|                           |                        |               | In.Water                     | In.Merc. | Psig or (Pd)              |                  |                   |
| Orifice Meter             | <u>3</u>               | <u>.750</u>   |                              |          | <u>100</u>                | <u>.26</u>       |                   |
| Critical Flow Prover      |                        |               |                              |          |                           |                  |                   |
| Orifice Well Tester       |                        |               |                              |          |                           |                  |                   |

GAS FLOW RATE CALCULATIONS (R)

| Coeff. (Fb)  | MCFD (Fp) | Meter-Prover Press. (Psia) | Extension (Pm) | Gravity Factor (Fg) | Flowing Temp. Factor (Ft) | Deviation Factor (Fpv) | Chart Factor (Fd) |
|--------------|-----------|----------------------------|----------------|---------------------|---------------------------|------------------------|-------------------|
| (Fb)         | (Fp)      | (OWTC)                     | (Pm)           | √hw x Pm            | (Fg)                      | (Ft)                   | (Fp)              |
| <u>2.740</u> |           |                            |                | <u>1.195</u>        |                           |                        |                   |

Gas Prod. MCFD \_\_\_\_\_ Oil Prod. Bbls./Day: 11 Gas/Oil Ratio (GOR) = 1.9 Cubic Ft. per Bbl. \_\_\_\_\_  
 Flow Rate (R): 21

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 19 day of 9 19 89

For Offset Operator \_\_\_\_\_ For State \_\_\_\_\_ For Company Robert W. Eggert

STATE CORPORATION COMMISSION OF KANSAS, CONSERVATION DIVISION

PRODUCTIVITY TEST  
BARREL TEST

OPERATOR \_\_\_\_\_ LOCATION OF WELL \_\_\_\_\_  
 LEASE \_\_\_\_\_ OF SEC. T R \_\_\_\_\_  
 WELL NO. \_\_\_\_\_ COUNTY \_\_\_\_\_  
 FIELD \_\_\_\_\_ PRODUCING FORMATION \_\_\_\_\_  
 Date Taken \_\_\_\_\_ Date Effective \_\_\_\_\_  
 Well Depth \_\_\_\_\_ Top Prod. Form \_\_\_\_\_ Perfs \_\_\_\_\_  
 Casing: Size \_\_\_\_\_ Wt. \_\_\_\_\_ Depth \_\_\_\_\_ Acid \_\_\_\_\_  
 Tubing: Size \_\_\_\_\_ Depth of Perfs \_\_\_\_\_ Gravity \_\_\_\_\_  
 Pump: Type \_\_\_\_\_ Bore \_\_\_\_\_ Purchaser \_\_\_\_\_  
 Well Status \_\_\_\_\_  
 Pumping, flowing, etc.

TEST DATA

Permanent \_\_\_\_\_ Field \_\_\_\_\_ Special \_\_\_\_\_  
 Flowing \_\_\_\_\_ Swabbing \_\_\_\_\_ Pumping \_\_\_\_\_

STATUS BEFORE TEST:

PRODUCED \_\_\_\_\_ HOURS  
 SHUT IN \_\_\_\_\_ HOURS  
 DURATION OF TEST \_\_\_\_\_ HOURS \_\_\_\_\_ MINUTES \_\_\_\_\_ SECONDS  
 GAUGES: WATER \_\_\_\_\_ INCHES \_\_\_\_\_ PERCENTAGE  
 OIL \_\_\_\_\_ INCHES \_\_\_\_\_ PERCENTAGE  
 GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) \_\_\_\_\_  
 WATER PRODUCTION RATE (BARRELS PER DAY) \_\_\_\_\_  
 OIL PRODUCTION RATE (BARRELS PER DAY) \_\_\_\_\_ PRODUCTIVITY  
 STROKES PER MINUTE \_\_\_\_\_  
 LENGTH OF STROKE \_\_\_\_\_ INCHES  
 REGULAR PRODUCING SCHEDULE \_\_\_\_\_ HOURS PER DAY.  
 COMMENTS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

WITNESSES:

FOR STATE \_\_\_\_\_ FOR OPERATOR \_\_\_\_\_ FOR OFFSET \_\_\_\_\_