

COMMISSION HEARING MARCH 10, 1994  
PRORATED GAS ALLOWABLES APRIL-SEPT., 1994  
CASE 10933  
TESTIMONY NOTES

EXHIBIT NO. 1 is the Market Demand and Allowable Determination Schedule for the prorated gas pools in SE NM.

This is the layout we have used in the past to establish a beginning point for pool allowables and F1 factors for each pool. As discussed at previous hearings, the F1 factor is the monthly allowable which is assigned to a prorated or non-marginal well which has an acreage factor of 1.

The allowables are actually assigned to the GPUs since some have more than one - sometimes as many as 6 or 7 wells on a single GPU.

Prorated GPUs with acreage factors different from 1 are assigned allowables equal to F1 times the acreage factor.

The acreage factor is a ratio equal to the acreage dedicated to a GPU divided by pool spacing (in most cases).

To briefly explain how the MDADS table works, please look at the top line on the top page of Exhibit No. 1. Average monthly production from the Atoka Penn Pool during the Apr-Sep 1993 period was 106,172 MCF per month. The pool adjustment column will be used to introduce any adjustments which you decide are appropriate after you hear and review the testimony and evidence presented here today.

In the third column we have entered the same 106,172 MCF as a starting point for Apr-Sep, 1994 allowable, assuming no adjustments. Column 4 is the avg. monthly gas volume produced by marginal wells in the Apr-Sep, 1993 period. This amount is subtracted from the total pool volume, leaving 47,070 MCF for the prorated wells.

Since there are currently only 2 prorated acreage factors in the Atoka Penn Pool, each would receive 1/2 of the 47,070. So the F1 factor (last column) is 23,535 MCF.

Pages 2 and 3 of Ex.1 are MDADS tables from the last 2 proration schedules and are included for comparison to show previous allowable and production records for each pool.

EXHIBIT No. 2 is similar to Ex 1. Ex 2 is the MDADS for the 4 prorated gas pools in the Aztec Dist. Please look at the Basin Dakota Pool on the top line; it follows the same format as Ex 1 until the 6th column. In the NW NM pools only a part of prorated pool allowable is distributed to the GPUs based on acreage. Deliverability is also a factor.

In Basin Dakota the acreage part of the allowable for a prorated GPU is  $171,042 \times 60\% / 15.05 = 6,819$  MCF per month for a GPU with an acreage factor of 1. This is the F1 factor.

The remaining 40% of the allowable is distributed to the prorated GPUs by first determining the F2 factor. This is  $171,042 \times 40\% /$  the sum of prorated AD factors. The AD factor is the acreage factor of a GPU  $\times$  the daily deliverability for the GPU. The sum of these is 7,978 (an average deliverability of 530). The F2 factor is  $171,042 \times 40\% / 7,978 = 8.57$ . Each prorated GPU receives allowable equal to  $8.57 \times AF \times \text{del.}$  This is in addition to the F1 part of the allowable.

A GPU with an AF of 1 and a del. of 530 would be assigned a monthly allowable of  $6,819 + (1 \times 8.57 \times 530) = 6,819 + 4,542 = 11.36$  MMCF per month or 372 MCF per day.

The calculations for the remaining 3 Aztec Dist. pools use the same method except that 25% of the allowable is based on acreage and 75% on acreage  $\times$  deliverability.

Pages 2 and 3 of ex 2 are tables from the last 2 proration schedules included for information concerning recent allowable and production volumes.

Exhibit No. 3 is a group of graphs showing historical data from the Eumont Pool. The top plot shows a record of the average monthly allowable and production volumes for the Apr-Sep periods for the last 5 years. The Apr-Sep 1994 preliminary allowable is also plotted. The Oct-Mar periods are left out since this hearing is concerned with Apr-Sept.

The increases in allowable and production are the results of more demand, new wells, and workovers. A minimum allowable equal to an F1 of 18.3 MMCF per month (600 MCF/day) was assigned early in 1991. At a recent Eumont-Jalmat hearing, testimony was entered which indicated that the minimum allowable had enabled operators to justify the expenditures necessary for new drilling and remedial projects in the two pools.

As allowables have been increased in Eumont to permit the pool to participate in the increasing demand for NM gas, the number of prorated or non-marginal GPUs has declined from 150 to 22 between 1989 and now. This is shown on the bottom graph.

EXHIBIT No. 4 shows similar data for the Blanco Mesaverde Pool. Production, allowable and F1 factors have increased. Prorated acreage factors have decreased from 1500 to 126 as we have assigned additional allowable to Blanco Mesaverde and other prorated pools in response to increasing demand.

This concludes the discussion of OCD's exhibits 1-4; we will try to answer any questions.



**Marathon  
Oil Company**

P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

March 4, 1994

Mr. William J. LeMay  
Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
310 Old Santa Fe Trail, Room 206  
Santa Fe, New Mexico 87503

RE: Prorated Gas Allowables for April through September, 1994 Period  
Indian Basin Upper Penn Gas Pool  
Eddy County, New Mexico

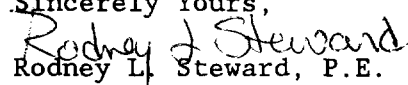
Dear Mr. LeMay:

Marathon Oil Company operates fourteen active gas wells and owns a working interest in six other active wells in the Indian Basin Upper Penn Pool. Although Marathon does not intend to present testimony at the March 10, 1994 hearing, we support Chevron Oil Company and Oryx Energy Company in their testimony for maintaining the non-marginal well allowable rate of 197,000 Mcf per month.

Marathon has made significant investments for production equipment and development work to maximize production capacity from Indian Basin Upper Penn wells. Marathon currently operates one well and has an interest in two Chevron-operated wells which are capable of producing the current allowable (197,019 Mcf per month). Maintaining the current allowable is a continuation of the Commission's findings during the prior three proration periods. We believe maintaining this allowable will permit equitable sharing of gas produced between the owners in the pool based on current well deliverabilities.

Nearly all of the gas from the Indian Basin Upper Penn Pool is processed at the Marathon-operated Indian Basin Gas Plant. This plant was shut-down on June 2 for approximately seven days to perform maintenance and upgrade the system. The shut-down time represents 4% of the total producing time during the 1993 summer proration period. The reduction in pool production during the summer proration period would be a similar percentage. We present this evidence as justification for part of the Pool Adjustment to maintain the current allowable.

Operators in the Indian Basin Field have agreed to form a technical committee to evaluate development techniques and rules governing Indian Basin in an attempt to optimize gas recovery. Marathon is looking forward to working in unison with the other operators in a cooperative effort to possibly unitize and improve recovery from this field.

Sincerely Yours,  
  
Rodney L. Steward, P.E.  
Petroleum Engineer

**ARCO Oil and Gas Company** ◆

Western Office  
600 N. Main Street  
Midland, Texas 79701  
Post Office Box 4444  
Midland, Texas 79702  
Telephone 805-688-1111

**March 4, 1994**

**Mr. William J. LeMay**  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

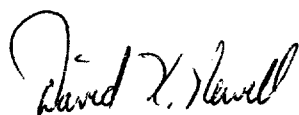
**RE: State of New Mexico Gas Allowable Hearing**  
**March 10, 1994**  
**Eumont Field**

Dear Mr. LeMay:

ARCO Oil and Gas Company is in support of maintaining allowables for the April 1994 through September 1994 time period in the Eumont Field at the current (October 1993 through March 1994) level of 952 MCFD for 160 acre proration units.

ARCO completed 13 workovers or recompletions in the Eumont Pool in 1993, and drilled 4 Eumont Pool gas wells in 1993. ARCO is planning to workover 7 wells and drill 2 wells in 1994 in the Eumont Pool, but may have to cancel some of these if the allowable drops to the minimum Eumont allowable of 600 MCFD. In addition, ARCO has several Eumont proration units that are capable of production above the minimum Eumont allowable due to recent workover or recompletion activity that was justified by the higher allowables in 1993.

Sincerely,



David K. Newell  
Senior Operations/Analytical Engineer  
ARCO Oil and Gas Company



New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: Commission Hearing on March 10, 1994 Concerning Prorated Gas  
Allowables for April through September, 1994  
Eumont Gas Pool

Gentlemen:

Texaco advocates the continuance of the Eumont Gas Pool allowables at or near the current level of 952 mcf/d. The proposed reduction to the minimum 600 mcf/d may adversely affect the growth and activity level seen in the pool recently. Production levels resulting from this activity have clearly been able to support higher allowables over the past 18 months.

Additionally, evidence presented at the February 17th Eumont hearing assured all operators of pipeline availability for all produced gas.

In the interests of continuity and profitability, we fully support allowables significantly above the minimum of 600 mcf/d.

Sincerely,

*T. L. Frazier / RSP*

Terry L. Frazier  
Hobbs Area Manager

DAB/s

file  
chrono

## MW PETROLEUM CORPORATION

March 7, 1994

Mr. William J. LeMay  
Oil Conservation Commission  
State Land Office Building  
310 Old Santa Fe Trail, Room 206  
Santa Fe, NM 87503

Prorated Gas Allowables (April 1994 - September 1994)  
Indian Basin (Upper Penn) Gas Pool  
Eddy County, New Mexico

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MW Petroleum Corporation operates 2 producing gas wells and is a working interest owner in 7 additional active producers in the Indian Basin (Upper Penn) Gas Pool. Although we will be unable to attend the March 10, 1994, commission hearing, we would like to express our position regarding the proposed gas allowable for the Indian Basin (Upper Penn) Gas Pool.

MW Petroleum Corporation supports an allowable of 197,000 MCF per month. We believe this will permit equitable sharing between the owners in this gas pool based on the present production capacity of the producers in the pool. The MW Petroleum Smith Federal #1 is capable of producing 7.0 MMCFD, and would be considered a nonmarginal well. MW Petroleum recently drilled the Federal C #2, an updip replacement well for the C #1. The #2 well is capable of 6.4 MMCFD but produces with a 62% acreage factor. An allowable of 197,000 MCF per month is flat to the 1993/1994 winter allowable and will protect the current income of those operators who have made investments to attain production increases.

Sincerely yours,

*Ceci Searls Leonard*

Ceci Searls Leonard  
MW Petroleum Corporation

cc: Chevron (Brian Huzzey)  
Marathon (Ron Folse)  
Oryx (Larry Phillips)

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713-708-0000

Mid-Continent Region  
Production United States



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March 8, 1994

Mr. William J. LeMay  
Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
310 Old Santa Fe Trail, Room 206  
Santa Fe, New Mexico 87503

RE: Prorated Gas Allowable for April through September, 1994 Period  
Eumont Gas Pool  
Lea County, New Mexico

Dear Mr. LeMay,

Marathon Oil Company operates eight active wells in the Eumont Gas Pool. Although we will be unable to attend the March 10, 1994 hearing, we would like to express our position regarding the proposed gas allowable for the Eumont Gas Pool.

Marathon Oil Company supports an acreage allocation factor of 28,928 MCF per month. We believe this will permit equitable sharing between the owners in the gas pool based on the present production capacity of the producers in the pool. Marathon recently drilled three development wells. The drilling of those wells was justified based on the higher allowable. Marathon is planning to drill three more wells this year if the allowable is kept at 28,928 MCF per month. This allowable is flat to the 1993/1994 winter allowable and will protect the current income of those operators who have made investments to obtain production increases.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'T. N. Tipton'.

T. N. Tipton  
Engineering Manager  
Midland Operations



March 7, 1994

Mr. William J. LeMay  
Oil Conservation Commission  
State Land Office Building  
310 Old Santa Fe Trail, Room 206  
Santa Fe, NM 87503

MAR 9 1994

Prorated Gas Allowables (April 1994 - September 1994)  
Indian Basin (Upper Penn) Gas Pool  
Eddy County, New Mexico

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MW Petroleum Corporation operates 2 producing gas wells and is a working interest owner in 7 additional active producers in the Indian Basin (Upper Penn) Gas Pool. Although we will be unable to attend the March 10, 1994, commission hearing, we would like to express our position regarding the proposed gas allowable for the Indian Basin (Upper Penn) Gas Pool.

MW Petroleum Corporation supports an allowable of 197,000 MCF per month. We believe this will permit equitable sharing between the owners in this gas pool based on the present production capacity of the producers in the pool. The MW Petroleum Smith Federal #1 is capable of producing 7.0 MMCFD, and would be considered a nonmarginal well. MW Petroleum recently drilled the Federal C #2, an updip replacement well for the C #1. The #2 well is capable of 6.4 MMCFD but produces with a 62% acreage factor. An allowable of 197,000 MCF per month is flat to the 1993/1994 winter allowable and will protect the current income of those operators who have made investments to attain production increases.

Sincerely yours,

*Ceci Searls Leonard*

Ceci Searls Leonard  
MW Petroleum Corporation

cc: Chevron (Brian Huzzey)  
Marathon (Ron Folse)  
Oryx (Larry Phillips)