### OIL & GAS DOCKET NO. 03-0254845

## APPLICATION OF JENEX PETROLEUM CORPORATION PURSUANT TO STATEWIDE RULE 38(d)(3) FOR THE DISSOLUTION OF THE 1096.3 ACRE THIEL UNIT, WELL NO. 1 (RRC GAS ID NO. 160814), GIDDINGS (AUSTIN CHALK, GAS) FIELD, WASHINGTON COUNTY, TEXAS.

#### **APPEARANCES:**

## FOR APPLICANT:

Doug Dashiell, Attorney Gerald L. Jensen, President Jerry Ilseng, Petroleum Engineer

#### FOR PROTESTANT:

## **APPLICANT:**

Jenex Petroleum Corporation

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**PROTESTANT:** 

Glenn E. Johnson, Attorney David C. Triana, P.E. Atasca Resources, Inc.

## **PROPOSAL FOR DECISION**

#### **PROCEDURAL HISTORY**

DATE APPLICATIONS FILED: DATE OF NOTICE OF HEARING: DATE OF INITIAL HEARING: SUPPLEMENTAL NOTICE OF HEARING: DATE OF HEARING: TRANSCRIPT RECEIVED: HEARD BY:

DATE PFD CIRCULATED:

December 18, 2007 February 8, 2008 April 1, 2008 April 3, 2008 April 21, 2008 May 9, 2008 Marshall Enquist, Hearings Examiner Donna Chandler, Technical Examiner December 22, 2008

#### **STATEMENT OF THE CASE**

This is the application of Jenex Petroleum Corporation ("Jenex") for the dissolution under Statewide Rule 38(d)(3) of the 1,096.3 acre Thiel Unit in Washington County into its separate component tracts so that a new pooled unit can be formed for the new 194.88 acre Thiel Unit, Well No. 1, Giddings (Austin Chalk, Gas) Field, Washington County, Texas.

The parties to the hearing have stipulated to the fact that there is a disparity between the various filings of Union Pacific Resources Company ("UPRC") regarding this unit. On November 25, 1996, UPRC filed completion papers for the Thiel Unit. The Form G-1 and the Form P-12 show a 1,096.3 acre pooled unit composed of 58 separate tracts. The plat filed on the same date shows a 1,108.6 acre unit composed of 62 separate tracts. On December 13, 1996, UPRC filed a "Designation of Unit - Thiel Unit No. 1" in the Official Records of Washington County, designating a 1,108.6 acre contractual pooled unit. The parties have stipulated that notice of this hearing has been given to the owners within both the 1,096.3 acre unit and the 1,108.6 acre unit. The parties have also stipulated that the contractual pooled unit formed in the December 13, 1996 "Designation of Unit" has terminated by its own terms no later than 2004. No production has been reported for the Thiel Unit Well No. 1 since January, 2004. For purposes of consistency in this record, the unit will hereinafter be referred to as the 1,096.3 acre Thiel Unit.

Well No. 1 on the 1096.3 acre Thiel Unit, was drilled by UPRC with opposing laterals. The updip lateral extends 2,535 feet to the north and the downdip lateral extends 3,730 feet in a southeasterly direction (see Attachment I). Production from the well began in October, 1996 and ceased in October, 1998. The well then transferred through a series of operators that attempted to restore production and achieved varied levels of success. The last reported production for the well was 41 MCF in January of 2004, by Arcturus Operating Company. The well had a cumulative production of 2.4 BCF of gas.

In April, 2005, the protestant in this case, Atasca Resources, Inc. ("Atasca") became the Commission-recognized P-4 operator of the well. In January, 2005, Atasca transferred the well to Jenex, who is the current Commission-recognized P-4 operator of the well. Jenex now seeks to form the 194.88 acre Thiel Unit for Well No. 1 to drill a new sidetrack lateral for completion in the Giddings (Austin Chalk, Gas) Field and the Giddings (Austin Chalk-3) Field.

