

February 12, 1996

OIL AND GAS DOCKET NO. 02-0210518

**THE APPLICATION OF GREAT TEXAS CRUDE INC. TO CONSIDER TEMPORARY
FIELD RULES FOR THE TYNAN, EAST (FRIO 3420) FIELD, BEE COUNTY, TEXAS**

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural History

Application received: November 6, 1995

Hearing held: January 5, 1996

Appearances

Representing

Gene Day

Great Texas Crude, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Great Texas Crude is seeking the following temporary field rules for the Tynan, East (Frio 3420) Field:

1. Designated interval from 3420 to 3432 feet as shown on the log of the Great Texas Crude Kircher Lease Well No. 1;
2. 467-1200' well spacing;
3. 80 acre oil proration units with 40 acre tolerance for the last well on the lease and a maximum diagonal of 3250 feet;
4. 100% acreage allocation.

DISCUSSION OF THE EVIDENCE

The Great Texas Crude Kircher Well No. 1 is the discovery well for the Tynan, East (Frio 3420) Field. This well was completed in January of 1995, with an initial potential of 686 MCF/D at 1540 psi. The perforations are from 3420 to 3426'. The well initially produced dry gas but over time the gas/liquid ratio has decreased to about 16,000 cubic feet per barrel.

The second well in the field, the Mengers No. 1, was completed as an oil well in October of 1995, with perforations from 3448 to 3461 feet. The initial potential of this well was 32 BOPD and 4 MCF/D for a net gas/oil ratio of 125 cubic feet per barrel. The producing reservoir is a channel sand and the applicant plans to drill at least two additional wells into this channel. The extra flexibility of 467'-1200' well spacing will allow the operator to keep the wellbore within the expected channel.

The average porosity in the reservoir is 25% and the water saturation is 35%. The oil has low gravity at 27 degrees API and the reservoir thickness is only 13 feet. Volumetric calculations indicate that there are 190 barrels of recoverable oil per acre-foot. There is insufficient production history for the oil well to estimate ultimate recovery but other Frio oil wells at this depth in the area have produced about 180,000 BO. If the Menger No. 2 produces this much it will drain 73 acres.

The top allowable for oil wells at this depth on 80 acre density is 144 BOPD. During the first six weeks of production, the Mengers No. 2 produced at a rate of about 110 BOPD and became overproduced. An allowable of 144 BOPD should prevent this well from becoming overproduced again. The applicant tested the Kircher No. 1 to see if the well needed increased gas allowable but the lowest gas/oil ratios were at rates below the gas allowable of 288 MCF/D, though there were slight indications of loading. The Kircher No. 2 will most likely be classified as an oil well soon as the gas cap appears to be about depleted.

FINDINGS OF FACT

1. Notice of this hearing was issued to all operators in the field and all offset operators and unleased mineral interest owners on December 12, 1996.
2. The Tynan, East (Frio 3240) Field was discovered in January of 1995 with the completion of the Kircher Well No. 1 as a gas well.
3. In October of 1995, the Mengers No. 2 was completed as an oil well and has produced at a rate of about 110 BOPD for the first six weeks.
4. Eighty acre oil rules are appropriate for temporary field rules.
 - a. Other Frio oil wells at this depth have produced about 180,000 BO.

- b. Volumetric calculations indicate that if the Menger No. 1 produces this amount it will drain 73 acres.
- 5. The producing formation is a channel sandstone and the requested 467-1200' well spacing will allow additional wells to be located inside the channel.
- 6. The producing interval occurs between the depths of 3420 and 3432' as shown on the log of the Kircher Well No. 1.
- 7. Allocation based on acreage will protect correlative rights.

CONCLUSIONS OF LAW

- 1. Proper notice was issued by the Commission to appropriate parties legally entitled to notice.
- 2. All things have been done or have occurred to give the Railroad Commission jurisdiction to decide this matter.
- 3. Adoption of the proposed field rules will promote the orderly and efficient development of the field in question and will prevent the waste of hydrocarbons and will protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the field rules requested at the hearing be adopted on a temporary basis for a period of 18 months.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action_____