OIL AND GAS DOCKET NO. 04-0234588

THE APPLICATION OF M.J.G, INC., TO CONSOLIDATE THE HEINTZ (VICKSBURG 8500) FIELD INTO THE HEINTZ (VICKSBURG 10400) FIELD AND TO ADOPT OPERATING RULES AND REGULATIONS FOR THE HEINTZ (VICKSBURG 10400) FIELD, HIDALGO COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: April 22, 2003
Hearing held: May 23, 2003

Appearances

	Representing
Dale Miller	M.J.G., Inc.
Keith Lilie	

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

M.J.G. is seeking to have the Heintz (Vicksburg 8500) Field consolidated into the Heintz (Vicksburg 10400) Field. M.J.G. requests the operating rules summarized below:

1. Designated interval between 8130 feet and 10,720 feet as shown on the log of the M.J.G., Inc., Olivarez-Van Dresar Unit Lease Well No. 2; and

2. allocation based 5% per well and 95% on deliverability.

DISCUSSION OF THE EVIDENCE

M.J.G. has the only well in the Heintz (Vicksburg 8500) Field and in the Heintz (Vicksburg 10400) Fields. Its Olivares-Van Dresar Unit Well No. 1 discovered the Vicksburg 8500 field when it was completed October 31, 2002. The well was perforated from 8520' to 8570' and was tested at a top rate of 485 MCF/D with a bottom-hole pressure of 5073 psi. The Olivares-Van Dresar Unit Well No. 2 was the discovery well for the Heintz (Vicksburg 10400) Field when it was completed December 15, 2002. This well was perforated from 10,518' to 10,556' and was tested at a top rate of 1775 MCF/D with a bottom-hole pressure of 7539 psi.

Initial production from Well No. 1 was only 244 MCF/D and a large hydraulic fracture stimulation was performed in January, 2003. Daily production increased to 1775 MCF but has since declined to 375 MCF. Cumulative production is 95,181 MCF and 1824 BC. The applicant plans to recomplete this well soon if this application is approved.

Initial production from Well No. 2 was 2100 MCF/D but the well declined very rapidly and died in January, 2003. The well was reperforated between 9194' and 9224'. Daily production increased to

2348 MCF but declined rapidly again. The well was again reperforated, this time between 8980' and 9110'. Cumulative production for this well is 111,552 MCF and 2922 BC. If this application is approved, all the perforations will be downhole commingled.

The top of the proposed designated interval is shown at 8130 feet and the base at 10,720 feet on the log of the Olivares-Van Dresar Unit Lease Well No. 2. This includes all of the Vicksburg sandstones below the Rincon Sand, which have similar reservoir and fluid properties. Because of the multiple reservoirs included within the proposed designated interval, a two-factor allocation formula is necessary. Allocation based 5% per well and 95% on deliverability is close to the Statewide Rules, and will satisfy statutory requirements.

These sandstones in the upper and lower Vicksburg have very low permeability and require large fracture stimulations to produce. The initial decline rate is 70% but M.J.G. believes production from the various sets of perforations will level off about 400 MCF/D, and then decline at 10%. The economic limit for each completion is 60 MCF/D as compression will be necessary due to decreasing flowing tubing pressure.

The applicant believes that approval of this application will result in the recovery of reserves that would otherwise be unrecovered. If reservoirs can be downhole commingled, the economic limit per completion will be reduced. M.J.G. has estimated the increase in ultimate production due to commingling the Vicksburg Formation to be 208 MMCF per well.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators of wells in the fields to be consolidated on May 6, 2003.

2. Wells in the Heintz (Vicksburg 8500) and Heintz (Vicksburg 10400) Field can be produced economically, and without causing waste, if consolidated into a single field.

3. In October, 2002, M.J.G. completed the discovery well for the Heintz (Vicksburg 8500) Field, the Olivares-Van Dresar Unit Lease Well No. 1, with perforations between 8520' and 8570'.

4. In December, 2002, M.J.G. completed the discovery well for the Heintz (Vicksburg 10400) Field, the Olivares-Van Dresar Unit Lease Well No. 2, with perforations between 10,518' and 10,556'.

5. Daily production from the Olivares-Van Dresar No. 1 was 1775 MCF after fracture stimulation and the well has 95 MMCF of cumulative production.

6. Daily production from the Olivares-Van Dresar No. 2 was 2348 MCF but the well has had to be reperforated to achieve its 111.6 MMCF of cumulative production.

7. The Vicksburg sandstones, shown between 8130' and 10,720' on the log of the Olivares-Van Dresar Unit Lease Well No. 2, have similar properties including low permeability, and deplete very rapidly.

8. The wells in this Vicksburg interval will be economic only if multiple reservoirs are produced together.

9. Downhole commingling marginal production from various sandstones in a single wellbore will lower the economic limit of each completion and allow the recovery of an estimated 209 MMCF of additional reserves per well.

10. Because the designated interval includes multiple, stratigraphic reservoirs within the Vicksburg Formation, two- factor allocation is required by statute.

11. Gas allocation based 5% per well and 95% on deliverability will satisfy statutory requirements.

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 Consolidation of the requested fields will prevent waste and protect correlative rights, while encouraging conservation.

4. The proposed field rules for the remaining field, the Heintz (Vicksburg 10400) Field, will prevent waste, protect correlative rights within the field, and satisfy statutory requirements.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the Heintz (Vicksburg 8500) Field be consolidated into the Heintz (Vicksburg 10400) Field. The proposed field rules should be adopted, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner