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May 1, 1997

HAND-DELIVERED

Michael E. Stogner, Hearing Examiner
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, New Mexico 87501

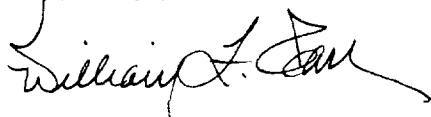
Re: ***Oil Conservation Division Case No. 11757:
Application of Amoco Production Company for Permanent Exemption from
Oil Conservation Division Rules 402, 406 and 1125 relating to Shut-in
Pressure Tests for the Bravo Dome Carbon Dioxide Gas Unit, Harding,
Quay and Union Counties, New Mexico***

Dear Mr. Stogner:

Enclosed for your consideration is Amoco Production Company's proposed Order which you requested at the April 3, 1997 Examiner hearing in the above-captioned case. As you will note this Order differs in certain ways from the application filed in this case by Amoco. These changes are in response to questions raised by the Division during the hearing.

If you need anything further from Amoco Production Company to proceed with your consideration of this matter, please advise.

Very truly yours,



WILLIAM F. CARR
ATTORNEY FOR AMOCO PRODUCTION COMPANY

WFC:mlh

Enclosure

cc: Perry Jarrell

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**APPLICATION OF AMOCO PRODUCTION
COMPANY FOR PERMANENT EXEMPTION
FROM OIL CONSERVATION DIVISION
RULES 402, 406 AND 1125 RELATING TO
SHUT-IN PRESSURE TESTS FOR THE
BRAVO DOME CARBON DIOXIDE GAS
UNIT, HARDING, QUAY AND UNION
COUNTIES, NEW MEXICO.**

CASE NO. 11757

ORDER NO. R-_____

**AMOCO PRODUCTION COMPANY'S
PROPOSED ORDER OF THE DIVISION**

BY THE DIVISION:

This cause came on for hearing at 8:15 o'clock a. m. on April 3, 1997, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this ____ day of May, 1997, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Amoco Production Company ("Amoco"), seeks an exemption

from the annual pressure testing requirements of Division Rule 402 where such testing is determined unnecessary for the prevention of waste and the protection of correlative rights for the Bravo Dome Carbon Dioxide Gas Unit ("Bravo Dome Unit"). No exemptions are now being sought from Division Rules 406 and 1125.

(3) Amoco operates the Bravo Dome Unit from which it produces carbon dioxide gas from numerous wells completed in the Tubb formation.

(4) Amerada Hess Corporation, the only other operator of carbon dioxide wells in the Tubb formation in the Bravo Dome Area appeared through counsel in support of the application of Amoco on the condition that the exemption sought to the annual pressure testing requirements of Rule 402 apply only to wells that have been drilled or are currently producing in the Bravo Dome Unit thereby assuring that pressure data was obtained in areas of new development in the Bravo Dome Unit Area.

(5) Amoco presented evidence which demonstrated that the data obtained from annual testing of all wells in the Bravo Dome Unit is unnecessary because:

- A. the developed portion of the Bravo Dome Unit consists of four distinct areas which demonstrate different reservoir characteristics (Amoco Exhibit 2);
- B. these areal distinctions are caused by a number of factors including the time when these areas were initially developed and faulting within the reservoir (Amoco Exhibit 2);
- C. there is substantial pressure data within each of these areas which demonstrates reservoir continuity and shows similar rates of depletion throughout the developed portion of the Bravo Dome Unit (Amoco Exhibits 3 and 4);
- D. future production, reserves and pressures can be accurately predicted by modeling the reservoir and the data obtained from annual pressure testing of all wells is unnecessary to efficiently manage the reservoir (Amoco Exhibits 5, 6 and 7); and

- E. testing a few select wells can provide sufficient information to confirm model results and therefore annual testing of all wells is unnecessary (Testimony of Jarrell).

(6) The evidence established that unnecessary testing of carbon dioxide wells costs approximately one day's production from the Bravo Dome Unit each year and that these costs adversely affect the economics of carbon dioxide development in this unit and the ultimate recovery of carbon dioxide from the Bravo Dome Unit (Amoco Exhibit 8).

(7) Annual testing of all wells in the Bravo Dome Unit is unnecessary to maintain accurate data on carbon dioxide wells in the developed portion of this unit and the exemption of the Bravo Dome Unit from these requirements will not reduce the quality of the data available on the reservoir, will result in economic savings and will prevent the waste of carbon dioxide.

(8) The application of Amoco Production Company for a special exemption from the annual shut-in pressure testing requirements of Division General Rule 402 should be **granted** provided, however, the exemption should only apply to:

- A. wells within a spacing or proration unit where the well and all offset wells within contiguous spacing or proration units are draining the same pool and where the ownership of such spacing or proration units is committed to the Bravo Dome Unit agreement,
- B. the developed areas within the Bravo Dome Unit where pressure data has been collected historically as established by P/Z vs. Cumulative Recovery Plots and the absence of future exempted well pressure data does not significantly compromise the interpretation of the unit recovery efficiency, and
- C. in no circumstance should less than 5% of the Bravo Dome Unit total producing wells be tested each year.

(9) Amoco shall file an annual testing proposal which shall identify all wells it proposes to pressure test during that calendar year with the District Supervisor of Oil Conservation Division District IV. The first testing plan shall be filed within 30-days of the

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date of this order and subsequent plans thereafter during January of each year. On approval by the District Supervisor, the plan shall be the annual testing program for the Bravo Dome Unit. Additional well tests may be required by the Division if determined that additional data is needed to prevent waste and protect correlative rights in the Bravo Dome Unit.

IT IS THEREFORE ORDERED THAT:

(1) The application of Amoco production Company for an exemption to the annual shut-in pressure test requirements of Division General Rule 402 for the Bravo Dome Carbon Dioxide Gas Unit is hereby **granted**.

PROVIDED HOWEVER THAT, the exemption shall only apply to wells within a spacing or proration unit where the well and all offset wells within contiguous spacing or proration units are draining the same pool and where the ownership of such spacing or proration units is ratified and committed to the Bravo Dome Unit Agreement.

PROVIDED FURTHER THAT, the exemption shall only apply to the developed areas in the Bravo Dome Unit where pressure data has been collected historically as established by P/Z vs. Cumulative Recovery Plots and the absence of future exempted well pressure data does not significantly compromise the interpretation of the unit recovery efficiency.

PROVIDED FURTHER THAT, in no circumstance shall less than 5% of the Bravo Dome Unit total producing wells be tested each year.

(2) Amoco shall file an annual testing proposal which shall identify all wells it proposes to pressure test during that calendar year with the District Supervisor of the Oil Conservation Division, District IV. The first testing plan shall be filed within 30 days of the date of this order and subsequent plans thereafter during January of each year. On approval by the District Supervisor, the plan shall be the annual testing program for the Bravo Dome Unit. Additional well tests may be required by the Division if determined that additional data is needed to prevent waste and protect correlative rights in the Bravo Dome Unit.

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(3) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinafter designated.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**

WILLIAM J. LEMAY
Director

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