



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 04-0318574

**APPLICATION OF SANDALWOOD EXPLORATION, L.P. (747194) TO CONSIDER
AMENDING THE FIELD RULES FOR THE PAPALOTE, SOUTH (CATAHOULA)
FIELD, SAN PATRICIO COUNTY, TEXAS**

HEARD BY: Ashley Correll - Technical Hearings Examiner
Jennifer N. Cook - Administrative Law Judge

HEARING DATE: April 12, 2019

CONFERENCE DATE: September 11, 2019

APPEARANCES:

REPRESENTING:

APPLICANT

Doug Dashiell (Attorney)
Michael Francisco (Applicant)

Sandalwood Exploration, L.P.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Sandalwood Exploration, L.P. ("Sandalwood") seeks to amend the current field rules for the Papalote, South (Catahoula) Field ("Field"), San Patricio County, Texas.

Sandalwood requests the following amended rules be adopted for the Field:

1. Papalote South (Catahoula) Field: 3368' to 3564' MD as shown on the Dual Induction Log for the Pappy Unit No. 2, Well No. 1 (API No. 42-409-33019).
2. 330' minimum property, lease, or subdivision line spacing and 0' minimum between-wells spacing.
3. 40-acre standard drilling and proration units for oil wells, with up to 20-acre tolerance for the last well on a lease or pooled unit.
4. 10-acre optional units for oil or gas wells.
5. 100% acreage allocation for oil allowables.
6. Oil allowable of 10 barrels of oil per day (BOPD) per acre assigned.

Notice was given to operators in the Field, the application was not protested, and no protesting party appeared at the hearing. The Technical Examiner and Administrative

Law Judge (collectively, "Examiners") recommend granting the application to amend the field rules as set out in the Final Order.

DISCUSSION OF THE EVIDENCE

Sandalwood sent a letter dated March 4, 2019, requesting a hearing to amend field rules. A Notice of Hearing was issued by the Commission on March 20, 2019, to all operators entitled to notice at least ten days prior to the date of the hearing. A hearing was held on April 12, 2019.

The Field (No. 69047500) was discovered on August 8, 2013, with the completion of the Pappy Unit No. 1, Well No. 1 five miles northwest of the town of Sinton, San Patricio County, Texas. The Field is an oil field, and is located along the Texas Gulf Coast in San Patricio County. It produces from the Catahoula Sand at a depth of 3395 feet in the discovery well.

Mr. Michael Francisco testified as an expert petroleum engineer on behalf of Sandalwood. Sandalwood submitted exhibits including a copy of the oil and gas proration schedule for the Field showing Sandalwood as the only operator, with two active vertical wells and a third well that is inactive. Mr. Francisco testified that the third well is now a saltwater disposal well used to dispose of produced water in the Field.

Sandalwood seeks to drill horizontal wells to recover oil reserves that cannot be economically recovered by vertical wells. The vertical wells in the Field have recovered 42,447 barrels cumulative oil with 502,127 barrels of water and no gas. Water encroachment in this water drive reservoir results in high operating costs and low ultimate recoveries. Mr. Francisco estimates the Field has recovered only 1% of its original oil in place and horizontal drilling is necessary to recover additional recoverable oil and prevent waste.

Sandalwood presented copies of Examiners' Reports and Recommendations and Final Orders from six recent dockets whereby the Commission adopted comparable rules to facilitate horizontal drilling within other comparable oil fields with multiple existing vertical wells (O&G Docket Nos. 02-0308631, 02-0308632, 02-0308635, 04-0309350, 04-0310416 and 02-0310417). In each field the Commission adopted zero between-well spacing, optional 10-acre density, and an oil allowable of 10 BOPD per acre assigned. Based on W-2 tests from wells in these fields, horizontal wells have tested at initial rates averaging 813.7 BOPD based on a 42 well sample. Mr. Francisco testified that Sandalwood seeks to obtain similar production rates to these other fields.

Production from the Field has declined so that there is only marginal production from the remaining vertical wells. Sandalwood proposes to drill horizontal wells in the relatively thin targeted interval, the Catahoula Sand which lies above the Frio formation.

Mr. Francisco testified the proposed spacing and density rules are appropriate for further development with horizontal wells in the Field. The requested zero between-well spacing and 330 feet lease-line spacing rules will facilitate horizontal drilling and is the rule in many fields in Texas being developed with horizontal wells. The requested 40-acre standard unit size is unchanged in the Field. The requested optional 10-acre field rule will facilitate the drilling of horizontal wells by allowing a reduction in acres assigned to vertical

wells with very low production rates so that acreage can be assigned to horizontal wells to provide additional allowable. The requested allowable of 10 BOPD per acre assigned will cover most of the expected initial production from Sandalwood's future horizontal wells. As the wells decline and no longer need as much allowable, the acreage will be reassigned to other more recently drilled horizontal wells.

Acreage will be assigned for allowable purposes using the Form P-16. Consistent with Statewide Rule 86 and special field rules in other fields being developed with horizontal wells, Sandalwood requests that proration unit plats not be required, but that operators be permitted to file such plats at the operator's option.

In summary, Sandalwood seeks amended field rules that are appropriate for development with horizontal wells. The Examiners recommend granting the application.

The requested rule changes will be protective of correlative rights, increase recovery of resources, and prevent waste.

At the hearing, Sandalwood agreed on the record that the Final Order in this case is to be final and effective when the Master Order relating to the Final Order is signed.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of the hearing and no protests were received.
2. Sandalwood Exploration, L.P. ("Sandalwood") seeks to amend the current field rules for the Papalote, South (Catahoula) Field ("Field"), in San Patricio County, Texas.
3. The Field (No. 69047500) was discovered when the first well was completed on August 8, 2013. Field rules were adopted on February 2, 2014 by Docket No. 04-0284934.
4. In the hearing on April 12, 2019, Sandalwood requested the following amended special field rules for the Field to facilitate horizontal drilling:
 - a. A designated correlative interval from 3,368 feet to 3,564 feet measured depth as shown on the Dual Induction Log for the Pappy Unit 2 Well No. 1 (API No. 42-409-33019).
 - b. 330 feet minimum property, lease, or subdivision line spacing and no minimum between-well spacing.
 - c. 40-acre oil drilling and proration units with up to 20-acres tolerance for the last well on a lease or pooled unit.
 - d. 10-acre optional units for oil wells.
 - e. The filing of proration unit plats permitted, but not required. Form P-16 or its successor used to identify the number of acres assigned to each well for allowable purposes.
 - f. 100% acreage allocation for oil allowables.

5. Sandalwood as the only operator in the Field, with two active vertical wells and a third saltwater disposal well used to dispose of produced water in the Field.
6. Production from the subject field has declined so that there is only marginal production from the remaining vertical wells.
7. Water encroachment in this water drive reservoir results in high operating costs and low ultimate recoveries.
8. It is estimated that the Field has recovered only 1% of its original oil in place and horizontal drilling is necessary to recover additional recoverable oil and prevent waste.
9. Amending field rules for the Field, as proposed by Sandalwood, will allow for additional development of the Field with horizontal wells.
10. The requested rule changes will be protective of correlative rights, increase recovery of resources, and prevent waste.
11. At the hearing, Sandalwood agreed on the record that the Final Order in this case is to be final and effective when the Master Order relating to the Final Order is signed.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051.
2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.42.
3. The requested amendment to the Field Rules will prevent waste and protect correlative rights.
4. Pursuant to § 2001.144 (a)(4)(A) of the Texas Government Code and the agreement of the applicant on the record, the Final Order can be final and effective when a Master Order relating to the Final Order is presented at Commission conference and signed by the Commissioners.

EXAMINER'S RECOMMENDATION

Based on the above findings of facts and conclusions of law, the Examiners recommend the Commission enter an order regarding the application of Sandalwood Exploration, L.P. approving the requested amended field rules as set out in the proposed Final Order for the Papalote, South (Catahoula) Field, in San Patricio County, Texas.

Respectfully submitted,



Ashley Correll
Technical Hearings Examiner



Jennifer Cook
Administrative Law Judge