## OIL AND GAS DOCKET NO. 02-0223492

## THE APPLICATION OF HART PETROLEUM SERVICES, INC., FOR FIELD-WIDE MER IN THE BEN SHELTON (7400) FIELD, VICTORIA COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

#### **Procedural history**

Application received: December 14, 1999 Hearing called: February 2, 2000 Exhibits tendered: February 8, 2000

#### Representative

**Rick Johnston** 

Hart Petroleum Services

## **EXAMINER'S REPORT AND RECOMMENDATION**

## STATEMENT OF THE CASE

Hart Petroleum Services, Inc., is requesting that an MER of 275 BOPD be assigned to every well in the Ben Shelton (7400) Field.

#### **DISCUSSION OF THE EVIDENCE**

The Ben Shelton (7400) Field was discovered in 1997, with the completion of the Hart Petroleum Ben Shelton Well No. 6. This well was granted an MER of 275 BOPD under Docket No. 02-0218902, effective April 28, 1998. A second well in the field, the Hart Petroleum Ben Shelton Well No. 7 was completed in March of 1999. This well had an initial potential of 246 BOPD with 102 MCF/D and no water. The perforations in Well No. 7 extend from 7592 to 7594 feet.

The current daily allowable for wells in the field is 121 BOPD and 242 MCF/D, but only Well No. 7 is subject to this allowable. Well No. 7 was tested between December 23, 1999, and January 20, 2000, to determine its most efficient rate of flow. The choke size was adjusted so that the oil producing rate was increased in steps from 121 BOPD to 241 BOPD. When the well was tested at the current daily oil allowable, the gas/oil ratio was 889 cubic feet per barrel. When the oil rate was increased to 152 BOPD, the gas/oil ratio was 829 cubic feet per barrel. When the oil rate was further increased to 180 BOPD, the gas/oil ratio decreased significantly to 526 cubic feet per barrel. The most efficient rate of production occurred when the oil producing rate was 241 BOPD and the gas oil ratio was 521 cubic feet per barrel.

## Oil & Gas Docket No. 02-0223492

During the test, the well's water production rose from 34 to 53 barrels per day. The percentage oil cut changed little, increasing from 78% to 82%. The flowing tubing pressure did not change significantly either, increasing from 750 psi to 770 psi.

Well No. 7 has already produced 32,699 BO according to the January, 2000, proration schedule, and had 17,129 barrels of overproduction indicated on the Oil Ledger for November, 1999. The amount of overproduction has increased, in part because of the production step-rate test. The applicant has requested that the overproduction for Well No. 7 be canceled as producing at a lower rate to make up the overproduction would be less efficient than producing at the rate of 241 BOPD.

Hart Petroleum is the only operator in this two well field. Hart is requesting that the MER for all wells in the field be set at 275 BOPD, the MER already determined for the discovery well, the Hart Ben Shelton Well No. 6.

## FINDINGS OF FACT

- 1. Notice of this hearing was given to Hart Petroleum, the only operator in the Ben Shelton (7400) Field, on December 29, 1999.
- 2. The field was discovered in 1997, with the completion of the Hart Petroleum Ben Shelton Well No. 6, and this well has already received an MER of 275 BOPD.
- 3. The second and only other well in the field, the Hart Petroleum Ben Shelton Well No. 7, was completed in March of 1999, at tested rates of 246 BOPD and 102 MCF/D.
- 4. The current daily allowable is 121 barrels of oil and 242 MCF of gas.
- 5. The well was tested between December 23, 1999, and January 20, 2000, on varying choke sizes.
  - a. At a daily rate of 122 barrels of oil, near the current oil allowable, the measured gas/oil ratio was 889 cubic feet per barrel.
  - b. When the oil rate was increased to 152 BOPD, the gas/oil ratio was 829 cubic feet per barrel.
  - c. When the oil rate was further increased to180 BOPD, the gas/oil ratio was 832 cubic feet per barrel.
  - d. When the oil rate was increased to 210 BOPD, the gas/oil ratio decreased

## Oil & Gas Docket No. 02-0223492

- e. The most efficient rate of production occurred when the oil producing rate was 241 BOPD where the measured gas/oil ratio was 521 cubic feet per barrel.
- 6. The Ben Shelton Well No. 7 has already produced 32,700 BO and accumulated significant overproduction.
- 7. A maximum oil allowable of 275 BOPD is efficient for both wells in the field and there is no reason to require Well No. 7 to make up overproduction through producing it at a lower rate.

## **CONCLUSIONS OF LAW**

- 1. Proper notice was given as required by statute.
- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
- 3. Granting an MER for each well, regardless of assigned acres, will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that an MER of 275 BOPD be established for each well in the Ben Shelton (7400) Field. Any overproduction in the field should also be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: February 24, 2000

# Exhibits

- 1. Proration schedule
- 2. Oil ledger
- 3. Form W-2
- 4. Log
- 5. Plat
- 6. Step-rate test results
- 7. Previous order