THE APPLICATION OF TEXAKOMA OPERATING, L.P. TO CONSIDER A FIELDWIDE MER AND INCREASED NET GOR FOR THE ST. CLAIR (GRANITE WASH) FIELD, ROBERTS COUNTY, TEXAS

Heard by: Donna K. Chandler on June 15, 2006

Appearances:

Representing:

Dale Miller

Texakoma Operating, L.P.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Texakoma Operating, L.P. requests approval of a fieldwide MER of 180 BOPD per well and increased net gas-oil ratio authority with a daily casinghead gas limit of 1,500 MCFD per well in the St. Clair (Granite Wash) Field. Texakoma also requests that all overproduction in the field be canceled.

The application is unprotested and the examiner recommends approval of the requested MER of 180 BOPD per well, increased gas-oil ratio authority with a daily gas limit of 1,500 MCFD per well, and cancellation of overproduction for all wells in the field.

DISCUSSION OF EVIDENCE

The St. Clair (Granite Wash) Field was discovered in 1974 at a depth of approximately 10,000 feet. The field is an associated field with 51 gas wells and 5 oil wells. The gas field is AOF and the oil field has a top allowable of 157 BOPD and 314 MCFD. The oil and gas wells are intermingled.

Two of the oil wells were completed in 2001, two in 2005 and one in 2006. Texakoma has two wells on its McMordie 84 lease: the No. 1 completed in October 2005 and the No. 2 completed in April 2006. The No. 1 had an initial potential of 158 BOPD, 952 MCFD, and 60 BWPD. The well is assigned a penalized allowable of 52 BOPD based on the high gas-oil ratio. The No. 2 had an initial potential of 364 BOPD, 730 MCFD and 298 BWPD. This well has not yet been assigned an allowable, but it will be limited by the 157 BOPD top allowable. The other three wells in the field produce less than 20 BOPD each.

Texakoma tested its McMordie 84 Nos. 1 and 2 to determine rate sensitivity. The average test results are summarized as follows:

Well No. 1 (average values)

<u>choke</u>	<u>oil rate</u>	<u>gas rate</u>	water rate	<u>gas-oil ratio</u>
64/64"	40 BOPD	400 MCFD	5 BWPD	10,000 cuft/bbl
48/64"	28 BOPD	380 MCFD	3 BWPD	13,200 cuft/bbl
24/64"	16 BOPD	320 MCFD	2 BWPD	21,000 cuft/bbl
36/64"	25 BOPD	330 MCFD	2 BWPD	14,000 cuft/bbl

If the No. 1 well is restricted to its current casinghead gas limit of 314 MCFD, the producing gas-oil ratio is much higher than if the well is allowed to produce at a higher rate.

Well No. 2 (average values)

<u>choke</u>	<u>oil rate</u>	<u>gas rate</u>	water rate	gas-oil ratio
24/64"	150 BOPD	1450 MCFD	30 BWPD	9,300 cuft/bbl
16/64"	171 BOPD	1900 MCFD	5 BWPD	11,000 cuft/bbl
17/64"	140 BOPD	1000 MCFD	15 BWPD	7,200 cuft/bbl
13/64"	12 BOPD	680 MCFD	2 BWPD	62,000 cuft/bbl
16/64"	120 BOPD	950 MCFD	12 BWPD	7,200 cuft/bbl
18/64"	100 BOPD	1000 MCFD	10 BWPD	10,000 cuft/bbl

From the average values during the variable rate testing of this well, it would appear that the most efficient rate is at the 17/64" choke. However, during the nine day test through that choke, the gas-oil ratio varied between 6,000 and 8,000 cubic feet per barrel. If the No. 2 is restricted below 17/64", production becomes very erratic and it begins to load. When the choke was changed from 17/64" to 13/64", liquid production almost ceased. When the well was opened up to 16/64", it took several days for the well to unload and oil production varied from 101 BOPD to over 300 BOPD. The well exhibited the most stable production at a 24/64" choke. The producing rate at this choke size was very stable at 150-160 BOPD and 1,450 MCFD.

Texakoma asks that the MER be set at 180 BOPD and that the casinghead gas limit be set at 1,500 MCFD. These requested rates, slightly in excess of the tested rates, will cover higher initial rates from new wells. Texakoma plans to drill additional wells.

As of May 1, 2006, the McMordie 84 lease was overproduced about 4,200 BO and 35 MMCF of casinghead gas. It is requested that all overage in the field be canceled.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
- 2. The St. Clair (Granite Wash) Field was discovered in 1974 at a depth of approximately 10,000 feet.
 - a. The field is an associated field with 51 gas wells and 5 oil wells.
 - b. The gas field is AOF and the oil field has a top allowable of 157 BOPD and 314 MCFD.
- 3. Texakoma completed two oil wells in the past eight months, the McMordie 84 lease Nos. 1 and 2. The two oldest oil wells in the field were completed in 2001.
 - a. The McMordie 84 No. 1 is assigned a penalized allowable due to high GOR. The initial potential was 158 BOPD, 952 MCFD and 60 BWPD.
 - b. The McMordie 84 No. 2 had an initial potential of 364 BOPD, 730 MCFD and 298 BWPD and will be limited by the 157 BOPD top allowable.
- 4. Producing wells in the St. Clair (Granite Wash) Field at rates up to 180 BOPD and 1,500 MCFD will prevent waste.
 - a. The McMordie 84 No. 1 produces at a high gas-oil ratio regardless of producing rate. Restricting the well to produce within its assigned 314 MCFD results in higher gas-oil ratios than producing at higher rates.
 - b. The McMordie 84 No. 2 produces most efficiently through a 24/64" choke at a rate of approximately 145 BOPD and 1,450 MCFD.
- 5. Estimated overproduction for the McMordie 84 lease as of May 1, 2006 is 4,269 BO and 35 MMCF.

CONCLUSIONS OF LAW

- 1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
- 2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.

3. Approval of a fieldwide MER of 180 BOPD per well, net gas-oil ratio authority with a daily gas limit of 1,500 MCFD and cancellation of overproduction in the St. Clair (Granite Wash) Field will prevent waste and protect correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of a fieldwide MER of 180 BOPD per well, net gas-oil ratio authority with a daily gas limit of 1,500 MCFD per well, and cancellation of overproduction in the St. Clair (Granite Wash) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner