

OIL AND GAS DOCKET NO. 7C-0258301

THE APPLICATION OF HENRY PETROLEUM, LP TO INCREASE THE TOP ALLOWABLE IN THE SPRABERRY (TREND AREA) FIELD, VARIOUS COUNTIES, TEXAS

Heard by: Richard D. Atkins, P.E. - Technical Examiner

Hearing Dates: September 26 and December 8, 2008

Appearances:

Representing:

Greg Cloud

Henry Petroleum, LP

Philip Whitworth
Allen Harp

EOG Resources, Inc.

Tim George

Endeavor Energy Resources, LP

Brian R. Sullivan

Pioneer Natural Resources USA, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Henry Petroleum, LP requests to increase the Top Allowable to 515 BOPD in the Spraberry (Trend Area) Field, Various Counties, Texas. Henry stated that the top allowable of 515 BOPD is based on the 1965 Yardstick Allowable for fields producing from a depth between 10,000 feet and 10,500 feet on 160 acre density.

After the hearing, the examiner noted that the Spraberry (Trend Area) Field was actually on 80 acre density with a tolerance of 80 acres for each well on the lease. Henry then proposed that the current 80-acre top allowable for the field be set at 515 BOPD. Henry also proposes that wells assigned an acreage amount of more or less than 80 acres will have their daily allowable proportioned according to the field allocation formula.

Prior to the order being approved at the Commissioner's conference on November 12, 2008, it was discovered that the hearing had not been noticed to all of the operators in District 8 and 8A. The hearing was rescheduled and properly noticed to consider Henry's proposal that the current 80-acre top allowable for the field be set at 515 BOPD.

The application was unopposed and the examiner recommends approval of the 515 BOPD Top Allowable for the Spraberry (Trend Area) Field.

DISCUSSION OF EVIDENCE

The Spraberry (Trend Area) Field currently extends over many counties and is located in parts of Districts 7C, 8 and 8A. The field was originally discovered in 1935, but through the course of time, the field has been enlarged both horizontally and vertically and now comprises approximately 1.6 MM acres with a length of 150 miles and a width of 75 miles. Currently, there are 11,234 wells and 198 operators carried on the proration schedules. The top allowable in the field is 121 BOPD, with an allowable gas-oil ratio of 4,000 cubic feet per barrel.

Cumulative production from the field since 1952 is 975.2 MMBO and 2.5 TCFG. Production for June 2008 was 2.5 MMBO and 7.8 BCFG. The average production from each oil well is 7.5 BOPD and 23.2 MCFGPD. Henry Petroleum, LP operates approximately 385 wells in the field.

There have been many field consolidations into the Spraberry (Trend Area) field and the field rules have been amended to increase drilling density. The field is located in the Midland Basin and is composed of submarine deposits of sandstones, siltstones, limestones and shales. The correlative interval is over 3,500 feet thick and includes the Clearfork, Upper Spraberry, Lower Spraberry, Dean and Wolfcamp formations. Though these formations are correlative across the entire area, the sand lenses are lenticular and the porosity and permeability change quickly over short distances due to formation shaliness. The quality of the sandstones are generally characterized as poor with an average porosity of 10% and permeability of less than 1.0 millidarcy. Additionally, most zones would not be economic to produce as separate completions.

Henry is drilling additional infill wells in the Spraberry (Trend Area) Field. The field is experiencing an increase in completions due to favorable oil prices, satisfactory results from infill drilling and fracture stimulation techniques. Due to the large correlative interval, the wells require multi-stage fracture stimulation to produce. This results in a high initial potential that declines rapidly. Usually, within three to six months, the flush production declines down to below the current allowable of 121 BOPD. Since 2005, there have been twelve MER hearings for an increased allowable to accommodate the high initial production rates. The MER rates have ranged from 700 BOPD down to 184 BOPD.

Therefore, to eliminate future additional MER hearings, Henry requests a Top Allowable of 515 BOPD for wells on 80 acre density be approved for the Spraberry (Trend Area) Field.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.

2. The Spraberry (Trend Area) Field currently extends over many counties and is located in parts of Districts 7C, 8 and 8A. The field was originally discovered in 1935, but through the course of time, the field has been enlarged both horizontally and vertically and now comprises approximately 1.6 MM acres with a length of 150 miles and a width of 75 miles.
3. There are 11,234 wells and 198 operators carried on the proration schedules. The top allowable in the field is 121 BOPD, with an allowable gas-oil ratio of 4,000 cubic feet per barrel.
4. Cumulative production from the field since 1952 is 975.2 MMBO and 2.5 TCFG. Production for June 2008 was 2.5 MMBO and 7.8 BFG. The average production from each oil well is 7.5 BOPD and 23.2 MCFGPD.
5. The correlative interval is over 3,500 feet thick and includes the Clearfork, Upper Spraberry, Lower Spraberry, Dean and Wolfcamp formations. The quality of the sandstones are generally characterized as poor with an average porosity of 10% and permeability of less than 1.0 millidarcy.
6. Due to the large correlative interval, the wells require multi-stage fracture stimulation to produce which results in a high initial potential that declines rapidly. Usually, within three to six months, the flush production declines down to below the current allowable of 121 BOPD.
7. Since 2005, there have been twelve MER hearings for an increased allowable to accommodate the high initial production rates. The MER rates have ranged from 700 BOPD down to 184 BOPD.
8. To eliminate future additional MER hearings, Henry requests a Top Allowable of 515 BOPD for wells on 80 acre density be approved for the Spraberry (Trend Area) Field.
9. Producing wells in the Spraberry (Trend Area) Field at rates up to 515 BOPD will not cause waste.

CONCLUSIONS OF LAW

1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
3. Approval of an increased Top Allowable of 515 BOPD in the Spraberry (Trend Area) Field will not cause waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends approval of an increased Top Allowable of 515 BOPD for the Spraberry (Trend Area) Field, Various Counties, Texas.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner