



# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 8A-0269367

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THE APPLICATION OF MEDDERS OIL COMPANY, INC. TO AMEND FIELD RULE NOS.  
2 AND 3 FOR THE BALT (TANNEHILL) FIELD, KING COUNTY, TEXAS

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HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: April 21, 2011

APPEARANCES:

REPRESENTING:

**APPLICANT:**

Glenn E. Johnson  
David C. Triana  
Lewis Cadman  
Bob Gilmore  
Bryant Medders  
Cullen Medders

Medders Oil Company, Inc.

### EXAMINER'S REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

Field Rules for the Balt (Tannehill) Field were adopted in Final Order No. 8A-0212462, effective July 2, 1996. The Field Rules are summarized as follows:

1. Designation of the field as the correlative interval from 3,800 feet to 3,820 feet as shown on the log of the Medders Oil Company, Inc. - Forks "1" Lease, Well No. 2A (API No. 42-269-32216);
2. 467'-1,200' well spacing;
3. 80 acre oil units;
4. Allocation based on 100% acres.

Medders Oil Company, Inc. ("Medders") requests that Field Rule Nos. 2 and 3 be amended as follows:

2. 467'-933' well spacing;
3. 80 acre oil units with optional 40 acre density.

The application was unopposed and the examiner recommends that Field Rule Nos. 2 and 3 for the Balt (Tannehill) Field be amended, as requested by Medders.

### **DISCUSSION OF EVIDENCE**

The Balt (Tannehill) Field was discovered in February 1996 at an average depth of 3,800 feet. There are 68 producing oil wells and three operators carried on the proration schedule. Current Field Rules provide for a designated interval, 467'-1,200' well spacing, 80 acre oil units and allocation based on 100% acres. The top allowable is 144 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a casinghead gas limit of 288 MCFGPD. Cumulative production from the field through March 2011 is 5.6 MBO and 68.4 MMCFG.

Medders is planning on drilling infill wells and requests 467'-933' well spacing and 80 acre oil units with optional 40 acre density. Medders submitted Field Rules for three Tannehill fields in the area that already have similar well spacing and 40 acre density. Medders opined that the proposed rules would allow greater flexibility in selecting future drilling locations.

From the available reservoir data, Medders estimated an average porosity of 21%, an average water saturation of 40% and an average net pay thickness of 11 feet. The primary drive mechanism is a solution gas drive and the primary recovery to date on the leases that Medders operates has been 14% of the original oil in place. Medders is proposing a waterflood project coupled with infill drilling to 40 acre density and estimates that this project will be equal to 150% of primary recovery or approximately 2.5 MMBO.

Using the ultimate recoveries from forty four wells on seven separate leases, Medders calculated drainage areas which ranged from 23 acres up to 68 acres. The average drainage area was 49 acres. Since the drainage areas were less than 80 acres, Medders believes that optional 40 acre density is justified.

### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Balt (Tannehill) Field was discovered in February 1996 at an average depth of 3,800 feet.

- a. There are 68 producing oil wells and three operators carried on the proration schedule.
  - b. Current Field Rules provide for a designated interval, 467'-1,200' well spacing, 80 acre oil units and allocation based on 100% acres.
  - c. The top allowable is 144 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a casinghead gas limit of 288 MCFGPD.
3. Well Spacing of 467'-933' and 80 acre oil units with optional 40 acre density is appropriate for the field.
- a. Three Tannehill fields in the area already have similar well spacing and 40 acre density.
  - b. The proposed rules would allow greater flexibility in implementing a waterflood project and in selecting future 40 acre infill drilling locations.
  - c. Using the ultimate recoveries from forty four wells on seven separate leases, Medders calculated drainage areas which ranged from 23 acres up to 68 acres. The average drainage area was 49 acres.
  - d. The primary drive mechanism is a solution gas drive and the primary recovery to date on the leases that Medders operates has been 14% of the original oil in place.
  - e. The proposed waterflood project coupled with infill drilling to 40 acre density is expected to equal 150% of primary recovery or approximately 2.5 MMBO.

**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. Amending Field Rule Nos. 2 and 3 for the Balt (Tannehill) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission amend Field Rule Nos. 2 and 3 for the Balt (Tannehill) Field, as proposed by Medders Oil Company, Inc.

Respectfully submitted,

A handwritten signature in cursive script that reads "Richard D. Atkins".

Richard D. Atkins, P.E.  
Technical Examiner