

THE APPLICATION OF CHESAPEAKE OPERATING, INC. FOR INCREASED GAS OIL RATIO AUTHORITY FOR ITS HALLEY, S.M. -B- LEASE, WELL NO. 42, IN THE EMPEROR (ELLENBURGER) FIELD, WINKLER COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: April 11, 2006

Hearing held: May 18, 2006

Appearances

Bill G. Spencer
Ginni Kenedy (by telephone)

Representing
Chesapeake Operating, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Chesapeake Operating, Inc. ("Chesapeake") is seeking increased gas/oil ratio authority for its Halley, S.M. -B- Lease Well No. 42 to allow this well to produce unlimited amounts of gas with a daily oil allowable of 255 barrels. Chesapeake also wants all overproduction for this lease cancelled.

DISCUSSION OF THE EVIDENCE

The Emperor (Ellenburger) Gas Field was discovered in 1954 at a depth of 11,480'. There are three gas wells, however they have been shut-in for decades. The Emperor (Ellenburger) Oil Field was discovered in 1958 at a depth of 11,453'. The Halley, S.M. -B- Lease Well No. 42 is the only oil well in the field. The top allowable is 255 BOPD with a daily gas limit of 510 MCF.

The Halley, S.M. -B- Lease Well No. 42 was completed March 15, 2005, with an initial daily potential of 24 BO, 340 BW and 586 MCF. The well was perforated from 11,300' to 11,414' and acidized. Oil initially flowed at rates up to 100 barrels per day but the well was accidentally shut-in during June, then loaded up and was unable to unload itself. A submersible pump was installed at a depth of 11,213' in October, 2005, that was designed to be able to unload the expected 650 barrels of water per day.

Instead the well has produced up to 2000 barrels of water per day and the submersible pump needs to be replaced with a larger one. Tests show 1947' of gas-free liquid standing above the pump and 10,412' of total liquid above the pump. The Ellenburger is obviously flowing into the wellbore at the same time it is being pumped and the existing pump is producing very inefficiently. The most recent W-10 test, taken January 2, 2006, shows the well capable of 10 BO, 2300 BW and 1450 MCF per day.

The applicant believes that increasing the pump size will allow the well to return to producing 80-100 BO, 2000 BW and 2-3 MMCF per day.

It will cost another \$300,000 to replace the submersible pump and Chesapeake is unwilling to spend this if the well's gas production must be restricted to 510 MCFD. The applicant believes that the remaining reserves for this well may be as much as 1.14 BCF and 11,400 BO if the production problems can be solved.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Emperor (Ellenburger) Field, on April 27, 2006.
2. The subject well, the Halley, S.M. -B- Lease Well No. 42, was completed in the Emperor (Ellenburger) Field in March of 2005, with an initial daily potential daily of 26 BO, 340 BW and 586 MCF.
3. The current allowable for the Emperor (Ellenburger) Field is 255 BOPD with 510 MCF of gas per day.
4. The most recent W-10 test rates for the Halley, S.M. -B- Lease Well No. 42 were 10 BO, 2300 BW and 1450 MCF per day, measured on January 2, 2006.
5. It will not cause waste to produce the Halley, S.M. -B- Lease Well No. 42, with an unlimited daily gas allowable.
 - a. During June, 2005, the subject well loaded up and was unable to unload itself.
 - b. A submersible pump was installed at a depth of 11,213' in October, 2005, that was designed to be able to lift 650 barrels of water, in addition to the oil, per day.
 - c. The Ellenburger is flowing at the same time it is being pumped and the submersible pump cannot keep up with the water production.
 - d. Replacing the submersible pump size could allow the well to return to producing 80-100 BO, 2000 BW and 2-3 MMCF per day.
6. Cancellation of overproduction for the Chesapeake Operating, Inc. Halley, S.M. -B- Lease Well No. 42 will not harm correlative rights as it is the only producing well in the field.

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. Unlimited daily gas allowable for the Chesapeake Operating, Inc., Halley, S.M. -B- Lease Well No. 42, while leaving the daily oil allowable at 255 barrels, will not cause waste and will protect correlative rights within Emperor (Ellenburger) Field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the Halley, S.M. -B- Lease Well No. 42, operated by Chesapeake Operating, Inc. in the Emperor (Ellenburger) Field, be allowed to produce unlimited amounts of gas without restricting the daily oil allowable to less than 255 barrels, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner