

THE APPLICATION OF APACHE CORPORATION TO AMEND FIELD RULES, ADOPT A MER AND NET GOR FOR THE CLYDE BLAIR OIL UNIT 1, WELL NO. 2 IN THE STEWARDS MILL, NE (RODESSA) FIELD, FREESTONE COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E. on July 22, 2010

Appearances:

James M. Clark
Bill Spencer

Representing:

Apache Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Apache Corporation requests that the correlative interval for the Stewards Mill, NE (Rodessa) Field be expanded to include additional productive sands. Apache also additionally requests an increased MER allowable of 225 BOPD for the Clyde Blair Oil unit No.1, Well No. 2 and an increased net gas-oil ratio authority with a casinghead gas limit of 560 MCFD. Apache additionally requests cancellation of accrued over production.

This application was unopposed and the examiner recommends approval of Apache's request to expand the correlative interval for the field, increased MER allowable, increased net gas-oil ratio authority and cancellation of accrued over production.

DISCUSSION OF THE EVIDENCE

The Stewards Mill, NE (Rodessa) Field was discovered in 1958 originally as a non-associated gas field. The field currently is classified as an associated field with four gas wells and one oil well. The field has produced 9.5 BCF of gas and 316,000 BC/BO. The approved field interval is from 7,106 feet to 7,310 feet as shown on the log of the Watson Trust Gas Unit Well No. 1. The correlative interval was first established in Oil and Gas Docket No. 05-024688 approved on October 6, 2005. Apache requests that the field be defined as the correlative interval between 7,088 feet and 7,310 feet as shown on the log of the Watson Trust Gas Unit Well No. 1. The interval includes an additional productive sand in the Upper Rodessa that is oil productive and not found in other wells. The field operates under Special Rules.

Apache recently recompleted the Clyde Blair Oil Unit No.1, Well No. 2 from existing perforations found from 7,112 feet to 7,184 feet in the Lower Rodessa to a new set of

perforations from 6,990 feet to 7,012 feet in the Upper Rodessa. The recompletion produced the first oil well in the field. The well had an initial potential of 401 BOPD, 261 MCFPD and 5 BWPD with a flowing tubing pressure of 900 psi. There are no other oil wells in the field.

During June and July 2010, Apache tested the Clyde Blair Oil Unit No.1, No.2 at various rates to determine sensitivity. The results of the test are summarized as follows:

<u>choke size</u>	<u>oil rate</u>	<u>gas rate</u>	<u>gas-oil ratio</u>	<u>FTP</u>
15/64"	225 BOPD	558 MCFD	2,480 cuft/bbl	780 psi
13/64"	201 BOPD	502 MCFD	2,497 cuft/bbl	820 psi
9/64"	125 BOPD	336 MCFD	2,692 cuft/bbl	1,000 psi

The producing gas-oil ratio remained nearly constant through out the rate testing. At the highest daily test rate of 225 BOPD and 558 MCFD, the GOR decreased to 2,480 cuft/bbl. Testing shows the well can produce above the top allowable and maintain efficient use of reservoir energy. When the well was produced near the allowable, the well's GOR increased slightly. The reservoir energy is primarily derived from a solution gas drive.

The well is estimated to be overproduced by 6,443 BO and 2,505 MCF as of May 2010. Apache requests that this overage be cancelled.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators of wells in the Stewards Mill, NE (Rodessa) Field at least ten days prior to the date of hearing.
2. The Stewards Mill, NE (Rodessa) Field was discovered in 1958 as a non-associated gas field. The interval for the field is from 7,106 feet to 7,310 feet as shown on the log of the Watson Trust Gas Unit Well No. 1 as established in Oil and Gas Docket No. 05-024688 approved on October 6, 2005.
3. The Clyde Blair Oil Unit No.1, Well No. 2 was recompleted from the Lower Rodessa to the Upper Rodessa as an oil well. The well had an initial potential of 401 BOPD, 261 MCFPD and 5 BWPD with a flowing tubing pressure of 900 psi.
4. The Stewards Mill, NE (Rodessa) Field should be designated as the correlative interval from 7,088 feet and 7,310 feet as shown on the log of the Watson Trust Gas Unit Well No. 1. The expanded interval adds 18 feet of additional productive sands in the Upper Rodessa formation.
5. Variable rate testing of the Clyde Blair Oil Unit No.1, Well No. 2 indicates that producing at rates of up to 225 BOPD and a casinghead gas limit of 560

MCFGPD will not cause waste.

- a. The maximum oil rate was 225 BOPD and 560 MCFGPD on a 15/64" choke.
 - b. The well's GOR remained nearly constant between 2,500 to 2,700 scf/bbl regardless of production rate.
 - c. The well produced at its lowest GOR of 2,480 cuft/bbl when the well was produced at its highest rate of 225 BOPD.
6. The well is estimated to be overproduced by 6,443 BO and 2,505 MCF as of May 2010.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Expansion of the designated field interval, approval of an MER of 225 BOPD, authorization to produce under net gas-oil ratio authority with a daily gas limit of 560 MCFGPD for the Clyde Blair Oil Unit No.1, Well No. 2 and cancellation of overproduction for the well in the Stewards Mill, NE (Rodessa) Field will not cause waste and will not harm correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the Stewards Mill, NE (Rodessa) Field's correlative interval be expanded and the approval of an MER of 225 BOPD, authorization to produce under net gas-oil ratio authority with a daily gas limit of 560 MCFGPD and cancellation of overproduction for the Clyde Blair Oil Unit No.1, Well No. 2 in the Stewards Mill, NE (Rodessa) Field in Freestone County, Texas.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Hearings Examiner