

OIL AND GAS DOCKET NO. 04-0222668

THE APPLICATION OF SANDALWOOD OIL & GAS, INC. FOR INCREASED NET GAS OIL RATIO AUTHORITY FOR THE WELDER D LEASE WELL NO. 4, PORTILLA (7000-B SAND) FIELD, SAN PATRICIO COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: September 15, 1999

Hearing held: December 29, 1999

Appearances

Frank B. Padon

Representing

Sandalwood Oil & Gas Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Sandalwood is requesting increased net gas/oil ratio authority with a daily gas limit of 500 MCF for its Welder D Lease, Well No. 4 in the Portilla (7000-B-Sand) Field, San Patricio.

DISCUSSION OF THE EVIDENCE

The Portilla (7000-B-Sand) Field was discovered in 1999, with the completion of Sandalwood's Welder D Lease Well No. 4. This well was drilled to the Vicksburg but did not encounter Vicksburg pay and was plugged back to the Frio. The well is perforated from 7061 to 7065 feet in an eight-foot thick sand. Two and seven/eights inch casing was set and the well is completed without tubing.

The well was originally classified as a gas well and a Form G-1 was filed on August 4. September 15, 1999, the operator filed a Form W-2 reclassifying the well. The initial producing rate on the W-2 test was 28 BOPD, 780 MCF/D and 22 BWPD. The oil gravity is 45 to 47 degrees API.

The applicant believes this reservoir has a thin oil rim and that the increasing water cut indicates a water drive. There is no clear cut gas/oil contact nor oil/water contact as the reservoir is very thin. There is also no reason to conserve the gas cap to provide reservoir energy for the thin oil rim.

Daily production reports from September 15 through November 4, 1999, show that while on

a 10/64th inch choke, the flowing pressure declined gradually from 1420 psi to 1155 psi on a 10/64th inch choke. The gas rate also declined gradually from 482 to 328 MCF/D, the daily hydrocarbon liquid rate declined from 34 to 27 barrels, and daily water production declined from 40 to 29 barrels. The well was tested on a 6/64th inch choke from November 25 through the 29th, 1999. The flowing pressure decreased rapidly to 980psi, indicating to the operator that the well was loading with fluids. Daily gas production also decreased rapidly from 488 to 176 MCF, daily oil production decreased from 22 to 6 barrels and daily water production decreased from 38 to 18 barrels, again indicating liquid loading.

The well's daily allowable rate is 121 barrels of oil and 242 MCF of gas. For two weeks prior to reducing the choke size, the well was efficiently producing about 475 to 525 MCF/D on a 12/64th inch choke. The applicant therefor requests a daily gas limit of 500 MCF. The applicant also requested that any overproduction to date be canceled. It is unlikely that any additional wells will be drilled for this field.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Portilla (7000-B Sand) Field on October 1, 1999.
2. The subject well is the only well in the field and was completed in August of 1999.
3. This well was first completed as a gas well but was reclassified to oil on September 15, 1999.
4. The initial producing rate was 28 BOPD, 780 MCF/D and 22 BWPD at a flowing pressure of 1420 psi in the tubingless completion.
5. Between September 15 and November 4, the flowing pressure on a 10/64th inch choke, declined gradually from 1420 to 1155 psi, daily gas production declined from 482 to 328 MCF and daily oil production declined from 34 to 27 barrels.
6. The well's current daily allowable limit is 121 barrels of oil and 242 MCF.
7. When the well was tested on a 6/64th inch choke, the flowing pressure declined rapidly to 980 psi, the daily oil rate declined to 6 barrels, daily gas rate declined to 176 MCF and the daily water rate declined to 18 barrels.
8. The rapid decrease in flowing pressure and producing rates also indicate fluid loading.
9. The well can efficiently produce at a daily gas rate of 500 MCF, which corresponds to a daily oil rate of 43 barrels, at a flowing pressure of about 1175 psi.
10. A gas producing rate of 500 MCF/D is efficient for this well and there is no reason to require it to make up overproduction through producing it at a less efficient rate.

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. Granting increased gas oil ratio authority will prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that increased net gas/oil ratio authority be approved for the Sandalwood Oil & Gas, Inc., Welder D Lease Well No. 4 in the Portilla (7000-B-Sand) Field. The recommended daily gas limit is 500 MCF. Any overproduction for this the only well in the field should also be canceled.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: January 11, 2000