



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 03-0296160

THE APPLICATION OF SANDALWOOD EXPLORATION, LP FOR A NEW FIELD DESIGNATION FOR THE NORMAN HURD (WILCOX 2) FIELD AND TO ADOPT TEMPORARY FIELD RULES FOR THE PROPOSED NORMAN HURD (WILCOX 2) FIELD, TYLER COUNTY, TEXAS

HEARD BY: Karl Caldwell – Technical Examiner
Marshall Enquist – Hearings Examiner

HEARING DATE: May 15, 2015
CONFERENCE DATE: July 14, 2015

APPEARANCES:

REPRESENTING:

APPLICANT:

Sandalwood Exploration, LP

Doug Dashiell
David Swenson

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Sandalwood Exploration, LP (Sandalwood) requests a new field designation for the proposed Norman Hurd (Wilcox 2) Field and to adopt temporary field rules for the proposed field. Sandalwood proposes to adopt the following temporary field rules:

1. A correlative interval from 7,810 feet MD to 7,862 feet MD as shown on the High Definition Induction Log of the BP A-22 Lease, Well No. 2 (API No. 42-457-30866) to be designated as a single reservoir for proration purposes and be designated as the Norman Hurd (Wilcox 2) Field;
2. 200'-400' well spacing (lease line, between well spacing);

3. 40 acre proration units, with no requirement to file individual well proration plats.
4. Allowable of 400 BOPD, based on MER tests.

Notice of the application was sent to all operators with active wells within 2.5 miles of the discovery well and no protests were received. The Examiners recommend approval of a new field designation for the Norman Hurd (Wilcox 2) Field and to adopt temporary field rules as proposed by Sandalwood.

DISCUSSION OF THE EVIDENCE

Sandalwood has recently drilled and completed the BP A-22 Lease, Well No. 2 (BP A-22 No. 2) in a new field and seeks a new field designation. A review of all wells within a 2.5 mile radius of the discovery well revealed that the BP A-22 No. 2 is producing from a reservoir that is not productive in any other wells within this radius. A log cross-section of wells in the area shows that the Wilcox 2 sand completed in the BP A-22 No. 2 is geologically separate from intervals completed in all other wells within a 2.5 mile radius. Historical data lists the depth of the lowest known oil produced from the Wilcox 2 sand at 7,677 feet, with the top depth at 7,641 feet. The lowest known oil-water contact is at 7,647 feet in the nearby Joe's Lake Field, located to the west of the discovery well for the proposed field. The bottom perforation in the BP A-22 No. 2 is at a depth of 7,670 feet, which is 23 below the oil-water contact in the Joe's Lake Field, which has been depleted since 1967. The Wilcox 2 interval in the new field has an average porosity of 26%, a water saturation of 36%, and a permeability of 69 millidarcies.

Sandalwood is requesting 400 feet between well spacing for the new field. Drilling wells any further than 400 feet apart will increase the risk of drilling an uneconomic well or a dry hole. Sandalwood's witness testified that lease line spacing of 200 feet with between well spacing of 400 feet is critical in drilling an additional economic well targeting the Wilcox 2 sand in the new field. The entire Norman Hurd (Wilcox 2) Field is located on acreage leased from BP America Production Co. ("BP") and BP is the only offset operator to the lease where the discovery well was drilled, received notice of the hearing, and did not file a protest to the proposed field rules.

Sandalwood tested the discovery well for the proposed Norman Hurd (Wilcox 2) Field between March 29, 2015 and May 15, 2015 to determine the maximum efficient rate (MER) for the well. Flowing tubing pressure was fairly steady on 13/64 and 14/64 inch choke sizes. Testing the well on an 11/64 inch choke to approximate the discovery allowable for the well resulted in erratic production rates, as well as the highest GOR among the four choke sizes used during testing. Analysis of both the flowing tubing pressure and gas:oil ratio (GOR) indicated reservoir pressure would not be wasted by producing the discovery well at a 400 BOPD top allowable based on the MER results.

FINDINGS OF FACT

1. Notice of the application was sent to all operators with active wells within 2.5 miles of the discovery well at least ten days prior to the date of hearing and no protests were received.
2. Sandalwood requests a new field designation for the proposed Norman Hurd (Wilcox 2) Field and to adopt temporary field rules for the field.
3. The discovery well for the proposed Norman Hurd (Wilcox 2) Field is the BP A-22 Lease, Well No. 2 (API No. 42-457-30866) Tyler County, Texas.
4. The Wilcox 2 sand in the BP A-22 Lease, Well No. 2 is producing from a separate reservoir than existing nearby fields.
5. Drilling wells in the subject field greater than 400 feet apart increases the risk of drilling an uneconomic well or a dry hole.
6. Analysis of both the flowing tubing pressure and GOR indicated reservoir pressure in the subject field would not be wasted by producing the discovery well at a top allowable of 400 BOPD.

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. Granting a new field designation for the Norman Hurd (Wilcox 2) Field and adopting temporary field rules will prevent waste.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the new field designation and adopt temporary field rules for the proposed Norman Hurd (Wilcox 2) Field, Tyler County, Texas as requested by Sandalwood Exploration, LP.

Respectfully submitted,



Karl Caldwell
Technical Examiner



Marshall Enquist
Hearings Examiner