



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 06-0284255

APPLICATION OF SABINE OIL & GAS LLC TO CONSIDER BLANKET RULE 10 EXCEPTION AUTHORITY FOR THE CARTHAGE (HAYNESVILLE SHALE), OAK HILL (COTTON VALLEY), AND OAK HILL (TRAVIS PEAK) FIELDS IN PANOLA AND RUSK COUNTIES, TEXAS

HEARD BY: Paul Dubois - Technical Examiner
Michael Crnich - Legal Examiner

DATE OF HEARING: September 23, 2013

APPEARANCES:

Dale Miller

REPRESENTING:

Sabine Oil & Gas LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of Sabine Oil & Gas LLC (Sabine), for the Commission to consider granting a blanket exception to Statewide Rule 10 allowing downhole commingling of the Carthage (Haynesville Shale), Oak Hill (Cotton Valley) and Oak Hill (Travis Peak) Fields in Panola and Rusk Counties, Texas. This application for blanket Statewide Rule 10 authority for the three fields is not protested and the examiners recommend approval.

DISCUSSION OF THE EVIDENCE

Statewide Rule 10 generally prohibits oil and gas from being produced through the same string of tubulars. Operators may apply for an exception to this general prohibition if the commingled production will prevent waste, promote conservation or protect correlative rights. Sabine is requesting blanket authority to commingle the three fields. Existing wells producing from one or two of the fields are nearing the end of their economically productive lives. Commingling the wells in additional fields will extend the productive life of the wells and allow for more hydrocarbons to be recovered from each field than would otherwise be economically feasible. The three fields subject to this application are described below in descending stratigraphic order (note the correlative intervals were

interpreted from different well logs):

- Oak Hill (Travis Peak) Field: This field has 6 oil and 14 gas wells completed in the correlative interval from 6,990 to 8,940 feet.
- Oak Hill (Cotton Valley) Field: This field has 4 oil and 1,923 gas wells completed in the correlative interval from 8,670 to 10,469 feet.
- Carthage (Haynesville Shale) Field: This field has 671 gas wells completed in the correlative interval of 9,568 to 11,089 feet.

The Oak Hill (Cotton Valley) and Carthage (Haynesville Shale) Fields are the products of the consolidations of a number of other fields over time as development in the area has evolved. These three fields have not been commingled in the past. However, other fields from the three corresponding geologic formations have been commingled on numerous occasions. Sabine does not expect cross flow or fluid compatibility will be an issue. Sabine will monitor for compatibility issues and will respond accordingly. There are mechanical and reservoir justifications in favor of downhole commingling the various zones instead of attempting to place and operate multiple production tubulars.

Sabine has identified 10 existing wells completed in one or more of these fields that it will re-complete and add one or two additional producing fields to the wells. Commingling the various fields will allow all fields to contribute to a combined economic rate that the wells could not attain on an individual field basis. By allowing all fields to produce to a lower bottom hole pressure and individual production rate, Sabine will increase their ultimate expected recoverable reserves. Without authority to commingle the various fields, the wells will be plugged and abandoned as they are nearing the end of their economically productive lives.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the hearing.
2. The hearing was not protested.
3. The subject formations have been successfully commingled numerous times in the immediate area and throughout the region.
4. Reservoir cross-flow is not anticipated to happen.
5. The reservoir fluids are expected to be compatible.
6. Commingling the various fields will allow all fields to contribute to a combined

economic rate that the wells could not attain on an individual field basis

7. Without authority to commingle the various fields, the wells will be plugged and abandoned as they are nearing the end of their economically productive lives.
8. The proposed blanket exception to Statewide Rule 10 will promote the orderly development of the Carthage (Haynesville Shale), Oak Hill (Cotton Valley) and Oak Hill (Travis Peak) Fields and protect correlative rights.

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. The proposed blanket authority for exception to Statewide Rule 10 for the Carthage (Haynesville Shale), Oak Hill (Cotton Valley) and Oak Hill (Travis Peak) Fields in Panola and Rusk Counties, Texas will protect correlative rights and satisfy statutory requirements.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions of law, the examiners recommend approval of the proposed blanket exception to Statewide Rule 10 for the Carthage (Haynesville Shale), Oak Hill (Cotton Valley) and Oak Hill (Travis Peak) Fields.

Respectfully submitted,



Paul Dubois
Technical Hearings Examiner



Michael Crnich
Legal Hearings Examiner