



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0296967

THE APPLICATION OF HENRY RESOURCES, LLC TO AMEND AND MAKE PERMANENT THE FIELD RULES FOR THE UNIVERSITY 31 WEST (U. DEVONIAN) FIELD, CRANE COUNTY, TEXAS

HEARD BY: Karl Caldwell – Technical Examiner
Marshall Enquist – Administrative Law Judge

HEARING DATE: July 22, 2015
CONFERENCE DATE: January 12, 2016

APPEARANCES: **REPRESENTING:**
APPLICANT: Henry Resources, LLC
Sandra Buch
Greg Cloud
Rebecca Wilson

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Henry Resources, LLC (Henry) is requesting to amend the field rules for the University 31 West (U. Devonian) Field, Crane County, Texas and make the field rules permanent. The current field rules are summarized as follows:

1. Designated correlative interval from 4,772 feet to 11,632 feet as shown on the log of the University 31-6 Lease, Well No. 1 (API No. 103-35744);
2. 467' 933' well spacing;
3. 80 acre oil units, 40 acre tolerance, with a minimum diagonal of 3,250 feet; and
4. 1965 Yardstick daily allowable with allocation based on 75% acreage, 25% per well.

Henry proposes the following field rule amendments:

- 330' minimum lease-line spacing with no minimum between well spacing (330' – 0');
- Dual lease-line spacing for horizontal wells of 100' – 330';
- Optional 20 acre oil units with 10 acre tolerance, and elimination of the diagonal rule, as well as the ability to assign additional acreage to horizontal wells in accordance with Statewide Rule 86;
- Adoption of rules pertaining to horizontal well development, including an off-lease penetration point rule, a 50' box rule, no-perforation zone (NPZ) language, and a stacked lateral rule;
- 2,000 BOPD top allowable;
- A six-month exception to Statewide Rule 51(a) regarding the filing of potential tests;
- A net-gas:oil ratio of 7,000:1 and cancellation of any accumulated overproduction; and
- An exception to Statewide Rule 16.

At the hearing, Henry withdrew the request for an exception to Statewide Rule 16 as it was deemed no longer necessary. Henry is the only operator in the field at this time, and therefore the application is unopposed. The Examiners recommend amending the field rules for the University 31 West (U. Devonian) Field, and making the field rules permanent.

DISCUSSION OF THE EVIDENCE

The University 31 West (U. Devonian) Field was discovered on October 27, 2011. The field is located in central-eastern Crane County. At the present time, Henry is the only operator in the field. Approximately 70 wells have been completed in the field. All of the wells listed on the most recent proration schedule are vertical wells. Henry has recently completed a horizontal well in the field which does not yet appear on the proration schedule. This horizontal well was completed in the Woodford Shale interval of the field. The well was hydraulically-fracture stimulated in 22 total stages.

The correlative interval for the field is a thick interval, consisting of several formations. Wells are typically completed in the Devonian and Woodford intervals. Henry is planning to drill additional wells in the Upper and Lower Woodford, as well as the Barnett Shale intervals. Henry is proposing to amend the current field rules to allow for horizontal well development in the field. The proposed rules will prevent waste by allowing the development of shale horizons that cannot be developed with vertical wells. The thickness of the correlative interval and the presence of multiple targets within the correlative interval indicate a need for a stacked lateral field rule. Henry is also requesting that the field rules be made permanent, as the field rules are currently temporary field rules, with a review date of April 29, 2016.

Henry's request for optional 20 acre units is necessary for further development of the field with horizontal well completions. The lone horizontal well that has been completed in the field to-date was drilled amongst existing vertical wells. The vertical wells currently in the field are essentially holding all of the acreage, as the field was drilled to full density with vertical wells. Henry's engineering witness believes that flexible field rules similar to those adopted in the Spraberry (Trend Area) Field are necessary in this field.

Drainage calculations for ten wells completed as Devonian-only completions with good log data show the drainage area for wells completed in the field varies. The drainage area calculations for these ten wells range between 43 acres and 391 acres. Additional drainage calculations support a smaller optional density for the field. The drainage area calculation for the Henry Suzahn 1211, completed in the Lower Woodford interval in the field indicates a drainage area of 7.1 acres. The drainage area calculation for the Henry UnivSherry 2013R, completed in the Upper Woodford interval in the field indicates a drainage area of 6.5 acres. The Henry UnivTaylor 192UW was also completed in the Upper Woodford and the drainage calculation indicates a drainage area of 98.7 acres, although there is not enough production history to make a hard EUR for this particular well at this time.

The current top allowable in the field is 250 BOPD with a 2,000:1 GOR. Henry is requesting a top allowable of 2,000 BOPD, and a GOR of 7,000:1. The requested top oil allowable is based on the field rules adopted in the Eagleford Trend area fields. Henry's engineering witness described a need for a higher allowable with the planned stacked lateral development of the field. The UnivShannon 1806 is a vertical well completed in the field and production peaked at 300 BOPD. With horizontal drilling and improvements in hydraulic fracturing, production rates are anticipated to exceed the current top allowable for the field.

Henry is requesting that any accumulation in the field be cancelled, and the adoption of a GOR of 7,000:1. The requested relief is a result of a dramatic increase in the UnivShannon 1806 gas production in mid-November 2014. Gas production increased from approximately 350 Mcf per day to approximately 700 Mcf per day, and

then to 1,000 Mcf per day. As a result, this well has exceeded its daily gas limit and has accumulated overproduction. The cause of the increase in gas production is unknown. The well was on a rod-pump prior to the increase in gas production and is currently still on a rod-pump. Since the cause of the increase in gas production is unknown and only one well in the field has accumulated overproduction, the Applicant proposed an alternative form of relief for the single well: a net daily gas allowable of 1,200 Mcf per day. The Examiners recommend a net daily gas allowable for the UnivShannon 1806 as opposed to a field-wide rule, as this is the only well in the field that has accumulated over-production. This provision would provide the relief sought and allow a variance of 20% over the current maximum daily production for the well.

FINDINGS OF FACT

1. Notice of the hearing was provided to all operators in the field at least ten (10) days' prior to the date of the hearings and no protests were received.
2. Henry is the only operator in the field.
3. The correlative interval for the field consists of several productive formations.
4. Henry has recently completed a horizontal well in the Woodford Shale interval of the field.
5. The first horizontal well completed in the field was drilled amongst existing vertical wells.
6. Drainage calculations show varying drainage areas for wells completed in the different productive intervals within the correlative interval for the field.
7. The UnivShannon 1806 well has exceeded its daily gas limit and has accumulated overproduction.
8. Amending the field rules to allow for horizontal well development in the field will prevent waste by allowing the development of shale horizons that cannot be developed with vertical wells.

CONCLUSIONS OF LAW

1. Proper notice was issued as required by all applicable statutes and regulatory codes.

2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Amending the field rules for the University 31 West (U. Devonian) Field will prevent waste.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission amend the field rules for the University 31 West (U. Devonian) Field and make the field rules permanent.

Respectfully submitted,



Karl Caldwell
Technical Examiner



Marshall Enquist
Administrative Law Judge