

THE APPLICATION OF WAGNER OIL COMPANY TO CONSOLIDATE VARIOUS LA SAL VIEJA FIELDS INTO THE LA SAL VIEJA (FRIO CONS) FIELD AND ADOPT FIELD RULES FOR THE LA SAL VIEJA (FRIO CONS) FIELD, WILLACY AND HIDALGO COUNTIES, TEXAS

Heard by: Richard D. Atkins, P.E.

Date of Hearing: June 25, 2008

Appearances:

Clark Jobe
Paul R. Tough
Anna R. Irion
Mark Belcher
David Sadler

Representing:

Wagner Oil Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Wagner Oil Company requests to consolidate eight La Sal Vieja Fields into a new field to be known as the La Sal Vieja (Frio Cons) Field. The fields proposed for consolidation are as follows:

<u>FIELD NAME</u>	<u>FIELD NUMBER</u>
La Sal Vieja (Frio 10,700)	51011 058
La Sal Vieja (Frio 10,800)	51011 116
La Sal Vieja (Frio 10,950)	51011 121
La Sal Vieja (Frio 11,000)	51011 123
La Sal Vieja (Frio 11,100)	51011 125
La Sal Vieja (Frio 11,360)	51011 130
La Sal Viejo (Nuevo)	51011 140
La Sal Vieja (Oberg)	51011 174

Wagner requests that the following rules be adopted for the new field:

1. Designation of the field as the correlative interval from 10,226 feet to 11,502

feet, as shown on the Atlas Induction Electric Log of the Mitchell Energy Corporation - B. F. Cox Lease Well No. 2 (API No. 42-489-30103);

2. 467'-1,200' well spacing;
3. 640 acre units with optional 40 acre density and a 10 percent tolerance;
4. Allocation based on 75 percent deliverability and 25 percent per well and that the allocation formula be suspended.

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

DISCUSSION OF THE EVIDENCE

The eight La Sal Vieja fields were discovered beginning in November 1962. The fields operate under various spacing and density rules and have various allocation formulas. The fields are all classified as non-associated and are geographically intermingled. There are no other fields contained within the proposed correlative interval.

Wagner is proposing to consolidate the eight fields into the La Sal Vieja (Frio Cons) Field and classify it as non-associated. The proposed designated interval for the consolidated field is from 10,226 feet to 11,502 feet, as shown on the Atlas Induction Electric Log of the Mitchell Energy Corporation - B. F. Cox Lease Well No. 2 (API No. 42-489-30103).

The only operators in the various La Sal Vieja fields are Wagner and Apache Corporation. Together, they operate nine wells that have had a total of eighteen completions. Several of the wells have produced from up to four different fields.

The La Sal Vieja fields are located on a rollover anticline on the down-thrown side of the Francisco Conundrum fault zone. This fault zone is north-south trending and extends down into Mexico. The fields consist of stacked Frio sands that were deposited in a deltaic near shore marine environment. Cross section analysis indicates that the Frio interval includes numerous lenticular sands with extensive lateral variability. Structurally downdip, many of the sands exhibit a serrated log characteristic and begin to pinch out.

Most of the sands may prove to be productive in future wells, but separate completions in each sand would not be commercial. In addition, completing in all of the productive intervals at the same time will reduce the economic limit for each interval and provide for the additional recovery of hydrocarbons.

The bottom hole pressures and gas compositions are similar throughout the Frio

interval. A typical well has a bottomhole pressure of 8,240 psia, gas gravity of 0.6 and bottomhole temperature of 249 degree F. As a result, Wagner stated that crossflow between zones and fluid incompatibilities are not anticipated. The Frio sands all have depletion drive as the primary drive mechanism and produce little water. Wagner calculated a recovery factor of 65 percent for all of the fields.

Wagner provided drainage area calculations for eleven wells in the various La Sal Vieja fields and the Chile Vieja (Frio) field located 2 miles to the southeast. The drainage areas range from 12 acres up to a maximum of 627 acres. The average drainage area was calculated to be approximately 143 acres. However, five of the eleven wells will drain less than 80 acres and two of the eleven wells will drain less than 40 acres.

Minimum well spacing of 467'-1,200' (lease line-between well) and 640 acre units with optional 40 acre density will provide flexibility in locating wells for future development in the La Sal Vieja area. Wagner will be actively developing the Frio interval by drilling infill wells and completing existing wells into additional Frio zones.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. Since the Frio interval includes numerous lenticular sands with extensive lateral variability, the ultimate recovery is determined by sand quality and not by assigned acreage. Therefore, Wagner proposed a two-factor allocation formula for gas wells based on 75 percent deliverability and 25 percent per well to satisfy both of the above statements. In addition, the allocation formula should be suspended as there is a 100 percent market for all the gas produced from the field.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The eight La Sal Vieja fields were discovered beginning in November 1962. The fields operate under various spacing and density rules and have various allocation formulas. The fields are all classified as non-associated and are geographically intermingled.
3. There are nine wells with eighteen completions in the fields. Wagner Oil Company and Apache Corporation operate all of the wells in the eight fields proposed for consolidation.
4. Wagner is proposing to consolidate the eight fields into the La Sal Vieja (Frio Cons) Field and classify it as non-associated.
5. The designated interval for the consolidated field is from 10,226 feet to 11,502 feet, as shown on the Atlas Induction Electric Log of the Mitchell

Energy Corporation - B. F. Cox Lease Well No. 2 (API No. 42-489-30103).

6. Wells in the eight La Sal Vieja fields produce from the same correlative interval.
7. The La Sal Vieja fields consist of stacked Frio sands that were deposited in a deltaic near shore marine environment. Cross section analysis indicates that the Frio interval includes numerous lenticular sands with extensive lateral variability.
8. The Frio sands all have depletion drive as the primary drive mechanism and produce little water. Wagner calculated a recovery factor of 65 percent for all of the fields.
9. The bottom hole pressures and gas compositions are similar throughout the Frio interval. As a result, Wagner stated that crossflow between zones and fluid incompatibilities are not anticipated.
10. The calculated drainage areas support Wagner's requested 640 acre spacing with optional 40 acre units that will provide flexibility in locating wells for future development in the La Sal Vieja area.
11. Wagner proposed a two-factor allocation formula for gas wells based on 75 percent deliverability and 25 percent per well to satisfy State Statutes.
12. Suspension of the allocation formula in the consolidated field is appropriate because there is a market for any gas produced from the field.

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 Wagner Oil Company 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 of fact and conclusions of law, the examiner recommends that the Commission consolidate the eight La Sal Vieja Fields into the new field, the La Sal Vieja (Frio Cons) Field, Willacy and Hidalgo Counties, Texas, adopt permanent field rules for the La Sal Vieja (Frio Cons) Field and that the allocation formula in the field be suspended.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Hearings Examiner