



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 08-0274237

THE APPLICATION OF ANADARKO PETROLEUM CORPORATION TO CONSOLIDATE VARIOUS BONE SPRINGS AND WOLFCAMP FIELDS INTO THE PHANTOM (WOLFCAMP) FIELD AND TO AMEND FIELD RULES FOR THE PHANTOM (WOLFCAMP) FIELD, LOVING, REEVES, WARD AND WINKLER COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner
James M. Doherty - Legal Examiner

DATE OF HEARING: February 2, 2012

APPEARANCES:

REPRESENTING:

APPLICANT:

Ana Maria Marsland-Griffith
David Christian
Charles Clark

Anadarko Petroleum Corporation

OBSERVERS:

Michael McElroy
Terry A. Cook

Energen Resources Corporation

John Soule

Occidental Permian Ltd.
Oxy USA Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Anadarko Petroleum Corporation ("Anadarko") requests that various Bone Springs and Wolfcamp Fields be consolidated into the Phantom (Wolfcamp) Field (ID No. 71052 900). The fields proposed for consolidation are as follows:

FIELD NAME

FIELD NUMBER

Phantom Ranch (Wolfcamp)
Phantom, W. (Bone Spring)

71080 475
71058 200

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
Quito (Bone Spring)	73926 400
Quito (Wolfcamp)	73926 700
Soda Lake (Bone Springs)	84477 200
Vermejo, E. (Wolfcamp)	93586 600
War-Wink, S. (Wolfcamp)	95129 600
Wolf (Wolfcamp)	98360 500

Anadarko also requests that the Field Rules for the Phantom (Wolfcamp) Field be amended to provide for a new designated interval, apply to oil and gas wells and an allocation formula based on 95% deliverability and 5% per well. In addition, Anadarko proposed to transfer eight Energen Resources Corporation's wells from the Two Georges (Bone Spring) Field into the Phantom (Wolfcamp) Field and requests that the Phantom (Wolfcamp) Field be classified as associated-prorated.

At the hearing, Anadarko withdrew its proposal to consolidate the War-wink, S. (Wolfcamp) Field into the Phantom (Wolfcamp) Field, as the subject field was over three miles east and contained only vertical wells. To avoid a protest, Anadarko also withdrew its proposal to transfer eight Energen Resources Corporation's wells from the Two Georges (Bone Spring) Field into the Phantom (Wolfcamp) Field.

The application was unprotested and the examiners recommend approval of Anadarko's request for field consolidation and to amend Field Rules for the Phantom (Wolfcamp) Field.

DISCUSSION OF THE EVIDENCE

The subject Bone Springs and Wolfcamp Fields to be consolidated were discovered beginning in March 1978. All of the fields have less than 10 producing wells carried on the proration schedules and several of the fields are classified as associated. All of the fields operate under Statewide Rules and are contained within the Phantom (Wolfcamp) Field area.

The Phantom (Wolfcamp) Field was discovered in June 1983 at an average depth of 11,000 feet. There are 65 producing oil wells and 10 operators carried on the proration schedule. The field operates under 467'-0' well spacing with special rules for horizontal drainhole wells and 320 acre units with optional 40 acre density. Cumulative production from the field through December 2011 is 9.4 MMBO and 15.5 BCFG.

Anadarko proposes that the correlative interval from 10,455 feet to 11,326 feet as shown on the log of the Amtex Energy, Inc. - Lee 128 Lease, Well No. 1 (API No. 42-475-30939), Section 128, Block 34, H&TC RR Co. Survey, A-640, Ward County, Texas, be considered a single field known as the Phantom (Wolfcamp) Field. This interval

includes the Lower Bone Spring 2, Bone Spring 3 and Upper Wolfcamp formations. The three intervals have a pressure depletion drive mechanism and are in the primary stage of depletion. In addition, the reservoir and fluid properties in all three zones are similar.

Anadarko submitted a mathematically recombined heptanes+ wellstream analysis for one well in the Phantom (Wolfcamp) Field and a table of nine wells that Anadarko believed would qualify for a gas well classification. The average producing gas-oil ratio on initial test was about 5,000 to 6,000 cubic feet per barrel. The mol% heptanes+ in the sample analyzed was 8.3%, which is less than the 12.5% required to be administratively classified as a gas well. The mol% of methane was 59.9%.

Anadarko requests that the Phantom (Wolfcamp) Field be classified as associated-prorated. The correlative interval is lenticular and heterogeneous and wells may encounter individual gas or oil bearing zones. There are wells in the field that would qualify for a gas well classification and there are productive gas wells contained within the fields to be consolidated. Anadarko also requests allocation based on 95% deliverability and 5% per well and that the allocation formula be suspended, as there is a 100% market demand for all of the gas produced from the field.

FINDINGS OF FACT

1. Notice of this hearing was sent to all persons legally entitled to notice at least ten days prior to the date of hearing.
2. The subject Bone Springs and Wolfcamp Fields to be consolidated were discovered beginning in March 1978.
 - a. All of the fields have less than 10 producing wells carried on the proration schedules and several of the fields are classified as associated.
 - b. All of the fields operate under Statewide Rules and are contained within the Phantom (Wolfcamp) Field area.
3. The Phantom (Wolfcamp) Field was discovered in June 1983 at an average depth of 11,000 feet.
 - a. There are 65 producing oil wells and 10 operators carried on the proration schedule.
 - b. The field operates under 467'-0' well spacing with special rules for horizontal drainhole wells and 320 acre units with optional 40 acre density.

4. The Phantom (Wolfcamp) Field should be designated as the correlative interval from 10,455 feet to 11,326 feet as shown on the log of the Amtex Energy, Inc. - Lee 128 Lease, Well No. 1 (API No. 42-475-30939).
 - a. This interval includes the Lower Bone Spring 2, Bone Spring 3 and Upper Wolfcamp formations.
 - b. The three intervals have a pressure depletion drive mechanism and are in the primary stage of depletion.
 - c. The reservoir and fluid properties in all three zones are similar.
5. Classifying the Phantom (Wolfcamp) Field as associated-prorated is appropriate.
 - a. The correlative interval is lenticular and heterogeneous and wells may encounter individual gas or oil bearing zones.
 - b. The mol% heptanes+ in the sample analyzed was 8.3%, which is less than the 12.5% required to be administratively classified as a gas well.
 - c. There are wells in the field that would qualify for a gas well classification based on the mathematically recombined heptanes+ wellstream analysis.
 - d. There are productive gas wells contained within the fields to be consolidated
6. A two-factor gas allocation based on 95% deliverability and 5% per well is appropriate for the Phantom (Wolfcamp) Field and will satisfy State Statutes.
7. Suspension of the allocation formula in the Phantom (Wolfcamp) Field is appropriate, as there is a 100% market demand for all of the gas produced from the field.

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.

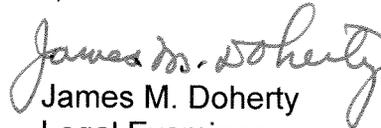
3. Consolidation of the subject Bone Springs and Wolfcamp Fields is necessary to prevent waste and protect correlative rights.
4. Amending the Field Rules for the Phantom (Wolfcamp) Field will prevent waste, protect correlative rights, and promote development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the field consolidation and amend the Field Rules for the Phantom (Wolfcamp) Field, as requested by Anadarko Petroleum Corporation.

Respectfully submitted,


Richard D. Atkins, P.E.
Technical Examiner


James M. Doherty
Legal Examiner