



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 10-0291059**

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**THE APPLICATION OF SABINE OIL & GAS LLC TO CONSIDER A FIELDWIDE  
MAXIMUM EFFICIENT RATE ALLOWABLE AND NET GAS-OIL RATIO FOR THE  
LARD RANCH (GRANITE WASH -C-) FIELD, ROBERTS COUNTY, TEXAS**

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**HEARD BY:** Paul Dubois – Technical Examiner  
Terry Johnson – Hearings Examiner

**HEARING DATE:** December 17, 2014

**CONFERENCE DATE:** March 24, 2015

**APPEARANCES:**

Dale Miller  
Richard Atkins, P.E.

**REPRESENTING:**

Sabine Oil & Gas LLC

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Sabine Oil & Gas, LLC (Sabine) is requesting a field-wide maximum efficient rate (MER) allowable of 1,500 barrels of oil per day (BOPD) and a daily gas limit of 5,000 thousand cubic feet (MCF) per day for all wells in the Lard Ranch (Granite Wash -C-) Field, Roberts County, Texas. Sabine also requests that overproduction be cancelled. The application was not protested. The Examiners recommend Sabine's request be granted.

**DISCUSSION OF EVIDENCE**

The Lard Ranch (Granite Wash -C-) Field was discovered on May 31, 1980. The Lard Ranch (Granite Wash -C-) Field is an associated field currently developed with about 42 oil wells and 70 gas wells. The field rules in place at the time of the hearing provided for 40-acre proration units, 467-foot lease line spacing and 660-foot between well spacing. The top oil allowable in the field is 133 BOPD. Oil wells may produce casinghead gas at a gas-to-oil ratio (GOR) of 2,000 standard cubic feet (SCF) per barrel of oil, which corresponds to a daily gas limit of 266 MCF gas per day. Gas production from gas wells is not restricted; gas wells may produce at absolute open flow.

Sabine believes the current oil allowable and daily gas limit restrict the ability of Sabine and other operators to produce the field efficiently. Sabine's is developing its interests in the Lard Ranch (Granite Wash -C-) Field with horizontal wells. These wells exhibit high initial oil production rates followed by rapid decline. The current maximum oil allowable of 133 BOPD is dwarfed by the production of some of its wells. The average initial potential test for an oil well in the field is 431 BOPD, and the maximum observed to date is 1,434 BOPD. Further, oil allowables are penalized (reduced) because the wells in the field produce more than 2,000 scf gas per barrel of oil.

Sabine believes the oil wells can be produced efficiently at allowables much higher than the current 133 BOPD, and is requesting an MER allowable of 1,500 BOPD. To demonstrate that wells in the field can produce efficiently at a higher daily oil allowable rate, Sabine tested two of its horizontal wells in the field, the Boone 11 Lease (No. 09005), Well No. 1H (API No. 42-393-32530), and the Mesa Vista 4 Lease (No. 08888), Well No. 2H (API No. 42-393-32523). The tests included varying choke sizes from 64/64<sup>ths</sup> of an inch to as low as 5/64<sup>ths</sup> of an inch. The test data for both of these wells indicate the wells produce more efficiently—that is, with a lower GOR—at larger choke sizes as follows:

Boone 11 Lease (No. 09005), Well No. 1H (API No. 42-393-32530)

- On 52/64<sup>ths</sup> of an inch choke the well flowed with an average tubing pressure of 200 pounds per square inch (psi) and produced 392 BOPD at an average GOR of 3,803 SCF per barrel.
- On a 31/64<sup>ths</sup> of an inch choke the well flowed with an average tubing pressure of 550 psi and produced 107 BOPD at an average GOR of 7,648 SCF per barrel.
- Intermediate choke steps resulted in proportionately intermediate oil production and GOR.

Mesa Vista 4 Lease (No. 08888), Well No. 2H (API No. 42-393-32523)

- On 64/64<sup>ths</sup> of an inch choke the well flowed with an average tubing pressure of 136 psi and produced 185 BOPD at an average GOR of 6,256 SCF per barrel.
- On a 5/64<sup>ths</sup> of an inch choke the well flowed with an average tubing pressure of 446 psi and produced 82 BOPD at an average GOR of 12,574 SCF per barrel.
- Intermediate choke steps resulted in proportionately intermediate oil production and GOR.

Because of the insufficient allowable and penalized allowables due to high gas production, Sabine also requests that overproduction be cancelled for all oil wells in the Lard Ranch (Granite Wash -C-) Field.

**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 hearing.
2. The Lard Ranch (Granite Wash -C-) Field was discovered on May 31, 1980.
3. The Lard Ranch (Granite Wash -C-) Field is an associated field currently developed with about 42 oil wells and 70 gas wells.
4. The top oil allowable in the field is 133 BOPD. Oil wells may produce casinghead gas at a gas-to-oil ratio (GOR) of 2,000 standard cubic feet (SCF) per barrel of oil, which corresponds to a daily gas limit of 266 MCF gas per day. Gas production from gas wells is not restricted; gas wells may produce at absolute open flow.
5. The average initial potential test for an oil well in the field is 431 BOPD. The maximum initial potential test is 1,434 BOPD.
6. Oil allowables are penalized (reduced) because the wells in the field produce more than 2,000 scf gas per barrel of oil.
7. Step-rate testing demonstrated that oil wells can be produced efficiently at allowables much higher than the current 133 BOPD.
8. Wells in the Lard Ranch (Granite Wash -C-) Field can produce efficiently at an MER allowable of 1,500 BOPD and a daily gas limit of 5,000 MCF per day.

**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 § 1.45
3. An MER allowable of 1,500 BOPD and a daily gas limit of 5,000 MCF per day will prevent waste and protect correlative rights.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the Examiners recommend Sabine's request be granted, and the Lard Ranch (Granite Wash -C-) Field be assigned a MER allowable of 1,500 BOPD and a daily gas limit of 5,000 MCF per day.

Respectfully submitted,



Paul Dubois  
Technical Examiner



Terry Johnson  
Hearings Examiner