OIL AND GAS DOCKET NO. 7C-0239882

THE APPLICATION OF J. CLEO THOMPSON FOR EXCEPTION TO STATEWIDE RULES 26 & 27; VARIOUS LEASES; OZONA, N.E. (CANYON 7520), OZONA, N.E. (ELLENBURGER), UNIVERSITY 56, SAWYER (CANYON), ADDIE (PENN), AND OZONA, N.E. (STRAWN) FIELDS; CROCKETT COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner James Doherty, Hearings Examiner

Procedural history

Application received: September 4, 2004 Hearing held: October 28, 2004 Proposal for decision issued: January 20, 2005

Appearances

Representing

<u>Applicant</u> John Soule Tim Smith Richard Booth

<u>Protestants</u> Ken Nunley Chad Upham

Royalty owners (Bailey Trust)

Observer

Mike McElroy

Approach Resources

J. Cleo Thompson

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Statewide Rules 26 <u>Separating Devices, Tanks, and Surface Commingling of Oil</u> and 27 <u>Gas to</u> <u>be Measured and Surface Commingling of Gas</u> require generally that liquid hydrocarbons be separated from gas and that both be measured before leaving a lease. Rule 26 also provides for exceptions wherein the commission may approve commingling on the surface of oil, gas, or oil and gas production from more than one lease if necessary to prevent waste, to promote conservation or to protect correlative rights.

J. Cleo Thompson ("Thompson") has an existing surface commingling permit for production from 87 wells in six fields¹ in Crockett County, Texas. Thompson is seeking to amend this permit to allow production from an additional well to be commingled on the surface after it leaves the lease with the commingled production from the other wells including in the existing permit. Rather than separating and measuring production from each well, a portion of the total commingled production is allocated to each well. The tracts from which production is being commingled do not have identical working interest and royalty interest ownership in identical percentages. The application is protested by royalty owners.

DISCUSSION OF THE EVIDENCE

Applicant's position and evidence

Thompson first applied for its existing surface commingling permit, No. 0857, on August 18, 1976. The permit has been amended several times to add more wells, and now includes 87 wells. The requested amendment to the permit will add production from Thompson's Approach Bailey "A" Lease Well No. 501 (Well "A" No. 501). Thompson is the operator of record of all eighty-eight wells.

These wells produce relatively low volumes of gas and condensate from reservoirs with similar characteristics. Several of the reservoirs have been classified as tight gas formations and all have low permeability. The daily gas production of the 87 wells in the current permit ranges from 1.1 MCF to 308 MCF, with an average of 34.1 MCF. According to Thompson, all but ten of these wells are classified as stripper wells under NGPA² guidelines because they produce less than 60 MCF per day.

Well "A" No. 501 was completed in April, 2004, with a highest reported daily rate of 1046 MCF. On its May 14, 2004, G-10 test, the well produced at a daily rate of 666 MCF and 6.16 barrels of condensate. The producing rate has dropped rapidly during the well's first four months, according to Thompson. Total production has been 30,080 MCF and the current rate is only 166 MCF per day, with no condensate. If Well "A" No. 501 is included within the permit, the average daily gas production from all 88 wells will increase from 34.1 MCF to 35.6 MCF.

Thompson testified that after a brief interval of flush production, wells in low permeability reservoirs such as these, can be expected to produce at low volumes for long periods of time. Average ultimate production per well is less than 250 MMCF of gas, according to Thompson. Capital expenditures must be reduced to make such low production economic, and Thompson believes one important method is to have a central separation and storage facility. Thompson testified that surface commingling will prolong the production life of its wells, particularly the most marginal wells, by reducing operating costs.

Thompson measures the full well stream gas from each well before it leaves the lease. It pointed out that this method is specifically allowed by Statewide Rule 26(a)(2):

¹ Ozona, N.E. (Canyon 7520), Ozona, N.E. (Ellenburger), University 56, Sawyer (Canyon), Addie (Penn) and Ozona, N.E. (Strawn) Fields

² Natural Gas Policy Act.

All oil and any other liquid hydrocarbons as and when produced shall be adequately measured according to the pipeline rules and regulations of the commission before the same leaves the lease from which they are produced, except for gas wells where the full well stream is moved to a plant or central separation facility...and the full well stream is measured, with each completion being separately measured, before the gas leaves the lease.

Approval by the Commission of a surface commingling permit is contingent on the operator allocating production reasonably to each well whose production is commingled on the surface. Statewide Rule 26(b)(3) describes the minimum well testing required for the Commission to consider that an operator is allocating production reasonably. Alternate methods can be used if the Commission determines that an alternate method will insure a reasonable allocation. According to Rule 26(b)(3):

The applicant must demonstrate to the Commission or its designee that the proposed commingling of hydrocarbons will not harm the correlative rights of the working or royalty interest owners of any of the wells to be commingled. The method of allocation of production to individual interests must accurately attribute to each interest its fair share of aggregated production.

(A) In the absence of contrary information, such as indications of material fluctuations in the monthly production volume of a well proposed for commingling, the Commission will presume that allocation based on the daily production rate for each well as determined and reported to the Commission by semi-annual well tests will accurately attribute to each interest its fair share of production without harm to correlative rights.

Semi-annual tests (G-10 tests) can be used to allocate both gas and condensate to each well. According to Thompson, the method it uses to allocate production is preferable to the method described in 26(b)(3)(A), and should be considered reasonable by the Commission. Thompson measures the full well stream produced (dry gas with entrained condensate and water) every day at each well. Semi-annual tests are not necessary to determine producing rates since these are actually measured at each well; the semi-annual tests are used only to attribute gas/condensate ratios appropriate for each well.

After measurement at each well, the full well stream gas is commingled before going to a central facility for separation. At the central facility, a two-phase separator removes the dry gas from any liquids and the volume of dry gas is allocated to each well based on the gas/condensate ratio as measured semiannually. The liquids are separated into condensate and water and the water is eventually hauled away. The aggregated volume of condensate is allocated back to each well based on the gas/condensate ratio determined by the semi-annual testing.

Thompson provided a detailed example to demonstrate why its method is preferable. For example, assume that one of the 88 wells produces 3.2% of the total gas production based on the sum of the semi-annual G-10 tests of all 88 wells. If the method described in Statewide Rule 26(b)(3)(A) is used, this well will be attributed 3.2% of the total gas produced over a six month period. Thompson's method measures full well stream gas volume daily and each month each well's percent of total production is based on its actual production. Thus in Thompson's example, the subject well can be attributed more than 3.2% of the total gas volume one month and a different percentage the next month based on the individual measurements made of all the wells that month.

Thompson testified that monthly variability in condensate production is also accounted for by its method, though it admits that the gas/condensate ratio is assumed to be constant for each well throughout a six month period. The amount of condensate attributed to each well is based both on daily measurements of the full well stream production and semi-annual measurements of the gas/condensate ratio.

According to Thompson, the amount of condensate that these 88 wells produce does not justify the installation of a separator at each well. The daily average condensate rate ranges from zero to 8.2 barrels per well, with an average daily rate of 0.6 barrels of condensate. Forty of the wells, including Well "A" No. 501, produce no condensate, and only sixteen of the remaining wells average more than one barrel of condensate per day. If it were required to install a separator on every well, many wells would become uneconomic and have to be abandoned prematurely, according to Thompson.

Thompson also testified that there is no contrary information, such as discussed in 26(b)(3)(A), that would cause the Commission to change its presumption that semi-annual well tests will accurately attribute fair shares of production without harm to correlative rights. Thompson believes its method is more accurate at attributing to each well its fair share of aggregated production than the minimum required by Commission rules. According to the applicant, even the minimum allocation requirements by the Commission and by Texas statute is "accurate" attribution.

Protestant's position

The protestants appeared at this hearing to ensure that the findings of the Commission have no impact on a district court action which is going to allege improper maintenance, improper measurement and other improper actions on behalf of Thompson. They were willing to stipulate that if the system, as described by Thompson's witness, is operated within industry standards, then it complies with Statewide Rules 26 and 27. The protestants are not alleging that Thompson's existing or proposed operations are in violation of Commission rules.

The protestants disputed the use of the word "accurate" by Thompson or by the Commission, believing accuracy to be subjective. Commission rules provide no standard or definition to determine that any measurement or production is accurate, according to the protestants. Protestants assert that, without an objective standard, the Commission should make no finding using the word "accurate".

EXAMINERS' OPINION

The examiners believe that this application should be granted. The application clearly complies with applicable Commission rules and statutes. The most precise method of establishing the exact production of gas and condensate from each well would be to install a separator on each well. Even then, the amounts of production reported are subject to the possible errors that are part of any measurement system.

The applicant testified that some gas contracts require a gas sales meter to be tested by a prover and be within 2% of the amount that the prover measures. The Commission specifies the method by which gas is measured but has no standard percentage of error which is allowed. The Commission has the right to independently gauge any measurement device when it wishes to do so.

There are no indications of material fluctuations in the monthly production volume of the wells in the existing permit or applied-for amended permit. The Commission's presumption is therefor that allocation based on the daily production rate for each well as determined and reported to the Commission by semi-annual well tests will accurately attribute to each interest its fair share of production without harm to correlative rights. The methods used by Thompson exceed Commission rules in establishing a reasonable representation of the contribution of individual wells to the commingled hydrocarbon stream.

FINDINGS OF FACT

- 1 Notice of this application for an amendment to surface commingling permit No. 0857, was issued to all working interest and royalty interest owners in the wells subject to the existing and proposed amended permit on September 13, 2004.
- 2. The existing permit allows J. Cleo Thompson ("Thompson) to commingle production on the surface from 87 wells in the Ozona, N.E. (Canyon 7520), Ozona, N.E. (Ellenburger), University 56, Sawyer (Canyon), Addie (Penn), and Ozona, N.E. (Strawn) Fields.
- 3. The amended permit will allow production from the Approach Bailey "A" Lease Well No. 501 to be added to the commingled production of the wells in the existing permit.
- 4. All the wells whose production will be commingled on the surface are operated by Thompson and all produce from similar low permeability reservoirs.
- 5. All of the wells in the subject fields can produce for long periods of time though at very low rates.
 - a. The daily gas production of the 87 wells in the current permit ranges from 1.1 MCF to 308 MCF, with an average of 34.1 MCF.
 - b. The daily producing rate of the Approach Bailey "A" Lease Well No. 501 is 166 MCF per day; and the addition of this well will increase the average daily production by only 1.5 MCF.
- 6. The wells in the proposed amended application do not produce enough condensate to justify the installation of a compressor on every well.
 - a. The daily average condensate rate ranges from zero to 8.2 barrels, with an average daily rate of 0.6 barrels of condensate per well.
 - b. Forty wells, including the Approach Bailey "A" Lease Well No. 501, produce no condensate.
- 7. The installation of a separator on every well would raise the economic limit, causing the lowest

producing wells to be abandoned prematurely.

- 8. Thompson is allocating production reasonably to each well whose production is commingled on the surface.
 - a. The full well stream produced (dry gas with entrained condensate and water) is metered every day at each well.
 - b. At a central facility, the dry gas is separated from liquids, and a volume of gas is allocated to each well based on the gas/condensate ratio as measured by semi-annual (G-10) tests
 - c. The aggregated volume of condensate is allocated back to each well based on the gas/condensate ratio determined by semi-annual (G-10) tests.
 - d. There are no indications of material fluctuations in the monthly production volume of the wells in the applied-for amended permit.
 - e. The proposed commingling will not harm the correlative rights of the working or royalty interest owners of any of the wells to be commingled.
 - f. Thompson's method of allocating production to individual interests accurately attributes to each interest its fair share of aggregated production.

CONCLUSIONS OF LAW

- 1. Proper notice was given to all necessary parties as required by Statewide Rules 26 and 27 [Tex. R.R. Comm'n, 16 TEX. ADMIN. CODE §3.26 and §3.27] and other applicable statutory and regulatory provisions.
- 2. All things necessary to give the Commission jurisdiction to decide this matter have been performed or have occurred.
- 3. Approval of the application of J. Cleo Thompson for exception to Statewide Rules 26 and 27 will prevent waste, promote conservation and protect correlative rights.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the application of J. Cleo Thompson for an amendment to surface commingling Permit No. 0857, be **GRANTED**.

Respectfully submitted,

James M. Doherty Legal Examiner Margaret Allen Technical Hearings Examiner