The applicable field rules for the Giddings (Austin Chalk, Gas) Field and the Giddings (Austin Chalk-3) Field both require leaseline spacing of 467 feet and between well spacing of 1200 feet on 160 acres with 80 acre options. If the unit dissolution is approved, the sidetracked Well No. 1 will be at a regular location on the proposed pooled 194.88 acre Thiel Unit. The proposed unit is of regular size and shape under the applicable field rules. However, there are tracts that were part of the old Thiel Unit that are not part of the proposed unit that are of substandard size under the field rules.

The application is protested by Astasca, which claims approval of the Statewide Rule 38(d)(3) dissolution of the 1,096.3 acre Thiel Unit and subsequent formation of the 194.88 acre

Thiel Unit will cause waste and confiscation.

## JENEX'S POSITION AND EVIDENCE

On November 25, 1996, UPRC filed completion papers for its Well No. 1 on the 1096.3 acre pooled Thiel Unit. Production from the well ceased no later than January, 2004 and the courthouse pooled unit expired by its own terms in 2004.

Jenex has taken leases on portions of the old unit, including the drill site tract of 90.38 acres owned by Herbert Thiel, to create its proposed 194.88 acre Thiel Unit. Jenex proposes to set a whipstock at approximately 11,500 feet in the existing Well No. 1 and drill a sidetrack lateral 3,800 feet long to the south-southeast (see Attachment II).

The well is completed with 2,864 feet of 13 %" casing cemented to surface. Production casing (95%") is set at 11,975 feet and a 7 %" liner is set inside the production casing from 11,671 down to 14,585 feet. A packer was set on 2 %" tubing at 13,980 feet. The top of the Austin Chalk is at 14,512 feet.

Between November 12, 2007 and November 24, 2007, Jenex began a workover on the well. At that time, there was 6200 psi on the tubing, an indication that substantial reserves remain in the well. Jenex attempted to clean out the existing wellbore and recovered a few shale cuttings and a small piece of metal. Based on this, Jenex believes the 75% " liner in the well is partially collapsed. Jenex was able to pull the tubing and packer from the well and a cast iron bridge plug was set at 11,620 feet inside the 95% " casing, with 20 feet of cement on top of that. Jenex did not attempt to set a packer deeper in the well inside the 75% " liner. (See Attachment III, current wellbore diagram).

The existing laterals must be plugged back and Jenex has expressed its willingness to work with the District Office and the Engineering Section of the Commission to formulate an acceptable plug back plan. This may require drilling through the  $7 \frac{5}{8}$ " liner (if there is any restriction in the liner), setting a cement retainer in the  $7 \frac{5}{8}$ " liner and setting inflatable packers in the open hole area. Jenex does not know of any way to effectively circulate cement throughout the length of an openhole lateral. It speculates that it would only be able to pump back into the formation. How far the cement extends into the openhole could be estimated from the amount successfully pumped into the hole, but the cement may not fill the entire lateral. However, this method of cementing would probably at least isolate the updip and downdip laterals from each other.

Jenex does not regard the existing laterals as an aid to drain additional acreage, but rather as a problem requiring an expensive cure. Even if it could somehow clean out the two existing laterals, Jenex notes that it does not have the contractual authority to produce them. The existing laterals go off Jenex's leased acreage in two directions. At present, no operator has a leasehold over all the existing drainholes. Jenex does have sufficient acreage to satisfy the density rule for its proposed sidetrack lateral under the field rules for the Giddings (Austin Chalk, Gas) Field and the Giddings (Austin Chalk-3) Field.

In Jenex's view, the important facts in this application are as follows. The 1,096.3 acre Thiel Unit no longer exists. It has terminated as a matter of contract. The courthouse pooling has expired. The existing laterals originally drilled by UPRC are no longer pooled as a matter of contract. No operator currently has the right to produce the existing wellbore. There are significant reserves under the Thiel Unit, possibly six to eight BCF of gas. Nothing that Jenex is doing prevents Atasca or any other operator from forming and drilling up to five additional units from the remaining tracts that made up the old Thiel Unit.

Counsel for Jenex notes that there have been few protested Statewide Rule 38(d)(3) applications over the years. Rule 38(d)(3) applications are usually granted for the prevention of waste, to provide the applicant with a reasonable opportunity to recover the reserves beneath its tract, and when it is apparent the application is not intended to circumvent the density rules for the field. Jenex believes its proposed sidetrack will recover a significant quantity of reserves under its tract which will otherwise not be recovered, thereby preventing waste. Jenex is not attempting to circumvent the density rules for the field. Its proposed 194.88 acre Thiel Unit exceeds the requirement of 160 acres for a drilling unit under the field rules.

Jenex believes Atasca is attempting to misuse the rule to force its leasehold into Jenex's proposed pooled unit for the new lateral. The rule does not exist to authorize the Commission to require parties to force pool their interests. The rule exists simply to ensure that no one circumvents the density or spacing rule.

### **PROTESTANT'S POSITION AND EVIDENCE**

Atasca believes Commission approval of the requested unit dissolution will cause waste and confiscation. Atasca is also concerned that the proposed new lateral will be in communication with the existing laterals through the natural fractures of the Austin Chalk. Atasca also believes that the proposed new lateral would therefore also be in communication with the 21.14 acre Bennie G. Bailey Tract which Atasca has under lease.

Atasca does not believe the 7 <sup>5</sup>/<sub>8</sub>" liner has collapsed. The record also shows that, in November of 2001, an operator named "The 7711 Corporation" was able to remove debris from the well with coiled tubing, resulting in a production increase from 78 MCF in October to 66,374 MCF in November. This led to the recovery of an additional 345,000 MCF of gas. Atasca believes that the north and southeast existing laterals are likely in communication with each other as the well currently exists. If the proposed Jenex downdip lateral communicates with the existing southeast lateral through fractures, the new lateral will also effectively be in communication with the north existing lateral, resulting in drainage of gas not only from the Bailey Tract but also from the unleased lands drained by the updip north lateral.

The Austin Chalk is no more than 400 feet thick. Atasca believes that where the existing south lateral is crossed by the path of the proposed new lateral, the laterals will necessarily be within 400 feet vertically of each other, and probably much closer. This will lead to communication between the wellbores through the natural fractures in the Austin Chalk.

Jenex has isolated the vertical section of the wellbore from the existing two laterals, but its proposed new lateral will communicate through fractures with the old laterals. The between well spacing in this field is 1200 feet, which, according to Atasca, means the Commission recognizes that two wellbores on the same lease would each drain 600 feet from each other before reaching an interference point. Atasca notes that the proposed new lateral is within 600 feet of the old lateral for approximately 2,600 feet. Thus, the proposed drain hole will benefit from draining acreage that has is not within the new proposed pooled unit.

Atasca asserts that waste would be caused by the proposed Jenex Unit, insofar as waste means leaving gas in the ground. The Jenex well would leave in place the gas accessed by the northern lateral, unless the two laterals are left in communication. If the northern lateral is not redrilled, or is plugged, the area's existing gas in place would not be drained. If the Jenex application is approved, some of the acreage assigned to the original larger unit will not be developed or compensated by the future production from the new Thiel Unit Well No. 1.

Alternatively, Atasca's position is that the Thiel Unit, Well No. 1 has already drained 2.4 BCF from under the old 1,096.3 acre unit. Therefore, the area that Jenex proposes to drill is already partially depleted. Atasca asserts that it is wasteful to drill another lateral in a depleted zone.

Atasca's expert witness testified that each horizontal drainhole presents a unique situation in regard to plugging. For example, an inflatable packer could be set inside each drainhole to attempt to fill the drainhole. The District Director may also authorize setting a packer in the liner and pumping cement through that into the laterals.

If the existing laterals are not properly plugged, communication between the laterals is likely. However, if the laterals are properly plugged, communication between the downdip and updip laterals would be eliminated. Atasca's expert also asserts that when one well crosses another in a 400 foot thick formation such as the Austin Chalk, the chance of communication between the wellbores through fractures is as likely as unlikely, but probably a little more on the likely side. Atasca agrees that if there is no further production from the Thiel Unit, waste will result.

The old downdip lateral crosses the extreme southwestern corner of the Bailey Tract (see Attachment I). Atasca asserts that this creates a situation in which the old downdip lateral will communicate with the new lateral, affecting the correlative rights of adjacent owners because gas from underneath their property will flow through natural fractures to the old lateral and then through natural fractures in communication with the new drainhole that Jenex is proposing. Atasca believes that this should not be allowed to happen. It is a violation of correlative rights for Jenex to utilize an existing drainhole to communicate with its proposed lateral. Plugging the entire length of the old lateral will be very difficult, if not impossible.

## **EXAMINERS' OPINION**

Dissolution of a unit is governed by Statewide Rule 38(d)(3)(A) which provides:

(A) If two or more separate tracts are joined to form a unit for oil or gas development, the unit is accepted by the Commission, and the unit has produced hydrocarbons in the preceding twenty (20) years, the unit may not thereafter be dissolved into the separate tracts with the rules of the Commission applicable to each separate tract is the dissolution results in any tract composed of substandard acreage for the field from which the unit produced, unless the Commission approves such dissoplution.

Dissolution of a unit pursuant to Statewide Rule 38(D)(3) may be granted is the dissolution of the unit will not cause waste or confiscation and will not result in the circumvention of Commission rules. The primary purpose of an application under Statewide Rule 38(d)(3) is the restoration of each individual tract's pre-pooling status.

This case is complicated by the presence of a pre-existing drainhole on the applicant's proposed new unit and the fact that the formation in question, the Austin Chalk, is normally drained by intersecting as many natural fractures in the formation as possible. The examiners believe that the pre-existing downdip and updip laterals must be plugged in order to comply with Statewide Rule 14(k). The current status of the Thiel Unit, Well No. 1 (as shown in Attachment III) does not comply with Statewide Rule 14(k).

At present, there is 2,965 feet of open casing between the shoe of the 75%" liner at 14,585 feet and the cast iron bridge plug set by Jenex at 11,620 feet inside the 95%" casing. According to the G-1 filed by UPRC when the well was completed, the top of the Austin Chalk is at 14,512 feet. Under Statewide Rule 14(k), because the casing shoe in the liner is below the top of the productive horizon, the productive horizon isolation plug must be set from 50 feet below the production casing shoe to a depth that is 50 feet above the top of the productive horizon.

Statewide Rule 14(k), titled "Plugging horizontal drainhole wells" states:

All plugs in horizontal drainhole wells shall be set in accordance with subsection (d)(11) of this section. The productive horizon isolation plug shall be set from a depth 50 feet below the top of the productive horizon to a depth either 50 feet above the top of the productive horizon, or 50 feet above the production casing shoe if the production casing is set above the top of the productive horizon. If the production casing shoe is set below the top of the productive horizon, then the productive horizon isolation plug shall be set from a depth 50 feet below the productive horizon. In accordance with subsection (d)(7) of this section, the Commission or its delegate may require additional plugs.

The examiners believe that Jenex must plug the existing downdip and updip laterals as required by the District Office. Once the laterals are plugged back, they cease to exist for Commission purposes, although some portion of them may remain openhole below the cement. It is possible that some minor communication may occur between any remnant open hole and the new Jenex drainhole. Astasca's remedy is self-help. Nothing prevents Atasca from leasing the acreage to the east of the proposed 194.88 acre Thiel Unit, Well No. 1, and drilling a competing lateral. A

competing lateral might also find itself in minor communication with any remnant open hole from the original Thiel Unit, establishing a no-flow boundary. The evidence demonstrates the likely presence of 6 to 8 BCF of recoverable gas beneath the old 1,096.3 acre Thiel Unit, a significant quantity of hydrocarbons.

Jenex is not attempting to circumvent Commission rules in this application. The proposed 194.88 acre pooled unit has more acreage than required under the field rules. The proposed new lateral is regular to lease lines. Jenex has agreed to plug back the existing laterals in an attempt to alleviate Atasca's concerns regarding possible communication between the new side-tracked wellbore and the old laterals.

The examiners recommend that the application of Jenex for dissolution of the 1,096.3 acre Thiel Unit pursuant to Statewide Rule 38(d)(3) be granted, provided that Jenex plug the existing laterals as required by Statewide Rule 14(k).

## FINDINGS OF FACT

- 1. At least ten (10) days notice was provided to all current lessees and unleased mineral interest owners of each tract within the overlapping 1108.60 acre Thiel Unit and the 1,096.3 acre Thiel Unit. Notice of Application was published in the Brenham Banner-Press on December 23 and 30, 2007, and January 6 and 13, 2008. Notice of Hearing was published in the Brenham Banner-Press on February 20 and 27, and March 5 and 12, 2008.
- 2. Jenex Petroleum Corporation ("Jenex") has applied for approval under Statewide Rule 38(d)(3) for division of the 1,096.3 acre Thiel Unit into its separate tracts, with the rules of the Railroad Commission applicable to each tract.
- 3. Protestant Atasca Resources, Inc. ("Atasca") has interests in four leased tracts within the boundaries of the original 1108.60 Thiel Unit. In particular, Atasca has leased the 21.14 Bennie G. Bailey Tract which directly offsets the new proposed 190 acre Thiel Unit to the east.
- 4. On June 12, 1996, the Commission granted a drilling permit (Permit No. 449029) to UPRC for its Thiel Unit, Well No. 1, a 1,096.35 acre pooled unit in the Giddings (Austin Chalk, Gas) Field. The horizontal well consisted of opposing laterals. The updip lateral extended 2,535 feet to the north. The downdip lateral extended 3,730 feet to the south southeast. Drilling was completed September 23, 1996 and production was reported for October, 1996.
- 5. The existing laterals of the original 1,096.035 acre Thiel Unit, Well No. 1 (Permit No. 449029) (API No. 477-30824) must be plugged-back in accordance with the provisions of Statewide Rule 14(k) prior to drilling the applied-for sidetrack for the proposed 194.88 acre Thiel Unit, Well No. 1 (Permit No. 649146).
- 6. The original 1,096.3 acre Thiel Unit last produced in January, 2004 and is terminated as a

matter of contract.

- 7. The proposed sidetracked Well No. 1 on the proposed 194.88 acre Thiel Unit is regular to leaselines, has sufficient acreage to comply with the density requirements of both the Giddings (Austin Chalk, Gas) Field and the Giddings (Austin Chalk-3) Field, and will recover a significant quantity of hydrocarbons, thus preventing waste and protecting the correlative rights of the mineral owners in the unit.
- 8. The applicable field rules for the Giddings (Austin Chalk, Gas) Field require leaseline spacing of 467 feet and between well spacing of 1200 feet on 160 acre units with 80 acre options. The applicable field rules for the Giddings (Austin Chalk-3) Field require leaseline spacing of 467 feet and between well spacing of 1200 feet on 160 acre units with 80 acre options.
- 9. Dissolution of the existing 1,096.35 acre Thiel Unit will not cause waste or confiscation.
- 10. Dissolution of the existing 1,096.35 acre Thiel Unit will not preclude the interest owners of any tract previously within the Thiel Unit from having a reasonable opportunity to recover hydrocarbons underlying their tracts in the Giddings (Austin Chalk, Gas) Field.

## **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. The 1,096.3 acre Thiel Unit should be dissolved into its separate tracts for regulatory purposes with the rules of the Railroad Commission applicable to each tract.
- 4. The approval of this application will allow for the orderly and efficient development of the subject tracts.
- 5. Dissolution of the 1,096.3 acre Thiel Unit will not result in the circumvention of Commission rules.
- 6. The existing downdip and updip laterals from the 1,096.3 acre Thiel Unit must be plugged back in accordance with Statewide Rule 14(k).

## **RECOMMENDATION**

The examiners recommend approval of Jenex's application for the dissolution of the 1.096.3 acre Thiel Unit, Giddings (Austin Chalk, Gas) Field, Washington County, Texas, so that the rules

of the Railroad Commission are applicable to each separate tract.

Respectfully submitted,

Marshall Enquist Hearings Examiner Donna Chandler Technical Examiner

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