

RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

January 13, 2014

Oil & Gas Docket No. 01-0284743

APPLICATION OF PETROSAURUS INC. TO CONSIDER AN EXCEPTION TO STATEWIDE RULE 21 IN ORDER TO PRODUCE BY SWABBING, BAILING OR JETTING IN VARIOUS LEASES, VARIOUS WELLS, SOMERSET FIELD, ATASCOSA AND BEXAR COUNTIES, TEXAS.

APPEARANCES:

Antonio Prado, Vice President Ruben Smith, Operations Manager Petrosaurus, Inc.

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED:
NOTICES OF HEARING ISSUED:
HEARINGS HELD:
HEARINGS EXAMINER:
TECHNICAL EXAMINER:
PFD CIRCULATED:

September 16, 2013 November 1, 2013 November 22, 2013 Marshall Enquist Richard Atkins January 13, 2014

STATEMENT OF THE CASE

Petrosaurus, Inc. (hereinafter "Petrosaurus") seeks swabbing authority for its leases and wells in the Somerset Field of Atascosa and Bexar Counties. Those leases and wells are:

- 1. Jesus Mireles (10858) Lease, Atascosa County Well Nos. 3, 4, 5, 7, 8, 9, 12 and 15.
- Lucy Nichols (10856) Lease, Atascosa County
 Well Nos. 8, 10, 13, 14, 18, 21, 24, 25, 26, 27, 28 and 29.

- 3. Webb -A- (11365) Lease, Atascosa County
 Well Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23.
- Wiemers, C.T, -A- (11211) Lease, Atascosa County
 Well Nos. 1A, 2A, 3A, 4A, 6A, 7A, 9A, 11A, 12A, 13A, 14A, 16A, 17A, 19A, 20A, 21A, 23A and 24A.
- 5. Bennett (10974) Lease, Bexar County Well Nos. 1, 2, 4, 6, 7, 9, 12, 13 and 14.
- 6. Gorden S. -A- (11001) Lease, Bexar County
 Well Nos. B 1, B 2, B 3, B 4, B 5, B 6, B 7, B 8, B 9, B 10, C 2, J 2, M 2, M 3, M 6, P 22,
 P 33, S 4 and S 5.
- 7. Williams, Minnie E. (10946) Lease, Bexar County Well Nos. 1, 1A, 2A, 11, 12, 13, 14, 16, 17, 20, 22, 23, 24, 25 and 26.
- 8. Winn (11068) Lease, Bexar County Well Nos. 1, A 1, A 2, A 3, A 5, A 6, A 8, A 9, A 10, A 12, A 13, A 16, A 17, A 18, A 19, A 21, A 22, B 1, B 2, B 3, B 4, B 5 and J 3.

The applied-for wells currently are produced by swabbing by Aminex USA, Inc. and are being transferred to Petrosaurus. Swabbing permits are not transferrable, hence the need for the present hearing.

For the purpose of giving notice of the applications here involved, Petrosaurus provided the Commission with the addresses of the surface owners and mineral owners of the affected tracts. Notice by publication was not necessary. Petrosaurus appeared and presented evidence at the hearing through its Vice President Antonio Prado and its Operations Manager Ruben Smith. No one appeared in opposition to the applications.

STATEWIDE RULE 21

Effective October 2, 2002, the Commission adopted amendments to Statewide Rule 21 which prohibited swabbing, bailing or jetting as a production method for wells unless the Commission has, after notice and hearing, granted an exception to Statewide Rule 21. Statewide Rule 21(k)(1) and (2) set the mandatory and discretionary issues considered by the Commission for exceptions allowing swabbing as a production method:

- (1) An operator seeking an exception to allow swabbing, bailing, or air jetting of a well shall:
- (A) provide the Commission with the names and mailing addresses of the mineral interest owners of record and surface owners of record of the lease on which

a well for which an exception is sought is located;

- (B) present evidence at the hearing establishing:
 - (i) the method of production proposed;
- (ii) that any production is properly accounted for pursuant to §3.26 of this title (relating to Separating Devices, Tanks, and Surface Commingling of Oil);
- (iii) that the proposed exception is necessary to prevent waste or protect correlative rights;
- (iv) that wellhead control is sufficient to prevent releases from the well:
- (v) that no pollution of usable quality water or safety hazard will result from either the proposed production method or the condition of the well; and
- (vi) that the operator possesses a continuing good faith claim to the right to operate the well.
- (2) In addition to the information set out in paragraph (1) of this subsection, factors that the Commission may consider in ruling on a request for an exception include:
- (A) whether the well has passed a mechanical integrity test within the preceding 12 months;
- (B) the estimated monthly and cumulative production from the well if the requested exception is granted;
 - (C) whether production will be into an on-lease tank battery or a mobile tank;
- (D) the adequacy of the financial assurance provided by the operator to assure that the well will be timely and properly plugged;
- (E) whether production volume, fine sands in the reservoir, or other factors render pumping of the well impracticable;
- (F) whether the reservoir from which the well produces contains hydrogen sulfide; and
 - (G) the operator's history of compliance with Commission rules.

On September 16, 2013, Petrosaurus filed an application with the Commission requesting approval to produce the above-listed wells on eight leases by swabbing.

MATTERS OFFICIALLY NOTICED

The examiner has officially noticed: (1) Commission production records reflecting production of oil or gas on the leases involved in this proceeding, as reported to the Commission by predecessor operator Aminex; and, (2) the Mainframe "Wellbore Lease Inquiry" listing the on-schedule wells on the relevant leases, the Mainframe "On-Schedule Leases, Wells, Wellbores By Operator" and (3) memoranda and recommendations of District Office 1 and the Commission's Field Operations Section contained in the Commission's files relating to the application involved in this proceeding.

DISCUSSION OF THE EVIDENCE

Organization Information

Petrosaurus first filed a P-5 Organization Report with the Commission on August 30, 2011. The examiner has officially noticed Commission "On Schedule Leases, Wells, Wellbores By Operator" records indicating that as of December 16, 2013, Petrosaurus was the operator of 292 wells with a total depth of 428,973 feet. Petrosaurus filed its most recent organization report with the Commission on June 27, 2013. Catherine Garrett is the President and Robert Barger is the Secretary of Petrosaurus.

Proposed Production Method and Proper Accounting

Petrosaurus will use swabbing as a means of production for the applied-for leases and wells. On the eight leases that are the subject of these applications, there are a total of 127 active wells. All will be swabbed.

Each lease has an on-site tank battery. The Petrosaurus swabbing rig, a tractor carrying swabbing equipment with a tank trailer attached, swabs each well into the mobile tank. The contents of the mobile tank are then pumped into the on-site tank battery before the swabbing unit leaves the lease. This method allows Petrosaurus to keep track of the amount of oil the swabbed wells are producing on each lease.

The wells that are swabbed have threaded casing above the ground, with wellhead control maintained by a threaded collar screwed onto the casing. The collar has a flat plate welded on top and there is a short section of pipe, with a valve, welded to the flat plate. The valve allows any pressure build-up in the well to be relieved before the collar is unscrewed and the well is opened to atmosphere. The swabbing tool ("stinger") is inserted into the well and a rubber cup lowered into the fluids. As the cup is retrieved, it expands and forces a column of fluid upward into the hose connected to the mobile tank. When swabbing is completed and the swabbing tool is withdrawn from the well, a pan swings under the tool to catch any drippings, preventing oil-staining of the ground around the wellbore. By pumping the recovered fluids from the swabbed wells into the lease tank battery, there is no commingling with production from other leases.

Waste and Correlative Rights

Petrosaurus will be swabbing in the Somerset Field, which produces from the Olmos Sands. The Somerset Field was discovered in 1911, with the majority of the drilling activity occurring in the 1980s. The field extends over 30 miles with 3000 wells drilled so far. The Somerset Field is a low volume field with a long life. It is currently pressure-depleted with the majority of production obtained from stripper wells. Petrosaurus believes fluid entry into the wells is on the order of 0.25 barrels of oil per day.

The cost of maintaining a pumping unit on these stripper wells is prohibitive. Even a small pumping unit would cost \$2,000. Tubing would add another \$3.00 per foot and rods would add \$2.75

per foot. Parts on each pumping unit would wear over time, requiring repairs and replacement of parts. As the cost of metal has increased over the years, isolated pumping units have been subjected to the theft of wire and metal, leading to additional costs. Petrosaurus believes that if it is denied the authority to produce these wells by swabbing, that it will be forced to plug them.

The production curves for the wells are essentially flat, but the wells are expected to produce at these low levels indefinitely. Petrosaurus believes that if swabbing authority is not granted, waste of hydrocarbons will occur. If swabbing authority is granted, Petrosaurus believes the correlative rights of it and its lessors will be protected.

Wellhead Control

Each well has continuous wellhead control, with a threaded collar on the well casing, and a flat plate welded to the collar to prevent the escape of fluids. Each flat plate has a short pipe welded to it, with a valve attached, to maintain wellhead control and to allow the venting of each well prior to attachment of the swabbing rig.

Pollution and Safety Hazards

Petrosaurus believes that the equipment it uses for swabbing, including the rotating pan that will catch any dripping oil once the swabbing rig is detached from the well, provides a method of hydrocarbon production that will prevent almost all oil from reaching the ground. The Somerset Field does not produce any hydrogen sulfide, so there is no necessity for safety equipment or controls to deal with this hazard.

Good Faith Claim

After the hearing, Petrosaurus provided copies of oil and gas leases for all eight of the applied-for leases. Commission production records indicate all eight leases have produced continuously since at least 2003, supporting Petrosaurus' good faith claim to operate.

Mechanical Integrity Tests

The Commission's Mainframe "Lease H-15 Problem Inquiry" screen, for each of the eight applied-for leases, states "No well with H-15 violation found". Fluid Level and Mechanical Integrity Tests are not required for any of the subject wells.

Estimated Production Amounts

The amounts of oil produced by the applied-for leases is erratic. However, using the reported production figures for the first ten months of 2013, the average monthly production for each of the leases is as follows: Jesus Mireles (10858) Lease - 5 barrels; Lucy Nichols (10856) Lease - 32 barrels; Webb -A- (11365) Lease - 39 barrels; Wiemers, C.T. -A- (11211) Lease - 54 barrels; Bennett (10974) Lease - 47 barrels; Gorden S. -A- (11001) Lease - 50 barrels; Williams, Minnie E. (10946) Lease - 56

barrels and Winn (11068) Lease - 47 barrels. As the production curve for all of the leases has already flattened, it is likely that the leases will produce at their average monthly rate with only a gradual decline for the next decade.

Considering the production figures over the past decade, from October 2003 through October 2013, a substantial quantity of oil was produced by these stripper wells, and a substantial quantity will likely be produced in the decade to come. Production figures for the past decade are as follows:

| .1.) | Jesus Mireles (10858) Lease | 2,445 BO | 8 wells |
|------|-----------------------------------|----------|----------|
| 2.) | Lucy Nichols (10856) Lease | 3,828 BO | 12 wells |
| 3.) | Webb -A- (11365) Lease | 6,503 BO | 23 wells |
| 4.) | Wiemers, C.TA- (11211) Lease | 5,953 BO | 18 wells |
| 5.) | Bennett (10974) Lease | 5,070 BO | 9 wells |
| 6.) | Gorden SA- (11001) Lease | 7,259 BO | 19 wells |
| 7.) | Williams, Minnie E. (10946) Lease | 6,242 BO | 15 wells |
| 8.) | Winn (11068) Lease | 7,961 BO | 23 wells |

Total production over the last decade from the eight leases is 45,261 barrels of oil.

Financial Assurance

Petrosaurus has filed financial assurance in the amount of \$250,000 pursuant to Texas Natural Resources Code §91.1042 and Statewide Rule 78(g)(1)(B) in the form of a bond.

Practicality of Pumping Operations

As previously stated, the subject leases and wells do not produce a sufficient volume of oil to justify equipping for pumping. As an example, the Wiemers, C.T. -A- Lease has produced an average of 54 barrels of oil per month in the first ten months in 2013, but the lease has eighteen wells. Averaged over the entire lease, each well produces only three barrels of oil in a month.

History of Compliance

Petrosaurus has no history of violations of Commission rules.

EXAMINERS' OPINION

Statewide Rule 21 sets forth both mandatory requirements and discretionary considerations in evaluating an application to use swabbing as a production method for a well. It is the examiners' conclusion that, based on the uncontested evidence, Petrosaurus' application satisfies all of the mandatory requirements set forth in Statewide Rule 21 to approve its applications.

Mandatory Requirements

Statewide Rule 21 provides that an operator seeking an exception to the rule prohibiting swabbing as a production method *must* present evidence establishing: (1) the method of production proposed; (2) that any production is properly accounted for pursuant to Statewide Rule 26 (relating to Separating Devices, Tanks, and Surface Commingling of Oil); (3) that the proposed exception is necessary to prevent waste or protect correlative rights; (4) that wellhead control is sufficient to prevent releases from the well; (5) that no pollution of usable quality water or safety hazard will result from either the proposed production method or the condition of the well; and (6) that the operator possesses a continuing good faith claim to the right to operate the well.

- (A) The Method of Production Proposed: Petrosaurus proposes to produce the wells involved in this proceeding by swabbing. There is sufficient evidence of the type of equipment and procedures used by Petrosaurus for this purpose to support the applications.
- (B) Proper Accounting for Production: This mandatory consideration applies to the requirements of Statewide Rule 26 relating to Separating Devices, Tanks, and Surface Commingling of Oil. All oil produced on each lease by Petrosaurus will be properly accounted for by being pumped into the on-site tank battery of each lease. There is nothing in the evidence to suggest that Petrosaurus will not properly account for production by swabbing on the leases that are the subject of this proceeding.
- (C) Waste and Correlative Rights: Petrosaurus has presented sufficient evidence to support its claim that swabbing will result in the prevention of waste. The leases and wells at issue have produced a total of approximately 45,261 barrels of oil by swabbing over the last ten years and are likely to produce this amount, or slightly less, in the next ten years. Denial of authority to produce these wells by swabbing would result in the waste of at least some of this oil, and possible confiscation due to production on adjacent leases.

It reasonably may be inferred from this evidence that there are additional recoverable reserves in the subject field that can be produced by Petrosaurus through use of swabbing as a method of production. The subject wells are no longer equipped for production by pumping, and re-equipping the wells for pumping production does not appear to be economical. The examiner concludes that granting of the requested Statewide Rule 21 exception will prevent waste of hydrocarbons. The production decline curve for these leases and wells is essentially flat, and may remain so for the foreseeable future.

It might be argued that swabbing authority is necessary to protect Petrosaurus' correlative rights

because operators of wells on adjacent leases would be allowed to produce their wells, potentially draining reserves from the Petrosaurus properties. However, Petrosaurus offered no evidence that offsetting production could drain reserves from its properties which would be produced by swabbing. Petrosaurus not address a central premise behind any claim that a permit is necessary to protect correlative rights; i.e., that protection of correlative rights addresses the opportunity to recover the fair share of reserves underlying the property. There is no evidence that Petrosaurus is being denied such an opportunity. Accordingly, the examiners can only recommend a grant of swabbing authority based on prevention of waste.

- (D) Wellhead Control: Petrosaurus presented evidence that all of its wells have wellhead control. Petrosaurus presented a photograph of a representative well, with threaded collar, plate and valve, indicating adequate wellhead control.
- (E) Pollution and Safety Hazards: The evidence presented by Petrosaurus tends to show that swabbing the subject wells will not result in pollution of usable quality water or a safety hazard. Swabbing as conducted by Petrosaurus does not inherently present a threat of oil spills. Spills can always occur from leaks, but these are a possibility under any production method. The wells produce a minimal amount of gas and hydrogen sulfide release is not a concern.
- (F) Good Faith Claim: The applicant for exceptions to Statewide Rule 21 must present evidence establishing that the applicant possesses a continuing good faith claim to the right to operate the wells proposed to be produced by swabbing, bailing, or jetting. Statewide Rule 21 does not define "good faith claim," but Statewide Rule 14 does. Pursuant to Statewide Rule 14(a)(1)(E), "good faith claim" means "A factually supported claim based on a recognized legal theory to a continuing possessory right in a mineral estate, such as evidence of a currently valid oil and gas lease or a recorded deed conveying a fee interest in the mineral estate." Petrosaurus presented sufficient evidence that it holds currently valid oil and gas leases with respect to all of the leases involved in these applications.

Discretionary Considerations

Pursuant to Statewide Rule 21, the Commission may consider: (1) whether the wells for which exceptions are sought have passed a mechanical integrity test within the preceding 12 months; (2) the estimated monthly and cumulative production from the wells if the requested exceptions are granted; (3) whether production will be into an on-lease tank battery or a mobile tank; (4) the adequacy of the financial assurance provided by the operator to assure that the wells will be timely and properly plugged; (5) whether production volume, fine sands in the reservoir, or other factors render pumping of the wells impracticable; (6) whether the reservoir from which the well produces contains hydrogen sulfide; and (7) the operator's history of compliance with Commission rules.

- (A) Mechanical Integrity Testing: Almost all of the Petrosaurus wells in these applications are over 25 years old, but none have been inactive for a period of one year. Consequently, MIT tests are not required to be performed.
 - (B) Monthly and Cumulative Production: The evidence shows that the applied-for leases

have produced by swabbing an average of 5 to 56 barrels of oil per month over the last ten months and that, collectively, the eight leases will produce 330 barrels of oil per month. The wells have produced at this rate for approximately ten years, resulting in recovery of 45,261 barrels of oil. The decline curve for the wells is flat and they will likely produce another 45,261 barrels of oil, or slightly less, over the next decade.

- (C) Production Into Tanks: Petrosaurus swabs the wells by hooking them up to its swabbing unit mounted on a tractor and producing the recovered fluids into a mobile tank attached to the tractor. All produced fluids are taken to storage tanks on-lease.
- **(D)** Adequacy of Financial Assurance: Petrosaurus has filed financial assurance with the Commission in the form of a \$250,000 bond.
- (E) Practicality of Pumping Wells: Petrosaurus presented credible testimony that it is not economically practical to produce the wells by equipping them with pumps.
- **(F)** Hydrogen Sulfide: The wells involved in these applications do not produce hydrogen sulfide gas.
 - (G) History of Compliance: Petrosaurus has not been the subject of any enforcement dockets.

Conclusion

Based on all of the factors that the Commission must, or in its discretion may, consider, the examiners have concluded that these applications for exceptions to Statewide Rule 21 should be approved for so long as Petrosaurus remains the operator of the wells.

The examiners recommend adoption of the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

- 1. At least ten (10) days notice of the hearing in these dockets was sent to all parties entitled to notice.
- 2. Petrosaurus Inc. ("Petrosaurus") first filed a P-5 Organization Report with the Commission on August 30, 2011. The Commission's "On Schedule Leases, Wells, Wellbores By Operator" records indicate that as of December 16, 2013, Petrosaurus was the operator of 292 wells with a total depth of 428,973 feet. Petrosaurus filed its most recent organization report with the Commission on June 27, 2013. Catherine Garrett is identified as the President and Robert Barger is the Secretary of Petrosaurus.
- Petrosuarus has filed blanket financial assurance pursuant to Texas Natural Resources Code §91.1042 and Statewide Rule 78(g)(1)(B) in the form of a \$250,000 bond, the minimum amount required based on the number of wells Petrosaurus operates.

