## THE APPLICATION OF SANDRIDGE ENERGY, INC. TO CONSOLIDATE VARIOUS FIELDS INTO A NEW FIELD CALLED THE THISTLE (OVERTHRUST) FIELD AND ADOPT FIELD RULES FOR THE THISTLE (OVERTHRUST) FIELD, PECOS COUNTY, TEXAS

HEARD BY: Donna K. Chandler on March 24, 2008

### **APPEARANCES:**

#### **REPRESENTING:**

Cary McGregor

Sandridge Energy, Inc.

## EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

Sandridge Energy, Inc. requests that the Thistle (Caballos B), Thistle (Caballos B, FB-2), Thistle (Caballos Novaculite), Thistle (Caballos Novaculite FB2) and Thistle (Caballos Novclte E. FB.) Fields be consolidated into a new field called the Thistle (Overthrust) Field. Sandridge further requests that the following rules be adopted for the Thistle (Overthrust) Field:

- 1. Designation of the Thistle (Overthrust) Field as the correlative interval from 2,388 feet to 6,408' as shown on the log of the Downie Ranch No. 401;
- 2. 330'-0' well spacing;
- 3. 160 acre density with optional 20 acre density; and
- 4. Allocation formula based on 95% deliverability and 5% per well for gas wells, with AOF status. Salvage classification for oil wells.

Sandridge further requests that Form P-15 and plats not be required.

This application was unprotested and the examiner recommends approval.

### **DISCUSSION OF THE EVIDENCE**

The five subject fields were discovered in 1984 and 1985. The Thistle (Caballos B), Thistle (Caballos B, FB-2) and Thistle (Caballos Novaculite) Fields are classified as associated fields. The Thistle (Caballos Novaculite FB2) and Thistle (Caballos Novclte E. FB.) Fields are classified as non-associated gas fields. The Thistle (Caballos B) and Thistle (Caballos Novaculite) Fields operated under rules providing for 160 acre density for oil and gas wells. The other three fields operate under Statewide Rules.

There are 14 active wells in the five fields, all operated by Sandridge. Cumulative production from the fields is 5.1 BCF of gas and 2.9 million BO. Current production from the fields is 732 MCFD and 28 BOPD.

The geology of the Caballos reservoirs is very complex due to presence of numerous thrust faults. In some wells, the same sand section appears several times. Sandridge requests that no between-well spacing rule be adopted for the consolidated field. This will provide flexibility in completing existing wellbores in all sands. Additionally, the topography in the area is very rough and useable surface locations are difficult to find.

Sandridge requests that the Thistle (Overthrust) Field be designated as the correlative interval from 2,388 feet to 6,408' as shown on the log of the Downie Ranch No. 401. This interval includes all Caballos sands. A two-factor allocation formula is necessary to satisfy statutory requirements for combining multiple separate reservoirs into a single field. Sandridge proposed that allocation be based on 95% deliverability and 5% per well for gas wells, with AOF status. There is a market for all gas produced from the field. Sandridge requests that the gas field be classified as Associated-Prorated instead of limited by Rule 49(b). None of the sands have gas caps and are therefore not true associated fields. Sandridge requests that the oil field be classified as "salvage", with no restrictions on oil or gas production. These fields are in the late stages of depletion and restriction of production from any well is not necessary to prevent waste.

Three of the fields already have exceptions to Rule 10 allowing downhole commingling. The fields produce similar water and no adverse effects of commingling have been observed.

Sandridge requests that 160 acre/optional 20 acre density be adopted for the consolidated field. The Downie Ranch No. 401 has produced about 600,000 BO from the Thistle (Caballos Novaculite) Field. Volumetric calculations demonstrate that recoverable reserves beneath 160 acres in this reservoir are 553,000 BO, assuming 25% recovery. This is one of the most prolific well in any of the fields. Many wells have produced significantly less, some less than 20,000 BO.

Sandridge pointed out that the Pinon (Overthrust) Field is a similar field. The same spacing and density rule was recently adopted for the Pinon (Overthrust) Field and numerous fields were consolidated into the Pinon (Overthrust) Field.

# FINDINGS OF FACT

- Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
- 2. The Thistle (Caballos B), Thistle (Caballos B, FB-2), Thistle (Caballos Novaculite), Thistle (Caballos Novaculite FB2) and Thistle (Caballos Novclte E. FB.) Fields were discovered in 1984 and 1985.
- 3. The Thistle (Caballos B) and Thistle (Caballos Novaculite) Fields operated under rules providing for 160 acre density for oil and gas wells. The other three fields operate under Statewide Rules.
- 4. There are 14 active wells in the five fields, all operated by Sandridge. Cumulative production from the fields is 5.1 BCF of gas and 2.9 million BO.
- 5. Consolidation of the five fields into a single field will provide for the recovery of additional reserves from the fields.
  - a. The fields are all in the late stage of depletion. Two fields have no active wells.
  - b. The reservoirs have numerous thrust faults and consolidation of the fields will allow completions in all productive intervals.
- 6. The entire correlative interval from 2,388 feet to 6,408 feet as shown on the log of the Downie Ranch No.401 should be designated as the Thistle (Overthrust) Field.
- 7. Rules providing for 160/optional 20 acre density is appropriate for the consolidated field.
  - a. The Downie Ranch No. 401 has a calculated drainage area in excess of 160 acres in the Thistle (Caballos Novaculite) Field. Other wells are much less prolific.
  - b. The Pinon (Overthrust) Field is a similar field in Pecos County in the overthrust area. This field operates under a 160/optional 20 acre density rule.
- 8. Minimum well spacing of 330 feet from lease lines and no minimum between well spacing limitation will provide flexibility in utilizing existing wellbores without the need of obtaining numerous Rule 37 exceptions. This spacing will also provide additional flexibility necessary to build surface locations in this area of very rough terrain.

- 9. Allocation based on 95% deliverability and 5% per well meets statutory requirements for combining multiple reservoirs into a single field.
- 10. There is a market for all gas produced from the fields.
- 11. Because restrictions on allowable are not necessary to prevent waste, associate-prorated status for the gas field and salvage classification for the oil field is appropriate.

# CONCLUSIONS OF LAW

- 1 Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Consolidation of fields and adoption of field rules is necessary to prevent waste and protect correlative rights.
- 4. The Thistle (Overthrust) Fields meets the requirements for AOF status pursuant to Rule 31(j).

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed field consolidation and field rules for the Thistle (Overthrust) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner