



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7C-0289896

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THE APPLICATION OF XTO ENERGY, INC. TO AMEND FIELD RULES FOR THE WILSHIRE (PENNSYLVANIAN) FIELD, UPTON COUNTY, TEXAS

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HEARD BY: Paul Dubois – Technical Examiner  
Terry Johnson – Hearings Examiner

HEARING DATE: July 25, 2014

APPEARANCES: REPRESENTING:

**APPLICANT:**

David Gross  
Dale Miller

XTO Energy, Inc.

### EXAMINERS' REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

XTO Energy, Inc. ("XTO") requests that field rules for the Wilshire (Pennsylvanian) Field in Upton County, Texas, be amended. XTO seeks to harmonize the field rules with the spacing and density provisions of the overlying Spraberry (Trend Area) Field to facilitate the co-development of both fields in the area. The application is not protested and the examiners recommend that the field rules be amended for the Wilshire (Pennsylvanian) Field, as proposed by XTO.

#### DISCUSSION OF EVIDENCE

The Wilshire (Pennsylvanian) Field in Upton County was discovered in 1951 at a depth of 9,810 feet. The field has been developed with about 30 wells, many of which are no longer producing and have been plugged and abandoned. The July 2014, proration schedules carry two oil wells and five gas wells. The Wilshire (Pennsylvanian) Field currently operates under field rules established on October 27, 1969 (Docket No. 7C-59,620) and amended on January 25, 1971 (Docket No. 7C-60,491.) The current rules provide for 80 acre drilling and proration units with 660 feet lease line spacing and 1,320

feet between well spacing. Oil wells in the field may produce at a maximum efficient rate allowable of 222 bbl per day, but the current top potential in the field is 2 bbl per day.

Since 1951 the field has produced more than 1.4 million bbl hydrocarbon liquids (oil and condensate) and 37 billion cubic feet of gas. In 2013, the field produced 2,337 bbl hydrocarbon liquids and 333 MCF gas. On initial potential testing, oil wells in the field produced from 1 to 309 bbl oil per day; gas wells produced up to 1,400 MCF per day absolute open flow.

On April 10, 2012, the Commission approved blanket exceptions to Statewide Rule 10 to allow for the downhole commingling of hydrocarbons in wells completed in the Spraberry (Trend Area) Field and a number of other fields, including the Wilshire (Pennsylvanian) Field (Docket No. 7C-0274132). Downhole commingling provides operators with certain efficiencies of production; one string of tubulars can be used to produce multiple fields. To optimize these efficiencies, it is helpful if (1) there are no gaps in the field definitions within the stratigraphic column, and (2) the drilling spacing and density provisions are identical. To meet these ends, XTO proposes to amend the field rules for the Wilshire (Pennsylvanian) Field to match those of the overlying Spraberry (Trend Area) Field as follows:

1. Establish a correlative interval for the field to include that entire interval from 9,660 feet to 10,774 feet on the Halliburton Array Compensated True Resistivity Log of the XTO Energy Inc., McElroy Ranch B, Well No. 1114, API No. 42-461-38855 (formerly the McElroy Ranch Co. 111 No. 41) located 860 feet south and 660 feet west of Section 111, Block D, CCSD & RGNG RR Co. Survey, Upton County. The interval is intended to include reservoirs in the following formations: Strawn, Atoka/Bend, Atoka Lime, Mississippian Lime, Barnett and Kinderhook.
2. Amend the minimum spacing of 467 feet from lease or property lines and zero (0) feet minimum spacing between wells located on the same lease or pooled unit.
3. Allow operators to file Form P-15 with a plat of the entire lease or pooled unit along with a schedule showing the number of acres assigned to each well on a lease or pooled unit with no need to file individual proration unit plats.
4. Provide for optional 40-acre drilling and proration units.

The Spraberry (Trend Area) Field includes all formations from the top of the Clear Fork Formation down to the top of the Strawn Formation. By establishing the proposed correlative interval, the Wilshire (Pennsylvanian) Field will include all formations from the top of the Strawn down through the base of the Kinderhook.

XTO analyzed the reservoir and drainage characteristics of the Wilshire (Pennsylvanian) Field. XTO estimates the following reservoir parameters: 6 percent porosity, 10.0 millidarcy permeability, 33 percent water saturation, and 30 feet net effective oil pay thickness. The original reservoir pressure was 4,225 psig and an initial temperature of 157°F. The reservoir operates on a solution gas drive and is in the late primary stage of production. Evaluating wells on seven one-well leases, XTO estimates that per-well drainage areas vary from 1 to 126 acres. XTO concludes based on this study that 80 acre base units with 40 acre optional units are appropriate for continued field development.

Existing field rule no. 4, regarding surface casing, is obsolete and will be removed from the field rules. Existing field rules no. 3 (oil well allowables) and no. 5 (gas-oil ratio) will remain.

#### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Wilshire (Pennsylvanian) Field was discovered in 1951 at a depth of 9,810 feet.
3. The Wilshire (Pennsylvanian) Field currently operates under field rules established on October 27, 1969 (Docket No. 7C-59,620) and amended on January 25, 1971 (Docket No. 7C-60,491.)
4. The field has produced more than 1.4 million bbl hydrocarbon liquids (oil and condensate) and 37 billion cubic feet of gas.
5. Downhole commingling provides operators with certain efficiencies of production; one string of tubulars can be used to produce multiple fields.
6. On April 10, 2012, the Commission approved blanket exceptions to Statewide Rule 10 to allow for the downhole commingling of hydrocarbons in wells completed in the Spraberry (Trend Area) Field and a number of other fields, including the Wilshire (Pennsylvanian) Field (Docket No. 7C-0274132).
7. The proposed correlative interval will include all formations from the top of the Strawn down through the base of the Kinderhook.
8. Drainage areas vary from 1 to 126 acres.
9. 80 acre base units with 40 acre optional units are appropriate for continued field development.

**CONCLUSIONS OF LAW**

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051.
2. All notice requirements have been satisfied. 16 Tex. Admin Code § 1.45.
3. Adopting Field Rules for the Wilshire (Pennsylvanian) Field is necessary to prevent waste, protect correlative rights and promote the orderly development of the field.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission amend the Field Rules for the Wilshire (Pennsylvanian) Field, as requested by XTO Energy, Inc.

Respectfully submitted,



Paul Dubois  
Technical Examiner



Terry Johnson  
Hearings Examiner