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. 3462 Order No. R-3134

APPLICATION OF CITIES SERVICE OIL COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28, 1966, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 14th day of October, 1966, 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, Cities Service Oil Company, seeks permission to institute a waterflood project in the Southeast Maljamar Grayburg-San Andres Unit Area, Maljamar (Grayburg-San Andres) Pool, by the injection of water into the Grayburg-San Andres formation through eleven injection wells in Sections 29, 30, and 32, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

- (5) That the applicant further seeks the establishment of an administrative procedure whereby additional wells, within the said unit area, could be placed on water injection.
- (6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to institute a waterflood project in the Southeast Maljamar Grayburg-San Andres Unit Area, Maljamar (Grayburg-San Andres) Pool, by the injection of water into the Grayburg-San Andres formation through the following-described wells in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico:

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Shell St. "A" # 1
                                  1980' FSL 660' FWL Section 29
Cities Service
                                 660' FSL 1980' FWL Section 29
                Shell St. "A" # 2
Cities Service
Cities Service Philmex St. "A" # 6
                                 990' FNL 2310' FEL Section 29
Cities Service Philmex St. "A" # 5 2310' FNL 990' FEL
                                                      Section 29
                             # 3
                                  1980' FNL 1980' FWL
                                                      Section 29
               Philmex
Phillips
                             # 7
                                  660' FNL 660' FWL Section 29
Phillips
               Philmex
                             # 2 1980' FSL 1980' FEL Section 29
               State "A"
Shell
                             # 3 660' FSL 990' FEL Section 29
               State "A"
Shell
                             # 1
                                  1980' FNL 660' FEL
                                                      Section 30
Cities Service Ohio Jones "A"
                             # 3 660' FSL 660' FEL
                                                      Section 30
Phillips
            U.S. Minerals
Cities Service Cockburn St. "A" # 3
                                   660' FNL 1980' FEL
                                                      Section 32
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- (2) That the subject waterflood project is hereby designated the Southeast Maljamar Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the Secretary-Director of the Commission may approve the placing of additional wells, within the said unit area, on water injection as may be necessary to complete an efficient waterflood injection pattern.
- (3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

-3-CASE No. 3462 Order No. R-3134

(4) 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

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & 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 NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 4750 Order No. R-3134-A

APPLICATION OF CITIES SERVICE OIL COMPANY FOR AN UNORTHODOX LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 28, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 19th day of July, 1972, 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, Cities Service Oil Company, is the operator of the Southeast Maljamar Grayburg-San Andres Unit Waterflood Project, Maljamar Pool, Lea County, New Mexico.
- (3) That the applicant seeks authority to drill a well at an unorthodox location 1155 feet from the South line and 1385 feet from the East line of Section 29, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico, as a producing well in said Southeast Maljamar Grayburg-San Andres Unit Waterflood Project.
- (4) That the proposed unorthodox location is necessary to provide an efficient oil producing pattern.
- (5) That the applicant also seeks the establishment of an administrative procedure whereby the Secretary-Director of the Commission may authorize additional producing wells and injection wells at orthodox and unorthodox locations within said Southeast Maljarmar Grayburg-San Andres Unit Waterflood Project area as may be necessary to complete an efficient production and injection pattern.

- (6) That approval of the requested administrative procedure will afford the applicant the opportunity to produce its just and equitable share of the oil in the Maljamar Pool, provided said wells are drilled no closer than 330 feet to the outer boundary of the above-described unit area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary.
- (7) That the subject waterflood project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Cities Service Oil Company, is hereby authorized to drill a well at an unorthodox location 1155 feet from the South line and 1385 feet from the East line of Section 29, Township 17 South, Range 33 East, NMPM, Maljamar Pool, Lea County, New Mexico, as a producing well in its Southeast Maljamar Grayburg-San Andres Unit Waterflood Project.
- (2) That Order (2) of Order No. R-3134 is hereby amended to read in its entirety as follows:
- "(2) That the subject waterflood project shall continue to be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve such additional producing wells and injection wells at orthodox and unorthodox locations within the Southeast Maljamar Grayburg-San Andres Unit Waterflood Project 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 the Southeast Maljamar Grayburg-San Andres Unit Area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided that the application has been sent to all offset operators, if any there be, and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection."

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

-3-CASE NO. 4750 Order No. R-3134-A

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

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

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

CASE NO. 11742 ORDER NOS. R-3130-A and R-3134-C

APPLICATION OF CROSS TIMBERS OPERATING COMPANY FOR UNIT EXPANSION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 6, 1997, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>31st</u> day of March, 1997, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant in this matter, Cross Timbers Operating Company ("Cross Timbers"), is the designated Unit operator of the Southeast Maljamar Grayburg-San Andres Unit, which comprises approximately 1,080 acres, more or less, of State and Federal lands underlying the following described area in Lea County, New Mexico:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM

Section 29: NW/4 NE/4, S/2 NE/4, W/2, and SE/4

Section 30: NE/4, N/2 SE/4, and SE/4 SE/4

Section 32: N/2 NE/4, SE/4 NE/4, and N/2 NW/4

Said Unit was approved by Division Order No. R-3130, issued in Case 3461 and dated October 4, 1966, for the purpose of conducting a waterflood project in the Maljamar Grayburg-San Andres Pool, which was approved by Division Order No. R-3134, issued

in Case 3462 and dated October 14, 1966. The unitized formation is from the top of the Grayburg formation down to and including 100 feet below the top of the San Andres formation.

- (3) The Maljamar Grayburg-San Andres Pool within the subject Unit/Waterflood Area is currently governed by the general Statewide Rules and Regulations with development on standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the boundary of the unitized area nor closer than ten feet from any quarter-quarter section line or subdivision inner boundary.
- (4) At this time Cross Timbers seeks to expand the Southeast Maljamar Grayburg-San Andres Unit area to include three additional tracts of State and Federal lands in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico comprising the following described 200 acres, more or less:
 - (i) Tract No. 11: 40 acres of Federal land (Lease No. NM-010388) comprising the NW/4 NW/4 of Section 33;
 - (ii) Tract No. 12: 80 acres of Federal land (Lease No. NM-04242) comprising the N/2 SW/4 of Section 33; and,
 - (iii) Tract No. 13: 80 acres of State land (Lease No. E-00398) comprising the N/2 SE/4 of Section 32.

The Unit area, after expansion, will comprise a total area of 1280 acres (400 acres of Federal land - 31.25% and 880 acres of State land - 68.75%); is further described on Exhibit "A" attached hereto and made a part hereof.

- (5) Any order issued in this case extending the boundary of the Southeast Maljamar Grayburg-San Andres Unit will also extend the governing rules of the Unit, as expanded, to the waterflood project in said Unit area.
- (6) The only working interest or cost bearing interest owner in the Unit, as expanded, is Cross Timbers, who has ratified the Unit expansion.
- (7) The royalty interest owners in the Unit, the Commissioner of Public Lands of the State of New Mexico and the Bureau of Land Management of the United States Department of Interior, have approved the expansion of the Unit.
- (8) However, there are numerous overriding royalty interest owners in the three tracts to be added to the Unit. A number of the overriding royalty interest owners have

ratified expansion of the Unit. Those who have not ratified the expansion of the Unit will continue to be paid on a lease basis by the Unit operator.

- (9) Due to the differences in overriding royalty ownership in the tracts to be added to the Unit and to assure that correlative rights are being adequately protected, there should be well location restrictions on wells drilled or recompleted in the expanded Unit which offset the three additional Unit tracts.
- (10) The applicant presented evidence and testimony which estimates that the existing Unit area should produce 6,116,000 barrels of oil from the Maljamar Grayburg-San Andres Pool, with 58% of the production being secondary oil. It was further estimated that ultimate primary production from the three tracts being added to the Unit area will be 536,000 barrels of oil. If the secondary/primary recovery ratio for the expanded area remains the same as for the existing Unit area, expanding the Unit will allow the recovery of an additional 740,000 barrels of oil.
- (11) The original Unit Agreement approved in 1966 by Division Order No. R-3130 is not being amended by the applicant, other than to revise:
 - (i) Exhibit "A", being a map of the boundary of the Unit Area and the boundaries and identity of tracts and leases within the Unit Area;
 - (ii) Exhibit "B", being a schedule showing the percentage and type of ownership of oil and gas interests in all land in the Unit Area; and,
 - (iii) Exhibit "C", being a schedule of the Tract Participation percentages for each tract during Phase I and Phase II.
- (12) The Phase II tract participation formula in the Unit Agreement is being used to allocate production among the tracts in the expanded Unit area, and the formula is fair and equitable.
- (13) All plans of development and operation, expansions or contractions of participating areas, or expansions or contractions of the Unit area should be submitted to the Director of the Division for approval.
- (14) Approval of the Unit Agreement, as amended by the revised Exhibits A, B, and C thereto, should promote the prevention of waste and the protection of correlative

rights within the expanded Unit area.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Cross Timbers Operating Company ("Cross Timbers") to expand the Southeast Maljamar Grayburg-San Andres Unit Area (originally approved by Division Order No. R-3130, issued in Case 3461 and dated October 4, 1966, for the purpose of conducting a waterflood project in the Maljamar Grayburg-San Andres Pool, which was approved by Division Order No. R-3134, issued in Case 3462 and dated October 14, 1966) to include three additional tracts of State and Federal lands in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico comprising the following described 200 acres, more or less, is hereby approved:
 - (i) Tract No. 11: 40 acres of Federal land (Lease No. NM-010388) comprising the NW/4 NW/4 of Section 33;
 - (ii) Tract No. 12: 80 acres of Federal land (Lease No. NM-04242) comprising the N/2 SW/4 of Section 33; and,
 - (iii) Tract No. 13: 80 acres of State land (Lease No. E-00398) comprising the N/2 SE/4 of Section 32.
- (2) The Unit area, after expansion, will comprise a total area of 1280 acres, 400 acres of Federal land (31.25%) and 880 acres of State land (68.75%), for oil and gas produced from the top of the Grayburg formation to 100 feet below the top of the San Andres formation, and is further described on Exhibit "A" attached hereto and made a part hereof.
- (3) The plan contained in the Unit Agreement for the development and operation of the expanded Unit area is hereby approved in principle as a proper conservation measure; provided, however, notwithstanding any of the provisions contained in the Unit Agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Division to supervise and control operations for the Unit and production of oil and gas therefrom.

IT IS FURTHER ORDERED HOWEVER THAT:

(4) No well may be drilled or recompleted in the Maljamar Grayburg-San Andres Pool within 330 feet of:

- (a) the boundary between the original Unit Area (tracts one through ten) and the newly incorporated tracts 11, 12, and 13; or,
- (b) the boundary between Unit tracts 12 and 13.
- (5) In the event of subsequent joinder by any other party, or expansion or contraction of the Unit Area, the Unit operator shall file with the Division, within 30 days thereafter, counterparts of the Unit Agreement or ratification of same reflecting the subscription of those interests having joined or ratified.
- (6) All plans of development and operation, any further expansions or contractions of Unit participating areas and expansions or contractions of the Unit area, shall be submitted to the Director of the Division for approval.
- (7) This order shall be effective upon the first of the month following approval by the Commissioner of Public Lands of the State of New Mexico and the appropriate agency of the United States Department of Interior. This order shall terminate upon the termination of said Unit Agreement; and the last Unit operator shall notify the Division immediately in writing of such termination.
- (8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

EXHIBIT "A" CASE NO. 11742

ORDER NOS. R-3130-A AND R-3134-C

SOUTHEAST MALJAMAR GRAYBURG-SAN ANDRES UNIT AGREEMENT CROSS TIMBERS OIL COMPANY LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM

Section 29: NW/4 NE/4, S/2 NE/4, W/2, and SE/4

Section 30: NE/4, N/2 SE/4, and SE/4 SE/4

Section 32: N/2 NE/4, SE/4 NE/4, N/2 NW/4, and N/2 SE/4

Section 33: NW/4 NW/4 and N/2 SW/4.

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. 3461 Order No. R-3130

APPLICATION OF CITIES SERVICE OIL COMPANY FOR APPROVAL OF THE SOUTH-EAST MALJAMAR GRAYBURG-SAN ANDRES UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28, 1966, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 4th day of October, 1966, 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, Cities Service Oil Company, seeks approval of the Southeast Maljamar Grayburg-San Andres Unit Agreement covering 1080 acres, more or less, of State and Federal lands described as follows:

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM

Section 29: W/2, SE/4, W/2 NE/4, and

SE/4 NE/4

Section 30: NE/4, N/2 SE/4, and SE/4 SE/4

Section 32: N/2 N/2 and SE/4 NE/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

- (1) That the Southeast Maljamar Grayburg-San Andres Unit Agreement is hereby approved.
- (2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.
- (3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.
- (4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.
- (5) 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

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

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

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

CASE NO. 11742 ORDER NOS. R-3130-A and R-3134-C

APPLICATION OF CROSS TIMBERS OPERATING COMPANY FOR UNIT EXPANSION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 6, 1997, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>31st</u> day of March, 1997, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant in this matter, Cross Timbers Operating Company ("Cross Timbers"), is the designated Unit operator of the Southeast Maljamar Grayburg-San Andres Unit, which comprises approximately 1,080 acres, more or less, of State and Federal lands underlying the following described area in Lea County, New Mexico:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM

Section 29: NW/4 NE/4, S/2 NE/4, W/2, and SE/4

Section 30: NE/4, N/2 SE/4, and SE/4 SE/4

Section 32: N/2 NE/4, SE/4 NE/4, and N/2 NW/4

Said Unit was approved by Division Order No. R-3130, issued in Case 3461 and dated October 4, 1966, for the purpose of conducting a waterflood project in the Maljamar Grayburg-San Andres Pool, which was approved by Division Order No. R-3134, issued

in Case 3462 and dated October 14, 1966. The unitized formation is from the top of the Grayburg formation down to and including 100 feet below the top of the San Andres formation.

- (3) The Maljamar Grayburg-San Andres Pool within the subject Unit/Waterflood Area is currently governed by the general Statewide Rules and Regulations with development on standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the boundary of the unitized area nor closer than ten feet from any quarter-quarter section line or subdivision inner boundary.
- (4) At this time Cross Timbers seeks to expand the Southeast Maljamar Grayburg-San Andres Unit area to include three additional tracts of State and Federal lands in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico comprising the following described 200 acres, more or less:
 - (i) Tract No. 11: 40 acres of Federal land (Lease No. NM-010388) comprising the NW/4 NW/4 of Section 33;
 - (ii) Tract No. 12: 80 acres of Federal land (Lease No. NM-04242) comprising the N/2 SW/4 of Section 33; and,
 - (iii) Tract No. 13: 80 acres of State land (Lease No. E-00398) comprising the N/2 SE/4 of Section 32.

The Unit area, after expansion, will comprise a total area of 1280 acres (400 acres of Federal land - 31.25% and 880 acres of State land - 68.75%); is further described on Exhibit "A" attached hereto and made a part hereof.

- (5) Any order issued in this case extending the boundary of the Southeast Maljamar Grayburg-San Andres Unit will also extend the governing rules of the Unit, as expanded, to the waterflood project in said Unit area.
- (6) The only working interest or cost bearing interest owner in the Unit, as expanded, is Cross Timbers, who has ratified the Unit expansion.
- (7) The royalty interest owners in the Unit, the Commissioner of Public Lands of the State of New Mexico and the Bureau of Land Management of the United States Department of Interior, have approved the expansion of the Unit.
- (8) However, there are numerous overriding royalty interest owners in the three tracts to be added to the Unit. A number of the overriding royalty interest owners have

ratified expansion of the Unit. Those who have not ratified the expansion of the Unit will continue to be paid on a lease basis by the Unit operator.

