



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 8A-0289255

THE APPLICATION OF RAW OIL & GAS, INC., TO ADOPT FIELD RULES FOR THE ADCOCK, W. (SPRABERRY) FIELD, DAWSON COUNTY, TEXAS

Heard by: Paul Dubois – Technical Examiner
Cecile Hanna – Hearings Examiner

Heard on: June 24, 2014

Appearances:

Dale Miller

Representing:

Raw Oil & Gas, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of Raw Oil & Gas, Inc., to adopt permanent field rules for the Adcock, W. (Spraberry) Field in Dawson County, Texas. Raw Oil & Gas is requesting the following field rules be adopted:

1. Correlative interval from 6,910 feet to 8,000 feet;
2. 330-foot lease line spacing and zero (0) feet between well spacing;
3. 160-acre oil proration units with 40-acre optional units, and acreage assignments using Form P-15 without the need for proration unit plats; and,
4. Two-factor allocation formula based on 90 percent per well and 10 percent acreage.

The application is not protested. The examiners recommend that the field rules be permanently adopted as requested by Raw Oil & Gas.

DISCUSSION OF EVIDENCE

The Adcock, W. (Spraberry) Field in Dawson County was discovered on August 22, 2012, at a depth of 7,205 feet to 7,314 feet. The new field designation was approved by the Commission on April 28, 2014. The discovery well was the Raw Oil & Gas Darrell Lease, Well No. 1 (API No. 42-115-33520). On initial potential testing on February 13, 2013, the well produced 111 bbl oil, no gas and 7 bbl water.

The nearest production to the subject well is the Adcock (Spraberry) Field, which is about 1.5 miles to the northeast. The Adcock (Spraberry) Field produces from the depth interval of 7,548 feet to 7,722 feet, which is generally the same stratigraphic interval as the subject Adcock, W. (Spraberry) Field.

The reservoir has an average porosity of 16 percent and an average permeability of 27 millidarcies. The water saturation is 35 percent, and the average net effective oil pay thickness is 6 feet. The original reservoir pressure was 2,832 psi at an initial temperature of 113°F. The field has produced 57,609 bbl oil and 28,524 MCF gas from four wells through May 31, 2014. The average gas-oil ratio is 448 SCF/bbl.

The new field discovery established the correlative interval for the field to be from 7,205 feet to 7,314 feet. With this application, Raw Oil & Gas requests the correlative interval be expanded to include the entire Spraberry Formation, from 6,910 feet to 8,000 feet as indicated on the array compensated true resistivity type log of the Darrell Lease Well No. 1 (API No. 42-115-33520).

Four (4) wells have been drilled in the field. Raw Oil & Gas is the only operator in the field. Development thus far has revealed important characteristics of the field:

- Darrell No. 1 (API No. 42-115-33520, discovery well): produced 111 bbl oil on initial potential.
- Darrell No. 2 (API No. 42-115-33579): produced 3 bbl oil on initial potential, indicating this well came in high and tight on the structure. This well will be recompleted as an injection well.
- Double D No. 1 (API No. 42-115-33595): produced 47 bbl oil on initial potential.
- Darrell No. 3: (API No. 42-115-33635): produced 108 bbl oil on initial potential, and indicated pressure interference with the Darrell No. 1 well.

Raw Oil & Gas has four additional permitted locations in the field. However, three of them will be cancelled and not drilled. Those three are relatively close to the Darrell Lease Well Nos. 1 and 4. Based on the pressure interference observed in the Darrell No.

4 well indicating communication with the Darrell No. 1 well, Raw Oil & Gas believes that these locations may also experience pressure interference.

Based on the pressure interference between Darrell Well Nos. 1 and 4, Raw Oil & Gas estimates a radial drainage area of at least 103 acres. Factoring in decline curve analysis for the Darrell No. 1 and the Double D No. 1 wells, Raw Oil & Gas estimates drainage areas of 146 and 87 acres, respectively. Based on this information, Raw Oil & Gas believes that 160-acre standard proration units with 40-acre options are appropriate. Further, the large correlative interval and the presence of multiple lenticular producing horizons within it indicate that a two-factor allocation formula is necessary to meet the requirements of the Texas Water Code.

FINDINGS OF FACT

1. Proper notice of this hearing was issued.
2. The Adcock, W. (Spraberry) Field in Dawson County was discovered on August 22, 2012, at a depth of 7,205 feet to 7,314 feet.
 - a. The new field designation was approved by the Commission on April 28, 2014.
 - b. The discovery well was the Raw Oil & Gas Darrell Lease, Well No. 1 (API No. 42-115-33520).
 - c. On initial potential testing on February 13, 2013, the well produced 111 bbl oil, no gas and 7 bbl water.
3. The reservoir characteristics include: an average porosity of 16 percent; an average permeability of 27 millidarcies, water saturation of 35 percent, the average net effective oil pay thickness is 6 feet, and the original reservoir pressure was 2,832 psi at an initial temperature of 113°F.
4. The field has produced 57,609 bbl oil and 28,524 MCF gas from four wells through May 31, 2014. The average gas-oil ratio is 448 SCF/bbl.
5. The proposed correlative interval from 6,910 feet to 8,000 feet as indicated on the array compensated true resistivity type log of the Darrel Lease Well No. 1 (API No. 42-115-33520) represents the entire Spraberry Formation.
6. Reservoir pressure data and decline curve analysis indicates drainage areas ranging from 87 to 146 acres.

7. Allocation based on 90 percent per well and 10 percent acreage will protect correlative rights and meets statutory requirements for combining multiple productive zones into a single field.

CONCLUSIONS OF LAW

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. The requested field rules will prevent waste, 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 adopting the field rules for the Adcock, W. (Spraberry) Field as requested by Raw Oil & Gas Oil Company.

Respectfully submitted,



Paul Dubois
Technical Examiner



Cecile Hanna
Hearings Examiner