THE APPLICATION OF BIG STAR OIL & GAS, LLC TO CONSIDER NEW FIELD DESIGNATION AND FIELD RULES FOR THE (PROPOSED) RAYMON (GIN SAND) FIELD, DAWSON COUNTY, TEXAS

**Heard by:** Donna K. Chandler on September 20, 2010

Appearances: Representing:

Brad Cross (by phone)

Big Star Oil & Gas, LLC

#### **EXAMINER'S REPORT AND RECOMMENDATION**

# STATEMENT OF THE CASE

Big Star Oil & Gas, LLC requests that a new field designation be approved for its North Star Well No. 901 called the Raymon (Gin Sand) Field. Big Star requests that the following temporary field rules be adopted for the Raymon (Gin Sand) Field:

- 1. Designation of the field as the correlative interval from 7,136 feet to 7,268 feet as shown on the log of the North Star No. 901;
- 2. 330'-933' well spacing;
- 3. 80 acre oil units with a maximum diagonal of 3,250;
- 4. Allocation based on 100% acreage.

This application was unprotested and the examiner recommends approval of the new field designation and temporary field rules, subject to review of the rules in 18 months.

#### **DISCUSSION OF EVIDENCE**

Big Star Oil & Gas, LLC completed it North Star No. 901 in June 2010. The well is completed in the lower portion of the Gin Sand, with perforations between 7,211 and 7,226 feet. On initial test, the well produced at a rate of 153 BOPD, with no gas or water. Big Star plans to drill at least one more well in the field.

The proposed correlative interval for the field is from 7,136 feet to 7,268 feet as shown on the log of the North Star No. 901. The interval includes the entire Gin Sand. There are no wells within a 2 ½ mile radius of the North Star No. 901 which produced from the Gin Sand. The nearest comparable production is approximately 4 miles to the southwest. Although the Gin Sand in the area can be correlated across the area, the sands are channels which are not in communication. The No. 901 well is surrounded by dry holes.

The average porosity of the reservoir is 21% and average water saturation is 40%. Net pay in the No. 901 well is 15 feet. Big Star has studied numerous Gin Sand fields in the area and found that average primary ultimate recovery is 120,000 BO. Based on these reservoir properties and assuming 12% recovery, the calculated drainage area for the No. 901 well is approximately 100 acres.

Big Star requests that the spacing rule for the field be a minimum of 330 feet from lease lines and 933 feet between wells. This spacing will provide flexibility in development of this channel sand deposition reservoir. Additionally, the exact rules have been adopted for the Key West (Spraberry) and Powe (Spraberry) Fields, both of which produce from the Gin Sand in Dawson County.

Allocation based on 100% acreage is a reasonable formula which will protect the correlative rights of mineral owners in the field.

## FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
- 2. Big Star Oil & Gas, LLC completed it North Star No. 901 in June 2010. The well is completed in the lower portion of the Gin Sand, with perforations between 7,211 and 7,226 feet.
- 3. The North Star No. 901 is entitled to a new field designation.
  - a. There are no wells within a 2 ½ mile radius of the North Star No. 901 which produced from the Gin Sand.
  - b. The No. 901 well is surrounded by dry holes.
- 4. Temporary field rules providing for 80 acre base units is appropriate for the field on a temporary basis.
  - a. Estimated ultimate primary recovery for Gin Sand wells in other comparable fields is 120,000 BO.

- b. The calculated drainage area for the North Star No. 901 is approximately 100 acres based on 120,000 BO ultimate recovery.
- c. On initial test, the well produced at a rate of 153 BOPD, with no gas or water.
- d. Other Gin Sand fields in the area operate under identical rules as proposed for the Raymon (Gin Sand) Field.
- 5. The Raymon (Gin Sand) Field should be defined as the correlative interval from 7,136 feet to 7,268 feet as shown on the log of the North Star No. 901. The interval includes the entire Gin Sand.
- 6. Well spacing a minimum of 330 feet from lease lines and 933 feet between wells will provide additional flexibility in locating additional wells in this channel sand reservoir.
- 7. Allocation based on 100% acreage is a reasonable formula which will protect correlative rights.

### **CONCLUSIONS OF LAW**

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Approval of the requested new field designation and adoption of temporary field rules will prevent waste, protect correlative rights and promote the orderly development of the field.

# RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the new field designation and adoption of temporary field rules for the Raymon (Gin Sand) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner