

## OIL AND GAS DOCKET NO. 8A-0263728

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

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**Heard by:** Donna K. Chandler on December 14, 2009

**Appearances:**

Paul Tough  
Bradley Cross (by phone)

**Representing:**

Big Star Oil & Gas LLC

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

#### **STATEMENT OF THE CASE**

Big Star Oil & Gas requests that a new field designation be approved for its Hughes 30 Well No. 2 called the Powe (Spraberry) Field. Big Star requests that the following temporary field rules be adopted for the Powe (Spraberry) Field:

1. Designation of the field as the correlative interval from 6,985 feet to 8,024 feet as shown on the log of the Hughes 30 Well No. 2;
2. 330'-933' well spacing;
3. 80 acre oil units with a maximum diagonal of 3,250 feet; 40 acre optional units with a maximum diagonal of 2,100 feet;
4. Allocation based on 95% acreage and 5% per well.

This application was unopposed and the examiner recommends approval of the new field designation and temporary field rules, subject to review of the rules in 18 months. The examiner also recommends that the Adcock, S. (Spraberry) Field be consolidated into the Powe (Spraberry) Field. There are no wells currently in the Adcock, S. (Spraberry) Field.

#### **DISCUSSION OF EVIDENCE**

Big Star Oil & Gas completed its Hughes 30 Well No. 2 in October 2009 with perforations in the Gin interval between 7,262 and 7,278. The well produced at a rate of 22 BOPD on pump on initial test. The Hughes 30 No. 1 had been completed in July 2009 and placed in the Key West (Spraberry) Field. The No. 1 has perforations in the same Gin interval as the No. 2 well. Big Star is in the process of completing the Culp No. 1 in the same interval. Additionally, Fasken Oil has recently completed a well in the same interval.

The proposed correlative interval for the field is from 6,985 feet to 8,024 feet as shown on the log of the Hughes 30 Well No. 2. This interval includes the entire Spraberry. There is one well within a 2 ½ mile radius of the Hughes 30 No. 2 which produced a minimal amount of oil from a sand within the Spraberry. This well, the Jones No. 1, was given a new field designation in 1981 and was called the Adcock, S. (Spraberry) Field. The well was perforated in the Spraberry between 7,862 feet and 7,866 feet. It is suggested that this field be consolidated into the new field because the designated interval for the new field includes the thin interval within the Spraberry from which the Jones No. 1 produced. The Hughes 30 No. 1 should be transferred to the new field.

Big Star studied 10 similar Spraberry fields in the area. Average primary production from the 150 wells in the fields is 120,000 BO. Using reservoir properties of 18% porosity, 60% water saturation, 23 feet of pay, and 12% recovery, the average drainage area is 82 acres. The initial test on the Hughes 30 No. 1 was 54 BOPD and the initial test on the Hughes 20 No. 2 was only 22 BOPD. Big Star believes that 40 acre optional rules are appropriate on a temporary basis for the new field. Additionally, the Key West (Spraberry) Field approximately six miles away operates under rules producing for 80/optional 40 acre density. Big Star believes that a similar density rule is appropriate for development of this new field until additional production information is available.

The proposed 330'-933' well spacing is necessary to provide flexibility in locating future wells in this channel sand reservoir. The Key West (Spraberry) Field has the same spacing rule requested for this new field.

A two-factor allocation formula is required for this new field because the proposed Spraberry field interval includes several separate pay intervals. Allocation based on 95% acreage and 5% per well will meet statutory requirements.

### **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 completed its Hughes 30 Well No. 2 in October 2009 with perforations in the Gin interval between 7,262 and 7,278. The Hughes 30 No. 1 had been completed in July 2009 and placed in the Key West (Spraberry) Field. The No. 1 has perforations in the same Gin interval as the No. 2 well.
3. The Hughes 30 No. 2 is entitled to a new field designation.
  - a. Only one well within a 2 ½ mile radius of the Hughes 30 No. 2 produced a minimal amount of oil from a sand within the gross Spraberry interval. This well, the Jones No. 1, was given a new field designation in 1981 and was called the Adcock, S. (Spraberry) Field.

- b. The interval for the new field includes the thin interval within the Spraberry from which the Jones No. 1 produced.
4. Field rules providing for 80/optional 40 acre density is appropriate for the new field.
  - a. Based on production from wells in 10 similar Spraberry fields, average primary production is 120,000 BO per well.
  - b. Based on 18% porosity, 60% water saturation, 23 feet of pay, and 12% recovery, the average drainage area is 82 acres.
  - c. The Key West (Spraberry) Field approximately six miles away operates under rules producing for 80/optional 40 acre density.
5. The Powe (Spraberry) Field should be defined as the correlative interval from 6,985 to 8,024 feet as shown on the log of the Hughes 30 Well No. 2.
6. Well spacing a minimum of 330 feet from lease lines and 933 feet between wells will provide additional flexibility in locating wells in this channel sand reservoir.
7. Allocation based on 95% acreage and 5% per well is a reasonable formula which will protect correlative rights and meet statutory requirements..

#### **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 Powe (Spraberry) Field. It is further recommended that the Adcock, S. (Spraberry) Field be consolidated into the Powe (Spraberry) Field and that the Hughes 30 No. 1 be transferred from the Key West (Spraberry) Field to the Powe (Spraberry) Field.

Respectfully submitted,

Donna K. Chandler  
Technical Examiner