

OIL AND GAS DOCKET NO. 08-0268004

THE APPLICATION OF NEARBURG PRODUCING COMPANY TO CONSIDER INCREASED NET GAS-OIL RATIO AUTHORITY FOR ALL WELLS IN THE PV TWO (DEVONIAN) FIELD, CRANE COUNTY, TEXAS

OIL AND GAS DOCKET NO. 08-0268005

THE APPLICATION OF NEARBURG PRODUCING COMPANY TO CONSIDER INCREASED NET GAS-OIL RATIO AUTHORITY FOR ALL WELLS IN THE PEAK VICTOR (DEVONIAN) FIELD, CRANE COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: December 15, 2010

APPEARANCES:

REPRESENTING:

APPLICANT:

Flip Whitworth
Tim Speer

Nearburg Producing Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Nearburg Producing Company ("Nearburg") requests authority to produce all wells in the PV Two and Peak Victor (Devonian) Fields under increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFGPD. Nearburg also requests that all overproduction in the two fields be canceled.

This application was unopposed and the examiner recommends approval of the increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFGPD and cancellation of all overproduction in the subject two fields.

DISCUSSION OF EVIDENCE

The PV Two (Devonian) Field was discovered in September 1989 at a depth of 5,250 feet. The field has two producing oil wells carried on the proration schedule and

operates under Statewide Rules. Nearburg is the only operator in the field. The top allowable is 102 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a daily gas limit of 204 MCFGPD. The field cumulative production through July 2010 is 78.3 MBO and 301.7 MMCFG.

The Peak Victor (Devonian) Field was discovered in October 1988 at a depth of 5,400 feet. The field has six producing oil wells carried on the proration schedule and operates under Statewide Rules. Nearburg is the only operator in the field. The top allowable is 102 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a daily gas limit of 204 MCFGPD. The field cumulative production through July 2010 is 578.4 MBO and 2.9 BCFG.

The Devonian formation is a chert and there is no gas cap in either field. The main drive mechanism is a solution gas drive and the field bottomhole pressure is at or near the bubble point of 2,500 psi. Wells typically have initial potentials with gas production rates substantially in excess of the permitted casinghead gas limit of 204 MCFGPD. This results in the assignment of penalized oil allowables to the new wells during their initial months of production. Once a well begins producing below the bubble point, it experiences decreasing oil production, increasing gas production and higher well GORs.

In order to determine rate sensitivity, Nearburg tested three wells during November 2010. The results of the testing are summarized as follows:

Peak Victor 12 Lease, Well No.1:

Choke Size (in)	Oil Rate (bopd)	Gas Rate (mcfpd)	Water Rate (bwpd)	FTP (psi)	GOR (cuft/bbl)
25/64	32	459	70	300	14,585
30/64	41	699	113	280	17,048
35/64	43	743	110	200	17,279
40/64	42	634	103	170	15,059

Peak Victor 77 Lease, Well No.1:

Choke Size (in)	Oil Rate (bopd)	Gas Rate (mcfpd)	Water Rate (bwpd)	FTP (psi)	GOR (cuft/bbl)
8.5/64	43	101	3	875	2,348
9/64	51	176	3	725	3,450
10/64	71	230	3	800	3,239
11/64	98	278	2	750	2,836

Dawson 78B Lease, Well No.1:

Choke Size (in)	Oil Rate (bopd)	Gas Rate (mcfpd)	Water Rate (bwpd)	FTP (psi)	GOR (cuft/bbl)
15/64	22	280	0	500	12,727
20/64	36	459	0	325	12,750
25/64	39	480	0	200	12,307

40/64 39 481 0 100 12,333

The wells are not rate sensitive and Nearburg believes that oil will be left behind in the formation if the gas production is curtailed. In order to maximize production and prevent waste, Nearburg requests an increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFGPD be approved. This will also allow for the depletion of the reservoir without any reservoir damage, prevent oil from being left behind in the formation if the gas production is curtailed and increase the ultimate recovery from the wells.

As of October 1, 2010, wells in the PV Two (Devonian) Field are overproduced by approximately 32 MMCFG and wells in the Peak Victor (Devonian) Field are overproduced by approximately 28 MMCFG. Nearburg requests that all overproduction be cancelled in both fields.

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 PV Two (Devonian) Field was discovered in September 1989 at a depth of 5,250 feet.
 - a. The field has two producing oil wells carried on the proration schedule and Nearburg is the only operator in the field.
 - b. The field operates under Statewide Rules.
 - c. The top allowable is 102 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a daily gas limit of 204 MCFGPD.
3. The Peak Victor (Devonian) Field was discovered in October 1988 at a depth of 5,400 feet.
 - a. The field has six producing oil wells carried on the proration schedule and Nearburg is the only operator in the field.
 - b. The field operates under Statewide Rules.
 - c. The top allowable is 102 BOPD with an allowable gas-oil ratio of 2,000 cubic feet per barrel and a daily gas limit of 204 MCFGPD.
4. The main drive mechanism is a solution gas drive and the bottomhole pressure is at or near the bubble point of 2,500 psi in the two subject fields.
 - a. Once a well begins producing below the bubble point, it experiences decreasing oil production, increasing gas production and higher well

GORs.

- b. Wells typically have initial potentials with gas production rates substantially in excess of the permitted casinghead gas limit of 204 MCFGPD.
 - c. Three wells were tested during November 2010 and were not rate sensitive.
 - d. Oil will be left behind in the formation if the gas production is curtailed.
5. Producing the wells at rates of up to 1,000 MCFGPD will not cause waste.
6. As of October 1, 2010, wells in the PV Two (Devonian) Field are overproduced by approximately 32 MMCFG and wells in the Peak Victor (Devonian) Field are overproduced by approximately 28 MMCFG.

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 the increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFGPD and cancellation of the overproduction in both subject fields 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 that the PV Two and Peak Victor (Devonian) Fields be authorized to produce under net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFGPD and that all accumulated overproduction in the two subject fields be canceled.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner