



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0286299

THE APPLICATION OF OXY USA, INC., TO AMEND THE FIELD RULES FOR THE SAINT WILMA (STRAWN) FIELD, ANDREWS COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Michael Crnich – Hearings Examiner

HEARING DATE: January 17, 2014

APPEARANCES:

John Soule
Wayman Gore

REPRESENTING:

OXY USA, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of OXY USA, Inc. (OXY), to amend the field rules for the Saint Wilma (Strawn) Field in Andrews County, Texas. Generally, OXY is requesting changes to the field rules to more efficiently accommodate the drilling and completion of horizontal wells in the field. OXY also believes that the current allowable assigned to oil wells in the field is incorrect and is asking that the allowable be corrected to the 1965 yardstick value for the maximum depth of the field. The application was not protested. The examiners recommend that the field rule amendments and allowable correction requested by OXY be granted.

DISCUSSION OF THE EVIDENCE

The Saint Wilma (Strawn) Field was discovered in January 2008 at a depth of 11,042 feet. A new field designation and initial field rules were established on January 15, 2009 (Docket No. 08-0259900). Temporary field rules were established by Commission Final Order (Docket No. 08-0262513) on September 29, 2009. These rules were amended made permanent (Docket No. 08-0268009) on December 14, 2010, are the current rules for the field, and include the following provisions:

1. Designation of the field as the correlative interval from 7,225 feet to 11,042 feet as shown on the log of the University Brittany Well No. 1.
2. 660'- 1,320' well spacing;
3. 160 acre oil units with 40 acre tolerance and a maximum diagonal of 4,500 feet;
4. Allocation based on 95% acreage and 5% per well.

The correlative interval for the Saint Wilma (Strawn) Field includes the Clear Fork, Spraberry, Dean, Wolfcamp and Strawn Formations. The field is currently developed with vertical wells. The January 2014 proration schedule carries 39 oil wells, 37 of which are operated by OXY and two are operated by Dakota Resources. In addition, OXY has recently completed about 56 wells that are not yet on the schedule. OXY holds 13 leases on about 9 ½ sections of land in the field. OXY plans to begin development of the field with horizontal wells and may drill two to three horizontal wells per section. The horizontal wells will target the Spraberry, Wolfcamp and Strawn Formations.

Initial potential tests for wells in the field have ranged from 14 BOPD to 308 BOPD for the existing vertical wells. OXY reports that for vertical wells not yet on schedule, the initial potential test range is about 100 BOPD to 240 BOPD.

OXY's development plans are currently limited by available acreage in the field, which in turn is preventing the full development of the field's hydrocarbon resources. OXY has conducted a drainage area study for wells on four of the leases. Based on a study of four leases, OXY calculates that the field contains from about 47 MBO per acre to 73 MBO per acre, and that the existing vertical wells drain from 11.6 acres to 13.3 acres. Thus OXY is proposing an optional proration unit size for the field of 20 acres.

OXY is proposing several rule changes to accommodate efficient development by horizontal wells in the field. To support these changes, OXY provided volumetric calculations to support the additional hydrocarbon reserves that will be produced by the proposed changes; without these proposed changes, the additional reserves would not be produced:

- An off-lease penetration point provision will result in a horizontal drainhole length increase of 650 feet per well.
- A provision allowing first and last take points to be 100 feet from lease lines will result in a horizontal drainhole length increase of 560 feet per well.

- Field productivity is about 50 BOE per foot of drainhole length
- The proposed provisions will result in an additional recovery of about 61 MBOE per well, or about 1.5 MMBOE for 25 horizontal wells on all leases in the field.
- Provisions for stacked lateral wells will allow an additional 50 horizontal wells for an increased recovery of 16.5 MMBOE.

The field is currently assigned an oil allowable of 340 BOPD. This appears to be an error. The current 1965 yardstick allowable for a field with a maximum depth of 11,042 feet is 621 BOPD. There has not been a hearing or other request to establish a maximum efficient rate allowable for the field. It appears as if the 340 BOPD value was assigned in error. 340 BOPD is the discovery allowable for a well with a depth of 8,000 to 8,999 feet per Statewide Rule 42. This depth corresponds to the uppermost producing interval in the discovery well. Oil wells are typically assigned discovery allowables based on the deepest producing interval of the field, which is 11,042 feet and should have corresponded to a discovery allowable of 670 BOPD. Regardless, when the discovery allowable was discontinued after two years (in about January, 2010) the yardstick value of 621 BOPD per Statewide Rule 45 should have become effective, but it was not.

It appears that the Final Order in Docket No. 08-026513, which established temporary field rules on September 29, 2009, defined the field allowable at 340 BOPD without reference to it being either a discovery allowable or a yardstick allowable. The allowable was kept in place when the field rules were made permanent on December 14, 2010 (Docket No. 08-0268009). The examiners' reports in these matters did not include discussion of special allowables, thus it appears to have been an oversight. This oversight has not been an issue in the field given the production characteristics of vertical wells. However, OXY anticipates horizontal wells may produce from 3 to 12 times the volume of a horizontal well, and is requesting that the field allowable be corrected to the 1965 yardstick value of 621 BOPD.

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. The Saint Wilma (Strawn) Field was discovered in January 2008 at a depth of 11,042 feet.
3. The field is currently developed with vertical wells, with 39 wells on the January 2014, proration schedule and another 56 wells pending approval of

completion.

4. OXY is proposing several rule changes that will increase the productivity of the field, including:
 - a. Optional 20-acre proration units based on reservoir volumetric and drainage studies.
 - b. An off-lease penetration point provision will result in a horizontal drainhole length increase of 650 feet per well.
 - c. A provision allowing first and last take points to be 100 feet from lease lines will result in a horizontal drainhole length increase of 560 feet per well.
 - d. Field productivity is about 50 BOE per foot of drainhole length.
 - e. The proposed provisions will result in an additional recovery of about 61 MBOE per well, or about 1.5 MMBOE for 25 horizontal wells on all leases in the field.
 - f. Provisions for stacked lateral wells will allow an additional 50 horizontal wells for an increased recovery of 16.5 MMBOE.
5. The current field-wide allowable of 340 BOPD is not correct.
6. The field-wide allowable should be 621 BOPD per well based on the 1965 yardstick table in Statewide Rule 45 for a field with a maximum depth of 11,042 feet on 160 acre proration units.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Amending the field rules for the Saint Wilma (Strawn) Field and correcting the field allowable will prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the field rules for the Saint Wilma (Strawn) Field be amended as proposed by OXY.

Respectfully submitted,



Paul Dubois
Technical Examiner



Michael Crnich
Hearings Examiner