



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0277868

THE APPLICATION OF HENRY RESOURCES, L.L.C. TO CONSIDER TEMPORARY FIELD RULES FOR THE UNIVERSITY 31 WEST (U. DEVONIAN) FIELD, CRANE COUNTY, TEXAS

HEARD BY: Andres J. Trevino P.E., Technical Examiner
Randall Collins, Hearings Examiner

DATE OF HEARING: September 18, 2012

APPEARANCES:

REPRESENTING:

Greg Cloud

Henry Resources, L.L.C.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Henry Resources, L.L.C. requests that temporary field rules be adopted for the University 31 West (U. Devonian) Field. The proposed rules are summarized as follows:

1. Designation of the field as the correlative interval from 4,772 feet to 11,632 feet as shown on the well log of the Devon Energy Production Co. University 31-6 Lease, Well No. 1;
2. 467' - 933' well spacing;
3. 80 acre oil units, maximum diagonal of 3,250';
4. Allocation based on 75% acreage and 25% per well.

The applicant originally requested 900 feet between well spacing and stated they would not consider approving the standard 933 feet between well spacing in stead of the 900 feet between well spacing adverse. This application was unprotested and the examiners recommend adoption of the proposed temporary field rules.

DISCUSSION OF EVIDENCE

The University 31 West (U. Devonian) Field was discovered in October 2011 upon completion of the UnivAniston, Well No. 2910 by Henry Resources. On initial test, the well pumped at a rate of 80 BOPD, 60 MCFD and 135 barrels of water and encountered virgin pressure of 4,055 psia. The field is located on an adjacent down thrown block from the Block 31 (Devonian) Field. There are two other wells completed in the field.

The UnivAniston, Well No. 2910 is perforated in the Upper Devonian between 8,873 feet and 8,985 feet. The current correlative interval from 8,846 feet to 9,080 feet is designated as the field interval was first defined in the new field designation application Form P-7. Henry Resources requests that the field interval be expanded to include additional marginally productive pay zones found in the area.

Henry Resources requests that the field be designated as the correlative interval from 4,772 feet to 11,632 feet as shown on the well log of the Devon Energy Production Co. University 31-6 Lease, Well No. 1. This interval includes the Clearfork, the Tubb, the Wichita, the Wolfcamp, the Pennsylvanian, the Atoka, the Barnett, the Mississippian, the Woodford, the Devonian, the Fusselman, the Montoya, the Connell and the top 100 feet of the Ellenburger. The Devonian is the primary objective in the area and is the only formation that has produced commercial quantities of hydrocarbons. Marginal production has been found above the Devonian in the Pennsylvanian zone at a depth of 7,700 feet. Oil and gas shows have been found in the above the Pennsylvanian in such zones as the Clearfork at 5,000 feet, Tubb at 5,300 feet, Wichita at 6,700 feet. Additionally, deeper pay zones have been found in the Montoya, the Fusselman and top portions of the Ellenburger. Only the Devonian is a stand alone formation and the other zones could be commingled with the Devonian to produce those reservoirs that would otherwise not be produced. It is common to commingle the Devonian with the Pennsylvanian, Atoka and Ellenburger in the adjacent field, the Block 31 (Devonian) Field.

Henry Resources requests that the well density be increased to 80 acre units. The UnivAniston, Well No. 2910 has produced 33,009 BO through July 2012. Decline curve analysis indicates the UnivAniston, Well No. 2910 will ultimately recover a total of 163,450 BO. Average porosity of the reservoir is 6.5%, the average water saturation is 29% and the average net effective oil pay thickness is 68.5 feet. With a recovery factor of 10%, recoverable reserves are estimated to be 27 STB/ac-ft. Volumetric calculations indicated that the UnivAniston, Well No. 2910 will drain approximately 89 acres.

Henry Resources requests 467'-933' well spacing, which will allow flexibility in locating optimal drilling locations between wells based on hydraulic fracture half lengths. A hydraulic fracture stimulation study of the UnivAniston, Well No. 2910 indicates wells will have fracture half lengths of 900 feet meaning a well that is fracture stimulated is believed to stimulate or drain 900 feet. By placing a well 933 feet from other wells, a well will not be too close or too far away from a fracture stimulated well to effectively drain the reservoir. Henry Resources

also requests that allocation be based on 75% acreage and 25% per well as the thick interval has multiple pay zones and requires a two factor allocation.

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 University 31 West (U. Devonian) Field was discovered in October 2011 upon completion of the UnivAniston, Well No. 2910 by Henry Resources. There are two other wells completed in the field.
3. The entire correlative interval 4,772 feet to 11,632 feet as shown on the well log of the Devon Energy Production Co. University 31-6 Lease, Well No. 1 should be designated as the University 31 West (U. Devonian) Field. The interval includes the Clearfork, the Tubb, the Wichita, the Wolfcamp, the Pennsylvanian, the Atoka, the Barnett, the Mississippian, the Woodford, the Devonian, the Fusselman, the Montoya, the Connell and the top 100 feet of the Ellenburger.
4. The Devonian is the primary objective in the area and is the only formation that has produced commercial quantities of hydrocarbons. Marginal production has been found above and below the Devonian in the various other formations.
5. Commingling the marginal formations with the Devonian will allow the production from marginal reservoirs that would otherwise not be produced.
6. Density rules providing for 80 acre density are appropriate for the University 31 West (U. Devonian) Field on a temporary basis.
 - a. Using reservoir parameters of 6.5% porosity, water saturation of 29%, and a 68.5 foot net pay thickness, recoverable oil beneath 80 acres is estimated to be 148.5 MB of oil.
 - b. The estimated ultimate recovery for the UnivAniston, Well No. 2910 is 163.45 MB of oil as determined from a decline curve analysis.
 - c. The calculated drainage area for the UnivAniston, Well No. 2910 is 89 acres.
7. Well spacing of a minimum of 467 feet from lease lines and 933 feet between wells will allow flexibility in locating optimal drilling locations between wells which when stimulated will have an effective half frac lengths of 900 feet. By placing a well 933 feet from other wells, a well will not be too close or too far away from a fracture stimulated well to effectively drain the reservoir.
8. Allocation based on 75% acreage and 25% per well is a reasonable method of allocation 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. Adoption of the proposed field rules for the University 31 West (U. Devonian) Field on a temporary basis is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Commission adopt the field rules proposed by Henry Resources, L.L.C. for the University 31 West (U. Devonian) Field on a temporary basis, subject to review in 18 months.



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Technical Examiner

Respectfully submitted,



Randall Collins
Hearings Examiner