- 4. Petrosaurus requests that the Commission grant exceptions to Statewide Rule 21 to permit the production of its wells on eight leases by swabbing. These leases and wells are:
 - a. Jesus Mireles (10858) Lease, Atascosa County Well Nos. 3, 4, 5, 7, 8, 9, 12 and 15.
 - b. Lucy Nichols (10856) Lease, Atascosa County Well Nos. 8, 10, 13, 14, 18, 21, 24, 25, 26, 27, 28 and 29.
 - c. Webb -A- (11365) Lease, Atascosa County Well Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23.
 - Wiemers, C.T, -A- (11211) Lease, Atascosa County
 Well Nos. 1A, 2A, 3A, 4A, 6A, 7A, 9A, 11A, 12A, 13A, 14A, 16A, 17A, 19A, 20A, 21A, 23A and 24A.
 - e. Bennett (10974) Lease, Bexar County Well Nos. 1, 2, 4, 6, 7, 9, 12, 13 and 14.
 - f. Gorden S. -A- (11001) Lease, Bexar County Well Nos. B 1, B 2, B 3, B 4, B 5, B 6, B 7, B 8, B 9, B 10, C 2, J 2, M 2, M 3, M 6, P 22, P 33, S 4 and S 5.
 - g. Williams, Minnie E. (10946) Lease, Bexar County Well Nos. 1, 1A, 2A, 11, 12, 13, 14, 16, 17, 20, 22, 23, 24, 25 and 26.
 - h. Winn (11068) Lease, Bexar County
 Well Nos. 1, A 1, A 2, A 3, A 5, A 6, A 8, A 9, A 10, A 12, A 13, A 16, A 17, A 18,
 A 19, A 21, A 22, B 1, B 2, B 3, B 4, B 5 and J 3.
- 5. The granting of the requested exceptions to Statewide Rule 21 will enable Petrosaurus to produce hydrocarbons that otherwise would not likely be recovered.
 - a. The reported production for the eight leases for the first 10 months of 2013, when the involved wells were produced by swabbing, averaged 5 to 56 barrels of oil per lease per month.
 - b. The swabbed wells are not equipped to be produced by pumping. Equipping the wells to produce by pumping would be cost prohibitive.
 - c. The subject leases and wells have produced approximately 45,261 barrels of oil over

the last decade. Their production figures over the past decade are:

| A.) | Jesus Mireles (10858) Lease | 2,445 BO | 8 wells |
|-----|-----------------------------------|----------|----------|
| B.) | Lucy Nichols (10856) Lease | 3,828 BO | 12 wells |
| C.) | Webb -A- (11365) Lease | 6,503 BO | 23 wells |
| D.) | Wiemers, C.TA- (11211) Lease | 5,953 BQ | 18 wells |
| E.) | Bennett (10974) Lease | 5,070 BO | 9 wells |
| F.) | Gorden SA- (11001) Lease | 7,259 BO | 19 wells |
| G.) | Williams, Minnie E. (10946) Lease | 6,242 BO | 15 wells |
| H.) | Winn (11068) Lease | 7,961 BO | 23 wells |

- d. The decline curve for the eight leases is essentially flat.
- e. If the requested exceptions to Statewide Rule 21 are granted, the applied-for leases and wells will produce approximately 45,261 barrels of oil, or slightly less, over the next decade.
- 6. All of the applied-for wells are equipped with threaded collars, plates and valves to maintain wellhead control.
- 7. Granting of the requested exceptions to Statewide Rule 21 will not result in pollution of usable quality water or a safety hazard.
 - a. Petrosaurus' swabbing of the leases and wells will not result in any significant oil spillage. When the swabbing unit is detached from the wells, a pan rotates under the "stinger" which catches any dripping oil.
 - b. The wells do not produce H₂S gas.
- 8. Petrosaurus has currently effective mineral leases with one or more mineral owners on each lease involved in these applications.
- 9. Petrosaurus plugs its wells as necessary when they are no longer capable of economic production.
- 10. Petrosaurus has no history of prior violations of Commission rules.

CONCLUSIONS OF LAW

- 1. Proper notice of hearing was timely issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3. Petrosaurus has a good faith claim of a current right to operate the leases and wells.
- 4. Approval of the exceptions to Statewide Rule 21 [16 Tex. ADMIN. CODE §3.21] requested by Petrosaurus will prevent the waste of hydrocarbons.
- 5. Petrosaurus presented sufficient evidence to justify the granting of exceptions to Statewide Rule 21.

RECOMMENDATION

The examiners recommend that the Petrosaurus application be approved subject to the conditions of the Final Order.

Respectfully submitted,

Richard Atkins

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Technical Examiner

Marshall Enquist

July At

Hearings Examiner

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