



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 09-0282674

THE APPLICATION OF BEST PETROLEUM EXPLORATIONS, INC. TO CONSIDER INCREASED NET GAS TO OIL RATIO AUTHORITY AND MAXIMUM EFFICIENT RATE ALLOWABLE FOR THE LAKE LEASE, WELL NO. 2 IN THE LOST VALLEY (CADDO) FIELD, JACK COUNTY, TEXAS

Heard by: Paul Dubois - Technical Examiner
Andres J. Trevino, P.E. - Technical Examiner
Michael Crnich - Legal Examiner

Hearing Date: June 28, 2013

Appearances:

Dale Miller

Representing:

Best Petroleum Explorations, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Best Petroleum Explorations, Inc. (Best), requests authority to produce its Lake Well No. 2 under increased net gas-oil ratio (GOR) authority with a daily gas limit of 550 MCFD and a maximum efficient rate (MER) allowable of 150 BOPD. Best also requests that all overproduction for the well be canceled. This application was unopposed and the examiner recommends approval of the proposed daily gas limit and MER allowable and cancellation of overproduction as requested by Best.

DISCUSSION OF EVIDENCE

The Lake No. 2 was completed in May 2013 and was placed in the Lost Valley (Caddo) Field. The subject well is perforated between 4,664 feet and 4,684 feet. On initial test, the well produced at a rate of 20 BOPD, 100 MCFD and 90 BWPD with a GOR of 5 MCFPB. The well was flowing on a 20/64^{ths} choke with 250 psi tubing pressure. The top allowable in the field is 48 BO and casinghead gas limit of 96 MCFD.

The well was put on a pump and the production increased significantly, although the production rates vary from month to month. The variation in production rates appears to be related to the back pressure applied to the tubing to prevent gas lift, and thus the recovery is sensitive to line pressure changes. Oil and gas production declined during the last quarter of 2012 and then increased in early 2013. In May 2013 the well produced an average of 100 BOPD with a maximum of 136 BOPD, and an average of 485 MCFD with a maximum of 548 MCFD. GOR values during May 2013 averaged 5,023 CF/Bbl with a maximum of 6,949 CF/Bbl.

Best Petroleum believes the reservoir is of limited size and contains a limited gas cap and an oil rim with a water leg below it. The Caddo is a carbonate formed of algal reef deposits. The algal deposits form mounds which create structural highs which allow the fluids to be trapped. It is believed the Lake No. 2 is producing one of these mounds.

The well was not tested after being placed on a pump for fear that choking back the well will cause it to load up and die, and may result in damage to the well or the reservoir, reducing ultimate recovery and causing waste. The well has accumulated overproduction of approximately 33,296 BO and 56,450 MCF of casinghead gas through May 2013. Best Petroleum requests a 550 MCFD daily gas limit as the well has produced rates as high as 548 MCFD in May 2013 and that the overproduction be canceled.

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 Lake No. 2 was completed in May 2012 and was placed in the Lost Valley (Caddo) Field
3. The well on initial test produced at a rate of 20 BOPD, 100 MCFD and 90 BWPD with a GOR of 5,000. The well was flowing on a 20/64^{ths} choke with 250 psi tubing pressure.
4. The Lake No.2 is producing from an algal mound carbonate reservoir of limited size.
6. The well's current production averages 100 BOPD and 485 MCFD, with recent maxima of 136 BOPD and 548 MCFD.
7. The well was not tested as it is feared the well will load up and die if the well is choked back, damaging the reservoir and causing waste
8. The well has accumulated overproduction of approximately 33,296 BO and 56,450 MCF of casinghead gas through May 2013.

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 increased MER allowable of 150 BOPD and net gas-oil ratio authority with a casinghead gas limit of 550 MCFD for the Lake No. 2 in the Lost Valley (Caddo) Field and cancellation of overproduction will prevent waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Lake No. 2 in the Lost Valley (Caddo) Field be authorized to produce under a MER allowable of 150 BOPD and net gas-oil ratio authority with a casinghead gas limit of 550 MCFD, and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Paul Dubois
Technical Examiner



Michael Crnich
Legal Examiner