

July 10, 2002

OIL AND GAS DOCKET NO. 08-0228447

**THE APPLICATION OF SHENANDOAH PETROLEUM CORPORATION TO BALANCE
THE VIEJOS (DEVONIAN) FIELD, PECOS COUNTY, TEXAS**

Heard by: Margaret Allen, Technical Hearings Examiner
Mark Helmueller, Hearings Examiner

Procedural history

Application received: May 22, 2001
Hearing held: April 12, 2002
Proposal for decision issued: July 10, 2002

Appearances

<u>Applicant</u>	Representing
Brian Sullivan Don Rhodes	Shenandoah Petroleum Corporation
<u>Protestant</u>	
John Soule Martin Allday	Fuller Production, Inc./AEC Operating Company

EXAMINER'S REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Shenandoah Petroleum is seeking relief from the requirement that four of its wells on the University 4 Lease (Nos. 2, 4, 5 and 7) make up overproduction in the Viejos (Devonian) Field. It does not matter to the applicant whether the relief is granted by balancing the field; by back-dating the gas allowable assignments more than the 15-days permitted under Statewide Rule 31; or by re-instating canceled oil allowables for these wells. The application is protested by two offset operators in the field, Fuller Production, Inc., and AEC Operating Company ("protestants").

DISCUSSION OF THE EVIDENCE

The Viejos (Devonian) oil field was discovered in 1990. Field rules, first adopted December 5, 1994, prescribe 80 acre proration units with 40 acre optional units. The daily allowable for an oil well on 80 acres is 184 BO and 650 MCF, and the daily allowable for a gas well on 80 acres is 740 MCF. The discovery date for the Viejos (Devonian) gas field is listed as 1996, and since 1996, oil well production has decreased and the amount of gas production increased.

There are 14 prorated oil wells on the April 2002 oil proration schedule, only two of which have potentials over 10 BOPD. Both of these are Shenandoah wells and have potentials of 13 and 14 BOPD, respectively. The highest oil potential of any of the seven wells, not operated by Shenandoah, is 5 barrels per day and the highest daily gas rate of any of these seven wells was reported to be 117 MCF.

There are 13 gas wells on the April 2002 gas schedule, all governed by Statewide Rule 49(b). Shenandoah operates all but four gas wells, and the highest deliverability rate among these four wells is 281 MCF/D. Shenandoah would like to have the Viejos (Devonian) gas field classified as a prorated field rather than be governed by Rule 49(b), though the protestants prefer the current status.

Shenandoah's University 4 Lease is an oil lease that had seven active oil wells prior to October, 2000. The September 2000 oil proration schedule, shows that the four subject wells (Well Nos. 2, 4, 5 and 7) have gas/oil ratios between 32,000 and 83,000 cubic feet per barrel. Shenandoah was scheduled to test all the oil wells on this lease during the last half of 2000, and file a Form W-10 with the test results by January 31, 2001. Shenandoah's records indicate that the subject wells were tested during October of 2000, and all were statutory gas wells (gas/oil ratios over 100,000 cubic feet per barrel) as shown in Table 1:

Table 1

Well No.	Late 2000 test results and date taken			Early 2001 test results and date taken		
2	5 BO 1300 MCF	GOR: 260,000	10-22-00	3 BO 500 MCF	GOR: 166,667	4-24-01
4	11 BO 2350 MCF	GOR: 213,636	10-18-00	9 BO 850 MCF	GOR: 94,444	5-1-01
5	15 BO 2500 MCF	GOR: 166,667	10-27-00	6 BO 420 MCF	GOR: 70,000	4-29-01
7	3 BO 1180 MCF	GOR: 393,300	10-13-00	2 BO 450 MCF	GOR: 225,000	4-30-01

GOR (gas/oil ratio): in cubic feet per barrel

Shenandoah's Exhibit No. 7 is its Form W-10, signed December 19, 2000, showing these results but there is no evidence that the form was received by the Commission. For the months prior to February, 2001, the Commission mailed Shenandoah a monthly 'strip out'¹ with gas allowables of 650 MCF/D for each of these four wells. The monthly strip outs from February 2001 through July 2001, show the four subject wells on the oil schedule with the notation that the Form W-10 was delinquent and no allowable was assigned.

On May 25, 2001, the Commission sent the operator a letter informing Shenandoah that it had 1086 barrels and 204,364 MCF of overproduction because the Form W-10 that was due January 31, 2000, was still delinquent. This letter told Shenandoah to take corrective action within 20 days. By this date, Shenandoah had already conducted its semi-annual well tests for the first part of the year 2001. In fact, Shenandoah had already completed another Form W-10 reporting the results of the April and May 2001 tests (Table 1). This form, dated May 21, 2001, was apparently received by the Commission because at least some of the test results were used to set the allowables on the Commission's strip-out

¹ Monthly proration schedule listed by operator and then by field.

for August 2001². Table 1 shows Well Nos. 2 and 7 were still statutory gas wells, but Well Nos. 4 and 5 tested at rates below 100,000 cubic feet per barrel.

Shenandoah testified that its consultant responded to the Commission's letter of May 25, 2001, within 20 days. He determined that the subject wells should be reclassified as gas wells, based on the well tests of October, 2000. All of the forms necessary, including Forms G-1 and G-10, to reclassify Well Nos. 2, 4, 5 and 7 as gas wells, were received at the Commission by June 15th. The four wells were each given daily gas allowables of 740 MCF from June 1, 2001³. At the same time, a Commission oil allowable supplement removed the oil and casinghead gas allowables of the subject wells as of October 2000.

According to the 2000 and 2001 oil ledgers, the University 4 Lease (including the four subject wells and three other wells) had gas overproduction of 172,291 MCF by September, 2000. The four subject wells were removed from the oil schedule by November 2000. The gas overage for the lease was assigned to the three remaining wells and was made up by April, 2001.

According to the gas ledgers for the same years, Well Nos. 2, 4, 5, and 7 accumulated gas overage from October through May 2001, as they were produced without any allowables assigned. Table 2 shows the amounts of overproduction accumulated by June 1, 2001. After monthly gas well allowables began to be assigned in June 2001, the amount of overproduction decreased by March 1, 2002 (Table 2).

Table 2

Well No.	Gas overage on June 1, 2001	Gas overage on March 1, 2002
2	124,814 MCF	40,324 MCF
4	206,260 MCF	107,169 MCF
5	141,580 MCF	46,845 MCF
7	126,907 MCF	45,986 MCF

Shenandoah is requesting that all overproduction, that its Well Nos. 2, 4, 5 and 7 accumulated while zero allowables were assigned, be forgiven. There are three methods of assigning allowable which would eliminate all overproduction as on June 1, 2001. Firstly, the field could be balanced on that date. All over- and underproduction of all wells in the field would be eliminated as of June 1, 2001. Secondly, gas allowables could be assigned prior to the 15 days allowed by Rule 31. In this case, daily gas allowables of 740 MCF per well would be assigned between October 1, 2000 and June 1, 2001. Thirdly, oil allowables could be re-instated for the time after the G-1 test dates. The dates of the G-1 tests, as reported to the Commission, are the same dates as the late 2000 W-10 tests were conducted (Table 1).

² Well Nos. 4 and 5 were assigned oil allowables with casinghead gas limits of 650 MCF per day.

³ Statewide Rule 31(a)(1) states that allowables of gas wells not currently assigned an allowable will not be made effective more than 15 days prior to the date all reports or information necessary to the assignment of an allowable are received in the appropriate Commission office.

In this case, daily casinghead gas allowables of 650 MCF per well would be assigned from October 2000 through May 2001.

Since June 1, 2001, all four subject wells have produced less than their gas allowables and if any one of these methods is adopted, the subject wells would have not accumulated any further overproduction.

The protestants believe that Shenandoah should be denied this relief because the University 4 Oil Lease had 172,291 MCF of overproduction on October 1, 2000. The University 4 Lease offsets leases belonging to the protestants and it has been consistently overproduced. At the very least, the protestants believe the actions of Shenandoah reflect a lack of effort to get things done promptly and correctly.

Shenandoah testified that it was a small company which did not always comply with Commission requirements only because it was not fully aware of them. The protestants believe that Shenandoah is more sophisticated about Commission procedures and required filings than it indicated at the hearing. For example, Shenandoah filed the correct forms to reclassify wells on another lease in this field when those wells showed high gas/oil ratios on the same fall 2000 tests. The protestants also pointed out discrepancies and inconsistent results in the production tests run by Shenandoah at various times.

The protestants also submitted evidence showing Shenandoah dated Forms G-10 for the four subject wells on February 12, 2001. These Forms G-10 reported exactly the same test dates and results as were on the Form W-10 that Shenandoah had dated December 19, 2000. The protestants believe this shows that Shenandoah knew the subject wells were gas wells but deliberately chose not to reclassify the wells until forced to by the Commission. Cancellation of the overproduction would allow Shenandoah to flout the Commission's rules regarding timely filings without any consequences.

The protestants also object to the gas wells sharing meters on the lease. Because there are fewer meters than wells, Shenandoah produces more than one gas well through some meters, but only one well is to be produced at a time. The protestants believe shared meters prevent them from knowing just how much each well is producing every month. The protestants showed evidence that at least some of the subject wells could not have produced the monthly production reported for them unless the G-10 production tests were incorrect. They propose that each well on the University 4 lease have a separate meter so that underproduction by one well on the lease could not conceal the overproduction of another well on the same lease.

EXAMINERS' OPINION

According to Shenandoah, if the oil allowables and casinghead gas allowable up to 650 MCF/D per well had remained in place until the wells were reclassified as gas in June, 2001, the University 4 Lease would have made up its 172,261 MCF of overproduction by March 1, 2001. If gas well allowables of 740 MCF had been assigned to Well Nos. 2, 4, 5 and 7 during the period of zero allowables, only Well No. 4 would have accumulated any significant overproduction. Well No. 4 would have had 43,336 MCF of overage on March 1, 2001 and 17,503 MCF of overage on the next balancing date of September 1, 2001. All its overage was made up by November 1, 2001.

Under either gas well allowables or casinghead gas allowables, the overproduction that the

subject wells show as of June 1, 2001, would have been made up. None of the subject wells would have been subject to being shut-in or required to produce at a reduced rate whether they classified as gas or as oil, between October 2000 and June, 2001. If, under the third option suggested by the applicant, the field is balanced as on June 1, 2002, none of the subject wells has overproduced since.

Shenandoah definitely showed a lack of diligence by filing reclassification forms months late. It was also apparently aware that the subject wells had become gas wells at least by February, 2001. Shenandoah's failure to reclassify the subject wells timely seem to have inconvenienced Shenandoah with little benefit. As the protestants pointed out, if Shenandoah had mailed the gas Forms G-10 that it filled out and dated February 12, 2001, (along with certain other forms) it would have had a daily gas allowable of 740 MCF available to each of the subject wells at least from February through May, rather than receiving a zero gas allowable for those months.

There is no mechanism other than shutting these wells in, or producing them at a restricted rate, to punish operators who do not comply with the Commission's requirements on the timeliness of filings. The examiners believe there would be little gained by requiring Shenandoah's University 4 Lease Well Nos. 2, 4, 5 and 7 to be restricted or shut-in now to make up either the overproduction as of October 2000 or that accumulated between October 2000 and June 2001. As all of the solutions proposed by Shenandoah have the same effect on the subject wells' status as of June 1, 2001, the examiners believe the best solution is to balance the field as of that date.

The subject wells are surrounded on the north, east and south by Shenandoah wells or dry holes. Only on the west side of the University 4 Lease, is one of the subject wells directly offsetting one of the protestants' wells: Shenandoah's Well No. 7 is about 800' inside of a common lease line with AEC Operating Company ("AEC"). AEC's University 5 Lease Well No. 2 is about 467' west of this lease line and has a deliverability of only 75 MCF/D. The protestants' other wells in this field are also relatively low producers. The highest potential among the protestants' oil wells is 5 BOPD, and highest deliverability of among their gas wells is 176 MCF/D.

The protestants' claim that the shortage of meters on the lease prevents determination of the specific production of each well has some merit. As many as three wells are attached to a meter, though Shenandoah testified that at all times at least two of these wells are shut-in such that only one well can produce at a time. A district inspection report indicates that Shenandoah agreed to mark each flowline at the header to prevent further confusion. However, daily monitoring by the Commission or another interested person would be required to confirm which well was producing each day.

Shenandoah claimed that the issue of separate meters was not within the call of the hearing as proposed. The applicant objects to any requirement for separate meters for each well on the University 4 Lease. The examiners recommend that the Commission consider requiring Shenandoah to install a separate meter for each well if there are any further problems with wells showing production in excess of their reported physical capacity.

FINDINGS OF FACT

1. Notice of hearing was issued on October 17, 2001 and March 19, 2002, to all operators in the Viejos (Devonian) Field.

2. Many of the wells in the Viejos (Devonian) Field have been reclassified from oil wells to gas wells in the last several years and the field now has 14 prorated oil wells and 13 gas wells.
3. The daily allowable for an oil well on 80 acres is 184 BO and 650 MCF, and the daily allowable for a gas well on 80 acres is 740 MCF.
4. Shenandoah Petroleum Corporation (Shenandoah”) operates nine of the wells currently classified as gas wells and seven of the oil wells.
5. Shenandoah’s University 4 Lease Well Nos. 2, 4, 5 and 7 (“subject wells”) were reclassified from oil to gas wells on June 1, 2001, based on Forms G-1 and G-10 that the operator filed on June 15, 2001.
6. The G-1 and G-10 tests on the subject wells, performed during October 2000, showed they were statutory gas wells.
7. The subject wells were assigned no oil well casinghead gas allowables nor gas well allowables between October 2000 and June 2001 and accumulated a total of 600 MMCF of overproduction by June 1, 2001.
8. Shenandoah’s application to cancel or remove the overproduction of the subject wells is protested by two offset operators in the field, Fuller Production, Inc., and AEC Operating Company (“protestants”).
9. Operators of gas wells with overproduction on two consecutive balancing dates and of oil wells with casinghead gas overproduction are required to shut-in those wells or produce at restricted rates to make up that overproduction.
10. The overproduction of the subject wells on June 1, 2001, was due to Shenandoah’s failure to timely complete and file the required Commission forms.
11. It is unnecessary to restrict production or shut the subject wells in to protect correlative rights.
 - a. Only one well directly offsets any of the subject wells and it has a deliverability of less than 100 MCF/D.
 - b. All of the other operators’ wells in the subject field produce relatively small amounts with the highest oil well’s potential at 5 BOPD, and highest gas well deliverability at 281 MCF/D.
12. Had the subject wells been assigned either oil well casinghead gas allowables or gas well allowables between October 2000 and June 2001, they would not have any overproduction on June 1, 2001, or now.

CONCLUSIONS OF LAW

1. Proper notice of hearing was timely given to all persons legally entitled to notice.

2. All things have occurred and have been done to give the Commission jurisdiction to decide this matter.
3. Balancing the Viejos (Devonian) Field as of June 1, 2001, will properly account for the overproduction currently carried on Commission proration records for Well Nos. 2, 4, 5 and 7 on Shenandoah's University 4 Lease.
4. Balancing the Viejos (Devonian) Field as of June 1, 2001, will not harm the correlative rights of other operators in the field or cause waste of hydrocarbons.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the Viejos (Devonian) Field be balanced as of June 1, 2001.

Respectfully submitted,

Mark Helmueller
Legal Examiner

Margaret Allen
Technical Hearings Examiner