CASE 3049: Application of SOHIO PETROLEUM CO. for approval of the LITTMAN SAN ANDRES UNIT AGREEMENT.

CASE NO. 3049

Application,
Transcripts,
Small Exhibits
ETC.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

70 SEP 2 AM 8 13

IN REPLY REFER TO:

September 1, 1970

Sohio Petroleum Company
P.O. Box 3167
Midland, Texas 79701

Attention: Mr. Roy C. Gould

Gentlemen:

Your application for termination of the Littman San Andres unit agreement, Lea County, New Mexico, and Andrews County, Texas, pursuant to Article 22.3 thereof, was approved on September 1, 1970, effective as of October 1, 1970.

Copies of the approved termination are being furnished to the appropriate Federal offices and one approved copy is enclosed. It is requested that you furnish notice of this approval to each party affected by the termination of the Littman San Andres unit agreement.

Sincerely yours,

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:
Washington (w/cy appln)
BLM, Santa Fe (w/cy appln.)
Hobbs (w/cy appln.)
BOMC, Roswell (ltr. only)
NMOCC, Santa Fe (ltr. only)
Com. of Pub. Lands, Santa Fe (ltr. only)

August 17, 1970

'70 Aug 19 PM 1 26

Sohio Petroleum Company
Box 3167
Midland, Texas 79701

Re: Littman Unit
TERMINATION
Andrews County, Texas
Lea County, New Mexico

ATTENTION: Mr. Roy C. Gould

Gentlemen:

Your request received August 17, 1970, to terminate the Littman Unit pursuant to Article 22.3 (2) of the Unit Agreement for the Development and Operation of the Littman Unit, is hereby approved, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

The effective date of the termination to be as of 7:00 A.M., October 1, 1970.

Very truly yours,

GORDON G. MARCUM, II, Director
Oil and Gas Department

GGM/ML/s
cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico

COPY

August 17, 1970

Sohio Petroleum Company
Box 3167
Midland, Texas 79701

'70 AUG 19 PM 1 26

Re: Littman Unit
TERMINATION
Andrews County, Texas
Lea County, New Mexico

ATTENTION: Mr. Roy C. Gould

Gentlemen:

Your request received August 17, 1970, to terminate the Littman Unit pursuant to Article 22.3 (2) of the Unit Agreement for the Development and Operation of the Littman Unit, is hereby approved, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

The effective date of the termination to be as of 7:00 A.M., October 1, 1970.

Very truly yours,

GORDON G. MARCUM, II, Director
Oil and Gas Department

GGM/ML/s
cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico

COPY

SOHIO

SOHIO PETROLEUM COMPANY

PRODUCTION AND EXPLORATION DIVISION

MIDLAND DISTRICT

February 6, 1967

BOX 1567
MIDLAND, TEXAS 79701

Mr. Arthur Barbeck
Railroad Commission of Texas
Tribune Building
Austin, Texas

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Railroad Commission of Texas
District 8
P. O. Box 1110
Midland, Texas

Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico

United States Department of the Interior
Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico
Attn: Mrs. Marion Rhea

Re: Littman San Andres Unit
Andrews County, Texas
Lea County, New Mexico

Gentlemen:

This letter is to advise you of change of status of wells in the expansion from the five-spot in the above unit.

Injection was commenced February 2, 1967, into Wells No. 6-6 in Texas, and 2-2, 3-3 and 4-2 in New Mexico.

OCC Order No. R-2715 entered in Case No. 3050 and RRC Order No. 8-58, 821 approved this unit in New Mexico and Texas.

Yours very truly,

SOHIO PETROLEUM COMPANY

A. K. Hood
District Superintendent
Midland District

DWR:ee

SOHIO PETROLEUM COMPANY

PRODUCTION AND EXPLORATION DIVISION

MIDLAND DISTRICT

February 6, 1967

BOX 3167
MIDLAND, TEXAS 79704

Mr. Arthur Barbeck
Railroad Commission of Texas
Tribune Building
Austin, Texas

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Railroad Commission of Texas
District 8
P. O. Box 1110
Midland, Texas

Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico

United States Department of the Interior
Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico
Attn: Mrs. Marion Rhea

Re: Littman San Andres Unit
Andrews County, Texas
Lea County, New Mexico

Gentlemen:

This letter is to advise you of change of status of wells in the expansion from the five-spot in the above unit.

Injection was commenced February 2, 1967, into Wells No. 6-6 in Texas, and 2-2, 3-3 and 4-2 in New Mexico.

OCC Order No. R-2715 entered in Case No. 3050 and RRC Order No. 8-58, 821 approved this unit in New Mexico and Texas.

Yours very truly,

SOHIO PETROLEUM COMPANY

A. K. Hood
District Superintendent
Midland District

DWR:ee

3049

SOHIO

SOHIO PETROLEUM COMPANY

PRODUCTION AND EXPLORATION DIVISION

November 18, 1966

MIDLAND DISTRICT

BOX 167
MIDLAND, TEXAS 79701

Mr. Arthur Barbeck
Chief Engineer
Railroad Commission of Texas
Tribune Building
Austin, Texas

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Railroad Commission of Texas
District 8
P. O. Box 1110
Midland, Texas

Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico

United States Department of the Interior
Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico
Attn: Mrs. Marion Rhea

Re: Littman San Andres Unit
Andrews County, Texas
Lea County, New Mexico

Gentlemen:

This letter is to advise you of change of status of wells in the expansion from the five-spot in the above unit.

Water injection into Well 6-3 was commenced November 15, 1966, making a current total of five injection wells in the unit. All injection wells thus far are in Texas.

Wells No. 6-6 in Texas and No. 2-2, 3-3 and 4-2 in New Mexico are currently being prepared for injection. As requested in previous letters, the allowables have been cancelled on these wells.

You will be notified when injection is commenced in the four wells.

OCC Order No. R-2715 entered in Case No. 3050 and RRC Order No. 8-53, 821 approved this unit in New Mexico and Texas.

Yours very truly,

SOHIO PETROLEUM COMPANY

A. K. Hood
District Superintendent
Midland District

DWR:ee

'65 AUG 10

August 6, 1965

Sohio Petroleum Company
970 First National Office Building
Oklahoma City, Oklahoma 73102

Attention: Mr. C. L. Ware

Re: Littman San Andres Unit
Lea County, New Mexico

Gentlemen:

The Unit Agreement under Article 11,11.3 provides for periodical reports of the plan of operation for this water flood unit. The unit has been in effect for over a year and as of this date the Commissioner of Public Lands has received no communication from Sohio.

We have received New Mexico O.C.C. operator's monthly report. However, there is no indication on this report that there has been any water injected. May we have a complete, up to date report on this unit at your very earliest convenience.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

By:

(Mr.) Ted Bilberry, Director
Oil and Gas Department

GBH:TB:MMR:oc
cc: N. M. Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

1964 JUN 23 AM 7:19

June 19, 1964

RE: U-413-46 and U-291-20
Littman San Andres Unit
Lea County, New Mexico and
Andrews County, Texas

Oil Conservation Commission for the
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Under date of June 3, 1964, the Oil Conservation Commission of the State of New Mexico in Order #R-2714, dated June 3, 1964; and the Commissioner of Public Lands for the State of New Mexico in a Certificate of Approval dated June 4, 1964; and the Railroad Commission of the State of Texas at a formal conference held June 10, 1964; and the Director of the United States Geological Survey in a certificate of Approval-Certification-Determination dated June 12, 1964; have each approved the Unit Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas.

As a requisite of effectiveness, Article 22.1.4 of said Unit Agreement requires the delivery of a certificate to the effect that said agreement will become effective according to its terms and stating the effective date to the Supervisor of the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, and the filing of such certificate in the records of Lea County, New Mexico and Andrews County, Texas.

This letter and the attached certificate of effectiveness shall constitute compliance with Article 22.1.4 of said Unit Agreement. Attached to this letter for your files is an executed original Certificate of Effectiveness, Unit Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas, which recites all of the necessary approvals by the Commissioner, Commission, Railroad Commission and the Director of the United States Geological Survey duly authorized representative of the Secretary of the Interior, and that the Littman San Andres Unit Agreement will become effective under its terms and conditions on July 1, 1964 at 7:00 o'clock A.M.

You are also advised that the Unit Agreement, Littman San Andres Unit, was filed for record in Andrews County, Texas, at 8:40 A.M., June 18, 1964, and was given File Numbers 5680 through 5796; and was filed for record in Lea County, New Mexico, at 10:00 A.M. on June 18, 1964, and was given File Numbers 20180 through 20296. The respective volume or book and page numbers will be furnished to you when received.

SOHIO

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

1964 JUN 23 AM 7:19

June 19, 1964

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

RE: U-413-46 and U-291-20
Littman San Andres Unit
Lea County, New Mexico and
Andrews County, Texas

Oil Conservation Commission for the
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Under date of June 3, 1964, the Oil Conservation Commission of the State of New Mexico in Order #R-2714, dated June 3, 1964; and the Commissioner of Public Lands for the State of New Mexico in a Certificate of Approval dated June 4, 1964; and the Railroad Commission of the State of Texas at a formal conference held June 10, 1964; and the Director of the United States Geological Survey in a certificate of Approval-Certification-Determination dated June 12, 1964; have each approved the Unit Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas.

As a requisite of effectiveness, Article 22.1.4 of said Unit Agreement requires the delivery of a certificate to the effect that said agreement will become effective according to its terms and stating the effective date to the Supervisor of the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, and the filing of such certificate in the records of Lea County, New Mexico and Andrews County, Texas.

This letter and the attached certificate of effectiveness shall constitute compliance with Article 22.1.4 of said Unit Agreement. Attached to this letter for your files is an executed original Certificate of Effectiveness, Unit Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas, which recites all of the necessary approvals by the Commissioner, Commission, Railroad Commission and the Director of the United States Geological Survey duly authorized representative of the Secretary of the Interior, and that the Littman San Andres Unit Agreement will become effective under its terms and conditions on July 1, 1964 at 7:00 o'clock A.M.

You are also advised that the Unit Agreement, Littman San Andres Unit, was filed for record in Andrews County, Texas, at 8:40 A.M., June 18, 1964, and was given File Numbers 5680 through 5796; and was filed for record in Lea County, New Mexico, at 10:00 A.M. on June 18, 1964, and was given File Numbers 20180 through 20296. The respective volume or book and page numbers will be furnished to you when received.

June 19, 1964

Oil Conservation Commission for the
State of Texas

RE: U-413-46 and U-291-20
Littman San Andres Unit

We are this date simultaneously with the mailing of this certificate to you, filing an identical certificate for record in Andrews County, Texas and in Lea County, New Mexico.

The Unit Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas, has been assigned Contract No. 14-08-0001 8608 by the United States Geological Survey.

We enclose for your files a copy of a letter dated June 11, 1964, from the Railroad Commission of Texas, and a copy of the Certificate of Approval-Certification-Determination dated June 12, 1964, executed by the Director of the United States Geological Survey.

In compliance with paragraph Numbered 5 of Order #R-2714 issued in Case #3049, we enclose for your files an executed original of the Littman San Andres Unit Agreement and original executed Ratifications and Joinders to the Littman San Andres Unit Agreement.

Yours very truly,

SOHIO PETROLEUM COMPANY, Operator

By C. L. Ware
C. L. Ware
Staff Landman

CLW:wh
Encls.

3047

June 4, 1964

Ohio Petroleum Company
970 First National Office Bldg.
Oklahoma City 2, Oklahoma

Re: Littman San Andres Unit
Lea County, New Mexico
and Andrews County, Texas

Attention: Mr. C. L. Ware

Gentlemen:

The Commissioner of Public Lands approved as of June 4, 1964, the Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas, subject to like approval by the United States Geological Survey.

This Unit Agreement and Waterflood Project was approved by the Oil Conservation Commission under Case No. 3049 and Case No. 3050, Order No. R-2714 and Order No. R-2715 as of June 3, 1964.

We are enclosing six Certificates of Approval together with one originally signed copy of the Unit Agreement, also enclosed is Official Receipt No. G-44179 in the amount of Forty five ($45.00) Dollars which covers the filing fee.

We are sending one originally signed Certificate of Approval to the United States Geological Survey, Oil and Gas Supervisor, P. O. Drawer 1857, Roswell, New Mexico, Attention Mr. John A. Anderson.

Please furnish this office any change in well numbers, also a copy of Operators Monthly report.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/v
cc:
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico
Attention: Mr. John A. Anderson
Oil and Gas Supervisor

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 27, 1964

EXAMINER HEARING

IN THE MATTER OF:
Application of Sohio Petroleum Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Littman San Andres Unit Area comprising 661 acres, more or less, of State and Federal lands in Sections 8, 9, 16, and 17, Township 21 South, Range 38 East, Lea County, New Mexico. The Unit Area also includes 1280 acres of fee land in Sections 5, 6, 7, 14, and 15, Block A-29, PSL, Andrews County, Texas.

Case No. 3049
and
Case No. 3050

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M.
PHONE 243-6691
SANTA FE, N. M.
PHONE 983-3971
FARMINGTON, N. M.
PHONE 325-1182

MR. UTZ: Case 3049.

MR. DURRETT: Application of Sohio Petroleum Company for a unit agreement, Lea County, New Mexico.

MR. COOTER: Paul Cooter of Atwood, Malone, Roswell, appearing for the Applicant. Mr. Utz, for purposes of this hearing and the taking of testimony, we would move the consolidation of Cases 3049 and 3050.

MR. UTZ: 3050 is a waterflood application for the Littman San Andres Unit?

MR. COOTER: Yes, sir.

MR. UTZ: For purposes of testimony, 3049 and 3050 will be consolidated.

MR. COOTER: We have two witnesses, C. L. Ware and R. L. McCormick.

(Witnesses sworn.)

C. L. WARE

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record, please?

A My name is C. L. Ware.

Q By whom are you employed, Mr. Ware?

A Sohio Petroleum Company.

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

Q In what capacity?

A A staff landman.

Q Are you familiar with Sohio's application in Case 3049 for the approval of the unit agreement?

A I am.

Q What is the purpose of Sohio's application?

A The purpose of the application is to secure approval of the Littman San Andres agreement and Unit Area for the purposes of instigating a secondary recovery project to promote conservation and prevent waste.

(Whereupon, Sohio's Exhibit No. 1 marked for identification.)

Q I'll hand you what has been marked for purposes of identification Exhibit No. 1 and ask you if this is a copy of the unit agreement.

A It is.

Q There was a unit agreement filed with the application. Is this the same unit agreement that was filed with that?

A Yes. There are three minor mechanical corrections that have been made in there. There's three typing errors that were discovered and corrected.

Q For the purposes of the record, would you identify those three corrections? I believe they appear on pages 5, 6, and 18.

A On page 5 under Article 4, the definition reference to 2.15 should have been 2.14 and that has been corrected. 2.15

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971

I believe defined the unit manager, the unit operator rather than the Unit Area.

MR. PORTER: I find that as you read it in, 2.14.

A In the one we are submitting it is corrected.

MR. PORTER: It is corrected?

A Yes, sir. On page 6 in paragraph B at the top of the page on the second line, the word "immediately" was mis-spelled. It is corrected.

Q (By Mr. Cooter) Page 18 I believe is the third change.

A On page 18 in Article 24, on the second line of 24.1, the word "and" should have been "any" and has been corrected.

MR. COOTER: Mr. Examiner, we would offer Exhibit 1 and ask to withdraw the copies of the unit agreement which were filed with the application.

MR. UTZ: You may do so.

(Whereupon, Sohio's Exhibit No. 2 marked for identification.)

Q I will hand you next what has been marked for purposes of identification Exhibit No. 2 and ask you to identify that exhibit.

A Exhibit No. 2 is a unit operating agreement prepared to cover the operations of the Littman San Andres unit agreement.

(Whereupon, Sohio's Exhibit No. 3 marked for identification.)

MR. UTZ: These three copies that you sent with the

DEARNLEY-MEIER REPORTING SERVICE, Inc.
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691

application are incorrect?

MR. COOTER: Right. I think it would clarify the record if we just withdrew those.

MR. UTZ: All right.

Q (By Mr. Cooter) Was the unit agreement submitted to the office of the Commissioner of Public Lands of the State of New Mexico?

A Yes.

Q I'll hand you what has been marked for purposes of identification as Exhibit No. 3 and ask you to relate what that is.

A It's a letter from the Commissioner of Public Lands dated March 19, 1963, approving the Littman San Andres unit agreement as to form and content, subject to two changes requested by the Commissioner.

Q Were those changes made in the unit agreement which has been marked as Exhibit No. 1?

A Yes.

Q Was the unit agreement submitted to the U.S.G.S.?

A Yes.

(Whereupon, Sohio's Exhibit No. 4 marked for identification.)

Q I will hand you what has been marked for identification as Exhibit 4 and ask you to relate what that is.

A This is a letter from the United States Department of

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

the Interior dated August 13th, 1963, approving the Littman San Andres Unit Area and approving the form and content of the unit agreement, subject to changes as requested by the U.S.G.S.

Q Were those changes incorporated into the exhibit that is now Exhibit 1?

A Yes.

(Whereupon, Schio's Exhibit No. 5 marked for identification.)

Q I hand you what has been marked for purposes of identification as Exhibit No. 5 and ask you to relate what Exhibit 5 is.

A Exhibit 5 is a map to the scale of one inch to 2,000 feet showing the Littman San Andres Unit outlined in hashers, and further outlined in red pencil showing the State land between New Mexico and Texas indicated in red. This map shows the entire Littman San Andres Field, showing the proposed injection wells, the producing wells, and an areal extent of approximately two to two and a half miles around the Littman San Andres Field.

Q Are the wells in that two to two and a half mile area all shown?

A Yes.

Q What percentage of the area involved in the proposed Unit is federal acreage?

A Twenty-five percent.

Q What percentage is State land owned by the State of New Mexico?

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

A 8.75 percent.

Q Does the Federal and State land comprise all of the land within the Unit in the State of New Mexico?

A Yes.

Q What percentage of the proposed Unit is fee land?

A 66.25 percent.

Q Where is the fee land located?

A The fee land is located entirely within the State of Texas.

Q Is all of the land in the State of Texas fee land?

A Yes.

Q Is this exhibit which has been marked as Exhibit No. 5 substantially the same as the index map filed with the application?

A Yes.

(Whereupon, Sohio's Exhibit No. 7 marked for identification.)

Q I hand you what has now been marked for purposes of identification as Exhibit No. 7 and ask you to relate what that is.

A This is a map on a scale one inch to 1,000 feet, again showing the Littman San Andres Unit outlined with a hashered line and indicating in a code, in color code, the percentage of the sign-up of the royalty interest, overriding royalty interest, production payment interest, and so forth, under the heading "Royalty" in each tract within the Unit Area.

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

The tracts colored yellow or gold-colored indicate the tracts in which 100 percent of the interest is signed. Incidentally, the 100 percent interest sign-up includes all of the working interest in every tract. The tracts indicated in solid red indicate 90 to 99.99 percent sign-up. The cross-hatched red indicates 80 to 89.99 percent sign-up. You will note on the tract number three it shows 96.2496 percent as committed royalty. There is a 3.7 percent of a two and one-half percent overriding royalty which I did not have in hand. This interest is in the Estate of C. H. Kyte, and we have been advised that the Executor of the Estate has signed the ratification and joindor, and has requested confirmation of his signature from the beneficiaries of the Estate, which we have been assured by the counsel for the Estate will be forthcoming.

MR. COOTER: At this point we will offer Exhibit No. 10 which is a letter from Mr. Bondurant, the lawyer for the C. H. Kyte Estate, dated May 25, 1964.

(Whereupon, Sohio's Exhibit No. 10 marked for identification.)

A With the C. H. Kyte joinder in hand, we will have 100 percent sign-up within the State of New Mexico.

(Whereupon, Sohio's Exhibit No. 8 marked for identification.)

Q I hand you now what has been marked for purposes of identification as Exhibit No. 8 and ask you to briefly relate what that shows.

DEARNLEY-MEIER REPORTING SERVICE, Inc.
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691

A Exhibit 8 is an ownership schedule of the entire ownership by tracts in the entire Littman San Andres Unit, showing the tract number, the lease name and description, the number of acres, the number of wells, the lease numbers where applicable, the basic royalty and amount, royalty owners and amount, overriding royalty owners and amount, production payment owners and amounts, working interest owners and amounts, on a tract basis; and then the respective owner's unit participation within that tract; also shows the tract participation of the tract.

(Whereupon, Sohio's Exhibit No. 9 marked for identification.)

Q In connection with that, I'll hand you what has been marked as Exhibit No. 9 and ask you to relate what that exhibit shows.

A Exhibit No. 9 is a summation of the unit participation parameter factors, showing the tract numbers, the lease names, the number of wells, the percentage of wells; a summation of the various parameters within each tract going to make up the total tract participation of the tract.

Q And you have stated that the unit agreement has been executed by all owners of the operating rights?

A That is right.

Q And in the State of New Mexico by all owners of any overriding royalty interest with the exception of the C. H. Ryte Estate?

A Right. We have everyone in hand except the Ryte

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

ratification.

Q Do you have the ratification and joinders to the unit agreement by the owners of the working interest and the royalty, overriding royalty?

A Yes, I have an original plat of ratification with a set of two Xerox copies of the ratification which I have in hand.

MR. COOTER: We would offer these if the Commission would like to have them.

MR. UTZ: I don't believe it's necessary.

MR. COOTER: Fine.

Q (By Mr. Cooter) This Unit comprises land both within the State of New Mexico and within the State of Texas. Have you had a hearing on this Unit before the Texas Railroad Commission?

A Yes, the hearing was held on May 20th at 2:00 P.M. before the Railroad Commission.

Q Were there any objections presented to the Railroad Commission of Texas by the owners or adjoining owners at that time?

A There were no protests and no objections.

Q Under the terms of the unit agreement, will there be any commingling of the production across the State line?

A No.

Q In your opinion, would this Unit promote the best economic recovery and prevent waste of the oil?

A Yes.

DEARNLEY-MEIER REPORTING SERVICE, Inc.
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691

Q Are there provisions in the unit agreement for subsequent enlargement of it?

A Yes.

Q How about subsequent joinder?

A Subsequent joinder is provided for.

Q Were Exhibits 5, 7, 8, and 9 which have been offered prepared by you or under your direction?

A Yes, sir.

Q Do you have anything else to add to your testimony?

A I would think not.

MR. COOTER: That concludes this phase of the testimony.

MR. UTZ: You are offering at this time Exhibits 5, 7, 8, and 9?

MR. COOTER: We will offer all of the exhibits, Mr. Utz, and some additional ones.

MR. UTZ: All right. Any questions of the witness? The witness may be excused.

(Witness excused.)

(Whereupon, Sohio's Exhibits No. 16 marked for identification.)

ROBERT L. McCORMICK

called as a witness, having been first duly sworn, was examined and testified as follows:

DEARNLEY-MEIER REPORTING SERVICE, Inc.
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record, please?

A Robert L. McCormick.

Q By whom are you employed, Mr. McCormick?

A Sohio Petroleum Company.

Q In what capacity are you employed?

A Petroleum engineer.

Q You have previously testified before the New Mexico Oil Conservation Commission?

A I have not.

Q Are you a college graduate?

A Yes, sir.

Q From which college?

A Pennsylvania State University.

Q What degree did you obtain?

A Bachelor of Science degree in Petroleum Natural Gas Engineering.

Q Would you please relate briefly your experience that you've had since your college graduation?

A I graduated in 1938, was employed by Plymouth Oil Company from 1938 to 1944 doing field grade work in geology; then by the Pennsylvania State University from 1944 to '45 doing graduate work and from 1945 to date with Sohio Petroleum Company. That entire

time has been in the capacity of a petroleum engineer.

MR. COOTER: Are his qualifications acceptable, Mr. Utt?

MR. UTT: Yes, sir, they are.

Q I'll hand you what has been marked for purposes of identification as Exhibit No. 6 and ask you to relate what that exhibit discloses.

A Exhibit No. 6 is a structure map drawn on top of the San Andres formation. All wells on the map are San Andres completions excepting only three, and these wells have symbols by them showing W.S.W., which symbol means Water Supply Well. They are shallower completions from the Santa Rosa. One of these wells is located in Section 8 on the New Mexico side, one of them is located in Section 6 on the Texas side, and the third one in Section 7 on the Texas side.

Q Does the proposed Unit include all lands expected to be or possibly productive?

A Yes, it does.

Q Would you briefly describe the geology and the reservoir characteristics?

A The Sohio acquired their interest in this field through our position so we did not do the original drilling. The original drilling from the records is shown to have been done by combination use where they used rotary to the top of the San Andres, set their production string of casing and cable tooled in. So there

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

are no cores, and such knowledge we have of the San Andres formation is derived entirely from sample analysis by geologists at that time.

Q Could you go ahead further and explain generally a little about the geology of it?

A The structure is an elongated east-west anticlinal structure. Drilling encountered water along the south side of the field at the subsea depth of minus 820. We have reason to believe that the formation in this field is susceptible to waterflood through a single pilot injection test. It was made on the northernmost well shown on the map, tract 11, Southland No. 4.

This pilot test was done by the former operator of these properties and in it they were able to inject up to about 600 barrels a day at a pressure of about 1200 pounds, 1280 pounds.

From the performance, it is a solution gas drive pressure depletion type reservoir. There's no gascap and there's no water drive.

(Whereupon, Sohio's Exhibit No. 11 marked for identification.)

Q I hand you what has now been marked as Exhibit No. 11 and ask you what tabulation that exhibit shows. Perhaps in conjunction with it you would also like to have Exhibits 12, 13 and 14.

(Whereupon, Sohio's Exhibits Nos. 12, 13 and 14 marked for identification.)

A Exhibit No. 11 is a tabulation by month of the entire productive history of the San Andres Field and it has been subdivided into the New Mexico subdivision and the Texas subdivision and then a total. The first production from the field having occurred in June, 1951, Exhibits 12, 13 and 14 are graphic presentations of this tabular data, again subdivided between New Mexico subdivision and the Texas subdivision and the pool total.

Q Do any of the exhibits reflect the remaining primary production contemplated under this?

A The exhibits identify the declining rate of production; the average rate of production on a per well basis is slightly less than five barrels a day at the present time, so that this reservoir is in an advanced stage of primary depletion. There are approximately 200,000 barrels of remaining primary reserve, about 50,000 of these barrels to be recovered on the New Mexico subdivision and about 150,000 on the Texas subdivision.

Q Have you been able to form an opinion as to the probable additional recovery through the use of a waterflood project?

A It is our estimate that the additional oil to be recovered from secondary recovery by water injection will be as much as one and three-quarter million barrels.

Q If this waterflood project is approved, from where will the water be obtained?

A From the Santa Rosa formation, which in this area is

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

at a depth of approximately 1200 feet.

Q What type of water is this?

A It's a brackish water, slightly brackish.

Q Water will be injected into which formation?

A The San Andres formation.

Q At what depth?

A 4300 feet.

Q At what rate?

A We anticipate injection rates of 800 barrels per injection well with injection pressures up to 2,000 pounds. We will design our system for that maximum pressure.

Q What is the depth of the Santa Rosa water bed in this area?

A About 1200 feet.

(Whereupon, Sohio's Exhibit No. 15 marked for identification.)

Q I hand you what has now been marked as Exhibit No. 15 and ask you to relate what that is.

A Exhibit No. 15 is a gamma ray neutron log of Southland No. 4, which is one of the wells proposed for injection service on the Texas side. It is the northernmost well shown on the map. It identifies the top of the San Andres formation in this well at a depth of 4322 feet, which is a subsea depth of minus 770.

(Whereupon, Sohio's Exhibit No. 16 marked for identification.)

DEARNLEY-MEIER REPORTING SERVICE, Inc.
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691
FARMINGTON, N. M. PHONE 325-1182

Q I hand you what has been marked for purposes of identification as Exhibit No. 16 and ask you to relate what that exhibit is.

A This exhibit is again a gamma ray neutron log of Sims No. 1 well which is the most southeasterly well on the map, again on the Texas side. The San Andres formation in that well is shown to be at 4,308 feet with a subsea datum of minus 795 feet.

Q Are there any other logs, to your knowledge, of any of the injection wells?

A There are none to my knowledge. These are presented as exhibits and represent the only logs available on proposed injection wells.

(Whereupon, Sohio's Exhibit No. 17 marked for identification.)

Q I hand you what has now been marked as Exhibit No. 17 and ask you what that exhibit shows.

A Since logs aren't available, we've constructed a schematic diagram of the well bore to show for each of the proposed injection wells the surface string of pipe, its size, setting depth, and number of sacks used to cement it, the setting depth of the production string, and then the total depth of the well.

All wells are completed through open hole, and such data as we have available to us indicates that essentially every well, the surface casing had cement circulated back to surface and that the setting depth was in the range of 1600 feet, which is

DEARNLEY-MEIER REPORTING SERVICE, Inc.
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182
ALBUQUERQUE, N. M. PHONE 243-6691

well below the Santa Rosa water formation and therefore the Santa Rosa is protected by surface pipe and by circulated cement.

Q Assuming that permission is given both by the Texas Railroad Commission and by the New Mexico Oil Conservation Commission, where will the first operation under the waterflood project commence?

A Our plan of operation calls for initiating the project on the Texas subdivision. We have made application and had a hearing requesting wells shown on Exhibit 5 for injection wells, and if that request is granted we will select a five-spot which would mean we would convert four wells to injection and produce the center well as our initial development.

Q On the proposed injection wells in the State of New Mexico, have definite plans yet been made for the conversion of the wells to injection wells?

A Not in specific detail, no, sir.

Q Were Exhibits 11, 12, 13, 14, and 17 either prepared by you or under your direction?

A Yes, sir.

MR. COOTER: At this time, Mr. Examiner, we would offer all exhibits, being numbered 1 through 17.

MR. UTZ: Without objection Exhibits 1 through 17 will be entered into the record of these two cases.

(Whereupon, Sohio's Exhibits Nos. 1 through 17 received in evidence.)

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

Q (By Mr. Cooter) Do you have anything further to add to your testimony?

A I believe not.

CROSS EXAMINATION

BY MR. UTZ:

Q On your Exhibit No. 17, Mr. McCormick, which is a schematic of your injection wells in Lea County, I notice on your Wylie No. 1 that there was only 150 sacks used on the 8-5/8ths, which is approximately the same length as those in which 450 and 250 sacks were used on other wells. Do you think that's enough cement to circulate on that 8-5/8ths?

A Cement fill-up in absence of an variants in the cement are about 800 feet, I mean eight feet per sack, so this would be approximately 1200 feet, and I think that the evidence that we have been able to gather, that while maybe this record shows 150 sacks, it appears that they did circulate and we are wondering whether or not we have a complete enough record of all the detail to know that they didn't circulate. I think they did.

Q It is your opinion on all of the surface casing that all the cement is circulated?

A Yes, that's my opinion. We went back to the cementing companies and asked for the data from them, and we did get response from most of them. Unfortunately, on the New Mexico side is where we were least able to get cementing records. I

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

would wonder as we go on to the Wylie No. 3, they report 600 sacks; well, that's far in excess of the need for fill-up. That would be page 3, the third page.

Q Yes.

A 600 sacks is much too much. They would have cement all over the surface, all over the ground.

Q Might be enough to cement a driveway, too, wouldn't it?

A Yes, sir.

Q How about the production strings? Do you have any data as to the top of the cement on those?

A No temperature surveys, no data other than some theoretical fill-up calculations we could derive from cementing records.

Q How old are these wells?

A Our first development was 1951 and the development was complete by 1954.

Q Do you have any idea as to how you are going to complete these wells for injection?

A We have some tentative proposals for this initial area in Texas. First off, we probably will develop even a few wells down to this water table of minus 320, this for investigative purposes to see that we have the entire reservoir exposed, and then we very well will set a liner in that and complete through perforations and tubing will be run on a packer.

Q And inject under a packer?

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

A Under a packer, yes, sir.

Q With inert fluid in the annulus?

A Yes.

Q You are at this time requesting that these four wells in New Mexico on Exhibit 17 be approved as injection wells?

A Yes, we respectfully request that if this project is approved, the Commission provide for administrative approval of the conversion of the injection wells in accordance with Rule 701.

MR. UTZ: Are there other questions of the witness?

MR. PORTER: I was wondering if you were going to get into any discussion of the allowable.

MR. UTZ: He wants it under Rule 701.

MR. PORTER: It is to be operated under the rules of 701?

A That is our request, yes, sir.

MR. PORTER: Okay. That's all I have.

MR. UTZ: Mr. Irby.

BY MR. IRBY:

Q I notice some of these wells in Texas have very small amounts of cement used, and actually Texas isn't my concern unless something gets loose and migrates across the line; let them worry about their problem.

MR. PORTER: We're kind of hoping the oil will get

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

loose and migrate across.

MR. KIRBY: I hope so, too, but I hope this injection water doesn't.

Q (By Mr. Ixby) I would like for you to tell me just what you know about this very limited amount of cement used in the wells just across the imaginary line.

A Well, one of them that you might be referring to is the Littman "B" Well No. 1 and in it they set 160 feet of 13-3/8ths and cemented it with 150 sacks. That was followed by 8-5/8ths set at 1630 and with a reported 40 sacks of cement on it. I can't say much more about it, except this is the data that we have to work with now, and hope that it does do the job of protecting us. If it doesn't, we're going to have to work with it some more.

Q What about the Littman A-4?

A Littman A-4 is where there is no cement reported.

Q Yes.

A We just haven't found a record of it at all. Halliburton didn't do the job, it isn't on their records. Maybe we can find out who did it and get from the cementing company the cement that was used.

Q Where would you estimate the top of the 300 sacks used on the 7-inch casing?

A 300 sacks on 7-inch, let's just for easy arithmetic say about 10 feet per sack which would be about 3,000 feet above

DEARNLEY-MEIER REPORTING SERVICE, Inc.
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691
FARMINGTON, N. M. PHONE 325-1182

4300, which would be roughly 1300 feet from the surface.

Q I know this is hard for you. Do you have any reason to believe there's any cement at all around this surface string, this 8-5/8ths?

A Oh, yes. I think it's just we don't have the record. Yes, sir, I think it's there.

Q Do you have any notion that it might be circulated or that it would be protecting the Santa Rosa formation?

A This well was drilled by the same operator who did a lot of their drilling. In all cases, he circulated cement, that we have been able to tell, and in absence of a specific record for this well, I am assuming that he performed a cement job on this well similar to all the rest. That's as much evidence as I have now.

Q Now most of these wells, the surface casing is set at approximately 1600 in all of these. Does this completely penetrate the Santa Rosa and go into a lower formation for setting?

A Yes, the bottom of the Santa Rosa is approximately 1400 feet, so we have it at least 200 feet below it.

Q I notice that on nearly all of the wells -- not all, but nearly all, you have 2-inch production tubing in there. Is it your intention to inject water through tubing?

A Yes, sir.

Q Will there be a packer on here?

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

A Packer, yes, sir.

Q And this packer, will it be set below the top of the cement on the production string?

A Yes, sir. It will be set nearer the bottom of the pipe and if we run liners, we'll have to lap them over and the packer will be set above liner depth, or maybe into the liner.

Q Good. Now you gave some testimony with regard to your Exhibit 5, which is the San Andres structural map, I believe.

A Yes, sir.

Q I didn't get down all of the information. My shorthand is a little bit slow. You made some remarks about the water, I believe it was on the south side of the field?

A Yes, sir.

Q Then you remarked about whether this was a water or gas drive, and I didn't get that. Would you repeat it for me, please?

A We have evidence of an oil-water contact at minus 820 feet, and this evidence arises from the deepest well drilled, which is along the south side of the field. Then I intended by talking about performance, that there is no gas cap, that this is a solution gas drive reservoir and there's no evidence of water drive. There seems to be, all the evidence points to a porosity and permeability pinchout of the San Andres around this field, and it is ringed by dry holes or -- there are a couple of wells that were

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

completed, production attempted in the San Andres. They recovered as much as 2,000 barrels and they were temporarily abandoned. They were very uneconomical.

Q You said this pilot test was injected under 1280 psi?

A Yes, sir.

Q What did you say that volume was in barrels per day?

A They injected about 580 barrels a day. This test was of relatively short duration, about two weeks, and they kept varying the rates and conditions and --

Q You feel that this is indicative of what you can expect?

A Yes, sir. Furthermore, the well that was used for the injection is a flank well and we know from its primary performance that the reservoir is getting tight, we're toward the edge of the reservoir, and we reduced it. If we could inject at effective rates into this edge well, we will be able to inject higher volumes and lesser pressures as we get to the better part of the reservoir.

MR. IRBY: Thank you, Mr. McCormick.

MR. UTZ: Any other questions of the witness? Mr. Durrett.

BY MR. DURRETT:

Q What allowable did Sohio request in Texas?

A We did not request an allowable in Texas.

Q What's the usual procedure there? Will they assign you an allowable that's similar to 701 allowables under waterflood projects?

A The usual occurrence in Texas with respect to allowable is we will be granted an allowable for the producing well and this can be worked up as performance shows an improved oil production rate through flood up to their Mer or their allowable and we will be granted in addition to the basic Mer allowable a transfer from the injection well.

Now this is not a full Mer. This is a test rate of production now, which would mean we would get something in the order of five barrels a day and a proportionate share of that for each of the four injection wells.

Q Well, then, do you think it would be feasible that the allowable in Texas would be higher or lower than the allowable in New Mexico, or proportionately similar, or what do you feel?

A It will be closely similar, and let's go at it this way. The Mer for the field as set by the Texas Railroad Commission is 81 barrels. They're down to 26 percent, but let's use 30 percent as their proration factor, that would make 24 barrels. Now we will be permitted to transfer from the injection well on the current rate of production basis. Those wells, we'll say, average five barrels and we'll get a proportionate share of that. We'll probably get a quarter of the summation of the four wells. The

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

Docket No. 15-64

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 27, 1964

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 3033: (Continued from April 29, 1964 Examiner Hearing)
Application of Cherry Brothers and Cabot Corporation for the creation of a new oil pool and for special temporary pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Lower Wolfcamp production for its Austin State Well No. 1, located in Unit F of Section 19, Township 14 South, Range 36 East, Lea County, New Mexico, and for the establishment of temporary pool rules therefor, including a provision for 80-acre oil proration units.

CASE 3046: Application of Marathon Oil Company for a triple completion and a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (tubingless) of its State Warn A/c 1 Well No. 3, located in Unit F of Section 31, Township 17 South, Range 35 East, to produce oil from the Glorieta, Wolfcamp, and Abo formations, Vacuum Field, Lea County, New Mexico. Applicant further seeks the approval of a non-standard 80-acre proration unit comprising the SE/4 NW/4 and NE/4 SW/4 of said Section 31 to be dedicated to the aforesaid Wolfcamp and Abo zones in said well.

CASE 3047: Application of El Paso Natural Gas Company for three non-standard gas proration units and one unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the approval of the following three non-standard gas proration units:

A 376.88-acre unit comprising the SE/4 and E/2 SW/4 and Lots 1, 2 and 3 of Section 9 and Lots 3 and 4 and the NW/4 SW/4 of Section 10;

A 357.84-acre unit comprising the SE/4, S/2 SW/4, and NE/4 SW/4 and Lots 1 and 2 of Section 10 and Lots 3 and 4 of Section 11;

A 359.20-acre unit comprising the S/2 and Lots 1 and 2 of Section 11, all in Township 32 North, Range 7 West, Blanco Mesaverde Pool, San Juan County, New Mexico. Applicant further seeks the approval of an unorthodox location for a well to be dually completed in the Mesaverde and Dakota formations at a point 1650 feet from the South line and 825 feet from the East line of said Section 9.

CASE 3048: Application of E. L. Fundginsland for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin Dakota Gas Pool underlying the S/2 of Section 3, Township 29 North, Range 13 West, San Juan County, New Mexico.

CASE 3049: Application of Sohio Petroleum Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Littman San Andres Unit Area comprising 661 acres, more or less, of State and Federal lands in Sections 8, 9, 16, and 17, Township 21 South, Range 38 East, Lea County, New Mexico. The Unit Area also includes 1280 acres of fee land in Sections 5, 6, 7, 14, and 15, Block A-29, PSL, Andrews County, Texas.

CASE 3050: Application of Sohio Petroleum Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Littman-San Andres Pool by the injection of water into the San Andres formation through 4 wells in Sections 8, 9 and 16, Township 21 South, Range 38 East, Lea County, New Mexico. Said project is to be operated in Lea County, New Mexico. Said project is to be operated in conjunction with applicant's proposed waterflood project in the Littman San Andres Unit in Andrews County, Texas.

CASE 3051: Application of Pan American Petroleum Corporation to amend Order No. R-2026, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Rules 7 and 10 of Order No. R-2026 to permit the production of more than two times top allowable from wells in its Northeast Hogback Unit Pressure Maintenance Project even though they offset wells outside the project area.

CASE 3052: Application of The Atlantic Refining Company to amend Order No. R-2210, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Rules 7 and 10 of Order No. R-2210 to permit the production of more than two times top allowable from wells in the Horseshoe Gallup Unit Pressure Maintenance Project even though they offset wells ourside the project area.

CASE 3053: Application of Texaco Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formation through two wells located in Section 12, Township 17 South, Range 32 East, Lea County, New Mexico.

CASE 3055: Application of Texas Pacific Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its J. P. Collier Well No. 1 located in Unit F of Section 10, Township 11 South, Range 33 East, Lea County, New Mexico, to produce oil from the North Bagley Upper and Lower Pennsylvanian Pools through parallel strings of tubing.

CASE 3056: Application of Texas Pacific Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its State "AF" Well No. 3, located in Unit L of Section 8, Township 18 South, Range 35 East, Lea County, New Mexico, to produce oil from the Abo and Wolfcamp formations, Vacuum Field, through parallel strings of tubing.

CASE 3057: Application of Charles O. Trimble for an oil treating plant permit, Lea County, New Mexico. Charles O. Trimble, dba Trimble Mud Service, in the above-styled cause, seeks authority pursuant to Rule 312 to install and operate an oil treating plant approximately one mile South and West of Eunice, New Mexico, for the purpose of processing and treating sediment oil.

CASE 3058: Application of Cities Service Oil Company to establish a special GOR limit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a special gas-oil ratio limit of 6000 cubic feet of gas for each barrel of oil produced in the Reeves-Pennsylvanian Pool, Lea County, New Mexico.

CASE 3059: Application of Frank Darden for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Cowtown Unit Area comprising 280 acres, more or less, of State land in Sections 13 and 24, Township 18 South, Range 28 East, Eddy County, New Mexico.

CASE 3060: Application of Frank Darden for a waterflood, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Artesia Pool in his Cowtown Unit Area, by the injection of water into the Grayburg formation through two injection wells in Sections 13 and 24, Township 18 South, Range 28 East, Eddy County, New Mexico.

CASE 3061: Application of Kewanee Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Dayton Grayburg Pool by the injection of water into the Grayburg formation through one well in Section 25, Township 18 South, Range 26 East, Eddy County, New Mexico.

CASE 3062: Application of Kewanee Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Atoka Grayburg Pool by the injection of water into the Grayburg formation through one well in Section 13, Township 18 South, Range 26 East, Eddy County, New Mexico.

DRAFT

JMD/esr

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. 3049

Order No. R- 2714

APPLICATION OF SOHIO PETROLEUM COMPANY FOR APPROVAL OF THE LITTMAN-SAN ANDRES UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 27, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz. ~~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 ____ day of June, 1964, the Commission, a quorum being present, having considered the ~~application~~ testimony, the record, ~~evidence adduced~~ 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 Littmann-San Andres Unit Area ~~(the "Unit Area") described, more or less,~~ consists of the New Mexico Subdivision comprising 661 acres, more or less, of State and Federal lands in Sections 8, 9, 16, and 17, Township 21 South, Range 38 East, NMPM, Lea County, New Mexico, and the Texas Subdivision comprising 1280 acres, more or less, of fee lands in Sections 5, 6, 7, 14, and 15, Block A-29, PSL, Andrews County, Texas

(2) ... that the applicant, Sohio Petroleum Company, seeks approval of the Littmann San Andres Unit Agreement which covers the above described non-pooled Subdivision of the Littmann San Andres Unit Area.

(3) That approval of the proposed Littman-San Andres Unit Agreement, as the same relates to the non-pooled Subdivision of the Littmann San Andres Unit Area, will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Littman-San Andres Unit Agreement is hereby approved.

(2) That the plan under which the new mexico Subdivision of the Littman San Andres unit area shall be operated shall be embraced in the form of a unit agreement for the ~~New Mexico Subdivision of the~~ development and operation of the Littman-San Andres Unit Area, and such plan shall be known as the Littman-San Andres Unit Agreement Plan.

(3) That the Littman-San Andres Unit Agreement Plan 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 Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the new mexico Subdivision of the Littman-San Andres Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the new mexico Subdivision of the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO
TOWNSHIP 21 SOUTH, RANGE 38 EAST

Section 8: SE/4
Section 9: SW/4
Section 16: NW/4
Section 17: NE/4

containing 661.38 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Littman-San Andres Unit Agreement within 30 days after the effective date thereof. 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.

(6) 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, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) 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.

summation might be 20, the summation is back to five, and that added gives 29 barrels so I anticipate that we'll be slightly under in Texas what we would expect to be normal allowable in New Mexico.

MR. DURRETT: Thank you.

MR. UTZ: Any other questions?

MR. IRBY: I would like to ask one more, if I may.

BY MR. IRBY:

Q I got the impression from some of your answers that you intend to continue in your efforts to get additional information with regard to the cementing of the casing in these wells, is this correct?

A Yes, sir.

Q Would you furnish me this information if you are fortunate enough to obtain it?

A We'll be very happy to, yes, sir.

MR. UTZ: Any other questions?

MR. COOTER: May I state to the Examiner that we would appreciate early consideration of this unit agreement and waterflood project, as under the terms of the unit agreement operation by July 1st is necessary in submitting it to the Commission and U.S.G.S., and reassure them that conversion with the injection wells in New Mexico will be by petition for administrative approval under Rule 701.

DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M. PHONE 243-6691
SANTA FE, N. M. PHONE 983-3971
FARMINGTON, N. M. PHONE 325-1182

MR. DURRETT: I'm not sure I understand you. Do you want approval, are you seeking approval now of certain injection wells, or are you going to seek all of the injection wells by administrative approval?

MR. COOTER: I think under Rule 701, and I might be wrong, all that can be asked for now is the approval of the waterflood project and the proposed injection wells. Before the injection wells may be converted, we must comply with the porosity information, et cetera, and submit this for administrative approval of the actual conversion. I am incorrect?

MR. UTZ: The injection wells will be approved by this hearing right here. It is my understanding that you requested permission to have these four approved.

MR. DURRETT: You want the four approved, and then any additional could come through administrative approval?

MR. COOTER: Right.

MR. UTZ: If no further questions, the witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements in this case? The case will be taken under advisement.

* * *

DEARNLEY-MEIER REPORTING SERVICE, Inc.
FARMINGTON, N. M. PHONE 325-1182
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 10th day of June, 1964.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3049-50 heard by me on May 27, 1964.

....., Examiner
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.
SANTA FE, N. M. PHONE 983-3971
ALBUQUERQUE, N. M. PHONE 243-6691
FARMINGTON, N. M. PHONE 325-1182

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. 3049
Order No. R-2714

APPLICATION OF SOHIO PETROLEUM
COMPANY FOR APPROVAL OF THE
LITTMAN-SAN ANDRES UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 27, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of June, 1964, 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 Littman-San Andres Unit Area consists of the New Mexico Subdivision comprising 661 acres, more or less, of State and Federal lands in Sections 8, 9, 16, and 17, Township 21 South, Range 38 East, NMPM, Lea County, New Mexico, and the Texas Subdivision comprising 1280 acres, more or less, of fee lands in Sections 5, 6, 7, 14, and 15, Block A-29, PSL, Andrews County, Texas.

(3) That the applicant, Sohio Petroleum Company, seeks approval of the Littman-San Andres Unit Agreement which covers the above-described New Mexico Subdivision of the Littman-San Andres Unit Area.

(3) That approval of the proposed Littman-San Andres Unit Agreement as the same relates to the New Mexico Subdivision of

the Littman-San Andres Unit Area will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Littman-San Andres Unit Agreement is hereby approved.

(2) That the plan under which the New Mexico Subdivision of the Littman-San Andres Unit Area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Littman-San Andres Unit Area, and such plan shall be known as the Littman-San Andres Unit Agreement Plan.

(3) That the Littman-San Andres Unit Agreement Plan 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 Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the New Mexico Subdivision of the Littman-San Andres Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the New Mexico Subdivision of the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO
TOWNSHIP 21 SOUTH, RANGE 38 EAST

Section 8: SE/4
Section 9: SW/4
Section 16: NW/4
Section 17: NE/4

containing 661.38 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Littman-San Andres Unit Agreement within 30 days after the effective date thereof. 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.

(6) 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, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) 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

JACK M. CAMPBELL, Chairman

E. S. Walker

E. S. WALKER, Member

A. L. Porter, Jr.

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

esr/

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

June 3, 1964

Re: Case No. 3049
Order No. R-2714
Applicant:
SOHIO PETROLEUM COMPANY

Mr. Paul Cooter
Atwood & Malone
Attorneys at Law
P. O. Box 700
Roswell, New Mexico

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC
OTHER

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. 3047
Order No. R-2714

APPLICATION OF SOHIO PETROLEUM
COMPANY FOR APPROVAL OF THE
LITTMAN-SAN ANDRES UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 27, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of June, 1964, 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 Littman-San Andres Unit Area consists of the New Mexico Subdivision comprising 661 acres, more or less, of State and Federal lands in Sections 8, 9, 16, and 17, Township 21 South, Range 38 East, NMPM, Lea County, New Mexico, and the Texas Subdivision comprising 1200 acres, more or less, of fee lands in Sections 5, 6, 7, 14, and 15, Block A-29, PSL, Andrews County, Texas.

(3) That the applicant, Sohio Petroleum Company, seeks approval of the Littman-San Andres Unit Agreement which covers the above-described New Mexico Subdivision of the Littman-San Andres Unit Area.

(4) That approval of the proposed Littman-San Andres Unit Agreement as the same relates to the New Mexico Subdivision of

the Littman-San Andres Unit Area will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Littman-San Andres Unit Agreement is hereby approved.

(2) That the plan under which the New Mexico Subdivision of the Littman-San Andres Unit Area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Littman-San Andres Unit Area, and such plan shall be known as the Littman-San Andres Unit Agreement Plan.

(3) That the Littman-San Andres Unit Agreement Plan 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 Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the New Mexico Subdivision of the Littman-San Andres Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the New Mexico Subdivision of the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO
TOWNSHIP 21 SOUTH, RANGE 38 EAST

Section 6: SE/4
Section 8: S/2
Section 16: NW/4
Section 17: NE/4

containing 641.38 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Littman-San Andres Unit Agreement within 30 days after the effective date thereof. 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.

(6) 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, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) 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

E. S. WALKER, Member

S E A L

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

esr/

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Littman-San Andres Unit Agreement within 30 days after the effective date thereof. 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.

(6) 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, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) 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

E. S. WALKER, Member

S E A L

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

esr/

CERTIFICATE OF EFFECTIVENESS

UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

KNOW ALL MEN BY THESE PRESENTS:

THAT:

WHEREAS, an executed counterpart of that certain Agreement entitled "Unit Agreement, Littman San Andres Unit, Lea County, New Mexico, and Andrews County, Texas", dated September 9, 1963, hereinafter referred to as "Unit Agreement", has been duly filed for record in the office of the County Clerk of Lea County, New Mexico, and duly filed for record in the office of the County Clerk of Andrews County, Texas; and

WHEREAS, said Unit Agreement provides for unitization of the subsurface formation commonly known as the "San Andres Formation" and defined in said Unit Agreement as the "Unitized Formation", underlying the lands comprising the Unit Area therein provided for and described as follows:

1. Northeast Quarter (NE¼) of Section 17, Township 21 South, Range 38 East, N.M.P.M., Lea County, New Mexico, containing 160.00 acres of land, more or less;

2. Southeast Quarter (SE¼) of Section 8, Township 21 South, Range 38 East, N.M.P.M., Lea County, New Mexico, containing 160.00 acres of land, more or less;

3. Southwest Quarter (SW¼) of Section 9, Township 21 South, Range 38 East, N.M.P.M., Lea County, New Mexico, containing 170.69 acres of land, more or less;

4. Northwest Quarter (NW¼) of Section 16, Township 21 South, Range 38 East, N.M.P.M., Lea County, New Mexico, containing 170.69 acres of land, more or less;

5. Northeast Quarter (NE¼) of Section 15, Block A-29, P.S.L., Andrews County, Texas, containing 160.00 acres of land, more or less;

6. South Half (S½)of Section 6, Block A-29, P.S.L., Andrews County, Texas, containing 320.00 acres of land, more or less;

7. North Half (N½) of Section 6, Block A-29, P.S.L., Andrews County, Texas, containing 320.00 acres of land, more or less;

8. Southwest Quarter (SW¼) of Section 7, Block A-29, P.S.L., Andrews County, Texas, containing 160.00 acres of land, more or less;

9. East 40 acres of South 71.25 acres of Southwest Quarter (SW¼) of Section 5, Block A-29, P.S.L., Andrews County, Texas, containing 40.00 acres of land, more or less;

10. Northwest Quarter (NW¼) of Section 14, Block A-29, P.S.L., Andrews County, Texas, containing 160.00 acres of land, more or less;

11. South Half of the Southeast Quarter (S½ SE¼) and West 40 acres of North 71.25 acres of Southeast Quarter (SE¼) of Section 5, Block A-29, P.S.L., Andrews County, Texas, containing 120.00 acres of land, more or less;

said lands are described and identified as Tracts 1 through 11 respectively in Exhibit "B" attached to and made part of said Unit Agreement;

and

WHEREAS, the Railroad Commission of the State of Texas at a formal conference held June 10, 1964, approved said Unit Agreement effective as of June 10, 1964; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico in Order No. R-2714, dated June 3, 1964, approved said Unit Agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico in Certificate of Approval dated June 4, 1964, approved said Unit Agreement; and

WHEREAS, the Director of the United States Geological Survey in Certificate of Approval - Certification - Determination dated June 12, 1964, approved said Unit Agreement; and

WHEREAS, all of the terms and conditions of said Unit Agreement, as a prerequisite to make the same effective, have been complied with and met.

NOW, THEREFORE, for the consideration set forth in said Unit Agreement, the undersigned, Sohio Petroleum Company, an Ohio Corporation, as Unit Operator under said Unit Agreement, hereby certifies and declares said Unit Agreement will become effective according to its terms and conditions on July 1, 1964, at 7:00 a.m.

IN WITNESS, WHEREOF, this Certificate of Effectiveness has been executed this 18th day of June, 1964.

SOHIO PETROLEUM COMPANY

By _____
Agent and Attorney in Fact

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared CECIL C. IRBY known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said SOHIO PETROLEUM COMPANY, an Ohio Corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by CECIL C. IRBY, Agent and Attorney in Fact of SOHIO PETROLEUM COMPANY, an Ohio Corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 18th day of June, A.D., 1964.

Notary Public in and for Oklahoma County, Oklahoma.

My Commission Expires:

September 6, 1965

RECEIVED
JUN - 2 1964
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

CONSERVATION DIVISION
RECEIVED
JUN 11 1964
GEOLOGICAL SURVEY

APPROVAL - CERTIFICATION - DETERMINATION

14-08-0001 8603

Pursuant to the authority vested in the Secretary of the Interior under the Act approved February 25, 1920, 41 Stat. 437, 30 U.S.C. Secs. 181 et seq., as amended by the Act of August 8, 1946, 60 Stat. 950, and delegated to the Director of the Geological Survey, pursuant to Departmental Order No. 2365 of October 8, 1947, 43 CFR Sec. 4.618, 12 FR 6784, I do hereby:

A. Approve the attached secondary recovery Unit Agreement for the development and operation of the Littman San Andres Unit Area, in the Counties of Lea and Andrews in the States of New Mexico and Texas, respectively.

B. Certify and determine that the unit plan for secondary recovery contemplated in the attached Agreement is necessary and advisable in the public interest and is 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 the Federal lease or leases committed to said agreement are hereby established, altered, changed or revoked to conform with the terms and conditions of the Agreement.

Dated JUN 12 1964.

Contract No.

Director
United States Geological Survey

COMMISSIONERS
BEN RAMSEY
Chairman
ERNEST O. THOMPSON
JIM C. LANGDON

Railroad Commission of Texas

OIL AND GAS DIVISION

AUSTIN, TEXAS

ARTHUR H. BARBECK
Chief Engineer

June 11, 1964

Sohio Petroleum Company
970 First National Bldg.
Oklahoma City, Oklahoma

Attention Mr. Robert L. McCormick

Gentlemen:

The Commission, at a formal conference held June 10, 1964, considered the above-mentioned application.

The Littman (San Andres) Unit Unitization Agreement, submitted for approval as Exhibit #12, at a hearing held May 20, 1964, was approved effective June 10, 1964; however, for administrative purposes, no amended proration schedule will be issued showing the changed conditions thereon, such as new unit and well designations, until the first (1st) day of July, so that the Proration Department may have time to acquire the necessary data (see enclosure) and to set up and work the new proration schedule.

During the interim period, all operators who have properties committed to the Unit will continue to file Commission required reports on an individual lease basis. When the new schedule has been worked and issued by the Proration Department, the proper unit authority will then file such reports on a unit basis.

Over-production accrued to an individual lease, if any, must either be balanced out by under-production or transferred to the Unit at the time operation of the individual tract under a unitized schedule of allowables and reports is commenced. Any tract having accrued over-production contrary to this provisions may not be merged into unit operations until the matter is corrected.

The injection program was approved as requested except that Tract 9, Well #1 may not be converted to injection service until 100% of the interests in said tract have been signed to the Unit. It is requested that the proper unit designation for the wells to be used for injection purposes be submitted to the Engineering Department of the Commission as soon as possible, so that they may be included in the formal injection order. If any of the wells to be used for injection

purposes are converted producing wells, please advise the date such wells will cease to produce oil, so that their allowables may be cancelled.

The Commission also authorized transfer of allowables from wells converted to injection purposes, and authorized expansion of the program without the necessity of further hearing.

Yours very truly,

Patrick W. Kelly

Patrick W. Kelly, Senior Engineer
for
Arthur H. Barbeck, Chief Engineer

PWK/LJ
Copy to Mr. Jules Delaune
RRC - Midland, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE June 12-1964

Ethel Sims

ADDRESS Box 232

Eunice New Mexico

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF New Mexico
COUNTY OF Lea

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Ethel Dunn, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Ethel Dunn.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 12 day of June, A.D. 1964.

My Commission Expires:
February 2 1967

Laughlin Rudasill
Notary Public in and for
Lea County, New Mexico

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE June 5, 1964

Board of Trustees

ADDRESS Geneva College

Beaver Falls, Pennsylvania

ATTEST:

Ethel M. Lytle
Ethel M. Lytle, Secretary

By J. Merrill Robb
J. Merrill Robb, President

ADDRESS Geneva College

Beaver Falls, Pennsylvania

CERTIFICATE

I, Ethel M. Lytle, hereby certify that I am the Secretary of the Board of Trustees of Geneva College, a Pennsylvania non-profit corporation, and that at a meeting of the said Trustees, duly called and legally held on May 28, 1964, at which meeting a quorum was present and acting throughout, the following resolution was unanimously adopted:

> RESOLVED that the President and the Secretary of the Board of Trustees of the College be and they hereby are authorized and directed, in the name and on behalf of the College, to execute, and under its corporate seal to deliver to the Sohio Petroleum Company a Ratification and Joinder to the Littman San Andres Unit Agreement, Lea County, State of New Mexico, and Andrews County, State of Texas, dated September 3, 1963.

And I hereby further certify that the aforesaid resolution is still in full force and effect.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the official seal of Geneva College this 5th day of June, 1964.

Ethel M. Lytle
Secretary

STATE OF Pennsylvania)
)
COUNTY OF Beaver)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared J. Merrill Robb known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Geneva College, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by J. Merrill Robb of Geneva College, a Pennsylvania corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5th day of June, A.D. 1964.

My Commission Expires:
CLEM R. DAVIDSON, Notary Public
MY COMMISSION EXPIRES
APRIL 4, 1965

Clem R Davidson
Notary Public in and for Beaver County, Penna.

SOHIO

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

August 7, 1964

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

RE: U-413-46 and U-291-20
Littman San Andres Unit
Lea County, New Mexico
and Andrews County, Texas

Oil Conservation Commission of the
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

In compliance with your requirements, we furnish you herewith original, executed Ratification and Joinders to the Littman San Andres Unit Agreement as follows:

(1) Robert W. Wakefield

(2) Samuel N. Frishman

These instruments were received subsequent to our letter of July 23, 1964.

Yours very truly,

SOHIO PETROLEUM COMPANY, Operator

By _____
C. L. Ware
Staff Landman

CLW:wh
Encls.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY, NEW MEXICO, AND ANDREWS COUNTY, STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Aug 4, 1964

Robert W. Wakefield

ADDRESS 325 Delaware Trust Bldg.
Wilmington, Delaware

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

1964 AUG 10 AM 7 37

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Robert W. Wakefield, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Robert W. Wakefield.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 4th day of August, A.D. 1964.

My Commission Expires:
NOTARY PUBLIC OF DELAWARE
MY COMMISSION EXPIRES 6/29/65

Mildred D. Scalapino
Notary Public in and for
New Castle County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE June 29, 1964

ADDRESS 5518 Camino El Patio, Ft. Worth

DATE _____

ADDRESS _____

ATTEST:

JOSEPH L. KAHN, Alderman
My Commission Expires
First Monday in January 1965

By _____
President

ADDRESS _____

SOHIO

SOHIO PETROLEUM COMPANY

MAIL OFFICE 80

1964 JUL 11 PM 1:45

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

July 8, 1964

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG

RE: U-413-46 and U-291-20
Littman San Andres Unit
Lea County, New Mexico and
Andrews County, Texas

Oil Conservation Commission for the
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

You are advised that the Unit Agreement, Littman San Andres Unit, was filed for record:

June 18, 1964 at 10:00 A.M. and recorded in Book 219, Page 369 of the Miscellaneous Records of Lea County, New Mexico; and

June 18, 1964 at 8:40 A.M. and duly recorded the 19th day of June 1964, in Volume 309, Page 1 of the Deed Records of Andrews County, Texas.

The Certificate of Effectiveness, Unit Agreement, Littman San Andres Unit, was filed for record:

June 29, 1964 at 9:10 A.M. and recorded in Book 220, Page 239 of the Records of Lea County, New Mexico; and

June 22, 1964 at 8:00 A.M. and duly recorded the 24th day of June, 1964, in Volume 309, Page 223 of the Deed Records of Andrews County, Texas.

In compliance with your requirements we furnish you herewith original Ratification and Joinders to the Littman San Andres Unit Agreement, which have been received subsequent to our letter of June 19, 1964:

(1) Frank A. Elliott, Jr.
(2) J. Merrill Robb, President, Board of Trustees, Geneva College.
(3) Charlotte M. Sears, Adms. of Estate of Joseph H. Sears.
(4) Ethel Sims.

Yours very truly,
SOHIO PETROLEUM COMPANY, Operator

By C. L. Ware
C. L. Ware, Staff Landman

wh
Encls.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE June 27, 1964

Frank A. Elliott

ADDRESS Greenwood, Delaware
RD#1

ATTEST:

_____

By_____
President

ADDRESS_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware)
)
COUNTY OF Sussex)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Frank A. Elliott, Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Frank A. Elliott, Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of June, A.D. 19 64.

My Commission Expires:

Dec. 1965

George Tindall
Notary Public in and for
Sussex County, Dela.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE June 8, 1964

Charlotte M Sears (widow)
Admx of Estate of Joseph H. Sears
ADDRESS Box 43
East Dennis, Mass

DATE _____

_____
ADDRESS _____
_____

ATTEST:

_____

By _____ President
ADDRESS _____
_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Massachusetts)
)
COUNTY OF Barnstable)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Charlotte M. Sears, Admx, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Charlotte M. Sears, Admx.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of June, A.D. 1964.

My Commission Expires:

December 1, 1965

_____
Notary Public in and for Barnstable
County, Massachusetts

3041

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

1964 JUL 27 AM 7 38

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

July 23, 1964

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

RE: U-413-46 and U-291-20
Littman San Andres Unit
Lea County, New Mexico
and Andrews County, Texas

Oil Conservation Commission of the
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

In compliance with your requirements, we furnish you herewith original, executed Ratification and Joinders to the Littman San Andres Unit Agreement. These instruments have been received subsequent to our letter of June 19 and July 8, 1964:

(1) E. Bernard Johnston, Executor UTW
of C. H. Kyte, Deceased

(2) Amerada Petroleum Corporation

(3) James M. Tunnell, Jr. and
Mildred S. Tunnell.

Yours very truly,

SOHIO PETROLEUM COMPANY, Operator

By C. L. Ware
C. L. Ware
Staff Landman

wh
CLW:wh
Encls.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 7-7-64

E. Bernard Johnston, Executor UTW of
C. H. Kyte, Deceased

E. Bernard Johnston

ADDRESS Box 880
Roswell, N. Mex.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared E. Bernard Johnson, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by E. Bernard Johnson, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7th day of July, A.D. 1964.

My Commission Expires:

Nov 17 1967

Leta E. Adkins
Notary Public in and for
Chaves County, New Mexico

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

DATE June 26, 1964

AMERADA PETROLEUM CORPORATION

ATTEST:

By_____
Assistant Secretary

Senior Vice President

ADDRESS P. O. Box 2040

Tulsa, Oklahoma

STATE OF OKLAHOMA)
)
COUNTY OF TULSA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John P. Hammond known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said AMERADA PETROLEUM CORPORATION, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by John P. Hammond, Senior Vice President of AMERADA PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 26th day of June, A.D. 19 64.

My Commission Expires:

My Commission Expires February 8, 1965

Jo Leonard

Notary Public in and for Tulsa County, Oklahoma.

JO LEONARD

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE July 20, 1964

James H. Tunnell, Jr.

ADDRESS 601 Beaver Valley Road
Wilmington, Delaware 19803

DATE July 20, 1964

Mildred S. Tunnell

ADDRESS 601 Beaver Valley Road
Wilmington, Delaware 19803

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF Delaware)
)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James M. Tunnell, Jr. and Mildred S. Tunnell, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Mildred S. Tunnell, wife of the said James M. Tunnell, Jr., having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Mildred S. Tunnell, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by James M. Tunnell, Jr. and Mildred S. Tunnell, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 16th day of July, A.D. 1904.

My Commission Expires:

Jan. 5, 1906

Notary Public in and for New Castle County, Delaware

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

Case 3049

May 5, 1964

Mr. Paul A. Cooter
Attorney at Law
P. O. Drawer 700
Roswell, New Mexico

DOCKET MAILED
Date 5/15/64

Dear Paul:

Your application for approval of the Littman-San Andres Unit Agreement and Waterflood Project contains all required information. We will advertise the unit and waterflood as separate cases on the May 27, 1964, Examiner Hearing Docket, and issue a separate order in each case. If you desire, you may move to consolidate the cases for the purpose of testimony at the hearing. The docket will be printed and a copy mailed to you approximately ten days prior to the hearing.

Please contact me if you need additional information or assistance.

Very truly yours,

J. M. DURRETT, Jr.
Attorney

JMD/esr

Case 3049

ATWOOD & MALONE
LAWYERS

JEFF D. ATWOOD (1883-1960)
ROSS L. MALONE
CHARLES F. MALONE
RUSSELL D. MANN
PAUL A. COOTER
BOB F. TURNER
ROBERT A. JOHNSON

P. O. DRAWER 700
TELEPHONE 505 622-6221
SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO
88201

May 1, 1964

New Mexico Oil Conservation Commission
P.O. Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Dear Mr. Porter:

On behalf of Sohio Petroleum Company, we enclose herewith its Application for approval of the Littman San Andres Unit and for the secondary recovery program therefrom. Attached to the Application are three exhibits, the same being the index map, the log of the proposed injection well No. 1 Sims and the diagrammatic sketches of the proposed injection wells. In addition thereto, we enclose a copy of the Unit Agreement, a list of all working interest, royalty, overriding royalty and production payment owners, a copy of the Geological Survey Director's letter dated August 13, 1963, and the Commissioner's of Public Lands letter dated March 19, 1963.

It is our understanding that this Application may be placed on the next examiner's docket which will be May 27, 1964.

If additional information is desired, please advise us.

Appreciating your courtesy to us in this matter, we are,

Very truly yours,

ATWOOD & MALONE

BY: [signature]

PC/mm
Encl.

CC: Mr. Frank Irby, State Engineer
State of New Mexico
Santa Fe, New Mexico

Mr. C. L. Ware, Staff Landman
Sohio Oil Company

'64 Oct AM 8 0

SOHIO

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

October 15, 1964

RE: U-413-46 - U-291-20
Littman San Andres Unit
Lea County, New Mexico
and Andrews County, Texas

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

ATTENTION: Mr. A. L. Porter, Jr.

Enclosed for your information and files is an instrument entitled "Ratification and Joinder to Littman San Andres Unit Agreement, Lea County, New Mexico and Andrews County, Texas, dated September 9, 1963" which has been executed and acknowledged by Frank T. Foshee, Jr. and wife Jean Fay Horton Foshee.

This instrument has now been recorded in Volume 313 at Page 230 of the Deed Records of Andrews County, Texas, and is presently being recorded in Lea County, New Mexico.

Yours very truly,

SOHIO PETROLEUM COMPANY

C. L. Ware
Staff Landman

CLW:na

Enclosure

'64 Oct 10 AM

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE June 1, 1964

Frank J. Tasker Jr.

ADDRESS _____

_____

DATE Oct. 1, 1964

Frank J. Tasker Jr.
Jean Jay Horton Tasker

ADDRESS 2957 Kalakaua
Honolulu, Hawaii

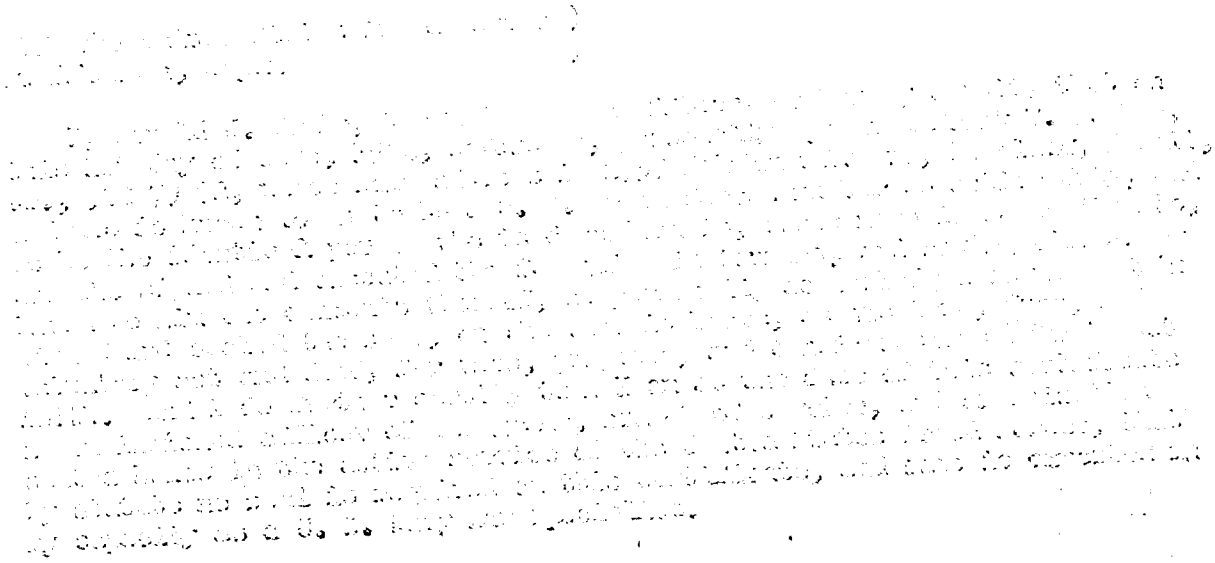
ATTEST:

_____

By _____
President

ADDRESS _____

_____



STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19__.

My Commission Expires:

_____

Notary Public _____
_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____ of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____.

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

OKLAHOMA CITY, OKLAHOMA 73102
420 FIRST NATIONAL OFFICE BLDG

October 14, 1964

RE: U-413-46 - U-291-20
Littman San Andres Unit
Lea County, New Mexico &
Andrews County, Texas

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico
Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Attached for your information and files is a Ratification and Joinder to the Littman San Andres Unit Agreement executed by John L. Pratt on October 12, 1964.

With this Ratification we now have in hand Ratification and Joinders from all owners of interest in the Littman San Andres Unit and every tract is now 100% committed.

You are advised that we are this date sending the above Ratification for recording in Lea County, New Mexico, and in Andrews County, Texas

Yours very truly,

SOHIO PETROLEUM COMPANY

C. L. Ware
Staff Landman

CLW:na

Attachment

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 10/12/64

John L Proctor

ADDRESS c/o ROBERT W. WAKEFIELD
P. O. BOX 707
WILMINGTON 99, DELAWARE

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____ President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF Delaware)
)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John L. Pratt, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by John L. Pratt.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 17th day of October, A.D. 1964.

My Commission Expires:
June 11, 1966

J. S. Walker
Notary Public in and for
New Castle County, Delaware

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____ _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19_____.

My Commission Expires:

_____

_____
Notary Public in and for _____
County, _____.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

IN REPLY REFER TO:

1964 JUN 29 AM 7 35

Drawer 1857
Roswell, New Mexico 88201

June 25, 1964

Sohio Petroleum Company
970 First National Office Building
Oklahoma City, Oklahoma 73102

Attention: Mr. R. L. McCormick

Gentlemen:

Your undated initial plan of operation covering secondary recovery operations for the Littman San Andres unit, Lea County, New Mexico, and Andrews County, Texas, has been approved on this date subject to like approval by the appropriate State officials.

One approved copy of the plan is enclosed.

Sincerely yours,

(Orig. Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:
Washington (w/cy of plan)
Hobbs (w/cy of plan)
NMOCC, Santa Fe (ltr. only)
Com. of Public Lands, Santa Fe (ltr. only)

SOHIO PETROLEUM COMPANY
EXPLORATION DEPARTMENT
OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG.

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

941

November 6, 1964

RE: U-413-46 - U-291-20
Littman San Andres Unit
Lea County, New Mexico and
Andrews County, Texas

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico
Attention: Mr. A. L. Porter, Jr.

Gentlemen:

This will advise that the Ratification and Joinder to the Littman San Andres Unit Agreement executed by John L. Pratt has now been recorded in Volume 313 at Page 398, Deed Records of Andrews County, Texas, and in Book 224 at Page 552, Records of Lea County, New Mexico.

With the recording in Lea County, New Mexico, of this Ratification, the royalty sign-up under the Littman San Andres Unit is now complete with 100% of the royalty owners now having signed Ratifications and all Ratifications have been duly recorded in both Andrews County, Texas and Lea County, New Mexico.

Yours very truly,

SOHIO PETROLEUM COMPANY

C. L. Ware
Staff Landman

CLW:na

SOHIO

SOHIO PETROLEUM COMPANY

EXPLORATION DEPARTMENT

JOHN L. ROSS, MANAGER
E. E. YOUNG, ASST. MANAGER

OKLAHOMA CITY, OKLAHOMA 73102
970 FIRST NATIONAL OFFICE BLDG

October 27, 1964

RE: U-413-46 - U-291-20
Littman San Andres Unit
Lea County, New Mexico and
Andrews County, Texas

Oil Conservation Commission of the
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico
ATTENTION: A. L. Porter, Jr.

Gentlemen:

This will advise that the Ratification and Joinder to the Littman San Andres Unit Agreement executed by Mr. and Mrs. Frank T. Foshee, Jr., a copy of which was furnished to you, has now been recorded in Lea County, New Mexico in Book 224, Page 406.

You have previously been furnished the recording data on this instrument in Andrews County, Texas.

You are advised that the Ratification and Joinder instrument executed by Mr. John L. Pratt, a copy of which has been furnished to you, has now been recorded in Volume 313, Page 398, Deed Records of Andrews County, Texas, and is currently being recorded in Lea County, New Mexico. The Lea County recording data will be furnished when available.

Yours very truly,

SOHIO PETROLEUM COMPANY

C. L. Ware
Staff Landman

CLW:na

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
HINKLE BUILDING
ROSWELL, NEW MEXICO

CLARENCE E. HINKLE
W. F. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. KENSLEY, JR.
MICHAEL R. WALLER

OF COUNSEL HIRAM M. DOW

TELEPHONE 622-6510
AREA CODE 505
POST OFFICE BOX 10

May 25, 1964

Atwood & Malone
Attorneys at Law
Security National Bank Building
Roswell, New Mexico

Attention: Mr. Paul A. Cooter

Gentlemen:

We have been handed a letter dated May 22nd from Sohio Petroleum Company enclosing the Unit Agreement for Littman San Andres Unit, Lea County, New Mexico, dated September 9, 1963.

We represent the C. H. Kyte Estate who own an interest under this Unit. We will recommend that the proper parties execute the Ratification and Joinder in behalf of the Estate. In the past our recommendations have been followed and we believe that they will be in the present instance.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

W. E. Bondurant, Jr.

WEB:tw

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 10
CASE NO. 3049 + 3050

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
HINKLE BUILDING
ROSWELL, NEW MEXICO

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER

OF COUNSEL HIRAM M. DOW

TELEPHONE 622-6510
AREA CODE 505
POST OFFICE BOX 10

May 25, 1964

Atwood & Malone
Attorneys at Law
Security National Bank Building
Roswell, New Mexico

Attention: Mr. Paul A. Cooter

Gentlemen:

We have been handed a letter dated May 22nd from Sohio Petroleum Company enclosing the Unit Agreement for Littman San Andres Unit, Lea County, New Mexico, dated September 9, 1963.

We represent the C. H. Kyte Estate who own an interest under this Unit. We will recommend that the proper parties execute the Ratification and Joinder in behalf of the Estate. In the past our recommendations have been followed and we believe that they will be in the present instance.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

W. E. Bondurant, Jr.

WEB:tw

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 10
CASE NO. 3049 & 3050

LITTMAN (SAN ANDRES) FIELD

UNIT PARTICIPATION FACTORS

Tract No.	Lease Name	No. of Wells	% Wells	Waterflood Acre-Feet	% Waterflood Acre-Feet	Accumulated Primary Production to 10/1/61	% Accumulated Primary Production	Remaining Primary Production from 10/1/61	% Remaining Primary Production	Unit Participation: % Wells X 0.10	% Waterflood Acre-Feet X 0.20	% Accumulated Primary Production X 0.40	% Remaining Primary Production X 0.30	Total % Participation
UNITED STATES OF AMERICA LEASES									NEW MEXICO SUBDIVISION					
1	Ohio-Federal	1	3.44827	42.7	0.27008	32,890	3.07744	21,633	6.59060	0.34483	0.05402	1.23098	1.97718	3.60701
2	Parcell-Federal	2	6.89655	234.4	1.48255	31,480	2.94551	1,710	0.52096	0.68966	0.29651	1.17820	0.15629	2.32066
3	Wylie-Federal	3	10.34483	2,236.3	14.14431	125,172	11.71203	63,874	19.45954	1.03448	2.82886	4.68481	5.83786	14.38601
	Total Federal	6	20.68965	2,513.4	15.89694	189,542	17.73498	87,217	26.57110	2.06897	3.17939	7.09399	7.97133	20.31368
STATE OF NEW MEXICO LEASES														
4	Numex	2	6.89655	323.8	2.04799	73,829	6.90800	30,638	9.33402	0.68965	0.40960	2.76320	2.80021	6.66266
FEE LEASES									TEXAS SUBDIVISION					
5	Freund	1	3.44827	203.9	1.28964	5,882	0.55035	0	0	0.34483	0.25793	0.22014	0	0.82290
6	Littman	6	20.68966	3,844.0	24.31280	229,293	21.45438	50,897	15.50603	2.06897	4.86256	8.58175	4.65181	20.16509
7	Littman "A"	7	24.13793	6,651.6	42.07051	387,258	36.23476	113,235	34.49762	2.41379	8.41410	14.49391	10.34929	35.67109
8	Littman "B"	2	6.89655	590.6	3.73547	87,677	8.20372	34,178	10.41251	0.68965	0.74709	3.28149	3.12375	7.84198
9	Monarch	1	3.44828	343.8	2.17449	14,357	1.34335	1,655	0.50421	0.34483	0.43490	0.53734	0.15126	1.46833
10	Sims	1	3.44828	84.5	0.53445	22,864	2.13933	9,490	2.89118	0.34483	0.10689	0.85573	0.86735	2.17480
11	Southland	3	10.34483	1,255.0	7.93771	58,045	5.43113	930	0.28333	1.03448	1.58754	2.17245	0.08500	4.87947
	Total Fee	21	72.41380	12,973.4	82.05507	805,376	75.35702	210,385	64.09488	7.24138	16.41101	30.14281	19.22846	73.02366
	TOTAL	29	100.00000	15,810.6	100.00000	1,068,747	100.00000	328,240	100.00000	10.00000	20.00000	40.00000	30.00000	100.00000

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 9
CASE NO. 3049 & 3050

LITTMAN (SAN ANDRES) FIELD

UNIT PARTICIPATION FACTORS

Tract No.	Lease Name	No. of Wells	% Wells	Waterflood Acre-Feet	% Waterflood Acre-Feet	Accumulated Primary Production to 10/1/61	% Accumulated Primary Production	Remaining Primary Production from 10/1/61	% Remaining Primary Production	Unit Participation: % Wells X 0.10	Unit Participation: % Waterflood Acre-Feet X 0.20	Unit Participation: % Accumulated Primary Production X 0.40	Unit Participation: % Remaining Primary Production X 0.30	Total % Participation
UNITED STATES OF AMERICA LEASES								NEW MEXICO SUBDIVISION						
1	Ohio-Federal	1	3.44827	42.7	0.27008	32,890	3.07744	21,633	6.59060	0.34483	0.05402	1.23098	1.97718	3.60701
2	Parcell-Federal	2	6.89655	234.4	1.48255	31,480	2.94551	1,710	0.52096	0.68966	0.29651	1.17820	0.15629	2.32066
3	Wylie-Federal	3	10.34483	2,236.3	14.14431	125,172	11.71203	63,874	19.45954	1.03448	2.82886	4.68481	5.83786	14.38601
	Total Federal	6	20.68965	2,513.4	15.89694	189,542	17.73498	87,217	26.57110	2.06897	3.17939	7.09399	7.97133	20.31368
STATE OF NEW MEXICO LEASES														
4	Numex	2	6.89655	323.8	2.04799	73,829	6.90800	30,638	9.33402	0.68965	0.40960	2.76320	2.80021	6.66266
FEE LEASES								TEXAS SUBDIVISION						
5	Freund	1	3.44827	203.9	1.28964	5,882	0.55035	0	0	0.34483	0.25793	0.22014	0	0.82290
6	Littman	6	20.68966	3,844.0	24.31280	229,293	21.45438	50,897	15.50603	2.06897	4.86256	8.58175	4.65181	20.16509
7	Littman "A"	7	24.13793	6,651.6	42.07051	387,258	36.23476	113,235	34.49762	2.41379	8.41410	14.49391	10.34929	35.67109
8	Littman "B"	2	6.89655	590.6	3.73547	87,677	8.20372	34,178	10.41251	0.68965	0.74709	3.28149	3.12375	7.84198
9	Monarch	1	3.44828	343.8	2.17449	14,357	1.34335	1,655	0.50421	0.34483	0.43490	0.53734	0.15126	1.46833
10	Sims	1	3.44828	84.5	0.53445	22,864	2.13933	9,490	2.89118	0.34483	0.10689	0.85573	0.86735	2.17480
11	Southland	3	10.34483	1,255.0	7.93771	58,045	5.43113	930	0.28333	1.03448	1.58754	2.17245	0.08500	4.87947
	Total Fee	21	72.41380	12,973.4	82.05507	805,376	75.35702	210,385	64.09488	7.24138	16.41101	30.14281	19.22846	73.02366
	TOTAL	29	100.00000	15,810.6	100.00000	1,068,747	100.00000	328,240	100.00000	10.00000	20.00000	40.00000	30.00000	100.00000

LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
1	Ohio-Federal NE¼ Sec. 17, T-21-S, R-38-E Lea County, New Mexico, down to a depth of 4750 feet.	160	1	LC-057443-A					.0360701	
				U.S.A.	.1250000					
						Marathon Oil Company .0625000				.0045088
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0100000				.0022544
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0325000				.0003607
						Sunshine Royalty Company .0225000				.0011723
						Charlie W. Parcell and wife, Gertrude L. Parcell .0100000				.0008116
						Total ORRI .1375000				.0003607
							None - 0 -			
								Sohio Petroleum Company .5838541		.0210596
								Broseco Corporation .1459636		.0052649
								John B. Rich .0076823		.0002771
								Total W.I. .7375000		.0360701
2	Parcell-Federal SE¼ Section 8, T-21-S, R-38-E Lea County, New Mexico	160	2	LC-062170-A					.0232066	
				U.S.A.	.1250000					
						Charlie W. Parcell and wife, Gerturde L. Parcell .0044440				.0029008
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0044440				.0001031
						Sunshine Royalty Company .0099990				.0001031
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0144430				.0002321
						Total ORRI .0333300				.0003352
							None - 0 -			
								Elliott, Inc. .8416700		.0195323
										.0232066

LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
										.0360701	
											.0045088
1	Ohio-Federal NE¼ Sec. 17, T-21-S, R-38-E Lea County, New Mexico, down to a depth of 4750 feet.	160	1	LC-057443-A							.0022544
					U.S.A. .1250000						
						Marathon Oil Company .0625000					.0003607
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0100000					.0011723
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0325000					.0008116
						Sunshine Royalty Company .0225000					.0003607
						Charlie W. Parcell and wife, Gertrude L. Parcell .0100000					
						Total ORRI .1375000					
							None - 0 -	Sohio Petroleum Company	.5838541		.0210596
								Broseco Corporation	.1459636		.0052649
								John B. Rich	.0076823		.0002771
								Total W.I.	.7375000		.0360701
										.0232066	
											.0029008
2	Parcell-Federal SE¼ Section 8, T-21-S, R-38-E Lea County, New Mexico	160	2	LC-062170-A							.0001031
					U.S.A. .1250000						
						Charlie W. Parcell and wife, Gerturde L. Parcell .0044440					.0001031
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0044440					.0002321
						Sunshine Royalty Company .0099990					.0003352
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0144430					
						Total ORRI .0333300					
							None - 0 -	Elliott, Inc.	.8416700		.0195323
											.0232066

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
3	Wylie Federal SW¼ Section 9, T-21-S, R-38-E Lea County, New Mexico	170.69	3	LC-069408					.1438601	
					U.S.A. .1250000					.0179825
						Albuquerque National Bank Testamentary Trustee of F. A. Andrews .0052082				.0007492
						Selma E. Andrews .0060418				.0008692
						The Atlantic Refining Company .0000625				.0000090
						M. W. Coll Estate .0009375				.0001349
						Lillian Hinkle Coll .0009375				.0001349
						Mariee I. Kyte .0009375				.0001349
						E. Bernard Johnson, Exec. UTW of C. H. Kyte .0009376				.0001349
						John M. Loffland, Jr. .0012500				.0001798
						Timothy A. Pedley, Jr. .0001562				.0000225
						Gracean M. Pedley .0001562				.0000225
						The First National Bank of Denver, Trustee UTW of Josephine M. Smith, Dec. .0009375				.0001349
						Albert Stevenson and wife, Artie Stevenson .0012500				.0001798
						Kathleen L. and E.D. Wylie .0037500				.0005395
						Joe Stydahar .0012500				.0001798
						The Chase Manhattan Bank, Assignee of Argo Oil Payment .0011875				.0001707
						Total ORRI .0250000	None - 0 -			
								Elliott, Inc. .8500000		.1222811
										.1438601
4	Numex NW¼ Section 16, T-21-S, R-38-E Lea County, New Mexico, down to a depth of 4750 feet.	170.69	2	B-11232					.0666266	
					The State of New Mexico .1250000					.0083283
						Humble Oil & Refining Company .0625000				.0041642
							None - 0 -			
								Sohio Petroleum Company .5755208		.0383450
								Broseco Corporation .2251302		.0149996
								John B. Rich .0118490		.0007895
								Total W.I. .8125000		.0666266

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
5	Freund NE¼ Section 15, Blk. A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160	1	None					.0082290	
					The American National Bank of Austin, Trustee for the Ruth Reed Dyke Trust .0312500					.0002572
					Scratch Ranch Royalty Company .0214844					.0001768
					Amerada Petroleum Corporation .0078125					.0000643
					Ethel Sims .0019531					.0000161
					Marshall & Winston, Inc. .0039063					.0000321
					Geneva College - Ira Flocker Fund .0009766					.0000080
					Gilbert D. Flocker .0003255					.0000027
					James Miller Flocker .0002441					.0000020
					Esther Flocker Johnston .0000814					.0000007
					R. E. Williams .0001628					.0000013
					S. L. Parham .0001628					.0000013
					Donald Winston, Trustee .0019531					.0000161
					Selma E. Andrews .0083914					.0000690
					Republic National Bank of Dallas, Trustee UTW Frank A. Andrews #631 .0072336					.0000595
					Fred H. Campbell and [illegible], Marguerite F. Campbell .0019531					.0000161
					Joyce A. Holliday .0019531					.0000161
					Lawrence L Fuller, administrator with will annexed of estate of James G. Bennett .0039063					.0000321
					W. M. Beecherl .0117188					.0000964
					J. G. Catlett Co. .0032657					.0000269
					Robert W. Wakefield .0000690					.0000006
					David D. Wakefield .0000690					.0000006
					John L. Pratt, III .0001379					.0000011
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt .0002759					.0000023
					Frances Grier Wakefield and husband, Harold K. Wakefield .0002759					.0000023
					Andrew Oil & Gas Royalties, Inc. .0008278					.0000068

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
5 (Continued)					Charlotte M. Sears, Adm. of Estate of Joseph H. Sears .0008278					.0000068
					Richard H. Sears, Ind. and as Trustee UTW of Henry E. Sears .0008278					.0000068
					Frank A. Elliott, Jr. .0008278					.0000068
					Charles K. Elliott .0008278					.0000068
					Neville G. Penrose, Trustee of the Patricia Penrose Trust .0080566					.0000663
					Sohio Petroleum Company .0034180					.0000281
					Broseco Corporation .0002319					.0000019
					John B. Rich .0000123					.0000001
					Kirby Production Company .0073924					.0000608
					Total Royalty .1328125					
						Humble Oil & Refining Company .0477028				.0003925
							None - 0 -			
								J. G. Catlett Co. .0354726		.0002919
								Kirby Production Company .0623130		.0005128
								Sohio Petroleum Company .5112036		.0042067
								Broseco Corporation .1999708		.0016456
								John B. Rich .0105247		.0000867
								Total W.I. .8194847		.0082290
									.2016509	
6	Littman S½ Section 6, Blk. A-29, PSL., Andrews County, Texas, down to a depth of 4750 feet	320	6	None	D. H. Byrd .0039062					.0007876
					Jack Frost .0039063					.0007877
					Scratch Ranch Royalty Company .0078125					.0015754
					Phillips Petroleum Company .0117187					.0023631
					Roland S. Bond .0117187					.0023631
					Anna Lou Home and husband, Tom S. Home .0029297					.0005908
					Marshall & Winston, Inc. .0087891					.0017723
					Amerada Petroleum Corporation .0234375					.0047262
					Lawrence L. Fuller, administrator with will annexed of Estate of James G. Bennett .0087891					.0017723

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
6	(Continued)				Joel L. Simon .0058484					.0011793
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld .0058484					.0011793
					Marcus Baum and Eddie Baum, Ind. Exec. of Estate of Bessie Baum .0035141					.0007086
					Rose Kleeman .0118976					.0023991
					Clara Silberberg .0017068					.0003441
					Mayme Newman .0017068					.0003441
					Queenie Littman .0035140					.0007086
					Jeanette Hammer and husband, Leo Hammer .0017068					.0003441
					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0017068					.0003441
					Lydia Littman .0250503					.0050514
					The Midland National Bank, Trustee of Management Trust created by W. T. Walsh .0021973					.0004431
					The Midland National Bank, Trustee of Kathleen Walsh et al Trust .0007324					.0001477
					Total Royalty: .1484375					
						Monsanto Chemical Co. .0312500 (Oil) .0312500 (Gas)				.0063016(Oil .0063016(Gas
						Phillips Petroleum Company .0039062 (Oil) .0078125 (Gas)				.0007878(Oil .0015755(Gas
						Total ORRI: .0351562 (Oil) .0390625 (Gas)				
							New York Life Insurance Company Presently .0355469			.0071681
							(After June 1, 1964) (.0382813)			(.0077194)
							(After June 1, 1968) (.0437500)			(.0088222)
								R. W. Leonard .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Obie P. Leonard, Jr. .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Margery Ann Hodges .0126954 (Oil) .0126302 (Gas)		.0025601(Oil .0025469(Gas

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
6 (Continued)								Martha Jane Anthony .0126953 (Oil) .0126303 (Gas)		.0025601(Oil) .0025469(Gas)
								Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 .1523437 (Oil) .1515626 (Gas)		.0307205(Oil) .0305630(Gas)
								Broseco Corporation .1447266 (Oil) .1439844 (Gas)		.0291842(Oil) .0290346(Gas)
								John B. Rich .0076172 (Oil) .0075781 (Gas)		.0015361(Oil) .0015282(Gas)
								Sohio Petroleum Company .4062500 (Oil) .4041665 (Gas)		.0819207(Oil) .0815006(Gas)
								Delhi Taylor Oil Corporation Presently .0191406 (After June 1, 1964)(.0164062) (After June 1, 1968)(.0109375)		.0038597 (.0033084) (.0022056)
								Total W.I. .7808594(Oil)(Presently) .7769531(Gas)(Presently) .7781250(Oil)(After 6-1-64) .7742187(Gas)(After 6-1-64) .7726563(Oil)(After 6-1-68) .7687500(Gas)(After 6-1-68)	.2016509 .3567109	
7	Littman "A" N½ Section 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320	7	None	D. H. Byrd .0039063 Jack Frost .0039063 Scratch Ranch Royalty Company .0078125 Phillips Petroleum Company .0117188 Roland S. Bond .0156250* .0117187** .0156250*** Anna Lou Home and husband, Tom L. Home .0039063* .0029297** .0039063*** Marshall & Winston, Inc. .0117188* .0087891** .0117188***					.001393420 .001393420 .002786804 .004180224 .005573608* .004180188** .005573608*** .001393420* .001045056** .001393420*** .004180224* .003135168** .004180224***

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
7 (Continued)					Amerada Petroleum Corporation .0312500* .0234375** .0234375***					.011147216* .008360412** .008360412***
					Lawrence L. Fuller, administrator with will annexed of the Estate of James G. Bennett .0117188* .0087891** .0117188***					.004180224* .003135168** .004180224***
					Joel L. Simon .0058484					.002086188
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld .0058484					.002086188
					Marcus and Eddie Baum, Ind. Exec. of Estate of Bessie Baum, dec. .0035140					.001253482
					Rose Kleeman .0118976					.004244004
					Clara Silberberg .0017068					.000608834
					Mayme Newman .0017068					.000608834
					Queenie Littman .0035140					.001253482
					Jeanette Hammer and husband, Leo Hammer .0017068					.000608834
					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0017068					.000608834
					Lydia Littman .0250503					.008935715
					The Midland National Bank, Trustee of Management Trust created by W. T. Walsh .0029297* .0021973** .0029297***					.001045056* .000783800** .001045056***
					The Midland National Bank, Trustee of the Kathleen Walsh et al Trust .0009766* .0007324** .0009766***					.000348364* .000261255** .000348364***
					Total Royalty: .1679690* .1484376** .1601565***					
						Phillips Petroleum Company .0078125* .0039063** .0078125***				.002786804* .001393420** .002786804***
								New York Life Insurance Company Presently .0355469 (After June 1, 1964) (.0382813) (After June 1, 1968) (.0437500)		.012679967 (.013655357) (.015606102)

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
7	(Continued)							Broseco Corporation	.0901226*	.032147713*
									.096484 3**	.034417001**
									.0922433***	.032904190***
								John B. Rich	.0047433*	.001691986*
									.0050781**	.001811414**
									.0048548***	.001731760***
								Sohio Petroleum Company	.2371651*	.084599376*
									.2539062**	.090571109**
									.2427454***	.086589929***
								Delhi Taylor Oil Corporation		
								Presently	.0191406	.006827661
								(After June 1, 1964)	(.0164062)	(.005852271)
								(After June 1, 1968)	(.0109375)	(.003901526)
								Shell Oil Company	.4375000	.156061018
								Total W.I.	.7886716*(Presently)	.356710900
									.8121092**(Presently)	
									.7964841***(Presently)	
									.7859372*(After 6-1-64)	
									.8093748**(After 6-1-64)	
									.7937497***(After 6-1-64)	
									.7804685*(After 6-1-68)	
									.8039061**(After 6-1-68)	
									.7882810***(After 6-1-68)	
8	Littman Estate SW¼ Section 7, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160	2	None					.0784198	
								C. H. Byrd	.0039062	.0003064
								Jack Frost	.0039063	.0003064
								Scratch Ranch Royalty Company	.0078125	.0006126
								Phillips Petroleum Company	.0117188	.0009191
								Roland S. Bond	.0117188	.0009191
								Joel L. Simon	.0087726	.0006879
								Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld	.0087726	.0006879
								Marcus and Eddie Baum, Ind. Exec. of the Estate of Bessie Baum, deceased	.0052710	.0004134
								Rose Kleeman	.0178464	.0013995
								Clara Silberberg	.0025602	.0002007
								Mayme Newman	.0025603	.0002007
								Queenie Littman	.0052710	.0004134
								Jeanette Hammer and husband, Leo Hammer	.0025602	.0002007

* When DAP more than 35 BOPD
** When DAP less than 35 BOPD
*** When DAP exactly 35 BOPD

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
8 (Continued)					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0025602 Lydia Littman .0375754 Total Royalty: .1328125					.0002007 .0029467
						Monsanto Chemical Company .0468750 Phillips Petroleum Company .0039062 Total O.R.R.I. .0507812				.0036759 .0003064
							New York Life Insurance Company Presently .0355469 (After June 1, 1964) (.0382813) (After June 1, 1968) (.0437500)			.0027876 (.0030020) (.0034308)
								Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 .1523438		.0119468
								Broseco Corporation .1447266		.0113494
								John B. Rich .0076172		.0005973
								Sohio Petroleum Company .4062500		.0318580
								Delhi Taylor Oil Corporation Presently .0191406 (After June 1, 1964) (.0164062) (After June 1, 1968) (.0109375)		.0015010 (.0012866) (.0008578)
								R. W. Leonard .0126953 Obie P. Leonard, Jr. .0126953 Margery Ann Hodges .0126953 Martha Jane Anthony .0126953		.0009955 .0009955 .0009956 .0009956
								Total W.I. .7808594 Presently .7781250(After 6-1-64) .7726563(After 6-1-68)		.0784198
									.0146833	
9	Monarch East 40 acres of South 71.25 acres of SW¼ Section 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	40	1	None	The Chase Manhattan Bank (For the account of Mon-Dak Oil Corp. et al) .0118750 Sinclair Oil & Gas Company .0037500 Texsylvania Mineral Corporation .0019531					.000174364 .000055063 .000028678

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
9	(Continued)				J. Ralph Stewart .0006510					.000009560
					Howard L. Anderson .0006510					.000009560
					James S. and James G. Noland, Ind. Exec. UTW of Mabel C. Noland .0003255					.000004780
					J. S. Noland .0003255					.000004780
					H. A. Hedberg .0013021		.0005697		RI	.000019119
									PPI	.000008365
					E. S. Birdsong .0007531		.0003294		RI	.000011058
									PPI	.000004836
					R. V. Bebout .0012033		.0005264		RI	.000017668
									PPI	.000007729
					Sam Letwin .0005459		.0002388		RI	.000008016
									PPI	.000003506
					W. H. Beadles .0006510		.0002848		RI	.000009560
									PPI	.000004182
					Aberdeen Oil Company, Inc. .0190972		.0083550		RI	.000280410
									PPI	.000122679
					Michael J. Denda and Lawrence E. Arnsten, Trustees under Trust Ind. dated March 30, 1962 .0039063		.0017090		RI	.000057358
									PPI	.000025093
					C. J. Davidson .0039063		.0017090		RI	.000057358
									PPI	.000025093
					Pittsburgh National Bank, Trustee UTW Samuel W. Jull .0000301		.0000132		RI	.000000442
									PPI	.000000195
					John A. Byerly .0001506		.0000659		RI	.000002212
									PPI	.000000968
					Emma Anne H. Kunkle .0000527		.0000231		RI	.000000775
									PPI	.000000339
					Berthold Floersheim .0000753		.0000329		RI	.000001107
									PPI	.000000483
					James Hemphill .0001506		.0000659		RI	.000002212
									PPI	.000000967
					Myrtle Conner, Ind. Exec. UTW Frank Conner .0000527		.0000231		RI	.000000774
									PPI	.000000339
					Myrtle H. Conner .0000377		.0000164		RI	.000000553
									PPI	.000000241
					Mrs. Helen Reed Allen .0000039		.0000017		RI	.000000058
									PPI	.000000024
					Irene Allen .0000012		.0000006		RI	.000000017
									PPI	.000000008
					Marie Allen Denby Ricketts and husband, D. H. Ricketts .0000012		.0000005		RI	.000000016
									PPI	.000000008

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
9 (Continued)					June Allen Stewart and husband, R. W. Stewart .0000012		.0000005		RI PPI	.000000016 .000000008
					William A. Siefert, Jr. .0000150		.0000066		RI PPI	.000000220 .000000096
					Samuel N. Frishman .0000151		.0000066		RI PPI	.000000221 .000000096
					Max Q. Frishman and wife, Beatrice S. Frishman .0000151		.0000066		RI PPI	.000000221 .000000096
					Agnes Graff Murray .0001506		.0000659		RI PPI	.000002212 .000000968
					Geo. L. Bradford and wife, Marion Bradford .0017361		.0007595		RI PPI	.000025492 .000011151
					Frank Jeppi .0005208		.0002279		RI PPI	.000007647 .000003346
					Fay Kleinpell Shannon and husband, Donald C. Shannon .0002605		.0001138		RI PPI	.000003825 .000001670
					Karoline Kay Kleinpell Rosoff and husband, Harold Jay Rosoff .0001302		.0000570		RI PPI	.000001912 .000000837
					Jean Fay Horton Foshee .0001302		.0000570		RI PPI	.000001912 .000000836
					Kathryn Houchin .0010938		.0004785		RI PPI	.000016062 .000007025
					C. E. Houchin Trust #2 .0013368		.0005849		RI PPI	.000019628 .000008588
							Total P.P.I. .0163302			
					Southland Royalty Company .0156250					.000229426
					Edward S. Wilson and wife, Hilda G. Wilson .0004132					.000006068
					Mary Evelyn Davidson Leidinger .0004132					.000006068
					John H. Costello .0004132					.000006068
					Edward Gerber .0002066					.000003034
					Iris Gerber Damson .0002066					.000003034
					Glenna Wright Adams .0002066					.000003033
					Lewes Oil & Gas Co. .0003616					.000005309
					Alice F. Mask Gordon and husband Robt. C. Gordon .0001033					.000001518
					Robert W. Wakefield .0000172					.000000252
					David D. Wakefield .0000172					.000000252
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt .0000689					.000001012

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNI PARTICI
9 (Continued)					John L. Pratt, III .0000344					.0000005
					Frances Grier Wakefield .0000689					.0000010
					Amerada Petroleum Corporation .0073242					
					J. G. Catlett Co. .0012626					.0001075
					Elizabeth W. Shuster Life Estate with remainder to James Shuster .0000345					.0000185
					James D. Shuster .0000688					
					James M. Tunnell, Jr. .0000129					.0000005
					Robert W. Tunnell .0000129					.0000010
					Mildred S. Tunnell .0000129					.0000001
					Eolyne K. Tunnell and husband, Robert W. Tunnell .0000129					.0000001
					Kirby Production Company .0023761					.0000001
					Andrew Oil & Gas Royalties, Inc. .0002066					.0000348
					Cities Service Oil Company .0416667					.0000030
					C. S. Longcope .0004132					.0006118
					Total Royalty: .1284179					.0000060
						Cities Service Oil Company .0364583				
						Kirby Production Company .0023803				.0005353
						Phillips Petroleum Company .0470921				.0000349
						J. G. Catlett Co. .0033345				.0006914
						Total O.R.R.I. .0892652				.0000489
								C. S. Longcope .0028926		.0000424
								Sohio Petroleum Company .5405250		.0079366
								Broseco Corporation .2114406		.0031046
								John B. Rich .0111285		.0001634
								Total W.I. .7659867		.0146833
10	Sims NW¼ Section 14, Block A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160	1	None					.0217480	
					American National Bank of Austin, Trustee for the Ruth Reed Dyke Trust .0312500					.0006796
					Scratch Ranch Royalty Company .0214844					.0004672
					Amerada Petroleum Corporation .0182292					.0003964
					Ethel Sims .0019531					.0000424
					Marshall & Winston, Inc. .0058593					.0001274
					Geneva College - Ira Flocker Fund .0009766					.0000212
					Gilbert D. Flocker .0003255					.0000070

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT		OVERRIDING ROYALTY OWNERS AND AMOUNT		PRODUCTION PAYMENT OWNERS AND AMOUNT		WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
10 (Continued)					James Miller Flocker	.0002441								.000005308
					Esther Flocker Johnston	.0000814								.000001770
					R. E. Williams	.0001628								.000003540
					S. L. Parham	.0001628								.000003540
					Donald Winston, Trustee under Trust Indenture dated 12-31-41	.0081380								.000176985
					Donald Winston, Trustee UTW of Francisca S. Winston, deceased	.0009766								.000021239
					Selma E. Andrews	.0083914								.000182496
					Republic National Bank of Dallas, Trustee UTW Frank A. Andrews #631	.0072336								.000157316
					Fred H. Campbell and wife, Marguerite F. Campbell	.0019531								.000042477
					Joyce A. Holliday	.0019531								.000042477
					Lawrence L. Fuller, administrator with will annexed of the Estate of James G. Bennett	.0058594								.000127431
					The First National Bank of Midland, Texas, Agent and Attorney in Fact for John Ed Crabb	.0009766								.000021239
					R. C. Crabb, Jr.	.0009766								.000021239
					Anna Lou Home and husband, Tom S. Home	.0006510								.000014158
					M. W. Coil Estate	.0058594								.000127431
					The Midland National Bank, Trustee of the Management Trust created by W. T. Walsh	.0004882								.000010617
					The Midland National Bank, Trustee of Kathleen Walsh et al Trust	.0001628								.000003540
					Sohio Petroleum Company	.0005425								.000011800
					Broseco Corporation	.0001031								.000002243
					John B. Rich	.0000054								.000000118
					Total Royalty:	.1250000								
							Humble Oil & Refining Company	.0625000						.001359251
											Fort Worth National Bank of Fort Worth, Trustee Account No. 1979	.1523438		.003313174
											Martha Jane Anthony	.0126953		.000276098

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
10 (Continued)								Margery Ann Hodges	.0126953		.000276098
								Obie P. Leonard, Jr.	.0126953		.000276098
								R. W. Leonard	.0126953		.000276098
								Sohio Petroleum Company	.4401041		.009571383
								Broseco Corporation	.1608073		.003497235
								John B. Rich	.0084636		.000184065
								Total W.I.	.8125000		.0217480
11	Southland S½ SE¼ and West 40 Acres of North 71.25 Acres of SE¼ Section 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	120	3	None						.0487947	
					The Chase Manhattan Bank, for account of Mon-Dak Oil Corp. et al	.0118750					.000579437
					Sinclair Oil & Gas Company	.0037500					.000182980
					Texsylvania Mineral Corporation	.001953!					.000095301
					J. Ralph Stewart	.0006510					.000031765
					Howard L. Anderson	.0006510					.000031765
					James S. and James G. Noland, Ind. Exec. UTW Mable C. Noland	.0003255					.000015883
					J. S. Noland	.0003255					.000015883
					H. A. Hedberg	.0013021	.0005697			RI	.000063535
										PPI	.000027799
					E. S. Birdsong	.0007531	.0003294			RI	.000036747
										PPI	.000016074
					R. V. Bebout	.0012033	.0005264			RI	.000058715
										PPI	.000025686
					Sam Letwin	.0005459	.0002388			RI	.000026637
										PPI	.000011653
					W. H. Beadles	.0006510	.0002848			RI	.000031765
										PPI	.000013898
					Aberdeen Oil Company, Inc.	.0190972	.0083550			RI	.000931842
										PPI	.000407680
					Michael J. Denda and Lawrence E. Arnsten, Trustees under Trust Indenture dated March 30, 1962	.0039063	.0017090			RI	.000190607
										PPI	.000083391
					C. J. Davidson	.0039063	.0017090			RI	.000190606
										PPI	.000083391
					Pittsburgh National Bank, Trustee UTW of Samuel W. Jull	.0000301	.0000132			RI	.000001469
										PPI	.000000645
					John A. Byerly	.0001506	.0000659			RI	.000007348
										PPI	.000003216
					Emma Anne H. Kunkle	.0000527	.0000231			RI	.000002571
										PPI	.000001128

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
11	(Continued)				Berthold Floersheim .0000753		.0000329		RI PPI	.000003674 .000001606
					James Hemphill .0001506		.0000659		RI PPI	.000007348 .000003216
					Myrtle Conner, Ind. Exec. of Estate of Frank Conner .0000527		.0000231		RI PPI	.000002571 .000001128
					Myrtle H. Conner .0000377		.0000164		RI PPI	.000001839 .000000801
					Helen Reed Allen .0000039		.0000017		RI PPI	.000000190 .000000083
					Irene Allen .0000012		.0000006		RI PPI	.000000059 .000000028
					Marie Allen Denby Ricketts and husband, D. H. Ricketts .0000012		.0000005		RI PPI	.000000059 .000000028
					June Allen Stewart .0000012		.0000005		RI PPI	.000000058 .000000026
					William A. Siefert, Jr. .0000150		.0000066		RI PPI	.000000732 .000000323
					Samuel N. Frishman .0000151		.0000066		RI PPI	.000000732 .000000323
					Max Q. Frishman and wife, Beatrice S. Frishman .0000151		.0000066		RI PPI	.000000732 .000000323
					Agnes Graff Murray .0001506		.0000659		RI PPI	.000007348 .000003216
					Geo. L. and Marion Bradford .0017361		.0007595		RI PPI	.000084712 .000037060
					Frank Jeppi .0005208		.0002279		RI PPI	.000025412 .000011121
					Fay Kleinpell Shannon and husband, Donald C. Shannon .0002605		.0001138		RI PPI	.000012711 .000005553
					Karoline Kay Kleinpell Rosoff and husband, Harold Jay Rosoff .0001302		.0000570		RI PPI	.000006353 .000002782
					Jean Fay Horton Foshee .0001302		.0000570		RI PPI	.000006353 .000002782
					Kathryn Houchin .0010938		.0004785		RI PPI	.000053371 .000023349
					C. E. Houchin Trust No. 2 .0013368		.0005849		RI PPI	.000065228 .000028541
						Total P.P.I. .0163302				
					Southland Royalty Company .0156250					.000762417

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT		OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
11	(Continued)				Edward S. and Hilda G. Wilson	.0004132						.000020161
					Mary Evelyn Davidson Leidinger	.0004132						.000020161
					John H. Costello	.0004132						.000020161
					Edward Gerber	.0002066						.000010080
					Iris Gerber Damson	.0002066						.000010080
					Glenna Wright Adams	.0002066						.000010080
					Lewes Oil & Gas Co.	.0003616						.000017644
					Alice F. Mask Gordon and husband, Robt. C. Gordon	.0001033						.000005040
					Robert W. Wakefield	.0000172						.000000839
					David D. Wakefield	.0000172						.000000839
					John L. Pratt, III	.0000344						.000001678
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt	.0000689						.000003362
					Frances Grier Wakefield and husband, Harold K. Wakefield	.0000689						.000003362
					Amerada Petroleum Corporation	.0078125*						.000381208*
						.0058594**						.000285908**
						.0058594***						.000285908***
					J. G. Catlett Co.	.0012626						.000061609
					Elizabeth W. Shuster, Life Estate with remainder to James D. Shuster	.0000345						.000001684
					James D. Shuster	.0000688						.000003358
					James M. Tunnell, Jr.	.0000129						.000000629
					Robert W. Tunnell	.0000129						.000000629
					Mildred S. Tunnell	.0000129						.000000629
					Eolyne K. Tunnell and husband, Robert W. Tunnell	.0000129						.000000629
					Kirby Production Company	.0023761						.000115942
					Andrew Oil & Gas Royalties, Inc.	.0002066						.000010080
					Cities Service Oil Company	.0416666						.002033110
					C. S. Longcope	.0004132						.000020163
					Total Royalty:	.1289061*						
						.1269530**						
						.1269530***						
							Phillips Petroleum Company	.0561525*				.002739944*
								.0199111**				.000971556**
								.0561525***				.002739944***

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
11	(Continued)							C. S. Longcope	.0028926		.000141144
								Sohio Petroleum Company	.3255208*		.015883689*
									.3526476**		.017207332**
									.3269080***		.015951377***
								Broseco Corporation	.1261719*		.006156520*
									.1366862**		.006669562**
									.1267096***		.006182757***
								John B. Rich	.0066407*		.000324030*
									.0071941**		.000351033**
									.0066689***		.00325405***
								Cities Service Oil Company	.2916667		.014231790
								J. G. Catlett Co.	.0266760		.001301650
								Kirby Production Company	.0190425		.000929173
								Total W.I.	.7986112*		.0487947
									.8368057**		
									.8005643***		

* When DAP more than 35 BOPD
** When DAP is less than 35 BOPD
*** When DAP is exactly 35 BOPD.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 5049 & 5050

LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
1	Ohio-Federal NE¼ Sec. 17, T-21-S, R-38-E Lea County, New Mexico, down to a depth of 4750 feet.	160	1	LC-057443-A					.0360701	
				U.S.A.	.1250000					.0045088
						Marathon Oil Company .0625000				.0022544
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0100000				.0003607
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0325000				.0011723
						Sunshine Royalty Company .0225000				.0008116
						Charlie W. Parcell and wife, Gertrude L. Parcell .0100000				.0003607
						Total ORRI .1375000				.0003607
							None - 0 -			
								Sohio Petroleum Company .5838541		.0210596
								Broseco Corporation .1459636		.0052649
								John B. Rich .0076823		.0002771
								Total W.I. .7375000		.0360701
2	Parcell-Federal SE¼ Section 8, T-21-S, R-38-E Lea County, New Mexico	160	2	LC-062170-A					.0232066	
				U.S.A.	.1250000					.0029008
						Charlie W. Parcell and wife, Gerturde L. Parcell .0044440				.0001031
						Continental-Emsco Company a division of The Youngstown Sheet and Tube Company .0044440				.0001031
						Sunshine Royalty Company .0099990				.0002321
						First National Bank of Nevada, Trustee UTW of Allie M. Lee .0144430				.0003352
						Total ORRI .0333300				
							None - 0 -			
								Elliott, Inc. .8416700		.0195323
										.0232066

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
									.1438601	
										.0179825
3	Wylie Federal SW¼ Section 9, T-21-S, R-38-E Lea County, New Mexico	170.69	3	LC-069408	U.S.A. .1250000					
						Albuquerque National Bank Testamentary Trustee of F. A. Andrews .0052082				.0007492
						Selma E. Andrews .0060418				.0008692
						The Atlantic Refining Company .0000625				.0000090
						M. W. Coil Estate .0009375				.0001349
						Lillian Hinkle Coil .0009375				.0001349
						Mariee I. Kyte .0009375				.0001349
						E. Bernard Johnson, Exec. UTW of C. H. Kyte .0009376				.0001798
						John M. Loffland, Jr. .0012500				.0000225
						Timothy A. Pedley, Jr. .0001562				.0000225
						Gracean M. Pedley .0001562				.0001349
						The First National Bank of Denver, Trustee UTW of Josephine M. Smith, Dec. .0009375				.0001798
						Albert Stevenson and wife, Artie Stevenson .0012500				.0005395
						Kathleen L. and E.D. Wylie .0037500				.0001798
						Joe Stydahar .0012500				.0001707
						The Chase Manhattan Bank, Assignee of Argo Oil Payment .0011875				
						Total ORRI .0250000	None - 0 -	Elliott, Inc. .8500000		.1222811
										.1438601
									.0666266	.0083283
4	Numex NW¼ Section 16, T-21-S, R-38-E Lea County, New Mexico, down to a depth of 4750 feet.	170.69	2	B-11232	The State of New Mexico .1250000					.0041642
						Humble Oil & Refining Company .0625000	None - 0 -			.0383450
								Sohio Petroleum Company .5755208		.0149996
								Broseco Corporation .2251302		.0007895
								John B. Rich .0118490		
								Total W.I. .8125000		.0666266

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
5	Freund NE¼ Section 15, Blk. A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160	1	None					.0082290	
					The American National Bank of Austin, Trustee for the Ruth Reed Dyke Trust	.0312500				.0002572
					Scratch Ranch Royalty Company	.0214844				.0001768
					Amerada Petroleum Corporation	.0078125				.0000643
					Ethel Sims	.0019531				.0000161
					Marshall & Winston, Inc.	.0039063				.0000321
					Geneva College - Ira Flocker Fund	.0009766				.0000080
					Gilbert D. Flocker	.0003255				.0000027
					James Miller Flocker	.0002441				.0000020
					Esther Flocker Johnston	.0000814				.0000007
					R. E. Williams	.0001628				.0000013
					S. L. Parham	.0001628				.0000013
					Donald Winston, Trustee	.0019531				.0000161
					Selma E. Andrews	.0083914				.0000690
					Republic National Bank of Dallas, Trustee UTW Frank A. Andrews #631	.0072336				.0000595
					Fred H. Campbell and wife, Marguerite F. Campbell	.0019531				.0000161
					Joyce A. Holliday	.0019531				.0000161
					Lawrence L. Fuller, administrator with will annexed of estate of James G. Bennett	.0039063				.0000321
					W. M. Beecherl	.0117188				.0000964
					J. G. Catlett Co.	.0032657				.0000269
					Robert W. Wakefield	.0000690				.0000006
					David D. Wakefield	.0000690				.0000006
					John L. Pratt, III	.0001379				.0000011
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt	.0002759				.0000023
					Frances Grier Wakefield and husband, Harold K. Wakefield	.0002759				.0000023
					Andrea Oil & Gas Royalties, Inc.	.0008278				.0000068

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
5 (Continued)					Charlotte M. Sears, Adm. of Estate of Joseph H. Sears .0008278					.0000068
					Richard H. Sears, Ind. and as Trustee UTW of Henry E. Sears .0008278					.0000068
					Frank A. Elliott, Jr. .0008278					.0000068
					Charles K. Elliott .0008278					.0000068
					Neville G. Penrose, Trustee of the Patricia Penrose Trust .0080566					.0000663
					Sohio Petroleum Company .0034180					.0000281
					Broseco Corporation .0002319					.0000019
					John B. Rich .0000123					.0000001
					Kirby Production Company .0073924					.0000608
					Total Royalty .1328125					
						Humble Oil & Refining Company .0477028				.0003925
							None - 0 -			
								J. G. Catlett Co. .0354726		.0002919
								Kirby Production Company .0623130		.0005128
								Sohio Petroleum Company .5112036		.0042067
								Broseco Corporation .1999708		.0016456
								John B. Rich .0105247		.0000367
								Total W.I. .8194847		.0082290
									.2016509	
6	Littman S½ Section 6, Blk. A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet	320	6	None	D. H. Byrd .0039062					.0007876
					Jack Frost .0039063					.0007877
					Scratch Ranch Royalty Company .0078125					.0015754
					Phillips Petroleum Company .0117187					.0023631
					Roland S. Bond .0117187					.0023631
					Anna Lou Home and husband, Tom S. Home .0029297					.0005908
					Marshall & Winston, Inc. .0087891					.0017723
					Amerada Petroleum Corporation .0234375					.0047262
					Lawrence L. Fuller, administrator with will annexed of Estate of James G. Bennett .0087891					.0017723

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
6 (Continued)					Joel L. Simon .0058484					.0011793
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld .0058484					.0011793
					Marcus Baum and Eddie Baum, Ind. Exec. of Estate of Bessie Baum .0035141					.0007086
					Rose Kleiman .0118976					.0023991
					Clara Silberberg .0017068					.0003441
					Mayme Newman .0017068					.0003441
					Queenie Littman .0035140					.0007086
					Jeanette Hammer and husband, Leo Hammer .0017068					.0003441
					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0017068					.0003441
					Lydia Littman .0250503					.0050514
					The Midland National Bank, Trustee of Management Trust created by W. T. Walsh .0021973					.0004431
					The Midland National Bank, Trustee of Kathleen Walsh et al Trust .0007324					.0001477
					Total Royalty: .1484375					
						Monsanto Chemical Co. .0312500 (Oil) .0312500 (Gas)				.0063016(Oil .0063016(Gas
						Phillips Petroleum Company .0039062 (Oil) .0078125 (Gas)				.0007878(Oil .0015755(Gas
						Total ORRI: .0351562 (Oil) .0390625 (Gas)				
							New York Life Insurance Company Presently .0355469			.0071681
							(After June 1, 1964) (.0382813)			(.0077194)
							(After June 1, 1968) (.0437500)			(.0088222)
								R. W. Leonard .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Obie P. Leonard, Jr. .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Margery Ann Hodges .0126954 (Oil) .0126302 (Gas)		.0025601(Oil .0025469(Gas

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
6 (Continued)					Joel L. Simon .0058484					.0011793
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld .0058484					.0011793
					Marcus Baum and Eddie Baum, Ind. Exec. of Estate of Bessie Baum .0035141					.0007086
					Rose Kleeman .0118976					.0023991
					Clara Silberberg .0017068					.0003441
					Mayme Newman .0017068					.0003441
					Queenie Littman .0035140					.0007086
					Jeanette Hammer and husband, Leo Hammer .0017068					.0003441
					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0017068					.0003441
					Lydia Littman .0250503					.0050514
					The Midland National Bank, Trustee of Management Trust created by W. T. Walsh .0021973					.0004431
					The Midland National Bank, Trustee of Kathleen Walsh et al Trust .0007324					.0001477
					Total Royalty: .1484375					
						Monsanto Chemical Co. .0312500 (Oil) .0312500 (Gas)				.0063016(Oil .0063016(Gas
						Phillips Petroleum Company .0039062 (Oil) .0078125 (Gas)				.0007878(Oil .0015755(Gas
						Total ORRI: .0351562 (Oil) .0390625 (Gas)				
							New York Life Insurance Company Presently .0355469			.0071681
							(After June 1, 1964) (.0382813)			(.0077194)
							(After June 1, 1968) (.0437500)			(.0088222)
								R. W. Leonard .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Obie P. Leonard, Jr. .0126953 (Oil) .0126302 (Gas)		.0025600(Oil .0025469(Gas
								Margery Ann Hodges .0126954 (Oil) .0126302 (Gas)		.0025601(Oil .0025469(Gas

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
6 (Continued)								Martha Jane Anthony .0126953 (Oil) .0126303 (Gas)		.0025601(Oil) .0025469(Gas)
								Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 .1523437 (Oil) .1515626 (Gas)		.0307205(Oil) .0305630(Gas)
								Broseco Corporation .1447266 (Oil) .1439844 (Gas)		.0291842(Oil) .0290346(Gas)
								John B. Rich .0076172 (Oil) .0075781 (Gas)		.0015361(Oil) .0015282(Gas)
								Sohio Petroleum Company .4062500 (Oil) .4041665 (Gas)		.0819207(Oil) .0815006(Gas)
								Delhi Taylor Oil Corporation Presently .0191406 (After June 1, 1964)(.0164062) (After June 1, 1968)(.0109375)		.0038597 (.0033084) (.0022056)
										.2016509
								Total W.I. .7808594(Oil)(Presently) .7769531(Gas)(Presently) .7781250(Oil)(After 6-1-64) .7742187(Gas)(After 6-1-64) .7726563(Oil)(After 6-1-68) .7687500(Gas)(After 6-1-68)		
7	Littman "A" N½ Section 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320	7	None					.3567109	
					D. H. Byrd .0039063 Jack Frost .0039063 Scratch Ranch Royalty Company .0078125 Phillips Petroleum Company .0117188 Roland S. Bond .0156250* .0117187** .0156250*** Anna Lou Home and husband, Tom L. Home .0039063* .0029297** .0039063*** Marshall & Winston, Inc. .0117188* .0087891** .0117188***					.001393420 .001393420 .002786804 .004180224 .005573608* .004180188** .005573608*** .001393420* .001045056** .001393420*** .004180224* .003135168** .004180224***

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
7 (Continued)					Amerada Petroleum Corporation .0312500*					.01114721 6*
					.0234375**					.00836041 2**
					.0234375***					.00836041 2***
					Lawrence L. Fuller, administrator with will annexed of the Estate of James G. Bennett .0117188*					.004180224*
					.0087891**					.00313516 8**
					.0117188***					.004180224***
					Joel L. Simon .0058484					.002086188
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld .0058484					.002086188
					Marcus and Eddie Baum, Ind. Exec. of Estate of Bessie Baum, dec. .0035140					.001253482
					Rose Kleeman .0118976					.004244004
					Clara Silberberg .0017068					.000608834
					Mayme Newman .0017068					.000608834
					Queenie Littman .0035140					.001253482
					Jeanette Hammer and husband, Leo Hammer .0017068					.000608834
					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0017068					.000608834
					Lydia Littman .0250503					.008935715
					The Midland National Bank, Trustee of Management Trust created by W. T. Walsh .0029297*					.001045056*
					.0021973**					.000783800**
					.0029297***					.001045056***
					The Midland National Bank, Trustee of the Kathleen Walsh et al Trust .0009766*					.000348364*
					.0007324**					.000261255**
					.0009766***					.000348364***
					Total Royalty: .1679690*					
					.1484376**					
					.1601565***					
						Phillips Petroleum Company .0078125*				.002786804*
						.0039063**				.001393420**
						.0078125***				.002786804***
								New York Life Insurance Company Presently .0355469		.012679967
								(After June 1, 1964) (.0382813)		(.013655357)
								(After June 1, 1968) (.0437500)		(.015606102)

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
7	(Continued)							Broseco Corporation	.0901226*	.03214771*
									.0964843**	.03441700**
									.0922433***	.03290419***
								John B. Rich	.0047433*	.00169198*
									.0050781**	.00181141**
									.0048548***	.00173176***
								Sohio Petroleum Company	.2371651*	.08459937*
									.2539062**	.09057110**
									.2427454***	.08658992***
								Delhi Taylor Oil Corporation		
								Presently	.0191406	.00682766
								(After June 1, 1964)	(.0164062)	(.00585227)
								(After June 1, 1968)	(.0109375)	(.00390152)
								Shell Oil Company	.4375000	.15606102
								Total W.I.	.7886716*(Presently)	.35671090
									.8121092**(Presently)	
									.7964841***(Presently)	
									.7859372*(After 6-1-64)	
									.8093748**(After 6-1-64)	
									.7937497***(After 6-1-64)	
									.7804685*(After 6-1-68)	
									.8039061**(After 6-1-68)	
									.7882810***(After 6-1-68)	
									.0784198	.0003064
										.0003064
8	Littman SEC Swᵀ Section 7, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160	2	None	D. H. Byrd	.0039062				.0006126
					Jack Frost	.0039063				.0009191
					Scratch Ranch Royalty Company	.0078125				.0009191
					Phillips Petroleum Company	.0117188				.0006879
					Roland S. Bond	.0117188				
					Joel L. Simon	.0087726				.0006879
					Pauline Simon Hirschfeld and husband, Louis L. Hirschfeld	.0087726				.0004134
					Marcus and Eddie Baum, Ind. Exec. of the Estate of Bessie Baum, deceased	.0052710				.0013995
					Rose Kleeman	.0178464				.0002007
					Ciara Silberberg	.0025602				.0002007
					Mayme Newman	.0025603				.0004134
					Queenie Littman	.0052710				
					Jeanette Hammer and husband, Leo Hammer	.0025602				.0002007

* When OAP more than 35 BOPD
** When OAP less than 35 BOPD
*** When OAP exactly 35 BOPD

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMCUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
8 (Continued)					Clara Silberberg, Ind. Exec. of Estate of Moselle Bell .0025602					.0002007
					Lydia Littman .0375754					.0029467
					Total Royalty: .1328125					
						Monsanto Chemical Company .0468750				.0036759
						Phillips Petroleum Company .0039062				.0003064
						Total O.R.R.I. .0507812				
							New York Life Insurance Company			
							Presently .0355469			.0027876
							(After June 1, 1964) (.0382813)			(.0030020)
							(After June 1, 1968) (.0437500)			(.0034308)
								Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 .1523438		.0119468
								Broseco Corporation .1447266		.0113494
								John B. Rich .0076172		.0005973
								Sohio Petroleum Company .4062500		.0318530
								Delhi Taylor Oil Corporation		
								Presently .0191406		.0015010
								(After June 1, 1964) (.0164062)		(.0012866)
								(After June 1, 1968) (.0109375)		(.0008578)
								R. W. Leonard .0126953		.0009955
								Obie P. Leonard, Jr. .0126953		.0009955
								Margery Ann Hodges .0126953		.0009956
								Martha Jane Anthony .0126953		.0009956
								Total W.I. .7808594 Presently .7781250(After 6-1-64) .7726563(After 6-1-68)		.0784198
									.0146833	
9	Monarch East 40 acres of South 71.25 acres of SW¼ Section 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	40	1	None	The Chase Manhattan Bank (For the account of Mon-Dak Oil Corp. et al) .0118750					.000174364
					Sinclair Oil & Gas Company .0037500					.000055063
					Texsylvania Mineral Corporation .0019531					.000028678

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
9 (Continued)					J. Ralph Stewart .0006510					.000009560
					Howard L. Anderson .0006510					.000009560
					James S. and James G. Noland, Ind. Exec. UTW of Mabel C. Noland .0003255					.000004780
					J. S. Noland .0003255					.000004780
					H. A. Hedberg .0013021		.0005697		RI	.000019119
									PPI	.000008365
					E. S. Birdsong .0007531		.0003294		RI	.000011058
									PPI	.000004836
					R. V. Bebout .0012033		.0005264		RI	.000017666
									PPI	.000007729
					Sam Letwin .0005459		.0002388		RI	.000008016
									PPI	.000003506
					W. H. Beadles .0006510		.0002848		RI	.000009560
									PPI	.000004182
					Aberdeen Oil Company, Inc. .0190972		.0083550		RI	.000280410
									PPI	.000122679
					Michael J. Denda and Lawrence E. Arnsten, Trustees under Trust Ind. dated March 30, 1962 .0039063		.0017090		RI	.000057358
									PPI	.000025093
					C. J. Davidson .0039063		.0017090		RI	.000057358
									PPI	.000025093
					Pittsburgh National Bank, Trustee UTW Samuel W. Jull .0000301		.0000132		RI	.000000442
									PPI	.000000195
					John A. Byerly .0001506		.0000659		RI	.000002212
									PPI	.000000968
					Emma Anne H. Kunkle .0000527		.0000231		RI	.000000775
									PPI	.000000339
					Berthold Floersheim .0000753		.0000329		RI	.000001107
									PPI	.000000483
					James Memphill .0001506		.0000659		RI	.000002212
									PPI	.000000967
					Myrtle Conner, Ind. Exec. UTW Frank Conner .0000527		.0000231		RI	.000000774
									PPI	.000000339
					Myrtle H. Conner .0000377		.0000164		RI	.000000553
									PPI	.000000241
					Mrs. Helen Reed Allen .0000039		.0000017		RI	.000000058
									PPI	.000000024
					Irene Allen .0000012		.0000006		RI	.000000017
									PPI	.000000008
					Marie Allen Denby Ricketts and husband, D. H. Ricketts .0000012		.0000005		RI	.000000016
									PPI	.000000008

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
9 (Continued)					June Allen Stewart and husband, R. W. Stewart .0000012		.0000005		RI	.000000016
									PPI	.000000008
					William A. Siefert, Jr. .0000150		.0000066		RI	.000000220
									PPI	.000000096
					Samuel N. Frishman .0000151		.0000066		RI	.000000221
									PPI	.000000096
					Max Q. Frishman and wife, Beatrice S. Frishman .0000151		.0000066		RI	.000000221
									PPI	.000000096
					Agnes Graff Murray .0001506		.0000659		RI	.000002212
									PPI	.000000968
					Geo. L. Bradford and wife, Marion Bradford .0017361		.0007595		RI	.000025492
									PPI	.000011151
					Frank Jeppi .0005208		.0002279		RI	.000007647
									PPI	.000003346
					Fay Kleinpell Shannon and husband, Donald C. Shannon .0002605		.0001138		RI	.000003825
									PPI	.000001670
					Karoline Kay Kleinpell Rosoff and husband, Harold Jay Rosoff .0001302		.0000570		RI	.000001912
									PPI	.000000837
					Jean Fay Horton Foshee .0001302		.0000570		RI	.000001912
									PPI	.000000836
					Kathryn Houchin .0010938		.0004785		RI	.000016062
									PPI	.000007025
					C. E. Houchin Trust #2 .0013368		.0005849		RI	.000019628
									PPI	.000008588
							Total P.P.I. .0163302			
					Southland Royalty Company .0156250					.000229426
					Edward S. Wilson and wife, Hilda G. Wilson .0004132					.000006068
					Mary Evelyn Davidson Leidinger .0004132					.000006068
					John H. Costello .0004132					.000006068
					Edward Gerber .0002066					.000003034
					Iris Gerber Damson .0002066					.000003034
					Glenna Wright Adams .0002066					.000003033
					Lewes Oil & Gas Co. .0003616					.000005309
					Alice F. Mask Gordon and husband Robt. C. Gordon .0001033					.000001518
					Robert W. Wakefield .0000172					.000000252
					David D. Wakefield .0000172					.000000252
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt .0000689					.000001012

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
9 (Continued)					John L. Pratt, III .0000344					.000000505
					Frances Grier Wakefield .0000689					.000001012
					Amerada Petroleum Corporation .0073242					.000107543
					J. G. Catlett Co. .0012626					.000018539
					Elizabeth W. Shuster Life Estate with remainder to James Shuster .0000345					
					James D. Shuster .0000688					.000000506
					James M. Tunnell, Jr. .0000129					.000001010
					Robert W. Tunnell .0000129					.000000189
					Mildred S. Tunnell .0000129					.000000189
					Eolyne K. Tunnell and husband, Robert W. Tunnell .0000129					.000000189
					Kirby Production Company .0023761					.000000189
					Andrew Oil & Gas Royalties, Inc. .0002066					.000034889
					Cities Service Oil Company .0416667					.000003033
					C. S. Longcope .0004132					.000611805
					Total Royalty: .1284179					.000006068
						Cities Service Oil Company .0364583				.000535328
						Kirby Production Company .0023803				.000034951
						Phillips Petroleum Company .0470921				.000691486
						J. G. Catlett Co. .0033345				.000048961
						Total O.R.R.I. .0892652		C. S. Longcope .0028926		.000042473
								Sohio Petroleum Company .5405250		.007936690
								Broseco Corporation .2114406		.003104645
								John B. Rich .0111285		.000163403
								Total W.I. .7659867		.0146833
10	Sims NW¼ Section 14, Block A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160	1	None	American National Bank of Austin, Trustee for the Ruth Reed Dyke Trust .0312500				.0217480	
					Scratch Ranch Royalty Company .0214644					.000679625
					Amerada Petroleum Corporation .0182292					.000467242
					Ethel Sims .0019531					.000396448
					Marshall & Winston, Inc. .0058593					.000042476
					Geneva College - Ira Flocker Fund .0009766					.000127428
					Gilbert D. Flocker .0003255					.000021239
										.000007078

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT		OVERRIDING ROYALTY OWNERS AND AMOUNT		PRODUCTION PAYMENT OWNERS AND AMOUNT		WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
10 (Continued)					James Miller Flocker	.0002441								.000005308
					Esther Flocker Johnston	.0000814								.000001770
					R. E. Williams	.0001628								.000003540
					S. L. Parham	.0001628								.000003540
					Donald Winston, Trustee under Trust Indenture dated 12-31-41	.0081380								.000176985
					Donald Winston, Trustee UTW of Francisca S. Winston, deceased	.0009766								.000021239
					Selma E. Andrews	.0083914								.000182496
					Republic National Bank of Dallas, Trustee UTW Frank A. Andrews #631	.0072336								.000157316
					Fred H. Campbell and wife, Marguerite F. Campbell	.0019531								.000042477
					Joyce A. Holliday	.0019531								.000042477
					Lawrence L. Fuller, administrator with will annexed of the Estate of James G. Bennett	.0058594								.000127431
					The First National Bank of Midland, Texas, Agent and Attorney in Fact for John Ed Crabb	.0009766								.000021239
					R. C. Crabb, Jr.	.0009766								.000021239
					Anna Lou Home and husband, Tom S. Home	.0006510								.000014158
					M. W. Coil Estate	.0058594								.000127431
					The Midland National Bank, Trustee of the Management Trust created by W. T. Walsh	.0004882								.000010617
					The Midland National Bank, Trustee of Kathleen Walsh et al Trust	.0001628								.000003540
					Sohio Petroleum Company	.0005425								.000011800
					Broseco Corporation	.0001031								.000002243
					John B. Rich	.0000054								.000000118
					Total Royalty:	.1250000								
							Humble Oil & Refining Company	.0625000						.001359251
											Fort Worth National Bank of Fort Worth, Trustee Account No. 1979	.1523438		.003313174
											Martha Jane Anthony	.0126953		.000276098

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT		TRACT PARTICIPATION	UNIT PARTICIPATION
10	(Continued)							Margery Ann Hodges	.0126953		.000276098
								Obie P. Leonard, Jr.	.0126953		.000276098
								R. W. Leonard	.0126953		.000276098
								Sohio Petroleum Company	.4401041		.009571383
								Broseco Corporation	.1608073		.003497235
								John B. Rich	.0084636		.000184065
								Total W.I.	.8125000		.0217480
11	Southland S½ SE¼ and West 40 Acres of North 71.25 Acres of SE¼ Section 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	120	3	None						.0487947	
					The Chase Manhattan Bank, for account of Mon-Dak Oil Corp. et al	.0118750					.000579437
					Sinclair Oil & Gas Company	.0037500					.000182980
					Texsylvania Mineral Corporation	.0019531					.000095301
					J. Ralph Stewart	.0006510					.000031765
					Howard L. Anderson	.0006510					.000031765
					James S. and James G. Noland, Ind. Exec. UTW Mable C. Noland	.0003255					.000015883
					J. S. Noland	.0003255					.000015883
					H. A. Hedberg	.0013021	.0005697			RI	.000063535
										PPI	.000027799
					E. S. Birdsong	.0007531	.0003294			RI	.000036747
										PPI	.000016074
					R. V. Bebout	.0012033	.0005264			RI	.000058715
										PPI	.000025686
					Sam Letwin	.0005459	.0002368			RI	.000026637
										PPI	.000011653
					W. H. Beadles	.0006510	.0002848			RI	.000031765
										PPI	.000013898
					Aberdeen Oil Company, Inc.	.0190972	.0083550			RI	.000931842
										PPI	.000407680
					Michael J. Denda and Lawrence E. Arnsten, Trustees under Trust Indenture dated March 30, 1962	.0039063	.0017090			RI	.000190607
										PPI	.000083391
					C. J. Davidson	.0039063	.0017090			RI	.000190606
										PPI	.000083391
					Pittsburgh National Bank, Trustee UTW of Samuel W. Jull	.0000301	.0000132			RI	.000001469
										PPI	.000000645
					John A. Byerly	.0001506	.0000659			RI	.000007348
										PPI	.000003216
					Emma Anne H. Kunkle	.0000527	.0000231			RI	.000002571
										PPI	.000001128

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
11	(Continued)				Berthold Floersheim .0000753		.0000329			
					James Hemphill .0001506		.0000659		RI	.000003674
					Myrtle Conner, Ind. Exec. of Estate of Frank Conner .0000527				PPI	.000001606
					Myrtle H. Conner .0000377		.0000231		RI	.000007348
					Helen Reed Allen .0000039		.0000164		PPI	.000003216
					Irene Allen .0000012		.0000017		RI	.000002571
					Marie Allen Denby Ricketts and husband, D. H. Ricketts .0000012		.0000006		PPI	.000001128
					June Allen Stewart .0000012		.0000005		RI	.000001839
					William A. Siefert, Jr. .0000150		.0000005		PPI	.000000801
					Samuel N. Frishman .0000151		.0000066		RI	.000000190
					Max Q. Frishman and wife, Beatrice S. Frishman .0000151		.0000066		PPI	.000000083
					Agnes Graff Murray .0001506		.0000066		RI	.000000059
					Geo. L. and Marion Bradford .0017361		.0000659		PPI	.000000028
					Frank Jeppi .0005208		.0007595		RI	.000000059
					Fay Kleinpell Shannon and husband, Donald C. Shannon .0002605		.0002279		PPI	.000000028
					Karoline Kay Kleinpell Rosoff and husband, Harold Jay Rosoff .0001302		.0001138		RI	.000000058
					Jean Fay Horton Foshee .0001302		.0000570		PPI	.000000026
					Kathryn Houchin .0010938		.0000570		RI	.000000732
					C. E. Houchin Trust No. 2 .0013368		.0004785		PPI	.000000323
							.0005849		RI	.000000732
					Southland Royalty Company .0156250		Total P.P.I. .0163302		PPI	.000000323
									RI	.000000732
									PPI	.000000323
									RI	.000007348
									PPI	.000003216
									RI	.000084712
									PPI	.000037060
									RI	.000025412
									PPI	.000011121
									RI	.000012711
									PPI	.000005553
									RI	.000006353
									PPI	.000002782
									RI	.000006353
									PPI	.000002782
									RI	.000053371
									PPI	.000023349
									RI	.000065228
									PPI	.000028541
										.000762417

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPA
11	(Continued)				Edward S. and Hilda G. Wilson .0004132					.000020161
					Mary Evelyn Davidson Leidinger .0004132					.000020161
					John H. Costello .0004132					.000020161
					Edward Gerber .0002066					.000010080
					Iris Gerber Damson .0002066					.000010080
					Glenna Wright Adams .0002066					.000010080
					Lewes Oil & Gas Co. .0003616					.000017644
					Alice F. Mask Gordon and husband, Robt. C. Gordon .0001033					.000005040
					Robert W. Wakefield .0000172					.000000839
					David D. Wakefield .0000172					.000000839
					John L. Pratt, III .0000344					.000001678
					J. L. Pratt, Ind. and as Independent Exec. of the Estate of Mary Grier Pratt .0000689					
					Frances Grier Wakefield and husband, Harold K. Wakefield .0000689					.000003362
					Amerada Petroleum Corporation .0078125* .0058594** .0058594***					.000003362
					J. G. Catlett Co. .0012626					.000381208* .000285908** .000285908***
					Elizabeth W. Shuster, Life Estate with remainder to James D. Shuster .0000345					.000061609
					James D. Shuster .0000688					.000001684
					James M. Tunnell, Jr. .0000129					.000003358
					Robert W. Tunnell .0000129					.000000629
					Mildred S. Tunnell .0000129					.000000629
					Eolyne K. Tunnell and husband, Robert W. Tunnell .0000129					.000000629
					Kirby Production Company .0023761					.000000629
					Andrew Oil & Gas Royalties, Inc. .0002066					.000115942
					Cities Service Oil Company .0416666					.000010080
					C. S. Longcope .0004132					.002033110
					Total Royalty: .1289061* .1269530** .1269530***					.000020163
								Phillips Petroleum Company .0561525* .0199111** .0561525***		.002739944* .000971556** .002739944***

TRACT NO.	LEASE NAME AND DESCRIPTION	NUMBER OF ACRES	NUMBER OF WELLS	LEASE NUMBER	BASIC ROYALTY OWNERS AND AMOUNT	OVERRIDING ROYALTY OWNERS AND AMOUNT	PRODUCTION PAYMENT OWNERS AND AMOUNT	WORKING INTEREST OWNERS AND AMOUNT	TRACT PARTICIPATION	UNIT PARTICIPATION
11	(Continued)							C. S. Longcope	.0028926	.000141144
								Sohio Petroleum Company	.3255208*	.015883689*
									.3526476**	.017207332**
									.3269080***	.015951377***
								Broseco Corporation	.1261719*	.006156520*
									.1366862**	.006669562**
									.1267096***	.006182757***
								John B. Rich	.0066407*	.000324030*
									.0071941**	.000351033**
									.0066689***	.000325405***
								Cities Service Oil Company	.2916667	.014231790
								J. G. Catlett Co.	.0266760	.001301650
								Kirby Production Company	.0190425	.000929173
								Total W.I.	.7986112*	.0487947
									.8368057**	
									.8005643***	

* When DAP more than 35 BOPD
** When DAP is less than 35 BOPD
*** When DAP is exactly 35 BOPD.

Case 3099

WORKING INTEREST OWNERS
LITTMAN SAN ANDRES UNIT AREA
LEA COUNTY, NEW MEXICO
ANDREWS COUNTY, TEXAS

1984 MAY 4 AM

Broseco Corporation
507 Mutual Savings & Loan Building
Fort Worth 2, Texas
Attention: Mr. John P. McNaughton

J. G. Catlett Company
114 East 5th Street
Tulsa, Oklahoma

Cities Service Oil Company
Cities Service Building
Bartlesville, Oklahoma
Attention: Mr. J. E. Embry

Delhi-Taylor Oil Corporation
Fidelity Union Tower
Dallas, Texas
Attention: Mr. Rudy Parkison

Elliott, Inc.
P. O. Box 1355
Roswell, New Mexico
Attention: Mr. Frank Elliott

Kirby Production Company
P. O. Box 1745
Houston 1, Texas
Attention: Mr. C. K. Smith

Mr. J. M. Leonard
200 Houston Street
Fort Worth, Texas

Mr. C. S. Longcope
P. O. Box 667
Brownwood, Texas

Mr. John B. Rich
c/o Broseco Corporation
506 Mutual Savings & Loan Building
Fort Worth 2, Texas

Shell Oil Company
P. O. Box 1509
Midland, Texas
Attention: Mr. James A. Lore

ROYALTY, OVERRIDING ROYALTY AND PRODUCTION PAYMENT INTEREST OWNERS
LITTMAN SAN ANDRES UNIT

Aberdeen Oil Company, Inc.
First National Building
Tulsa 3, Oklahoma (Tracts 9 and 11)

Adams, Glenna Wright
c/o Raymond A. Weisner
~~104 S. Division Street~~ 301 N. Salisbury Blvd.
Salisbury, Maryland 21801 (Tracts 9 and 11)

Albuquerque National Bank
Testamentary Trustee UTW of F.A. Andrews
Albuquerque, New Mexico (Tract 3)

Allen, Mrs. Helen R.
1716 Virginia Place
Fort Worth, Texas (Tracts 9 and 11)

Allen, Irene
1716 Virginia Place
Fort Worth, Texas (Tracts 9 and 11)

American National Bank of Austin
Trustee for the Ruth Deed Dyke Trust
Austin, Texas (Tracts 5 and 10)

Amerada Petroleum Corporation
P. O. Box 2040
Tulsa, Oklahoma (Tracts 5,6,7,9,10&11)

Anderson, Howard L.
Suite 250 Equitable Building
Denver, Colorado (Tracts 9 and 11)

Andrews, Mrs. Selma E.
14 Old Ranch Road
Bradbury Estates
Bradbury, California (Tracts 3,5 &10)

The Atlantic Refining Company
Box 1610
Midland, Texas (Tract 3)

Baum, Marcus, and Eddie Baum,
Independent Executors of Estate of
Bessie Baum
1011 West 5th Street
Austin, Texas (Tracts 6,7 & 8)

Beadles, W. H.
P. O. Box 15006
Fort Worth 19, Texas (Tracts 9 and 11)

R. V. Bebout
Route 10, Box 621
Fort Worth, Texas (Tracts 9 and 11)

Beecherl, W. M.
4033 Grassmere Lane
Dallas 5, Texas (Tract 5)

Birdsong, E. S.
c/o H. A. Hedberg
2513 Continental Bank Building
Fort Worth 2, Texas (Tracts 9 and 11)

Bond, Roland S.
2600 Republic National Bank Building
Pacific at Ervay Streets
Dallas, Texas (Tracts 6, 7 & 8)

Bradford, George L. and Marion
450 Haberfelde Building
Bakersfield, California (Tracts 9 and 11)

Broseco Corporation
618 Mercantile Trust Building
Baltimore 2, Maryland (Tracts 5 and 10)

Byerly, John A.
c/o Fidelity Trust Company
Pittsburg, Pennsylvania (Tracts 9 and 11)

Byrd, D. H.
1110 Tower Petroleum Building
Dallas, Texas (Tracts 6, 7 & 8)

Campbell, Fred H.
1022 Franklin Street
Whittier, California (Tracts 5 and 10)

Catlett, J. G.,Company
114 East Fifth Street
Tulsa 3, Oklahoma (Tracts 5, 9 & 11)

Chase Manhattan Bank, The
Assignee of Argo Oil Payment
18 Pine Street
New York 15, New York (Tract 3)

Chase Manhattan Bank, The
(For the account of Mon-Dak Oil Corp.,
et al)
18 Pine Street
New York 15, New York (Tracts 9 and 11)

Cities Service Oil Company
P. O. Box 3238
Dallas 21, Texas (Tracts 9 and 11)

Coll, Lillian Hinkle
P. O. Box 1818
Roswell, New Mexico (Tract 3)

Coll, M. W.
P. O. Box 1818 (Tracts 3 & 10)
Roswell, New Mexico

Conner, Myrtle H.
4253 Westmont Court
Fort Worth, Texas (Tracts 9 and 11)

Conner, Myrtle H., Ind. Executrix of Estate
of Frank T. Conner
4253 Westmont Court
Fort Worth, Texas (Tracts 9 and 11)

Continental Emsco Company,
a division of Youngstown Sheet and Tube
Company, Box 359
Dallas, Texas (Tracts 1 and 2)
Attention: Mr. J. F. Wagenhauser

Costello, John H.
305 Andover Street
Lowell, Massachusetts (Tracts 9 and 11)

Crabb, John Ed
c/o Trust Department
First National Bank of Midland
P. O. Box 1599
Midland, Texas (Tract 10)

Crabb, R. C., Jr.
Box 54
Coyanosa, Texas (Tract 10)

Damson, Iris Gerber
315 East 72nd Street
New York 21, New York (Tracts 9 and 11)

Davidson, C. J.
1004 Continental Life Building
Fort Worth, Texas (Tracts 9 and 11)

Denda, Michael J. and
Arnsten, Lawrence E.,
Trustees under Trust Indenture
c/o Lawrence E. Arnsten
15 East 48th Street
New York 17, New York (Tracts 9 and 11)

Elliott, Charles K.
Greenwood,Delaware (Tract 5)

Elliott, Frank A., Jr.
Greenwood, Delaware (Tract 5)

First National Bank of Denver, The
Trustee of Josephine M. Smith
P. O. Box 5808 T.A.
Denver 17, Colorado (Tract 3)

First National Bank of Nevada
Trustee of Estate of Allie M. Lee
Reno, Nevada (Tracts 1 and 2)
Attention: R. O. Kwapil

Flocker, Gilbert D.
281 Wayne Street
Beaver, Pennsylvania (Tracts 5 and 10)

Flocker, James Miller
9275 19th Street
Alta Loma, California (Tracts 5 and 10)

Floersheim, Berthold
Farmers Bank Building
Pittsburgh, Pennsylvania (Tracts 9 and 11)

Frishman, Samuel N.
5518 Corvode Street (Tracts 9 and 11)
Pittsburgh 17, Pennsylvania

Frishman, Max Q.
5518 Corvode Street (Tracts 9 and 11)
Pittsburgh 17, Pennsylvania

Frost, Jack
1110 Tower Petroleum Building
Dallas, Texas (Tracts 6,7 & 8)

Fuller, Lawrence L.
Administrator with Will annexed of the
Estate of James G. Bennett, Deceased
First National Bank Building
Midland, Texas (Tracts 5,6,7 & 10)

Geneva College
"Ira Flocker Fund" (Tracts 5 and 10)
Beaver Falls, Pennsylvania

Gerber, Edward
120 Wall Street
New York 21, New York (Tracts 9 and 11)

Gordon, Alice F. Mask
2010 Ferndale Drive
Westwood Manor
Wilmington, Delaware (Tracts 9 and 11)

Hammer, Jeanette
2400 Bayview Drive
Fort Lauderdale, Florida (Tracts 6,7 & 8)

Hedberg, H. A.
2513 Continental Bank Building
Fort Worth 2, Texas (Tracts 9 and 11)

Hemphill, James
c/o Pittsburgh National Bank
R. E. Department
P. O. Box 747 (Tracts 9 and 11)
Pittsburgh 30, Pennsylvania

Hirschfield, Pauline Simon
1505 Parkway
Austin, Texas (Tracts 6,7 & 8)

Holliday, Joyce A.
1034 Princeton Street
Santa Monica, California (Tracts 5 and 10)

Home, Anna Lou
207 So. Orange Drive (Tracts 6,7 & 10)
Los Angeles 36, California

Horton, Jean Fay
~~2957 Kalakaua Avenue~~ P.O. Box 2041
~~Apartment 112~~
Honolulu, Hawaii (Tracts 9 and 11)

Houchin, C. E.
Trust No. 2
P. O. Box 869
Bakersfield, California (Tracts 9 and 11)

Houchin, Mrs. Kathryn
P. O. Box 869
Bakersfield, California (Tracts 9 and 11)

Humble Oil & Refining Company
Box 2180
Houston, Texas (Tracts 4,5 & 10)

Jeppi, Frank
501 S. Chester Avenue
Bakersfield, California (Tracts 9 and 11)

Johnston, Esther Flocker
3468 Verde Street
Riverside, California (Tracts 5 and 10)

Kirby Production Company
P. O. Box 1745
Houston 1, Texas (Tracts 5,9 & 11)

Kleeman, Rose
4504 Edgemont Drive
Austin, Texas (Tracts 6,7 & 8)

Kleinpell, Mrs. Fay Shannon
809 Oleander Avenue
Bakersfield, California (Tracts 9 & 11)

Kleinpell, Karoline Kay Roff
1471 Arroyo View Drive
Pasadena, California (Tracts 9 & 11)

Kunkle, Emma Anne H.
1505 Bigelow Apartments
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Kyte, Cecil H., Estate of (Deceased)
(E.Bernard Jonnson Executor UTW
of C. H. Kyte) (Tract 3)
David Bond Kyte
c/o Bartless & Pringle
26 West Figueroa
Santa Barbara, California
Betty Kyte Dressen
c/o The Bank of California
40 California Street
San Francisco 20, California

Kyte, Marie I.
P. O. Box 817
Los Altos, California (Tract 3)

Leidinger, Mary Evelyn Davidson
5705 Sherrier Place, N.W.
Washington, D.C. (Tracts 9 & 11)

Letwin, Sam
Hilton Hotel
Fort Worth, Texas (Tracts 9 & 11)

Lewes Oil and Gas Company
Box 36
Lewes, Delaware (Tracts 9 & 11)

Littman, Lydia
1210 West 12th Street
Austin, Texas (Tracts 6,7 & 8)

Littman, Queenie
1210 West 12th Street
Austin, Texas (Tracts 6,7 & 8)

Loffland, John M., Jr.
2330 Rowan Building
6000 Camp Bowie Boulevard
Fort Worth, Texas (Tract 3)

Longcope, C. S.
P. O. Box 667
Brownwood, Texas (Tracts 9 & 11)

Marathon Oil Company
Box 3128
Houston, Texas (Tract 1)
Attention: W.O. Yokom

Marshall & Winston, Inc.
1054 Broxton Avenue (Tracts 5,6,7 & 10)
Los Angeles 24, California

Midland National Bank
Trustee of Management Trust created
by W. T. Walsh et ux on 5-29-62
Midland, Texas (Tracts 6,7 & 10)

Midland National Bank
Trustee of Kathleen Walsh et al Trust
created by W. T. Walsh et ux on
5/29/62
Midland, Texas (Tracts 6,7 & 10)

Monsanto Chemical Company
Lion Oil Building
El Dorado, Arkansas (Tracts 6 & 8)

Murray, Agnes Graff
c/o Pittsburgh National Bank
R. E. Department
P. O. Box 747 (Tracts 9 & 11)
Pittsburgh, Pennsylvania

New York Life Insurance Company
51 Madison Avenue
New York 10, New York (Tracts 6,7 & 8)

Newman, Mayme
531 44th Street
Union City, New Jersey (Tracts 6,7 & 8)

Noland, J. S.
c/o First National Bank
Midland, Texas (Tracts 9 & 11)

Noland, James S. and James G. Noland
Independent Executors and Trustees
UTW of Mabel C. Noland, Deceased
c/o First National Bank
Midland, Texas (Tracts 9 & 11)

Parcell, Charles W.
1206 Galisteo Parkway
Santa Fe, New Mexico (Tracts 1 & 2)

Parham, S. L.
P. O. Box 1492
Midland, Texas (Tracts 5 & 10)

Pedley, Gracean M.
115 McGoodwin Avenue
Princeton, Kentucky (Tract 3)

Pedley, Timothy A., Jr.
4025 East 22nd Avenue
Denver, Colorado (Tract 3)

Penrose, Neville G.,
Trustee of the Patricia Penrose Trust
1813 Fair Building
Fort Worth 2, Texas (Tract 5)

Phillips Petroleum Company
Phillips Building
Bartlesville, Oklahoma (Tracts 6,7,8,9 &11)

Pittsburgh National Bank,
Trustee UTW of Samuel W. Jull
R. E. Department
P. O. Box 747
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Pratt, John L., III
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Pratt, Mary Grier
c/o Robert W. Wakefield
P. O. Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Republic National Bank of Dallas
Trustee UTW of F. A. Andrews
Box 241
Dallas, Texas (Tracts 5 & 10)

Rich, John B.
618 Mercantile Trust Building
Baltimore 2, Maryland (Tracts 5 & 10)

Ricketts, Marie Allen Denby
~~1007 W. Shaw Street~~
~~Fort Worth, Texas~~ (Tracts 9 & 11)
~~Hollywood, California~~
Scratch Ranch Royalty Company
1210 West 12th Street
Austin, Texas (Tracts 5,6,7,8 & 10)

Sears, Charlotte M.
Administratrix of Estate of
Joseph H. Sears
Box 45 (Tract 5)
East Dennis, Massachusetts

Sears, Richard H., Individually
and as Trustee UTW of Henry E. Sears
Deceased
The Barstow School
4950 Cherry Street (Tract 5)
Kansas City, Missouri

Seifert, William A., Jr.
747 Union Trust Building
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Seventh Street Realty Company
200 Houston Street
Fort Worth, Texas (Tract 6)

Shuster, Elizabeth M.
1301 N. Harrison Street
Wilmington 6, Delaware (Tracts 9 & 11)

Shuster, James D.
96 Harrison Avenue
Montclair, New Jersey (Tracts 9 & 11)

Silberberg, Clara
1618 Waterston Avenue
Austin, Texas (Tracts 6,7 & 8)

Silberberg, Clara,
Ind. Executrix of Estate of Moselle Bell
1618 Waterston Avenue
Austin 3, Texas (Tracts 6,7, & 8)

Simon, Joel L.
1413 Gaston Avenue
Austin, Texas (Tracts 6,7 & 8)

Sims, Ethel
c/o Midland National Bank
Midland, Texas (Tracts 5 & 10)

Sinclair Oil & Gas Company
P. O. Box 521
Tulsa 2, Oklahoma (Tracts 9 & 11)
Attention: Treasurer

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma (Tracts 5 & 10)

Southland Royalty Company
1603 First National Building
Fort Worth 2, Texas (Tracts 9 & 11)

State of New Mexico
c/o of Commissioner of Public Lands
Santa Fe, New Mexico (Tract 4)

Stephenson, Albert
730 Santiago Avenue
Long Beach, California (Tract 3)

Stewart, June Allen
c/o 1716 Virginia Street
~~Dallas~~, Texas (Tracts 9 & 11)
Fort Worth

Stewart, J. Ralph
Box 1254
San Angelo, Texas (Tracts 9 & 11)

Stydahar, Joe
165 Franklin Road
Glencoe, Illinois (Tract 3)

Sunshine Royalty Company
Box 1355
Roswell, New Mexico (Tracts 1 and 2)

Texsylvania Mineral Corporation
Suite 514
McBurnett Building
San Angelo, Texas (Tracts 9 & 11)

Tunnell, Eloyne K.
South Bedford Street
Georgetown, Delaware (Tracts 9 & 11)

Tunnell, James M., Jr.
3000 Dupont Building
Wilmington 1, Delaware (Tracts 9 & 11)

Tunnell, Mildred S.
601 Beaver Valley Road
Wilmington, Delaware (Tracts 9 & 11)

Tunnell, Robert W.
Georgetown, Delaware (Tracts 9 & 11)

United States of America
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico (Tracts 1,2 & 3)

Wakefield, David D.
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Wakefield, Frances Grier
c/o Robert W. Wakefield
P. O. Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Wakefield, Robert W.
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Weisner, Raymond A.
301 N. Salisbury Boulevard
Salisbury, Maryland (Tracts 5,9 & 11)

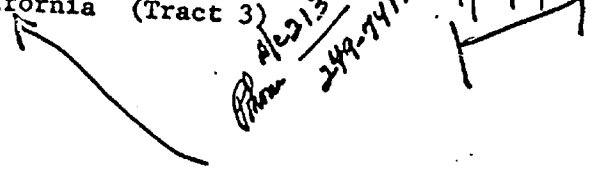
Williams, R. E.
Box 1737
Midland, Texas (Tracts 5 & 10)

Wilson, Edward S. & Hilda G.
Leipsic, Delaware (Tracts 9 & 11)

Winston, Donald
Trustee under Trust Indenture
dated 12/13/41 between Francisca S. Winston &
Charles Winston
1511 Foshay Tower
Minneapolis, Minnesota (Tracts 5 & 10)

Winston, Donald
Trustee UTW of Francisca S. Winston, Deceased
1511 Foshay Tower
Minneapolis, Minnesota (Tracts 5 & 10)

Wylie, Kathleen L. and E. D.
3508 Los Palmas
Glegdale, 8, California (Tract 3)



Case 3049

WORKING INTEREST OWNERS
LITTMAN SAN ANDRES UNIT AREA
LEA COUNTY, NEW MEXICO
ANDREWS COUNTY, TEXAS

Broseco Corporation
507 Mutual Savings & Loan Building
Fort Worth 2, Texas
Attention: Mr. John P. McNaughton

J. G. Catlett Company
114 East 5th Street
Tulsa, Oklahoma

Cities Service Oil Company
Cities Service Building
Bartlesville, Oklahoma
Attention: Mr. J. E. Embry

Delhi-Taylor Oil Corporation
Fidelity Union Tower
Dallas, Texas
Attention: Mr. Rudy Parkison

Elliott, Inc.
P. O. Box 1355
Roswell, New Mexico
Attention: Mr. Frank Elliott

Kirby Production Company
P. O. Box 1745
Houston 1, Texas
Attention: Mr. C. K. Smith

Mr. J. M. Leonard
200 Houston Street
Fort Worth, Texas

Mr. C. S. Longcope
P. O. Box 667
Brownwood, Texas

Mr. John B. Rich
c/o Broseco Corporation
506 Mutual Savings & Loan Building
Fort Worth 2, Texas

Shell Oil Company
P. O. Box 1509
Midland, Texas
Attention: Mr. James A. Lore

ROYALTY, OVERRIDING ROYALTY AND PRODUCTION PAYMENT INTEREST OWNERS
LITTMAN SAN ANDRES UNIT

Aberdeen Oil Company, Inc.
First National Building
Tulsa 3, Oklahoma (Tracts 9 and 11)

Adams, Glenna Wright
c/o Raymond A. Weisner
~~104 S. Division Street~~ 301 N. Salisbury Blvd.
Salisbury, Maryland 21801 (Tracts 9 and 11)

Albuquerque National Bank
Testamentary Trustee UTW of F.A. Andrews
Albuquerque, New Mexico (Tract 3)

Allen, Mrs. Helen R.
1716 Virginia Place
Fort Worth, Texas (Tracts 9 and 11)

Allen, Irene
1716 Virginia Place
Fort Worth, Texas (Tracts 9 and 11)

American National Bank of Austin
Trustee for the Ruth Deed Dyke Trust
Austin, Texas (Tracts 5 and 10)

Amerada Petroleum Corporation
P. O. Box 2040
Tulsa, Oklahoma (Tracts 5,6,7,9,10&11)

Anderson, Howard L.
Suite 250 Equitable Building
Denver, Colorado (Tracts 9 and 11)

Andrews, Mrs. Selma E.
14 Old Ranch Road
Bradbury Estates
Bradbury, California (Tracts 3,5 &10)

The Atlantic Refining Company
Box 1610
Midland, Texas (Tract 3)

Baum, Marcus, and Eddie Baum,
Independent Executors of Estate of
Bessie Baum
1011 West 5th Street
Austin, Texas (Tracts 6,7 & 8)

Beadles, W. H.
P. O. Box 15006
Fort Worth 19, Texas (Tracts 9 and 11)

R. V. Bebout
Route 10, Box 621
Fort Worth, Texas (Tracts 9 and 11)

Beecherl, W. M.
4033 Grassmere Lane
Dallas 5, Texas (Tract 5)

Birdsong, E. S.
c/o H. A. Hedberg
2513 Continental Bank Building
Fort Worth 2, Texas (Tracts 9 and 11)

Bond, Roland S.
2600 Republic National Bank Building
Pacific at Ervay Streets
Dallas, Texas (Tracts 6, 7 & 8)

Bradford, George L. and Marion
450 Haberfelde Building
Bakersfield, California (Tracts 9 and 11)

Broseco Corporation
618 Mercantile Trust Building
Baltimore 2, Maryland (Tracts 5 and 10)

Byerly, John A.
c/o Fidelity Trust Company
Pittsburg, Pennsylvania (Tracts 9 and 11)

Byrd, D. H.
1110 Tower Petroleum Building
Dallas, Texas (Tracts 6, 7 & 8)

Campbell, Fred H.
1022 Franklin Street
Whittier, California (Tracts 5 and 10)

Catlett, J. G.,Company
114 East Fifth Street
Tulsa 3, Oklahoma (Tracts 5, 9 & 11)

Chase Manhattan Bank, The
Assignee of Argo Oil Payment
18 Pine Street
New York 15, New York (Tract 3)

Chase Manhattan Bank, The
(For the account of Mon-Dak Oil Corp.,
et al)
18 Pine Street
New York 15, New York (Tracts 9 and 11)

Cities Service Oil Company
P. O. Box 3238
Dallas 21, Texas (Tracts 9 and 11)

Coll, Lillian Hinkle
P. O. Box 1818
Roswell, New Mexico (Tract 3)

Coll, M. W.
P. O. Box 1818 (Tracts 3 & 10)
Roswell, New Mexico

Conner, Myrtle H.
4253 Westmont Court
Fort Worth, Texas (Tracts 9 and 11)

Conner, Myrtle H., Ind. Executrix of Estate
of Frank T. Conner
4253 Westmont Court
Fort Worth, Texas (Tracts 9 and 11)

Continental Emsco Company,
a division of Youngstown Sheet and Tube
Company, Box 359
Dallas, Texas (Tracts 1 and 2)
Attention: Mr. J. F. Wagenhauser

Costello, John H.
305 Andover Street
Lowell, Massachusetts (Tracts 9 and 11)

Crabb, John Ed
c/o Trust Department
First National Bank of Midland
P. O. Box 1599
Midland, Texas (Tract 10)

Crabb, R. C., Jr.
Box 54
Coyanosa, Texas (Tract 10)

Damson, Iris Gerber
315 East 72nd Street
New York 21, New York (Tracts 9 and 11)

Davidson, C. J.
1004 Continental Life Building
Fort Worth, Texas (Tracts 9 and 11)

Denda, Michael J. and
Arnsten, Lawrence E.,
Trustees under Trust Indenture
c/o Lawrence E. Arnsten
15 East 48th Street
New York 17, New York (Tracts 9 and 11)

Elliott, Charles K.
Greenwood,Delaware (Tract 5)

Elliott, Frank A., Jr.
Greenwood, Delaware (Tract 5)

First National Bank of Denver, The
Trustee of Josephine M. Smith
P. O. Box 5808 T.A.
Denver 17, Colorado (Tract 3)

First National Bank of Nevada
Trustee of Estate of Allie M. Lee
Reno, Nevada (Tracts 1 and 2)
Attention: R. O. Kwapil

Flocker, Gilbert D.
281 Wayne Street
Beaver, Pennsylvania (Tracts 5 and 10)

Flocker, James Miller
9275 19th Street
Alta Loma, California (Tracts 5 and 10)

Floersheim, Berthold
Farmers Bank Building
Pittsburgh, Pennsylvania (Tracts 9 and 11)

Frishman, Samuel N.
5518 Corvode Street (Tracts 9 and 11)
Pittsburgh 17, Pennsylvania

Frishman, Max Q.
5518 Corvode Street (Tracts 9 and 11)
Pittsburgh 17, Pennsylvania

Frost, Jack
1110 Tower Petroleum Building
Dallas, Texas (Tracts 6,7 & 8)

Fuller, Lawrence L.
Administrator with Will annexed of the
Estate of James G. Bennett, Deceased
First National Bank Building
Midland, Texas (Tracts 5,6,7 & 10)

Geneva College
"Ira Flocker Fund" (Tracts 5 and 10)
Beaver Falls, Pennsylvania

Gerber, Edward
120 Wall Street
New York 21, New York (Tracts 9 and 11)

Gordon, Alice F. Mask
2010 Ferndale Drive
Westwood Manor
Wilmington, Delaware (Tracts 9 and 11)

Hammer, Jeanette
2400 Bayview Drive
Fort Lauderdale, Florida (Tracts 6,7 & 8)

Hedberg, H. A.
2513 Continental Bank Building
Fort Worth 2, Texas (Tracts 9 and 11)

Hemphill, James
c/o Pittsburgh National Bank
R. E. Department
P. O. Box 747 (Tracts 9 and 11)
Pittsburgh 30, Pennsylvania

Hirschfield, Pauline Simon
1505 Parkway
Austin, Texas (Tracts 6,7 & 8)

Holliday, Joyce A.
1034 Princeton Street
Santa Monica, California (Tracts 5 and 10)

Home, Anna Lou
207 So. Orange Drive (Tracts 6,7 & 10)
Los Angeles 36, California

Horton, Jean Fay
~~2957 Kalakaua Avenue~~ P.O. Box 2041
~~Apartment 112~~
Honolulu, Hawaii (Tracts 9 and 11)

Houchin, C. E.
Trust No. 2
P. O. Box 869
Bakersfield, California (Tracts 9 and 11)

Houchin, Mrs. Kathryn
P. O. Box 869
Bakersfield, California (Tracts 9 and 11)

Humble Oil & Refining Company
Box 2180
Houston, Texas (Tracts 4,5 & 10)

Jeppi, Frank
501 S. Chester Avenue
Bakersfield, California (Tracts 9 and 11)

Johnston, Esther Flocker
3468 Verde Street
Riverside, California (Tracts 5 and 10)

Kirby Production Company
P. O. Box 1745
Houston 1, Texas (Tracts 5,9 & 11)

Kleeman, Rose
4504 Edgemont Drive
Austin, Texas (Tracts 6,7 & 8)

Kleinpell, Mrs. Fay Shannon
809 Oleander Avenue
Bakersfield, California (Tracts 9 & 11)

Kleinpell, Karoline Kay Roaff
1471 Arroyo View Drive
Pasadena, California (Tracts 9 & 11)

Kunkle, Emma Anne H.
1505 Bigelow Apartments
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Kyte, Cecil H., Estate of (Deceased)
(E.Bernard Johnson Executor UTW
of C. H. Kyte) (Tract 3)
David Bond Kyte
c/o Bartless & Pringle
26 West Figueroa
Santa Barbara, California
Betty Kyte Dressen
c/o The Bank of California
40 California Street
San Francisco 20, California

Kyte, Marie I.
P. O. Box 817
Los Altos, California (Tract 3)

Leidinger, Mary Evelyn Davidson
5705 Sherrier Place, N.W.
Washington, D.C. (Tracts 9 & 11)

Letwin, Sam
Hilton Hotel
Fort Worth, Texas (Tracts 9 & 11)

Lewes Oil and Gas Company
Box 36
Lewes, Delaware (Tracts 9 & 11)

Littman, Lydia
1210 West 12th Street
Austin, Texas (Tracts 6,7 & 8)

Littman, Queenie
1210 West 12th Street
Austin, Texas (Tracts 6,7 & 8)

Loffland, John M., Jr.
2330 Rowan Building
6000 Camp Bowie Boulevard
Fort Worth, Texas (Tract 3)

Longcope, C. S.
P. O. Box 667
Brownwood, Texas (Tracts 9 & 11)

Marathon Oil Company
Box 3128
Houston, Texas (Tract 1)
Attention: W.O. Yokom

Marshall & Winston, Inc.
1054 Broxton Avenue (Tracts 5,6,7 & 10)
Los Angeles 24, California

Midland National Bank
Trustee of Management Trust created
by W. T. Walsh et ux on 5-29-62
Midland, Texas (Tracts 6,7 & 10)

Midland National Bank
Trustee of Kathleen Walsh et al Trust
created by W. T. Walsh et ux on
5/29/62
Midland, Texas (Tracts 6,7 & 10)

Monsanto Chemical Company
Lion Oil Building
El Dorado, Arkansas (Tracts 6 & 8)

Murray, Agnes Graff
c/o Pittsburgh National Bank
R. E. Department
P. O. Box 747 (Tracts 9 & 11)
Pittsburgh, Pennsylvania

New York Life Insurance Company
51 Madison Avenue
New York 10, New York (Tracts 6,7 & 8)

Newman, Mayme
531 44th Street
Union City, New Jersey (Tracts 6,7 & 8)

Noland, J. S.
c/o First National Bank
Midland, Texas (Tracts 9 & 11)

Noland, James S. and James G. Noland
Independent Executors and Trustees
UTW of Mabel C. Noland, Deceased
c/o First National Bank
Midland, Texas (Tracts 9 & 11)

Parcell, Charles W.
1206 Galisteo Parkway
Santa Fe, New Mexico (Tracts 1 & 2)

Parham, S. L.
P. O. Box 1492
Midland, Texas (Tracts 5 & 10)

Pedley, Gracean M.
115 McGoodwin Avenue
Princeton, Kentucky (Tract 3)

Pedley, Timothy A., Jr.
4025 East 22nd Avenue
Denver, Colorado (Tract 3)

Penrose, Neville G.,
Trustee of the Patricia Penrose Trust
1813 Fair Building
Fort Worth 2, Texas (Tract 5)

Phillips Petroleum Company
Phillips Building
Bartlesville, Oklahoma (Tracts 6,7,8,9 &11)

Pittsburgh National Bank,
Trustee UTW of Samuel W. Jull
R. E. Department
P. O. Box 747
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Pratt, John L., III
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Pratt, Mary Grier
c/o Robert W. Wakefield
P. O. Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Republic National Bank of Dallas
Trustee UTW of F. A. Andrews
Box 241
Dallas, Texas (Tracts 5 & 10)

Rich, John B.
618 Mercantile Trust Building
Baltimore 2, Maryland (Tracts 5 & 10)

Ricketts, Marie Allen Denby
~~1007 W. Shaw Street~~
~~Fort Worth, Texas~~ (Tracts 9 & 11)
Scratch Ranch Royalty Company
1210 West 12th Street
Austin, Texas (Tracts 5,6,7,8 & 10)

Sears, Charlotte M.
Administratrix of Estate of
Joseph H. Sears
Box 45 (Tract 5)
East Dennis, Massachusetts

Sears, Richard H., Individually
and as Trustee UTW of Henry E. Sears
Deceased
The Barstow School
4950 Cherry Street (Tract 5)
Kansas City, Missouri

Seifert, William A., Jr.
747 Union Trust Building
Pittsburgh, Pennsylvania (Tracts 9 & 11)

Seventh Street Realty Company
200 Houston Street
Fort Worth, Texas (Tract 6)

Shuster, Elizabeth M.
1301 N. Harrison Street
Wilmington 6, Delaware (Tracts 9 & 11)

Shuster, James D.
96 Harrison Avenue
Montclair, New Jersey (Tracts 9 & 11)

Silberberg, Clara
1618 Waterston Avenue
Austin, Texas (Tracts 6,7 & 8)

Silberberg, Clara,
Ind. Executrix of Estate of Moselle Bell
1618 Waterston Avenue
Austin 3, Texas (Tracts 6,7, & 8)

Simon, Joel L.
1413 Gaston Avenue
Austin, Texas (Tracts 6,7 & 8)

Sims, Ethel
c/o Midland National Bank
Midland, Texas (Tracts 5 & 10)

Sinclair Oil & Gas Company
P. O. Box 521
Tulsa 2, Oklahoma (Tracts 9 & 11)
Attention: Treasurer

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma (Tracts 5 & 10)

Southland Royalty Company
1603 First National Building
Fort Worth 2, Texas (Tracts 9 & 11)

State of New Mexico
c/o of Commissioner of Public Lands
Santa Fe, New Mexico (Tract 4)

Stephenson, Albert
730 Santiago Avenue
Long Beach, California (Tract 3)

Stewart, June Allen
c/o 1716 Virginia Street
~~Dallas~~, Texas (Tracts 9 & 11)
Fort Worth

Stewart, J. Ralph
Box 1254
San Angelo, Texas (Tracts 9 & 11)

Stydahar, Joe
165 Franklin Road
Glencoe, Illinois (Tract 3)

Sunshine Royalty Company
Box 1355
Roswell, New Mexico (Tracts 1 and 2)

Texsylvania Mineral Corporation
Suite 514
McBurnett Building
San Angelo, Texas (Tracts 9 & 11)

Tunnell, Eloyne K.
South Bedford Street
Georgetown, Delaware (Tracts 9 & 11)

Tunnell, James M., Jr.
3000 Dupont Building
Wilmington 1, Delaware (Tracts 9 & 11)

Tunnell, Mildred S.
601 Beaver Valley Road
Wilmington, Delaware (Tracts 9 & 11)

Tunnell, Robert W.
Georgetown, Delaware (Tracts 9 & 11)

United States of America
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico (Tracts 1,2 & 3)

Wakefield, David D.
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Wakefield, Frances Grier
c/o Robert W. Wakefield
P. O. Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Wakefield, Robert W.
Box 707
Wilmington 99, Delaware (Tracts 5,9 & 11)

Weisner, Raymond A.
301 N. Salisbury Boulevard
Salisbury, Maryland (Tracts 5,9 & 11)

Williams, R. E.
Box 1737
Midland, Texas (Tracts 5 & 10)

Wilson, Edward S. & Hilda G.
Leipsic, Delaware (Tracts 9 & 11)

Winston, Donald
Trustee under Trust Indenture
dated 12/13/41 between Francisca S. Winston &
Charles Winston
1511 Foshay Tower
Minneapolis, Minnesota (Tracts 5 & 10)

Winston, Donald
Trustee UTW of Francisca S. Winston, Deceased
1511 Foshay Tower
Minneapolis, Minnesota (Tracts 5 & 10)

Wylie, Kathleen L. and E. D.
3508 Los Palmas
Glendale, 8, California (Tract 3)

#6213
Phone 249-7411

4/6/64

State of New Mexico
Commissioner of Public Lands

Lea Bay
MAR 21 1963
SOHIO PETROLEUM CO. (WEST)
OKLAHOMA CITY LAND

E. S. JOHNNY WALKER
COMMISSIONER

P. O. BOX 791
SANTA FE, NEW MEXICO

March 19, 1963

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma

Re: Proposed Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas

Attention: Mr. C. L. Ware

Gentlemen:

This office approves, as to form and content, the proposed Littman San Andres Unit Agreement, subject to two changes being made in the Unit Agreement, to wit:

(a) ARTICLE 5; ENLARGEMENT OR CONTRACTION OF UNIT AREA. Our suggestion was to delete the words "where required" on page 6, ARTICLE 5.3.
(b) ARTICLE 31; NON-JOINDER AND SUBSEQUENT JOINDER. Effective date of Joinder should provide for approval by the Commissioner of Public Lands and other administrative bodies if desired, on page 22, ARTICLE 31.4.

These two changes were discussed with Mr. Ware by telephone March 18, 1963, and it was my understanding he was in agreement with them.

Please remit a Forty-five ($45.00) Dollar filing fee at your earliest convenience.

Very truly yours

E. S. Johnny Walker
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea
Supervisor, Unit Division

ESW/mmr/e
cc:
United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

State of New Mexico

Commissioner of Public Lands

RECEIVED
MAR 21 1963
SOHIO PETROLEUM COMPANY
OKLAHOMA CITY LAND

E. S. JOHNNY WALKER
COMMISSIONER

P. O. BOX 791
SANTA FE, NEW MEXICO

March 19, 1963

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma

Re: Proposed Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas

Attention: Mr. C. L. Ware

Gentlemen:

This office approves, as to form and content, the proposed Littman San Andres Unit Agreement, subject to two changes being made in the Unit Agreement, to wit:

(a) ARTICLE 5; [illegible] OR CONTRACTION OF UNIT AREA. Our suggestion was to delete the words "where required" on page 6, ARTICLE 5.3.

(b) ARTICLE 31; NON-JOINDER AND SUBSEQUENT JOINDER. Effective date of Joinder should provide for approval by the Commissioner of Public Lands and other administrative bodies if desired, on page 22, ARTICLE 31.4.

These two changes were discussed with Mr. Ware by telephone March 18, 1963, and it was my understanding he was in agreement with them.

Please remit a Forty-five ($45.00) Dollar filing fee at your earliest convenience.

Very truly yours

E. S. Johnny Walker
COMMISSIONER OF PUBLIC LANDS

BY: (Mrs.) Marian M. Rhea
Supervisor, Unit Division

ESW/mmr/e
cc:
United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

Case 3049

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

AUG 1 8 1963

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma

Attention: Mr. Charles H. Burke

Gentlemen:

Your application of June 3, filed with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 1,941.38 acres, more or less, Lea County, New Mexico, and Andrews County, Texas, as logically subject to operation under the unitization provisions of the Mineral Leasing Act, as amended.

The land outlined on your plat marked "Exhibit A, Littman San Andres Unit" is acceptable as a logical unit area for secondary recovery purposes. Unitization, for the purpose of conducting secondary operations by water flooding, will be limited to the San Andres formation as identified in Section 2 of the proposed unit agreement form. The area to be unitized, developed by the completion of 29 producing oil wells in the San Andres formation, contains 490.69 acres of Federal land (25.275 percent), 170.69 acres of State of New Mexico land (8.79 percent), and 1,280 acres of fee land (65.935 percent). You estimate that 1,723,900 barrels of oil will be recovered by the water flood project over and above the total amount of oil to be recovered by primary production methods.

Participation in unitized substances will be based 10 percent on the number of wells, 20 percent on water flood acre feet, 30 percent on remaining primary production as of October 1, 1961, and 40 percent on cumulative primary production to October 1, 1961.

Your proposed form of unit agreement which modifies the 1961 reprint of the standard form of unit agreement to the extent necessary to cover conditions incidental to secondary recovery operations of a producing unit, will be acceptable if further modified as marked by colored pencil and by attached riders. One copy of the marked form is returned herewith, and the remaining copies are retained for the appropriate offices of the Geological Survey.

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement conformed to the marked copy and accompanied by an acceptable allocation schedule calculated in accordance with the basic participation formula, will be approved if submitted in approval status within a reasonable period of time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of secondary recovery operations.

Include the latest status of all acreage when the executed agreement is submitted for approval. The lease number for tract 3 shown by exhibit B as Las Cruces 069408 should be corrected to Las Cruces 069048. The format of the sample exhibits attached to the 1961 reprint of the standard form should be followed closely in preparation of exhibits A and B.

Inasmuch as this unit area contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe and you are requested to contact the State of New Mexico before soliciting joinders.

Sincerely yours,

Acting Director

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

AUG 13 1963

Minor changes
Page 5
Page 11
Page 16
Page 17
Page 20

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 3044 & 3045

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma

Attention: Mr. Charles H. Burke

Gentlemen:

Your application of June 3, filed with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 1,941.38 acres, more or less, Lea County, New Mexico, and Andrews County, Texas, as logically subject to operation under the unitization provisions of the Mineral Leasing Act, as amended.

The land outlined on your plat marked "Exhibit A, Littman San Andres Unit" is acceptable as a logical unit area for secondary recovery purposes. Unitization, for the purpose of conducting secondary operations by water flooding, will be limited to the San Andres formation as identified in Section 2 of the proposed unit agreement form. The area to be unitized, developed by the completion of 29 producing oil wells in the San Andres formation, contains 490.69 acres of Federal land (25.275 percent), 170.69 acres of State of New Mexico land (8.79 percent), and 1,280 acres of fee land (65.935 percent). You estimate that 1,723,900 barrels of oil will be recovered by the water flood project over and above the total amount of oil to be recovered by primary production methods.

Participation in unitized substances will be based 10 percent on the number of wells, 20 percent on water flood acre feet, 30 percent on remaining primary production as of October 1, 1961, and 40 percent on cumulative primary production to October 1, 1961.

Your proposed form of unit agreement which modifies the 1961 reprint of the standard form of unit agreement to the extent necessary to cover conditions incidental to secondary recovery operations of a producing unit, will be acceptable if further modified as marked by colored pencil and by attached riders. One copy of the marked form is returned herewith, and the remaining copies are retained for the appropriate offices of the Geological Survey.

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement conformed to the marked copy and accompanied by an acceptable allocation schedule calculated in accordance with the basic participation formula, will be approved if submitted in approval status within a reasonable period of time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of secondary recovery operations.

Include the latest status of all acreage when the executed agreement is submitted for approval. The lease number for tract 3 shown by exhibit B as Las Cruces 069408 should be corrected to Las Cruces 069048. The format of the sample exhibits attached to the 1961 reprint of the standard form should be followed closely in preparation of exhibits A and B.

2 Inasmuch as this unit area contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe and you are requested to contact the State of New Mexico before soliciting joinders.

Sincerely yours,

Acting Director

MAIN OFFICE OCC
JAN 4 AM 8:30

BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SOHIO PETROLEUM COMPANY FOR APPROVAL OF THE UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE LITTMAN SAN ANDRES UNIT IN TOWNSHIP 21 SOUTH, RANGE 38 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO (and Andrews County, Texas) AND FOR ORIGINAL AUTHORITY FOR THE INJECTION OF WATER THEREIN FOR THE SECONDARY RECOVERY THEREFROM AND THE PRESSURE MAINTENANCE THEREOF.

NO. 3049

APPLICATION

Sohio Petroleum Company hereby applies for approval of the Unit Agreement for the development and operation of the Littman San Andres Unit which includes 1941.38 acres of land, more or less, in Lea County, New Mexico, and Andrews County, Texas, and more fully described as follows:

Lea County, New Mexico

Township 21 South, Range 38 East

Section 8:	$SE\frac{1}{4}$
Section 9:	$SW\frac{1}{4}$
Section 16:	$NW\frac{1}{4}$
Section 17:	$NE\frac{1}{4}$

Andrews County, Texas

Block A-29, PSL

Section 5:	East 40 acres of South 71.25 acres of $SW\frac{1}{4}$, $S\frac{1}{2}SE\frac{1}{4}$ and West 40 acres of North 71.25 acres of $SE\frac{1}{4}$

Section 6:	$N\frac{1}{2}$ and $S\frac{1}{2}$
Section 7:	$SW\frac{1}{4}$
Section 14:	$NW\frac{1}{4}$
Section 15:	$NE\frac{1}{4}$

Designation of the Littman San Andres Unit as heretofore described has been approved by the United States Geological Survey and the form of the Unit Agreement has been approved by the Commissioner of Public Lands of the State of New Mexico. The Unit area includes 490.69 acres, more or less, of Federal land and 170. 69 acres of State of New Mexico land.

The Federal and State of New Mexico lands comprise all of the unit area within the State of New Mexico. The unit area also includes 1280 acres of fee land, situate in Andrews County, Texas. The Federal land so included is described as follows:

Lea County, New Mexico

Township 21 South, Range 38 East

Section 8:	$SE\frac{1}{4}$
Section 9:	$SW\frac{1}{4}$
Section 17:	$NE\frac{1}{4}$

The State of New Mexico land so included is described as follows:

Lea County, New Mexico

Township 21 South, Range 38 East

Section 16:	$NW\frac{1}{4}$

The Unit Agreement has been executed by 100 % of the working interest owners and by more than 75% of the royalty, overriding royalty and production payment owners. A list of all interested parties known to applicant is attached hereto.

In addition to the approval of the Unit Agreement, applicant also requests original authority for the injection of water into the unit formation for the secondary recovery therefrom and the pressure maintenance thereof, and, in support thereof, attaches hereto as Exhibits:

Exhibit "1": Index map of the Littman San Andres Unit within Lea County, New Mexico and Andrews County, Texas.

Exhibit "2": Log of proposed injection well No. 1 Sims.

Exhibit "3": Diagrammatic sketches of the proposed injection wells.

The water injection will be into the San Andres formation at an average depth of 4300 feet. The water source for this program will be the Santa Rosa formation which occurs at an average depth of 1200 feet in the vicinity of the Littman Pool. The injection rate is estimated to be 800 barrels per day per injection well which, under full scale operations, would require a supply of 12000 barrels per day.

A copy of this application is likewise forwarded to the office of the State Engineer, P.O. Box 1079, Santa Fe, New Mexico, marked for the attention of Frank Irby.

Applicant respectfully submits that the creation of the Littman San Andres Unit would be in the best interest of conservation of natural resources and would prevent waste and increase the ultimate recovery of oil from the Littman San Andres field, at the same time protecting the correlative rights of all owners of interest. The agreement provides for the separate handling and accounting of production from the New Mexico portion of the unit area.

WHEREFORE, Applicant respectfully requests that this Application be set for a hearing before a duly appointed examiner of the Commission at the earliest possible date, that notice be given as required by law and the regulations and that the Littman San Andres Unit be approved and authority given for the injection of water therein for the secondary recovery therefrom and the pressure maintenance thereof.

Respectfully submitted,

SOHIO PETROLEUM COMPANY

BY _____

of ATWOOD & MALONE, its attorneys
P.O.Drawer 700
Roswell, New Mexico

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 2144 & 2145

State of New Mexico

Commissioner of Public Lands

RECEIVED
MAR 21 1963
SOHIO PETROLEUM COMPANY
OKLAHOMA CITY LAND

E. S. JOHNNY WALKER
COMMISSIONER

P. O. BOX 791
SANTA FE, NEW MEXICO

March 19, 1963

Sohio Petroleum Company
970 First National Office Building
Oklahoma City 2, Oklahoma

Re: Proposed Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas

Attention: Mr. C. L. Ware

Gentlemen:

This office approves, as to form and content, the proposed Littman San Andres Unit Agreement, subject to two changes being made in the Unit Agreement, to wit:

(a) ARTICLE 5; ENLARGEMENT OR CONTRACTION OF UNIT AREA. Our suggestion was to delete the words "where required" on page 6, ARTICLE 5.3.
(b) ARTICLE 31; NON-JOINDER AND SUBSEQUENT JOINDER. Effective date of Joinder should provide for approval by the Commissioner of Public Lands and other administrative bodies if desired, on page 22, ARTICLE 31.4.

These two changes were discussed with Mr. Ware by telephone March 18, 1963, and it was my understanding he was in agreement with them.

Please remit a Forty-five ($45.00) Dollar filing fee at your earliest convenience.

Very truly yours

E. S. Johnny Walker
COMMISSIONER OF PUBLIC LANDS

BY: Marian M. Rhea
(Mrs.) Marian M. Rhea
Supervisor, Unit Division

ESW/mmr/e
cc:

United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

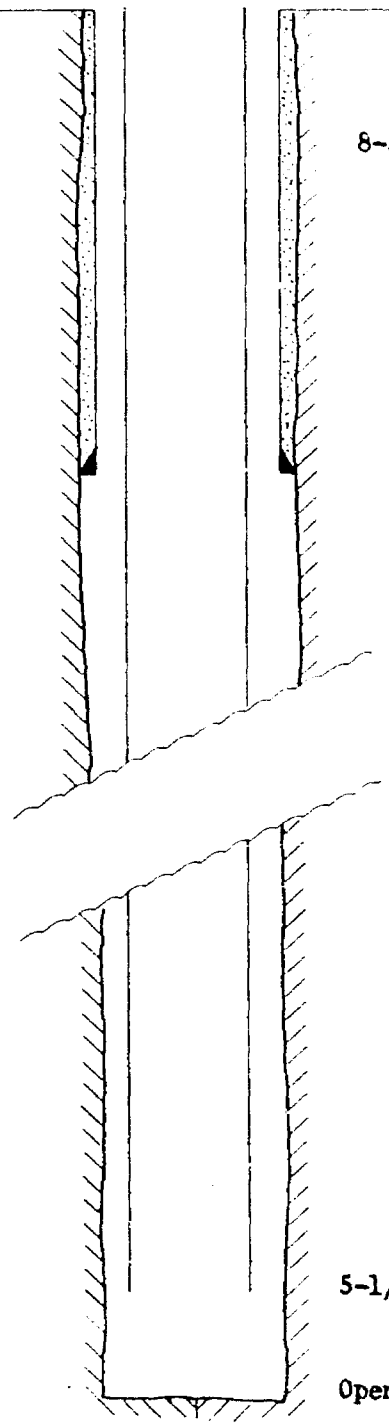
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Elliott, Inc. LEASE Parcell WELL 2

LOCATION 990' FSL & 330' FEL, Sec. 8-T21S-R38E, Lea County, New Mexico

Surface



8-5/8" Csg. @ 1614' with 450 Sacks

Production Tubing:

2" @ 4330'

5-1/2" Csg. @ 4316' with 350 Sacks

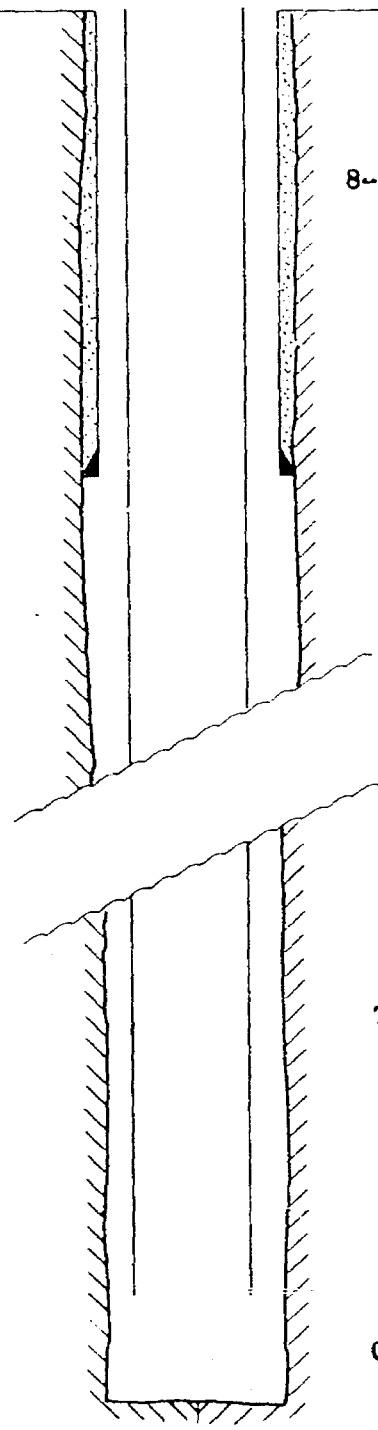
Open Hole 4316'-60'

LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Elliott, Inc. LEASE Wylie WELL 1

LOCATION 990' FSL & 330' FEL, Sec. 9-T21S-R38E, Lea County, New Mexico



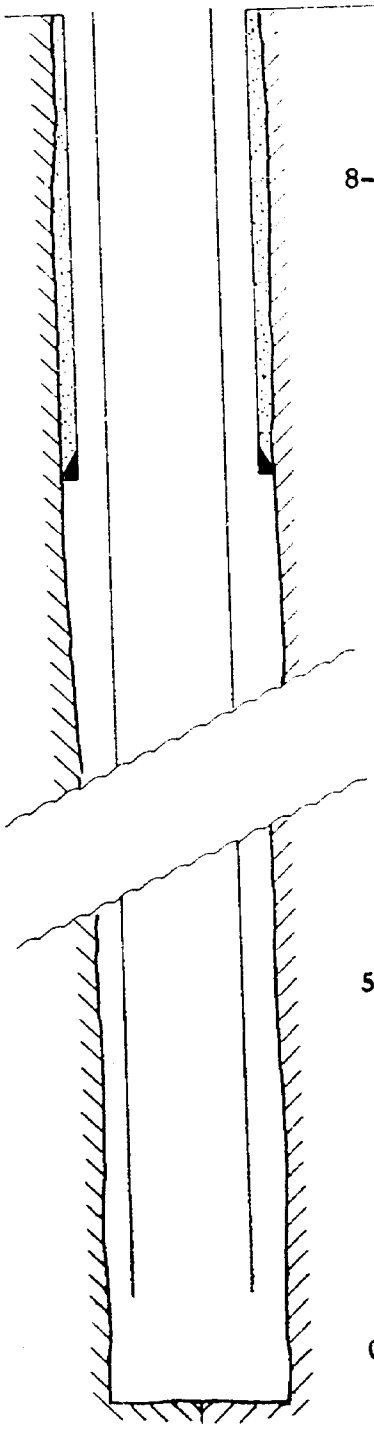
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Elliott, Inc. LEASE Wylie WELL 3

LOCATION 1650' FSL & 1650' FEL, Sec. 9-T21S-R38E, Lea County, New Mexico

Surface



8-5/8" Csg. @ 1625' with 600 Sacks

5-1/2" Csg. @ 4327' with 350 Sacks

Production Tubing:

2" @ 4337'

Open Hole 4327'-59'

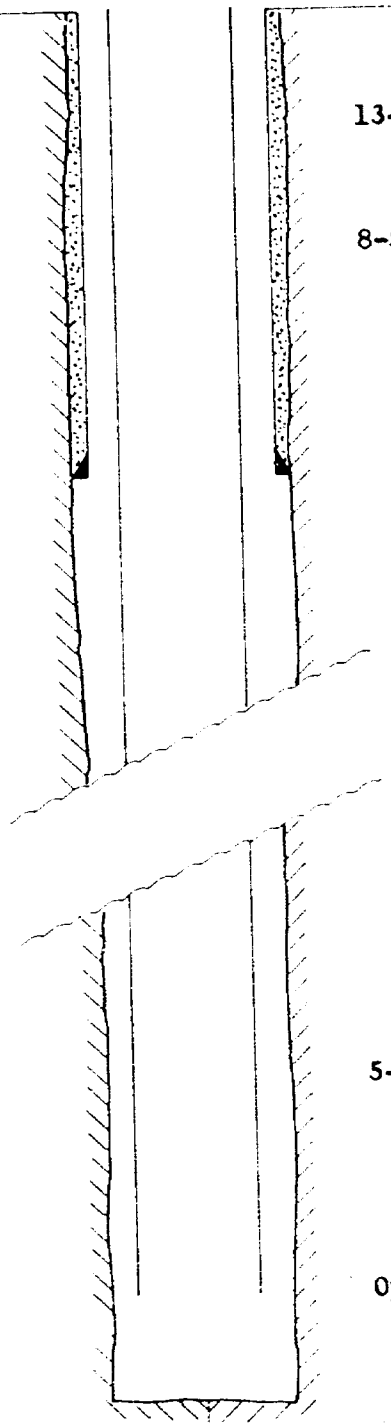
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE NuMex WELL 2

LOCATION 1650' FEL, 330' FNL, Sec. 16-T21S-R38E, Lea County, New Mexico

Surface



13-3/8" Csg. @ 150' with 160 Sacks

8-5/8" Csg. @ 1620' with 250 Sacks

Production Tubing:

2" @ 4339'

5-1/2" Csg. @ 4330' with 450 Sacks

Open Hole 4330'-58'

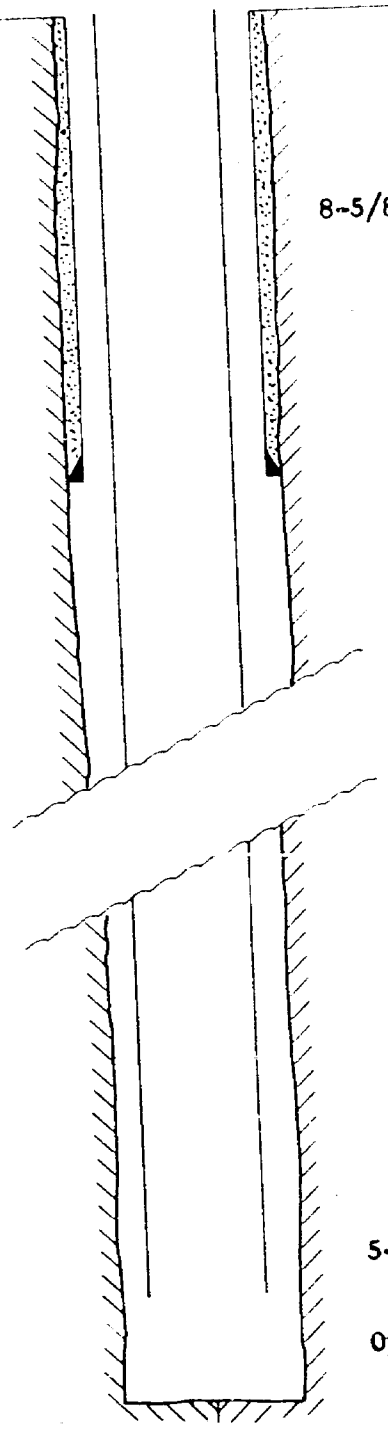
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman WELL 2

LOCATION 2173' FSL & 2027' FEL, Sec. 6, Blk. A-29, PSL Sur., Andrews County, Texas

Surface



8-5/8" Csg. @ 1636' with 450 Sacks

Production Tubing:

2" @ 4358'

5-1/2" Csg. @ 4321' with 150 Sacks

Open Hole 4321'-58'

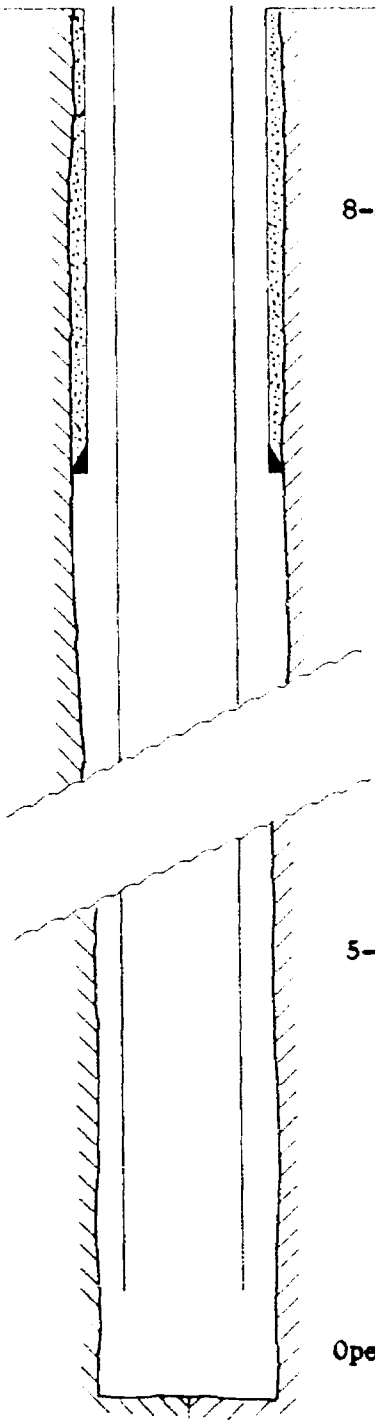
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman WELL 3

LOCATION 811' FEL & 880' FSL, Sec. 6, Blk. A-29, PSL Sur., Andrews County, Texas

Surface



8-5/8" Csg. @ 1628' with 200 Sacks

5-1/2" Liner 1567' - 4306' with 575 Sacks

Production Tubing:

2" @ 4347'

Open Hole 4306'-49'

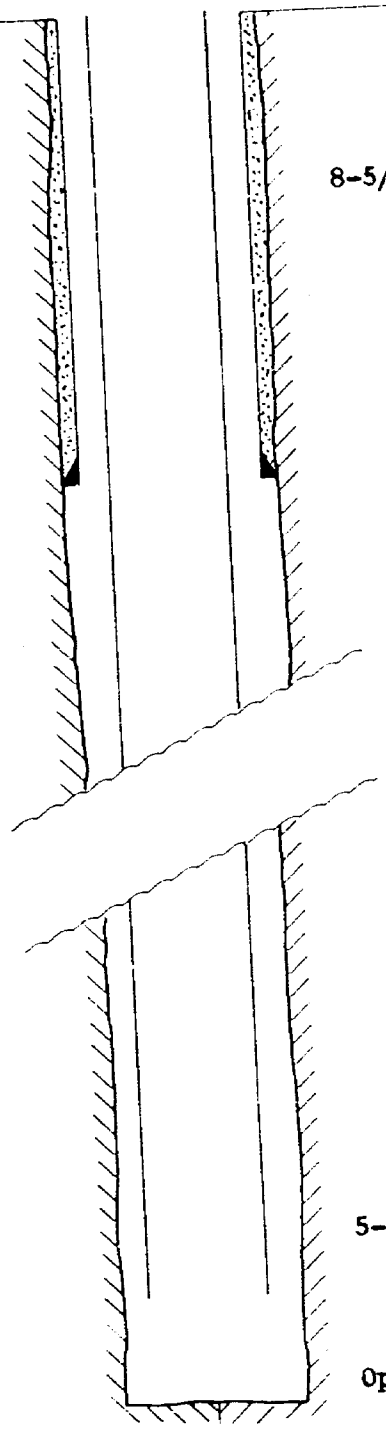
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman WELL 6

LOCATION 440' FWL & 2200' FSL, Sec. 6, Blk. A-29, PSL Sur., Andrews County, Texas

Surface



8-5/8" Csg. @ 1625' with 500 sacks

Production Tubing:

2" @ 4350'

5-1/2" Csg. @ 4323' with 100 sacks

Open Hole 4323'-53'

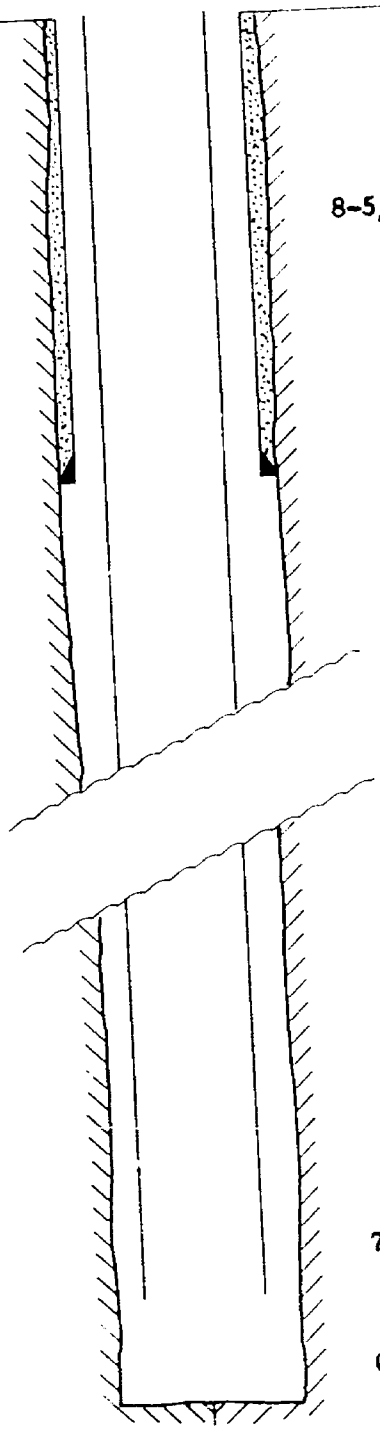
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman "A" WELL 1

LOCATION 467' FNL & 467' FWL, SE/4 NE/4 of Sec. 6, Blk. A-29, PSL Sur.,
Andrews County, Texas

Surface



8-5/8" Csg. @ 1628' with 500 Sacks

Production Tubing:

2" @ 4330'

7" Csg. @ 4301' with 100 Sacks

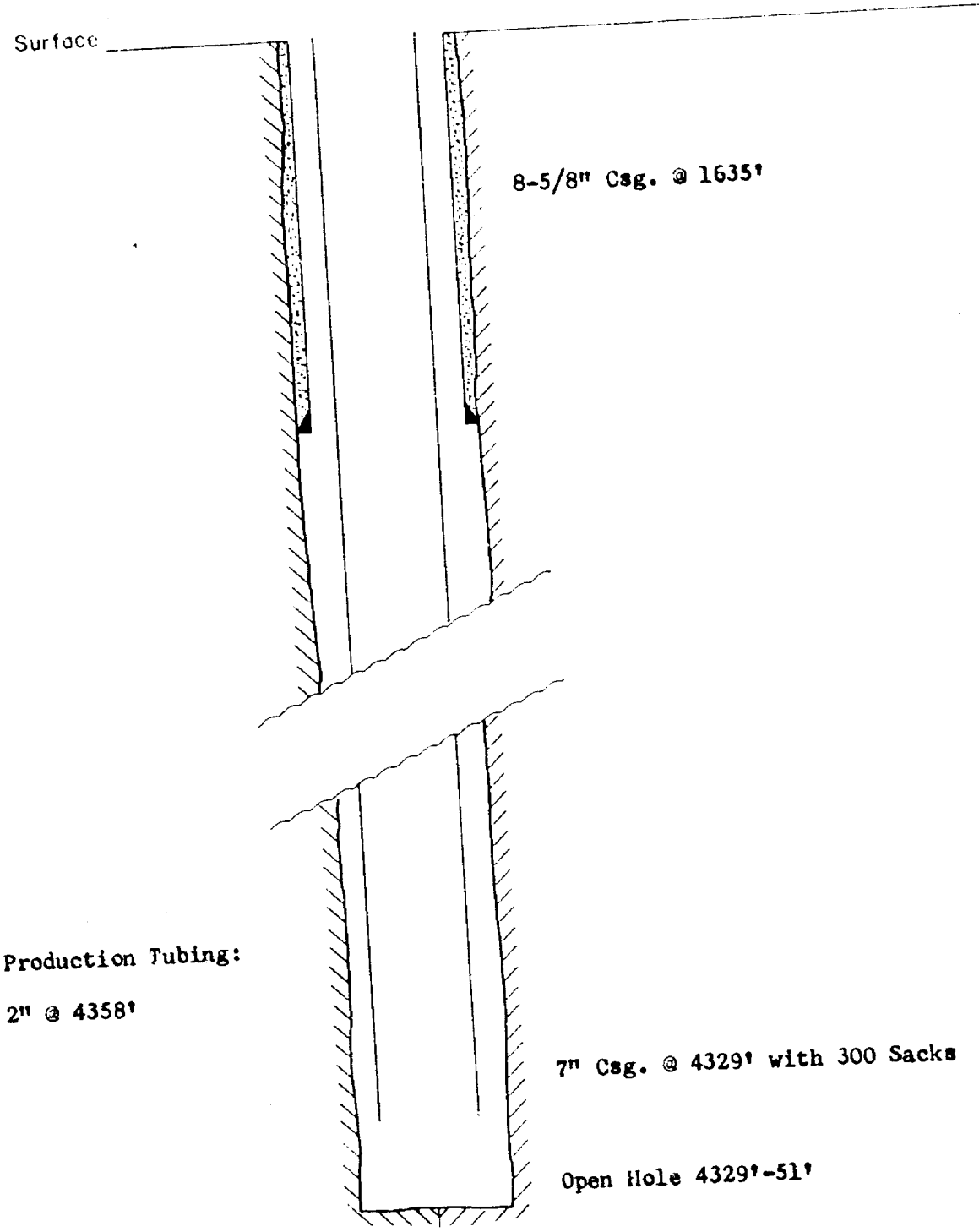
Open Hole 4301'-40'

LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman "A" WELL 4

LOCATION 2062' FEL & 440' FNL, Sec. 6, Blk. A-29, PSL Sur., Andrews County, Texas



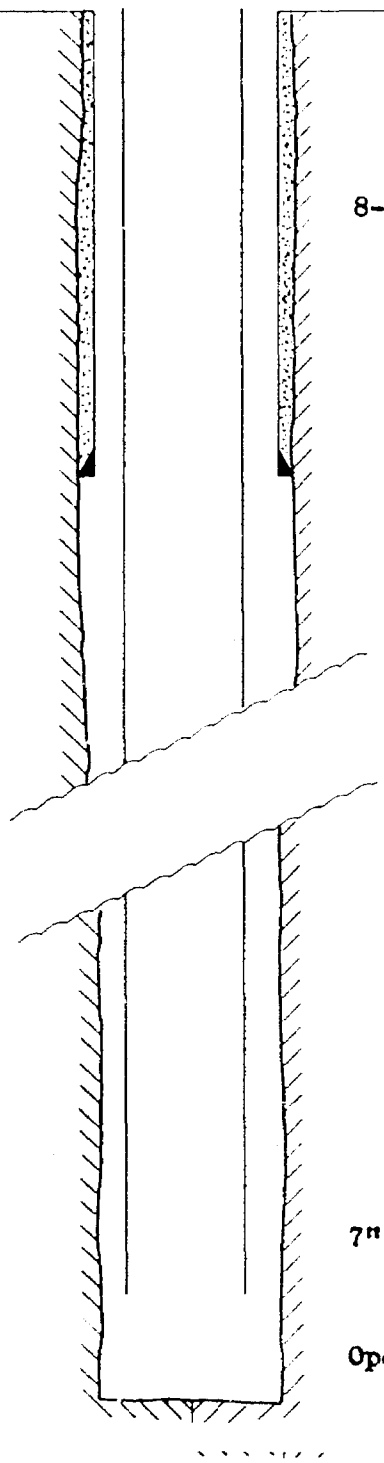
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman "A" WELL 5

LOCATION 1760' FNL & 1691' FWL, Sec. 6, Blk. A-29, PSL Sur., Andrews County, Texas

Surface



8-5/8" Csg. @ 1622' with 250 Sacks

Production Tubing:

2" @ 4353'

7" Csg. @ 4323' with 125 Sacks

Open Hole 4323'-56'

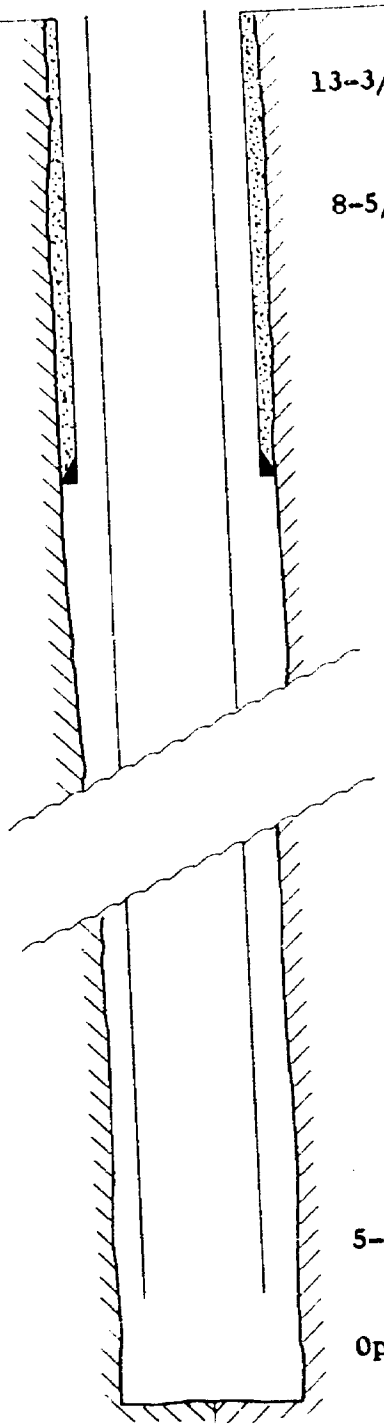
LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Littman "B" WELL 1

LOCATION 467' FNL & 467' FWL of S/2 Sec. 7, Blk. A-29, PSL Sur., Andrews County, Texas

Surface



13-3/8" Csg. @ 160' with 150 Sacks

8-5/8" Csg. @ 1630' with 40 Sacks

Production Tubing:

2" @ 4347'

5-1/2" Csg. @ 4315' with 60 Sacks

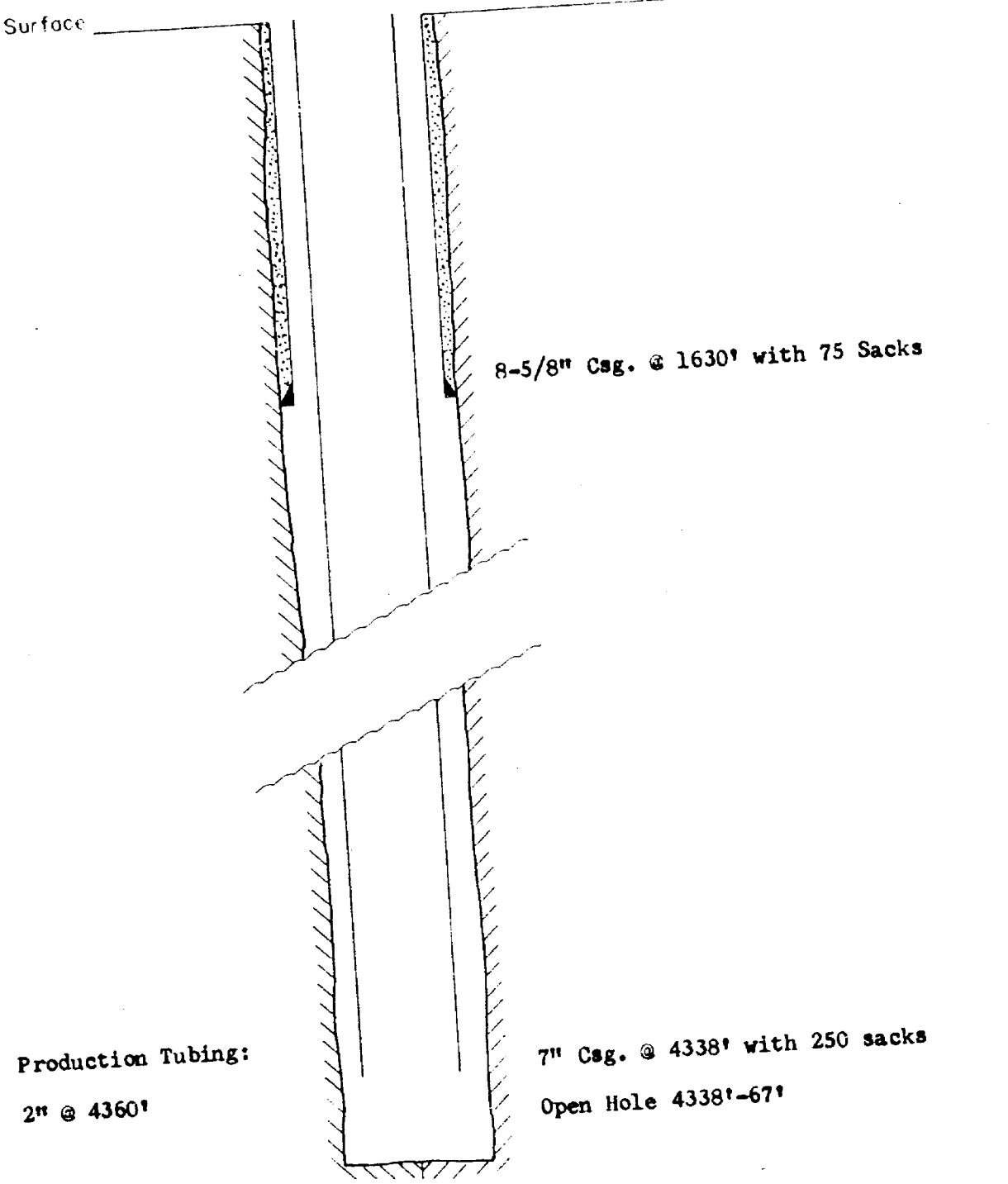
Open Hole 4315'-51'

LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Monarch WELL 1

LOCATION 330' FSL & 1691' FWL, Sec. 5, Blk. A-29, PSL Sur., Andrews County, Texas

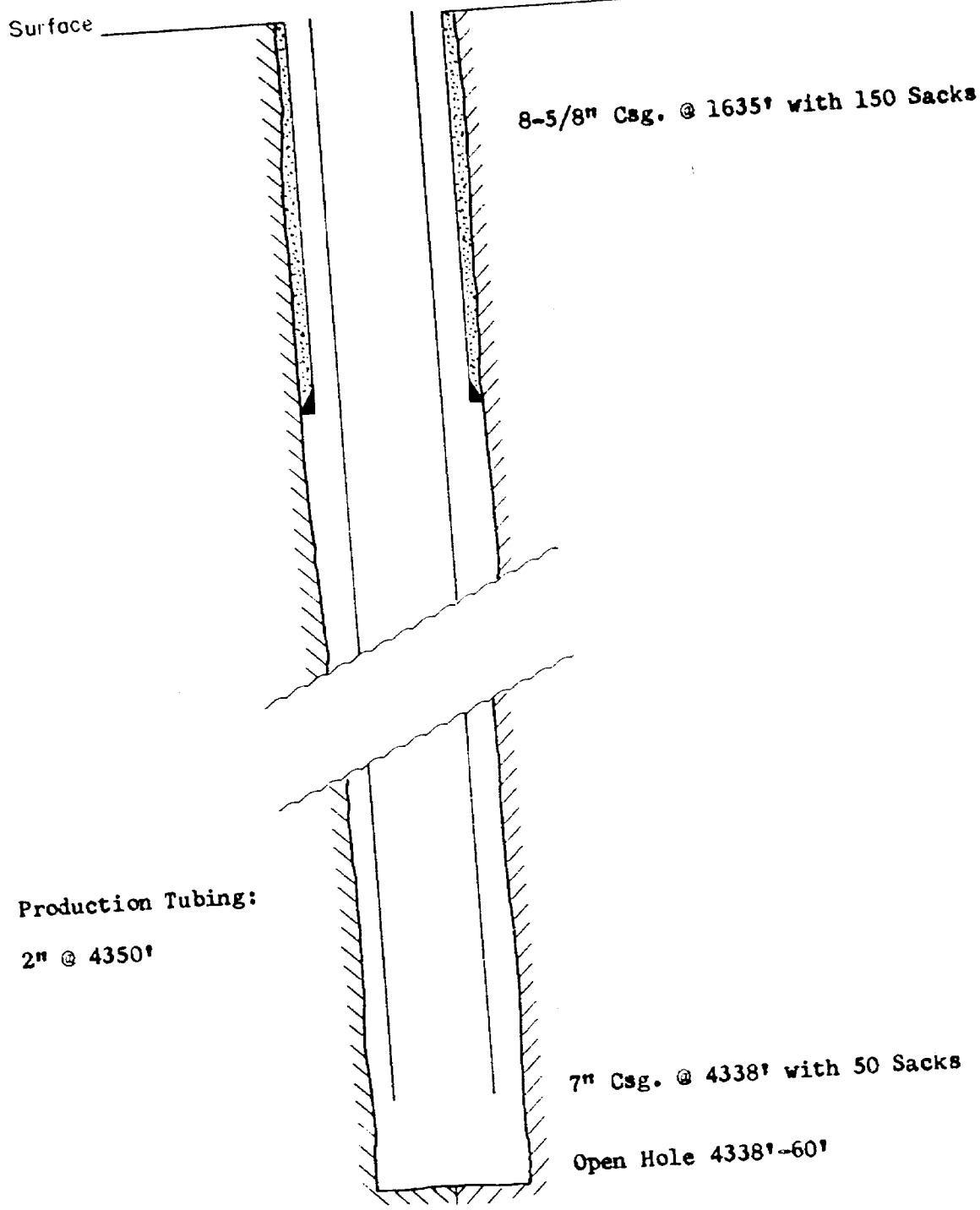


LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Southland WELL 2

LOCATION 880' FSL & 810' FEL, Sec. 5, Blk. A-29, PSL Sur., Andrews County, Texas

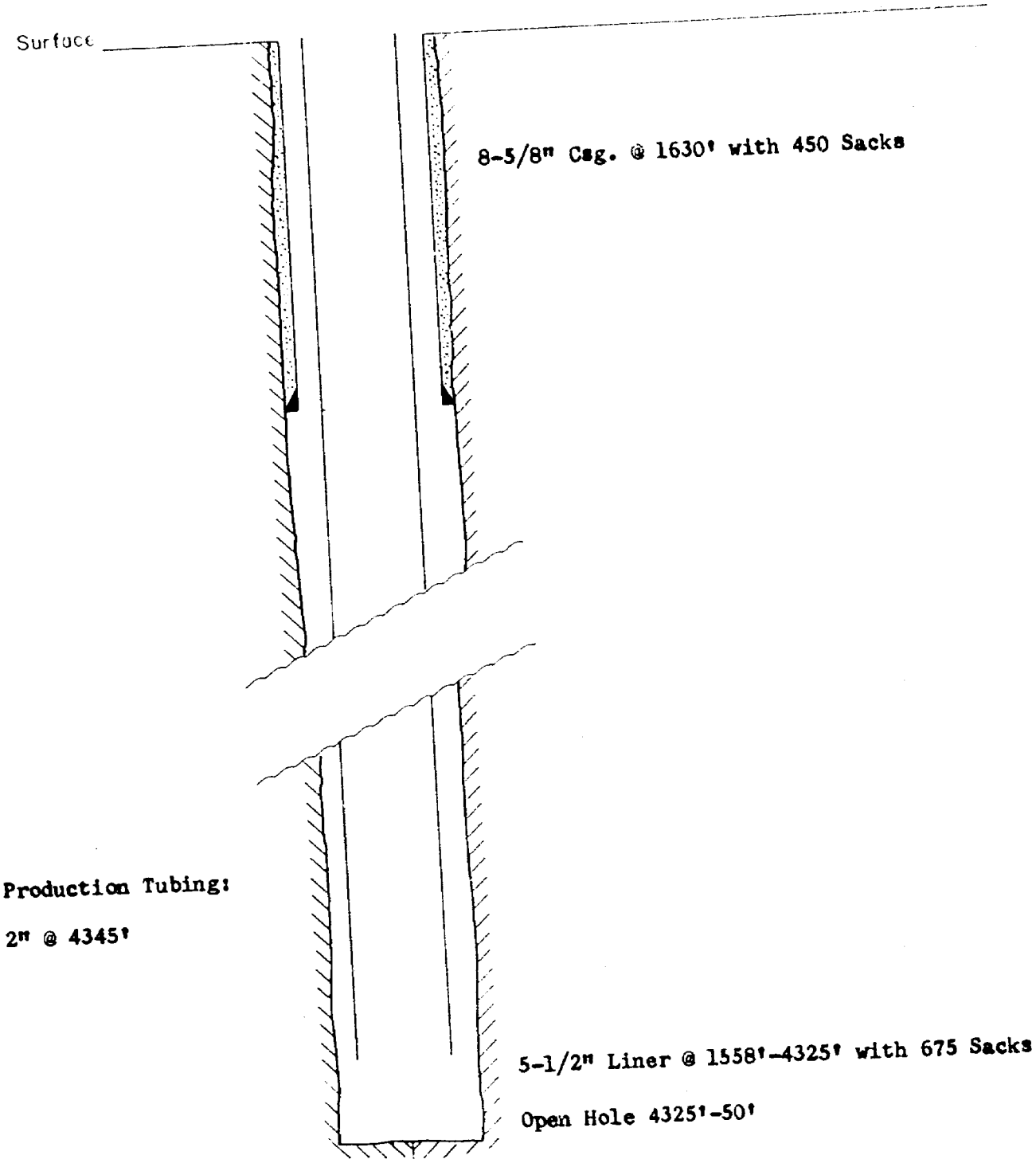


LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

OPERATOR Sohio Petroleum Company LEASE Southland WELL 4

LOCATION 1760' FSL & 2060' FEL, Sec. 5, Blk. A-29, PSL Sur., Andrews County, Texas



RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE October 7, 1963

_____

ADDRESS Mercantile Trust Building
Baltimore 2, Maryland

ATTEST:

_____
Secretary

BROSECO CORPORATION

By _____
Executive Vice - President

ADDRESS Mercantile Trust Building
Baltimore 2, Maryland

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Maryland)
)
COUNTY OF Baltimore)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John B. Rich, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by John B. Rich.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7 th day of October, A.D. 19 63.

My Commission Expires:

May 3, 1965

Guy S. Wagner
Notary Public in and for
Baltimore County, Maryland

STATE OF Maryland)
)
COUNTY OF Baltimore)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John B. Rich known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said BROSECO CORPORATION a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed. and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by John B. Rich of BROSECO CORPORATION, a Maryland corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7 th day of October, A.D. 19 63.

My Commission Expires:

May 3, 1965

Notary Public in and for Baltimore County, Maryland.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

J. G. CATLETT CO.

By G. R. Ellis
President

ADDRESS 1579 East 21st Street, Room 508

Tulsa 14, Oklahoma

ATTEST:
L. D. Bauer
Asst. Secretary

STATE OF OKLAHOMA)
)
COUNTY OF TULSA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared G. R. Ellis known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said J. G. Catlett Co., a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by G. R. Ellis, President of J. G. Catlett Co., a Delaware corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 20th day of September, A.D. 19 63.

My Commission Expires:

March 6, 1964

Notary Public in and for Tulsa County, Oklahoma.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ATTEST:

K. C. Carson
ASS'T SECRETARY

CITIES SERVICE OIL COMPANY

By Donald M. Drew
Vice President

ADDRESS_____

_____

STATE OF Oklahoma)
COUNTY OF Washington)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Jesse M Grear known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said CITIES SERVICE OIL COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Jesse M Grear CITIES SERVICE OIL COMPANY, a corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23 day of October, A.D. 1963.

My Commission Expires:

October 22, 1964

Dilma Nelson
Notary Public in and for Washington County, Oklahoma.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

Delhi-Taylor Oil Corporation

ATTEST:

Katherine Vaughn
Assistant Secretary

By _____
Vice President

ADDRESS _____

_____

STATE OF Texas)
)
COUNTY OF Dallas)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared O. W. Crisman known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Delhi-Taylor Oil Corporation, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by O. W. Crisman of Delhi-Taylor Oil Corporation, a Delaware corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of October, A.D. 1963.

My Commission Expires:

RUTH AVERY, Notary Public,
In and for Dallas County, Texas
My Commission Expires June 1, 1965

Ruth Avery
Notary Public in and for
County, .

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ELLIOTT, INC.

ATTEST:

Edwin M Elliott
Secretary

By L. E. Elliott
President

ADDRESS P. O. Box 1355

Roswell, New Mexico

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared L. E. Elliott known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said ELLIOTT, INC., a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by L. E. Elliott of ELLIOTT, INC., a New Mexico corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 22nd day of October, A.D. 1963.

My Commission Expires:

June 1, 1966

Paul S. Saunders
Notary Public in and for Chaves County, New Mexico.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 10-25-63

ATTEST:

Mack Milton, Jr.
Assistant Cashier

THE FORT WORTH NATIONAL BANK, TRUSTEE

BY _____
Vice-President & Trust Officer
c/o Oil Department

ADDRESS 200 Houston St.
Fort Worth, Texas

DATE October 23, 1963

Obie P. Leonard, Jr.
ADDRESS 200 Houston St.
Ft. Worth, Texas

DATE October 23, 1963

R. W. Leonard
ADDRESS 200 Houston St.
Ft. Worth, Texas

DATE October 23, 1963

Margery Ann Hodges
ADDRESS 200 Houston St.
Ft. Worth, Texas

DATE October 23, 1963

Martha Jane Anthony
ADDRESS 200 Houston St.
Ft. Worth, Texas

THE STATE OF TEXAS, CORPORATION ACKNOWLEDGMENT

COUNTY OF TARRANT

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Alan C. Roberts, Vice President & Trust Officer of The Fort Worth National Bank whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said The Fort Worth National Bank, known to me to be the person and officer a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 25th day of October A. D. 1963

(L. S.)

Commission Expires June 1, 1965

RUTH RAGON MAYO, Notary Public
Notary Public in and for TARRANT County, Texas

County, Texas.

844—THE ODEE COMPANY, PUBLISHERS—DALLAS

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Leland A. Hodges and Margery Ann Hodges, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Margery Ann Hodges, wife of the said Leland A. Hodges, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Margery Ann Hodges, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Leland A. Hodges and Margery Ann Hodges, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of October, A.D. 1963.

My Commission Expires:

June 1, 1965

Glenna Tell
Notary Public in and for Tarrant County, Texas

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Obie P. Leonard, Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Obie P. Leonard, Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of October, A.D. 1963.

My Commission Expires:

June 1, 1965

Glenna Tell
Notary Public in and for Tarrant County, Texas

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James E. Anthony and Martha Jane Anthony, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Martha Jane Anthony, wife of the said James E. Anthony, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Martha Jane Anthony, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by James E. Anthony and Martha Jane Anthony, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of October, A.D. 1963.

My Commission Expires:

June 1, 1965

Glenna Kell
Notary Public in and for Tarrant County, Texas

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R. W. Leonard, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by R. W. Leonard.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of October, A.D. 1963.

My Commission Expires:

June 1, 1965

Glenna Kell
Notary Public in and for Tarrant County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

October 10, 1963

KIRBY PRODUCTION COMPANY

ATTEST:

By C. K. Smith
Vice President

Assistant Secretary

ADDRESS _____

P. O. Box 1745, Houston, Texas

STATE OF TEXAS)

COUNTY OF HARRIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. K. Smith known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Kirby Production Company, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by C. K. Smith, Vice Pres. of Kirby Production Company, a Nevada corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 10th day of October, A.D. 19 63.

My Commission Expires:

June 1, 1963

Notary Public in and for Harris County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Sept. 15, 1963.

W H Longcope

ADDRESS Box 667,
Brownwood, Texas.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF BROWN)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. S. Longcope, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by C. S. Longcope.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 17 day of September, A.D. 1963.

My Commission Expires:

June 1, 1965

Dale Palmer
Notary Public in and for Brown
County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

SHELL OIL COMPANY

BY: _____
Attorney in Fact

ADDRESS Box 1509
Midland, Texas

DATE_____

_____

ADDRESS_____

ATTEST:

_____

By_____
President

ADDRESS_____

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

Before me, the undersigned authority, on this day personally appeared J. V. Lindsey, known to me to be the person whose name is subscribed to the foregoing instrument as Attorney in Fact for Shell Oil Company, a Delaware corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and as the free act and deed of said Shell Oil Company in the capacity therein stated.

Given under my hand and seal of office this 11th day of October, 1963.

My Commission Expires:

June 1, 1965

Rosalyn Magee
Notary Public in and for
Midland County, Texas.

Rosalyn Magee
Notary Public in and for
Midland County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ABERDEEN OIL COMPANY, INC.

ATTEST: Lola C. Bell
SECRETARY

By Boyce R. Smith
President

ADDRESS 1010 First National Building

Tulsa 3, Oklahoma

STATE OF OKLAHOMA)
)
COUNTY OF TULSA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared GEORGE R. PIETCH known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said ABERDEEN OIL COMPANY, INC., a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by GEORGE R. PIETCH, PRESIDENT of ABERDEEN OIL COMPANY, INC., a DELAWARE corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 29TH day of JANUARY, A.D. 19 64.

My Commission Expires:

DEC 12 1964

J B Pittman
Notary Public in and for Tulsa County, Oklahoma.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2-17-64

Glenna Wright Adams
Glenna Wright Adams, a widow
ADDRESS c/o Raymond A. Weisner
301 N. Salisbury Boulevard
Salisbury, Maryland 21801

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President
ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Maryland
)
COUNTY OF Frederick

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Diana Wright Adams known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Diana Wright Adams

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 17th day of February, A.D. 1962.

My Commission Expires:
May 3, 1965

Irene E. Ward
Notary Public in and for Frederick
County, Maryland.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

Attest: [signature]
Assistant Cashier

DATE April 9, 1964

Albuquerque National Bank, Testamentary
Trustee of Frank A. Andrews
By [signature]
Vice President and Trust Officer

ADDRESS P. O. Box 1344

Albuquerque, New Mexico

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF New Mexico)
)
COUNTY OF Bernalillo)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Ralph E. Becker known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Albuquerque National Bank, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Ralph E. Becker of Albuquerque National Bank, a banking corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of April, A.D. 1964.

My Commission Expires:

3/14/67

Jean Morton
Notary Public in and for Bernalillo County, New Mexico.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 28, 1963

Helen Red Allen

ADDRESS HELEN ALLEN
1716 VIRGINIA PLACE
FORT WORTH, TEXAS

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____. _____, acknowledged such instrument to be her act and deed, and she declared that she had wiliingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Helen Reed Allen Tunstall known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Helen Reed Allen.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7 day of February, A.D. 1964.

My Commission Expires:

6-1-65

E. Bierley
Notary Public in and for
Tarrant County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 2-6, 1963

ADDRESS [illegible]
[illegible] VIRGINIA PLACE
FORT WORTH, TEXAS

DATE _____

ADDRESS _____

ATTEST:

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Irene Allen Jesse Lee known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Irene Allen.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7 day of February, A.D. 1964.

My Commission Expires:

6-1-65

E. Bussey
Notary Public in and for _____
Tarrant County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

The American National Bank of Austin
Trustee for the Ruth Reed Dyke Trust

ATTEST:

By_____
Vice - President

Assistant Cashier

ADDRESS P. O. Drawer 97

Austin, Texas 78761

STATE OF Texas)
)
COUNTY OF Travis)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Harry S. Williams known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said The American National Bank of Austin, Trustee of Ruth Reed Dyke Trust, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Harry S. Williams of Travis County, Texas, a Vice President of the corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 4th day of February, A.D. 1964.

My Commission Expires:

June 1, 1965

Helen M. Cochran
Notary Public in and for Travis County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Feb. 10 1964

Howard L. Anderson

ADDRESS 950 Equitable Bldg

Denver, Colo

80202

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

City of

STATE OF Colorado)
)
COUNTY OF Denver)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Howard L. Cudlipp, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Howard L. Cudlipp.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 10th day of February, A.D. 1961.

My Commission Expires:

Dec 31 1966

Ruth K. Fulton
Notary Public in and for Denver County, Colorado

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

ADDRESS _____

_____

DATE Feb 1 - 1964

ADDRESS _____

_____

ATTEST:

Mary Virginia Shea
Mary Virginia Shea, Secretary

ANDREW OIL & GAS ROYALTIES, INC.

By Mary A. Weisner
Mary A. Weisner, President

ADDRESS 34-28 76th Street
Jackson Heights, New York

STATE OF Maryland)
)
COUNTY OF Wicomico)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Mary C. Warner known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Landreth Mill & Lee Clayton, Inc., a corporation, and that the same was the act of such corporation for the purposes and consideration therein stated; and the capacity therein stated; and that she executed the same as the act of Landreth Mill & Lee Clayton, Inc., a New York corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of February, A.D. 1962.

Irene E. Ward
Notary Public in and for Wicomico County, Maryland.

My Commission Expires:
May 3, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE MARCH 30, 1964

Selma E. Andrews,
SELMA E. ANDREWS, A WIDOW
ADDRESS c/o Trust Department
P. O. Box 241
Dallas, Texas 75221

DATE

ADDRESS

DATE

By
President

ADDRESS

ATTEST:

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Jessie E. Lindsay, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31st day of March, A.D. 1964.

My Commission Expires:
JUANITA C. MARTIN
My Commission Expires January 25, 1966

Juanita C. Martin
Notary Public in and for
Los Angeles County, Calif.

JUANITA C. MARTIN
NOTARY PUBLIC-CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

THE ATLANTIC REFINING COMPANY

DATE 1-31-64

Boone Mercantun for
ATTORNEY IN FACT
ADDRESS Box 1978
Roswell, N.M.

DATE _____

_____
ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____ of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____.

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

The foregoing instrument was acknowledged before me this 31st day of January, 1964, by Boone Macaulay as Attorney-in-Fact in behalf of The Atlantic Refining Company, a Pennsylvania Corporation.

Fred N. Williamson, Jr.
Notary Public

My Commission Expires: January 2, 1966.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

Independent Executors of the Estate of
Bessie Baum, deceased.

DATE April 8-1964

Eddie Baum

ADDRESS 2200 Town Dome
Austin Texas

DATE April 8. 1964

Marcie Baum

ADDRESS 1011 West
Austin, Tx

ATTEST:

By _____
President

ADDRESS _____

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

BEFORE ME, the undersigned authority, a Notary Public, in and for said County and State, on this day personally appeared MARCUS BAUM and EDDIE BAUM, as Independent Executors of the Estate of BESSIE BAUM, deceased, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 5th day of April, A.D., 1964.

My Commission Expires:

June 1965

Notary Public in and for Travis County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE March 2 1964

[signature]

ADDRESS P. O. Box 15006,
Fort Worth -Texas, 76119

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared W. H. BEADLES, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by W. H. ~~XXXXXXX~~ BEADLES.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 2nd day of MARCH, A.D. 19 64.

My Commission Expires:

6-1-1965

Kathryn Scott
Notary Public in and for _____
Tarrant County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE JAN. 27th 1964

R. V. Bebout

ADDRESS Rt. 10 Box 621
Ft. Worth, Texas.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R V Bebout, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by R V Bebout.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27 day of January, A.D. 1964.

My Commission Expires:

6/1/65

Gladys Perry
Notary Public in and for
Tarrant County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1-27-64

H. W. Sachse

ADDRESS 4033 Bryan Ave
Dallas, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Dallas)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared W. B. Brecheen, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by W. B. Brecheen.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27 day of January, A.D. 1964.

My Commission Expires:

6-1-65

Paul E. Geddes
Notary Public in and for
Dallas County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 30, 1964

E S Pinkerton

ADDRESS c/o H. A. Hedberg
2513 Continental National Bank Building
Fort Worth, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared E. S. BIRDSONG, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by E. S. BIRDSONG.

Bldg.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of January, A.D. 1964.

My Commission Expires:

June 1, 1965

Notary Public in and for TARRANT County, TEXAS

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE MAR 31 1964

ADDRESS 2600 Republic National Bank Bldg.
Dallas, Texas 75201

DATE _____

ADDRESS _____

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Pubiic in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Dallas)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Roland D. Boyd, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Roland D. Boyd.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31st day of January, A.D. 1964.

My Commission Expires:

June 1, 1965

Frances C. Stone
Notary Public in and for
Dallas County, Texas

FRAN

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE April 23, 1964

Geo. A. Brashear

ADDRESS 450 Haberfelde Building
Bakersfield, California

DATE April 23, 1964

Marion Brashear

ADDRESS 450 Haberfelde Building
Bakersfield, California

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF CALIFORNIA)
)
COUNTY OF KERN)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared GEO. L. BRADFORD and MARION BRADFORD, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said MARION BRADFORD, wife of the said GEO. L. BRADFORD, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said MARION BRADFORD, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by GEO. L. BRADFORD and MARION BRADFORD, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of April, A.D. 19 64.

My Commission Expires:

January 12, 1966

E. Rowena Edwards

Notary Public in and for KERN County, CALIFORNIA

E. ROWENA EDWARDS
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
KERN COUNTY

E. Rowena Edwards, Notary Public
My Commission Expires Jan. 12, 1966

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1-28-64

ADDRESS Pittsburgh National Bank
341-4th Avenue
Pittsburgh, Pa. 15230

DATE _____

ADDRESS _____

ATTEST:

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF Pennsylvania)
)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John A. Byerly, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by John A. Byerly.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of January, A.D. 1964.

My Commission Expires:

[illegible] Notary Public
[illegible]
[illegible]
February 18, 1965

Notary Public in and for
Allegheny County, Pennsylvania

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 27, 1964

L. & T. Byrd

ADDRESS D. H. Byrd

1110 Tower Petroleum Bldg.

Dallas, Texas 75201

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____

ADDRESS _____ President

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF DALLAS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared D. A. BYRD, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by D. A. BYRD.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January, A.D. 1964.

My Commission Expires:

June 1, 1965

Orlean Ehrlich
_____
Notary Public in and for Dallas
_____County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 6, 1964

Lucid Campbell

ADDRESS 1022 Franklin Street

Whittier, California, 90602.

DATE February 6 1964

Marguerite F. Campbell

ADDRESS Same as above

ATTEST:

By

ADDRESS President

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this

The Chase Manhattan Bank is executing this Ratification and Joinder to the Littman San Andres Unit Agreement (1) as holder of the Notes of the below-named Purchasers of the Argo Production Payment herein below described, which Notes are secured by that certain Mortgage and Deed of Trust and Assignment of Production dated December 15, 1961 from said Purchasers to Wm. B. Bateman, Trustee, and The Chase Manhattan Bank and (2) as assignees and pledgee of production and the proceeds thereof. The Argo Production Payment was excepted by Argo Oil Corporation in Part I of that certain Conveyance dated December 15, 1961 from Argo Oil Corporation (Part I being a transfer of certain oil and gas properties to The Atlantic Refining Company) and fractional undivided interests in the Argo Production Payment were conveyed in Part II of said Conveyance to the Purchasers, namely, The Wemac Company, Mon-Dak Oil Corporation, Salem Oil Corporation and East Wall Street Corporation.

It is understood that this execution of this Ratification and Joinder by The Chase Manhattan Bank is without recourse on any representation, warranty or indemnity of title, express or implied.

ATTEST:

W. O. Kelly
Assistant Treasurer

THE CHASE MANHATTAN BANK,

By R K Allen
~~Assistant Treasurer~~

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Fred H. Campbell and Marguerite F. Campbell, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Marguerite F. Campbell, wife of the said Fred H. Campbell, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Marguerite F. Campbell, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Fred H. Campbell and Marguerite F. Campbell, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 6 day of February, A.D. 1964.

My Commission Expires:

T. W. REED, NOTARY PUBLIC
~~My Commission Expires April 22, 1966~~

Notary Public in and for Los Angeles County, California.

T. W. REED

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF New York)
COUNTY OF New York)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R. K. Herr known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said The Chase Manhattan Bank, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by R. K. Herr of The Chase Manhattan Bank, a corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 13 day of April, A.D. 1964.

My Commission Expires:

Imelda Clennan
Notary Public in and for
County, .

IMELDA CLENNAN
Notary Public, State of New York
No.
Qualified in County
Certificate filed in New York County
Term Expires March 30, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

William H. Coll Individually and as Executrix and Trustee under the Last Will and Testament of M. W. Coll, deceased

ADDRESS Box 1818 - Roswell, N. M.

DATE_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF New Mexico
COUNTY OF Chaves

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Lillian H. Call, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Lillian H. Call.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 11th day of May, A.D. 1967.

My Commission Expires:

July 28, 1967

Stephen C. Shelburn
Notary Public in and for Chaves
County, New Mexico

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 5-11-64

Myrtle H. Connor

ADDRESS 4253 Westmont Pl.
Ft. Worth 9 - Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Myrtle N. Connor, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Myrtle N. Connor.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 11th day of May, A.D. 1964.

My Commission Expires:

June 1, 1965

Della Carter Green
Notary Public in and for
Tarrant County, Texas

f

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

CONTINENTAL-EMSCO COMPANY, a Division of
The Youngstown Sheet and Tube Company

ATTEST:

J. Morgenthaler
Secretary

By L. E. Dickens Jr
Vice President

ADDRESS P. O. Box 359

Dallas 21, Texas

STATE OF TEXAS)

COUNTY OF DALLAS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. L. VICKERS known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said CONTINENTAL-EMSCO COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by C. L. VICKERS of CONTINENTAL-EMSCO COMPANY a n Ohio corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5th day of February, A.D. 19 64.

My Commission Expires:

June 1, 1965

Yettie Moore
Notary Public in and for Dallas County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 30, 1964

Lorraine E. Estabrooks

ADDRESS 305 Andover Street

Lowell, Massachusetts

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 30, 1964

ADDRESS 305 Andover Street
Lowell, Massachusetts

DATE _____

ADDRESS _____

ATTEST:

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

COMMONWEALTH OF
~~STATE OF~~ MASSACHUSETTS)
)
COUNTY OF MIDDLESEX)

BEFORE ME, the undersigned, a Notary Public in and for said ~~County and State~~ Commonwealth, on this day personally appeared John H. Costello, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by said John H. Costello.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of January, A.D. 19 64.

My Commission Expires:

March 2, 1968

Notary Public in and for the Commonwealth of ~~County~~, Massachusetts

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2/6/64

B. C. Caraway

ADDRESS Box 217
Coyanosa, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF Pecos)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R.C. Crabb Jr, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by R.C Crabb Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 6th day of February, A.D. 1964.

My Commission Expires:

June 1, 1965

Robert E Brown
Notary Public in and for
Pecos County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 5/10/04

Iris Gerber Dawson
Bessie M. Dawson
ADDRESS
9350 Mount Jean Jane
Beverly Hills California

DATE _____

_____
ADDRESS _____

_____

ATTEST:

_____

By _____
President
ADDRESS _____

_____

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared BARRIE M DAWSON and IRIS GERBER DAWSON, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said IRIS GERBER DAWSON, wife of the said BARRIE M DAWSON, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said GERBER DAWSON, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to recede from said going instrument was acknowledged before me this day by BARRIE M DAWSON and IRIS GERBER DAWSON, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 12 day of MAY, A.D. 1961.

My Commission Expires:

_____

Notary Public in and for CALIFORNIA County, Public

Raymond Kaufman, N
State of Califo
Prin. Office Los Angeles C
My Com. expires June 14, 1965
1041 N. Formosa, Los Angeles, Cal.

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1/27/64

C J Davidson

ADDRESS Continental Life Building
Fort Worth, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State. on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. J. DAVIDSON, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by C. J. Davidson.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January —, A.D. 1964.

My Commission Expires:

6-1-65

Alice Ward
Notary Public in and for
Tarrant County, Texas.

ALICE WARD

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 3, 1964

Maurice D. Deeds

ADDRESS C/O Lawrence E. Arnsten
15 East 48th Street
New York 17, N.Y.

DATE February 3, 1964

Lawrence E. Arnsten

ADDRESS 15 East 48th Street
New York 17, N.Y.

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF New York)
)
COUNTY OF New York)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Michael J. Denda & Lawrence E. Arnsten known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Michael J. Denda & Lawrence E. Arnsten

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of February, A.D. 19 64.

My Commission Expires:

_____

Theodore J. Greene
Notary Public in and for _____
_____ County, _____

THEODORE J. GREENE
Notary Public, State of New York
No. 03-6553675 Qual. in Bronx County
Certificate filed in New York County
Commission Expires March 30 1964

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 27 Feb 1964

Charles K. Elliott

ADDRESS R.D.#1 Box 232
Greenwood Delaware
Z. code 19950

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware
)
COUNTY OF Sussex)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Charles K. Elliott, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Charles K Elliott.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27 day of February, A.D. 1964.

My Commission Expires:
June 1964

H W Marshall
Notary Public in and for
Sussex County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

The First National Bank of Denver, Trustee
under the Will of Josephine M. Smith, deceased

ATTEST:

James F Kennett
Assistant Cashier

By_____
Vice-President

ADDRESS T. A. Box #5808

Denver, Colorado

The First National Bank of Denver executes the within instrument solely in its capacity as Trustee under the Will of Josephine M. Smith, deceased, and not in its individual corporate capacity, makes no warranties of title either express or implied, and any liability asserted against said Bank because of its execution of this instrument shall be satisfied solely from assets held by it as such Trustee.

STATE OF COLORADO)
)
COUNTY OF DENVER)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Robert J. Sullivan known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said The First National Bank of Denver, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Robert J. Sullivan of The First National Bank of Denver, a national banking corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 10th day of March, A.D. 19 64.

My Commission Expires:

May 7, 1967

K C Gardner
Notary Public in and for Denver County, Colorado.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)

COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)

COUNTY OF _____)

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS

COUNTY OF MIDLAND

BEFORE ME, the undersigned authority, on this day personally appeared Fred G. Middleton, known to me to be the persons whose names are subscribed to the foregoing instrument, as Assistant Vice President and Trust Officer of The First National Bank of Midland, Texas a corporation, and acknowledged to me that they executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 2nd day of March A. D. 19 64

Lucille A. Ramsey

Notary Public in and for Midland County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE Mar 23, 1964

_____

ADDRESS _____

_____

First National Bank of Nevada,
Trustee U/W of Allie M. Lee

ATTEST:

_____
Assistant Trust Officer

By _____
Sr.Vice Pres. & Trust Officer

ADDRESS 1 East First St.

Reno, Nevada

STATE OF Nevada)
)
COUNTY OF Washoe)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R. O. Kwapil known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said First National Bank of Nevada, a ~~corporation~~ national banking association, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by R. O. Kwapil of First Natl. Bank of Nev a ~~corporation~~ national banking association, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of March, A.D. 1964.

My Commission Expires:

April 17, 1965

Donna Perry
Notary Public in and for Washoe County, Nevada.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 20, 1984

Gilbert M. Flockus
by Margaret M. Flockus
Attorney-in-Fact

ADDRESS

DATE _____

_____

ADDRESS 251 Wayne Street
Beaver, Pa. 15009

ATTEST:

By _____
President

_____

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____ _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF Texas)
)
COUNTY OF Bexar)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Margaret M. Cocke, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Margaret M. Cocke, Attorney-in-fact for Delbert K. Cocke

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 25 day of June, A.D. 1964.

My Commission Expires:

May 9, 1967

James L. Stinson
Notary Public in and for
Bexar County, Tex

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE March 13, 1964

James Miller Flocker
ADDRESS Box 3084
Alta Loma, Calif

DATE _____

_____
ADDRESS _____

_____

ATTEST:

By _____
President

_____
ADDRESS _____

_____

STATE OF _____)

COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)

COUNTY OF San Bernardino)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James Miller Flocker, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by James Miller Flocker.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 13th day of Dec, A.D. 1960.

My Commission Expires:

Oct 4, 1961

Notary Public in and for San Bernardino County, California

BERNARD S. [illegible]
NOTARY PUBLIC
SAN BERNARDINO COUNTY
CALIFORNIA

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE May 22, 1964

Berthold Florsheim

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Pennsylvania)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Berthold Thoersheim, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and the foregoing instrument was acknowledged before me this day by Berthold Thoersheim.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 22nd day of May, A.D. 1964.

My Commission Expires:

Notary Public, Pittsburgh, Allegheny County
My Commission Expires May 13, 1966

Eugenie Nelson
Notary Public in and for
Allegheny County, Pa.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2/5/64

Mary A Littman

ADDRESS 5518 Covode St
Ogdo, Pa

DATE 2/5/64

Beatrice L Littman

ADDRESS 5518 Covode St
Pgh, Pa

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF FLORIDA)
)
COUNTY OF [illegible])

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared [illegible] and [illegible], his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said [illegible], wife of the said [illegible], having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said [illegible], acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by [illegible] and [illegible], his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the [illegible] day of [illegible], A.D. 19[illegible].

My Commission Expires:
NOTARY PUBLIC STATE OF FLORIDA AT LARGE
MY COMMISSION EXPIRES SEPT. 24, 1967
BONDED THROUGH FRED W. DIESTELHORST

Nancy Litten
Notary Public in and for [illegible] County, FLORIDA

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____

7

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

6-7-8

DATE APR 23 1964

Jack Frost

ADDRESS JACK FROST
1602 National Bank Of Commerce Bldg.
San Antonio 5, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Bexar)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Jack Frost, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by him.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 23rd day of April, A.D. 19 64

My Commission Expires:

_____

Ruth W. Jenks
Notary Public in and for _____
_____County, _____

RUTH W. JENKS, Notary Public
in and for Bexar County, Texas
Expires 6-1-65

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

Lawrence L. Fuller, Administrator
with Will Annexed of the Estate of
James G. Bennett

ADDRESS 1210 Baker Building
Minneapolis, Minnesota

DATE_____

_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared LAWRENCE L. FULLER, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by LAWRENCE L. FULLER.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of March, A.D. 19 64.

My Commission Expires:

June 1 1965

Ruby P. Hughes
Notary Public in and for
Midland County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

ADDRESS_____

DATE June 5, 1964

Board of Trustees

ADDRESS Geneva College

Beaver Falls, Pennsylvania

ATTEST:

Ethel M. Lytle

Ethel M. Lytle, Secretary

By J. Merrill Robb

J. Merrill Robb, President

ADDRESS Geneva College

Beaver Falls, Pennsylvania

CERTIFICATE

I, Ethel M. Lytle, hereby certify that I am the Secretary of the Board of Trustees of Geneva College, a Pennsylvania non-profit corporation, and that at a meeting of the said Trustees, duly called and legally held on May 28, 1964, at which meeting a quorum was present and acting throughout, the following resolution was unanimously adopted:

> RESOLVED that the President and the Secretary of the Board of Trustees of the College be and they hereby are authorized and directed, in the name and on behalf of the College, to execute, and under its corporate seal to deliver to the Sohio Petroleum Company a Ratification and Joinder to the Littman San Andres Unit Agreement, Lea County, State of New Mexico, and Andrews County, State of Texas, dated September 9, 1963.

And I hereby further certify that the aforesaid resolution is still in full force and effect.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the official seal of Geneva College this 5th day of June, 1964.

Ethel M. Lytle
Secretary

STATE OF Pennsylvania)
)
COUNTY OF Beaver)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared J. Merrill Robb known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Geneva College, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by J. Merrill Robb of Geneva College, a Pennsylvania corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5th day of June, A.D. 1964.

Clem R Davidson
Notary Public in and for Beaver
County, Pennsa.

My Commission Expires:
CLEM R. DAVIDSON, Notary Public
MY COMMISSION EXPIRES
APRIL 4, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1/31/64

Edward Suter

ADDRESS 120 Wall St
New York 5, N.Y.

DATE _____

ADDRESS _____

ATTEST:

_____

By _____ President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared EDWARD GERSEK and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31 day of January, A.D. 19 66.

My Commission Expires:

March 30 1965

Notary Public in and for _____ County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

Notary Public in and for _____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1/29/64

Alice F. Mask Gordon
ADDRESS 2010 Ferndale Dr.
Wilmington Del

DATE 1/29/64

Robt. L. Gordon
ADDRESS 2010 Ferndale Dr
Wilmington Del

By _____ President

ADDRESS _____

ATTEST:

_____

STATE OF Delaware)
)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Robert L. Gordon and Alice J. Gordon, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Robert L. Gordon having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Alice J. Gordon, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Robert L. Gordon and Alice J. Gordon, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24th day of January, A.D. 1964.

Harry J. Clam
Notary Public in and for New Castle County, Delaware

My Commission Expires:
6/18/64

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

Notary Public in and for _____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Apr 9, 1964

Juanita Hammer

ADDRESS 545 S. Atlantic Blvd.
Ft Lauderdale Fla 33316

DATE April 9-64

Leo Hammer

ADDRESS 545 So. Atlantic Blvd
Ft. Lauderdale Florida

ATTEST:

By _____
President

ADDRESS _____

LEO HAMMER
545 S. ATLANTIC BLVD.
FT. LAUDERDALE, FLA.
APT. 903

STATE OF Florida)
)
COUNTY OF Broward)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Leo Hammer and Jeanette Hammer, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Jeanette Hammer, wife of the said Leo Hammer, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Jeanette Hammer, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Leo Hammer and Jeanette Hammer, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of April, A.D. 19 64.

My Commission Expires:
Notary Public, State of Florida at Large
My Commission Expires Jan. 29, 1968
Bonded by American Surety Co. of N. Y.

Dorothy Jean Hellriegel
Notary Public in and for
Broward County, Florida

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1-30-64

N. A. Nedberg

ADDRESS 2513 Continental Nat'l Bank Bldg.

Fort Worth, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared H. A. HEDBERG, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by H. A. HEDBERG.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of January, A.D. 19 64.

My Commission Expires:

June 1, 1965

Mary Boyd Abney
Notary Public in and for
TARRANT County, TEXAS

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE FEB. 29, 1964

Witness to mark signature
Edward A Toledo
Aida J Hemphill

James (X) Hemphill
his
mark

ADDRESS PITTSBURGH NATIONAL BANK
REAL ESTATE DEPARTMENT
P. O. BOX 747, PITTSBURGH, PA. 15230

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____

STATE OF Pa)
)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James Kimpbell, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by James Kimpbell.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 6th day of March, A.D. 1964.

My Commission Expires:

_____

Harry W. Meisner
Notary Public in and for Allegheny County, Pennsylvania

HARRY W. MEISNER, Notary Public
PITTSBURGH, ALLEGHENY COUNTY, PA.
MY COMMISSION EXPIRES
FEBRUARY 10, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4/6/64

Pauline Swan Hirschfeld

ADDRESS 1505 Parkway

Austin, Texas

DATE 4/6/64

Louis L. Hirschfeld

ADDRESS 1505 Parkway

Austin Texas

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF Texas)
)
COUNTY OF Travis)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Louis L Newchurch and Pauline Duncan Newchurch, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Pauline Duncan Newchurch, wife of the said Louis L Newchurch, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Pauline Duncan Newchurch, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Louis L Newchurch and Pauline Duncan Newchurch, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 6 th day of April, A.D. 1964.

My Commission Expires:

6-65

Shirley Pattison
Notary Public in and for
Travis County, Texas

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 12, 1964

Joyce A Holliday

ADDRESS 1034 Princeton Street

Santa Monica, California. 90403

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Joyce A. Holliday, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Joyce A. Holliday.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 12 day of February, A.D. 1964.

My Commission Expires:

My Commission Expires June 26, 1964

COUNTY

MARY E. GABLER

Mary E. Gabler
Notary Public in and for _____
Los Angeles County, California.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 3/2/64

Anne Lou Home

ADDRESS 207 So. Orange Dr.
Los Angeles 36, Calif

DATE 3-2-64

Tom A. Home

ADDRESS 207 So Orange Dr.
Los Angeles 36, Calif

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Anna Lou Home and Tom S. Home, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Anna Lou Home and Tom S. Home.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 2nd day of March, A.D. 1964.

My Commission Expires:

E. HELENE JONES, Notary Public in and for
~~the County of Los Angeles~~, State of California
My Commission Expires May 8, 1966

E. Helene Jones
Notary Public in and for _____
_____County, _____

E. HELENE JONES
NOTARY PUBLIC-CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

C. E. HOUCHIN TRUST NO. 2

DATE APR 14 1964

Francis L. Houchin Trustee

Anna Lumis Trustee

Dwight L. Clarke Trustee

J. E. Woolley Trustee

DATE _____

William S. Ramsden Trustee

ADDRESS P. O. Box 869

Bakersfield, California 93302

ATTEST:

By _____
President

_____

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____ _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19_____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____.

STATE OF CALIFORNIA)
) ss
COUNTY OF KERN)

On April 14, 1964, before me, the undersigned, a Notary Public in and for said County and State, personally appeared ANNA LUMIS, FRANCIS L. HOUCHIN, DWIGHT L. CLARKE, J. E. WOOLLEY and WILLIAM S. RAGDEN, the Trustees of C. F. Houchin Trust Number Two under the last Will of C. E. Houchin, deceased, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same as such Trustees.

WITNESS my hand and official seal.

W. F. OVERAND
NOTARY PUBLIC - CALIFORNIA
COUNTY OF KERN

W. F. Overand
Notary Public in and for said County and State
My Commission Expires—March 20, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE APR 6 1964

Kathryn Houchin Widow
ADDRESS P. O. Box 869
Bakersfield, California 93302

DATE _____

_____
ADDRESS _____
_____

ATTEST:

_____

By _____
President
ADDRESS _____
_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____ _____

_____
Notary Public in and for _____
_____County, _____

STATE OF CALIFORNIA)
)
COUNTY OF KERN)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared KATHRYN HOUCHIN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by KATHRYN HOUCHIN.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 6th day of April, A.D. 19____.

My Commission Expires:

SEP 20 1964

W. L. Saunders
Notary Public in and for _____
KERN County, CALIFORNIA

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

HUMBLE OIL & REFINING COMPANY

DATE March 9, 1964

By: C. M. Carothers
C.M. Carothers, Agent and Attorney-in-Fact
ADDRESS P. O. Box 1600
Midland, Texas

Desc. N.P.M.
Acreage N.P.M.
Int. N.P.M.
Form N
Acctg. X
Prod. New
Trade N.P.M.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. M. CAROTHERS known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said HUMBLE OIL & REFINING COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by C. M. CAROTHERS of HUMBLE OIL & REFINING COMPANY a DELAWARE corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of March, A.D. 19 64.

My Commission Expires:

My Commission Expires June 1, 1965

MARY SUE SLOAN

Mary Sue Sloan

Notary Public in and for Midland County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE ... 1984

ADDRESS _____

DATE _____

ADDRESS _____

ATTEST:

_____

by _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)
)
COUNTY OF Kern)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Frank Jeppi, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Frank Jeppi.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January, A.D. 1961.

My Commission Expires:

My Commission Expires Feb. 21, 1964.

M. T. Caldwell
Notary Public in and for
Kern County, California

M. T. CALDWELL
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
KERN COUNTY

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 31, 1964

Esther Tolocker Johnston "Fame Sale"

ADDRESS 7795 Willow Ave.

Riverside, California

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____ _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF California)
)
COUNTY OF Riverside)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Esther Flocker Johnston, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Esther Flocker Johnston.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31st day of January, A.D. 1964.

My Commission Expires:
My Commission Expires July 30, 1967

A M Woodruff
Notary Public in and for _____
_____County, _____

A. M. WOODRUFF
NOTARY PUBLIC-CALIFORNIA
PRINCIPAL OFFICE IN
RIVERSIDE COUNTY

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE April 7, 1964

Rose Klemm, Midow

ADDRESS 4504 Edgemont Dr.
Austin, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Rose Kleeman, a widow, , known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that She executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by said Rose Kleeman. .

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of April, , A.D. 1964.

My Commission Expires:

June 1, 1965

David J. Pickle
Notary Public in and for _____
Travis County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 3, 1964

Mrs. Emma Anne H. Kunkle (Widow)

ADDRESS 1525 Bigelow Apts.
Pittsburgh, Pennsylvania
15219

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF Pennsylvania)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Emma Anne W. Kunkle ~~and~~ _____, ~~his wife~~, ~~both known~~ to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of Feb., A.D. 1964.

My Commission Expires:

Sept 30-1964

MAYETTE R. HALL, NOTARY PUBLIC
PITTSBURGH, ALLEGHENY COUNTY
MY COMMISSION EXPIRES SEPTEMBER 30, 1964

Mayette R. Hall
Notary Public in and for Pa &
Allegheny County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Feb. 25, 1964

Mrs. Marie T. Wyte

ADDRESS 100 Box 517

Los Altos, California 94022

9-11

w, widow

n.w.

D.C.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____

President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF California
COUNTY OF Santa Clara

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Mrs. Maree L. Kepke, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Mrs Maree L. Kepke. idow

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 25th day of February, A.D. 1960.

My Commission Expires:
March 8, 1967

Notary Public in and for Santa Clara County, California

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

9-11

DATE January 30, 1964

Mary Evelyn Davidson Leidinger, widow

ADDRESS 5705 Sherrier Place N.W.
Washington 20016, D.C.

ATTEST:

_____

By_____
President

ADDRESS_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

~~STATE OF~~ Washington D.C.)
)
~~COUNTY OF~~ _____)

BEFORE ME, the undersigned, a ~~Notary~~ Public in and for said County and State, on this day personally appeared Mary Davidson Leidinger, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Mary Evelyn Davidson Leidinger.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of January, A.D. 19 64.

My Commission Expires:

June 30, 1968

Edward L. Cobb
Notary Public in and for Washington D.C.
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 24, 1964

[signature]

ADDRESS Blackstone Hotel
Ft Worth, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF [illegible])
COUNTY OF [illegible])

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared [illegible], known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by [illegible].

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 26th day of January, A.D. 19 64

My Commission Expires:

June 1, 1965

[illegible]
Notary Public in and for
Tarrant County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

ADDRESS _____

_____

DATE _____

Lewes Oil & Gas Co.
ADDRESS P.O Box 36
Lewes. Delaware

ATTEST:
Florence H. Russell

By J. Leighton Joseph
President
ADDRESS P.O Box 36
Lewes. Delaware

STATE OF DELAWARE)
)
COUNTY OF SUSSEX)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared J. LEIGHTON JOSEPH known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Lewes Oil & Gas Co, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by 31st of January 1964, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31ST day of JANUARY, A.D. 1964.

My Commission Expires:

RAYMOND W. RINIKER, NOTARY PUBLIC
My Commission Expires August 16, 1965

Raymond W. Riniker
Notary Public in and for SUSSEX
County, DELAWARE.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 18, 1964

Lydia Littman, a feme sole

ADDRESS 1210 Nr. 12th St.
Austin - Texas

DATE _____

Lydia Littman

ADDRESS 1210 Nr. 12th St.
Austin - Texas

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Lydia Littman,a feme sole, , known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Lydia Littman.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 18th day of February, A.D. 1964.

My Commission Expires:

June 1, 1965

David J. Pickle
(David J.Pickle)
Notary Public in and for Travis
--- County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE April 8/64

Queenie Littmanpersonal

ADDRESS 1210 West 12th

Austin-3-Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Travis)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Queenie Littmon, Lessee, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Queenie Littmon.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of April, A.D. 1964

My Commission Expires:
June 1, 1965

David J. Pickle
Notary Public in and for
Travis County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE JAN 27 1964

John M. Lofflan Jr.

ADDRESS 261 Rowan Building

Fort Worth, Texas 76116

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John M. Loffland, Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by John M. Loffland, Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January, A.D. 1964.

My Commission Expires:

6-1-65

Dorothy Heiemann
Notary Public in and for
Tarrant County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

MARATHON OIL COMPANY

DATE February 3, 1964

I. G. Burrell - Division Manager
ADDRESS P. O. Box 3128
Houston, Texas 77001

APPROVED AS TO FORM

DATE _____

ADDRESS _____

ATTEST:

By _____
President
ADDRESS _____

STATE OF TEXAS)
)
COUNTY OF HARRIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared I. G. Burrell known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Marathon Oil Company, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by I. G. Burrell of Marathon Oil Company, an Ohio corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of February, A.D. 1964.

My Commission Expires:

Irma Green
Notary Public in and for Harris County, Texas.

IRMA GREEN
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By Jamil W. Marshall
President

ADDRESS _____

_____

STATE OF New Mexico)
)
COUNTY OF Chaves)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Sam'l H. Marshall known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Marshall & Winston, Inc., a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Sam'l H. Marshall of Marshall & Winston, Inc, a Nevada corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 29th day of January, A.D. 19 64.

My Commission Expires:

March 5, 1965

Maurine M. Landers
Notary Public in and for Chaves County, New Mexico.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE March 26, 196

ATTEST:

Assistant Cashier

The Midland National Bank, Trustee
of Kathleen Walsh et al Trust

By: Vice President and Trust Officer

ADDRESS P. O. Box 2097, Midland, Texas

DATE March 26, 1964

ATTEST:

Assistant Cashier

The Midland National Bank, Trustee
~~of Management Trust created by~~ W. T. Walsh

By: Vice President and Trust Officer

ADDRESS P. O. Box 2097, Midland, Texas

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS

COUNTY OF Midland

BEFORE ME, the undersigned authority, on this day personally appeared [illegible], known to me to be the person whose name is subscribed to the foregoing instrument, as [illegible] of [illegible], Trustee, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the [illegible] day of [illegible] A. D. 195[illegible]

My comm. expires 6-1-65

Notary Public in and for [illegible] County, Texas.

No. 254 Pound Printing & Stationery Co., Houston, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

MONSANTO CHEMICAL COMPANY

DATE_____

_____
Attorney-in-Fact

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

MONSANTO CHEMICAL COMPANY

ATTEST: _____
Assistant Secretary

By H. M. Bible
Vice President

ADDRESS 800 N. Lindbergh Blvd.

St. Louis, Missouri 63166

STATE OF MISSOURI }
COUNTY OF ST. LOUIS } ss.

BE IT REMEMBERED, Mary F. Hammer, a Notary Public in and for said County and State, on this day personally appeared R. N. Bible known to me to be the person whose name is subscribed to the foregoing instrument, and known to me to be to be the Vice President of Monsanto Chemical Company, a corporation, and acknowledged to me that he executed said instrument for the purposes and consideration therein expressed, and as the act of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 25th day of March, 1954.

Mary F. Hammer
Notary Public

My commission expires: FEB 7 1965

STATE OF MISSOURI }
COUNTY OF ST. LOUIS } ss.

The foregoing instrument was acknowledged before me this 25th day of March, 1954, by R. N. Bible, Vice President of Monsanto Chemical Company, a Delaware corporation, on behalf of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal in the County of St. Louis, State of Missouri, this 25th day of March, 1954.

Mary F. Hammer
Notary Public

My commission expires: FEB 7 1965

9

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 3 1964

Agnes Mae F. Murray

ADDRESS PITTSBURGH NATIONAL BANK
REAL ESTATE DEPARTMENT
P. O. BOX 747, PITTSBURGH, PA. 15230

9-11

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF PENNSYLVANIA)
)
COUNTY OF ALLEGHENY)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Agnes Graff Murray, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Agnes Graff Murray.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of February, A.D. 19 64.

My Commission Expires:

Notary Public, Pittsburgh, Allegheny Co.
My Commission Expires February 8, 1965

Helen M. Watson
Notary Public in and for _____
Allegheny County, Pennsylvania

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

6-7-8

_____

ADDRESS _____

_____

NEW YORK LIFE INSURANCE COMPANY

ATTEST:

Robert P. Stieglitz
Assistant Secretary

By Ronald S. Haeckel
Second Vice President

ADDRESS 51 Madison Ave.
New York, N.Y. 10010

STATE OF NEW YORK)
)
COUNTY OF NEW YORK)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Gerald B. Haeckel known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said NEW YORK LIFE INSURANCE COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by Gerald B. Haeckel of New York Life Ins. Co., a New York corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th day of January, A.D. 19 64.

My Commission Expires:

_____

Frances Pfaff
Notary Public in and for _____ County, _____.

FRANCES PFAFF
Notary Public, State of New York
No. 41-8355850
Qualified in Queens County
Term Expires March 30, 1964

8

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

6-7-8

DATE April 8 1964

Wayne Newman (Widow)
ADDRESS 531-44th St
Union City, New Jersey

DATE _____

_____
ADDRESS _____

_____

ATTEST:

By _____
President

_____
ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF New Jersey)
)
COUNTY OF Bergen)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Mayme Newman, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Mayme Newman.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of April, A.D. 1964.

My Commission Expires:

NOTARY PUBLIC OF NEW JERSEY
My Commission Expires August 11, 1964

Dorothy J. Hughes
Notary Public in and for Hudson County, NJ

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 29, 1964

Gulf

ADDRESS Box 1713

Midland, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)

COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)

COUNTY OF Midland)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared J. H. DeLaney, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by J. H. DeLaney.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24 day of June, A.D. 1965.

My Commission Expires:

6-1-65

J. H. Seymour, Jr.
Notary Public in and for
Midland County, Texas
J H Seymour, Jr.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan 29, 1964

9-11

James D. Noland

ADDRESS Box 1713
Midland, Texas

DATE Jan 29, 1964

James D Noland

ADDRESS Box 1713
Midland, Texas

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
COUNTY OF Midland)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James B Bland known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by James B Bland.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 29 day of June, A.D. 19 64

My Commission Expires:

6-1-65

Notary Public in and for
Midland County, Texas
J. A Seymour, Jr.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 5, 1964

Charles W. Parcell

ADDRESS 1206 Galisteo Parkway

Santa Fe, New Mexico-87502

1-2

DATE February 5, 1964

Gertrude F. Parcell (wife)

ADDRESS 1206 Galisteo Parkway

Santa Fe, New Mexico-87502

ATTEST:

By _____
President

ADDRESS _____

STATE OF [illegible])
)
COUNTY OF Santa Fe)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Charlie A. Parcell and Gertrude L. Parcell, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Gertrude L. Parcell, wife of the said Charlie A. Parcell, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Gertrude L. Parcell, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Charlie A. Parcell and Gertrude L. Parcell, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of February, A.D. 1964.

My Commission Expires:

5-15-65

Notary Public in and for Santa Fe County, N.M.

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

Notary Public in and for _____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Feb. 24, 1964

ADDRESS S. L. PARHAM
P. O. BOX 1492
MIDLAND, TEXAS

K-10

DATE _____

ADDRESS _____

ATTEST:

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Midland)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared S. L. Parham, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by S. L. Parham.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24th day of Bebruary, A.D. 19 64.

My Commission Expires:

June 1, 1965

Geraldyn Sweeney
Notary Public
Notary Public in and for Midland
County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE Jan. 27, 1964

(Mr.) Thomas R. Ridley

ADDRESS 115 McGoodwin Avenue

Princeton, Ky.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Kentucky)
COUNTY OF Caldwell)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Gracie M. Pedley, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Gracie M. Pedley.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28 day of January, A.D. 1964.

My Commission Expires:
Notary Public State of Kentucky at Large
My Commission Expires

Elizabeth B. Logan
Notary Public in and for _____
_____County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 27 Jan 64

Timothy A. Fedley, Jr.
ADDRESS 4025 E. 22nd Ave.
Denver, Colo. 80207

DATE _____

_____
ADDRESS _____

_____

ATTEST:

By _____
President

_____
ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Colorado)
City and
COUNTY OF Denver)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Timothy A. Pedley, Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Timothy A. Pedley, Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January, A.D. 1964.

My Commission Expires:

Dec. 18, 1966

Notary Public in and for City and County of Denver ~~County~~, Colorado

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1/28/64

Neville G. Penrose, Trustee of the
Patricia Penrose Trust

ADDRESS 1813 Fair Building
Fort Worth 2, Texas

DATE _____

ADDRESS _____

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for
_____ County, _____

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Neville B Penrose, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Neville B Penrose.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 29th day of January, A.D. 1964

My Commission Expires:

June 1, 1965

Elaine Adams
Notary Public in and for
Tarrant County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

6-7-8-9-11

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

PHILLIPS PETROLEUM COMPANY

ATTEST:

_____

Assistant Secretary

By _____
Vice President

ADDRESS Bartlesville, Oklahoma

_____

STATE OF OKLAHOMA)
)
COUNTY OF WASHINGTON)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared H. D. Brookby known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said PHILLIPS PETROLEUM COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by H. D. Brookby of PHILLIPS PETROLEUM COMPANY, a Delaware corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7th day of April, A.D. 1964.

My Commission Expires:

June 5, 1965

Clarence Armstrong
Notary Public in and for Washington County, Oklahoma.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE JAN 28 1964

Pittsburgh National Bank, Trustee UTW of Samuel W. Jull

By T. W. Wassick
Ass't. Vice-President

ADDRESS

PITTSBURGH NATIONAL BANK
REAL ESTATE DEPARTMENT
P. O. BOX 747, PITTSBURGH, PA. 15230

9-11

DATE

ADDRESS

ATTEST:

By
President

ADDRESS

STATE OF Pennsylvania)
)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared W.W. Wamsley Jr known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Pittsburgh National Bank, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by W.W. Wamsley IV Asst Vice President of [illegible], a corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of January, A.D. 1964.

My Commission Expires:

[illegible], Notary Public
[illegible]
MY COMMISSION EXPIRES
FEBRUARY 15, 1965

Harry A. Miller
Notary Public in and for Allegheny County, Pennsylvania

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4/4/64

John L. Pratt

ADDRESS P. O. Box 707
Wilmington, Delaware

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____

STATE OF DELAWARE)
)
COUNTY OF NEW CASTLE)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John L. Pratt, III, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by John L. Pratt, III.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 4th day of April, A.D. 19 64.

My Commission Expires:

June, 1964

J. Walker
Notary Public in and for New Castle County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

Attest: J. B. Houghton
Assistant Cashier

DATE 3-5-64

REPUBLIC NATIONAL BANK OF DALLAS

By: [signature]
Asst. Vice President & Trust Officer

TRUSTEE U/W OF FRANK A. ANDREWS #631

ADDRESS c/o Trust Department
P. O. Box 241
Dallas, Texas 75221

V-10

DATE _____

ADDRESS _____

ATTEST:

By _____ President

ADDRESS _____

STATE OF Texas)
)
COUNTY OF Dallas)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared George E. Wilkin, Jr. ASSISTANT VICE PRESIDENT AND TRUST OFFICER known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____ of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by George E. Wilkin, Jr. ASSISTANT VICE PRESIDENT AND TRUST OFFICER of REPUBLIC NATIONAL BANK of DALLAS, a National Banking corporation, on behalf of said corporation.

REPUBLIC NATIONAL BANK of DALLAS

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5th day of March, A.D. 1964.

Chloe Ann Fridrick
Notary Public in and for Dallas County, Texas.

My Commission Expires:

June 1, 1965

CHLOE ANN FRIDRICK, Notary Public,
Dallas County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

O.T. Ricketts

ADDRESS 7062 Yarmouth Avenue
Reseda, California

DATE _____

Marie O. Ricketts Deed

ADDRESS 7062 Yarmouth Avenue
Reseda, California

ATTEST:

_____

By _____ President

ADDRESS _____

STATE OF Texas)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared D. H. Ricketts and Marie Allen Denby Ricketts, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Marie Allen Denby Ricketts, wife of the said D. H. Ricketts, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Marie Allen Denby Ricketts, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by D. H. Ricketts and Marie Allen Denby Ricketts, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 17th day of February, A.D. 19 64.

My Commission Expires:

June 1965

W. E. Linnett
Notary Public in and for Tarrant County, Texas

STATE OF _____)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2-25-64

Harold Jay Lovett
ADDRESS 1471 Arroyo View Dr.
Pasadena, Calif. 9-11

DATE 2-25-64

Kathleen Lovett Campbell Lovett
ADDRESS same as above

By _____ President

ATTEST:

ADDRESS

STATE OF California)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared [illegible] and Karoline Kay Kleinpell Roseff whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Karoline Kay Kleinpell Roseff, wife of the said Harold Jay Roseff her husband, and having the same fully explained to her, she, the said Karoline Kay Kleinpell Roseff, having been examined by me privily and apart from her said husband, and having the same fully explained to her, she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Harold Jay Roseff and Karoline Kay Kleinpell Roseff his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of February, A.D. 1964.

Notary Public in and for Los Angeles County, California

My Commission Expires:

Sept. 6, 1967

STATE OF _____)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19___.

Notary Public in and for _____ County, _____

My Commission Expires:

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

5-6-7-8-10

DATE _____

ADDRESS _____

_____

DATE 4/21/64

SCRATCH RANCH ROYALTY COMPANY

ADDRESS J. M. Cuthbertson- Sec.
3805 B ailey Lane
Austin, Texas

By _____ President

ADDRESS RFD 5,
AUSTIN TEXAS

ATTEST:
Myrtle Cuthbertson
Sec

STATE OF _____)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

_____
Notary Public in and for _____ County, _____

My Commission Expires:

_____

STATE OF TEXAS)
COUNTY OF TRAVIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. A. Freund, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by C. A. Freund.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 21 day of April, A.D. 19 64

Mrs. Jack H. Rogers
Notary Public in and for Travis County, Texas

My Commission Expires:

June 1, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE June 8, 1964

Charlotte M. Sears (widow)
Admx of Estate of Joseph H. Sears
ADDRESS Box 45
East Dennis, Mass.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____.
_____County, _____

STATE OF Massachusetts)
)
COUNTY OF Barnstable)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Charlotte M. Sears, Admx, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Charlotte M. Sears, Admx.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of June, A.D. 1964.

My Commission Expires:

December 1, 1965

Notary Public in and for Barnstable
County, Massachusetts

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 31, 1964

Richard N. Sears

ADDRESS 2314 West 95th Street,
Leawood, Kansas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Missouri)
)
COUNTY OF Jackson)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Richard H. Shaw, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and the foregoing instrument was acknowledged before me this day by Richard H. Shaw.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31st day of January, A.D. 1967.

My Commission Expires:

My Commission Expires Nov. 3, 1967

Notary Public in and for
Jackson County, Missouri

9

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 27, 1964

William A. Dufford Jr.

ADDRESS 747 Union Trust Bldg. 9-11
Pittsburgh (15219), Pa.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Pennsylvania)
)
COUNTY OF Allegheny)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared William A. Seifert Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by William A. Seifert Jr.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of January, A.D. 1964.

My Commission Expires:

NANCY R. LEWIS, Notary Public
Pittsburgh, Allegheny Co., Pa.
My Commission Expires Jan. 28, 1964

Nancy R. Lewis
Notary Public in and for
Allegheny County, Pennsylvania

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2/27/64

Day Kleinfeld Thomson

ADDRESS 2235 Broadway
#22 San Francisco 15 Calif

DATE 2/27/64

Edward C Kleinfeld

ADDRESS 2235 Broadway #22
San Francisco 15, Calif

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF California)
)
COUNTY OF Kern)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared DONALD C. SHANNON and Fay Kleinpell Shannon, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said FAY KLEINPELL SHANNON, wife of the said DONALD C. SHANNON, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said FAY KLEINPELL SHANNON, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Donald C. Shannon and Fay Kleinpell Shannon, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 27th day of February, A.D. 1964.

My Commission Expires:

July 13, 1965

Belva Jared
Notary Public in and for Kern County, California

BELVA JARED
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
KERN COUNTY

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

Elizabeth W. Hunter (Widow)
ADDRESS 1301 N. Harrison St.
Wilmington Del. 19806

DATE _____

_____
ADDRESS _____

_____

ATTEST:

_____

By _____
President
ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware)
)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Elizabeth W Shuster, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Elizabeth W Shuster.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 20th day of March, A.D. 1964.

My Commission Expires:

Nov 13, 1964

Mary Ann Wright
Notary Public in and for New Castle County, Delaware

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware)
)
COUNTY OF New Castle)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Elizabeth W Shuster, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Elizabeth W Shuster.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 20th day of March, A.D. 1964.

My Commission Expires:

Nov 13 1964

Mary Ann Wright
Notary Public in and for New Castle County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE May 25, 1964

James D. Shuster

ADDRESS 96 Harrison Ave.
Montclair, N.J.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF New Jersey)
)
COUNTY OF Essex)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared James D. Shuster, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by James D. Shuster.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 25 day of May, A.D. 1967.

My Commission Expires:
NOTARY PUBLIC OF NEW JERSEY
My commission expires JAN. 16, 1967

Katherine T. Moody
Notary Public in and for
Essex County, N.J.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE April 8, 1964

Gloria Silberberg, widow

ADDRESS 1618 Waterston Ave.
Austin, Texas.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Travis)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Clara Silberberg, a widow, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that She executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Mrs. Clara Silberberg.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of April, A.D. 1904.

My Commission Expires:

June 1, 1905

David J. Pickle
Notary Public in and for Travis County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE April 8, 1964

Clara Silberberg, Ind. Exec.
of Estate of Noelle Beel

ADDRESS 1618 Watertone Ave.
Austin, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Clara Silberberg, a widow, , known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by said Clara Silberberg, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 8th day of April, A.D. 19 64.

My Commission Expires:

June 1, 1965

David J. Pickle
Notary Public in and for _____
Travis County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4/7/64

Joel L. Agron

ADDRESS 1413 Preston

Austin, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

_____

By _____
President

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Travis)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Joel L. Simon, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Joel L. Simon.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7th day of April, A.D. 1964.

My Commission Expires:

June 1, 1965

Mrs. Dorothy Hibler
Notary Public in and for
Travis County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

Sinclair represents that it has heretofore secured consent to its execution of this agreement from the Owners of Production Payment under the terms and provisions of the Indenture of Conveyance of Leasehold, Mineral and Other Interests and Retention of Production Payment dated November 1, 1956 between Southern Production Company, Inc. and Sinclair Oil & Gas Company, as amended, modified and supplemented, and of the Holder of the Notes and of the Trustee under the provisions of a Mortgage dated November 1, 1956 between Mon-Dak Oil Corporation, et al. and John A. Bell, Trustee, as amended, modified and supplemented.

SINCLAIR OIL & GAS COMPANY

ATTEST:

Assistant Secretary

By _____
Vice-President

ADDRESS P. O. Box 1470

Midland, Texas 79701

DATE MAY 21 1964

STATE OF TEXAS)

COUNTY OF MIDLAND)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R. M. KOBDISH known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said SINCLAIR OIL & GAS COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by R.M. KOBDISH, Vice-Pres. of SINCLAIR OIL & GAS COMPANY, a Maine corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 21st day of [illegible], A.D. 1964.

My Commission Expires:

June 1, 1965

ELLEN MILLER

Ellen Miller

Notary Public in and for Midland County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ATTEST:

Robert L. Trimble
Asst. Secretary

SOUTHLAND ROYALTY COMPANY

By J. Hurley Harvey 9-11
Vice President

ADDRESS 1603 First National Building

Fort Worth, Texas 76102

STATE OF TEXAS)
)
COUNTY OF TARRANT)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John C. Harvey known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Southland Royalty Company, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by John C. Harvey, of Southland Royalty Company, a Delaware corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of January, A.D. 19 64.

My Commission Expires:

June 1, 1965

Gan Horton

Notary Public in and for Tarant County, Texas.

ANN HORTON, Notary Public
Tarant County, Texas
My Commission Expires June 1, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 1/28/64

Albert Stevenson
ADDRESS 730 Santiago Avenue
Long Beach, California

DATE January 28, 1964

Artie Stevenson
Artie Stevenson
ADDRESS 730 Santiago Avenue
Long Beach, California

ATTEST:

By _____
President
ADDRESS _____

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Albert Stevenson and Artie Stevenson, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Artie Stevenson, wife of the said Albert Stevenson, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Artie Stevenson, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Albert Stevenson and Artie Stevenson, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of January, A.D. 19 64.

My Commission Expires:

February 2, 1965

Earlyne M. Dillon Earlyne M. Dillon
Notary Public in and for
Los Angeles County, California

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4-15-64

Ralph Stewart

ADDRESS Box 1254
San Angelo, Texas

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Tom Green)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Ralph Stewart, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Ralph Stewart.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 15th day of April, A.D. 1965.

My Commission Expires:

6-1-65

D. L. Kennedy
Notary Public in and for
Tom Green County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2/5/64

June Allen Stewart

ADDRESS 4108 Woodridge Cr.
Hurst, Tex

DATE 2/5/64

ADDRESS 4108 Woodridge Cr.
Hurst, Tex

ATTEST:

By _____
President

ADDRESS _____

STATE OF Texas)
)
COUNTY OF Tarrant)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R. W. Stewart and June Allen Stewart, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said June Allen Stewart, wife of the said R W Stewart, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said June Allen Stewart, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by R W Stewart and June Allen Stewart, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 15th day of February, A.D. 1964.

My Commission Expires:

6-1-65

A Wachu
Notary Public in and for
Tarrant County, Texas

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

Joe Stephenson

ADDRESS 165 Franklin Rd.
Seminole, Tex.

DATE_____

_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Illinois)
)
COUNTY OF Cook)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Joe Stydahar, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Joe Stydahar.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24th day of February, A.D. 1964.

My Commission Expires:
November 1964

Seymour Graham
Notary Public in and for Cook County, Illinois

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

SUNRISE ROYALTY COMPANY

ATTEST:

Edwin M Ellwett
Secretary

By C. C. Ellwett
President

ADDRESS P. O. Box 1355

Roswell, New Mexico

STATE OF New Mexico)
)
COUNTY OF Chaves)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared L. E. Elliott known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Sunshine Royalty Company, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by L. E. Elliott of Sunshine Royalty Company, a New Mexico corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 29th day of January, A.D. 19 64.

My Commission Expires:

June 1, 1966

Paul S. Saunders
Notary Public in and for Chaves County, New Mexico.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____

_____

ADDRESS _____

_____

DATE _____

_____

ADDRESS _____

_____

ATTEST:

Marvin Hall
Secy-Treas.

By J. H. Nail
Vice-President

ADDRESS TEXSYLVANIA MINERAL CORP.
514 FIRST SAVINGS BLDG.
SAN ANGELO, TEXAS

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED _____

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE _____ _____

ADDRESS _____

_____

DATE _____ _____

ADDRESS _____

_____

ATTEST:

_____

By J. H. Nail
Vice-President

ADDRESS _____

_____

STATE OF Texas)

COUNTY OF Taylor)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared J. H. Nail known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Corporation, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by J. H. Nail of ~~Texas Pacific Coal and Oil Company~~ Texas Pacific Coal and Oil Company corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31 day of January, A.D. 1964.

My Commission Expires:

June 1 1965

Vivian Friar VIVIAN FRIAR

Notary Public in and for Taylor County, Texas.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 2/3/64

Calyx L. Tunnell

ADDRESS 719 South Bedford St.
Georgetown, Del.

DATE _____

Robert W. Tunnell

ADDRESS _____

ATTEST:

By _____
President

ADDRESS _____

STATE OF Delaware)
)
COUNTY OF Sussex)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Robert W. Pennell and Evelyne K. Pennell, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Evelyne K. Pennell, wife of the said Robert W. Pennell, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Evelyne K. Pennell acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Robert W. Pennell and Evelyne K. Pennell, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 10th day of Feb., A.D. 1964.

My Commission Expires:

June 6, 1965

Howard A. Hudson
Notary Public in and for Sussex
County, Delaware

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE February 24, 1964

Robert W. Murrell

ADDRESS Tunnell & Raysor
Georgetown, Delaware

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Delaware)
)
COUNTY OF Sussex)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Robert W Purnell, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Robert W Purnell.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24th day of February, A.D. 1964.

My Commission Expires:

June 6. 1965

Howard W Hudson
Notary Public in and for Sussex
_____County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4/4/64

David D. Wakefield

ADDRESS P. O. Box 707

Wilmington, Delaware

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF DELAWARE)
)
COUNTY OF NEW CASTLE)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared David D. Wakefield, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by David D. Wakefield.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 4th day of April, A.D. 19 64.

My Commission Expires:

June, 1964

J. Lewis
Notary Public in and for New Castle
County, Delaware

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 4/4/64

Frances Irwin Wakefield

ADDRESS P. O. Box 707

Wilmington, Delaware

DATE 4/4/64

Harold K. Wakefield (Trustee)

ADDRESS Same

ATTEST:

By _____
President

ADDRESS _____

STATE OF DELAWARE)
)
COUNTY OF NEW CASTLE)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Harold K. Wakefield and Frances G. Wakefield, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Frances G. Wakefield, wife of the said Harold K. Wakefield, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Frances G. Wakefield acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Harold K. Wakefield and Frances G. Wakefield, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 4th day of April, A.D. 1964.

My Commission Expires:

June, 1964

Notary Public in and for New Castle County, Delaware

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

Notary Public in and for _____ County, _____

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE 7/18/1964

R Runnions

ADDRESS Box 1737

Midland Texa

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF Texas)
)
COUNTY OF Midland)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared R E Williams, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 18 day of February, A.D. 19 64.

My Commission Expires:

_____

Jenny King
Notary Public in and for
Midland County, Texas

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE January 30th. 1964

Edward L. Wilson

ADDRESS P.O. Box 611,
Dover, Delaware.

DATE January 30th. 1964

Hilda L. Wilson

ADDRESS

ATTEST:

By President

ADDRESS

STATE OF Delaware)
)
COUNTY OF Kent)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Edward S. Wilson and Hilda G. Wilson, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Hilda G. Wilson, wife of the said Edward S. Wilson, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Hilda G. Wilson acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by Edward S. Wilson and Hilda G. Wilson, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th. day of January, A.D. 19 64.

Notary Public in and for Kent County, Delaware

My Commission Expires:
June 3, 1965

STATE OF Delaware)
)
COUNTY OF Kent)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Edward S. Wilson, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by Edward S. Wilson.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 30th. day of January, A.D. 1964.

Notary Public in and for Kent County, Delaware

My Commission Expires:
June 3, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE FEB 3, 1964

Donald Winston - Trustee

ADDRESS DONALD WINSTON, Trustee
~~under Trust Agreement~~
dated Dec. 31, 1941
1511 FOSHAY TOWER
MINNEAPOLIS 2, MINN.

DATE _____

ADDRESS _____

ATTEST:

By _____ President

ADDRESS _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____ County, _____

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared DONALD WINSTON, Trustee, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by DONALD WINSTON, Trustee under Trust Agreement dated December 31, 1941.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3-26-84 day of FEBRUARY, A.D. 1984.

My Commission Expires:

_____

Robert H. Ritchie
Notary Public in and for _____
County

ROBERT H. RITCHIE - NOTARY PUBLIC
In and for the County of Los Angeles, and State of California
My Commission Expires October 26, 1985

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE FEB. 3, 1964

Donald Winston, Trustee

ADDRESS DONALD WINSTON, Trustee
~~under the Will of FRANCISCA S.~~
WINSTON, deceased
~~1511 FOSHAY TOWER~~
MINNEAPOLIS 2, MINN.

DATE _____

_____

ADDRESS _____

_____

ATTEST:

By _____
President

_____

ADDRESS _____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF CALIFORNIA)
)
COUNTY OF Los ANGELES)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared DONALD WINSTON, Trustee under the will of FRANK COATS, WINSTON, deceased, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by DONALD WINSTON, Trustee under the will of FRANK COATS, WINSTON, deceased.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 3rd day of FEBRUARY, A.D. 1964.

My Commission Expires:

_____

Robert H. Ritchie
Notary Public in and for _____
_____County, _____

ROBERT H. RITCHIE - NOTARY PUBLIC
In and for the County of Los Angeles, and State of California
My Commission Expires October 26, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE May 5, 1964

E D Wyllie

ADDRESS 3508 Las Palmas
Glendale 8 Calif.

DATE May 5 1964

Kathleen E Wyllie

ADDRESS 3508 Las Palmas
Glendale 8 California

ATTEST:

_____

By _____
President

ADDRESS _____

STATE OF California)
)
COUNTY OF Los Angeles)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared E D Wylie and Kathleen L Wylie, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said Kathleen L Wylie, wife of the said E D Wylie, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Kathleen L Wylie, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by E D Wylie and Kathleen L Wylie, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5 day of May, A.D. 1964.

My Commission Expires:

RENE LA TREILL, Notary Public
State of California - Principal Office - Los Angeles County
My Commission Expires Dec. 23, 1967
914 No. Glendale Ave., Glendale 6, Calif.

Rene La Treill
Notary Public in and for Los Angeles County, California

STATE OF _____)
)
COUNTY OF _____)

OFFICIAL SEAL
RENE LA TREILL
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 3049 & 3050

UNIT AGREEMENT

LITTMAN SAN ANDRES UNIT

LEA COUNTY, NEW MEXICO

ANDREWS COUNTY, TEXAS

INDEX

UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO AND ANDREWS COUNTY, TEXAS

	Page
Opening	1
Whereas's	1
Article 1 - Enabling Act and Regulations	2
Article 2 - Definitions	2
Article 3 - Exhibits	4
3.1 Exhibits Attached	4
3.2 Reference to Exhibits	5
3.3 Exhibits Considered Correct	5
3.4 Revision of Exhibits	5
3.5 Recording of Revised Exhibits	5
Article 4 - Unit Area and Unitized Substances	5
Article 5 - Enlargement of Unit Area	5
5.1 Enlargement	5
5.2 The Effective Date of Enlargement	6
Article 6 - Unit Operator	6
Article 7 - Resignation or Removal of Unit Operator	6
Article 8 - Successor Unit Operator	7
Article 9 - Accounting Provisions and Unit Operating Agreement	8
Article 10- Rights and Obligations of Unit Operator	8
Article 11- Plan of Operations	8
Article 12- Tract Participation	9
Article 13- Tracts Qualified	10
13.1 Qualification of Tracts	10
13.2 Revision of Exhibit "C"	10

INDEX

	Page
Article 14 - Allocation of Unitized Substances	11
14.1 Allocation to Tracts	11
14.2 Distribution Within Tracts	11
14.3 Ownership Prior to Effective Date or Dates	12
14.4 Responsibility to Royalty Owner	12
Article 15 - Disposition of Unitized Substances	12
Article 16 - Royalty Settlement	13
Article 17 - Rental Settlement	13
Article 18 - Conservation	14
Article 19 - Drainage	14
Article 20 - Leases and Contracts Conformed and Extended	14
Article 21 - Covenants Run With the Land	16
Article 22 - Effective Date and Term	16
22.1 When Agreement Effective	16
22.2 Expiration Before It Becomes Effective	17
22.3 Term	17
22.4 Effect of Termination	17
22.5 Certificate of Termination	18
Article 23 - Production As Of the Effective Date	18
Article 24 - Rate of Prospecting, Development and Production	18
Article 25 - Appearances	19
Article 26 - Notices	19
Article 27 - No Waiver of Certain Rights	20
Article 28 - Non-Liability - Force Majeure	20
Article 29 - Non-Discrimination	20
Article 30 - Titles	20

	Page
30.1 Exclusion of Qualified Tract	20
30.2 Revision of Exhibits	21
30.3 Retention of Tract	21
30.4 Production Where Title Is in Dispute	21
Article 31 - Non-Joinder and Subsequent Joinder	21
31.1 Non-Qualified and Non-Committed Tracts	21
31.2 Prior to Six (6) Months After Effective Date	22
31.3 Subsequent to Six (6) Months After Effective Date	22
31.4 Effective Date of Joinder	22
31.5 Acquisition of Uncommitted Interests	22
Article 32 - Counterparts and Ratifications	22
32.1 Counterparts	22
32.2 Ratification	23
32.3 Joinder by Working Interest Owner in Unit Operating Agreement	23
Article 33 - Unleased Interests	23
Article 34 - Injection Rights; Easements; Water	23
Article 35 - Oil and Gas Interest Not Transferred	23
Article 36 - Reports	24
Article 37 - Taxes	24
Article 38 - Internal Revenue Provisions	24
Article 39 - Variable Interests	24
Article 40 - Conflict of Supervision	25
Article 41 - Laws and Regulations	25
41.1 Effect on Agreement	25

INDEX

	Page
Article 42 - Relationship of Parties	25
42.1 No Partnership Created	25
42.2 No Sharing of Market	26
42.3 Royalty Owners Free of Costs	26

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION OF THE

LITTMAN SAN ANDRES UNIT

LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO AND ANDREWS COUNTY, TEXAS

No._____

THIS AGREEMENT, entered into as of the 9th day of September, 1963, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of Working, Royalty or other oil or gas interests in the Unit Area, as hereinafter defined, which has been reasonably developed for production of oil and/or gas from the San Andres formation; and

WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. Sections 181 et seq., authorizes Federal lessees and their representatives to unite with each other or jointly or separately with others, in collectively adopting and operating a cooperative or unit plan of development or operation or any oil or gas pool, field or like area or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest, and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Section 1, Chap. 88, Laws of 1943 as amended by Section 1, Chapter 176, Laws of 1961) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and is authorized by an Act of the Legislature (Section 3, Chap. 88, Laws of 1943, as amended by Section 1, Chap. 162, Laws of 1951) to amend with the approval of the lessee, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such unitized development and operation of State lands; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941 and Chap. 168, Laws of 1949) to approve this agreement, and the conservation provisions hereof; and

WHEREAS, in conformity with the provisions of Article 6008b of Title 102, Vernon's Annotated Civil Statutes of the State of Texas, it is necessary to establish the Littman San Andres Unit in order to effect secondary recovery operations for oil and gas from the San Andres formation, which operations are designed to conserve oil and gas, to prevent waste and to increase the ultimate recovery of oil therefrom while protecting the rights of all owners of interests in the Littman San Andres Field; and

WHEREAS, the parties hereto hold sufficient interests in the Littman San Andres Unit covering the land hereinafter described to give reasonably effective control of operations therein;

WHEREAS, it is the purpose of the parties hereto, to enable institution and consummation of secondary recovery operations, to conserve natural resources, prevent waste and secure the other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined Unit Area, and agree severally among themselves as follows:

ARTICLE 1

ENABLING ACT AND REGULATIONS

1.1 The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent, and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the States, in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

ARTICLE 2

DEFINITIONS

As used in this agreement:

2.1 "Commission" means the Oil Conservation Commission of the State of New Mexico.

2.2 "Commissioner" means the Commissioner of Public Lands of the State of New Mexico.

2.3 "Department" means the Department of the Interior of the United States of America.

2.4 "Director" means the Director of the United States Geological Survey.

2.5 "Effective Date" means the time when this agreement becomes effective, as hereinafter provided.

2.6 "Paying Quantities" means production of Unitized Substances in quantities sufficient to pay the costs of producing same from wells within the Unit Area with a reasonable profit.

2.7 "Railroad Commission" means the Railroad Commission of Texas.

2.8 "Royalty Interest" or "Royalty" means an interest in a tract, other than Working Interest, which entitles the owner thereof to share in the Unitized Substances produced from such tract, or in the proceeds or value thereof.

2.9 "Royalty Owner" means the owner of a Royalty Interest.

2.10 "Secretary" means the Secretary of the Interior of the United States of America or any person duly authorized to exercise the powers vested in that office.

2.11 "Supervisor" means the Oil and Gas Supervisor of the United States Geological Survey having jurisdiction for the region in which the Unitized Land is situated.

2.12 "Tract" means a parcel of land described and given a Tract number in Exhibit "B".

2.13 "Tract Participation" means that percentage of Unitized Substances produced from the Unitized Formation which is allocated to a Tract under this agreement.

2.14 "Unit Area" means the land described by Tracts in Exhibit "B" and shown in outline on Exhibit "A", containing as shown 1941.38 acres, more or less. The portion thereof situated in New Mexico and Texas will sometimes be referred to herein as the "New Mexico Subdivision of Unit Area" and the "Texas Subdivision of Unit Area".

2.15 "Unit Manager" means the person or corporation appointed by Working Interest Owners to perform the duties of the Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Articles 7 and 8 hereof.

2.16 "Unit Operating Agreement" means the agreement entitled "Unit Operating Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas" bearing the same date as this Agreement and entered into by the Working Interest Owners who are parties to this agreement, and includes any amendments thereto.

2.17 "Unit Operator" means, at any time, the person, firm, or corporation then designated and acting as such in accordance with the Unit Operating Agreement.

2.18 "Unitized Formation" means that subsurface portion of the Unit Area which is subject to this Agreement and is commonly known as the San Andres formation of the Guadalupe Series, a part of the Permian system, which is produced from the subsurface depths of 4316 feet to 4354 feet in the Neville G. Penrose, Inc., #1 Lydia Littman well located in the NE/4 SE/4 of Sec. 6, Block A-29, PSL Survey, Andrews County, Texas, plus an additional 150 feet below the latter depth in said well.

2.19 "Unitized Substances" means all oil, gas, gaseous substances, sulfur contained in gas, condensate, distillate, and all associated and constituent liquid or liquefiable hydrocarbons within or produced from the Unitized Formation.

2.20 "Usable Well" means a well which has been drilled within the Unit Area to the depth of the Unitized Formation and has casing in the hole in condition for use either as a producing well or an injection well, and on which well there has been filed with the Commission or with the Railroad Commission, on or before the effective date of this Agreement, a well record and completion report (Form C-105 in New Mexico and Form 2, Texas Railroad Commission) and/or Request for Allowable (Form C-104 in New Mexico and Form 3, Texas Railroad Commission), and which well has produced some oil from the Unitized Formation and has had an allowable granted for it by the Commission or by the Railroad Commission.

2.21 "Voting Interest" means the voting power possessed by a Working Interest Owner as defined in the Unit Operating Agreement.

2.22 "Waterflood Acre-Feet" means the volume of net pay (as determined from sample logs and other available data) of Unitized Formation contained within the Waterflood Acre-Feet limit line shown on the attached Exhibit "A".

2.23 "Working Interest" means an interest in a Tract by virtue of a lease, operating agreement, fee title, or otherwise under which the owner of such interest is vested with the right to explore for, develop and produce such substances and which is chargeable with and obligated to pay or bear in cash or out of production or otherwise all or a portion of the cost of drilling, producing and other operations for the production of Unitized Substances from such Tract, in the absence of unitization. The right delegated to the Unit Operator as such by the Unit Operating Agreement is not to be regarded as a Working Interest.

2.24 " Working Interest Owner" means the owner of a Working Interest.

ARTICLE 3

EXHIBITS

3.1 Exhibits Attached. Attached hereto are the following exhibits which constitute a part of this agreement:

Exhibit "A",which is a map showing in addition to the boundary of the Unit Area the boundaries and identity of Tracts and leases within said Unit Area to the extent known by the Unit Operator.

Exhibit "B", which is a schedule showing to the extent known to the Unit Operator a description of each Tract, the leases thereon, and showing its Tract number and the percentage and kind of ownership.

Exhibit "C", which is a schedule of the Tracts within the Unit Area which are reasonably proved to be productive of Unitized

Substances and for each tract is shown the description, the leases thereon, the Tract number, and Tract Participation.

3.2 Reference to Exhibits. Reference in this agreement to exhibits shall mean the exhibits attached hereto except that from and after the time at which a revision to an exhibit becomes effective reference to such exhibit shall mean the then latest revision thereof.

3.3 Exhibits Considered Correct. For all purposes of this agreement said exhibits shall be considered to be true and correct unless and until they are revised or corrected in accordance with this Agreement.

3.4 Revision of Exhibits. Exhibits "A", "B", and "C" shall be revised by the Unit Operator whenever changes render such revision necessary or to correct any mathematical or other errors which might exist in said exhibits.

3.5 Recording of Revised Exhibits. Whenever an exhibit is revised in accordance with the terms and provisions hereof, the Unit Operator shall certify to the revised exhibit and shall file it for record in Lea County, New Mexico, and Andrews County, Texas, and with the Supervisor and with the Commissioner.

ARTICLE 4

UNIT AREA AND UNITIZED SUBSTANCES

4.1 The Unit Area shall be that as defined under 2.14 hereof. All oil and gas in or that may be produced from the Unitized Formation underlying the lands within the Unit Area together with the right to use the surface of such lands for the development and operation of the Unitized Formation are unitized under the terms of this agreement. Nothing herein shall be construed to unitize, pool or in any way affect the oil, gas and other minerals contained in or that may be produced from any formation other than the Unitized Formation as hereinabove defined.

ARTICLE 5

ENLARGEMENT OF UNIT AREA

5.1 Enlargement. The above described Unit Area shall when practicable be expanded to include any additional Tract or Tracts regarded as reasonably necessary or advisable for the purposes of this agreement. Such expansion shall be effected in the following manner:

5.1.1 Unit Operator when authorized by a vote of at least ninety per cent (90%) of the combined voting interests, after preliminary concurrence of the Director and the Commissioner, shall:

a. Prepare a notice of the proposed expansion, describing the contemplated changes in the boundary of the Unit Area, the reason therefor and the proposed effective date thereof, delivering copies of the notice to the Supervisor and the Commissioner, and mailing copies to

the last known address of each lessee, lessor and Working Interest Owner whose interests are affected, advising such parties that thirty (30) days will be allowed for submission to the Unit Operator of any objections, and

b. Upon expiration of said thirty (30) day period as set out immediately above Unit Operator shall file with the Director, Commissioner, Commission and Railroad Commission the following:

i. Evidence of mailing of the notice of expansion;

ii. A copy of any objections thereto which have been filed with the Unit Operator;

iii. An application for such expansion;

iv. An instrument containing the appropriate joinders in compliance with the participation requirements of Article 31 hereof.

