

THE APPLICATION OF APACHE CORPORATION FOR INCREASED GAS OIL RATIO AUTHORITY FOR ITS J.S. ELLIFF ET AL LEASE WELL NOS. 54, 58 AND 70, AND RIVERS "A" LEASE WELL NO. 26, AGUA DULCE (CONSOLIDATED FRIO) FIELD, NUECES COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: April 18, 2006
Hearing held: May 31, 2006

Appearances

	Representing	
Bill G. Spencer		Apache Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Apache Corporation ("Apache") is seeking increased gas/oil ratio authority for its J.S. Elliff et al Lease Well Nos. 54, 58 and 70, and Rivers "A" Lease Well No. 26 to allow these wells to produce unlimited amounts of gas. Apache also wants all overproduction for these leases cancelled.

DISCUSSION OF THE EVIDENCE

The Agua Dulce (Consolidated Frio) Gas Field was formed in 1994 with the consolidation of many Agua Dulce Frio fields. There are 161 gas wells in this field. Some wells in the consolidated interval have been reclassified as oil wells. These wells were originally classified as gas wells but some of the Frio sands they were completed in apparently contained oil. The top oil allowable is 102 BOPD with a daily gas limit of 204 MCFD.

There are only two active leases in the Agua Dulce (Consolidated Frio) Oil Field—the J.S. Elliff et al and Rivers "A" Leases. There are two oil wells on these leases that are not part of this application. All of the subject wells are interior wells that are surrounded by gas wells with unlimited allowables. The allocation formula is suspended in the Agua Dulce (Consolidated Frio) Field.

The J.S. Elliff et al No. 54 was completed in December, 2000, as a gas well with perforations from 5544' to 5679'. The well was reclassified as an oil well on March 31, 2001, then reclassified as a gas well October 1, 2004. A year later, it was again reclassified as an oil well, this time with a daily potential of 5 BO, 146 MCF and 54 BW. The total production during the first three weeks of May, 2006, was 43 BO and 2190 MCF for a gas/oil ratio of 51,127 cubic feet per barrel. The cumulative production for 2006 was 272 BO and 14,600 MCF for a gas/oil ratio of 53,610.

The J.S. Elliff et al No. 58 was completed in February, 2001, as a gas well with perforations from 5848' to 7682'. The well was reclassified as an oil well on March 31, 2001, with a daily potential of 16 BO, 303 MCF and 10 BW. The total production during the first three weeks of May, 2006, was 103 BO and 1706 MCF for a gas/oil ratio of 16,518 cubic feet per barrel. The cumulative production for 2006 was 512 BO and 11,690 MCF for a gas/oil ratio of 22,848.

The J.S. Elliff et al No. 70 was completed in February, 2005, as a gas well with perforations from 7048' to 7056'. The well was reclassified as an oil well on September 26, 2005, with a daily potential of 98 BO, 200 MCF and 5 BW. The total production during the first three weeks of May, 2006, was 1276 BO and 16,498 MCF for a gas/oil ratio of 12,931 cubic feet per barrel. The cumulative production for 2006 was 6554 BO and 74,594 MCF for a gas/oil ratio of 11,382.

The Rivers "A" Well No. 26 was completed in January, 2001, as a gas well with perforations from 7568' to 7574'. The well was reclassified as an oil well on April 20, 2004, this time with perforations from 7227' to 7231'. The daily oil potential was 98 BO, 150 MCF and 0 BW. The total production during the first three weeks of May, 2006, was 684 BO and 8089 MCF for a gas/oil ratio of 11,824 cubic feet per barrel. The cumulative production for 2006 was 3515 BO and 50,163 MCF for a gas/oil ratio of 14,271.

All of these wells produce from stratigraphic, lenticular sandstones. It is difficult to know whether a sand will be gas-bearing or oil-bearing before completion. All four wells have significant uphole potential and these wells may be reclassified back and forth as gas wells or oil wells as additional perforations are made. Restricting gas production in any of the subject wells will not increase the ultimate oil recovery from any of the individual sandstones. All of these wells are being pumped which indicates little available reservoir energy to be protected by a daily gas limit.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Agua Dulce (Consolidated Frio) Field, on May 2, 2006.
2. The subject wells of this application of Apache Corporation are the J.S. Elliff et al Lease, Well Nos. 54, 58 and 70 and Rivers "A" Lease Well No. 26 completed in the Agua Dulce (Consolidated Frio) Oil Field.
3. The current allowable for the Agua Dulce (Consolidated Frio) Oil Field is 102 BOPD with 204 MCF of gas per day.
4. There are six oil wells in the Agua Dulce (Consolidated Frio) Field which were all originally gas wells.
5. There are 161 gas wells in the Agua Dulce (Consolidated Frio) Field which has a suspended allocation formula.
6. It will not cause waste to produce the subject wells with unlimited gas allowables.

- a. All of these wells are being pumped which indicates little available reservoir energy to be protected by a daily gas limit.
 - b. The Agua Dulce (Consolidated Frio) produces from stratigraphic, lenticular sandstones and it is difficult to know whether a sand will be gas-bearing or oil-bearing before completion.
 - c. All four wells have significant uphole potential and these wells may be reclassified back and forth as gas wells or oil wells as additional perforations are made.
 - d. Restricting gas production in any of the subject wells will not increase the ultimate oil recovery from any of the individual sandstones.
7. All of the subject well wells are interior wells that are surrounded by gas wells with unlimited allowables.
 8. Cancellation of overproduction for the subject wells will not harm correlative rights as all of the wells on offsetting leases have unlimited gas allowables.

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. Unlimited daily gas allowables for the Apache Corporation J.S. Elliff et al Lease, Well Nos. 54, 58 and 70 and Rivers "A" Lease Well No. 26, while leaving the daily oil allowable at 102 barrels, will not cause waste and will protect correlative rights within the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the subject wells operated by Apache Corporation in the Agua Dulce (Consolidated Frio) Field, be allowed to produce unlimited amounts of gas per day without restricting the daily oil allowable, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner