OIL AND GAS DOCKET NO. 10-0233463

THE APPLICATION OF NEWFIELD EXPL. MID-CON, INC., TO AMEND RULES FOR THE HOOVER, NE (GRANITE WASH) FIELD, GRAY COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: December 27, 2002
Hearing held: January 30, 2003

Appearances

	Representing
Dale Miller	Newfield Expl. Mid-Con, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules for the Hoover, NE (Granite Wash) Field, adopted April 15, 1997, under Docket No. 10-0214831, as amended, are summarized as follows:

1. Designated interval from 6498' to 8350' as shown on the log of the Jones Energy, Ltd., Ruth 23 Lease Well No. 5;

2. 467-1200 foot well spacing;

3. 640 acre proration units with 10% tolerance; and

4. Allocation based 50% on acreage and 50% on deliverability.

Newfield Expl. Mid-Con is requesting that the designated interval rule be amended as follows and that 40-acre optional units be allowed:

1. Designated interval from 5582' to 9100' as shown on the log of the Newfield Expl. Mid-Con, Inc., (originally Jones Energy, Ltd) Spearman 26 Well No. 2.

DISCUSSION OF THE EVIDENCE

The Hoover, NE (Granite Wash) Field was discovered in 1996, and has three producing wells, all operated by Newfield. The Granite Wash is a thick sequence of sandstones and shales. The producing reservoirs comprise thin sandstone lenses of small areal extent. Historic practice in this field has been to produce a well from one Granite Wash sandstone for a time, then recomplete up the wellbore in sequence. The individual sandstones deplete fairly quickly.

The applicant is requesting a different well be used to designate the field as the originally-designated well was not drilled deep enough to encounter the whole formation. The interval between 5582' and 9100' in the Spearman 26 Well No. 2 includes all of the Granite Wash formation. There is already a two-factor allocation formula (based 50% on acreage and 50% on deliverability), though it has been suspended.

Newfield's Ruth 23 No. 5-C has produced a total of 1.2 BCF, with 1 BCF having been produced from the first sandstone completed in the well. The Spearman 26 No. 2 C has cumulative production of 530 MMCF of gas, 305 MMCF of which came from one sandstone. Both wells have been recompleted several times. The Spearman 23 No. 5 has produced 930 MMCF from its single completion to date.

The average thickness of a single sandstone lens is 14 feet, the average porosity is 18% and the average water saturation is 52%. The original reservoir pressure was 2860 psi and the recovery factor is estimated to be 80%. The recoverable gas-in-place is calculated to be 710 MCF per acre-foot. The average recoverable gas from a single sandstone lens underneath 40 acres is therefor estimated to be 318 MMCF and underneath 640 acres is estimated to be 5 BCF.

The best producing sandstone in the Ruth 23 No. 5-C is only 5' thick and this sand's production calculates to a drainage area of 349 acres. The other sandstones that have been completed in the active wells are from 6 to 114' thick. These other completions have estimated drainage areas from 5 to 114 acres, with an average of 30 acres. Infill drilling on 40 acres should encounter new sandstones that have not yet been drained. The existing well spacing of 467-1200 feet is adequate to allow infill wells to be drilled on 40 acre density.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Hoover, NE (Granite Wash) Field on January 17, 2003.

2. The field was discovered in 1996; and has three producing wells all operated by Newfield Exploration Mid-Con.

3. The interval between 5582' and 9100' in the Newfield Expl. Mid-Con, Inc., (originally Jones Energy, Ltd) Spearman 26 Well No. 2 includes all of the Granite Wash formation.
4. There are multiple producing sandstones of limited areal extent in the Granite Wash, and these have been developed sequentially.

5. The recoverable gas-in-place is calculated to be 710 MCF per acre-foot and the individual producing sandstones have an average thickness of 14'.

6. The recoverable reserves from a single sandstone are estimated to be 318 MMCF underneath 40 acres and 5 BCF underneath 640 acres.

7. The separate sandstones that have been completed to date have thicknesses from 5' to 114' and have drainage areas between 5 and 349 acres.

8. Allowing infill wells to be drilled on 40-acre optional units will allow additional sandstone lenses to be drilled and produced.

9. The field rules already provide for a two-factor allocation formula as is required for multiple reservoir fields.

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. Amending the designated interval rule and the density rule, to allow optional 40-acre units, will prevent waste, protect correlative rights within the field, and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the field rules for the Hoover, NE (Granite Wash) Field be amended to increase the designated interval and provide for 40-acre optional units, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: February 25, 2003