

THE APPLICATION OF APACHE CORPORATION TO AMEND RULES FOR THE SMYER, N. (CANYON) AND SMYER, N. (STRAWN) FIELDS, HOCKLEY COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: May 25, 2005

Hearing held: July 18, 2006

Appearances

Bill Spencer
James M. Clark

Representing
Apache Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

The field rules adopted December 19, 1957, in Final Order No. 8A-36,926, as amended, for both the Smyer, N. (Canyon) and (Strawn) Fields can be summarized as follows:

1. 660'-1750' well spacing;
2. 80 acre oil proration units with 4500' maximum diagonal; and
3. allocation based 75% on acreage and 25% per well.

Apache Corporation ("Apache") proposed that field rules in both fields be amended as follows:

1. Designated interval from 9740' to 10,040' for the Canyon and from 10,040' to 10,130' for the Strawn, as shown on the log of the Pan American Petroleum Corporation (now Apache) Ellwood Estate "A" Lease Well No. 108;
2. 467-1200' well spacing;
3. 40 acre oil proration units with 20 tolerance; and
4. allocation based 95% on potential and 5% per well.

DISCUSSION OF THE EVIDENCE

The Smyer, N. (Canyon) Field was discovered in February, 1956, at a depth of 9630'. The proration schedule indicates 6 shut-in wells and one injection well. The producing wells were shut-in

during 1995 and have not produced since. The Smyer, N. (Strawn) Field was discovered in July, 1956, at a depth of 9968'. This field has one well which was shut-in over 10 years ago. Both fields have active water drives and production ceased when the oil cut declined to 1%.

Cumulative production from the 13 wells ever completed in the Canyon Formation is 5.2 million barrels and 0.9 BCF of gas. Wells produced from a Canyon reef that has vuggy porosity in a naturally-fractured carbonate. The Canyon wells were located along the crest of a north-trending anticline. Cumulative production from the 23 wells ever completed in the Strawn is 6.5 million barrels of oil and 1.8 BCF. The Strawn reservoir is a naturally-fractured dolomite. The Strawn was productive further down the flanks of the anticline, particularly on the eastern flank.

During the last 10 years, only one well has been drilled for these fields and it was uneconomic. It produced 4670 barrels of oil from the Canyon and 4866 barrels from the Strawn before being recompleted uphole. The applicant believes that there may still be a few pockets of bypassed oil at the very top of the structure. If another well can be completed and recover 3-5% oil Apache believes it will be economic.

Apache believes that spacing and density consistent with statewide rules is appropriate for any additional wells. The requested amendments to the allocation formulas will allow Apache to forgo the filing of plats for any new well. The Canyon Formation is found between 9740' and 10,040' on the log of the Pan American Ellwood "A" Lease Well No. 108. The underlying Strawn Formation occurs between 10,040' and 10,130' on the log of the same well.

FINDINGS OF FACT

1. Notice of this hearing was mailed to all operators in the Smyer, N. (Canyon) Field on June 30, 2006. No notice was issued in the Smyer, N. (Strawn) Field but Apache Corporation is the only operator in both fields.
2. Both fields were discovered in 1956, the Smyer, N. (Canyon) Field at 9630' and the Smyer, N. (Strawn) Field at 9968'.
3. Current rules in both fields provide for 660'-1750' well spacing, 80 acre oil proration units and allocation based 75% on acreage and 25% per well.
4. All wells in both fields were shut-in over ten years ago when the oil cut declined to 1%.
5. Cumulative production in the Smyer, N. (Canyon) Field has been is 5.2 million barrels and 0.9 BCF of gas; and in the Smyer, N. (Strawn) Field has been 6.5 million barrels and 1.8 BCF of gas.
6. There may still be a few pockets, covering less than 40 acres, of bypassed oil at the very top of the structure.
7. The proposed well spacing of 467'-1200' will allow infill drilling to recover the attic oil left in these fields.

8. Designated intervals extending from 9740' and 10,040' for the Canyon and from 10,040' to 10,130' for the Strawn on the log of the Pan American Ellwood "A" Lease Well No. 108 includes the producing sandstones in each field.
9. Two factor allocation formulas are necessary according to state statutes for fields with multiple reservoirs.
10. Allocation based 95% on potential and 5% per well will allow the applicant to avoid filing plats.

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 amendments to the Smyer, N. (Canyon) Field and Smyer, N. (Strawn) Field rules will prevent waste, protect correlative rights and promote orderly development of the fields.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends approval of the request by Apache Corporation for amended field rules in the Smyer, N. (Canyon) Field and Smyer, N. (Strawn) Field, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner