

September 7, 2005

OIL AND GAS DOCKET NO. 06-0243599

APPLICATION OF CHESAPEAKE OPERATING, INC. TO CONSOLIDATE VARIOUS NACONICHE CREEK FIELDS INTO THE PROPOSED NACONICHE CREEK (ROD.-TP CONS.) FIELD AND ADOPT FIELD RULES FOR THE NACONICHE CREEK (ROD.-TP CONS.) FIELD, NACOGDOCHES COUNTY, TEXAS

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

DATE OF HEARING: August 31, 2005

APPEARANCES:

James M. Clark

Bill G. Spencer

REPRESENTING:

Chesapeake Operating, Inc.

Apache Corporation

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Chesapeake Operating, Inc. for the Commission to consider consolidating the Naconiche Creek (Rodessa, Up), Naconiche Creek (Rodessa, Lo), Naconiche Creek (Pettit) and Naconiche Creek (Travis Peak) Fields into a new field designation to be known as the Naconiche Creek (Rod.-TP Cons.) Field. It is proposed that the following special field rules be adopted:

1. The entire combined correlative interval from the top of the Rodessa at 6,785' to the base of the Travis Peak at 10,264' as shown on the electric log of the Prairie Producing Company, W.D. Curbow Lease Well No. 1 (API No. 42-347-31301), A. Yancy Survey, A-625, Nacogdoches County, Texas, should be designated as the Naconiche Creek (Rod.-TP Cons.) Field.
2. Minimum well spacing of 467'/933' (leaseline/between well);
3. 40 acre proration unit density with 10% tolerance and maximum diagonal of 2100';
4. An allocation formula based on 95% deliverability and 5% acreage. It is further requested that the allocation formula be suspended.

At the hearing, Chesapeake withdrew its request to include the Oak Creek (James Lime) Field from inclusion of the proposed consolidation. The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Naconiche Creek (Travis Peak) was discovered in 1981 at 8,092' subsurface depth. The field is governed by Statewide Rules and designated as Associated. The allocation formula is suspended. There are three operators and 99 wells in the field. The "oil" side of the field was designated in 1986, though there has never been any wells in the field.

The Naconiche Creek (Pettit) was discovered in 1977 at 7,785' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. The allocation formula is suspended. There are two operators and 59 wells in the field.

The Naconiche Creek (Rodessa, Lo.) was discovered in 1977 at 6,819' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. There is one operator in the field with one shut-in well.

The Naconiche Creek (Rodessa, Up.) was discovered in 1978 at 6,765' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. The allocation formula is suspended. There are three operators and 10 wells in the field.

Consolidation of the subject fields into the proposed Naconiche Creek (Rod.-TP Cons.) Field will provide for the recovery of reserves that otherwise would go unrecovered. The subject reservoirs overlies one another. There are numerous wells in the fields that have been granted downhole commingling authority and there has been no adverse effects. The primary production is from the Travis Peak and the Pettit reservoirs. Well completions in the consolidated section will allow for timely completions in those zones where lenticular sands are present which in effect lowers the economic producing limit for all the zones and will increase the ultimate recovery from each member. The entire combined correlative interval from the top of the Rodessa at 6,785' to the base of the Travis Peak at 10,264' as shown on the electric log of the Prairie Producing Company, W.D. Curbow Lease Well No. 1 (API No. 42-347-31301), A. Yancy Survey, A-625, Nacogdoches County, Texas, should be designated as the Naconiche Creek (Rod.-TP Cons.) Field.

Oil/gas well proration units of 40 acres is necessary to provide for the effective and efficient depletion of the reservoir. The Smith Family Trust Well No. 1 is downhole commingled in the Travis Peak and the Pettit reservoirs. Production decline analysis calculates an estimated ultimate recovery of 2 BCF of gas. Volumetric analysis estimates a drainage area of 52 acres.¹

Minimum well spacing of 467'/933' (lease line/between well) will provide uniform flexibility

¹ Average porosity 8.2%, average water saturation 45%, pay thickness 117', recovery factor 81%.

in locating wells in the subject consolidated field. The four fields have been developed on Statewide spacing.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. The proposed two-factor allocation formula for gas wells based on 95% deliverability and 5% acreage satisfies this requirement. Because the allocation formula is currently suspended in the respective fields (except the one field with no producing wells) it is proposed that the allocation formula be suspended in the consolidated field as there is a 100% market for all the produced gas.

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 Naconiche Creek (Travis Peak) was discovered in 1981 at 8,092' subsurface depth. The field is governed by Statewide Rules and designated as Associated. The allocation formula is suspended. There are three operators and 99 wells in the field. The "oil" side of the field was designated in 1986, though there has never been any wells in the field.
4. The Naconiche Creek (Pettit) was discovered in 1977 at 7,785' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. The allocation formula is suspended. There are two operators and 59 wells in the field.
5. The Naconiche Creek (Rodessa, Lo.) was discovered in 1977 at 6,819' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. There is one operator in the field with one shut-in well.
6. The Naconiche Creek (Rodessa, Up.) was discovered in 1978 at 6,785' subsurface depth. The field is governed by Statewide Rules and designated as Non-Associated. The allocation formula is suspended. There are three operators and 10 wells in the field.
7. The entire combined correlative interval from the top of the Rodessa at 6,785' to the base of the Travis Peak at 10,264' as shown on the electric log of the Prairie Producing Company, W.D. Curbow Lease Well No. 1 (API No. 42-347-31301), A. Yancy Survey, A-625, Nacogdoches County, Texas, should be designated as the Naconiche Creek (Rod.-TP Cons.) Field.
8. Consolidation of the subject fields into the proposed Naconiche Creek (Rod.-TP Cons.) Field will provide for the recovery of reserves that otherwise would go unrecovered.
 - a. The subject reservoirs overlie one another.

- b. There are numerous wells in the fields that have been granted downhole commingling authority and there has been no adverse effects.
 - c. Well completions in the consolidated section will allow for timely completions in those zones where lenticular sands are present which in effect lowers the economic producing limit for all the zones and will increase the ultimate recovery from each member.
- 9. Minimum well spacing of 467'/933' (lease line/between well) will provide uniform flexibility in locating wells in the subject consolidated field. The four fields have been developed on Statewide spacing.
- 10. A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes.
 - a. The proposed two-factor allocation formula for gas wells based on 95% deliverability and 5% acreage satisfies this requirement.
 - b. Because the allocation formula is currently suspended in the respective fields (except the one field with no producing wells) it is proposed that the allocation formula be suspended in the consolidated field as there is a 100% market for all the produced gas.

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 Naconiche Creek (Rod.-TP Cons.) Field.

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