OIL AND GAS DOCKET NO. 7C-0229150

THE APPLICATION OF MEADCO PROPERTIES FOR INCREASED GAS-OIL RATIO AUTHORITY FOR THE SUGG 1903 "A" LEASE, TOM KETCHUM (WOLFCAMP REEF) FIELD, IRION COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: July 31, 2001 Hearing held: September 27, 2001

Appearances

Representing
Pat Drxler Meadco Properties

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Meadco Properties wants to produce its Sugg 1903 "A" Lease Well No. 1, the only well in the Tom Ketchum (Wolfcamp Reef) Field, Irion County, Texas, under increased gas-oil ratio authority with a daily gas limit of 750 MCF. Meadco also requests that the overproduction for this well be canceled.

DISCUSSION OF THE EVIDENCE

The Sugg 1903 "A" Lease Well No. 1 was the discovery well for the Tom Ketchum (Wolfcamp Reef) Field. This well was completed February 20, 2000, with an initial potential of 193 BOPD, 86 MCF/D and 13 BWPD. The field is on Statewide Rules. An MER allowable of 225 BOPD and 450 MCF/D was adopted September 12, 2000, under Oil & Gas Docket No. 7C-0225329. The subject well's allowable is now penalized to 57 BOPD due to high gas/oil ratio.

The perforations in the subject well are between 6470 and 6528 feet. The reservoir is on a small closure formed by a Wolfcamp reef that covers only 12 to 20 acres. Depletion of the reservoir pressure has caused gas production to increase and oil production to decrease. The well's cumulative production through June 1, 2001, is 79,000 BO and 21 MMCF.

The well was step-rate tested between August 16 and September 15, 2001. On a 14/64th inch choke, daily production averaged 43 barrels oil and 639 MCF, for a gas/oil ratio of 14,900 cubic feet per barrel. When the choke size was increased to 16/64th inches, the average daily gas and oil rates increased to 55 BO and 789 MCF, but gas/oil ratio stayed about the same at 14,339 cubic feet per barrel. The choke size was then decreased to 12/64th inches, and daily production rates decreased to 31 BO and 547 MCF, causing an increased in the gas/oil ratio to 17,629 cubic feet per barrel.

The well has accumulated 30 MMCF of overproduction through July, 2001. This is the only active well in the subject field, and requiring it to make up this overproduction would not prevent waste or protect correlative rights.

FINDINGS OF FACT

- 1. Notice of this hearing was issued to operators of record in the Tom Ketchum (Wolfcamp Reef) Field on August 15, 2001.
- 2. The Tom Ketchum (Wolfcamp Reef) Field was discovered in February, 2000, with the completion of Meadco Properties' Sugg 1903 "A" Lease Well No. 1.
- 3. The subject well was perforated from 6470 to 6528 feet, and its initial potential was 193 BOPD, 86 MCF/D and 13 BWPD.
- 4. The field is under Statewide Rules and has only the one well.
- 5. An MER allowable of 225 BOPD and 450 MCF/D was adopted September 12, 2000, under Oil & Gas Docket No. 7C-0225329.
- 6. The reservoir is very small and the well's cumulative production is 79,000 BO and 225 MMCF.
- 7. As reservoir pressure was depleted the subject well's gas production increased and its allowable is now penalized to 57 BOPD.
- 8. The well was step-rate tested between August 16, and September 15, 2001, and the results show that it can produce efficiently at higher rates.
 - a. On a 14/64th inch choke, daily production averaged 43 barrels oil and 639 MCF, for a gas/oil ratio of 14,900 cubic feet per barrel.
 - b. On a 16/64th inch choke, the average daily gas and oil rates increased to 55 BO and 789 MCF, but gas/oil ratio stayed about the same at 14,339 cubic feet per barrel.
 - c. On a 12/64th inch choke, the daily production rates decreased to 31 BO and 547 MCF, causing an increased in the gas/oil ratio to 17,629 cubic feet per barrel.
- 9. Requiring the well to stay within its current daily gas limit of 450 MCF will not increase the well's ultimate oil recovery and will waste reservoir energy.
- 10. This is the only well in the field and requiring it to make up overproduction will not prevent waste nor protect correlative rights.

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 increased gas oil ratio authority for the only well in the Tom Ketchum (Wolfcamp

Reef) Field will prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that increased net gas/oil ratio authority, with a daily gas limit of 750 MCF, be approved for the Meadco Properties Sugg 1903 "A" Lease Well No. 1 in the Tom Ketchum (Wolfcamp Reef) Field, Irion County, Texas. All overproduction for this well should also be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: October 2, 2001