5.2 The Effective Date of Enlargement. An enlargement of the Unit Area shall, after due consideration of all pertinent information and upon approval by the Director, Commission, Commissioner, and Railroad Commission, become effective at 7:00 o'clock A.M. on the date set forth in said notice.

ARTICLE 6

UNIT OPERATOR

6.1 SOHIO PETROLEUM COMPANY is hereby designated as Unit Operator, and by signing this instrument as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the operations, development and production of Unitized Substances as herein provided.

6.2 Whenever reference is made herein or in the Unit Operating Agreement to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of an interest in Unitized Substances; and the term "Working Interest Owner" or the term "Royalty Owner" as so used, shall include Unit Operator as the owner of a Working Interest or Royalty Interest, respectively, when such interest is owned by it.

ARTICLE 7

RESIGNATION OR REMOVAL OF UNIT OPERATOR

7.1 Unit Operator shall have the right to resign at any time, but such

resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been given by Unit Operator to all Working Interest Owners, the Director, Commission, Commissioner, and the Railroad Commission and until all wells then subject hereto are placed in a satisfactory condition for suspension or abandonment, whichever is required by the Supervisor as to Federal lands and by the Commission and Railroad Commission as to State and/or fee lands unless a new Unit Operator or Unit Manager shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

7.3 The Working Interest Owners may remove the Unit Operator by the affirmative vote of eighty-five per cent (85%) of the Voting Interest of all the Working Interest Owners other than the one acting as Unit Operator. Such removal shall be effective upon notice thereof to the Unit Operator, the Director and the Commissioner.

7.4 In all such instances of resignation or removal, until a successor Unit Operator is selected and approved as hereinafter provided, the Working Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, preferably at least thirty (30) days before such resignation or removal becomes effective, appoint a Unit Manager to represent them in any action to be taken hereunder.

7.5 The resignation or removal of Unit 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 Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, materials, appurtenances and any other assets, used in conducting the unit operations and owned by the Working Interest Owners to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

7.6 Sale or other disposition of all its Working Interest in the Unit Area by Unit Operator will operate automatically to effect the removal of Unit Operator. No sale or disposition of Working Interest by Unit Operator shall include or pass the right to act as Unit Operator.

ARTICLE 8

SUCCESSOR UNIT OPERATOR

8.1 Upon the resignation or removal of a Unit Operator, a successor Unit Operator shall be selected by Working Interest Owners in accordance with the terms and provisions of the Unit Operating Agreement. Such selection shall not become effective until (a) a Unit Operator so selected shall accept, in writing, the duties and responsibilities of Unit Operator, and (b) the selection shall have

been filed with the Supervisor and approved by the Commissioner. If no successor Unit Operator or Unit Manager is selected and qualified as provided herein, the Director and Commissioner at their election may declare this Unit Agreement terminated.

ARTICLE 9

ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT

9.1 Costs and expenses incurred by Unit Operator in conducting Unit operations hereunder, shall be paid, apportioned among and borne by the Working Interest Owners in accordance with the agreement or agreements entered into (separately or collectively) by and between the Working Interest Owners and Unit Operator, herein referred to as Unit Operating Agreement. However, nothing contained herein or in the Unit Operating Agreement shall obligate any Working Interest Owner or the Unit Operator to bear or pay any tax upon any Royalty Interest or upon the production or sale of Unitized Substances accruing or allotted thereto or any tax measured by such production or the value or proceeds of sale thereof. Such Unit Operating Agreement may also provide the manner in which the Working Interest Owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing to them in conformity with their underlying operating agreements, leases or other independent contracts and such other rights and obligations as between Unit Operator and the Working Interest Owners as may be agreed upon by the Unit Operator and the Working Interest Owners. However, no such operating agreement shall be deemed either to modify any of the terms and conditions of this Unit Agreement or to relieve the Unit Operator of any right or obligations established under this Unit Agreement; and in case of any inconsistency or conflict between the Unit Agreement and the Unit Operating Agreement, this Unit Agreement shall prevail. Three true copies of any Unit Operating Agreement executed pursuant to this Article shall be filed with the Supervisor, prior to approval of this agreement by the Director, and two true copies shall be filed with the Commissioner.

ARTICLE 10

RIGHTS AND OBLIGATIONS OF UNIT OPERATOR

10.1 Except as otherwise specifically provided herein or in the Unit Operating Agreement, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary for producing, storing, allocating and distributing the Unitized Substances, are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and together with this agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer to Unit Operator title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

ARTICLE 11

PLAN OF OPERATIONS

11.1 It is recognized and agreed by the parties hereto that the land

subject to this Agreement is reasonably proved to be productive of Unitized Substances in paying quantities or necessary for Unit Operatiors and that the object and purpose of this Agreement is to formulate and put into effect a secondary recovery project in order to effect the increased recovery of Unitized Substances, prevent waste and conserve natural resources. The parties hereto agree that Unit Operator may, subject to the consent and approval of a plan of operation by Working Interest Owners, the Supervisor, and the Commissioner, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, and any one or more other substances, whether produced from the Unit Area or not.

11.2 Unitized Substances produced from wells in the New Mexico and Texas Subdivisions of the Unit Area, respectively, shall be separately measured and sold, and reported separately to the proper governmental authorities of the two states. In case of any Unitized Substance which is stored in tanks or other facilities, the storage tanks or facilities for the production from the two subdivisions shall be separate from each other. It is recognized that the proper governmental authorities respectively of each of the two states will or may provide for separate allowables of production of Unitized Substances from each of the two subdivisions, however, the provisions of this paragraph 11.2 shall not alter or affect the computation and definition of the Tract Participation of the Tracts as herein elsewhere set forth; nor shall this Unit Agreement operate to create separate units for the New Mexico and Texas Subdivisions of the Unit Area — it being agreed that only one unit is created hereby.

11.3 The Working Interest Owners, Supervisor, Commissioner, Commission and Railroad Commission shall be furnished periodical reports 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 consent and approval of the Working Interest Owners, the Supervisor, Commissioner, Commission, and Railroad Commission.

11.4 The initial plan of operation shall be filed with the Supervisor, Commissioner, Commission, and Railroad Commission concurrently with the filing of this Unit Agreement for final approval. Said initial plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor, Commissioner, Commission and Railroad Commission may determine to be necessary for timely operation consistent herewith. The initial plan of operation shall include a pilot water flood to determine the feasibility of water flooding the Unit Area.

11.5 Reasonable diligence shall be exercised in complying with the approved plan of development and operation, however, notwithstanding anything to the contrary herein contained, the Unit Operator shall commence secondary recovery operations on the Unit Area within six (6) months after the effective date of this Agreement, or any extension thereof approved by the Director and Commissioner or this Agreement shall terminate automatically, in which latter event Unit Operator shall notify all interested parties.

ARTICLE 12

TRACT PARTICIPATION

12.1 Tract Participation of each Tract is based upon the summation of four factors weighted as follows, to wit:

12.1.1 10% times the ratio of the total number of Usable Wells

upon the Tract to the total number of Usable Wells in the Unit Area.

12.1.2 20% times the ratio of total number of Waterflood Acre-Feet in the Tract to the total number of Waterflood Acre-Feet in the Unit Area.

12.1.3 40% times the ratio of total accumulated primary production of oil from the Tract from first production to October 1, 1961, to total accumulated primary production of oil from the Unit Area for said period.

12.1.4 30% times the ratio of the total remaining primary production of oil from the Tract to the total remaining primary production of oil from the Unit Area from and after October 1, 1961.

ARTICLE 13

TRACTS QUALIFIED

13.1 Qualification of Tracts. On and after the effective date hereof, the Tracts within the Unit Area which shall be entitled to participation in the production of Unitized Substances therefrom, shall be those Tracts within the Unit Area, and more particularly described in Exhibit "B" that are qualified as follows:

13.1.1 Each Tract as to which Working Interest Owners owning one hundred per cent (100%) of the Working Interest therein, have signed or ratified this agreement and Royalty Owners owning one hundred per cent (100%) of the Royalty Interest therein have signed or ratified this agreement; or

13.1.2 Each Tract as to which Working Interest Owners owning not less than ninety-five per cent (95%) of the Working Interest therein have signed or ratified this Agreement and Royalty Owners owning not less than seventy-five per cent (75%) of the Royalty Interest therein have signed or ratified this Agreement, and in which the Working Interest Owners in said Tract who have signed or ratified this Agreement have agreed to indemnify and hold harmless all other parties hereto against any and all claims and demands that may be made by the nonjoining Working Interest Owners and/or Royalty Owners on account of the inclusion of such Tract in the Unit Area and the operation of the Unit Area on the basis herein set forth; provided, however, that the manner of such indemnity and the inclusion of such Tract in the Unit Area shall have been approved by Working Interest Owners owning eighty-five per cent (85%) of the combined Voting Interest attributable to all of the Tracts which have qualified under Section 13.1.1 above.

13.2 Revision of Exhibit C. If less than all Tracts are committed

hereto as of the effective date of this agreement, Unit Operator, as soon as practicable after such date, shall file with the Supervisor and Commissioner a schedule of Qualified Tracts as of said effective date. Said schedule shall be designated "First Revised Exhibit C" and shall set forth opposite each such Qualified Tract a revised Tract Participation which shall be computed according to the formula set out in Article 12 hereof. Unless disapproved by the Supervisor and the Commissioner within thirty (30) days after filing, said First Revised Exhibit "C" shall become effective as of the effective date hereof.

If after the effective date of this agreement, there is any tract subsequently committed hereto, as provided in Article 5 (Enlargement of Unit Area) hereof, or any non-committed tract subsequently committed hereto under the provisions of Article 31 (Non-joinder and Subsequent Joinder), or if any tract is eliminated from the unit as provided for in Article 30 (Titles), schedule C shall be revised by the Unit Operator and distributed to the Working Interest Owners, the Supervisor, Director, Commissioner, Commission and Railroad Commissioner to show the new tract participation of all the then effectively committed tracts; and the revised schedule, upon approval by the Commissioner and the Supervisor or the Director, shall govern all the allocation of production from and after the effective date thereof until a new schedule is so approved. In all such revisions, the previously committed tracts shall remain in the same ratio one to the other.

ARTICLE 14

ALLOCATION OF UNITIZED SUBSTANCES

14.1 Allocation to Tracts. All Unitized Substances produced and saved shall be apportioned and allocated to the several qualified Tracts in accordance with the respective Tract Participations effective hereunder from and after the effective date hereof, as set forth in Exhibit "C"; less, save and except any part of such Unitized Substances used in conformity with good operating practices within the Unit Area for drilling, operating, camp, and other development purposes and for pressure maintenance and other operations hereunder, or lost or destroyed in handling, or delivered to lessors under terms of their respective leases for use on the leased premises within the Unit Area -- as to all of which the parties hereto agree that no royalty, overriding royalty, production payment or other payment to any Royalty Owner shall be payable. The amount of Unitized Substances so allocated to each Tract, and only that amount, regardless of whether it be more or less than the amount of actual production from the well or wells, if any, on such Tract, shall for all intents, uses and purposes, be deemed to have been produced from such Tract.

14.2 Distribution Within Tracts. The Unitized Substances allocated to each Tract 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 to the same extent and 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. If ownership of the Working Interest and/or Royalty Interest is not uniform throughout any Tract, or if the Working Interest and/or Royalty Interest, or any part thereof, in any Tract are divided with respect to separate parcels or portions of such Tract and owned severally by different persons, the Tract Participation assigned to such a Tract shall in each such instance, in the absence of a recordable instrument executed by all such owners and furnished to Unit Operator fixing the division of ownership on a uniform basis throughout the Tract, be divided among the parcels or portions in

which there is uniformity of ownership, in proportion to the number of surface acres in each.

14.3 Ownership Prior to Effective Date or Dates. This Agreement shall not affect ownership of oil and gas produced prior to its effective date; and anything herein contained to the contrary notwithstanding (except for the provisions of Article 23) there shall not be any retroactive adjustment for production of oil and/or gas obtained prior to the effective date of this agreement, the effective date of joinder of any Tract or parcel of land, or the effective date of commitment of any interest to this Agreement. No Tract committed to this Agreement and qualified for participation as elsewhere herein provided shall be subsequently excluded from participation because of depletion of Unitized Substances.

14.4 Responsibility to Royalty Owner. If any Working Interest Owner shall receive in kind, dispose of or receive proceeds of sale of any of the Unitized Substances which accrues to the Royalty Interest of any Royalty Owner then in each such instance such Working Interest Owner shall account to such Royalty Owner for the latter's share of such production or proceeds of same and shall hold each other party hereto harmless against all claims, demands and causes of action on the part of such Royalty Owner for or in respect of its share of such production or proceeds of sale of same.

ARTICLE 15

DISPOSITION OF UNITIZED SUBSTANCES

15.1 The Unitized Substances allocated to each Tract shall be delivered in kind to the respective parties entitled thereto by virtue of the ownership of oil and gas rights therein or by purchase from such owners. Each such party entitled thereto shall have the continuing right to receive such production in kind at a common point within the Unit Area and/or to sell or dispose of the same as it sees fit. Notwithstanding any other provision hereof, each party shall always have the right of separately disposing of its share of the Unitized Substances produced and saved, and shall execute all division orders or other instruments pertaining to the sale of its share of such production. Each such party shall have the right to construct, maintain and operate within the Unit Area all necessary facilities for that purpose, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto. Any extra expenditure incurred by Unit Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be borne by the party receiving the same in kind. In the event any such party shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Unit Area currently as and when produced, then so long as such conditions continue, Unit Operator for the account and at the expense of such party in order to avoid curtailing the operation of the Unit Area may sell or otherwise dispose of such production at the then prevailing market price for Unitized Substances of the same kind, grade and quality in which event Unit Operator shall account monthly to such party for the proceeds thereof, provided, however, that the term of any contract made by Unit Operator for the sale of such Unitized Substances shall be no longer than is commensurate with the minimum needs of the industry under the circumstances and in no event longer than one year; and provided further that Unit Operator's right to sell Unitized Substances not taken in kind or sold by the party entitled thereto shall be revocable at the will of such party.

ARTICLE 16

ROYALTY SETTLEMENT

16.1 The United States of America, the State of New Mexico, and all Royalty Owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any Tract shall hereafter be entitled to the right to take in kind their share of the Unitized Substances allocated to such Tract, and Unit Operator shall make deliveries of such Royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Royalty Interest not taken in kind shall be made by Working Interest Owners responsible therefor under existing contracts, division orders, laws and regulations, on or before the last day of each calendar month for Unitized Substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases, except that such royalties shall be computed in accordance with the terms of this agreement.

16.2 All royalties due the United States of America, the State of New Mexico, and the other Royalty Owners hereunder on each Tract shall be computed and paid on the basis of the Unitized Substances allocated to the respective Tracts committed hereto, in lieu of actual production from each such Tract.

16.3 Each Royalty Owner (other than the United States of America and the State of New Mexico) that executes this Agreement, represents and warrants that it is the owner of a Royalty Interest in a Tract or Tracts within the Unit Area. If any Royalty Interest in a Tract or Tracts should be lost by title failure in whole or in part, during the term of this Agreement, then the Royalty Interest of the party representing himself to be the owner thereof shall be reduced proportionately and the interest of all parties shall be adjusted accordingly.

16.4 If the amount of Unitized Substances accruing to any Royalty Interest or Working Interest in a Tract depends by the terms of the instrument reserving or creating it, on the per well production from such Tract during any period of time, then for the purpose of computing the quantity of Unitized Substances accruing to such Interest during such period of time, there shall be deemed located on such Tract that percentage of the total number of wells completed in the entire Unitized Formation and used or usable at the beginning of such period, either as producing wells or injection wells, which is equal to the Tract Participation of such Tract, and the quantity of Unitized Substances allocated to such Tract, as above provided, shall be deemed to have been produced in equal proportions by the number of wells so deemed located on such Tract; except for leases issued by the United States of America 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 Unit Area were a single consolidated lease.

ARTICLE 17

RENTAL SETTLEMENT

17.1 In each instance in which proceeds of royalty production shall be less than the required minimum rental or royalty due on the area including some

portion of the Unit Area, the deficiency shall be made up and paid by the Working Interest Owners of the portion of lease in question. Rental for the lands of the State of New Mexico, subject to this agreement, shall be paid by such Working Interest Owners at the rate specified in the respective leases from the State of New Mexico. Rental or minimum royalty from lands of the United States of America, subject to this agreement, shall be paid by such Working Interest Owners at the rate specified in the respective leases from the United States of America, unless rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

ARTICLE 18

CONSERVATION

18.1 Operations hereunder and production of Unitized Substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to Federal and State laws and regulations.

ARTICLE 19

DRAINAGE

19.1 The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from the Unitized Formation by wells on lands not subject to this Agreement.

ARTICLE 20

LEASES AND CONTRACTS CONFORMED AND EXTENDED

20.1 The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil and/or gas of land committed to this Agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but shall otherwise remain in full force and effect, and the parties hereto hereby consent that the Secretary and the Commissioner, respectively, shall and by their approval hereof, or by the approval hereof of their duly authorized representatives, do hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty or royalty requirements of Federal and State of New Mexico leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this Agreement. Without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

20.1.1 The development and operation of lands subject to this Agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned Tract subject to this Agreement, regardless of whether there is any development of any particular part or Tract of the Unit Area, notwithstanding anything to the contrary in the lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

20.1.2 Drilling, producing or secondary recovery operations performed hereunder upon any qualified Tract of Unitized Land will be accepted and deemed to be performed upon and for the benefit of each and every qualified Tract of the Unit Area, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on land therein embraced.

20.1.3 Suspension of drilling or producing operations on any qualified Tract within the Unit Area pursuant to direction or consent of the Secretary, Commissioner, Commission and/or Railroad Commission, or their duly authorized representatives, or other lawful authority having jurisdiction, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every qualified Tract within the Unit Area and no lease shall terminate by reason of such suspension, but every lease shall remain in full force and effect during the period of suspension.

20.1.4 Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil and/or gas which might expire prior to the termination of this Agreement is hereby extended beyond any such term so provided therein, so that it shall be continued in full force and effect for and during the term of this Agreement.

20.1.5 Termination of this Agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, shall continue in force and effect thereafter.

20.1.6 Any lease other than a Federal or State of New Mexico lease having only a portion of its land committed hereto shall be segregated as to the land subject to this Agreement and the lands not subject to this Agreement, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof. Provided, however, that so long as Unitized Substances are produced from the Unit Area and a portion is allocated to the lands within such lease included within the Unit Area or so long as the Unit Operator in accordance with the provisions of this Agreement is engaged in secondary recovery operations or drilling or reworking wells for the purpose of improving or maintaining or restoring production of Unitized Substances that portion of the lease which is not committed to this Agreement shall remain in full force and effect.

20.1.7 If a Federal lease committed to this Agreement covers lands outside the Unit Area such lease shall be governed by the 4th paragraph of Section 17 (j) of the Mineral Leasing Act as amended by the Act of September 2, 1960 (74 Stat. 781-784).

20.1.8 Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall be segregated as to the portion committed and as to the por-

tion not committed and the terms of such lease shall apply separately as to such segregated portions commencing as of the effective date hereof. Notwithstanding any of the provisions of this agreement to the contrary, such lease shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease, (a) if Unitized Substances are discovered in paying quantities on some part of the lands embraced in such lease committed to this agreement, or (b) so long as a portion of Unitized Substances produced from the Unit Area is, under the terms of this Agreement, allocated to the portion of the lands covered by such lease committed to this Agreement, or (c) if, at the expiration of the full term thereof, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced therein such lease shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of Unitized Substances, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as Unitized Substances are produced in paying quantities from any portion of said lands.

ARTICLE 21

COVENANTS RUN WITH THE LAND

21.1 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 interest in land or leases subject hereto shall be 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 Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic or certified copy of the instrument of transfer; and no assignment or transfer of any Royalty Interest subject thereto 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, photostatic or certified copy of the instrument of transfer.

ARTICLE 22

EFFECTIVE DATE AND TERM

22.1 When Agreement Effective. 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 of 7:00 o'clock A.M. on the first day of the calendar month next following:

22.1.1 The execution or ratification of this Agreement and/or the Unit Operating Agreement by Working Interest Owners owning a combined Voting Interest of all the qualified Tracts within the Unit Area of not less than ninety-five per cent (95%); and the qualification for participation by all Tracts in said Unit Area as provided in Article 13 hereof, and such qualification shall, notwithstanding any

other provision hereof be a condition precedent to this Agreement's becoming effective, and

22.1.2 The final approval of this Agreement by the Commissioner, Commission, Railroad Commission and the Secretary of his duly authorized representative, and

22.1.3 The filing of at least one counterpart of this Agreement in the records of Lea County, New Mexico, and the records of Andrews County, Texas, by Unit Operator; provided that the above filings must be made within thirty (30) days after the final approval as provided above in this Article, and

22.1.4 The delivery by Unit Operator to the Supervisor and the Commissioner of a certificate to the effect that this Agreement will become effective according to its terms and stating the effective date, and the filing of such certificate in the records of Lea County, New Mexico, and Andrews County, Texas.

22.2 Expiration Before it Becomes Effective. This Agreement shall ipso facto expire on July 1, 1964 (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this Agreement has been executed or ratified by Working Interest Owners owning a combined Voting Interest in qualified Tracts within the Unit Area of at least ninety per cent (90%) and who have decided to extend said expiration date for a period not to exceed six (6) months. If said expiration date is so extended and 22.1.1, 22.1.2, 22.1.3, and 22.1.4 are not accomplished on or before said extended expiration date, this agreement shall ipso facto expire on said extended expiration date and thereafter be of no further force or effect.

22.3 Term. This Agreement shall continue in force and effect from and after the effective date so long as Unitized Substances are produced from the Unit Area in paying quantities or drilling, reworking or other operations are conducted by Working Interest Owners for the purpose of obtaining or restoring production of Unitized Substances from the Unit Area without cessation in production or in such operations of more than ninety (90) consecutive days at any one time; provided, however, that if production of Unitized Substances or the conduct of drilling, reworking or other operations for the production of Unitized Substances is prevented by force majeure at any time or times this Agreement shall not terminate by reason of the cessation of such production or such operations provided that such production or such operations are resumed within sixty (60) days after such force majeure has ceased to operate and provided further, (1) this agreement shall terminate automatically as of the first day of the month after the owners of 85 per cent of the voting interests shall have determined that the pilot flood required under Article 11.4 is unsuccessful, and all principals are notified promptly, or (2) if the owners of 85 per cent of the voting interests determine that the unit agreement should be terminated because it can no longer be operated profitably, feasibly, or in the interest of conservation, this agreement may be terminated with approval of the Commissioner and the Director, effective as of the first day of the month after such approval by the Director.

22.4 Effect of Termination. On termination of this Agreement the further development and operation of the Unitized Formation under this Agreement

shall be abandoned and the unitization effected by this Agreement shall be at an end and thereafter the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate Tracts just as if this Agreement had never been entered into, provided, however, that Royalty Owners, to the extent of their authority, hereby grant Working Interest Owners a period of twelve (12) months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with the operations hereunder.

22.5 Certificate of Termination. Upon termination of this Agreement in accordance with this Article, Unit Operator shall execute and file for record in Lea County, New Mexico, and Andrews County, Texas, certificate evidencing such termination provided, however, that such certificate shall be filed only after the approval of Working Interest Owners as above provided.

ARTICLE 23

PRODUCTION AS OF THE EFFECTIVE DATE

23.1 Unit Operator shall gauge all lease and other tanks within the Unit Area to ascertain the amount of merchantable oil produced from the Unitized Formation in such tanks, above the pipe line connections, as of 7:00 A.M. on the effective date hereof. The oil that is a part of the prior allowable of the wells from which it was produced shall remain the property of the parties entitled thereto the same as if the Unit had not been formed. Any such oil not promptly removed may be sold by the Unit Operator for the account of the parties entitled thereto, subject to the payment of all royalties, overriding royalties, production payments, and all other payments under the provisions of the applicable lease or other contracts. The oil that is in excess of the prior allowable of the wells from which it was produced shall be regarded as Unitized Substances produced after effective date hereof.

23.2 If, as of the effective date hereof, any Tract is over-produced with respect to the allowable of the wells on that Tract and the amount of over-production has been sold or otherwise disposed of, such over-production shall be regarded as a part of the Unitized Substances produced after the effective date hereof and shall be charged to such Tract as having been delivered to the parties entitled to Unitized Substances allocated to such Tract.

ARTICLE 24

RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION

24.1 All production and disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. As to lands within the State of New Mexico, the Director is hereby vested with authority from time to time, in his discretion to alter or modify the rate of prospecting and development and within the limits made or fixed by the Commission to alter or modify the quantity and rate of production under this Agreement; provided that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of specific written approval thereof by the Commissioner, and as to any lands of the State of New Mexico or privately owned lands in said State subject to this Agreement, as to the quantity and rate of production in the absence of specific written approval thereof by the

Commission. As to lands within the State of Texas, the Director is hereby vested with authority similar to that above vested in him as to lands in New Mexico, provided that all alterations or modifications of the kind above mentioned, shall be within limits made or fixed by the Railroad Commission, and provided further that no such alteration or modification shall be effective in the absence of specific written approval thereof by the Railroad Commission -- it being agreed that the making of Field Rules and the matter of fixing the amount of production of oil or gas as to lands in Texas are the province of the Railroad Commission. And provided further that the authority vested above in the Director in this Article 24 is limited to alteration or modification in the public interest -- the purpose thereof and the public interest to be served to be stated in the order of alteration or modification.

Powers in this Article 24 vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than fifteen (15) days from notice.

ARTICLE 25

APPEARANCES

25.1 Unit Operator shall, after notice to the other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department, the Commissioner, the Commission and the Railroad Commission, and to appeal from orders issued under regulations of said Department, Commissioner, Commission or Railroad Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the said Department, Commissioner, Commission or Railroad Commission or any other legally constituted authority, provided, however, that any other interested party shall also have the right, at his own expense, to be heard in any such proceedings.

ARTICLE 26

NOTICES

26.1 Except as otherwise specified herein, each notice given pursuant to this Agreement shall be given in writing as follows: (a) By registered or certified mail or by telegraph with postage or charges prepaid, properly addressed to each party to whom given at such party's address set forth below its signature to this Agreement or its ratification or consent hereto; or (b) By personal delivery to the party to whom the notice is to be given, provided that if delivered to a corporate party, the notice shall be delivered personally to an executive officer of such party, subject to the provisions of (c) below; or (c) In case of each Working Interest Owner who shall designate a representative and/or alternate representative as specified in Section 5.2 of the Unit Operating Agreement, the notice may be given either by personal delivery to such a representative or alternate representative or by mailing or telegraphing the same (with postage or charges prepaid) to such representative or alternate representative in the manner above specified, properly addressed to such representative or alternate representative at his address specified in the designation made by the Working Interest Owner. Each notice given by mail or telegraph as above provided shall be deemed given 48 hours after such notice is deposited in the United States mail or 24 hours after it is filed with an operating telegraph company for immediate transmission by telegraph. Any party hereto may change the address to which notices for it may be sent by appropriate

written notice to Unit Operator, provided that notice of such change of address of Unit Operator shall be given by the latter to all other parties hereto. Notice given in the manner above specified, to the husband of any married woman who is a party to this Agreement, shall also constitute notice to her.

ARTICLE 27

NO WAIVER OF CERTAIN RIGHTS

27.1 Nothing contained in this Agreement shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State or States wherein said Unit Area is located or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

ARTICLE 28

NON-LIABILITY - FORCE MAJEURE

28.1 Unit Operator shall not be liable to any other party hereto for anything wrongfully or negligently done or omitted to be done in the conduct of operations hereunder except in case of bad faith. The obligations, other than the obligation to make money payments herein provided for, of Unit Operator or any Working Interest Owner shall be suspended to the extent that and so long as performance thereof is prevented by fire, explosion, action of the elements, unavoidable accidents, strikes or other differences with workmen, acts of civil or military authorities, act of the public enemy, war, restrictions or restraints imposed by law or regulation or order of governmental authority, whether federal, state or local, inability to obtain necessary rights of access, uncontrollable delays in transportation, inability to obtain materials or equipment in open market, or any other cause reasonably beyond control by such party, whether or not similar to any cause above enumerated; and such party shall not be liable to any other party for losses caused by any of said matters or things. The affected party shall give notice thereof to the other parties hereto as promptly as reasonably possible.

ARTICLE 29

NON-DISCRIMINATION

29.1 In the performance of work under this Agreement the Operator agrees to comply with the non-discrimination provisions of Section 301 (1) (7) inclusive of Executive Order 10925, as amended, (28 F.R. 6485) which are hereby included by reference in this Agreement.

ARTICLE 30

TITLES

30.1 Exclusion of Qualified Tracts. Whenever it is determined by Working Interest Owners after the effective date that through error or because of failure in title of a party hereto a qualified Tract at or after the effective date failed to meet the requirements specified in Article 13 such Tract shall be excluded from Participation as of 7:00 o'clock A.M. on the first day of the

calendar month next succeeding the month in which such determination is made, provided, however, that if such Tract meets the requirements specified in Article 13 before the exclusion thereof becomes effective it shall not be excluded.

30.2 Revision of Exhibits. If a Tract is excluded pursuant to 30.1, Unit Operator shall revise Exhibit "C" accordingly recomputing the Tract Participation of the remaining qualified Tracts such revised Exhibit to be effective as of the time at which the exclusion of such Tract becomes effective. In any such computation the qualified Tract Participation of the remaining qualified Tracts shall remain in the same ratio one to another.

30.3 Retention of Tract. If there is a failure in the title of any party hereto to a Royalty Interest or a Working Interest in a Tract but such Tract is not excluded as above provided, the party whose title has failed shall not be entitled to any benefits under this Agreement in respect of the interest affected by the title failure.

30.4 Production Where Title Is In Dispute. If the title or right of any party claiming the right to receive in kind all or any portion of the Unitized Substances allocated to a Tract is in dispute, Unit Operator at the discretion of Working Interest Owners shall either:

30.4.1 Require that the party to whom such Unitized Substances are delivered or to whom the proceeds thereof are paid, furnish security for the proper accounting therefor to the rightful owner if the title or right of such party fails in whole or in part, or

30.4.2 Withhold and market the portion of Unitized Substances with respect to which title or right is in dispute, and impound the proceeds thereof without liability for interest until such time as the title or right thereto is established by a final judgment of a court of competent jurisdiction or otherwise to the satisfaction of Working Interest Owners, whereupon the proceeds so impounded shall be paid to the party rightfully entitled thereto; provided, that as to State or Federal land or leases, no payments of funds due the State of New Mexico or the United States of America should be withheld, but such funds shall be deposited as directed by the Commissioner of Public Lands of the State of New Mexico and the Supervisor of the United States Geological Survey, to be held as unearned money pending final settlement of title dispute, and then applied as earned or returned in accordance with such final settlement.

30.5 Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

ARTICLE 31

NON-JOINDER AND SUBSEQUENT JOINDER

31.1 Non-Qualified and Non-Committed Tracts. Any tract not qualified

as of the effective date of this agreement or any tract brought into this unit pursuant to Article 5 may be committed to this agreement by meeting such requirements as may be voted by ninety per cent (90%) of the voting interest, by qualifying pursuant to Article 13, and by effecting a joinder pursuant to Article 31, if needed.

31.2 Prior to Six (6) Months After Effective Date. Any oil or gas interest in the Unitized Formation in lands within the Unit Area not committed hereto prior to submission of this Agreement to the Director, the Commissioner, Commission and Railroad Commission for final approval, may (subject to provisions of Article 14.3) thereafter be committed hereto upon compliance with the applicable provisions of Article 13 hereof, at any time up to the effective date hereof and for a period of six (6) months thereafter, on the same basis of participation as provided for in Article 12 by the owner or owners thereof subscribing or consenting in writing to this Agreement; provided that the Tract embracing such an interest must have been qualified for participation prior to the effective date hereof as required by Articles 13 and 22 hereof.

31.3 Subsequent to Six (6) Months After Effective Date. It is understood and agreed, however, that subsequent to six (6) months after the effective date hereof, the right of subsequent joinder as provided in this section shall be subject to such requirements or approvals and on such basis as may be agreed upon by Working Interest Owners having ninety per cent (90%) of the combined Voting Interest of all the Working Interest Owners subject to the approval of the Director and Commissioner. Such joinder by a Royalty Owner must be evidenced by his execution or ratification of this Unit Agreement and must be consented to in writing by the Working Interest Owner responsible for the payment of any benefits that may accrue hereunder in behalf of such Royalty Owner.

31.4 Effective Date of Joinder. Except as may otherwise herein be provided, subsequent joinder to this Agreement shall be effective at 7:00 o'clock A.M. as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish commitment of the interest in question to this Agreement.

31.5 Acquisition of Uncommitted Interests. In the event at any time after the effective date hereof any party bound by this Agreement acquires an uncommitted interest in any qualified Tract such interest upon being so acquired shall be, upon approval of Working Interest Owners, subject to this Agreement effective as of 7:00 o'clock A.M. on the first day of the calendar month following the date of such acquisition and where such interest acquired is a Working Interest, such interest shall also be subject to the Unit Operating Agreement. Notice of such acquisition shall be filed with the Supervisor not more than fifteen (15) days following such effective date.

ARTICLE 32

COUNTERPARTS AND RATIFICATIONS

32.1 Counterparts. This Agreement may be executed in any number of counterparts and all executed counterparts hereof shall be deemed to constitute

a single instrument binding upon every party executing any counterpart hereof, with the same force and effect as if all parties who execute counterparts hereof had joined in the execution of the same counterpart hereof.

32.2 Ratification. This Agreement may be ratified by a separate instrument in writing, and each party who executes any such instrument shall be deemed a party to this Agreement with the same force and effect as if such party had executed a counterpart hereof.

32.3 Joinder by Working Interest Owner in Unit Operating Agreement. Execution or ratification of this Agreement by a Working Interest Owner shall constitute ratification of and joinder in the Unit Operating Agreement by such Working Interest Owner with like effect as if such Working Interest Owner had executed the Unit Operating Agreement.

ARTICLE 33

UNLEASED INTERESTS

33.1 Where a party to this Agreement commits hereto an oil and gas interest that is unleased, then for all purposes of this Agreement and the Unit Operating Agreement, such party shall be considered a "Working Interest Owner" as herein defined, as to 7/8ths thereof and a "Royalty Owner" as herein defined, as to 1/8th thereof; and said 7/8ths shall be considered to be a "Working Interest" as herein defined; and said 1/8th shall be considered a "Royalty Interest" as herein defined. And for all purposes aforesaid, such Working Interest shall be treated as a lease remaining in force as long as this Unit Agreement remains in force.

ARTICLE 34

INJECTION RIGHTS; EASEMENTS; WATER

34.1 Royalty Owners hereby grant unto Working Interest Owners the right to inject into the Unitized Formation any substances in whatever amounts the Working Interest Owners deem expedient, including the right to place and maintain injection wells on the Unit Area and to use producing or abandoned oil or gas wells for said purposes in accordance with an approved plan of operation as provided in Section 11.1. The parties hereto to the extent of their rights and interests, hereby grant to Working Interest Owners the right to use as much of the surface of the land within the area embracing the Unit Area as may be reasonably necessary for the operation and development of the Unitized Formation, including a site for a water, gas injection, processing or other plant, and camp site. Working Interest Owners shall have free use of water from the Unit Area for operations hereunder except water from Royalty Owners' wells, private lakes, ponds, or irrigation ditches.

ARTICLE 35

OIL AND GAS INTEREST NOT TRANSFERRED

35.1 Notwithstanding any other provision of this Agreement each of the parties hereto reserves its title to its mineral interests in the respective Tracts in the Unit Area and the Unitized Substances credited to it hereunder and nothing

contained in this Agreement shall be construed to transfer or assign from one party to another or others, individually or collectively, any mineral interest in the separately owned Tracts, other than the right to share in the allocation of Unitized Substances produced from the Unit Area as herein specified and to use and operate the Unit Area to the extent set out in this Agreement. The term "mineral interest" as used in this Article 35 shall include Working Interests and Royalty Interests.

ARTICLE 36

REPORTS

36.1 Unit Operator shall make such reports to governmental authorities as may be required by applicable laws or by the regulations or orders of such authorities.

ARTICLE 37

TAXES

37.1 Each party hereto shall for its own account render and be responsible for the payment of its share of any taxes levied against or measured by the amount or value of Unitized Substances produced from the Unit Area.

Nothing herein contained shall impair the right of any Working Interest Owner or Royalty Owner to contest the validity of any levy, assessment, or imposition of any tax by any governmental authority including without limitation production taxes, a tax upon or measured by production or an ad valorem tax.

ARTICLE 38

INTERNAL REVENUE PROVISIONS

38.1 It is agreed that it is not the purpose or intention of this Agreement to create, nor shall the same be construed as creating, any mining partnership, commercial partnership or other partnership relation. The parties hereto, and each of them, hereby agree that this Agreement shall not constitute a partnership as defined in the Internal Revenue Code of 1954, and specifically elect to be excluded from all of Sub-Chapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954, or similar provision of any applicable state income tax law. Unit Operator is hereby authorized and directed to execute and file on behalf of each Working Interest Owner such further evidence of such election as may be required to make such election under the laws and regulations promulgated thereunder.

ARTICLE 39

VARIABLE INTERESTS

39.1 In case of any change in amounts of interest in the Unitized Formation or Unitized Substances accruing to or owned by any party or parties which results from any variable or sliding scale royalty provided for in any lease now or hereafter becoming subject to this Agreement, variable overriding royalty, liquidation of any production payment, or other kind of variable interest, or other

cause, each party so affected shall promptly advise Unit Operator thereof. Every renewal or exchange lease issued as a renewal of or exchange of any Federal lease covering any part of the Unit Area shall be subject to the terms and provisions of this Agreement in the same manner and to the same extent as the lease so renewed or exchanged.

39.2 Notwithstanding any other provisions of this Agreement or of the Unit Operating Agreement, it is agreed that there shall be no obligation on the part of Unit Operator to ascertain or determine when any production payment is satisfied or paid out, or when there is any change in allocation of Unitized Substances to any party hereto on account of any variable royalty, overriding royalty, or other variable interest. It shall be the duty and responsibility of the affected Working Interest Owners and Royalty Owners in all such instances to take such action as may be proper or necessary to effectuate appropriate changes in the allocation of Unitized Substances and proceeds of sale of same, including without limitation the notification of pipeline companies and purchasers of production and the execution of transfer orders, division orders and other documents which may be required.

ARTICLE 40

CONFLICT OF SUPERVISION

40.1 Neither the Unit Operator nor the Working Interest Owners, nor any of them, shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provisions thereof to the extent that the said Unit Operator or the Working Interest Owners, or any of them, are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and/or proper representatives of the States of New Mexico and/or Texas in and about any matters or things concerning which it is required herein that such concurrence be obtained.

ARTICLE 41

LAWS AND REGULATIONS

41.1 Effect on Agreement. This Agreement and operations hereunder shall be subject to the conservation laws of the States of New Mexico and Texas, to the rules, regulations and orders of the Commission and the Railroad Commission and to all other applicable laws and rules, regulations and orders of governmental authority whether Federal, State or local. Unit Operator and Working Interest Owners shall be entitled to assume that every such law, rule, regulation or order is valid and enforceable unless and until the contrary is established by final judgment of a court of competent jurisdiction. It is not the intent of this Agreement to limit, restrict or prorate the production of Unitized Substances, it being recognized that such powers are to be exercised exclusively by governmental authority.

ARTICLE 42

RELATIONSHIP OF PARTIES

42.1 No Partnership Created. This Agreement is not intended to create,

and nothing contained herein shall be construed as creating, an association or trust or as imposing a partnership duty, obligation or liability, with regard to any one or more of the parties hereto, it being intended that the duties, obligations and liabilities of the parties hereto shall be several and not joint or collective, each party hereto being individually responsible for the obligations herein assumed by such party.

42.2 No Sharing of Market. Nothing in this Agreement shall be construed as providing directly or indirectly for any cooperative refining or joint sale or cooperative marketing of Unitized Substances.

42.3 Royalty Owners Free of Costs. Nothing contained in this Agreement shall be construed as imposing upon any Royalty Owner any obligation to pay any of the expenses incurred in the development or operation of the Unitized Formation except to the extent, if any, that such Royalty Owner is obligated to pay the same by the terms of an agreement other than this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the date indicated opposite their respective signatures.

SOHIO PETROLEUM COMPANY

DATE: September 9, 1963

By _____
Cecil C. Irby
Agent and Attorney in Fact

970 First National Office Building
Oklahoma City, Oklahoma 73102

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared CECIL C. IRBY known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said SOHIO PETROLEUM COMPANY, an Ohio Corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by CECIL C. IRBY, Agent and Attorney in Fact of SOHIO PETROLEUM COMPANY, an Ohio Corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of SEPTEMBER, A.D. 1963.

My Commission Expires:

September 6, 1965

Notary Public in and for Oklahoma County, Oklahoma.

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

_____

APPROVAL - CERTIFICATION - DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior under the Act approved February 25, 1920, 41 Stat. 437, 30 U.S.C. Secs. 181 et seq., as amended by the Act of August 8, 1946, 60 Stat. 950, and delegated to the Director of the Geological Survey, pursuant to Departmental Order No. 2365 of October 8, 1947, 43 CFR Sec. 4.618, 12 FR 6784, I do hereby:

A. Approve the attached secondary recovery Unit Agreement for the development and operation of the Littman San Andres Unit Area, in the Counties of Lea and Andrews in the States of New Mexico and Texas, respectively.

B. Certify and determine that the unit plan for secondary recovery contemplated in the attached Agreement is necessary and advisable in the public interest and is 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 the Federal lease or leases committed to said agreement are hereby established, altered, changed or revoked to conform with the terms and conditions of the Agreement.

Dated_____.

Contract No.

_____

Director
United States Geological Survey

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____ of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19_____.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____.

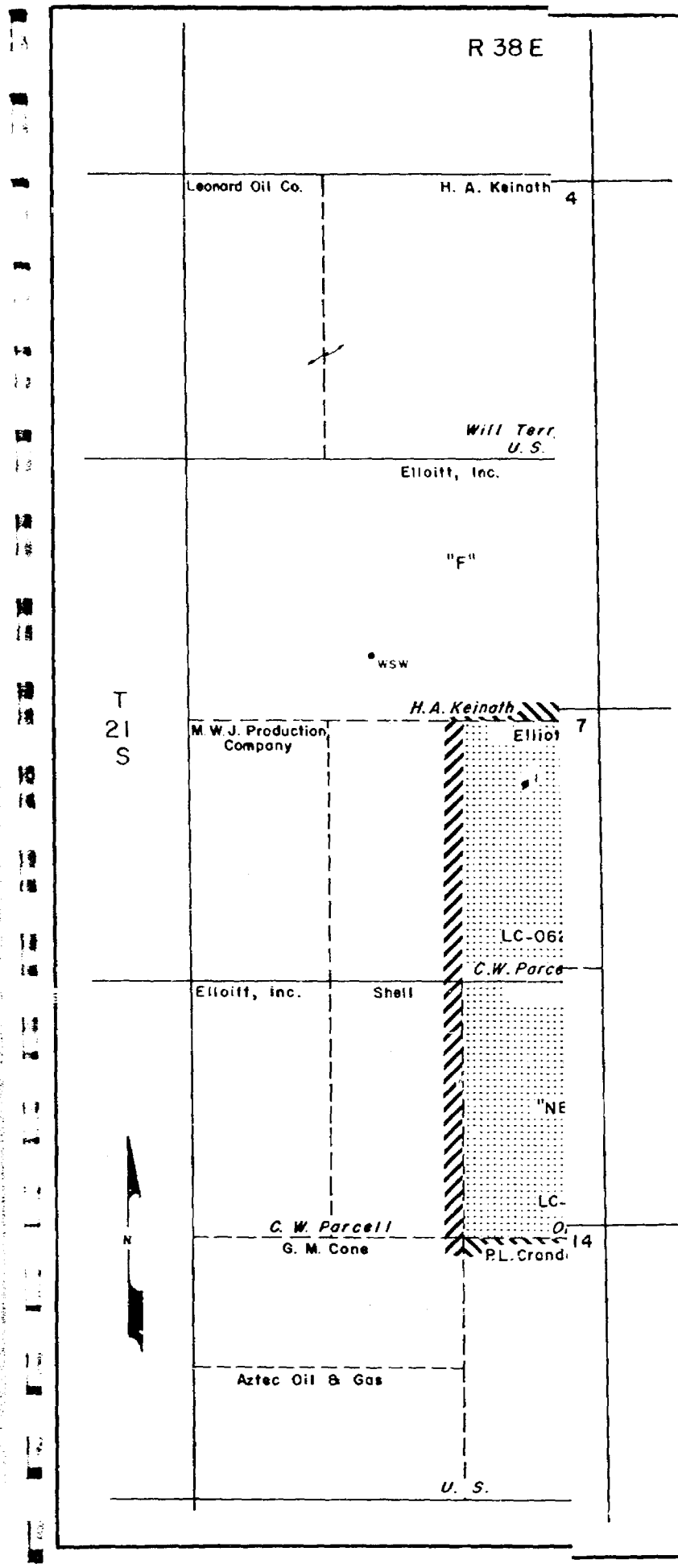


Exhibit "A"

LITTMAN (SAN ANDRES) UNIT

LITTMAN (SAN ANDRES) FIELD

ANDREWS COUNTY, TEXAS
AND
LEA COUNTY, NEW MEXICO

Legend:

- PRODUCING OIL WELL
- ABANDONED OIL WELL
- DRY HOLE
- WATER SUPPLY WELL
- WATER SUPPLY WELL LOCATION
- UNIT AREA BOUNDARY
- WATERFLOOD ACRE-FEET LIMIT LINE
- FEE LAND
- FEDERAL LAND
- STATE LAND
- TRACT NUMBER

SCALE
0' 1000' 2000

PETROLEUM ENGINEERS

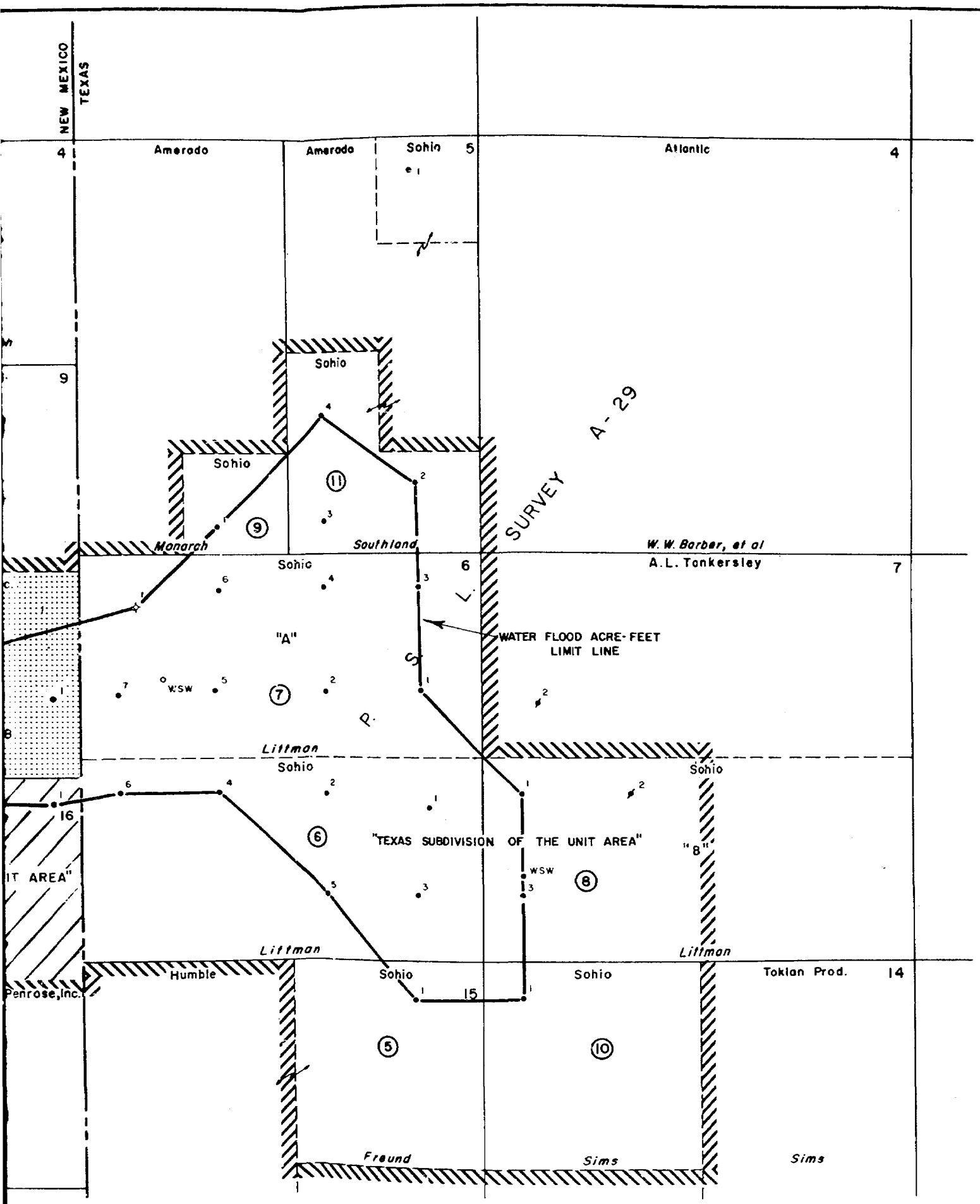


Exhibit "A"

LITTMAN (SAN ANDRES) UNIT

LITTMAN (SAN ANDRES) FIELD

ANDREWS COUNTY, TEXAS
AND
LEA COUNTY, NEW MEXICO

Legend:

- PRODUCING OIL WELL
- ABANDONED OIL WELL
- DRY HOLE
- WATER SUPPLY WELL
- WATER SUPPLY WELL LOCATION
- UNIT AREA BOUNDARY
- WATERFLOOD ACRE-FEET LIMIT LINE
- FEE LAND
- FEDERAL LAND
- STATE LAND
- TRACT NUMBER

SCALE
0' 1000' 2000

RICE SCOTT COMPANY
PETROLEUM ENGINEERS

E X H I B I T "B"
LITTMAN SAN ANDRES UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
UNITED STATES OF AMERICA LEASES				NEW MEXICO SUBDIVISION						
1	Ohio-Federal NE/4 Sec. 17, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4750 feet.	160.00	1	LC-057443-A	12.50000%	Ohio Oil Co.	13.75000%	- 0 -	Broseco Corporation John B. Rich Sohio Petroleum Company	.1979167 .0104166 .7916667
2	Parcell-Federal SE/4 Sec. 8, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico	160.00	2	LC-062170-A	12.50000%	Elliott, Inc.	03.33300%	- 0 -	Elliott, Inc.	1.0000000
3	Wylie-Federal SW/4 Sec. 9, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico	170.69	3	LC-069408	12.50000%	Elliott, Inc.	02.38125%	00.11875%	Elliott, Inc.	1.0000000
	Federal Tracts	490.69 Acres								
STATE OF NEW MEXICO LEASES										
4	Numex NW/4 Sec. 16, T-21-S R-38-E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4750 feet.	170.69	2	B-11232	12.50000%	Humble Oil & Refining Company	06.25000%	- 0 -	Broseco Corporation John B. Rich Sohio Petroleum Company	.2770834 .0145833 .7083333
	State of New Mexico Tracts	170.69 Acres.								

EXHIBIT "B"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
FEE LEASES				TEXAS SUBDIVISION						
5	Freund NE/4 Sec. 15, Block A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160.00	1	None	13.28125%	Humble Oil & Refining Company, et al	04.77208%	- 0 -	Broseco Corporation J. G. Catlett Co. Kirby Production Company John B. Rich Sohio Petroleum Company	.2461179 .0405401 .0712149 .0129536 .6291735
6	Littman S/2 Sec. 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320.00	6	None	14.84374%	Neville G. Penrose	03.51562%	06.09375%	Martha Jane Anthony Broseco Corporation Delhi Taylor Oil Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0131250 .1781250 .0625000 .1875000 .0131250 .0131250 .0131250 .0093750 .5000000
7	Littman "A" N/2 Sec. 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320.00	7	None	16.79690%* 14.84376%** 16.01565%***	Phillips Petroleum Company, et al	00.78125%* 00.39063%** oo.78125%***	- 0 -	Broseco Corporation Delhi Taylor Oil Corporation John B. Rich Shell Oil Company Sohio Petroleum Company	.1187500 .0625000 .0062500 .5000000 .3125000

*When average Daily Production per well is more than 35 barrels.
**When average Daily Production per well is less than 35 barrels.
***When average Daily Production per well is exactly 35 barrels.

8	Littman "B" SW/4 Sec. 7, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160.00	2	None	13.28125%	Phillips Petroleum Company, et al	05.07812%	- 0 -	Martha Jane Anthony Broseco Corporation Delhi Taylor Oil Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0156250 .1781250 .0625000 .1875000 .0156250 .0156250 .0156250 .0093750 .5000000

EXHIBIT "B"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
FEE LEASES (Continued)										
9	Monarch E. 40 Ac. of S. 71.25 Ac. of SW/4 Sec. 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	40.00	1	None	12.84179%	Phillips Petroleum Company, et al	08.92652%	01.63302%	Broseco Corporation C. S. Longcope John B. Rich Sohio Petroleum Company	.2761673 .0033058 .0145351 .7059918
10	Sims NW/4 Sec. 14, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160.00	1	None	12.50000%	Humble Oil & Refining Company	06.25000%	- 0 -	Martha Jane Anthony Broseco Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0156250 .1979167 .1875000 .0156250 .0156250 .0156250 .0104167 .5416666
11	Southland S/2 SE/4 and W. 40 Ac. of N. 71.25 Ac. of SE/4 Sec. 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	120.00	3	None	12.89060%* 12.69529%** 12.69529%***	Phillips Petroleum Company, et al	05.61525%* 01.99110%** 05.61525%***	01.63302%* 01.63302%** 01.63302%***	Broseco Corporation J. G. Catlett Co. Cities Service Oil Company Kirby Production Company C. S. Longcope John B. Rich Sohio Petroleum Company	.1682291 .0304869 .3333333 .0217629 .0033058 .0088543 .4340277

* When daily average production per well is more than 35 barrels.
** When daily average production per well is less than 35 barrels.
*** When daily average production per well is exactly 35 barrels.

Fee Tracts 1,280.00 Acres.

Total Acreage in Unit 1,941.38 Acres.

E X H I B I T "C"
LITTMAN SAN ANDRES UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

Tract No.	Lease Name and Description	Number of Acres	Lease and/or Assignment Number	Tract Participation
UNITED STATES OF AMERICA LEASES		NEW MEXICO SUBDIVISION		
1	Ohio–Federal NE/4 Sec. 17, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4,750 feet.	160.00	LC–057443–A	03.60701%
2	Parcell–Federal SE/4 Sec. 8, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico	160.00	LC–062170–A	02.32066%
3	Wylie–Federal SW/4 Sec. 9, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico	170.69	LC–069408	14.38601%
	Federal Tracts	490.69 Acres.		
STATE OF NEW MEXICO LEASES				
4	Numex NW/4, Sec. 16, T–21–S, R–38 E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4,750 feet.	170.69 66138	B–11232	06.66266%
	State of New Mexico Tracts	170.69 Acres.		
FEE LEASES		TEXAS SUBDIVISION		
5	Freund NE/4 Sec. 15, Block A–29, PSL, Andrews County, Texas, Down to a depth of 5,000 feet.	160.00	None	00.82290%
6	Littman S/2 Sec. 6, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	320.00	None	20.16509%

EXHIBIT "C"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Lease and/or Assignment Number	Tract Participation
FEE LEASES (Continued)				
7	Littman "A" N/2 Sec. 6, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	320.00	None	35.67109%
8	Littman "B" SW/4 Sec. 7, Block A–29, PSL, Andrews County, Texas, down to a depth of 4,750 feet.	160.00	None	07.84198%
9	Monarch E. 40 Ac. of S. 71.25 Acs. of SW/4 Sec. 5, Block A–29, PSL, Andrews County, Texas, down to a depth of 4,750 feet.	40.00	None	01.46833%
10	Sims NW/4 Sec. 14, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	160.00	None	02.17480%
11	Southland S/2 SE/4 and W. 40 Ac. of N. 71.25 Ac. of SE/4, Sec. 5, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	120.00	None	04.87947%
	Fee Tracts	1,280.00 Acres.		
	Total Acreage in Unit	1,941.38 Acres.		

UNIT AGREEMENT

LITTMAN SAN ANDRES UNIT

LEA COUNTY, NEW MEXICO

ANDREWS COUNTY, TEXAS

INDEX

UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO AND ANDREWS COUNTY, TEXAS

	Page
Opening	1
Whereas's	1
Article 1 - Enabling Act and Regulations	2
Article 2 - Definitions	2
Article 3 - Exhibits	4
3.1 Exhibits Attached	4
3.2 Reference to Exhibits	5
3.3 Exhibits Considered Correct	5
3.4 Revision of Exhibits	5
3.5 Recording of Revised Exhibits	5
Article 4 - Unit Area and Unitized Substances	5
Article 5 - Enlargement of Unit Area	5
5.1 Enlargement	5
5.2 The Effective Date of Enlargement	6
Article 6 - Unit Operator	6
Article 7 - Resignation or Removal of Unit Operator	6
Article 8 - Successor Unit Operator	7
Article 9 - Accounting Provisions and Unit Operating Agreement	8
Article 10- Rights and Obligations of Unit Operator	8
Article 11- Plan of Operations	8
Article 12- Tract Participation	9
Article 13- Tracts Qualified	10
13.1 Qualification of Tracts	10
13.2 Revision of Exhibit "C"	10

	Page
Article 14 - Allocation of Unitized Substances	11
14.1 Allocation to Tracts	11
14.2 Distribution Within Tracts	11
14.3 Ownership Prior to Effective Date or Dates	12
14.4 Responsibility to Royalty Owner	12
Article 15 - Disposition of Unitized Substances	12
Article 16 - Royalty Settlement	13
Article 17 - Rental Settlement	13
Article 18 - Conservation	14
Article 19 - Drainage	14
Article 20 - Leases and Contracts Conformed and Extended	14
Article 21 - Covenants Run With the Land	16
Article 22 - Effective Date and Term	16
22.1 When Agreement Effective	16
22.2 Expiration Before It Becomes Effective	17
22.3 Term	17
22.4 Effect of Termination	17
22.5 Certificate of Termination	18
Article 23 - Production As Of the Effective Date	18
Article 24 - Rate of Prospecting, Development and Production	18
Article 25 - Appearances	19
Article 26 - Notices	19
Article 27 - No Waiver of Certain Rights	20
Article 28 - Non-Liability - Force Majeure	20
Article 29 - Non-Discrimination	20
Article 30 - Titles	20

	Page
30.1 Exclusion of Qualified Tract	20
30.2 Revision of Exhibits	21
30.3 Retention of Tract	21
30.4 Production Where Title Is in Dispute	21
Article 31 - Non-Joinder and Subsequent Joinder	21
31.1 Non-Qualified and Non-Committed Tracts	21
31.2 Prior to Six (6) Months After Effective Date	22
31.3 Subsequent to Six (6) Months After Effective Date	22
31.4 Effective Date of Joinder	22
31.5 Acquisition of Uncommitted Interests	22
Article 32 - Counterparts and Ratifications	22
32.1 Counterparts	22
32.2 Ratification	23
32.3 Joinder by Working Interest Owner in Unit Operating Agreement	23
Article 33 - Unleased Interests	23
Article 34 - Injection Rights; Easements; Water	23
Article 35 - Oil and Gas Interest Not Transferred	23
Article 36 - Reports	24
Article 37 - Taxes	24
Article 38 - Internal Revenue Provisions	24
Article 39 - Variable Interests	24
Article 40 - Conflict of Supervision	25
Article 41 - Laws and Regulations	25
41.1 Effect on Agreement	25

INDEX

	Page
Article 42 - Relationship of Parties	25
42.1 No Partnership Created	25
42.2 No Sharing of Market	26
42.3 Royalty Owners Free of Costs	26

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION OF THE

LITTMAN SAN ANDRES UNIT

LITTMAN SAN ANDRES FIELD

LEA COUNTY, NEW MEXICO AND ANDREWS COUNTY, TEXAS

No._____

THIS AGREEMENT, entered into as of the 9th day of September, 1963, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of Working, Royalty or other oil or gas interests in the Unit Area, as hereinafter defined, which has been reasonably developed for production of oil and/or gas from the San Andres formation; and

WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. Sections 181 et seq., authorizes Federal lessees and their representatives to unite with each other or jointly or separately with others, in collectively adopting and operating a cooperative or unit plan of development or operation or any oil or gas pool, field or like area or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest, and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Section 1, Chap. 88, Laws of 1943 as amended by Section 1, Chapter 176, Laws of 1961) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and is authorized by an Act of the Legislature (Section 3, Chap. 88, Laws of 1943, as amended by Section 1, Chap. 162, Laws of 1951) to amend with the approval of the lessee, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such unitized development and operation of State lands; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941 and Chap. 168, Laws of 1949) to approve this agreement, and the conservation provisions hereof; and

WHEREAS, in conformity with the provisions of Article 6008b of Title 102, Vernon's Annotated Civil Statutes of the State of Texas, it is necessary to establish the Littman San Andres Unit in order to effect secondary recovery operations for oil and gas from the San Andres formation, which operations are designed to conserve oil and gas, to prevent waste and to increase the ultimate recovery of oil therefrom while protecting the rights of all owners of interests in the Littman San Andres Field; and

WHEREAS, the parties hereto hold sufficient interests in the Littman San Andres Unit covering the land hereinafter described to give reasonably effective control of operations therein;

WHEREAS, it is the purpose of the parties hereto, to enable institution and consummation of secondary recovery operations, to conserve natural resources, prevent waste and secure the other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined Unit Area, and agree severally among themselves as follows:

ARTICLE 1

ENABLING ACT AND REGULATIONS

1.1 The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent, and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the States, in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

ARTICLE 2

DEFINITIONS

As used in this agreement:

2.1 "Commission" means the Oil Conservation Commission of the State of New Mexico.

2.2 "Commissioner" means the Commissioner of Public Lands of the State of New Mexico.

2.3 "Department" means the Department of the Interior of the United States of America.

2.4 "Director" means the Director of the United States Geological Survey.

2.5 "Effective Date" means the time when this agreement becomes effective, as hereinafter provided.

2.6 "Paying Quantities" means production of Unitized Substances in quantities sufficient to pay the costs of producing same from wells within the Unit Area with a reasonable profit.

