APPLICATION OF ANADARKO PETROLEUM CORPORATION TO AMEND THE FIELD RULES FOR THE BALD PRAIRIE (C.V. CONSOLIDATED) FIELD, LEON, LIMESTONE AND ROBERTSON COUNTIES, TEXAS

**Heard by:** Andres J. Trevino, P.E. on February 2, 2011

Appearances: Representing:

Ana Maria Marsland-Griffith

David Christian

Anadarko Petroleum Corporation

Brian Sullivan P.E. Devon Energy Production Company, LP

### **EXAMINER'S REPORT AND RECOMMENDATION**

## STATEMENT OF THE CASE

This is the unprotested application of Anadarko Petroleum Corporation to amend the field rules last amended in Order No. 05-0254454, effective April 8, 2008 for the Bald Prairie (C.V. Consolidated) Field that currently provide for the following:

- 1. Designation of the field as the correlative interval from 10,264 feet to 13,142 feet as shown on the Induction-Gamma Ray log of the Wesseley Energy J.H. Mitchell I, Well No. 2.
- 2. Minimum well spacing of 467'/600';
- 3. 640 acre gas proration units plus 10% tolerance and optional 20 acre gas proration units, no maximum diagonal, Forms P-15 or plats; and
- 4. An allocation formula based on 95% deliverability and 5% per well with AOF Status.

Anadarko Petroleum Corporation proposes that Field Rule No. 2 be amended to decrease lease line spacing from 467 feet to 330 feet, eliminate between well spacing for all wells in the field, add take point provisions, off lease penetration, a horizontal box rule, Field Rule No. 4 be added to add a stacked lateral rule.

The examiner recommends that field rules for the Bald Prairie (C.V. Consolidated) Field be amended as proposed by Anadarko Petroleum Corporation.

## **DISCUSSION OF THE EVIDENCE**

The Bald Prairie (C.V. Consolidated) Field was formed with the consolidation of seven Bald Prairie Cotton Valley and Bossier fields in February 2001. The field is found at approximately 10,264' subsurface depth. Special field rules were first adopted in 2001 and were last amended in February 2008. The gas field is designated as a non-associated field with the allocation formula suspended. There are 15 operators and 704 gas wells in the field. The field has produced 634.3 BCF of gas and 223.5 MBC.

Anadarko is amending the existing field rules in the Bald Prairie (C.V. Consolidated) Field to adopt horizontal rules to allow efficient and orderly development of the Bald Prairie (C.V. Consolidated) Field with horizontal wells. The proposed horizontal rules are similar to horizontal rules found in other Cotton Valley fields in the area. Anadarko requests to adopt 330' lease line spacing and 0' between well spacing be adopted to be consistent with the spacing rules of other fields undergoing horizontal development. The 0' between well spacing will allow the drilling of horizontal wells in between the numerous existing vertical wells.

Anadarko requests several standard horizontal well provisions commonly adopted when horizontal well development is anticipated. The provisions include take point language to allow flexible drilling of the laterals and off-lease penetration to allow the additional recovery of reserves by allowing the lateral to be horizontal at a legal lease line location. An additional stage frac will be placed on each lateral if off lease penetration is allowed.

The gross thickness of the Cotton Valley in this field is over 2,870 feet. The interval has several potential zones that may support horizontal drilling. The sand pay zones are lenticular, discontinuous and varies both laterally and vertically. Amending the rule as proposed will allow stacked lateral drainholes to be simultaneously drilled from multiple surface locations. The stacked lateral rules also require that each point of a stacked lateral horizontal drainhole be no more than 300 feet in a horizontal direction from any point along any other horizontal drainhole of the same stacked lateral well.

Anadarko proposes a 50 foot "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception. Anadarko requests that the allocation formula for the field remain suspended.

#### FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators of wells in the Bald Prairie (C.V. Consolidated) Field at least ten days prior to the date of hearing.
- 2. The Bald Prairie (C.V. Consolidated) Field was formed with the consolidation of seven Bald Prairie Cotton Valley and Bossier fields in February 2001. The

field is found at approximately 10,264' subsurface depth.

- 3. There are 15 operators and 704 gas wells in the field. Cumulative production from the field is about 634.3 BCF of gas and 223.5 MBC.
- 4. The Bald Prairie (C.V. Consolidated) Field is a non-associated gas field. Rules governing the gas wells provide for 467'-600' well spacing, 640/optional 20 acre density and 95% deliverability and 5% per well allocation. The allocation formula is suspended.
- 5. Adopting field rules that provide for 330 feet lease line spacing and eliminating between well spacing, similar to other Cotton Valley fields, will allow horizontal wells be drilled between numerous existing vertical wells.
- 6. Given that the gross thickness of the Cotton Valley in this field is almost 2,870 feet, multiple stacked laterals may be required to fully develop the reservoir.
- 7. The proposed 50 foot "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.
- 8. Field rules that provide for 330 feet lease line spacing, eliminate between well spacing for all wells in the field, take point language, stacked laterals and a "box rule" for horizontal wells will provide consistency with other Cotton Valley fields under going horizontal drilling.
- 9. Allowing off-lease penetration will allow an additional stage frac to be placed on each lateral causing the recovery of additional reserves that would otherwise be left in the ground.
- 10. Continued suspension of the allocation formula is appropriate, as there is a 100% market for all the gas produced.

### **CONCLUSIONS OF LAW**

- 1. Proper notice of this hearing was given to all persons legally entitled to notice.
- 2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
- 3. Amending field rules as proposed by Anadarko Petroleum Corporation is necessary to prevent waste and protect correlative rights.

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that field rules be amended for the Bald Prairie (C.V. Consolidated) Field to reduce lease line spacing to 330 feet, eliminate between well spacing for all wells, add take points, allow off lease penetration, add stacked lateral language and a 50 foot "box" rule.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Hearings Examiner