OIL AND GAS DOCKET NO. 01-0253019

THE APPLICATION OF ENCANA OIL & GAS (USA)TO EXPAND THE TIGHT GAS INTERVAL PREVIOUSLY APPROVED IN DOCKET NO. 20-75,144 FOR THE COTTON VALLEY SAND, BOSSIER AND COTTON VALLEY LIME FORMATIONS VARIOUS COUNTIES IN DISTRICTS 1, 3, 5 AND 6, TEXAS

Heard by: Andres J. Trevino, P.E. Technical Examiner

Hearing Date: September 29, 2007

Appearances:	**Representing:**
Rick Johnston	EnCana Oil & Gas (USA), Inc.
Bill Spencer	Chesapeake Operating, Inc.
Tim George	Leor Energy
Robert E. Dreyling	Gastar Exploration Texas, L.P.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

EnCana Oil & Gas (USA), Inc. requests an expansion of the existing tight gas interval for the tight gas area approved in the Commission's Docket No. 20-75,144, issued in July 7, 1980, This designation includes the Cotton Valley Sand, Bossier Shale and Cotton Valley Lime Formations in 48 Counties in Commission Districts 1,3,5 and 6. This application is not seeking to add any formations not previously approved in the original Docket or expand the original area designated in the Docket No. 20-75,144 but only seeks to define the base of the Cotton Valley Group. Numerous observers appeared at the hearing but did not participate or make statements at the hearing, however were in support of the application.

This application was unprotested and the examiner recommends approval.

DISCUSSION OF EVIDENCE

The Cotton Valley group which consists of the Cotton Valley Sands, the Bossier Shale (includes Bossier Sands within the Bossier Shale) and the Cotton Valley Lime have been designated as tight gas formations in 48 counties at certain depths by the Commission in Docket No. 20-75,144 issued on July 7, 1980. The language in the Commission's Docket to the Federal Energy Regulatory Commission (FERC) describes the depths at which the Cotton Valley Group members can be found as :

> "The average depth at which the Cotton Valley Sand can be encountered is approximately 7,000' to the north, 8,000' to the east, between 10,000' and 11,000' to the south, and 5,000' to the west. Following the same pattern, the top of the Bossier Shale is located at 7,700' to the north, 10,720' to the east, 12,600' to the south and 5,340' to the west. Formation thickness of the Bossier is relatively thin, ranging from 110' to 580'; within this formation, laminated sand bodies are present which range from 0' to 90'. The Cotton Valley Lime lies below the thin Bossier Shale, at 8,000' to the north, 11,400' to the east, 13,200' to the south, and 5,500' to the west, with its thickness extending from 6,480' to 13,170'."

This description primarily addresses the depths of the tops of the various members of the Cotton Valley Group. This description was further defined in the FERC's Docket No RM79-76, Order 105, issued October 24, 1980, which was issued as a result of the Commission's tight gas Order. The FERC's description similarly describes the Cotton Valley Lime as encountered at a depth of 13,200' to the south. The Commission's Approved Tight Gas Formation Listing, lists the Cotton Valley Lime as existing from 5,500' to 13,200' deep. This description does not allow the administrative approval of ST-1's of wells if perforations are found below 13,200' unless a correlative log is filed. If the designated tight gas interval is expanded to state that the Cotton Valley Lime exists below 13,200' the need to file a well log is not required. EnCana and other operators are reluctant to file well logs in competitive and sensitive exploration areas.

EnCana submitted evidence from the original Cotton Valley tight gas docket which supports that the language should be modified to accurately describe the top and base of the Cotton Valley Group. This evidence includes nine in-situ permeability data points located below 13,200' (original Exhibit 22), a cross section indicating the base of the Cotton Valley Group lies well below 14,000' (original Exhibit 9) and a structure map of the top of the Cotton Valley Group as existing in the designated area as deep as 13,000' (original Exhibit 6).

Evidence submitted by EnCana as a result of the additional drilling which has taken place in the last 27 years since the original tight gas area designation verifies that the original docket language needs to be clarified. This evidence includes G-1 completion reports with wells that have perforations in Cotton Valley Lime over 17,500' deep and new

cross sections placing the estimated base of the Cotton Valley Lime at 20,000'. Current drilling exploration is targeting the Bossier Sands within the Bossier Shale. The current high energy prices and advances in drilling and completion technology has further defined the base of the Cotton Valley Group.

The proposed tight gas designation expansion will not add any new formations or add any new counties to the approved tight gas designation.

FINDINGS OF FACT

1. Notice of this hearing was given to all affected persons at least ten days prior to the date of hearing. No protests were received.

2. The tight gas area approved in Docket No. 20-75,144, issued in July 7, 1980, includes the Cotton Valley Sand, Bossier Shale and Cotton Valley Lime Formations in 48 Counties in Commission Districts 1,3,5 and 6.

3. The Commission's Approved Tight Gas Formation Listing, lists the Cotton Valley Lime as existing from 5,500' to 13,200' deep.

4. Evidence from the original Cotton Valley tight gas docket which supports that the language should be modified to accurately describe the top and base of the Cotton Valley Group.

    a. Nine in-situ permeability data points of various Cotton Valley Group Members are located below 13,200' (original Exhibit 22).

    b. A cross section indicating the base of the Cotton Valley Group lies well below 14,000' (original Exhibit 9)

    c. The structure map of the top of the Cotton Valley Group indicates the top as existing in the designated area as deep as 13,000' (original Exhibit 6).

5. Evidence submitted by EnCana as a result of the additional drilling which has taken place in the last 27 years since the original tight gas area designation verifies that the docket language needs to be clarified.

    a. Numerous G-1 completion reports of wells in Robertson County have perforations in the Cotton Valley Lime as deep as 17,500'.

    b. Updated cross sections place the estimated base of the Cotton Valley Lime at 20,000'.

6. The Commission's Approved Tight Gas Formation Listing for the Cotton Valley Lime as existing from 5,500' to 13,200' deep unnecessarily limits the administrative approval of Cotton Valley tight gas wells below 13,200'.

7. The proposed tight gas designation expansion will not add any new formations or add any new counties to the approved tight gas designation.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.

2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.

3. The Cotton Valley Sand, Bossier and Cotton Valley Lime Formations in 48 Counties in Commission Districts 1,3,5 and 6 as defined in the Final Order, meets the requirements of 16 TEX. ADMIN. CODES 3.101(f) and qualifies for certification as a designated tight formation.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Commission approve an expansion of the existing tight gas interval for the tight gas area approved in Docket No. 20-75,144 which includes the Cotton Valley Sand, Bossier and Cotton Valley Lime Formations in 48 Counties in Commission Districts 1,3,5 and 6.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner