

# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

February 22, 2007

OIL AND GAS DOCKET NO. 04-0250026

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**APPLICATION OF REPUBLIC RESOURCES, LLC, TO CONSIDER AN INCREASED NET GOR AUTHORITY FOR THE ANGELITA UNIT WELL NO. 1, ANGELITA NEW (6900) FIELD, SAN PATRICIO COUNTY, TEXAS**

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**HEARD BY:** Thomas H. Richter, P.E.

**DATE OF HEARING:** February 21, 2007

**APPEARANCES:**

Dale E. Miller

**REPRESENTING:**

Republic Resources, LLC

### EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unopposed application of Republic Resources for a net gas-oil ratio (GOR) which increases the permitted gas limit to 500 MCFD for the Angelita Unit Well No. 1. It also requests that all overproduction be canceled for its Angelita Unit. The examiner recommends approval.

### DISCUSSION OF THE EVIDENCE

The Angelita New (6900) Field was discovered in 1966 at 6,905' subsurface depth. The field operates pursuant to Statewide Rule. The top allowable for a well in the field is 111 BOPD and 222 MCFD. Cumulative production from the field is 46,600 BO. Republic Resources is the only operator in the field with one well.

The Republic Resources, Angelita Unit Well No. 1 was completed September 19, 2006 through perforations from 6,884' to 6,890' subsurface depth. The well potentialized at 108 BOPD, 54 MCFD, no water and a gas-oil ratio of 500:1. The oil gravity is 39.9 °API. The initial flowing tubing pressure was 1450 psig.

A net GOR resulting in a gas limit of 500 MCFD is appropriate. The testing shows that the well is rate sensitive. It is believed that the reservoir drive is that of a strong water encroachment. Since initial completion the well has flowed on an 8/64ths choke and stable at: 18-20 BOPD, 375-400 MCFD, 20 BWPD, a GOR of ± 20,000:1. The flowing tubing pressure was stable at 1,225 psig. When the flow rate was reduced by an 6/64ths choke, the tubing pressure started decreasing over a seven hour period from 1225 to 850 psig, oil and water production ceased and gas production continued to reduce to 115 MCFD. The well was opened back to the 8/64ths choke and was

produced for several days until the previous stabilization was reached. The flow rate was reduced to a 7/64ths choke, the tubing pressure started decreasing over a six hour period from 1225 to 1050 psig, oil and water production ceased and gas production continued to reduce to 135 MCFD. The highest flow rate achieved was 431 MCFD and 21 BOPD. It is anticipated that the well may have to be flowed at a higher rate eventually to maintain sufficient velocity to remove the liquids from the wellbore.

Cancellation of the over production will not harm correlative rights. The subject well is the only well in the field.

#### FINDINGS OF FACT

1. Notice of this application was given to all person entitled to notice at least ten (10) days prior to the hearing.
2. There was no protest of the application.
3. The Angelita New (6900) Field was discovered in 1966 at 6,905' subsurface depth.
  - a. The field operates pursuant to Statewide Rule and the top allowable for a well in the field is 111 BOPD and 222 MCFD.
  - b. Republic Resources is the only operator in the field with one well.
4. The Republic Resources, Angelita Unit Well No. 1 was completed September 19, 2006 through perforations from 6,884' to 6,890' subsurface depth.
  - a. The well potentialed at 108 BOPD, 54 MCFD, no water and a gas-oil ratio of 500:1.
  - b. The initial flowing tubing pressure was 1450 psig.
5. A net GOR resulting in a gas limit of 500 MCFD is appropriate as the testing shows that the well is rate sensitive.
  - a. The testing shows that the well is rate sensitive and since initial completion has flowed on an 8/64ths choke and stable at: 18-20 BOPD, 375-400 MCFD, 20 BWPD, a GOR of  $\pm$  20,000:1. The flowing tubing pressure was stable at 1,225 psig.
  - b. Any flow rate reduction results in continuing tubing pressure decrease over short periods with oil and water production ceased and gas production continued to decrease.

- c. It is anticipated that the well may have to be flowed at a higher rate eventually to maintain sufficient velocity to remove the liquids from the wellbore.
6. Cancellation of the over production of the Angelita Unit (RRC Lease No. 13394) will not harm correlative rights.

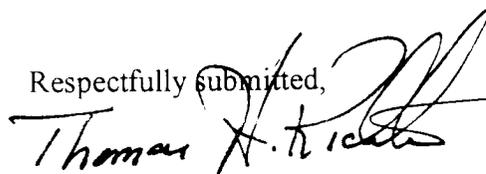
**CONCLUSIONS OF LAW**

1. Notice of this hearing was provided in accordance with all applicable regulatory statutes and rules.
2. All things have occurred or been accomplished to afford the Commission the jurisdiction to consider and decide this matter.
3. Consideration and approval of this application for a gas-oil ratio which results in a casinghead gas limit of 500 MCFD is a matter properly within the jurisdiction of the Commission to foster conservation and prevent waste.
4. Approval of the proposed application of Republic Resources for a net gas-oil ratio which increases the permitted GOR to a gas limit of 500 MCFD will foster conservation and prevent waste.
5. Cancellation of overproduction will not harm correlative rights.

**EXAMINER'S RECOMMENDATION**

It is recommended that the application of Republic Resources for a net gas-oil ratio which increases the permitted GOR to a gas limit of 500 MCFD for the Angelita Unit Well No. 1 be approved. It is further recommended that all overproduction for the Angelita Unit (RRC Lease No. 13394) be canceled.

Respectfully submitted,



Thomas H. Richter, P.E.  
Technical Examiner  
Office of General Counsel