2.7 "Railroad Commission" means the Railroad Commission of Texas.

2.8 "Royalty Interest" or "Royalty" means an interest in a tract, other than Working Interest, which entitles the owner thereof to share in the Unitized Substances produced from such tract, or in the proceeds or value thereof.

2.9 "Royalty Owner" means the owner of a Royalty Interest.

2.10 "Secretary" means the Secretary of the Interior of the United States of America or any person duly authorized to exercise the powers vested in that office.

2.11 "Supervisor" means the Oil and Gas Supervisor of the United States Geological Survey having jurisdiction for the region in which the Unitized Land is situated.

2.12 "Tract" means a parcel of land described and given a Tract number in Exhibit "B".

2.13 "Tract Participation" means that percentage of Unitized Substances produced from the Unitized Formation which is allocated to a Tract under this agreement.

2.14 "Unit Area" means the land described by Tracts in Exhibit "B" and shown in outline on Exhibit "A", containing as shown 1941.38 acres, more or less. The portion thereof situated in New Mexico and Texas will sometimes be referred to herein as the "New Mexico Subdivision of Unit Area" and the "Texas Subdivision of Unit Area".

2.15 "Unit Manager" means the person or corporation appointed by Working Interest Owners to perform the duties of the Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Articles 7 and 8 hereof.

2.16 "Unit Operating Agreement" means the agreement entitled "Unit Operating Agreement, Littman San Andres Unit, Lea County, New Mexico and Andrews County, Texas" bearing the same date as this Agreement and entered into by the Working Interest Owners who are parties to this agreement, and includes any amendments thereto.

2.17 "Unit Operator" means, at any time, the person, firm, or corporation then designated and acting as such in accordance with the Unit Operating Agreement.

2.18 "Unitized Formation" means that subsurface portion of the Unit Area which is subject to this Agreement and is commonly known as the San Andres formation of the Guadalupe Series, a part of the Permian system, which is produced from the subsurface depths of 4316 feet to 4354 feet in the Neville G. Penrose, Inc., #1 Lydia Littman well located in the NE/4 SE/4 of Sec. 6, Block A-29, PSL Survey, Andrews County, Texas, plus an additional 150 feet below the latter depth in said well.

2.19 "Unitized Substances" means all oil, gas, gaseous substances, sulfur contained in gas, condensate, distillate, and all associated and constituent liquid or liquefiable hydrocarbons within or produced from the Unitized Formation.

2.20 "Usable Well" means a well which has been drilled within the Unit Area to the depth of the Unitized Formation and has casing in the hole in condition for use either as a producing well or an injection well, and on which well there has been filed with the Commission or with the Railroad Commission, on or before the effective date of this Agreement, a well record and completion report (Form C-105 in New Mexico and Form 2, Texas Railroad Commission) and/or Request for Allowable (Form C-104 in New Mexico and Form 3, Texas Railroad Commission), and which well has produced some oil from the Unitized Formation and has had an allowable granted for it by the Commission or by the Railroad Commission.

2.21 "Voting Interest" means the voting power possessed by a Working Interest Owner as defined in the Unit Operating Agreement.

2.22 "Waterflood Acre-Feet" means the volume of net pay (as determined from sample logs and other available data) of Unitized Formation contained within the Waterflood Acre-Feet limit line shown on the attached Exhibit "A".

2.23 "Working Interest" means an interest in a Tract by virtue of a lease, operating agreement, fee title, or otherwise under which the owner of such interest is vested with the right to explore for, develop and produce such substances and which is chargeable with and obligated to pay or bear in cash or out of production or otherwise all or a portion of the cost of drilling, producing and other operations for the production of Unitized Substances from such Tract, in the absence of unitization. The right delegated to the Unit Operator as such by the Unit Operating Agreement is not to be regarded as a Working Interest.

2.24 " Working Interest Owner" means the owner of a Working Interest.

ARTICLE 3

EXHIBITS

3.1 Exhibits Attached. Attached hereto are the following exhibits which constitute a part of this agreement:

Exhibit "A",which is a map showing in addition to the boundary of the Unit Area the boundaries and identity of Tracts and leases within said Unit Area to the extent known by the Unit Operator.

Exhibit "B", which is a schedule showing to the extent known to the Unit Operator a description of each Tract, the leases thereon, and showing its Tract number and the percentage and kind of ownership.

Exhibit "C", which is a schedule of the Tracts within the Unit Area which are reasonably proved to be productive of Unitized

Substances and for each tract is shown the description, the leases thereon, the Tract number, and Tract Participation.

3.2 Reference to Exhibits. Reference in this agreement to exhibits shall mean the exhibits attached hereto except that from and after the time at which a revision to an exhibit becomes effective reference to such exhibit shall mean the then latest revision thereof.

3.3 Exhibits Considered Correct. For all purposes of this agreement said exhibits shall be considered to be true and correct unless and until they are revised or corrected in accordance with this Agreement.

3.4 Revision of Exhibits. Exhibits "A", "B", and "C" shall be revised by the Unit Operator whenever changes render such revision necessary or to correct any mathematical or other errors which might exist in said exhibits.

3.5 Recording of Revised Exhibits. Whenever an exhibit is revised in accordance with the terms and provisions hereof, the Unit Operator shall certify to the revised exhibit and shall file it for record in Lea County, New Mexico, and Andrews County, Texas, and with the Supervisor and with the Commissioner.

ARTICLE 4

UNIT AREA AND UNITIZED SUBSTANCES

4.1 The Unit Area shall be that as defined under 2.14 hereof. All oil and gas in or that may be produced from the Unitized Formation underlying the lands within the Unit Area together with the right to use the surface of such lands for the development and operation of the Unitized Formation are unitized under the terms of this agreement. Nothing herein shall be construed to unitize, pool or in any way affect the oil, gas and other minerals contained in or that may be produced from any formation other than the Unitized Formation as hereinabove defined.

ARTICLE 5

ENLARGEMENT OF UNIT AREA

5.1 Enlargement. The above described Unit Area shall when practicable be expanded to include any additional Tract or Tracts regarded as reasonably necessary or advisable for the purposes of this agreement. Such expansion shall be effected in the following manner:

5.1.1 Unit Operator when authorized by a vote of at least ninety per cent (90%) of the combined voting interests, after preliminary concurrence of the Director and the Commissioner, shall:

a. Prepare a notice of the proposed expansion, describing the contemplated changes in the boundary of the Unit Area, the reason therefor and the proposed effective date thereof, delivering copies of the notice to the Supervisor and the Commissioner, and mailing copies to

the last known address of each lessee, lessor and Working Interest Owner whose interests are affected, advising such parties that thirty (30) days will be allowed for submission to the Unit Operator of any objections, and

b. Upon expiration of said thirty (30) day period as set out immediately above Unit Operator shall file with the Director, Commissioner, Commission and Railroad Commission the following:

i. Evidence of mailing of the notice of expansion;

ii. A copy of any objections thereto which have been filed with the Unit Operator;

iii. An application for such expansion;

iv. An instrument containing the appropriate joinders in compliance with the participation requirements of Article 31 hereof.

5.2 The Effective Date of Enlargement. An enlargement of the Unit Area shall, after due consideration of all pertinent information and upon approval by the Director, Commission, Commissioner, and Railroad Commission, become effective at 7:00 o'clock A.M. on the date set forth in said notice.

ARTICLE 6

UNIT OPERATOR

6.1 SOHIO PETROLEUM COMPANY is hereby designated as Unit Operator, and by signing this instrument as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the operations, development and production of Unitized Substances as herein provided.

6.2 Whenever reference is made herein or in the Unit Operating Agreement to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of an interest in Unitized Substances; and the term "Working Interest Owner" or the term "Royalty Owner" as so used, shall include Unit Operator as the owner of a Working Interest or Royalty Interest, respectively, when such interest is owned by it.

ARTICLE 7

RESIGNATION OR REMOVAL OF UNIT OPERATOR

7.1 Unit Operator shall have the right to resign at any time, but such

resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been given by Unit Operator to all Working Interest Owners, the Director, Commission, Commissioner, and the Railroad Commission and until all wells then subject hereto are placed in a satisfactory condition for suspension or abandonment, whichever is required by the Supervisor as to Federal lands and by the Commission and Railroad Commission as to State and/or fee lands unless a new Unit Operator or Unit Manager shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

7.3 The Working Interest Owners may remove the Unit Operator by the affirmative vote of eighty-five per cent (85%) of the Voting Interest of all the Working Interest Owners other than the one acting as Unit Operator. Such removal shall be effective upon notice thereof to the Unit Operator, the Director and the Commissioner.

7.4 In all such instances of resignation or removal, until a successor Unit Operator is selected and approved as hereinafter provided, the Working Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, preferably at least thirty (30) days before such resignation or removal becomes effective, appoint a Unit Manager to represent them in any action to be taken hereunder.

7.5 The resignation or removal of Unit 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 Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, materials, appurtenances and any other assets, used in conducting the unit operations and owned by the Working Interest Owners to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

7.6 Sale or other disposition of all its Working Interest in the Unit Area by Unit Operator will operate automatically to effect the removal of Unit Operator. No sale or disposition of Working Interest by Unit Operator shall include or pass the right to act as Unit Operator.

ARTICLE 8

SUCCESSOR UNIT OPERATOR

8.1 Upon the resignation or removal of a Unit Operator, a successor Unit Operator shall be selected by Working Interest Owners in accordance with the terms and provisions of the Unit Operating Agreement. Such selection shall not become effective until (a) a Unit Operator so selected shall accept, in writing, the duties and responsibilities of Unit Operator, and (b) the selection shall have

been filed with the Supervisor and approved by the Commissioner. If no successor Unit Operator or Unit Manager is selected and qualified as provided herein, the Director and Commissioner at their election may declare this Unit Agreement terminated.

ARTICLE 9

ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT

9.1 Costs and expenses incurred by Unit Operator in conducting Unit operations hereunder, shall be paid, apportioned among and borne by the Working Interest Owners in accordance with the agreement or agreements entered into (separately or collectively) by and between the Working Interest Owners and Unit Operator, herein referred to as Unit Operating Agreement. However, nothing contained herein or in the Unit Operating Agreement shall obligate any Working Interest Owner or the Unit Operator to bear or pay any tax upon any Royalty Interest or upon the production or sale of Unitized Substances accruing or allotted thereto or any tax measured by such production or the value or proceeds of sale thereof. Such Unit Operating Agreement may also provide the manner in which the Working Interest Owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing to them in conformity with their underlying operating agreements, leases or other independent contracts and such other rights and obligations as between Unit Operator and the Working Interest Owners as may be agreed upon by the Unit Operator and the Working Interest Owners. However, no such operating agreement shall be deemed either to modify any of the terms and conditions of this Unit Agreement or to relieve the Unit Operator of any right or obligations established under this Unit Agreement; and in case of any inconsistency or conflict between the Unit Agreement and the Unit Operating Agreement, this Unit Agreement shall prevail. Three true copies of any Unit Operating Agreement executed pursuant to this Article shall be filed with the Supervisor, prior to approval of this agreement by the Director, and two true copies shall be filed with the Commissioner.

ARTICLE 10

RIGHTS AND OBLIGATIONS OF UNIT OPERATOR

10.1 Except as otherwise specifically provided herein or in the Unit Operating Agreement, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary for producing, storing, allocating and distributing the Unitized Substances, are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and together with this agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer to Unit Operator title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

ARTICLE 11

PLAN OF OPERATIONS

11.1 It is recognized and agreed by the parties hereto that the land

subject to this Agreement is reasonably proved to be productive of Unitized Substances in paying quantities or necessary for Unit Operations and that the object and purpose of this Agreement is to formulate and put into effect a secondary recovery project in order to effect the increased recovery of Unitized Substances, prevent waste and conserve natural resources. The parties hereto agree that Unit Operator may, subject to the consent and approval of a plan of operation by Working Interest Owners, the Supervisor, and the Commissioner, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, and any one or more other substances, whether produced from the Unit Area or not.

11.2 Unitized Substances produced from wells in the New Mexico and Texas Subdivisions of the Unit Area, respectively, shall be separately measured and sold, and reported separately to the proper governmental authorities of the two states. In case of any Unitized Substance which is stored in tanks or other facilities, the storage tanks or facilities for the production from the two subdivisions shall be separate from each other. It is recognized that the proper governmental authorities respectively of each of the two states will or may provide for separate allowables of production of Unitized Substances from each of the two subdivisions, however, the provisions of this paragraph 11.2 shall not alter or affect the computation and definition of the Tract Participation of the Tracts as herein elsewhere set forth; nor shall this Unit Agreement operate to create separate units for the New Mexico and Texas Subdivisions of the Unit Area — it being agreed that only one unit is created hereby.

11.3 The Working Interest Owners, Supervisor, Commissioner, Commission and Railroad Commission shall be furnished periodical reports 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 consent and approval of the Working Interest Owners, the Supervisor, Commissioner, Commission, and Railroad Commission.

11.4 The initial plan of operation shall be filed with the Supervisor, Commissioner, Commission, and Railroad Commission concurrently with the filing of this Unit Agreement for final approval. Said initial plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor, Commissioner, Commission and Railroad Commission may determine to be necessary for timely operation consistent herewith. The initial plan of operation shall include a pilot water flood to determine the feasibility of water flooding the Unit Area.

11.5 Reasonable diligence shall be exercised in complying with the approved plan of development and operation, however, notwithstanding anything to the contrary herein contained, the Unit Operator shall commence secondary recovery operations on the Unit Area within six (6) months after the effective date of this Agreement, or any extension thereof approved by the Director and Commissioner or this Agreement shall terminate automatically, in which latter event Unit Operator shall notify all interested parties.

ARTICLE 12

TRACT PARTICIPATION

12.1 Tract Participation of each Tract is based upon the summation of four factors weighted as follows, to wit:

12.1.1 10% times the ratio of the total number of Usable Wells

upon the Tract to the total number of Usable Wells in the Unit Area.

12.1.2 20% times the ratio of total number of Waterflood Acre-Feet in the Tract to the total number of Waterflood Acre-Feet in the Unit Area.

12.1.3 40% times the ratio of total accumulated primary production of oil from the Tract from first production to October 1, 1961, to total accumulated primary production of oil from the Unit Area for said period.

12.1.4 30% times the ratio of the total remaining primary production of oil from the Tract to the total remaining primary production of oil from the Unit Area from and after October 1, 1961.

ARTICLE 13

TRACTS QUALIFIED

13.1 Qualification of Tracts. On and after the effective date hereof, the Tracts within the Unit Area which shall be entitled to participation in the production of Unitized Substances therefrom, shall be those Tracts within the Unit Area, and more particularly described in Exhibit "B" that are qualified as follows:

13.1.1 Each Tract as to which Working Interest Owners owning one hundred per cent (100%) of the Working Interest therein, have signed or ratified this agreement and Royalty Owners owning one hundred per cent (100%) of the Royalty Interest therein have signed or ratified this agreement; or

13.1.2 Each Tract as to which Working Interest Owners owning not less than ninety-five per cent (95%) of the Working Interest therein have signed or ratified this Agreement and Royalty Owners owning not less than seventy-five per cent (75%) of the Royalty Interest therein have signed or ratified this Agreement, and in which the Working Interest Owners in said Tract who have signed or ratified this Agreement have agreed to indemnify and hold harmless all other parties hereto against any and all claims and demands that may be made by the nonjoining Working Interest Owners and/or Royalty Owners on account of the inclusion of such Tract in the Unit Area and the operation of the Unit Area on the basis herein set forth; provided, however, that the manner of such indemnity and the inclusion of such Tract in the Unit Area shall have been approved by Working Interest Owners owning eighty-five per cent (85%) of the combined Voting Interest attributable to all of the Tracts which have qualified under Section 13.1.1 above.

13.2 Revision of Exhibit C. If less than all Tracts are committed

hereto as of the effective date of this agreement, Unit Operator, as soon as practicable after such date, shall file with the Supervisor and Commissioner a schedule of Qualified Tracts as of said effective date. Said schedule shall be designated "First Revised Exhibit C" and shall set forth opposite each such Qualified Tract a revised Tract Participation which shall be computed according to the formula set out in Article 12 hereof. Unless disapproved by the Supervisor and the Commissioner within thirty (30) days after filing, said First Revised Exhibit "C" shall become effective as of the effective date hereof.

If after the effective date of this agreement, there is any tract subsequently committed hereto, as provided in Article 5 (Enlargement of Unit Area) hereof, or any non-committed tract subsequently committed hereto under the provisions of Article 31 (Non-joinder and Subsequent Joinder), or if any tract is eliminated from the unit as provided for in Article 30 (Titles), schedule C shall be revised by the Unit Operator and distributed to the Working Interest Owners, the Supervisor, Director, Commissioner, Commission and Railroad Commissioner to show the new tract participation of all the then effectively committed tracts; and the revised schedule, upon approval by the Commissioner and the Supervisor or the Director, shall govern all the allocation of production from and after the effective date thereof until a new schedule is so approved. In all such revisions, the previously committed tracts shall remain in the same ratio one to the other.

ARTICLE 14

ALLOCATION OF UNITIZED SUBSTANCES

14.1 Allocation to Tracts. All Unitized Substances produced and saved shall be apportioned and allocated to the several qualified Tracts in accordance with the respective Tract Participations effective hereunder from and after the effective date hereof, as set forth in Exhibit "C"; less, save and except any part of such Unitized Substances used in conformity with good operating practices within the Unit Area for drilling, operating, camp, and other development purposes and for pressure maintenance and other operations hereunder, or lost or destroyed in handling, or delivered to lessors under terms of their respective leases for use on the leased premises within the Unit Area -- as to all of which the parties hereto agree that no royalty, overriding royalty, production payment or other payment to any Royalty Owner shall be payable. The amount of Unitized Substances so allocated to each Tract, and only that amount, regardless of whether it be more or less than the amount of actual production from the well or wells, if any, on such Tract, shall for all intents, uses and purposes, be deemed to have been produced from such Tract.

14.2 Distribution Within Tracts. The Unitized Substances allocated to each Tract 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 to the same extent and 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. If ownership of the Working Interest and/or Royalty Interest is not uniform throughout any Tract, or if the Working Interest and/or Royalty Interest, or any part thereof, in any Tract are divided with respect to separate parcels or portions of such Tract and owned severally by different persons, the Tract Participation assigned to such a Tract shall in each such instance, in the absence of a recordable instrument executed by all such owners and furnished to Unit Operator fixing the division of ownership on a uniform basis throughout the Tract, be divided among the parcels or portions in

which there is uniformity of ownership, in proportion to the number of surface acres in each.

14.3 Ownership Prior to Effective Date or Dates. This Agreement shall not affect ownership of oil and gas produced prior to its effective date; and anything herein contained to the contrary notwithstanding (except for the provisions of Article 23) there shall not be any retroactive adjustment for production of oil and/or gas obtained prior to the effective date of this agreement, the effective date of joinder of any Tract or parcel of land, or the effective date of commitment of any interest to this Agreement. No Tract committed to this Agreement and qualified for participation as elsewhere herein provided shall be subsequently excluded from participation because of depletion of Unitized Substances.

14.4 Responsibility to Royalty Owner. If any Working Interest Owner shall receive in kind, dispose of or receive proceeds of sale of any of the Unitized Substances which accrues to the Royalty Interest of any Royalty Owner then in each such instance such Working Interest Owner shall account to such Royalty Owner for the latter's share of such production or proceeds of same and shall hold each other party hereto harmless against all claims, demands and causes of action on the part of such Royalty Owner for or in respect of its share of such production or proceeds of sale of same.

ARTICLE 15

DISPOSITION OF UNITIZED SUBSTANCES

15.1 The Unitized Substances allocated to each Tract shall be delivered in kind to the respective parties entitled thereto by virtue of the ownership of oil and gas rights therein or by purchase from such owners. Each such party entitled thereto shall have the continuing right to receive such production in kind at a common point within the Unit Area and/or to sell or dispose of the same as it sees fit. Notwithstanding any other provision hereof, each party shall always have the right of separately disposing of its share of the Unitized Substances produced and saved, and shall execute all division orders or other instruments pertaining to the sale of its share of such production. Each such party shall have the right to construct, maintain and operate within the Unit Area all necessary facilities for that purpose, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto. Any extra expenditure incurred by Unit Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be borne by the party receiving the same in kind. In the event any such party shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Unit Area currently as and when produced, then so long as such conditions continue, Unit Operator for the account and at the expense of such party in order to avoid curtailing the operation of the Unit Area may sell or otherwise dispose of such production at the then prevailing market price for Unitized Substances of the same kind, grade and quality in which event Unit Operator shall account monthly to such party for the proceeds thereof, provided, however, that the term of any contract made by Unit Operator for the sale of such Unitized Substances shall be no longer than is commensurate with the minimum needs of the industry under the circumstances and in no event longer than one year; and provided further that Unit Operator's right to sell Unitized Substances not taken in kind or sold by the party entitled thereto shall be revocable at the will of such party.

ARTICLE 16

ROYALTY SETTLEMENT

16.1 The United States of America, the State of New Mexico, and all Royalty Owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any Tract shall hereafter be entitled to the right to take in kind their share of the Unitized Substances allocated to such Tract, and Unit Operator shall make deliveries of such Royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Royalty Interest not taken in kind shall be made by Working Interest Owners responsible therefor under existing contracts, division orders, laws and regulations, on or before the last day of each calendar month for Unitized Substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases, except that such royalties shall be computed in accordance with the terms of this agreement.

16.2 All royalties due the United States of America, the State of New Mexico, and the other Royalty Owners hereunder on each Tract shall be computed and paid on the basis of the Unitized Substances allocated to the respective Tracts committed hereto, in lieu of actual production from each such Tract.

16.3 Each Royalty Owner (other than the United States of America and the State of New Mexico) that executes this Agreement, represents and warrants that it is the owner of a Royalty Interest in a Tract or Tracts within the Unit Area. If any Royalty Interest in a Tract or Tracts should be lost by title failure in whole or in part, during the term of this Agreement, then the Royalty Interest of the party representing himself to be the owner thereof shall be reduced proportionately and the interest of all parties shall be adjusted accordingly.

16.4 If the amount of Unitized Substances accruing to any Royalty Interest or Working Interest in a Tract depends by the terms of the instrument reserving or creating it, on the per well production from such Tract during any period of time, then for the purpose of computing the quantity of Unitized Substances accruing to such Interest during such period of time, there shall be deemed located on such Tract that percentage of the total number of wells completed in the entire Unitized Formation and used or usable at the beginning of such period, either as producing wells or injection wells, which is equal to the Tract Participation of such Tract, and the quantity of Unitized Substances allocated to such Tract, as above provided, shall be deemed to have been produced in equal proportions by the number of wells so deemed located on such Tract; except for leases issued by the United States of America 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 Unit Area were a single consolidated lease.

ARTICLE 17

RENTAL SETTLEMENT

17.1 In each instance in which proceeds of royalty production shall be less than the required minimum rental or royalty due on the area including some

portion of the Unit Area, the deficiency shall be made up and paid by the Working Interest Owners of the portion of lease in question. Rental for the lands of the State of New Mexico, subject to this agreement, shall be paid by such Working Interest Owners at the rate specified in the respective leases from the State of New Mexico. Rental or minimum royalty from lands of the United States of America, subject to this agreement, shall be paid by such Working Interest Owners at the rate specified in the respective leases from the United States of America, unless rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

ARTICLE 18

CONSERVATION

18.1 Operations hereunder and production of Unitized Substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to Federal and State laws and regulations.

ARTICLE 19

DRAINAGE

19.1 The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from the Unitized Formation by wells on lands not subject to this Agreement.

ARTICLE 20

LEASES AND CONTRACTS CONFORMED AND EXTENDED

20.1 The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil and/or gas of lands committed to this Agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but shall otherwise remain in full force and effect, and the parties hereto hereby consent that the Secretary and the Commissioner, respectively, shall and by their approval hereof, or by the approval hereof of their duly authorized representatives, do hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty or royalty requirements of Federal and State of New Mexico leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this Agreement. Without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

20.1.1 The development and operation of lands subject to this Agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned Tract subject to this Agreement, regardless of whether there is any development of any particular part or Tract of the Unit Area, notwithstanding anything to the contrary in the lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

20.1.2 Drilling, producing or secondary recovery operations performed hereunder upon any qualified Tract of Unitized Land will be accepted and deemed to be performed upon and for the benefit of each and every qualified Tract of the Unit Area, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on land therein embraced.

20.1.3 Suspension of drilling or producing operations on any qualified Tract within the Unit Area pursuant to direction or consent of the Secretary, Commissioner, Commission and/or Railroad Commission, or their duly authorized representatives, or other lawful authority having jurisdiction, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every qualified Tract within the Unit Area and no lease shall terminate by reason of such suspension, but every lease shall remain in full force and effect during the period of suspension.

20.1.4 Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil and/or gas which might expire prior to the termination of this Agreement is hereby extended beyond any such term so provided therein, so that it shall be continued in full force and effect for and during the term of this Agreement.

20.1.5 Termination of this Agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, shall continue in force and effect thereafter.

20.1.6 Any lease other than a Federal or State of New Mexico lease having only a portion of its land committed hereto shall be segregated as to the land subject to this Agreement and the lands not subject to this Agreement, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof. Provided, however, that so long as Unitized Substances are produced from the Unit Area and a portion is allocated to the lands within such lease included within the Unit Area or so long as the Unit Operator in accordance with the provisions of this Agreement is engaged in secondary recovery operations or drilling or reworking wells for the purpose of improving or maintaining or restoring production of Unitized Substances that portion of the lease which is not committed to this Agreement shall remain in full force and effect.

20.1.7 If a Federal lease committed to this Agreement covers lands outside the Unit Area such lease shall be governed by the 4th paragraph of Section 17 (j) of the Mineral Leasing Act as amended by the Act of September 2, 1960 (74 Stat. 781-784).

20.1.8 Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall be segregated as to the portion committed and as to the por-

tion not committed and the terms of such lease shall apply separately as to such segregated portions commencing as of the effective date hereof. Notwithstanding any of the provisions of this agreement to the contrary, such lease shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease, (a) if Unitized Substances are discovered in paying quantities on some part of the lands embraced in such lease committed to this agreement, or (b) so long as a portion of Unitized Substances produced from the Unit Area is, under the terms of this Agreement, allocated to the portion of the lands covered by such lease committed to this Agreement, or (c) if, at the expiration of the full term thereof, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced therein such lease shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of Unitized Substances, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as Unitized Substances are produced in paying quantities from any portion of said lands.

ARTICLE 21

COVENANTS RUN WITH THE LAND

21.1 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 interest in land or leases subject hereto shall be 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 Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic or certified copy of the instrument of transfer; and no assignment or transfer of any Royalty Interest subject thereto 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, photostatic or certified copy of the instrument of transfer.

ARTICLE 22

EFFECTIVE DATE AND TERM

22.1 When Agreement Effective. 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 of 7:00 o'clock A.M. on the first day of the calendar month next following:

22.1.1 The execution or ratification of this Agreement and/or the Unit Operating Agreement by Working Interest Owners owning a combined Voting Interest of all the qualified Tracts within the Unit Area of not less than ninety-five per cent (95%); and the qualification for participation by all Tracts in said Unit Area as provided in Article 13 hereof, and such qualification shall, notwithstanding any

other provision hereof be a condition precedent to this Agreement's becoming effective, and

22.1.2 The final approval of this Agreement by the Commissioner, Commission, Railroad Commission and the Secretary of his duly authorized representative, and

22.1.3 The filing of at least one counterpart of this Agreement in the records of Lea County, New Mexico, and the records of Andrews County, Texas, by Unit Operator; provided that the above filings must be made within thirty (30) days after the final approval as provided above in this Article, and

22.1.4 The delivery by Unit Operator to the Supervisor and the Commissioner of a certificate to the effect that this Agreement will become effective according to its terms and stating the effective date, and the filing of such certificate in the records of Lea County, New Mexico, and Andrews County, Texas.

22.2 Expiration Before it Becomes Effective. This Agreement shall ipso facto expire on July 1, 1964 (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this Agreement has been executed or ratified by Working Interest Owners owning a combined Voting Interest in qualified Tracts within the Unit Area of at least ninety per cent (90%) and who have decided to extend said expiration date for a period not to exceed six (6) months. If said expiration date is so extended and 22.1.1, 22.1.2, 22.1.3, and 22.1.4 are not accomplished on or before said extended expiration date, this agreement shall ipso facto expire on said extended expiration date and thereafter be of no further force or effect.

22.3 Term. This Agreement shall continue in force and effect from and after the effective date so long as Unitized Substances are produced from the Unit Area in paying quantities or drilling, reworking or other operations are conducted by Working Interest Owners for the purpose of obtaining or restoring production of Unitized Substances from the Unit Area without cessation in production or in such operations of more than ninety (90) consecutive days at any one time; provided, however, that if production of Unitized Substances or the conduct of drilling, reworking or other operations for the production of Unitized Substances is prevented by force majeure at any time or times this Agreement shall not terminate by reason of the cessation of such production or such operations provided that such production or such operations are resumed within sixty (60) days after such force majeure has ceased to operate and provided further, (1) this agreement shall terminate automatically as of the first day of the month after the owners of 85 per cent of the voting interests shall have determined that the pilot flood required under Article 11.4 is unsuccessful, and all principals are notified promptly, or (2) if the owners of 85 per cent of the voting interests determine that the unit agreement should be terminated because it can no longer be operated profitably, feasibly, or in the interest of conservation, this agreement may be terminated with approval of the Commissioner and the Director, effective as of the first day of the month after such approval by the Director.

22.4 Effect of Termination. On termination of this Agreement the further development and operation of the Unitized Formation under this Agreement

shall be abandoned and the unitization effected by this Agreement shall be at an end and thereafter the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate Tracts just as if this Agreement had never been entered into, provided, however, that Royalty Owners, to the extent of their authority, hereby grant Working Interest Owners a period of twelve (12) months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with the operations hereunder.

22.5 Certificate of Termination. Upon termination of this Agreement in accordance with this Article, Unit Operator shall execute and file for record in Lea County, New Mexico, and Andrews County, Texas, certificate evidencing such termination provided, however, that such certificate shall be filed only after the approval of Working Interest Owners as above provided.

ARTICLE 23

PRODUCTION AS OF THE EFFECTIVE DATE

23.1 Unit Operator shall gauge all lease and other tanks within the Unit Area to ascertain the amount of merchantable oil produced from the Unitized Formation in such tanks, above the pipe line connections, as of 7:00 A.M. on the effective date hereof. The oil that is a part of the prior allowable of the wells from which it was produced shall remain the property of the parties entitled thereto the same as if the Unit had not been formed. Any such oil not promptly removed may be sold by the Unit Operator for the account of the parties entitled thereto, subject to the payment of all royalties, overriding royalties, production payments, and all other payments under the provisions of the applicable lease or other contracts. The oil that is in excess of the prior allowable of the wells from which it was produced shall be regarded as Unitized Substances produced after effective date hereof.

23.2 If, as of the effective date hereof, any Tract is over-produced with respect to the allowable of the wells on that Tract and the amount of over-production has been sold or otherwise disposed of, such over-production shall be regarded as a part of the Unitized Substances produced after the effective date hereof and shall be charged to such Tract as having been delivered to the parties entitled to Unitized Substances allocated to such Tract.

ARTICLE 24

RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION

24.1 All production and disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. As to lands within the State of New Mexico, the Director is hereby vested with authority from time to time, in his discretion to alter or modify the rate of prospecting and development and within the limits made or fixed by the Commission to alter or modify the quantity and rate of production under this Agreement; provided that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of specific written approval thereof by the Commissioner, and as to any lands of the State of New Mexico or privately owned lands in said State subject to this Agreement, as to the quantity and rate of production in the absence of specific written approval thereof by the

Commission. As to lands within the State of Texas, the Director is hereby vested with authority similar to that above vested in him as to lands in New Mexico, provided that all alterations or modifications of the kind above mentioned, shall be within limits made or fixed by the Railroad Commission, and provided further that no such alteration or modification shall be effective in the absence of specific written approval thereof by the Railroad Commission -- it being agreed that the making of Field Rules and the matter of fixing the amount of production of oil or gas as to lands in Texas are the province of the Railroad Commission. And provided further that the authority vested above in the Director in this Article 24 is limited to alteration or modification in the public interest -- the purpose thereof and the public interest to be served to be stated in the order of alteration or modification.

Powers in this Article 24 vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than fifteen (15) days from notice.

ARTICLE 25

APPEARANCES

25.1 Unit Operator shall, after notice to the other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department, the Commissioner, the Commission and the Railroad Commission, and to appeal from orders issued under regulations of said Department, Commissioner, Commission or Railroad Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the said Department, Commissioner, Commission or Railroad Commission or any other legally constituted authority, provided, however, that any other interested party shall also have the right, at his own expense, to be heard in any such proceedings.

ARTICLE 26

NOTICES

26.1 Except as otherwise specified herein, each notice given pursuant to this Agreement shall be given in writing as follows: (a) By registered or certified mail or by telegraph with postage or charges prepaid, properly addressed to each party to whom given at such party's address set forth below its signature to this Agreement or its ratification or consent hereto; or (b) By personal delivery to the party to whom the notice is to be given, provided that if delivered to a corporate party, the notice shall be delivered personally to an executive officer of such party, subject to the provisions of (c) below; or (c) In case of each Working Interest Owner who shall designate a representative and/or alternate representative as specified in Section 5.2 of the Unit Operating Agreement, the notice may be given either by personal delivery to such a representative or alternate representative or by mailing or telegraphing the same (with postage or charges prepaid) to such representative or alternate representative in the manner above specified, properly addressed to such representative or alternate representative at his address specified in the designation made by the Working Interest Owner. Each notice given by mail or telegraph as above provided shall be deemed given 48 hours after such notice is deposited in the United States mail or 24 hours after it is filed with an operating telegraph company for immediate transmission by telegraph. Any party hereto may change the address to which notices for it may be sent by appropriate

written notice to Unit Operator, provided that notice of such change of address of Unit Operator shall be given by the latter to all other parties hereto. Notice given in the manner above specified, to the husband of any married woman who is a party to this Agreement, shall also constitute notice to her.

ARTICLE 27

NO WAIVER OF CERTAIN RIGHTS

27.1 Nothing contained in this Agreement shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State or States wherein said Unit Area is located or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

ARTICLE 28

NON-LIABILITY - FORCE MAJEURE

28.1 Unit Operator shall not be liable to any other party hereto for anything wrongfully or negligently done or omitted to be done in the conduct of operations hereunder except in case of bad faith. The obligations, other than the obligation to make money payments herein provided for, of Unit Operator or any Working Interest Owner shall be suspended to the extent that and so long as performance thereof is prevented by fire, explosion, action of the elements, unavoidable accidents, strikes or other differences with workmen, acts of civil or military authorities, act of the public enemy, war, restrictions or restraints imposed by law or regulation or order of governmental authority, whether federal, state or local, inability to obtain necessary rights of access, uncontrollable delays in transportation, inability to obtain materials or equipment in open market, or any other cause reasonably beyond control by such party, whether or not similar to any cause above enumerated; and such party shall not be liable to any other party for losses caused by any of said matters or things. The affected party shall give notice thereof to the other parties hereto as promptly as reasonably possible.

ARTICLE 29

NON-DISCRIMINATION

29.1 In the performance of work under this Agreement the Operator agrees to comply with the non-discrimination provisions of Section 301 (1) (7) inclusive of Executive Order 10925, as amended, (28 F.R. 6485) which are hereby included by reference in this Agreement.

ARTICLE 30

TITLES

30.1 Exclusion of Qualified Tracts. Whenever it is determined by Working Interest Owners after the effective date that through error or because of failure in title of a party hereto a qualified Tract at or after the effective date failed to meet the requirements specified in Article 13 such Tract shall be excluded from Participation as of 7:00 o'clock A.M. on the first day of the

calendar month next succeeding the month in which such determination is made, provided, however, that if such Tract meets the requirements specified in Article 13 before the exclusion thereof becomes effective it shall not be excluded.

30.2 Revision of Exhibits. If a Tract is excluded pursuant to 30.1, Unit Operator shall revise Exhibit "C" accordingly recomputing the Tract Participation of the remaining qualified Tracts such revised Exhibit to be effective as of the time at which the exclusion of such Tract becomes effective. In any such computation the qualified Tract Participation of the remaining qualified Tracts shall remain in the same ratio one to another.

30.3 Retention of Tract. If there is a failure in the title of any party hereto to a Royalty Interest or a Working Interest in a Tract but such Tract is not excluded as above provided, the party whose title has failed shall not be entitled to any benefits under this Agreement in respect of the interest affected by the title failure.

30.4 Production Where Title Is In Dispute. If the title or right of any party claiming the right to receive in kind all or any portion of the Unitized Substances allocated to a Tract is in dispute, Unit Operator at the discretion of Working Interest Owners shall either:

30.4.1 Require that the party to whom such Unitized Substances are delivered or to whom the proceeds thereof are paid, furnish security for the proper accounting therefor to the rightful owner if the title or right of such party fails in whole or in part, or

30.4.2 Withhold and market the portion of Unitized Substances with respect to which title or right is in dispute, and impound the proceeds thereof without liability for interest until such time as the title or right thereto is established by a final judgment of a court of competent jurisdiction or otherwise to the satisfaction of Working Interest Owners, whereupon the proceeds so impounded shall be paid to the party rightfully entitled thereto; provided, that as to State or Federal land or leases, no payments of funds due the State of New Mexico or the United States of America should be withheld, but such funds shall be deposited as directed by the Commissioner of Public Lands of the State of New Mexico and the Supervisor of the United States Geological Survey, to be held as unearned money pending final settlement of title dispute, and then applied as earned or returned in accordance with such final settlement.

30.5 Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

ARTICLE 31

NON-JOINDER AND SUBSEQUENT JOINDER

31.1 Non-Qualified and Non-Committed Tracts. Any tract not qualified

as of the effective date of this agreement or any tract brought into this unit pursuant to Article 5 may be committed to this agreement by meeting such requirements as may be voted by ninety per cent (90%) of the voting interest, by qualifying pursuant to Article 13, and by effecting a joinder pursuant to Article 31, if needed.

31.2 Prior to Six (6) Months After Effective Date. Any oil or gas interest in the Unitized Formation in lands within the Unit Area not committed hereto prior to submission of this Agreement to the Director, the Commissioner, Commission and Railroad Commission for final approval, may (subject to provisions of Article 14.3) thereafter be committed hereto upon compliance with the applicable provisions of Article 13 hereof, at any time up to the effective date hereof and for a period of six (6) months thereafter, on the same basis of participation as provided for in Article 12 by the owner or owners thereof subscribing or consenting in writing to this Agreement; provided that the Tract embracing such an interest must have been qualified for participation prior to the effective date hereof as required by Articles 13 and 22 hereof.

31.3 Subsequent to Six (6) Months After Effective Date. It is understood and agreed, however, that subsequent to six (6) months after the effective date hereof, the right of subsequent joinder as provided in this section shall be subject to such requirements or approvals and on such basis as may be agreed upon by Working Interest Owners having ninety per cent (90%) of the combined Voting Interest of all the Working Interest Owners subject to the approval of the Director and Commissioner. Such joinder by a Royalty Owner must be evidenced by his execution or ratification of this Unit Agreement and must be consented to in writing by the Working Interest Owner responsible for the payment of any benefits that may accrue hereunder in behalf of such Royalty Owner.

31.4 Effective Date of Joinder. Except as may otherwise herein be provided, subsequent joinder to this Agreement shall be effective at 7:00 o'clock A.M. as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish commitment of the interest in question to this Agreement.

31.5 Acquisition of Uncommitted Interests. In the event at any time after the effective date hereof any party bound by this Agreement acquires an uncommitted interest in any qualified Tract such interest upon being so acquired shall be, upon approval of Working Interest Owners, subject to this Agreement effective as of 7:00 o'clock A.M. on the first day of the calendar month following the date of such acquisition and where such interest acquired is a Working Interest, such interest shall also be subject to the Unit Operating Agreement. Notice of such acquisition shall be filed with the Supervisor not more than fifteen (15) days following such effective date.

ARTICLE 32

COUNTERPARTS AND RATIFICATIONS

32.1 Counterparts. This Agreement may be executed in any number of counterparts and all executed counterparts hereof shall be deemed to constitute

a single instrument binding upon every party executing any counterpart hereof, with the same force and effect as if all parties who execute counterparts hereof had joined in the execution of the same counterpart hereof.

32.2 Ratification. This Agreement may be ratified by a separate instrument in writing, and each party who executes any such instrument shall be deemed a party to this Agreement with the same force and effect as if such party had executed a counterpart hereof.

32.3 Joinder by Working Interest Owner in Unit Operating Agreement. Execution or ratification of this Agreement by a Working Interest Owner shall constitute ratification of and joinder in the Unit Operating Agreement by such Working Interest Owner with like effect as if such Working Interest Owner had executed the Unit Operating Agreement.

ARTICLE 33

UNLEASED INTERESTS

33.1 Where a party to this Agreement commits hereto an oil and gas interest that is unleased, then for all purposes of this Agreement and the Unit Operating Agreement, such party shall be considered a "Working Interest Owner" as herein defined, as to 7/8ths thereof and a "Royalty Owner" as herein defined, as to 1/8th thereof; and said 7/8ths shall be considered to be a "Working Interest" as herein defined; and said 1/8th shall be considered a "Royalty Interest" as herein defined. And for all purposes aforesaid, such Working Interest shall be treated as a lease remaining in force as long as this Unit Agreement remains in force.

ARTICLE 34

INJECTION RIGHTS; EASEMENTS; WATER

34.1 Royalty Owners hereby grant unto Working Interest Owners the right to inject into the Unitized Formation any substances in whatever amounts the Working Interest Owners deem expedient, including the right to place and maintain injection wells on the Unit Area and to use producing or abandoned oil or gas wells for said purposes in accordance with an approved plan of operation as provided in Section 11.1. The parties hereto to the extent of their rights and interests, hereby grant to Working Interest Owners the right to use as much of the surface of the land within the area embracing the Unit Area as may be reasonably necessary for the operation and development of the Unitized Formation, including a site for a water, gas injection, processing or other plant, and camp site. Working Interest Owners shall have free use of water from the Unit Area for operations hereunder except water from Royalty Owners' wells, private lakes, ponds, or irrigation ditches.

ARTICLE 35

OIL AND GAS INTEREST NOT TRANSFERRED

35.1 Notwithstanding any other provision of this Agreement each of the parties hereto reserves its title to its mineral interests in the respective Tracts in the Unit Area and the Unitized Substances credited to it hereunder and nothing

contained in this Agreement shall be construed to transfer or assign from one party to another or others, individually or collectively, any mineral interest in the separately owned Tracts, other than the right to share in the allocation of Unitized Substances produced from the Unit Area as herein specified and to use and operate the Unit Area to the extent set out in this Agreement. The term "mineral interest" as used in this Article 35 shall include Working Interests and Royalty Interests.

ARTICLE 36

REPORTS

36.1 Unit Operator shall make such reports to governmental authorities as may be required by applicable laws or by the regulations or orders of such authorities.

ARTICLE 37

TAXES

37.1 Each party hereto shall for its own account render and be responsible for the payment of its share of any taxes levied against or measured by the amount or value of Unitized Substances produced from the Unit Area.

Nothing herein contained shall impair the right of any Working Interest Owner or Royalty Owner to contest the validity of any levy, assessment, or imposition of any tax by any governmental authority including without limitation production taxes, a tax upon or measured by production or an ad valorem tax.

ARTICLE 38

INTERNAL REVENUE PROVISIONS

38.1 It is agreed that it is not the purpose or intention of this Agreement to create, nor shall the same be construed as creating, any mining partnership, commercial partnership or other partnership relation. The parties hereto, and each of them, hereby agree that this Agreement shall not constitute a partnership as defined in the Internal Revenue Code of 1954, and specifically elect to be excluded from all of Sub-Chapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954, or similar provision of any applicable state income tax law. Unit Operator is hereby authorized and directed to execute and file on behalf of each Working Interest Owner such further evidence of such election as may be required to make such election under the laws and regulations promulgated thereunder.

ARTICLE 39

VARIABLE INTERESTS

39.1 In case of any change in amounts of interest in the Unitized Formation or Unitized Substances accruing to or owned by any party or parties which results from any variable or sliding scale royalty provided for in any lease now or hereafter becoming subject to this Agreement, variable overriding royalty, liquidation of any production payment, or other kind of variable interest, or other

cause, each party so affected shall promptly advise Unit Operator thereof. Every renewal or exchange lease issued as a renewal of or exchange of any Federal lease covering any part of the Unit Area shall be subject to the terms and provisions of this Agreement in the same manner and to the same extent as the lease so renewed or exchanged.

39.2 Notwithstanding any other provisions of this Agreement or of the Unit Operating Agreement, it is agreed that there shall be no obligation on the part of Unit Operator to ascertain or determine when any production payment is satisfied or paid out, or when there is any change in allocation of Unitized Substances to any party hereto on account of any variable royalty, overriding royalty, or other variable interest. It shall be the duty and responsibility of the affected Working Interest Owners and Royalty Owners in all such instances to take such action as may be proper or necessary to effectuate appropriate changes in the allocation of Unitized Substances and proceeds of sale of same, including without limitation the notification of pipeline companies and purchasers of production and the execution of transfer orders, division orders and other documents which may be required.

ARTICLE 40

CONFLICT OF SUPERVISION

40.1 Neither the Unit Operator nor the Working Interest Owners, nor any of them, shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provisions thereof to the extent that the said Unit Operator or the Working Interest Owners, or any of them, are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and/or proper representatives of the States of New Mexico and/or Texas in and about any matters or things concerning which it is required herein that such concurrence be obtained.

ARTICLE 41

LAWS AND REGULATIONS

41.1 Effect on Agreement. This Agreement and operations hereunder shall be subject to the conservation laws of the States of New Mexico and Texas, to the rules, regulations and orders of the Commission and the Railroad Commission and to all other applicable laws and rules, regulations and orders of governmental authority whether Federal, State or local. Unit Operator and Working Interest Owners shall be entitled to assume that every such law, rule, regulation or order is valid and enforceable unless and until the contrary is established by final judgment of a court of competent jurisdiction. It is not the intent of this Agreement to limit, restrict or prorate the production of Unitized Substances, it being recognized that such powers are to be exercised exclusively by governmental authority.

ARTICLE 42

RELATIONSHIP OF PARTIES

42.1 No Partnership Created. This Agreement is not intended to create,

and nothing contained herein shall be construed as creating, an association or trust or as imposing a partnership duty, obligation or liability, with regard to any one or more of the parties hereto, it being intended that the duties, obligations and liabilities of the parties hereto shall be several and not joint or collective, each party hereto being individually responsible for the obligations herein assumed by such party.

42.2 No Sharing of Market. Nothing in this Agreement shall be construed as providing directly or indirectly for any cooperative refining or joint sale or cooperative marketing of Unitized Substances.

42.3 Royalty Owners Free of Costs. Nothing contained in this Agreement shall be construed as imposing upon any Royalty Owner any obligation to pay any of the expenses incurred in the development or operation of the Unitized Formation except to the extent, if any, that such Royalty Owner is obligated to pay the same by the terms of an agreement other than this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the date indicated opposite their respective signatures.

SOHIO PETROLEUM COMPANY

DATE: September 9, 1963

By _____
Cecil C. Irby
Agent and Attorney in Fact

970 First National Office Building
Oklahoma City, Oklahoma 73102

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared CECIL C. IRBY known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said SOHIO PETROLEUM COMPANY, an Ohio Corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by CECIL C. IRBY, Agent and Attorney in Fact of SOHIO PETROLEUM COMPANY, an Ohio Corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of SEPTEMBER, A.D. 1963.

Notary Public in and for Oklahoma County, Oklahoma.

My Commission Expires:

September 6, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT AGREEMENT, LEA COUNTY,
STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Agreement.

The undersigned acknowledges receipt of a copy of said Unit Agreement and acknowledges that no representations not incorporated herein or in said Unit Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

_____

APPROVAL - CERTIFICATION - DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior under the Act approved February 25, 1920, 41 Stat. 437, 30 U.S.C. Secs. 181 et seq., as amended by the Act of August 8, 1946, 60 Stat. 950, and delegated to the Director of the Geological Survey, pursuant to Departmental Order No. 2365 of October 8, 1947, 43 CFR Sec. 4.618, 12 FR 6784, I do hereby:

A. Approve the attached secondary recovery Unit Agreement for the development and operation of the Littman San Andres Unit Area, in the Counties of Lea and Andrews in the States of New Mexico and Texas, respectively.

B. Certify and determine that the unit plan for secondary recovery contemplated in the attached Agreement is necessary and advisable in the public interest and is 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 the Federal lease or leases committed to said agreement are hereby established, altered, changed or revoked to conform with the terms and conditions of the Agreement.

Dated_____.

Contract No.

_____

Director
United States Geological Survey

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, wife of the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____ _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19____.

My Commission Expires:

_____

_____
Notary Public in and for _____
_____County, _____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____ _____, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19_____.

My Commission Expires:

_____

_____
Notary Public in and for _____
County, _____.

R 38 E

Leonard Oil Co.

H. A. Keinath 4

Will Terr. U. S.

Elloitt, Inc.

"F"

•WSW

H.A. Keinath 7

T 21 S

M.W.J. Production Company

Elliot

LC-062

C.W. Parce

Elloitt, Inc.

Shell

"NE

LC-

O. 14

C. W. Parcell

G. M. Cone

P.L. Crond

N

Aztec Oil & Gas

U. S.

Exhibit "A"

LITTMAN (SAN ANDRES) UNIT

LITTMAN (SAN ANDRES) FIELD

ANDREWS COUNTY, TEXAS
AND
LEA COUNTY, NEW MEXICO

Legend:

- PRODUCING OIL WELL
- ABANDONED OIL WELL
- DRY HOLE
- WATER SUPPLY WELL
- WATER SUPPLY WELL LOCATION
- UNIT AREA BOUNDARY
- WATERFLOOD ACRE-FEET LIMIT LINE
- FEE LAND
- FEDERAL LAND
- STATE LAND
- TRACT NUMBER

SCALE

0' 1000' 2000

BIGBY STOTT COMPANY
PETROLEUM ENGINEERS

R 38 E

NEW MEXICO
TEXAS

T
21
S

Leonard Oil Co.
H. A. Keinath
5
Elloitt, Inc.
4
Amerada
Amerada
Sohio
5

Will Terry
U. S.
H. A. Keinath
U. S.

Elloitt, Inc.
8
Elloitt, Inc.
9

"F"

wsw

Sohio
Sohio
Monarch
Southland
SURVEY
A-29

H. A. Keinath

M. W. J. Production Company
Elliott, Inc.
Elliott, Inc.
Sohio
6

"A"

WATER FLOOD ACRE-FEET LIMIT LINE

LC-062170-A
C.W. Parcell
LC-069408
Wylie
U.S.

Littman
Sohio

Elloitt, Inc.
Shell
Sohio
Sohio
17
16

"TEXAS SUBDIVISION OF THE UNIT AREA"

"NEW MEXICO SUBDIVISION OF THE UNIT AREA"

LC-057443-A
Ohio-Fed.
B-11232

Littman
Humble
Sohio
Sohio
15

C. W. Parcell
G. M. Cone
P.L. Crandell
Elliott, Inc.
Sohio
N.G. Penrose, Inc.

Aztec Oil & Gas

NuMex
U. S.
State

Freund
Sims

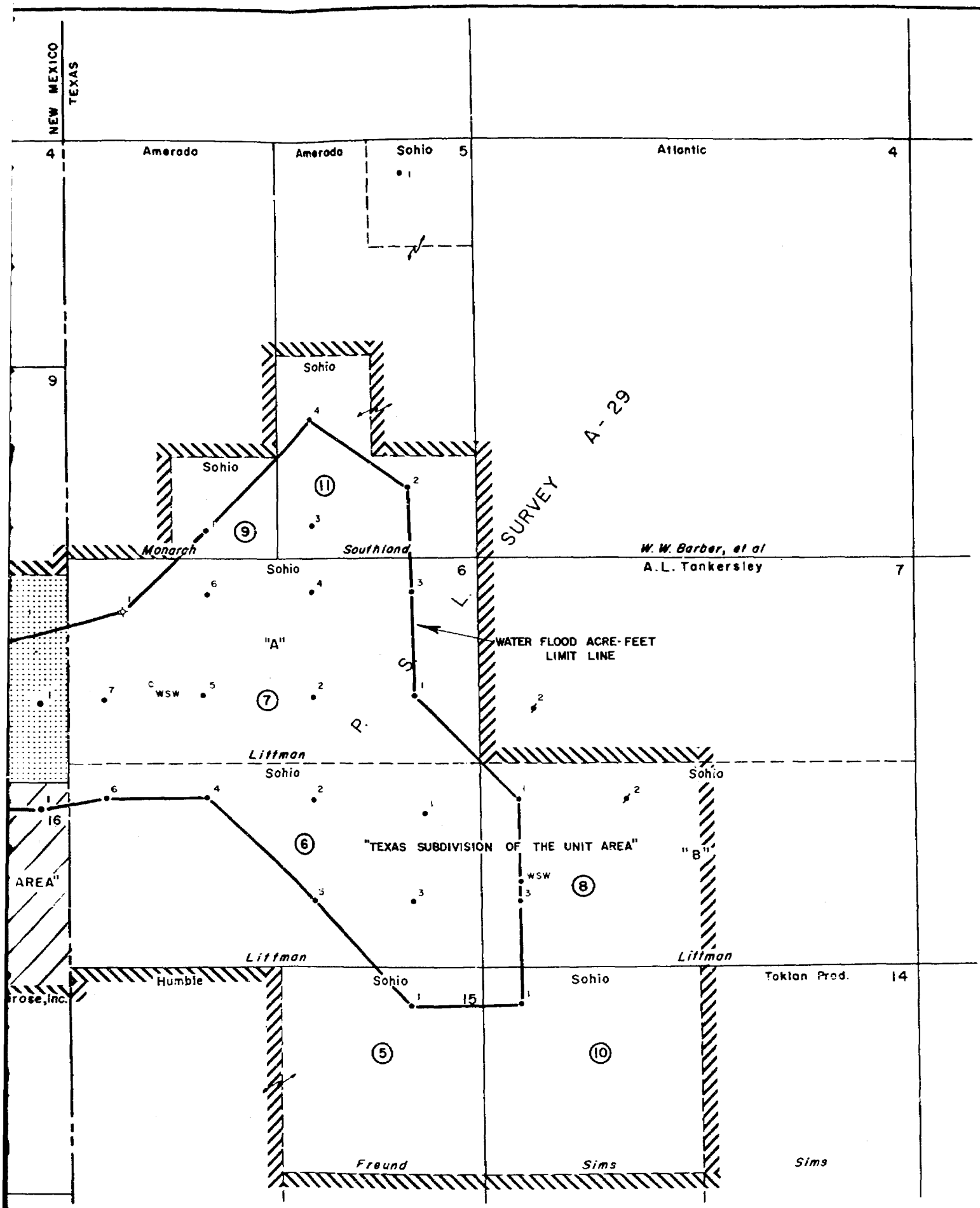


Exhibit "A"

LITTMAN (SAN ANDRES) UNIT

LITTMAN (SAN ANDRES) FIELD

ANDREWS COUNTY, TEXAS
AND
LEA COUNTY, NEW MEXICO

Legend:

- PRODUCING OIL WELL
- ABANDONED OIL WELL
- DRY HOLE
- WATER SUPPLY WELL
- WATER SUPPLY WELL LOCATION
- UNIT AREA BOUNDARY
- WATERFLOOD ACRE-FEET LIMIT LINE
- FEE LAND
- FEDERAL LAND
- STATE LAND
- TRACT NUMBER

SCALE
0' 1000' 2000

PAUL B. SCOTT COMPANY
PETROLEUM ENGINEERS

E X H I B I T "B"
LITTMAN SAN ANDRES UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
UNITED STATES OF AMERICA LEASES				NEW MEXICO SUBDIVISION						
1	Ohio-Federal NE/4 Sec. 17, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4750 feet.	160.00	1	LC-057443-A	12.50000%	Ohio Oil Co.	13.75000%	- 0 -	Broseco Corporation John B. Rich Sohio Petroleum Company	.1979167 .0104166 .7916667
2	Parcell-Federal SE/4 Sec. 8, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico	160.00	2	LC-062170-A	12.50000%	Elliott, Inc.	03.33300%	- 0 -	Elliott, Inc.	1.0000000
3	Wylie-Federal SW/4 Sec. 9, T-21-S, R-38-E, N.M.P.M., Lea County, New Mexico	170.69	3	LC-069408	12.50000%	Elliott, Inc.	02.38125%	00.11875%	Elliott, Inc.	1.0000000
	Federal Tracts	490.69 Acres								
STATE OF NEW MEXICO LEASES										
4	Numex NW/4 Sec. 16, T-21-S R-38-E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4750 feet.	170.69	2	B-11232	12.50000%	Humble Oil & Refining Company	06.25000%	- 0 -	Broseco Corporation John B. Rich Sohio Petroleum Company	.2770834 .0145833 .7083333
	State of New Mexico Tracts	170.69 Acres.								

EXHIBIT "B"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
FEE LEASES					TEXAS SUBDIVISION					
5	Freund NE/4 Sec. 15, Block A-29, PSL, Andrews County, Texas, down to a depth of 5000 feet.	160.00	1	None	13.28125%	Humble Oil & Refining Company, et al	04.77208%	- 0 -	Broseco Corporation J. G. Catlett Co. Kirby Production Company John B. Rich Sohio Petroleum Company	.2461179 .0405401 .0712149 .0129536 .6291735
6	Littman S/2 Sec. 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320.00	6	None	14.84374%	Neville G. Penrose	03.51562%	06.09375%	Martha Jane Anthony Broseco Corporation Delhi Taylor Oil Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0131250 .1781250 .0625000 .1875000 .0131250 .0131250 .0131250 .0093750 .5000000
7	Littman "A" N/2 Sec. 6, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	320.00	7	None	16.79690%* 14.84376%** 16.01565%***	Phillips Petroleum Company, et al	00.78125%* 00.39063%** 00.78125%***	- 0 -	Broseco Corporation Delhi Taylor Oil Corporation John B. Rich Shell Oil Company Sohio Petroleum Company	.1187500 .0625000 .0062500 .5000000 .3125000
8	Littman "B" SW/4 Sec. 7, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160.00	2	None	13.2812 5%	Phillips Petroleum Company, et al	05.07812%	- 0 -	Martha Jane Anthony Broseco Corporation Delhi Taylor Oil Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0156250 .1781250 .0625000 .1875000 .0156250 .0156250 .0156250 .0093750 .5000000

*When average Daily Production per well is more than 35 barrels.
**When average Daily Production per well is less than 35 barrels.
***When average Daily Production per well is exactly 35 barrels.

EXHIBIT "B"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Number of Wells	Lease and/or Assignment Number	Amount of Basic Royalty	Lessee of Record	Overriding Royalty Amount	Production Payment Amount	Working Interest	
FEE LEASES (Continued)										
9	Monarch E. 40 Ac. of S. 71.25 Ac. of SW/4 Sec. 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	40.00	1	None	12.84179%	Phillips Petroleum Company, et al	08.92652%	01.63302%	Broseco Corporation C. S. Longcope John B. Rich Sohio Petroleum Company	.2761673 .0033058 .0145351 .7059918
10	Sims NW/4 Sec. 14, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	160.00	1	None	12.50000%	Humble Oil & Refining Company	06.25000%	- 0 -	Martha Jane Anthony Broseco Corporation Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979 Margery Ann Hodges Obie P. Leonard, Jr. R. W. Leonard John B. Rich Sohio Petroleum Company	.0156250 .1979167 .1875000 .0156250 .0156250 .0156250 .0104167 .5416666
11	Southland S/2 SE/4 and W. 40 Ac. of N. 71.25 Ac. of SE/4 Sec. 5, Block A-29, PSL, Andrews County, Texas, down to a depth of 4750 feet.	120.00	3	None	12.89060%* 12.69529%** 12.69529%***	Phillips Petroleum Company, et al	05.61525%* 01.99110%** 05.61525%***	01.63302%* 01.63302%** 01.63302%***	Broseco Corporation J. G. Catlett Co. Cities Service Oil Company Kirby Production Company C. S. Longcope John B. Rich Sohio Petroleum Company	.1682291 .0304869 .3333333 .0217629 .0033058 .0088543 .4340277

* When daily average production per well is more than 35 barrels.
** When daily average production per well is less than 35 barrels.
*** When daily average production per well is exactly 35 barrels.

Fee Tracts 1,280.00 Acres.

Total Acreage in Unit 1,941.38 Acres.

E X H I B I T "C"
LITTMAN SAN ANDRES UNIT AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO – ANDREWS COUNTY, TEXAS

Tract No.	Lease Name and Description	Number of Acres	Lease and/or Assignment Number	Tract Participation
UNITED STATES OF AMERICA LEASES		NEW MEXICO SUBDIVISION		
1	Ohio–Federal NE/4 Sec. 17, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4,750 feet.	160.00	LC–057443–A	03.60701%
2	Parcell–Federal SE/4 Sec. 8, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico	160.00	LC–062170–A	02.32066%
3	Wylie–Federal SW/4 Sec. 9, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico	170.69	LC–069408	14.38601%
	Federal Tracts	490.69 Acres.		
STATE OF NEW MEXICO LEASES				
4	Numex NW/4, Sec. 16, T–21–S, R–38–E, N.M.P.M., Lea County, New Mexico, Down to a depth of 4,750 feet.	170.69	B–11232	06.66266%
	State of New Mexico Tracts	170.69 Acres.		
FEE LEASES		TEXAS SUBDIVISION		
5	Freund NE/4 Sec. 15, Block A–29, PSL, Andrews County, Texas, Down to a depth of 5,000 feet.	160.00	None	00.82290%
6	Littman S/2 Sec. 6, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	320.00	None	20.16509%

EXHIBIT "C"
(Continued)

Tract No.	Lease Name and Description	Number of Acres	Lease and/or Assignment Number	Tract Participation
FEE LEASES	(Continued)			
7	Littman "A" N/2 Sec. 6, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	320.00	None	35.67109%
8	Littman "B" SW/4 Sec. 7, Block A–29, PSL, Andrews County, Texas, down to a depth of 4,750 feet.	160.00	None	07.84198%
9	Monarch E. 40 Ac. of S. 71.25 Acs. of SW/4 Sec. 5, Block A–29, PSL, Andrews County, Texas, down to a depth of 4,750 feet.	40.00	None	01.46833%
10	Sims NW/4 Sec. 14, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	160.00	None	02.17480%
11	Southland S/2 SE/4 and W. 40 Ac. of N. 71.25 Ac. of SE/4, Sec. 5, Block A–29, PSL, Andrews County, Texas, Down to a depth of 4,750 feet.	120.00	None	04.87947%
Fee Tracts		1,280.00 Acres.		
Total Acreage in Unit		1,941.38 Acres.		

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 3041 & 3050

UNIT OPERATING AGREEMENT

LITTMAN SAN ANDRES UNIT

LEA COUNTY, NEW MEXICO

ANDREWS COUNTY, TEXAS

INDEX

UNIT OPERATING AGREEMENT
LITTMAN SAN ANDRES UNIT
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

	Page
Article 1 - Unit Agreement and Existing Operating Agreements	1
1.1 Confirmation of the Unit Agreement	1
1.2 Ratification of the Unit Agreement	1
1.3 Existing Operating Agreements	1
Article 2 - Definitions	1
2.1 Unit Agreement Definitions	1
2.2 Additional Definitions	2
2.3 Use of Neuter Pronouns	2
Article 3 - Exhibits	2
3.1 Unit Agreement Exhibits	2
3.2 Additional Exhibits	2
3.3 Revision of Exhibits	3
3.4 Reference to Exhibits	3
Article 4 - Cost Participation	3
Article 5 - Manner of Exercising Supervision	3
5.1 Right of Supervision	3
5.2 Representatives	4
5.3 Meetings	4
5.4 Vote Required	4
5.5 Absent Voting	4
5.6 Minutes of Meetings	4
5.7 Voting Without a Meeting	5
5.8 Vote Required; Amendment to Exhibit "F"	5

INDEX

		Page
Article 6 –	Designation of Operator	5
	6.1 Initial Designation	5
	6.2 Resignation or Removal	5
	6.3 Designation of Successor	5
	6.4 Selection of Successor	5
Article 7 –	Powers and Duties of Unit Operator	5
	7.1 Conduct of Operations	5
	7.2 Compliance with Instructions	6
	7.3 Specific Duties	6
	7.4 Specific Limitations	7
	7.5 Employees	7
	7.6 Liability of Unit Operator	7
	7.7 Non-Discrimination	7
	7.8 Settlement of Claims	8
Article 8 –	Rights Reserved to Working Interest Owners	8
	8.1 Access to Unit Area	8
	8.2 Reports and Data	8
Article 9 –	Taxes	8
	9.1 Production Taxes	8
	9.2 Ad Valorem Taxes	8
	9.3 Renditions, Returns and Reports	9
Article 10 –	Adjustment for Lease and Well Equipment	9
	10.1 Delivery of Wells and Equipment	9
	10.2 Inventory of Equipment	9
	10.3 Valuation of Equipment	10
	10.4 Approval of Inventory and Valuation	10

	Page
10.5 Equipment Adjustment	10
10.6 Intangible Costs	10
10.7 Warehouse, Camp and Other Facilities	10
10.8 Ownership of Equipment and Other Property	11
Article 11 – Unit Expense	11
11.1 Payment and Charging	11
11.2 Budgets	11
11.3 Advance Billings	12
11.4 Commingling of Funds	12
11.5 Lien of Unit Operator	12
11.6 Default in Payment	13
11.7 Adjustments on Uncommitted Interests	13
11.8 Audits	13
11.9 Non-Participation in Expenditures by a Working Interest Owner	14
Article 12 – Non-Unitized Formations	14
12.1 Right to Operate	15
12.2 Dually Completed Wells	15
Article 13 – Titles	15
13.1 Title Representation and Indemnification	15
13.2 Loss of Title Because of Unit Operations	15
Article 14 – Claims and Suits	15
14.1 Settlement or Defense	16
14.2 Notice of Claim	16
Article 15 – Relationship of Parties	16
15.1 Individual Rights and Obligations	

INDEX

	Page
Article 16 – Notices	16
Article 17 – Withdrawal of Working Interest Owner	16
17.1 Withdrawal	16
Article 18 – Abandonment of Wells	17
18.1 Rights of Former Owners	17
18.2 Plugging	18
Article 19 – Term of Agreement	18
19.1 Effective Date	18
19.2 Term	18
Article 20 – Abandonment of Operations	18
20.1 Termination	19
Article 21 – Transfers of Interest	19
21.1 Successors and Assigns	19
21.2 Notice of Transfers	19
Article 22 – Counterparts and Ratifications	19
22.1 Counterparts	19
22.2 Ratifications	19
Article 23 – Renewal and Exchange Leases	

UNIT OPERATING AGREEMENT

LITTMAN SAN ANDRES UNIT

LEA COUNTY, NEW MEXICO AND ANDREWS COUNTY, TEXAS

THIS AGREEMENT, made and entered into as of the 9th day of September, 1963, 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 and delivered as of the date hereof, that certain Unit Agreement, Littman San Andres Unit, Lea County, New Mexico, and Andrews County, Texas, hereinafter referred to as "Unit Agreement", and 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 San Andres Formation in the Unit Area therein defined.

Now, therefore, in consideration of the mutual covenants and agreements herein set forth, it is agreed as follows:

ARTICLE 1

UNIT AGREEMENT AND EXISTING OPERATING AGREEMENTS

1.1 Confirmation of the Unit Agreement. The Unit Agreement is hereby confirmed and incorporated herein by reference and made a part of this agreement. In the event of any conflict between the Unit Agreement and this agreement, the Unit Agreement shall prevail.

1.2 Ratification of the Unit Agreement. Each party who executes or ratifies this agreement without having executed or ratified the Unit Agreement shall be deemed, by the execution and ratification of this agreement, to have ratified and joined in the Unit Agreement with the same force and effect as if such party had executed it.

1.3 Existing Operating Agreements. During the life of this Unit Operating Agreement, all other existing operating agreements providing for operation of jointly owned properties within the Unit Area (except of course, operating and other agreements which create or transfer operating rights under any Federal or other lease which are in lieu of assignments of interest in the lease itself) shall be inoperative to the extent that they relate to the Unitized Formation, except as to settlement of obligations and liabilities accruing thereunder prior to effective date hereof.

ARTICLE 2

DEFINITIONS

2.1 Unit Agreement Definitions. All definitions contained in the Unit Agreement are adopted for the purpose of this agreement.

2.2 Additional definitions of terms used in this agreement are as follows:

2.2.1 "Unit Expense" means all costs and expenses incurred by Unit Operator in the conduct of operations pursuant to this agreement and any and all other costs, expenses and liabilities herein provided to be borne by the Working Interest Owners, except production taxes and ad valorem taxes, for which special provisions are made in Article 9 hereof.

2.2.2 "Cost Participation" means the participation of a Working Interest Owner in operations hereunder determined in accordance with Article 4 hereof, which participation represents the share of Unit Expenses to be charged to and borne by such Working Interest Owner.

2.2.3 "Voting Interest" means the voting power possessed by a Working Interest Owner, and in voting on any matter, each Working Interest Owner shall have a Voting Interest equal to such Working Interest Owner's Cost Participation.

2.2.4 "Unit Participation" means the interest of a Working Interest Owner in Unitized Substances which is arrived at by adding the results obtained by multiplying such Working Interest Owner's fractional oil interest, attributable to its Working Interest, in each Tract by the Tract Participation.

2.3 Use of Neuter Pronouns. Each party hereto is herein referred to by the neuter pronoun, whether such party is a natural person, a corporation, a partnership or other entity.

ARTICLE 3

EXHIBITS

3.1 Unit Agreement Exhibits. Exhibits "A", "B" and "C" of the Unit Agreement are incorporated herein by reference and shall be deemed part of this agreement in the same manner as if attached hereto.

3.2 Additional Exhibits. Attached hereto and made a part hereof are the following exhibits, the participation factors shown on Exhibits "D" and "E" having been computed on the assumption that all Tracts will be included in the Participating Area as established on the effective date:

EXHIBIT "D"

Part 1 is a schedule showing for each Tract the decimal fraction of Working Interest therein as to oil and the Tract Participation of such Tract.

Part 2 is a schedule showing by Working Interest Owner the Tract numbers of the Tracts in which such Working Interest Owner owns an interest, the decimal fraction of Working Interest as to oil in the Tract, the Tract Participation and the Cost Participation of each such Working Interest Owner.

EXHIBIT "E" is a schedule showing the decimal fractions of ad valorem taxes which shall be charged against and paid by the respective Working Interest Owners. These decimal fractions represent the proportion which each Working Interest Owner's Unit Participation bears to the total of the Unit Participation for all Working Interest Owners.

EXHIBIT "F" is the Accounting Procedure adopted for the purposes of this Agreement; however, the provisions contained in the body of this agreement shall prevail over any contrary or inconsistent provisions of Exhibit "F".

EXHIBIT "G" is a schedule of insurance to be maintained by Unit Operator for the benefit of the parties hereto, the cost of which is to be included in Unit Expense.

3.3 Revision of Exhibits. Whenever Exhibits "A", "B" and "C" are revised in accordance with the Unit Agreement, Exhibits "D" and "E" shall be revised by Unit Operator to conform to Exhibits "A", "B" and "C" as revised, each such revision of Exhibits "D" and "E" to become effective at the same time the corresponding revisions of Exhibits "A", "B" and "C" become effective. Promptly after revision of Exhibits "A", "B", "C", "D" and "E" Unit Operator shall furnish each party hereto a copy of each revised exhibit.

3.4 Reference to Exhibits. From and after the time at which a revision of any exhibit becomes effective reference in this agreement to such exhibits shall mean the then latest revision thereof.

ARTICLE 4

COST PARTICIPATIONS

4.1 Computation. The Cost Participation of each Working Interest Owner shall be computed by crediting to the owner or owners of the Working Interest as to oil in a Tract the Tract Participation of such Tract as shown in Exhibit "C", the Tract Participation of a Tract the Working Interest in which as to oil is owned by two or more parties to be credited to such parties in proportion to their respective Working Interests as to oil in such Tract. The total amount credited to a Working Interest Owner for all Tracts in which it has a Working Interest as above provided shall be its Cost Participation.

4.2 Exhibit "D" shall be deemed to be correct and each party hereto agrees that original Exhibit "D" correctly shows each Working Interest owned by it in any Tract listed in original Exhibit "B". Each party hereto agrees to bear the proportion of unit expense equal to its Cost Participation as computed in accordance with Section 4.1 and on the basis of Exhibit "D".

ARTICLE 5

MANNER OF EXERCISING SUPERVISION

5.1 Right of Supervision. All operations conducted pursuant to this agreement shall be subject to over-all control and supervision by the Working Interest Owners exercised in the manner hereinafter specified. In exercise of

such supervision and control, 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 a group. Unit Operator, as a Working Interest Owner, shall have the right to participate to the extent of its Voting Interest in the exercise of such supervision and control, in the same manner as any other party hereto.

5.2 Representatives. Each Working Interest Owner, by written notice to Unit Operator, shall designate and state addresses of a representative and alternate representative, either of whom shall have authority to represent, act for and bind it in all matters herein provided or permitted to be acted upon by the parties hereto; provided however, that a Working Interest Owner who is an individual may act in person. A Working Interest Owner may change its representative or alternate representative by written notice to Unit Operator stating the name and address of the successor. The representative and alternate representative of the Working Interest Owner who may be acting as Unit Operator shall also be its representative in its capacity as Unit Operator.

5.3 Meetings. Regular meetings of the parties hereto shall be held at such times as may be specified by them from time to time. Other meetings of the parties hereto shall be held upon call by the Unit Operator, either on its own motion, or at written request of two or more parties whose Voting Interests total twenty per cent (20%) or more. Unit Operator shall give to each Working Interest Owner written notice of each meeting at least ten (10) days in advance of the date thereof, such notice to be accompanied by the agenda for the meeting. The representative or alternate representative of Unit Operator shall act as the chairman of each meeting; however, in the absence of both the representative and the alternate representative of Unit Operator, a chairman may be designated by the parties represented at the meeting.

5.4 Vote Required. Unless otherwise provided herein or in the Unit Agreement, Working Interest Owners shall act upon and determine all matters coming before them by the affirmative vote of three or more Working Interest Owners owning a combined Voting Interest of at least sixty-five per cent (65%); provided that should any one Working Interest Owner own more than thirty-five per cent (35%) Voting Interest, its negative vote or failure to vote shall not serve to defeat a motion, and such motion shall pass if approved by a majority Voting Interest unless such negatively voting or non-voting Working Interest Owner is supported by the vote of one or more Working Interest Owners having a combined Voting Interest of at least five per cent (5%).

5.5 Absent Voting. A party hereto who is not represented at a meeting may vote on any matter included in the agenda for the meeting by letter or telegram addressed to the Unit Operator, and delivered to the chairman of the meeting prior to the submission of such matter to vote at the meeting; provided however, that such a vote shall not be counted with respect to any matter on the agenda which is amended at the meeting.

5.6 Minutes of Meetings. At each meeting, the chairman shall designate a suitable person to act as secretary for the purpose of keeping minutes which shall reflect all matters considered and all actions taken at the meeting, although such minutes need not be a verbatim record of the proceedings. If request therefor is made at the meeting, the minutes shall reflect the vote of Working Interest Owners on the action or actions specified in the request. As promptly as reasonably possible after each meeting Unit Operator shall mail to

each Working Interest Owner a true copy of the minutes of the meeting, as signed by the chairman and attested by the secretary; such minutes shall be deemed approved and shall be considered correct unless, within thirty days after the mailing of copies thereof as above provided, Unit Operator receives written objections thereto, with specifications of the item or items objected to and a statement of the reasons for the objection.

5.7 Voting Without A Meeting. The Working Interest Owners may vote by letter or telegram addressed to Unit Operator on any matter that might be considered and acted upon at a meeting with like effect as if their votes were cast at a meeting, provided that a statement of the matter is mailed to all Working Interest Owners and no meeting to consider the matter is called or requested in accordance with Section 5.3 within seven days after the mailing of such statement. Unit Operator shall give to Working Interest Owners prompt notice of the result of voting by mail or telegram, as above provided, and the proposal voted on and the results of the voting shall be reflected in the minutes of the next meeting.

5.8 Vote Required; Amendment to Exhibit "F". Exhibit "F" may be amended by the affirmative vote of two or more Working Interest Owners owning a combined Voting Interest of at least eighty-five per cent (85%); provided that should any one Working Interest Owner own more than fifteen per cent (15%) Voting Interest, its negative vote or failure to vote shall not serve to defeat a motion to amend said Exhibit "F", and such motion shall pass if approved by a majority Voting Interest unless such negatively voting or non-voting Working Interest Owner is supported by vote of one or more Working Interest Owners having a combined Voting Interest of at least five per cent (5%).

ARTICLE 6

DESIGNATION OF OPERATOR

6.1 Initial Designation. SOHIO PETROLEUM COMPANY is hereby designated as the initial Unit Operator.

6.2 Resignation or Removal. The provisions of Article 7 of the Unit Agreement (Resignation or Removal of Unit Operator) are adopted and made part of this agreement the same as if fully copied at length herein.

6.3 Designation of Successor. The provisions of Article 8 of the Unit Agreement (Successor Unit Operator) are adopted and made part of this agreement the same as if fully copied at length herein.

6.4 Selection of Successor. Upon the resignation or removal of a Unit Operator, a successor Unit Operator shall be selected by Working Interest Owners; provided, that if the Unit Operator that is removed fails to vote or votes only to succeed itself the successor Unit Operator may be selected by the affirmative vote of at least fifty-one per cent (51%) of the Voting Interest after excluding the Voting Interest of the Unit Operator that was removed.

ARTICLE 7

POWERS AND DUTIES OF UNIT OPERATOR

7.1 Conduct of Operations. Subject to the provisions of this agreement, the development and operation of the Unit Area for Unitized Substances and

all operations incidental thereto shall be conducted by Unit Operator, and Unit Operator shall be entitled to custody of all materials, equipment and other property owned by the Working Interest Owners jointly.

7.2 Compliance with Instructions. In the conduct of operations hereunder, Unit Operator shall comply with such instructions as are rightfully given it by Working Interest Owners from time to time. Operations not covered by any applicable instructions by Working Interest Owners shall be conducted by Unit Operator in accordance with its best judgment and as would a prudent operator conducting similar operations.

7.3 Specific Duties. In the conduct of operations hereunder, Unit Operator shall:

7.3.1 Consult freely with the Working Interest Owners and keep them advised of all matters which Unit Operator, in the exercise of reasonable judgment, considers sufficiently important.

7.3.2 Keep true and correct books of account reflecting all items of Unit Expense and ad valorem taxes described in Article 9 hereof, and accurate records of the quantities of Unitized Substances produced, saved and delivered to or for the account of the parties hereto.

7.3.3 Furnish to Working Interest Owners such quarterly reports concerning the development and operation of the Unit Area and the Unitized Substances produced therefrom as may be directed by the Working Interest Owners from time to time.

7.3.4 Furnish to each Working Interest Owner who makes request therefor a copy of the log of each well drilled by the Unit Operator, and a copy of each engineering or geological report prepared by Unit Operator in the conduct of operations hereunder.

7.3.5 Make such reports to governmental authorities as may be required by applicable laws or by the regulations or orders of such authorities.

7.3.6 Keep the Working Interests of the Working Interest Owners and all materials, equipment and other property owned by them jointly, free from liens of persons furnishing labor, material or services in connection with operations conducted by Unit Operator, excepting such as are contested by Unit Operator in good faith.

7.3.7 Maintain in force at Unit Expense while operations are conducted by it hereunder the insurance specified in Exhibit "G".

Except as otherwise provided above, neither fire, explosion, windstorm, nor other property hazard insurance nor underground damage liability insurance shall be provided by Unit Operator for the benefit of the parties hereto.

The premiums paid for insurance carried by Unit Operator pursuant hereto shall be a proper charge to the joint account, except that pre-

miums on insurance described in item (c) of Exhibit "G" shall be handled as provided in Article III, 5, B of Exhibit "F", Accounting Procedure.

It is further understood and agreed that the Unit Operator is not a warrantor of the financial responsibility of any insurer with whom such insurance is carried, and that except for willful negligence, Unit Operator shall not be liable to Working Interest Owners for any loss suffered on account of the insufficiency of the insurance carried, or of insurer with whom carried. Unit Operator shall not be liable to Working Interest Owners for any loss accruing by reason of Unit Operator's inability to procure or maintain the insurance above mentioned. Unit Operator agrees that if at any time during the life of this agreement it is unable to obtain or maintain such insurance it shall immediately notify in writing Working Interest Owners of such fact.

7.4 Specific Limitations. Except at the direction or with the approval of the Working Interest Owners, Unit Operator shall not:

7.4.1 Undertake any project beyond the scope of normal or routine operations that is reasonably estimated to involve expenditures in excess of $10,000.00; provided however, that whenever any project is authorized by the parties hereto, Unit Operator shall be authorized to make all expenditures that are necessary or proper in carrying out such project; and further provided, that in case of emergency, Unit Operator is authorized to make such expenditures as may be immediately necessary for the protection of life or property, but prompt notice of such emergency shall be given to the Working Interest Owners.

7.4.2 Make any change in the method of operation theretofore authorized by the Working Interest Owners.

7.4.3 Drill, recomplete, abandon or change the status of any well in the Unit Area.

7.4.4 Dispose of any surplus materials or equipment, excepting junk materials, and also excepting any item (other than pipe and tubular goods) the then current replacement cost of which is less than $1,500.00.

7.5 Employees. All individuals employed by Unit Operator in the conduct of operations hereunder shall be the employees of Unit Operator alone. The selection of such employees, their hours of labor, and their compensation shall be determined by Unit Operator.

7.6 Liability of Unit Operator. Unit Operator shall not be liable to any other party hereto for anything done or omitted to be done in the conduct of operations hereunder unless caused by its gross negligence or willful misconduct.

7.7 Non-Discrimination. In the performance of work under this agreement the Unit Operator agrees to comply with the non-discrimination provisions of Section 301 (1) (7) inclusive of Executive Order 10925 (26 F.R. 1977) which are hereby included by reference in this agreement.

7.8 Settlement of Claims. Unit Operator shall have authority to settle or pay any claim or suit arising out of operations hereunder for not more than $1,500.00, for which purpose two or more claims or suits arising out of the same accident or occurrence shall be considered as one claim or suit.

ARTICLE 8

RIGHTS RESERVED TO WORKING INTEREST OWNERS

8.1 Access to Unit Area. Each Working Interest Owner shall be entitled at all reasonable times, but at its own risk and expense, to have access to the Unit Area for the purpose of observing operations being conducted pursuant to this agreement and of inspecting wells, equipment and other property on the Unit Area.

8.2 Reports and Data. Each Working Interest Owner, by written request therefor, shall be entitled to receive from Unit Operator copies of all reports made by Unit Operator to governmental agencies, reports of Unitized Substances produced and delivered to or for the account of the Working Interest Owners, inventory reports and all other data pertaining to operations hereunder that are in possession of Unit Operator. However, the cost of assembling and furnishing at the request of a Working Interest Owner, reports and data not furnished by Unit Operator to all Working Interest Owners shall be charged solely to and paid by the Working Interest Owner who requests the same.

ARTICLE 9

TAXES

9.1 Production Taxes. Each Working Interest Owner shall be severally liable for and shall for its own account pay or cause to be paid all production taxes imposed by the States of New Mexico and/or Texas or pursuant to their laws, or by any other lawful taxing authority upon or in respect of the share of Unitized Substances allocated to such Working Interest Owner by the terms of the Unit Agreement and/or this Unit Operating Agreement, or the production, sale or other handling of same, – regardless of the State or Tracts from which the Unitized Substances are produced. The term, production taxes, as used in this agreement shall mean and include all gross production taxes, severance taxes, gathering taxes, and other taxes upon or measured by production, handling, sale, value or proceeds of Unitized Substances; and said term shall include, without limitation, taxes imposed by the Oil and Gas Ad Valorem Production Tax Act of New Mexico, which shall not be deemed to be an ad valorem tax as that term is used in this agreement.

9.2 Ad Valorem Taxes. Unit Operator on behalf of all Working Interest Owners shall pay all ad valorem taxes becoming due and payable on account of real and personal property (or interest therein) of each Working Interest Owner within the Unit Area (and each and every part thereof) covered by this agreement or used in connection with operations under this agreement and the Unit Agreement regardless of the State or Tract in which located. The aggregate amount of all such ad valorem taxes shall be charged against and borne by all the Working Interest Owners in proportions specified below as follows:

(1) The percentage of such ad valorem taxes on personal property which shall be considered Unit Expense shall be charged

against and borne by each respective Working Interest Owner in accordance with their respective Cost Participation. Cost Participation of the Working Interest Owners are shown in Exhibit "D", Part 2.

(2) The proportion of such ad valorem taxes on real property which shall not be considered as Unit Expense shall be charged against and borne by each respective Working Interest Owner in accordance with the decimal fractions in Exhibit "E" opposite the name of each such Working Interest Owner.

9.3 Renditions, Returns and Reports. Unit Operator shall make and file with the proper taxing authorities or governmental subdivisions all renditions, returns and reports required by law for the ad valorem taxes above mentioned. Any Working Interest Owner who is dissatisfied with any assessment of its interest in any real or personal property shall have the right, at its own expense, to protest or contest the same. Each Working Interest Owner shall promptly furnish Unit Operator with the originals or photostatic copies of all notices, assessments, tax statements and other papers received by it from taxing authorities and relating to such taxes, and upon request by Unit Operator shall furnish the latter with all information in the possession of the Working Interest Owner which may be useful to Unit Operator in handling the taxes and the settlement and accounting in respect thereto.

ARTICLE 10

ADJUSTMENT FOR LEASE AND WELL EQUIPMENT

10.1 Delivery of Wells and Equipment. At the effective date hereof the Working Interest Owners shall deliver to Unit Operator possession of:

10.1.1 All wells completed in the Unitized Formation, together with the casing therein, whether or not such wells are producing at the effective date.

10.1.2 All other lease and well equipment in, on or used in connection with operations of wells mentioned in Section 10.1.1, including tubing, lift equipment, pumping units, flow lines, separators, tank batteries, and other lease equipment, except the Elliott, Inc., Parcell-Federal tank battery.

10.1.3 A copy of each production and well record pertaining to a well completed in the Unitized Formation.

10.2 Inventory of Equipment. The Working Interest Owners shall appoint an inventory committee which shall take, or cause to be taken, under the supervision of Unit Operator and at Unit Expense, as of the effective date hereof and as soon thereafter as may be reasonably possible, a physical inventory of all lease and well equipment hereinabove provided to be delivered to Unit Operator. The inventory of equipment to be made pursuant to this article shall be limited to controllable material as defined in the 1960 Material Classification Manual. Each Working Interest Owner who is, or whose representative is a member of said committee, and also Unit Operator regardless of whether it or its representative is a member of the committee, shall charge the joint account and be paid or credited the sum of $35.00 per man day for the time spent by it or its representatives in

taking and completing the inventory (including in addition, in case of Unit Operator, the supervision of same), plus actual expenses including mileage at 8¢ per mile incurred in connection therewith. At least five days before the taking of such inventory with respect to a Tract, Unit Operator shall notify the Working Interest Owner or Owners owning the Working Interest in such tract. The inventory shall be made by Tracts, and shall show for each Tract the equipment to be credited to such Tract. Each Working Interest Owner agrees to furnish Unit Operator with a list of its underground equipment prior to the taking of such inventory. The cost of taking, pricing, reproducing and mailing such inventory shall be a charge to the joint property.

10.3 Valuation of Equipment. The casing in each well which is taken over by Unit Operator shall be valued at $2,500.00. The equipment (other than casing) included in the inventory shall be valued as provided in Section 2 of Article III of Exhibit "F".

10.4 Approval of Inventory and Valuation. Upon completion thereof, the inventory and valuation shall be submitted to the Working Interest Owners for approval. If any item of equipment (other than casing) is determined not to be needed in the conduct of operations under this agreement, such item shall be removed from the inventory and shall be returned to the party or parties who owned the same immediately prior to the effective date hereof, who shall remove the same from the Unit Area as promptly as reasonably possible, if so directed by the parties hereto.

10.5 Equipment Adjustment. Upon approval of the inventory and valuation of equipment taken over by Unit Operator, the value of each item included in the approved inventory shall be credited to the Working Interest Owner or Owners who owned the same immediately prior to the effective date hereof (such credit, if made to two or more parties, to be made to them in proportion to their respective interests) and each Working Interest Owner shall be charged with that percentage of the total valuation of all such equipment which is equal to its Cost Participation, and settlement for differences between the credits and charges to the Working Interest Owners shall thereupon be made. Such settlement shall be effected through Unit Operator, who shall invoice each Working Interest Owner charged with an amount in excess of the amount credited to it, as above provided, for the amount of such excess; and each Working Interest Owner so billed agrees to promptly pay to Unit Operator the amount of such bill received by it. The amounts so invoiced, when received by Unit Operator, shall be paid or credited to the Working Interest Owners credited with amounts in excess of the amounts charged to them, respectively, in proportion to their respective excesses of credits over charges. A sale or other transfer of Working Interest in a Tract prior to the settlement above provided for shall be deemed to transfer to the transferee of such Working Interest the credit made to, and the charge made against, the transferor, in respect of such Tract, in the adjustment above provided for.

10.6 Intangible Costs. No adjustment shall be made among the Working Interest Owners for road construction costs or for intangible costs of any kind incurred prior to the effective date hereof in respect of wells within the Unit Area, whether incurred in the installation of equipment or in drilling, completing, testing or reworking a well, or otherwise.

10.7 Warehouse, Camps and Other Facilities. The adjustment hereinabove provided for shall not include facilities such as warehouse stocks, lease

houses, camps, office buildings, water supply wells, water pressure plant and water lines necessary for operations hereunder, or any other facilities not properly classed as lease or well equipment. Such facilities may be acquired for the joint account of the parties hereto only on such terms and conditions as may be agreed upon between the owners thereof and Unit Operator, with the approval of the Working Interest Owners.

10.8 Ownership of Equipment and Other Property. All equipment included in the adjustment above provided for, and all materials, equipment, facilities and other property, the cost of which is charged to Working Interest Owners, shall be owned by them in proportion to their respective Cost Participation.

ARTICLE 11

UNIT EXPENSE

11.1 Payment and Charging. In the first instance, all items of Unit Expense incurred by Unit Operator shall be paid by it promptly as and when due and payable. All such Unit Expense shall be charged to Working Interest Owners in proportion to their respective Cost Participations and each Working Interest Owner shall reimburse Unit Operator for its proportionate share thereof in accordance with Exhibit "F", the provisions of which shall govern the charging, invoicing and payment of such Unit Expense. In case of a Tract included in the Unit Area on the basis of an indemnity agreement executed by Working Interest Owner or Owners in accordance with Sub-Section 13.1.2 of the Unit Agreement, the Working Interest Owner or Owners executing such indemnity agreement shall be charged with and shall pay to Unit Operator in ratio of their Cost Participations, all Unit Expense otherwise chargeable hereunder to each owner of Working Interest in such Tract who has not executed or ratified this agreement.

11.2 Budgets. Before or as soon as reasonably possible after the effective date hereof, Unit Operator shall prepare a budget of estimated Unit Expense for the remainder of the calendar year and a budget for the succeeding calendar year, and on or before the first day of each November thereafter Unit Operator shall prepare a budget of estimated Unit Expense for the next succeeding calendar year. Each such budget shall properly itemize the estimated Unit Expense included therein and shall set forth the estimated Unit Expense for each quarter-annual period covered thereby; unless otherwise specified in the budget, it shall be presumed for the purpose of the advance billings hereinafter provided for that the estimated Unit Expense for each month of a quarterly period is one-third of the estimate for the quarter. Such budget shall be subject to revision by Unit Operator from time to time as may be found necessary. Unit Operator shall furnish to each Working Interest Owner a copy of each such budget and a copy of any revision thereof, each of which shall be subject to correction and adjustment by the Working Interest Owners as they may determine to be proper from time to time. However, approval of a budget shall not be deemed to authorize any expenditure shown therein that is not otherwise authorized in accordance with this agreement.

11.3 Advance Billings. Unit Operator shall have the right at its election from time to time to require each Working Interest Owner to advance its proportionate share of the estimated amount of Unit Expense for any month by submitting to each Working Interest Owner, at least fifteen (15) days in advance of the beginning of such month, a properly itemized statement of such estimated amount, with a request for payment in advance. Whenever such request is made,

each Working Interest Owner shall advance to Unit Operator, on or before the first day of the month for which advance payment is requested its proportionate share of the estimated Unit Expense for such month. The amount of any advance so requested, if not paid when due, shall thereafter bear interest at the rate of six per cent (6%) per annum until paid. At the end of each month for which advance payment is requested, Unit Operator shall make proper adjustment for any difference between the estimated amount and the actual amount of Unit Expense for such month by making appropriate charges or credits to the parties hereto. Unit Operator whenever it considers it convenient to do so may include in advance billings ad valorem taxes which are chargeable to Working Interest Owners as elsewhere herein set forth, and the foregoing provisions of this Section 11.3 shall in such cases have similar application to such taxes.

11.4 Commingling of Funds. Unit Operator shall not be required to segregate funds received by it under this agreement, and such funds may be commingled with its own funds.

11.5 Lien of Unit Operator. Each Working Interest Owner grants to Unit Operator a lien upon its Working Interest or Interests, its interest in all jointly owned materials, equipment and other property, and its interest in all Unitized Substances produced and saved, as security for payment of its proportionate share of Unit Expense and taxes, together with interest thereon at the rate of six per cent (6%) per annum, which lien may be enforced in the same manner as a mortgage lien or in any other manner now or hereafter permitted by law. In addition, upon default by any Working Interest Owner in the payment of any invoice submitted to it by Unit Operator for its proportionate share of Unit Expense and/or taxes, or in payment of any advance requested by Unit Operator as above provided, Unit Operator shall have the right to collect and receive from the purchaser or purchasers of Unitized Substances the proceeds thereof accruing to the interest of such Working Interest Owner up to the amount owing by it, plus interest as aforesaid. Each such purchaser shall be entitled to rely upon the Unit Operator's statement concerning the existence and amount of any such default. Unit Operator shall have the right to sue for recovery of any amount owing by any Working Interest Owner that is not paid when due, plus attorneys' fees and other expenses incurred in connection with the suit, with or without foreclosure of the lien or exercising the right above granted.

11.6 Default in Payment. In the event of the neglect or failure of any Working Interest Owner to pay its proportionate part of Unit Expense incurred by Unit Operator and/or taxes within sixty (60) days after rendition of statements therefor by the Unit Operator, the other Working Interest Owners who are not in default agree after request by Unit Operator to pay to the Unit Operator in the ratio of their respective Cost Participations the unpaid Unit Expense and/or taxes of any defaulting Working Interest Owner, as follows:

11.6.1 In the event of a defaulting Working Interest Owner, Unit Operator shall collect and receive each month from the purchaser or purchasers the proceeds from sale of such defaulting Working Interest Owner's share of Unitized Substances as provided in Section 11.5.

11.6.2 In the event the proceeds of sale of such Working Interest Owner's share of Unitized Substances is insufficient to reimburse Unit Operator for such defaulting Working Interest

Owner's share of the Unit Expense incurred hereunder by Unit Operator and taxes, the Working Interest Owners who are not in default agree to pay Unit Operator in the ratio of their respective Cost Participations each month, such Unit Expense and taxes for which Unit Operator was not reimbursed by the proceeds from the sale of such defaulting Working Interest Owner's share of Unitized Substances.

11.6.3 Upon the payment to and receipt by the Unit Operator of any past due amounts owing by any such defaulting Working Interest Owner which has been previously paid by other Working Interest Owners, or in the event the proceeds received by Unit Operator from the sale of such defaulting Working Interest Owner's share of Unitized Substances during any month is in excess of the amount of such defaulting Working Interest Owner's share of Unit Expense for such month, taxes and the unsatisfied portions of such items for prior months, Unit Operator shall reimburse the Working Interest Owners for their pro rata share of the amounts paid by them to Unit Operator. Such reimbursement shall include each party's pro rata share of any interest collected from a defaulting Working Interest Owner by Unit Operator.

11.6.4 Any Working Interest Owner so advancing a defaulting Working Interest Owner's Unit Expense and/or taxes shall be subrogated to the lien and rights appurtenant thereto herein given Unit Operator.

11.7 Adjustments on Uncommitted Interests. In case of each royalty or working interest in any Tract in the Unit Area which interest is not effectively committed to the Unit Agreement, the following adjustment shall be made in respect of differences between the amount of actual production of oil and gas from the San Andres (as defined in the Unit Agreement) in the Tract accruing to the uncommitted interest and the amount accruing thereto computed on the basis of the quantity of production allocated to the Tract as provided in the Unit Agreement. (a) Any excess of the amount payable for any month computed on the basis of actual production, over the amount computed on the basis of the allocated production shall be paid to the owner of the uncommitted interest by the owners of the effectively committed Working Interests in the Tract, and Unit Operator shall reimburse the latter for the amount of the excess so paid, and such reimbursement shall be treated and charged as Unit Expense; and (b) any excess of the amount payable for any month computed on the basis of the allocated production, over the amount computed on the basis of actual production shall be paid by the owners of the effectively committed Working Interests in the Tract to Unit Operator for credit of all Working Interest Owners in proportion to their respective Cost Participations.

11.8 Audits. Unit Operator's records and books of account shall be audited only at such times and in such manner as may be directed by a majority in Voting Interest of Working Interest Owners (other than the Working Interest Owner who is Unit Operator) from time to time, except that such audits shall not be made more frequently than at intervals of twelve (12) months unless made upon the resignation or removal of Unit Operator. The cost of each such audit shall be borne by the Working Interest Owners other than the one who is Unit Operator in the ratio of their respective Cost Participations.

11.9 Non-Participation in Expenditures by a Working Interest Owner. Unit Operator shall submit for approval by the Working Interest Owners an Authority

for Expenditure covering the expenditures contemplated to be made under the initial plan of operation and when the initial Authority for Expenditure has been approved by the Working Interest Owners, Unit Operator shall proceed to carry out such plan of operation and is authorized to make the expenditures contemplated. After the initial plan of operation has been accomplished, should the Working Interest Owners vote (by the required percentage vote) for any additional expenditure in the gross amount of $50,000.00 or more, then any Working Interest Owner who does not desire to participate in, and who has not voted for, such expenditure shall have the right to notify Unit Operator in writing of its desire not to so participate, — such notice to be delivered to Unit Operator within twenty (20) days after the vote. Each Working Interest Owner or Owners delivering such notice will be hereinafter referred to as a "Non—Participating Owner". In each such instance, the other Working Interest Owners who have not delivered such notice, herein referred to as "Participating Owners" shall have the right at their sole cost, expense and liability to proceed with the matter or project and to make the expenditure in question. And the Participating Owners shall be entitled to receive all of the Unitized Substance (including oil in storage tanks at the time next below specified) accruing to the total Unit Participation of each Non—Participating Owner under the entire Unit Area, and which is produced or run from the Unitized Formation from and after 7:00 o'clock A.M. on the first day of the calendar month next following the giving of the notice by the Non—Participating Owner to Unit Operator, until Participating Owners shall have received from proceeds of each Non—Participating Working Interest Owner's share of Unitized Substances after deducting severance, production, ad valorem and like taxes applicable thereto an amount equal to 200 per cent of such Non—Participating Owner's proportionate share of the full amount of the expenditure in question, together with 100 per cent of such Non—Participating Owner's proportionate share of the cost of operation of, or relating to, the entire Unitized Formation during such time, — all of such costs to be determined in accordance with the provisions of Exhibit "F" attached hereto. Immediately after the Participating Owners have recovered out of proceeds of production of Unitized Substances the amount of money as above provided in this Article 11.9, the Non—Participating Owner shall become entitled to again receive its share of the Unitized Substances. No Working Interest Owner who fails to give the written notice to Unit Operator within the time above specified therefor shall have the right to be a Non—Participating Owner as above provided, and shall be required to participate in the expenditure in question. The production of Unitized Substances which would have accrued to the Non—Participating Owners during the payout period above specified shall be owned and shared by the Participating Owners in proportion to their respective Unit Participations, that is, in the proportion that the Unit Participation of each bears to the total of the Unit Participation of all of them.

ARTICLE 12

NON—UNITIZED FORMATIONS

12.1 Right to Operate. This agreement shall not affect the right of any Working Interest Owner to conduct operations in search of or for the production of oil, gas or other minerals from any formation underlying the Unitized Land other than the Unitized Formation, except that such operations shall be conducted in such manner as to prevent unnecessary or unreasonable interference with the conduct of operations under this agreement. If any Working Interest Owner drills any well into or through the Unitized Formation, such party shall case or otherwise seal off the Unitized Formation in such manner as to protect the Unitized Formation and the production of Unitized Substances, none of which shall be produced through such well.

12.2 Dually Completed Wells. After the effective date hereof, no well completed for production from the Unitized Formation shall be completed in a formation other than the Unitized Formation for operation as a dually completed well.

ARTICLE 13

TITLES

13.1 Title Representation and Indemnification. Each Working Interest Owner represents and warrants that it is the owner of the respective Working Interests set forth opposite its name in Exhibit "D" 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 proceeds that shall have been received by the indemnifying Working Interest Owner from the sale of 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 7:00 o'clock A.M. on the first day of the calendar month in which such failure is finally determined and there shall be no retroactive adjustment of Unit Expense, taxes, or Unitized Substances or the proceeds therefrom as a result of title failure, except the indemnity above specified.

13.2 Loss of Title Because of Unit Operations. If the title of any Working Interest Owner hereto to all or any part of its interest in a Tract is lost because of operations conducted pursuant to the Unit Agreement or this agreement (including but not limited to the cessation of production from such Tract after the effective date) such loss shall be shared by all of the Working Interest Owners hereto in the ratio of their respective Cost Participations. Such loss shall not reduce the Cost Participation of such Working Interest Owner. To the extent that such loss of title results in the reduction of the share of Unitized Substances accruing to such Working Interest Owner such reduction shall be made up by all the Working Interest Owners hereto in the ratio of their respective Cost Participations.

ARTICLE 14

CLAIMS AND SUITS

14.1 Settlement or Defense. 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 Unit 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 Unit Agreement, said Working Interest Owner shall immediately notify the Unit Operator of such claim or suit. Working Interest Owners shall assume and take over the further handling, settling or otherwise discharging 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 Unit Area; except as otherwise provided in the Unit Agreement and/or this agreement. The foregoing exception, without limitation, will include the provisions of Article 13 of the Unit Agreement and Section 11.6 of this agreement relating to indemnity given by certain Working Interest Owners in certain instances of nonjoinder by a Working Interest Owner; provisions of Section 13.1 hereof (Title

Representation and Indemnification); and provisions of Section 11.7 hereof (Adjustment on Uncommitted Interests).

14.2 Notice of Claim. Unit Operator shall inform the Working Interest Owners of each claim or suit arising out of operations hereunder promptly after Unit Operator receives notice thereof, excepting however, claims, or suits that are settled by Unit Operator in accordance with the authority hereinbefore conferred upon it.

ARTICLE 15

RELATIONSHIP OF PARTIES

15.1 Individual Rights and Obligations. The rights, duties, obligations and liabilities of the parties hereto shall be individual and several, and not joint or collective. Each Working Interest Owner shall be responsible only for its obligations as set out herein, and shall be liable only for its proportionate share of the costs, expenses, taxes, losses and liabilities as herein stipulated. It is agreed that it is not the purpose or intention of this agreement to create, nor shall the same be construed as creating, any mining partnership, commercial partnership or other partnership relation, joint venture, trust, or association.

ARTICLE 16

NOTICES

16.1 Except as otherwise specified herein, each notice given pursuant to this agreement shall be given in writing as follows: (a) By United States mail or by telegraph with postage or charges prepaid, properly addressed to each party to whom given at such party's address set forth below its signature to this agreement or its ratification or consent hereto; or (b) By personal delivery to the party to whom the notice is to be given, provided that if delivered to a corporate party, the notice shall be delivered personally to an executive officer of such party, subject to provisions of (c) below; or (c) In case of each Working Interest Owner who shall designate a representative and/or alternate representative as specified in Section 5.2 hereof, the notice may be given either by personal delivery to such a representative or alternate representative or by mailing or telegraphing (with postage or charges prepaid) the same to such representative or alternate representative at his address specified in the designation made by the Working Interest Owner. Each notice given by mail or telegraph as above provided shall be deemed given 48 hours after such notice is deposited in the United States mail or 24 hours after it is filed with an operating telegraph company for immediate transmission by telegraph. Any party hereto may change the address to which notices for it may be sent, by appropriate written notice to Unit Operator, provided that the notice of such change of address of Unit Operator shall be given by the latter to all other parties hereto. Notice given in the manner above specified, to the husband of any married woman who executes this agreement, shall also constitute notice to her.

ARTICLE 17

WITHDRAWAL OF WORKING INTEREST OWNER

17.1 Withdrawal. If any Working Interest Owner desires, it may with-

draw from this agreement by conveying, assigning and transferring with special warranty only, to the other Working Interest Owners, all of the former's rights, titles and interests (a) in its Working Interests, and in its lease or leases or other operating rights insofar as same pertain to the Unitized Formation; (b) in and accruing under the Unit Agreement and this Operating Agreement to it as a Working Interest Owner; and (c) its interest in all wells, pipelines, casing, injection equipment, facilities, personal property of every kind, and jointly owned real property if any which may have been acquired for joint account of the Working Interest Owners, held or used in connection with operations hereunder; provided (1) that such withdrawal shall not relieve said Working Interest Owner from any obligation or liability incurred prior to execution and delivery of the assignment; and (2) that a Working Interest Owner who is charged with any excess in the adjustment provided for in Section 10.5 hereof shall not have the right to withdraw until it has paid the same to Unit Operator; and (3) that unless the other Working Interest Owners otherwise agree, a Working Interest Owner may not withdraw if its interest (or any of its interests if more than one) is burdened by any royalties, overriding royalties or other burdens in excess of a 1/8th lessor's royalty after application of usual proportionate reduction for fractional interests. The interest so transferred shall be taken and owned and the payment specified below made by the other Working Interest Owners in the ratio of their respective Cost 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 Unit Agreement, and the right of such Working Interest Owner to any benefits subsequently accruing hereunder and under said Unit 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 the jointly owned personal property and equipment of every kind so assigned, the salvage value of the assignor's interest therein, such salvage value to be determined and fixed by Working Interest Owners on the basis of the above ground fair market value of such personal property and equipment less the reasonably estimated cost of salvaging same, which amount shall be full consideration to the assigning Working Interest Owner for said assignment. Any transfer or assignment made under this Section 17.1 which covers rights under a Federal lease as to the Unitized Formation shall be in such form of assignment, operating agreement or other instrument as will meet with approval of the Secretary. The above provisions of this Section shall not be construed to prevent any Working Interest Owner from selling and assigning its interest to any purchaser or assignee (whether or not a party to this agreement) for such consideration as may be acceptable to the assigning Working Interest Owner, nor as creating any preferential right to purchase if a Working Interest Owner desires to so sell or assign its interest – as distinguished from exercise of its right of withdrawal as above provided.

ARTICLE 18

ABANDONMENT OF WELLS

18.1 Rights of Former Owners. If Working Interest Owners decide to permanently abandon any well within the Unit Area prior to termination of the Unit Agreement, Unit 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 sixty (60) days after receipt of such notice to notify Unit 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

Unitized Formation. Within ten (10) days after said Working Interest Owners have so notified Unit Operator of their desire to take over such well, they shall pay to Unit Operator, for credit to the joint account of all Working Interest Owners in proportion to their respective Cost Participations, 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 after deducting the reasonably estimated cost of salvaging same. At the same time the Working Interest Owners taking over the well shall agree by letter addressed to Unit Operator to effectively seal off and protect the Unitized Formation, 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; and such Working Interest Owners shall acquire no interest in the Unitized Formation by taking over such well.

18.2 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, Unit Operator shall plug and abandon the well in accordance with applicable laws, the cost of same to be treated as Unit Expense.

ARTICLE 19

TERM OF AGREEMENT

19.1 Effective Date. This agreement shall become effective on the date and at the same time Unit Agreement becomes effective.

19.2 Term. This agreement shall continue in full force and effect so long as the Unit Agreement remains in force and effect and thereafter until all unit wells have been abandoned and plugged or turned over to Working Interest Owners in accordance with Article 20 hereof, and all personal and real property (if there should be any real property) acquired for the joint account of Working Interest Owners has been disposed of by Unit Operator in accordance with instructions of Working Interest Owners and there has been a final accounting and settlement between the parties hereto.

ARTICLE 20

ABANDONMENT OF OPERATIONS

20.1 Termination. Upon termination of the Unit Agreement, the following will occur:

20.1.1 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.

20.1.2 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 Unit Operator, for credit to the joint account, the net salvage value of the casing and equipment in and on the well or wells after deducting the reasonably estimated cost of salvaging same and by agreeing to properly plug the same at such time as it is abandoned.

20.1.3 Salvaging Wells and Equipment. With respect to all wells

not taken over by Working Interest Owners, Unit Operator shall at the joint expense of Working Interest Owners salvage as much of the casing and equipment in and on such wells as can economically and reasonably be salvaged and shall cause the same to be properly plugged and abandoned and shall likewise salvage all jointly owned material and equipment located upon the Unit Area all of which shall be disposed of in such manner as may be determined by the Working Interest Owners.

20.1.4 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 Unit Area in proportion to their respective Cost Participations.

ARTICLE 21

TRANSFERS OF INTEREST

21.1 Successors and Assigns. The provisions of this Agreement shall constitute covenants running with the lands and leases covered hereby, and shall be binding upon and inure to the benefits of the heirs, devisees, legal representatives, successors and assigns of the Working Interest Owners respectively. Each assignment or other transfer of Working Interest by any Working Interest Owner shall be made expressly subject to this agreement and shall provide expressly that the transferee shall assume and be bound by all obligations accruing hereunder in respect of the Working Interest transferred from and after the assignment or other transfer.

21.2 Notice of Transfers. An assignment or other transfer of Working Interest that is subject to this agreement shall not be binding upon Unit Operator, and shall not relieve the transferor of obligations accuring hereunder, prior to the first day of the calendar month next succeeding receipt by Unit Operator of written notice thereof, accompanied by certified copy of the recorded instrument evidencing the transfer.

ARTICLE 22

COUNTERPARTS AND RATIFICATIONS

22.1 Counterparts. This agreement and ratification of same may be executed in any number of counterparts and all executed counterparts hereof shall be deemed to constitute a single instrument binding upon every party executing any such counterpart with the same force and effect as if all parties who execute counterparts had joined in the execution of the same counterpart.

22.2 Ratification. This agreement may be ratified by a separate instrument or instruments in writing. Each party who executes any such ratification shall be deemed a party hereto, with the same force and effect as if it had executed a counterpart hereof.

ARTICLE 23

RENEWAL AND EXCHANGE LEASES

23.1 Every renewal or exchange lease issued as a renewal or of exchange

of any Federal lease covering any part of the Unit Area shall be subject to the terms and provisions of this agreement in the same manner and to the same extent as the lease so renewed or extended.

IN WITNESS WHEREOF, this agreement has been executed by the undersigned parties on the dates indicated opposite their respective signatures.

UNIT OPERATOR AND WORKING INTEREST OWNER

SOHIO PETROLEUM COMPANY

DATE September 9, 1963

By Cecil C. Irby
Cecil C.Irby
Agent and Attorney in Fact

ADDRESS 970 First National Office Building

Oklahoma City, Oklahoma 73102

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared CECIL C. IRBY known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said SOHIO PETROLEUM COMPANY, an Ohio Corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by CECIL C. IRBY, Agent and Attorney in Fact of SOHIO PETROLEUM COMPANY, an Ohio Corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9th day of SEPTEMBER, A.D. 1963.

Notary Public in and for Oklahoma County, Oklahoma.

My Commission Expires:

September 6, 1965

RATIFICATION AND JOINDER TO THE
LITTMAN SAN ANDRES UNIT OPERATING AGREEMENT,
LEA COUNTY, STATE OF NEW MEXICO, AND ANDREWS COUNTY,
STATE OF TEXAS, DATED SEPTEMBER 9, 1963

For the consideration stated in the above described Unit Operating Agreement, each of the undersigned hereby ratifies, confirms and joins in the execution of said Unit Operating Agreement which is hereby incorporated herein and made a part hereof, to the same extent and effect as if the undersigned had executed the original of said Unit Operating Agreement.

The undersigned acknowledges receipt of a copy of said Unit Operating Agreement and acknowledges that no representations not incorporated herein or in said Unit Operating Agreement have been made to the undersigned and that this instrument has been signed and delivered unconditionally.

WORKING INTEREST OWNERS

DATE_____

_____

ADDRESS_____

_____

DATE_____

_____

ADDRESS_____

_____

ATTEST:

By_____
President

_____

ADDRESS_____

DATE_____

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ and _____, his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said _____, having been examined by me privily and apart from her husband, and having the same fully explained to her, she, the said _____, wife of the said _____, acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it; and the foregoing instrument was acknowledged before me this day by _____ and _____, his wife.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19___.

_____
Notary Public in and for _____ County, _____

My Commission Expires:

_____

STATE OF _____)
)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed; and the foregoing instrument was acknowledged before me this day by _____.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19___.

_____
Notary Public in and for _____ County, _____,

My Commission Expires:

_____

STATE OF _____)
COUNTY OF _____)

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said _____ of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated; and the foregoing instrument was acknowledged before me this day by _____ of _____, a _____ corporation, on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, A.D. 19___.

My Commission Expires:

_____

_____
Notary Public in and for _____ County, _____.

EXHIBIT "D" PART 1

LITTMAN SAN ANDRES UNIT OPERATING AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

Tract No.	Ownership of Working Interest	Working Interest In Tract Oil	Tract Participation
1			03.60701%
	Broseco Corporation	.1979167	
	John B. Rich	.0104166	
	Sohio Petroleum Company	.7916667	
2			02.32066%
	Elliott, Inc.	1.0000000	
3			14.38601%
	Elliott, Inc.	1.0000000	
4			06.66266%
	Broseco Corporation	.2770834	
	John B. Rich	.0145833	
	Sohio Petroleum Company	.7083333	
5			00.82290%
	Broseco Corporation	.2461179	
	J. G. Catlett Co.	.0405401	
	Kirby Production Company	.0712149	
	John B. Rich	.0129536	
	Sohio Petroleum Company	.6291735	
6			20.16509%
	Martha Jane Anthony	.0131250	
	Broseco Corporation	.1781250	
	Delhi Taylor Oil Corporation	.0625000	
	Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979	.1875000	
	Margery Ann Hodges	.0131250	
	Obie P. Leonard, Jr.	.0131250	
	R. W. Leonard	.0131250	
	John B. Rich	.0093750	
	Sohio Petroleum Company	.5000000	
7			35.67109%
	Broseco Corporation	.1187500	
	Delhi Taylor Oil Corporation	.0625000	
	John B. Rich	.0062500	
	Shell Oil Company	.5000000	
	Sohio Petroleum Company	.3125000	

EXHIBIT "D" PART 1
(Continued)

Tract No.	Ownership of Working Interest	Working Interest In Tract Oil	Tract Participation
8			07.84198%
	Martha Jane Anthony	.0156250	
	Broseco Corporation	.1781250	
	Delhi Taylor Oil Corporation	.0625000	
	Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979	.1875000	
	Margery Ann Hodges	.0156250	
	Obie P. Leonard, Jr.	.0156250	
	R. W. Leonard	.0156250	
	John B. Rich	.0093750	
	Sohio Petroleum Company	.5000000	
9			01.46833%
	Broseco Corporation	.2761673	
	C. S. Longcope	.0033058	
	John B. Rich	.0145351	
	Sohio Petroleum Company	.7059918	
10			02.17480%
	Martha Jane Anthony	.0156250	
	Broseco Corporation	.1979167	
	Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979	.1875000	
	Margery Ann Hodges	.0156250	
	Obie P. Leonard, Jr.	.0156250	
	R. W. Leonard	.0156250	
	John B. Rich	.0104167	
	Sohio Petroleum Company	.5416666	
11			04.87947%
	Broseco Corporation	.1682291	
	J. G. Catlett Co.	.0304869	
	Cities Service Oil Company	.3333333	
	Kirby Production Company	.0217629	
	C. S. Longcope	.0033058	
	John B. Rich	.0088543	
	Sohio Petroleum Company	.4340277	

EXHIBIT "D" PART 2

LITTMAN SAN ANDRES UNIT OPERATING AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

Working Interest Onwers	Tract No.	Decimal Working Interest In Tract (Oil)	Tract Participation Credited Per Sec. 4.1	Cost Participation
Martha Jane Anthony	6	.0131250	20.16509%	00.31508%
	8	.0156250	07.84198	00.12253
	10	.0156250	02.17480	00.03398
				00.47159%
Broseco Corporation	1	.1979167	03.60701%	00.71389%
	4	.2770834	06.66266	01.84611
	5	.2461179	00.82290	00.20253
	6	.1781250	20.16509	03.59191
	7	.1187500	35.67109	04.23595
	8	.1781250	07.84198	01.39685
	9	.2761673	01.46833	00.40550
	10	.1979167	02.17480	00.43043
	11	.1682291	04.87947	00.82087
				13.64404%
J. G. Catlett Co.	5	.0405401	00.82290%	00.03336%
	11	.0304869	04.87947	00.14876
				00.18212%
Cities Service Oil Company	11	.3333333	04.87947%	01.62650%
Delhi Taylor Oil Corporation	6	.0625000	20.16509%	01.26032%
	7	.0625000	35.67109	02.22944
	8	.0625000	07.84198	00.49012
				03.97988%
Elliott, Inc.	2	1.0000000	02.32066%	02.32066%
	3	1.0000000	14.38601	14.38601
				16.70667%
Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979	6	.1875000	20.16509%	03.78096%
	8	.1875000	07.84198	01.46036
	10	.1875000	02.17480	00.40778
				05.65910%
Margery Ann Hodges	6	.0131250	20.16509%	00.31508%
	8	.0156250	07.84198	00.12253
	10	.0156250	02.17480	00.03398
				00.47159%
Kirby Production Company	5	.0712149	00.82290%	00.05861%
	11	.0217629	04.87947	00.10619
				00.16480%

EXHIBIT "D" PART 2
(Continued)

Working Interest Owners	Tract No.	Decimal Working Interest In Tract (Oil)	Tract Participation Credited Per Sec. 4.1	Cost Participation
Obie P. Leonard, Jr.	6	.0131250	20.16509%	00.31508%
	8	.0156250	07.84198	00.12254
	10	.0156250	02.17480	00.03398
				00.47160%
R. W. Leonard	6	.0131250	20.16509%	00.31508%
	8	.0156250	07.84198	00.12254
	10	.0156250	02.17480	00.03398
				00.47160%
C. S. Longcope	9	.0033058	01.46833%	00.00485%
	11	.0033058	04.87947	00.01613
				00.02098%
John B. Rich	1	.0104166	03.60701%	00.03757%
	4	.0145833	06.66266	00.09716
	5	.0129536	00.82290	00.01066
	6	.0093750	20.16509	00.18905
	7	.0062500	35.67109	00.22294
	8	.0093750	07.84198	00.07352
	9	.0145351	01.46833	00.02134
	10	.0104167	02.17480	00.02265
	11	.0088543	04.87947	00.04320
				00.71809%
Shell Oil Company	7	.5000000	35.67109%	17.83554%
Sohio Petroleum Company	1	.7916667	03.60701%	02.85555%
	4	.7083333	06.66266	04.71938
	5	.6291735	00.82290	00.51775
	6	.5000000	20.16509	10.08255
	7	.3125000	35.67109	11.14722
	8	.5000000	07.84198	03.92099
	9	.7059918	01.46833	01.03663
	10	.5416666	02.17480	01.17801
	11	.4338477	04.87947	02.11782
				37.57590%

EXHIBIT "E"

LITTMAN SAN ANDRES UNIT OPERATING AGREEMENT
LITTMAN SAN ANDRES UNIT
LITTMAN SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

Working Interest Owner	TAX PARTICIPATION Ad Valorem Taxes - Real Property *	**
Martha Jane Anthony	.0047900	.0047297
Broseco Corporation	.1342011	.1359424
J. G. Catlett Co.	.0019921	.0019670
Cities Service Oil Company	.0177915	.0175671
Delhi Taylor Oil Corporation	.0435344	.0429852
Elliott, Inc.	.1772846	.1750482
Fort Worth National Bank of Fort Worth, Texas, Trustee Account No. 1979	.0325809	.0321699
Margery Ann Hodges	.0047902	.0047296
Kirby Production Company	.0018026	.0017799
Obie P. Leonard, Jr.	.0047900	.0047270
R. W. Leonard	.0047901	.0047270
C. S. Longcope	.0002295	.0002267
John B. Rich	.0070632	.0071549
Shell Oil Company	.1950959	.1926348
Sohio Petroleum Company	.3692639	.3736106
	1.0000000	1.0000000

* When production is greater than 35 BO per well per day.

** When production is less than 35 BO per well per day.

NOTE: This tax is assessed on the net oil production accruing to each Working Interest Owner. This exhibit is derived from Exhibit "B" and is based on the proportion that each Working Interest Owner's Unit Participation as to oil bears to the total of the Unit Participation as to oil of all Working Interest Owners.

EXHIBIT "F"

Attached to and made a part of
UNIT OPERATING AGREEMENT
Littman-San Andres Unit, Littman-San Andres Field
Lea County, New Mexico - Andrews County, Texas

ACCOUNTING PROCEDURE
(Unit and Joint Lease Operations)

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 classification 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 fifteen (15) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest 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 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 the joint property.

B. Operator's cost of holiday, vacation, sickness and disability benefits, and other customary allowances applicable to the salaries and wages chargeable under Subparagraph 2A and Paragraph 11 of this Section II.

Costs under this Subparagraph 2B may be charged on a "when and as paid basis" or by "Percentage assessment" on the amount of salaries and wages chargeable under Subparagraph 2A 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 Subparagraph 2A, 2B, 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 per cent (10%) 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 reasonably 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 herein 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.

EXHIBIT "F"
(Continued)

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 service, 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 Midland, Texas (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, and shall not exceed $75.00 per month for each producing well and a drilling well shall be equivalent to eight producing wells.

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.

WELL BASIS (Rate Per Well Per Month)

Well Depth	Drilling Well Rate Each Well	Producing Well Rate (Use Completion Depth) First Five	Next Five	All Wells Over Ten
Unitized Formation	$200.00	$35.00 per well per month		

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 repressuring or water flood, shall be included in the overhead schedule the same as producing oil wells.

(2) Water supply wells utilized for waterflooding 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, 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

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 suit-

able 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 provisions 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.

EXHIBIT "F"
(Continued)

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.

EXHIBIT "G"

ATTACHED TO AND MADE A PART OF
UNIT OPERATING AGREEMENT
LITTMAN SAN ANDRES UNIT, LITTMAN SAN ANDRES FIELD,
LEA COUNTY, NEW MEXICO - ANDREWS COUNTY, TEXAS

INSURANCE TO BE PROVIDED BY THE
OPERATOR FOR THE JOINT ACCOUNT

At all times during the conduct of operations hereunder, Operator shall maintain in force the following insurance:

A. Operator shall comply with the Workmen's Compensation laws of the state in which operations hereunder are conducted, either by maintaining in force Workmen's Compensation Insurance or by qualifying as a self-insurer. If Operator carries Workmen's Compensation Insurance, the premium cost thereof in respect of employees engaged in operations hereunder shall be charged to the joint account. During any time when Operator is qualified as a self-insurer for Workmen's Compensation purposes, Operator shall be entitled to charge the joint account an amount equal to the premium cost that would be incurred for Workmen's Compensation Insurance, if carried, on the basis of manual rates, in respect of employees engaged in operations hereunder, and any and all Workmen's Compensation losses and expenses (including the cost of investigating and litigating claims), shall be borne entirely by Operator.

B. Public Liability and Property Damage Insurance and Automobile Insurance with limits not less than $100,000 per person and $300,000 per accident on bodily injury to or death of persons and not less than $100,000 per accident on loss of or damage to property.

All premiums paid on such insurance shall be charged to the joint account. Except by mutual consent of the parties, no other insurance shall be maintained for the joint account and all losses not covered by such insurance shall be charged to the joint account and each drilling or other contractor performing work for the joint account shall be required to maintain in force, with respect to work performed by such contractor, the same insurance; and whenever Operator performs a drilling or reworking operation for the joint account with its own equipment, Operator at its own expense, shall provide the same insurance coverage in respect thereof as would be required if the work were performed by an independent contractor.

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 price.

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 3B, 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.

EXHIBIT "F"
(Continued)

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.