

THE APPLICATION OF SAMSON LONE STAR, LLC TO ESTABLISH AN MER FOR THE SUN-HARDER LEASE WELL NO. 1 IN THE NOME (X SAND) FIELD, JEFFERSON COUNTY, TEXAS

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

Hearing Date: May 23, 2008

Appearances:

Representing:

James M. Clark
Randal Maxwell

Samson Lone Star, LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Samson Lone Star, LLC requests an MER of 250 BOPD for its Sun-Harder Lease Well No. 1 in the Nome (X Sand) Field. At the hearing, Samson amended its request to include an increased net gas-oil ratio authority with a casinghead gas limit of 550 MCFGPD. Samson also requests that all accumulated overproduction be cancelled for this well. After the hearing, notice was amended to include Samson's request for an increased net gas-oil ratio authority with a casinghead gas limit of 550 MCFGPD.

The application is unopposed and the examiner recommends approval of the requested MER, net gas-oil ratio authority and cancellation of overproduction.

DISCUSSION OF EVIDENCE

The Sun-Harder Lease Well No. 1 was completed in the Nome (X Sand) Field in February 2008 with perforations between 8,062 feet and 8,066 feet. On initial test, the well flowed on a 8/64" choke at a rate of 141 BOPD, 505 MCFGPD and 0 BOPD.

The top allowable in the field is 121 BOPD, with an allowable gas-oil ratio of 2,000 cubic feet per barrel. There are 5 shut-in oil wells, 1 shut-in injection well and 1 associated gas well carried on the proration schedules. The gas well has an allowable of 808 MCFGPD but is only capable of producing 756 MCFGPD.

The Nome (X Sand) Field was discovered in October 1953 and has produced 4.4 MBO. The field produces from a Frio sand that has a porosity of 30% and a permeability of over two darcies. The primary drive mechanism is a strong water drive, as the reservoir

pressure as declined only 157 psig since 1953.

The Sun-Harder Lease Well No. 1 was tested at various rates during April and May to determine rate sensitivity. The choke was adjusted incrementally from 6/64" to 9/64" and the oil producing rate varied between 108 BOPD and 263 BOPD. The gas-oil ratio varied between 486 cubic feet per barrel to 2,469 cubic feet per barrel.

During the test period on a 6/64" choke, the well began to load up with fluid. The producing gas rate went from 249 MCFGPD down to 106 MCFGPD. This resulted in the GOR moving from 1,463 cubic feet per barrel down to 486 cubic feet per barrel. In addition, the flowing tubing pressure began at 1,800 psig and by the end of the test period was down to 1,350 psig. When the choke size was increased to a 7/64", the producing gas rate went back up to 262 MCFGPD, the tubing pressure increased to 1,750 psig and the well unloaded 199 BW.

Samson Lone Star, LLC requests an MER of 250 BOPD and increased net gas-oil ratio authority with a casinghead gas limit of 550 MCFGPD for its Sun-Harder Lease Well No. 1 in the Nome (X Sand) Field. Samson also requests that all accumulated overproduction be cancelled for this well.

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 Sun-Harder Lease Well No. 1 was completed in the Nome (X Sand) Field in February 2008.
3. The top allowable in the field is 121 BOPD, with an allowable gas-oil ratio of 2,000 cubic feet per barrel.
4. The Sun-Harder Lease Well No. 1 is a flowing well and is capable of producing in excess of 250 BOPD and 550 MCFGPD.
5. During the test period on a 6/64" choke, the well began to load up with fluid. The producing gas rate went from 249 MCFGPD down to 106 MCFGPD. This resulted in the GOR moving from 1,463 cubic feet per barrel down to 486 cubic feet per barrel. In addition, the flowing tubing pressure began at 1,800 psig and by the end of the test period was down to 1,350 psig.
6. When the choke size was increased to a 7/64", the producing gas rate went back up to 262 MCFGPD, the tubing pressure increased to 1,750 psig and the well unloaded 199 BW.

7. Producing the Sun-Harder Lease Well No. 1 at rates up to 250 BOPD and 550 MCFGPD 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 MER of 250 BOPD, increased net gas-oil ratio authority with a casinghead gas limit of 550 MCFGPD and cancellation of overproduction for the Sun-Harder Lease Well No. 1 in the Nome (X Sand) 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 MER of 250 BOPD, increased net gas-oil ratio authority with a casinghead gas limit of 550 MCFGPD and cancellation of overproduction for the Sun-Harder Lease Well No. 1 in the Nome (X Sand) Field.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner