

November 21, 2005

OIL AND GAS DOCKET NO. 04-0244552

APPLICATION OF MAGNUM PRODUCING, L.P. TO CONSOLIDATE VARIOUS FIELDS AND ADOPT FIELD RULES INTO THE PROPOSED ORCONES (FRIO-VKSBG CONS.) FIELD, DUVAL COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E.

DATE OF HEARING: November 17, 2005

APPEARANCES:

Applicant:

Dale E. Miller
William Dase (Observer)

REPRESENTING:

Magnum Operating, L.P.
Railroad Commission of Texas

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Magnum Operating for the Commission to consider consolidating 19 fields into an a new field to be known as the Orcones (Frio-Vksbg Cons.) Field. It is proposed that the following field rules be adopted:

1. The entire combined correlative interval from 2,470' to 7,590' as shown on the High Definition Induction Log, Digital Acoustic, Gamma Ray Log of the Magnum Producing, LP, Hilda Parr Lease Well No. 101 (API No. 42-131-38752), Andres Garcia Hrs. Survey, A-657, Duval County, Texas should be designated as the Orcones (Frio-Vksbg Cons.) Field.
2. Minimum well spacing of 467' (leaseline) and no between well spacing and only 40 acre drilling units;
3. An allocation formula based on 95% deliverability and 5% per well for gas wells and capacity exempt or salvage classification for any oil wells. It is proposed that the allocation formula for gas wells be suspended.

DISCUSSION OF THE EVIDENCE

The seven Oil Fields to be consolidated are: the Atlee Field, Atlee (4900) Field, Good Friday (Hilda Sand) Field, Lyle Wilson (Yegua 6670) Field, Orcones (5200) Field, Orcones (5200-Oil) Field and the Orcones (Hockley-Woodley) Field. The Atlee Field was the first discovery in 1950. There are only four producing wells in the subject fields and two non-producing wells. Five of the fields have no wells on schedule. The majority of the field area development occurred in the 50's and 60's. The discovery depths of the oil fields as shown on the Proration Schedule extend from 3,562' to 6,687' subsurface depth.

The 13 Gas Fields to be consolidated are: the Atlee (Hiawatha) Field, Atlee, NE. (Frio 2450) Field, Atlee, NE. (6500) Field, Good Friday (Atlee) Field, Lyle Wilson (Yegua 7150) Field, Orcones (Hockley-Teddlie) Field, Orcones (Hockley-Parr) Field, Orcones (4900 Frio) Field, Orcones (5200) Field, Orcones (Hiawatha) Field, Orcones (Delores) Field, Orcones (Bazan) Field and Orcones, South (Hockley-Parr) Field. The Atlee "gas" field was first discovered in 1953. There are only nine producing wells in the subject fields, seven non-producing wells and one water injection well. Four of the fields have no wells on schedule. The field area development occurred in the 50's and 60's. The discovery depths of the oil fields as shown on the Proration Schedule extend from 2,472' to 7,462' subsurface depth.

The entire combined correlative interval from 2,470' to 7,590' as shown on the High Definition Induction Log, Digital Acoustic, Gamma Ray Log of the Magnum Producing, LP, Hilda Parr Lease Well No. 101 (API No. 42-131-38752), Andres Garcia Hrs. Survey, A-657, Duval County, Texas should be designated as the Orcones (Frio-Vksbg Cons.) Field. The entire gross interval is a series of stacked Frio and Vicksburg Formation Sands of similar reservoir characteristics.

Consolidation of the subject 19 fields will provide for the recovery of reserves that otherwise would go unrecovered. The fields to be consolidated are both oil and gas. All the fields are intermingled as these are a series of various stacked Frio and Vicksburg Formation sands that are heterogeneous (porosity, permeability and thickness) and are lenticular from well to well over short distances. Many of the sand stringers are not stand alone economic producing sands. Completion costs will be reduced. There are numerous potentially productive horizons to be produced, but without the consolidation of the fields and the freedom to produce multiple reservoirs simultaneously, reserves could be left in the ground, un-recovered, as the economics may not justify individual completions. The expanded correlative interval will allow completion of wellbores in all of the productive sand accumulations during initial completion operations. The cost of drilling, completing and stimulating a wellbore drilled for the deepest reservoir of the correlative interval is approximately \$1,400,000. Downhole commingling the production from all reservoirs during the initial completion will reduce capital expenditures by approximately \$25,000 per individual reservoir. By reducing capital expenditures, the recovery factor for each well will increase, thereby allowing for recovery of additional reserves and minimizing waste. In addition, by allowing multiple reservoirs to be simultaneously produced, the economic limit is lowered for each of the individual reservoirs thereby enhancing recovery and preventing waste of recoverable reserves.

Among the seven oil fields being considered for consolidation, as of September 1, 2005, 2 of the fields have a cumulative production of less than 10 MSTB [Atlee (4900) Field and Orcones (5200) Field]; 1 field has a cumulative production between 10 MSTB and 25 MSTB [Lyle Wilson (Yegua 6670) Field]; 1 field has a cumulative production between 100 MSTB and 200 MSTB [Orcones (Hockley-Woodley) Field]; 3 fields have a cumulative production between 200 MSTB and 500 MSTB [Orcones (5200-Oil) Field, Good Friday (Hilda Sand) Field and Atlee Field]; the total cumulative production from all of the Oil fields is 1075.8 MSTB. The Oil fields are in the final stage of development, and there are still remaining oil reserves left to secure but nothing to

necessitate SWR 49B restrictions on the gas fields. The oil fields all appear to be in the salvage stage of depletion and Magnum Producing, LP is attempting to secure the remaining reserves in as economic a manner as possible.

Among the gas fields being considered for consolidation, as of September 1, 2005, 1 field never had any production assigned to it; 4 fields have cumulative production less than 100,000 MCF; 3 fields have cumulative production between 100,001 MCF and 1 BCF; 3 fields have cumulative production between 3 BCF and 5 BCF; and 3 fields have cumulative production between 5 BCF and 7 BCF. The total cumulative production from all of the fields is 29.7 BCF. Because of the maturity level of the fields, and to be able to economically recover the remaining recoverable reserves, flexibility is needed to downhole commingle the production to increase the economic viability of completing the wells and also to provide additional incentive to drill development wells.

The minimum lease line spacing of 467' will provide flexibility in locating wells in the field. Elimination of between well spacing is necessary to utilize existing wellbores in completing in various zones. Proration unit designation is not required in a field area that is near final depletion and the acreage assignable to a well is not representative of the area to be drained and acreage is not a factor in the proposed allocation formula.

The Orcones (Frio-Vksbg Cons.) Field should be classified as Associated-Prorated and not subject to 49(b) allocation. An allocation formula for gas wells based on 95% deliverability and 5% per well meets the statutory requirements of a multi-factor allocation formula. The allocation formula should be suspended as there is market for 100% of the produced gas. For oil well(s) that are completed, the allowable allocation should be exempt from limitation (classify the field as "Salvage") and should therefore be designated as whatever the well's capacity to produce.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
2. There was no protest at the call of the hearing.
3. The seven Oil Fields to be consolidated are: the Atlee Field, Atlee (4900) Field, Good Friday (Hilda Sand) Field, Lyle Wilson (Yegua 6670) Field, Orcones (5200) Field, Orcones (5200-Oil) Field and the Orcones (Hockley-Woodley) Field.
 - a. The Atlee Field was the first discovery in 1950.
 - b. There are four producing wells in the subject fields and two non-producing wells and five of the fields have no wells on schedule.
 - c. The majority of the field area development occurred in the 50's and 60's.

- d. The discovery depths of the oil fields as shown on the Proration Schedule extend from 3,562' to 6,687' subsurface depth.
4. The 13 Gas Fields to be consolidated are: the Atlee (Hiawatha) Field, Atlee, NE. (Frio 2450) Field, Atlee, NE. (6500) Field, Good Friday (Atlee) Field, Lyle Wilson (Yegua 7150) Field, Orcones (Hockley-Teddlie) Field, Orcones (Hockley-Parr) Field, Orcones (4900 Frio) Field, Orcones (5200) Field, Orcones (Hiawatha) Field, Orcones (Delores) Field, Orcones (Bazan) Field and Orcones, South (Hockley-Parr) Field.
 - a. The Atlee "gas" Field was first discovered in 1953.
 - b. There are nine producing wells in the subject fields, seven non-producing wells and one water injection well and four of the fields have no wells on schedule.
 - c. The field area development occurred in the 50's and 60's.
 - d. The discovery depths of the oil fields as shown on the Proration Schedule extend from 2,472' to 7,462' subsurface depth.
5. The entire combined correlative interval from 2,470' to 7,590' as shown on the High Definition Induction Log, Digital Acoustic, Gamma Ray Log of the Magnum Producing, LP, Hilda Parr Lease Well No. 101 (API No. 42-131-38752), Andres Garcia Hrs. Survey, A-657, Duval County, Texas should be designated as the Orcones (Frio-Vksbg Cons.) Field.
6. Consolidation of the subject 19 fields will provide for the recovery of reserves that otherwise would go unrecovered.
 - a. The fields to be consolidated are both oil and gas and all the fields are intermingled as these are a series of various stacked Frio and Vicksburg Formation sands that are heterogeneous (porosity, permeability and thickness) and are lenticular from well to well over short distances.
 - b. Many of the sand stringers are not stand alone economic producing sands.
 - c. Completion costs will be reduced and there are numerous potentially productive horizons to be produced, but without the consolidation of the fields and the freedom to produce multiple reservoirs simultaneously, reserves could be left in the ground, un-recovered, as the economics may not justify individual completions.
7. The minimum lease line spacing of 467' will provide flexibility in locating wells in the field.
8. The Orcones (Frio-Vksbg Cons.) Field should be classified as Associated-Prorated and not subject to 49(b) allocation.

- a. An allocation formula for gas wells based on 95% deliverability and 5% per well meets the statutory requirements of a multi-factor allocation formula.
- b. The allocation formula should be suspended as there is market for 100% of the produced gas.
- c. For oil well(s) that are completed, the allowable allocation should be exempt from limitation (classify the field as “Salvage”) and should therefore be designated as whatever the well’s capacity to produce.

CONCLUSIONS OF LAW

- 1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Consideration for consolidation of fields and field rules, a determination of the effectiveness of the rules and appropriate actions is a matter within the Commission jurisdiction.
- 4. Adoption of the proposed consolidation of fields and adoption of the proposed field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed field consolidation and field rules for the Orcones (Frio-Vksbg Cons.) Field.

Respectfully submitted,

Thomas H. Richter, P.E.
Technical Examiner
Office of General Counsel