

THE APPLICATION OF WASHITA OIL & GAS L.L.C. FOR PERMANENT FIELD RULES FOR THE DARROUZETT (ST. LOUIS) FIELD, LIPSCOMB COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: July 7, 2005

Hearing held: August 9, 2006

Appearances

Ana Maria Marsland-Griffith
William C. Towner

Representing
Washita Oil & Gas L.L.C.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Washita Oil & Gas, L.L.C. ("Washita") proposed the following permanent rules for the Darrouzett (St. Louis) Field:

1. 1320'-2640' well spacing; and
2. 640 acre gas proration units with 10% tolerance.

The examiner recommended a designated interval and an allocation formula be adopted. Washita suggested the correlative interval from 10,015' to 10,650' as shown on the log of the Washita Terrel Lease No. 1-1126 and allocation based on deliverability. The examiner also recommended that the rules be adopted on a temporary basis to be reviewed in 18 months. Washita had no objection.

DISCUSSION OF THE EVIDENCE

The Darrouzett (St. Louis) Field was discovered in 1986 at a depth of 9900'. The discovery well was the Reading and Bates Miller Lease Well No. 1-159. It was tested at a maximum rate of 700 MCFD and produced only 26 MMCF before being abandoned. There are no wells completed in the field now.

Washita has completed two wells in the overlying Darrouzett (Morrow Lower) Field. When it drilled the Meier Lease Well No. 2-1162 in January, 2005, it also tested the St. Louis. This well was perforated from 10,226' to 10,248' in the St. Louis and tested at a maximum rate of 1.5 MMCFD. Washita has just completed the second well in the lower Morrow, the Terrel Lease Well No. 1-1126. This well was also drilled deep enough to test the St. Louis. It was perforated from 10,102' to 10,594' in the St. Louis and tested at top rates of 2.1-2.3 MMCFD.

The structure on the top of the St. Louis Formation mimics that of the overlying lower Morrow. These Darrouzett fields are on the east side of an up-to-the-east fault with over 200' of throw. There are also smaller east-west faults, one of which separates Washita's wells from the discovery wells of both the Darrouzett (Morrow Lower) and (St. Louis) Fields. When the Meier No. 2-1162 was completed in the lower Morrow, it encountered virgin pressure at around 3500 psi, while the reservoir pressure in the discovery well of the lower Morrow had declined to about 200 psi.

The St. Louis porosity is 6%, water saturation is 30%, and the reservoir pressure is 4100 psi. Washita estimated the reservoir area may be as large as 3300 acres with recoverable gas in place of 4.6 BCF. Because the St. Louis appears to be present across much of the same area as the lower Morrow, Washita wants to develop the two reservoirs with the same wellbores. It is requesting the same rules for the St. Louis as for the Darrouzett (Morrow Lower) Field. The most common density rule for the St. Louis in both Texas and Oklahoma is 640 acres.

The St. Louis occurs between 10,015' to 10,650' as shown on the log of the Terrel Lease No. 1-1126. Well spacing of 1320'-2640' will provide extra flexibility for drilling the additional wells necessary to drain this field. The current allocation formula is based on deliverability.

FINDINGS OF FACT

1. Notice of this hearing was issued on July 26, 2006.
2. The Darrouzett (Morrow, Lower) Field was discovered in 1986 at a depth of 9900'.
3. The discovery well produced less than 27 MMCF before being abandoned and there are no wells carried in the field now.
4. Wichita Oil & Gas, L.L.C. has completed two wells in the overlying Darrouzett (Morrow Lower) Field and the structure of the St. Louis Formation mimics that of the overlying lower Morrow.
5. Temporary field rules adopting 640 acre proration units are appropriate for the Darrouzett (St. Louis) Field.
 - a. The Meier Lease Well No. 2-1162 was tested at a maximum rate of 1.5 MMCFD and the Terrel Lease Well No. 1-1126 was tested at a maximum rate of 2.1-2.3 MMCFD.
 - b. The two new wells are most likely fault separated from the discovery well.
 - c. This is the same density as recommended for the Darrouzett (Morrow Lower) Field and the two fields will be developed with the same wells.
 - d. 640 acres is the most common density rule for St. Louis fields in both Texas and Oklahoma.
6. Additional wells will need to be drilled to drain this field and well spacing of 1320'-2640' will

facilitate the additional drilling.

7. Allocation based on deliverability is the same as the current allocation formula.
8. A designated interval extending from 10,015' to 10,650' as shown on the log of the Wichita Oil & Gas L.L.C. Terrel Lease Well No. 1-1126 includes the productive section in the Darrouzett (St. Louis) Field.

CONCLUSIONS OF LAW

1. Proper notice was given as required by statute.
2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. The requested field rules for the Darrouzett (St. Louis) Field will prevent waste, protect correlative rights and promote orderly development of the reservoir.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends approval of the requested permanent field rules for the Darrouzett (St. Louis) Field, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner