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# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 02-0314890**

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**APPLICATION OF FROSTWOOD ENERGY, LLC (288391) TO CONSIDER AMENDING FIELD RULES FOR THE HEYSER (5400 #3) FIELD, CALHOUN COUNTY, TEXAS**

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**OIL AND GAS DOCKET NO. 02-0314891**

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**APPLICATION OF FROSTWOOD ENERGY, LLC (288391) TO CONSIDER AMENDING FIELD RULES FOR THE HEYSER (5400 #2) FIELD, VICTORIA AND CALHOUN COUNTIES, TEXAS**

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**HEARD BY:** Karl Caldwell, P.E. – Technical Examiner  
Clayton Hoover – Administrative Law Judge

**HEARING DATE:** November 16, 2018  
**CONFERENCE DATE:** January 23, 2019

**APPEARANCES:** **REPRESENTING:**

**APPLICANT:** Frostwood Energy, LLC

John Soule  
Matthew Talbert

**OBSERVER:** Fredco

George Neale

### EXAMINERS' REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

Frostwood Energy, LLC, Operator No. 288391 ("Frostwood"), requests to replace all existing field rules for the Heyser (5400 #2) Field in Victoria and Calhoun Counties and the Heyser (5400 #3) Field in Calhoun County, Texas. Frostwood proposes the same field rules for each field, with the exception of different designated correlative intervals.

For the Heyser (5400 #2) Field in Victoria and Calhoun Counties, Frostwood proposes the following field rules:

1. The entire correlative interval from 5,455 feet to 5,493 feet, as shown on the Calibrated Gamma Ray and SP Log for the Welder #58D Well (API No. 42-057-31810), shall be designated as a single reservoir for proration purposes and be designated as the Heyser (5400 #2) Field. The Heyser (5400 #2) Field interval is commonly referred to as the Sinton Sand and is correlative across much of the South Texas Gulf Coast.
2. Spacing 330'/0'.
3. Density 20-Acre Standard Units; 10-Acre Optional Units.
4. Allocation 100% acreage, with acreage assigned for allowable purposes identified on a table attached to Form P-15 or on Form P-16, with a plat permitted, but not required to be filed.
5. Top Allowable: 10 barrels of oil per day ("BOPD") per acre ("BOPD/acre").

For the Heyser (5400 #3) Field in Calhoun County, Texas, Frostwood proposes the following field rules:

1. The entire correlative interval from 5,500 feet to 5,552 feet, as shown on the Calibrated Gamma Ray and SP Log for the Welder #58D Well (API No. 42-057-31810), shall be designated as a single reservoir for proration purposes and be designated as the Heyser (5400 #3) Field. The Heyser (5400 #3) Field interval is commonly referred to as the Sinton Sand and is correlative across much of the South Texas Gulf Coast.
2. Spacing 330'/0'.
3. Density 20-Acre Standard Units; 10-Acre Optional Units.
4. Allocation 100% acreage, with acreage assigned for allowable purposes identified on a table attached to Form P-15 or on Form P-16, with a plat permitted, but not required to be filed.
5. Top Allowable: 10 BOPD/acre.

Frostwood originally requested cancellation of any overproduction as of the date of the final order, but withdrew this request at the hearing as there is no overproduction in the fields at this time. Notice of each application was sent to all operators in each of the respective fields, and each application is unopposed. Frostwood is requesting the same field rules other than the correlative interval (Rule No. 1), as six recently approved

field rule amendments in similar fields, and the Technical Examiner and Administrative Law Judge (collectively, "Examiners") hereby take official notice of the evidence and testimony in these six previous dockets: Oil and Gas Docket Nos. 04-0310416, 02-0310417, 02-0308632, 02-0308631, 02-0308635, and 04-0309350. Based on the evidence in the record, the Examiners recommend approval of the applications.

### DISCUSSION OF THE EVIDENCE

Frostwood is focused on the acquisition of prolific, mature, conventional assets along the Gulf Coast, with a focus on re-development of those assets that have historically only been produced with vertical wells. Frostwood plans to re-develop these assets with new technologies, namely, horizontal drilling. Typically these mature fields have been primarily developed with vertical wells. Frostwood utilizes open hole completions with no fracture stimulation. The horizontal lateral lengths range from 1,500 feet to 2,000 feet in the Heyser (5400 #2) Field and Heyser (5400 #3) Field.

Frostwood expects similar production results in the Heyser (5400 #2) Field and Heyser (5400 #3) Field as compared to the production in six other mature fields Frostwood is also developing with horizontal wells in the area (Taft (4000) Field, West Ranch (Ward) Field, Ganado, West (4700 Zone) Field, McFaddin (4400) Field, and the Portilla (Frio) Field). All of these fields produce from some portion of the Frio Formation. In the Heyser (5400 #2) Field and Heyser (5400 #3) Field, it is the Sitton Sand that is productive in the Frio Formation in the two subject fields. The rock properties and characteristics, including porosity, permeability, and water saturation, are similar in all six fields.

As a result, for both the Heyser (5400 #2) Field and Heyser (5400 #3) Field, Frostwood is requesting the same field rules, other than the correlative interval (Rule No. 1), as the following six recently approved field rule amendments:

1. Ganado, West (4700 Zone) Field, Final Order No. 02-0308632.
2. Placedo Field, Final Order No. 02-0308631.
3. McFaddin (4400) Field, Final Order No. 02-0308635.
4. Portilla (Frio) Field, Final Order No. 04-0309350.
5. Taft (4000) Field, Final Order No. 04-0310416.
6. West Ranch (Ward) Field, Final Order No. 02-0310417.

The request for lease line spacing of 330 feet with no minimum between well spacing will provide flexibility in drilling wells to maximum ultimate recovery from each field, which will result in the recovery of additional oil that may otherwise go unrecovered. The proposed 20-acre standard density with 10-acre option is the same density rule adopted in fields 1-6 above, and 20-acre density is the current rule in both the Heyser (5400 #2) Field and the Heyser (5400 #3) Field.

The current allowable for the Heyser (5400 #2) Field is a 100 BOPD MER, with a salvage classification, while the current allowable for the Heyser (5400 #3) Field is a 70 BOPD MER with an allocation formula based on 50% acres and 50% per well. Frostwood is requesting an allocation formula based on 100% acreage, which is the same allocation formula that has been adopted in fields 1-6 above. Frostwood is requesting the same oil allowable as previously adopted in fields 1-6 above, which is 10 BOPD per acre assigned. Frostwood's completions are open hole completions, with lateral lengths of 1,500 to 2,000 feet in the two subject fields. Frostwood incorporates screens and gravel packs around the screens, which results in highly productive wells.

In applying Statewide Rule 86 to assign additional acreage to horizontal wells, an operator in the subject fields would be able to assign roughly 100 acres per horizontal well to these wellbore lengths, and the requested allowable of 10 BOPD per acre assigned equates to the 1,000 BOPD realized from the horizontal wells completed in similar reservoirs in the area on 24-hour initial potential tests. Frostwood expects similar results for wells completed in the two subject fields. Frostwood asserts that the proposed field rules will result in the recovery of additional oil that may otherwise go unrecovered.

Both the Heyser (5400 #2) Field and the Heyser (5400 #3) Field were separated from the Heyser Field in a final order, effective January 1, 1963. The November 2018 oil and gas proration schedules for the Heyser (5400 #2) Field list Frostwood as an operator in the field, while the November 2018 oil and gas proration schedules for the Heyser (5400 #3) Field do not list Frostwood as an operator in the field. However, Frostwood has drilled and completed a horizontal well in the Heyser (5400 #3) Field: Form W-2 for the Welder Lease, Well No. 60H (42-057-31813) shows the well is completed in the Heyser (5400 #3) Field, with a completion date of July 27, 2018. Initial potential test data shows the well produced 455.8 BOPD, with 197 Mcfd of casinghead gas, 2,802 barrels of water per day ("bwpd") with a gas-oil ratio ("GOR") of 432. A water drive is the primary mechanism in this reservoir and the GOR is relatively flat.

Frostwood agreed that pursuant to the provisions of Texas Government Code §2001.144(a)(4)(A), this Final Order shall be effective on the date a Master Order relating to this Final Order is signed.

#### **FINDINGS OF FACT**

1. Frostwood Energy, LLC, Operator No. 288391, requests to replace all existing field rules for the Heyser (5400 #2) Field in Victoria and Calhoun Counties and the Heyser (5400 #3) Field in Calhoun County, Texas.
2. Notice of each application was sent to all operators in the each field, the Heyser (5400 #2) Field and the Heyser (5400 #3) Field, and each application is unopposed.

3. Frostwood originally requested cancellation of any overproduction as of the date of the final order, but withdrew this request at the hearing as there is no overproduction in the fields at this time.
4. Frostwood proposes the same field rules pertaining to well spacing, density, allocation, and top allowable for each field.
5. For both the Heyser (5400 #2) Field and the Heyser (5400 #3) Field, Frostwood is requesting the same field rules pertaining to well spacing, density, allocation, and top allowable as six recently approved field rule amendments:
  - a. Ganado, West (4700 Zone) Field, Final Order No. 02-0308632.
  - b. Placedo Field, Final Order No. 02-0308631.
  - c. McFaddin (4400) Field, Final Order No. 02-0308635.
  - d. Portilla (Frio) Field, Final Order No. 04-0309350.
  - e. Taft (4000) Field, Final Order No. 04-0310416.
  - f. West Ranch (Ward) Field, Final Order No. 02-0310417.
6. The request for lease line spacing of 330 feet with no minimum between well spacing will provide flexibility in drilling wells to maximum ultimate recovery from each field, resulting in the recovery of additional oil that may otherwise go unrecovered.
7. Both the Heyser (5400 #2) Field and the Heyser (5400 #3) Field were separated from the Heyser Field in a final order, effective January 1, 1963.
8. Frostwood is focused on the acquisition of prolific, mature, conventional assets along the Gulf Coast, with a focus on re-development of those assets that have historically only been produced with vertical wells. Frostwood plans to re-develop these assets with new technologies, namely, horizontal drilling.
9. The proposed field rules will result in the recovery of additional oil that may otherwise go unrecovered.
10. Frostwood agreed that pursuant to the provisions of Texas Government Code §2001.144(a)(4)(A), this Final Order shall be effective on the date a Master Order relating to this Final Order is signed.

**CONCLUSIONS OF LAW**

1. Proper notice was issued as required by all applicable statutes and regulatory codes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Amending the field rules for the Heyser (5400 #2) Field and the Heyser (5400 #3) Field will allow operators in the fields to recover additional reserves and prevent waste.
4. Pursuant to §2001.144(a)(4)(A) of the Texas Government Code, and the consent of the applicant, this Final Order is effective when a Master Order relating to this Final Order is signed.

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission amend the field rules for the Heyser (5400 #2) Field in Victoria and Calhoun Counties, and the Heyser (5400 #3) Field in Calhoun County, Texas

Respectfully submitted,



Karl Caldwell, P.E.  
Technical Examiner



Clayton Hoover  
Administrative Law Judge