

BEFORE THE OIL CONSERVATION COMMISSION OF THE  
STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY  
THE OIL CONSERVATION COMMISSION OF THE  
STATE OF NEW MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 36

ORDER NO. 485

THE PETITION OF THE OPERATORS' COMMITTEE  
UNDER MALJAMAR COOPERATIVE REPRESSURING  
AGREEMENT, WITH REGARD TO A CERTAIN AREA  
WITHIN THE MALJAMAR FIELD, LEA COUNTY, FOR  
AN ORDER APPROVING THE FOLLOWING, AND SUCH  
OTHER MATTERS AND THINGS INCIDENT THERETO  
AS MAY BE REQUIRED BY LAW TO BE APPROVED  
BY THE OIL CONSERVATION COMMISSION:  
UNITIZATION OF GAS, SELECTION OF KEY OR  
IN-PUT WELLS, MANNER OF COMPUTATION AND  
COMPENSATION FOR LOSS TO PRORATION UNITS  
UPON WHICH ARE LOCATED KEY OR IN-PUT WELLS,  
AND THE PROHIBITION OF A TOP ALLOWABLE  
EXCEEDING 44 BARRELS PER PRORATION UNIT  
PER DAY.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at two o'clock P.M., October 29,  
1942, at Santa Fe, New Mexico, before the Oil Conservation Commission  
of New Mexico, hereinafter referred to as the "Commission".

Now, on this 14th day of November, 1942, the Commission  
having before it for consideration the testimony adduced at the hearing  
of said case and being fully advised in the premises, the Commission  
finds:

FINDINGS

1. That on August 5, 1941, an agreement was made and entered  
into by and between the parties signatory thereto, an original of  
which agreement is filed in this case as exhibit A; said agreement  
having as its general objects and purposes, the following:

(a) The erection and maintenance of a repressuring plant and  
system, for the purpose of using the natural gas produced from the  
area subject to the agreement for pressure maintenance, so as to secure  
the greatest ultimate recovery of oil and gas from such area.

(b) For the erection and maintenance of a natural gasoline plant  
to be operated in connection with the repressuring plant and system  
hereinabove referred to.

(c) For the purpose of conducting operations in the area subject to the agreement in such a manner as to provide for the most economical and efficient recovery of oil and gas to the end that the maximum ultimate recovery may be obtained without waste.

2. That said agreement provides for a cooperative area, hereinabove referred to as the cooperative area, and within the boundaries of the cooperative area a somewhat lesser area that is actually committed to said agreement, which lesser area is hereinafter referred to as the committed area. Both of said areas are more particularly described in Section II of the Order herein.

All of the lands within the committed area are under oil and gas lease. All of the leases within the committed area, except the lease covering the E $\frac{1}{2}$  Sec. 16, T. 17S., R.32E., are issued by the United States under and pursuant to the Act of Congress approved Debruary 25, 1920. The lease covering the said E $\frac{1}{2}$  Sec. 16 was issued by the State of New Mexico, acting by and through its Commissioner of Public Lands. All of said lands being in the area commonly referred to and known as the Maljamar Oil & Gas Field.

It is contemplated by said agreement that other lands within the cooperative area may be committed to said agreement which adjoin the lands which are already committed, with the consent of the parties to said agreement, and where such lands will be benefited by the pressure maintenance operations.

3. That it is the purpose and intention of said agreement to operate the properties subject thereto, in so far as the oil produced is concerned in the same manner as they were operated prior to entering into said agreement; that is to say, each of the respective owners are to operate their properties individually and the oil is to belong to the lease from which produced, and each operator is to market his or its own oil.

In so far as the natural gas produced from the properties subject to the agreement is concerned, all of such gas except the amount used for development purposes or unavoidably lost is to be delivered to the repressuring plant, and after the extraction of the natural gasoline is to be returned to the formation from which oil is being produced in said field.

4. That said repressuring agreement provides for the selection by the parties thereto of a Committee to be known as "The Operators' Committee" for the purpose of carrying out the objects and purposes of the agreement, and for the purpose of operating and maintaining the repressuring plant and system and gasoline plant. That the following representatives of the parties to said agreement have been elected to constitute the Operators' Committee, namely, Emery Carper, Artesia, New Mexico, representing Carper Drilling Company; M. E. Baish, Artesia, New Mexico, representing Maljamar Oil & Gas Corporation; J. B. Steele, representing the Kewanee Oil Company, the latter having acquired its interest from Barney Cockburn after the execution of the repressuring agreement; Barney Cockburn, Lubbock, Texas, representing himself, the Fair Oil Company and Johney Cockburn; J. B. Shaw, representing E. G. Woods.

5. That the Operators' Committee has selected, subject to the approval of the Commission, thirteen in-put wells which have been selected after careful study by engineers, with the view of being the most effective and properly located so as to be of the greatest benefit in maintaining the pressure of the field in the repressuring operations. Said wells are shown on the map of the Maljamar Oil Field filed in this Case as exhibit B, and are more particularly described in Section V of the Order herein.

In addition to the said in-put wells, there is contemplated the selection of other in-put wells within the now committed area and in other areas within the cooperative area as the committed area is extended-- a matter necessary for the fuller attainment of the objects and purposes named in Section 1 of the findings herein.

That such in-put wells as may be necessary to be selected from time to time should be submitted by the Operators' Committee to the Commission for approval administratively without the calling of a formal hearing therefor.

6. That sixty percent of the allowable to the proration units upon which are situated the in-put wells should be redistributed to all the other proration units within the committed area capable of producing such additional oil without waste.

7. That the proration units within the committed area should not exceed the production of 44 barrels of oil daily if the current allowable in the future exceeds said amount; subject, however, to the proviso set out in Section VII of the order herein. Such petition should be considered by the Commission administratively without further notice and formal hearing.

IT IS THEREFORE ORDERED:

I. That this project shall hereafter be known as the Maljamar Cooperative Repressuring Agreement.

II. That the cooperative area referred to in Section 2 of the findings herein consists of the following tracts: Section 14 to 23 inclusive, and Sections 26 to 35, inclusive, in Twp. 17S. Rge. 32E., N.M.P.M., Lea County, New Mexico.

The committed area referred to in Section 2 of the findings herein is described as follows:

The E $\frac{1}{2}$  Sec. 14; E $\frac{1}{2}$  Sec. 16; all Sec. 17, 18, 19, 20, 21, 22, 27, 28, 29 and 30.  
 The N $\frac{1}{2}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SW $\frac{1}{4}$  Sec. 23;  
 S $\frac{1}{2}$  NW $\frac{1}{4}$ , SW $\frac{1}{4}$  Sec. 26; N $\frac{1}{2}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , Sec. 31;  
 N $\frac{1}{2}$ , SE $\frac{1}{4}$  Sec. 33; NE $\frac{1}{4}$ , W $\frac{1}{2}$ NW $\frac{1}{4}$  Sec. 34; W $\frac{1}{2}$  Sec. 35, all in Twp. 17S. Rge.32E., N.M.P.M.

As the committed area within the boundaries of the cooperative area is enlarged as in Section 2 of the findings herein, the Operators' Committee shall notify the Commission promptly in writing as to such enlarged committed area named subject to the approval of the Commission administratively without further notice and formal hearing; provided, however, that any extension of the cooperative area and of the committed area beyond the limits of the cooperative area as set out in Section II of the order herein shall be upon formal petition, notice and hearing as provided by law.

III. There shall be no unitization of oil but the gas shall be utilized in the manner set out in Section 3 of the findings herein.

IV. That the management of said project shall be by the Operators' Committee as set out in Section 4 of the findings herein. Any change of membership of said Operators' Committee should be transmitted promptly in writing to the Commission.

V. That the in-put wells referred to in Section 5 of the findings herein are hereby authorized for use as such and are more particularly described as follows:

|                          |              |      |                                   |                   |
|--------------------------|--------------|------|-----------------------------------|-------------------|
| Maljamar Oil & Gas Corp. | Wm. Mitchell | B-12 | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | Sec. 19 - 17S-32E |
| "                        | "            | B-4  | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | " 20 "            |
| "                        | "            | A-8  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 20 "            |
| "                        | Baish        | A-8  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 21 "            |
| "                        | "            | A-1  | NE $\frac{1}{4}$ NE $\frac{1}{4}$ | " 21 "            |
| "                        | "            | B-6  | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | " 21 "            |
| Carper Drilling Company  | Simon        | 4-N  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 29 "            |
| "                        | Simon        | 8-N  | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | " 29 "            |
| Kewanee Oil Company      | "            | B-15 | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 28 "            |
| "                        | "            | B-29 | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | " 28 "            |
| "                        | "            | B-9  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 27 "            |
| "                        | "            | B-11 | SW $\frac{1}{4}$ SE $\frac{1}{4}$ | " 27 "            |
| Barney Cockburn          | Miller       | A-6  | SW $\frac{1}{4}$ NW $\frac{1}{4}$ | " 26 "            |

The selection of other in-put wells within the area committed and for the further area to be committed within the cooperative area described in Section II of the order herein shall be submitted to the Commission for its consideration of approval administratively without further notice and formal hearing thereupon.

VI. That said 13 in-put wells described in Section V of the order herein are hereby assigned the top allowable for one year beginning with the effective date of this order. Thereafter, said in-put wells if further used as such shall have such allowable for such period of time as determined by the Commission administratively; likewise, other in-put wells authorized to be selected as provided in Section V of the order herein shall have such allowable for such period of time as field tests to the Commission may seem advisable.

Sixty percent of the allowable lost by in-put wells shall be redistributed to all the other top allowable proration units within the committed area by dividing the above mentioned amount lost through the use of in-put wells by the number of top allowable producing wells in the committed area and the amount so determined would be added to the regular top allowable for each well. If the operators subject to said agreement do not desire to produce such excess allowable during any month the Operators' Committee would in that event notify the Commission before the allowable for such month is fixed and not later than the 25th day of the month preceding.

VII. That the proration units within the committed area shall not exceed the production of 44 barrels of oil daily should the current allowable in the future exceed that amount; subject, however, to the right of the Operators' Committee to petition the Commission administratively, by the 25th day of the month before the fixing of any monthly allowable, to change or modify such maximum allowable for the committed area.

VIII. That this order shall become effective on the first day of the proration month next succeeding the month in which said Order is adopted.

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

OIL CONSERVATION COMMISSION

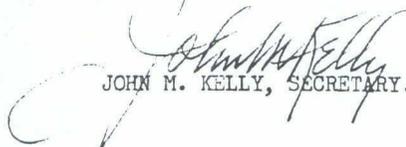
(SGD) JOHN E. MILES  
JOHN E. MILES, CHAIRMAN

H. R. RODGERS, MEMBER

(SGD) JOHN M. KELLY  
JOHN M. KELLY, SECRETARY.

(There being no further business the meeting adjourned.)

OIL CONSERVATION COMMISSION

  
JOHN M. KELLY, SECRETARY.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY  
THE OIL CONSERVATION COMMISSION OF THE  
STATE OF NEW MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 56

ORDER NO. 595

THE PETITION OF THE OPERATORS' COMMITTEE  
UNDER MALJAMAR COOPERATIVE REPRESSURING  
AGREEMENT FOR A CHANGE IN METHOD OF  
ALLOCATING OF OIL PRODUCTION AND GAS  
CONTROL FOR THE COMMITTED AREA WITHIN  
THE MALJAMAR COOPERATIVE REPRESSURING AREA.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at ten o'clock A.M., January 8, 1945, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 28th day of March, 1945, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises;

IT IS THEREFORE ORDERED:

SECTION 1. That VI of Order 485 be and is hereby amended to read as follows:

VI. (a) That the allocating to the committed area and the re-allocation to the respective proration units therein shall be made upon the following plan:

(b) The Operators' Committee shall submit monthly to the Commission for approval the nomination in total barrels daily and schedule of re-allocation to the respective proration units.

(c) In no event shall any proration unit producing from horizons other than the Grayburg or San Andres formations be prorated under this plan of allocation, other than they shall not produce at a rate in excess of State top allowable.

(d) Each proration unit shall be assigned an acreage allowable in whatsoever amount production test shows that it is capable of making up to but not exceeding 15 barrels daily.

(e) Each proration unit capable of producing the acreage allowable but incapable of producing the additional allowable through the application of the void space factor hereinafter provided shall be permitted to produce that volume of oil as shown on its production test.

(f) All proration units capable of producing said acreage allowable plus the additional allowable through the application of the void space factor shall be assigned a proportionate part of the remaining nominated allowable; such proportionate part to be determined on the ratio that the void space created by each individual proration unit bears to the total void space created by all proration units, or in strict accordance with the following formula:

$$\frac{\text{Unit Void Space}}{\text{Total Unit Void Space}} \times \frac{\text{void space allowable}}{\text{void space allowable}} = \text{Number of obls.}$$

(g) A proration unit upon which is located a newly completed or reconditioned well shall be assigned an allowable up to and including 30 barrels daily insofar as it is capable of producing such amount; that allowable being derived from the average void space created by all producing wells in the committed area. Such allowable to prevail only for those allocation periods in accordance with Proration Schedule Order No. 235 and until well can be properly tested and its allowable rate determined.

(h) Said nomination and schedule shall be submitted to the Commission and a duplicate shall be supplied to the Proration Office not later than the 20th day of each month preceding the next proration month.

SECTION 2. That VII of Order 485 be and is hereby amended to read as follows:

VII. Tests necessary in connection with the foregoing plan shall be those designated by the Commission, made by such methods and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time.

SECTION 3. That VIII of Order 485 be and is hereby amended to read as follows:

VIII. That the order herein shall be inapplicable to any non-committed proration units within the cooperative area; such non-committed units shall receive their respective allocations in accordance with the State-Wide Proration Order and field gas-oil ratio limitation.

That this order shall be effective on execution and applicable to the Commission's Proration Schedule beginning with the next proration month.

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

OIL CONSERVATION COMMISSION

(SGD) John J. Dempsey  
JOHN J. DEMPSEY, CHAIRMAN

(SGD) John E. Miles  
JOHN E. MILES, MEMBER

The Commission adopted Order No. 596, allocating 109,900 barrels of oil per day for the month of April, 1945.

The Commission adopted E. Order No. 597 to continue E. Order No. 576 for the last half of March, 1945.

The Commission adopted E. Order No. 598 to continue E. Order No. 576 for the first half of April, 1945.

Entered July 13, 1956  
D.S.P.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF THE STATE OF NEW  
MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 1072  
Order No. R-841

APPLICATION OF KEWANEE OIL  
COMPANY FOR AN ORDER GRANTING  
PERMISSION TO INJECT WATER INTO  
ITS PEARL WELL NO. 26 IN THE  
NW/4 SW/4 OF SECTION 30, TOWN-  
SHIP 17 SOUTH, RANGE 33 EAST,  
MALJAMAR POOL, LEA COUNTY, NEW  
MEXICO, FOR THE PURPOSE OF  
SECONDARY RECOVERY AND FURTHER  
FOR PERMISSION TO DISCONTINUE  
THE INJECTION OF GAS HERETOFORE  
AUTHORIZED FOR SAID WELL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 20, 1956, at Hobbs, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico in accordance with Rule 1214 of the Rules and Regulations of the New Mexico Oil Conservation Commission.

NOW, on this 9<sup>th</sup> day of July 1956, the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," a quorum being present, having considered said application and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the oil and gas lease involved in the application is Federally owned, and the Supervisor of the United States Geological Survey has interposed no objection to the application.

(3) That Kewanee Oil Company is the owner and holder of a Federal Oil and Gas Lease and said lease covers the following described land in Lea County, New Mexico, to-wit:

All Sec. 25, Twp. 17 South, Range 32 East;  
Lots 1, 2, 3, and 4, and the E/2 W/2 Sec. 30,  
Twp. 17 South, Range 33 East, containing  
968.56 acres, more or less,

which said lease is designated as Kewanee Oil Company's "Pearl" Lease.

(4) That applicant received authority for an unorthodox location for its Pearl Lease Well No. 26 by Order 770 on May 25, 1948, and that said well is located 2615 feet from the South line and 25 feet from the West line of Section 30, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico. Further, that applicant received authority to inject gas into said well and into two other wells on said Pearl lease by Commission Order R-146, dated May 1, 1952, for the purpose of secondary recovery from the adjoining wells on said Pearl Lease, with the provision that no allowables from the aforesaid three gas injection wells would be transferred to the other wells on said Pearl Lease.

(5) That recent engineering studies have indicated that greater secondary recovery of oil can be accomplished by the initiation of a pilot water flood operation on the aforesaid Pearl Lease.

(6) That applicant has shown that to discontinue the injection of gas into its Pearl Well No. 26 and to convert said well to a water injection well will result in greater secondary recovery of oil.

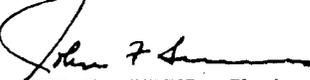
(7) That said conversion of applicant's Pearl Well No. 26 to a water injection well is in the best interests of conservation and the prevention of waste.

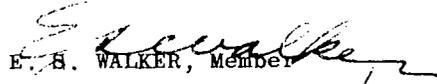
IT IS THEREFORE ORDERED:

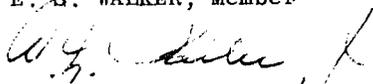
That the application of Kewanee Oil Company to discontinue the injection of gas into its Pearl Well No. 26, located 2615 feet from the South line and 25 feet from the West line of Section 30, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico, and to convert said well to a water injection well be and the same is hereby approved.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
JOHN F. SIMMS, Chairman

  
E. B. WALKER, Member

  
A. L. PORTER, Jr., Member & Secretary

S E A L

Entered October 31, 1957  
U.P.P.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF THE STATE OF NEW  
MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 1309  
Order No. R-1075

IN THE MATTER OF THE APPLICATION OF  
THE OPERATORS COMMITTEE OF THE  
MALJAMAR COOPERATIVE REPRESSURING  
AGREEMENT FOR AN ORDER EXPANDING THE  
KEWANEE OIL COMPANY PILOT WATER FLOOD  
PROJECT AND FOR THE APPROVAL OF AN  
ADDITIONAL PILOT WATER FLOOD PROJECT  
IN THE MALJAMAR COOPERATIVE REPRESSURING  
AGREEMENT AREA, MALJAMAR POOL, LEA COUNTY,  
NEW MEXICO, AND FOR THE PROMULGATION OF  
RULES TO GOVERN THE OPERATION OF SAID  
PROJECTS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
September 18, 1957, at Santa Fe, New Mexico, before the Oil  
Conservation Commission of New Mexico, hereinafter referred to  
as the "commission."

NOW, on this 23<sup>rd</sup> day of October, 1957, the Commission,  
a quorum being present, having considered the application and the  
evidence adduced, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, The Operators Committee of the  
Maljamar Cooperative Repressuring Agreement, proposes to expand  
the Kewanee Oil Company pilot water flood project authorized by  
Commission Order No. R-841, dated July 9, 1956, by the conversion  
from a producing oil well to a water injection well of the Pearl  
"B" No. 21 Well, located 2615 feet from the South line and 1295  
feet from the East line of Section 25, Township 17 South, Range 32  
East, NMPM, Lea County, New Mexico.

(3) That the applicant further proposes to institute  
an additional pilot water flood project in the Maljamar Pool in  
the W/2 SE/4 and the SW/4 of Section 21, E/2 SE/4 of Section 20,  
W/2 NE/4 and the NW/4 of Section 28, and the E/2 NE/4 of Section  
29, all in Township 17 South, Range 32 East, NMPM, Lea County,

New Mexico, with the water to be injected through nine wells located in the above-described pilot area.

(4) That one of the proposed injection wells is the Buffalo Baish "A" No. 21 Well, located 1395 feet from the South line and 1347 feet from the West line of said Section 21, which well is presently producing oil from the Maljamar Pool, and that the aforementioned Pearl "B" No. 21 Well in the proposed extension of the Kewanee Oil Company pilot water flood project is also presently producing oil from the Maljamar Pool.

(5) That the applicant proposes to transfer the oil allowables for the said Baish "A" No. 21 Well and the Pearl "B" No. 21 Well to other wells on the same basic lease on which the respective wells are located, the allowables to be transferred being based on the wells' allowables for the month during which work is commenced to convert each producing well to a water injection well.

(6) That the applicant further proposes that it be authorized to make additions to or deletions from the pilot area and/or changes in the injection wells by administrative approval of the Commission without notice and hearing.

(7) That the area contained in both of the pilot water flood projects covered by the subject application is within the Maljamar Cooperative Repressuring Agreement Area and that the allowables for all wells in said area are computed and allocated in accordance with Order No. 485 dated November 14, 1942, as amended by Order No. 595 dated March 28, 1945.

(8) That the proposed program will promote conservation and will tend to prevent waste through the production of oil which might not otherwise be recovered.

(9) That the applicant should be permitted to expand the Kewanee Oil Company pilot water flood project and to institute an additional water flood project in the Maljamar Pool in accordance with its proposals as set forth above, and that it should be permitted to transfer the oil allowables for the designated water input wells, where such wells are now producing oil, to other wells in the same basic lease.

(10) That the applicant should be permitted to make additions to or deletions from the pilot areas and/or changes of injection wells after administrative approval by the Commission without notice and hearing provided the request for administrative approval is made in accordance with Rule 701 (b) of the Commission Rules and Regulations and provided said additions, deletions, and/or changes are confined to the boundaries of the Maljamar Cooperative Repressuring Agreement Area.

(11) That the applicant should submit periodic reports to the Commission disclosing the progress of the secondary recovery programs.

IT IS THEREFORE ORDERED:

(1) That the Kewanee Oil Company pilot water flood project authorized by Order R-841 be and the same is hereby expanded to permit the injection of water into the Maljamar Pool through the Kewanee Oil Company Pearl "B" No. 21 Well, located 2615 feet from the South line and 1295 feet from the East line of Section 25, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That the Operators Committee of the Maljamar Cooperative Repressuring Agreement be and the same is hereby authorized to institute a pilot water flood project in the Maljamar Pool in the E/2 SE/4 of Section 20, the W/2 SE/4 and the SW/4 of Section 21, the W/2 NE/4 and the NW/4 of Section 28, and the E/2 NE/4 of Section 29, all in Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, and that the following described wells be and the same are hereby authorized as water injection wells for said project:

New well. 25 feet from the West line and 1325 feet from the South line of Section 21, T 17S-R 32E.

Buffalo Baish "A" No. 21 Well. 1395 feet from the South line and 1347 feet from the West line of Section 21, T 17S-R 32E. (Presently producing oil)

New well. 1325 feet from the South line and 2615 feet from the West line of Section 21, T 17S-R 32E.

Kewanee Baish "B" IP #11 Well. 80 feet from the North line and 25 feet from the West line of Section 28, T 17S-R 32E. (Presently gas input well).

New well. 25 feet from the South line and 1325 feet from the West line of Section 21, T 17S-R 32E.

Kewanee Baish "B" IP #35 Well. 2560 feet from the East line and 75 feet from the North line of Section 28, T 17S-R 32E. (Presently gas input well).

New well. 25 feet from the West line and 1325 feet from the North line of Section 28, T 17S-R 32E.

New well. 1325 feet from the North line and 1325 feet from the West line of Section 28, T 17S-R 32E.

New Well. 1325 feet from the North line and 2635 feet from the West line of Section 28, T 17S-R 32E.

(3) That the applicant be and the same is hereby authorized to transfer the allowables for the aforementioned Baish "A" No. 21 Well and the Pearl "B" No. 21 Well to other wells on the same respective basic leases, and that the allowables to be

-4-

Case No. 1309  
Order No. R-1075

transferred shall be based on the allowables assigned to each of said wells for the month during which work is commenced to convert each to a water injection well.

(4) That the Secretary-Director of the Commission shall have authority to approve any extension to or deletion from the pilot areas described above and any change in the number and/or location of the injection wells for either of the above-described pilot water flood projects, without notice and hearing; provided however, that all information required by Rule 701 (b) of the Commission Rules and Regulations shall be included in the application for administrative approval, and provided further that any such extension, deletion, and/or change shall be confined to the boundaries of the Maljamar Cooperative Repressuring Agreement Area.

(5) That monthly progress reports on each of the above-described pilot water flood project shall be submitted to the Commission in accordance with Rule 704 and Rule 1119 of the Commission Rules and Regulations.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman



MURRAY E. MORGAN, Member



A. L. PORTER, Jr., Member & Secretary

S E A L

ir/

*Entered February 8, 1963*

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 2718  
Order No. R-2403

APPLICATION OF CONTINENTAL OIL COMPANY,  
AS OPERATOR, FOR APPROVAL OF A SUPPLE-  
MENTAL COOPERATIVE AGREEMENT UNITIZING  
CERTAIN LEASES, A PLAN OF OPERATION FOR  
CONTINUED GAS AND WATER INJECTION, MODI-  
FICATION OF ALLOCATION METHOD FOR TRANS-  
FER OF ALLOWABLES, CERTAIN ADMINISTRATIVE  
PROCEDURES, AND PERMISSION TO PRODUCE MORE  
THAN 16 WELLS INTO A SINGLE TANK BATTERY,  
MALJAMAR COOPERATIVE AGREEMENT AREA,  
MALJAMAR POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 6, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 31st day of December, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That, by Order No. 485, the Commission approved the Maljamar Cooperative Repressuring Agreement, said agreement having been entered into on August 5, 1941, by the parties signatory thereto, for pressure maintenance in the Grayburg-San Andres formations under the Maljamar Cooperative Repressuring Agreement area in the Maljamar Pool, Lea County, New Mexico, unitizing gas in the area, making provisions for gas injection wells, and the expansion thereof by administrative approval. The order further provided that the proration units within the committed area

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should not exceed the production of 44 barrels of oil daily; provided for expansion of the committed area by administrative approval; provided for the management of said project by the Operators Committee; and included other provisions for the conduct of the repressuring program.

(3) That, by Order No. 595, the Commission amended Order No. 485 and provided a method of allocation to the committed area and the reallocation to the respective proration units on a basis which included an acreage allowable up to 15 barrels per day, a maximum marginal well allowable of 20 barrels per day, and a void space allowable determined by reservoir conditions as reflected by each well's bottomhole pressure and gas-oil ratio.

(4) That numerous other orders have been entered approving additional injection wells for expansion of the repressuring program and for non-standard locations for both injection and producing wells. The order number or date of administrative approval providing for the present injection wells or non-standard locations is set out in the attached Exhibit "A".

(5) That, by Order No. R-841, the Commission approved the injection of water into the Pearl "B" Well No. 26, located 2615 feet from the South line and 25 feet from the West line of Section 30, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico. By Order No. R-1075 the Commission authorized the expansion of Order No. R-841 to include the drilling and conversion of certain other wells to water injection wells, said wells also being listed on Exhibit "A" attached. The order further provided for administrative approval for expansion of the water injection program.

(6) That by adoption of Supplement No. 4 to the Maljamar Cooperative Repressuring Agreement, the applicant, Continental Oil Company, was elected Chairman of the Operators Committee and the name was changed to the Maljamar Cooperative Agreement.

(7) That the owners in the Maljamar Cooperative Agreement area have adopted Supplement No. 5 to the Maljamar Cooperative Agreement with Continental Oil Company as Operator of the Participating Area. The effect of Supplement No. 5 is to unitize all liquid hydrocarbons in the Grayburg-San Andres formations underlying the Participating Area, and to adopt a Plan of Operations for the expansion of the pressure maintenance program by gas and water injection.

(8) That the pressure maintenance program heretofore carried out has been successful and that approval of Supplement No. 5 and the plan of Operation contemplated thereunder, and a revision of the allocation method for transferring allowables should increase the efficiency and ultimate recovery of the pressure maintenance program.

(9) That said repressuring project was instituted during the early primary life of the Maljamar Pool; that the Maljamar Pool, without the benefit of fluid injection, would be in or approaching a "stripper" state of depletion, and that any secondary recovery project instituted at the present time would in all probability be classified by the Commission as a water-flood project subject to Commission Rule 701-E governing water-flood projects.

(10) That to afford continuity of operations under the existing pressure maintenance rules, the present void space formula for the project should remain in effect, with the added privilege of allowable transfer for injection tracts, for wells shut-in for engineering reasons, and for wells incapable of making their computed share of the void space allowable. Provided however, that the maximum allowable assigned to any 40-acre proration unit should be limited to the Southeast New Mexico Waterflood Allowable Factor currently in effect or as modified by future orders of the Commission.

(11) That, by application in this case, Continental Oil Company, as Chairman for the Maljamar Cooperative Agreement area and operator of the Participating Area, seeks the consolidation of prior orders, modification of the allocation method for transfer of allowables, an administrative procedure for expansion or revision of the fluid injection program and expansion of the Participating Area within the Maljamar Cooperative Agreement boundaries; further, applicant seeks an exception to the provisions of Rule 309-A of the Commission Rules and Regulations to permit production of more than sixteen proration units into a single tank battery.

(12) That the proposed program will promote conservation and will tend to prevent waste through the production of oil which might not otherwise be recovered.

IT IS THEREFORE ORDERED:

(1) That the Maljamar Cooperative Repressuring Agreement and its supplements, including Supplement 4 which changed the name to Maljamar Cooperative Agreement and appointed Continental Oil Company as Chairman of the Operators Committee, are hereby continued in effect.

(2) That Supplement No. 5, being a Supplemental and Amendatory Agreement to the Maljamar Cooperative Agreement, and the initial Plan of Operations pursuant thereto, are hereby approved.

(3) That all oil produced from the Grayburg-San Andres formations underlying the Participating Area, as hereinafter

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defined, is fully unitized as provided in said Supplement No. 5, and all gas produced and utilized as provided in said Supplements No. 4 and No. 5 is fully unitized as provided therein.

(4) That the Cooperative Area, heretofore approved by this Commission for pressure maintenance of the Grayburg-San Andres formations and hereinafter called MCA Unit Area, consists of the following lands:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Sections 14 to 23, inclusive  
Sections 25 to 35, inclusive

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Section 30: W/2

containing 13,786.66 acres, more or less.

That the following-described lands lying within such Cooperative Area are hereby designated and recognized as constituting the Participating Area for the Grayburg-San Andres formations:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Section 15: SW/4 SW/4  
Section 16: S/2 S/2, W/2 NW/4, and  
NE/4 NW/4  
Section 17: E/2 E/2 and NW/4 NE/4,  
SE/4 NW/4, and S/2 SW/4  
Section 18: SW/4 SW/4  
Section 19: All  
Section 20: All  
Section 21: All  
Section 22: NW/4 NW/4, S/2 NW/4, S/2 NE/4,  
and S/2  
Section 23: W/2, S/2 NE/4, and SE/4  
Section 25: N/2, N/2 SW/4, N/2 SE/4 and  
SE/4 SE/4  
Section 26: N/2, SW/4, and NW/4 SE/4  
Section 27: All  
Section 28: All  
Section 29: All  
Section 30: All  
Section 31: NE/4 NW/4  
Section 33: N/2  
Section 34: W/2 NW/4, NE/4 NW/4, and  
NW/4 NE/4

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TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Section 30: NW/4 and N/2 SW/4

containing 8,055.16 acres, more or less.

That the Participating Area described above and the following-described lands lying outside of the Participating Area but within the Cooperative Area, are hereby designated and recognized as constituting the committed acreage to the Maljamar Cooperative Agreement:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Section 14: SW/4 (156.25 acres of 160-acre tract), and E/2  
Section 16: NE/4, N/2 SE/4, and SE/4 NW/4  
Section 17: SW/4 NE/4, W/2 SE/4, N/2 NW/4, SW/4 NW/4, and N/2 SW/4  
Section 18: E/2, E/2 W/2, and Lots 1, 2 and 3  
Section 22: N/2 NE/4 and NE/4 NW/4  
Section 23: N/2 NE/4  
Section 25: SW/4 SE/4, and S/2 SW/4  
Section 26: NE/4 SE/4, and S/2 SE/4  
Section 31: E/2, SE/4 NW/4, E/2 SW/4, and Lots 1, 2, 3 and 4  
Section 32: NE/4 and N/2 NW/4, below 5,000 feet only  
Section 33: S/2  
Section 34: N/2 SE/4 below 5,000 feet only, NE/4 NE/4, S/2 NE/4, and SE/4 NW/4  
Section 35: W/2

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
LEA COUNTY, NEW MEXICO  
Section 30: Lot 4, and SE/4 SW/4

(5) That the fully Unitized Area shall be those lands designated above as the Participating Area of the MCA Unit for the Grayburg-San Andres formation.

(6) That the Participating Area may be enlarged as provided in said Supplement No. 5 and additional acreage committed to the MCA Unit; provided, however, that administrative approval for the expansion of the Participating Area or the committed acreage must be obtained from the Secretary-Director of the Commission; and provided, further, that any extension of the Cooperative Area, or of the Unitized Area beyond the boundaries of the Cooperative Area as described herein, shall be made only after notice and hearing.

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(7) That the MCA Unit operator shall file with the Commission an executed original or executed counterpart of the Supplement No. 5 within thirty (30) days after the effective date thereof. In the event of subsequent joinder by any party or expansion of the Participating Area, the unit operator shall file with the Commission within thirty (30) days thereafter counterparts of the unit agreement reflecting the subscription of those interests having subsequently joined or ratified.

IT IS FURTHER ORDERED:

(1) That the applicant, Continental Oil Company, as operator, is hereby authorized to continue the gas and water injection project authorized by Orders 485, 595, and R-841, and to continue and expand the water injection project as further authorized by Order No. R-1075 and as proposed by the Plan of Operations submitted with Supplement No. 5.

(2) That the MCA Unit approved gas and water injection wells shall be those wells listed in Exhibit "A" attached hereto. Additional wells may be drilled for gas or water injection, gas injection wells may be converted to water injection, water injection wells may be converted to gas injection wells, and producing wells may be converted to injection wells and injection wells to producing wells within the boundaries of the Maljamar Cooperative Agreement Area upon administrative approval of the Secretary-Director of the Commission without notice or hearing; provided, however, that all information required by Rule 701-B of the Commission Rules and Regulations shall be included in the application for administrative approval; and provided, further, that all offset operators to the well, if any there be, whose acreage is not included within the Participating Area, and the State Engineer shall also be notified by registered or certified mail of such request for administrative approval. The Secretary-Director may approve the application if no such offset operator or the State Engineer has objected within 20 days. The Secretary-Director may grant immediate approval of the application upon receipt of written waivers of objection from all such offset operators and the State Engineer.

(3) That the allocation to the Participating Area and other committed leases within the MCA Unit Area and the reallocation to the respective proration units therein shall be made upon the following plan:

(a) The unit operator shall submit to the Commission for approval the nomination in total barrels daily and schedule of reallocation to the respective proration units. Said nomination and schedule shall be submitted to the Commission and a duplicate shall be supplied to the Hobbs District Office of

the Commission not later than the twentieth day of each month preceding the next proration month.

- (b) Each proration unit shall be assigned an acreage allowable in whatsoever amount it is capable of producing up to but not exceeding fifteen (15) barrels daily, unless the unit operator nominates a lesser amount per proration unit.
- (c) Each proration unit capable of producing the acreage allowable but incapable of producing the acreage allowable plus the allowable assignable through the application of the void space formula hereinafter provided shall be assigned an allowable equal to that volume of oil shown on its production test.
- (d) All proration units capable of producing said acreage allowable plus the allowable allocated through the application of the void space formula shall be assigned a proportionate part of the total void space allowable so that each said proration unit will share in the void space allocation in inverse proportion to the amount of reservoir space voided as reflected by its production tests in strict accordance with the following formula:

$$\frac{\text{Proration Unit Reciprocal Void Space Factor}}{\text{Summation of MCA Unit Reciprocal Void Space Factors}} \times \text{Void Space Allowable} = \text{Number of Barrels}$$

The reciprocal void space factors to be determined from the attached Exhibit "B", being a table of "BARRELS OF RESERVOIR SPACE VOIDED IN PRODUCING ONE BARREL OF STOCK TANK OIL, AND THE RECIPROCAL FACTOR THERETO, AT GIVEN GAS-OIL RATIOS AND RESERVOIR PRESSURES."

- (e) A proration unit upon which is located a newly completed or reconditioned well shall be assigned an allowable in accordance with its acreage and void space allowable from the first day of production of new oil.

- (f) The proration units within the MCA Unit Area shall have a top daily oil allowable equal to the Southeast New Mexico Waterflood Allowable Factor currently in effect or as modified by future orders of the Commission, subject to the acreage and void space allowable allocations. A proration unit must have either a producing well, an injection well or a shut-in well capable of production before it can receive an allowable assignment.
- (g) Bottomhole pressure surveys and gas-oil ratio tests shall be taken and filed with the Commission in accordance with the Commission Rules and Regulations every six (6) months or at such periods as the Commission in its discretion may prescribe from time to time. All bottomhole pressures shall be computed to a common datum of sea level.
- (h) In no event shall any well producing from horizons other than the Grayburg-San Andres formations be prorated under this plan of allocation.

(4) That the operator is hereby authorized to transfer the top unit allowable from any proration unit containing only an injection well, or a well shut-in for engineering reasons and approved by the Commission, to any well or wells assigned a top unit allowable under the void space formula and capable of making the transferred allowable or portion thereof. Where a well is incapable of producing its calculated void space allowable, the difference between its capability and that allowable assigned by the void space formula may likewise be transferred to any well or wells assigned a top unit allowable under the void space formula capable of making the transferred allowable or a portion thereof. Provided however, that no allowable shall be transferred across the boundary of the Participating Area or across the boundary of any lease outside the Participating Area without notice and hearing.

(5) That an exception is hereby granted to the provisions of Rule 309-A of the Commission Rules and Regulations to permit the production of more than sixteen wells into a single tank battery. Operator shall notify the Commission of the location of any central tank battery at the time of its installation.

(6) That no well in the MCA Unit Area that is within the Participating Area and is closer than 1000 feet to the boundary thereof or that is outside the Participating Area and is closer than 1000 feet to the Participating Area or to another lease shall produce in excess of two times the top unit allowable for the MCA Unit Area. The Secretary-Director may, upon application

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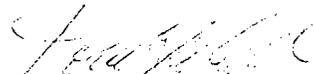
filed in due form, approve production in excess of two times the top unit allowable if all offset operators have been notified of the application and no objection has been received within ten days. The Secretary-Director may grant immediate approval of such application upon receipt of written waivers of objection from all such offset operators.

(7) That all previous orders pertaining to the MCA Unit are hereby superseded insofar as they are inconsistent with this order.

(8) That 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 herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
TOM BOLACK, Chairman

  
E. S. WALKER, Member

  
A. L. PORTER, Jr., Member & Secretary

S E A L

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SUPPLEMENTAL AND AMENDATORY AGREEMENT TO  
MALJAMAR COOPERATIVE AGREEMENT  
(SUPPLEMENT NO. 5)  
I Sec. No. 341

THIS AGREEMENT, made and entered into as of the first day of July, 1962, by and between the parties subscribing, ratifying or consenting hereto and herein referred to as the "parties hereto,"

W I T N E S S E T H:

WHEREAS, by instrument entitled "Supplemental and Amendatory Agreement to Maljamar Cooperative Repressuring Agreement (Supplement No. 4), I Sec. No. 341," that certain agreement dated the 5th day of August, 1941, entitled "Maljamar Cooperative Repressuring Agreement," together with all prior amendments thereof, were further amended and supplemented and consolidated together in a single instrument so entitled, which Supplement No. 4 agreement was approved by the Secretary of the Interior on February 5, 1960, and by the Commissioner of Public Lands of the State of New Mexico on December 23, 1959, and is now in full force and effect; and

WHEREAS, among the parties hereto are all of the parties who, as owners of working interests under oil and gas leases committed thereto, were parties to such prior agreement as so amended; and

WHEREAS, said Supplement No. 4 agreement contemplates the possibility that waterflooding or other secondary recovery operations other than the then existing gas injection pressure maintenance program might become desirable in order to more fully and completely recover the oil and gas within one or more

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ROSWELL, NEW MEXICO

formations underlying the Cooperative Area covered thereby; and

WHEREAS, such parties and the other parties hereto owning royalty, overriding royalty, production payment or other like interests in the oil and gas underlying the Cooperative Area believe that the Grayburg-San Andres formations, as hereinafter defined, underlying the Participating Area hereinafter described, should now be subjected to such a secondary recovery operation in order to effect a greater ultimate recovery of oil and gas producible from such formations underlying said lands, and that the greatest ultimate recovery can be effected by fully unitizing that portion of the Cooperative Area included within such Participating Area and by providing for the full unitization of such additional lands as may hereafter be ready for such secondary recovery operations and which should hereafter be included in such Participating Area, and the parties hereto, together with the United States of America as to federal lands located within the Cooperative Area, by the Secretary of the Interior or his delegate, and the State of New Mexico as to lands of the State of New Mexico lying within the Cooperative Area by its Commissioner of Public Lands, as evidenced by their respective certificates hereto, desire to effect such full unitization for the purposes aforesaid;

NOW, THEREFORE, in consideration of the premises, it is mutually agreed by and between the parties hereto that the aforesaid agreement of August 5, 1941, as heretofore so supplemented and amended, shall be and same is hereby further supplemented and amended so that the following articles hereof as hereinafter set forth shall, with respect only to the Grayburg-San Andres formations, as defined herein, underlying the Participating Area hereinafter described, or any enlargement thereof, be and become effective as between all of such parties, the said

Supplement No. 4 remaining in full force and effect as to all other formations underlying such Cooperative Area, and as to the Grayburg-San Andres formations lying without such Participating Area but within the Cooperative Area described in such Supplement No. 4 until any such land may hereafter be included in an enlarged Participating Area pursuant to the provisions hereof.

I

The provisions of the following sections of said Supplement No. 4, to the extent not inconsistent herewith, shall be applicable hereto: Sections I (ENABLING ACT AND REGULATIONS), II (COOPERATIVE AREA), V (LEASEHOLD INTERESTS COMMITTED), VI (EXPANSION OF COOPERATIVE AREA), VIII (NATURAL GASOLINE, OTHER PRODUCTS AND RESIDUE GAS) (except as modified herein), XII (RENTAL SETTLEMENT), XIII (ROYALTY SETTLEMENT) (except as modified herein), XIV (CONSERVATION), XV (LEASES CONFORMED TO AGREEMENT), XVI (COVENANTS RUN WITH LAND), XVIII (RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION), XIX (EXISTING AGREEMENTS NOT CANCELLED), XX (SUSPENSION OF OBLIGATIONS), XXI (NOTICES), XXII (NO WAIVER OF CERTAIN RIGHTS), XXIV (WARRANTY OF TITLE) and XXV (COUNTERPARTS) thereof, and subparagraphs 1 and 2 of Section XI (PRESSURE MAINTENANCE AND SECONDARY RECOVERY OPERATIONS) (except to the extent that this agreement modifies the same) and Section XXIII (STATUS OF PARTIES AND SUBSEQUENT JOINDER) thereof (except, however, that any subsequent joinder under the provisions of said Section XXIII (STATUS OF PARTIES AND SUBSEQUENT JOINDER), from and after the date hereof, shall likewise serve to commit the interest of any such subsequently joining party to the provisions of this Supplement No. 5 and to the full unitization provided for herein as to lands within the Participating Area, or any enlargement thereof, and to the provisions for subsequent commitment thereto upon any such enlargement thereof.) All

other of the provisions of said Supplement No. 4 are superseded by the provisions hereof.

The parties hereto commit their respective interests within the Cooperative Area described in said Supplement No. 4 to the terms hereof.

This agreement shall apply only to the Grayburg-San Andres formations underlying the Cooperative Area. Lands included within the Participating Area, or any enlargement thereof, shall continue to be subject in all things to the terms and provisions of said Supplement No. 4. Lands within the Participating Area hereinafter described or any enlargement thereof shall, as to the Grayburg-San Andres formations being fully unitized hereunder, be governed by the following provisions hereof.

II

UNIT AREA AND PARTICIPATING AREA: The following described lands comprise the Cooperative Area as described in said Supplement No. 4 agreement:

Township 17 South, Range 32 East, N.M.P.M.,  
Lea County, New Mexico:  
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Sections 14 to 23 inclusive  
Sections 25 to 35 inclusive

Township 17 South, Range 33 East, N.M.P.M.,  
Lea County, New Mexico:  
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West Half (W/2) Section 30

containing 13,786.66 acres, more or less.

Said Cooperative Area shall be the Unit Area.

The following described lands lying within such Cooperative Area are hereby designated and recognized as constituting the Participating Area for the Grayburg-San Andres formations:

Township 17 South, Range 32 East, N.M.P.M.,  
Lea County, New Mexico:  
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Section 15: SW/4 SW/4  
Section 16: S/2 SE/4, S/2 SW/4, W/2 NW/4,  
NE/4 NW/4  
Section 17: E/2 SE/4, E/2 NE/4, NW/4 NE/4,  
SE/4 NW/4, S/2 SW/4  
Section 18: SW/4 SW/4

Section 19: All  
 Section 20: All  
 Section 21: All  
 Section 22: All, except N/2 NE/4 and NE/4 NW/4  
 Section 23: All, except N/2 NE/4  
 Section 25: All, except S/2 SW/4 and SW/4 SE/4  
 Section 26: All, except E/2 SE/4 and SW/4 SE/4  
 Section 27: All  
 Section 28: All  
 Section 29: All  
 Section 30: All  
 Section 31: NE/4 NW/4  
 Section 33: N/2  
 Section 34: W/2 NW/4, NE/4 NW/4, NW/4 NE/4

Township 17 South, Range 33 East, N.M.P.M.,  
 Lea County, New Mexico:

Section 30: NW/4, N/2 SW/4

Embracing 8,055.16 acres more or less.

There is attached hereto as Exhibit "A" a map showing the Cooperative Area and particularly the Participating Area embraced therein, the classes of land involved, the boundaries of the respective leasehold interests within said area, and the tract numbers thereof corresponding to the tract numbers shown on Exhibit "B" attached hereto. These tract numbers in turn correspond with the tract numbers in Exhibits "A" and "B" to such Supplement No. 4, except to the extent that less than all of a tract shown on such Exhibits "A" and "B" to such Supplement No. 4 are included within the above described Participating Area, in which event a letter "X" designation has been employed following the tract number to indicate that part of such a Supplement No. 4 tract lying within the Participating Area. Exhibit "B" attached hereto is a schedule showing, to the extent known to the Operator, the acreage, percentage and kind of ownership of oil and gas interests in the tracts comprising the Participating Area insofar as the fully unitized formations are concerned. However, nothing herein or in said Exhibits contained shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said Exhibits as owned by such party. For the

sake of convenience, percentages have been employed whether or not the interest as created is expressed in terms of percentage or as a fractional interest, and each party hereto commits the entire interest in fact owned by him to this agreement whether or not the percentage employed to indicate his interest is wholly correct. Operator, as such, is relieved of any responsibility for any defect in or failure of any title or interest hereunder. Exhibits "A" and "B" may be revised by the Operator as hereinafter provided whenever changes in the Participating Area renders such revisions necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor," or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner," and not less than seven copies of the revised exhibits shall be filed with the Supervisor and one copy thereof shall be filed with the Commissioner and one copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "Commission."

### III

**SUBSTANCES FULLY UNITIZED:** All oil and gas produced from the Grayburg-San Andres formations underlying the Participating Area, as herein defined, are hereby fully unitized and are hereinafter referred to as "fully unitized substances."

For the purpose of this agreement, the unitized formations (also referred to in this agreement as the Grayburg-San Andres Formations) are identified and limited to that part of the Grayburg and San Andres Formations from the top thereof (found at the stratigraphic equivalent of 3419 feet on the Gamma Ray-Neutron Log of the Baish "B" well No. 36 located 554 feet from the north and west lines of Section 28, T-17-S, R-32-E, N.M.P.M.) to a depth of -700 feet subsea.

## IV

EXPANSION: The above described Participating Area may when practicable be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for inclusion in order to more fully accomplish the purposes of this agreement. Such expansion shall be effected in the following manner:

(a) Any 40-acre legal subdivision of lands or lot equivalent lying within the Cooperative Area but outside the Participating Area shall be eligible for inclusion within the Participating Area insofar as the fully unitized formations covered hereby are concerned whenever a well located thereon is capable of producing from the unitized formations. Subject to the approval of the Director and the Commissioner, the working interest owner or owners of such developed tract and the working interest owner or owners of all tracts within the Participating Area shall determine that such developed tract should be included in order to accomplish the purposes of this agreement, all as provided in the following subsections of this section.

Whenever a 40-acre legal subdivision of lands or lot equivalent lying within the Cooperative Area but outside the Participating Area upon which there is no well capable of producing fully unitized substances is considered to be desirable for inclusion within the Participating Area in order to more fully accomplish the purposes of this agreement, then such tract may be so included within the Participating Area in accordance with the following subsections of this section except that the working interest owner or owners of such undeveloped tract may not initiate the request for inclusion contemplated by subsection (b) hereof, and the tract participation to be assigned such tract may be determined as provided in subsection (c) hereof.

(b) Either the working interest owner or owners of such a developed tract, or the working interest owners within the then Participating Area, or the Director, or the Commissioner, may initiate a demand addressed to the others that such tract be included within the Participating Area. Such demand shall set forth a short statement of the reasons why such tract should be included within the Participating Area and shall state a proposed tract participation for such tract.

(c) Thereupon, Operator and the owner or owners of the working interest in such tract shall meet and seek to determine, on the basis of reasonable negotiation the estimated recoverable reserves of fully unitized substances underlying such tract in relation to recoverable reserves of fully unitized substances underlying the Participating Area, the tract participation that should be assigned to such tract; provided, however, if the owner of the working interest in any such tract proposed for inclusion within the Participating Area is the Operator hereunder, then the working interest owners exclusive of Operator shall select a qualified person to meet with the Operator in its capacity as a working interest owner and seek to determine, on the basis aforesaid, the tract participation that should be assigned to such tract, and such person for such limited purpose shall act as if he were the operator hereunder. If and when such parties agree upon the tract participation that should be assigned to such tract, Operator thereupon, subject to the approval of the working interest owners of the then Participating Area and subject to an appropriate agreement between the working interest owner or owners of such tract and the working interest owners in the then Participating Area covering an adjustment of investment on account of the inclusion of such tract, both as provided in the Operating Agreement hereinafter provided for, shall prepare a notice of the proposed expansion, describing the tract so to

be included within the Participating Area and the tract participation assignable thereto. Copies of such notice shall be mailed to the Supervisor, the Commissioner, the Commission, each working interest owner of the then Participating Area, and the working interest owner or owners of the tract proposed for inclusion.

(d) Each addressee of the notice provided for above shall have thirty (30) days from the date of such notice within which to file objections to the proposed expansion of the Participating Area, and after the lapse of such 30-day period, unless at least two or more working interest owners with a combined participation of at least five percent (5%), based upon total tract participations of the working interest owners in the then Participating Area, file objections with the Operator, the Commissioner and the Supervisor to such proposed expansion, then the expansion shall be subject to approval by the Director and the Commissioner, effective as of 7:00 a.m. on the first day of the month following such approvals. Such tract will then be included within the Participating Area as fully as if initially a part thereof.

(e) If the tract proposed for inclusion within the Participating Area has as the owner of a royalty interest therein, or of an overriding royalty, production payment or other payment based upon production, one other than the United States of America or the State of New Mexico, then the working interest owner or owners of the tract to be included shall during such 30-day period exercise their best efforts to procure a ratification of this unitization by the owner or owners of any such interest. If anyone other than the United States of America or the State of New Mexico is the owner of the basic royalty under the oil and gas lease covering such tract, then unless all of the owners of such royalty sign such a ratification before the expiration of such

30-day period Unit Operator may withdraw such notice of proposed expansion, unless all working interest owners agree to the inclusion of such tract within the Participating Area with a lesser percentage of the basic royalty committed hereto. In any event, the burden of any unsigned royalty interest or overriding royalty, production payment or other such interest shall be borne as hereinafter provided.

There shall be no contraction of the Participating Area, or of any enlarged Participating Area.

Upon any revision of the Participating Area, the revised tract participations of the respective tracts in whole or in part within the Participating Area prior to such revision shall remain in the same ratio one to another.

V

OPERATOR: Continental Oil Company, a Delaware corporation, is hereby designated as Operator for the fully unitized formations underlying the Participating Area, and by signing this instrument in such capacity it agrees and consents to accept the duties and obligations of Operator for the operation, development and production of fully unitized substances as herein provided. Whenever reference is made herein to the Operator, such reference means the Operator acting in that capacity and not as an owner of interests in fully unitized substances, and the term "working interest owner" when used herein shall include or refer to Operator as the owner of a working interest when such an interest is owned by it.

VI

RESIGNATION OR REMOVAL OF OPERATOR: Operator shall have the right to resign at any time, but such resignation shall not become effective so as to release it from the duties and obligations of Operator and terminate Operator's rights as such

for a period of six (6) months after written notice of intention to resign has been given by Operator to all working interest owners, the Commissioner and the Supervisor, unless a new Operator shall have taken over and assumed the duties and obligations of Operator prior to the expiration of said period.

The resignation of Operator shall not release Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation.

The Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the affirmative eighty-five percent (85%) vote of the committed working interest owners (on the basis of participation within the Participating Area) exclusive of the working interest owner who is the Operator. Such removal shall be effective upon notice thereof to the Commissioner and the Supervisor. In the event Operator should sell or otherwise dispose of its working interests within the Participating Area, then the Operator shall be deemed to have resigned, and such resignation and selection of a new operator shall be governed by the provisions of this Article VI and of Article VII.

In all such instances of effective resignation or removal, until a successor to Operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for the performance of the duties of the Operator and shall, not later than thirty (30) days before such resignation or removal becomes effective, appoint a Manager to represent them in any action to be taken hereunder.

The resignation or removal of Operator under this agreement shall not terminate its right, title or interest as the owner of a working interest or other interest in unitized substances, but upon the resignation or removal of Operator

becoming effective, such Operator shall deliver possession of all equipment, books, and records, materials, appurtenances and any other assets, used in conducting the operations hereunder and owned by the working interest owners (including any and all data and information which it might have gained or assembled by reason of its operation of the Participating Area) to the new duly qualified successor Operator or to the Manager if no such new Operator is elected, to be used for the purpose of conducting operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells. Nothing herein contained shall be construed to relieve or discharge any Operator who resigns or is removed hereunder for any liability or duties accruing or performable by it prior to the effective date of such resignation or removal.

#### VII

SUCCESSOR OPERATOR: Whenever the Operator shall tender its resignation or shall be removed as hereinabove provided, the working interest owners shall select a successor Operator by a majority vote of the working interest owners (on the basis of participation within the Participating Area), provided no working interest owner who has been Operator and who has been removed may vote for self-succession. Such selection shall not become effective until (a) an Operator so selected shall accept in writing the duties and responsibilities of Operator, and (b) the notice of selection shall have been delivered to the Commissioner and the Supervisor. If no successor Operator or Manager is selected and qualified as herein provided, the Commissioner and the Director, at their election, may declare this agreement terminated.

#### VIII

ACCOUNTING PROVISIONS AND OPERATING AGREEMENT: Costs

and expenses incurred by Operator in conducting operations hereunder for the production of fully unitized substances shall be paid and apportioned among the working interest owners in accordance with the Grayburg-San Andres Operating Agreement of even date herewith between working interest owners owning working interests in one or more tracts within the Participating Area. No such Grayburg-San Andres Operating Agreement shall be deemed to modify any of the terms and conditions of this agreement or to relieve the Operator of his right or obligation established under this agreement, and in case of any inconsistency or conflict between this agreement and the Grayburg-San Andres Operating Agreement, this agreement shall prevail. Two true copies of any Grayburg-San Andres Operating Agreement executed pursuant to this section shall be filed with the Commissioner and three true copies thereof shall be filed with the Supervisor prior to the approval of this agreement. That certain Cooperative Operating Agreement dated the 1st day of December, 1959, between working interest owners of lands included within the Cooperative Area shall continue in effect as to lands within the Cooperative Area but outside the Participating Area insofar as the Grayburg-San Andres formations are concerned and insofar as all other formations are concerned, to all lands within the Cooperative Area; and in connection with gas injection shall remain in full force and effect as to any gas injection anywhere within the Cooperative Area.

#### IX

RIGHTS AND OBLIGATIONS OF OPERATOR: Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the fully

unitized substances are hereby delegated to and shall be exercised by the Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Operator, and together with this agreement shall constitute and define the rights, privileges and obligations of Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Operator, in its capacity as Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

## X

PLAN OF OPERATIONS: It is recognized and agreed by the parties hereto that all of the lands within the Participating Area are reasonably proved to be productive of fully unitized substances in paying quantities and that the object and purpose of this agreement is to formulate and to put into effect a secondary recovery project in order to effect the greatest recovery of fully unitized substances, prevent waste and conserve natural resources. The parties hereto agree that the Operator may, subject to the consent and approval of a plan of operation by the affirmative vote of eighty percent (80%), based upon participation, of the working interest owners, and by the Supervisor and the Commissioner, inject into the unitized formation, through any well or wells completed therein, brine, water, air, gas, oil or other liquid hydrocarbons, and any one or more other substances, whether produced from the Participating Area or not, and that the location of input wells and the rates of injection therein and the rate of production shall be governed by standards of good geologic and petroleum engineering practices and conservation methods. After commencement of secondary recovery

operations, Operator shall furnish the Commissioner and the Supervisor periodical injection and production reports for each well in the Participating Area. The working interest owners, the Supervisor, and the Commissioner, shall be furnished periodical reports on the progress of the plan of operation and any revisions or changes thereto; provided, however, that any major revisions of the plan of operation involving a basic deviation from the initial plan of operation shall be subject to the consent and approval by the affirmative vote of eighty percent (80%), based upon participation, of the working interest owners, of the Supervisor, and the Commissioner.

The initial plan of operation shall be filed with the Supervisor and the Commissioner concurrently with the filing of this agreement for final approval. Said initial plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor and the Commissioner may determine to be necessary for timely operation consistent herewith. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of operation.

#### XI

TRACT PARTICIPATION: The tract participations assigned to each tract within the Participating Area on Exhibit "B" hereto reflects the percentage of production of fully unitized substances from the Participating Area allocated to each committed tract within the Participating Area. Production of fully unitized substances throughout the Participating Area shall be allocated to the several tracts comprising the same in the proportions shown by such tract participations on Exhibit "B" or on any revision thereof should the Participating Area be revised as hereinabove provided.

For so long as this agreement remains in effect, then if anywhere within the Participating Area there is a well or

wells capable of producing fully unitized substances in paying quantities it will be considered that fully unitized substances are being produced in paying quantities from each tract within the Participating Area insofar as the leases, operating agreements, term royalties, or other like instruments affecting such tract are concerned, and, by the same token, whenever operations are being conducted upon any such tract it will, for the same purposes, be considered as if operations were being conducted upon each tract within the Participating Area.

## XII

TRACTS QUALIFIED FOR UNIT PARTICIPATION: Each tract within the Participating Area has been committed to the Maljamar Cooperative Agreement, as amended, and this agreement shall be effective only when all parties to such Maljamar Cooperative Agreement, as amended, have executed this agreement or a ratification thereof such that the working interest in each such tract is fully committed hereto and all parties to such Maljamar Cooperative Agreement have consented hereto, and only then when this agreement has been approved by the Commissioner and Secretary or his delegate such that the interest of the United States of America and the State of New Mexico, respectively, as Lessors, has been effectively committed hereto as the owner of the basic royalty under any such tract, and shall be effective at 7:00 a.m. on the first day of the month next following the approval by both of such officials.

## XIII

BURDENS OF UNSIGNED ROYALTY: If any owner of a royalty interest or an overriding royalty interest, production payment or other like interest affecting any tract within the Participating Area committed hereto by working interest owners fails to execute or ratify this agreement and commit his interest hereto, then the

working interest owner or owners committing such tract shall, to the extent that actual production is greater than allocated production as to such tract, alone bear the burdens thereof, and to the extent that allocated production is greater than actual production as to such tract, shall alone receive the benefit thereof.

#### XIV

ALLOCATION OF FULLY UNITIZED SUBSTANCES: All fully unitized substances produced and saved from the Participating Area (less, save and except any part of such fully unitized substances used in conformity with good operating practices on fully unitized land for drilling, operating, camp, and other production or development purposes, or otherwise used in operations hereunder pursuant to an approved plan of operation or unavoidably lost) shall be allocated to the various tracts within the Participating Area in accordance with respective tract participation effective hereunder during the respective periods such fully unitized substances were produced as hereinabove provided. The amount of fully unitized substances so allocated to each tract, and only that amount, shall be distributed among or accounted for to the parties executing, consenting to or ratifying this agreement entitled to share in the production from such tract in the same manner, in the same proportions, and upon the same conditions as they would have participated and shared in the production from such tract, or in the proceeds thereof, had this agreement not been entered into, and with the same legal force and effect.

The tracts shown on Exhibits "A" and "B" have been subdivided to the extent known to the parties to reflect a common ownership in any such tract throughout the area thereof, no part of any such tract being owned differently than any other part thereof, both as to the basic royalty, the working interest

and any overriding royalties, production payments, or other burdens based upon production affecting the same. If any error shall have been made in this determination, or if hereafter any assignment is made by any party hereto to an interest covering less than all of any such tract, then in the absence of a recordable instrument executed by the parties to such assignment fixing the division of ownership intended as between themselves, their respective ownership shall be determined upon a surface acre basis.

The fully unitized substances allocated to each tract shall be delivered in kind to the respective working interest owners and parties entitled thereto by virtue of the ownership of oil and gas rights therein or by purchase from such owners. Each working interest owner and the parties entitled thereto by the lease terms or existing contracts shall have the continuing right to receive such production in kind at a common point within the Participating Area and to sell or dispose of the same as it sees fit. Each such party shall have the right to construct, maintain and operate all necessary facilities for that purpose on Participating Area lands, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto. Any extra expenditure incurred by Operator by reason of the delivery in kind of any portion of the fully unitized substances shall be borne by the party receiving the same in kind; however, the federal and state government rights to take royalty in kind shall not be affected. In the event any party hereto shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Participating Area currently as and when produced, then so long as such conditions continue, Operator, for the account and at the expense of such party and in order to avoid curtailing operations on the Participating Area, may sell or otherwise dispose of such production to itself or others on a day-to-day basis at

not less than the prevailing market price in the area for like production, and the account of such party shall be charged therewith as having received such production. The net proceeds, if any, of the fully unitized substances so disposed of by Operator shall be paid to the party entitled thereto.

Any party receiving in kind or separately disposing of all or any part of the fully unitized substances allocated to any tract, or receiving the proceeds therefrom if the same is sold or purchased by Operator, shall be responsible for the payment of all royalty on the lease or leases and tracts contributed hereto by it, and each such party shall hold each other party hereto harmless against all claims, demands and causes of action for such royalty or other such burdens on the lease or leases and tracts contributed by it. Each working interest owner shall be responsible for the payment of royalty and of any overriding royalty, production payment, or like burden upon production affecting the tract or tracts owned by it committed hereto.

#### XV

ROYALTY SETTLEMENT: Royalties due the United States and the State of New Mexico and to other lessors, and any overriding royalties, production payments or like burdens upon production, insofar as they become due on account of the production of fully unitized substances, shall be paid by the respective owners of leasehold interests committed hereto burdened therewith at the rates and in the manner specified in the respective leases, except that as specified in Section XIV (ALLOCATION OF FULLY UNITIZED SUBSTANCES) hereof, such payments shall be determined upon the basis of the production allocated to the respective tracts hereunder rather than upon actual production from any such tract, provided, that for leases on which the royalty rate depends on the daily average production per well, said

average production shall be determined in accordance with the operating regulations as though the participating area were a single consolidated lease; provided further that when such a lease lies in part within and in part outside the Participating Area the daily average production of the two parts shall be established independently. The daily average production on the part inside will be computed as set out above and the daily average production on the part outside shall be computed on the basis of the production and the number of wells on that part in accordance with the operating regulations.

## XVI

ROYALTY ON OUTSIDE SUBSTANCES: If any substance procured in whole or in part from lands not within the Participating Area (other than gas being injected under the terms of the Maljamar Cooperative Agreement as amended, which agreement continues to govern the injection of gas into the fully unitized formations) is injected into the fully unitized formations for the purpose of increasing the ultimate recovery, which shall be in conformance with a plan first approved by the Supervisor and the Commissioner, part or all of such injected substance less deductions for loss from any cause may be withdrawn, royalty free, pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor and the Commissioner. Operator shall cooperate with the Operator's Committee in injecting any gas into the Participating Area. Any gas produced from the fully unitized formation and not re-injected but disposed of shall be a fully unitized substance allocable and distributable as any other fully unitized substance as provided herein.

## XVII

TITLE FAILURE: No person executing, ratifying or consenting to this instrument shall have any right to receive any

part of the fully unitized substances, or the proceeds thereof, produced from the Participating Area in the event his title is lost or fails, and should any question arise with respect to the title of any such party then amounts otherwise accruing to such party may be suspended until the title dispute is finally determined.

## XVIII

MATHEMATICAL ERRORS: It is hereby agreed by all parties to this agreement that Operator is empowered to correct any mathematical errors which might exist in the pertinent exhibits to this agreement upon approval of the Commissioner and the Supervisor.

## XIX

COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer or conveyance of any interest in lands or leases subject hereto shall be subject hereto and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any working interest subject hereto shall be binding upon Operator until the first day of the calendar month after Operator is furnished with the original, or acceptable photostatic or certified copy, of the recorded instrument of transfer; and no assignment or transfer of any royalty interest subject hereto shall be binding upon the working interest owner responsible therefor until the first day of the calendar month after said working interest owner is furnished with the original, or acceptable photostatic or certified copy, of the recorded instrument of transfer.

XX

NONDISCRIMINATION: In connection with the performance of work under this agreement, the Operator agrees to comply with all of the provisions of Section 301(1) to (7) inclusive, of Executive Order 10925 (26 F.R. 1977), which are hereby incorporated by reference in this agreement.

XXI

EFFECTIVE DATE AND TERM: This agreement shall become binding upon each party who executes or ratifies it as of the date of execution or ratification by such party and shall become effective as hereinabove provided in Section XII (TRACTS QUALIFIED FOR UNIT PARTICIPATION).

The term of this agreement shall be for and during the time that fully unitized substances are produced in quantities sufficient to pay for the cost of producing same from wells on unitized land or operations (whether drilling, reworking, testing, or the like) are being conducted in the unitized formation on the Participating Area or any enlargement thereof, all without any single cessation of more than ninety (90) consecutive days, unless sooner terminated by working interest owners in the manner hereinafter provided. No termination of this Supplement No. 5 agreement shall serve to terminate the aforesaid Supplement No. 4 agreement.

This agreement may be terminated with the approval of the Commissioner and the Director by working interest owners owning ninety percent (90%) participation hereunder whenever such working interest owners determine that operations hereunder are no longer profitable, feasible or in the interest of conservation. Notice of any such termination shall be given by Operator to all parties hereto.

Upon termination of this agreement, however effected,

the further development and operation of the Participating Area Hereunder shall be abandoned and thereafter the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate tracts, including and as modified by said Supplement No. 4 agreement if it continues in effect, except in this, that Operator for the account of working interest owners shall have a period of six (6) months after any such termination within which to conduct salvage operations on any tract within the Participating Area.

## XXII

SUBSEQUENT JOINDER: Subsequent joinder of a working interest shall be effected by the working interest owner or owners owning any tract to be committed hereto subsequent to the effective date hereof as in Section I hereof provided, except that the one-year period prescribed in Section XXIII (STATUS OF PARTIES AND SUBSEQUENT JOINDER) of the Supplement No. 4 agreement shall not extend beyond the effective date hereof, and such one-year period is for every purpose shortened to the extent that it shall not extend beyond such effective date, and no such subsequent joinder shall be effective except with the consent of the working interest owners within the Participating Area who have entered into the Grayburg-San Andres Operating Agreement and upon the joining working interest owners' execution of a counterpart thereof.

After the effective date hereof the owner of a royalty, overriding royalty, production payment or like interest in any tract within the Participating Area may commit his or its interest hereto with written consent by the working interest owner responsible therefor by executing a counterpart hereof or by executing an instrument of ratification and consent hereto. The effective date thereof shall be 7:00 a.m. on the first day of the month

next following the filing with Operator of the instrument or instruments evidencing such joinder.

XXIII

COUNTERPARTS: This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be binding upon all those parties who have executed such a counterpart, ratification, or consent hereto with the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described Cooperative Area.

The joinder herein by any party shall be effective to commit all of such party's interests within the Cooperative Area to this agreement, and, as to a working interest owner not yet committed thereto, to the Supplement No. 4 agreement.

XXIV

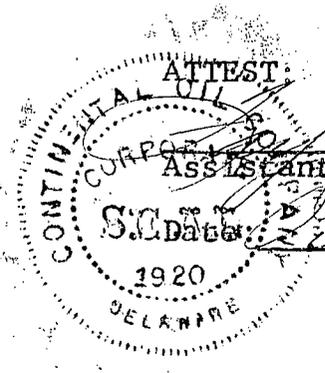
BORDER AGREEMENTS: Subject to the approval of the Supervisor and the Commissioner, the unit operator, with concurrence of ninety percent (90%) of the working interest owners may enter into a border-protection agreement or agreements with the working interest owners of adjacent lands along the exterior boundary of the unit area with respect to the operations in the border area for the maximum ultimate recovery, conservation purposes and proper protection of the parties and interests.

WITNESS the execution hereof, as of the date first hereinabove set forth, the date of execution by each being set opposite its name.

ATTEST:

*[Signature]*  
Assistant Secretary

S. C. Date: *October 3, 1962*



CONTINENTAL OIL COMPANY

By *[Signature]*  
Attorney in Fact

Operator and Working Interest Owner

CARPER DRILLING COMPANY, INC.

ATTEST:

Bliss A. Caskey  
Sec. 1962

Date: \_\_\_\_\_

Date: October 4, 1962

By Stanley Carper  
Its Stanley Carper, President  
Working Interest Owner

Zula Cockburn  
ZULA COCKBURN  
Working Interest Owner

DRILLING AND EXPLORATION COMPANY, INC.

ATTEST:

Wm. C. Thompson  
Wm. C. Thompson Ass't. Secretary  
OCT 3 1962

Date: \_\_\_\_\_

By E. A. Roberts, Jr.  
Its E. A. Roberts, Jr. Vice President  
Working Interest Owner

FAIR N & N TRUST

By Gus W. Arnold  
Trustee

Date: OCT 2 1962

Working Interest Owner

FAIR OIL COMPANY

ATTEST:

Marvin D. Arnold  
Date: OCT 2 1962

Date: \_\_\_\_\_

Date: OCT 2 1962

By James W. Fair  
Its Pres.  
Working Interest Owner

R. W. Fair  
R. W. FAIR  
Working Interest Owner

J. P. Pierce  
J. P. PIERCE  
Working Interest Owner

Geneva Pierce  
GENEVA PIERCE

Virginia Sears

Mary Jo Vandiver  
VIRGINIA SEARS and MARY JO  
VANDIVER

Date: OCT 5 1962

Individually and as Co-Execu-  
trixes of the Estate of Ross  
Sears, Deceased, & Mary Jo Van-  
diver as Trustee under the Will  
of Ross Sears, Deceased

Working Interest Owners

MARY KATHERINE FOWLES  
CHARLOTTE WOODS RUNYAN  
EMILY KATHERINE FLINT BOYD  
ROSEMARY FLINT  
VIRGINIA WOODS SHAW

Date: OCT 5 1962

By Jack B. Shaw  
JACK B. SHAW, their  
Attorney-in-Fact

Working Interest Owners

Date: \_\_\_\_\_

Jewell Smith  
JEWELL SMITH

Working Interest Owner

Date: \_\_\_\_\_

Leon C. Smith  
LEON C. SMITH

Working Interest Owner

KEWANEE OIL COMPANY

ATTEST:

By Jim Harrison  
Its VICE PRESIDENT

Working Interest Owner in formations other than the fully unitized formations committed to the Supplement No. 4 Agreement, hereby consenting to this Amendment and Supplement thereto

PAN AMERICAN PETROLEUM CORPORATION

By James J. [Signature]  
Its ATTORNEY-IN-FACT

Working Interest Owner in formations other than the fully unitized formations committed to the Supplement No. 4 Agreement, hereby consenting to this Amendment and Supplement thereto



ATTEST:  
W. P. DORNAUS  
ASSISTANT SECRETARY  
Date: 10-24-62

ATTEST:  
[Signature]  
Assistant Secretary  
Date: December 11, 1962

STATE OF TEXAS    X  
COUNTY OF TARRANT X

The foregoing instrument was acknowledged before me this 3rd day of October, 1962, by JOHN E. KIRCHER, Attorney in Fact for CONTINENTAL OIL COMPANY, a Delaware corporation, on behalf of said corporation.

My Commission Expires:  
6-1-63

Barbara Lee Nelson  
Notary Public, Tarrant County,  
Texas

STATE OF New Mexico X  
COUNTY OF Edley X

The foregoing instrument was acknowledged before me this 5th day of October, 1962, by Stanley Carper, President, of CARPER DRILLING COMPANY, INC., a New Mexico corporation, on behalf of said corporation.

My Commission Expires:  
OCT 8 1962

Lela Ellicott  
Notary Public, Edley  
County, New Mexico

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this 4th day of October, 1962, by ZULA COCKBURN.

My Commission Expires: June 1, 1963

Romanus Ober  
Notary Public, Tarrant  
County, Texas

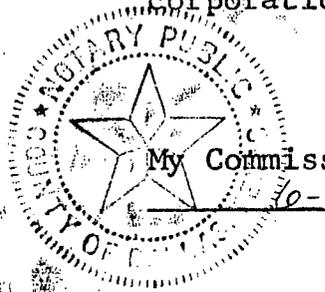


STATE OF Texas  
COUNTY OF Dallas

The foregoing instrument was acknowledged before me this 10th day of October, 1962, by E. A. Roberts, Jr., Vice President, of DRILLING AND EXPLORATION COMPANY, INC., a Delaware corporation, on behalf of said corporation.

My Commission Expires: 10-1-63

Ruby Sherwood  
Notary Public, Dallas  
County, Texas

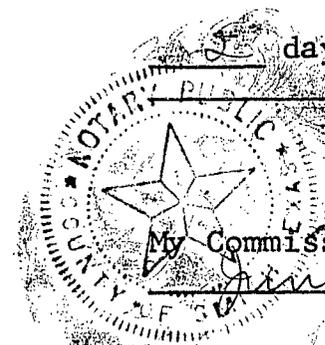


STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me this 2 day of Oct, 1962, by Geo W. Arnold, Trustee of FAIR N & N TRUST.

My Commission Expires: June 1, 1963

Margaret Ober  
Notary Public, Smith  
County, Texas

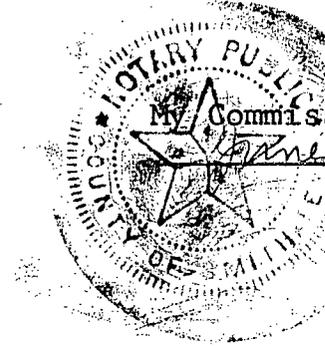


STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me this 2 day of Oct, 1962, by James W. Fair, President of FAIR OIL COMPANY, a Texas corporation, on behalf of said corporation.

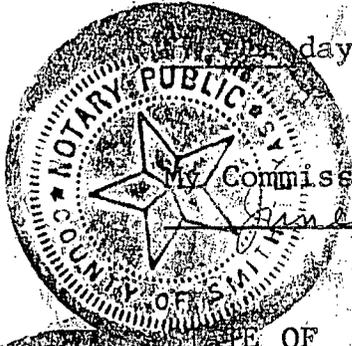
My Commission Expires: June 1, 1963

Margaret Ober  
Notary Public, Smith  
County, Texas



STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me this  
day of Oct-, 1962, by R. W. FAIR

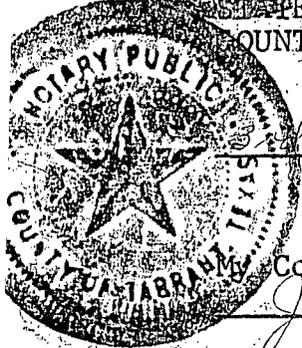


My Commission Expires:  
June 1, 1963

Margaret Ober  
Notary Public, Smith  
County, Texas

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this  
day of October, 1962, by J. P. PIERCE

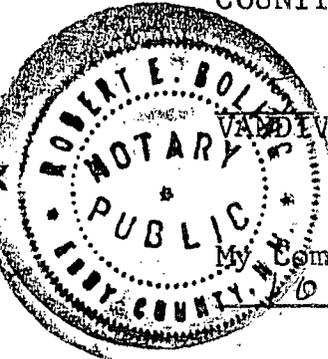


My Commission Expires:  
June 1, 1963

Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

STATE OF New Mexico  
COUNTY OF Eddy

The foregoing instrument was acknowledged before me this  
day of October, 1962, by VIRGINIA SEARS and MARY JO  
VANDIVER, individually, and in the capacities therein stated.

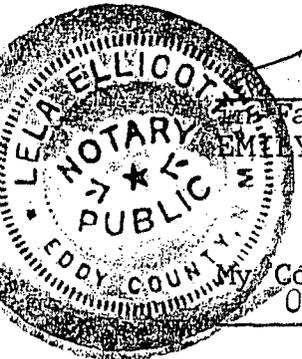


My Commission Expires:  
10-6-63

Robert E. Baling  
Notary Public, Eddy  
County, New Mexico

STATE OF New Mexico  
COUNTY OF Eddy

The foregoing instrument was acknowledged before me this  
day of October, 1962, by JACK B. SHAW, as Attorney-  
in-Fact on behalf of MARY KATHERINE FOWLES, CHARLOTTE WOODS RUNYAN,  
EMILY KATHERINE FLINT BOYD, ROSEMARY FLINT, and VIRGINIA WOODS SHAW.

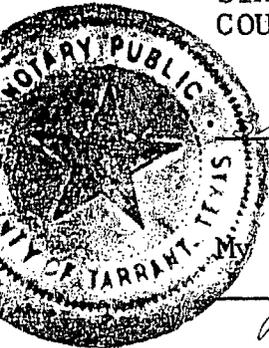


My Commission Expires:  
OCT 8 1962

Lela Elliott  
Notary Public, Eddy  
County, New Mexico

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this  
day of October, 1962, by JEWELL SMITH.



My Commission Expires:  
June 1, 1963

Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this day of October, 1962, by LEON C. SMITH.

My Commission Expires:  
June 1, 1963

Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

STATE OF Oklahoma  
COUNTY OF Tulsa

The foregoing instrument was acknowledged before me this day of October, 1962, by J.M. Harbin,  
VICE PRESIDENT of KEWANEE OIL COMPANY, a Delaware corporation, on behalf of said corporation.

My Commission Expires:  
My Commission Expires July 6, 1964

Kenneth C. Squit  
Notary Public, Tulsa  
County, Oklahoma

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this day of December, 1962, by D. B. MASON, JR.,  
ATTORNEY-IN-FACT of PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

My Commission Expires:  
November 1, 1963

Velma B. Craft VELMA B. CRAFT  
Notary Public, Tarrant  
County, Texas

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this day of \_\_\_\_\_, 1962, by \_\_\_\_\_,  
of \_\_\_\_\_,  
a \_\_\_\_\_ corporation, on behalf of said corporation.

My Commission Expires:  
\_\_\_\_\_

Notary Public, \_\_\_\_\_  
County, \_\_\_\_\_

STATE OF TEXAS  
COUNTY OF TARRANT



The foregoing instrument was acknowledged before me this  
day of March, 1963, by J. P. PIERCE and his  
wife GENEVA PIERCE.

James G. Tilley  
Notary Public, Tarrant  
County, Texas.

My Commission Expires:  
6-1-63

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this  
day of \_\_\_\_\_, 1962, by \_\_\_\_\_.

My Commission Expires:  
\_\_\_\_\_

Notary Public, \_\_\_\_\_  
County, \_\_\_\_\_

EXHIBIT "B"

MALJAMAR COOPERATIVE AGREEMENT

TOWNSHIP 17 SOUTH, RANGE 32 EAST and RANGE 33 EAST  
LEA COUNTY, NEW MEXICO

SCHEDULE SHOWING OWNERSHIP OF OIL AND GAS INTERESTS  
IN THE FULLY UNITIZED FORMATIONS WITHIN THE PARTICIPATING AREA

| TRACT NO.           | DESCRIPTION OF LAND             | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD           | WORKING INT. & PERCENTAGE OWNER | OVERRIDING ROYALTY OWNER & PERCENTAGE   | TRACT PARTICI-PATION |
|---------------------|---------------------------------|--------------|----------------------------|-------------------------------|----------------------------|---------------------------------|---|----------------------|
| 1                   | NW/4 SW/4 Sec. 23<br>T17S, R32E | 40           | LC-029400(a)<br>8-1-59     | USA<br>12.5%<br>step<br>scale | Continental Oil<br>Company | Oil Company - 100%              | Buffalo Petr. Corp.<br>10.937500% (3)<br>Janet M. Jacobsen<br>0.714286%<br>Malcolm T. Mitchell<br>0.714286%<br>Margaret M. Ogden<br>0.714286%<br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535714%<br>Virginia Simon<br>0.535714%<br>Lucretia E. Conlon<br>0.500000%<br>L. Jay Root<br>0.500000%<br>El Paso National<br>Bank, Trustee of<br>Baish Trust Estate<br>2.750000% | 0.350000%            |
| <u>FEDERAL LAND</u> |                                 |              |                            |                               |                            |                                 |   |                      |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND   | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY           | LESSEE OF RECORD             | WORKING INT. & PERCENTAGE           | OVERRIDING ROYALTY OWNER & PERCENTAGE   | TRACT PARTICIPATION |
|-----------|---|--------------|----------------------------|-------------------------|------------------------------|-------------------------------------|---|---------------------|
| 2         | N/2 Sec. 19 and N/2 Sec. 20, T17S, R32E                       | 641.96       | LC-029405(a) 7-1-38        | USA 5%                  | Continental Oil Company      | Continental Oil Company - 100%      | Virginia Simon 0.535714%<br>Malcolm T. Mitchell 0.714286%<br>Janet M. Jacobsen 0.714286%<br>Margaret M. Ogden 0.714286%<br>El Paso National Bank, Trustee of Baish Trust Estate 3.750000%<br>Elizabeth B. King 0.535714%<br>Henry W. Beardsley 0.535714%<br>Buffalo Production Payments (1) | 8.474890%           |
| 3x-1      | S/2 SW/4, NW/4 NE/4, S/2 Sec. 19, and S/2 Sec. 20, T17S, R32E | 761.96       | LC-029405(b) 7-1-48        | USA 12.5% sliding scale | Continental Oil Company      | Continental Oil Company - 100%      | Buffalo Production Payments (1)   | 11.657459%          |
| 3x-2      | SE/4 NW/4, T17S, R32E   | 40           | LC-029405(b) 7-1-48        | USA 12.5%               | Continental Oil Company      | Continental Oil Company - 100%      | Buffalo Production Payments (1)   | 0.197562%           |
| 5         | N/2, SE/4, and E/2 NE/4, T17S, R32E                           | 560          | LC-029410(a) 7-1-39        | USA 5%                  | Carpenter Drilling Co., Inc. | Carpenter Drilling Co., Inc. - 100% | Virginia Simon 0.535714%<br>Malcolm T. Mitchell 0.714286%<br>Janet M. Jacobsen 0.714286%<br>Margaret M. Ogden 0.714286%   | 8.690039%           |

Amended 7-23-63

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND                                       | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD        | WORKING INT. OWNER & PERCENTAGE | OVERRIDING ROYALTY OWNER & PERCENTAGE   | TRACT PARTITION |
|-----------|---|--------------|----------------------------|-------------------------------|-------------------------|---------------------------------|---|-----------------|
| 6X-1      | S/2, NW/4, W/2 NE/4, Sec. 30, T17S, R32E                  | 563.88       | LC-029410(b)<br>7-1-39     | USA<br>12.5%<br>sliding scale | Carper Drly. Co., Inc.  | Carper Drly. Co. - 100%         | NONE<br><br>El Paso National Bank, Trustees of Baish Trust Estate<br>3.750000%<br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535714%   | 7.293779%       |
| 6X-2      | NE/4 NW/4, Sec. 31, T17S, R32E                            | 40.00        | LC-029410(b)<br>7-1-39     | USA<br>12.5%                  | Carper Drly. Co., Inc.  | Carper Drly. Co. - 100%         | NONE  | 0.066182%       |
| 7         | W/2, NE/4, N/2 SE/4 Sec. 21, W/2 NW/4 Sec. 22, T17S, R32E | 640          | LC-029509(a)<br>8-3-29     | USA<br>5%                     | Continental Oil Company | Continental Oil Company - 100%  | Virginia Simon<br>0.535714%<br>First National Bank of Lake George, New York<br>for deposit to the account of<br>Malcolm T. Mitchell<br>0.714286%<br>Janet M. Jacobsen<br>0.714286%<br>Margaret M. Ogden<br>0.714286%<br>El Paso National Bank, Trustee of Baish Trust Estate<br>3.750000% | 11.195394%      |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND   | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD  | WORKING INT. OWNER & PERCENTAGE                 | OVERRIDING ROYALTY OWNER & PERCENTAGE  | TRACT PARTITION  |
|-----------|---|--------------|----------------------------|-------------------------------|---|---|--|------------------|
| 8x        | S/2 SE/4 Sec. 21,<br>SW/4, SE/4 NW/4,<br>S/2 NE/4, NW/4 SE/4<br>Sec. 22, T17S, R32E | 400          | LC-029509 (b)<br>4-1-46    | USA<br>12.5%<br>step<br>scale | Continental<br>Oil Company  | Continental Oil<br>Company - 100%               | Elizabeth B. King<br>0.535714%<br>Henry W. Beardslley<br>0.535714%<br>Buffalo Production<br>Payments (1)   | 4.680417%<br>(1) |
| 9         | E/2 NE/4 Sec. 26,<br>T17S, R32E   | 80           | LC-030437 (a)<br>12-12-39  | USA<br>5%                     | Drilling &<br>Exploration<br>Co., Inc.                              | Drilling & Ex-<br>ploration Co.,<br>Inc. - 100% | Ruth D. Lisle<br>2.343750%<br>Martha Johns Densmore<br>0.703130%<br>Nancy J. Kent<br>0.703130%<br>J. B. Bockman<br>3.750000%<br>S. J. Iverson<br>6.250000% | 0.700000%        |
| 10-B      | SW/4 SW/4 Sec.<br>15, T17S, R32E  | 40           | LC-054687<br>10-15-37      | USA<br>12.5%<br>step<br>scale | W. A. Hudson<br>and E. A.<br>Hudson - 2/3<br>S. J.<br>Iverson - 1/3 | Continental Oil<br>Company - 100%               | Buffalo Production<br>Payments (1)   | 0.250629%        |
| 11        | W/2, SE/4,<br>SW/4 NE/4,<br>NE/4 NE/4 Sec.<br>27, All Sec. 28,<br>T17S, R32E        | 1200         | LC-057210<br>9-1-43        | USA<br>12.5%<br>step<br>scale | Continental<br>Oil Company  | Continental Oil<br>Company - 100%               | Kewanee Production<br>Payments (2)   | 19.847123%       |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND                     | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                    | LESSEE OF RECORD                                   | WORKING INT. & PERCENTAGE                          | OWNER & PERCENTAGE   | TRACT PARTICI-PATION |
|-----------|---|--------------|----------------------------|----------------------------------|--|--|--|----------------------|
| 12        | E/2 SE/4, SW/4 SE/4 Sec. 22, T17S, R32E | 120          | LC-058395 (b)<br>5-15-34   | USA<br>12.5%<br>sliding<br>scale | Fair N&N<br>Trust - 75%<br>Fair Oil<br>Co. - 25%   | Fair N&N<br>Trust - 75%<br>Fair Oil<br>Co. - 25%   | Fair N&N<br>Trust<br>42.000000%*<br>The R.W. Fair<br>Foundation<br>14.000000%**  | 1.412293%            |
| 14        | W/2 NE/4 Sec. 26, T17S, R32E            | 80           | LC-058408 (a)<br>12-12-39  | USA<br>5%                        | Fair Oil<br>Co. - 66.67%<br>R. W. Fair<br>- 33.33% | Fair Oil<br>Co. - 66.67%<br>R. W. Fair<br>- 33.33% | The R.W. Fair<br>Foundation<br>25.000000%**<br>R. W. Fair<br>12.500000%***<br>J. B. Bockman<br>3.750000%<br>Ruth D. Lisle<br>2.343750%<br>Martha Densmore<br>0.703120%<br>W.A. & E.R. Hudson<br>joint operating acct.<br>7.968750%<br>Nancy J. Kent<br>0.703130%<br>First Hutchings-Sealy<br>National Bank, Trustee<br>for Francis B. Moore<br>0.337500%<br>First Hutchings-Sealy<br>National Bank, Gdn.<br>of the estate of John<br>Knox Hutchings Moore<br>and Donald Bartlett<br>Moore, minors<br>0.143440% | 0.717445%            |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND           | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD                                | WORKING INT. OWNER & PERCENTAGE                 | OVERRIDING ROYALTY OWNER & PERCENTAGE  | TRACT PARTITION |
|-----------|-------------------------------|--------------|----------------------------|-------------------------------|---|---|--|-----------------|
| 15x       | NW/4 SE/4 Sec. 26, T17S, R32E | 40           | LC-058408(b)<br>12-12-39   | USA<br>12.5%<br>sliding scale | Fair Oil<br>CO. - 66.67%<br>R. W. Fair - 33.33% | Fair Oil<br>CO. - 66.67%<br>R. W. Fair - 33.33% | W.A. & E.R. Hudson<br>joint operating acct.<br>9.375000%<br>The R.W. Fair<br>Foundation<br>25.000000%***<br>R. W. Fair<br>12.500000%***          | 0.278891%       |
| 17x       | NW/4 NE/4 Sec. 34, T17S, R32E | 40           | LC-058514<br>9-22-39       | USA<br>12.5%<br>sliding scale | Continental Oil Company                         | Continental Oil Company - 100%                  | Production Payment to Buffalo Petr. Corp. of \$50,000 out of<br>5.468750%*** (3)<br>Kewanee Production Payments (2)                              | 0.172795%       |
| 18        | S/2 SE/4 Sec. 23, T17S, R32E  | 80           | LC-058697(a)<br>8-11-39    | USA<br>5%                     | Continental Oil Company                         | Continental Oil Company - 100%                  | Buffalo Petr. Corp.<br>10.937500% (3)<br>Virginia Simon<br>0.535714%<br>El Paso National<br>Bank, Trustee for<br>Balsh Trust Estate<br>2.750000% | 0.572727%       |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND   | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD        | WORKING INT. OWNER & PERCENTAGE | OVERRIDING ROYALTY OWNER & PERCENTAGE   | TRACT PARTITION |
|-----------|---|--------------|----------------------------|-------------------------------|-------------------------|---------------------------------|---|-----------------|
| 19*       | N/2, N/2 S/2, SE/4 SE/4 Sec. 25, T17S, R32E, NW/4, N/2 SW/4 Sec. 30, T17S, R33E | 766.39       | LC-058697 (b)<br>8-11-39   | USA<br>12.5%<br>sliding scale | Continental Oil Company | Continental Oil Company - 100%  | Buffalo Petr. Corp. 5.874647%<br>5.468750%*** (3)<br>Kewanee Production Payments (2)  |                 |
| 20        | N/2 SE/4, NE/4 SW/4, S/2 SW/4 Sec. 23 and S/2 NW/4 Sec. 26, T17S, R32E          | 280          | LC-058698 (a)<br>8-11-39   | USA<br>5%                     | Continental Oil Company | Continental Oil Company - 100%  | Buffalo Petr. Corp. 2.204034%<br>10.937500% (3)<br>Virginia Simon 0.535714%<br>El Paso National Bank, Trustee for Baish Trust Estate 2.750000%<br>Elizabeth B. King 0.535714% |                 |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND                   | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                    | LESSEE OF RECORD        | WORKING INT. OWNER & PERCENTAGE  | OVERRIDING ROYALTY OWNER & PERCENTAGE  | TRACT PARTITION |
|-----------|---------------------------------------|--------------|----------------------------|----------------------------------|-------------------------|--|--|-----------------|
| 21x       | NW/4 and S/2 NE/4 Sec. 23, T17S, R32E | 240          | LC-058698 (b)<br>8-11-39   | USA<br>12.5%<br>sliding<br>scale | Continental Oil Company | Continental Oil Company - 100%   | Buffalo Petr. Corp.<br>5.468750%(3)<br>Kewanee Production Payments (2)   | 1.371455%       |
| 22        | SW/4 Sec. 26, T17S, R32E              | 160          | LC-058699 (a)<br>8-11-39   | USA<br>5%                        | Ross Sears              | Virginia Sears and Mary Jo Vandiver, Co-executrixes of the estate of Ross Sears, dec'd.<br>J. P. Pierce<br>16.667000%<br>Zula Cockburn<br>50.000000%<br>Jewell Smith<br>12.499000%<br>Leon C. Smith<br>4.167000% | Buffalo Petr. Corp.<br>10.937500%(3)<br>El Paso National Bank, Trustee for Baish Trust Estate<br>2.750000%<br>Malcolm T. Mitchell<br>0.714270%<br>Margaret Mitchell<br>Ogden<br>0.714270%<br>Janet M. Jacobsen<br>0.714270%<br>Virginia Simon<br>0.535700% | 2.400000%       |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND           | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                    | LESSEE OF RECORD        | WORKING INT. OWNER & PERCENTAGE | OVERRIDING ROYALTY OWNER & PERCENTAGE  | TRACT PARTICI-PATION |
|-----------|-------------------------------|--------------|----------------------------|----------------------------------|-------------------------|---------------------------------|--|----------------------|
| 23x       | NE/4 NW/4 Sec. 34, T17S, R32E | 40           | LC-058728 (b)<br>9-22-39   | USA<br>12.5%<br>sliding<br>scale | Continental Oil Company | Continental Oil - 100%          | Kewanee Production<br>Payments (2)<br><br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535700%<br>L. Jay Root<br>0.500000%<br>Lucretia E. Conlon<br>0.500000%   | 0.248794%            |
| 24x       | N/2 Sec. 33, T17S, R32E       | 320          | LC-059001 (a)<br>9-22-39   | USA<br>5%                        | Continental Oil Company | Continental Oil - 100%          | Virginia Simon<br>0.535714%<br>El Paso National Bank, Trustee for Baish Trust Estate<br>3.750000%<br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535714%<br>Malcolm T. Mitchell<br>0.714286%<br>Janet M. Jacobsen<br>0.714286%<br>Margaret M. Ogden<br>0.714286%<br>Kewanee Production<br>Payments (2) | 2.478006%            |
| 25        | W/2 NW/4 Sec. 34, T17S, R32E  | 80           | LC-059002<br>9-22-39       | USA<br>12.5%                     | Continental Oil Company | Continental Oil - 100%          | Kewanee Production<br>Payments (2)   | 0.624604%            |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND          | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                 | LESSEE OF RECORD    | WORKING INT. OWNER & PERCENTAGE   | OVERRIDING ROYALTY OWNER & PERCENTAGE  | TRACT PARTICIPATION |
|-----------|------------------------------|--------------|----------------------------|-------------------------------|---------------------|---|--|---------------------|
| 27        | W/2 NE/4 Sec. 29, T17S, R32E | 80           | LC-060199(a)<br>7-1-39     | USA<br>5%<br>sliding scale    | Virginia Woods Shaw | Virginia Woods Shaw<br>25%<br>Charlotte Woods Runyan<br>25%<br>Emily Katherine Flint Boyd and Rosemary Flint<br>25%<br>Mary Katherine Fowles<br>25% | Virginia Simon<br>0.535714%<br>Malcolm T. Mitchell<br>0.714286%<br>Janet M. Jacobsen<br>0.714286%<br>Margaret M. Ogden<br>0.714286%<br>El Paso National Bank, Trustee for Baish Trust Estate<br>3.750000%<br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535714% | 1.459726%           |
| 28        | E/2 NE/4 Sec. 30, T17S, R32E | 80           | LC-060199(b)<br>7-1-39     | USA<br>12.5%<br>sliding scale | Virginia Woods Shaw | Virginia Woods Shaw<br>25%<br>Charlotte Woods Runyan<br>25%<br>Emily Katherine Flint Boyd and Rosemary Flint<br>25%<br>Mary Katherine Fowles<br>25% | Oil Payment in the amount of \$126,636 payable out of 20% of 7/8 reserved by Mrs. E. G. Woods  | 1.340274%           |

EXHIBIT "B" (continued)

| TRACT NO. | DESCRIPTION OF LAND                            | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY                    | LESSEE OF RECORD                           | WORKING INT. & PERCENTAGE                    | OWNER & PERCENTAGE  | TRACT PARTICI-PATION |
|-----------|--|--------------|----------------------------|----------------------------------|--|--|---|----------------------|
| 29x       | Lot 4 Sec. 18, and E/2 E/2 Sec. 17, T17S, R32E | 200.97       | LC-060329<br>12-1-58       | USA<br>12.5%<br>sliding<br>scale | Continental Oil Company                    | Continental Oil Company - 100%               | Buffalo Petr. Corp.<br>7.000000%(3)<br>Kewanee Production<br>Payments (2)   | 1.352261%            |
| 32        | N/2 NW/4 Sec. 26, T17S, R32E                   | 80           | LC-061841<br>8-11-39       | USA<br>5%                        | Continental Oil Company                    | Continental Oil Company - 100%               | Virginia Simon<br>0.535714%<br>El Paso National<br>Bank, Trustee for<br>Baish Trust Estate<br>2.750000%<br>Elizabeth B. King<br>0.535714%<br>Henry W. Beardsley<br>0.535714%<br>Malcolm T. Mitchell<br>0.714286%<br>Janet M. Jacobsen<br>0.714286%<br>Margaret M. Ogden<br>0.714286%<br>Lucretia E. Conlon<br>0.500000%<br>L. Jay Root<br>0.500000%<br>Kewanee Production<br>Payments (2) | 0.664147%            |
| 34        | NW/4 NE/4, SE/4 NE/4 Sec. 27, T17S, R32E       | 80           | LC-058396(b)<br>5-15-34    | USA<br>12.5%<br>sliding<br>scale | Fair N&N Trust - 75%<br>Fair Oil Co. - 25% | Fair N&N Trust<br>75%<br>Fair Oil Co.<br>25% | Fair N&N Trust<br>42.000000%*<br>The R. W. Fair<br>Foundation<br>14.000000%**   | 0.991371%            |

EXHIBIT "B" (continued)

| TRACT NO.  | DESCRIPTION OF LAND                     | NO. OF ACRES | SERIAL NO. & DATE OF LEASE | BASIC ROYALTY           | LESSEE OF RECORD        | WORKING INT. OWNER & PERCENTAGE | OVERRIDING ROYALTY OWNER & PERCENTAGE                       | TRACT PARTICIPATION |
|--|---|--------------|----------------------------|-------------------------|-------------------------|---------------------------------|---|---------------------|
| 28 FEDERAL TRACTS, CONTAINING 7,775.16 ACRES, or 96.524% OF PARTICIPATING AREA |   |              |                            |                         |                         |                                 |   |                     |
| <u>STATE LAND</u>  |   |              |                            |                         |                         |                                 |   |                     |
| 39X-1  | N/2 NW/4 Sec. 16, T17S, R32E            | 80           | B-155 8-14-31              | State of New Mex. 12.5% | Continental Oil Company | Continental Oil Company - 100%  | Texaco Inc. 6.250000%<br>Kewanee Production Payments (2)    | 0.466529%           |
| 39X-2  | SW/4 NW/4, S/2 SW/4 Sec. 16, T17S, R32E | 120          | B-155 8-14-31              | State of New Mex. 12.5% | Continental Oil Company | Continental Oil Company - 100%  | Texaco Inc. 6.250000%***<br>Kewanee Production Payments (2) | 1.022878%           |
| 41X  | SW/4 SE/4 Sec. 16, T17S, R32E           | 40           | B-2366-9 1-8-34            | State of New Mex. 12.5% | Continental Oil Company | Continental Oil Company - 100%  | Buffalo Production Payments (1)                             | 0.412930%           |
| 42   | SE/4 SE/4 Sec. 16, T17S, R32E           | 40           | B-4062 4-3-35              | State of New Mex. 12.5% | Continental Oil Company | Continental Oil Company - 100%  | Buffalo Production Payments (1)                             | 0.530519%           |

4 STATE TRACTS, CONTAINING 280 ACRES, OR 3.476% OF PARTICIPATING AREA

(1) The interests so marked are those production payments reserved in that certain Assignment and Conveyance of Oil and Gas Properties and Agreement with Respect Thereto between Buffalo Oil Company, as Assignor, and Continental Oil Company, as Assignee, dated August 12, 1958, and recorded in the records of Lea County, New Mexico, Miscellaneous Book 138, Page 1, and all of such interests are being committed hereto by the party or parties owning the same or their mortgagees, trustees or others having the power to commit same.

(2) The interest so marked are those production payments reserved in that certain Assignment and Conveyance of Oil and Gas Properties and Agreement with Respect Thereto between Kewanee Oil Company, as Assignor, and Continental Oil Company, as Assignee, dated December 14, 1959, and recorded in Miscellaneous Book 181, Page 375, in the records of Lea County, New Mexico, and all of such interests are being committed hereto by the party or parties owning the same or their mortgagees, trustees or others having the power to commit same.

(3) The interests so marked are those formerly owned by Buffalo Petroleum Corporation which were liquidated January 1, 1962, and its assets distributed in kind to its stockholders. These interests are now owned by the following in the indicated percentages:

|   |         |
|---|---------|
| Charles S. Taubman  | 6.545%  |
| M. B. Taubman   | 10.529% |
| Janice L. Taubman   | .204%   |
| M. B. Taubman, as Custodian for Richard Taubman under the Oklahoma Uniform Gifts to Minors Act  | .407%   |
| M. B. Taubman, as Custodian for Anne Taubman under the Oklahoma Uniform Gifts to Minors Act   | .407%   |
| Morris B. Taubman and Janice L. Taubman, Trustees for Richard Taubman under the Richard Taubman Accumulation Trust dated the 1st day of April, 1959 | .582%   |
| Morris B. Taubman and Janice L. Taubman, Trustees for Anne Taubman under the Anne Taubman Accumulation Trust dated the 1st day of April, 1959       | .582%   |
| M. I. Taubman   | 4.508%  |
| M. I. Taubman, as Custodian for Deborah Taubman under the Oklahoma Uniform Gifts to Minors Act  | .174%   |
| M. I. Taubman, as Custodian for Elizabeth Taubman under the Oklahoma Uniform Gifts to Minors Act  | .175%   |
| M. I. Taubman, as Custodian for William David Taubman under the Oklahoma Uniform Gifts to Minors Act  | .174%   |
| M. I. Taubman, as Custodian for Daniel M. Taubman under the Oklahoma Gifts to Minors Act  | .175%   |

|   |        |
|---|--------|
| Louis Taubman   | 9.395% |
| Louis Taubman, Ruthe S. Taubman and Morris Taubman, Trustees of the Ruthe and Louis Taubman Foundation  | .145%  |
| Louis Taubman, Custodian for Maurine Taubman under the Oklahoma Uniform Gifts to Minors Act   | .407%  |
| Louis Taubman, Custodian for Lawrence Taubman under the Oklahoma Uniform Gifts to Minors Act  | .407%  |
| Ruthe S. Taubman, Custodian for Lawrence Nathan Taubman under the Oklahoma Uniform Gifts to Minors Act  | .349%  |
| Ruthe S. Taubman, Custodian for Maurine Taubman under the Oklahoma Uniform Gifts to Minors Act  | .349%  |
| Louis Taubman and Ruthe S. Taubman, Trustees for Lawrence Nathan Taubman under the Lawrence Nathan Taubman Accumulation Trust dated the 5th day of February, 1960 | .582%  |
| Louis Taubman and Ruthe S. Taubman, Trustees for Maurine Taubman under the Maurine Taubman Accumulation Trust dated the 5th day of February, 1960                 | .582%  |
| Ruthe S. Taubman  | .495%  |
| Robert M. Taubman   | 4.508% |
| Robert M. Taubman, Custodian for Hilary Lu Taubman under the Oklahoma Uniform Gifts to Minors Act   | .174%  |
| Robert M. Taubman, Custodian for Sara Katherine Taubman under the Oklahoma Uniform Gifts to Minors Act  | .175%  |
| Robert M. Taubman, Custodian for Rebecca Melanie Taubman under the Oklahoma Uniform Gifts to Minors Act   | .174%  |
| Robert M. Taubman, Custodian for Andrea Minda Taubman under the Oklahoma Uniform Gifts to Minors Act  | .175%  |
| Rosalie Taubman Shalom  | 3.112% |
| David B. Shalom, Custodian for Karen Paula Shalom under the Oklahoma Uniform Gifts to Minors Act  | .698%  |

Sophia Taubman

23.437%

This interest has been assigned to the following parties in the proportion set opposite their names subject to a production payment in the amount of \$703,110.00, and other considerations as set forth in the instrument entitled "Assignment of Overriding Royalty Reserving Production Payment" dated January 15, 1962, payable out of 95% of the monies accruing to the interests assigned:

|                        |          |
|------------------------|----------|
| Charles S. Taubman     | 12.3467% |
| M. B. Taubman          | 38.2667% |
| M. I. Taubman          | 12.3466% |
| Louis Taubman          | 12.3467% |
| Robert M. Taubman      | 12.3466% |
| Rosalie Taubman Shalom | 12.3467% |

Sophia Taubman, Morris Taubman and National Bank of Tulsa, Co-Executrix and Co-Executors of the Estate of Herman Paul Taubman, Deceased

30.374%

This interest has been assigned to the following parties in the proportion set opposite their names subject to a production payment in the amount of \$911,220.00, and other consideration as set forth in the instrument entitled "Assignment of Overriding Royalty Reserving Production Payment" dated January 15, 1962, payable out of 95% of the monies accruing to the interests assigned:

|                        |     |
|------------------------|-----|
| Charles S. Taubman     | 1/5 |
| M. I. Taubman          | 1/5 |
| Louis Taubman          | 1/5 |
| Robert M. Taubman      | 1/5 |
| Rosalie Taubman Shalom | 1/5 |

- \* - to be charged against working interest of Fair N&N Trust only.
- \*\* - to be charged against working interest of Fair Oil Company only.
- \*\*\* - to be charged against working interest of R. W. Fair only.
- \*\*\*\* - variable, dependent upon royalty rate.
- \*\*\*\*\* - subject to increase, as to oil, to 9.375% in accordance with terms of instrument dated November 13, 1940, recorded in Book 23, Page 253, in the records of Lea County, New Mexico.

CERTIFICATION - DETERMINATION  
SUPPLEMENTAL AND AMENDATORY AGREEMENT  
TO MALJAMAR COOPERATIVE AGREEMENT  
(SUPPLEMENT NO. 5)

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Pursuant to the authority vested in the Secretary of Interior as to Federal Lands, under the Act approved February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. Secs. 181, et seq., and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, 43 C.F.R. Sec. 4.611, 12 F.R. 6784, I do hereby:

A. Approve the attached Supplemental and Amendatory Agreement to Maljamar Cooperative Agreement (Supplement No. 5) for the development and operation of the Maljamar Cooperative Agreement Participating Area, Lea County, State of New Mexico.

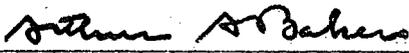
B. Certify and determine that the plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

APR 30 1963

DATED

Acting

  
DIRECTOR, UNITED STATES GEOLOGICAL  
SURVEY.

CERTIFICATE OF APPROVAL

BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

SUPPLEMENTAL AND AMENDATORY AGREEMENT TO  
MALJAMAR COOPERATIVE AGREEMENT  
(SUPPLEMENT NO. 5)

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of agreeage which is described within the attached Agreement, dated July 1, 1962, which has been executed or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area.
- (c) That each beneficiary Institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the area.
- (d) That such agreement is in other respects for the best interests of the State, with respect to State lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Section 7-11-39, 7-11-40, 7-11-41, 7-11-47, 7-11-48, New Mexico Statutes Annotated 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed with seal affixed, this 20 day of January, 1963.

*Esmeralda*  
Commissioner of Public Lands  
of the State of New Mexico



RECEIVED  
FEB 5 1963  
U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

MAY 19 1963

at 11:45 o'clock A. M  
and recorded in Book 511  
Page 743  
Shirley Hooper, Lea County Clerk  
By Russ Newton Deputy

046424

046425

GRAYBURG-SAN ANDRES OPERATING AGREEMENT  
Appurtenant To  
SUPPLEMENTAL AND AMENDATORY AGREEMENT TO  
MALJAMAR COOPERATIVE AGREEMENT  
(Supplement No. 5)

THIS AGREEMENT entered into as of the 1st day of July, 1962, by and between the parties who execute or ratify this agreement,

W I T N E S S E T H:

WHEREAS, the parties hereto as Working Interest Owners have executed, as of the date hereof, that certain agreement entitled "Supplemental and Amendatory Agreement to Maljamar Cooperative Agreement (Supplement No. 5), I Sec. No. 341," hereinafter referred to as the "Supplement No. 5 Agreement," which among other things provides for a separate agreement to be made and entered into by and between Working Interest Owners pertaining to the development and operation of the Participating Area therein defined, and the parties hereto have accordingly agreed upon the terms hereof as the agreement so contemplated in such Supplement No. 5 Agreement;

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, it is agreed as follows:

ARTICLE 1

CONFIRMATION OF SUPPLEMENT NO. 5 AGREEMENT

1.1 Confirmation of Supplement No. 5 Agreement. The Supplement No. 5 Agreement is hereby confirmed and incorporated herein by reference and made a part of this agreement. The terms used in such Agreement are adopted for all purposes of this agreement and are used in the same sense in which they are

used therein. In the event of any conflict between the Supplement No. 5 Agreement and this agreement, the Supplement No. 5 Agreement shall prevail.

## ARTICLE 2

### EXHIBITS

2.1 Exhibits. The following exhibits are incorporated by reference:

2.1.1 Exhibits A and B of the Supplement No. 5 Agreement.

2.1.2 Exhibit C, attached hereto, is a schedule showing each Working Interest Owner's working interest in each tract, the percentage of total Participating Area Participation attributable to each such interest, and the total Participating Area Participation of each Working Interest Owner.

2.1.3 Exhibit D, attached hereto, is the Accounting Procedure applicable to development and operation of the Participating Area. In the event of conflict between this Agreement and Exhibit D, this Agreement shall prevail.

2.1.4 Exhibit E, attached hereto, contains insurance provisions applicable to the development and operation of the Participating Area.

2.2 Revision of Exhibits. Whenever Exhibits A and B are revised, Exhibit C shall be revised according to such revision to be effective as of the effective date of revised Exhibits A and B.

## ARTICLE 3

### SUPERVISION OF OPERATIONS BY WORKING INTEREST OWNERS

3.1 Overall Supervision. Working Interest Owners shall exercise overall supervision and control of all matters

pertaining to the development and operation of the Participating Area pursuant to this agreement and the Supplement No. 5 Agreement. In the exercise of such power each Working Interest Owner shall act solely in its own behalf in the capacity of an individual owner and not on behalf of the owners as an entirety.

3.2 Particular Powers and Duties. The matters to be passed upon and decided by Working Interest Owners shall include, but not be limited to, the following:

3.2.1 Method of Operation. The kind, character and method of operation, including any type of pressure maintenance or secondary recovery program to be employed.

3.2.2 Rates of Production. The determination of quantities of production of Fully Unitized Substances from the Participating Area which are determined to be justified by good engineering principles in the interest of the conservation of Fully Unitized Substances. In this connection, Working Interest Owners have determined that, except upon the affirmative vote of all but two Working Interest Owners owning a combined participation of at least 5%, the average rate of production from the Participating Area shall not exceed 11,600 barrels oil per day plus an additional 58 barrels oil per day for each 40 acre subdivision which may be added to the Participating Area, the rate of production of fully unitized substances other than oil being governed by the production of oil.

3.2.3 Drilling of Wells. The drilling of any well within the Participating Area either for production of Fully Unitized Substances, for use as an injection well, or for other purposes.

3.2.4 Well Workovers and Change of Status. The workover, recompletion, repair, abandonment, or change of status of any well in the Participating Area or use of any such well for injection or other purposes.

3.2.5 Expenditures. Making of any single expenditure in excess of Seven Thousand Five Hundred Dollars (\$7,500.00); provided that approval by Working Interest Owners of the drilling, reworking, drilling deeper or plugging back of any well shall include approval of all necessary expenditures required therefor and for completing, testing and equipping the same, including necessary flow lines, separators and lease tankage.

3.2.6 Disposition of Surplus Facilities. Selling or otherwise disposing of any major item of surplus material or equipment, the current list price of new equipment similar thereto being Two Thousand Five Hundred Dollars (\$2,500.00) or more.

3.2.7 Appearance Before a Court or Regulatory Body. The designating of a representative to appear before any court or regulatory body in matters pertaining to operations; provided, however, that the authorization by Working Interest Owners of the designation of any such representatives shall not prevent any Working Interest Owner from appearing in person or from designating another representative in its own behalf.

3.2.8 Audits. The making of proper audits of the accounts of Operator pertaining to operations hereunder; provided that such audits shall

- (a) not be conducted more than once each year or upon the resignation or removal of Operator; and shall

- (b) be made at the expense of all Working Interest Owners other than the Working Interest Owner designated as Operator; and
- (c) be upon not less than thirty (30) days' written notice to Operator.

3.2.9 Inventories. The taking of periodic inventories under the terms of Exhibit D.

3.2.10 Technical Services. Any direct charges to the joint account for services by consultants or Operator's technical personnel not covered by the overhead charges provided by Exhibit D.

3.2.11 Assignments to Committees. The appointment or designation of the purposes of committees or subcommittees necessary for the study of any problem in connection with operations.

3.2.12 The removal of Operator and the selection of a successor.

3.2.13 The enlargement of the Participating Area.

3.2.14 The adjustment and readjustment of investments.

3.2.15 The termination of the Supplement No. 5 Agreement.

#### ARTICLE 4

##### MANNER OF EXERCISING SUPERVISION

4.1 Designation of Representatives. Each Working Interest Owner shall advise Operator in writing the names and addresses of its representative and alternate authorized to represent and bind it in respect to any matter pertaining to the development and operation of the Participating Area. Such representative or alternate may be changed from time to time by written notice to Operator.

4.2 Meetings. All meetings of Working Interest Owners for the purpose of considering and acting upon any matter pertaining to the development and operation of the Participating Area shall be called by Operator upon its own motion or at the request of one or more Working Interest Owners having a total Participating Area Participation of not less than two percent (2%). No meeting shall be called on less than fourteen (14) days' advance written notice, with agenda for the meeting attached. The Working Interest Owners attending such meeting shall not be prevented from amending items included in the agenda or from discussing such amended item or from discussing other items presented at such meeting; provided, however, that no final action shall be taken at such meeting on any item not included in the agenda of such meeting unless all Working Interest Owners are present or represented. The representative of Operator shall be chairman of each meeting.

4.3 Voting Procedure. Working Interest Owners shall act upon and determine all matters coming before them as follows:

4.3.1 Voting Interest. In voting on any matter each Working Interest Owner shall have a voting interest equal to its Participating Area Participation as set out in Exhibit C.

4.3.2 Vote Required--Generally. Except as may otherwise be provided herein or in the Supplement No. 5 Agreement, Working Interest Owners shall act upon and determine all matters coming before them by the affirmative vote of fifty-one percent (51%) or more voting interest, provided, that should any one Working Interest Owner own more than fifty percent (50%) voting interest, its vote must be supported by the vote of two (2) or more Working Interest Owners having a combined voting interest of at least four

percent (4%).

4.3.3 Vote at Meeting by Nonattending Working Interest Owners. Any Working Interest Owner not represented at a meeting may vote on any item included in the agenda of the meeting by letter or telegram addressed to the chairman of the meeting provided such vote is received prior to the submission of such item to vote. Such vote shall not be counted with respect to any item on the agenda which is amended at the meeting.

4.3.4 Poll Votes. Working Interest Owners may decide any matter by vote taken by letter or telegram, provided the matter is first submitted in writing to each Working Interest Owner and no meeting on the matter is called as provided in Article 4.2, within seven (7) days after such proposal is dispatched to Working Interest Owners. Operator will give prompt notice of the results of such voting to all Working Interest Owners. The approval of an Authority for Expenditure circulated by Operator hereunder shall constitute a vote for the project contemplated thereby as fully as if it constituted an affirmative vote to a letter poll.

## ARTICLE 5

### INDIVIDUAL RIGHTS AND PRIVILEGES OF WORKING INTEREST OWNERS

5.1 Reservation of Rights. Working Interest Owners severally reserve to themselves all their rights, power, authority and privileges, except as expressly provided in this agreement and the Supplement No. 5 Agreement.

5.2 Specific Rights. Each Working Interest Owner shall have, among others, the following specific rights and

privileges:

5.2.1 Access to Participating Area. Access to the Participating Area at all reasonable times to inspect the operations hereunder and all wells and records and data pertaining thereto.

5.2.2 Reports by Request. The right to receive from Operator, upon written request, copies, prepared subsequent to the request, of: (1) all reports to any governmental agency, (2) reports of crude oil runs and stocks, (3) inventory reports, and (4) all other data pertaining to operations hereunder.

## ARTICLE 6

### OPERATOR

6.1 Initial Operator. Continental Oil Company is hereby designated as Operator.

6.2 Resignation or Removal. Operator may resign or be removed and a successor Operator selected as in the Supplement No. 5 Agreement provided.

## ARTICLE 7

### POWERS AND DUTIES OF OPERATOR

7.1 Exclusive Right to Operate. Subject to the provisions of this agreement and to the orders, directions and limitations rightfully given or imposed by Working Interest Owners, Operator shall have the exclusive right and be obligated to develop and operate the Participating Area for the production of Fully Unitized Substances.

7.2 Workmanlike Conduct. Operator shall conduct all operations hereunder in a good and workmanlike manner and, in the absence of specific instructions from Working Interest Owners, shall have the right and duty to conduct such operations in the same manner as would a prudent operator under the same or

similar circumstances. Operator shall freely consult with Working Interest Owners and keep them advised of all matters arising in connection with such operations which Operator, in the exercise of its best judgment, considers important. Operator shall not be liable to Working Interest Owners for damages unless such damages result from the gross negligence or willful misconduct of Operator.

7.3 Liens and Encumbrances. Operator shall keep the lands and leases in the Participating Area free from all liens and encumbrances occasioned by its operations hereunder, except the lien of Operator granted hereunder.

7.4 Employees. The number of employees used by Operator in conducting operations hereunder, the selection of such employees, the hours of labor, and the compensation for services to be paid any and all such employees shall be determined by Operator. Such employees shall be the employees of Operator.

7.5 Records. Operator shall keep true and correct books, accounts and records of its operations hereunder.

7.6 Reports to Working Interest Owners. Operator shall furnish to each Working Interest Owner periodic reports of the development and operation of the Participating Area.

7.7 Reports to Governmental Authorities. Operator shall make all reports to governmental authorities that it has the duty to make as Operator.

7.8 Engineering and Geological Information. Operator shall furnish to each Working Interest Owner, upon written request, a copy of the log of, and copies of engineering and geological data pertaining to, wells drilled by Operator.

7.9 Expenditures. Operator is authorized to make single expenditures not in excess of Seven Thousand Five Hundred Dollars (\$7,500.00) without prior approval of Working Interest

Owners.

7.10 Settlements. Operator may settle any single damage claim not involving an expenditure in excess of Two Thousand Five Hundred Dollars (\$2,500.00) provided such payment is a complete settlement of such claim.

## ARTICLE 8

### TAXES

8.1 Ad Valorem Taxes. Operator, after consulting with Working Interest Owners, shall make and file for ad valorem tax purposes all necessary renditions and returns with the proper taxing authorities or governmental subdivisions covering all real and personal property of each Working Interest Owner within the Participating Area and used in connection with the development and operation of the Participating Area. Any Working Interest Owner dissatisfied with any proposed rendition or assessment of its interest in real or personal property shall have the right, at its own expense, to protest and resist the same. All such ad valorem taxes due and payable on account of real and personal property of each Working Interest Owner located within the Participating Area and used in connection with operations shall be paid by Operator for the joint account in the same manner as other costs and expenses of operations.

8.2 Direct Taxes and Assessments. Each Working Interest Owner shall pay or cause to be paid all production, severance, ad valorem production, conservation, school, gathering and other direct taxes and assessments imposed upon or on account of the production or handling of its share of Fully Unitized Substances.

## ARTICLE 9

### INSURANCE

9.1 Insurance. Operator shall carry, with respect

to operations subject to this agreement:

9.1.1 Workmen's Compensation and Employer's Liability Insurance as required by the laws of the State in which operations hereunder are conducted.

9.1.2 Such other insurance as set forth in Exhibit E.

## ARTICLE 10

### ADJUSTMENT OF INVESTMENTS

10.1 Personal Property Taken Over. Upon the effective date hereof, Working Interest Owners shall deliver to Operator possession of:

10.1.1 Wells and Casing. All wells completed in the Fully Unitized Formations together with the casing therein, including any wells being used as injection wells for the injection of gas or water, whether or not any such well is a lease line well or for other reasons is owned on some other than a lease basis.

10.1.2 Well and Lease Equipment. The tubing in each such well, together with the wellhead connections thereon, and all other lease and operating equipment used in the operation of such wells which Working Interest Owners determine is necessary or desirable for conducting operations; and

10.1.3 Records. A copy of all production and well records pertaining to such wells.

10.2 Inventory and Evaluation of Personal Property. Working Interest Owners will at the expense of the joint account, and as of the effective date, inventory all wells and well and lease equipment delivered to the Operator as provided in Article 10.1.2. The inventory will include all tangible property

classified as controllable equipment. For the purpose of inventory and adjustment of investment, sucker rods and tubing under 2 inches in the wells will also be considered as controllable but will not be considered controllable in future accounting. Non-controllable equipment except items listed above will not be included on the inventory but may nevertheless be taken over by the unit if in use on the property. The distinction between controllable and noncontrollable equipment will be based on the material classification manual prepared in 1960 by the Petroleum Accountants Society of Oklahoma. The condition of the equipment will be indicated on the inventory and priced in accordance with the basis prescribed in section III, paragraph 2 of Exhibit D attached. The inventory and evaluation will be presented to the Working Interest Owners within ninety (90) days after the taking of the inventory. Upon approval by the Working Interest Owners of the inventory and evaluation of the equipment and personal property, the Operator will furnish each Working Interest Owner a copy thereof showing only those items which it has been decided to retain and the value of each item.

10.3 Investment Adjustment. Upon approval by Working Interest Owners of such inventory and evaluation, each Working Interest Owner shall be credited with the value of its interest in all personal property so taken over by Operator under Article 10.1.2, and charged with an amount equal to that obtained by multiplying the total value of all such property so taken over by Operator under Article 10.1.2 by such Working Interest Owner's Participating Area Participation, as shown on Exhibit C. If the charge against any Working Interest Owner is greater than the amount credited to such Working Interest Owner, the resulting net charge shall be paid and in all other respects be treated as any other item of expense chargeable against such Working Interest Owner. If the credit to any Working Interest

Owner is greater than the amount charged against such Working Interest Owner, the resulting net credit shall be paid to such Working Interest Owner by Operator out of funds received by it in settlement of the net charges described above.

10.4 General Facilities. The acquisition of warehouses, warehouse stocks, lease houses, camps, facility systems, and office buildings necessary for operations hereunder shall be by negotiation by and between the owners thereof and Operator, subject to the approval of Working Interest Owners, except in this, that those facilities procured in anticipation of a future waterflood by the parties hereto (including, but not limited to, water leases, water rights, and water wells and equipment) shall be delivered to Operator, who shall value the same at cost, and there shall be an adjustment of investment to the extent that the former ownership thereof differs from the Participating Area Participation of the parties, and such facilities will be owned as other assets procured hereunder for the joint account.

10.5 Ownership of Personal Property and Facilities. Each Working Interest Owner, individually, shall by virtue hereof own an undivided interest in all personal property and facilities taken over or otherwise acquired by Operator pursuant to this agreement equal to its Participating Area Participation, shown on Exhibit C.

10.6 Adjustment of Investments Upon Enlargement of Participating Area. Whenever the Participating Area is enlarged pursuant to the provisions of the Supplement No. 5 Agreement, the working interest owner or owners of the tract to be included within the Participating Area shall negotiate with Operator, with the concurrence of Working Interest Owners, an investment adjustment. The items covered by Articles 10.1.1, 10.1.2 and 10.1.3 shall be delivered to Operator upon the effective date of any such enlargement, and an inventory and evaluation of the

personal property located upon the tract so to be included shall be made by Working Interest Owners, including the working interest owner or owners of the tract so to be included in the enlarged Participating Area. An investment adjustment, on account of leasehold equipment situated upon the tract so to be included within the Participating Area as covered by Article 10.1.2, shall be made in accordance with Article 10.3, based upon the resulting revised participations of Working Interest Owners in the enlarged Participating Area, using the inventory and evaluation of such items so then made and the inventory and evaluation theretofore made under Article 10.2 for the Participating Area as it existed prior to such enlargement. The working interest owner or owners of the tract so to be included in the enlarged Participating Area shall either pay to Operator, for the account and benefit of Working Interest Owners, the amount to which they would be entitled under such adjustment, or Operator shall pay the working interest owner or owners of such tract the amount to which it or they would be entitled as the case may be, any amount paid to the owner or owners of such tract to be charged to the Working Interest Owners of the Participating Area as it existed immediately prior to such enlargement in proportion to their relative participations, and payments for such amounts, if any, shall be paid by such Working Interest Owners at the time and in the method provided for the payment of operating expenses hereunder. If at the time of any such enlargement Operator, for the account of Working Interest Owners, has incurred costs in connection with the drilling or conversion of injection wells, the drilling of source water wells, the laying of water lines, water treating facilities, injection compressors and equipment, and other facilities designed for use in connection with Participating Area operations, then the total of such costs (including overhead charges, if any) shall be

determined and a reasonable allowance for depreciation will be made and the present real value thereof, based upon costs less reasonable depreciation, shall be determined by Working Interest Owners, and the working interest owner or owners of the tract so to be included within the enlarged Participating Area shall pay to Operator, for the account of Working Interest Owners, an amount equal to its or their participation in the enlarged Participating Area times the present real value of all such Participating Area facilities.

## ARTICLE 11

### DEVELOPMENT AND OPERATING COSTS

#### 11.1 Basis of Charge to Working Interest Owners.

Operator initially shall pay and discharge all costs and expenses incurred in the development and operation of the Participating Area. Working Interest Owners shall reimburse Operator for all such costs and expenses, in proportion to their respective Participating Area Participation shown on Exhibit C. All charges, credits and accounting for costs and expenses shall be in accordance with Exhibit D. In addition to the charges provided in Exhibit D, Operator shall be allowed a construction overhead charge applicable only to and during the period of construction of facilities, both initially and from time to time thereafter, where the cost of any such construction computed as provided herein and in Exhibit D exceeds Twenty-five Thousand Dollars (\$25,000.00). The drilling of injection wells, the conversion to injection wells, and the drilling of source water wells shall not be included in determining the costs of any such facility construction, and "facility," as used in this "construction overhead" provision, shall be limited to water mains, water meters, water treating and pumping equipment, injection supply and return lines, and appurtenant equipment for the transpor-

tation from source to injection well and from producing well to treating equipment of water or other injected substance. The "construction overhead" charge shall be equal to five percent (5%) of the first Twenty-five Thousand Dollars (\$25,000.00) and two percent (2%) of all amounts in excess of Twenty-five Thousand Dollars (\$25,000.00) of the cost thereof computed as in Exhibit D provided.

11.2 Budgets. Before or as soon as practical after the effective date hereof, Operator shall prepare a budget of estimated costs and expenses for the remainder of the calendar year and on or before the first day of each October thereafter shall prepare a budget of estimated costs and expenses for the ensuing calendar year. Unless otherwise specified in the budget, it shall be presumed for the purpose of advance billings that the estimated costs and expenses for each month of an annual period shall be one-twelfth (1/12) of the estimate for such period. Budgets so prepared shall be estimates only and shall be subject to adjustment and correction by Working Interest Owners and Operator from time to time whenever it shall appear that an adjustment or correction is proper. A copy of each such budget and adjusted budget shall be promptly furnished each Working Interest Owner.

11.3 Advance Billings. Operator shall have the right at its option to require Working Interest Owners to advance their respective proportions of such costs and expenses by submitting to Working Interest Owners, on or before the 15th day of any month, an itemized estimate of such costs and expenses for the succeeding month with a request for payment in advance. Within thirty (30) days thereafter, each Working Interest Owner shall pay to Operator its proportionate part of such estimate. Adjustment between estimates and the actual costs shall be made by Operator at the close of each calendar month, and the

accounts of the Working Interest Owners shall be adjusted accordingly.

11.4 Commingling of Funds. No funds received by Operator under this agreement need be segregated by Operator or maintained by it as a joint fund, but may be commingled with its own funds.

11.5 Lien of Operator. Each Working Interest Owner grants to Operator a lien upon such Working Interest Owner's leasehold and other mineral interests in each tract, its interest in all jointly owned materials, equipment and other property and its interest in all Fully Unitized Substances, as security for payment of the costs and expenses chargeable to it, together with interest thereon at the rate of six percent (6%) per annum. Operator shall have the right to bring any action at law or in equity to enforce collection of such indebtedness with or without foreclosure of such lien. In addition, upon default by any Working Interest Owner in the payment of costs and expenses chargeable to it, Operator shall have the right to collect and receive from the purchaser or purchasers the proceeds of such Working Interest Owner's share of Fully Unitized Substances up to the amount owing by such Working Interest Owner plus interest, as aforesaid, until paid. Each such purchaser shall be entitled to rely upon Operator's statement concerning the existence and amount of any such default.

11.6 Wells Drilled by Operator. All wells drilled by Operator shall be drilled on a competitive contract basis at the usual rates prevailing in the area and shall be based upon competitive bids for the drilling of not more than six (6) wells under any such competitive bid contract.

## ARTICLE 12

### OIL IN LEASE TANKAGE ON EFFECTIVE DATE

12.1 Gauge of Merchantable Oil. Operator shall make

a proper and timely gauge of all lease and other tanks within the Participating Area in order to ascertain the amount of merchantable oil in such tanks as of 7:00 a.m. on the effective date hereof. All such oil which has been produced legally shall be and remain the property of the Working Interest Owners entitled thereto the same as if the unit had not been formed; and such Working Interest Owners shall promptly remove said oil from the Participating Area. Any such oil not so removed shall be sold by Operator for the account of such Working Interest Owners, subject to the payment of all royalty to Royalty Owners under the terms and provisions of the applicable lease or leases and other contracts.

### ARTICLE 13

#### OPERATION OF NON-UNITIZED FORMATIONS

##### 13.1 Right to Operate in Non-Unitized Formations.

Any Working Interest Owner now having, or hereafter acquiring, the right to drill for and produce oil, gas or other minerals, other than Fully Unitized Substances, within the Participating Area shall have the full right to do so notwithstanding this agreement. In exercising said right, however, such Working Interest Owner shall exercise every reasonable precaution to prevent unreasonable interference with operations hereunder. No Working Interest Owner shall produce Fully Unitized Substances through any well drilled or operated by it. If any Working Interest Owner drills any well into or through the Fully Unitized Formations, the Fully Unitized Formations shall be cased and cemented or otherwise protected to the satisfaction of Operator in such a manner that the Fully Unitized Formations and the production of Fully Unitized Substances will not be adversely affected.

##### 13.2 Dual Completions. Dually completed wells will

be handled as follows:

No well shall be dually completed to produce from the Fully Unitized Formations and some other formation or formations.

In the event that any party hereto now has located upon any tract of land within the Participating Area a well completed both in the Fully Unitized Formations and in another formation, whether for production from both, for injection in both, or for production from one and injection into another, then Operator, with the concurrence of Working Interest Owners, at the request of the working interest owner or owners committing such tract, may, at the sole cost, risk and expense of such owners of said tract, continue to operate the well in such other formation for the account of such owners until such time as Working Interest Owners determine that the well is required exclusively for operations in the Fully Unitized Formations, at which time Operator, for the account and at the sole risk, cost and expense of such owners of said tract, shall remove the tubing and wellhead equipment relating exclusively to the non-fully unitized formation and deliver the same to the owners thereof, and shall seal off such other formation. The said owners of such tract shall indemnify Working Interest Owners against any loss or damage occasioned by such continued operation of the well in such other formation and the abandonment thereof, all in manner and form satisfactory to Working Interest Owners.

## ARTICLE 14

## TITLES

14.1 Warranty and Indemnity. Each Working Interest Owner represents and warrants that it is the owner of the respective working interests set forth opposite its name in Exhibit C and hereby indemnifies and holds the other Working Interest Owners harmless from any loss due to failure, in whole or in part, of its title to any such interest, except failure of title arising out of operations hereunder; provided, however, that such indemnity shall be limited to an amount equal to the net value that had been received from the sale of Fully Unitized Substances attributed hereunder to the interest as to which title failed. Each failure of title will be effective, insofar as this agreement is concerned, as of the first day of the calendar month in which such failure is finally determined and there shall be no retroactive adjustment of development and operating expenses, Fully Unitized Substances or the proceeds therefrom as a result of title failure.

## ARTICLE 15

## LIABILITY, CLAIMS AND SUITS

15.1 Individual Liability. The duties, obligations and liabilities of Working Interest Owners shall be several and not joint or collective; and nothing contained herein shall ever be construed as creating a partnership of any kind, joint venture, or an association or trust between or among Working Interest Owners.

15.2 Settlements. In the event claim is made against any Working Interest Owner or any Working Interest Owner is sued on account of any matter or thing arising from the development and operation of the Participating Area and over which such Working Interest Owner individually has no control because of

the rights, powers and duties granted by this agreement and the Supplement No. 5 Agreement, said Working Interest Owner shall immediately notify the Operator of such claim or suit. Working Interest Owners shall assume and take over the further handling of such claim or suit and all costs and expenses of handling, settling or otherwise discharging such claim or suit shall be borne by Working Interest Owners as any other cost or expense of operating the Participating Area.

#### ARTICLE 16

##### INTERNAL REVENUE PROVISION

16.1 Internal Revenue Provision. Each Working Interest Owner hereby elects that it and the operations covered by this agreement be excluded from the application of Subchapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954, or such portion or portions thereof as the Secretary of the Treasury of the United States or his delegate shall permit by election to be excluded therefrom. Operator is hereby authorized and directed to execute on behalf of each Working Interest Owner such additional or further evidence of said election as may be required by regulations issued under said Subchapter K, or should said regulations require each party to execute such further evidence, each Working Interest Owner agrees to execute or join in the execution thereof.

#### ARTICLE 17

##### NOTICES

17.1 Notices. All notices required hereunder or under the Supplement No. 5 Agreement shall be in writing and shall be deemed to have been properly served when sent by mail or telegram to the address of the representative of each Working Interest Owner as furnished to Operator in accordance with Article 4 hereof.

## ARTICLE 18

## WITHDRAWAL OF WORKING INTEREST OWNER

18.1 Withdrawal. IF any Working Interest Owner so desires, it may withdraw from this agreement by conveying, assigning and transferring without warranty of title, either express or implied, to the other Working Interest Owners who do not desire to withdraw herefrom, all of the former's rights, title and interest in and to its lease or leases, or other operating rights in the Participating Area, insofar as said lease, leases or rights pertain to the Fully Unitized Formations, together with the withdrawing Working Interest Owner's interest in all wells, pipe lines, casing, injection equipment, facilities and other personal property used in conjunction with the development and operation of the Participating Area; provided, that such transfer, assignment or conveyance shall not relieve said Working Interest Owner from any obligation or liability incurred prior to the date of the execution and delivery thereof. The interest so transferred, assigned and conveyed shall be taken and owned by the other Working Interest Owners in proportion to their respective Participating Area Participations. After the execution and delivery of such transfer, assignment or conveyance, the withdrawing Working Interest Owner shall be relieved from all further obligations and liability hereunder and under said Supplement No. 5 Agreement; and the right of such Working Interest Owner to any benefits subsequently accruing hereunder and under said Supplement No. 5 Agreement shall cease; provided, that upon delivery of said transfer, assignment or conveyance, the assignees, in the ratio of the respective interests so acquired, shall pay to the assignor for its interest in all jointly owned equipment, casing and other personal property the fair salvage value thereof, as estimated and fixed by Working Interest Owners.

ARTICLE 19

ABANDONMENT OF WELLS

19.1 Rights of Former Owners. If Working Interest Owners decide to permanently abandon any well within the Participating Area prior to termination of the Supplement No. 5 Agreement, Operator shall give written notice of such fact to the Working Interest Owners of the tract on which such well is located and said Working Interest Owners shall have the right and option for a period of ninety (90) days after receipt of such notice to notify Operator of their election to take over and own said well and to deepen or plug back said well to a formation other than the Fully Unitized Formations. Within ten (10) days after said Working Interest Owners have so notified Operator of their desire to take over such well, they shall pay to Operator, for credit to the joint account of the Working Interest Owners, the amount as estimated and fixed by Working Interest Owners to be the net salvage value of the casing and equipment in and on said well. At the same time the Working Interest Owners taking over the well shall agree by letter addressed to Operator to effectively seal off and protect the Fully Unitized Formations, and at such time as the well is ready for abandonment to plug and abandon the well in a workmanlike manner in accordance with applicable laws.

19.2 Plugging. In the event the Working Interest Owners of a tract do not elect to take over a well located thereon which is proposed for abandonment, Operator shall plug and abandon the well in accordance with applicable laws.

ARTICLE 20

EFFECTIVE DATE AND TERM

20.1 Effective Date. This agreement shall become effective on the date and at the time the Supplement No. 5 Agreement becomes effective.

20.2 Term. This agreement shall continue in full force and effect so long as the Supplement No. 5 Agreement remains in force and effect and thereafter until all wells have been abandoned and plugged or turned over to Working Interest Owners in accordance with Article 21 hereof, and all personal and real property acquired for the joint account of Working Interest Owners has been disposed of by Operator in accordance with instructions of Working Interest Owners.

## ARTICLE 21

### ABANDONMENT OF OPERATIONS

21.1 Termination. Upon termination of the Supplement No. 5 Agreement, the following will occur:

21.1.1 Oil and Gas Rights. Possession of all Oil and Gas Rights in and to the several separate tracts shall revert to the Working Interest Owners thereof.

21.1.2 Right to Operate. Working Interest Owners of any such tract desiring to take over and continue to operate a well or wells located thereon may do so by paying Operator, for the credit of the joint account, the net salvage value of the casing and equipment in and on the well and by agreeing to properly plug the well at such time as it is abandoned.

21.1.3 Salvaging Wells. With respect to all wells not taken over by Working Interest Owners, Operator shall at the joint expense of Working Interest Owners salvage as much of the casing and equipment in or on such wells as can economically and reasonably be salvaged and shall cause the same to be properly plugged and abandoned.

21.1.4 Cost of Salvaging. Working Interest

Owners shall share the cost of salvaging, liquidation or other distribution of assets and properties used in the development and operation of the Participating Area in proportion to their respective Participating Area Participations.

ARTICLE 22

COUNTERPART EXECUTION

22.1 Execution by Separate Counterparts or Ratifications. This agreement may be executed in any number of counterparts and each counterpart so executed shall have the same force and effect as an original instrument and as if all of the parties to the aggregate counterparts had signed the same instrument; or may be ratified by a separate instrument in writing referring to this agreement. Each such ratification shall have the force and effect of an executed counterpart and of adopting by reference all of the provisions hereof.

ARTICLE 23

SUCCESSORS AND ASSIGNS

23.1 Successors and Assigns. The terms and provisions hereof shall be covenants running with the lands and leases covered hereby and shall be binding upon and inure to the benefit of the respective heirs, successors and assigns of the parties hereto; provided that if more than four persons succeed to the interest of any party hereto, then such parties shall nominate one of their number to receive all notices and to take all action hereunder which they can take.

IN WITNESS WHEREOF, the parties hereto have executed this agreement upon the respective dates indicated opposite

their respective signatures.


  
 CONTINENTAL OIL CORPORATION  
 ATTEST  
 Assistant Secretary  
 Date: October 3, 1962

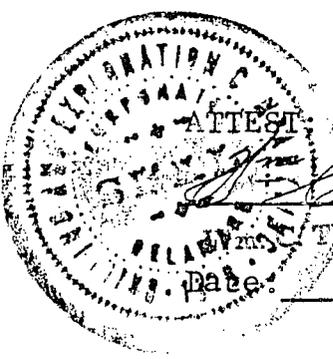
CONTINENTAL OIL COMPANY  
 By John E. Kirchner FORM APPROVED ATTORNEY  
 Attorney in Fact  
 Operator and Working Interest Owner


  
 CARPER DRILLING COMPANY  
 ATTEST  
 Date: Oct 5 1962

CARPER DRILLING COMPANY, INC.  
 By Stanley Carper  
 Its Stanley Carper, President  
 Working Interest Owner

Date: October 4, 1962

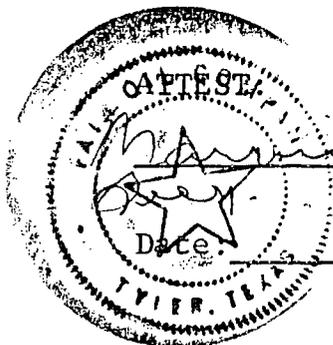
Zula Cockburn  
 ZULA COCKBURN  
 Working Interest Owner


  
 DRILLING AND EXPLORATION COMPANY  
 ATTEST  
 Thompson, Ass't. Secretary  
 Date: OCT 9 1962

DRILLING AND EXPLORATION COMPANY, INC.  
 By E. A. Roberts  
 Its E. A. Roberts, Vice President  
 Working Interest Owner

Date: OCT 2 1962

FAIR N & N TRUST  
 By Luis W. Arnold  
 Trustee  
 Working Interest Owner


  
 FAIR OIL COMPANY  
 ATTEST  
 Date: OCT 2 1962

FAIR OIL COMPANY  
 By James W. Fair  
 Its James W. Fair  
 Working Interest Owner

Date: OCT 2 1962

R. W. Fair  
R. W. FAIR  
Working Interest Owner

Date: \_\_\_\_\_

J. P. Pierce  
J. P. PIERCE  
Working Interest Owner

Date: OCT 5 1962

Virginia Sears  
VIRGINIA SEARS and MARY JO VAN-DIVER

Individually and as Co-Executrixes of the Estate of Ross Sears, Deceased, and Mary Jo Vandiver as Trustee under the Will of Ross Sears, Deceased

MARY KATHERINE FOWLES  
CHARLOTTE WOODS RUNYAN  
EMILY KATHERINE FLINT BOYD  
ROSEMARY FLINT  
VIRGINIA WOODS SHAW

Date: OCT 5 1962

By Jack B. Shaw  
JACK B. SHAW, their  
Attorney-in-Fact  
Working Interest Owners

Date: OCT 5 1962

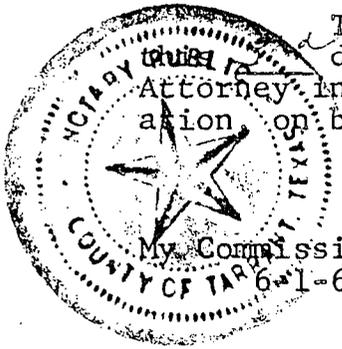
Jewell Smith  
JEWELL SMITH  
Working Interest Owner

Date: OCT 3 1962

Leon C. Smith  
LEON C. SMITH  
Working Interest Owner

STATE OF TEXAS  
COUNTY OF TARRANT

BOOK 511 PAGE 821

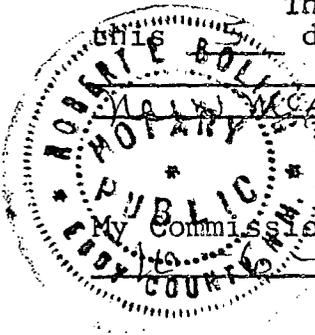


The foregoing instrument was acknowledged before me  
this 12th day of October, 1962, by JOHN E. KOSHER  
Attorney in Fact for CONTINENTAL OIL COMPANY, a Delaware corpor-  
ation on behalf of said corporation.

My Commission Expires:  
6-1-63

Barbara Lee Nelson  
Notary Public, Tarrant County,  
Texas.

STATE OF New Mexico  
COUNTY OF Sandoval



The foregoing instrument was acknowledged before me  
this 5th day of October, 1962, by Stanley Carper, President  
Stanley Carper of CARPER DRILLING COMPANY, INC., a  
Delaware corporation, on behalf of said corporation.

My Commission Expires:  
6-3

Robert S. Baling  
Notary Public, Sandoval  
County, New Mexico

STATE OF Texas  
COUNTY OF Tarrant

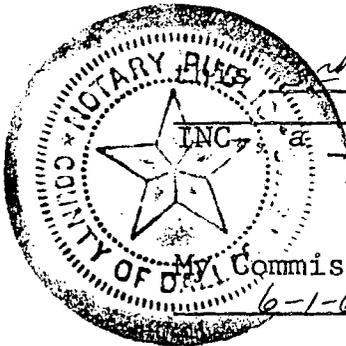


The foregoing instrument was acknowledged before me  
this 12th day of October, 1962, by ZULA COCKBURN.

My Commission Expires:  
6-3

Roman O'Hair  
Notary Public, Tarrant  
County, Texas

STATE OF Texas  
COUNTY OF Dallas



The foregoing instrument was acknowledged before me  
this 12th day of October, 1962, by E. A. Roberts, Jr., Vice President  
E. A. Roberts, Jr. of DRILLING AND EXPLORATION COMPANY,  
Delaware corporation, on behalf of said corporation.

My Commission Expires:  
6-1-63

Ruby Sherwood  
Notary Public, Dallas  
County, Texas

STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me  
this 2 day of Oct., 1962, by Les H. Arnold  
Trustee of FAIR N & N TRUST.

My Commission Expires:  
June 1, 1963

Margaret Aber  
Notary Public, Smith  
County, Texas

STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me  
this 2 day of Oct., 1962, by James H. Fair  
President of FAIR OIL COMPANY, a Texas  
Corporation, on behalf of said corporation.

My Commission Expires:  
June 1, 1963

Margaret Aber  
Notary Public, Smith  
County, Texas

STATE OF Texas  
COUNTY OF Smith

The foregoing instrument was acknowledged before me  
this 2 day of Oct., 1962, by R. W. FAIR.

My Commission Expires:  
June 1, 1963

Margaret Aber  
Notary Public, Smith  
County, Texas

STATE OF Texas  
COUNTY OF Tarrant

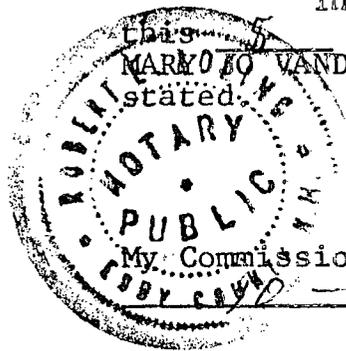
The foregoing instrument was acknowledged before me  
this 3rd day of October, 1962, by J. P. PIERCE.

My Commission Expires:  
July 7-63

Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

STATE OF New Mexico  
COUNTY OF Eddy

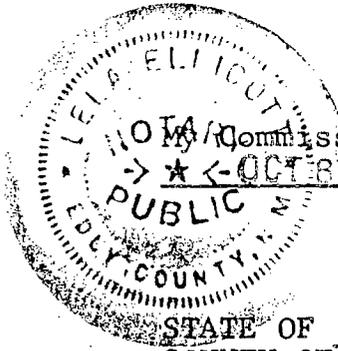
The foregoing instrument was acknowledged before me  
this 5 day of October, 1962, by VIRGINIA SEARS and  
MARY TO VANDIVER, individually and in the capacities therein  
stated.



Robert E. Baling  
Notary Public, Eddy  
County, New Mexico

STATE OF New Mexico  
COUNTY OF Eddy

The foregoing instrument was acknowledged before me  
this 5 day of October, 1962, by JACK B. SHAW, as  
Attorney-in-Fact on behalf of MARY KATHERINE FOWLES, CHARLOTTE  
WOODS RUNYAN, EMILY KATHERINE FLINT BOYD, ROSEMARY FLINT, and  
VIRGINIA WOODS SHAW.



Lela Elliott  
Notary Public, Eddy  
County, New Mexico

STATE OF Texas  
COUNTY OF Tarrant

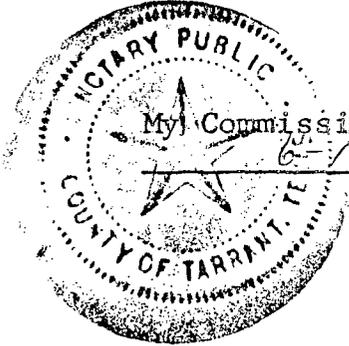
The foregoing instrument was acknowledged before me  
this 3rd day of October, 1962, by JEWELL SMITH.



Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

STATE OF Texas  
COUNTY OF Tarrant

The foregoing instrument was acknowledged before me  
this 3rd day of October, 1962, by LEON C. SMITH.



Barbara Lee Nelson  
Notary Public, Tarrant  
County, Texas

EXHIBIT "C"

TO

GRAYBURG-SAN ANDRES OPERATING AGREEMENT  
DATED AS OF JULY 1, 1962

UNIT PARTICIPATION

| Tract No. | Working Interest Owner                               | Working Interest In Tract | Unit Participation |
|-----------|--|---------------------------|--------------------|
| 1         | Continental Oil Company                              | 100%                      | 0.350000           |
| 2         | Continental Oil Company                              | 100%                      | 8.474890           |
| 3-x-1     | Continental Oil Company                              | 100%                      | 11.657459          |
| 3-x-2     | Continental Oil Company                              | 100%                      | 0.197562           |
| 5         | Carper Drilling Company, Inc.                        | 100%                      | 8.690039           |
| 6-x-1     | Carper Drilling Company, Inc.                        | 100%                      | 7.293779           |
| 6-x-2     | Carper Drilling Company, Inc.                        | 100%                      | 0.066182           |
| 7         | Continental Oil Company                              | 100%                      | 11.195594          |
| 8-x       | Continental Oil Company                              | 100%                      | 4.680417           |
| 9         | Drilling and Exploration Company, Inc.               | 100%                      | 0.700000           |
| 10-B      | Continental Oil Company                              | 100%                      | 0.250629           |
| 11        | Continental Oil Company                              | 100%                      | 19.847123          |
| 12        | Fair N&N Trust                                       | 75%                       | 1.059220           |
|           | Fair Oil Company                                     | 25%                       | 0.353073           |
| 14        | Fair Oil Company                                     | 66.67%                    | 0.478297           |
|           | R. W. Fair   | 33.33%                    | 0.239148           |
| 15-x      | Fair Oil Company                                     | 66.67%                    | 0.185927           |
|           | R. W. Fair   | 33.33%                    | 0.092964           |
| 17-x      | Continental Oil Company                              | 100%                      | 0.172795           |
| 18        | Continental Oil Company                              | 100%                      | 0.572727           |
| 19-x      | Continental Oil Company                              | 100%                      | 5.874647           |
| 20        | Continental Oil Company                              | 100%                      | 2.204034           |
| 21-x      | Continental Oil Company                              | 100%                      | 1.371455           |
| 22-x      | Virginia Sears and Mary Jo Van-diver, Co-executrixes | 16.667%                   | 0.400000           |
|           | J. P. Pierce   | 16.667%                   | 0.400000           |
|           | Zula Cockburn  | 50%                       | 1.200000           |
|           | Jewell Smith   | 12.499%                   | 0.300000           |
|           | Leon C. Smith  | 4.167%                    | 0.100000           |
| 23-x      | Continental Oil Company                              | 100%                      | 0.248794           |
| 24-x      | Continental Oil Company                              | 100%                      | 2.478006           |
| 25        | Continental Oil Company                              | 100%                      | 0.624604           |
| 27        | Virginia Woods Shaw                                  | 25%                       | 0.364931           |
|           | Charlotte Woods Runyon                               | 25%                       | 0.364932           |
|           | Emily Katherine Flint Boyd                           | 12.5%                     | 0.182465           |
|           | Rosemary Flint                                       | 12.5%                     | 0.182466           |
|           | Mary Katherine Fowles                                | 25%                       | 0.364932           |
| 28        | Virginia Woods Shaw                                  | 25%                       | 0.335069           |
|           | Charlotte Woods Runyon                               | 25%                       | 0.335068           |
|           | Emily Katherine Flint Boyd                           | 12.5%                     | 0.167535           |
|           | Rosemary Flint                                       | 12.5%                     | 0.167534           |
|           | Mary Katherine Fowles                                | 25%                       | 0.335068           |
| 29-x      | Continental Oil Company                              | 100%                      | 1.352261           |
| 32        | Continental Oil Company                              | 100%                      | 0.664147           |
| 34        | Fair N&N Trust                                       | 75%                       | 0.743528           |
|           | Fair Oil Company                                     | 25%                       | 0.247843           |
| 39-x-1    | Continental Oil Company                              | 100%                      | 0.466529           |
| 39-x-2    | Continental Oil Company                              | 100%                      | 1.022878           |
| 41-x      | Continental Oil Company                              | 100%                      | 0.412930           |
| 42        | Continental Oil Company                              | 100%                      | 0.530519           |

S U M M A R Y

| Working Interest<br>Owner                 | Tract<br>No. | Unit<br>Participation<br>By Tracts | Total Unit Parti-<br>cipation of Each<br>Working Int. Owner |
|---|--------------|------------------------------------|---|
| Carper Drilling Company,<br>Inc.          | 5            | 8.690039                           | 16.050000   |
|   | 6-x-1        | 7.293779                           |   |
|   | 6-x-2        | 0.066182                           |   |
| Zula Cockburn                             | 22-x         | 1.200000                           | 1.200000  |
| Continental Oil Company                   | 1            | 0.350000                           | 74.650000   |
|   | 2            | 8.474890                           |   |
|   | 3-x          | 11.855021                          |   |
|   | 7            | 11.195594                          |   |
|   | 8-x          | 4.680417                           |   |
|   | 10-B         | 0.250629                           |   |
|   | 11           | 19.847123                          |   |
|   | 17-x         | 0.172795                           |   |
|   | 18           | 0.572727                           |   |
|   | 19-x         | 5.874647                           |   |
|   | 20           | 2.204034                           |   |
|   | 21-x         | 1.371455                           |   |
|   | 23-x         | 0.248794                           |   |
|   | 24-x         | 2.478006                           |   |
|   | 25           | 0.624604                           |   |
|   | 29-x         | 1.352261                           |   |
|   | 32           | 0.664147                           |   |
| 39-x-1                                    | 0.466529     |                                    |   |
| 39-x-2                                    | 1.022878     |                                    |   |
| 41-x                                      | 0.412930     |                                    |   |
| 42  | 0.530519     |                                    |   |
| Drilling and Exploration<br>Company, Inc. | 9            | 0.700000                           | 0.700000  |
| R. W. Fair                                | 14           | 0.239148                           | 0.332112  |
|   | 15-x         | 0.092964                           |   |
| Fair Oil Company                          | 12           | 0.353073                           | 1.265140  |
|   | 14           | 0.478297                           |   |
|   | 15-x         | 0.185927                           |   |
|   | 34           | 0.247843                           |   |
| Fair N&N Trust                            | 12           | 1.059220                           | 1.802748  |
|   | 34           | 0.743528                           |   |
| Mary Katherine Fowles                     | 27           | 0.364932                           | 0.700000  |
|   | 28           | 0.335068                           |   |
| J. P. Pierce                              | 22-x         | 0.400000                           | 0.400000  |
| Emily Katherine Flint Boyd                | 27           | 0.182465                           | 0.350000  |
|   | 28           | 0.167535                           |   |
| Rosemary Flint                            | 27           | 0.182466                           | 0.350000  |
|   | 28           | 0.167534                           |   |
| Charlotte Woods Runyon                    | 27           | 0.364932                           | 0.700000  |
|   | 28           | 0.335068                           |   |

| Working Interest<br>Owner                              | Tract<br>No. | Unit<br>Participation<br>By Tracts | Total Unit Parti<br>cipation of Each<br>Working Int. Owner |
|--|--------------|------------------------------------|--|
| Virginia Woods Shaw                                    | 27           | 0.364931                           | 0.700000   |
|  | 28           | 0.335069                           |  |
| Jewell Smith   | 22-x         | 0.300000                           | 0.300000   |
| Leon C. Smith  | 22-x         | 0.100000                           | 0.100000   |
| Virginia Sears and Mary Jo<br>Vandiver, Co-executrixes | 22-x         | 0.400000                           | 0.400000   |
| UNIT TOTAL   |              |                                    | 100.000000   |

Attached to and made a part of Grayburg-San Andres Operating Agreement Appurtenant to Supplemental and Amendatory Agreement to Maljamar Cooperative Agreement (Supplement No. 5)

## ACCOUNTING PROCEDURE

### I. GENERAL PROVISIONS

#### 1. Definitions

"Joint property" as herein used shall be construed to mean the subject area covered by the agreement to which this "Accounting Procedure" is attached.

"Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the subject area for the joint account of the parties hereto.

"Non-Operator" as herein used shall be construed to mean any one or more of the non-operating parties.

#### 2. Statements and Billings

Operator shall bill Non-Operator on or before the last day of each month for its proportionate share of costs and expenditures during the preceding month. Such bills will be accompanied by statements, reflecting the total costs and charges as set forth under Subparagraph "C" below:

A. Statement in detail of all charges and credits to the joint account.

B. Statement of all charges and credits to the joint account, summarized by appropriate classifications indicative of the nature thereof.

C. Statements as follows:

- (1) Detailed statement of material ordinarily considered controllable by operators of oil and gas properties;
- (2) Statement of ordinary charges and credits to the joint account summarized by appropriate classifications indicative of the nature thereof; and
- (3) Detailed statement of any other charges and credits.

#### 3. Payments by Non-Operator

Each party shall pay its proportion of all such bills within thirty (30) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest from and after such 30-day period at the rate of six per cent (6%) per annum until paid.

#### 4. Adjustments

Payment of any such bills shall not prejudice the right of Non-Operator to protest or question the correctness thereof. Subject to the exception noted in Paragraph 5 of this section I, all statements rendered to Non-Operator by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period Non-Operator takes written exception thereto and makes claim on Operator for adjustment. Failure on the part of Non-Operator to make claim on Operator for adjustment within

such period shall establish the correctness thereof and preclude the filing of exceptions thereto or making of claims for adjustment thereon. The provisions of this paragraph shall not prevent adjustments resulting from physical inventory of property as provided for in Section VI, Inventories, hereof.

## 5. Audits

A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the accounting hereunder for any calendar year within the twenty-four (24) month period following the end of such calendar year, provided, however, that Non-Operator must take written exception to and make claim upon the Operator for all discrepancies disclosed by said audit within said twenty-four (24) month period. Where there are two or more Non-Operators the Non-Operators shall make every reasonable effort to conduct joint or simultaneous audits in a manner which will result in a minimum of inconvenience to the Operator.

## II. DEVELOPMENT AND OPERATING CHARGES

Subject to limitations hereinafter prescribed, Operator shall charge the joint account with the following items:

### 1. Rentals and Royalties

Delay or other rentals, when such rentals are paid by Operator for the joint account; royalties, when not paid directly to royalty owners by the purchaser of the oil, gas, casinghead gas, or other products.

### 2. Labor

- A. Salaries and wages of Operator's employees directly engaged on the joint property in the development, maintenance, and operation thereof, including salaries or wages paid to geologists and other employees who are temporarily assigned to and directly employed on a drilling well.
- B. Operator's cost of holiday, vacation, sickness and disability benefits, and other customary allowances applicable to the salaries and wages chargeable under Subparagraph 2 A and Paragraph 11 of this Section II. Costs under this Subparagraph 2 B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable under Subparagraph 2 A and Paragraph 11 of this Section II. If percentage assessment is used, the rate shall be based on the Operator's cost experience.
- C. Costs of expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's labor cost of salaries and wages as provided under Subparagraphs 2 A, 2 B, and Paragraph 11 of this Section II.

### 3. Employee Benefits

Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus and other benefit plans of a like nature, applicable to Operator's labor cost, provided that the total of such charges shall not exceed ten and one-half per cent (10 1/2%) of Operator's labor costs as provided in Subparagraphs A and B of Paragraph 2 of this Section II and in Paragraph 11 of this Section II.

## 4. Material

Material, equipment, and supplies purchased or furnished by Operator for use of the joint property. So far as it is reasonable, practical and consistent with efficient and economical operation, only such material shall be purchased for or transferred to the joint property as may be required for immediate use; and the accumulation of surplus stocks shall be avoided.

## 5. Transportation

Transportation of employees, equipment, material, and supplies necessary for the development, maintenance, and operation of the joint property subject to the following limitations:

- A. If material is moved to the joint property from vendor's or from the Operator's warehouse or other properties, no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where such material is available, except by special agreement with Non-Operator.
- B. If surplus material is moved to Operator's warehouse or other storage point, no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point, except by special agreement with Non-Operator. No charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Non-Operator.

## 6. Service

- A. Outside Services:  
The cost of contract services and utilities procured from outside sources.
- B. Use of Operator's Equipment and Facilities:  
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 5 of Section III entitled "Operator's Exclusively Owned Facilities".

## 7. Damages and Losses to Joint Property and Equipment

All costs or expenses necessary to replace or repair damages or losses incurred by fire, flood, storm, theft, accident, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after report of the same has been received by Operator.

## 8. Litigation Expense

All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorneys' fees and expenses as hereinafter provided, together with all judgments obtained against the parties or any of them on account of the joint operations under this agreement, and actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.

- A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto; and a charge commensurate with cost of providing and furnishing such services rendered may be made against the joint account; but no such charge shall be made until approved by the legal departments of or attorneys for the respective parties hereto.

- B. Fees and expenses of outside attorneys shall not be charged to the joint account unless authorized by the majority of the interests hereunder.

9. Taxes

All taxes of every kind and nature assessed or levied upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.

10. Insurance and Claims

- A. Premiums paid for insurance required to be carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.

- B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.

11. District and Camp Expense (Field Supervision and Camp Expense)

A pro rata portion of the salaries and expenses of Operator's production superintendent and other employees serving the joint property and other properties of the Operator in the same operating area, whose time is not allocated directly to the properties, and a pro rata portion of the cost of maintaining and operating a production office known as Operator's District office located at or near Hobbs, New Mexico (or a comparable office if location changed), and necessary suboffices (if any), maintained for the convenience of the above-described office, and all necessary camps, including housing facilities for employees if required, used in the conduct of the operations on the joint property and other properties operated in the same locality. The expense of, less any revenue from, these facilities should be inclusive of depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned to all properties served on some equitable basis consistent with Operator's accounting practice.

Charges under this Paragraph 11 of Section II, together with the charges contemplated by Paragraph 2-A of this Section II and the charges contemplated by Paragraphs 2-B, 2-C, 3 and 5 of this Section II insofar as they cover or relate to employees or the wages thereof chargeable under said Paragraph 2-A excepting, however, roustabouts, including head roustabouts, geologists and drilling foremen and the wages or salaries thereof, where such wages or salaries are charged under said Paragraph 2-A, shall all collectively not exceed an amount equal to \$75.00 per well per month times the number of wells used in connection with overhead charges as set out under Paragraph 12-B of this Section II; provided however, that no oftener than once each year Operator may request a re-determination of the maximum charge herein provided and thereupon an increase in the maximum charge may be determined by a vote of working interest owners on the basis provided in Article 4.3.2 of the agreement to which this instrument is an exhibit.

12. Administrative Overhead

Operator shall have the right to assess against the joint property covered hereby the following management and administrative overhead charges, which shall be in lieu of all expenses of all offices of the Operator not covered by Section II, Paragraph 11, above, including salaries and expenses of personnel assigned to

such offices, except that salaries of geologists and other employees of Operator who are temporarily assigned to and directly serving on the joint property will be charged as provided in Section II, Paragraph 2, above. Salaries and expenses of other technical employees assigned to such offices will be considered as covered by overhead charges in this paragraph unless charges for such salaries and expenses are agreed upon between Operator and Non-Operator as a direct charge to the joint property.

| <u>Well Depth</u> | <u>WELL BASIS (Rate Per Well Per Month)</u>      |  |                  |                                     |
|-------------------|--|--|------------------|-------------------------------------|
|                   | <u>Drilling Well</u><br>Rate<br><u>Each Well</u> | <u>PRODUCING WELL RATE</u><br>(Use Completion Depth) |                  |                                     |
|                   |  | <u>First Five</u>                                    | <u>Next Five</u> | <u>All Wells</u><br><u>Over Ten</u> |
| 0 to 5,000 feet   | \$250.00   | \$20.00  | \$20.00          | \$20.00                             |

- A. Overhead charges for drilling wells shall begin on the date each well is spudded and terminate when it is on production or is plugged, as the case may be, except that no charge shall be made during the suspension of drilling operations for fifteen (15) or more consecutive days.
- B. In connection with overhead charges, the status of wells shall be as follows:
- (1) Injection wells for recovery operations, such as for repressure or water flood, shall be included in the overhead schedule the same as producing oil wells.
  - (2) Water supply wells utilized for water flooding operations shall be included in the overhead schedule the same as producing oil wells.
  - (3) Producing gas wells shall be included in the overhead schedule the same as producing oil wells.
  - (4) Wells permanently shut down but on which plugging operations are deferred shall be dropped from the overhead schedule at the time the shutdown is effected. When such wells are plugged, overhead shall be charged at the producing well rate during the time required for the plugging operation.
  - (5) Wells being plugged back, drilled deeper, workover when drilling rig is required, or converted to a source or input well shall be included in the overhead schedule the same as drilling wells.
  - (6) Temporarily shut-down wells (other than by governmental regulatory body) which are not produced or worked upon for a period of a full calendar month shall not be included in the overhead schedule; however, wells shut in by governmental regulatory body shall be included in the overhead schedule only in the event the allowable production is transferred to other wells on the same property. In the event of a unit allowable, all wells capable of producing will be counted in determining the overhead charge.
  - (7) Wells completed in dual or multiple horizons shall be considered as two wells in the producing overhead schedule.
  - (8) Lease salt water disposal wells shall not be included in the overhead schedule unless such wells are used in a secondary recovery program on the joint property.
- C. The above overhead schedule for producing wells shall be applied to the total number of wells operated under the Operating Agreement to which this accounting procedure is attached, irrespective of individual leases.

- D. It is specifically understood that the above overhead rates apply only to drilling and producing operations and are not intended to cover the construction or operation of additional facilities such as, but not limited to, gasoline plants, compressor plants, repressuring projects, salt water disposal facilities, and similar installations. If at any time any or all of these become necessary to the operation, a separate agreement will be reached relative to an overhead charge and allocation of district expense.
- E. The above specific overhead rates may be amended from time to time by agreement between Operator and Non-Operator, if, in practice, they are found to be insufficient or excessive.
13. Operator's Fully Owned Warehouse Operating and Maintenance Expense (Describe fully the agreed procedure to be followed by the Operator)
- None, except as included in District Expense.
14. Other Expenditures

Any expenditure, other than expenditures which are covered and dealt with by the foregoing provisions of this Section II, incurred by the Operator for the necessary and proper development, maintenance, and operation of the joint property.

### III. BASIS OF CHARGES TO JOINT ACCOUNT

#### 1. Purchases

Material and equipment purchased and service procured shall be charged at price paid by Operator after deduction of all discounts actually received.

#### 2. Material Furnished by Operator

Material required for operations shall be purchased for direct charge to joint account whenever practicable, except that Operator may furnish such material from Operator's stocks under the following conditions:

##### A. New Material (Condition "A")

- (1) New material transferred from Operator's warehouse or other properties shall be priced f.o.b. the nearest reputable supply store or railway receiving point, where such material is available, at current replacement cost of the same kind of material. This will include material such as tanks, pumping units, sucker rods, engines, and other major equipment. Tubular goods, two-inch (2") and over, shall be priced on carload basis effective at date of transfer and f.o.b. railway receiving point nearest the joint account operation, regardless of quantity transferred.
- (2) Other material shall be priced on basis of a reputable supply company's preferential price list effective at date of transfer and f.o.b. the store or railway receiving point nearest the joint account operation where such material is available.
- (3) Cash discount shall not be allowed.

##### B. Used Material (Condition "B" and "C")

- (1) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classed as Condition "B" and priced at seventy-five per cent (75%) of new price.

- (2) Material which cannot be classified as Condition "B" but which,
  - (a) After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
  - (b) Is serviceable for original function but substantially not suitable for reconditioning, shall be classed as Condition "C" and priced at fifty per cent (50%) of new price.
- (3) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use.
- (4) Tanks, buildings, and other equipment involving erection costs shall be charged at applicable percentage of knocked-down new price.

### 3. Premium Prices

Whenever materials and equipment are not readily obtainable at the customary supply point and at prices specified in Paragraphs 1 and 2 of this Section III because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the joint account for the required materials on the basis of the Operator's direct cost and expense incurred in procuring such materials, in making it suitable for use, and in moving it to the location, provided, however, that notice in writing is furnished to Non-Operator of the proposed charge prior to billing the Non-Operator for the material and/or equipment acquired pursuant to this provision, whereupon Non-Operator shall have the right, by so electing and notifying Operator within 10 days after receiving notice from the Operator, to furnish in kind, or in tonnage as the parties may agree, at the location, nearest railway receiving point, or Operator's storage point within a comparable distance, all or part of his share of material and/or equipment suitable for use and acceptable to the Operator. Transportation costs on any such material furnished by Non-Operator, at any point other than at the location shall be borne by such Non-Operator. If, pursuant to the provision of this paragraph, any Non-Operator furnishes material and/or equipment in kind, the Operator shall make appropriate credits therefor to the account of said Non-Operator.

### 4. Warranty of Material Furnished by Operator

Operator does not warrant the material furnished beyond or back of the dealer's or manufacturer's guaranty; and in case of defective material, credit shall not be passed until adjustment has been received by Operator from the manufacturers or their agents.

### 5. Operator's Exclusively Owned Facilities

The following rates shall apply to service rendered to the joint account by facilities owned exclusively by Operator:

- A. Water, fuel, power, compressor and other auxiliary services at rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.
- B. Automotive equipment at rates commensurate with cost of ownership and operation. Such rates should generally be in line with the schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account

operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck and tractor rates may include wages and expenses of driver.

- C. A fair rate shall be charged for the use of drilling and cleaning-out tools and any other items of Operator's fully owned machinery or equipment which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property; provided that such charges shall not exceed those currently prevailing in the field where the joint property is located. Pulling units shall be charged at hourly rates commensurate with the cost of ownership and operation, which shall include repairs and maintenance, operating supplies, insurance, depreciation, and taxes. Pulling unit rates may include wages and expenses of the operator.
- D. A fair rate shall be charged for laboratory services performed by Operator for the benefit of the joint account, such as gas, water, core, and any other analyses and tests; provided such charges shall not exceed those currently prevailing if performed by outside service laboratories.
- E. Whenever requested, Operator shall inform Non-Operator in advance of the rates it proposes to charge.
- F. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

#### IV. DISPOSAL OF LEASE EQUIPMENT AND MATERIAL

The Operator shall be under no obligation to purchase interest of Non-Operator in surplus new or secondhand material. The disposition of major items of surplus material, such as derricks, tanks, engines, pumping units, and tubular goods, shall be subject to mutual determination by the parties hereto; provided Operator shall have the right to dispose of normal accumulations of junk and scrap material either by transfer or sale from the joint property.

##### 1. Material Purchased by the Operator or Non-Operator

Material purchased by either the Operator or Non-Operator shall be credited by the Operator to the joint account for the month in which the material is removed by the purchaser.

##### 2. Division in Kind

Division of material in kind, if made between Operator and Non-Operator, shall be in proportion to their respective interests in such material. Each party will thereupon be charged individually with the value of the material received or receivable by each party, and corresponding credits will be made by the Operator to the joint account. Such credits shall appear in the monthly statement of operations.

##### 3. Sales to Outsiders

Sales to outsiders of material from the joint property shall be credited by Operator to the joint account at the net amount collected by Operator from vendee. Any claims by vendee for defective material or otherwise shall be charged back to the joint account if and when paid by Operator.

## V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

Material purchased by either Operator or Non-Operator or divided in kind, unless otherwise agreed, shall be valued on the following basis:

## 1. New Price Defined

New price as used in the following paragraphs shall have the same meaning and application as that used above in Section III, "Basis of Charges to Joint Account".

## 2. New Material

New material (Condition "A"), being new material procured for the joint account but never used thereon, at one hundred per cent (100%) of current new price (plus sales tax if any).

## 3. Good Used Material

Good used material (Condition "B"), being used material in sound and serviceable condition, suitable for reuse without reconditioning:

- A. At seventy-five per cent (75%) of current new price if material was charged to joint account as new, or
- B. At sixty-five per cent (65%) of current new price if material was originally charged to the joint property as secondhand at seventy-five per cent (75%) of new price.

## 4. Other Used Material

Used material (Condition "C"), at fifty per cent (50%) of current new price, being used material which:

- A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
- B. Is serviceable for original function but substantially not suitable for reconditioning.

## 5. Bad-Order Material

Material and equipment (Condition "D"), which is no longer usable for its original purpose without excessive repair cost but is further usable for some other purpose, shall be priced on a basis comparable with that of items normally used for that purpose.

## 6. Junk

Junk (Condition "E"), being obsolete and scrap material, at prevailing prices.

## 7. Temporarily Used Material

When the use of material is temporary and its service to the joint account does not justify the reduction in price as provided in Paragraph 3 B, above, such material shall be priced on a basis that will leave a net charge to the joint account consistent with the value of the service rendered.

## VI. INVENTORIES

## 1. Periodic Inventories, Notice and Representation

At reasonable intervals, inventories shall be taken by Operator of the joint account material, which shall include all such material as is ordinarily considered controllable by operators of oil and gas properties.

Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operator may be represented when any inventory is taken.

Failure of Non-Operator to be represented at an inventory shall bind Non-Operator to accept the inventory taken by Operator, who shall in that event furnish Non-Operator with a copy thereof.

2. Reconciliation and Adjustment of Inventories

Reconciliation of inventory with charges to the joint account shall be made by each party at interest, and a list of overages and shortages shall be jointly determined by Operator and Non-Operator.

Inventory adjustments shall be made by Operator with the joint account for overages and shortages, but Operator shall be held accountable to Non-Operator only for shortages due to lack of reasonable diligence.

3. Special Inventories

Special inventories may be taken, at the expense of the purchaser, whenever there is any sale or change of interest in the joint property; and it shall be the duty of the party selling to notify all other parties hereto as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be represented and shall be governed by the inventory so taken.

## EXHIBIT "E"

Attached to and made a part of Grayburg-San Andres Operating Agreement Appurtenant to Supplemental and Amendatory Agreement to Maljamar Cooperative Agreement (Supplement No. 5)

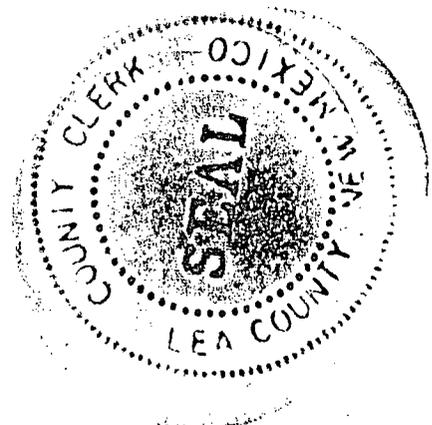
## INSURANCE PROVISIONS

1. Operator shall carry insurance as follows for the protection of the parties to this agreement:
  - A. Insurance which shall comply with the applicable workmen's compensation and occupational disease laws. Coverage "B" (employers' liability) limits shall be not less than \$25,000 per employee.
  - B. Comprehensive general public liability insurance with bodily injury limits of not less than \$100,000 for one person and \$200,000 for two or more persons in any one accident and a property damage limit of not less than \$25,000 for any one accident.
  - C. Automobile public liability insurance with bodily injury limits of not less than \$100,000 for any one person and \$200,000 for two or more persons in any one accident and a property damage limit of not less than \$25,000 for any one accident.
2. Operator shall not carry physical damage insurance on jointly owned property for the benefit of the parties hereto, it being understood that each partner will protect its own interest in such properties and assume its portion of any loss that occurs. Operator shall, however, promptly notify non-operators in writing of all losses involving damage to jointly owned properties in excess of \$100.
3. Operator shall require all contractors engaged in operations under this agreement to comply with the applicable workmen's compensation and occupational disease laws and to maintain such other insurance as the operator deems necessary.

STATE OF NEW MEXICO  
COUNTY OF LEA  
FILED

MAY 19 1989

at 11:45 o'clock A. M.  
and recorded in Book 511  
Page 794  
Shirley Hooper, Lea County Clerk  
By [Signature] Deputy



046425

*Entered February 9, 1970*

*C.P.P.*

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 4304  
Order No. R-2403-A

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR AN UNORTHODOX OIL WELL LOCATION AND  
AMENDMENT OF ORDER NO. R-2403, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 4, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of February, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Continental Oil Company, as operator of the MCA Unit approved by Commission Order No. R-2403, seeks authority to drill its MCA Unit Well No. 251, a producing oil well, at an unorthodox location 1100 feet from the South line and 2600 feet from the West line of Section 21, Township 17 South, Range 32 East, NMPM, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico, as an infill well in said MCA Unit project area.

(3) That the proposed unorthodox location is necessary to provide an efficient oil producing pattern.

(4) That the applicant also seeks the amendment of said Order No. R-2403 to provide for the establishment of an administrative procedure whereby the Secretary-Director of the Commission

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CASE No. 4304

Order No. R-2403-A

may authorize additional producing wells and injection wells at unorthodox locations within said MCA Unit Area as may be necessary to complete an efficient production and injection pattern.

(4) That approval of the aforesaid amendment will afford the applicant the opportunity to produce its just and equitable share of the oil in the Maljamar Grayburg-San Andres Pool, and will otherwise prevent waste and protect correlative rights, provided said producing wells and injection wells are drilled no closer than 330 feet to the outer boundary of said MCA Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

IT IS THEREFORE ORDERED:

That the applicant, Continental Oil Company, is hereby authorized to drill its MCA Unit Well No. 251, a producing oil well, at an unorthodox location 1100 feet from the South line and 2600 feet from the West line of Section 21, Township 17 South, Range 32 East, NMPM, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico, as an infill well in its MCA Unit Area approved by Commission Order No. R-2403.

IT IS FURTHER ORDERED:

(1) That Order (2) of "IT IS FURTHER ORDERED" of Order No. R-2403, as amended by Order No. R-3375, is hereby further amended by the addition of a second paragraph as follows:

"The Secretary-Director of the Commission is hereby also authorized to approve such additional producing wells and injection wells at unorthodox locations within the boundaries of the Maljamar Cooperative Agreement Unit Area as may be necessary to complete an efficient production and injection pattern; provided said wells are drilled no closer than 330 feet to the outer boundary of said MCA Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that the application therefor has been filed in accordance with Rule 701-B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all operators owning acreage offsetting the quarter-quarter section upon which the well is to be located, if any there be, and no such operator has objected within 20 days. The Secretary-Director may grant immediate approval of the

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CASE No. 4304

Order No. R-2403-A

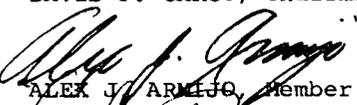
application upon receipt of written waivers of objection from all such offset operators."

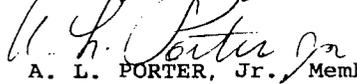
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

  
ALEX J. ARREOLA, Member

  
A. L. PORTER, Jr., Member & Secretary

S E A L

esr/



New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

Joanna Prukop  
Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



**Administrative Order PMX-164-A**  
**August 11, 2009**

APPLICATION OF CONOCOPHILLIPS COMPANY TO ADD PERFORATIONS WITHIN THE LOWER SAN ANDRES IN ORDER TO INCREASE INJECTION CAPACITY IN THE MCA UNIT WELL No. 386 IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-6157, as amended, ConocoPhillips Company (OGRID No. 217817) has made application to the Division on July 24, 2009 for permission to add perforations to expand its MCA Unit Pressure Maintenance/Enhanced Recovery Project in the Maljamar Grayburg San Andres Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application was filed in due form. No objections have been filed within the waiting period prescribed by Division Rule 26.8(C). The proposed well(s) are eligible for conversion to injection under the terms of Rule 26.8. The current operator is in compliance with Rule 5.9.

The proposed expansion of the above-referenced Pressure Maintenance Project will not cause waste nor impair correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

The operator is hereby authorized to inject water for purposes of secondary recovery into Grayburg San Andres formation within the unitized interval [see Division Order No R-6157] of the MCA Unit in the following-described well. This well shall be equipped with plastic-lined tubing set in a packer located within 100 feet of the top of the actual injection interval. The maximum allowed surface injection pressure is specified below.



**MCA Unit Well No. 386 (API No. 30-025-31100)**

1921' FNL, 1995' FWL, Unit F, Sec 29, T17S, R32E, NMPM

Injection Interval (Perforated): 3,755 to 4,290 feet

Maximum Surface Injection Pressure = 2,150 psi

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the permitted injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, injection casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The casing-tubing annulus shall openly extend to within 100 feet of the top of the injection interval and shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or injection system shall be equipped with pressure limiting devices which will limit the wellhead pressure to the maximum surface injection pressure described above.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator that such higher pressure will not result in waste of oil and gas or migration of the injected fluid from the permitted injection interval. Such proper showing shall be accompanied by valid step-rate test(s) run in accordance with and acceptable to this office.

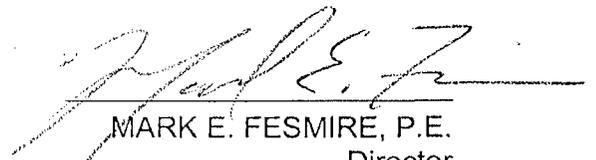
The operator shall notify the supervisor of the Division's district office of the date and time of the installation of injection equipment and of all mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Division's district office of any failure of tubing, casing, or packer and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well(s) shall be governed by all provisions of Division Order No. R-6157, as amended and Rules 26.9-26.13 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator mailed prior to the one year deadline, may grant an extension thereof for good cause shown.

  
MARK E. FESMIRE, P.E.  
Director

MEF/tw

cc: Oil Conservation Division – Hobbs  
Bureau of Land Management - Carlsbad



New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

Joanna Prukop  
Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



**Administrative Order PMX-254**  
**August 11, 2009**

APPLICATION OF CONOCOPHILLIPS COMPANY TO EXPAND ITS PRESSURE MAINTENANCE PROJECT IN THE LOWER SAN ANDRES IN ORDER TO INCREASE INJECTION CAPACITY IN THE MCA UNIT WELL No. 94 IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-6157, as amended, ConocoPhillips Company (OGRID No. 217817) has made application to the Division on July 24, 2009 for permission to expand its MCA Unit Pressure Maintenance/Enhanced Recovery Project in the Maljamar Grayburg San Andres Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application was filed in due form. No objections have been filed within the waiting period prescribed by Division Rule 26.8(C). The proposed well(s) are eligible for conversion to injection under the terms of Rule 26.8. The current operator is in compliance with Rule 5.9.

The proposed expansion of the above-referenced Pressure Maintenance Project will not cause waste nor impair correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

The operator is hereby authorized to inject water for purposes of secondary recovery into Grayburg San Andres formation within the unitized interval [see Division Order No R-6157] of the MCA Unit in the following-described well.

**MCA Unit Well No. 94 (API No. 30-025-08063)**  
660' FSL, 660' FEL, Unit P, Sec 20, T17S, R32E, NMPM  
Injection Interval : 3,755 to 4,290 feet  
Maximum Surface Injection Pressure = 2,150 psi



This well shall be equipped with plastic-lined tubing set in a packer located within 100 feet of the top of the actual injection interval. The maximum allowed surface injection pressure is specified below.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the permitted injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, injection casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The casing-tubing annulus shall openly extend to within 100 feet of the top of the injection interval and shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or injection system shall be equipped with pressure limiting devices which will limit the wellhead pressure to the maximum surface injection pressure described above.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator that such higher pressure will not result in waste of oil and gas or migration of the injected fluid from the permitted injection interval. Such proper showing shall be accompanied by valid step-rate test(s) run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of injection equipment and of all mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Division's district office of any failure of tubing, casing, or packer and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well(s) shall be governed by all provisions of Division Order No. R-6157, as amended and Rules 26.9-26.13 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator mailed prior to the one year deadline, may grant an extension thereof for good cause shown.

  
MARK E. FESMIRE, P.E.  
Director

MEF/tw

cc: Oil Conservation Division – Hobbs  
Bureau of Land Management - Carlsbad



New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Reese Fullerton**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



**Administrative Order WFX-855**

**September 2, 2009**

Jalyn N. Fiske  
ConocoPhillips Company  
3300 N. "A" Street, Bldg. 6  
Midland, TX 79705

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-2403, ConocoPhillips Company (OGRID No. 217817) has made application to the Division for permission to add 12 water injection wells to its MCA Unit Waterflood Project located within the Maljamar; Grayburg-San Andres Pool (43329) in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application was filed in due form. No objections have been filed within the waiting period prescribed by Division Rule 26.8C.(2). The proposed injection wells are eligible for conversion to injection under the terms of Rule 26.8. The operator is in compliance with Rule 5.9.

The proposed expansion of the above-referenced waterflood project, will prevent waste, is in the best interests of conservation, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED THAT:

ConocoPhillips Company is hereby authorized to inject water into the unitized interval, through plastic-lined tubing set in packers located within 100 feet of the top of the injection intervals in the following-described wells for purposes of secondary recovery:



| API          | Well # | Unit | Sec | Tsp | Rge | Top Perf | Bot Perf | Tubing | Pressure |
|--------------|--------|------|-----|-----|-----|----------|----------|--------|----------|
| 30-025-38972 | 399    | K    | 27  | 17S | 32E | 3880     | 4130     | 2.375  | 776      |
| 30-025-38975 | 404    | M    | 26  | 17S | 32E | 4041     | 4271     | 2.375  | 808      |
| 30-025-38856 | 411    | C    | 33  | 17S | 32E | 3883     | 4125     | 2.375  | 777      |
| 30-025-38982 | 414    | O    | 27  | 17S | 32E | 4028     | 4202     | 2.375  | 806      |
| 30-025-38986 | 418    | M    | 27  | 17S | 32E | 3934     | 4159     | 2.375  | 787      |
| 30-025-38987 | 419    | M    | 27  | 17S | 32E | 3955     | 4205     | 2.375  | 791      |
| 30-025-38989 | 420    | A    | 33  | 17S | 32E | 3973     | 4225     | 2.375  | 795      |
| 30-025-39318 | 462    | K    | 26  | 17S | 32E | 4075     | 4298     | 2.375  | 815      |
| 30-025-39320 | 474    | I    | 27  | 17S | 32E | 3945     | 4183     | 2.375  | 789      |
| 30-025-39349 | 475    | I    | 27  | 17S | 32E | 3916     | 4170     | 2.375  | 783      |
| 30-025-39351 | 478    | O    | 28  | 17S | 32E | 3884     | 4126     | 2.375  | 777      |
| 30-025-39353 | 483    | I    | 28  | 17S | 32E | 3822     | 4018     | 2.375  | 764      |

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into these wells, the casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection wells or injection system shall be equipped with pressure limiting devices which will limit the wellhead pressure to the maximum surface injection pressure described above.

The Director of the Division may authorize increases in injection pressure upon a proper showing by the operator that higher pressure will not result in migration of the injected fluid from the permitted injection interval or harmful formation fracturing. Such proper showing shall consist of valid step-rate tests and possibly injection profiles or pressure transient testing run in accordance with and acceptable to this office.

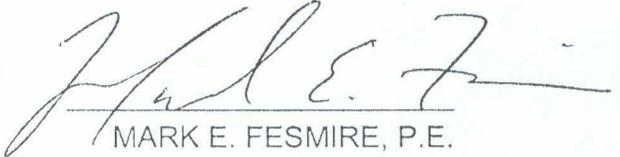
The operator shall notify the supervisor of the District Office of the date and time of the installation of injection equipment and of all mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the District Office of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-2243, and Rules 26.9 through 26.13 not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into at least one of the subject wells, provided however, the Division, upon written request by the operator received prior to the one year deadline, may grant an extension thereof for good cause shown.

  
MARK E. FESMIRE, P.E.  
Director

MEF/tw

cc: Oil Conservation Division – Hobbs