



**CHACE OIL COMPANY, INC.**

313 Washington S.E.

Albuquerque, New Mexico 87108

(505) 266-5562

February 17, 1983

Mr. Gilbert Quintana  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87501

Mr. Frank T. Chavez  
Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, NM 87410

Gentlemen:

The following report is submitted to document and present an allocation of production formula for five (5) commingled wells owned and operated by Chace Oil Company, Inc.

The subject wells are completed in the Chacon Dakota Associated Pool, as well as an Undesignated Gallup Member or Members. Descriptions of the well locations and Conservation Division Order Numbers are listed below:

| <u>Well:</u>         | <u>Description:</u> | <u>Order No.:</u> |
|----------------------|---------------------|-------------------|
| #1-47-JV             | I-12-23N-04W        | DHC-388           |
| Chace Apache 15-2    | I-20-23N-04W        | R-7178            |
| Chace Apache 15-3    | F-20-23N-03W        | DHC-389           |
| Chace Apache 54-10   | I- 3-22N-03W        | DHC-393           |
| / Chace Apache 54-11 | K- 3-22N-03W        | DHC-394           |

Evaluation of the production histories of the offset wells and the subject wells, nearby test data, and our (in house) reserves study of the producing zones has enabled us to conclude that the Gallup and Dakota zones are capable of low to marginal production only, and that allocation of production attributable to each zone has been derived by reserve determination for oil and test data for gas.

Mr. Gilbert Quintana  
Mr. Frank T. Chavez

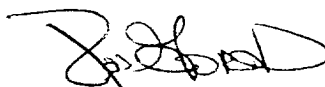
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The allocation of production formula for the two zones is presented below for each well:

| <u>Well:</u>       |     | <u>Gallup:</u> | <u>Dakota:</u> |
|--------------------|-----|----------------|----------------|
| #1-47-JV           |     |                |                |
|                    | Oil | 25%            | 75%            |
|                    | Gas | TSTM           | TSTM           |
| Chace Apache 15-2  |     |                |                |
|                    | Oil | 21%            | 79%            |
|                    | Gas | 44%            | 56%            |
| Chace Apache 15-3  |     |                |                |
|                    | Oil | 21%            | 79%            |
|                    | Gas | 44%            | 56%            |
| Chace Apache 54-10 |     |                |                |
|                    | Oil | 27%            | 73%            |
|                    | Gas | 44%            | 56%            |
| Chace Apache 54-11 |     |                |                |
|                    | Oil | 18%            | 82%            |
|                    | Gas | 44%            | 56%            |

This report is submitted in compliance with the conditions set forth in the Oil Conservation Commission Orders, (referenced above), which grant Chace Oil Company, Inc. approval for downhole commingling in the subject wells.

Very truly yours,



Ron Gordon  
Geologist



Ross Easterling  
Landman

RE/ss

PRODUCTION HISTORY

Field: Chacor:  
Well: Chace Apache 54-11  
Initial Production: 7/1982  
Zones Completed: Dakota, Tocito  
Production History:

|               | <u>Oil/Bbls.</u> | <u>Gas/MCF</u> |
|---------------|------------------|----------------|
| July          | 234              | 0              |
| August        | 1106             | 0              |
| September     | 581              | 0              |
| October       | 620              | 1787           |
| November      | 627              | 463            |
| December      | <u>536</u>       | <u>161</u>     |
| <u>Total:</u> | 3704             | 2411           |

CHAVE OIL COMPANY  
RESERVE DATA & OIL RESERVES  
VALUES @ 14.73 PSIA & 60° F.

AREA Chacon 34 area  
STATE New Mexico DATE 1-1-83  
RESERVES as of

Geological Age  
Reservoir Name  
Average Depth  
Limiting Contact  
No. Wells Producing  
Productive Area, Acres  
Average Net Sand, Feet  
Reservoir Volume, Ac. Ft.  
Average Porosity, %  
Average Connate Water, %  
Liquid Specific Gravity, API  
Formation Volume Factor  
Orig. Oil in Place, Bbl./Ac. Ft.  
Orig. Oil in Place Reservoir, Bbls.  
Oil Recovery Factor, %  
Orig. Recoverable Oil, Bbls.  
Cum. Oil Production, Bbls.  
Remaining Rec. Oil, Bbls.

| Gallup Assoc. 54-10 | Dakota 54-10 | Gall Assoc. 54-11 | Dakota 54-11 |  |  |
|---------------------|--------------|-------------------|--------------|--|--|
| 40                  | 160          | 40                | 160          |  |  |
| 30                  | 22           | 11                | 14           |  |  |
| 1200                | 3520         | 440               | 2240         |  |  |
| 6.0                 | 8.0          | 6.0               | 8.0          |  |  |
| 60                  | 50           | 60                | 50           |  |  |
| 1.160               | 2.105        | 1.160             | 2.105        |  |  |
| 160                 | 147          | 160               | 147          |  |  |
| 192000              | 517440       | 70400             | 329280       |  |  |
| 10                  | 10           | 10                | 10           |  |  |
| 19200               | 51744        | 7040              | 3037         |  |  |
| 898                 | 2427         | 667               | 29891        |  |  |
| 18302               | 49317        | 6373              |              |  |  |
| 27%                 | 75%          | 18%               | 82%          |  |  |

% of O.R.K. attributable  
to each formation

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Commingleing Study

PRODUCTION - OFFSETTING WELLS

| <u>Chace Well</u> | <u>Offsetting Well</u> | <u>Location</u>            | <u>Date I. P.</u> | <u>Cum. Prod.</u><br>1-1-83 | <u>Zones Completed</u> |
|-------------------|------------------------|----------------------------|-------------------|-----------------------------|------------------------|
| 47-1-JV           | None                   |                            |                   |                             |                        |
| 15-2              | Chace 15-1             | NE NE Sec. 20<br>T23N, R4W | 4/1977            | 17,931 B. O.<br>106,980 MCF | Dakota                 |
| 15-3              | As above               |                            |                   |                             |                        |
| 54-10             | Chace 54-1             | NE, NE Sec. 3<br>T22N, R3W | 11/1978           | 9,558 B. O.<br>84,276 MCF   | Dakota                 |
| 54-11             | Chace 54-9             | NE, NW Sec. 3<br>T22N, R3W | 8/1981            | 9,009 B. O.<br>4,854 MCF    | Dakota                 |

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Commingling Study

TEST DATA

Well: Amoco Production Company  
#2-396 Jicarilla

Location: SE/4, Section 8, T23N,R3W  
Rio Arriba County, New Mexico

Dakota Zone - Pressure @ 7600' 2094 PSIA

| <u>Date</u> | <u>Choke</u> | <u>FTP</u> | <u>Oil Rate Bbls/Day</u> | <u>Gas Rate MCFD</u> |
|-------------|--------------|------------|--------------------------|----------------------|
| 8-14-82     | 20/64        | 220        | 22                       | 663                  |
| 8-15-82     | 20/64        | 220        | 20                       | 606                  |
| 8-16-82     | 20/64        | 200        | 15                       | 630                  |
| 8-17-82     | 20/64        | 200        | 16                       | 583                  |
| 8-21-82     | 20/64        | 210        | 13                       | 591                  |
| 8-22-82     | 20/64        | 210        | 13                       | 591                  |
| 8-23-82     | 20/64        | 210        | 14                       | 548                  |
| 8-24-82     | 20/64        | 210        | 20                       | 571                  |

Gallup Zone - Pressure @ 7400' 2010 PSIA

| <u>Date</u> | <u>Choke</u> | <u>FTP</u> | <u>Oil Rate Bbls/Day</u> | <u>Gas Rate MCFD</u> |
|-------------|--------------|------------|--------------------------|----------------------|
| 9-3-82      | 20/64        | 240        | 22                       | 539                  |
| 9-4-82      | 20/64        | 225        | 15                       | 447                  |
| 9-5-82      | 20/64        | 210        | 15                       | 427                  |
| 9-6-82      | 20/64        | 210        | 18                       | 478                  |
| 9-7-82      | 20/64        | 190        | 13                       | 427                  |
| 9-8-82      | 20/64        | 240        | 22                       | 539                  |
| 9-9-82      | 20/64        | 200        | 11                       | 427                  |