



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 09-0261654

THE APPLICATION OF EL PASO CIMAREX ENERGY CO. OF COLORADO TO CONSIDER AN EXCEPTION TO STATEWIDE RULE 10 FOR THE WALNUT BEND UNIT 1, WELL NOS. 52, 124 AND 125 IN THE WALNUT BEND (WINGER) AND WALNUT BEND (CONSOLIDATED) FIELDS, COOKE COUNTY, TEXAS

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

Hearing Date: June 23, 2009

Appearances:

Representing:

Richard P. Marshall
Jack Keeling, P.E.

Cimarex Energy Co. of Colorado

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Cimarex Energy Co. of Colorado requests an exception to Statewide Rule 10 to downhole commingle production from the Walnut Bend (Winger) and Walnut Bend (Consolidated) Fields in its Walnut Bend Unit 1, Well Nos. 52, 124 and 125. A hearing was required because the royalty and working interests in the two fields are not identical.

All royalty and working interest owners (over 1,800) were notified of this hearing and one protest was entered initially. The protestant Continental Shale Corporation later decided not to pursue the protest after receiving additional information about the application. The examiner recommends approval of the exception and proposed allocation method.

DISCUSSION OF EVIDENCE

The Walnut Bend (Winger) Field was discovered in 1943. The Walnut Bend (Consolidated) Field was discovered in 1989. Cimarex wishes to commingle three wells in two very mature waterflood units initially established in the 1960's. The P sand lies within the Walnut Bend (Consolidated) Field interval and lies above the Winger sand. The P Sand is a higher productive sand that is believed to be unswept by the existing waterflood wells. Cimarex believes the area is a more permeable channel sand that has a hydraulic barrier between the channel sand and the main over bank area of the other unit wells.

The Walnut Bend Unit 1, Well No. 52 was completed in the Walnut Bend (Winger) Field in 1943 with perforations between 5,560 feet and 5,607 feet. Cimarex will perforate the P Sands between 4,920 feet to 4,938 feet. The combined production from the well is expected to be 37 BO and 824 BW.

The Walnut Bend Unit 1, Well No. 124 was completed in the Walnut Bend (Winger) Field in 1972 with perforations between 5,511 feet and 5,566 feet. Cimarex will perforate the P Sands between 4,904 feet to 4,912 feet. The combined production from the well is expected to be 45 BO and 442 BW.

The Walnut Bend Unit 1, Well No. 125 was completed in the Walnut Bend (Winger) Field in 2007 with perforations between 5,490 feet and 5,502 feet. Cimarex will perforate the P Sands between 4,892 feet to 4,898 feet. The combined production from the well is expected to be 87 BO and 355 BW.

Commingling the two fields will maximize recovery from the wells. Currently it is uneconomic to drill a new well to recover existing reserves in the P sands. It is also impractical to dually complete the wells into the two zones at the same time. The wells have 5½ inch casing that would limit tubing size to 2 inches and 200 barrels a day of fluids. The wells produce in excess of 400 to 900 barrels of water and oil. Without the commingling authority plugs will be set over the Winger zone and will recomplate into the P-Sand. When the P-Sand is depleted after about 20 years of production, the P-Sand perms will be plugged off and the plug over the Winger will be removed and production will be re-established.

Cimarex's proposes to allocation production of the two zones by comparing adjacent Winger production with production from the three wells completed in the Winger and P-Sand (with in the Consolidated interval). Allocation of oil production from the Walnut Bend Unit 1, Well Nos. 52, 124 and 125 shall be based on the average of the annual W-10 production tests of adjacent nine producing oil wells completed in the Walnut Bend (Winger) Field to establish a Winger baseline rate. Any oil production above each well's Winger baseline rate will be attributed to the Walnut Bend (Consolidated) Field. The commingled production should be assigned to the Walnut Bend (Consolidated) Field.

Current bottom hole pressures are similar in both fields so cross flow should not be a problem. Water analysis confirms the produced water is largely injected water from the waterflood and is nearly identical in composition. There should not be any fluid incompatibility issues.

There are numerous non-identical interests owners in the two units. Notice of this hearing was sent to all offsetting operators and all royalty interest owners. Notice was also published in the *Gainesville Daily Register*, a newspaper of general circulation in Cooke County, on May 10, 2009.

FINDINGS OF FACT

1. Notice of this hearing was given to all affected persons at least ten days prior to the date of hearing. Notice was also published in the *Gainesville Daily Register*, a newspaper of general circulation in Cooke County, on May 10, 2009. One protest was received initially. The protestant Continental Shale Corporation later decided not to pursue the protest after receiving additional information about the application.
2. The Walnut Bend (Winger) Field was discovered in 1943. The Walnut Bend (Consolidated) Field was discovered in 1989. The three wells are in two very mature waterflood units initially established in the 1960's.
3. Cimarex Energy Co. of Colorado completed the Walnut Bend Unit 1, Well Nos. 52, 124 and 125 in the Walnut Bend (Winger) Field at an average depth of 5,500 feet. The wells will be recompleted into the P Sand within the Walnut Bend (Consolidated) Field interval at a depth averaging 4,900 feet.
4. The P-Sand found in Wells Nos. 52, 124 and 125 is located within the Walnut Bend (Consolidated) Field's interval. The P-Sand is a more productive sand believed to be unswept by the existing waterflood.
5. It is impractical to dually complete the wells into the two zones at the same time. The wells have 5½ inch casing that would limit tubing size to 2 inches and 200 barrels a day of fluids. The wells produce in excess of 400 to 900 barrels of water and oil.
6. Currently it is uneconomic to drill a new well to recover existing reserves in the P sands
7. Commingled production is expected to be as follows:
 - a. The Walnut Bend Unit 1, Well No. 52 commingled production expected to be 37 BO and 824 BW.
 - b. The Walnut Bend Unit 1, Well No. 124 commingled production expected to be 45 BO and 442 BW.
 - c. The Walnut Bend Unit 1, Well No. 125 commingled production expected to be 87 BO and 355 BW.
8. There are non-identical royalty interest owners in the Walnut Bend (Winger) and Walnut Bend (Consolidated) Fields.
9. The wellbores are permitted regular locations in both fields.
10. Cimarex's proposed method of allocation production to the two zones is reasonable.

- a. Allocation of oil production from the Walnut Bend Unit 1, Well Nos. 52, 124 and 125 shall be based on the average of the annual W-10 production tests of adjacent nine producing oil wells completed in the Walnut Bend (Winger) Field to establish a Winger baseline rate.
 - b. Any oil production above each well's Winger baseline rate will be attributed to the Walnut Bend (Consolidated) Field.
11. The commingled production should be assigned to the Walnut Bend (Consolidated) Field.
 12. Crossflow should not occur and fluids should be compatible.

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. Approval of the requested Rule 10 exception is necessary to prevent waste and will not harm correlative rights of mineral owners in the wells.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that a Rule 10 exception be approved for the Walnut Bend Unit 1, Well Nos. 52, 124 and 125. in the Walnut Bend (Winger) and Walnut Bend (Consolidated) Fields.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner