

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:

*CASE NO. 11948  
ORDER NO. R-11075*

**APPLICATION OF SONAT EXPLORATION COMPANY FOR LEASE  
COMMINGLING, LEA AND EDDY COUNTIES, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 19 and on April 2, 1998 at Santa Fe, New Mexico, before Examiners Michael E. Stogner and David R. Catanach, respectively.

NOW, on this 26th day of October, 1998, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Sonat Exploration Company ("Sonat"), seeks an exception to the provisions of Division Rule 309.A and B to provide for blanket lease commingling of Delaware oil production from the following pools for all existing and future wells to be drilled on ten Federal oil and gas leases in portions of Sections 1, 8, 9, 10, 11, 12, and 15, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico and in Section 18, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico and to permit the allocation of such production to each well without separate metering:

- Undesignated Sand Dunes-Cherry Canyon Pool
- Designated and Undesignated Ingle Wells-Delaware Pool
- Designated and Undesignated West Sand Dunes-Delaware Pool
- Designated and Undesignated South Sand Dunes-Delaware Pool
- Undesignated Northwest Poker Lake-Delaware Pool
- Undesignated Poker Lake-Delaware Pool
- Undesignated North Poker Lake-Delaware Pool

- Undesignated South Poker Lake-Delaware Pool
- Undesignated East Poker Lake-Delaware Pool
- Designated and Undesignated Mesa Verde-Delaware Pool
- Undesignated Cotton Draw-Delaware Pool
- Undesignated East Cotton Draw-Delaware Pool, and
- Undesignated Cotton Draw-Brushy Canyon Pool.

(3) Sonat is the lessee of ten oil and gas leases and operates wells in the following described portions of these leases in Eddy and Lea Counties, New Mexico, hereinafter referred to as the "project area":

**EDDY COUNTY, NEW MEXICO**  
**TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMPM**

- Section 1: Lots 1 and 3, SW/4 NE/4, SW/4 NW/4, NE/4 SW/4, SW/4 SW/4, NE/4 SE/4, and SW/4 SE/4
- Section 8: NW/4 NW/4, SE/4 NW/4, NW/4 SW/4, and SE/4 SW/4
- Section 9: E/2
- Section 10: NE/4, NE/4 SW/4, NE/4 SE/4, and S/2 SE/4
- Section 11: E/2, NE/4 SW/4, S/2 SW/4, and SE/4
- Section 12: NE/4 NE/4, SW/4 NE/4, NW/4, NE/4 SE/4, and SW/4 SE/4
- Section 15: E/2 NE/4, W/2, NE/4 SE/4, and S/2 SE/4

**LEA COUNTY, NEW MEXICO**  
**TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM**

- Section 18: Lots 1 and 2 and E/2 NW/4.

(4) Lease commingling has been previously approved by the Division for Sonat in portions of Sections 11 and 12, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico by Division Administrative Order CTB-426, dated May 22, 1996 and in portions of Sections 8, 9, 10, and 11, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico by Division Administrative Order CTB-417, dated November 28, 1995.

(5) At the time of the hearing, Sonat operated 14 wells within the project area that produce oil from the Delaware Mountain Group and is currently engaged in a development program whereby additional wells are being drilled into this interval.

(6) At the hearing Sonat presented testimony and evidence demonstrating that:

(a) the commingling of Delaware production from the project area can be accomplished without experiencing compatibility problems;

(b) the project area is currently being served by three tank batteries and the approval of lease commingling will serve to avoid the purchase, installation, and operation of additional surface facilities;

(c) all necessary surface facilities will be properly maintained and will have adequate capacity to store 18 hours of high-operating-level production from the project area; and

(d) each well within the project area will be tested monthly and production will be allocated according to the following formula:

$$Z'1 = \frac{[Z1 \times R1] A}{\Sigma(Z's \times R's)}$$

Where:  $Z'1$  = adjusted production chargeable to the well  
 $Z1$  = well test results (BOPD or MCFPD)  
 $R1$  = number of days well has produced in the month  
 $\Sigma(Z's \times R's)$  = summation of chargeable production based on well tests for all wells producing into the facility  
 $A$  = facility volume sold for the month (BBLS) or (MCF).

(7) The above-described allocation formula will serve to accurately allocate this commingled production to the individual wells within the project area and an exception to Division Rule 309.B authorizing the use of this method of well testing and production allocation should therefore be granted.

(8) The royalty interest on all these leases is one-eighth and belongs to the United States of America; however, working interests and overriding royalty interests vary among those ten Federal leases.

(9) Sonat has notified all mineral interest owners within the project area of this application and none have objected.

(10) Further, Sonat has notified all purchasers of production from the project area and the U. S. Bureau of Land Management of this application and no objection has been received nor did any interested party appear at the hearing in opposition to this application.

(11) Approval of this application will serve to reduce the capital outlay within the project area and should result in other savings which should enable Sonat to drill and complete additional Delaware wells in the project area. Furthermore, the commingling of production in this manner is in the best interest of conservation, is based on sound engineering principles, and should result in the recovery of production that would otherwise be left in the reservoir thereby preventing waste.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Sonat Exploration Company for an exception to the provisions of Division Rule 309.A and B to authorize the blanket commingling of Delaware production (Undesignated Sand Dunes-Cherry Canyon Pool, designated and Undesignated Ingle Wells-Delaware Pool, designated and Undesignated West Sand Dunes-Delaware Pool, designated and Undesignated South Sand Dunes-Delaware Pool, Undesignated Northwest Poker Lake-Delaware Pool, Undesignated Poker Lake-Delaware Pool, Undesignated North Poker Lake-Delaware Pool, Undesignated South Poker Lake-Delaware Pool, Undesignated East Poker Lake-Delaware Pool, designated and Undesignated Mesa Verde-Delaware Pool, Undesignated Cotton Draw-Delaware Pool, Undesignated East Cotton Draw-Delaware Pool, and Undesignated Cotton Draw-Brushy Canyon Pool) from all existing and future wells to be drilled in the portions of ten Federal oil and gas leases that comprise the following described "project area" and to permit the allocation of such production to each well without separate metering is hereby approved.

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**Project Area:**

**EDDY COUNTY, NEW MEXICO  
TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMPM**

- Section 1: Lots 1 and 3, SW/4 NE/4, SW/4 NW/4, NE/4 SW/4,  
SW/4 SW/4, NE/4 SE/4, and SW/4 SE/4  
Section 8: NW/4 NW/4, SE/4 NW/4, NW/4 SW/4, and SE/4  
SW/4  
Section 9: E/2

Section 10: NE/4, NE/4 SW/4, NE/4 SE/4, and S/2 SE/4  
Section 11: E/2, NE/4 SW/4, S/2 SW/4, and SE/4  
Section 12: NE/4 NE/4, SW/4 NE/4, NW/4, NE/4 SE/4, and  
SW/4 SE/4  
Section 15: E/2 NE/4, W/2, NE/4 SE/4, and S/2 SE/4

**LEA COUNTY, NEW MEXICO**  
**TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM**

Section 18: Lots 1 and 2 and E/2 NW/4.

(2) Each well within the project area will be tested monthly and production will be allocated utilizing the following formula:

$$Z'1 = \frac{[Z1 \times R1] A}{\Sigma(Z's \times R's)}$$

Where: Z'1 = adjusted production chargeable to the well  
Z1 = well test results (BOPD or MCFPD)  
R1 = number of days well has produced in the month  
 $\Sigma(Z's \times R's)$  = summation of chargeable production based on  
well tests for all wells producing into the  
facility  
A = facility volume sold for the month (BBLS) or (MCF).

**PROVIDED HOWEVER THAT,** the facilities for the commingling of production shall be properly installed and maintained;

**PROVIDED FURTHER THAT,** the facilities shall have adequate storage capacity available at all times to allow the storage of a volume of oil equal to 18 hours of high-operating-level production in the project area.

**PROVIDED FURTHER THAT,** the applicant shall file the results of the monthly well tests with the Division's Artesia District Office on Division Form C-115 each month.

(3) The operator shall notify the supervisor of the Division's Artesia District Office prior to implementation of commingling and at such times as wells are completed and production from those wells is also commingled.

(4) It is the producer's responsibility to notify the transporter of this commingling order.

(5) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director

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