- (9) Due to the differences in overriding royalty ownership in the tracts to be added to the Unit and to assure that correlative rights are being adequately protected, there should be well location restrictions on wells drilled or recompleted in the expanded Unit which offset the three additional Unit tracts.
- (10) The applicant presented evidence and testimony which estimates that the existing Unit area should produce 6,116,000 barrels of oil from the Maljamar Grayburg-San Andres Pool, with 58% of the production being secondary oil. It was further estimated that ultimate primary production from the three tracts being added to the Unit area will be 536,000 barrels of oil. If the secondary/primary recovery ratio for the expanded area remains the same as for the existing Unit area, expanding the Unit will allow the recovery of an additional 740,000 barrels of oil.
- (11) The original Unit Agreement approved in 1966 by Division Order No. R-3130 is not being amended by the applicant, other than to revise:
 - (i) Exhibit "A", being a map of the boundary of the Unit Area and the boundaries and identity of tracts and leases within the Unit Area;
 - (ii) Exhibit "B", being a schedule showing the percentage and type of ownership of oil and gas interests in all land in the Unit Area; and,
 - (iii) Exhibit "C", being a schedule of the Tract Participation percentages for each tract during Phase I and Phase II.
- (12) The Phase II tract participation formula in the Unit Agreement is being used to allocate production among the tracts in the expanded Unit area, and the formula is fair and equitable.
- (13) All plans of development and operation, expansions or contractions of participating areas, or expansions or contractions of the Unit area should be submitted to the Director of the Division for approval.
- (14) Approval of the Unit Agreement, as amended by the revised Exhibits A, B, and C thereto, should promote the prevention of waste and the protection of correlative

rights within the expanded Unit area.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Cross Timbers Operating Company ("Cross Timbers") to expand the Southeast Maljamar Grayburg-San Andres Unit Area (originally approved by Division Order No. R-3130, issued in Case 3461 and dated October 4, 1966, for the purpose of conducting a waterflood project in the Maljamar Grayburg-San Andres Pool, which was approved by Division Order No. R-3134, issued in Case 3462 and dated October 14, 1966) to include three additional tracts of State and Federal lands in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico comprising the following described 200 acres, more or less, is hereby approved:
 - (i) Tract No. 11: 40 acres of Federal land (Lease No. NM-010388) comprising the NW/4 NW/4 of Section 33;
 - (ii) Tract No. 12: 80 acres of Federal land (Lease No. NM-04242) comprising the N/2 SW/4 of Section 33; and,
 - (iii) Tract No. 13: 80 acres of State land (Lease No. E-00398) comprising the N/2 SE/4 of Section 32.
- (2) The Unit area, after expansion, will comprise a total area of 1280 acres, 400 acres of Federal land (31.25%) and 880 acres of State land (68.75%), for oil and gas produced from the top of the Grayburg formation to 100 feet below the top of the San Andres formation, and is further described on Exhibit "A" attached hereto and made a part hereof.
- (3) The plan contained in the Unit Agreement for the development and operation of the expanded Unit area is hereby approved in principle as a proper conservation measure; provided, however, notwithstanding any of the provisions contained in the Unit Agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Division to supervise and control operations for the Unit and production of oil and gas therefrom.

IT IS FURTHER ORDERED HOWEVER THAT:

(4) No well may be drilled or recompleted in the Maljamar Grayburg-San Andres Pool within 330 feet of:

- (a) the boundary between the original Unit Area (tracts one through ten) and the newly incorporated tracts 11, 12, and 13; or,
- (b) the boundary between Unit tracts 12 and 13.
- (5) In the event of subsequent joinder by any other party, or expansion or contraction of the Unit Area, the Unit operator shall file with the Division, within 30 days thereafter, counterparts of the Unit Agreement or ratification of same reflecting the subscription of those interests having joined or ratified.
- (6) All plans of development and operation, any further expansions or contractions of Unit participating areas and expansions or contractions of the Unit area, shall be submitted to the Director of the Division for approval.
- (7) This order shall be effective upon the first of the month following approval by the Commissioner of Public Lands of the State of New Mexico and the appropriate agency of the United States Department of Interior. This order shall terminate upon the termination of said Unit Agreement; and the last Unit operator shall notify the Division immediately in writing of such termination.
- (8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J./LEMAY

Director

EXHIBIT "A" CASE NO. 11742

ORDER NOS. R-3130-A AND R-3134-C

SOUTHEAST MALJAMAR GRAYBURG-SAN ANDRES UNIT AGREEMENT CROSS TIMBERS OIL COMPANY LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM

Section 29: NW/4 NE/4, S/2 NE/4, W/2, and SE/4

Section 30: NE/4, N/2 SE/4, and SE/4 SE/4

Section 32: N/2 NE/4, SE/4 NE/4, N/2 NW/4, and N/2 SE/4

Section 33: NW/4 NW/4 and N/2 SW/4.