



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7B-0300030

**THE APPLICATION OF SCHKADE BROS. OPERATING COMPANY PURSUANT TO
16 TEX. ADMIN. CODE §3.23 TO CONSIDER AUTHORITY TO INSTALL A VACUUM
PUMP FOR THE CHRANE LEASE, WELL NO. 1, CHRANE (HOPE) FIELD,
CALLAHAN COUNTY TEXAS**

HEARD BY: Brian Fancher, P.G. – Technical Examiner
Jennifer Cook – Administrative Law Judge

HEARING DATE: July 1, 2016

SUBMISSION DATE: July 27, 2016

CONFERENCE DATE: August 9, 2016

APPEARANCES:

REPRESENTING:

APPLICANT:

Rick Johnston

Schkade Bros. Operating Co.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Schkade Bros. Operating Company ("Schkade") seeks approval from the Commission to place its Chrane Lease ("Subject Lease"), Well No. 1 ("Subject Well"), completed in the Chrane (Hope) Field ("Field"), on a vacuum pump, pursuant to Statewide Rule 23(2) [16 Tex. Admin. §3.23(2)]. Schkade requests that it be allowed to exert up to 25-inches of mercury on the Subject Well through vacuum pump compression. This application is unopposed. The Administrative Law Judge and Examiner (collectively "Examiners") recommend that it be granted.

DISCUSSION OF THE EVIDENCE

Statewide Rule 23(2) states:

In a field which is depleted or practically depleted vacuum may be used, but no vacuum pump shall be installed or used without a permit from the commission obtained upon application after notice to adjacent lease owners and operators and a public hearing.

Rick Johnston, consulting petroleum engineer, testified on behalf of Schkade.

On January 5, 2016, a Commission inspection was performed on the Subject Lease, where the Commission inspector observed that the Subject Well was producing with 20" of vacuum on the well without a proper permit. By letter dated January 21, 2016, the Commission issued a letter to Schkade of the findings made by the inspector on January 5th.¹ Schkade subsequently removed the vacuum from the Subject Well and observed that production through the well fell to nearly zero barrels per day.² As a result, Schkade seeks to return the well to production through use of a vacuum pump.

Mr. Johnston testified that the Subject Field is practically depleted. The Subject Well is a marginal well, and it is situated on a 20-acre lease.³ Schkade submitted several copies of letters signed by unleased mineral owners that waived objection to the use of a vacuum pump on the Subject Well.⁴ Schkade identified those unleased mineral owners as adjacent lease owners to the Subject Lease.⁵ Notice of Hearing for the subject application was made by U.S. Mail to those unleased mineral interest owners on May 18, 2016.

The Subject Well is the only well of record in the Subject Field and is surrounded by dry holes.^{6,7} It is also the discovery well for the Subject Field. The well was originally completed on June 6, 1996. Upon completion, the well was placed on pump and its initial potential test resulted in 30 barrels of oil per day, 0 MCF of gas per day, and 0 barrels of water per day.⁸ The Subject Well has produced on decline from 1996 until roughly 2012.⁹ In late-2012, a vacuum pump was placed on the well.¹⁰ After that, production from the well increased and subsequently resumed its decline. Prior to removal of the vacuum pump, the well produced roughly two to three barrels of oil per day.¹¹

In the subject application, Schkade seeks to place up to 25-inches of mercury on the Subject Well. Atmospheric pressure is 14.69 pounds per square inch absolute ("psia"), which

¹ Schkade Exh. No. 1.

² Testimony at 2:50 of audio recording.

³ Schkade Exh. No. 3.

⁴ Schkade Exh. No. 4.

⁵ Testimony at 5:15.

⁶ Schkade Exh. Nos. 5.

⁷ Schkade Exh. No. 6.

⁸ Schkade Exh. No. 7.

⁹ Schkade Exh. No. 8.

¹⁰ Testimony at 9:00.

¹¹ Testimony at 10:00.

equates to 29.92-inches of mercury. That is also equivalent to zero pounds per square inch gauge (“psig”). By placing 25-inches of mercury on the Subject Well, a vacuum is established that increases hydrocarbon mobility in the Subject Field’s reservoir. At Schkade’s requested rate, 4.92-inches of mercury absolute is equivalent to 2.42 psia.¹² Mr. Johnston testified if Schkade’s requested relief is not granted, then approximately 1,370 barrels of oil will likely go unrecovered from the Subject Field.¹³ Thus, the subject application is necessary to prevent physical waste.

EXAMINERS’ DISCUSSION

Although it was indicated that Schkade has actively produced the Subject Well through means of vacuum pump before it received authority from the Commission, the only issue considered in the captioned docket is whether or not Schkade should be granted exception to Statewide Rule 23 to place the Subject Well on vacuum in order to prevent waste.

Based on the record evidence, the Examiners believe that Schkade has reasonably shown that its requested relief should be granted from the date the hearing was requested, onward.

FINDINGS OF FACT

1. Schkade Bros. Operating Company (“Schkade”) seeks approval from the Commission to place its Chrane Lease (“Subject Lease”), Well No. 1 (“Subject Well”), completed in the Chrane (Hope) Field (“Subject Field”), on a vacuum pump, pursuant to Statewide Rule 23(2) [16 Tex. Admin. §3.23(2)].
2. Notice of Hearing for the subject application was made by U.S. Mail to those unleased mineral interest owners on May 18, 2016.
3. The Subject Well is the discovery well for the Subject Field, and it is the only well of record in the Subject Field.
4. The Subject Well is immediately surrounded by dry holes.
5. The Subject Well has produced through use of an artificial vacuum pump since late-2012.
6. Without the use of artificial vacuum on the Subject Well, it does not sustain production from the Subject Field.
7. Through assertion of up to 20-inches of mercury on the Subject Well, it produces approximately two to three barrels of oil per day from the Subject Field.
8. The Subject Field is practically depleted.
9. Through use of artificial vacuum, approximately 1,370 barrels of oil will be recovered from the Subject Field.

¹² Schkade Exh. No. 10.

¹³ Testimony at 13:27.

10. Without artificial vacuum, approximately 1,370 barrels of oil will go unrecovered from the Subject Field.
11. Authority to assert up to 25-inches of mercury on the Subject Well is reasonable to establish a vacuum so that the remaining recoverable reserves may be captured from the Subject Field.
12. The use of a vacuum pump on the subject wells is appropriate.

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. Approval of the Subject Application subject, pursuant to 16 Tex. Admin. Code §3.23(2) will prevent waste.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission grant Schkade Bros. Operating Company's subject application to place no more than 25-inches of mercury on the Subject Well so that the Subject Field may be produced on vacuum.

Respectfully Submitted,

Brian Fancher, P.G.
Technical Examiner

Jennifer Cook
Administrative Law Judge