OIL AND GAS DOCKET NO. 8A-0230584

THE APPLICATION OF ALPINE PETROLEUM FOR PERMANENT FIELD RULES IN THE ONE JOINT OFF (TANNEHILL) FIELD, KING COUNTY, TEXAS

Reviewed by: Margaret Allen, Technical Hearing Examiner

Procedural history

Application received: February 4, 2002

Hearing held: March 7, 2002 Reviewed: April 17, 2002

Representative

Greg Cloud

Alpine Petroleum

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Alpine Petroleum requested that the following permanent field rules be adopted for the One Joint Off (Tannehill) Field:

- 1. 330-700 foot well spacing; and
- 2. 20 acre proration units.

The hearing was called on March 7, 2002, but no appearance was entered for Alpine Petroleum, the only party on the service list. The examiner at the time believed the applicant had withdrawn its application, but a telephone call from Alpine indicated rather that it expected the requested rules be adopted without evidence. On April 9, 2002, a consulting engineer prepared a package of exhibits sufficient to recommend permanent field rules.

The reviewing examiner believes that rules specifying a designated interval and an allocation formula should to be adopted in addition to the requested rules.

DISCUSSION OF THE EVIDENCE

The One Joint Off (Tannehill) Field was discovered in 1984, and now has three producing wells, all on Alpine's Simpson Lease. There are also two plugged and abandoned wells that were produced by Two Way Oil Company on the eastern side of the field. The Tannehill formation produces from channel sands and all five wells ever completed in this field extend along an east-west line.

The perforations in the discovery well, the Sojourner Drilling Corporation Simpson Well No. 1, extended from 3374 to 3380 feet. The initial potential of this well was 85 BOPD, with a gas/oil ratio

of 100 cubic feet per barrel. This well was converted to a salt-water disposal well in 1992, by Two Way Oil Company. The second well drilled by Two Way Oil in 1990, had an initial potential of only 4 BOPD with 60 BWPD.

Alpine drilled its first Simpson well in 1997, perforated it from 3380 to 3381', and measured an initial potential of 17 BOPD. Its second and third wells had initial potentials of 15 and 30 BOPD respectively, without measurable gas or water. The Alpine Simpson Well No. 3 was completed in October of 2001, and can be used for a type log. It was perforated between 3398 and 3406 feet in a sand whose top is at 3390'. The oil/water contact appears to be at about 3408'.

The discovery well produced 16,398 BO before being shut-in 1986. The porosity of this well was 16%, average water saturation was 42% and the net pay was 8'. Assuming 15% recovery, there were 103 barrels of recoverable oil per acre-foot. The discovery well therefor drained an estimated 20 acres.

Alpine's Simpson Lease has produced 6,180 BO since 1997, and the estimated ultimate production calculated for the first two wells is 14,280 BO. Assuming the same reservoir parameters as the discovery well, each of Alpine's first two wells will drain 9 acres. Most of the Tannehill fields in King County have been developed on 20-acre density. Alpine plans to drill additional wells in the subject field on 20-acre density, beginning April 24, 2002. Adopting an allocation formula based on acreage will protect correlative rights.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators in the One Joint Off (Tannehill) Field on February 19, 2002.
- 2. The field was discovered in 1984, and has three producing wells and two abandoned wells.
- 3. Several Tannehill fields in King County have been developed on 20-acre density and the applicant wants to drill additional wells in the subject field on this same density.
- 4. Rules specifying 20 acre units are appropriate.
 - a. The discovery well produced 16,398 BO between 1984 and 1986.
 - b. Assuming 15% recovery, there were 103 barrels of recoverable oil per acre-foot, and the discovery well drained an estimated 20 acres.
 - c. The drainage areas of Alpine's first two wells, drilled in 1997 and 1998, averaged 9 acres.
- 5. Minimum well spacing of 330-700 feet will allow additional wells to be drilled on 20-acre density without Rule 37 exceptions.
- 6. The productive Tannehill section in this field extends from 3390 feet to 3408 feet as shown on the log of Alpine's Simpson Lease Well No. 3.
- 7. Allocation based on acreage will protect correlative rights.

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 recommended field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested field rules for the One Join Off (Tannehill) Field, with an appropriate designated interval and allocation based on acreage, be approved on a permanent basis.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: April 22, 2002