



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 8A-0277024

**THE APPLICATION OF WAGNER & BROWN, LTD TO CONSIDER TEMPORARY
FIELD RULES AND A NEW FIELD DESIGNATION FOR THE PROPOSED CY-JACK
(LWCC) FIELD, TERRY COUNTY**

HEARD BY: Brian K. Fancher, P.G. - Technical Examiner
Terry Johnson - Legal Examiner

DATE OF HEARING: July 16, 2012

APPEARANCES:

APPLICANT:

Glenn Johnson
Billy Harris

REPRESENTING:

Wagner & Brown, Ltd.

OBSERVER:

Ana Maria Marsland -Griffith
Aaron Young

COG Operating, LLC

Austin Hardwick

Enduro Resource Partners, LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Wagner & Brown, Ltd. ("Wagner") requests a new field designation be approved for its Andrews Lease, Well No. 1. Further, Wagner proposes that the following Temporary Field Rules be adopted for the new field, subject to review in 18 months:

1. A correlative interval that designates the top and bottom of the Cy-Jack (LWCC) Field;
2. 330'-0' well spacing with special horizontal well spacing based on "take points", a "box" rule, and off-lease penetration points;
3. 320 acre proration units with 160 acre tolerance and no maximum diagonal rule;

4. Two-factor allocation formula for both oil and gas wells;
5. Administrative exception for the 10 day filing rule for well potential tests;
6. Stacked-lateral horizontal wells.

At the hearing, Wagner requested that its proposed field rules allow for horizontal well spacing for the first and last take-points to be 100 feet from any property line, lease line, or subdivision line. In addition, Wagner requested that all oil wells completed in the subject field be granted unlimited net-gas oil ration authority, as well as, a six-month exception to the tubing requirements as set forth in 16 TAC §3.13(b)(5)(A) with the option of three additional months contingent upon good-cause shown by the operator of the well.

After review of the application, the examiners concluded the adoption of the field rules proposed by Wagner for a temporary basis of eighteen months be approved, with exceptions. The examiners opined it appropriate that oil wells completed in the subject field remain governed by gas-to-oil ratio of 1:2000 (STB/SCFG), that oil wells completed in the subject field remain governed by 16 TAC §3.13(b)(5)(A), and that the first and last take-points in a horizontal well be no closer than 330' feet to any property line, lease line, or subdivision line. Wagner did not consider the examiners' opinion adverse.

No protest was filed in opposition of the subject application. The examiners recommend approval of the new field designation and adoption of temporary field rules for the Cy-Jack (LWCC) Field (Field ID No. 22588 500), as proposed by Wagner and the examiners.

DISCUSSION OF EVIDENCE

In support of its application, Wagner submitted a copy of the Commission Form W-2 filed for its Andrews Lease, Well No. 1. Reportedly, the well was completed on April 13, 2012 with perforations in the Leonard, Wolfcamp, Cisco, and Canyon formations from 8,800 feet to 11,107. The twenty-four hour potential test performed on May 11, 2012 reported the well produced on pump at a rate of 128 BOPD, 75 MCFGPD with a gas-oil ration ("GOR") of 1:585, and 125 BWPD.

Wagner submitted a copy of its initial Commission Form P-7 (New Field Designation and/or Discovery Allowable Application) dated June 01, 2012 for the Andrews Lease, Well No. 1. Wagner concluded the nearest production to the subject well, also located in the same stratigraphic member, is from the Barrier (Leonard) Field. The aforementioned field is located 3.4 miles northwest of the subject well and produces at an interval from 8,796 feet to 8,852 feet below ground surface. Additionally, Wagner submitted a copy of the revised Form P-7 dated June 21, 2012. The revised P-7 included the perforation depths implemented in the Andrews Lease, Well No. 1, a type-log, an area map showing wells located within 2.5 miles of the discovery well, and a structure map utilizing the top of the Leonard formation.

At the hearing, Wagner submitted a survey map that incorporated well locations of wells surrounding the Andrews Lease, Well No. 1. The well locations presented on the map depict one well was drilled and completed within a 2.5 mile radial distance from the subject well. Wagner testified the closest well located from the Andrews Lease, Well No. 1 is approximately 1.34 miles to the northwest and is completed approximately 1,500 feet stratigraphically above the top of Wagner's proposed correlative interval for the subject field. Wagner testified the remaining wells drilled within a 2.5 mile distance from the subject well were not completed, as they were dry-holes.

At the hearing, Wagner submitted a reservoir data sheet for its proposed new field designation. Wagner identified the reservoir comprising its proposed new field has an average porosity of 5.7%, average water saturation of 25.1%, average net effective pay of 32.5 feet, average oil gravity of 28.8 degrees API, original reservoir pressure of 5,189 psi, based upon well log calculation, and produces under a solution-gas drive mechanism.

In addition to its requested new field designation, Wagner requested special field rules be adopted on a temporary basis of 18 months for its proposed discovery field. The proposed field rules include a designated correlative interval, 330 lease line spacing and no minimum between well spacing, 320 acre proration units with 160 acre tolerance and no maximum diagonal, and a two-part allocation formula for both oil and gas wells completed in the subject field.

Wagner requests that the entire correlative interval from 8,800 feet to 11,107 feet, as shown on the log of the Wagner & Brown Ltd, Andrews Lease, Well No. 1 (API No. 42-445-32325), EL & RR Co. Survey, Abstract 607, Block E., Section 62, Terry County, be designated as the Cy-Jack (LWCC) Field.

In support of the correlative interval it seeks to adopt for the proposed field, Wagner submitted a structural cross-section of the Leonard, Dean, Wolfcamp, Wolfcamp Shale, Cisco, and Canyon formations. The cross-section indicates the new field discovery is located in the Midland Basin, approximately thirteen miles northwest of Brownfield, Texas. Wagner testified the proposed new field incorporates these stratigraphic formations and that its cross-section depicts the formations are continuous throughout the area surrounding its proposed field, without formation separation in the form of faulting or fracturing. Wagner further testified the geologic formations comprising its proposed field interval were determined through petrophysical analyses to generally be made of alternating units of limestone, shale, and sandstone.

Wagner testified its proposed 330'-0' minimum well spacing is necessary to provide flexibility in locating wells in its proposed new field. Wagner further testified it anticipates the implementation of horizontal well drilling within the subject field in the foreseeable future. As it is, Wagner testified the incorporation of horizontal well spacing based on "take-points" is necessary as it will allow the additional recovery of hydrocarbons that would otherwise remain unrecovered. Additionally, Wagner testified it seeks to implement No Perforation Zones or ("NPZs") in its proposed field rules.

At the hearing, Wagner testified no horizontal wellbores have been drilled or completed in the subject field. In response, the examiners opined it would be inappropriate to adopt a 100 foot

dual take-point spacing rule for the first and last take point to any property line, lease lined, or subdivision line. The examiners opined it appropriate to allow 330 foot lease line spacing for the first and last take-points of horizontal wells. Wagner did not consider the examiners opinion adverse in this instance.

Wagner testified it seeks to include a “box” rule provision for horizontal wells completed in the subject field. As proposed, the “box” rule will allow any horizontal well to remain in compliance with the spacing rules if the as-drilled location of a well-bore falls within a rectangle that is thirty-three feet (ten percent of the lease line spacing provision) on either side of the permitted well-bore.

In addition, Wagner requested its proposed field rules provide for off-lease penetration points for horizontal wells in the subject field. Wagner testified that in some instances, it is necessary to penetrate a reservoir off-lease due to the amount of horizontal displacement involved as a consequence of “steering” a deviated well-bore from vertical to horizontal. Wagner testified it seeks to implement off-lease penetration points in the proposed field rules as it would ultimately increase the recovery of hydrocarbons for one wellbore.

In support of its proposed 320 acre density provision, Wagner submitted drainage area calculations based on data obtained from the subject well, incorporated with a production decline analysis. Wagner concluded the Estimated Ultimate Recovery (“EUR”) for the Andrews Lease, Well No. 1 to be 193,307 BO, based upon an estimated recovery factor of ten percent. Utilizing petrophysical characteristics obtained from the Andrews Lease, Well No. 1, Wagner submitted evidence that indicates a vertical well completed in the subject field is capable of draining approximately 232.8 acres.

Wagner sought to incorporate an exception to the tubing requirement set forth for oil wells in 16 TAC §3.13(b)(5)(A), that would allow oil wells completed in the subject field to produce through the production casing string without tubing and packer. Wagner testified the Andrews Lease, Well No. 1 was completed on April 13, 2012 and tested for 24-hour potential on May 11, 2012 while on pump. The examiners’ opined the tubing requirement exception is unnecessary due to the Andrews Lease, Well No. 1 requiring a pump in order to bring hydrocarbons to the surface thirty days after the well was completed. Wagner did not consider the examiners’ opinion adverse to its application.

Wagner proposed to incorporate an unlimited net gas-oil ratio (“GOR”) for the production of casing-head gas produced from oil wells completed in the subject field. No well test data was offered in support of its request demonstrating the need for the exception to 16 TAC §3.49. In response, the examiners concluded this part of Wagner’s proposed field rules was inappropriate at the current point in the development of its proposed new field discovery. Wagner did not consider the examiners’ opinion adverse.

Wagner requested that allocation be based upon a two-factor allocation formula for both oil and gas wells completed in the subject field. In support of its request, Wagner testified that its proposed allocation based on 95% acreage and 5% per well for oil wells, along with 95% deliverability and 5% per well for gas wells, will provide for the protection of correlative rights.

Wagner also requests that an oil well be granted administratively a six month exception to the provisions of Statewide Rule 51(a) regarding the 10 day rule for filing the potential test. This will allow for the backdating of allowables on the oil wells without requiring a waiver to be secured from all field operators. While allowables are needed to cover oil and gas volumes recovered during flowback and load recovery, early-time well test results are not representative of reservoir conditions in terms of flowing pressures and volumes of substances produced. This rule will grant the Commission the authority to issue an allowable back to the initial completion date for all oil wells in the field and will prevent unnecessary shut-ins to alleviate potential overproduction issues related to completion paperwork filings.

Finally, Wagner requested that stacked-lateral rules be incorporated for horizontal wells completed in the subject field. The gross thickness of the field interval is approximately 2,300 feet. The rule would allow stacked horizontal laterals within the correlative interval that are drilled from different surface locations to be considered a single well for regulatory purposes. It is proposed that a stacked lateral be defined to be multiple horizontal drainholes which are drilled from different surface locations.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. Wagner & Brown, Ltd. ("Wagner") completed its Andrews Lease, Well No. 1. on April 13, 2012 with perforations in the Leonard, Wolfcamp, Cisco, and Canyon formations from 8,800 feet to 11,107.
3. The Wagner, Andrews Lease, Well No. 1 reported a twenty-four hour potential test performed on May 11, 2012 reported the well produced pump at a rate of 128 BOPD, 75 MCFGPD with a gas-oil ration ("GOR") of 1:585, and 125 BWPD.
4. The Wagner, Andrews Lease, Well No. 1 is entitled to a new field designation. There is no comparable production within a 2.5 mile radius of the discovery well.
5. The correlative interval from 8,800 feet to 11,107 feet, as shown on the log of the Wagner & Brown Ltd, Andrews Lease, Well No. 1 (API No. 42-445-32325), EL & RR Co. Survey, Abstract 607, Block E., Section 62, Terry County, should be designated as the Cy-Jack (LWCC) Field (Field ID No. 22588 500)
6. Wagner provided a drainage calculation for its Andrews Lease, Well No. 1. The Andrews Lease, Well No. 1 is estimated to drain approximately 232 acres.
7. Adoption of 330'-0' well spacing is appropriate for wells completed in the subject field at this time.

8. Allocation based upon a two-part allocation formula is a reasonable formula which will protect the correlative rights of mineral owners in the field.


CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Approval of the requested new field designation and adoption of Temporary Field Rules for the Cy-Jack (LWCC) Field will protect correlative rights and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the new field designation and adopt Temporary Field Rules, subject to review in 18 months, for the proposed Cy-Jack (LWCC) Field, as requested by Wagner and the examiners.

Respectfully submitted,



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Technical Examiner



Terry Johnson
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