#### OIL AND GAS DOCKET NO. 06-0230825

THE APPLICATION OF EOG RESOURCES, INC. FOR INCREASED GAS/OIL RATIO AUTHORITY FOR ITS PARKER NO. 1 OIL UNIT WELL NO. 1, CARTHAGE (T.P. 6400 SW) FIELD, PANOLA COUNTY, TEXAS

**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history** 

Application received: March 6, 2002 Hearing held: April 22, 2002

**Appearances** 

Representing Richard Johnston EOG

chard Johnston EOG Resources

# EXAMINER'S REPORT AND RECOMMENDATION

# **STATEMENT OF THE CASE**

EOG Resources is seeking increased gas/oil ratio authority for its Parker Oil Unit 1 Well No. 1 to allow this well to produce its daily gas limit of 384 MCF per day, regardless of the producing gas/oil ratio. The applicant is also asking to have this well's overproduction canceled. The subject well is producing within its daily gas limit but has overproduced its penalized oil allowable. The examiner recommends that an MER be adopted as well.

### **DISCUSSION OF THE EVIDENCE**

The Carthage (T.P. 6400 SW) Field was discovered in 1976 and the three operators in the field have 37 wells. Four wells are operated by EOG Resources and Texaco operates 31 wells, five of which already have increased gas limits. The field has 80-acre proration units and the daily yardstick allowable is 184 BO with 368 MCF per well.

The initial potential of the Parker Oil Unit 1 Well No. 1 was measured at 15 BOPD with a gas/oil ratio of 48,415 cubic feet per barrel, on January 24, 2000. The entire producing sandstone (between 6356 and 6365 feet) was perforated. Cumulative production is 6300 BO and 200 MMCF. The gas/oil ratio increased until August of 2000, when it crept over 100,000 cubic feet per barrel. The ratio has declined somewhat erratically since, and for the last nine months it has stabilized at 45,000 to 50,000 cubic feet per barrel.

The well initially overproduced its gas allowable, but this overage was made up by October, 2000. The daily oil allowable was penalized to 7 or 8 barrels by the high gas/oil ratio, and the well began accruing oil production as soon as it began producing. The maximum overage status was 2600 barrels in April, 2000. After notification by the Commission of its intent to cancel the well's P-4, EOG agreed in October, 2000, to produce at a reduced rate to make up the well's overproduction. The amount of

overproduction has decreased slowly, mostly to depletion of the well. By January, 2002, the well still had 800 barrels of oil overproduction and the Commission informed EOG that it would be allowed to produce this well only 1 barrel per month.

The Parker Oil Unit 1 Well No. 1 has produced with a high gas/oil ratio since it was drilled. Its potential is now only 10 BOPD and the most recent W-10 test showed a gas/oil ratio of 54,300 cubic feet per barrel. Gas production has been less than half of the allowable limit for the last nine months. The applicant testified that testing the well by restricting the flow would cause it to load with liquids are die. There is no reason to require this well to make up its oil overproduction since producing 7 BOPD instead of 10 BOPD will not prevent waste of reservoir energy.

The two closest wells in the field are two miles to the northeast and two miles to the southwest. Two of the closest wells to the northeast have already received increased net gas/oil ratios allowing them to produce more than 2000 cubic feet per barrel. The largest gas limit approved for any well in this field to date is 1900 MCF. If the Parker Oil Unit 1 Well No. 1 is allowed to produce at capacity, the oil allowable will increase by only 3 barrels per day. No correlative rights will be damaged if the overproduction of Well No. 1 is canceled.

#### FINDINGS OF FACT

- 1. Notice of this hearing was given to the only offset operators in the Carthage (T.P. 6400 SW) Field on March 19, 2002.
- 2. The subject well, the Parker Oil Unit 1 Well No. 1, was completed in January of 2000, and perforated between 6356 and 6364 feet.
- 3. The well's initial potential was 15 BOPD, with a gas/oil ratio of 48,415 cubic feet per barrel.
- 4. The daily yardstick allowable for wells in the Carthage (T.P. 6400 SW) Field is 184 BO, with 368 MCF of gas, but the subject well is penalized to 7 BO due to high gas/oil ratio.
- 5. Cumulative production from the subject well is 6300 BO and 200 MMCF of gas.
- 6. As production began declining, the gas/oil ratio climbed quickly to 100,000 cubic feet per barrel, but has since decreased again to 45,000 to 50,000.
- 7. No test results are available for the Parker Oil Unit 1 Well No. 1 but allowing the well to produce at capacity will increase the oil allowable only from 7 BOPD to 10 BOPD, without causing an increase in the daily gas production.
- 8. The closest wells in this field are two miles away and come of them have already been granted increased gas limits, under net gas/oil ratio authorities.
- 9. Requiring the Parker Oil Unit 1 Well No. 1 to make up its overproduction, currently 800 barrels of oil, is not necessary to protect correlative rights.

### **CONCLUSIONS OF LAW**

- 1. Proper notice was given as required by statute.
- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
- 3. The requested increase in gas allowable for the Parker Oil Unit 1 Well No. 1 in the Carthage (T.P. 6400 SW) Field will not cause waste and not harm correlative rights.

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the daily oil allowable of the EOG Resources, Inc., Parker Oil Unit 1 Well No. 1, in the Carthage (T.P. 6400 SW) Field, be set at 10 barrels, the current W-10 potential rate, and the daily gas allowable be set at the current daily limit of 368 MCF. All overproduction for this well should be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: May 21, 2002