

THE APPLICATION OF WYNN CROSBY OPERATING TO CONSOLIDATE HORDES CREEK (JUDY SAND) FIELD AND THE HORDES CREEK (KAY SAND) FIELD INTO THE PROPOSED HORDES CREEK (WILCOX CONS.) FIELD AND TO ADOPT FIELD RULES FOR THE PROPOSED HORDES CREEK (WILCOX CONS.) FIELD, GOLIAD COUNTY, TEXAS

HEARD BY: Andres J. Trevino, P.E. - Technical Examiner
Marshall F. Enquist - Legal Examiner

HEARING DATE: July 13, 2012

APPEARANCES:

REPRESENTING:

APPLICANT:

James M. Clark
Jose Velez

Wynn Crosby Operating

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Wynn Crosby Operating requests that the Hordes Creek (Judy Sand) Field (No. 42575 127) and the Hordes Creek (Kay Sand) Field (No. 42575 130) be consolidated into a new field to be known as the Hordes Creek (Wilcox Cons.) Field (No. 42575 500). Wynn Crosby requests that the following rules be adopted for the consolidated field:

1. Designated interval from 10,320 feet to 13,500 feet measured depth as shown on the log of the Hamman and Anderson Gas Unit No. 2;
2. Allocation based on 95% deliverability and 5% per well and allocation formula to remain suspended;

This application was unopposed and the examiner recommends approval of Wynn Crosby's request for field consolidation and field rules.

DISCUSSION OF THE EVIDENCE

The two fields which are the subject of this hearing were discovered in 2001. The fields include Lower Wilcox sands, the Kay Sand at 10,840 feet and the Judy Sand found at 12,800 feet, which are in the late stages of depletion. Both fields are non-associated gas fields and both operate under Statewide Rules. Both reservoirs are geo-pressured with a

gradient of 0.88 psi/ft and a reservoir temperature of 340 °F. The reservoirs produce dry gas with little water or condensate. The gas has a high CO₂ content of 4% to 9%. The high CO₂ content of the gas requires the operation of an amine plant to treat the gas which increases operating costs.

There are a total of four wells listed on the proration schedules for the two fields with about 6 completions that have ever been completed in the two fields. Cumulative production from the fields is about 7.0 BCF of gas. The discovery well for the Hordes Creek (Judy Sand) Field, the Hamman and Anderson Gas Unit No. 2, produced 3 BCF from the Judy Sand and was later recompleted into the Betty Sand and produced 1 BCF of gas. The discovery well for the Hordes Creek (Kay Sand) Field, the Hamman and Anderson Gas Unit No. 3, produced only 8 MMCF of gas. One other well operated by Wynn Crosby has produced 2 BCF of gas from the Kay Sand. Wynn Crosby plans to perform additional recompletions of existing wells into the various sands within the proposed consolidated interval.

Wynn Crosby requests that the consolidated field be designated as the interval from 10,320 feet to 13,500 feet measured depth as shown on the log of the Hamman and Anderson Gas Unit No. 2. Wynn Crosby has identified six other sands within the consolidated interval they would like to produce. These sands include the J sand, the 11,500 Sand, the 11,800 Sand, the Betty Sand, the 12,600 Sand and the Elizabeth Sand. Each is expected to be marginally economic and produce between 300 to 400 MMCF of gas each. Consolidation of the various sands into a single field will result in the recovery of additional reserves, which would otherwise be uneconomic, by producing multiple reservoirs simultaneously. Additionally, the high CO₂ content of the gas is corrosive to the casing so producing the individual sand simultaneously will minimize the exposure of the corrosive gas to the well casings.

Wynn Crosby requests that spacing and density rules remain unchanged. The proposed consolidated field will consist of numerous sands. A two factor allocation formula based on 95% deliverability and 5% per well is requested for the consolidated field to meet statutory requirements.

All wells are currently producing at 100% AOF and Wynn Crosby request the suspension of the allocation formula as there is a market demand for 100% of the gas.

FINDINGS OF FACT

1. Notice of this hearing was sent to all persons legally entitled to notice at least ten days prior to the date of hearing.
2. The subject fields proposed for consolidation were discovered in 2001. All of the fields are non-associated gas fields and there are four wells in the fields.
3. The two fields produce from the Lower Wilcox sands which are geo-pressured and in the late stages of depletion. The reservoirs produce dry gas with little water or condensate and has a high CO₂ content of 4% to 9%.

4. Both fields operate under Statewide Rules. Wynn Crosby and Milagro Exploration are the only operators in the field.
5. Cumulative production from the fields is about 7.0 BCF of gas.
 - a. The discovery well for the Hordes Creek (Judy Sand) Field, the Hamman and Anderson Gas Unit No. 2, produced 3 BCF from the Judy Sand and was later recompleted into the Betty Sand and produced 1 BCF of gas.
 - b. The discovery well for the Hordes Creek (Kay Sand) Field, the Hamman and Anderson Gas Unit No. 3, produced only 8 MMCF of gas.
 - c. One other well operated by Wynn Crosby has produced 2 BCF of gas from the Kay Sand.
6. Consolidation of the fields will result in the recovery of additional reserves from the various sands as a result of a lower combined economic limit.
7. The Hordes Creek (Wilcox Cons.) Field should be designated as the correlative interval from 10,320 feet to 13,500 feet measured depth as shown on the log of the Hamman and Anderson Gas Unit No. 2.
 - a. The interval contains six other sands within the consolidated interval that may be productive. These sands include the J Sand, the 11,500 Sand, the 11,800 Sand, the Betty Sand, the 12,600 Sand and the Elizabeth Sand.
 - b. Each is expected to be marginally economic and produce between 300 to 400 MMCF of gas.
 - c. The high CO₂ content of the gas is corrosive to the casing so producing the individual sand simultaneously will minimize the exposure of the corrosive gas to the well casings.
8. Allocation based 5% per well and 95% on deliverability will protect correlative rights and satisfy statutory requirements.
9. The Hordes Creek (Judy Sand) field is currently producing at 100% AOF.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.

2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Consolidation of the fields as proposed by Wynn Crosby Operating is necessary to prevent waste and protect correlative rights.
4. The proposed field rules will prevent waste, protect correlative rights, and satisfy statutory requirements.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the four subject fields be consolidated into a new field to be known as the Hordes Creek (Wilcox Cons.) Field and that the requested field rules be adopted for the consolidated field.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner

Marshall F. Enquist
Legal Examiner